CIF File(s) (REQUIRED if paper describes X-ray crystal structures)

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ATOM 2    CA    CA    . SER SER SER A A 1   1   . 67.946  77.127  21.359  1.00
15.17  1 . .
ATOM 3    CB    CB    . SER SER SER A A 1   1   . 67.979  75.600  21.287  1.00
16.36  1 . .
ATOM 4    OG    OG    . SER SER SER A A 1   1   . 67.100  75.087  20.306  1.00
18.92  1 . .
ATOM 5    C     C     . SER SER SER A A 1   1   . 68.522  77.751  20.069  1.00
13.47  1 . .
ATOM 6    O     O     . SER SER SER A A 1   1   . 67.901  78.660  19.440  1.00
12.27  1 . .
ATOM 7    N     N     . ILE ILE ILE A A 2   2   . 69.727  77.300  19.704  1.00
12.29  1 . .
ATOM 8    CA    CA    . ILE ILE ILE A A 2   2   . 70.383  77.779  18.498  1.00
8.45   1 . .
ATOM 9    CB    CB    . ILE ILE ILE A A 2   2   . 71.885  77.492  18.577  1.00
8.59   1 . .
ATOM 10   CG1   CG1   . ILE ILE ILE A A 2   2   . 72.463  78.249  19.755  1.00
7.93   1 . .
ATOM 11   CD1   CD1   . ILE ILE ILE A A 2   2   . 73.804  77.852  20.200  1.00
9.34   1 . .
ATOM 12   CG2   CG2   . ILE ILE ILE A A 2   2   . 72.627  77.863  17.292  1.00
6.37   1 . .
ATOM 13   C     C     . ILE ILE ILE A A 2   2   . 69.703  77.162  17.288  1.00
9.36   1 . .
ATOM 14   O     O     . ILE ILE ILE A A 2   2   . 69.623  75.935  17.176  1.00
7.49   1 . .
ATOM 15   N     N     . GLN GLN GLN A A 3   3   . 69.259  77.996  16.376  1.00
8.27   1 . .
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ATOM 16   CA    CA    . GLN GLN GLN A A 3   3   . 68.728  77.540  15.089  1.00
8.42   1 . .
ATOM 17   CB    CB    . GLN GLN GLN A A 3   3   . 67.646  78.495  14.530  1.00
9.17   1 . .
ATOM 18   CG    CG    . GLN GLN GLN A A 3   3   . 66.318  78.473  15.271  1.00
13.62  1 . .
ATOM 19   CD    CD    . GLN GLN GLN A A 3   3   . 65.391  79.666  14.896  1.00
19.56  1 . .
ATOM 20   OE1   OE1   . GLN GLN GLN A A 3   3   . 65.784  80.588  14.153  1.00
23.96  1 . .
ATOM 21   NE2   NE2   . GLN GLN GLN A A 3   3   . 64.155  79.635  15.411  1.00
19.50  1 . .
ATOM 22   C     C     . GLN GLN GLN A A 3   3   . 69.780  77.275  14.014  1.00
9.37   1 . .
ATOM 23   O     O     . GLN GLN GLN A A 3   3   . 69.718  76.264  13.335  1.00
11.70  1 . .
ATOM 24   N     N     . LYS LYS LYS A A 4   4   . 70.735  78.187  13.855  1.00
7.98   1 . .
ATOM 25   CA    CA    . LYS LYS LYS A A 4   4   . 71.731  78.065  12.840  1.00
7.48   1 . .
ATOM 26   CB    CB    . LYS LYS LYS A A 4   4   . 71.127  78.542  11.497  1.00
7.77   1 . .
ATOM 27   CG    CG    . LYS LYS LYS A A 4   4   . 72.175  78.611  10.374  1.00
13.29  1 . .
ATOM 28   CD    CD    . LYS LYS LYS A A 4   4   . 71.681  78.987  8.952   1.00
20.89  1 . .
ATOM 29   CE    CE    . LYS LYS LYS A A 4   4   . 72.926  79.177  8.069   1.00
25.18  1 . .
ATOM 30   NZ    NZ    . LYS LYS LYS A A 4   4   . 72.747  80.016  6.821   1.00
28.70  1 . .
ATOM 31   C     C     . LYS LYS LYS A A 4   4   . 72.887  78.994  13.231  1.00
4.36   1 . .
ATOM 32   O     O     . LYS LYS LYS A A 4   4   . 72.667  80.035  13.913  1.00
3.82   1 . .
ATOM 33   N     N     . ILE ILE ILE A A 5   5   . 74.091  78.635  12.823  1.00
3.99   1 . .
ATOM 34   CA    CA    . ILE ILE ILE A A 5   5   . 75.278  79.500  13.008  1.00
3.13   1 . .
ATOM 35   CB    CB    . ILE ILE ILE A A 5   5   . 76.250  78.891  14.087  1.00
3.59   1 . .
ATOM 36   CG1   CG1   . ILE ILE ILE A A 5   5   . 75.639  79.059  15.442  1.00
4.72   1 . .
ATOM 37   CD1   CD1   . ILE ILE ILE A A 5   5   . 76.465  78.380  16.564  1.00
4.04   1 . .
ATOM 38   CG2   CG2   . ILE ILE ILE A A 5   5   . 77.627  79.512  14.050  1.00
4.64   1 . .
ATOM 39   C     C     . ILE ILE ILE A A 5   5   . 75.995  79.586  11.714  1.00
3.51   1 . .
ATOM 40   O     O     . ILE ILE ILE A A 5   5   . 76.204  78.548  11.083  1.00
5.68   1 . .
ATOM 41   N     N     . TRP TRP TRP A A 6   6   . 76.454  80.803  11.385  1.00
2.52   1 . .
ATOM 42   CA    CA    . TRP TRP TRP A A 6   6   . 77.258  80.975  10.182  1.00
4.00   1 . .
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ATOM 43   CB    CB    . TRP TRP TRP A A 6   6   . 76.417  81.360  8.957   1.00
5.32   1 . .
ATOM 44   CG    CG    . TRP TRP TRP A A 6   6   . 77.264  81.354  7.651   1.00
6.28   1 . .
ATOM 45   CD1   CD1   . TRP TRP TRP A A 6   6   . 77.664  82.437  6.940   1.00
10.03  1 . .
ATOM 46   NE1   NE1   . TRP TRP TRP A A 6   6   . 78.437  82.069  5.896   1.00
7.70   1 . .
ATOM 47   CE2   CE2   . TRP TRP TRP A A 6   6   . 78.473  80.705  5.833   1.00
10.26  1 . .
ATOM 48   CD2   CD2   . TRP TRP TRP A A 6   6   . 77.782  80.222  6.956   1.00
6.70   1 . .
ATOM 49   CE3   CE3   . TRP TRP TRP A A 6   6   . 77.717  78.856  7.167   1.00
8.75   1 . .
ATOM 50   CZ3   CZ3   . TRP TRP TRP A A 6   6   . 78.331  78.003  6.252   1.00
9.15   1 . .
ATOM 51   CH2   CH2   . TRP TRP TRP A A 6   6   . 79.036  78.489  5.159   1.00
9.31   1 . .
ATOM 52   CZ2   CZ2   . TRP TRP TRP A A 6   6   . 79.144  79.842  4.930   1.00
8.84   1 . .
ATOM 53   C     C     . TRP TRP TRP A A 6   6   . 78.376  81.985  10.353  1.00
2.06   1 . .
ATOM 54   O     O     . TRP TRP TRP A A 6   6   . 78.053  83.144  10.629  1.00
3.15   1 . .
ATOM 55   N     N     . ALA ALA ALA A A 7   7   . 79.624  81.595  10.186  1.00
3.39   1 . .
ATOM 56   CA    CA    . ALA ALA ALA A A 7   7   . 80.815  82.423  10.350  1.00
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ATOM 57   CB    CB    . ALA ALA ALA A A 7   7   . 81.847  81.693  11.265  1.00
3.98   1 . .
ATOM 58   C     C     . ALA ALA ALA A A 7   7   . 81.385  82.804  8.983   1.00
2.40   1 . .
ATOM 59   O     O     . ALA ALA ALA A A 7   7   . 81.195  82.101  7.962   1.00
2.58   1 . .
ATOM 60   N     N     . ARG ARG ARG A A 8   8   . 82.034  83.971  8.954   1.00
2.17   1 . .
ATOM 61   CA    CA    . ARG ARG ARG A A 8   8   . 82.683  84.426  7.756   1.00
2.08   1 . .
ATOM 62   CB    CB    . ARG ARG ARG A A 8   8   . 81.723  85.325  6.983   1.00
2.00   1 . .
ATOM 63   CG    CG    . ARG ARG ARG A A 8   8   . 81.493  86.724  7.637   1.00
3.79   1 . .
ATOM 64   CD    CD    . ARG ARG ARG A A 8   8   . 80.531  87.693  6.878   1.00
2.44   1 . .
ATOM 65   NE    NE    . ARG ARG ARG A A 8   8   . 79.240  87.016  6.662   1.00
2.46   1 . .
ATOM 66   CZ    CZ    . ARG ARG ARG A A 8   8   . 78.269  86.976  7.538   1.00
2.30   1 . .
ATOM 67   NH1   NH1   . ARG ARG ARG A A 8   8   . 78.413  87.611  8.707   1.00
4.11   1 . .
ATOM 68   NH2   NH2   . ARG ARG ARG A A 8   8   . 77.170  86.257  7.286   1.00
3.81   1 . .
ATOM 69   C     C     . ARG ARG ARG A A 8   8   . 83.957  85.173  8.110   1.00
2.56   1 . .
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ATOM 70   O     O     . ARG ARG ARG A A 8   8   . 84.163  85.570  9.260   1.00
2.16   1 . .
ATOM 71   N     N     . GLU GLU GLU A A 9   9   . 84.754  85.446  7.109   1.00
2.59   1 . .
ATOM 72   CA    CA    . GLU GLU GLU A A 9   9   . 85.896  86.322  7.181   1.00
2.67   1 . .
ATOM 73   CB    CB    . GLU GLU GLU A A 9   9   . 86.832  85.935  6.076   1.00
5.88   1 . .
ATOM 74   CG    CG    . GLU GLU GLU A A 9   9   . 88.227  85.720  6.412   1.00
8.82   1 . .
ATOM 75   CD    CD    . GLU GLU GLU A A 9   9   . 89.080  85.325  5.210   1.00
8.86   1 . .
ATOM 76   OE1   OE1   . GLU GLU GLU A A 9   9   . 90.179  84.782  5.535   1.00
2.74   1 . .
ATOM 77   OE2   OE2   . GLU GLU GLU A A 9   9   . 88.638  85.589  4.015   1.00
10.47  1 . .
ATOM 78   C     C     . GLU GLU GLU A A 9   9   . 85.425  87.776  6.963   1.00
2.33   1 . .
ATOM 79   O     O     . GLU GLU GLU A A 9   9   . 84.656  88.034  6.008   1.00
4.01   1 . .
ATOM 80   N     N     . ILE ILE ILE A A 10  10  . 85.794  88.704  7.840   1.00
2.36   1 . .
ATOM 81   CA    CA    . ILE ILE ILE A A 10  10  . 85.620  90.163  7.600   1.00
2.30   1 . .
ATOM 82   CB    CB    . ILE ILE ILE A A 10  10  . 84.659  90.839  8.511   1.00
2.22   1 . .
ATOM 83   CG1   CG1   . ILE ILE ILE A A 10  10  . 85.134  90.769  9.965   1.00
2.00   1 . .
ATOM 84   CD1   CD1   . ILE ILE ILE A A 10  10  . 84.236  91.662  10.853  1.00
3.56   1 . .
ATOM 85   CG2   CG2   . ILE ILE ILE A A 10  10  . 83.213  90.329  8.368   1.00
2.45   1 . .
ATOM 86   C     C     . ILE ILE ILE A A 10  10  . 87.013  90.779  7.751   1.00
2.03   1 . .
ATOM 87   O     O     . ILE ILE ILE A A 10  10  . 87.975  90.109  8.120   1.00
2.80   1 . .
ATOM 88   N     N     . LEU LEU LEU A A 11  11  . 87.129  92.089  7.485   1.00
2.42   1 . .
ATOM 89   CA    CA    . LEU LEU LEU A A 11  11  . 88.455  92.739  7.689   1.00
2.00   1 . .
ATOM 90   CB    CB    . LEU LEU LEU A A 11  11  . 88.909  93.601  6.482   1.00
2.75   1 . .
ATOM 91   CG    CG    . LEU LEU LEU A A 11  11  . 89.100  92.838  5.170   1.00
2.37   1 . .
ATOM 92   CD1   CD1   . LEU LEU LEU A A 11  11  . 89.740  93.848  4.189   1.00
2.20   1 . .
ATOM 93   CD2   CD2   . LEU LEU LEU A A 11  11  . 89.989  91.554  5.357   1.00
2.39   1 . .
ATOM 94   C     C     . LEU LEU LEU A A 11  11  . 88.466  93.599  8.973   1.00
2.35   1 . .
ATOM 95   O     O     . LEU LEU LEU A A 11  11  . 87.495  94.305  9.190   1.00
2.01   1 . .
ATOM 96   N     N     . ASP ASP ASP A A 12  12  . 89.570  93.550  9.719   1.00
2.00   1 . .
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ATOM 97   CA    CA    . ASP ASP ASP A A 12  12  . 89.660  94.324  10.941  1.00
2.23   1 . .
ATOM 98   CB    CB    . ASP ASP ASP A A 12  12  . 90.539  93.554  11.968  1.00
2.00   1 . .
ATOM 99   CG    CG    . ASP ASP ASP A A 12  12  . 92.021  93.641  11.717  1.00
4.92   1 . .
ATOM 100  OD1   OD1   . ASP ASP ASP A A 12  12  . 92.513  94.354  10.769  1.00
2.00   1 . .
ATOM 101  OD2   OD2   . ASP ASP ASP A A 12  12  . 92.768  92.960  12.507  1.00
2.65   1 . .
ATOM 102  C     C     . ASP ASP ASP A A 12  12  . 90.216  95.731  10.623  1.00
2.20   1 . .
ATOM 103  O     O     . ASP ASP ASP A A 12  12  . 90.406  96.074  9.414   1.00
2.04   1 . .
ATOM 104  N     N     . SER SER SER A A 13  13  . 90.417  96.564  11.635  1.00
2.38   1 . .
ATOM 105  CA    CA    . SER SER SER A A 13  13  . 90.767  97.947  11.380  1.00
2.00   1 . .
ATOM 106  CB    CB    . SER SER SER A A 13  13  . 90.676  98.719  12.718  1.00
2.35   1 . .
ATOM 107  OG    OG    . SER SER SER A A 13  13  . 91.588  98.145  13.673  1.00
2.00   1 . .
ATOM 108  C     C     . SER SER SER A A 13  13  . 92.134  98.183  10.787  1.00
2.11   1 . .
ATOM 109  O     O     . SER SER SER A A 13  13  . 92.431  99.299  10.446  1.00
2.76   1 . .
ATOM 110  N     N     . ARG ARG ARG A A 14  14  . 93.000  97.170  10.702  1.00
2.00   1 . .
ATOM 111  CA    CA    . ARG ARG ARG A A 14  14  . 94.249  97.277  10.021  1.00
2.57   1 . .
ATOM 112  CB    CB    . ARG ARG ARG A A 14  14  . 95.347  96.489  10.746  1.00
3.59   1 . .
ATOM 113  CG    CG    . ARG ARG ARG A A 14  14  . 96.187  97.407  11.624  1.00
4.71   1 . .
ATOM 114  CD    CD    . ARG ARG ARG A A 14  14  . 97.320  96.698  12.362  1.00
6.68   1 . .
ATOM 115  NE    NE    . ARG ARG ARG A A 14  14  . 96.892  95.613  13.234  1.00
10.34  1 . .
ATOM 116  CZ    CZ    . ARG ARG ARG A A 14  14  . 97.106  95.568  14.538  1.00
6.35   1 . .
ATOM 117  NH1   NH1   . ARG ARG ARG A A 14  14  . 97.742  96.595  15.180  1.00
4.01   1 . .
ATOM 118  NH2   NH2   . ARG ARG ARG A A 14  14  . 96.660  94.522  15.211  1.00
9.50   1 . .
ATOM 119  C     C     . ARG ARG ARG A A 14  14  . 94.143  96.603  8.630   1.00
2.11   1 . .
ATOM 120  O     O     . ARG ARG ARG A A 14  14  . 95.167  96.518  7.959   1.00
2.90   1 . .
ATOM 121  N     N     . GLY GLY GLY A A 15  15  . 92.984  96.110  8.201   1.00
2.09   1 . .
ATOM 122  CA    CA    . GLY GLY GLY A A 15  15  . 92.849  95.450  6.908   1.00
2.24   1 . .
ATOM 123  C     C     . GLY GLY GLY A A 15  15  . 93.227  94.004  6.889   1.00
2.97   1 . .
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ATOM 124  O     O     . GLY GLY GLY A A 15  15  . 93.564  93.487  5.831   1.00
4.26   1 . .
ATOM 125  N     N     . ASN ASN ASN A A 16  16  . 93.246  93.354  8.078   1.00
2.00   1 . .
ATOM 126  CA    CA    . ASN ASN ASN A A 16  16  . 93.602  91.938  8.205   1.00
2.67   1 . .
ATOM 127  CB    CB    . ASN ASN ASN A A 16  16  . 94.599  91.686  9.289   1.00
2.36   1 . .
ATOM 128  CG    CG    . ASN ASN ASN A A 16  16  . 95.955  92.272  8.973   1.00
2.56   1 . .
ATOM 129  OD1   OD1   . ASN ASN ASN A A 16  16  . 96.513  92.051  7.867   1.00
7.07   1 . .
ATOM 130  ND2   ND2   . ASN ASN ASN A A 16  16  . 96.525  93.005  9.933   1.00
7.01   1 . .
ATOM 131  C     C     . ASN ASN ASN A A 16  16  . 92.350  91.102  8.426   1.00
2.00   1 . .
ATOM 132  O     O     . ASN ASN ASN A A 16  16  . 91.377  91.525  9.056   1.00
2.42   1 . .
ATOM 133  N     N     . PRO PRO PRO A A 17  17  . 92.315  89.917  7.854   1.00
2.09   1 . .
ATOM 134  CA    CA    . PRO PRO PRO A A 17  17  . 91.080  89.109  8.106   1.00
2.00   1 . .
ATOM 135  CB    CB    . PRO PRO PRO A A 17  17  . 91.385  87.796  7.364   1.00
2.11   1 . .
ATOM 136  CG    CG    . PRO PRO PRO A A 17  17  . 92.343  88.258  6.315   1.00
3.07   1 . .
ATOM 137  CD    CD    . PRO PRO PRO A A 17  17  . 93.197  89.257  6.902   1.00
2.21   1 . .
ATOM 138  C     C     . PRO PRO PRO A A 17  17  . 90.834  88.782  9.580   1.00
2.13   1 . .
ATOM 139  O     O     . PRO PRO PRO A A 17  17  . 91.769  88.628  10.308  1.00
2.38   1 . .
ATOM 140  N     N     . THR THR THR A A 18  18  . 89.577  88.729  9.938   1.00
2.10   1 . .
ATOM 141  CA    CA    . THR THR THR A A 18  18  . 89.214  88.205  11.240  1.00
2.43   1 . .
ATOM 142  CB    CB    . THR THR THR A A 18  18  . 89.314  89.284  12.343  1.00
2.07   1 . .
ATOM 143  OG1   OG1   . THR THR THR A A 18  18  . 89.234  88.595  13.590  1.00
2.02   1 . .
ATOM 144  CG2   CG2   . THR THR THR A A 18  18  . 88.150  90.202  12.206  1.00
2.72   1 . .
ATOM 145  C     C     . THR THR THR A A 18  18  . 87.867  87.536  11.187  1.00
2.00   1 . .
ATOM 146  O     O     . THR THR THR A A 18  18  . 87.157  87.481  10.138  1.00
2.00   1 . .
ATOM 147  N     N     . VAL VAL VAL A A 19  19  . 87.542  86.868  12.289  1.00
2.01   1 . .
ATOM 148  CA    CA    . VAL VAL VAL A A 19  19  . 86.323  86.092  12.427  1.00
2.21   1 . .
ATOM 149  CB    CB    . VAL VAL VAL A A 19  19  . 86.518  84.969  13.473  1.00
2.63   1 . .
ATOM 150  CG1   CG1   . VAL VAL VAL A A 19  19  . 85.246  84.209  13.713  1.00
3.07   1 . .
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ATOM 151  CG2   CG2   . VAL VAL VAL A A 19  19  . 87.582  83.962  13.011  1.00
3.35   1 . .
ATOM 152  C     C     . VAL VAL VAL A A 19  19  . 85.086  86.899  12.765  1.00
2.11   1 . .
ATOM 153  O     O     . VAL VAL VAL A A 19  19  . 85.154  87.714  13.700  1.00
2.00   1 . .
ATOM 154  N     N     . GLU GLU GLU A A 20  20  . 84.023  86.699  11.994  1.00
2.23   1 . .
ATOM 155  CA    CA    . GLU GLU GLU A A 20  20  . 82.715  87.156  12.360  1.00
2.00   1 . .
ATOM 156  CB    CB    . GLU GLU GLU A A 20  20  . 82.271  88.276  11.342  1.00
2.00   1 . .
ATOM 157  CG    CG    . GLU GLU GLU A A 20  20  . 80.830  88.730  11.535  1.00
4.02   1 . .
ATOM 158  CD    CD    . GLU GLU GLU A A 20  20  . 80.468  89.921  10.674  1.00
5.29   1 . .
ATOM 159  OE1   OE1   . GLU GLU GLU A A 20  20  . 79.904  89.698  9.604   1.00
3.90   1 . .
ATOM 160  OE2   OE2   . GLU GLU GLU A A 20  20  . 80.693  91.025  11.140  1.00
3.98   1 . .
ATOM 161  C     C     . GLU GLU GLU A A 20  20  . 81.702  86.012  12.423  1.00
2.34   1 . .
ATOM 162  O     O     . GLU GLU GLU A A 20  20  . 81.714  85.180  11.519  1.00
2.00   1 . .
ATOM 163  N     N     . VAL VAL VAL A A 21  21  . 80.831  85.979  13.416  1.00
2.57   1 . .
ATOM 164  CA    CA    . VAL VAL VAL A A 21  21  . 79.853  84.930  13.553  1.00
2.83   1 . .
ATOM 165  CB    CB    . VAL VAL VAL A A 21  21  . 80.099  84.190  14.873  1.00
2.45   1 . .
ATOM 166  CG1   CG1   . VAL VAL VAL A A 21  21  . 78.970  83.122  15.121  1.00
3.60   1 . .
ATOM 167  CG2   CG2   . VAL VAL VAL A A 21  21  . 81.477  83.540  14.818  1.00
4.39   1 . .
ATOM 168  C     C     . VAL VAL VAL A A 21  21  . 78.403  85.495  13.562  1.00
2.05   1 . .
ATOM 169  O     O     . VAL VAL VAL A A 21  21  . 78.093  86.466  14.261  1.00
2.07   1 . .
ATOM 170  N     N     . ASP ASP ASP A A 22  22  . 77.538  84.870  12.772  1.00
2.47   1 . .
ATOM 171  CA    CA    . ASP ASP ASP A A 22  22  . 76.131  85.072  12.824  1.00
2.43   1 . .
ATOM 172  CB    CB    . ASP ASP ASP A A 22  22  . 75.446  85.149  11.423  1.00
2.82   1 . .
ATOM 173  CG    CG    . ASP ASP ASP A A 22  22  . 75.846  86.370  10.567  1.00
5.39   1 . .
ATOM 174  OD1   OD1   . ASP ASP ASP A A 22  22  . 75.345  86.440  9.408   1.00
8.25   1 . .
ATOM 175  OD2   OD2   . ASP ASP ASP A A 22  22  . 76.601  87.222  11.014  1.00
6.75   1 . .
ATOM 176  C     C     . ASP ASP ASP A A 22  22  . 75.405  83.915  13.503  1.00
2.75   1 . .
ATOM 177  O     O     . ASP ASP ASP A A 22  22  . 75.625  82.808  13.155  1.00
4.06   1 . .
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ATOM 178  N     N     . LEU LEU LEU A A 23  23  . 74.615  84.189  14.517  1.00
5.25   1 . .
ATOM 179  CA    CA    . LEU LEU LEU A A 23  23  . 73.948  83.121  15.232  1.00
4.19   1 . .
ATOM 180  CB    CB    . LEU LEU LEU A A 23  23  . 74.414  83.036  16.688  1.00
5.97   1 . .
ATOM 181  CG    CG    . LEU LEU LEU A A 23  23  . 73.916  81.825  17.539  1.00
4.70   1 . .
ATOM 182  CD1   CD1   . LEU LEU LEU A A 23  23  . 74.975  81.431  18.545  1.00
5.47   1 . .
ATOM 183  CD2   CD2   . LEU LEU LEU A A 23  23  . 72.598  82.087  18.264  1.00
4.47   1 . .
ATOM 184  C     C     . LEU LEU LEU A A 23  23  . 72.481  83.475  15.221  1.00
3.84   1 . .
ATOM 185  O     O     . LEU LEU LEU A A 23  23  . 72.077  84.569  15.577  1.00
6.34   1 . .
ATOM 186  N     N     . TYR TYR TYR A A 24  24  . 71.679  82.494  14.823  1.00
3.83   1 . .
ATOM 187  CA    CA    . TYR TYR TYR A A 24  24  . 70.250  82.661  14.736  1.00
4.13   1 . .
ATOM 188  CB    CB    . TYR TYR TYR A A 24  24  . 69.739  82.218  13.392  1.00
5.48   1 . .
ATOM 189  CG    CG    . TYR TYR TYR A A 24  24  . 70.263  82.913  12.155  1.00
6.40   1 . .
ATOM 190  CD1   CD1   . TYR TYR TYR A A 24  24  . 71.507  82.666  11.668  1.00
8.79   1 . .
ATOM 191  CE1   CE1   . TYR TYR TYR A A 24  24  . 71.971  83.317  10.474  1.00
8.95   1 . .
ATOM 192  CZ    CZ    . TYR TYR TYR A A 24  24  . 71.128  84.201  9.802   1.00
13.86  1 . .
ATOM 193  OH    OH    . TYR TYR TYR A A 24  24  . 71.509  84.854  8.651   1.00
16.75  1 . .
ATOM 194  CE2   CE2   . TYR TYR TYR A A 24  24  . 69.859  84.402  10.298  1.00
11.24  1 . .
ATOM 195  CD2   CD2   . TYR TYR TYR A A 24  24  . 69.454  83.796  11.481  1.00
9.92   1 . .
ATOM 196  C     C     . TYR TYR TYR A A 24  24  . 69.496  81.877  15.790  1.00
5.76   1 . .
ATOM 197  O     O     . TYR TYR TYR A A 24  24  . 69.800  80.674  16.059  1.00
6.63   1 . .
ATOM 198  N     N     . THR THR THR A A 25  25  . 68.507  82.579  16.350  1.00
7.79   1 . .
ATOM 199  CA    CA    . THR THR THR A A 25  25  . 67.528  81.982  17.238  1.00
8.81   1 . .
ATOM 200  CB    CB    . THR THR THR A A 25  25  . 67.724  82.409  18.702  1.00
7.60   1 . .
ATOM 201  OG1   OG1   . THR THR THR A A 25  25  . 67.379  83.788  18.796  1.00
10.78  1 . .
ATOM 202  CG2   CG2   . THR THR THR A A 25  25  . 69.180  82.269  19.087  1.00
9.34   1 . .
ATOM 203  C     C     . THR THR THR A A 25  25  . 66.153  82.400  16.762  1.00
9.45   1 . .
ATOM 204  O     O     . THR THR THR A A 25  25  . 66.033  83.068  15.744  1.00
9.64   1 . .
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ATOM 205  N     N     . ALA ALA ALA A A 26  26  . 65.121  82.013  17.496  1.00
10.68  1 . .
ATOM 206  CA    CA    . ALA ALA ALA A A 26  26  . 63.776  82.404  17.137  1.00
12.12  1 . .
ATOM 207  CB    CB    . ALA ALA ALA A A 26  26  . 62.755  81.646  17.978  1.00
11.95  1 . .
ATOM 208  C     C     . ALA ALA ALA A A 26  26  . 63.614  83.913  17.291  1.00
12.84  1 . .
ATOM 209  O     O     . ALA ALA ALA A A 26  26  . 62.681  84.447  16.737  1.00
14.67  1 . .
ATOM 210  N     N     . LYS LYS LYS A A 27  27  . 64.502  84.589  18.032  1.00
14.04  1 . .
ATOM 211  CA    CA    . LYS LYS LYS A A 27  27  . 64.500  86.056  18.133  1.00
15.02  1 . .
ATOM 212  CB    CB    . LYS LYS LYS A A 27  27  . 65.230  86.506  19.400  1.00
13.60  1 . .
ATOM 213  CG    CG    . LYS LYS LYS A A 27  27  . 64.614  86.015  20.705  1.00
18.33  1 . .
ATOM 214  CD    CD    . LYS LYS LYS A A 27  27  . 63.475  86.894  21.096  1.00
22.41  1 . .
ATOM 215  CE    CE    . LYS LYS LYS A A 27  27  . 62.819  86.462  22.363  1.00
22.76  1 . .
ATOM 216  NZ    NZ    . LYS LYS LYS A A 27  27  . 61.472  87.053  22.306  1.00
21.55  1 . .
ATOM 217  C     C     . LYS LYS LYS A A 27  27  . 65.133  86.811  16.932  1.00
15.31  1 . .
ATOM 218  O     O     . LYS LYS LYS A A 27  27  . 64.944  88.032  16.744  1.00
16.86  1 . .
ATOM 219  N     N     . GLY GLY GLY A A 28  28  . 65.906  86.110  16.119  1.00
15.00  1 . .
ATOM 220  CA    CA    . GLY GLY GLY A A 28  28  . 66.501  86.792  15.001  1.00
14.10  1 . .
ATOM 221  C     C     . GLY GLY GLY A A 28  28  . 67.968  86.484  14.939  1.00
11.99  1 . .
ATOM 222  O     O     . GLY GLY GLY A A 28  28  . 68.425  85.428  15.445  1.00
12.76  1 . .
ATOM 223  N     N     . LEU LEU LEU A A 29  29  . 68.718  87.455  14.403  1.00
9.99   1 . .
ATOM 224  CA    CA    . LEU LEU LEU A A 29  29  . 70.114  87.318  14.015  1.00
9.43   1 . .
ATOM 225  CB    CB    . LEU LEU LEU A A 29  29  . 70.341  87.908  12.609  1.00
11.15  1 . .
ATOM 226  CG    CG    . LEU LEU LEU A A 29  29  . 71.678  87.508  11.937  1.00
14.35  1 . .
ATOM 227  CD1   CD1   . LEU LEU LEU A A 29  29  . 71.730  87.759  10.413  1.00
16.33  1 . .
ATOM 228  CD2   CD2   . LEU LEU LEU A A 29  29  . 72.845  88.233  12.570  1.00
15.10  1 . .
ATOM 229  C     C     . LEU LEU LEU A A 29  29  . 70.970  88.103  14.984  1.00
7.11   1 . .
ATOM 230  O     O     . LEU LEU LEU A A 29  29  . 70.667  89.288  15.229  1.00
9.38   1 . .
ATOM 231  N     N     . PHE PHE PHE A A 30  30  . 72.009  87.461  15.537  1.00
4.56   1 . .
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ATOM 232  CA    CA    . PHE PHE PHE A A 30  30  . 72.968  88.069  16.462  1.00
4.39   1 . .
ATOM 233  CB    CB    . PHE PHE PHE A A 30  30  . 72.808  87.461  17.854  1.00
5.91   1 . .
ATOM 234  CG    CG    . PHE PHE PHE A A 30  30  . 71.398  87.570  18.318  1.00
5.86   1 . .
ATOM 235  CD1   CD1   . PHE PHE PHE A A 30  30  . 70.941  88.775  18.811  1.00
6.68   1 . .
ATOM 236  CE1   CE1   . PHE PHE PHE A A 30  30  . 69.624  88.957  19.130  1.00
9.54   1 . .
ATOM 237  CZ    CZ    . PHE PHE PHE A A 30  30  . 68.699  87.928  18.900  1.00
9.02   1 . .
ATOM 238  CE2   CE2   . PHE PHE PHE A A 30  30  . 69.121  86.687  18.336  1.00
8.60   1 . .
ATOM 239  CD2   CD2   . PHE PHE PHE A A 30  30  . 70.462  86.518  18.034  1.00
8.00   1 . .
ATOM 240  C     C     . PHE PHE PHE A A 30  30  . 74.354  87.913  15.920  1.00
6.05   1 . .
ATOM 241  O     O     . PHE PHE PHE A A 30  30  . 74.754  86.820  15.461  1.00
9.02   1 . .
ATOM 242  N     N     . ARG ARG ARG A A 31  31  . 75.100  89.015  15.894  1.00
3.23   1 . .
ATOM 243  CA    CA    . ARG ARG ARG A A 31  31  . 76.346  88.997  15.144  1.00
2.72   1 . .
ATOM 244  CB    CB    . ARG ARG ARG A A 31  31  . 76.206  89.874  13.834  1.00
4.07   1 . .
ATOM 245  CG    CG    . ARG ARG ARG A A 31  31  . 77.426  90.095  13.037  1.00
3.14   1 . .
ATOM 246  CD    CD    . ARG ARG ARG A A 31  31  . 77.168  90.813  11.697  1.00
5.99   1 . .
ATOM 247  NE    NE    . ARG ARG ARG A A 31  31  . 76.359  89.972  10.816  1.00
6.48   1 . .
ATOM 248  CZ    CZ    . ARG ARG ARG A A 31  31  . 75.447  90.401  9.935   1.00
8.33   1 . .
ATOM 249  NH1   NH1   . ARG ARG ARG A A 31  31  . 75.139  91.688  9.851   1.00
7.78   1 . .
ATOM 250  NH2   NH2   . ARG ARG ARG A A 31  31  . 74.789  89.505  9.171   1.00
10.41  1 . .
ATOM 251  C     C     . ARG ARG ARG A A 31  31  . 77.445  89.529  16.036  1.00
3.74   1 . .
ATOM 252  O     O     . ARG ARG ARG A A 31  31  . 77.238  90.577  16.655  1.00
3.14   1 . .
ATOM 253  N     N     . ALA ALA ALA A A 32  32  . 78.640  88.907  15.978  1.00
2.61   1 . .
ATOM 254  CA    CA    . ALA ALA ALA A A 32  32  . 79.833  89.384  16.718  1.00
2.15   1 . .
ATOM 255  CB    CB    . ALA ALA ALA A A 32  32  . 79.911  88.700  18.090  1.00
3.18   1 . .
ATOM 256  C     C     . ALA ALA ALA A A 32  32  . 81.064  89.134  15.948  1.00
2.46   1 . .
ATOM 257  O     O     . ALA ALA ALA A A 32  32  . 81.009  88.330  15.020  1.00
2.00   1 . .
ATOM 258  N     N     . ALA ALA ALA A A 33  33  . 82.102  89.947  16.169  1.00
2.22   1 . .
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ATOM 259  CA    CA    . ALA ALA ALA A A 33  33  . 83.396  89.783  15.527  1.00
2.30   1 . .
ATOM 260  CB    CB    . ALA ALA ALA A A 33  33  . 83.591  90.854  14.453  1.00
2.00   1 . .
ATOM 261  C     C     . ALA ALA ALA A A 33  33  . 84.530  89.811  16.520  1.00
2.14   1 . .
ATOM 262  O     O     . ALA ALA ALA A A 33  33  . 84.387  90.316  17.694  1.00
3.94   1 . .
ATOM 263  N     N     . VAL VAL VAL A A 34  34  . 85.633  89.224  16.093  1.00
2.00   1 . .
ATOM 264  CA    CA    . VAL VAL VAL A A 34  34  . 86.762  88.981  16.984  1.00
2.31   1 . .
ATOM 265  CB    CB    . VAL VAL VAL A A 34  34  . 87.205  87.505  16.830  1.00
2.00   1 . .
ATOM 266  CG1   CG1   . VAL VAL VAL A A 34  34  . 88.502  87.237  17.632  1.00
2.10   1 . .
ATOM 267  CG2   CG2   . VAL VAL VAL A A 34  34  . 86.068  86.630  17.169  1.00
2.58   1 . .
ATOM 268  C     C     . VAL VAL VAL A A 34  34  . 87.930  89.924  16.691  1.00
2.00   1 . .
ATOM 269  O     O     . VAL VAL VAL A A 34  34  . 88.320  90.128  15.505  1.00
2.22   1 . .
ATOM 270  N     N     . PRO PRO PRO A A 35  35  . 88.542  90.517  17.735  1.00
2.34   1 . .
ATOM 271  CA    CA    . PRO PRO PRO A A 35  35  . 89.638  91.415  17.502  1.00
2.01   1 . .
ATOM 272  CB    CB    . PRO PRO PRO A A 35  35  . 89.572  92.334  18.732  1.00
2.24   1 . .
ATOM 273  CG    CG    . PRO PRO PRO A A 35  35  . 89.196  91.350  19.854  1.00
2.22   1 . .
ATOM 274  CD    CD    . PRO PRO PRO A A 35  35  . 88.113  90.484  19.155  1.00
2.00   1 . .
ATOM 275  C     C     . PRO PRO PRO A A 35  35  . 90.955  90.704  17.417  1.00
2.36   1 . .
ATOM 276  O     O     . PRO PRO PRO A A 35  35  . 90.956  89.481  17.603  1.00
2.41   1 . .
ATOM 277  N     N     . SER SER SER A A 36  36  . 92.026  91.425  17.137  1.00
2.00   1 . .
ATOM 278  CA    CA    . SER SER SER A A 36  36  . 93.329  90.846  16.940  1.00
2.00   1 . .
ATOM 279  CB    CB    . SER SER SER A A 36  36  . 93.557  90.559  15.443  1.00
3.02   1 . .
ATOM 280  OG    OG    . SER SER SER A A 36  36  . 94.782  89.901  15.286  1.00
3.98   1 . .
ATOM 281  C     C     . SER SER SER A A 36  36  . 94.457  91.786  17.379  1.00
2.00   1 . .
ATOM 282  O     O     . SER SER SER A A 36  36  . 94.508  92.914  16.928  1.00
2.00   1 . .
ATOM 283  N     N     . GLY GLY GLY A A 37  37  . 95.387  91.250  18.180  1.00
2.61   1 . .
ATOM 284  CA    CA    . GLY GLY GLY A A 37  37  . 96.526  92.035  18.731  1.00
2.35   1 . .
ATOM 285  C     C     . GLY GLY GLY A A 37  37  . 97.684  92.136  17.765  1.00
2.00   1 . .
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ATOM 286  O     O     . GLY GLY GLY A A 37  37  . 97.788  91.278  16.838  1.00
2.25   1 . .
ATOM 287  N     N     . ALA ALA ALA A A 38  38  . 98.593  93.105  18.006  1.00
2.00   1 . .
ATOM 288  CA    CA    . ALA ALA ALA A A 38  38  . 99.866  93.175  17.310  1.00
2.06   1 . .
ATOM 289  CB    CB    . ALA ALA ALA A A 38  38  . 100.115 94.523  16.754  1.00
2.93   1 . .
ATOM 290  C     C     . ALA ALA ALA A A 38  38  . 100.918 92.859  18.345  1.00
2.50   1 . .
ATOM 291  O     O     . ALA ALA ALA A A 38  38  . 101.793 91.987  18.078  1.00
3.80   1 . .
ATOM 292  N     N     . SER SER SER A A 39  39  . 100.858 93.488  19.528  1.00
3.29   1 . .
ATOM 293  CA    CA    . SER SER SER A A 39  39  . 101.879 93.209  20.506  1.00
3.36   1 . .
ATOM 294  CB    CB    . SER SER SER A A 39  39  . 102.288 94.459  21.335  1.00
4.67   1 . .
ATOM 295  OG    OG    . SER SER SER A A 39  39  . 101.077 95.070  21.786  1.00
2.45   1 . .
ATOM 296  C     C     . SER SER SER A A 39  39  . 101.291 92.104  21.369  1.00
3.60   1 . .
ATOM 297  O     O     . SER SER SER A A 39  39  . 100.810 92.316  22.482  1.00
2.71   1 . .
ATOM 298  N     N     . THR THR THR A A 40  40  . 101.375 90.897  20.850  1.00
2.22   1 . .
ATOM 299  CA    CA    . THR THR THR A A 40  40  . 100.675 89.770  21.501  1.00
2.85   1 . .
ATOM 300  CB    CB    . THR THR THR A A 40  40  . 100.120 88.764  20.425  1.00
2.33   1 . .
ATOM 301  OG1   OG1   . THR THR THR A A 40  40  . 101.124 88.474  19.457  1.00
4.45   1 . .
ATOM 302  CG2   CG2   . THR THR THR A A 40  40  . 98.829  89.369  19.684  1.00
2.28   1 . .
ATOM 303  C     C     . THR THR THR A A 40  40  . 101.587 88.988  22.459  1.00
2.75   1 . .
ATOM 304  O     O     . THR THR THR A A 40  40  . 102.723 88.603  22.066  1.00
5.19   1 . .
ATOM 305  N     N     . GLY GLY GLY A A 41  41  . 101.121 88.725  23.674  1.00
2.80   1 . .
ATOM 306  CA    CA    . GLY GLY GLY A A 41  41  . 102.000 88.038  24.627  1.00
2.81   1 . .
ATOM 307  C     C     . GLY GLY GLY A A 41  41  . 102.164 86.588  24.212  1.00
3.70   1 . .
ATOM 308  O     O     . GLY GLY GLY A A 41  41  . 101.248 86.023  23.641  1.00
4.95   1 . .
ATOM 309  N     N     . ILE ILE ILE A A 42  42  . 103.267 85.998  24.633  1.00
3.36   1 . .
ATOM 310  CA    CA    . ILE ILE ILE A A 42  42  . 103.516 84.602  24.279  1.00
3.37   1 . .
ATOM 311  CB    CB    . ILE ILE ILE A A 42  42  . 104.981 84.208  24.550  1.00
4.22   1 . .
ATOM 312  CG1   CG1   . ILE ILE ILE A A 42  42  . 105.250 84.175  26.032  1.00
5.99   1 . .
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ATOM 313  CD1   CD1   . ILE ILE ILE A A 42  42  . 106.672 83.709  26.333  1.00
10.15  1 . .
ATOM 314  CG2   CG2   . ILE ILE ILE A A 42  42  . 105.933 85.113  23.734  1.00
5.48   1 . .
ATOM 315  C     C     . ILE ILE ILE A A 42  42  . 102.488 83.669  24.917  1.00
3.19   1 . .
ATOM 316  O     O     . ILE ILE ILE A A 42  42  . 102.237 82.549  24.412  1.00
4.44   1 . .
ATOM 317  N     N     . TYR TYR TYR A A 43  43  . 101.883 84.061  26.036  1.00
4.73   1 . .
ATOM 318  CA    CA    . TYR TYR TYR A A 43  43  . 100.908 83.186  26.708  1.00
3.11   1 . .
ATOM 319  CB    CB    . TYR TYR TYR A A 43  43  . 101.073 83.332  28.260  1.00
5.07   1 . .
ATOM 320  CG    CG    . TYR TYR TYR A A 43  43  . 102.459 82.993  28.713  1.00
6.49   1 . .
ATOM 321  CD1   CD1   . TYR TYR TYR A A 43  43  . 103.355 83.966  29.121  1.00
9.73   1 . .
ATOM 322  CE1   CE1   . TYR TYR TYR A A 43  43  . 104.641 83.625  29.514  1.00
9.08   1 . .
ATOM 323  CZ    CZ    . TYR TYR TYR A A 43  43  . 105.035 82.278  29.493  1.00
11.93  1 . .
ATOM 324  OH    OH    . TYR TYR TYR A A 43  43  . 106.297 81.869  29.910  1.00
10.68  1 . .
ATOM 325  CE2   CE2   . TYR TYR TYR A A 43  43  . 104.133 81.300  29.086  1.00
10.86  1 . .
ATOM 326  CD2   CD2   . TYR TYR TYR A A 43  43  . 102.888 81.662  28.691  1.00
6.35   1 . .
ATOM 327  C     C     . TYR TYR TYR A A 43  43  . 99.460  83.349  26.318  1.00
3.02   1 . .
ATOM 328  O     O     . TYR TYR TYR A A 43  43  . 98.620  82.662  26.894  1.00
4.67   1 . .
ATOM 329  N     N     . GLU GLU GLU A A 44  44  . 99.154  84.200  25.325  1.00
3.86   1 . .
ATOM 330  CA    CA    . GLU GLU GLU A A 44  44  . 97.763  84.314  24.877  1.00
3.02   1 . .
ATOM 331  CB    CB    . GLU GLU GLU A A 44  44  . 97.611  85.447  23.825  1.00
3.07   1 . .
ATOM 332  CG    CG    . GLU GLU GLU A A 44  44  . 98.048  86.801  24.424  1.00
3.59   1 . .
ATOM 333  CD    CD    . GLU GLU GLU A A 44  44  . 97.667  87.983  23.563  1.00
4.32   1 . .
ATOM 334  OE1   OE1   . GLU GLU GLU A A 44  44  . 96.806  87.827  22.657  1.00
2.79   1 . .
ATOM 335  OE2   OE2   . GLU GLU GLU A A 44  44  . 98.152  89.081  23.835  1.00
2.57   1 . .
ATOM 336  C     C     . GLU GLU GLU A A 44  44  . 97.265  83.026  24.199  1.00
2.46   1 . .
ATOM 337  O     O     . GLU GLU GLU A A 44  44  . 98.041  82.257  23.646  1.00
3.60   1 . .
ATOM 338  N     N     . ALA ALA ALA A A 45  45  . 95.964  82.781  24.324  1.00
3.17   1 . .
ATOM 339  CA    CA    . ALA ALA ALA A A 45  45  . 95.300  81.662  23.625  1.00
2.01   1 . .
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ATOM 340  CB    CB    . ALA ALA ALA A A 45  45  . 93.866  81.667  23.972  1.00
2.39   1 . .
ATOM 341  C     C     . ALA ALA ALA A A 45  45  . 95.573  81.781  22.104  1.00
3.44   1 . .
ATOM 342  O     O     . ALA ALA ALA A A 45  45  . 95.842  82.888  21.567  1.00
4.93   1 . .
ATOM 343  N     N     . LEU LEU LEU A A 46  46  . 95.597  80.652  21.403  1.00
4.13   1 . .
ATOM 344  CA    CA    . LEU LEU LEU A A 46  46  . 96.018  80.653  20.030  1.00
3.99   1 . .
ATOM 345  CB    CB    . LEU LEU LEU A A 46  46  . 96.162  79.230  19.528  1.00
3.40   1 . .
ATOM 346  CG    CG    . LEU LEU LEU A A 46  46  . 97.148  78.883  18.391  1.00
11.58  1 . .
ATOM 347  CD1   CD1   . LEU LEU LEU A A 46  46  . 96.327  78.400  17.213  1.00
12.19  1 . .
ATOM 348  CD2   CD2   . LEU LEU LEU A A 46  46  . 98.234  79.910  18.048  1.00
12.06  1 . .
ATOM 349  C     C     . LEU LEU LEU A A 46  46  . 95.081  81.356  19.106  1.00
4.26   1 . .
ATOM 350  O     O     . LEU LEU LEU A A 46  46  . 93.906  81.039  19.059  1.00
5.40   1 . .
ATOM 351  N     N     . GLU GLU GLU A A 47  47  . 95.635  82.321  18.350  1.00
2.84   1 . .
ATOM 352  CA    CA    . GLU GLU GLU A A 47  47  . 94.847  82.993  17.285  1.00
2.03   1 . .
ATOM 353  CB    CB    . GLU GLU GLU A A 47  47  . 95.324  84.426  17.073  1.00
2.89   1 . .
ATOM 354  CG    CG    . GLU GLU GLU A A 47  47  . 94.671  85.093  15.849  1.00
2.43   1 . .
ATOM 355  CD    CD    . GLU GLU GLU A A 47  47  . 95.183  86.551  15.686  1.00
5.45   1 . .
ATOM 356  OE1   OE1   . GLU GLU GLU A A 47  47  . 94.542  87.427  16.299  1.00
4.53   1 . .
ATOM 357  OE2   OE2   . GLU GLU GLU A A 47  47  . 96.288  86.756  15.077  1.00
4.61   1 . .
ATOM 358  C     C     . GLU GLU GLU A A 47  47  . 95.158  82.173  16.023  1.00
2.51   1 . .
ATOM 359  O     O     . GLU GLU GLU A A 47  47  . 96.295  82.169  15.536  1.00
2.66   1 . .
ATOM 360  N     N     . LEU LEU LEU A A 48  48  . 94.197  81.373  15.545  1.00
2.20   1 . .
ATOM 361  CA    CA    . LEU LEU LEU A A 48  48  . 94.473  80.506  14.379  1.00
2.30   1 . .
ATOM 362  CB    CB    . LEU LEU LEU A A 48  48  . 93.530  79.352  14.308  1.00
2.66   1 . .
ATOM 363  CG    CG    . LEU LEU LEU A A 48  48  . 93.707  78.360  13.125  1.00
4.35   1 . .
ATOM 364  CD1   CD1   . LEU LEU LEU A A 48  48  . 94.998  77.696  13.267  1.00
4.86   1 . .
ATOM 365  CD2   CD2   . LEU LEU LEU A A 48  48  . 92.583  77.428  13.254  1.00
5.06   1 . .
ATOM 366  C     C     . LEU LEU LEU A A 48  48  . 94.397  81.294  13.090  1.00
2.30   1 . .
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ATOM 367  O     O     . LEU LEU LEU A A 48  48  . 93.328  81.827  12.768  1.00
2.85   1 . .
ATOM 368  N     N     . ARG ARG ARG A A 49  49  . 95.500  81.284  12.349  1.00
2.84   1 . .
ATOM 369  CA    CA    . ARG ARG ARG A A 49  49  . 95.595  81.866  10.985  1.00
4.27   1 . .
ATOM 370  CB    CB    . ARG ARG ARG A A 49  49  . 96.718  82.935  10.915  1.00
4.64   1 . .
ATOM 371  CG    CG    . ARG ARG ARG A A 49  49  . 96.498  84.126  11.905  1.00
7.49   1 . .
ATOM 372  CD    CD    . ARG ARG ARG A A 49  49  . 96.077  85.340  11.234  1.00
10.51  1 . .
ATOM 373  NE    NE    . ARG ARG ARG A A 49  49  . 95.876  86.417  12.185  1.00
6.19   1 . .
ATOM 374  CZ    CZ    . ARG ARG ARG A A 49  49  . 94.964  87.334  11.926  1.00
5.24   1 . .
ATOM 375  NH1   NH1   . ARG ARG ARG A A 49  49  . 94.280  87.269  10.806  1.00
5.54   1 . .
ATOM 376  NH2   NH2   . ARG ARG ARG A A 49  49  . 94.710  88.302  12.747  1.00
5.51   1 . .
ATOM 377  C     C     . ARG ARG ARG A A 49  49  . 95.837  80.742  9.968   1.00
3.92   1 . .
ATOM 378  O     O     . ARG ARG ARG A A 49  49  . 96.402  79.720  10.345  1.00
5.43   1 . .
ATOM 379  N     N     . ASP ASP ASP A A 50  50  . 95.498  80.967  8.694   1.00
3.36   1 . .
ATOM 380  CA    CA    . ASP ASP ASP A A 50  50  . 95.598  79.917  7.715   1.00
4.52   1 . .
ATOM 381  CB    CB    . ASP ASP ASP A A 50  50  . 94.773  80.197  6.478   1.00
2.59   1 . .
ATOM 382  CG    CG    . ASP ASP ASP A A 50  50  . 93.310  80.386  6.793   1.00
2.44   1 . .
ATOM 383  OD1   OD1   . ASP ASP ASP A A 50  50  . 92.879  79.921  7.869   1.00
2.29   1 . .
ATOM 384  OD2   OD2   . ASP ASP ASP A A 50  50  . 92.606  81.070  6.023   1.00
4.13   1 . .
ATOM 385  C     C     . ASP ASP ASP A A 50  50  . 97.014  79.615  7.313   1.00
5.30   1 . .
ATOM 386  O     O     . ASP ASP ASP A A 50  50  . 97.254  78.460  6.984   1.00
5.56   1 . .
ATOM 387  N     N     . GLY GLY GLY A A 51  51  . 97.882  80.645  7.233   1.00
7.86   1 . .
ATOM 388  CA    CA    . GLY GLY GLY A A 51  51  . 99.246  80.494  6.727   1.00
7.92   1 . .
ATOM 389  C     C     . GLY GLY GLY A A 51  51  . 99.391  80.256  5.210   1.00
9.04   1 . .
ATOM 390  O     O     . GLY GLY GLY A A 51  51  . 100.422 79.743  4.710   1.00
12.69  1 . .
ATOM 391  N     N     . ASP ASP ASP A A 52  52  . 98.355  80.579  4.452   1.00
8.48   1 . .
ATOM 392  CA    CA    . ASP ASP ASP A A 52  52  . 98.451  80.498  2.995   1.00
10.38  1 . .
ATOM 393  CB    CB    . ASP ASP ASP A A 52  52  . 97.048  80.253  2.408   1.00
10.33  1 . .
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ATOM 394  CG    CG    . ASP ASP ASP A A 52  52  . 97.040  80.252  0.890   1.00
12.20  1 . .
ATOM 395  OD1   OD1   . ASP ASP ASP A A 52  52  . 95.997  79.927  0.343   1.00
13.71  1 . .
ATOM 396  OD2   OD2   . ASP ASP ASP A A 52  52  . 98.049  80.570  0.253   1.00
16.84  1 . .
ATOM 397  C     C     . ASP ASP ASP A A 52  52  . 99.065  81.802  2.471   1.00
13.15  1 . .
ATOM 398  O     O     . ASP ASP ASP A A 52  52  . 98.413  82.841  2.432   1.00
10.86  1 . .
ATOM 399  N     N     . LYS LYS LYS A A 53  53  . 100.345 81.744  2.106   1.00
14.79  1 . .
ATOM 400  CA    CA    . LYS LYS LYS A A 53  53  . 101.063 82.891  1.576   1.00
19.54  1 . .
ATOM 401  CB    CB    . LYS LYS LYS A A 53  53  . 102.551 82.536  1.441   1.00
20.32  1 . .
ATOM 402  CG    CG    . LYS LYS LYS A A 53  53  . 103.200 82.055  2.756   1.00
22.71  1 . .
ATOM 403  CD    CD    . LYS LYS LYS A A 53  53  . 103.286 83.190  3.771   1.00
27.89  1 . .
ATOM 404  CE    CE    . LYS LYS LYS A A 53  53  . 104.534 84.012  3.532   1.00
31.24  1 . .
ATOM 405  NZ    NZ    . LYS LYS LYS A A 53  53  . 105.763 83.310  4.038   1.00
31.61  1 . .
ATOM 406  C     C     . LYS LYS LYS A A 53  53  . 100.487 83.484  0.279   1.00
19.52  1 . .
ATOM 407  O     O     . LYS LYS LYS A A 53  53  . 100.842 84.600  -0.111  1.00
21.53  1 . .
ATOM 408  N     N     . GLN GLN GLN A A 54  54  . 99.599  82.773  -0.405  1.00
20.01  1 . .
ATOM 409  CA    CA    . GLN GLN GLN A A 54  54  . 98.971  83.357  -1.604  1.00
20.60  1 . .
ATOM 410  CB    CB    . GLN GLN GLN A A 54  54  . 98.932  82.358  -2.741  1.00
21.18  1 . .
ATOM 411  CG    CG    . GLN GLN GLN A A 54  54  . 100.337 82.027  -3.260  1.00
25.65  1 . .
ATOM 412  CD    CD    . GLN GLN GLN A A 54  54  . 101.063 83.281  -3.813  1.00
29.89  1 . .
ATOM 413  OE1   OE1   . GLN GLN GLN A A 54  54  . 100.687 83.822  -4.865  1.00
31.98  1 . .
ATOM 414  NE2   NE2   . GLN GLN GLN A A 54  54  . 102.095 83.746  -3.091  1.00
29.06  1 . .
ATOM 415  C     C     . GLN GLN GLN A A 54  54  . 97.612  83.997  -1.327  1.00
19.37  1 . .
ATOM 416  O     O     . GLN GLN GLN A A 54  54  . 96.787  84.228  -2.239  1.00
20.57  1 . .
ATOM 417  N     N     . ARG ARG ARG A A 55  55  . 97.410  84.346  -0.054  1.00
16.88  1 . .
ATOM 418  CA    CA    . ARG ARG ARG A A 55  55  . 96.138  84.887  0.373   1.00
13.18  1 . .
ATOM 419  CB    CB    . ARG ARG ARG A A 55  55  . 95.195  83.717  0.591   1.00
13.74  1 . .
ATOM 420  CG    CG    . ARG ARG ARG A A 55  55  . 93.820  84.143  0.765   1.00
11.15  1 . .
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ATOM 421  CD    CD    . ARG ARG ARG A A 55  55  . 92.800  83.045  0.620   1.00
9.83   1 . .
ATOM 422  NE    NE    . ARG ARG ARG A A 55  55  . 91.506  83.718  0.733   1.00
5.50   1 . .
ATOM 423  CZ    CZ    . ARG ARG ARG A A 55  55  . 90.961  84.210  1.834   1.00
6.76   1 . .
ATOM 424  NH1   NH1   . ARG ARG ARG A A 55  55  . 91.498  83.953  3.062   1.00
3.78   1 . .
ATOM 425  NH2   NH2   . ARG ARG ARG A A 55  55  . 89.781  84.820  1.730   1.00
5.05   1 . .
ATOM 426  C     C     . ARG ARG ARG A A 55  55  . 96.322  85.696  1.646   1.00
10.84  1 . .
ATOM 427  O     O     . ARG ARG ARG A A 55  55  . 96.711  85.169  2.716   1.00
10.58  1 . .
ATOM 428  N     N     . TYR TYR TYR A A 56  56  . 96.124  86.997  1.538   1.00
8.87   1 . .
ATOM 429  CA    CA    . TYR TYR TYR A A 56  56  . 96.258  87.882  2.699   1.00
8.39   1 . .
ATOM 430  CB    CB    . TYR TYR TYR A A 56  56  . 95.060  87.658  3.655   1.00
8.44   1 . .
ATOM 431  CG    CG    . TYR TYR TYR A A 56  56  . 93.791  88.335  3.236   1.00
6.49   1 . .
ATOM 432  CD1   CD1   . TYR TYR TYR A A 56  56  . 92.680  87.562  2.793   1.00
3.66   1 . .
ATOM 433  CE1   CE1   . TYR TYR TYR A A 56  56  . 91.451  88.141  2.426   1.00
6.43   1 . .
ATOM 434  CZ    CZ    . TYR TYR TYR A A 56  56  . 91.378  89.563  2.474   1.00
5.51   1 . .
ATOM 435  OH    OH    . TYR TYR TYR A A 56  56  . 90.203  90.153  2.059   1.00
5.79   1 . .
ATOM 436  CE2   CE2   . TYR TYR TYR A A 56  56  . 92.469  90.366  2.895   1.00
5.44   1 . .
ATOM 437  CD2   CD2   . TYR TYR TYR A A 56  56  . 93.674  89.785  3.270   1.00
5.81   1 . .
ATOM 438  C     C     . TYR TYR TYR A A 56  56  . 97.560  87.796  3.432   1.00
9.43   1 . .
ATOM 439  O     O     . TYR TYR TYR A A 56  56  . 97.594  87.915  4.623   1.00
9.70   1 . .
ATOM 440  N     N     . LEU LEU LEU A A 57  57  . 98.624  87.522  2.683   1.00
11.67  1 . .
ATOM 441  CA    CA    . LEU LEU LEU A A 57  57  . 99.981  87.302  3.151   1.00
12.81  1 . .
ATOM 442  CB    CB    . LEU LEU LEU A A 57  57  . 100.674 88.654  3.440   1.00
16.06  1 . .
ATOM 443  CG    CG    . LEU LEU LEU A A 57  57  . 100.463 89.899  2.555   1.00
18.20  1 . .
ATOM 444  CD1   CD1   . LEU LEU LEU A A 57  57  . 101.152 91.064  3.254   1.00
19.24  1 . .
ATOM 445  CD2   CD2   . LEU LEU LEU A A 57  57  . 100.946 89.797  1.100   1.00
21.79  1 . .
ATOM 446  C     C     . LEU LEU LEU A A 57  57  . 100.059 86.318  4.342   1.00
12.35  1 . .
ATOM 447  O     O     . LEU LEU LEU A A 57  57  . 100.802 86.543  5.316   1.00
14.14  1 . .
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ATOM 448  N     N     . GLY GLY GLY A A 58  58  . 99.293  85.227  4.254   1.00
10.18  1 . .
ATOM 449  CA    CA    . GLY GLY GLY A A 58  58  . 99.227  84.211  5.334   1.00
8.78   1 . .
ATOM 450  C     C     . GLY GLY GLY A A 58  58  . 98.220  84.421  6.440   1.00
6.65   1 . .
ATOM 451  O     O     . GLY GLY GLY A A 58  58  . 98.110  83.577  7.370   1.00
8.67   1 . .
ATOM 452  N     N     . LYS LYS LYS A A 59  59  . 97.475  85.533  6.367   1.00
4.43   1 . .
ATOM 453  CA    CA    . LYS LYS LYS A A 59  59  . 96.634  85.984  7.494   1.00
4.55   1 . .
ATOM 454  CB    CB    . LYS LYS LYS A A 59  59  . 96.798  87.506  7.689   1.00
4.64   1 . .
ATOM 455  CG    CG    . LYS LYS LYS A A 59  59  . 98.198  87.787  8.075   1.00
12.05  1 . .
ATOM 456  CD    CD    . LYS LYS LYS A A 59  59  . 98.397  89.092  8.870   1.00
15.40  1 . .
ATOM 457  CE    CE    . LYS LYS LYS A A 59  59  . 99.891  89.338  9.252   1.00
15.50  1 . .
ATOM 458  NZ    NZ    . LYS LYS LYS A A 59  59  . 100.126 90.763  9.730   1.00
18.45  1 . .
ATOM 459  C     C     . LYS LYS LYS A A 59  59  . 95.184  85.598  7.423   1.00
2.48   1 . .
ATOM 460  O     O     . LYS LYS LYS A A 59  59  . 94.358  86.088  8.210   1.00
2.00   1 . .
ATOM 461  N     N     . GLY GLY GLY A A 60  60  . 94.788  84.745  6.472   1.00
2.41   1 . .
ATOM 462  CA    CA    . GLY GLY GLY A A 60  60  . 93.387  84.380  6.372   1.00
2.37   1 . .
ATOM 463  C     C     . GLY GLY GLY A A 60  60  . 92.897  83.650  7.623   1.00
2.00   1 . .
ATOM 464  O     O     . GLY GLY GLY A A 60  60  . 93.687  83.092  8.391   1.00
2.27   1 . .
ATOM 465  N     N     . VAL VAL VAL A A 61  61  . 91.584  83.594  7.802   1.00
2.70   1 . .
ATOM 466  CA    CA    . VAL VAL VAL A A 61  61  . 91.040  82.862  8.932   1.00
2.86   1 . .
ATOM 467  CB    CB    . VAL VAL VAL A A 61  61  . 90.568  83.774  10.114  1.00
3.32   1 . .
ATOM 468  CG1   CG1   . VAL VAL VAL A A 61  61  . 91.731  84.549  10.687  1.00
4.15   1 . .
ATOM 469  CG2   CG2   . VAL VAL VAL A A 61  61  . 89.503  84.749  9.611   1.00
2.41   1 . .
ATOM 470  C     C     . VAL VAL VAL A A 61  61  . 89.938  81.901  8.468   1.00
2.63   1 . .
ATOM 471  O     O     . VAL VAL VAL A A 61  61  . 88.993  81.582  9.197   1.00
2.31   1 . .
ATOM 472  N     N     . LEU LEU LEU A A 62  62  . 90.155  81.360  7.275   1.00
3.11   1 . .
ATOM 473  CA    CA    . LEU LEU LEU A A 62  62  . 89.244  80.349  6.713   1.00
2.00   1 . .
ATOM 474  CB    CB    . LEU LEU LEU A A 62  62  . 89.704  79.975  5.273   1.00
2.69   1 . .
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ATOM 475  CG    CG    . LEU LEU LEU A A 62  62  . 89.750  81.170  4.243   1.00
2.10   1 . .
ATOM 476  CD1   CD1   . LEU LEU LEU A A 62  62  . 90.105  80.586  2.832   1.00
4.31   1 . .
ATOM 477  CD2   CD2   . LEU LEU LEU A A 62  62  . 88.363  81.824  4.273   1.00
4.03   1 . .
ATOM 478  C     C     . LEU LEU LEU A A 62  62  . 89.190  79.066  7.574   1.00
2.09   1 . .
ATOM 479  O     O     . LEU LEU LEU A A 62  62  . 88.128  78.462  7.695   1.00
4.00   1 . .
ATOM 480  N     N     . LYS LYS LYS A A 63  63  . 90.340  78.668  8.139   1.00
2.67   1 . .
ATOM 481  CA    CA    . LYS LYS LYS A A 63  63  . 90.318  77.462  8.986   1.00
2.38   1 . .
ATOM 482  CB    CB    . LYS LYS LYS A A 63  63  . 91.720  76.989  9.397   1.00
2.88   1 . .
ATOM 483  CG    CG    . LYS LYS LYS A A 63  63  . 92.626  76.644  8.265   1.00
3.46   1 . .
ATOM 484  CD    CD    . LYS LYS LYS A A 63  63  . 93.974  76.242  8.719   1.00
7.00   1 . .
ATOM 485  CE    CE    . LYS LYS LYS A A 63  63  . 94.925  76.050  7.551   1.00
8.16   1 . .
ATOM 486  NZ    NZ    . LYS LYS LYS A A 63  63  . 96.280  75.531  8.039   1.00
10.55  1 . .
ATOM 487  C     C     . LYS LYS LYS A A 63  63  . 89.452  77.639  10.242  1.00
2.46   1 . .
ATOM 488  O     O     . LYS LYS LYS A A 63  63  . 88.626  76.778  10.577  1.00
2.47   1 . .
ATOM 489  N     N     . ALA ALA ALA A A 64  64  . 89.546  78.806  10.890  1.00
2.50   1 . .
ATOM 490  CA    CA    . ALA ALA ALA A A 64  64  . 88.768  79.039  12.077  1.00
2.01   1 . .
ATOM 491  CB    CB    . ALA ALA ALA A A 64  64  . 89.239  80.398  12.759  1.00
3.13   1 . .
ATOM 492  C     C     . ALA ALA ALA A A 64  64  . 87.321  79.123  11.651  1.00
2.17   1 . .
ATOM 493  O     O     . ALA ALA ALA A A 64  64  . 86.472  78.585  12.345  1.00
2.69   1 . .
ATOM 494  N     N     . VAL VAL VAL A A 65  65  . 87.010  79.840  10.534  1.00
2.10   1 . .
ATOM 495  CA    CA    . VAL VAL VAL A A 65  65  . 85.607  79.898  10.082  1.00
2.22   1 . .
ATOM 496  CB    CB    . VAL VAL VAL A A 65  65  . 85.488  80.816  8.828   1.00
2.46   1 . .
ATOM 497  CG1   CG1   . VAL VAL VAL A A 65  65  . 84.125  80.658  8.139   1.00
3.63   1 . .
ATOM 498  CG2   CG2   . VAL VAL VAL A A 65  65  . 85.739  82.295  9.300   1.00
3.10   1 . .
ATOM 499  C     C     . VAL VAL VAL A A 65  65  . 85.078  78.454  9.848   1.00
2.62   1 . .
ATOM 500  O     O     . VAL VAL VAL A A 65  65  . 83.922  78.188  10.197  1.00
2.46   1 . .
ATOM 501  N     N     . ASP ASP ASP A A 66  66  . 85.869  77.571  9.239   1.00
2.50   1 . .
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ATOM 502  CA    CA    . ASP ASP ASP A A 66  66  . 85.355  76.223  8.877   1.00
2.16   1 . .
ATOM 503  CB    CB    . ASP ASP ASP A A 66  66  . 86.365  75.504  8.017   1.00
4.82   1 . .
ATOM 504  CG    CG    . ASP ASP ASP A A 66  66  . 85.989  74.056  7.814   1.00
8.28   1 . .
ATOM 505  OD1   OD1   . ASP ASP ASP A A 66  66  . 84.817  73.803  7.464   1.00
14.71  1 . .
ATOM 506  OD2   OD2   . ASP ASP ASP A A 66  66  . 86.847  73.157  8.053   1.00
22.56  1 . .
ATOM 507  C     C     . ASP ASP ASP A A 66  66  . 85.115  75.469  10.234  1.00
2.73   1 . .
ATOM 508  O     O     . ASP ASP ASP A A 66  66  . 84.173  74.680  10.353  1.00
2.86   1 . .
ATOM 509  N     N     . HIS HIS HIS A A 67  67  . 86.039  75.611  11.193  1.00
3.53   1 . .
ATOM 510  CA    CA    . HIS HIS HIS A A 67  67  . 85.804  74.977  12.486  1.00
2.15   1 . .
ATOM 511  CB    CB    . HIS HIS HIS A A 67  67  . 86.975  75.281  13.477  1.00
3.44   1 . .
ATOM 512  CG    CG    . HIS HIS HIS A A 67  67  . 88.269  74.592  13.129  1.00
4.23   1 . .
ATOM 513  ND1   ND1   . HIS HIS HIS A A 67  67  . 88.368  73.215  12.917  1.00
8.29   1 . .
ATOM 514  CE1   CE1   . HIS HIS HIS A A 67  67  . 89.637  72.895  12.705  1.00
7.33   1 . .
ATOM 515  NE2   NE2   . HIS HIS HIS A A 67  67  . 90.358  73.998  12.743  1.00
6.18   1 . .
ATOM 516  CD2   CD2   . HIS HIS HIS A A 67  67  . 89.537  75.052  13.094  1.00
6.42   1 . .
ATOM 517  C     C     . HIS HIS HIS A A 67  67  . 84.425  75.354  13.049  1.00
2.38   1 . .
ATOM 518  O     O     . HIS HIS HIS A A 67  67  . 83.652  74.506  13.592  1.00
2.63   1 . .
ATOM 519  N     N     . ILE ILE ILE A A 68  68  . 84.129  76.654  13.004  1.00
2.01   1 . .
ATOM 520  CA    CA    . ILE ILE ILE A A 68  68  . 82.880  77.100  13.548  1.00
2.26   1 . .
ATOM 521  CB    CB    . ILE ILE ILE A A 68  68  . 82.739  78.649  13.421  1.00
2.39   1 . .
ATOM 522  CG1   CG1   . ILE ILE ILE A A 68  68  . 83.716  79.273  14.385  1.00
2.00   1 . .
ATOM 523  CD1   CD1   . ILE ILE ILE A A 68  68  . 83.980  80.747  14.077  1.00
2.96   1 . .
ATOM 524  CG2   CG2   . ILE ILE ILE A A 68  68  . 81.310  79.070  13.692  1.00
3.44   1 . .
ATOM 525  C     C     . ILE ILE ILE A A 68  68  . 81.722  76.504  12.706  1.00
2.14   1 . .
ATOM 526  O     O     . ILE ILE ILE A A 68  68  . 80.723  75.954  13.257  1.00
3.11   1 . .
ATOM 527  N     N     . ASN ASN ASN A A 69  69  . 81.795  76.695  11.380  1.00
2.66   1 . .
ATOM 528  CA    CA    . ASN ASN ASN A A 69  69  . 80.631  76.295  10.555  1.00
2.72   1 . .
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ATOM 529  CB    CB    . ASN ASN ASN A A 69  69  . 80.851  76.810  9.148   1.00
2.92   1 . .
ATOM 530  CG    CG    . ASN ASN ASN A A 69  69  . 80.579  78.332  9.081   1.00
4.15   1 . .
ATOM 531  OD1   OD1   . ASN ASN ASN A A 69  69  . 79.878  78.862  9.950   1.00
4.02   1 . .
ATOM 532  ND2   ND2   . ASN ASN ASN A A 69  69  . 81.098  78.996  8.078   1.00
2.47   1 . .
ATOM 533  C     C     . ASN ASN ASN A A 69  69  . 80.354  74.817  10.564  1.00
3.22   1 . .
ATOM 534  O     O     . ASN ASN ASN A A 69  69  . 79.207  74.420  10.595  1.00
6.23   1 . .
ATOM 535  N     N     . SER SER SER A A 70  70  . 81.400  74.023  10.432  1.00
3.34   1 . .
ATOM 536  CA    CA    . SER SER SER A A 70  70  . 81.201  72.540  10.213  1.00
4.36   1 . .
ATOM 537  CB    CB    . SER SER SER A A 70  70  . 82.336  72.051  9.307   1.00
4.84   1 . .
ATOM 538  OG    OG    . SER SER SER A A 70  70  . 82.258  72.875  8.110   1.00
9.33   1 . .
ATOM 539  C     C     . SER SER SER A A 70  70  . 81.253  71.738  11.521  1.00
3.90   1 . .
ATOM 540  O     O     . SER SER SER A A 70  70  . 80.761  70.589  11.526  1.00
4.62   1 . .
ATOM 541  N     N     . THR THR THR A A 71  71  . 81.865  72.260  12.585  1.00
2.45   1 . .
ATOM 542  CA    CA    . THR THR THR A A 71  71  . 82.055  71.408  13.795  1.00
2.38   1 . .
ATOM 543  CB    CB    . THR THR THR A A 71  71  . 83.523  71.131  14.045  1.00
2.00   1 . .
ATOM 544  OG1   OG1   . THR THR THR A A 71  71  . 84.096  70.429  12.934  1.00
2.47   1 . .
ATOM 545  CG2   CG2   . THR THR THR A A 71  71  . 83.691  70.290  15.351  1.00
2.06   1 . .
ATOM 546  C     C     . THR THR THR A A 71  71  . 81.424  72.052  15.049  1.00
2.05   1 . .
ATOM 547  O     O     . THR THR THR A A 71  71  . 80.677  71.441  15.779  1.00
3.13   1 . .
ATOM 548  N     N     . ILE ILE ILE A A 72  72  . 81.789  73.299  15.385  1.00
2.19   1 . .
ATOM 549  CA    CA    . ILE ILE ILE A A 72  72  . 81.154  73.933  16.539  1.00
2.93   1 . .
ATOM 550  CB    CB    . ILE ILE ILE A A 72  72  . 81.856  75.273  16.876  1.00
3.30   1 . .
ATOM 551  CG1   CG1   . ILE ILE ILE A A 72  72  . 83.322  75.002  17.262  1.00
3.96   1 . .
ATOM 552  CD1   CD1   . ILE ILE ILE A A 72  72  . 84.277  76.284  17.486  1.00
4.22   1 . .
ATOM 553  CG2   CG2   . ILE ILE ILE A A 72  72  . 81.022  76.013  17.894  1.00
2.44   1 . .
ATOM 554  C     C     . ILE ILE ILE A A 72  72  . 79.660  74.140  16.441  1.00
2.30   1 . .
ATOM 555  O     O     . ILE ILE ILE A A 72  72  . 78.929  73.789  17.312  1.00
2.59   1 . .
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ATOM 556  N     N     . ALA ALA ALA A A 73  73  . 79.206  74.610  15.298  1.00
2.80   1 . .
ATOM 557  CA    CA    . ALA ALA ALA A A 73  73  . 77.780  74.860  15.083  1.00
3.45   1 . .
ATOM 558  CB    CB    . ALA ALA ALA A A 73  73  . 77.592  75.398  13.625  1.00
5.83   1 . .
ATOM 559  C     C     . ALA ALA ALA A A 73  73  . 76.834  73.646  15.304  1.00
4.10   1 . .
ATOM 560  O     O     . ALA ALA ALA A A 73  73  . 75.877  73.746  16.093  1.00
5.66   1 . .
ATOM 561  N     N     . PRO PRO PRO A A 74  74  . 77.117  72.487  14.638  1.00
4.42   1 . .
ATOM 562  CA    CA    . PRO PRO PRO A A 74  74  . 76.187  71.361  14.902  1.00
3.69   1 . .
ATOM 563  CB    CB    . PRO PRO PRO A A 74  74  . 76.710  70.228  13.989  1.00
3.75   1 . .
ATOM 564  CG    CG    . PRO PRO PRO A A 74  74  . 78.197  70.669  13.607  1.00
4.45   1 . .
ATOM 565  CD    CD    . PRO PRO PRO A A 74  74  . 78.097  72.181  13.555  1.00
3.68   1 . .
ATOM 566  C     C     . PRO PRO PRO A A 74  74  . 76.279  70.916  16.374  1.00
3.68   1 . .
ATOM 567  O     O     . PRO PRO PRO A A 74  74  . 75.308  70.540  16.975  1.00
5.10   1 . .
ATOM 568  N     N     . ALA ALA ALA A A 75  75  . 77.469  70.989  17.000  1.00
4.01   1 . .
ATOM 569  CA    CA    . ALA ALA ALA A A 75  75  . 77.627  70.622  18.447  1.00
5.36   1 . .
ATOM 570  CB    CB    . ALA ALA ALA A A 75  75  . 79.108  70.798  18.932  1.00
4.39   1 . .
ATOM 571  C     C     . ALA ALA ALA A A 75  75  . 76.702  71.445  19.338  1.00
5.32   1 . .
ATOM 572  O     O     . ALA ALA ALA A A 75  75  . 76.092  70.918  20.308  1.00
5.73   1 . .
ATOM 573  N     N     . LEU LEU LEU A A 76  76  . 76.606  72.776  19.061  1.00
5.88   1 . .
ATOM 574  CA    CA    . LEU LEU LEU A A 76  76  . 75.775  73.619  19.935  1.00
5.51   1 . .
ATOM 575  CB    CB    . LEU LEU LEU A A 76  76  . 76.206  75.088  19.843  1.00
4.13   1 . .
ATOM 576  CG    CG    . LEU LEU LEU A A 76  76  . 77.695  75.354  20.109  1.00
4.87   1 . .
ATOM 577  CD1   CD1   . LEU LEU LEU A A 76  76  . 77.952  76.897  20.287  1.00
6.42   1 . .
ATOM 578  CD2   CD2   . LEU LEU LEU A A 76  76  . 78.086  74.620  21.326  1.00
8.15   1 . .
ATOM 579  C     C     . LEU LEU LEU A A 76  76  . 74.298  73.491  19.623  1.00
6.59   1 . .
ATOM 580  O     O     . LEU LEU LEU A A 76  76  . 73.462  73.547  20.529  1.00
7.74   1 . .
ATOM 581  N     N     . ILE ILE ILE A A 77  77  . 73.979  73.288  18.344  1.00
6.50   1 . .
ATOM 582  CA    CA    . ILE ILE ILE A A 77  77  . 72.580  73.056  17.942  1.00
8.40   1 . .
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ATOM 583  CB    CB    . ILE ILE ILE A A 77  77  . 72.366  73.024  16.412  1.00
8.24   1 . .
ATOM 584  CG1   CG1   . ILE ILE ILE A A 77  77  . 72.714  74.370  15.837  1.00
8.03   1 . .
ATOM 585  CD1   CD1   . ILE ILE ILE A A 77  77  . 72.832  74.424  14.328  1.00
9.92   1 . .
ATOM 586  CG2   CG2   . ILE ILE ILE A A 77  77  . 70.944  72.552  16.070  1.00
10.11  1 . .
ATOM 587  C     C     . ILE ILE ILE A A 77  77  . 72.167  71.705  18.632  1.00
7.98   1 . .
ATOM 588  O     O     . ILE ILE ILE A A 77  77  . 71.175  71.637  19.371  1.00
8.74   1 . .
ATOM 589  N     N     . SER SER SER A A 78  78  . 73.023  70.689  18.512  1.00
7.92   1 . .
ATOM 590  CA    CA    . SER SER SER A A 78  78  . 72.717  69.388  19.090  1.00
8.68   1 . .
ATOM 591  CB    CB    . SER SER SER A A 78  78  . 73.886  68.412  18.874  1.00
7.83   1 . .
ATOM 592  OG    OG    . SER SER SER A A 78  78  . 73.986  67.989  17.510  1.00
13.16  1 . .
ATOM 593  C     C     . SER SER SER A A 78  78  . 72.418  69.498  20.578  1.00
8.67   1 . .
ATOM 594  O     O     . SER SER SER A A 78  78  . 71.584  68.823  21.056  1.00
10.07  1 . .
ATOM 595  N     N     . SER SER SER A A 79  79  . 73.152  70.326  21.314  1.00
7.55   1 . .
ATOM 596  CA    CA    . SER SER SER A A 79  79  . 73.028  70.428  22.750  1.00
9.65   1 . .
ATOM 597  CB    CB    . SER SER SER A A 79  79  . 74.025  71.467  23.199  1.00
10.12  1 . .
ATOM 598  OG    OG    . SER SER SER A A 79  79  . 73.486  72.783  23.177  1.00
9.04   1 . .
ATOM 599  C     C     . SER SER SER A A 79  79  . 71.641  70.832  23.222  1.00
9.46   1 . .
ATOM 600  O     O     . SER SER SER A A 79  79  . 71.213  70.458  24.289  1.00
11.93  1 . .
ATOM 601  N     N     . GLY GLY GLY A A 80  80  . 70.920  71.536  22.351  1.00
10.85  1 . .
ATOM 602  CA    CA    . GLY GLY GLY A A 80  80  . 69.586  72.056  22.656  1.00
9.50   1 . .
ATOM 603  C     C     . GLY GLY GLY A A 80  80  . 69.535  73.101  23.745  1.00
9.89   1 . .
ATOM 604  O     O     . GLY GLY GLY A A 80  80  . 68.450  73.531  24.127  1.00
11.10  1 . .
ATOM 605  N     N     . LEU LEU LEU A A 81  81  . 70.686  73.479  24.281  1.00
9.78   1 . .
ATOM 606  CA    CA    . LEU LEU LEU A A 81  81  . 70.744  74.514  25.255  1.00
9.28   1 . .
ATOM 607  CB    CB    . LEU LEU LEU A A 81  81  . 72.176  74.665  25.762  1.00
8.90   1 . .
ATOM 608  CG    CG    . LEU LEU LEU A A 81  81  . 72.744  73.396  26.377  1.00
8.87   1 . .
ATOM 609  CD1   CD1   . LEU LEU LEU A A 81  81  . 74.237  73.551  26.481  1.00
6.07   1 . .
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ATOM 610  CD2   CD2   . LEU LEU LEU A A 81  81  . 72.045  73.196  27.653  1.00
10.22  1 . .
ATOM 611  C     C     . LEU LEU LEU A A 81  81  . 70.234  75.890  24.785  1.00
9.98   1 . .
ATOM 612  O     O     . LEU LEU LEU A A 81  81  . 70.465  76.332  23.606  1.00
8.58   1 . .
ATOM 613  N     N     . SER SER SER A A 82  82  . 69.550  76.573  25.700  1.00
8.70   1 . .
ATOM 614  CA    CA    . SER SER SER A A 82  82  . 69.158  77.972  25.487  1.00
7.43   1 . .
ATOM 615  CB    CB    . SER SER SER A A 82  82  . 68.217  78.490  26.582  1.00
9.63   1 . .
ATOM 616  OG    OG    . SER SER SER A A 82  82  . 67.911  79.876  26.351  1.00
10.38  1 . .
ATOM 617  C     C     . SER SER SER A A 82  82  . 70.407  78.855  25.405  1.00
6.80   1 . .
ATOM 618  O     O     . SER SER SER A A 82  82  . 71.373  78.619  26.110  1.00
5.79   1 . .
ATOM 619  N     N     . VAL VAL VAL A A 83  83  . 70.402  79.842  24.500  1.00
5.99   1 . .
ATOM 620  CA    CA    . VAL VAL VAL A A 83  83  . 71.526  80.819  24.421  1.00
6.11   1 . .
ATOM 621  CB    CB    . VAL VAL VAL A A 83  83  . 71.368  81.803  23.216  1.00
4.21   1 . .
ATOM 622  CG1   CG1   . VAL VAL VAL A A 83  83  . 71.601  81.096  21.907  1.00
4.31   1 . .
ATOM 623  CG2   CG2   . VAL VAL VAL A A 83  83  . 70.077  82.455  23.237  1.00
5.61   1 . .
ATOM 624  C     C     . VAL VAL VAL A A 83  83  . 71.741  81.584  25.727  1.00
5.61   1 . .
ATOM 625  O     O     . VAL VAL VAL A A 83  83  . 72.773  82.259  25.858  1.00
6.11   1 . .
ATOM 626  N     N     . VAL VAL VAL A A 84  84  . 70.754  81.589  26.644  1.00
6.66   1 . .
ATOM 627  CA    CA    . VAL VAL VAL A A 84  84  . 70.984  82.210  27.947  1.00
5.87   1 . .
ATOM 628  CB    CB    . VAL VAL VAL A A 84  84  . 69.716  82.394  28.809  1.00
6.69   1 . .
ATOM 629  CG1   CG1   . VAL VAL VAL A A 84  84  . 68.588  83.070  28.110  1.00
9.33   1 . .
ATOM 630  CG2   CG2   . VAL VAL VAL A A 84  84  . 69.301  81.007  29.406  1.00
7.36   1 . .
ATOM 631  C     C     . VAL VAL VAL A A 84  84  . 72.010  81.451  28.787  1.00
6.46   1 . .
ATOM 632  O     O     . VAL VAL VAL A A 84  84  . 72.579  81.982  29.718  1.00
7.48   1 . .
ATOM 633  N     N     . GLU GLU GLU A A 85  85  . 72.235  80.191  28.438  1.00
7.93   1 . .
ATOM 634  CA    CA    . GLU GLU GLU A A 85  85  . 73.215  79.338  29.127  1.00
6.99   1 . .
ATOM 635  CB    CB    . GLU GLU GLU A A 85  85  . 72.817  77.867  29.047  1.00
7.58   1 . .
ATOM 636  CG    CG    . GLU GLU GLU A A 85  85  . 71.514  77.528  29.680  1.00
11.26  1 . .
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ATOM 637  CD    CD    . GLU GLU GLU A A 85  85  . 71.399  77.842  31.181  1.00
12.99  1 . .
ATOM 638  OE1   OE1   . GLU GLU GLU A A 85  85  . 72.425  77.844  31.915  1.00
15.20  1 . .
ATOM 639  OE2   OE2   . GLU GLU GLU A A 85  85  . 70.240  78.067  31.623  1.00
15.37  1 . .
ATOM 640  C     C     . GLU GLU GLU A A 85  85  . 74.658  79.513  28.663  1.00
4.94   1 . .
ATOM 641  O     O     . GLU GLU GLU A A 85  85  . 75.306  78.564  28.226  1.00
6.06   1 . .
ATOM 642  N     N     . GLN GLN GLN A A 86  86  . 75.175  80.721  28.855  1.00
4.85   1 . .
ATOM 643  CA    CA    . GLN GLN GLN A A 86  86  . 76.526  81.118  28.441  1.00
5.44   1 . .
ATOM 644  CB    CB    . GLN GLN GLN A A 86  86  . 76.910  82.522  28.956  1.00
6.29   1 . .
ATOM 645  CG    CG    . GLN GLN GLN A A 86  86  . 78.259  83.014  28.431  1.00
4.31   1 . .
ATOM 646  CD    CD    . GLN GLN GLN A A 86  86  . 78.158  83.451  26.931  1.00
3.38   1 . .
ATOM 647  OE1   OE1   . GLN GLN GLN A A 86  86  . 77.172  83.980  26.569  1.00
4.06   1 . .
ATOM 648  NE2   NE2   . GLN GLN GLN A A 86  86  . 79.112  83.105  26.070  1.00
2.85   1 . .
ATOM 649  C     C     . GLN GLN GLN A A 86  86  . 77.611  80.145  28.908  1.00
3.57   1 . .
ATOM 650  O     O     . GLN GLN GLN A A 86  86  . 78.400  79.673  28.102  1.00
3.11   1 . .
ATOM 651  N     N     . GLU GLU GLU A A 87  87  . 77.617  79.835  30.232  1.00
4.94   1 . .
ATOM 652  CA    CA    . GLU GLU GLU A A 87  87  . 78.627  78.970  30.732  1.00
5.00   1 . .
ATOM 653  CB    CB    . GLU GLU GLU A A 87  87  . 78.551  78.888  32.264  1.00
6.83   1 . .
ATOM 654  CG    CG    . GLU GLU GLU A A 87  87  . 79.766  78.198  32.885  1.00
10.15  1 . .
ATOM 655  CD    CD    . GLU GLU GLU A A 87  87  . 79.780  78.381  34.404  1.00
15.46  1 . .
ATOM 656  OE1   OE1   . GLU GLU GLU A A 87  87  . 78.845  79.045  34.886  1.00
17.93  1 . .
ATOM 657  OE2   OE2   . GLU GLU GLU A A 87  87  . 80.654  77.824  35.103  1.00
18.42  1 . .
ATOM 658  C     C     . GLU GLU GLU A A 87  87  . 78.562  77.532  30.139  1.00
5.58   1 . .
ATOM 659  O     O     . GLU GLU GLU A A 87  87  . 79.632  76.924  29.838  1.00
7.09   1 . .
ATOM 660  N     N     . LYS LYS LYS A A 88  88  . 77.348  76.954  30.054  1.00
7.09   1 . .
ATOM 661  CA    CA    . LYS LYS LYS A A 88  88  . 77.264  75.582  29.528  1.00
6.70   1 . .
ATOM 662  CB    CB    . LYS LYS LYS A A 88  88  . 75.844  74.973  29.679  1.00
8.39   1 . .
ATOM 663  CG    CG    . LYS LYS LYS A A 88  88  . 75.527  74.618  31.114  1.00
9.20   1 . .
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ATOM 664  CD    CD    . LYS LYS LYS A A 88  88  . 74.096  74.227  31.325  1.00
10.91  1 . .
ATOM 665  CE    CE    . LYS LYS LYS A A 88  88  . 73.870  74.127  32.880  1.00
10.82  1 . .
ATOM 666  NZ    NZ    . LYS LYS LYS A A 88  88  . 72.734  74.968  33.338  1.00
19.33  1 . .
ATOM 667  C     C     . LYS LYS LYS A A 88  88  . 77.787  75.523  28.084  1.00
6.15   1 . .
ATOM 668  O     O     . LYS LYS LYS A A 88  88  . 78.555  74.591  27.730  1.00
4.70   1 . .
ATOM 669  N     N     . LEU LEU LEU A A 89  89  . 77.373  76.498  27.269  1.00
4.64   1 . .
ATOM 670  CA    CA    . LEU LEU LEU A A 89  89  . 77.752  76.574  25.883  1.00
3.24   1 . .
ATOM 671  CB    CB    . LEU LEU LEU A A 89  89  . 76.952  77.617  25.088  1.00
3.28   1 . .
ATOM 672  CG    CG    . LEU LEU LEU A A 89  89  . 75.493  77.182  24.949  1.00
3.18   1 . .
ATOM 673  CD1   CD1   . LEU LEU LEU A A 89  89  . 74.526  78.385  24.558  1.00
3.58   1 . .
ATOM 674  CD2   CD2   . LEU LEU LEU A A 89  89  . 75.461  76.103  23.853  1.00
3.35   1 . .
ATOM 675  C     C     . LEU LEU LEU A A 89  89  . 79.251  76.814  25.685  1.00
3.23   1 . .
ATOM 676  O     O     . LEU LEU LEU A A 89  89  . 79.889  76.141  24.871  1.00
4.48   1 . .
ATOM 677  N     N     . ASP ASP ASP A A 90  90  . 79.820  77.717  26.461  1.00
3.45   1 . .
ATOM 678  CA    CA    . ASP ASP ASP A A 90  90  . 81.234  77.865  26.401  1.00
3.89   1 . .
ATOM 679  CB    CB    . ASP ASP ASP A A 90  90  . 81.712  79.023  27.302  1.00
3.90   1 . .
ATOM 680  CG    CG    . ASP ASP ASP A A 90  90  . 81.426  80.426  26.670  1.00
6.52   1 . .
ATOM 681  OD1   OD1   . ASP ASP ASP A A 90  90  . 81.314  80.549  25.445  1.00
5.17   1 . .
ATOM 682  OD2   OD2   . ASP ASP ASP A A 90  90  . 81.357  81.405  27.392  1.00
6.58   1 . .
ATOM 683  C     C     . ASP ASP ASP A A 90  90  . 81.926  76.604  26.823  1.00
4.63   1 . .
ATOM 684  O     O     . ASP ASP ASP A A 90  90  . 82.952  76.300  26.273  1.00
3.86   1 . .
ATOM 685  N     N     . ASN ASN ASN A A 91  91  . 81.449  75.982  27.885  1.00
4.50   1 . .
ATOM 686  CA    CA    . ASN ASN ASN A A 91  91  . 82.196  74.792  28.324  1.00
5.03   1 . .
ATOM 687  CB    CB    . ASN ASN ASN A A 91  91  . 81.700  74.258  29.710  1.00
5.42   1 . .
ATOM 688  CG    CG    . ASN ASN ASN A A 91  91  . 82.103  75.134  30.852  1.00
9.99   1 . .
ATOM 689  OD1   OD1   . ASN ASN ASN A A 91  91  . 83.102  75.864  30.794  1.00
12.06  1 . .
ATOM 690  ND2   ND2   . ASN ASN ASN A A 91  91  . 81.346  75.029  31.931  1.00
14.92  1 . .
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ATOM 691  C     C     . ASN ASN ASN A A 91  91  . 82.143  73.683  27.263  1.00
4.57   1 . .
ATOM 692  O     O     . ASN ASN ASN A A 91  91  . 83.132  72.945  27.065  1.00
6.39   1 . .
ATOM 693  N     N     . LEU LEU LEU A A 92  92  . 81.017  73.525  26.582  1.00
4.77   1 . .
ATOM 694  CA    CA    . LEU LEU LEU A A 92  92  . 80.907  72.595  25.447  1.00
5.39   1 . .
ATOM 695  CB    CB    . LEU LEU LEU A A 92  92  . 79.483  72.667  24.839  1.00
8.93   1 . .
ATOM 696  CG    CG    . LEU LEU LEU A A 92  92  . 78.549  71.521  24.449  1.00
12.21  1 . .
ATOM 697  CD1   CD1   . LEU LEU LEU A A 92  92  . 78.709  70.296  25.369  1.00
15.00  1 . .
ATOM 698  CD2   CD2   . LEU LEU LEU A A 92  92  . 77.113  71.954  24.441  1.00
10.34  1 . .
ATOM 699  C     C     . LEU LEU LEU A A 92  92  . 81.947  72.861  24.410  1.00
5.97   1 . .
ATOM 700  O     O     . LEU LEU LEU A A 92  92  . 82.607  71.943  23.909  1.00
5.45   1 . .
ATOM 701  N     N     . MET MET MET A A 93  93  . 82.167  74.140  24.080  1.00
5.48   1 . .
ATOM 702  CA    CA    . MET MET MET A A 93  93  . 83.291  74.400  23.134  1.00
2.51   1 . .
ATOM 703  CB    CB    . MET MET MET A A 93  93  . 83.259  75.868  22.633  1.00
5.17   1 . .
ATOM 704  CG    CG    . MET MET MET A A 93  93  . 81.925  76.226  22.001  1.00
5.63   1 . .
ATOM 705  SD    SD    . MET MET MET A A 93  93  . 81.864  77.840  21.092  1.00
3.29   1 . .
ATOM 706  CE    CE    . MET MET MET A A 93  93  . 81.558  78.975  22.441  1.00
6.60   1 . .
ATOM 707  C     C     . MET MET MET A A 93  93  . 84.646  74.159  23.743  1.00
3.87   1 . .
ATOM 708  O     O     . MET MET MET A A 93  93  . 85.534  73.698  23.041  1.00
3.01   1 . .
ATOM 709  N     N     . LEU LEU LEU A A 94  94  . 84.857  74.482  24.995  1.00
3.93   1 . .
ATOM 710  CA    CA    . LEU LEU LEU A A 94  94  . 86.202  74.324  25.520  1.00
3.75   1 . .
ATOM 711  CB    CB    . LEU LEU LEU A A 94  94  . 86.255  74.837  26.972  1.00
3.87   1 . .
ATOM 712  CG    CG    . LEU LEU LEU A A 94  94  . 86.107  76.305  27.203  1.00
9.81   1 . .
ATOM 713  CD1   CD1   . LEU LEU LEU A A 94  94  . 86.510  76.560  28.606  1.00
11.89  1 . .
ATOM 714  CD2   CD2   . LEU LEU LEU A A 94  94  . 86.993  77.001  26.337  1.00
10.87  1 . .
ATOM 715  C     C     . LEU LEU LEU A A 94  94  . 86.549  72.852  25.548  1.00
3.58   1 . .
ATOM 716  O     O     . LEU LEU LEU A A 94  94  . 87.682  72.459  25.287  1.00
3.99   1 . .
ATOM 717  N     N     . GLU GLU GLU A A 95  95  . 85.574  72.036  25.893  1.00
3.28   1 . .
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ATOM 718  CA    CA    . GLU GLU GLU A A 95  95  . 85.799  70.591  25.952  1.00
4.95   1 . .
ATOM 719  CB    CB    . GLU GLU GLU A A 95  95  . 84.667  69.895  26.713  1.00
5.22   1 . .
ATOM 720  CG    CG    . GLU GLU GLU A A 95  95  . 84.759  70.260  28.235  1.00
11.05  1 . .
ATOM 721  CD    CD    . GLU GLU GLU A A 95  95  . 86.203  70.180  28.793  1.00
21.54  1 . .
ATOM 722  OE1   OE1   . GLU GLU GLU A A 95  95  . 86.771  69.067  28.909  1.00
24.72  1 . .
ATOM 723  OE2   OE2   . GLU GLU GLU A A 95  95  . 86.780  71.245  29.116  1.00
26.52  1 . .
ATOM 724  C     C     . GLU GLU GLU A A 95  95  . 85.991  70.015  24.560  1.00
5.28   1 . .
ATOM 725  O     O     . GLU GLU GLU A A 95  95  . 86.858  69.175  24.387  1.00
5.77   1 . .
ATOM 726  N     N     . LEU LEU LEU A A 96  96  . 85.254  70.528  23.578  1.00
4.30   1 . .
ATOM 727  CA    CA    . LEU LEU LEU A A 96  96  . 85.323  69.991  22.194  1.00
4.48   1 . .
ATOM 728  CB    CB    . LEU LEU LEU A A 96  96  . 84.125  70.466  21.374  1.00
4.09   1 . .
ATOM 729  CG    CG    . LEU LEU LEU A A 96  96  . 83.951  69.892  19.958  1.00
4.35   1 . .
ATOM 730  CD1   CD1   . LEU LEU LEU A A 96  96  . 83.776  68.332  20.187  1.00
5.46   1 . .
ATOM 731  CD2   CD2   . LEU LEU LEU A A 96  96  . 82.715  70.487  19.292  1.00
7.14   1 . .
ATOM 732  C     C     . LEU LEU LEU A A 96  96  . 86.626  70.323  21.518  1.00
3.76   1 . .
ATOM 733  O     O     . LEU LEU LEU A A 96  96  . 87.201  69.514  20.758  1.00
4.57   1 . .
ATOM 734  N     N     . ASP ASP ASP A A 97  97  . 87.190  71.499  21.823  1.00
3.36   1 . .
ATOM 735  CA    CA    . ASP ASP ASP A A 97  97  . 88.498  71.805  21.405  1.00
3.37   1 . .
ATOM 736  CB    CB    . ASP ASP ASP A A 97  97  . 88.766  73.305  21.657  1.00
2.98   1 . .
ATOM 737  CG    CG    . ASP ASP ASP A A 97  97  . 90.249  73.658  21.492  1.00
3.74   1 . .
ATOM 738  OD1   OD1   . ASP ASP ASP A A 97  97  . 90.663  74.145  20.428  1.00
4.39   1 . .
ATOM 739  OD2   OD2   . ASP ASP ASP A A 97  97  . 91.039  73.474  22.436  1.00
6.19   1 . .
ATOM 740  C     C     . ASP ASP ASP A A 97  97  . 89.491  70.928  22.215  1.00
5.22   1 . .
ATOM 741  O     O     . ASP ASP ASP A A 97  97  . 90.347  70.311  21.660  1.00
3.91   1 . .
ATOM 742  N     N     . GLY GLY GLY A A 98  98  . 89.368  70.920  23.538  1.00
5.13   1 . .
ATOM 743  CA    CA    . GLY GLY GLY A A 98  98  . 90.105  69.951  24.345  1.00
6.30   1 . .
ATOM 744  C     C     . GLY GLY GLY A A 98  98  . 91.557  70.239  24.563  1.00
6.68   1 . .
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ATOM 745  O     O     . GLY GLY GLY A A 98  98  . 92.234  69.409  25.163  1.00
10.70  1 . .
ATOM 746  N     N     . THR THR THR A A 99  99  . 92.063  71.414  24.177  1.00
6.50   1 . .
ATOM 747  CA    CA    . THR THR THR A A 99  99  . 93.480  71.756  24.401  1.00
5.98   1 . .
ATOM 748  CB    CB    . THR THR THR A A 99  99  . 94.135  72.161  23.083  1.00
6.00   1 . .
ATOM 749  OG1   OG1   . THR THR THR A A 99  99  . 93.654  73.452  22.698  1.00
4.91   1 . .
ATOM 750  CG2   CG2   . THR THR THR A A 99  99  . 93.875  71.079  21.930  1.00
7.07   1 . .
ATOM 751  C     C     . THR THR THR A A 99  99  . 93.510  72.935  25.390  1.00
6.94   1 . .
ATOM 752  O     O     . THR THR THR A A 99  99  . 92.535  73.674  25.501  1.00
9.05   1 . .
ATOM 753  N     N     . GLU GLU GLU A A 100 100 . 94.630  73.103  26.094  1.00
6.73   1 . .
ATOM 754  CA    CA    . GLU GLU GLU A A 100 100 . 94.775  74.210  27.025  1.00
7.67   1 . .
ATOM 755  CB    CB    . GLU GLU GLU A A 100 100 . 96.101  74.081  27.779  1.00
9.56   1 . .
ATOM 756  CG    CG    . GLU GLU GLU A A 100 100 . 96.161  75.013  28.957  1.00
16.45  1 . .
ATOM 757  CD    CD    . GLU GLU GLU A A 100 100 . 95.052  74.687  29.913  1.00
25.13  1 . .
ATOM 758  OE1   OE1   . GLU GLU GLU A A 100 100 . 94.811  73.476  30.065  1.00
28.92  1 . .
ATOM 759  OE2   OE2   . GLU GLU GLU A A 100 100 . 94.397  75.609  30.462  1.00
29.64  1 . .
ATOM 760  C     C     . GLU GLU GLU A A 100 100 . 94.688  75.609  26.386  1.00
7.48   1 . .
ATOM 761  O     O     . GLU GLU GLU A A 100 100 . 93.987  76.480  26.862  1.00
7.62   1 . .
ATOM 762  N     N     . ASN ASN ASN A A 101 101 . 95.369  75.797  25.275  1.00
5.89   1 . .
ATOM 763  CA    CA    . ASN ASN ASN A A 101 101 . 95.414  77.104  24.718  1.00
5.45   1 . .
ATOM 764  CB    CB    . ASN ASN ASN A A 101 101 . 96.842  77.319  24.244  1.00
8.43   1 . .
ATOM 765  CG    CG    . ASN ASN ASN A A 101 101 . 97.326  76.139  23.332  1.00
15.02  1 . .
ATOM 766  OD1   OD1   . ASN ASN ASN A A 101 101 . 96.781  74.973  23.405  1.00
20.20  1 . .
ATOM 767  ND2   ND2   . ASN ASN ASN A A 101 101 . 98.337  76.416  22.482  1.00
18.48  1 . .
ATOM 768  C     C     . ASN ASN ASN A A 101 101 . 94.474  77.255  23.468  1.00
4.10   1 . .
ATOM 769  O     O     . ASN ASN ASN A A 101 101 . 94.755  78.133  22.632  1.00
3.64   1 . .
ATOM 770  N     N     . LYS LYS LYS A A 102 102 . 93.484  76.389  23.297  1.00
3.21   1 . .
ATOM 771  CA    CA    . LYS LYS LYS A A 102 102 . 92.518  76.479  22.215  1.00
2.14   1 . .
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ATOM 772  CB    CB    . LYS LYS LYS A A 102 102 . 91.724  77.777  22.338  1.00
2.77   1 . .
ATOM 773  CG    CG    . LYS LYS LYS A A 102 102 . 90.846  77.867  23.600  1.00
2.20   1 . .
ATOM 774  CD    CD    . LYS LYS LYS A A 102 102 . 90.119  79.193  23.676  1.00
2.72   1 . .
ATOM 775  CE    CE    . LYS LYS LYS A A 102 102 . 89.291  79.280  24.923  1.00
3.54   1 . .
ATOM 776  NZ    NZ    . LYS LYS LYS A A 102 102 . 89.964  79.007  26.175  1.00
2.92   1 . .
ATOM 777  C     C     . LYS LYS LYS A A 102 102 . 93.198  76.353  20.874  1.00
2.58   1 . .
ATOM 778  O     O     . LYS LYS LYS A A 102 102 . 92.821  77.004  19.925  1.00
2.51   1 . .
ATOM 779  N     N     . SER SER SER A A 103 103 . 94.178  75.447  20.796  1.00
2.90   1 . .
ATOM 780  CA    CA    . SER SER SER A A 103 103 . 94.992  75.333  19.568  1.00
3.40   1 . .
ATOM 781  CB    CB    . SER SER SER A A 103 103 . 96.385  74.850  19.905  1.00
4.72   1 . .
ATOM 782  OG    OG    . SER SER SER A A 103 103 . 96.213  73.654  20.587  1.00
10.11  1 . .
ATOM 783  C     C     . SER SER SER A A 103 103 . 94.364  74.426  18.521  1.00
4.28   1 . .
ATOM 784  O     O     . SER SER SER A A 103 103 . 94.934  74.337  17.407  1.00
5.02   1 . .
ATOM 785  N     N     . LYS LYS LYS A A 104 104 . 93.249  73.719  18.846  1.00
3.42   1 . .
ATOM 786  CA    CA    . LYS LYS LYS A A 104 104 . 92.584  72.896  17.790  1.00
5.01   1 . .
ATOM 787  CB    CB    . LYS LYS LYS A A 104 104 . 91.807  71.726  18.371  1.00
3.80   1 . .
ATOM 788  CG    CG    . LYS LYS LYS A A 104 104 . 91.106  70.873  17.316  1.00
4.98   1 . .
ATOM 789  CD    CD    . LYS LYS LYS A A 104 104 . 90.057  69.871  17.836  1.00
9.76   1 . .
ATOM 790  CE    CE    . LYS LYS LYS A A 104 104 . 90.632  68.888  18.849  1.00
11.18  1 . .
ATOM 791  NZ    NZ    . LYS LYS LYS A A 104 104 . 89.511  68.178  19.500  1.00
7.74   1 . .
ATOM 792  C     C     . LYS LYS LYS A A 104 104 . 91.662  73.769  16.906  1.00
3.65   1 . .
ATOM 793  O     O     . LYS LYS LYS A A 104 104 . 91.790  73.778  15.681  1.00
5.31   1 . .
ATOM 794  N     N     . PHE PHE PHE A A 105 105 . 90.778  74.553  17.520  1.00
2.33   1 . .
ATOM 795  CA    CA    . PHE PHE PHE A A 105 105 . 89.855  75.355  16.724  1.00
2.55   1 . .
ATOM 796  CB    CB    . PHE PHE PHE A A 105 105 . 88.524  75.493  17.454  1.00
3.82   1 . .
ATOM 797  CG    CG    . PHE PHE PHE A A 105 105 . 87.741  74.218  17.558  1.00
4.53   1 . .
ATOM 798  CD1   CD1   . PHE PHE PHE A A 105 105 . 86.874  74.003  18.611  1.00
5.80   1 . .
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ATOM 799  CE1   CE1   . PHE PHE PHE A A 105 105 . 86.126  72.793  18.704  1.00
5.27   1 . .
ATOM 800  CZ    CZ    . PHE PHE PHE A A 105 105 . 86.229  71.872  17.709  1.00
5.57   1 . .
ATOM 801  CE2   CE2   . PHE PHE PHE A A 105 105 . 87.114  72.061  16.643  1.00
7.01   1 . .
ATOM 802  CD2   CD2   . PHE PHE PHE A A 105 105 . 87.885  73.221  16.573  1.00
3.99   1 . .
ATOM 803  C     C     . PHE PHE PHE A A 105 105 . 90.376  76.785  16.616  1.00
2.52   1 . .
ATOM 804  O     O     . PHE PHE PHE A A 105 105 . 89.971  77.469  15.632  1.00
3.25   1 . .
ATOM 805  N     N     . GLY GLY GLY A A 106 106 . 91.259  77.206  17.542  1.00
3.51   1 . .
ATOM 806  CA    CA    . GLY GLY GLY A A 106 106 . 91.659  78.606  17.596  1.00
2.65   1 . .
ATOM 807  C     C     . GLY GLY GLY A A 106 106 . 90.759  79.350  18.585  1.00
2.30   1 . .
ATOM 808  O     O     . GLY GLY GLY A A 106 106 . 89.535  79.169  18.651  1.00
3.32   1 . .
ATOM 809  N     N     . ALA ALA ALA A A 107 107 . 91.359  80.242  19.336  1.00
2.47   1 . .
ATOM 810  CA    CA    . ALA ALA ALA A A 107 107 . 90.631  81.031  20.301  1.00
2.14   1 . .
ATOM 811  CB    CB    . ALA ALA ALA A A 107 107 . 91.632  81.718  21.211  1.00
2.61   1 . .
ATOM 812  C     C     . ALA ALA ALA A A 107 107 . 89.695  81.981  19.553  1.00
2.33   1 . .
ATOM 813  O     O     . ALA ALA ALA A A 107 107 . 88.670  82.414  20.054  1.00
2.27   1 . .
ATOM 814  N     N     . ASN ASN ASN A A 108 108 . 90.108  82.377  18.367  1.00
2.06   1 . .
ATOM 815  CA    CA    . ASN ASN ASN A A 108 108 . 89.282  83.219  17.549  1.00
2.43   1 . .
ATOM 816  CB    CB    . ASN ASN ASN A A 108 108 . 90.048  83.872  16.394  1.00
2.23   1 . .
ATOM 817  CG    CG    . ASN ASN ASN A A 108 108 . 90.979  82.906  15.596  1.00
2.01   1 . .
ATOM 818  OD1   OD1   . ASN ASN ASN A A 108 108 . 91.415  81.845  16.035  1.00
2.21   1 . .
ATOM 819  ND2   ND2   . ASN ASN ASN A A 108 108 . 91.332  83.352  14.358  1.00
2.00   1 . .
ATOM 820  C     C     . ASN ASN ASN A A 108 108 . 87.998  82.570  17.041  1.00
2.00   1 . .
ATOM 821  O     O     . ASN ASN ASN A A 108 108 . 86.950  83.240  16.908  1.00
3.20   1 . .
ATOM 822  N     N     . ALA ALA ALA A A 109 109 . 88.038  81.240  16.848  1.00
2.29   1 . .
ATOM 823  CA    CA    . ALA ALA ALA A A 109 109 . 86.820  80.517  16.474  1.00
2.00   1 . .
ATOM 824  CB    CB    . ALA ALA ALA A A 109 109 . 87.186  79.106  16.004  1.00
2.22   1 . .
ATOM 825  C     C     . ALA ALA ALA A A 109 109 . 85.909  80.481  17.686  1.00
2.00   1 . .
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ATOM 826  O     O     . ALA ALA ALA A A 109 109 . 84.684  80.810  17.621  1.00
2.37   1 . .
ATOM 827  N     N     . ILE ILE ILE A A 110 110 . 86.433  80.034  18.819  1.00
2.00   1 . .
ATOM 828  CA    CA    . ILE ILE ILE A A 110 110 . 85.615  79.801  20.017  1.00
2.70   1 . .
ATOM 829  CB    CB    . ILE ILE ILE A A 110 110 . 86.437  79.084  21.088  1.00
2.53   1 . .
ATOM 830  CG1   CG1   . ILE ILE ILE A A 110 110 . 86.702  77.669  20.614  1.00
2.11   1 . .
ATOM 831  CD1   CD1   . ILE ILE ILE A A 110 110 . 87.833  77.046  21.491  1.00
5.90   1 . .
ATOM 832  CG2   CG2   . ILE ILE ILE A A 110 110 . 85.706  79.079  22.428  1.00
2.96   1 . .
ATOM 833  C     C     . ILE ILE ILE A A 110 110 . 84.982  81.174  20.473  1.00
2.20   1 . .
ATOM 834  O     O     . ILE ILE ILE A A 110 110 . 83.767  81.297  20.772  1.00
2.19   1 . .
ATOM 835  N     N     . LEU LEU LEU A A 111 111 . 85.820  82.197  20.498  1.00
2.51   1 . .
ATOM 836  CA    CA    . LEU LEU LEU A A 111 111 . 85.387  83.502  21.006  1.00
2.35   1 . .
ATOM 837  CB    CB    . LEU LEU LEU A A 111 111 . 86.547  84.501  21.118  1.00
2.49   1 . .
ATOM 838  CG    CG    . LEU LEU LEU A A 111 111 . 86.046  85.862  21.693  1.00
2.87   1 . .
ATOM 839  CD1   CD1   . LEU LEU LEU A A 111 111 . 85.428  85.792  23.096  1.00
2.63   1 . .
ATOM 840  CD2   CD2   . LEU LEU LEU A A 111 111 . 87.194  86.814  21.644  1.00
4.82   1 . .
ATOM 841  C     C     . LEU LEU LEU A A 111 111 . 84.288  84.097  20.107  1.00
2.64   1 . .
ATOM 842  O     O     . LEU LEU LEU A A 111 111 . 83.319  84.711  20.604  1.00
2.00   1 . .
ATOM 843  N     N     . GLY GLY GLY A A 112 112 . 84.457  83.927  18.789  1.00
2.12   1 . .
ATOM 844  CA    CA    . GLY GLY GLY A A 112 112 . 83.456  84.494  17.909  1.00
3.17   1 . .
ATOM 845  C     C     . GLY GLY GLY A A 112 112 . 82.085  83.913  18.217  1.00
4.30   1 . .
ATOM 846  O     O     . GLY GLY GLY A A 112 112 . 81.078  84.629  18.284  1.00
2.60   1 . .
ATOM 847  N     N     . VAL VAL VAL A A 113 113 . 81.973  82.586  18.428  1.00
2.44   1 . .
ATOM 848  CA    CA    . VAL VAL VAL A A 113 113 . 80.685  81.995  18.819  1.00
2.83   1 . .
ATOM 849  CB    CB    . VAL VAL VAL A A 113 113 . 80.782  80.424  18.699  1.00
2.39   1 . .
ATOM 850  CG1   CG1   . VAL VAL VAL A A 113 113 . 79.457  79.759  19.223  1.00
3.56   1 . .
ATOM 851  CG2   CG2   . VAL VAL VAL A A 113 113 . 81.278  80.031  17.312  1.00
3.12   1 . .
ATOM 852  C     C     . VAL VAL VAL A A 113 113 . 80.226  82.414  20.217  1.00
2.89   1 . .
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ATOM 853  O     O     . VAL VAL VAL A A 113 113 . 79.074  82.735  20.437  1.00
2.14   1 . .
ATOM 854  N     N     . SER SER SER A A 114 114 . 81.178  82.450  21.126  1.00
2.24   1 . .
ATOM 855  CA    CA    . SER SER SER A A 114 114 . 80.903  82.825  22.529  1.00
2.04   1 . .
ATOM 856  CB    CB    . SER SER SER A A 114 114 . 82.223  82.851  23.294  1.00
2.04   1 . .
ATOM 857  OG    OG    . SER SER SER A A 114 114 . 82.009  83.018  24.713  1.00
3.72   1 . .
ATOM 858  C     C     . SER SER SER A A 114 114 . 80.241  84.198  22.627  1.00
2.38   1 . .
ATOM 859  O     O     . SER SER SER A A 114 114 . 79.251  84.393  23.360  1.00
2.29   1 . .
ATOM 860  N     N     . LEU LEU LEU A A 115 115 . 80.799  85.175  21.899  1.00
2.43   1 . .
ATOM 861  CA    CA    . LEU LEU LEU A A 115 115 . 80.185  86.537  21.866  1.00
2.55   1 . .
ATOM 862  CB    CB    . LEU LEU LEU A A 115 115 . 81.122  87.452  21.050  1.00
2.26   1 . .
ATOM 863  CG    CG    . LEU LEU LEU A A 115 115 . 82.552  87.646  21.595  1.00
2.90   1 . .
ATOM 864  CD1   CD1   . LEU LEU LEU A A 115 115 . 83.457  88.392  20.542  1.00
2.45   1 . .
ATOM 865  CD2   CD2   . LEU LEU LEU A A 115 115 . 82.568  88.401  22.965  1.00
4.62   1 . .
ATOM 866  C     C     . LEU LEU LEU A A 115 115 . 78.831  86.530  21.221  1.00
2.75   1 . .
ATOM 867  O     O     . LEU LEU LEU A A 115 115 . 77.925  87.226  21.693  1.00
2.68   1 . .
ATOM 868  N     N     . ALA ALA ALA A A 116 116 . 78.657  85.820  20.103  1.00
2.30   1 . .
ATOM 869  CA    CA    . ALA ALA ALA A A 116 116 . 77.310  85.809  19.502  1.00
3.58   1 . .
ATOM 870  CB    CB    . ALA ALA ALA A A 116 116 . 77.376  85.171  18.151  1.00
3.34   1 . .
ATOM 871  C     C     . ALA ALA ALA A A 116 116 . 76.249  85.132  20.398  1.00
2.48   1 . .
ATOM 872  O     O     . ALA ALA ALA A A 116 116 . 75.113  85.552  20.469  1.00
3.72   1 . .
ATOM 873  N     N     . VAL VAL VAL A A 117 117 . 76.669  84.100  21.101  1.00
3.75   1 . .
ATOM 874  CA    CA    . VAL VAL VAL A A 117 117 . 75.790  83.428  22.020  1.00
4.42   1 . .
ATOM 875  CB    CB    . VAL VAL VAL A A 117 117 . 76.520  82.232  22.710  1.00
5.48   1 . .
ATOM 876  CG1   CG1   . VAL VAL VAL A A 117 117 . 75.696  81.734  23.870  1.00
3.57   1 . .
ATOM 877  CG2   CG2   . VAL VAL VAL A A 117 117 . 76.793  81.073  21.706  1.00
4.45   1 . .
ATOM 878  C     C     . VAL VAL VAL A A 117 117 . 75.342  84.444  23.066  1.00
3.21   1 . .
ATOM 879  O     O     . VAL VAL VAL A A 117 117 . 74.217  84.493  23.433  1.00
2.99   1 . .
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ATOM 880  N     N     . CYS CYS CYS A A 118 118 . 76.300  85.218  23.578  1.00
3.33   1 . .
ATOM 881  CA    CA    . CYS CYS CYS A A 118 118 . 76.025  86.135  24.661  1.00
3.03   1 . .
ATOM 882  CB    CB    . CYS CYS CYS A A 118 118 . 77.312  86.759  25.175  1.00
4.61   1 . .
ATOM 883  SG    SG    . CYS CYS CYS A A 118 118 . 77.122  87.685  26.740  1.00
3.44   1 . .
ATOM 884  C     C     . CYS CYS CYS A A 118 118 . 74.994  87.197  24.215  1.00
2.77   1 . .
ATOM 885  O     O     . CYS CYS CYS A A 118 118 . 74.059  87.513  24.938  1.00
3.16   1 . .
ATOM 886  N     N     . LYS LYS LYS A A 119 119 . 75.148  87.764  23.002  1.00
2.00   1 . .
ATOM 887  CA    CA    . LYS LYS LYS A A 119 119 . 74.176  88.699  22.445  1.00
2.25   1 . .
ATOM 888  CB    CB    . LYS LYS LYS A A 119 119 . 74.703  89.241  21.126  1.00
3.10   1 . .
ATOM 889  CG    CG    . LYS LYS LYS A A 119 119 . 75.988  90.003  21.303  1.00
2.89   1 . .
ATOM 890  CD    CD    . LYS LYS LYS A A 119 119 . 76.615  90.414  19.934  1.00
8.07   1 . .
ATOM 891  CE    CE    . LYS LYS LYS A A 119 119 . 77.872  91.215  20.110  1.00
7.65   1 . .
ATOM 892  NZ    NZ    . LYS LYS LYS A A 119 119 . 78.307  92.021  18.855  1.00
6.05   1 . .
ATOM 893  C     C     . LYS LYS LYS A A 119 119 . 72.814  88.084  22.235  1.00
3.22   1 . .
ATOM 894  O     O     . LYS LYS LYS A A 119 119 . 71.751  88.692  22.519  1.00
4.06   1 . .
ATOM 895  N     N     . ALA ALA ALA A A 120 120 . 72.823  86.834  21.769  1.00
2.55   1 . .
ATOM 896  CA    CA    . ALA ALA ALA A A 120 120 . 71.566  86.143  21.569  1.00
4.53   1 . .
ATOM 897  CB    CB    . ALA ALA ALA A A 120 120 . 71.824  84.796  20.763  1.00
3.99   1 . .
ATOM 898  C     C     . ALA ALA ALA A A 120 120 . 70.900  85.904  22.925  1.00
5.08   1 . .
ATOM 899  O     O     . ALA ALA ALA A A 120 120 . 69.676  85.993  23.034  1.00
5.28   1 . .
ATOM 900  N     N     . GLY GLY GLY A A 121 121 . 71.717  85.661  23.953  1.00
3.77   1 . .
ATOM 901  CA    CA    . GLY GLY GLY A A 121 121 . 71.238  85.333  25.283  1.00
5.68   1 . .
ATOM 902  C     C     . GLY GLY GLY A A 121 121 . 70.565  86.532  25.887  1.00
5.80   1 . .
ATOM 903  O     O     . GLY GLY GLY A A 121 121 . 69.472  86.468  26.528  1.00
4.80   1 . .
ATOM 904  N     N     . ALA ALA ALA A A 122 122 . 71.215  87.667  25.753  1.00
6.57   1 . .
ATOM 905  CA    CA    . ALA ALA ALA A A 122 122 . 70.609  88.904  26.218  1.00
5.79   1 . .
ATOM 906  CB    CB    . ALA ALA ALA A A 122 122 . 71.592  90.089  25.961  1.00
3.87   1 . .
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ATOM 907  C     C     . ALA ALA ALA A A 122 122 . 69.233  89.145  25.515  1.00
4.15   1 . .
ATOM 908  O     O     . ALA ALA ALA A A 122 122 . 68.239  89.518  26.192  1.00
6.24   1 . .
ATOM 909  N     N     . ALA ALA ALA A A 123 123 . 69.119  88.907  24.196  1.00
4.78   1 . .
ATOM 910  CA    CA    . ALA ALA ALA A A 123 123 . 67.803  89.041  23.575  1.00
7.02   1 . .
ATOM 911  CB    CB    . ALA ALA ALA A A 123 123 . 67.908  88.817  22.075  1.00
7.26   1 . .
ATOM 912  C     C     . ALA ALA ALA A A 123 123 . 66.820  88.054  24.168  1.00
7.76   1 . .
ATOM 913  O     O     . ALA ALA ALA A A 123 123 . 65.645  88.362  24.284  1.00
8.42   1 . .
ATOM 914  N     N     . GLU GLU GLU A A 124 124 . 67.279  86.848  24.534  1.00
8.76   1 . .
ATOM 915  CA    CA    . GLU GLU GLU A A 124 124 . 66.320  85.801  24.900  1.00
9.48   1 . .
ATOM 916  CB    CB    . GLU GLU GLU A A 124 124 . 66.982  84.423  24.996  1.00
10.34  1 . .
ATOM 917  CG    CG    . GLU GLU GLU A A 124 124 . 65.946  83.261  24.985  1.00
14.49  1 . .
ATOM 918  CD    CD    . GLU GLU GLU A A 124 124 . 65.205  83.209  23.678  1.00
18.74  1 . .
ATOM 919  OE1   OE1   . GLU GLU GLU A A 124 124 . 65.855  83.153  22.591  1.00
17.25  1 . .
ATOM 920  OE2   OE2   . GLU GLU GLU A A 124 124 . 63.959  83.230  23.723  1.00
24.85  1 . .
ATOM 921  C     C     . GLU GLU GLU A A 124 124 . 65.728  86.234  26.258  1.00
9.66   1 . .
ATOM 922  O     O     . GLU GLU GLU A A 124 124 . 64.509  86.080  26.524  1.00
10.23  1 . .
ATOM 923  N     N     . ARG ARG ARG A A 125 125 . 66.575  86.820  27.087  1.00
8.96   1 . .
ATOM 924  CA    CA    . ARG ARG ARG A A 125 125 . 66.160  87.412  28.370  1.00
9.51   1 . .
ATOM 925  CB    CB    . ARG ARG ARG A A 125 125 . 67.383  87.784  29.231  1.00
8.54   1 . .
ATOM 926  CG    CG    . ARG ARG ARG A A 125 125 . 68.389  86.674  29.657  1.00
10.84  1 . .
ATOM 927  CD    CD    . ARG ARG ARG A A 125 125 . 67.753  85.977  30.774  1.00
6.81   1 . .
ATOM 928  NE    NE    . ARG ARG ARG A A 125 125 . 68.618  85.060  31.499  1.00
10.76  1 . .
ATOM 929  CZ    CZ    . ARG ARG ARG A A 125 125 . 68.250  83.824  31.809  1.00
8.68   1 . .
ATOM 930  NH1   NH1   . ARG ARG ARG A A 125 125 . 69.089  83.028  32.504  1.00
13.61  1 . .
ATOM 931  NH2   NH2   . ARG ARG ARG A A 125 125 . 67.056  83.372  31.394  1.00
9.76   1 . .
ATOM 932  C     C     . ARG ARG ARG A A 125 125 . 65.358  88.715  28.239  1.00
9.08   1 . .
ATOM 933  O     O     . ARG ARG ARG A A 125 125 . 64.856  89.272  29.269  1.00
11.32  1 . .
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ATOM 934  N     N     . GLU GLU GLU A A 126 126 . 65.327  89.272  27.025  1.00
10.07  1 . .
ATOM 935  CA    CA    . GLU GLU GLU A A 126 126 . 64.680  90.595  26.785  1.00
12.02  1 . .
ATOM 936  CB    CB    . GLU GLU GLU A A 126 126 . 63.232  90.521  27.210  1.00
12.33  1 . .
ATOM 937  CG    CG    . GLU GLU GLU A A 126 126 . 62.290  91.270  26.382  1.00
17.78  1 . .
ATOM 938  CD    CD    . GLU GLU GLU A A 126 126 . 61.345  90.325  25.684  1.00
24.51  1 . .
ATOM 939  OE1   OE1   . GLU GLU GLU A A 126 126 . 60.110  90.521  25.770  1.00
26.85  1 . .
ATOM 940  OE2   OE2   . GLU GLU GLU A A 126 126 . 61.846  89.365  25.073  1.00
28.26  1 . .
ATOM 941  C     C     . GLU GLU GLU A A 126 126 . 65.387  91.687  27.621  1.00
10.90  1 . .
ATOM 942  O     O     . GLU GLU GLU A A 126 126 . 64.728  92.534  28.258  1.00
13.71  1 . .
ATOM 943  N     N     . LEU LEU LEU A A 127 127 . 66.721  91.626  27.634  1.00
9.15   1 . .
ATOM 944  CA    CA    . LEU LEU LEU A A 127 127 . 67.505  92.557  28.430  1.00
7.63   1 . .
ATOM 945  CB    CB    . LEU LEU LEU A A 127 127 . 68.255  91.835  29.538  1.00
7.42   1 . .
ATOM 946  CG    CG    . LEU LEU LEU A A 127 127 . 67.486  91.153  30.676  1.00
11.77  1 . .
ATOM 947  CD1   CD1   . LEU LEU LEU A A 127 127 . 68.454  90.370  31.527  1.00
9.13   1 . .
ATOM 948  CD2   CD2   . LEU LEU LEU A A 127 127 . 66.715  92.207  31.497  1.00
12.60  1 . .
ATOM 949  C     C     . LEU LEU LEU A A 127 127 . 68.521  93.190  27.536  1.00
7.17   1 . .
ATOM 950  O     O     . LEU LEU LEU A A 127 127 . 68.964  92.569  26.590  1.00
10.42  1 . .
ATOM 951  N     N     . PRO PRO PRO A A 128 128 . 68.944  94.413  27.847  1.00
6.85   1 . .
ATOM 952  CA    CA    . PRO PRO PRO A A 128 128 . 70.134  94.932  27.136  1.00
6.30   1 . .
ATOM 953  CB    CB    . PRO PRO PRO A A 128 128 . 70.372  96.278  27.785  1.00
6.27   1 . .
ATOM 954  CG    CG    . PRO PRO PRO A A 128 128 . 69.250  96.573  28.655  1.00
6.12   1 . .
ATOM 955  CD    CD    . PRO PRO PRO A A 128 128 . 68.424  95.332  28.866  1.00
5.70   1 . .
ATOM 956  C     C     . PRO PRO PRO A A 128 128 . 71.341  94.089  27.453  1.00
6.17   1 . .
ATOM 957  O     O     . PRO PRO PRO A A 128 128 . 71.472  93.535  28.573  1.00
5.45   1 . .
ATOM 958  N     N     . LEU LEU LEU A A 129 129 . 72.301  94.093  26.553  1.00
4.09   1 . .
ATOM 959  CA    CA    . LEU LEU LEU A A 129 129 . 73.498  93.204  26.715  1.00
4.30   1 . .
ATOM 960  CB    CB    . LEU LEU LEU A A 129 129 . 74.406  93.346  25.496  1.00
5.27   1 . .
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ATOM 961  CG    CG    . LEU LEU LEU A A 129 129 . 75.732  92.593  25.499  1.00
2.65   1 . .
ATOM 962  CD1   CD1   . LEU LEU LEU A A 129 129 . 75.540  91.043  25.689  1.00
3.68   1 . .
ATOM 963  CD2   CD2   . LEU LEU LEU A A 129 129 . 76.486  92.953  24.194  1.00
3.86   1 . .
ATOM 964  C     C     . LEU LEU LEU A A 129 129 . 74.299  93.457  28.019  1.00
4.82   1 . .
ATOM 965  O     O     . LEU LEU LEU A A 129 129 . 74.706  92.542  28.761  1.00
4.45   1 . .
ATOM 966  N     N     . TYR TYR TYR A A 130 130 . 74.427  94.740  28.339  1.00
4.75   1 . .
ATOM 967  CA    CA    . TYR TYR TYR A A 130 130 . 75.135  95.073  29.571  1.00
3.69   1 . .
ATOM 968  CB    CB    . TYR TYR TYR A A 130 130 . 75.353  96.608  29.779  1.00
2.74   1 . .
ATOM 969  CG    CG    . TYR TYR TYR A A 130 130 . 74.086  97.440  29.881  1.00
3.08   1 . .
ATOM 970  CD1   CD1   . TYR TYR TYR A A 130 130 . 73.418  97.579  31.087  1.00
3.82   1 . .
ATOM 971  CE1   CE1   . TYR TYR TYR A A 130 130 . 72.295  98.332  31.183  1.00
5.32   1 . .
ATOM 972  CZ    CZ    . TYR TYR TYR A A 130 130 . 71.795  98.956  30.077  1.00
7.87   1 . .
ATOM 973  OH    OH    . TYR TYR TYR A A 130 130 . 70.651  99.622  30.250  1.00
10.13  1 . .
ATOM 974  CE2   CE2   . TYR TYR TYR A A 130 130 . 72.410  98.833  28.846  1.00
5.37   1 . .
ATOM 975  CD2   CD2   . TYR TYR TYR A A 130 130 . 73.539  98.019  28.760  1.00
4.22   1 . .
ATOM 976  C     C     . TYR TYR TYR A A 130 130 . 74.426  94.496  30.778  1.00
3.72   1 . .
ATOM 977  O     O     . TYR TYR TYR A A 130 130 . 75.057  94.082  31.737  1.00
5.01   1 . .
ATOM 978  N     N     . ARG ARG ARG A A 131 131 . 73.119  94.418  30.752  1.00
6.95   1 . .
ATOM 979  CA    CA    . ARG ARG ARG A A 131 131 . 72.373  93.880  31.910  1.00
5.95   1 . .
ATOM 980  CB    CB    . ARG ARG ARG A A 131 131 . 70.919  94.280  31.763  1.00
7.32   1 . .
ATOM 981  CG    CG    . ARG ARG ARG A A 131 131 . 70.623  95.513  32.542  1.00
14.23  1 . .
ATOM 982  CD    CD    . ARG ARG ARG A A 131 131 . 70.379  95.180  33.977  1.00
21.03  1 . .
ATOM 983  NE    NE    . ARG ARG ARG A A 131 131 . 70.239  96.395  34.745  1.00
24.22  1 . .
ATOM 984  CZ    CZ    . ARG ARG ARG A A 131 131 . 70.715  96.564  35.970  1.00
24.52  1 . .
ATOM 985  NH1   NH1   . ARG ARG ARG A A 131 131 . 71.392  95.596  36.583  1.00
20.74  1 . .
ATOM 986  NH2   NH2   . ARG ARG ARG A A 131 131 . 70.535  97.728  36.571  1.00
25.59  1 . .
ATOM 987  C     C     . ARG ARG ARG A A 131 131 . 72.490  92.346  31.990  1.00
6.60   1 . .
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ATOM 988  O     O     . ARG ARG ARG A A 131 131 . 72.605  91.746  33.072  1.00
6.95   1 . .
ATOM 989  N     N     . HIS HIS HIS A A 132 132 . 72.429  91.712  30.816  1.00
5.60   1 . .
ATOM 990  CA    CA    . HIS HIS HIS A A 132 132 . 72.613  90.261  30.750  1.00
4.87   1 . .
ATOM 991  CB    CB    . HIS HIS HIS A A 132 132 . 72.401  89.787  29.305  1.00
4.91   1 . .
ATOM 992  CG    CG    . HIS HIS HIS A A 132 132 . 72.647  88.326  29.073  1.00
6.95   1 . .
ATOM 993  ND1   ND1   . HIS HIS HIS A A 132 132 . 72.070  87.350  29.857  1.00
7.63   1 . .
ATOM 994  CE1   CE1   . HIS HIS HIS A A 132 132 . 72.444  86.157  29.427  1.00
7.80   1 . .
ATOM 995  NE2   NE2   . HIS HIS HIS A A 132 132 . 73.274  86.317  28.410  1.00
6.60   1 . .
ATOM 996  CD2   CD2   . HIS HIS HIS A A 132 132 . 73.435  87.670  28.181  1.00
4.55   1 . .
ATOM 997  C     C     . HIS HIS HIS A A 132 132 . 73.990  89.856  31.288  1.00
3.19   1 . .
ATOM 998  O     O     . HIS HIS HIS A A 132 132 . 74.116  88.944  32.099  1.00
4.90   1 . .
ATOM 999  N     N     . ILE ILE ILE A A 133 133 . 75.027  90.572  30.839  1.00
3.85   1 . .
ATOM 1000 CA    CA    . ILE ILE ILE A A 133 133 . 76.344  90.391  31.351  1.00
2.89   1 . .
ATOM 1001 CB    CB    . ILE ILE ILE A A 133 133 . 77.377  91.302  30.633  1.00
3.80   1 . .
ATOM 1002 CG1   CG1   . ILE ILE ILE A A 133 133 . 77.523  90.750  29.232  1.00
3.21   1 . .
ATOM 1003 CD1   CD1   . ILE ILE ILE A A 133 133 . 78.290  91.606  28.315  1.00
3.08   1 . .
ATOM 1004 CG2   CG2   . ILE ILE ILE A A 133 133 . 78.755  91.305  31.371  1.00
2.80   1 . .
ATOM 1005 C     C     . ILE ILE ILE A A 133 133 . 76.431  90.551  32.871  1.00
3.51   1 . .
ATOM 1006 O     O     . ILE ILE ILE A A 133 133 . 77.090  89.668  33.536  1.00
3.52   1 . .
ATOM 1007 N     N     . ALA ALA ALA A A 134 134 . 75.791  91.638  33.358  1.00
5.13   1 . .
ATOM 1008 CA    CA    . ALA ALA ALA A A 134 134 . 75.689  91.879  34.780  1.00
5.45   1 . .
ATOM 1009 CB    CB    . ALA ALA ALA A A 134 134 . 74.768  93.015  35.019  1.00
6.41   1 . .
ATOM 1010 C     C     . ALA ALA ALA A A 134 134 . 75.203  90.629  35.487  1.00
5.59   1 . .
ATOM 1011 O     O     . ALA ALA ALA A A 134 134 . 75.821  90.199  36.472  1.00
5.88   1 . .
ATOM 1012 N     N     . GLN GLN GLN A A 135 135 . 74.103  90.042  34.976  1.00
6.16   1 . .
ATOM 1013 CA    CA    . GLN GLN GLN A A 135 135 . 73.550  88.812  35.625  1.00
7.03   1 . .
ATOM 1014 CB    CB    . GLN GLN GLN A A 135 135 . 72.177  88.497  35.015  1.00
7.98   1 . .
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ATOM 1015 CG    CG    . GLN GLN GLN A A 135 135 . 71.065  89.604  35.395  1.00
7.98   1 . .
ATOM 1016 CD    CD    . GLN GLN GLN A A 135 135 . 69.643  89.323  34.849  1.00
14.73  1 . .
ATOM 1017 OE1   OE1   . GLN GLN GLN A A 135 135 . 68.684  90.021  35.230  1.00
20.23  1 . .
ATOM 1018 NE2   NE2   . GLN GLN GLN A A 135 135 . 69.485  88.276  34.006  1.00
14.01  1 . .
ATOM 1019 C     C     . GLN GLN GLN A A 135 135 . 74.536  87.623  35.570  1.00
8.18   1 . .
ATOM 1020 O     O     . GLN GLN GLN A A 135 135 . 74.702  86.874  36.555  1.00
9.63   1 . .
ATOM 1021 N     N     . LEU LEU LEU A A 136 136 . 75.189  87.437  34.430  1.00
7.94   1 . .
ATOM 1022 CA    CA    . LEU LEU LEU A A 136 136 . 76.194  86.372  34.310  1.00
6.09   1 . .
ATOM 1023 CB    CB    . LEU LEU LEU A A 136 136 . 76.834  86.392  32.903  1.00
5.75   1 . .
ATOM 1024 CG    CG    . LEU LEU LEU A A 136 136 . 75.879  85.925  31.781  1.00
5.77   1 . .
ATOM 1025 CD1   CD1   . LEU LEU LEU A A 136 136 . 76.584  85.967  30.416  1.00
4.29   1 . .
ATOM 1026 CD2   CD2   . LEU LEU LEU A A 136 136 . 75.229  84.512  32.005  1.00
7.60   1 . .
ATOM 1027 C     C     . LEU LEU LEU A A 136 136 . 77.310  86.504  35.352  1.00
7.50   1 . .
ATOM 1028 O     O     . LEU LEU LEU A A 136 136 . 77.816  85.537  35.872  1.00
8.81   1 . .
ATOM 1029 N     N     . ALA ALA ALA A A 137 137 . 77.653  87.748  35.663  1.00
7.76   1 . .
ATOM 1030 CA    CA    . ALA ALA ALA A A 137 137 . 78.759  88.028  36.544  1.00
8.90   1 . .
ATOM 1031 CB    CB    . ALA ALA ALA A A 137 137 . 79.566  89.247  36.008  1.00
6.50   1 . .
ATOM 1032 C     C     . ALA ALA ALA A A 137 137 . 78.329  88.202  37.990  1.00
9.97   1 . .
ATOM 1033 O     O     . ALA ALA ALA A A 137 137 . 79.174  88.294  38.871  1.00
12.06  1 . .
ATOM 1034 N     N     . GLY GLY GLY A A 138 138 . 77.014  88.138  38.214  1.00
10.95  1 . .
ATOM 1035 CA    CA    . GLY GLY GLY A A 138 138 . 76.415  88.412  39.530  1.00
13.16  1 . .
ATOM 1036 C     C     . GLY GLY GLY A A 138 138 . 76.439  89.840  40.059  1.00
13.85  1 . .
ATOM 1037 O     O     . GLY GLY GLY A A 138 138 . 76.453  90.061  41.279  1.00
12.59  1 . .
ATOM 1038 N     N     . ASN ASN ASN A A 139 139 . 76.397  90.831  39.152  1.00
14.52  1 . .
ATOM 1039 CA    CA    . ASN ASN ASN A A 139 139 . 76.288  92.235  39.563  1.00
14.78  1 . .
ATOM 1040 CB    CB    . ASN ASN ASN A A 139 139 . 77.293  93.095  38.779  1.00
15.58  1 . .
ATOM 1041 CG    CG    . ASN ASN ASN A A 139 139 . 78.711  92.534  38.829  1.00
15.71  1 . .
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ATOM 1042 OD1   OD1   . ASN ASN ASN A A 139 139 . 79.138  91.937  39.841  1.00
17.19  1 . .
ATOM 1043 ND2   ND2   . ASN ASN ASN A A 139 139 . 79.442  92.692  37.719  1.00
7.60   1 . .
ATOM 1044 C     C     . ASN ASN ASN A A 139 139 . 74.859  92.793  39.434  1.00
15.99  1 . .
ATOM 1045 O     O     . ASN ASN ASN A A 139 139 . 74.031  92.252  38.700  1.00
15.74  1 . .
ATOM 1046 N     N     . SER SER SER A A 140 140 . 74.554  93.866  40.168  1.00
17.28  1 . .
ATOM 1047 CA    CA    . SER SER SER A A 140 140 . 73.257  94.576  40.042  1.00
18.96  1 . .
ATOM 1048 CB    CB    . SER SER SER A A 140 140 . 72.377  94.335  41.266  1.00
19.12  1 . .
ATOM 1049 OG    OG    . SER SER SER A A 140 140 . 73.030  93.513  42.222  1.00
24.58  1 . .
ATOM 1050 C     C     . SER SER SER A A 140 140 . 73.376  96.076  39.800  1.00
19.00  1 . .
ATOM 1051 O     O     . SER SER SER A A 140 140 . 72.524  96.671  39.130  1.00
19.80  1 . .
ATOM 1052 N     N     . ASP ASP ASP A A 141 141 . 74.468  96.670  40.271  1.00
18.26  1 . .
ATOM 1053 CA    CA    . ASP ASP ASP A A 141 141 . 74.576  98.111  40.359  1.00
18.90  1 . .
ATOM 1054 CB    CB    . ASP ASP ASP A A 141 141 . 74.861  98.585  41.801  1.00
19.38  1 . .
ATOM 1055 CG    CG    . ASP ASP ASP A A 141 141 . 73.767  98.166  42.770  1.00
23.00  1 . .
ATOM 1056 OD1   OD1   . ASP ASP ASP A A 141 141 . 74.043  98.010  43.989  1.00
27.80  1 . .
ATOM 1057 OD2   OD2   . ASP ASP ASP A A 141 141 . 72.618  97.970  42.314  1.00
27.47  1 . .
ATOM 1058 C     C     . ASP ASP ASP A A 141 141 . 75.654  98.513  39.371  1.00
16.98  1 . .
ATOM 1059 O     O     . ASP ASP ASP A A 141 141 . 76.839  98.439  39.645  1.00
19.33  1 . .
ATOM 1060 N     N     . LEU LEU LEU A A 142 142 . 75.225  98.921  38.190  1.00
13.73  1 . .
ATOM 1061 CA    CA    . LEU LEU LEU A A 142 142 . 76.165  99.076  37.098  1.00
10.26  1 . .
ATOM 1062 CB    CB    . LEU LEU LEU A A 142 142 . 75.371  99.003  35.828  1.00
9.33   1 . .
ATOM 1063 CG    CG    . LEU LEU LEU A A 142 142 . 74.384  97.855  35.789  1.00
11.33  1 . .
ATOM 1064 CD1   CD1   . LEU LEU LEU A A 142 142 . 73.286  98.075  34.739  1.00
15.83  1 . .
ATOM 1065 CD2   CD2   . LEU LEU LEU A A 142 142 . 75.125  96.569  35.474  1.00
11.68  1 . .
ATOM 1066 C     C     . LEU LEU LEU A A 142 142 . 76.887  100.411 37.172  1.00
7.71   1 . .
ATOM 1067 O     O     . LEU LEU LEU A A 142 142 . 76.393  101.385 37.732  1.00
8.93   1 . .
ATOM 1068 N     N     . ILE ILE ILE A A 143 143 . 78.063  100.493 36.599  1.00
5.91   1 . .
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ATOM 1069 CA    CA    . ILE ILE ILE A A 143 143 . 78.702  101.771 36.582  1.00
6.33   1 . .
ATOM 1070 CB    CB    . ILE ILE ILE A A 143 143 . 79.768  101.989 37.657  1.00
10.14  1 . .
ATOM 1071 CG1   CG1   . ILE ILE ILE A A 143 143 . 80.998  101.187 37.331  1.00
10.33  1 . .
ATOM 1072 CD1   CD1   . ILE ILE ILE A A 143 143 . 82.155  102.049 37.168  1.00
12.67  1 . .
ATOM 1073 CG2   CG2   . ILE ILE ILE A A 143 143 . 79.236  101.908 39.143  1.00
10.92  1 . .
ATOM 1074 C     C     . ILE ILE ILE A A 143 143 . 79.361  102.084 35.227  1.00
4.03   1 . .
ATOM 1075 O     O     . ILE ILE ILE A A 143 143 . 79.822  101.174 34.501  1.00
4.27   1 . .
ATOM 1076 N     N     . LEU LEU LEU A A 144 144 . 79.422  103.355 34.951  1.00
3.35   1 . .
ATOM 1077 CA    CA    . LEU LEU LEU A A 144 144 . 80.071  103.830 33.697  1.00
2.24   1 . .
ATOM 1078 CB    CB    . LEU LEU LEU A A 144 144 . 79.424  105.097 33.149  1.00
2.69   1 . .
ATOM 1079 CG    CG    . LEU LEU LEU A A 144 144 . 78.251  105.030 32.194  1.00
3.78   1 . .
ATOM 1080 CD1   CD1   . LEU LEU LEU A A 144 144 . 78.498  104.288 30.877  1.00
4.95   1 . .
ATOM 1081 CD2   CD2   . LEU LEU LEU A A 144 144 . 77.133  104.202 32.894  1.00
7.05   1 . .
ATOM 1082 C     C     . LEU LEU LEU A A 144 144 . 81.541  104.044 33.971  1.00
2.41   1 . .
ATOM 1083 O     O     . LEU LEU LEU A A 144 144 . 81.922  104.658 34.961  1.00
5.16   1 . .
ATOM 1084 N     N     . PRO PRO PRO A A 145 145 . 82.405  103.451 33.155  1.00
2.16   1 . .
ATOM 1085 CA    CA    . PRO PRO PRO A A 145 145 . 83.833  103.547 33.423  1.00
2.09   1 . .
ATOM 1086 CB    CB    . PRO PRO PRO A A 145 145 . 84.417  102.487 32.446  1.00
2.05   1 . .
ATOM 1087 CG    CG    . PRO PRO PRO A A 145 145 . 83.515  102.604 31.257  1.00
2.50   1 . .
ATOM 1088 CD    CD    . PRO PRO PRO A A 145 145 . 82.099  102.779 31.864  1.00
2.31   1 . .
ATOM 1089 C     C     . PRO PRO PRO A A 145 145 . 84.474  104.873 33.086  1.00
2.14   1 . .
ATOM 1090 O     O     . PRO PRO PRO A A 145 145 . 83.965  105.602 32.219  1.00
2.36   1 . .
ATOM 1091 N     N     . VAL VAL VAL A A 146 146 . 85.626  105.156 33.655  1.00
2.51   1 . .
ATOM 1092 CA    CA    . VAL VAL VAL A A 146 146 . 86.447  106.193 33.057  1.00
2.53   1 . .
ATOM 1093 CB    CB    . VAL VAL VAL A A 146 146 . 87.535  106.636 34.041  1.00
2.86   1 . .
ATOM 1094 CG1   CG1   . VAL VAL VAL A A 146 146 . 88.490  107.643 33.431  1.00
2.94   1 . .
ATOM 1095 CG2   CG2   . VAL VAL VAL A A 146 146 . 86.897  107.133 35.406  1.00
2.92   1 . .
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ATOM 1096 C     C     . VAL VAL VAL A A 146 146 . 87.090  105.631 31.793  1.00
2.87   1 . .
ATOM 1097 O     O     . VAL VAL VAL A A 146 146 . 87.726  104.570 31.883  1.00
3.43   1 . .
ATOM 1098 N     N     . PRO PRO PRO A A 147 147 . 86.965  106.366 30.692  1.00
2.00   1 . .
ATOM 1099 CA    CA    . PRO PRO PRO A A 147 147 . 87.702  105.946 29.477  1.00
2.07   1 . .
ATOM 1100 CB    CB    . PRO PRO PRO A A 147 147 . 86.979  106.694 28.365  1.00
2.33   1 . .
ATOM 1101 CG    CG    . PRO PRO PRO A A 147 147 . 86.500  108.021 29.053  1.00
4.09   1 . .
ATOM 1102 CD    CD    . PRO PRO PRO A A 147 147 . 86.209  107.637 30.467  1.00
2.45   1 . .
ATOM 1103 C     C     . PRO PRO PRO A A 147 147 . 89.160  106.376 29.498  1.00
2.77   1 . .
ATOM 1104 O     O     . PRO PRO PRO A A 147 147 . 89.514  107.476 29.993  1.00
2.44   1 . .
ATOM 1105 N     N     . ALA ALA ALA A A 148 148 . 90.043  105.522 28.953  1.00
2.24   1 . .
ATOM 1106 CA    CA    . ALA ALA ALA A A 148 148 . 91.484  105.752 28.967  1.00
3.19   1 . .
ATOM 1107 CB    CB    . ALA ALA ALA A A 148 148 . 92.206  104.576 29.613  1.00
2.20   1 . .
ATOM 1108 C     C     . ALA ALA ALA A A 148 148 . 91.893  105.886 27.485  1.00
2.69   1 . .
ATOM 1109 O     O     . ALA ALA ALA A A 148 148 . 91.996  104.846 26.760  1.00
2.27   1 . .
ATOM 1110 N     N     . PHE PHE PHE A A 149 149 . 91.988  107.115 26.962  1.00
2.73   1 . .
ATOM 1111 CA    CA    . PHE PHE PHE A A 149 149 . 92.231  107.352 25.524  1.00
2.21   1 . .
ATOM 1112 CB    CB    . PHE PHE PHE A A 149 149 . 91.619  108.728 25.139  1.00
2.28   1 . .
ATOM 1113 CG    CG    . PHE PHE PHE A A 149 149 . 90.180  108.878 25.425  1.00
2.16   1 . .
ATOM 1114 CD1   CD1   . PHE PHE PHE A A 149 149 . 89.199  108.362 24.554  1.00
2.59   1 . .
ATOM 1115 CE1   CE1   . PHE PHE PHE A A 149 149 . 87.797  108.552 24.818  1.00
2.53   1 . .
ATOM 1116 CZ    CZ    . PHE PHE PHE A A 149 149 . 87.413  109.340 25.954  1.00
3.58   1 . .
ATOM 1117 CE2   CE2   . PHE PHE PHE A A 149 149 . 88.416  109.874 26.748  1.00
2.00   1 . .
ATOM 1118 CD2   CD2   . PHE PHE PHE A A 149 149 . 89.736  109.645 26.515  1.00
2.00   1 . .
ATOM 1119 C     C     . PHE PHE PHE A A 149 149 . 93.707  107.384 25.155  1.00
2.08   1 . .
ATOM 1120 O     O     . PHE PHE PHE A A 149 149 . 94.478  108.232 25.595  1.00
2.22   1 . .
ATOM 1121 N     N     . ASN ASN ASN A A 150 150 . 94.111  106.516 24.230  1.00
2.00   1 . .
ATOM 1122 CA    CA    . ASN ASN ASN A A 150 150 . 95.517  106.379 23.835  1.00
2.07   1 . .
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ATOM 1123 CB    CB    . ASN ASN ASN A A 150 150 . 95.731  104.887 23.355  1.00
2.00   1 . .
ATOM 1124 CG    CG    . ASN ASN ASN A A 150 150 . 97.124  104.632 22.750  1.00
2.47   1 . .
ATOM 1125 OD1   OD1   . ASN ASN ASN A A 150 150 . 97.325  103.603 22.080  1.00
5.51   1 . .
ATOM 1126 ND2   ND2   . ASN ASN ASN A A 150 150 . 98.047  105.464 23.006  1.00
3.15   1 . .
ATOM 1127 C     C     . ASN ASN ASN A A 150 150 . 95.763  107.409 22.688  1.00
2.19   1 . .
ATOM 1128 O     O     . ASN ASN ASN A A 150 150 . 95.527  107.146 21.482  1.00
2.29   1 . .
ATOM 1129 N     N     . VAL VAL VAL A A 151 151 . 96.206  108.601 23.101  1.00
2.07   1 . .
ATOM 1130 CA    CA    . VAL VAL VAL A A 151 151 . 96.253  109.769 22.222  1.00
2.61   1 . .
ATOM 1131 CB    CB    . VAL VAL VAL A A 151 151 . 95.753  111.033 22.977  1.00
2.00   1 . .
ATOM 1132 CG1   CG1   . VAL VAL VAL A A 151 151 . 94.294  110.792 23.428  1.00
2.63   1 . .
ATOM 1133 CG2   CG2   . VAL VAL VAL A A 151 151 . 96.652  111.438 24.186  1.00
4.26   1 . .
ATOM 1134 C     C     . VAL VAL VAL A A 151 151 . 97.644  109.946 21.574  1.00
2.24   1 . .
ATOM 1135 O     O     . VAL VAL VAL A A 151 151 . 97.761  110.695 20.635  1.00
2.02   1 . .
ATOM 1136 N     N     . ILE ILE ILE A A 152 152 . 98.681  109.305 22.067  1.00
2.11   1 . .
ATOM 1137 CA    CA    . ILE ILE ILE A A 152 152 . 99.944  109.220 21.329  1.00
2.51   1 . .
ATOM 1138 CB    CB    . ILE ILE ILE A A 152 152 . 101.115 110.082 21.947  1.00
3.61   1 . .
ATOM 1139 CG1   CG1   . ILE ILE ILE A A 152 152 . 100.742 111.550 21.912  1.00
5.39   1 . .
ATOM 1140 CD1   CD1   . ILE ILE ILE A A 152 152 . 101.875 112.385 22.483  1.00
5.29   1 . .
ATOM 1141 CG2   CG2   . ILE ILE ILE A A 152 152 . 102.459 109.793 21.244  1.00
3.82   1 . .
ATOM 1142 C     C     . ILE ILE ILE A A 152 152 . 100.398 107.765 21.225  1.00
2.52   1 . .
ATOM 1143 O     O     . ILE ILE ILE A A 152 152 . 100.487 107.060 22.254  1.00
3.02   1 . .
ATOM 1144 N     N     . ASN ASN ASN A A 153 153 . 100.560 107.295 19.978  1.00
3.06   1 . .
ATOM 1145 CA    CA    . ASN ASN ASN A A 153 153 . 100.927 105.891 19.712  1.00
2.79   1 . .
ATOM 1146 CB    CB    . ASN ASN ASN A A 153 153 . 100.070 105.316 18.557  1.00
2.95   1 . .
ATOM 1147 CG    CG    . ASN ASN ASN A A 153 153 . 98.593  105.355 18.835  1.00
2.47   1 . .
ATOM 1148 OD1   OD1   . ASN ASN ASN A A 153 153 . 98.100  105.680 19.985  1.00
4.67   1 . .
ATOM 1149 ND2   ND2   . ASN ASN ASN A A 153 153 . 97.833  104.972 17.815  1.00
2.10   1 . .
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ATOM 1150 C     C     . ASN ASN ASN A A 153 153 . 102.415 105.677 19.449  1.00
2.64   1 . .
ATOM 1151 O     O     . ASN ASN ASN A A 153 153 . 103.046 106.431 18.678  1.00
4.01   1 . .
ATOM 1152 N     N     . GLY GLY GLY A A 154 154 . 102.950 104.598 20.039  1.00
3.31   1 . .
ATOM 1153 CA    CA    . GLY GLY GLY A A 154 154 . 104.367 104.252 19.882  1.00
3.26   1 . .
ATOM 1154 C     C     . GLY GLY GLY A A 154 154 . 104.449 102.726 19.703  1.00
4.40   1 . .
ATOM 1155 O     O     . GLY GLY GLY A A 154 154 . 103.458 102.064 19.287  1.00
3.57   1 . .
ATOM 1156 N     N     . GLY GLY GLY A A 155 155 . 105.632 102.191 19.983  1.00
4.84   1 . .
ATOM 1157 CA    CA    . GLY GLY GLY A A 155 155 . 105.937 100.736 19.918  1.00
3.49   1 . .
ATOM 1158 C     C     . GLY GLY GLY A A 155 155 . 105.500 100.112 18.605  1.00
5.22   1 . .
ATOM 1159 O     O     . GLY GLY GLY A A 155 155 . 105.664 100.671 17.483  1.00
5.98   1 . .
ATOM 1160 N     N     . SER SER SER A A 156 156 . 104.880 98.954  18.751  1.00
4.75   1 . .
ATOM 1161 CA    CA    . SER SER SER A A 156 156 . 104.432 98.209  17.628  1.00
4.74   1 . .
ATOM 1162 CB    CB    . SER SER SER A A 156 156 . 104.280 96.762  18.091  1.00
3.77   1 . .
ATOM 1163 OG    OG    . SER SER SER A A 156 156 . 105.500 96.307  18.649  1.00
7.06   1 . .
ATOM 1164 C     C     . SER SER SER A A 156 156 . 103.150 98.728  16.961  1.00
5.80   1 . .
ATOM 1165 O     O     . SER SER SER A A 156 156 . 102.624 98.109  16.002  1.00
4.65   1 . .
ATOM 1166 N     N     . HIS HIS HIS A A 157 157 . 102.655 99.904  17.362  1.00
3.84   1 . .
ATOM 1167 CA    CA    . HIS HIS HIS A A 157 157 . 101.423 100.427 16.816  1.00
3.00   1 . .
ATOM 1168 CB    CB    . HIS HIS HIS A A 157 157 . 100.497 100.860 17.934  1.00
2.47   1 . .
ATOM 1169 CG    CG    . HIS HIS HIS A A 157 157 . 99.977  99.753  18.814  1.00
3.79   1 . .
ATOM 1170 ND1   ND1   . HIS HIS HIS A A 157 157 . 99.221  100.000 19.954  1.00
2.95   1 . .
ATOM 1171 CE1   CE1   . HIS HIS HIS A A 157 157 . 98.906  98.844  20.506  1.00
3.04   1 . .
ATOM 1172 NE2   NE2   . HIS HIS HIS A A 157 157 . 99.451  97.865  19.802  1.00
2.26   1 . .
ATOM 1173 CD2   CD2   . HIS HIS HIS A A 157 157 . 100.138 98.410  18.745  1.00
2.85   1 . .
ATOM 1174 C     C     . HIS HIS HIS A A 157 157 . 101.657 101.649 15.972  1.00
3.94   1 . .
ATOM 1175 O     O     . HIS HIS HIS A A 157 157 . 100.709 102.161 15.419  1.00
2.81   1 . .
ATOM 1176 N     N     . ALA ALA ALA A A 158 158 . 102.908 102.036 15.746  1.00
4.17   1 . .
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ATOM 1177 CA    CA    . ALA ALA ALA A A 158 158 . 103.199 103.290 15.091  1.00
4.85   1 . .
ATOM 1178 CB    CB    . ALA ALA ALA A A 158 158 . 103.097 104.516 16.077  1.00
5.89   1 . .
ATOM 1179 C     C     . ALA ALA ALA A A 158 158 . 104.533 103.297 14.389  1.00
5.97   1 . .
ATOM 1180 O     O     . ALA ALA ALA A A 158 158 . 105.469 102.670 14.810  1.00
8.38   1 . .
ATOM 1181 N     N     . GLY GLY GLY A A 159 159 . 104.538 104.063 13.302  1.00
7.08   1 . .
ATOM 1182 CA    CA    . GLY GLY GLY A A 159 159 . 105.756 104.391 12.545  1.00
7.06   1 . .
ATOM 1183 C     C     . GLY GLY GLY A A 159 159 . 106.406 105.611 13.172  1.00
8.46   1 . .
ATOM 1184 O     O     . GLY GLY GLY A A 159 159 . 106.056 106.762 12.893  1.00
8.63   1 . .
ATOM 1185 N     N     . ASN ASN ASN A A 160 160 . 107.361 105.324 14.027  1.00
6.74   1 . .
ATOM 1186 CA    CA    . ASN ASN ASN A A 160 160 . 108.117 106.328 14.777  1.00
6.17   1 . .
ATOM 1187 CB    CB    . ASN ASN ASN A A 160 160 . 107.209 107.304 15.610  1.00
6.28   1 . .
ATOM 1188 CG    CG    . ASN ASN ASN A A 160 160 . 106.344 106.600 16.648  1.00
3.63   1 . .
ATOM 1189 OD1   OD1   . ASN ASN ASN A A 160 160 . 106.499 105.404 16.943  1.00
4.46   1 . .
ATOM 1190 ND2   ND2   . ASN ASN ASN A A 160 160 . 105.464 107.351 17.244  1.00
4.28   1 . .
ATOM 1191 C     C     . ASN ASN ASN A A 160 160 . 109.176 105.576 15.626  1.00
7.16   1 . .
ATOM 1192 O     O     . ASN ASN ASN A A 160 160 . 109.169 104.325 15.680  1.00
5.63   1 . .
ATOM 1193 N     N     . LYS LYS LYS A A 161 161 . 110.092 106.276 16.289  1.00
8.28   1 . .
ATOM 1194 CA    CA    . LYS LYS LYS A A 161 161 . 111.124 105.582 17.071  1.00
7.99   1 . .
ATOM 1195 CB    CB    . LYS LYS LYS A A 161 161 . 112.348 106.518 17.196  1.00
10.12  1 . .
ATOM 1196 CG    CG    . LYS LYS LYS A A 161 161 . 113.183 106.580 15.896  1.00
9.73   1 . .
ATOM 1197 CD    CD    . LYS LYS LYS A A 161 161 . 114.476 107.365 16.161  1.00
15.79  1 . .
ATOM 1198 CE    CE    . LYS LYS LYS A A 161 161 . 115.139 107.821 14.882  1.00
16.68  1 . .
ATOM 1199 NZ    NZ    . LYS LYS LYS A A 161 161 . 116.598 107.886 15.165  1.00
22.68  1 . .
ATOM 1200 C     C     . LYS LYS LYS A A 161 161 . 110.558 105.223 18.469  1.00
7.28   1 . .
ATOM 1201 O     O     . LYS LYS LYS A A 161 161 . 110.993 104.266 19.131  1.00
8.55   1 . .
ATOM 1202 N     N     . LEU LEU LEU A A 162 162 . 109.590 106.013 18.911  1.00
6.65   1 . .
ATOM 1203 CA    CA    . LEU LEU LEU A A 162 162 . 109.027 105.979 20.257  1.00
4.66   1 . .
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ATOM 1204 CB    CB    . LEU LEU LEU A A 162 162 . 107.721 106.802 20.261  1.00
5.05   1 . .
ATOM 1205 CG    CG    . LEU LEU LEU A A 162 162 . 107.000 107.023 21.587  1.00
2.84   1 . .
ATOM 1206 CD1   CD1   . LEU LEU LEU A A 162 162 . 107.816 107.858 22.571  1.00
3.93   1 . .
ATOM 1207 CD2   CD2   . LEU LEU LEU A A 162 162 . 105.688 107.724 21.306  1.00
4.69   1 . .
ATOM 1208 C     C     . LEU LEU LEU A A 162 162 . 108.744 104.539 20.612  1.00
4.49   1 . .
ATOM 1209 O     O     . LEU LEU LEU A A 162 162 . 107.871 103.907 20.017  1.00
4.93   1 . .
ATOM 1210 N     N     . ALA ALA ALA A A 163 163 . 109.413 104.038 21.636  1.00
3.56   1 . .
ATOM 1211 CA    CA    . ALA ALA ALA A A 163 163 . 109.352 102.614 21.968  1.00
3.38   1 . .
ATOM 1212 CB    CB    . ALA ALA ALA A A 163 163 . 110.673 102.083 22.565  1.00
3.66   1 . .
ATOM 1213 C     C     . ALA ALA ALA A A 163 163 . 108.172 102.249 22.838  1.00
2.68   1 . .
ATOM 1214 O     O     . ALA ALA ALA A A 163 163 . 107.568 101.170 22.635  1.00
5.13   1 . .
ATOM 1215 N     N     . MET MET MET A A 164 164 . 107.805 103.047 23.843  1.00
3.24   1 . .
ATOM 1216 CA    CA    . MET MET MET A A 164 164 . 106.677 102.722 24.640  1.00
3.37   1 . .
ATOM 1217 CB    CB    . MET MET MET A A 164 164 . 106.688 103.508 25.943  1.00
3.05   1 . .
ATOM 1218 CG    CG    . MET MET MET A A 164 164 . 107.988 103.258 26.739  1.00
4.05   1 . .
ATOM 1219 SD    SD    . MET MET MET A A 164 164 . 108.069 104.097 28.296  1.00
6.95   1 . .
ATOM 1220 CE    CE    . MET MET MET A A 164 164 . 109.673 103.636 28.800  1.00
5.98   1 . .
ATOM 1221 C     C     . MET MET MET A A 164 164 . 105.407 102.870 23.805  1.00
3.44   1 . .
ATOM 1222 O     O     . MET MET MET A A 164 164 . 105.356 103.690 22.929  1.00
4.14   1 . .
ATOM 1223 N     N     . GLN GLN GLN A A 165 165 . 104.420 101.982 24.070  1.00
3.28   1 . .
ATOM 1224 CA    CA    . GLN GLN GLN A A 165 165 . 103.353 101.765 23.133  1.00
2.71   1 . .
ATOM 1225 CB    CB    . GLN GLN GLN A A 165 165 . 102.864 100.324 23.270  1.00
2.25   1 . .
ATOM 1226 CG    CG    . GLN GLN GLN A A 165 165 . 101.790 99.861  22.312  1.00
2.94   1 . .
ATOM 1227 CD    CD    . GLN GLN GLN A A 165 165 . 101.379 98.450  22.603  1.00
2.83   1 . .
ATOM 1228 OE1   OE1   . GLN GLN GLN A A 165 165 . 101.957 97.501  22.058  1.00
3.97   1 . .
ATOM 1229 NE2   NE2   . GLN GLN GLN A A 165 165 . 100.346 98.292  23.439  1.00
2.58   1 . .
ATOM 1230 C     C     . GLN GLN GLN A A 165 165 . 102.230 102.820 23.174  1.00
2.02   1 . .
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ATOM 1231 O     O     . GLN GLN GLN A A 165 165 . 101.681 103.217 22.115  1.00
3.61   1 . .
ATOM 1232 N     N     . GLU GLU GLU A A 166 166 . 101.781 103.105 24.394  1.00
3.22   1 . .
ATOM 1233 CA    CA    . GLU GLU GLU A A 166 166 . 100.551 103.865 24.586  1.00
2.00   1 . .
ATOM 1234 CB    CB    . GLU GLU GLU A A 166 166 . 99.342  102.990 25.001  1.00
2.08   1 . .
ATOM 1235 CG    CG    . GLU GLU GLU A A 166 166 . 99.130  101.817 24.047  1.00
2.83   1 . .
ATOM 1236 CD    CD    . GLU GLU GLU A A 166 166 . 98.081  100.898 24.539  1.00
5.11   1 . .
ATOM 1237 OE1   OE1   . GLU GLU GLU A A 166 166 . 97.340  101.207 25.490  1.00
5.09   1 . .
ATOM 1238 OE2   OE2   . GLU GLU GLU A A 166 166 . 97.980  99.814  23.964  1.00
6.50   1 . .
ATOM 1239 C     C     . GLU GLU GLU A A 166 166 . 100.703 104.994 25.628  1.00
2.57   1 . .
ATOM 1240 O     O     . GLU GLU GLU A A 166 166 . 101.176 104.750 26.793  1.00
3.34   1 . .
ATOM 1241 N     N     . PHE PHE PHE A A 167 167 . 100.204 106.186 25.241  1.00
2.98   1 . .
ATOM 1242 CA    CA    . PHE PHE PHE A A 167 167 . 100.143 107.296 26.183  1.00
3.14   1 . .
ATOM 1243 CB    CB    . PHE PHE PHE A A 167 167 . 101.119 108.409 25.773  1.00
5.05   1 . .
ATOM 1244 CG    CG    . PHE PHE PHE A A 167 167 . 102.554 107.961 25.735  1.00
4.11   1 . .
ATOM 1245 CD1   CD1   . PHE PHE PHE A A 167 167 . 103.066 107.225 24.619  1.00
6.06   1 . .
ATOM 1246 CE1   CE1   . PHE PHE PHE A A 167 167 . 104.351 106.798 24.594  1.00
4.90   1 . .
ATOM 1247 CZ    CZ    . PHE PHE PHE A A 167 167 . 105.212 107.068 25.678  1.00
4.29   1 . .
ATOM 1248 CE2   CE2   . PHE PHE PHE A A 167 167 . 104.763 107.805 26.784  1.00
4.90   1 . .
ATOM 1249 CD2   CD2   . PHE PHE PHE A A 167 167 . 103.417 108.254 26.803  1.00
4.73   1 . .
ATOM 1250 C     C     . PHE PHE PHE A A 167 167 . 98.693  107.774 26.206  1.00
2.18   1 . .
ATOM 1251 O     O     . PHE PHE PHE A A 167 167 . 98.189  108.304 25.232  1.00
3.51   1 . .
ATOM 1252 N     N     . MET MET MET A A 168 168 . 98.056  107.505 27.329  1.00
2.02   1 . .
ATOM 1253 CA    CA    . MET MET MET A A 168 168 . 96.632  107.668 27.571  1.00
2.40   1 . .
ATOM 1254 CB    CB    . MET MET MET A A 168 168 . 96.008  106.369 28.172  1.00
3.03   1 . .
ATOM 1255 CG    CG    . MET MET MET A A 168 168 . 96.102  105.149 27.202  1.00
2.11   1 . .
ATOM 1256 SD    SD    . MET MET MET A A 168 168 . 95.574  103.602 27.972  1.00
4.62   1 . .
ATOM 1257 CE    CE    . MET MET MET A A 168 168 . 97.091  102.974 28.618  1.00
6.24   1 . .
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ATOM 1258 C     C     . MET MET MET A A 168 168 . 96.238  108.802 28.443  1.00
2.62   1 . .
ATOM 1259 O     O     . MET MET MET A A 168 168 . 96.967  109.122 29.375  1.00
2.94   1 . .
ATOM 1260 N     N     . ILE ILE ILE A A 169 169 . 95.041  109.318 28.209  1.00
2.45   1 . .
ATOM 1261 CA    CA    . ILE ILE ILE A A 169 169 . 94.428  110.308 29.119  1.00
2.58   1 . .
ATOM 1262 CB    CB    . ILE ILE ILE A A 169 169 . 94.164  111.737 28.478  1.00
2.34   1 . .
ATOM 1263 CG1   CG1   . ILE ILE ILE A A 169 169 . 93.308  111.549 27.204  1.00
2.22   1 . .
ATOM 1264 CD1   CD1   . ILE ILE ILE A A 169 169 . 92.801  112.843 26.604  1.00
2.52   1 . .
ATOM 1265 CG2   CG2   . ILE ILE ILE A A 169 169 . 95.497  112.405 28.182  1.00
4.21   1 . .
ATOM 1266 C     C     . ILE ILE ILE A A 169 169 . 93.174  109.757 29.709  1.00
2.51   1 . .
ATOM 1267 O     O     . ILE ILE ILE A A 169 169 . 92.318  109.144 29.015  1.00
2.66   1 . .
ATOM 1268 N     N     . LEU LEU LEU A A 170 170 . 93.043  109.938 31.026  1.00
2.12   1 . .
ATOM 1269 CA    CA    . LEU LEU LEU A A 170 170 . 91.844  109.461 31.765  1.00
3.17   1 . .
ATOM 1270 CB    CB    . LEU LEU LEU A A 170 170 . 92.242  108.546 32.924  1.00
2.66   1 . .
ATOM 1271 CG    CG    . LEU LEU LEU A A 170 170 . 92.740  107.176 32.559  1.00
3.64   1 . .
ATOM 1272 CD1   CD1   . LEU LEU LEU A A 170 170 . 94.198  107.201 31.943  1.00
4.02   1 . .
ATOM 1273 CD2   CD2   . LEU LEU LEU A A 170 170 . 92.651  106.221 33.781  1.00
6.85   1 . .
ATOM 1274 C     C     . LEU LEU LEU A A 170 170 . 91.069  110.623 32.390  1.00
2.19   1 . .
ATOM 1275 O     O     . LEU LEU LEU A A 170 170 . 91.576  111.208 33.332  1.00
2.54   1 . .
ATOM 1276 N     N     . PRO PRO PRO A A 171 171 . 89.833  110.978 31.910  1.00
2.57   1 . .
ATOM 1277 CA    CA    . PRO PRO PRO A A 171 171 . 89.081  112.128 32.522  1.00
2.67   1 . .
ATOM 1278 CB    CB    . PRO PRO PRO A A 171 171 . 88.116  112.582 31.433  1.00
2.00   1 . .
ATOM 1279 CG    CG    . PRO PRO PRO A A 171 171 . 88.622  111.951 30.121  1.00
4.27   1 . .
ATOM 1280 CD    CD    . PRO PRO PRO A A 171 171 . 89.325  110.643 30.565  1.00
2.06   1 . .
ATOM 1281 C     C     . PRO PRO PRO A A 171 171 . 88.394  111.736 33.837  1.00
2.00   1 . .
ATOM 1282 O     O     . PRO PRO PRO A A 171 171 . 87.159  111.700 33.901  1.00
2.71   1 . .
ATOM 1283 N     N     . VAL VAL VAL A A 172 172 . 89.195  111.426 34.862  1.00
2.30   1 . .
ATOM 1284 CA    CA    . VAL VAL VAL A A 172 172 . 88.695  111.025 36.179  1.00
2.48   1 . .
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ATOM 1285 CB    CB    . VAL VAL VAL A A 172 172 . 89.789  110.702 37.193  1.00
4.22   1 . .
ATOM 1286 CG1   CG1   . VAL VAL VAL A A 172 172 . 90.559  109.468 36.719  1.00
2.40   1 . .
ATOM 1287 CG2   CG2   . VAL VAL VAL A A 172 172 . 90.824  111.849 37.332  1.00
4.10   1 . .
ATOM 1288 C     C     . VAL VAL VAL A A 172 172 . 87.792  112.105 36.757  1.00
2.18   1 . .
ATOM 1289 O     O     . VAL VAL VAL A A 172 172 . 86.827  111.801 37.529  1.00
3.66   1 . .
ATOM 1290 N     N     . GLY GLY GLY A A 173 173 . 88.060  113.362 36.409  1.00
2.42   1 . .
ATOM 1291 CA    CA    . GLY GLY GLY A A 173 173 . 87.267  114.512 36.969  1.00
2.78   1 . .
ATOM 1292 C     C     . GLY GLY GLY A A 173 173 . 86.031  114.935 36.188  1.00
2.64   1 . .
ATOM 1293 O     O     . GLY GLY GLY A A 173 173 . 85.354  115.921 36.456  1.00
4.63   1 . .
ATOM 1294 N     N     . ALA ALA ALA A A 174 174 . 85.736  114.184 35.156  1.00
3.58   1 . .
ATOM 1295 CA    CA    . ALA ALA ALA A A 174 174 . 84.534  114.412 34.347  1.00
2.80   1 . .
ATOM 1296 CB    CB    . ALA ALA ALA A A 174 174 . 84.567  113.487 33.109  1.00
4.08   1 . .
ATOM 1297 C     C     . ALA ALA ALA A A 174 174 . 83.256  114.233 35.126  1.00
2.92   1 . .
ATOM 1298 O     O     . ALA ALA ALA A A 174 174 . 83.189  113.527 36.126  1.00
4.02   1 . .
ATOM 1299 N     N     . GLU GLU GLU A A 175 175 . 82.205  114.899 34.719  1.00
4.50   1 . .
ATOM 1300 CA    CA    . GLU GLU GLU A A 175 175 . 80.910  114.772 35.428  1.00
6.75   1 . .
ATOM 1301 CB    CB    . GLU GLU GLU A A 175 175 . 80.024  115.982 35.098  1.00
8.52   1 . .
ATOM 1302 CG    CG    . GLU GLU GLU A A 175 175 . 80.346  117.187 35.954  1.00
17.96  1 . .
ATOM 1303 CD    CD    . GLU GLU GLU A A 175 175 . 79.942  116.925 37.385  1.00
27.15  1 . .
ATOM 1304 OE1   OE1   . GLU GLU GLU A A 175 175 . 80.849  116.555 38.174  1.00
32.88  1 . .
ATOM 1305 OE2   OE2   . GLU GLU GLU A A 175 175 . 78.718  117.003 37.696  1.00
29.69  1 . .
ATOM 1306 C     C     . GLU GLU GLU A A 175 175 . 80.108  113.476 35.107  1.00
6.99   1 . .
ATOM 1307 O     O     . GLU GLU GLU A A 175 175 . 79.214  113.058 35.840  1.00
7.74   1 . .
ATOM 1308 N     N     . SER SER SER A A 176 176 . 80.435  112.849 33.983  1.00
6.03   1 . .
ATOM 1309 CA    CA    . SER SER SER A A 176 176 . 79.558  111.751 33.430  1.00
3.53   1 . .
ATOM 1310 CB    CB    . SER SER SER A A 176 176 . 78.255  112.222 32.768  1.00
5.03   1 . .
ATOM 1311 OG    OG    . SER SER SER A A 176 176 . 78.463  113.097 31.683  1.00
4.70   1 . .
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ATOM 1312 C     C     . SER SER SER A A 176 176 . 80.386  111.094 32.337  1.00
2.86   1 . .
ATOM 1313 O     O     . SER SER SER A A 176 176 . 81.478  111.580 32.001  1.00
2.54   1 . .
ATOM 1314 N     N     . PHE PHE PHE A A 177 177 . 79.879  110.035 31.736  1.00
2.00   1 . .
ATOM 1315 CA    CA    . PHE PHE PHE A A 177 177 . 80.617  109.431 30.630  1.00
2.71   1 . .
ATOM 1316 CB    CB    . PHE PHE PHE A A 177 177 . 80.102  107.974 30.308  1.00
3.41   1 . .
ATOM 1317 CG    CG    . PHE PHE PHE A A 177 177 . 80.994  107.283 29.368  1.00
2.57   1 . .
ATOM 1318 CD1   CD1   . PHE PHE PHE A A 177 177 . 82.181  106.666 29.816  1.00
5.40   1 . .
ATOM 1319 CE1   CE1   . PHE PHE PHE A A 177 177 . 83.126  106.169 28.889  1.00
2.68   1 . .
ATOM 1320 CZ    CZ    . PHE PHE PHE A A 177 177 . 82.925  106.346 27.590  1.00
3.16   1 . .
ATOM 1321 CE2   CE2   . PHE PHE PHE A A 177 177 . 81.769  106.919 27.127  1.00
2.34   1 . .
ATOM 1322 CD2   CD2   . PHE PHE PHE A A 177 177 . 80.817  107.406 27.967  1.00
2.10   1 . .
ATOM 1323 C     C     . PHE PHE PHE A A 177 177 . 80.591  110.364 29.396  1.00
2.12   1 . .
ATOM 1324 O     O     . PHE PHE PHE A A 177 177 . 81.624  110.534 28.739  1.00
3.04   1 . .
ATOM 1325 N     N     . ARG ARG ARG A A 178 178 . 79.438  110.944 29.083  1.00
2.25   1 . .
ATOM 1326 CA    CA    . ARG ARG ARG A A 178 178 . 79.268  111.856 27.975  1.00
2.59   1 . .
ATOM 1327 CB    CB    . ARG ARG ARG A A 178 178 . 77.804  112.360 27.954  1.00
2.14   1 . .
ATOM 1328 CG    CG    . ARG ARG ARG A A 178 178 . 77.504  113.305 26.830  1.00
9.06   1 . .
ATOM 1329 CD    CD    . ARG ARG ARG A A 178 178 . 76.074  113.744 27.027  1.00
16.42  1 . .
ATOM 1330 NE    NE    . ARG ARG ARG A A 178 178 . 75.522  114.269 25.788  1.00
23.93  1 . .
ATOM 1331 CZ    CZ    . ARG ARG ARG A A 178 178 . 75.533  115.553 25.471  1.00
23.19  1 . .
ATOM 1332 NH1   NH1   . ARG ARG ARG A A 178 178 . 74.998  115.952 24.320  1.00
22.79  1 . .
ATOM 1333 NH2   NH2   . ARG ARG ARG A A 178 178 . 76.096  116.429 26.306  1.00
21.71  1 . .
ATOM 1334 C     C     . ARG ARG ARG A A 178 178 . 80.254  113.012 28.180  1.00
2.83   1 . .
ATOM 1335 O     O     . ARG ARG ARG A A 178 178 . 80.855  113.487 27.227  1.00
2.55   1 . .
ATOM 1336 N     N     . ASP ASP ASP A A 179 179 . 80.400  113.513 29.408  1.00
2.90   1 . .
ATOM 1337 CA    CA    . ASP ASP ASP A A 179 179 . 81.351  114.541 29.697  1.00
2.49   1 . .
ATOM 1338 CB    CB    . ASP ASP ASP A A 179 179 . 81.103  115.105 31.098  1.00
3.72   1 . .
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ATOM 1339 CG    CG    . ASP ASP ASP A A 179 179 . 81.826  116.469 31.359  1.00
6.00   1 . .
ATOM 1340 OD1   OD1   . ASP ASP ASP A A 179 179 . 82.378  116.616 32.489  1.00
7.98   1 . .
ATOM 1341 OD2   OD2   . ASP ASP ASP A A 179 179 . 81.845  117.375 30.445  1.00
9.52   1 . .
ATOM 1342 C     C     . ASP ASP ASP A A 179 179 . 82.796  114.111 29.541  1.00
2.08   1 . .
ATOM 1343 O     O     . ASP ASP ASP A A 179 179 . 83.583  114.870 28.998  1.00
2.33   1 . .
ATOM 1344 N     N     . ALA ALA ALA A A 180 180 . 83.121  112.864 29.924  1.00
2.00   1 . .
ATOM 1345 CA    CA    . ALA ALA ALA A A 180 180 . 84.487  112.399 29.742  1.00
3.35   1 . .
ATOM 1346 CB    CB    . ALA ALA ALA A A 180 180 . 84.640  111.029 30.384  1.00
3.30   1 . .
ATOM 1347 C     C     . ALA ALA ALA A A 180 180 . 84.808  112.309 28.218  1.00
2.11   1 . .
ATOM 1348 O     O     . ALA ALA ALA A A 180 180 . 85.949  112.518 27.878  1.00
2.43   1 . .
ATOM 1349 N     N     . MET MET MET A A 181 181 . 83.826  111.973 27.364  1.00
2.16   1 . .
ATOM 1350 CA    CA    . MET MET MET A A 181 181 . 84.077  111.990 25.904  1.00
2.00   1 . .
ATOM 1351 CB    CB    . MET MET MET A A 181 181 . 82.901  111.466 25.126  1.00
2.92   1 . .
ATOM 1352 CG    CG    . MET MET MET A A 181 181 . 82.684  109.980 25.308  1.00
2.17   1 . .
ATOM 1353 SD    SD    . MET MET MET A A 181 181 . 84.010  108.897 25.020  1.00
2.93   1 . .
ATOM 1354 CE    CE    . MET MET MET A A 181 181 . 84.383  109.480 23.382  1.00
2.00   1 . .
ATOM 1355 C     C     . MET MET MET A A 181 181 . 84.392  113.391 25.429  1.00
2.35   1 . .
ATOM 1356 O     O     . MET MET MET A A 181 181 . 85.318  113.543 24.642  1.00
3.02   1 . .
ATOM 1357 N     N     . ARG ARG ARG A A 182 182 . 83.710  114.408 25.957  1.00
3.43   1 . .
ATOM 1358 CA    CA    . ARG ARG ARG A A 182 182 . 84.007  115.776 25.570  1.00
3.15   1 . .
ATOM 1359 CB    CB    . ARG ARG ARG A A 182 182 . 82.949  116.761 26.128  1.00
3.17   1 . .
ATOM 1360 CG    CG    . ARG ARG ARG A A 182 182 . 83.423  118.218 25.955  1.00
4.85   1 . .
ATOM 1361 CD    CD    . ARG ARG ARG A A 182 182 . 82.428  119.212 26.619  1.00
7.50   1 . .
ATOM 1362 NE    NE    . ARG ARG ARG A A 182 182 . 83.066  120.536 26.650  1.00
13.40  1 . .
ATOM 1363 CZ    CZ    . ARG ARG ARG A A 182 182 . 82.528  121.650 27.134  1.00
15.50  1 . .
ATOM 1364 NH1   NH1   . ARG ARG ARG A A 182 182 . 83.234  122.772 27.058  1.00
15.62  1 . .
ATOM 1365 NH2   NH2   . ARG ARG ARG A A 182 182 . 81.293  121.662 27.648  1.00
18.03  1 . .
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ATOM 1366 C     C     . ARG ARG ARG A A 182 182 . 85.414  116.173 26.035  1.00
2.79   1 . .
ATOM 1367 O     O     . ARG ARG ARG A A 182 182 . 86.207  116.744 25.280  1.00
2.84   1 . .
ATOM 1368 N     N     . LEU LEU LEU A A 183 183 . 85.757  115.863 27.268  1.00
2.00   1 . .
ATOM 1369 CA    CA    . LEU LEU LEU A A 183 183 . 87.140  116.160 27.749  1.00
2.24   1 . .
ATOM 1370 CB    CB    . LEU LEU LEU A A 183 183 . 87.341  115.897 29.258  1.00
2.84   1 . .
ATOM 1371 CG    CG    . LEU LEU LEU A A 183 183 . 86.967  117.068 30.188  1.00
2.64   1 . .
ATOM 1372 CD1   CD1   . LEU LEU LEU A A 183 183 . 85.568  117.541 29.839  1.00
3.77   1 . .
ATOM 1373 CD2   CD2   . LEU LEU LEU A A 183 183 . 87.144  116.612 31.639  1.00
5.15   1 . .
ATOM 1374 C     C     . LEU LEU LEU A A 183 183 . 88.191  115.477 26.925  1.00
2.85   1 . .
ATOM 1375 O     O     . LEU LEU LEU A A 183 183 . 89.187  116.110 26.495  1.00
3.46   1 . .
ATOM 1376 N     N     . GLY GLY GLY A A 184 184 . 87.974  114.185 26.641  1.00
2.61   1 . .
ATOM 1377 CA    CA    . GLY GLY GLY A A 184 184 . 89.018  113.438 25.880  1.00
3.00   1 . .
ATOM 1378 C     C     . GLY GLY GLY A A 184 184 . 89.189  114.016 24.494  1.00
2.74   1 . .
ATOM 1379 O     O     . GLY GLY GLY A A 184 184 . 90.297  114.164 24.034  1.00
2.61   1 . .
ATOM 1380 N     N     . ALA ALA ALA A A 185 185 . 88.074  114.290 23.838  1.00
2.83   1 . .
ATOM 1381 CA    CA    . ALA ALA ALA A A 185 185 . 88.043  114.787 22.456  1.00
2.91   1 . .
ATOM 1382 CB    CB    . ALA ALA ALA A A 185 185 . 86.700  114.783 21.900  1.00
3.60   1 . .
ATOM 1383 C     C     . ALA ALA ALA A A 185 185 . 88.706  116.159 22.412  1.00
3.19   1 . .
ATOM 1384 O     O     . ALA ALA ALA A A 185 185 . 89.546  116.362 21.566  1.00
3.70   1 . .
ATOM 1385 N     N     . GLU GLU GLU A A 186 186 . 88.436  117.031 23.410  1.00
2.22   1 . .
ATOM 1386 CA    CA    . GLU GLU GLU A A 186 186 . 89.018  118.408 23.411  1.00
2.01   1 . .
ATOM 1387 CB    CB    . GLU GLU GLU A A 186 186 . 88.324  119.328 24.441  1.00
2.70   1 . .
ATOM 1388 CG    CG    . GLU GLU GLU A A 186 186 . 87.006  119.733 23.967  1.00
3.01   1 . .
ATOM 1389 CD    CD    . GLU GLU GLU A A 186 186 . 86.219  120.554 25.006  1.00
4.03   1 . .
ATOM 1390 OE1   OE1   . GLU GLU GLU A A 186 186 . 86.842  120.925 25.995  1.00
5.81   1 . .
ATOM 1391 OE2   OE2   . GLU GLU GLU A A 186 186 . 84.999  120.819 24.818  1.00
4.52   1 . .
ATOM 1392 C     C     . GLU GLU GLU A A 186 186 . 90.498  118.364 23.614  1.00
2.27   1 . .
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ATOM 1393 O     O     . GLU GLU GLU A A 186 186 . 91.254  119.077 22.901  1.00
3.45   1 . .
ATOM 1394 N     N     . VAL VAL VAL A A 187 187 . 90.952  117.501 24.489  1.00
2.37   1 . .
ATOM 1395 CA    CA    . VAL VAL VAL A A 187 187 . 92.379  117.352 24.683  1.00
2.53   1 . .
ATOM 1396 CB    CB    . VAL VAL VAL A A 187 187 . 92.767  116.545 25.911  1.00
3.13   1 . .
ATOM 1397 CG1   CG1   . VAL VAL VAL A A 187 187 . 94.282  116.259 25.959  1.00
2.95   1 . .
ATOM 1398 CG2   CG2   . VAL VAL VAL A A 187 187 . 92.309  117.223 27.252  1.00
2.89   1 . .
ATOM 1399 C     C     . VAL VAL VAL A A 187 187 . 93.030  116.745 23.381  1.00
3.73   1 . .
ATOM 1400 O     O     . VAL VAL VAL A A 187 187 . 94.112  117.170 22.925  1.00
2.84   1 . .
ATOM 1401 N     N     . TYR TYR TYR A A 188 188 . 92.412  115.726 22.829  1.00
3.13   1 . .
ATOM 1402 CA    CA    . TYR TYR TYR A A 188 188 . 92.984  115.188 21.611  1.00
2.41   1 . .
ATOM 1403 CB    CB    . TYR TYR TYR A A 188 188 . 92.037  114.062 21.137  1.00
2.62   1 . .
ATOM 1404 CG    CG    . TYR TYR TYR A A 188 188 . 92.475  113.331 19.877  1.00
2.31   1 . .
ATOM 1405 CD1   CD1   . TYR TYR TYR A A 188 188 . 93.516  112.378 19.940  1.00
2.83   1 . .
ATOM 1406 CE1   CE1   . TYR TYR TYR A A 188 188 . 93.940  111.732 18.734  1.00
2.00   1 . .
ATOM 1407 CZ    CZ    . TYR TYR TYR A A 188 188 . 93.283  111.994 17.542  1.00
2.60   1 . .
ATOM 1408 OH    OH    . TYR TYR TYR A A 188 188 . 93.705  111.353 16.373  1.00
2.03   1 . .
ATOM 1409 CE2   CE2   . TYR TYR TYR A A 188 188 . 92.279  112.963 17.443  1.00
2.50   1 . .
ATOM 1410 CD2   CD2   . TYR TYR TYR A A 188 188 . 91.881  113.627 18.650  1.00
2.80   1 . .
ATOM 1411 C     C     . TYR TYR TYR A A 188 188 . 93.136  116.297 20.482  1.00
2.16   1 . .
ATOM 1412 O     O     . TYR TYR TYR A A 188 188 . 94.119  116.347 19.742  1.00
2.52   1 . .
ATOM 1413 N     N     . HIS HIS HIS A A 189 189 . 92.103  117.110 20.297  1.00
2.75   1 . .
ATOM 1414 CA    CA    . HIS HIS HIS A A 189 189 . 92.164  118.165 19.252  1.00
3.29   1 . .
ATOM 1415 CB    CB    . HIS HIS HIS A A 189 189 . 90.767  118.746 18.994  1.00
3.87   1 . .
ATOM 1416 CG    CG    . HIS HIS HIS A A 189 189 . 89.787  117.719 18.472  1.00
4.13   1 . .
ATOM 1417 ND1   ND1   . HIS HIS HIS A A 189 189 . 88.492  117.581 18.927  1.00
9.14   1 . .
ATOM 1418 CE1   CE1   . HIS HIS HIS A A 189 189 . 87.917  116.552 18.310  1.00
4.26   1 . .
ATOM 1419 NE2   NE2   . HIS HIS HIS A A 189 189 . 88.785  116.051 17.443  1.00
6.10   1 . .
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ATOM 1420 CD2  CD2  . HIS HIS HIS A A 189 189 . 89.971  116.718 17.581  1.00
5.44   1 . .
ATOM 1421 C    C    . HIS HIS HIS A A 189 189 . 93.245  119.168 19.563  1.00
2.97   1 . .
ATOM 1422 O    O    . HIS HIS HIS A A 189 189 . 93.935  119.698 18.672  1.00
4.75   1 . .
ATOM 1423 N    N    . THR THR THR A A 190 190 . 93.327  119.482 20.853  1.00
3.65   1 . .
ATOM 1424 CA   CA   . THR THR THR A A 190 190 . 94.330  120.433 21.325  1.00
4.90   1 . .
ATOM 1425 CB   CB   . THR THR THR A A 190 190 . 94.092  120.756 22.788  1.00
3.95   1 . .
ATOM 1426 OG1  OG1  . THR THR THR A A 190 190 . 92.780  121.323 22.913  1.00
4.39   1 . .
ATOM 1427 CG2  CG2  . THR THR THR A A 190 190 . 95.164  121.650 23.450  1.00
8.70   1 . .
ATOM 1428 C    C    . THR THR THR A A 190 190 . 95.710  119.871 21.103  1.00
3.92   1 . .
ATOM 1429 O    O    . THR THR THR A A 190 190 . 96.649  120.590 20.647  1.00
5.13   1 . .
ATOM 1430 N    N    . LEU LEU LEU A A 191 191 . 95.867  118.594 21.383  1.00
5.53   1 . .
ATOM 1431 CA   CA   . LEU LEU LEU A A 191 191 . 97.142  117.937 21.180  1.00
4.03   1 . .
ATOM 1432 CB   CB   . LEU LEU LEU A A 191 191 . 97.024  116.497 21.726  1.00
4.00   1 . .
ATOM 1433 CG   CG   . LEU LEU LEU A A 191 191 . 98.242  115.573 21.533  1.00
3.88   1 . .
ATOM 1434 CD1  CD1  . LEU LEU LEU A A 191 191 . 99.604  116.093 22.149  1.00
7.53   1 . .
ATOM 1435 CD2  CD2  . LEU LEU LEU A A 191 191 . 97.875  114.176 22.056  1.00
6.87   1 . .
ATOM 1436 C    C    . LEU LEU LEU A A 191 191 . 97.624  117.913 19.750  1.00
3.63   1 . .
ATOM 1437 O    O    . LEU LEU LEU A A 191 191 . 98.783  118.063 19.466  1.00
4.19   1 . .
ATOM 1438 N    N    . LYS LYS LYS A A 192 192 . 96.704  117.699 18.824  1.00
3.26   1 . .
ATOM 1439 CA   CA   . LYS LYS LYS A A 192 192 . 97.057  117.786 17.409  1.00
2.99   1 . .
ATOM 1440 CB   CB   . LYS LYS LYS A A 192 192 . 95.795  117.667 16.487  1.00
2.41   1 . .
ATOM 1441 CG   CG   . LYS LYS LYS A A 192 192 . 96.245  117.413 15.046  1.00
7.27   1 . .
ATOM 1442 CD   CD   . LYS LYS LYS A A 192 192 . 95.083  117.210 14.114  1.00
8.51   1 . .
ATOM 1443 CE   CE   . LYS LYS LYS A A 192 192 . 95.535  116.520 12.834  1.00
10.19  1 . .
ATOM 1444 NZ   NZ   . LYS LYS LYS A A 192 192 . 94.388  116.460 11.873  1.00
9.64   1 . .
ATOM 1445 C    C    . LYS LYS LYS A A 192 192 . 97.831  119.122 17.141  1.00
2.94   1 . .
ATOM 1446 O    O    . LYS LYS LYS A A 192 192 . 98.897  119.135 16.491  1.00
2.94   1 . .
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ATOM 1447 N     N     . GLY GLY GLY A A 193 193 . 97.329  120.218 17.683  1.00
2.80   1 . .
ATOM 1448 CA    CA    . GLY GLY GLY A A 193 193 . 97.932  121.509 17.397  1.00
3.52   1 . .
ATOM 1449 C     C     . GLY GLY GLY A A 193 193 . 99.230  121.727 18.178  1.00
3.93   1 . .
ATOM 1450 O     O     . GLY GLY GLY A A 193 193 . 100.169 122.334 17.649  1.00
7.31   1 . .
ATOM 1451 N     N     . VAL VAL VAL A A 194 194 . 99.350  121.208 19.401  1.00
3.75   1 . .
ATOM 1452 CA    CA    . VAL VAL VAL A A 194 194 . 100.635 121.227 20.059  1.00
6.03   1 . .
ATOM 1453 CB    CB    . VAL VAL VAL A A 194 194 . 100.507 120.645 21.490  1.00
4.73   1 . .
ATOM 1454 CG1   CG1   . VAL VAL VAL A A 194 194 . 101.847 120.630 22.223  1.00
9.29   1 . .
ATOM 1455 CG2   CG2   . VAL VAL VAL A A 194 194 . 99.495  121.440 22.280  1.00
5.73   1 . .
ATOM 1456 C     C     . VAL VAL VAL A A 194 194 . 101.720 120.479 19.235  1.00
4.64   1 . .
ATOM 1457 O     O     . VAL VAL VAL A A 194 194 . 102.909 120.930 19.124  1.00
7.75   1 . .
ATOM 1458 N     N     . ILE ILE ILE A A 195 195 . 101.335 119.314 18.702  1.00
4.84   1 . .
ATOM 1459 CA    CA    . ILE ILE ILE A A 195 195 . 102.258 118.539 17.876  1.00
4.75   1 . .
ATOM 1460 CB    CB    . ILE ILE ILE A A 195 195 . 101.694 117.102 17.617  1.00
4.90   1 . .
ATOM 1461 CG1   CG1   . ILE ILE ILE A A 195 195 . 101.803 116.336 18.904  1.00
3.82   1 . .
ATOM 1462 CD1   CD1   . ILE ILE ILE A A 195 195 . 101.081 114.985 18.820  1.00
7.12   1 . .
ATOM 1463 CG2   CG2   . ILE ILE ILE A A 195 195 . 102.512 116.377 16.510  1.00
5.58   1 . .
ATOM 1464 C     C     . ILE ILE ILE A A 195 195 . 102.584 119.235 16.558  1.00
3.95   1 . .
ATOM 1465 O     O     . ILE ILE ILE A A 195 195 . 103.752 119.314 16.120  1.00
4.99   1 . .
ATOM 1466 N     N     . LYS LYS LYS A A 196 196 . 101.539 119.746 15.927  1.00
5.27   1 . .
ATOM 1467 CA    CA    . LYS LYS LYS A A 196 196 . 101.688 120.431 14.636  1.00
7.27   1 . .
ATOM 1468 CB    CB    . LYS LYS LYS A A 196 196 . 100.368 120.938 14.048  1.00
7.60   1 . .
ATOM 1469 CG    CG    . LYS LYS LYS A A 196 196 . 100.480 121.543 12.635  1.00
12.35  1 . .
ATOM 1470 CD    CD    . LYS LYS LYS A A 196 196 . 99.584  122.756 12.445  1.00
19.14  1 . .
ATOM 1471 CE    CE    . LYS LYS LYS A A 196 196 . 99.435  123.093 10.975  1.00
23.41  1 . .
ATOM 1472 NZ    NZ    . LYS LYS LYS A A 196 196 . 99.459  124.582 10.687  1.00
28.88  1 . .
ATOM 1473 C     C     . LYS LYS LYS A A 196 196 . 102.639 121.643 14.802  1.00
7.92   1 . .
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ATOM 1474 O     O     . LYS LYS LYS A A 196 196 . 103.556 121.811 13.990  1.00
7.77   1 . .
ATOM 1475 N     N     . ASP ASP ASP A A 197 197 . 102.435 122.437 15.856  1.00
9.71   1 . .
ATOM 1476 CA    CA    . ASP ASP ASP A A 197 197 . 103.289 123.628 16.147  1.00
9.64   1 . .
ATOM 1477 CB    CB    . ASP ASP ASP A A 197 197 . 102.781 124.329 17.401  1.00
11.43  1 . .
ATOM 1478 CG    CG    . ASP ASP ASP A A 197 197 . 101.532 125.143 17.162  1.00
14.55  1 . .
ATOM 1479 OD1   OD1   . ASP ASP ASP A A 197 197 . 101.022 125.696 18.137  1.00
16.98  1 . .
ATOM 1480 OD2   OD2   . ASP ASP ASP A A 197 197 . 101.031 125.228 16.010  1.00
17.52  1 . .
ATOM 1481 C     C     . ASP ASP ASP A A 197 197 . 104.757 123.229 16.373  1.00
9.00   1 . .
ATOM 1482 O     O     . ASP ASP ASP A A 197 197 . 105.682 123.931 15.926  1.00
9.99   1 . .
ATOM 1483 N     N     . LYS LYS LYS A A 198 198 . 104.994 122.140 17.110  1.00
8.01   1 . .
ATOM 1484 CA    CA    . LYS LYS LYS A A 198 198 . 106.379 121.777 17.490  1.00
6.10   1 . .
ATOM 1485 CB    CB    . LYS LYS LYS A A 198 198 . 106.372 121.027 18.846  1.00
5.16   1 . .
ATOM 1486 CG    CG    . LYS LYS LYS A A 198 198 . 107.715 120.936 19.549  1.00
7.14   1 . .
ATOM 1487 CD    CD    . LYS LYS LYS A A 198 198 . 107.543 120.467 21.032  1.00
10.19  1 . .
ATOM 1488 CE    CE    . LYS LYS LYS A A 198 198 . 108.844 120.562 21.860  1.00
9.50   1 . .
ATOM 1489 NZ    NZ    . LYS LYS LYS A A 198 198 . 108.719 119.797 23.144  1.00
8.62   1 . .
ATOM 1490 C     C     . LYS LYS LYS A A 198 198 . 107.116 120.944 16.463  1.00
6.42   1 . .
ATOM 1491 O     O     . LYS LYS LYS A A 198 198 . 108.346 121.092 16.311  1.00
7.54   1 . .
ATOM 1492 N     N     . TYR TYR TYR A A 199 199 . 106.418 120.022 15.780  1.00
6.25   1 . .
ATOM 1493 CA    CA    . TYR TYR TYR A A 199 199 . 107.049 118.997 14.967  1.00
7.78   1 . .
ATOM 1494 CB    CB    . TYR TYR TYR A A 199 199 . 106.840 117.568 15.548  1.00
6.53   1 . .
ATOM 1495 CG    CG    . TYR TYR TYR A A 199 199 . 107.608 117.347 16.808  1.00
5.54   1 . .
ATOM 1496 CD1   CD1   . TYR TYR TYR A A 199 199 . 106.972 117.242 18.033  1.00
6.05   1 . .
ATOM 1497 CE1   CE1   . TYR TYR TYR A A 199 199 . 107.713 117.081 19.196  1.00
6.17   1 . .
ATOM 1498 CZ    CZ    . TYR TYR TYR A A 199 199 . 109.088 117.041 19.160  1.00
5.76   1 . .
ATOM 1499 OH    OH    . TYR TYR TYR A A 199 199 . 109.798 116.943 20.323  1.00
10.41  1 . .
ATOM 1500 CE2   CE2   . TYR TYR TYR A A 199 199 . 109.749 117.218 17.966  1.00
8.41   1 . .
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ATOM 1501 CD2   CD2   . TYR TYR TYR A A 199 199 . 109.007 117.369 16.808  1.00
8.29   1 . .
ATOM 1502 C     C     . TYR TYR TYR A A 199 199 . 106.635 119.048 13.510  1.00
7.88   1 . .
ATOM 1503 O     O     . TYR TYR TYR A A 199 199 . 107.221 118.319 12.703  1.00
8.46   1 . .
ATOM 1504 N     N     . GLY GLY GLY A A 200 200 . 105.650 119.883 13.158  1.00
9.28   1 . .
ATOM 1505 CA    CA    . GLY GLY GLY A A 200 200 . 105.137 119.879 11.789  1.00
8.15   1 . .
ATOM 1506 C     C     . GLY GLY GLY A A 200 200 . 103.847 119.092 11.586  1.00
9.83   1 . .
ATOM 1507 O     O     . GLY GLY GLY A A 200 200 . 103.528 118.195 12.392  1.00
7.03   1 . .
ATOM 1508 N     N     . LYS LYS LYS A A 201 201 . 103.087 119.500 10.551  1.00
9.94   1 . .
ATOM 1509 CA    CA    . LYS LYS LYS A A 201 201 . 101.819 118.824 10.163  1.00
12.24  1 . .
ATOM 1510 CB    CB    . LYS LYS LYS A A 201 201 . 101.167 119.546 8.958   1.00
14.32  1 . .
ATOM 1511 CG    CG    . LYS LYS LYS A A 201 201 . 101.755 119.086 7.577   1.00
19.83  1 . .
ATOM 1512 CD    CD    . LYS LYS LYS A A 201 201 . 101.916 120.193 6.539   1.00
25.62  1 . .
ATOM 1513 CE    CE    . LYS LYS LYS A A 201 201 . 103.303 120.151 5.877   1.00
28.38  1 . .
ATOM 1514 NZ    NZ    . LYS LYS LYS A A 201 201 . 103.837 121.521 5.645   1.00
28.48  1 . .
ATOM 1515 C     C     . LYS LYS LYS A A 201 201 . 102.038 117.329 9.889   1.00
12.01  1 . .
ATOM 1516 O     O     . LYS LYS LYS A A 201 201 . 101.169 116.513 10.181  1.00
13.43  1 . .
ATOM 1517 N     N     . ASP ASP ASP A A 202 202 . 103.242 116.960 9.449   1.00
10.24  1 . .
ATOM 1518 CA    CA    . ASP ASP ASP A A 202 202 . 103.565 115.581 9.080   1.00
11.45  1 . .
ATOM 1519 CB    CB    . ASP ASP ASP A A 202 202 . 104.869 115.594 8.282   1.00
13.78  1 . .
ATOM 1520 CG    CG    . ASP ASP ASP A A 202 202 . 105.748 116.757 8.685   1.00
19.03  1 . .
ATOM 1521 OD1   OD1   . ASP ASP ASP A A 202 202 . 105.655 117.854 8.076   1.00
24.23  1 . .
ATOM 1522 OD2   OD2   . ASP ASP ASP A A 202 202 . 106.471 116.601 9.672   1.00
25.04  1 . .
ATOM 1523 C     C     . ASP ASP ASP A A 202 202 . 103.678 114.648 10.270  1.00
10.05  1 . .
ATOM 1524 O     O     . ASP ASP ASP A A 202 202 . 103.658 113.384 10.089  1.00
8.87   1 . .
ATOM 1525 N     N     . ALA ALA ALA A A 203 203 . 103.728 115.249 11.475  1.00
7.70   1 . .
ATOM 1526 CA    CA    . ALA ALA ALA A A 203 203 . 103.831 114.483 12.706  1.00
6.97   1 . .
ATOM 1527 CB    CB    . ALA ALA ALA A A 203 203 . 104.642 115.283 13.715  1.00
7.96   1 . .
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ATOM 1528 C     C     . ALA ALA ALA A A 203 203 . 102.455 114.197 13.309  1.00
5.86   1 . .
ATOM 1529 O     O     . ALA ALA ALA A A 203 203 . 102.339 113.645 14.447  1.00
5.88   1 . .
ATOM 1530 N     N     . THR THR THR A A 204 204 . 101.404 114.560 12.581  1.00
5.31   1 . .
ATOM 1531 CA    CA    . THR THR THR A A 204 204 . 100.049 114.384 13.135  1.00
5.40   1 . .
ATOM 1532 CB    CB    . THR THR THR A A 204 204 . 99.237  115.676 13.215  1.00
6.52   1 . .
ATOM 1533 OG1   OG1   . THR THR THR A A 204 204 . 99.101  116.252 11.926  1.00
7.98   1 . .
ATOM 1534 CG2   CG2   . THR THR THR A A 204 204 . 99.840  116.683 14.206  1.00
9.21   1 . .
ATOM 1535 C     C     . THR THR THR A A 204 204 . 99.215  113.381 12.382  1.00
5.56   1 . .
ATOM 1536 O     O     . THR THR THR A A 204 204 . 98.000  113.417 12.536  1.00
6.54   1 . .
ATOM 1537 N     N     . ASN ASN ASN A A 205 205 . 99.840  112.507 11.576  1.00
3.41   1 . .
ATOM 1538 CA    CA    . ASN ASN ASN A A 205 205 . 99.105  111.307 11.137  1.00
3.65   1 . .
ATOM 1539 CB    CB    . ASN ASN ASN A A 205 205 . 99.796  110.696 9.892   1.00
4.68   1 . .
ATOM 1540 CG    CG    . ASN ASN ASN A A 205 205 . 99.678  111.681 8.720   1.00
8.71   1 . .
ATOM 1541 OD1   OD1   . ASN ASN ASN A A 205 205 . 98.560  111.993 8.325   1.00
12.27  1 . .
ATOM 1542 ND2   ND2   . ASN ASN ASN A A 205 205 . 100.783 112.255 8.281   1.00
13.43  1 . .
ATOM 1543 C     C     . ASN ASN ASN A A 205 205 . 98.934  110.356 12.328  1.00
3.09   1 . .
ATOM 1544 O     O     . ASN ASN ASN A A 205 205 . 99.518  110.550 13.402  1.00
2.20   1 . .
ATOM 1545 N     N     . VAL VAL VAL A A 206 206 . 98.151  109.310 12.178  1.00
3.15   1 . .
ATOM 1546 CA    CA    . VAL VAL VAL A A 206 206 . 97.887  108.493 13.382  1.00
3.73   1 . .
ATOM 1547 CB    CB    . VAL VAL VAL A A 206 206 . 96.387  108.460 13.740  1.00
4.21   1 . .
ATOM 1548 CG1   CG1   . VAL VAL VAL A A 206 206 . 95.817  109.864 14.027  1.00
5.08   1 . .
ATOM 1549 CG2   CG2   . VAL VAL VAL A A 206 206 . 95.587  107.774 12.586  1.00
5.46   1 . .
ATOM 1550 C     C     . VAL VAL VAL A A 206 206 . 98.476  107.050 13.358  1.00
4.41   1 . .
ATOM 1551 O     O     . VAL VAL VAL A A 206 206 . 98.778  106.509 12.334  1.00
7.26   1 . .
ATOM 1552 N     N     . GLY GLY GLY A A 207 207 . 98.582  106.434 14.513  1.00
3.36   1 . .
ATOM 1553 CA    CA    . GLY GLY GLY A A 207 207 . 98.966  105.014 14.637  1.00
3.29   1 . .
ATOM 1554 C     C     . GLY GLY GLY A A 207 207 . 97.733  104.126 14.585  1.00
3.69   1 . .
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ATOM 1555 O     O     . GLY GLY GLY A A 207 207 . 96.589  104.544 14.330  1.00
2.00   1 . .
ATOM 1556 N     N     . ASP ASP ASP A A 208 208 . 97.956  102.862 14.894  1.00
3.74   1 . .
ATOM 1557 CA    CA    . ASP ASP ASP A A 208 208 . 96.921  101.846 14.751  1.00
2.63   1 . .
ATOM 1558 CB    CB    . ASP ASP ASP A A 208 208 . 97.502  100.480 15.066  1.00
3.43   1 . .
ATOM 1559 CG    CG    . ASP ASP ASP A A 208 208 . 98.348  99.920  13.972  1.00
3.54   1 . .
ATOM 1560 OD1   OD1   . ASP ASP ASP A A 208 208 . 98.335  100.383 12.824  1.00
5.79   1 . .
ATOM 1561 OD2   OD2   . ASP ASP ASP A A 208 208 . 99.102  98.971  14.253  1.00
5.98   1 . .
ATOM 1562 C     C     . ASP ASP ASP A A 208 208 . 95.705  102.098 15.633  1.00
2.32   1 . .
ATOM 1563 O     O     . ASP ASP ASP A A 208 208 . 94.565  101.731 15.277  1.00
3.11   1 . .
ATOM 1564 N     N     . GLU GLU GLU A A 209 209 . 95.887  102.820 16.757  1.00
2.00   1 . .
ATOM 1565 CA    CA    . GLU GLU GLU A A 209 209 . 94.782  102.993 17.714  1.00
2.04   1 . .
ATOM 1566 CB    CB    . GLU GLU GLU A A 209 209 . 95.252  102.610 19.172  1.00
2.85   1 . .
ATOM 1567 CG    CG    . GLU GLU GLU A A 209 209 . 95.544  101.086 19.253  1.00
3.18   1 . .
ATOM 1568 CD    CD    . GLU GLU GLU A A 209 209 . 95.596  100.567 20.628  1.00
4.91   1 . .
ATOM 1569 OE1   OE1   . GLU GLU GLU A A 209 209 . 95.625  99.338  20.766  1.00
4.05   1 . .
ATOM 1570 OE2   OE2   . GLU GLU GLU A A 209 209 . 95.557  101.346 21.611  1.00
4.11   1 . .
ATOM 1571 C     C     . GLU GLU GLU A A 209 209 . 94.263  104.439 17.681  1.00
2.01   1 . .
ATOM 1572 O     O     . GLU GLU GLU A A 209 209 . 93.503  104.809 18.569  1.00
2.00   1 . .
ATOM 1573 N     N     . GLY GLY GLY A A 210 210 . 94.671  105.227 16.672  1.00
2.00   1 . .
ATOM 1574 CA    CA    . GLY GLY GLY A A 210 210 . 94.037  106.542 16.435  1.00
2.10   1 . .
ATOM 1575 C     C     . GLY GLY GLY A A 210 210 . 94.808  107.659 17.190  1.00
2.09   1 . .
ATOM 1576 O     O     . GLY GLY GLY A A 210 210 . 94.480  108.842 17.034  1.00
3.69   1 . .
ATOM 1577 N     N     . GLY GLY GLY A A 211 211 . 95.850  107.292 17.965  1.00
2.27   1 . .
ATOM 1578 CA    CA    . GLY GLY GLY A A 211 211 . 96.678  108.377 18.569  1.00
2.17   1 . .
ATOM 1579 C     C     . GLY GLY GLY A A 211 211 . 97.635  108.976 17.554  1.00
3.04   1 . .
ATOM 1580 O     O     . GLY GLY GLY A A 211 211 . 98.023  108.295 16.576  1.00
3.52   1 . .
ATOM 1581 N     N     . PHE PHE PHE A A 212 212 . 98.021  110.210 17.784  1.00
2.91   1 . .
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ATOM 1582 CA    CA    . PHE PHE PHE A A 212 212 . 99.090  110.743 16.911  1.00
3.39   1 . .
ATOM 1583 CB    CB    . PHE PHE PHE A A 212 212 . 99.324  112.225 17.276  1.00
3.64   1 . .
ATOM 1584 CG    CG    . PHE PHE PHE A A 212 212 . 98.047  113.014 17.242  1.00
3.71   1 . .
ATOM 1585 CD1   CD1   . PHE PHE PHE A A 212 212 . 97.424  113.463 18.421  1.00
5.14   1 . .
ATOM 1586 CE1   CE1   . PHE PHE PHE A A 212 212 . 96.218  114.159 18.327  1.00
2.87   1 . .
ATOM 1587 CZ    CZ    . PHE PHE PHE A A 212 212 . 95.597  114.318 17.083  1.00
4.38   1 . .
ATOM 1588 CE2   CE2   . PHE PHE PHE A A 212 212 . 96.222  113.924 15.933  1.00
4.63   1 . .
ATOM 1589 CD2   CD2   . PHE PHE PHE A A 212 212 . 97.415  113.247 16.004  1.00
3.20   1 . .
ATOM 1590 C     C     . PHE PHE PHE A A 212 212 . 100.396 109.950 16.938  1.00
4.19   1 . .
ATOM 1591 O     O     . PHE PHE PHE A A 212 212 . 100.814 109.382 17.962  1.00
4.59   1 . .
ATOM 1592 N     N     . ALA ALA ALA A A 213 213 . 101.039 109.898 15.775  1.00
3.75   1 . .
ATOM 1593 CA    CA    . ALA ALA ALA A A 213 213 . 102.307 109.243 15.689  1.00
3.89   1 . .
ATOM 1594 CB    CB    . ALA ALA ALA A A 213 213 . 102.246 108.073 14.668  1.00
5.51   1 . .
ATOM 1595 C     C     . ALA ALA ALA A A 213 213 . 103.409 110.237 15.262  1.00
4.26   1 . .
ATOM 1596 O     O     . ALA ALA ALA A A 213 213 . 103.953 110.137 14.142  1.00
5.88   1 . .
ATOM 1597 N     N     . PRO PRO PRO A A 214 214 . 103.816 111.114 16.174  1.00
4.03   1 . .
ATOM 1598 CA    CA    . PRO PRO PRO A A 214 214 . 104.880 112.035 15.912  1.00
4.98   1 . .
ATOM 1599 CB    CB    . PRO PRO PRO A A 214 214 . 104.780 113.046 17.088  1.00
5.43   1 . .
ATOM 1600 CG    CG    . PRO PRO PRO A A 214 214 . 104.331 112.255 18.215  1.00
3.30   1 . .
ATOM 1601 CD    CD    . PRO PRO PRO A A 214 214 . 103.335 111.222 17.568  1.00
3.80   1 . .
ATOM 1602 C     C     . PRO PRO PRO A A 214 214 . 106.212 111.316 15.858  1.00
4.51   1 . .
ATOM 1603 O     O     . PRO PRO PRO A A 214 214 . 106.417 110.288 16.486  1.00
6.07   1 . .
ATOM 1604 N     N     . ASN ASN ASN A A 215 215 . 107.147 111.918 15.140  1.00
8.89   1 . .
ATOM 1605 CA    CA    . ASN ASN ASN A A 215 215 . 108.443 111.318 14.879  1.00
9.60   1 . .
ATOM 1606 CB    CB    . ASN ASN ASN A A 215 215 . 109.010 111.752 13.495  1.00
12.03  1 . .
ATOM 1607 CG    CG    . ASN ASN ASN A A 215 215 . 109.078 113.267 13.298  1.00
16.40  1 . .
ATOM 1608 OD1   OD1   . ASN ASN ASN A A 215 215 . 110.148 113.819 12.966  1.00
24.00  1 . .
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ATOM 1609 ND2   ND2   . ASN ASN ASN A A 215 215 . 107.956 113.934 13.432  1.00
14.38  1 . .
ATOM 1610 C     C     . ASN ASN ASN A A 215 215 . 109.437 111.622 16.023  1.00
8.95   1 . .
ATOM 1611 O     O     . ASN ASN ASN A A 215 215 . 110.435 112.292 15.823  1.00
11.30  1 . .
ATOM 1612 N     N     . ILE ILE ILE A A 216 216 . 109.118 111.174 17.226  1.00
7.39   1 . .
ATOM 1613 CA    CA    . ILE ILE ILE A A 216 216 . 109.917 111.363 18.456  1.00
6.88   1 . .
ATOM 1614 CB    CB    . ILE ILE ILE A A 216 216 . 109.136 112.114 19.530  1.00
6.80   1 . .
ATOM 1615 CG1   CG1   . ILE ILE ILE A A 216 216 . 107.877 111.310 19.954  1.00
5.15   1 . .
ATOM 1616 CD1   CD1   . ILE ILE ILE A A 216 216 . 107.149 111.883 21.175  1.00
5.52   1 . .
ATOM 1617 CG2   CG2   . ILE ILE ILE A A 216 216 . 108.812 113.469 18.993  1.00
9.04   1 . .
ATOM 1618 C     C     . ILE ILE ILE A A 216 216 . 110.446 110.042 18.986  1.00
7.32   1 . .
ATOM 1619 O     O     . ILE ILE ILE A A 216 216 . 109.910 108.943 18.622  1.00
8.70   1 . .
ATOM 1620 N     N     . LEU LEU LEU A A 217 217 . 111.548 110.125 19.745  1.00
7.89   1 . .
ATOM 1621 CA    CA    . LEU LEU LEU A A 217 217 . 112.120 108.945 20.382  1.00
7.46   1 . .
ATOM 1622 CB    CB    . LEU LEU LEU A A 217 217 . 113.640 108.845 20.185  1.00
5.62   1 . .
ATOM 1623 CG    CG    . LEU LEU LEU A A 217 217 . 114.497 107.917 21.037  1.00
10.19  1 . .
ATOM 1624 CD1   CD1   . LEU LEU LEU A A 217 217 . 114.233 106.403 20.715  1.00
9.42   1 . .
ATOM 1625 CD2   CD2   . LEU LEU LEU A A 217 217 . 115.962 108.286 20.784  1.00
10.47  1 . .
ATOM 1626 C     C     . LEU LEU LEU A A 217 217 . 111.829 108.878 21.863  1.00
8.53   1 . .
ATOM 1627 O     O     . LEU LEU LEU A A 217 217 . 111.635 107.780 22.414  1.00
7.07   1 . .
ATOM 1628 N     N     . GLU GLU GLU A A 218 218 . 111.859 110.041 22.538  1.00
7.92   1 . .
ATOM 1629 CA    CA    . GLU GLU GLU A A 218 218 . 111.857 110.030 24.027  1.00
8.03   1 . .
ATOM 1630 CB    CB    . GLU GLU GLU A A 218 218 . 112.593 111.269 24.627  1.00
8.72   1 . .
ATOM 1631 CG    CG    . GLU GLU GLU A A 218 218 . 114.050 111.351 24.172  1.00
13.09  1 . .
ATOM 1632 CD    CD    . GLU GLU GLU A A 218 218 . 115.045 111.079 25.270  1.00
24.46  1 . .
ATOM 1633 OE1   OE1   . GLU GLU GLU A A 218 218 . 116.012 111.877 25.379  1.00
29.81  1 . .
ATOM 1634 OE2   OE2   . GLU GLU GLU A A 218 218 . 114.877 110.075 26.021  1.00
28.54  1 . .
ATOM 1635 C     C     . GLU GLU GLU A A 218 218 . 110.463 109.895 24.574  1.00
8.33   1 . .
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ATOM 1636 O     O     . GLU GLU GLU A A 218 218 . 109.556 110.679 24.206  1.00
10.28  1 . .
ATOM 1637 N     N     . ASN ASN ASN A A 219 219 . 110.287 108.913 25.455  1.00
7.89   1 . .
ATOM 1638 CA    CA    . ASN ASN ASN A A 219 219 . 109.009 108.677 26.017  1.00
7.74   1 . .
ATOM 1639 CB    CB    . ASN ASN ASN A A 219 219 . 109.036 107.370 26.772  1.00
8.50   1 . .
ATOM 1640 CG    CG    . ASN ASN ASN A A 219 219 . 109.356 106.244 25.875  1.00
7.23   1 . .
ATOM 1641 OD1   OD1   . ASN ASN ASN A A 219 219 . 110.469 105.749 25.884  1.00
11.67  1 . .
ATOM 1642 ND2   ND2   . ASN ASN ASN A A 219 219 . 108.432 105.883 25.015  1.00
4.68   1 . .
ATOM 1643 C     C     . ASN ASN ASN A A 219 219 . 108.608 109.867 26.886  1.00
7.67   1 . .
ATOM 1644 O     O     . ASN ASN ASN A A 219 219 . 107.439 110.240 26.970  1.00
8.30   1 . .
ATOM 1645 N     N     . SER SER SER A A 220 220 . 109.580 110.486 27.555  1.00
6.89   1 . .
ATOM 1646 CA    CA    . SER SER SER A A 220 220 . 109.251 111.656 28.363  1.00
8.60   1 . .
ATOM 1647 CB    CB    . SER SER SER A A 220 220 . 110.502 112.122 29.104  1.00
9.44   1 . .
ATOM 1648 OG    OG    . SER SER SER A A 220 220 . 111.557 112.371 28.193  1.00
11.28  1 . .
ATOM 1649 C     C     . SER SER SER A A 220 220 . 108.648 112.812 27.508  1.00
7.09   1 . .
ATOM 1650 O     O     . SER SER SER A A 220 220 . 107.852 113.611 28.036  1.00
8.86   1 . .
ATOM 1651 N     N     . GLU GLU GLU A A 221 221 . 109.066 112.936 26.259  1.00
9.26   1 . .
ATOM 1652 CA    CA    . GLU GLU GLU A A 221 221 . 108.552 113.940 25.362  1.00
7.54   1 . .
ATOM 1653 CB    CB    . GLU GLU GLU A A 221 221 . 109.439 114.039 24.116  1.00
7.76   1 . .
ATOM 1654 CG    CG    . GLU GLU GLU A A 221 221 . 108.900 114.948 22.975  1.00
7.90   1 . .
ATOM 1655 CD    CD    . GLU GLU GLU A A 221 221 . 108.837 116.452 23.359  1.00
11.96  1 . .
ATOM 1656 OE1   OE1   . GLU GLU GLU A A 221 221 . 109.375 116.819 24.408  1.00
10.95  1 . .
ATOM 1657 OE2   OE2   . GLU GLU GLU A A 221 221 . 108.233 117.263 22.599  1.00
12.31  1 . .
ATOM 1658 C     C     . GLU GLU GLU A A 221 221 . 107.112 113.635 25.006  1.00
6.75   1 . .
ATOM 1659 O     O     . GLU GLU GLU A A 221 221 . 106.269 114.539 24.879  1.00
8.94   1 . .
ATOM 1660 N     N     . ALA ALA ALA A A 222 222 . 106.796 112.361 24.836  1.00
6.30   1 . .
ATOM 1661 CA    CA    . ALA ALA ALA A A 222 222 . 105.356 112.034 24.615  1.00
3.58   1 . .
ATOM 1662 CB    CB    . ALA ALA ALA A A 222 222 . 105.182 110.555 24.369  1.00
4.24   1 . .
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ATOM 1663 C     C     . ALA ALA ALA A A 222 222 . 104.541 112.498 25.819  1.00
3.73   1 . .
ATOM 1664 O     O     . ALA ALA ALA A A 222 222 . 103.490 113.089 25.657  1.00
4.17   1 . .
ATOM 1665 N     N     . LEU LEU LEU A A 223 223 . 105.013 112.183 27.035  1.00
4.55   1 . .
ATOM 1666 CA    CA    . LEU LEU LEU A A 223 223 . 104.308 112.611 28.252  1.00
4.90   1 . .
ATOM 1667 CB    CB    . LEU LEU LEU A A 223 223 . 105.030 112.160 29.498  1.00
4.35   1 . .
ATOM 1668 CG    CG    . LEU LEU LEU A A 223 223 . 104.899 110.667 29.702  1.00
4.86   1 . .
ATOM 1669 CD1   CD1   . LEU LEU LEU A A 223 223 . 106.023 110.077 30.736  1.00
6.46   1 . .
ATOM 1670 CD2   CD2   . LEU LEU LEU A A 223 223 . 103.447 110.347 30.084  1.00
4.70   1 . .
ATOM 1671 C     C     . LEU LEU LEU A A 223 223 . 104.237 114.140 28.325  1.00
4.21   1 . .
ATOM 1672 O     O     . LEU LEU LEU A A 223 223 . 103.226 114.673 28.710  1.00
6.63   1 . .
ATOM 1673 N     N     . GLU GLU GLU A A 224 224 . 105.274 114.819 27.877  1.00
5.94   1 . .
ATOM 1674 CA    CA    . GLU GLU GLU A A 224 224 . 105.320 116.281 27.996  1.00
5.86   1 . .
ATOM 1675 CB    CB    . GLU GLU GLU A A 224 224 . 106.737 116.788 27.625  1.00
7.82   1 . .
ATOM 1676 CG    CG    . GLU GLU GLU A A 224 224 . 106.819 118.298 27.551  1.00
11.24  1 . .
ATOM 1677 CD    CD    . GLU GLU GLU A A 224 224 . 106.980 118.985 28.877  1.00
14.15  1 . .
ATOM 1678 OE1   OE1   . GLU GLU GLU A A 224 224 . 106.905 120.225 28.869  1.00
16.28  1 . .
ATOM 1679 OE2   OE2   . GLU GLU GLU A A 224 224 . 107.230 118.347 29.929  1.00
16.08  1 . .
ATOM 1680 C     C     . GLU GLU GLU A A 224 224 . 104.283 116.837 27.041  1.00
4.89   1 . .
ATOM 1681 O     O     . GLU GLU GLU A A 224 224 . 103.593 117.811 27.333  1.00
6.77   1 . .
ATOM 1682 N     N     . LEU LEU LEU A A 225 225 . 104.204 116.233 25.865  1.00
4.92   1 . .
ATOM 1683 CA    CA    . LEU LEU LEU A A 225 225 . 103.201 116.690 24.900  1.00
5.01   1 . .
ATOM 1684 CB    CB    . LEU LEU LEU A A 225 225 . 103.360 115.961 23.545  1.00
6.83   1 . .
ATOM 1685 CG    CG    . LEU LEU LEU A A 225 225 . 104.613 116.278 22.695  1.00
7.19   1 . .
ATOM 1686 CD1   CD1   . LEU LEU LEU A A 225 225 . 104.871 115.255 21.610  1.00
6.07   1 . .
ATOM 1687 CD2   CD2   . LEU LEU LEU A A 225 225 . 104.508 117.733 22.147  1.00
7.62   1 . .
ATOM 1688 C     C     . LEU LEU LEU A A 225 225 . 101.795 116.490 25.434  1.00
5.68   1 . .
ATOM 1689 O     O     . LEU LEU LEU A A 225 225 . 100.919 117.381 25.313  1.00
5.77   1 . .
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ATOM 1690 N     N     . VAL VAL VAL A A 226 226 . 101.561 115.327 26.060  1.00
6.72   1 . .
ATOM 1691 CA    CA    . VAL VAL VAL A A 226 226 . 100.205 115.098 26.549  1.00
6.08   1 . .
ATOM 1692 CB    CB    . VAL VAL VAL A A 226 226 . 100.009 113.663 26.948  1.00
6.14   1 . .
ATOM 1693 CG1   CG1   . VAL VAL VAL A A 226 226 . 98.689  113.572 27.703  1.00
4.43   1 . .
ATOM 1694 CG2   CG2   . VAL VAL VAL A A 226 226 . 100.013 112.771 25.668  1.00
6.54   1 . .
ATOM 1695 C     C     . VAL VAL VAL A A 226 226 . 99.832  116.060 27.723  1.00
7.50   1 . .
ATOM 1696 O     O     . VAL VAL VAL A A 226 226 . 98.721  116.583 27.794  1.00
8.39   1 . .
ATOM 1697 N     N     . LYS LYS LYS A A 227 227 . 100.786 116.287 28.616  1.00
7.71   1 . .
ATOM 1698 CA    CA    . LYS LYS LYS A A 227 227 . 100.565 117.177 29.753  1.00
8.73   1 . .
ATOM 1699 CB    CB    . LYS LYS LYS A A 227 227 . 101.795 117.081 30.668  1.00
8.08   1 . .
ATOM 1700 CG    CG    . LYS LYS LYS A A 227 227 . 101.938 118.142 31.740  1.00
13.50  1 . .
ATOM 1701 CD    CD    . LYS LYS LYS A A 227 227 . 103.231 117.931 32.532  1.00
18.80  1 . .
ATOM 1702 CE    CE    . LYS LYS LYS A A 227 227 . 103.386 118.876 33.736  1.00
22.67  1 . .
ATOM 1703 NZ    NZ    . LYS LYS LYS A A 227 227 . 103.803 118.102 34.967  1.00
21.01  1 . .
ATOM 1704 C     C     . LYS LYS LYS A A 227 227 . 100.297 118.609 29.236  1.00
8.44   1 . .
ATOM 1705 O     O     . LYS LYS LYS A A 227 227 . 99.374  119.263 29.718  1.00
6.04   1 . .
ATOM 1706 N     N     . GLU GLU GLU A A 228 228 . 101.053 119.072 28.250  1.00
9.11   1 . .
ATOM 1707 CA    CA    . GLU GLU GLU A A 228 228 . 100.801 120.408 27.651  1.00
9.00   1 . .
ATOM 1708 CB    CB    . GLU GLU GLU A A 228 228 . 101.876 120.680 26.573  1.00
10.09  1 . .
ATOM 1709 CG    CG    . GLU GLU GLU A A 228 228 . 101.807 121.939 25.771  1.00
16.38  1 . .
ATOM 1710 CD    CD    . GLU GLU GLU A A 228 228 . 102.014 123.241 26.552  1.00
23.03  1 . .
ATOM 1711 OE1   OE1   . GLU GLU GLU A A 228 228 . 101.893 124.286 25.888  1.00
25.99  1 . .
ATOM 1712 OE2   OE2   . GLU GLU GLU A A 228 228 . 102.253 123.252 27.789  1.00
27.05  1 . .
ATOM 1713 C     C     . GLU GLU GLU A A 228 228 . 99.369  120.494 27.084  1.00
8.22   1 . .
ATOM 1714 O     O     . GLU GLU GLU A A 228 228 . 98.653  121.489 27.291  1.00
8.46   1 . .
ATOM 1715 N     N     . ALA ALA ALA A A 229 229 . 98.932  119.415 26.403  1.00
6.13   1 . .
ATOM 1716 CA    CA    . ALA ALA ALA A A 229 229 . 97.650  119.478 25.754  1.00
5.35   1 . .
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ATOM 1717 CB    CB    . ALA ALA ALA A A 229 229 . 97.494  118.303 24.788  1.00
5.19   1 . .
ATOM 1718 C     C     . ALA ALA ALA A A 229 229 . 96.510  119.529 26.791  1.00
5.21   1 . .
ATOM 1719 O     O     . ALA ALA ALA A A 229 229 . 95.455  120.222 26.598  1.00
7.15   1 . .
ATOM 1720 N     N     . ILE ILE ILE A A 230 230 . 96.743  118.814 27.885  1.00
5.36   1 . .
ATOM 1721 CA    CA    . ILE ILE ILE A A 230 230 . 95.823  118.795 28.983  1.00
6.82   1 . .
ATOM 1722 CB    CB    . ILE ILE ILE A A 230 230 . 96.197  117.759 30.073  1.00
5.65   1 . .
ATOM 1723 CG1   CG1   . ILE ILE ILE A A 230 230 . 95.982  116.325 29.538  1.00
4.60   1 . .
ATOM 1724 CD1   CD1   . ILE ILE ILE A A 230 230 . 96.466  115.224 30.535  1.00
7.12   1 . .
ATOM 1725 CG2   CG2   . ILE ILE ILE A A 230 230 . 95.218  117.897 31.363  1.00
8.51   1 . .
ATOM 1726 C     C     . ILE ILE ILE A A 230 230 . 95.709  120.203 29.591  1.00
6.76   1 . .
ATOM 1727 O     O     . ILE ILE ILE A A 230 230 . 94.608  120.767 29.749  1.00
9.48   1 . .
ATOM 1728 N     N     . ASP ASP ASP A A 231 231 . 96.870  120.795 29.880  1.00
8.20   1 . .
ATOM 1729 CA    CA    . ASP ASP ASP A A 231 231 . 96.816  122.110 30.493  1.00
8.84   1 . .
ATOM 1730 CB    CB    . ASP ASP ASP A A 231 231 . 98.219  122.477 31.002  1.00
11.19  1 . .
ATOM 1731 CG    CG    . ASP ASP ASP A A 231 231 . 98.774  121.474 32.070  1.00
15.11  1 . .
ATOM 1732 OD1   OD1   . ASP ASP ASP A A 231 231 . 99.954  121.624 32.470  1.00
22.55  1 . .
ATOM 1733 OD2   OD2   . ASP ASP ASP A A 231 231 . 98.058  120.560 32.532  1.00
22.12  1 . .
ATOM 1734 C     C     . ASP ASP ASP A A 231 231 . 96.281  123.150 29.474  1.00
9.31   1 . .
ATOM 1735 O     O     . ASP ASP ASP A A 231 231 . 95.483  124.050 29.862  1.00
8.17   1 . .
ATOM 1736 N     N     . LYS LYS LYS A A 232 232 . 96.676  123.035 28.195  1.00
8.56   1 . .
ATOM 1737 CA    CA    . LYS LYS LYS A A 232 232 . 96.186  124.036 27.203  1.00
9.12   1 . .
ATOM 1738 CB    CB    . LYS LYS LYS A A 232 232 . 96.942  123.989 25.876  1.00
10.36  1 . .
ATOM 1739 CG    CG    . LYS LYS LYS A A 232 232 . 96.672  125.238 25.039  1.00
16.79  1 . .
ATOM 1740 CD    CD    . LYS LYS LYS A A 232 232 . 97.458  125.280 23.729  1.00
24.39  1 . .
ATOM 1741 CE    CE    . LYS LYS LYS A A 232 232 . 96.527  125.048 22.540  1.00
25.88  1 . .
ATOM 1742 NZ    NZ    . LYS LYS LYS A A 232 232 . 97.055  125.674 21.290  1.00
28.95  1 . .
ATOM 1743 C     C     . LYS LYS LYS A A 232 232 . 94.661  123.944 26.995  1.00
10.05  1 . .
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ATOM 1744 O     O     . LYS LYS LYS A A 232 232 . 93.982  124.927 26.637  1.00
10.71  1 . .
ATOM 1745 N     N     . ALA ALA ALA A A 233 233 . 94.109  122.734 27.205  1.00
8.42   1 . .
ATOM 1746 CA    CA    . ALA ALA ALA A A 233 233 . 92.650  122.567 27.054  1.00
8.04   1 . .
ATOM 1747 CB    CB    . ALA ALA ALA A A 233 233 . 92.216  121.077 26.569  1.00
6.46   1 . .
ATOM 1748 C     C     . ALA ALA ALA A A 233 233 . 91.906  122.950 28.307  1.00
7.74   1 . .
ATOM 1749 O     O     . ALA ALA ALA A A 233 233 . 90.689  122.951 28.329  1.00
8.33   1 . .
ATOM 1750 N     N     . GLY GLY GLY A A 234 234 . 92.678  123.281 29.329  1.00
7.32   1 . .
ATOM 1751 CA    CA    . GLY GLY GLY A A 234 234 . 92.199  123.792 30.631  1.00
8.06   1 . .
ATOM 1752 C     C     . GLY GLY GLY A A 234 234 . 91.651  122.726 31.558  1.00
8.57   1 . .
ATOM 1753 O     O     . GLY GLY GLY A A 234 234 . 90.748  123.007 32.354  1.00
9.90   1 . .
ATOM 1754 N     N     . TYR TYR TYR A A 235 235 . 92.183  121.520 31.486  1.00
6.67   1 . .
ATOM 1755 CA    CA    . TYR TYR TYR A A 235 235 . 91.656  120.412 32.269  1.00
6.97   1 . .
ATOM 1756 CB    CB    . TYR TYR TYR A A 235 235 . 91.073  119.347 31.331  1.00
6.76   1 . .
ATOM 1757 CG    CG    . TYR TYR TYR A A 235 235 . 89.827  119.786 30.618  1.00
5.20   1 . .
ATOM 1758 CD1   CD1   . TYR TYR TYR A A 235 235 . 89.775  119.742 29.197  1.00
4.03   1 . .
ATOM 1759 CE1   CE1   . TYR TYR TYR A A 235 235 . 88.638  120.167 28.502  1.00
3.37   1 . .
ATOM 1760 CZ    CZ    . TYR TYR TYR A A 235 235 . 87.529  120.610 29.238  1.00
6.85   1 . .
ATOM 1761 OH    OH    . TYR TYR TYR A A 235 235 . 86.410  120.977 28.591  1.00
8.48   1 . .
ATOM 1762 CE2   CE2   . TYR TYR TYR A A 235 235 . 87.535  120.668 30.629  1.00
6.97   1 . .
ATOM 1763 CD2   CD2   . TYR TYR TYR A A 235 235 . 88.682  120.208 31.318  1.00
5.56   1 . .
ATOM 1764 C     C     . TYR TYR TYR A A 235 235 . 92.685  119.767 33.178  1.00
6.38   1 . .
ATOM 1765 O     O     . TYR TYR TYR A A 235 235 . 92.551  118.600 33.512  1.00
5.61   1 . .
ATOM 1766 N     N     . THR THR THR A A 236 236 . 93.706  120.520 33.555  1.00
5.93   1 . .
ATOM 1767 CA    CA    . THR THR THR A A 236 236 . 94.702  120.012 34.465  1.00
9.17   1 . .
ATOM 1768 CB    CB    . THR THR THR A A 236 236 . 95.699  121.129 34.802  1.00
10.60  1 . .
ATOM 1769 OG1   OG1   . THR THR THR A A 236 236 . 96.387  121.503 33.579  1.00
13.85  1 . .
ATOM 1770 CG2   CG2   . THR THR THR A A 236 236 . 96.705  120.681 35.834  1.00
9.69   1 . .
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ATOM 1771 C     C     . THR THR THR A A 236 236 . 94.151  119.334 35.723  1.00
11.64  1 . .
ATOM 1772 O     O     . THR THR THR A A 236 236 . 94.724  118.334 36.193  1.00
11.51  1 . .
ATOM 1773 N     N     . GLU GLU GLU A A 237 237 . 93.075  119.878 36.306  1.00
12.80  1 . .
ATOM 1774 CA    CA    . GLU GLU GLU A A 237 237 . 92.634  119.305 37.560  1.00
14.68  1 . .
ATOM 1775 CB    CB    . GLU GLU GLU A A 237 237 . 92.017  120.342 38.508  1.00
16.30  1 . .
ATOM 1776 CG    CG    . GLU GLU GLU A A 237 237 . 92.652  121.758 38.462  1.00
22.07  1 . .
ATOM 1777 CD    CD    . GLU GLU GLU A A 237 237 . 94.010  121.873 39.174  1.00
26.16  1 . .
ATOM 1778 OE1   OE1   . GLU GLU GLU A A 237 237 . 95.009  121.246 38.728  1.00
25.21  1 . .
ATOM 1779 OE2   OE2   . GLU GLU GLU A A 237 237 . 94.079  122.633 40.175  1.00
30.82  1 . .
ATOM 1780 C     C     . GLU GLU GLU A A 237 237 . 91.679  118.157 37.308  1.00
13.64  1 . .
ATOM 1781 O     O     . GLU GLU GLU A A 237 237 . 91.061  117.667 38.220  1.00
14.88  1 . .
ATOM 1782 N     N     . LYS LYS LYS A A 238 238 . 91.607  117.646 36.083  1.00
8.82   1 . .
ATOM 1783 CA    CA    . LYS LYS LYS A A 238 238 . 90.508  116.721 35.826  1.00
8.15   1 . .
ATOM 1784 CB    CB    . LYS LYS LYS A A 238 238 . 89.409  117.477 35.147  1.00
9.17   1 . .
ATOM 1785 CG    CG    . LYS LYS LYS A A 238 238 . 88.650  118.426 36.066  1.00
10.33  1 . .
ATOM 1786 CD    CD    . LYS LYS LYS A A 238 238 . 87.345  118.860 35.380  1.00
12.23  1 . .
ATOM 1787 CE    CE    . LYS LYS LYS A A 238 238 . 86.552  119.918 36.174  1.00
17.03  1 . .
ATOM 1788 NZ    NZ    . LYS LYS LYS A A 238 238 . 87.359  121.136 36.446  1.00
21.59  1 . .
ATOM 1789 C     C     . LYS LYS LYS A A 238 238 . 90.863  115.524 34.952  1.00
5.05   1 . .
ATOM 1790 O     O     . LYS LYS LYS A A 238 238 . 90.062  114.607 34.836  1.00
6.29   1 . .
ATOM 1791 N     N     . ILE ILE ILE A A 239 239 . 92.035  115.551 34.357  1.00
4.50   1 . .
ATOM 1792 CA    CA    . ILE ILE ILE A A 239 239 . 92.498  114.495 33.463  1.00
3.40   1 . .
ATOM 1793 CB    CB    . ILE ILE ILE A A 239 239 . 92.541  115.048 32.024  1.00
2.74   1 . .
ATOM 1794 CG1   CG1   . ILE ILE ILE A A 239 239 . 91.168  115.515 31.609  1.00
2.60   1 . .
ATOM 1795 CD1   CD1   . ILE ILE ILE A A 239 239 . 91.105  116.034 30.232  1.00
5.85   1 . .
ATOM 1796 CG2   CG2   . ILE ILE ILE A A 239 239 . 93.086  113.958 31.024  1.00
5.52   1 . .
ATOM 1797 C     C     . ILE ILE ILE A A 239 239 . 93.886  114.125 33.895  1.00
3.66   1 . .
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ATOM 1798 O     O     . ILE ILE ILE A A 239 239 . 94.739  114.983 34.100  1.00
5.49   1 . .
ATOM 1799 N     N     . VAL VAL VAL A A 240 240 . 94.118  112.837 34.025  1.00
2.87   1 . .
ATOM 1800 CA    CA    . VAL VAL VAL A A 240 240 . 95.440  112.277 34.434  1.00
3.48   1 . .
ATOM 1801 CB    CB    . VAL VAL VAL A A 240 240 . 95.352  111.563 35.790  1.00
3.36   1 . .
ATOM 1802 CG1   CG1   . VAL VAL VAL A A 240 240 . 95.069  112.575 36.865  1.00
8.88   1 . .
ATOM 1803 CG2   CG2   . VAL VAL VAL A A 240 240 . 94.255  110.387 35.773  1.00
5.01   1 . .
ATOM 1804 C     C     . VAL VAL VAL A A 240 240 . 95.926  111.360 33.341  1.00
2.89   1 . .
ATOM 1805 O     O     . VAL VAL VAL A A 240 240 . 95.184  111.143 32.365  1.00
4.54   1 . .
ATOM 1806 N     N     . ILE ILE ILE A A 241 241 . 97.084  110.741 33.543  1.00
2.90   1 . .
ATOM 1807 CA    CA    . ILE ILE ILE A A 241 241 . 97.751  110.026 32.481  1.00
2.92   1 . .
ATOM 1808 CB    CB    . ILE ILE ILE A A 241 241 . 99.105  110.668 32.040  1.00
3.58   1 . .
ATOM 1809 CG1   CG1   . ILE ILE ILE A A 241 241 . 98.896  112.104 31.505  1.00
2.94   1 . .
ATOM 1810 CD1   CD1   . ILE ILE ILE A A 241 241 . 100.227 112.904 31.264  1.00
4.15   1 . .
ATOM 1811 CG2   CG2   . ILE ILE ILE A A 241 241 . 99.845  109.794 31.025  1.00
4.27   1 . .
ATOM 1812 C     C     . ILE ILE ILE A A 241 241 . 97.984  108.539 32.804  1.00
3.91   1 . .
ATOM 1813 O     O     . ILE ILE ILE A A 241 241 . 98.268  108.169 33.929  1.00
5.10   1 . .
ATOM 1814 N     N     . GLY GLY GLY A A 242 242 . 97.788  107.701 31.777  1.00
4.27   1 . .
ATOM 1815 CA    CA    . GLY GLY GLY A A 242 242 . 98.111  106.292 31.949  1.00
3.03   1 . .
ATOM 1816 C     C     . GLY GLY GLY A A 242 242 . 99.044  105.874 30.794  1.00
3.39   1 . .
ATOM 1817 O     O     . GLY GLY GLY A A 242 242 . 99.038  106.555 29.800  1.00
4.60   1 . .
ATOM 1818 N     N     . MET MET MET A A 243 243 . 99.836  104.787 30.979  1.00
3.73   1 . .
ATOM 1819 CA    CA    . MET MET MET A A 243 243 . 100.768 104.270 29.992  1.00
3.88   1 . .
ATOM 1820 CB    CB    . MET MET MET A A 243 243 . 102.246 104.479 30.440  1.00
4.78   1 . .
ATOM 1821 CG    CG    . MET MET MET A A 243 243 . 102.558 105.920 30.797  1.00
6.23   1 . .
ATOM 1822 SD    SD    . MET MET MET A A 243 243 . 104.189 106.299 31.383  1.00
8.39   1 . .
ATOM 1823 CE    CE    . MET MET MET A A 243 243 . 105.245 105.656 30.096  1.00
13.21  1 . .
ATOM 1824 C     C     . MET MET MET A A 243 243 . 100.570 102.794 29.793  1.00
4.51   1 . .
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ATOM 1825 O     O     . MET MET MET A A 243 243 . 100.166 102.098 30.720  1.00
4.27   1 . .
ATOM 1826 N     N     . ASP ASP ASP A A 244 244 . 100.770 102.316 28.554  1.00
3.85   1 . .
ATOM 1827 CA    CA    . ASP ASP ASP A A 244 244 . 101.073 100.906 28.343  1.00
3.08   1 . .
ATOM 1828 CB    CB    . ASP ASP ASP A A 244 244 . 100.024 100.287 27.446  1.00
4.85   1 . .
ATOM 1829 CG    CG    . ASP ASP ASP A A 244 244 . 100.299 98.839  27.164  1.00
4.20   1 . .
ATOM 1830 OD1   OD1   . ASP ASP ASP A A 244 244 . 99.494  98.221  26.389  1.00
4.41   1 . .
ATOM 1831 OD2   OD2   . ASP ASP ASP A A 244 244 . 101.367 98.356  27.686  1.00
3.83   1 . .
ATOM 1832 C     C     . ASP ASP ASP A A 244 244 . 102.434 100.877 27.685  1.00
3.77   1 . .
ATOM 1833 O     O     . ASP ASP ASP A A 244 244 . 102.580 101.272 26.538  1.00
4.18   1 . .
ATOM 1834 N     N     . VAL VAL VAL A A 245 245 . 103.430 100.439 28.440  1.00
3.48   1 . .
ATOM 1835 CA    CA    . VAL VAL VAL A A 245 245 . 104.801 100.371 27.931  1.00
4.24   1 . .
ATOM 1836 CB    CB    . VAL VAL VAL A A 245 245 . 105.767 100.195 29.071  1.00
4.90   1 . .
ATOM 1837 CG1   CG1   . VAL VAL VAL A A 245 245 . 107.243 99.985  28.594  1.00
4.88   1 . .
ATOM 1838 CG2   CG2   . VAL VAL VAL A A 245 245 . 105.628 101.360 30.042  1.00
5.08   1 . .
ATOM 1839 C     C     . VAL VAL VAL A A 245 245 . 104.906 99.219  26.961  1.00
2.90   1 . .
ATOM 1840 O     O     . VAL VAL VAL A A 245 245 . 105.666 99.274  25.997  1.00
4.85   1 . .
ATOM 1841 N     N     . ALA ALA ALA A A 246 246 . 104.185 98.122  27.242  1.00
4.25   1 . .
ATOM 1842 CA    CA    . ALA ALA ALA A A 246 246 . 104.339 96.922  26.382  1.00
3.99   1 . .
ATOM 1843 CB    CB    . ALA ALA ALA A A 246 246 . 103.766 97.175  25.008  1.00
6.87   1 . .
ATOM 1844 C     C     . ALA ALA ALA A A 246 246 . 105.798 96.454  26.308  1.00
4.16   1 . .
ATOM 1845 O     O     . ALA ALA ALA A A 246 246 . 106.298 96.135  25.257  1.00
4.04   1 . .
ATOM 1846 N     N     . ALA ALA ALA A A 247 247 . 106.442 96.325  27.464  1.00
4.70   1 . .
ATOM 1847 CA    CA    . ALA ALA ALA A A 247 247 . 107.887 96.056  27.539  1.00
5.24   1 . .
ATOM 1848 CB    CB    . ALA ALA ALA A A 247 247 . 108.367 96.185  28.944  1.00
5.62   1 . .
ATOM 1849 C     C     . ALA ALA ALA A A 247 247 . 108.291 94.710  26.944  1.00
5.21   1 . .
ATOM 1850 O     O     . ALA ALA ALA A A 247 247 . 109.425 94.537  26.525  1.00
4.39   1 . .
ATOM 1851 N     N     . SER SER SER A A 248 248 . 107.382 93.741  26.899  1.00
3.52   1 . .
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ATOM 1852 CA    CA    . SER SER SER A A 248 248 . 107.776 92.484  26.232  1.00
4.13   1 . .
ATOM 1853 CB    CB    . SER SER SER A A 248 248 . 106.612 91.524  26.229  1.00
2.95   1 . .
ATOM 1854 OG    OG    . SER SER SER A A 248 248 . 106.232 91.185  27.525  1.00
7.25   1 . .
ATOM 1855 C     C     . SER SER SER A A 248 248 . 108.221 92.683  24.796  1.00
4.93   1 . .
ATOM 1856 O     O     . SER SER SER A A 248 248 . 109.011 91.885  24.229  1.00
5.53   1 . .
ATOM 1857 N     N     . GLU GLU GLU A A 249 249 . 107.681 93.715  24.168  1.00
5.20   1 . .
ATOM 1858 CA    CA    . GLU GLU GLU A A 249 249 . 108.000 94.081  22.756  1.00
3.82   1 . .
ATOM 1859 CB    CB    . GLU GLU GLU A A 249 249 . 107.031 95.166  22.208  1.00
4.07   1 . .
ATOM 1860 CG    CG    . GLU GLU GLU A A 249 249 . 105.570 94.746  22.121  1.00
5.62   1 . .
ATOM 1861 CD    CD    . GLU GLU GLU A A 249 249 . 105.443 93.658  21.073  1.00
4.11   1 . .
ATOM 1862 OE1   OE1   . GLU GLU GLU A A 249 249 . 105.690 94.002  19.904  1.00
9.30   1 . .
ATOM 1863 OE2   OE2   . GLU GLU GLU A A 249 249 . 105.110 92.519  21.417  1.00
8.85   1 . .
ATOM 1864 C     C     . GLU GLU GLU A A 249 249 . 109.452 94.495  22.530  1.00
5.13   1 . .
ATOM 1865 O     O     . GLU GLU GLU A A 249 249 . 109.969 94.452  21.381  1.00
7.65   1 . .
ATOM 1866 N     N     . PHE PHE PHE A A 250 250 . 110.114 94.936  23.598  1.00
7.24   1 . .
ATOM 1867 CA    CA    . PHE PHE PHE A A 250 250 . 111.490 95.463  23.474  1.00
6.97   1 . .
ATOM 1868 CB    CB    . PHE PHE PHE A A 250 250 . 111.593 97.019  23.472  1.00
6.74   1 . .
ATOM 1869 CG    CG    . PHE PHE PHE A A 250 250 . 111.016 97.704  24.657  1.00
5.55   1 . .
ATOM 1870 CD1   CD1   . PHE PHE PHE A A 250 250 . 109.802 98.404  24.554  1.00
3.91   1 . .
ATOM 1871 CE1   CE1   . PHE PHE PHE A A 250 250 . 109.245 99.091  25.617  1.00
3.70   1 . .
ATOM 1872 CZ    CZ    . PHE PHE PHE A A 250 250 . 109.927 99.129  26.816  1.00
5.65   1 . .
ATOM 1873 CE2   CE2   . PHE PHE PHE A A 250 250 . 111.160 98.472  26.952  1.00
5.58   1 . .
ATOM 1874 CD2   CD2   . PHE PHE PHE A A 250 250 . 111.695 97.754  25.858  1.00
6.06   1 . .
ATOM 1875 C     C     . PHE PHE PHE A A 250 250 . 112.443 94.816  24.422  1.00
7.75   1 . .
ATOM 1876 O     O     . PHE PHE PHE A A 250 250 . 113.563 95.329  24.598  1.00
7.45   1 . .
ATOM 1877 N     N     . TYR TYR TYR A A 251 251 . 112.047 93.661  24.973  1.00
8.57   1 . .
ATOM 1878 CA    CA    . TYR TYR TYR A A 251 251 . 112.915 92.901  25.869  1.00
8.88   1 . .
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ATOM 1879 CB    CB    . TYR TYR TYR A A 251 251 . 112.079 91.951  26.715  1.00
8.69   1 . .
ATOM 1880 CG    CG    . TYR TYR TYR A A 251 251 . 112.837 91.135  27.738  1.00
9.57   1 . .
ATOM 1881 CD1   CD1   . TYR TYR TYR A A 251 251 . 113.509 91.754  28.850  1.00
11.60  1 . .
ATOM 1882 CE1   CE1   . TYR TYR TYR A A 251 251 . 114.199 90.987  29.769  1.00
12.94  1 . .
ATOM 1883 CZ    CZ    . TYR TYR TYR A A 251 251 . 114.116 89.588  29.675  1.00
16.21  1 . .
ATOM 1884 OH    OH    . TYR TYR TYR A A 251 251 . 114.738 88.781  30.567  1.00
20.78  1 . .
ATOM 1885 CE2   CE2   . TYR TYR TYR A A 251 251 . 113.458 88.954  28.643  1.00
14.52  1 . .
ATOM 1886 CD2   CD2   . TYR TYR TYR A A 251 251 . 112.788 89.711  27.683  1.00
12.06  1 . .
ATOM 1887 C     C     . TYR TYR TYR A A 251 251 . 113.921 92.166  25.017  1.00
11.97  1 . .
ATOM 1888 O     O     . TYR TYR TYR A A 251 251 . 113.534 91.439  24.062  1.00
10.12  1 . .
ATOM 1889 N     N     . ARG ARG ARG A A 252 252 . 115.202 92.394  25.334  1.00
13.46  1 . .
ATOM 1890 CA    CA    . ARG ARG ARG A A 252 252 . 116.316 91.886  24.526  1.00
18.02  1 . .
ATOM 1891 CB    CB    . ARG ARG ARG A A 252 252 . 116.899 92.982  23.613  1.00
18.00  1 . .
ATOM 1892 CG    CG    . ARG ARG ARG A A 252 252 . 115.919 93.706  22.681  1.00
16.38  1 . .
ATOM 1893 CD    CD    . ARG ARG ARG A A 252 252 . 115.462 92.794  21.557  1.00
14.08  1 . .
ATOM 1894 NE    NE    . ARG ARG ARG A A 252 252 . 114.580 93.491  20.625  1.00
14.90  1 . .
ATOM 1895 CZ    CZ    . ARG ARG ARG A A 252 252 . 113.250 93.428  20.686  1.00
13.25  1 . .
ATOM 1896 NH1   NH1   . ARG ARG ARG A A 252 252 . 112.668 92.623  21.577  1.00
11.64  1 . .
ATOM 1897 NH2   NH2   . ARG ARG ARG A A 252 252 . 112.506 94.111  19.797  1.00
14.30  1 . .
ATOM 1898 C     C     . ARG ARG ARG A A 252 252 . 117.425 91.323  25.412  1.00
21.16  1 . .
ATOM 1899 O     O     . ARG ARG ARG A A 252 252 . 118.013 92.045  26.230  1.00
21.34  1 . .
ATOM 1900 N     N     . ASP ASP ASP A A 253 253 . 117.698 90.034  25.226  1.00
24.11  1 . .
ATOM 1901 CA    CA    . ASP ASP ASP A A 253 253 . 118.780 89.332  25.923  1.00
25.89  1 . .
ATOM 1902 CB    CB    . ASP ASP ASP A A 253 253 . 120.119 89.428  25.128  1.00
27.45  1 . .
ATOM 1903 CG    CG    . ASP ASP ASP A A 253 253 . 120.952 90.682  25.438  1.00
30.04  1 . .
ATOM 1904 OD1   OD1   . ASP ASP ASP A A 253 253 . 120.407 91.792  25.552  1.00
33.77  1 . .
ATOM 1905 OD2   OD2   . ASP ASP ASP A A 253 253 . 122.194 90.550  25.534  1.00
32.68  1 . .
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ATOM 1906 C     C     . ASP ASP ASP A A 253 253 . 118.886 89.769  27.388  1.00
25.06  1 . .
ATOM 1907 O     O     . ASP ASP ASP A A 253 253 . 119.964 90.158  27.866  1.00
26.73  1 . .
ATOM 1908 N     N     . GLY GLY GLY A A 254 254 . 117.752 89.712  28.090  1.00
23.50  1 . .
ATOM 1909 CA    CA    . GLY GLY GLY A A 254 254 . 117.706 90.079  29.508  1.00
19.84  1 . .
ATOM 1910 C     C     . GLY GLY GLY A A 254 254 . 117.701 91.576  29.816  1.00
18.03  1 . .
ATOM 1911 O     O     . GLY GLY GLY A A 254 254 . 117.553 91.934  30.980  1.00
17.98  1 . .
ATOM 1912 N     N     . LYS LYS LYS A A 255 255 . 117.872 92.429  28.801  1.00
15.18  1 . .
ATOM 1913 CA    CA    . LYS LYS LYS A A 255 255 . 117.770 93.918  28.939  1.00
14.54  1 . .
ATOM 1914 CB    CB    . LYS LYS LYS A A 255 255 . 119.083 94.590  28.499  1.00
14.34  1 . .
ATOM 1915 CG    CG    . LYS LYS LYS A A 255 255 . 120.337 93.968  29.136  1.00
16.68  1 . .
ATOM 1916 CD    CD    . LYS LYS LYS A A 255 255 . 121.580 94.741  28.712  1.00
22.50  1 . .
ATOM 1917 CE    CE    . LYS LYS LYS A A 255 255 . 121.684 96.064  29.474  1.00
24.98  1 . .
ATOM 1918 NZ    NZ    . LYS LYS LYS A A 255 255 . 123.106 96.357  29.693  1.00
26.59  1 . .
ATOM 1919 C     C     . LYS LYS LYS A A 255 255 . 116.611 94.520  28.140  1.00
13.37  1 . .
ATOM 1920 O     O     . LYS LYS LYS A A 255 255 . 115.798 93.806  27.556  1.00
13.43  1 . .
ATOM 1921 N     N     . TYR TYR TYR A A 256 256 . 116.544 95.843  28.063  1.00
12.34  1 . .
ATOM 1922 CA    CA    . TYR TYR TYR A A 256 256 . 115.420 96.492  27.396  1.00
10.80  1 . .
ATOM 1923 CB    CB    . TYR TYR TYR A A 256 256 . 114.461 97.099  28.455  1.00
9.86   1 . .
ATOM 1924 CG    CG    . TYR TYR TYR A A 256 256 . 113.768 96.076  29.331  1.00
7.16   1 . .
ATOM 1925 CD1   CD1   . TYR TYR TYR A A 256 256 . 112.527 95.540  28.947  1.00
5.19   1 . .
ATOM 1926 CE1   CE1   . TYR TYR TYR A A 256 256 . 111.890 94.655  29.700  1.00
9.98   1 . .
ATOM 1927 CZ    CZ    . TYR TYR TYR A A 256 256 . 112.445 94.235  30.902  1.00
6.62   1 . .
ATOM 1928 OH    OH    . TYR TYR TYR A A 256 256 . 111.771 93.286  31.625  1.00
6.76   1 . .
ATOM 1929 CE2   CE2   . TYR TYR TYR A A 256 256 . 113.663 94.756  31.345  1.00
6.71   1 . .
ATOM 1930 CD2   CD2   . TYR TYR TYR A A 256 256 . 114.323 95.639  30.551  1.00
10.15  1 . .
ATOM 1931 C     C     . TYR TYR TYR A A 256 256 . 115.925 97.587  26.419  1.00
10.87  1 . .
ATOM 1932 O     O     . TYR TYR TYR A A 256 256 . 116.806 98.403  26.740  1.00
10.37  1 . .
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ATOM 1933 N     N     . ASP ASP ASP A A 257 257 . 115.339 97.568  25.216  1.00
10.58  1 . .
ATOM 1934 CA    CA    . ASP ASP ASP A A 257 257 . 115.719 98.423  24.109  1.00
10.88  1 . .
ATOM 1935 CB    CB    . ASP ASP ASP A A 257 257 . 115.930 97.554  22.861  1.00
11.26  1 . .
ATOM 1936 CG    CG    . ASP ASP ASP A A 257 257 . 116.488 98.337  21.703  1.00
12.29  1 . .
ATOM 1937 OD1   OD1   . ASP ASP ASP A A 257 257 . 116.831 99.530  21.912  1.00
16.34  1 . .
ATOM 1938 OD2   OD2   . ASP ASP ASP A A 257 257 . 116.555 97.782  20.581  1.00
12.76  1 . .
ATOM 1939 C     C     . ASP ASP ASP A A 257 257 . 114.680 99.523  23.794  1.00
10.37  1 . .
ATOM 1940 O     O     . ASP ASP ASP A A 257 257 . 113.783 99.341  22.962  1.00
10.35  1 . .
ATOM 1941 N     N     . LEU LEU LEU A A 258 258 . 114.903 100.720 24.365  1.00
11.06  1 . .
ATOM 1942 CA    CA    . LEU LEU LEU A A 258 258 . 114.035 101.890 24.092  1.00
10.17  1 . .
ATOM 1943 CB    CB    . LEU LEU LEU A A 258 258 . 114.026 102.930 25.221  1.00
8.93   1 . .
ATOM 1944 CG    CG    . LEU LEU LEU A A 258 258 . 113.614 102.389 26.591  1.00
10.90  1 . .
ATOM 1945 CD1   CD1   . LEU LEU LEU A A 258 258 . 113.804 103.514 27.623  1.00
8.42   1 . .
ATOM 1946 CD2   CD2   . LEU LEU LEU A A 258 258 . 112.179 101.957 26.456  1.00
13.20  1 . .
ATOM 1947 C     C     . LEU LEU LEU A A 258 258 . 114.234 102.550 22.756  1.00
9.78   1 . .
ATOM 1948 O     O     . LEU LEU LEU A A 258 258 . 113.636 103.611 22.481  1.00
9.03   1 . .
ATOM 1949 N     N     . ASP ASP ASP A A 259 259 . 115.013 101.917 21.873  1.00
8.48   1 . .
ATOM 1950 CA    CA    . ASP ASP ASP A A 259 259 . 115.077 102.367 20.513  1.00
9.91   1 . .
ATOM 1951 CB    CB    . ASP ASP ASP A A 259 259 . 116.288 103.306 20.336  1.00
9.84   1 . .
ATOM 1952 CG    CG    . ASP ASP ASP A A 259 259 . 116.253 104.092 19.016  1.00
13.36  1 . .
ATOM 1953 OD1   OD1   . ASP ASP ASP A A 259 259 . 115.260 104.010 18.239  1.00
14.73  1 . .
ATOM 1954 OD2   OD2   . ASP ASP ASP A A 259 259 . 117.248 104.833 18.761  1.00
16.74  1 . .
ATOM 1955 C     C     . ASP ASP ASP A A 259 259 . 115.013 101.162 19.548  1.00
9.03   1 . .
ATOM 1956 O     O     . ASP ASP ASP A A 259 259 . 115.708 101.090 18.507  1.00
9.00   1 . .
ATOM 1957 N     N     . PHE PHE PHE A A 260 260 . 114.122 100.239 19.916  1.00
9.34   1 . .
ATOM 1958 CA    CA    . PHE PHE PHE A A 260 260 . 113.950 98.946  19.231  1.00
8.33   1 . .
ATOM 1959 CB    CB    . PHE PHE PHE A A 260 260 . 113.115 97.968  20.063  1.00
8.48   1 . .
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ATOM 1960 CG    CG    . PHE PHE PHE A A 260 260 . 111.633 98.108  19.871  1.00
6.90   1 . .
ATOM 1961 CD1   CD1   . PHE PHE PHE A A 260 260 . 110.906 99.044  20.592  1.00
6.77   1 . .
ATOM 1962 CE1   CE1   . PHE PHE PHE A A 260 260 . 109.526 99.144  20.444  1.00
10.21  1 . .
ATOM 1963 CZ    CZ    . PHE PHE PHE A A 260 260 . 108.850 98.328  19.522  1.00
6.68   1 . .
ATOM 1964 CE2   CE2   . PHE PHE PHE A A 260 260 . 109.544 97.428  18.815  1.00
9.48   1 . .
ATOM 1965 CD2   CD2   . PHE PHE PHE A A 260 260 . 110.944 97.315  18.977  1.00
4.98   1 . .
ATOM 1966 C     C     . PHE PHE PHE A A 260 260 . 113.520 98.952  17.757  1.00
9.91   1 . .
ATOM 1967 O     O     . PHE PHE PHE A A 260 260 . 113.801 97.997  17.043  1.00
11.17  1 . .
ATOM 1968 N     N     . LYS LYS LYS A A 261 261 . 112.936 100.037 17.281  1.00
11.34  1 . .
ATOM 1969 CA    CA    . LYS LYS LYS A A 261 261 . 112.620 100.162 15.854  1.00
11.37  1 . .
ATOM 1970 CB    CB    . LYS LYS LYS A A 261 261 . 111.360 100.971 15.638  1.00
10.82  1 . .
ATOM 1971 CG    CG    . LYS LYS LYS A A 261 261 . 110.124 100.189 16.204  1.00
7.53   1 . .
ATOM 1972 CD    CD    . LYS LYS LYS A A 261 261 . 108.882 101.052 16.227  1.00
4.81   1 . .
ATOM 1973 CE    CE    . LYS LYS LYS A A 261 261 . 108.817 101.987 17.486  1.00
3.77   1 . .
ATOM 1974 NZ    NZ    . LYS LYS LYS A A 261 261 . 107.517 102.790 17.567  1.00
7.25   1 . .
ATOM 1975 C     C     . LYS LYS LYS A A 261 261 . 113.767 100.729 15.046  1.00
12.21  1 . .
ATOM 1976 O     O     . LYS LYS LYS A A 261 261 . 113.607 101.010 13.859  1.00
13.91  1 . .
ATOM 1977 N     N     . SER SER SER A A 262 262 . 114.905 100.945 15.698  1.00
12.46  1 . .
ATOM 1978 CA    CA    . SER SER SER A A 262 262 . 116.084 101.388 14.996  1.00
14.15  1 . .
ATOM 1979 CB    CB    . SER SER SER A A 262 262 . 116.791 102.478 15.785  1.00
13.43  1 . .
ATOM 1980 OG    OG    . SER SER SER A A 262 262 . 116.026 103.652 15.752  1.00
16.25  1 . .
ATOM 1981 C     C     . SER SER SER A A 262 262 . 117.025 100.185 14.798  1.00
14.45  1 . .
ATOM 1982 O     O     . SER SER SER A A 262 262 . 116.995 99.263  15.578  1.00
12.46  1 . .
ATOM 1983 N     N     . PRO PRO PRO A A 263 263 . 117.873 100.208 13.744  1.00
16.78  1 . .
ATOM 1984 CA    CA    . PRO PRO PRO A A 263 263 . 118.721 99.026  13.488  1.00
17.96  1 . .
ATOM 1985 CB    CB    . PRO PRO PRO A A 263 263 . 119.812 99.572  12.563  1.00
17.46  1 . .
ATOM 1986 CG    CG    . PRO PRO PRO A A 263 263 . 119.369 100.906 12.113  1.00
18.58  1 . .
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ATOM 1987 CD    CD    . PRO PRO PRO A A 263 263 . 118.180 101.341 12.855  1.00
17.60  1 . .
ATOM 1988 C     C     . PRO PRO PRO A A 263 263 . 119.361 98.529  14.781  1.00
19.50  1 . .
ATOM 1989 O     O     . PRO PRO PRO A A 263 263 . 119.791 99.333  15.588  1.00
19.46  1 . .
ATOM 1990 N     N     . THR THR THR A A 264 264 . 119.451 97.219  14.972  1.00
20.90  1 . .
ATOM 1991 CA    CA    . THR THR THR A A 264 264 . 119.906 96.687  16.262  1.00
22.84  1 . .
ATOM 1992 CB    CB    . THR THR THR A A 264 264 . 119.947 95.154  16.317  1.00
22.61  1 . .
ATOM 1993 OG1   OG1   . THR THR THR A A 264 264 . 118.675 94.617  15.888  1.00
26.14  1 . .
ATOM 1994 CG2   CG2   . THR THR THR A A 264 264 . 120.225 94.693  17.743  1.00
21.89  1 . .
ATOM 1995 C     C     . THR THR THR A A 264 264 . 121.259 97.238  16.685  1.00
22.71  1 . .
ATOM 1996 O     O     . THR THR THR A A 264 264 . 122.184 97.356  15.885  1.00
24.47  1 . .
ATOM 1997 N     N     . ASP ASP ASP A A 265 265 . 121.332 97.633  17.946  1.00
22.85  1 . .
ATOM 1998 CA    CA    . ASP ASP ASP A A 265 265 . 122.560 98.177  18.548  1.00
22.91  1 . .
ATOM 1999 CB    CB    . ASP ASP ASP A A 265 265 . 122.864 99.623  18.097  1.00
23.27  1 . .
ATOM 2000 CG    CG    . ASP ASP ASP A A 265 265 . 124.099 100.219 18.781  1.00
23.81  1 . .
ATOM 2001 OD1   OD1   . ASP ASP ASP A A 265 265 . 124.646 99.608  19.738  1.00
24.01  1 . .
ATOM 2002 OD2   OD2   . ASP ASP ASP A A 265 265 . 124.533 101.306 18.358  1.00
24.37  1 . .
ATOM 2003 C     C     . ASP ASP ASP A A 265 265 . 122.526 98.019  20.085  1.00
22.24  1 . .
ATOM 2004 O     O     . ASP ASP ASP A A 265 265 . 122.105 98.925  20.821  1.00
22.10  1 . .
ATOM 2005 N     N     . PRO PRO PRO A A 266 266 . 123.016 96.860  20.574  1.00
21.69  1 . .
ATOM 2006 CA    CA    . PRO PRO PRO A A 266 266 . 122.925 96.470  21.977  1.00
21.36  1 . .
ATOM 2007 CB    CB    . PRO PRO PRO A A 266 266 . 123.556 95.061  22.019  1.00
21.18  1 . .
ATOM 2008 CG    CG    . PRO PRO PRO A A 266 266 . 123.912 94.745  20.622  1.00
22.06  1 . .
ATOM 2009 CD    CD    . PRO PRO PRO A A 266 266 . 123.905 95.982  19.812  1.00
21.94  1 . .
ATOM 2010 C     C     . PRO PRO PRO A A 266 266 . 123.622 97.410  22.928  1.00
20.81  1 . .
ATOM 2011 O     O     . PRO PRO PRO A A 266 266 . 123.280 97.444  24.119  1.00
20.91  1 . .
ATOM 2012 N     N     . SER SER SER A A 267 267 . 124.574 98.189  22.423  1.00
21.59  1 . .
ATOM 2013 CA    CA    . SER SER SER A A 267 267 . 125.217 99.197  23.280  1.00
21.75  1 . .
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ATOM 2014 CB    CB    . SER SER SER A A 267 267 . 126.317 99.988  22.548  1.00
22.47  1 . .
ATOM 2015 OG    OG    . SER SER SER A A 267 267 . 125.836 101.187 21.978  1.00
24.67  1 . .
ATOM 2016 C     C     . SER SER SER A A 267 267 . 124.182 100.144 23.940  1.00
21.26  1 . .
ATOM 2017 O     O     . SER SER SER A A 267 267 . 124.418 100.671 25.015  1.00
22.09  1 . .
ATOM 2018 N     N     . ARG ARG ARG A A 268 268 . 123.027 100.334 23.298  1.00
19.85  1 . .
ATOM 2019 CA    CA    . ARG ARG ARG A A 268 268 . 122.036 101.259 23.814  1.00
17.39  1 . .
ATOM 2020 CB    CB    . ARG ARG ARG A A 268 268 . 121.315 101.961 22.663  1.00
16.13  1 . .
ATOM 2021 CG    CG    . ARG ARG ARG A A 268 268 . 120.161 101.152 22.126  1.00
16.69  1 . .
ATOM 2022 CD    CD    . ARG ARG ARG A A 268 268 . 119.890 101.494 20.679  1.00
15.33  1 . .
ATOM 2023 NE    NE    . ARG ARG ARG A A 268 268 . 119.010 100.480 20.103  1.00
14.44  1 . .
ATOM 2024 CZ    CZ    . ARG ARG ARG A A 268 268 . 118.913 100.217 18.808  1.00
12.85  1 . .
ATOM 2025 NH1   NH1   . ARG ARG ARG A A 268 268 . 118.104 99.236  18.373  1.00
14.18  1 . .
ATOM 2026 NH2   NH2   . ARG ARG ARG A A 268 268 . 119.605 100.951 17.945  1.00
18.62  1 . .
ATOM 2027 C     C     . ARG ARG ARG A A 268 268 . 121.037 100.613 24.770  1.00
17.04  1 . .
ATOM 2028 O     O     . ARG ARG ARG A A 268 268 . 120.153 101.287 25.335  1.00
15.92  1 . .
ATOM 2029 N     N     . TYR TYR TYR A A 269 269 . 121.174 99.309  24.989  1.00
16.52  1 . .
ATOM 2030 CA    CA    . TYR TYR TYR A A 269 269 . 120.250 98.608  25.909  1.00
16.19  1 . .
ATOM 2031 CB    CB    . TYR TYR TYR A A 269 269 . 120.416 97.104  25.808  1.00
16.25  1 . .
ATOM 2032 CG    CG    . TYR TYR TYR A A 269 269 . 120.112 96.470  24.464  1.00
15.71  1 . .
ATOM 2033 CD1   CD1   . TYR TYR TYR A A 269 269 . 119.615 97.201  23.366  1.00
14.36  1 . .
ATOM 2034 CE1   CE1   . TYR TYR TYR A A 269 269 . 119.383 96.578  22.148  1.00
14.48  1 . .
ATOM 2035 CZ    CZ    . TYR TYR TYR A A 269 269 . 119.561 95.206  22.024  1.00
16.62  1 . .
ATOM 2036 OH    OH    . TYR TYR TYR A A 269 269 . 119.284 94.571  20.813  1.00
19.26  1 . .
ATOM 2037 CE2   CE2   . TYR TYR TYR A A 269 269 . 120.045 94.469  23.095  1.00
16.27  1 . .
ATOM 2038 CD2   CD2   . TYR TYR TYR A A 269 269 . 120.309 95.110  24.306  1.00
18.07  1 . .
ATOM 2039 C     C     . TYR TYR TYR A A 269 269 . 120.406 99.034  27.370  1.00
14.40  1 . .
ATOM 2040 O     O     . TYR TYR TYR A A 269 269 . 121.492 99.368  27.806  1.00
15.00  1 . .
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ATOM 2041 N     N     . ILE ILE ILE A A 270 270 . 119.318 99.011  28.117  1.00
13.00  1 . .
ATOM 2042 CA    CA    . ILE ILE ILE A A 270 270 . 119.350 99.359  29.538  1.00
10.47  1 . .
ATOM 2043 CB    CB    . ILE ILE ILE A A 270 270 . 118.555 100.710 29.881  1.00
11.26  1 . .
ATOM 2044 CG1   CG1   . ILE ILE ILE A A 270 270 . 117.053 100.537 29.689  1.00
11.38  1 . .
ATOM 2045 CD1   CD1   . ILE ILE ILE A A 270 270 . 116.148 101.684 30.254  1.00
12.89  1 . .
ATOM 2046 CG2   CG2   . ILE ILE ILE A A 270 270 . 119.174 101.934 29.152  1.00
11.47  1 . .
ATOM 2047 C     C     . ILE ILE ILE A A 270 270 . 118.815 98.212  30.396  1.00
10.68  1 . .
ATOM 2048 O     O     . ILE ILE ILE A A 270 270 . 118.120 97.318  29.881  1.00
11.15  1 . .
ATOM 2049 N     N     . THR THR THR A A 271 271 . 119.052 98.251  31.702  1.00
9.79   1 . .
ATOM 2050 CA    CA    . THR THR THR A A 271 271 . 118.607 97.187  32.580  1.00
10.30  1 . .
ATOM 2051 CB    CB    . THR THR THR A A 271 271 . 119.539 97.109  33.815  1.00
11.46  1 . .
ATOM 2052 OG1   OG1   . THR THR THR A A 271 271 . 119.456 98.312  34.627  1.00
10.27  1 . .
ATOM 2053 CG2   CG2   . THR THR THR A A 271 271 . 120.979 96.976  33.349  1.00
13.56  1 . .
ATOM 2054 C     C     . THR THR THR A A 271 271 . 117.180 97.403  33.084  1.00
9.88   1 . .
ATOM 2055 O     O     . THR THR THR A A 271 271 . 116.660 98.521  32.979  1.00
8.74   1 . .
ATOM 2056 N     N     . GLY GLY GLY A A 272 272 . 116.595 96.346  33.685  1.00
9.36   1 . .
ATOM 2057 CA    CA    . GLY GLY GLY A A 272 272 . 115.336 96.437  34.402  1.00
9.38   1 . .
ATOM 2058 C     C     . GLY GLY GLY A A 272 272 . 115.387 97.572  35.421  1.00
11.57  1 . .
ATOM 2059 O     O     . GLY GLY GLY A A 272 272 . 114.424 98.359  35.546  1.00
11.51  1 . .
ATOM 2060 N     N     . ASP ASP ASP A A 273 273 . 116.486 97.679  36.171  1.00
11.01  1 . .
ATOM 2061 CA    CA    . ASP ASP ASP A A 273 273 . 116.541 98.667  37.241  1.00
11.31  1 . .
ATOM 2062 CB    CB    . ASP ASP ASP A A 273 273 . 117.817 98.566  38.104  1.00
11.61  1 . .
ATOM 2063 CG    CG    . ASP ASP ASP A A 273 273 . 117.722 97.497  39.197  1.00
14.12  1 . .
ATOM 2064 OD1   OD1   . ASP ASP ASP A A 273 273 . 116.654 96.902  39.389  1.00
21.06  1 . .
ATOM 2065 OD2   OD2   . ASP ASP ASP A A 273 273 . 118.734 97.279  39.890  1.00
16.97  1 . .
ATOM 2066 C     C     . ASP ASP ASP A A 273 273 . 116.519 100.091 36.616  1.00
10.14  1 . .
ATOM 2067 O     O     . ASP ASP ASP A A 273 273 . 115.834 101.024 37.102  1.00
9.51   1 . .
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ATOM 2068 N     N     . GLN GLN GLN A A 274 274 . 117.343 100.263 35.573  1.00
10.53  1 . .
ATOM 2069 CA    CA    . GLN GLN GLN A A 274 274 . 117.337 101.522 34.836  1.00
10.03  1 . .
ATOM 2070 CB    CB    . GLN GLN GLN A A 274 274 . 118.391 101.513 33.721  1.00
11.04  1 . .
ATOM 2071 CG    CG    . GLN GLN GLN A A 274 274 . 119.777 101.651 34.306  1.00
11.30  1 . .
ATOM 2072 CD    CD    . GLN GLN GLN A A 274 274 . 120.858 101.428 33.308  1.00
12.58  1 . .
ATOM 2073 OE1   OE1   . GLN GLN GLN A A 274 274 . 120.719 100.591 32.413  1.00
11.68  1 . .
ATOM 2074 NE2   NE2   . GLN GLN GLN A A 274 274 . 121.985 102.170 33.457  1.00
10.86  1 . .
ATOM 2075 C     C     . GLN GLN GLN A A 274 274 . 115.949 101.911 34.314  1.00
10.02  1 . .
ATOM 2076 O     O     . GLN GLN GLN A A 274 274 . 115.564 103.072 34.399  1.00
9.80   1 . .
ATOM 2077 N     N     . LEU LEU LEU A A 275 275 . 115.195 100.918 33.851  1.00
8.65   1 . .
ATOM 2078 CA    CA    . LEU LEU LEU A A 275 275 . 113.856 101.170 33.314  1.00
9.25   1 . .
ATOM 2079 CB    CB    . LEU LEU LEU A A 275 275 . 113.350 99.921  32.538  1.00
9.49   1 . .
ATOM 2080 CG    CG    . LEU LEU LEU A A 275 275 . 111.994 99.948  31.800  1.00
9.59   1 . .
ATOM 2081 CD1   CD1   . LEU LEU LEU A A 275 275 . 111.894 101.119 30.766  1.00
12.29  1 . .
ATOM 2082 CD2   CD2   . LEU LEU LEU A A 275 275 . 111.745 98.658  31.114  1.00
7.99   1 . .
ATOM 2083 C     C     . LEU LEU LEU A A 275 275 . 112.954 101.548 34.459  1.00
9.49   1 . .
ATOM 2084 O     O     . LEU LEU LEU A A 275 275 . 112.178 102.513 34.356  1.00
8.84   1 . .
ATOM 2085 N     N     . GLY GLY GLY A A 276 276 . 113.070 100.857 35.582  1.00
9.40   1 . .
ATOM 2086 CA    CA    . GLY GLY GLY A A 276 276 . 112.214 101.216 36.721  1.00
7.31   1 . .
ATOM 2087 C     C     . GLY GLY GLY A A 276 276 . 112.425 102.651 37.257  1.00
9.84   1 . .
ATOM 2088 O     O     . GLY GLY GLY A A 276 276 . 111.444 103.385 37.605  1.00
9.42   1 . .
ATOM 2089 N     N     . ALA ALA ALA A A 277 277 . 113.707 103.045 37.277  1.00
10.21  1 . .
ATOM 2090 CA    CA    . ALA ALA ALA A A 277 277 . 114.097 104.393 37.690  1.00
10.25  1 . .
ATOM 2091 CB    CB    . ALA ALA ALA A A 277 277 . 115.621 104.627 37.612  1.00
10.66  1 . .
ATOM 2092 C     C     . ALA ALA ALA A A 277 277 . 113.419 105.359 36.751  1.00
10.98  1 . .
ATOM 2093 O     O     . ALA ALA ALA A A 277 277 . 112.970 106.435 37.214  1.00
10.51  1 . .
ATOM 2094 N     N     . LEU LEU LEU A A 278 278 . 113.375 105.009 35.453  1.00
8.88   1 . .
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ATOM 2095 CA    CA    . LEU LEU LEU A A 278 278 . 112.685 105.924 34.492  1.00
8.98   1 . .
ATOM 2096 CB    CB    . LEU LEU LEU A A 278 278 . 112.866 105.480 33.019  1.00
7.89   1 . .
ATOM 2097 CG    CG    . LEU LEU LEU A A 278 278 . 112.456 106.360 31.851  1.00
9.34   1 . .
ATOM 2098 CD1   CD1   . LEU LEU LEU A A 278 278 . 112.969 107.771 32.084  1.00
8.78   1 . .
ATOM 2099 CD2   CD2   . LEU LEU LEU A A 278 278 . 113.062 105.784 30.603  1.00
9.65   1 . .
ATOM 2100 C     C     . LEU LEU LEU A A 278 278 . 111.228 106.104 34.842  1.00
8.87   1 . .
ATOM 2101 O     O     . LEU LEU LEU A A 278 278 . 110.706 107.262 34.784  1.00
8.55   1 . .
ATOM 2102 N     N     . TYR TYR TYR A A 279 279 . 110.556 104.997 35.166  1.00
7.39   1 . .
ATOM 2103 CA    CA    . TYR TYR TYR A A 279 279 . 109.179 105.081 35.568  1.00
6.90   1 . .
ATOM 2104 CB    CB    . TYR TYR TYR A A 279 279 . 108.485 103.706 35.791  1.00
6.65   1 . .
ATOM 2105 CG    CG    . TYR TYR TYR A A 279 279 . 108.577 102.777 34.646  1.00
6.45   1 . .
ATOM 2106 CD1   CD1   . TYR TYR TYR A A 279 279 . 108.430 103.256 33.316  1.00
5.89   1 . .
ATOM 2107 CE1   CE1   . TYR TYR TYR A A 279 279 . 108.522 102.340 32.225  1.00
8.09   1 . .
ATOM 2108 CZ    CZ    . TYR TYR TYR A A 279 279 . 108.739 100.955 32.541  1.00
5.12   1 . .
ATOM 2109 OH    OH    . TYR TYR TYR A A 279 279 . 108.812 100.072 31.502  1.00
8.31   1 . .
ATOM 2110 CE2   CE2   . TYR TYR TYR A A 279 279 . 108.917 100.517 33.846  1.00
5.22   1 . .
ATOM 2111 CD2   CD2   . TYR TYR TYR A A 279 279 . 108.806 101.414 34.896  1.00
7.14   1 . .
ATOM 2112 C     C     . TYR TYR TYR A A 279 279 . 109.039 106.020 36.805  1.00
8.19   1 . .
ATOM 2113 O     O     . TYR TYR TYR A A 279 279 . 108.188 106.931 36.763  1.00
8.91   1 . .
ATOM 2114 N     N     . GLN GLN GLN A A 280 280 . 109.877 105.825 37.836  1.00
9.03   1 . .
ATOM 2115 CA    CA    . GLN GLN GLN A A 280 280 . 109.866 106.715 38.998  1.00
9.58   1 . .
ATOM 2116 CB    CB    . GLN GLN GLN A A 280 280 . 110.973 106.311 39.973  1.00
10.87  1 . .
ATOM 2117 CG    CG    . GLN GLN GLN A A 280 280 . 110.740 104.950 40.646  1.00
13.65  1 . .
ATOM 2118 CD    CD    . GLN GLN GLN A A 280 280 . 109.523 104.903 41.583  1.00
13.74  1 . .
ATOM 2119 OE1   OE1   . GLN GLN GLN A A 280 280 . 108.829 105.909 41.790  1.00
12.90  1 . .
ATOM 2120 NE2   NE2   . GLN GLN GLN A A 280 280 . 109.276 103.739 42.173  1.00
15.02  1 . .
ATOM 2121 C     C     . GLN GLN GLN A A 280 280 . 109.905 108.209 38.572  1.00
9.93   1 . .
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ATOM 2122 O     O     . GLN GLN GLN A A 280 280 . 109.066 109.011 39.005  1.00
7.63   1 . .
ATOM 2123 N     N     . ASP ASP ASP A A 281 281 . 110.826 108.559 37.682  1.00
10.42  1 . .
ATOM 2124 CA    CA    . ASP ASP ASP A A 281 281 . 110.892 109.903 37.107  1.00
10.48  1 . .
ATOM 2125 CB    CB    . ASP ASP ASP A A 281 281 . 112.094 110.063 36.155  1.00
11.28  1 . .
ATOM 2126 CG    CG    . ASP ASP ASP A A 281 281 . 113.435 110.045 36.876  1.00
14.53  1 . .
ATOM 2127 OD1   OD1   . ASP ASP ASP A A 281 281 . 113.466 109.838 38.086  1.00
21.14  1 . .
ATOM 2128 OD2   OD2   . ASP ASP ASP A A 281 281 . 114.485 110.244 36.210  1.00
19.93  1 . .
ATOM 2129 C     C     . ASP ASP ASP A A 281 281 . 109.550 110.302 36.458  1.00
10.52  1 . .
ATOM 2130 O     O     . ASP ASP ASP A A 281 281 . 109.004 111.359 36.764  1.00
8.98   1 . .
ATOM 2131 N     N     . PHE PHE PHE A A 282 282 . 108.939 109.412 35.667  1.00
9.48   1 . .
ATOM 2132 CA    CA    . PHE PHE PHE A A 282 282 . 107.670 109.771 35.051  1.00
8.95   1 . .
ATOM 2133 CB    CB    . PHE PHE PHE A A 282 282 . 107.224 108.664 34.109  1.00
9.27   1 . .
ATOM 2134 CG    CG    . PHE PHE PHE A A 282 282 . 108.146 108.430 32.934  1.00
7.84   1 . .
ATOM 2135 CD1   CD1   . PHE PHE PHE A A 282 282 . 107.943 107.328 32.093  1.00
9.41   1 . .
ATOM 2136 CE1   CE1   . PHE PHE PHE A A 282 282 . 108.754 107.123 30.974  1.00
10.81  1 . .
ATOM 2137 CZ    CZ    . PHE PHE PHE A A 282 282 . 109.758 108.004 30.660  1.00
11.13  1 . .
ATOM 2138 CE2   CE2   . PHE PHE PHE A A 282 282 . 109.985 109.106 31.506  1.00
11.85  1 . .
ATOM 2139 CD2   CD2   . PHE PHE PHE A A 282 282 . 109.163 109.306 32.611  1.00
9.01   1 . .
ATOM 2140 C     C     . PHE PHE PHE A A 282 282 . 106.552 110.038 36.069  1.00
9.00   1 . .
ATOM 2141 O     O     . PHE PHE PHE A A 282 282 . 105.715 110.941 35.884  1.00
10.71  1 . .
ATOM 2142 N     N     . VAL VAL VAL A A 283 283 . 106.506 109.231 37.117  1.00
8.41   1 . .
ATOM 2143 CA    CA    . VAL VAL VAL A A 283 283 . 105.531 109.355 38.182  1.00
9.75   1 . .
ATOM 2144 CB    CB    . VAL VAL VAL A A 283 283 . 105.605 108.108 39.079  1.00
10.51  1 . .
ATOM 2145 CG1   CG1   . VAL VAL VAL A A 283 283 . 104.702 108.211 40.256  1.00
10.91  1 . .
ATOM 2146 CG2   CG2   . VAL VAL VAL A A 283 283 . 105.230 106.871 38.208  1.00
11.20  1 . .
ATOM 2147 C     C     . VAL VAL VAL A A 283 283 . 105.716 110.639 38.987  1.00
10.77  1 . .
ATOM 2148 O     O     . VAL VAL VAL A A 283 283 . 104.747 111.234 39.431  1.00
10.00  1 . .
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ATOM 2149 N     N     . ARG ARG ARG A A 284 284 . 106.954 111.086 39.117  1.00
11.62  1 . .
ATOM 2150 CA    CA    . ARG ARG ARG A A 284 284 . 107.154 112.295 39.894  1.00
13.28  1 . .
ATOM 2151 CB    CB    . ARG ARG ARG A A 284 284 . 108.443 112.320 40.721  1.00
14.24  1 . .
ATOM 2152 CG    CG    . ARG ARG ARG A A 284 284 . 109.697 112.350 39.983  1.00
17.26  1 . .
ATOM 2153 CD    CD    . ARG ARG ARG A A 284 284 . 110.629 113.471 40.484  1.00
18.40  1 . .
ATOM 2154 NE    NE    . ARG ARG ARG A A 284 284 . 111.443 113.811 39.337  1.00
17.91  1 . .
ATOM 2155 CZ    CZ    . ARG ARG ARG A A 284 284 . 112.609 113.251 39.062  1.00
20.49  1 . .
ATOM 2156 NH1   NH1   . ARG ARG ARG A A 284 284 . 113.152 112.366 39.908  1.00
23.69  1 . .
ATOM 2157 NH2   NH2   . ARG ARG ARG A A 284 284 . 113.232 113.573 37.943  1.00
19.26  1 . .
ATOM 2158 C     C     . ARG ARG ARG A A 284 284 . 106.988 113.498 39.028  1.00
12.27  1 . .
ATOM 2159 O     O     . ARG ARG ARG A A 284 284 . 106.538 114.516 39.504  1.00
12.11  1 . .
ATOM 2160 N     N     . ASP ASP ASP A A 285 285 . 107.270 113.372 37.729  1.00
10.92  1 . .
ATOM 2161 CA    CA    . ASP ASP ASP A A 285 285 . 107.279 114.547 36.883  1.00
10.16  1 . .
ATOM 2162 CB    CB    . ASP ASP ASP A A 285 285 . 108.451 114.472 35.906  1.00
9.92   1 . .
ATOM 2163 CG    CG    . ASP ASP ASP A A 285 285 . 109.809 114.545 36.587  1.00
13.62  1 . .
ATOM 2164 OD1   OD1   . ASP ASP ASP A A 285 285 . 109.866 114.985 37.755  1.00
14.64  1 . .
ATOM 2165 OD2   OD2   . ASP ASP ASP A A 285 285 . 110.835 114.155 35.941  1.00
16.03  1 . .
ATOM 2166 C     C     . ASP ASP ASP A A 285 285 . 105.986 114.769 36.111  1.00
9.27   1 . .
ATOM 2167 O     O     . ASP ASP ASP A A 285 285 . 105.778 115.859 35.535  1.00
11.45  1 . .
ATOM 2168 N     N     . TYR TYR TYR A A 286 286 . 105.125 113.752 36.053  1.00
8.39   1 . .
ATOM 2169 CA    CA    . TYR TYR TYR A A 286 286 . 103.881 113.858 35.261  1.00
7.25   1 . .
ATOM 2170 CB    CB    . TYR TYR TYR A A 286 286 . 104.006 113.154 33.916  1.00
6.81   1 . .
ATOM 2171 CG    CG    . TYR TYR TYR A A 286 286 . 105.066 113.793 33.040  1.00
7.54   1 . .
ATOM 2172 CD1   CD1   . TYR TYR TYR A A 286 286 . 104.768 114.904 32.307  1.00
13.57  1 . .
ATOM 2173 CE1   CE1   . TYR TYR TYR A A 286 286 . 105.720 115.531 31.499  1.00
15.68  1 . .
ATOM 2174 CZ    CZ    . TYR TYR TYR A A 286 286 . 106.995 115.017 31.414  1.00
16.71  1 . .
ATOM 2175 OH    OH    . TYR TYR TYR A A 286 286 . 107.928 115.648 30.605  1.00
20.03  1 . .
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ATOM 2176 CE2   CE2   . TYR TYR TYR A A 286 286 . 107.327 113.884 32.120  1.00
12.48  1 . .
ATOM 2177 CD2   CD2   . TYR TYR TYR A A 286 286 . 106.343 113.271 32.938  1.00
12.24  1 . .
ATOM 2178 C     C     . TYR TYR TYR A A 286 286 . 102.760 113.241 36.042  1.00
7.29   1 . .
ATOM 2179 O     O     . TYR TYR TYR A A 286 286 . 103.081 112.445 36.937  1.00
7.04   1 . .
ATOM 2180 N     N     . PRO PRO PRO A A 287 287 . 101.455 113.574 35.734  1.00
6.32   1 . .
ATOM 2181 CA    CA    . PRO PRO PRO A A 287 287 . 100.362 112.978 36.505  1.00
5.54   1 . .
ATOM 2182 CB    CB    . PRO PRO PRO A A 287 287 . 99.149  113.890 36.224  1.00
4.59   1 . .
ATOM 2183 CG    CG    . PRO PRO PRO A A 287 287 . 99.443  114.457 34.893  1.00
5.96   1 . .
ATOM 2184 CD    CD    . PRO PRO PRO A A 287 287 . 100.961 114.576 34.782  1.00
6.39   1 . .
ATOM 2185 C     C     . PRO PRO PRO A A 287 287 . 100.055 111.525 36.009  1.00
4.47   1 . .
ATOM 2186 O     O     . PRO PRO PRO A A 287 287 . 98.930  111.199 35.635  1.00
4.51   1 . .
ATOM 2187 N     N     . VAL VAL VAL A A 288 288 . 101.069 110.687 36.017  1.00
4.20   1 . .
ATOM 2188 CA    CA    . VAL VAL VAL A A 288 288 . 100.923 109.254 35.630  1.00
3.76   1 . .
ATOM 2189 CB    CB    . VAL VAL VAL A A 288 288 . 102.293 108.686 35.142  1.00
4.48   1 . .
ATOM 2190 CG1   CG1   . VAL VAL VAL A A 288 288 . 102.256 107.195 34.936  1.00
4.78   1 . .
ATOM 2191 CG2   CG2   . VAL VAL VAL A A 288 288 . 102.822 109.404 33.835  1.00
6.56   1 . .
ATOM 2192 C     C     . VAL VAL VAL A A 288 288 . 100.343 108.479 36.797  1.00
4.50   1 . .
ATOM 2193 O     O     . VAL VAL VAL A A 288 288 . 100.875 108.515 37.914  1.00
4.99   1 . .
ATOM 2194 N     N     . VAL VAL VAL A A 289 289 . 99.215  107.829 36.569  1.00
4.86   1 . .
ATOM 2195 CA    CA    . VAL VAL VAL A A 289 289 . 98.528  107.184 37.669  1.00
5.30   1 . .
ATOM 2196 CB    CB    . VAL VAL VAL A A 289 289 . 97.098  107.783 37.940  1.00
5.30   1 . .
ATOM 2197 CG1   CG1   . VAL VAL VAL A A 289 289 . 97.171  109.209 38.457  1.00
7.69   1 . .
ATOM 2198 CG2   CG2   . VAL VAL VAL A A 289 289 . 96.138  107.668 36.681  1.00
5.55   1 . .
ATOM 2199 C     C     . VAL VAL VAL A A 289 289 . 98.372  105.704 37.384  1.00
4.60   1 . .
ATOM 2200 O     O     . VAL VAL VAL A A 289 289 . 97.851  105.012 38.256  1.00
7.09   1 . .
ATOM 2201 N     N     . SER SER SER A A 290 290 . 98.789  105.260 36.199  1.00
5.15   1 . .
ATOM 2202 CA    CA    . SER SER SER A A 290 290 . 98.676  103.849 35.785  1.00
4.45   1 . .
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ATOM 2203 CB    CB    . SER SER SER A A 290 290 . 97.259  103.573 35.228  1.00
4.41   1 . .
ATOM 2204 OG    OG    . SER SER SER A A 290 290 . 97.157  102.242 34.748  1.00
4.49   1 . .
ATOM 2205 C     C     . SER SER SER A A 290 290 . 99.732  103.521 34.744  1.00
4.53   1 . .
ATOM 2206 O     O     . SER SER SER A A 290 290 . 99.988  104.294 33.814  1.00
4.92   1 . .
ATOM 2207 N     N     . ILE ILE ILE A A 291 291 . 100.418 102.394 34.953  1.00
4.78   1 . .
ATOM 2208 CA    CA    . ILE ILE ILE A A 291 291 . 101.464 101.905 34.061  1.00
4.38   1 . .
ATOM 2209 CB    CB    . ILE ILE ILE A A 291 291 . 102.863 102.120 34.627  1.00
5.78   1 . .
ATOM 2210 CG1   CG1   . ILE ILE ILE A A 291 291 . 103.153 103.618 34.865  1.00
7.58   1 . .
ATOM 2211 CD1   CD1   . ILE ILE ILE A A 291 291 . 104.545 103.902 35.508  1.00
9.91   1 . .
ATOM 2212 CG2   CG2   . ILE ILE ILE A A 291 291 . 103.878 101.539 33.668  1.00
6.62   1 . .
ATOM 2213 C     C     . ILE ILE ILE A A 291 291 . 101.270 100.412 33.830  1.00
5.08   1 . .
ATOM 2214 O     O     . ILE ILE ILE A A 291 291 . 101.260 99.609  34.791  1.00
4.95   1 . .
ATOM 2215 N     N     . GLU GLU GLU A A 292 292 . 101.035 100.095 32.560  1.00
3.68   1 . .
ATOM 2216 CA    CA    . GLU GLU GLU A A 292 292 . 100.763 98.765  32.069  1.00
3.72   1 . .
ATOM 2217 CB    CB    . GLU GLU GLU A A 292 292 . 99.532  98.746  31.133  1.00
2.41   1 . .
ATOM 2218 CG    CG    . GLU GLU GLU A A 292 292 . 99.260  97.406  30.463  1.00
4.57   1 . .
ATOM 2219 CD    CD    . GLU GLU GLU A A 292 292 . 98.233  97.512  29.356  1.00
5.58   1 . .
ATOM 2220 OE1   OE1   . GLU GLU GLU A A 292 292 . 98.308  96.680  28.435  1.00
4.46   1 . .
ATOM 2221 OE2   OE2   . GLU GLU GLU A A 292 292 . 97.402  98.407  29.354  1.00
5.10   1 . .
ATOM 2222 C     C     . GLU GLU GLU A A 292 292 . 102.021 98.133  31.449  1.00
4.90   1 . .
ATOM 2223 O     O     . GLU GLU GLU A A 292 292 . 102.842 98.795  30.741  1.00
5.37   1 . .
ATOM 2224 N     N     . ASP ASP ASP A A 293 293 . 102.203 96.847  31.743  1.00
4.57   1 . .
ATOM 2225 CA    CA    . ASP ASP ASP A A 293 293 . 103.343 96.032  31.265  1.00
5.85   1 . .
ATOM 2226 CB    CB    . ASP ASP ASP A A 293 293 . 103.098 95.517  29.845  1.00
5.80   1 . .
ATOM 2227 CG    CG    . ASP ASP ASP A A 293 293 . 102.197 94.270  29.793  1.00
6.72   1 . .
ATOM 2228 OD1   OD1   . ASP ASP ASP A A 293 293 . 101.975 93.593  30.833  1.00
7.99   1 . .
ATOM 2229 OD2   OD2   . ASP ASP ASP A A 293 293 . 101.695 93.944  28.700  1.00
2.77   1 . .
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ATOM 2230 C     C     . ASP ASP ASP A A 293 293 . 104.686 96.746  31.328  1.00
5.25   1 . .
ATOM 2231 O     O     . ASP ASP ASP A A 293 293 . 105.380 96.803  30.337  1.00
5.34   1 . .
ATOM 2232 N     N     . PRO PRO PRO A A 294 294 . 105.087 97.250  32.512  1.00
4.19   1 . .
ATOM 2233 CA    CA    . PRO PRO PRO A A 294 294 . 106.360 97.921  32.690  1.00
4.78   1 . .
ATOM 2234 CB    CB    . PRO PRO PRO A A 294 294 . 106.303 98.364  34.171  1.00
3.53   1 . .
ATOM 2235 CG    CG    . PRO PRO PRO A A 294 294 . 105.477 97.383  34.814  1.00
5.95   1 . .
ATOM 2236 CD    CD    . PRO PRO PRO A A 294 294 . 104.343 97.265  33.778  1.00
5.03   1 . .
ATOM 2237 C     C     . PRO PRO PRO A A 294 294 . 107.567 97.035  32.479  1.00
4.72   1 . .
ATOM 2238 O     O     . PRO PRO PRO A A 294 294 . 108.672 97.547  32.210  1.00
5.87   1 . .
ATOM 2239 N     N     . PHE PHE PHE A A 295 295 . 107.349 95.722  32.505  1.00
4.24   1 . .
ATOM 2240 CA    CA    . PHE PHE PHE A A 295 295 . 108.459 94.768  32.361  1.00
5.84   1 . .
ATOM 2241 CB    CB    . PHE PHE PHE A A 295 295 . 108.954 94.317  33.741  1.00
6.44   1 . .
ATOM 2242 CG    CG    . PHE PHE PHE A A 295 295 . 109.517 95.456  34.545  1.00
8.31   1 . .
ATOM 2243 CD1   CD1   . PHE PHE PHE A A 295 295 . 110.731 96.085  34.166  1.00
5.15   1 . .
ATOM 2244 CE1   CE1   . PHE PHE PHE A A 295 295 . 111.241 97.183  34.962  1.00
8.91   1 . .
ATOM 2245 CZ    CZ    . PHE PHE PHE A A 295 295 . 110.492 97.607  36.056  1.00
9.50   1 . .
ATOM 2246 CE2   CE2   . PHE PHE PHE A A 295 295 . 109.314 96.993  36.418  1.00
11.82  1 . .
ATOM 2247 CD2   CD2   . PHE PHE PHE A A 295 295 . 108.809 95.923  35.640  1.00
8.75   1 . .
ATOM 2248 C     C     . PHE PHE PHE A A 295 295 . 108.013 93.591  31.473  1.00
5.27   1 . .
ATOM 2249 O     O     . PHE PHE PHE A A 295 295 . 106.811 93.435  31.171  1.00
6.30   1 . .
ATOM 2250 N     N     . ASP ASP ASP A A 296 296 . 108.993 92.778  31.063  1.00
8.43   1 . .
ATOM 2251 CA    CA    . ASP ASP ASP A A 296 296 . 108.689 91.630  30.206  1.00
7.58   1 . .
ATOM 2252 CB    CB    . ASP ASP ASP A A 296 296 . 109.968 90.886  29.826  1.00
8.99   1 . .
ATOM 2253 CG    CG    . ASP ASP ASP A A 296 296 . 109.661 89.725  28.920  1.00
4.85   1 . .
ATOM 2254 OD1   OD1   . ASP ASP ASP A A 296 296 . 109.395 89.999  27.761  1.00
11.87  1 . .
ATOM 2255 OD2   OD2   . ASP ASP ASP A A 296 296 . 109.641 88.595  29.410  1.00
10.90  1 . .
ATOM 2256 C     C     . ASP ASP ASP A A 296 296 . 107.704 90.686  30.893  1.00
8.38   1 . .
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ATOM 2257 O     O     . ASP ASP ASP A A 296 296 . 107.681 90.546  32.148  1.00
8.27   1 . .
ATOM 2258 N     N     . GLN GLN GLN A A 297 297 . 106.926 89.991  30.072  1.00
6.57   1 . .
ATOM 2259 CA    CA    . GLN GLN GLN A A 297 297 . 105.927 89.033  30.542  1.00
7.40   1 . .
ATOM 2260 CB    CB    . GLN GLN GLN A A 297 297 . 105.210 88.365  29.323  1.00
5.31   1 . .
ATOM 2261 CG    CG    . GLN GLN GLN A A 297 297 . 106.129 87.589  28.448  1.00
4.50   1 . .
ATOM 2262 CD    CD    . GLN GLN GLN A A 297 297 . 105.751 87.686  26.963  1.00
2.20   1 . .
ATOM 2263 OE1   OE1   . GLN GLN GLN A A 297 297 . 104.570 87.720  26.580  1.00
7.47   1 . .
ATOM 2264 NE2   NE2   . GLN GLN GLN A A 297 297 . 106.774 87.812  26.122  1.00
6.09   1 . .
ATOM 2265 C     C     . GLN GLN GLN A A 297 297 . 106.451 87.937  31.472  1.00
7.15   1 . .
ATOM 2266 O     O     . GLN GLN GLN A A 297 297 . 105.639 87.323  32.209  1.00
10.65  1 . .
ATOM 2267 N     N     . ASP ASP ASP A A 298 298 . 107.751 87.654  31.404  1.00
10.06  1 . .
ATOM 2268 CA    CA    . ASP ASP ASP A A 298 298 . 108.366 86.617  32.284  1.00
11.23  1 . .
ATOM 2269 CB    CB    . ASP ASP ASP A A 298 298 . 109.191 85.558  31.472  1.00
13.23  1 . .
ATOM 2270 CG    CG    . ASP ASP ASP A A 298 298 . 108.348 84.624  30.642  1.00
14.77  1 . .
ATOM 2271 OD1   OD1   . ASP ASP ASP A A 298 298 . 107.377 84.011  31.115  1.00
17.63  1 . .
ATOM 2272 OD2   OD2   . ASP ASP ASP A A 298 298 . 108.712 84.509  29.462  1.00
21.67  1 . .
ATOM 2273 C     C     . ASP ASP ASP A A 298 298 . 109.308 87.248  33.315  1.00
11.89  1 . .
ATOM 2274 O     O     . ASP ASP ASP A A 298 298 . 110.015 86.497  34.022  1.00
9.29   1 . .
ATOM 2275 N     N     . ASP ASP ASP A A 299 299 . 109.336 88.587  33.400  1.00
11.35  1 . .
ATOM 2276 CA    CA    . ASP ASP ASP A A 299 299 . 110.334 89.264  34.253  1.00
12.40  1 . .
ATOM 2277 CB    CB    . ASP ASP ASP A A 299 299 . 110.935 90.537  33.585  1.00
11.70  1 . .
ATOM 2278 CG    CG    . ASP ASP ASP A A 299 299 . 112.115 91.157  34.387  1.00
13.59  1 . .
ATOM 2279 OD1   OD1   . ASP ASP ASP A A 299 299 . 112.539 90.577  35.434  1.00
15.78  1 . .
ATOM 2280 OD2   OD2   . ASP ASP ASP A A 299 299 . 112.649 92.233  33.906  1.00
10.22  1 . .
ATOM 2281 C     C     . ASP ASP ASP A A 299 299 . 109.661 89.525  35.619  1.00
12.23  1 . .
ATOM 2282 O     O     . ASP ASP ASP A A 299 299 . 109.549 90.679  36.077  1.00
12.89  1 . .
ATOM 2283 N     N     . TRP TRP TRP A A 300 300 . 109.251 88.449  36.293  1.00
12.77  1 . .
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ATOM 2284 CA    CA    . TRP TRP TRP A A 300 300 . 108.429 88.567  37.477  1.00
13.74  1 . .
ATOM 2285 CB    CB    . TRP TRP TRP A A 300 300 . 108.036 87.179  38.019  1.00
14.00  1 . .
ATOM 2286 CG    CG    . TRP TRP TRP A A 300 300 . 107.080 86.435  37.094  1.00
13.12  1 . .
ATOM 2287 CD1   CD1   . TRP TRP TRP A A 300 300 . 107.413 85.591  36.078  1.00
12.77  1 . .
ATOM 2288 NE1   NE1   . TRP TRP TRP A A 300 300 . 106.269 85.082  35.479  1.00
13.17  1 . .
ATOM 2289 CE2   CE2   . TRP TRP TRP A A 300 300 . 105.169 85.576  36.128  1.00
10.80  1 . .
ATOM 2290 CD2   CD2   . TRP TRP TRP A A 300 300 . 105.643 86.440  37.151  1.00
12.02  1 . .
ATOM 2291 CE3   CE3   . TRP TRP TRP A A 300 300 . 104.716 87.069  37.975  1.00
13.90  1 . .
ATOM 2292 CZ3   CZ3   . TRP TRP TRP A A 300 300 . 103.338 86.837  37.756  1.00
12.47  1 . .
ATOM 2293 CH2   CH2   . TRP TRP TRP A A 300 300 . 102.880 85.994  36.700  1.00
12.10  1 . .
ATOM 2294 CZ2   CZ2   . TRP TRP TRP A A 300 300 . 103.783 85.365  35.874  1.00
10.42  1 . .
ATOM 2295 C     C     . TRP TRP TRP A A 300 300 . 109.050 89.370  38.594  1.00
14.91  1 . .
ATOM 2296 O     O     . TRP TRP TRP A A 300 300 . 108.364 90.165  39.239  1.00
15.65  1 . .
ATOM 2297 N     N     . ALA ALA ALA A A 301 301 . 110.344 89.185  38.825  1.00
14.75  1 . .
ATOM 2298 CA    CA    . ALA ALA ALA A A 301 301 . 110.971 89.872  39.943  1.00
15.70  1 . .
ATOM 2299 CB    CB    . ALA ALA ALA A A 301 301 . 112.373 89.388  40.142  1.00
15.93  1 . .
ATOM 2300 C     C     . ALA ALA ALA A A 301 301 . 110.958 91.377  39.767  1.00
14.28  1 . .
ATOM 2301 O     O     . ALA ALA ALA A A 301 301 . 110.882 92.102  40.758  1.00
13.65  1 . .
ATOM 2302 N     N     . ALA ALA ALA A A 302 302 . 111.124 91.844  38.523  1.00
12.90  1 . .
ATOM 2303 CA    CA    . ALA ALA ALA A A 302 302 . 111.094 93.283  38.229  1.00
12.31  1 . .
ATOM 2304 CB    CB    . ALA ALA ALA A A 302 302 . 111.570 93.580  36.828  1.00
12.59  1 . .
ATOM 2305 C     C     . ALA ALA ALA A A 302 302 . 109.737 93.891  38.508  1.00
12.16  1 . .
ATOM 2306 O     O     . ALA ALA ALA A A 302 302 . 109.666 94.928  39.125  1.00
10.19  1 . .
ATOM 2307 N     N     . TRP TRP TRP A A 303 303 . 108.684 93.233  38.037  1.00
11.62  1 . .
ATOM 2308 CA    CA    . TRP TRP TRP A A 303 303 . 107.326 93.616  38.333  1.00
10.91  1 . .
ATOM 2309 CB    CB    . TRP TRP TRP A A 303 303 . 106.377 92.521  37.872  1.00
11.02  1 . .
ATOM 2310 CG    CG    . TRP TRP TRP A A 303 303 . 106.062 92.506  36.423  1.00
9.99   1 . .
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ATOM 2311 CD1   CD1   . TRP TRP TRP A A 303 303 . 106.776 91.938  35.427  1.00
10.25  1 . .
ATOM 2312 NE1   NE1   . TRP TRP TRP A A 303 303 . 106.129 92.113  34.221  1.00
9.48   1 . .
ATOM 2313 CE2   CE2   . TRP TRP TRP A A 303 303 . 104.987 92.827  34.434  1.00
6.18   1 . .
ATOM 2314 CD2   CD2   . TRP TRP TRP A A 303 303 . 104.926 93.118  35.817  1.00
8.91   1 . .
ATOM 2315 CE3   CE3   . TRP TRP TRP A A 303 303 . 103.798 93.785  36.334  1.00
7.63   1 . .
ATOM 2316 CZ3   CZ3   . TRP TRP TRP A A 303 303 . 102.815 94.196  35.421  1.00
9.23   1 . .
ATOM 2317 CH2   CH2   . TRP TRP TRP A A 303 303 . 102.914 93.885  34.044  1.00
4.77   1 . .
ATOM 2318 CZ2   CZ2   . TRP TRP TRP A A 303 303 . 104.006 93.235  33.534  1.00
6.20   1 . .
ATOM 2319 C     C     . TRP TRP TRP A A 303 303 . 107.124 93.740  39.836  1.00
11.91  1 . .
ATOM 2320 O     O     . TRP TRP TRP A A 303 303 . 106.640 94.770  40.317  1.00
11.42  1 . .
ATOM 2321 N     N     . SER SER SER A A 304 304 . 107.454 92.683  40.588  1.00
12.51  1 . .
ATOM 2322 CA    CA    . SER SER SER A A 304 304 . 107.184 92.655  42.021  1.00
13.25  1 . .
ATOM 2323 CB    CB    . SER SER SER A A 304 304 . 107.569 91.283  42.606  1.00
14.72  1 . .
ATOM 2324 OG    OG    . SER SER SER A A 304 304 . 106.706 90.290  42.116  1.00
16.10  1 . .
ATOM 2325 C     C     . SER SER SER A A 304 304 . 107.956 93.762  42.769  1.00
13.81  1 . .
ATOM 2326 O     O     . SER SER SER A A 304 304 . 107.377 94.447  43.593  1.00
15.04  1 . .
ATOM 2327 N     N     . LYS LYS LYS A A 305 305 . 109.225 93.953  42.433  1.00
14.69  1 . .
ATOM 2328 CA    CA    . LYS LYS LYS A A 305 305 . 110.041 95.038  42.992  1.00
15.49  1 . .
ATOM 2329 CB    CB    . LYS LYS LYS A A 305 305 . 111.442 95.057  42.370  1.00
14.97  1 . .
ATOM 2330 CG    CG    . LYS LYS LYS A A 305 305 . 112.457 96.124  42.896  1.00
16.09  1 . .
ATOM 2331 CD    CD    . LYS LYS LYS A A 305 305 . 113.835 95.862  42.288  1.00
18.99  1 . .
ATOM 2332 CE    CE    . LYS LYS LYS A A 305 305 . 114.947 96.560  43.052  1.00
21.64  1 . .
ATOM 2333 NZ    NZ    . LYS LYS LYS A A 305 305 . 116.253 96.210  42.421  1.00
20.80  1 . .
ATOM 2334 C     C     . LYS LYS LYS A A 305 305 . 109.368 96.386  42.738  1.00
15.39  1 . .
ATOM 2335 O     O     . LYS LYS LYS A A 305 305 . 109.073 97.138  43.684  1.00
17.30  1 . .
ATOM 2336 N     N     . PHE PHE PHE A A 306 306 . 109.139 96.678  41.460  1.00
14.05  1 . .
ATOM 2337 CA    CA    . PHE PHE PHE A A 306 306 . 108.545 97.928  41.052  1.00
12.77  1 . .
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ATOM 2338 CB    CB    . PHE PHE PHE A A 306 306 . 108.388 98.037  39.509  1.00
12.90  1 . .
ATOM 2339 CG    CG    . PHE PHE PHE A A 306 306 . 107.902 99.423  39.062  1.00
11.06  1 . .
ATOM 2340 CD1   CD1   . PHE PHE PHE A A 306 306 . 108.686 100.550 39.259  1.00
11.58  1 . .
ATOM 2341 CE1   CE1   . PHE PHE PHE A A 306 306 . 108.237 101.834 38.894  1.00
11.87  1 . .
ATOM 2342 CZ    CZ    . PHE PHE PHE A A 306 306 . 107.013 101.993 38.269  1.00
10.49  1 . .
ATOM 2343 CE2   CE2   . PHE PHE PHE A A 306 306 . 106.213 100.865 38.023  1.00
11.73  1 . .
ATOM 2344 CD2   CD2   . PHE PHE PHE A A 306 306 . 106.657 99.590  38.447  1.00
8.14   1 . .
ATOM 2345 C     C     . PHE PHE PHE A A 306 306 . 107.231 98.224  41.789  1.00
12.13  1 . .
ATOM 2346 O     O     . PHE PHE PHE A A 306 306 . 107.088 99.291  42.370  1.00
12.74  1 . .
ATOM 2347 N     N     . THR THR THR A A 307 307 . 106.290 97.290  41.753  1.00
12.20  1 . .
ATOM 2348 CA    CA    . THR THR THR A A 307 307 . 104.959 97.473  42.302  1.00
10.71  1 . .
ATOM 2349 CB    CB    . THR THR THR A A 307 307 . 104.090 96.226  42.042  1.00
10.82  1 . .
ATOM 2350 OG1   OG1   . THR THR THR A A 307 307 . 103.889 96.088  40.621  1.00
10.64  1 . .
ATOM 2351 CG2   CG2   . THR THR THR A A 307 307 . 102.739 96.239  42.819  1.00
10.74  1 . .
ATOM 2352 C     C     . THR THR THR A A 307 307 . 105.033 97.801  43.781  1.00
10.98  1 . .
ATOM 2353 O     O     . THR THR THR A A 307 307 . 104.239 98.582  44.302  1.00
9.58   1 . .
ATOM 2354 N     N     . ALA ALA ALA A A 308 308 . 105.995 97.192  44.453  1.00
11.09  1 . .
ATOM 2355 CA    CA    . ALA ALA ALA A A 308 308 . 106.149 97.356  45.888  1.00
11.50  1 . .
ATOM 2356 CB    CB    . ALA ALA ALA A A 308 308 . 107.062 96.299  46.455  1.00
11.81  1 . .
ATOM 2357 C     C     . ALA ALA ALA A A 308 308 . 106.687 98.725  46.230  1.00
12.43  1 . .
ATOM 2358 O     O     . ALA ALA ALA A A 308 308 . 106.717 99.087  47.383  1.00
12.90  1 . .
ATOM 2359 N     N     . ASN ASN ASN A A 309 309 . 107.141 99.456  45.232  1.00
14.01  1 . .
ATOM 2360 CA    CA    . ASN ASN ASN A A 309 309 . 107.803 100.741 45.389  1.00
14.66  1 . .
ATOM 2361 CB    CB    . ASN ASN ASN A A 309 309 . 109.088 100.703 44.624  1.00
15.77  1 . .
ATOM 2362 CG    CG    . ASN ASN ASN A A 309 309 . 110.239 100.934 45.475  1.00
20.09  1 . .
ATOM 2363 OD1   OD1   . ASN ASN ASN A A 309 309 . 110.315 100.373 46.577  1.00
26.20  1 . .
ATOM 2364 ND2   ND2   . ASN ASN ASN A A 309 309 . 111.160 101.788 45.014  1.00
23.78  1 . .
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ATOM 2365 C     C     . ASN ASN ASN A A 309 309 . 107.048 101.878 44.792  1.00
14.24  1 . .
ATOM 2366 O     O     . ASN ASN ASN A A 309 309 . 107.603 102.986 44.608  1.00
17.09  1 . .
ATOM 2367 N     N     . VAL VAL VAL A A 310 310 . 105.813 101.632 44.418  1.00
13.13  1 . .
ATOM 2368 CA    CA    . VAL VAL VAL A A 310 310 . 104.998 102.757 43.903  1.00
11.51  1 . .
ATOM 2369 CB    CB    . VAL VAL VAL A A 310 310 . 104.762 102.691 42.374  1.00
11.55  1 . .
ATOM 2370 CG1   CG1   . VAL VAL VAL A A 310 310 . 106.066 102.819 41.579  1.00
13.62  1 . .
ATOM 2371 CG2   CG2   . VAL VAL VAL A A 310 310 . 103.959 101.444 41.977  1.00
9.57   1 . .
ATOM 2372 C     C     . VAL VAL VAL A A 310 310 . 103.632 102.690 44.508  1.00
11.60  1 . .
ATOM 2373 O     O     . VAL VAL VAL A A 310 310 . 103.181 101.612 44.970  1.00
14.17  1 . .
ATOM 2374 N     N     . GLY GLY GLY A A 311 311 . 102.937 103.827 44.457  1.00
11.68  1 . .
ATOM 2375 CA    CA    . GLY GLY GLY A A 311 311 . 101.567 103.905 44.936  1.00
10.58  1 . .
ATOM 2376 C     C     . GLY GLY GLY A A 311 311 . 100.537 103.927 43.829  1.00
9.55   1 . .
ATOM 2377 O     O     . GLY GLY GLY A A 311 311 . 99.345  104.089 44.114  1.00
10.58  1 . .
ATOM 2378 N     N     . ILE ILE ILE A A 312 312 . 100.973 103.796 42.591  1.00
7.88   1 . .
ATOM 2379 CA    CA    . ILE ILE ILE A A 312 312 . 100.010 103.855 41.471  1.00
7.02   1 . .
ATOM 2380 CB    CB    . ILE ILE ILE A A 312 312 . 100.639 104.586 40.291  1.00
7.86   1 . .
ATOM 2381 CG1   CG1   . ILE ILE ILE A A 312 312 . 101.923 103.898 39.847  1.00
8.09   1 . .
ATOM 2382 CD1   CD1   . ILE ILE ILE A A 312 312 . 102.132 104.067 38.339  1.00
10.12  1 . .
ATOM 2383 CG2   CG2   . ILE ILE ILE A A 312 312 . 101.009 106.040 40.730  1.00
6.53   1 . .
ATOM 2384 C     C     . ILE ILE ILE A A 312 312 . 99.431  102.512 41.034  1.00
6.62   1 . .
ATOM 2385 O     O     . ILE ILE ILE A A 312 312 . 99.827  101.512 41.598  1.00
6.57   1 . .
ATOM 2386 N     N     . GLN GLN GLN A A 313 313 . 98.572  102.535 39.997  1.00
5.00   1 . .
ATOM 2387 CA    CA    . GLN GLN GLN A A 313 313 . 98.007  101.342 39.360  1.00
5.13   1 . .
ATOM 2388 CB    CB    . GLN GLN GLN A A 313 313 . 96.785  101.746 38.539  1.00
4.17   1 . .
ATOM 2389 CG    CG    . GLN GLN GLN A A 313 313 . 96.267  100.547 37.794  1.00
3.84   1 . .
ATOM 2390 CD    CD    . GLN GLN GLN A A 313 313 . 94.881  100.663 37.392  1.00
2.83   1 . .
ATOM 2391 OE1   OE1   . GLN GLN GLN A A 313 313 . 93.977  100.215 38.103  1.00
4.84   1 . .
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ATOM 2392 NE2   NE2   . GLN GLN GLN A A 313 313 . 94.661  101.244 36.213  1.00
4.48   1 . .
ATOM 2393 C     C     . GLN GLN GLN A A 313 313 . 99.069  100.720 38.456  1.00
5.29   1 . .
ATOM 2394 O     O     . GLN GLN GLN A A 313 313 . 99.721  101.442 37.733  1.00
4.96   1 . .
ATOM 2395 N     N     . ILE ILE ILE A A 314 314 . 99.288  99.407  38.590  1.00
3.68   1 . .
ATOM 2396 CA    CA    . ILE ILE ILE A A 314 314 . 100.252 98.656  37.791  1.00
3.47   1 . .
ATOM 2397 CB    CB    . ILE ILE ILE A A 314 314 . 101.414 98.133  38.669  1.00
2.97   1 . .
ATOM 2398 CG1   CG1   . ILE ILE ILE A A 314 314 . 102.168 99.254  39.323  1.00
4.90   1 . .
ATOM 2399 CD1   CD1   . ILE ILE ILE A A 314 314 . 102.852 100.189 38.396  1.00
6.52   1 . .
ATOM 2400 CG2   CG2   . ILE ILE ILE A A 314 314 . 102.370 97.286  37.761  1.00
5.23   1 . .
ATOM 2401 C     C     . ILE ILE ILE A A 314 314 . 99.449  97.536  37.155  1.00
3.09   1 . .
ATOM 2402 O     O     . ILE ILE ILE A A 314 314 . 98.902  96.698  37.867  1.00
4.68   1 . .
ATOM 2403 N     N     . VAL VAL VAL A A 315 315 . 99.346  97.566  35.825  1.00
3.13   1 . .
ATOM 2404 CA    CA    . VAL VAL VAL A A 315 315 . 98.409  96.707  35.093  1.00
4.62   1 . .
ATOM 2405 CB    CB    . VAL VAL VAL A A 315 315 . 97.660  97.446  33.998  1.00
3.91   1 . .
ATOM 2406 CG1   CG1   . VAL VAL VAL A A 315 315 . 96.505  96.583  33.475  1.00
3.41   1 . .
ATOM 2407 CG2   CG2   . VAL VAL VAL A A 315 315 . 97.063  98.833  34.515  1.00
2.94   1 . .
ATOM 2408 C     C     . VAL VAL VAL A A 315 315 . 99.150  95.583  34.421  1.00
3.56   1 . .
ATOM 2409 O     O     . VAL VAL VAL A A 315 315 . 100.119 95.800  33.695  1.00
4.25   1 . .
ATOM 2410 N     N     . GLY GLY GLY A A 316 316 . 98.708  94.351  34.677  1.00
2.16   1 . .
ATOM 2411 CA    CA    . GLY GLY GLY A A 316 316 . 99.226  93.202  33.926  1.00
3.67   1 . .
ATOM 2412 C     C     . GLY GLY GLY A A 316 316 . 98.450  93.048  32.612  1.00
2.67   1 . .
ATOM 2413 O     O     . GLY GLY GLY A A 316 316 . 97.258  93.071  32.606  1.00
3.96   1 . .
ATOM 2414 N     N     . ASP ASP ASP A A 317 317 . 99.171  92.890  31.519  1.00
3.22   1 . .
ATOM 2415 CA    CA    . ASP ASP ASP A A 317 317 . 98.481  92.537  30.285  1.00
3.02   1 . .
ATOM 2416 CB    CB    . ASP ASP ASP A A 317 317 . 98.491  93.773  29.358  1.00
3.17   1 . .
ATOM 2417 CG    CG    . ASP ASP ASP A A 317 317 . 98.109  93.437  27.908  1.00
4.17   1 . .
ATOM 2418 OD1   OD1   . ASP ASP ASP A A 317 317 . 98.494  94.206  26.971  1.00
2.58   1 . .
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ATOM 2419 OD2   OD2   . ASP ASP ASP A A 317 317 . 97.396  92.427  27.734  1.00
2.33   1 . .
ATOM 2420 C     C     . ASP ASP ASP A A 317 317 . 99.116  91.311  29.703  1.00
3.80   1 . .
ATOM 2421 O     O     . ASP ASP ASP A A 317 317 . 98.542  90.232  29.798  1.00
4.81   1 . .
ATOM 2422 N     N     . ASP ASP ASP A A 318 318 . 100.252 91.462  29.050  1.00
3.60   1 . .
ATOM 2423 CA    CA    . ASP ASP ASP A A 318 318 . 101.026 90.265  28.610  1.00
3.09   1 . .
ATOM 2424 CB    CB    . ASP ASP ASP A A 318 318 . 102.249 90.633  27.787  1.00
2.71   1 . .
ATOM 2425 CG    CG    . ASP ASP ASP A A 318 318 . 101.874 91.201  26.417  1.00
4.75   1 . .
ATOM 2426 OD1   OD1   . ASP ASP ASP A A 318 318 . 100.768 90.864  25.946  1.00
4.53   1 . .
ATOM 2427 OD2   OD2   . ASP ASP ASP A A 318 318 . 102.723 91.938  25.844  1.00
5.59   1 . .
ATOM 2428 C     C     . ASP ASP ASP A A 318 318 . 101.465 89.396  29.819  1.00
3.60   1 . .
ATOM 2429 O     O     . ASP ASP ASP A A 318 318 . 101.662 88.193  29.699  1.00
4.42   1 . .
ATOM 2430 N     N     . LEU LEU LEU A A 319 319 . 101.704 90.022  30.954  1.00
4.76   1 . .
ATOM 2431 CA    CA    . LEU LEU LEU A A 319 319 . 102.012 89.274  32.174  1.00
5.72   1 . .
ATOM 2432 CB    CB    . LEU LEU LEU A A 319 319 . 102.139 90.223  33.390  1.00
5.43   1 . .
ATOM 2433 CG    CG    . LEU LEU LEU A A 319 319 . 102.468 89.511  34.704  1.00
5.79   1 . .
ATOM 2434 CD1   CD1   . LEU LEU LEU A A 319 319 . 103.941 89.084  34.584  1.00
4.80   1 . .
ATOM 2435 CD2   CD2   . LEU LEU LEU A A 319 319 . 102.200 90.388  35.997  1.00
5.91   1 . .
ATOM 2436 C     C     . LEU LEU LEU A A 319 319 . 100.939 88.217  32.515  1.00
4.15   1 . .
ATOM 2437 O     O     . LEU LEU LEU A A 319 319 . 101.263 87.042  32.822  1.00
5.84   1 . .
ATOM 2438 N     N     . THR THR THR A A 320 320 . 99.672  88.640  32.480  1.00
5.36   1 . .
ATOM 2439 CA    CA    . THR THR THR A A 320 320 . 98.563  87.884  32.959  1.00
3.52   1 . .
ATOM 2440 CB    CB    . THR THR THR A A 320 320 . 97.645  88.842  33.787  1.00
3.32   1 . .
ATOM 2441 OG1   OG1   . THR THR THR A A 320 320 . 97.579  90.109  33.095  1.00
5.61   1 . .
ATOM 2442 CG2   CG2   . THR THR THR A A 320 320 . 98.253  89.035  35.221  1.00
4.28   1 . .
ATOM 2443 C     C     . THR THR THR A A 320 320 . 97.705  87.218  31.893  1.00
3.43   1 . .
ATOM 2444 O     O     . THR THR THR A A 320 320 . 97.008  86.238  32.207  1.00
2.81   1 . .
ATOM 2445 N     N     . VAL VAL VAL A A 321 321 . 97.654  87.823  30.687  1.00
2.50   1 . .
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ATOM 2446 CA    CA    . VAL VAL VAL A A 321 321 . 96.855  87.277  29.560  1.00
3.01   1 . .
ATOM 2447 CB    CB    . VAL VAL VAL A A 321 321 . 97.618  86.252  28.666  1.00
2.77   1 . .
ATOM 2448 CG1   CG1   . VAL VAL VAL A A 321 321 . 98.786  86.931  27.933  1.00
3.09   1 . .
ATOM 2449 CG2   CG2   . VAL VAL VAL A A 321 321 . 98.164  85.022  29.514  1.00
4.73   1 . .
ATOM 2450 C     C     . VAL VAL VAL A A 321 321 . 95.422  86.809  29.834  1.00
2.55   1 . .
ATOM 2451 O     O     . VAL VAL VAL A A 321 321 . 94.972  85.774  29.309  1.00
2.54   1 . .
ATOM 2452 N     N     . THR THR THR A A 322 322 . 94.685  87.541  30.645  1.00
2.51   1 . .
ATOM 2453 CA    CA    . THR THR THR A A 322 322 . 93.328  87.237  30.985  1.00
2.33   1 . .
ATOM 2454 CB    CB    . THR THR THR A A 322 322 . 92.414  87.702  29.867  1.00
3.20   1 . .
ATOM 2455 OG1   OG1   . THR THR THR A A 322 322 . 92.832  89.014  29.471  1.00
4.67   1 . .
ATOM 2456 CG2   CG2   . THR THR THR A A 322 322 . 90.932  87.722  30.290  1.00
3.02   1 . .
ATOM 2457 C     C     . THR THR THR A A 322 322 . 93.124  85.784  31.352  1.00
3.35   1 . .
ATOM 2458 O     O     . THR THR THR A A 322 322 . 92.074  85.193  31.169  1.00
3.44   1 . .
ATOM 2459 N     N     . ASN ASN ASN A A 323 323 . 94.114  85.259  32.033  1.00
3.18   1 . .
ATOM 2460 CA    CA    . ASN ASN ASN A A 323 323 . 94.216  83.847  32.326  1.00
3.19   1 . .
ATOM 2461 CB    CB    . ASN ASN ASN A A 323 323 . 95.498  83.333  31.673  1.00
5.10   1 . .
ATOM 2462 CG    CG    . ASN ASN ASN A A 323 323 . 95.562  81.810  31.687  1.00
5.94   1 . .
ATOM 2463 OD1   OD1   . ASN ASN ASN A A 323 323 . 95.344  81.189  32.745  1.00
12.47  1 . .
ATOM 2464 ND2   ND2   . ASN ASN ASN A A 323 323 . 95.820  81.197  30.542  1.00
8.62   1 . .
ATOM 2465 C     C     . ASN ASN ASN A A 323 323 . 94.320  83.586  33.808  1.00
6.13   1 . .
ATOM 2466 O     O     . ASN ASN ASN A A 323 323 . 95.303  84.005  34.443  1.00
5.73   1 . .
ATOM 2467 N     N     . PRO PRO PRO A A 324 324 . 93.313  82.906  34.365  1.00
6.59   1 . .
ATOM 2468 CA    CA    . PRO PRO PRO A A 324 324 . 93.310  82.646  35.812  1.00
10.05  1 . .
ATOM 2469 CB    CB    . PRO PRO PRO A A 324 324 . 92.130  81.683  35.984  1.00
11.15  1 . .
ATOM 2470 CG    CG    . PRO PRO PRO A A 324 324 . 91.133  82.220  35.011  1.00
10.17  1 . .
ATOM 2471 CD    CD    . PRO PRO PRO A A 324 324 . 91.992  82.596  33.754  1.00
8.75   1 . .
ATOM 2472 C     C     . PRO PRO PRO A A 324 324 . 94.574  82.056  36.442  1.00
10.45  1 . .
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ATOM 2473 O     O     . PRO PRO PRO A A 324 324 . 94.847  82.419  37.592  1.00
11.00  1 . .
ATOM 2474 N     N     . LYS LYS LYS A A 325 325 . 95.284  81.144  35.749  1.00
11.11  1 . .
ATOM 2475 CA    CA    . LYS LYS LYS A A 325 325 . 96.547  80.508  36.204  1.00
12.16  1 . .
ATOM 2476 CB    CB    . LYS LYS LYS A A 325 325 . 97.013  79.435  35.183  1.00
13.67  1 . .
ATOM 2477 CG    CG    . LYS LYS LYS A A 325 325 . 98.454  78.899  35.362  1.00
17.85  1 . .
ATOM 2478 CD    CD    . LYS LYS LYS A A 325 325 . 99.573  79.679  34.587  1.00
23.76  1 . .
ATOM 2479 CE    CE    . LYS LYS LYS A A 325 325 . 100.967 79.500  35.202  1.00
25.19  1 . .
ATOM 2480 NZ    NZ    . LYS LYS LYS A A 325 325 . 101.515 80.680  35.993  1.00
26.77  1 . .
ATOM 2481 C     C     . LYS LYS LYS A A 325 325 . 97.668  81.556  36.395  1.00
10.22  1 . .
ATOM 2482 O     O     . LYS LYS LYS A A 325 325 . 98.381  81.584  37.386  1.00
10.43  1 . .
ATOM 2483 N     N     . ARG ARG ARG A A 326 326 . 97.793  82.454  35.418  1.00
8.30   1 . .
ATOM 2484 CA    CA    . ARG ARG ARG A A 326 326 . 98.836  83.500  35.480  1.00
6.39   1 . .
ATOM 2485 CB    CB    . ARG ARG ARG A A 326 326 . 99.030  84.186  34.078  1.00
7.99   1 . .
ATOM 2486 CG    CG    . ARG ARG ARG A A 326 326 . 99.692  83.333  32.881  1.00
11.06  1 . .
ATOM 2487 CD    CD    . ARG ARG ARG A A 326 326 . 100.810 84.185  32.141  1.00
16.34  1 . .
ATOM 2488 NE    NE    . ARG ARG ARG A A 326 326 . 102.093 83.710  32.594  1.00
21.14  1 . .
ATOM 2489 CZ    CZ    . ARG ARG ARG A A 326 326 . 103.259 84.324  32.571  1.00
22.47  1 . .
ATOM 2490 NH1   NH1   . ARG ARG ARG A A 326 326 . 103.414 85.542  32.106  1.00
22.99  1 . .
ATOM 2491 NH2   NH2   . ARG ARG ARG A A 326 326 . 104.304 83.661  33.036  1.00
26.22  1 . .
ATOM 2492 C     C     . ARG ARG ARG A A 326 326 . 98.412  84.604  36.516  1.00
7.26   1 . .
ATOM 2493 O     O     . ARG ARG ARG A A 326 326 . 99.234  85.142  37.225  1.00
6.70   1 . .
ATOM 2494 N     N     . ILE ILE ILE A A 327 327 . 97.110  84.884  36.605  1.00
4.79   1 . .
ATOM 2495 CA    CA    . ILE ILE ILE A A 327 327 . 96.610  85.911  37.529  1.00
7.05   1 . .
ATOM 2496 CB    CB    . ILE ILE ILE A A 327 327 . 95.118  86.066  37.315  1.00
6.17   1 . .
ATOM 2497 CG1   CG1   . ILE ILE ILE A A 327 327 . 94.901  86.687  35.931  1.00
3.28   1 . .
ATOM 2498 CD1   CD1   . ILE ILE ILE A A 327 327 . 93.284  86.642  35.551  1.00
6.34   1 . .
ATOM 2499 CG2   CG2   . ILE ILE ILE A A 327 327 . 94.375  86.896  38.379  1.00
6.76   1 . .
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ATOM 2500 C     C     . ILE ILE ILE A A 327 327 . 96.912  85.428  38.945  1.00
6.59   1 . .
ATOM 2501 O     O     . ILE ILE ILE A A 327 327 . 97.478  86.194  39.768  1.00
8.53   1 . .
ATOM 2502 N     N     . GLU GLU GLU A A 328 328 . 96.471  84.206  39.260  1.00
9.31   1 . .
ATOM 2503 CA    CA    . GLU GLU GLU A A 328 328 . 96.873  83.620  40.556  1.00
9.99   1 . .
ATOM 2504 CB    CB    . GLU GLU GLU A A 328 328 . 96.493  82.137  40.727  1.00
9.67   1 . .
ATOM 2505 CG    CG    . GLU GLU GLU A A 328 328 . 95.048  81.785  40.650  1.00
14.18  1 . .
ATOM 2506 CD    CD    . GLU GLU GLU A A 328 328 . 94.230  82.012  41.916  1.00
20.08  1 . .
ATOM 2507 OE1   OE1   . GLU GLU GLU A A 328 328 . 93.161  81.342  42.017  1.00
24.39  1 . .
ATOM 2508 OE2   OE2   . GLU GLU GLU A A 328 328 . 94.622  82.831  42.791  1.00
22.41  1 . .
ATOM 2509 C     C     . GLU GLU GLU A A 328 328 . 98.357  83.778  40.874  1.00
8.89   1 . .
ATOM 2510 O     O     . GLU GLU GLU A A 328 328 . 98.669  84.121  42.010  1.00
9.36   1 . .
ATOM 2511 N     N     . ARG ARG ARG A A 329 329 . 99.276  83.543  39.922  1.00
9.17   1 . .
ATOM 2512 CA    CA    . ARG ARG ARG A A 329 329 . 100.696 83.672  40.239  1.00
11.16  1 . .
ATOM 2513 CB    CB    . ARG ARG ARG A A 329 329 . 101.544 83.092  39.136  1.00
11.00  1 . .
ATOM 2514 CG    CG    . ARG ARG ARG A A 329 329 . 103.069 83.115  39.358  1.00
13.38  1 . .
ATOM 2515 CD    CD    . ARG ARG ARG A A 329 329 . 103.777 82.631  38.092  1.00
14.51  1 . .
ATOM 2516 NE    NE    . ARG ARG ARG A A 329 329 . 105.231 82.740  38.169  1.00
19.22  1 . .
ATOM 2517 CZ    CZ    . ARG ARG ARG A A 329 329 . 106.059 82.295  37.231  1.00
18.76  1 . .
ATOM 2518 NH1   NH1   . ARG ARG ARG A A 329 329 . 105.581 81.738  36.135  1.00
20.92  1 . .
ATOM 2519 NH2   NH2   . ARG ARG ARG A A 329 329 . 107.359 82.407  37.382  1.00
22.14  1 . .
ATOM 2520 C     C     . ARG ARG ARG A A 329 329 . 100.981 85.161  40.502  1.00
12.41  1 . .
ATOM 2521 O     O     . ARG ARG ARG A A 329 329 . 101.715 85.520  41.469  1.00
14.09  1 . .
ATOM 2522 N     N     . ALA ALA ALA A A 330 330 . 100.327 86.035  39.717  1.00
11.07  1 . .
ATOM 2523 CA    CA    . ALA ALA ALA A A 330 330 . 100.544 87.450  39.866  1.00
11.25  1 . .
ATOM 2524 CB    CB    . ALA ALA ALA A A 330 330 . 99.858  88.262  38.686  1.00
9.66   1 . .
ATOM 2525 C     C     . ALA ALA ALA A A 330 330 . 100.100 87.970  41.224  1.00
11.59  1 . .
ATOM 2526 O     O     . ALA ALA ALA A A 330 330 . 100.738 88.858  41.799  1.00
10.66  1 . .
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ATOM 2527 N     N     . VAL VAL VAL A A 331 331 . 98.977  87.451  41.688  1.00
12.89  1 . .
ATOM 2528 CA    CA    . VAL VAL VAL A A 331 331 . 98.448  87.782  43.019  1.00
13.92  1 . .
ATOM 2529 CB    CB    . VAL VAL VAL A A 331 331 . 97.056  87.101  43.325  1.00
13.97  1 . .
ATOM 2530 CG1   CG1   . VAL VAL VAL A A 331 331 . 96.722  87.218  44.838  1.00
14.94  1 . .
ATOM 2531 CG2   CG2   . VAL VAL VAL A A 331 331 . 95.907  87.708  42.513  1.00
10.68  1 . .
ATOM 2532 C     C     . VAL VAL VAL A A 331 331 . 99.415  87.366  44.121  1.00
16.39  1 . .
ATOM 2533 O     O     . VAL VAL VAL A A 331 331 . 99.687  88.159  45.006  1.00
16.32  1 . .
ATOM 2534 N     N     . GLU GLU GLU A A 332 332 . 99.928  86.139  44.045  1.00
17.75  1 . .
ATOM 2535 CA    CA    . GLU GLU GLU A A 332 332 . 100.755 85.565  45.134  1.00
19.65  1 . .
ATOM 2536 CB    CB    . GLU GLU GLU A A 332 332 . 101.003 84.047  44.944  1.00
20.51  1 . .
ATOM 2537 CG    CG    . GLU GLU GLU A A 332 332 . 101.944 83.341  45.975  1.00
24.60  1 . .
ATOM 2538 CD    CD    . GLU GLU GLU A A 332 332 . 101.415 83.307  47.436  1.00
29.50  1 . .
ATOM 2539 OE1   OE1   . GLU GLU GLU A A 332 332 . 102.263 83.183  48.362  1.00
32.56  1 . .
ATOM 2540 OE2   OE2   . GLU GLU GLU A A 332 332 . 100.174 83.374  47.670  1.00
28.92  1 . .
ATOM 2541 C     C     . GLU GLU GLU A A 332 332 . 102.058 86.321  45.203  1.00
19.38  1 . .
ATOM 2542 O     O     . GLU GLU GLU A A 332 332 . 102.606 86.548  46.297  1.00
19.52  1 . .
ATOM 2543 N     N     . GLU GLU GLU A A 333 333 . 102.570 86.670  44.028  1.00
17.57  1 . .
ATOM 2544 CA    CA    . GLU GLU GLU A A 333 333 . 103.832 87.362  43.923  1.00
15.79  1 . .
ATOM 2545 CB    CB    . GLU GLU GLU A A 333 333 . 104.558 86.888  42.675  1.00
17.34  1 . .
ATOM 2546 CG    CG    . GLU GLU GLU A A 333 333 . 104.803 85.371  42.740  1.00
19.48  1 . .
ATOM 2547 CD    CD    . GLU GLU GLU A A 333 333 . 105.773 84.855  41.703  1.00
24.46  1 . .
ATOM 2548 OE1   OE1   . GLU GLU GLU A A 333 333 . 105.379 84.003  40.870  1.00
26.15  1 . .
ATOM 2549 OE2   OE2   . GLU GLU GLU A A 333 333 . 106.935 85.281  41.745  1.00
29.30  1 . .
ATOM 2550 C     C     . GLU GLU GLU A A 333 333 . 103.702 88.908  43.982  1.00
14.26  1 . .
ATOM 2551 O     O     . GLU GLU GLU A A 333 333 . 104.679 89.628  43.800  1.00
12.11  1 . .
ATOM 2552 N     N     . LYS LYS LYS A A 334 334 . 102.496 89.396  44.251  1.00
11.75  1 . .
ATOM 2553 CA    CA    . LYS LYS LYS A A 334 334 . 102.246 90.829  44.319  1.00
13.16  1 . .
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ATOM 2554 CB    CB    . LYS LYS LYS A A 334 334 . 102.907 91.422  45.567  1.00
12.81  1 . .
ATOM 2555 CG    CG    . LYS LYS LYS A A 334 334 . 102.229 91.086  46.874  1.00
17.99  1 . .
ATOM 2556 CD    CD    . LYS LYS LYS A A 334 334 . 100.767 91.119  46.650  1.00
22.01  1 . .
ATOM 2557 CE    CE    . LYS LYS LYS A A 334 334 . 100.000 91.805  47.727  1.00
27.11  1 . .
ATOM 2558 NZ    NZ    . LYS LYS LYS A A 334 334 . 98.575  91.834  47.331  1.00
26.27  1 . .
ATOM 2559 C     C     . LYS LYS LYS A A 334 334 . 102.822 91.523  43.086  1.00
12.11  1 . .
ATOM 2560 O     O     . LYS LYS LYS A A 334 334 . 103.543 92.537  43.199  1.00
13.42  1 . .
ATOM 2561 N     N     . ALA ALA ALA A A 335 335 . 102.583 90.952  41.908  1.00
10.46  1 . .
ATOM 2562 CA    CA    . ALA ALA ALA A A 335 335 . 103.310 91.462  40.748  1.00
9.84   1 . .
ATOM 2563 CB    CB    . ALA ALA ALA A A 335 335 . 103.357 90.363  39.639  1.00
10.87  1 . .
ATOM 2564 C     C     . ALA ALA ALA A A 335 335 . 102.719 92.770  40.170  1.00
8.14   1 . .
ATOM 2565 O     O     . ALA ALA ALA A A 335 335 . 103.390 93.578  39.571  1.00
8.05   1 . .
ATOM 2566 N     N     . CYS CYS CYS A A 336 336 . 101.413 92.865  40.259  1.00
7.26   1 . .
ATOM 2567 CA    CA    . CYS CYS CYS A A 336 336 . 100.679 94.041  39.753  1.00
7.20   1 . .
ATOM 2568 CB    CB    . CYS CYS CYS A A 336 336 . 100.292 93.841  38.312  1.00
7.31   1 . .
ATOM 2569 SG    SG    . CYS CYS CYS A A 336 336 . 99.424  92.289  37.927  1.00
6.54   1 . .
ATOM 2570 C     C     . CYS CYS CYS A A 336 336 . 99.396  94.166  40.573  1.00
6.64   1 . .
ATOM 2571 O     O     . CYS CYS CYS A A 336 336 . 99.112  93.352  41.491  1.00
8.86   1 . .
ATOM 2572 N     N     . ASN ASN ASN A A 337 337 . 98.617  95.209  40.300  1.00
5.91   1 . .
ATOM 2573 CA    CA    . ASN ASN ASN A A 337 337 . 97.396  95.400  41.120  1.00
5.33   1 . .
ATOM 2574 CB    CB    . ASN ASN ASN A A 337 337 . 97.680  96.452  42.238  1.00
6.30   1 . .
ATOM 2575 CG    CG    . ASN ASN ASN A A 337 337 . 98.132  97.827  41.649  1.00
6.86   1 . .
ATOM 2576 OD1   OD1   . ASN ASN ASN A A 337 337 . 99.015  98.553  42.209  1.00
10.44  1 . .
ATOM 2577 ND2   ND2   . ASN ASN ASN A A 337 337 . 97.536  98.194  40.527  1.00
5.25   1 . .
ATOM 2578 C     C     . ASN ASN ASN A A 337 337 . 96.175  95.727  40.277  1.00
4.29   1 . .
ATOM 2579 O     O     . ASN ASN ASN A A 337 337 . 95.112  96.151  40.824  1.00
4.99   1 . .
ATOM 2580 N     N     . CYS CYS CYS A A 338 338 . 96.328  95.422  38.970  1.00
3.43   1 . .
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ATOM 2581 CA    CA    . CYS CYS CYS A A 338 338 . 95.231  95.576  38.008  1.00
3.80   1 . .
ATOM 2582 CB    CB    . CYS CYS CYS A A 338 338 . 95.230  96.993  37.448  1.00
3.16   1 . .
ATOM 2583 SG    SG    . CYS CYS CYS A A 338 338 . 93.782  97.464  36.379  1.00
4.58   1 . .
ATOM 2584 C     C     . CYS CYS CYS A A 338 338 . 95.351  94.568  36.905  1.00
2.90   1 . .
ATOM 2585 O     O     . CYS CYS CYS A A 338 338 . 96.452  94.342  36.412  1.00
3.82   1 . .
ATOM 2586 N     N     . LEU LEU LEU A A 339 339 . 94.184  94.077  36.466  1.00
3.82   1 . .
ATOM 2587 CA    CA    . LEU LEU LEU A A 339 339 . 94.106  93.129  35.365  1.00
2.07   1 . .
ATOM 2588 CB    CB    . LEU LEU LEU A A 339 339 . 93.144  92.004  35.658  1.00
2.05   1 . .
ATOM 2589 CG    CG    . LEU LEU LEU A A 339 339 . 92.914  91.008  34.532  1.00
4.10   1 . .
ATOM 2590 CD1   CD1   . LEU LEU LEU A A 339 339 . 94.200  90.220  34.180  1.00
5.42   1 . .
ATOM 2591 CD2   CD2   . LEU LEU LEU A A 339 339 . 91.729  90.075  34.858  1.00
5.40   1 . .
ATOM 2592 C     C     . LEU LEU LEU A A 339 339 . 93.611  93.817  34.097  1.00
2.04   1 . .
ATOM 2593 O     O     . LEU LEU LEU A A 339 339 . 92.560  94.425  34.100  1.00
2.44   1 . .
ATOM 2594 N     N     . LEU LEU LEU A A 340 340 . 94.354  93.647  32.981  1.00
2.43   1 . .
ATOM 2595 CA    CA    . LEU LEU LEU A A 340 340 . 93.826  94.106  31.633  1.00
2.52   1 . .
ATOM 2596 CB    CB    . LEU LEU LEU A A 340 340 . 94.944  94.449  30.633  1.00
2.45   1 . .
ATOM 2597 CG    CG    . LEU LEU LEU A A 340 340 . 94.413  95.344  29.461  1.00
2.81   1 . .
ATOM 2598 CD1   CD1   . LEU LEU LEU A A 340 340 . 94.093  96.784  29.902  1.00
6.15   1 . .
ATOM 2599 CD2   CD2   . LEU LEU LEU A A 340 340 . 95.379  95.345  28.344  1.00
4.92   1 . .
ATOM 2600 C     C     . LEU LEU LEU A A 340 340 . 92.941  92.971  31.148  1.00
2.01   1 . .
ATOM 2601 O     O     . LEU LEU LEU A A 340 340 . 93.441  91.856  30.908  1.00
3.44   1 . .
ATOM 2602 N     N     . LEU LEU LEU A A 341 341 . 91.688  93.284  30.877  1.00
2.01   1 . .
ATOM 2603 CA    CA    . LEU LEU LEU A A 341 341 . 90.745  92.222  30.510  1.00
2.15   1 . .
ATOM 2604 CB    CB    . LEU LEU LEU A A 341 341 . 89.418  92.404  31.199  1.00
2.00   1 . .
ATOM 2605 CG    CG    . LEU LEU LEU A A 341 341 . 88.555  91.133  31.299  1.00
4.88   1 . .
ATOM 2606 CD1   CD1   . LEU LEU LEU A A 341 341 . 89.002  90.196  32.431  1.00
6.40   1 . .
ATOM 2607 CD2   CD2   . LEU LEU LEU A A 341 341 . 87.116  91.451  31.444  1.00
3.34   1 . .
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ATOM 2608 C     C     . LEU LEU LEU A A 341 341 . 90.495  92.170  29.020  1.00
3.32   1 . .
ATOM 2609 O     O     . LEU LEU LEU A A 341 341 . 89.844  93.073  28.498  1.00
2.35   1 . .
ATOM 2610 N     N     . LYS LYS LYS A A 342 342 . 90.998  91.121  28.376  1.00
2.11   1 . .
ATOM 2611 CA    CA    . LYS LYS LYS A A 342 342 . 90.916  90.946  26.886  1.00
2.54   1 . .
ATOM 2612 CB    CB    . LYS LYS LYS A A 342 342 . 92.263  91.003  26.204  1.00
2.26   1 . .
ATOM 2613 CG    CG    . LYS LYS LYS A A 342 342 . 92.980  92.415  26.128  1.00
3.22   1 . .
ATOM 2614 CD    CD    . LYS LYS LYS A A 342 342 . 94.457  92.365  25.728  1.00
4.07   1 . .
ATOM 2615 CE    CE    . LYS LYS LYS A A 342 342 . 94.952  93.771  25.190  1.00
2.47   1 . .
ATOM 2616 NZ    NZ    . LYS LYS LYS A A 342 342 . 96.427  93.736  25.043  1.00
6.63   1 . .
ATOM 2617 C     C     . LYS LYS LYS A A 342 342 . 90.265  89.596  26.608  1.00
2.30   1 . .
ATOM 2618 O     O     . LYS LYS LYS A A 342 342 . 90.892  88.558  26.846  1.00
3.03   1 . .
ATOM 2619 N     N     . VAL VAL VAL A A 343 343 . 88.990  89.633  26.196  1.00
2.12   1 . .
ATOM 2620 CA    CA    . VAL VAL VAL A A 343 343 . 88.285  88.411  25.802  1.00
2.89   1 . .
ATOM 2621 CB    CB    . VAL VAL VAL A A 343 343 . 86.862  88.755  25.293  1.00
3.43   1 . .
ATOM 2622 CG1   CG1   . VAL VAL VAL A A 343 343 . 86.045  89.356  26.421  1.00
5.19   1 . .
ATOM 2623 CG2   CG2   . VAL VAL VAL A A 343 343 . 86.908  89.764  24.127  1.00
2.03   1 . .
ATOM 2624 C     C     . VAL VAL VAL A A 343 343 . 89.077  87.486  24.922  1.00
3.16   1 . .
ATOM 2625 O     O     . VAL VAL VAL A A 343 343 . 89.072  86.297  25.110  1.00
4.00   1 . .
ATOM 2626 N     N     . ASN ASN ASN A A 344 344 . 89.841  88.011  23.956  1.00
2.00   1 . .
ATOM 2627 CA    CA    . ASN ASN ASN A A 344 344 . 90.542  87.165  23.021  1.00
2.34   1 . .
ATOM 2628 CB    CB    . ASN ASN ASN A A 344 344 . 90.639  87.822  21.634  1.00
2.00   1 . .
ATOM 2629 CG    CG    . ASN ASN ASN A A 344 344 . 91.950  88.516  21.386  1.00
2.77   1 . .
ATOM 2630 OD1   OD1   . ASN ASN ASN A A 344 344 . 92.276  89.436  22.133  1.00
3.76   1 . .
ATOM 2631 ND2   ND2   . ASN ASN ASN A A 344 344 . 92.705  88.110  20.320  1.00
3.04   1 . .
ATOM 2632 C     C     . ASN ASN ASN A A 344 344 . 91.915  86.676  23.531  1.00
2.01   1 . .
ATOM 2633 O     O     . ASN ASN ASN A A 344 344 . 92.580  85.856  22.853  1.00
2.60   1 . .
ATOM 2634 N     N     . GLN GLN GLN A A 345 345 . 92.375  87.111  24.712  1.00
3.35   1 . .
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ATOM 2635 CA    CA    . GLN GLN GLN A A 345 345 . 93.641  86.519  25.213  1.00
2.80   1 . .
ATOM 2636 CB    CB    . GLN GLN GLN A A 345 345 . 94.306  87.417  26.259  1.00
2.85   1 . .
ATOM 2637 CG    CG    . GLN GLN GLN A A 345 345 . 95.193  88.512  25.695  1.00
2.35   1 . .
ATOM 2638 CD    CD    . GLN GLN GLN A A 345 345 . 95.747  89.404  26.810  1.00
3.38   1 . .
ATOM 2639 OE1   OE1   . GLN GLN GLN A A 345 345 . 95.147  89.565  27.870  1.00
3.63   1 . .
ATOM 2640 NE2   NE2   . GLN GLN GLN A A 345 345 . 96.890  89.993  26.555  1.00
2.99   1 . .
ATOM 2641 C     C     . GLN GLN GLN A A 345 345 . 93.297  85.175  25.870  1.00
2.16   1 . .
ATOM 2642 O     O     . GLN GLN GLN A A 345 345 . 94.157  84.285  25.933  1.00
4.01   1 . .
ATOM 2643 N     N     . ILE ILE ILE A A 346 346 . 92.049  84.973  26.254  1.00
3.63   1 . .
ATOM 2644 CA    CA    . ILE ILE ILE A A 346 346 . 91.649  83.708  26.879  1.00
2.43   1 . .
ATOM 2645 CB    CB    . ILE ILE ILE A A 346 346 . 91.133  83.956  28.347  1.00
2.37   1 . .
ATOM 2646 CG1   CG1   . ILE ILE ILE A A 346 346 . 91.140  82.629  29.145  1.00
6.00   1 . .
ATOM 2647 CD1   CD1   . ILE ILE ILE A A 346 346 . 92.487  81.963  29.259  1.00
2.88   1 . .
ATOM 2648 CG2   CG2   . ILE ILE ILE A A 346 346 . 89.730  84.646  28.323  1.00
3.48   1 . .
ATOM 2649 C     C     . ILE ILE ILE A A 346 346 . 90.688  82.923  26.006  1.00
2.59   1 . .
ATOM 2650 O     O     . ILE ILE ILE A A 346 346 . 90.781  81.691  26.007  1.00
4.54   1 . .
ATOM 2651 N     N     . GLY GLY GLY A A 347 347 . 89.764  83.554  25.286  1.00
2.54   1 . .
ATOM 2652 CA    CA    . GLY GLY GLY A A 347 347 . 89.059  82.811  24.245  1.00
2.12   1 . .
ATOM 2653 C     C     . GLY GLY GLY A A 347 347 . 87.594  82.609  24.468  1.00
2.82   1 . .
ATOM 2654 O     O     . GLY GLY GLY A A 347 347 . 86.979  82.080  23.639  1.00
3.85   1 . .
ATOM 2655 N     N     . SER SER SER A A 348 348 . 87.059  82.971  25.645  1.00
2.48   1 . .
ATOM 2656 CA    CA    . SER SER SER A A 348 348 . 85.602  82.840  25.835  1.00
2.36   1 . .
ATOM 2657 CB    CB    . SER SER SER A A 348 348 . 85.296  81.395  26.331  1.00
4.82   1 . .
ATOM 2658 OG    OG    . SER SER SER A A 348 348 . 85.536  81.270  27.698  1.00
2.62   1 . .
ATOM 2659 C     C     . SER SER SER A A 348 348 . 85.116  83.915  26.789  1.00
2.48   1 . .
ATOM 2660 O     O     . SER SER SER A A 348 348 . 85.916  84.455  27.578  1.00
4.41   1 . .
ATOM 2661 N     N     . VAL VAL VAL A A 349 349 . 83.842  84.263  26.641  1.00
3.56   1 . .
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ATOM 2662 CA    CA    . VAL VAL VAL A A 349 349 . 83.161  85.149  27.572  1.00
2.25   1 . .
ATOM 2663 CB    CB    . VAL VAL VAL A A 349 349 . 81.637  85.466  27.135  1.00
3.15   1 . .
ATOM 2664 CG1   CG1   . VAL VAL VAL A A 349 349 . 80.916  86.261  28.193  1.00
5.10   1 . .
ATOM 2665 CG2   CG2   . VAL VAL VAL A A 349 349 . 81.666  86.229  25.761  1.00
3.91   1 . .
ATOM 2666 C     C     . VAL VAL VAL A A 349 349 . 83.195  84.615  29.011  1.00
2.01   1 . .
ATOM 2667 O     O     . VAL VAL VAL A A 349 349 . 83.636  85.325  29.917  1.00
3.19   1 . .
ATOM 2668 N     N     . THR THR THR A A 350 350 . 82.730  83.378  29.211  1.00
2.53   1 . .
ATOM 2669 CA    CA    . THR THR THR A A 350 350 . 82.792  82.777  30.504  1.00
3.51   1 . .
ATOM 2670 CB    CB    . THR THR THR A A 350 350 . 82.284  81.304  30.424  1.00
2.84   1 . .
ATOM 2671 OG1   OG1   . THR THR THR A A 350 350 . 80.889  81.236  30.084  1.00
4.10   1 . .
ATOM 2672 CG2   CG2   . THR THR THR A A 350 350 . 82.479  80.575  31.765  1.00
5.45   1 . .
ATOM 2673 C     C     . THR THR THR A A 350 350 . 84.158  82.882  31.169  1.00
2.72   1 . .
ATOM 2674 O     O     . THR THR THR A A 350 350 . 84.278  83.303  32.340  1.00
3.78   1 . .
ATOM 2675 N     N     . GLU GLU GLU A A 351 351 . 85.222  82.554  30.433  1.00
3.13   1 . .
ATOM 2676 CA    CA    . GLU GLU GLU A A 351 351 . 86.559  82.675  31.040  1.00
3.15   1 . .
ATOM 2677 CB    CB    . GLU GLU GLU A A 351 351 . 87.652  81.977  30.230  1.00
4.88   1 . .
ATOM 2678 CG    CG    . GLU GLU GLU A A 351 351 . 87.366  80.447  30.065  1.00
5.35   1 . .
ATOM 2679 CD    CD    . GLU GLU GLU A A 351 351 . 88.307  79.807  29.060  1.00
4.84   1 . .
ATOM 2680 OE1   OE1   . GLU GLU GLU A A 351 351 . 88.111  80.044  27.863  1.00
5.42   1 . .
ATOM 2681 OE2   OE2   . GLU GLU GLU A A 351 351 . 89.252  79.136  29.511  1.00
7.82   1 . .
ATOM 2682 C     C     . GLU GLU GLU A A 351 351 . 86.978  84.084  31.367  1.00
2.91   1 . .
ATOM 2683 O     O     . GLU GLU GLU A A 351 351 . 87.581  84.306  32.421  1.00
4.54   1 . .
ATOM 2684 N     N     . ALA ALA ALA A A 352 352 . 86.621  85.036  30.496  1.00
4.60   1 . .
ATOM 2685 CA    CA    . ALA ALA ALA A A 352 352 . 86.937  86.432  30.739  1.00
2.59   1 . .
ATOM 2686 CB    CB    . ALA ALA ALA A A 352 352 . 86.579  87.249  29.547  1.00
4.16   1 . .
ATOM 2687 C     C     . ALA ALA ALA A A 352 352 . 86.184  86.918  32.003  1.00
2.95   1 . .
ATOM 2688 O     O     . ALA ALA ALA A A 352 352 . 86.786  87.643  32.792  1.00
5.23   1 . .
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ATOM 2689 N     N     . ILE ILE ILE A A 353 353 . 84.926  86.526  32.167  1.00
3.80   1 . .
ATOM 2690 CA    CA    . ILE ILE ILE A A 353 353 . 84.117  86.919  33.348  1.00
4.34   1 . .
ATOM 2691 CB    CB    . ILE ILE ILE A A 353 353 . 82.659  86.526  33.201  1.00
3.48   1 . .
ATOM 2692 CG1   CG1   . ILE ILE ILE A A 353 353 . 82.007  87.332  32.023  1.00
3.34   1 . .
ATOM 2693 CD1   CD1   . ILE ILE ILE A A 353 353 . 80.561  87.121  31.860  1.00
6.87   1 . .
ATOM 2694 CG2   CG2   . ILE ILE ILE A A 353 353 . 81.882  86.835  34.540  1.00
4.70   1 . .
ATOM 2695 C     C     . ILE ILE ILE A A 353 353 . 84.770  86.306  34.622  1.00
4.45   1 . .
ATOM 2696 O     O     . ILE ILE ILE A A 353 353 . 84.934  87.025  35.653  1.00
6.13   1 . .
ATOM 2697 N     N     . GLN GLN GLN A A 354 354 . 85.186  85.047  34.550  1.00
5.35   1 . .
ATOM 2698 CA    CA    . GLN GLN GLN A A 354 354 . 85.903  84.415  35.693  1.00
4.81   1 . .
ATOM 2699 CB    CB    . GLN GLN GLN A A 354 354 . 86.170  82.938  35.416  1.00
5.60   1 . .
ATOM 2700 CG    CG    . GLN GLN GLN A A 354 354 . 84.958  82.049  35.581  1.00
12.07  1 . .
ATOM 2701 CD    CD    . GLN GLN GLN A A 354 354 . 85.082  80.674  34.884  1.00
14.00  1 . .
ATOM 2702 OE1   OE1   . GLN GLN GLN A A 354 354 . 84.113  79.910  34.859  1.00
18.83  1 . .
ATOM 2703 NE2   NE2   . GLN GLN GLN A A 354 354 . 86.256  80.367  34.319  1.00
16.29  1 . .
ATOM 2704 C     C     . GLN GLN GLN A A 354 354 . 87.219  85.137  35.985  1.00
4.54   1 . .
ATOM 2705 O     O     . GLN GLN GLN A A 354 354 . 87.535  85.301  37.135  1.00
4.46   1 . .
ATOM 2706 N     N     . ALA ALA ALA A A 355 355 . 87.957  85.611  34.955  1.00
3.75   1 . .
ATOM 2707 CA    CA    . ALA ALA ALA A A 355 355 . 89.233  86.272  35.176  1.00
4.40   1 . .
ATOM 2708 CB    CB    . ALA ALA ALA A A 355 355 . 89.951  86.532  33.897  1.00
4.70   1 . .
ATOM 2709 C     C     . ALA ALA ALA A A 355 355 . 89.015  87.585  35.931  1.00
2.54   1 . .
ATOM 2710 O     O     . ALA ALA ALA A A 355 355 . 89.781  87.922  36.850  1.00
3.62   1 . .
ATOM 2711 N     N     . CYS CYS CYS A A 356 356 . 88.032  88.349  35.442  1.00
3.47   1 . .
ATOM 2712 CA    CA    . CYS CYS CYS A A 356 356 . 87.639  89.596  36.021  1.00
3.12   1 . .
ATOM 2713 CB    CB    . CYS CYS CYS A A 356 356 . 86.448  90.175  35.243  1.00
2.66   1 . .
ATOM 2714 SG    SG    . CYS CYS CYS A A 356 356 . 85.808  91.765  35.953  1.00
4.12   1 . .
ATOM 2715 C     C     . CYS CYS CYS A A 356 356 . 87.332  89.404  37.511  1.00
3.15   1 . .
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ATOM 2716 O     O     . CYS CYS CYS A A 356 356 . 87.927  90.116  38.375  1.00
4.49   1 . .
ATOM 2717 N     N     . LYS LYS LYS A A 357 357 . 86.433  88.429  37.793  1.00
5.25   1 . .
ATOM 2718 CA    CA    . LYS LYS LYS A A 357 357 . 85.951  88.224  39.159  1.00
6.84   1 . .
ATOM 2719 CB    CB    . LYS LYS LYS A A 357 357 . 84.810  87.223  39.229  1.00
6.29   1 . .
ATOM 2720 CG    CG    . LYS LYS LYS A A 357 357 . 83.496  87.834  38.695  1.00
12.95  1 . .
ATOM 2721 CD    CD    . LYS LYS LYS A A 357 357 . 82.325  86.877  38.681  1.00
16.98  1 . .
ATOM 2722 CE    CE    . LYS LYS LYS A A 357 357 . 81.971  86.510  40.097  1.00
20.09  1 . .
ATOM 2723 NZ    NZ    . LYS LYS LYS A A 357 357 . 80.568  86.110  40.155  1.00
24.36  1 . .
ATOM 2724 C     C     . LYS LYS LYS A A 357 357 . 87.052  87.804  40.064  1.00
5.09   1 . .
ATOM 2725 O     O     . LYS LYS LYS A A 357 357 . 87.063  88.253  41.228  1.00
6.98   1 . .
ATOM 2726 N     N     . LEU LEU LEU A A 358 358 . 87.990  87.004  39.539  1.00
5.69   1 . .
ATOM 2727 CA    CA    . LEU LEU LEU A A 358 358 . 89.189  86.585  40.277  1.00
5.62   1 . .
ATOM 2728 CB    CB    . LEU LEU LEU A A 358 358 . 90.044  85.623  39.446  1.00
7.76   1 . .
ATOM 2729 CG    CG    . LEU LEU LEU A A 358 358 . 91.259  85.015  40.107  1.00
7.67   1 . .
ATOM 2730 CD1   CD1   . LEU LEU LEU A A 358 358 . 90.941  84.319  41.448  1.00
9.68   1 . .
ATOM 2731 CD2   CD2   . LEU LEU LEU A A 358 358 . 92.046  84.053  39.132  1.00
7.04   1 . .
ATOM 2732 C     C     . LEU LEU LEU A A 358 358 . 89.992  87.803  40.672  1.00
4.88   1 . .
ATOM 2733 O     O     . LEU LEU LEU A A 358 358 . 90.419  87.972  41.838  1.00
6.22   1 . .
ATOM 2734 N     N     . ALA ALA ALA A A 359 359 . 90.183  88.723  39.734  1.00
4.67   1 . .
ATOM 2735 CA    CA    . ALA ALA ALA A A 359 359 . 91.018  89.883  40.014  1.00
5.92   1 . .
ATOM 2736 CB    CB    . ALA ALA ALA A A 359 359 . 91.199  90.713  38.705  1.00
5.90   1 . .
ATOM 2737 C     C     . ALA ALA ALA A A 359 359 . 90.313  90.723  41.098  1.00
6.39   1 . .
ATOM 2738 O     O     . ALA ALA ALA A A 359 359 . 90.932  91.127  42.122  1.00
7.90   1 . .
ATOM 2739 N     N     . GLN GLN GLN A A 360 360 . 88.998  90.891  40.920  1.00
5.19   1 . .
ATOM 2740 CA    CA    . GLN GLN GLN A A 360 360 . 88.233  91.835  41.782  1.00
7.00   1 . .
ATOM 2741 CB    CB    . GLN GLN GLN A A 360 360 . 86.832  92.155  41.273  1.00
6.81   1 . .
ATOM 2742 CG    CG    . GLN GLN GLN A A 360 360 . 86.829  92.932  39.944  1.00
5.10   1 . .
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ATOM 2743 CD    CD    . GLN GLN GLN A A 360 360 . 85.444  93.088  39.377  1.00
5.88   1 . .
ATOM 2744 OE1   OE1   . GLN GLN GLN A A 360 360 . 85.105  94.174  38.776  1.00
9.12   1 . .
ATOM 2745 NE2   NE2   . GLN GLN GLN A A 360 360 . 84.675  91.986  39.389  1.00
5.26   1 . .
ATOM 2746 C     C     . GLN GLN GLN A A 360 360 . 88.139  91.261  43.197  1.00
8.96   1 . .
ATOM 2747 O     O     . GLN GLN GLN A A 360 360 . 88.228  92.024  44.157  1.00
9.56   1 . .
ATOM 2748 N     N     . GLU GLU GLU A A 361 361 . 88.056  89.944  43.299  1.00
8.55   1 . .
ATOM 2749 CA    CA    . GLU GLU GLU A A 361 361 . 88.047  89.279  44.602  1.00
10.48  1 . .
ATOM 2750 CB    CB    . GLU GLU GLU A A 361 361 . 87.754  87.785  44.386  1.00
11.12  1 . .
ATOM 2751 CG    CG    . GLU GLU GLU A A 361 361 . 86.295  87.420  44.154  1.00
16.04  1 . .
ATOM 2752 CD    CD    . GLU GLU GLU A A 361 361 . 86.072  85.995  43.614  1.00
21.76  1 . .
ATOM 2753 OE1   OE1   . GLU GLU GLU A A 361 361 . 87.039  85.183  43.559  1.00
22.26  1 . .
ATOM 2754 OE2   OE2   . GLU GLU GLU A A 361 361 . 84.914  85.678  43.234  1.00
25.39  1 . .
ATOM 2755 C     C     . GLU GLU GLU A A 361 361 . 89.420  89.446  45.322  1.00
10.44  1 . .
ATOM 2756 O     O     . GLU GLU GLU A A 361 361 . 89.505  89.364  46.564  1.00
12.54  1 . .
ATOM 2757 N     N     . ASN ASN ASN A A 362 362 . 90.484  89.657  44.571  1.00
9.06   1 . .
ATOM 2758 CA    CA    . ASN ASN ASN A A 362 362 . 91.805  89.876  45.126  1.00
9.16   1 . .
ATOM 2759 CB    CB    . ASN ASN ASN A A 362 362 . 92.885  89.046  44.396  1.00
9.39   1 . .
ATOM 2760 CG    CG    . ASN ASN ASN A A 362 362 . 92.804  87.578  44.795  1.00
11.54  1 . .
ATOM 2761 OD1   OD1   . ASN ASN ASN A A 362 362 . 93.340  87.203  45.829  1.00
12.94  1 . .
ATOM 2762 ND2   ND2   . ASN ASN ASN A A 362 362 . 92.059  86.755  44.012  1.00
12.06  1 . .
ATOM 2763 C     C     . ASN ASN ASN A A 362 362 . 92.174  91.368  45.332  1.00
8.27   1 . .
ATOM 2764 O     O     . ASN ASN ASN A A 362 362 . 93.319  91.687  45.588  1.00
10.62  1 . .
ATOM 2765 N     N     . GLY GLY GLY A A 363 363 . 91.175  92.254  45.256  1.00
7.49   1 . .
ATOM 2766 CA    CA    . GLY GLY GLY A A 363 363 . 91.373  93.678  45.461  1.00
7.89   1 . .
ATOM 2767 C     C     . GLY GLY GLY A A 363 363 . 92.031  94.391  44.298  1.00
8.66   1 . .
ATOM 2768 O     O     . GLY GLY GLY A A 363 363 . 92.450  95.541  44.409  1.00
9.25   1 . .
ATOM 2769 N     N     . TRP TRP TRP A A 364 364 . 92.153  93.714  43.152  1.00
5.93   1 . .
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ATOM 2770 CA    CA    . TRP TRP TRP A A 364 364 . 92.768  94.373  42.011  1.00
6.03   1 . .
ATOM 2771 CB    CB    . TRP TRP TRP A A 364 364 . 93.322  93.347  41.025  1.00
5.60   1 . .
ATOM 2772 CG    CG    . TRP TRP TRP A A 364 364 . 94.568  92.632  41.312  1.00
6.05   1 . .
ATOM 2773 CD1   CD1   . TRP TRP TRP A A 364 364 . 95.184  92.419  42.514  1.00
6.36   1 . .
ATOM 2774 NE1   NE1   . TRP TRP TRP A A 364 364 . 96.355  91.626  42.317  1.00
7.16   1 . .
ATOM 2775 CE2   CE2   . TRP TRP TRP A A 364 364 . 96.383  91.249  40.985  1.00
7.07   1 . .
ATOM 2776 CD2   CD2   . TRP TRP TRP A A 364 364 . 95.246  91.813  40.345  1.00
3.70   1 . .
ATOM 2777 CE3   CE3   . TRP TRP TRP A A 364 364 . 95.117  91.674  38.968  1.00
5.03   1 . .
ATOM 2778 CZ3   CZ3   . TRP TRP TRP A A 364 364 . 96.001  90.920  38.302  1.00
5.24   1 . .
ATOM 2779 CH2   CH2   . TRP TRP TRP A A 364 364 . 97.086  90.309  38.964  1.00
6.07   1 . .
ATOM 2780 CZ2   CZ2   . TRP TRP TRP A A 364 364 . 97.326  90.501  40.287  1.00
6.02   1 . .
ATOM 2781 C     C     . TRP TRP TRP A A 364 364 . 91.756  95.216  41.282  1.00
4.52   1 . .
ATOM 2782 O     O     . TRP TRP TRP A A 364 364 . 90.537  94.957  41.277  1.00
4.97   1 . .
ATOM 2783 N     N     . GLY GLY GLY A A 365 365 . 92.265  96.170  40.537  1.00
5.24   1 . .
ATOM 2784 CA    CA    . GLY GLY GLY A A 365 365 . 91.391  96.837  39.531  1.00
3.79   1 . .
ATOM 2785 C     C     . GLY GLY GLY A A 365 365 . 91.254  95.952  38.320  1.00
3.95   1 . .
ATOM 2786 O     O     . GLY GLY GLY A A 365 365 . 92.035  94.973  38.155  1.00
3.23   1 . .
ATOM 2787 N     N     . VAL VAL VAL A A 366 366 . 90.303  96.304  37.472  1.00
3.61   1 . .
ATOM 2788 CA    CA    . VAL VAL VAL A A 366 366 . 90.193  95.641  36.142  1.00
2.89   1 . .
ATOM 2789 CB    CB    . VAL VAL VAL A A 366 366 . 89.113  94.504  36.036  1.00
3.32   1 . .
ATOM 2790 CG1   CG1   . VAL VAL VAL A A 366 366 . 89.084  93.884  34.649  1.00
4.26   1 . .
ATOM 2791 CG2   CG2   . VAL VAL VAL A A 366 366 . 89.327  93.419  37.115  1.00
2.29   1 . .
ATOM 2792 C     C     . VAL VAL VAL A A 366 366 . 89.943  96.729  35.128  1.00
3.04   1 . .
ATOM 2793 O     O     . VAL VAL VAL A A 366 366 . 88.937  97.437  35.256  1.00
2.05   1 . .
ATOM 2794 N     N     . MET MET MET A A 367 367 . 90.773  96.767  34.060  1.00
2.38   1 . .
ATOM 2795 CA    CA    . MET MET MET A A 367 367 . 90.570  97.662  32.924  1.00
2.89   1 . .
ATOM 2796 CB    CB    . MET MET MET A A 367 367 . 91.789  98.523  32.679  1.00
2.56   1 . .
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ATOM 2797 CG    CG    . MET MET MET A A 367 367 . 91.547  99.570  31.542  1.00
3.08   1 . .
ATOM 2798 SD    SD    . MET MET MET A A 367 367 . 93.065  100.409 30.967  1.00
4.11   1 . .
ATOM 2799 CE    CE    . MET MET MET A A 367 367 . 93.392  101.471 32.393  1.00
9.72   1 . .
ATOM 2800 C     C     . MET MET MET A A 367 367 . 90.211  96.800  31.707  1.00
2.59   1 . .
ATOM 2801 O     O     . MET MET MET A A 367 367 . 91.053  95.999  31.243  1.00
2.81   1 . .
ATOM 2802 N     N     . VAL VAL VAL A A 368 368 . 88.964  96.950  31.233  1.00
2.67   1 . .
ATOM 2803 CA    CA    . VAL VAL VAL A A 368 368 . 88.522  96.253  30.011  1.00
2.21   1 . .
ATOM 2804 CB    CB    . VAL VAL VAL A A 368 368 . 87.022  96.380  29.883  1.00
2.41   1 . .
ATOM 2805 CG1   CG1   . VAL VAL VAL A A 368 368 . 86.557  95.836  28.518  1.00
2.98   1 . .
ATOM 2806 CG2   CG2   . VAL VAL VAL A A 368 368 . 86.367  95.563  30.972  1.00
2.14   1 . .
ATOM 2807 C     C     . VAL VAL VAL A A 368 368 . 89.271  96.872  28.818  1.00
2.50   1 . .
ATOM 2808 O     O     . VAL VAL VAL A A 368 368 . 89.558  98.084  28.827  1.00
3.02   1 . .
ATOM 2809 N     N     . SER SER SER A A 369 369 . 89.672  96.053  27.833  1.00
2.01   1 . .
ATOM 2810 CA    CA    . SER SER SER A A 369 369 . 90.524  96.519  26.717  1.00
2.62   1 . .
ATOM 2811 CB    CB    . SER SER SER A A 369 369 . 91.991  96.156  26.967  1.00
2.44   1 . .
ATOM 2812 OG    OG    . SER SER SER A A 369 369 . 92.902  96.675  25.976  1.00
2.71   1 . .
ATOM 2813 C     C     . SER SER SER A A 369 369 . 90.106  95.993  25.358  1.00
2.00   1 . .
ATOM 2814 O     O     . SER SER SER A A 369 369 . 89.632  94.871  25.193  1.00
4.15   1 . .
ATOM 2815 N     N     . HIS HIS HIS A A 370 370 . 90.248  96.850  24.362  1.00
2.21   1 . .
ATOM 2816 CA    CA    . HIS HIS HIS A A 370 370 . 90.213  96.459  22.966  1.00
2.03   1 . .
ATOM 2817 CB    CB    . HIS HIS HIS A A 370 370 . 90.162  97.729  22.120  1.00
2.51   1 . .
ATOM 2818 CG    CG    . HIS HIS HIS A A 370 370 . 91.294  98.688  22.361  1.00
2.00   1 . .
ATOM 2819 ND1   ND1   . HIS HIS HIS A A 370 370 . 91.541  99.741  21.497  1.00
2.63   1 . .
ATOM 2820 CE1   CE1   . HIS HIS HIS A A 370 370 . 92.555  100.461 21.920  1.00
2.00   1 . .
ATOM 2821 NE2   NE2   . HIS HIS HIS A A 370 370 . 93.022  99.920  23.024  1.00
2.35   1 . .
ATOM 2822 CD2   CD2   . HIS HIS HIS A A 370 370 . 92.238  98.802  23.339  1.00
2.16   1 . .
ATOM 2823 C     C     . HIS HIS HIS A A 370 370 . 91.553  95.723  22.648  1.00
2.39   1 . .
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ATOM 2824 O     O     . HIS HIS HIS A A 370 370 . 92.444  95.585  23.472  1.00
2.35   1 . .
ATOM 2825 N     N     . ARG ARG ARG A A 371 371 . 91.682  95.294  21.377  1.00
2.06   1 . .
ATOM 2826 CA    CA    . ARG ARG ARG A A 371 371 . 92.983  95.025  20.754  1.00
2.36   1 . .
ATOM 2827 CB    CB    . ARG ARG ARG A A 371 371 . 92.962  93.687  20.009  1.00
2.09   1 . .
ATOM 2828 CG    CG    . ARG ARG ARG A A 371 371 . 92.615  92.454  20.869  1.00
2.00   1 . .
ATOM 2829 CD    CD    . ARG ARG ARG A A 371 371 . 93.410  92.390  22.161  1.00
2.00   1 . .
ATOM 2830 NE    NE    . ARG ARG ARG A A 371 371 . 94.874  92.366  22.045  1.00
2.60   1 . .
ATOM 2831 CZ    CZ    . ARG ARG ARG A A 371 371 . 95.633  91.299  22.327  1.00
2.00   1 . .
ATOM 2832 NH1   NH1   . ARG ARG ARG A A 371 371 . 95.067  90.054  22.499  1.00
2.00   1 . .
ATOM 2833 NH2   NH2   . ARG ARG ARG A A 371 371 . 96.943  91.411  22.228  1.00
2.22   1 . .
ATOM 2834 C     C     . ARG ARG ARG A A 371 371 . 93.352  96.131  19.744  1.00
2.29   1 . .
ATOM 2835 O     O     . ARG ARG ARG A A 371 371 . 92.447  96.880  19.340  1.00
2.01   1 . .
ATOM 2836 N     N     . SER SER SER A A 372 372 . 94.657  96.200  19.397  1.00
2.32   1 . .
ATOM 2837 CA    CA    . SER SER SER A A 372 372 . 95.245  97.030  18.322  1.00
4.58   1 . .
ATOM 2838 CB    CB    . SER SER SER A A 372 372 . 96.621  96.357  17.966  1.00
5.11   1 . .
ATOM 2839 OG    OG    . SER SER SER A A 372 372 . 97.570  97.301  18.313  1.00
16.27  1 . .
ATOM 2840 C     C     . SER SER SER A A 372 372 . 94.389  96.890  17.039  1.00
3.02   1 . .
ATOM 2841 O     O     . SER SER SER A A 372 372 . 94.177  97.838  16.228  1.00
2.00   1 . .
ATOM 2842 N     N     . GLY GLY GLY A A 373 373 . 94.078  95.638  16.746  1.00
3.06   1 . .
ATOM 2843 CA    CA    . GLY GLY GLY A A 373 373 . 93.255  95.367  15.552  1.00
2.02   1 . .
ATOM 2844 C     C     . GLY GLY GLY A A 373 373 . 91.839  95.201  16.037  1.00
2.13   1 . .
ATOM 2845 O     O     . GLY GLY GLY A A 373 373 . 91.513  94.135  16.643  1.00
3.10   1 . .
ATOM 2846 N     N     . GLU GLU GLU A A 374 374 . 90.942  96.147  15.735  1.00
2.26   1 . .
ATOM 2847 CA    CA    . GLU GLU GLU A A 374 374 . 89.551  96.085  16.195  1.00
2.52   1 . .
ATOM 2848 CB    CB    . GLU GLU GLU A A 374 374 . 89.210  97.306  17.041  1.00
2.59   1 . .
ATOM 2849 CG    CG    . GLU GLU GLU A A 374 374 . 89.354  97.021  18.577  1.00
2.00   1 . .
ATOM 2850 CD    CD    . GLU GLU GLU A A 374 374 . 88.432  95.949  19.062  1.00
2.27   1 . .
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ATOM 2851 OE1   OE1   . GLU GLU GLU A A 374 374 . 87.323  95.708  18.491  1.00
2.00   1 . .
ATOM 2852 OE2   OE2   . GLU GLU GLU A A 374 374 . 88.774  95.360  20.100  1.00
2.00   1 . .
ATOM 2853 C     C     . GLU GLU GLU A A 374 374 . 88.588  95.996  15.055  1.00
2.01   1 . .
ATOM 2854 O     O     . GLU GLU GLU A A 374 374 . 89.046  95.928  13.907  1.00
2.58   1 . .
ATOM 2855 N     N     . THR THR THR A A 375 375 . 87.302  95.912  15.361  1.00
2.33   1 . .
ATOM 2856 CA    CA    . THR THR THR A A 375 375 . 86.250  95.800  14.309  1.00
2.15   1 . .
ATOM 2857 CB    CB    . THR THR THR A A 375 375 . 85.648  94.390  14.161  1.00
2.70   1 . .
ATOM 2858 OG1   OG1   . THR THR THR A A 375 375 . 84.935  94.091  15.386  1.00
2.41   1 . .
ATOM 2859 CG2   CG2   . THR THR THR A A 375 375 . 86.744  93.357  13.946  1.00
3.37   1 . .
ATOM 2860 C     C     . THR THR THR A A 375 375 . 85.154  96.791  14.796  1.00
2.00   1 . .
ATOM 2861 O     O     . THR THR THR A A 375 375 . 85.263  97.418  15.853  1.00
2.24   1 . .
ATOM 2862 N     N     . GLU GLU GLU A A 376 376 . 84.105  96.832  13.992  1.00
2.22   1 . .
ATOM 2863 CA    CA    . GLU GLU GLU A A 376 376 . 82.873  97.541  14.284  1.00
2.00   1 . .
ATOM 2864 CB    CB    . GLU GLU GLU A A 376 376 . 81.979  97.767  12.991  1.00
2.52   1 . .
ATOM 2865 CG    CG    . GLU GLU GLU A A 376 376 . 81.563  96.452  12.283  1.00
3.60   1 . .
ATOM 2866 CD    CD    . GLU GLU GLU A A 376 376 . 82.582  95.983  11.208  1.00
2.57   1 . .
ATOM 2867 OE1   OE1   . GLU GLU GLU A A 376 376 . 83.804  95.976  11.510  1.00
3.91   1 . .
ATOM 2868 OE2   OE2   . GLU GLU GLU A A 376 376 . 82.158  95.603  10.108  1.00
2.29   1 . .
ATOM 2869 C     C     . GLU GLU GLU A A 376 376 . 82.073  96.966  15.448  1.00
2.81   1 . .
ATOM 2870 O     O     . GLU GLU GLU A A 376 376 . 81.054  97.547  15.786  1.00
2.88   1 . .
ATOM 2871 N     N     . ASP ASP ASP A A 377 377 . 82.521  95.842  16.030  1.00
2.08   1 . .
ATOM 2872 CA    CA    . ASP ASP ASP A A 377 377 . 81.858  95.215  17.176  1.00
2.36   1 . .
ATOM 2873 CB    CB    . ASP ASP ASP A A 377 377 . 82.557  93.874  17.471  1.00
2.40   1 . .
ATOM 2874 CG    CG    . ASP ASP ASP A A 377 377 . 81.924  93.076  18.573  1.00
3.04   1 . .
ATOM 2875 OD1   OD1   . ASP ASP ASP A A 377 377 . 82.341  93.260  19.749  1.00
5.72   1 . .
ATOM 2876 OD2   OD2   . ASP ASP ASP A A 377 377 . 81.073  92.252  18.206  1.00
4.78   1 . .
ATOM 2877 C     C     . ASP ASP ASP A A 377 377 . 81.940  96.148  18.357  1.00
2.16   1 . .
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ATOM 2878 O     O     . ASP ASP ASP A A 377 377 . 82.966  96.791  18.599  1.00
2.82   1 . .
ATOM 2879 N     N     . THR THR THR A A 378 378 . 80.880  96.162  19.178  1.00
2.42   1 . .
ATOM 2880 CA    CA    . THR THR THR A A 378 378 . 80.910  97.003  20.365  1.00
2.40   1 . .
ATOM 2881 CB    CB    . THR THR THR A A 378 378 . 79.777  98.097  20.315  1.00
2.12   1 . .
ATOM 2882 OG1   OG1   . THR THR THR A A 378 378 . 78.470  97.511  20.249  1.00
4.83   1 . .
ATOM 2883 CG2   CG2   . THR THR THR A A 378 378 . 79.929  99.039  19.084  1.00
2.96   1 . .
ATOM 2884 C     C     . THR THR THR A A 378 378 . 80.691  96.255  21.674  1.00
2.57   1 . .
ATOM 2885 O     O     . THR THR THR A A 378 378 . 80.407  96.890  22.687  1.00
2.03   1 . .
ATOM 2886 N     N     . PHE PHE PHE A A 379 379 . 80.889  94.964  21.667  1.00
2.43   1 . .
ATOM 2887 CA    CA    . PHE PHE PHE A A 379 379 . 80.641  94.109  22.836  1.00
2.50   1 . .
ATOM 2888 CB    CB    . PHE PHE PHE A A 379 379 . 81.192  92.693  22.515  1.00
2.81   1 . .
ATOM 2889 CG    CG    . PHE PHE PHE A A 379 379 . 80.921  91.669  23.635  1.00
2.70   1 . .
ATOM 2890 CD1   CD1   . PHE PHE PHE A A 379 379 . 81.848  91.474  24.659  1.00
3.78   1 . .
ATOM 2891 CE1   CE1   . PHE PHE PHE A A 379 379 . 81.533  90.505  25.708  1.00
2.80   1 . .
ATOM 2892 CZ    CZ    . PHE PHE PHE A A 379 379 . 80.360  89.874  25.732  1.00
2.28   1 . .
ATOM 2893 CE2   CE2   . PHE PHE PHE A A 379 379 . 79.452  90.014  24.724  1.00
3.40   1 . .
ATOM 2894 CD2   CD2   . PHE PHE PHE A A 379 379 . 79.705  90.997  23.685  1.00
4.57   1 . .
ATOM 2895 C     C     . PHE PHE PHE A A 379 379 . 81.346  94.631  24.076  1.00
3.02   1 . .
ATOM 2896 O     O     . PHE PHE PHE A A 379 379 . 80.751  94.591  25.163  1.00
2.00   1 . .
ATOM 2897 N     N     . ILE ILE ILE A A 380 380 . 82.608  95.110  23.983  1.00
2.09   1 . .
ATOM 2898 CA    CA    . ILE ILE ILE A A 380 380 . 83.309  95.486  25.205  1.00
2.50   1 . .
ATOM 2899 CB    CB    . ILE ILE ILE A A 380 380 . 84.854  95.600  25.015  1.00
2.00   1 . .
ATOM 2900 CG1   CG1   . ILE ILE ILE A A 380 380 . 85.194  96.718  24.005  1.00
2.42   1 . .
ATOM 2901 CD1   CD1   . ILE ILE ILE A A 380 380 . 86.690  97.002  23.905  1.00
2.30   1 . .
ATOM 2902 CG2   CG2   . ILE ILE ILE A A 380 380 . 85.385  94.229  24.645  1.00
2.38   1 . .
ATOM 2903 C     C     . ILE ILE ILE A A 380 380 . 82.738  96.691  25.906  1.00
2.00   1 . .
ATOM 2904 O     O     . ILE ILE ILE A A 380 380 . 82.990  96.892  27.103  1.00
2.30   1 . .
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ATOM 2905 N     N     . ALA ALA ALA A A 381 381 . 81.905  97.469  25.204  1.00
2.74   1 . .
ATOM 2906 CA    CA    . ALA ALA ALA A A 381 381 . 81.211  98.557  25.911  1.00
2.04   1 . .
ATOM 2907 CB    CB    . ALA ALA ALA A A 381 381 . 80.499  99.463  24.880  1.00
2.33   1 . .
ATOM 2908 C     C     . ALA ALA ALA A A 381 381 . 80.240  98.044  26.917  1.00
2.54   1 . .
ATOM 2909 O     O     . ALA ALA ALA A A 381 381 . 80.254  98.482  28.075  1.00
2.74   1 . .
ATOM 2910 N     N     . ASP ASP ASP A A 382 382 . 79.410  97.071  26.456  1.00
2.00   1 . .
ATOM 2911 CA    CA    . ASP ASP ASP A A 382 382 . 78.452  96.415  27.393  1.00
2.00   1 . .
ATOM 2912 CB    CB    . ASP ASP ASP A A 382 382 . 77.427  95.572  26.643  1.00
2.25   1 . .
ATOM 2913 CG    CG    . ASP ASP ASP A A 382 382 . 76.438  96.451  25.828  1.00
3.22   1 . .
ATOM 2914 OD1   OD1   . ASP ASP ASP A A 382 382 . 76.840  97.024  24.749  1.00
6.30   1 . .
ATOM 2915 OD2   OD2   . ASP ASP ASP A A 382 382 . 75.268  96.636  26.191  1.00
5.18   1 . .
ATOM 2916 C     C     . ASP ASP ASP A A 382 382 . 79.148  95.613  28.417  1.00
2.17   1 . .
ATOM 2917 O     O     . ASP ASP ASP A A 382 382 . 78.703  95.599  29.566  1.00
2.56   1 . .
ATOM 2918 N     N     . LEU LEU LEU A A 383 383 . 80.263  95.005  28.053  1.00
2.00   1 . .
ATOM 2919 CA    CA    . LEU LEU LEU A A 383 383 . 81.027  94.178  28.974  1.00
2.25   1 . .
ATOM 2920 CB    CB    . LEU LEU LEU A A 383 383 . 82.228  93.512  28.245  1.00
2.49   1 . .
ATOM 2921 CG    CG    . LEU LEU LEU A A 383 383 . 83.101  92.525  29.087  1.00
2.48   1 . .
ATOM 2922 CD1   CD1   . LEU LEU LEU A A 383 383 . 82.282  91.286  29.480  1.00
2.40   1 . .
ATOM 2923 CD2   CD2   . LEU LEU LEU A A 383 383 . 84.316  92.147  28.316  1.00
4.62   1 . .
ATOM 2924 C     C     . LEU LEU LEU A A 383 383 . 81.551  95.010  30.165  1.00
2.59   1 . .
ATOM 2925 O     O     . LEU LEU LEU A A 383 383 . 81.438  94.579  31.301  1.00
2.04   1 . .
ATOM 2926 N     N     . VAL VAL VAL A A 384 384 . 82.179  96.154  29.928  1.00
2.15   1 . .
ATOM 2927 CA    CA    . VAL VAL VAL A A 384 384 . 82.811  96.895  31.044  1.00
2.00   1 . .
ATOM 2928 CB    CB    . VAL VAL VAL A A 384 384 . 83.720  98.054  30.495  1.00
2.07   1 . .
ATOM 2929 CG1   CG1   . VAL VAL VAL A A 384 384 . 82.848  99.182  29.773  1.00
3.15   1 . .
ATOM 2930 CG2   CG2   . VAL VAL VAL A A 384 384 . 84.531  98.618  31.628  1.00
3.05   1 . .
ATOM 2931 C     C     . VAL VAL VAL A A 384 384 . 81.732  97.426  32.006  1.00
2.31   1 . .
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ATOM 2932 O     O     . VAL VAL VAL A A 384 384 . 81.981  97.537  33.201  1.00
2.33   1 . .
ATOM 2933 N     N     . VAL VAL VAL A A 385 385 . 80.575  97.786  31.465  1.00
2.00   1 . .
ATOM 2934 CA    CA    . VAL VAL VAL A A 385 385 . 79.484  98.297  32.309  1.00
2.88   1 . .
ATOM 2935 CB    CB    . VAL VAL VAL A A 385 385 . 78.407  98.925  31.500  1.00
2.31   1 . .
ATOM 2936 CG1   CG1   . VAL VAL VAL A A 385 385 . 77.156  99.277  32.330  1.00
4.38   1 . .
ATOM 2937 CG2   CG2   . VAL VAL VAL A A 385 385 . 78.900  100.080 30.820  1.00
2.00   1 . .
ATOM 2938 C     C     . VAL VAL VAL A A 385 385 . 78.874  97.118  33.131  1.00
4.87   1 . .
ATOM 2939 O     O     . VAL VAL VAL A A 385 385 . 78.723  97.205  34.375  1.00
4.73   1 . .
ATOM 2940 N     N     . GLY GLY GLY A A 386 386 . 78.624  95.979  32.472  1.00
3.96   1 . .
ATOM 2941 CA    CA    . GLY GLY GLY A A 386 386 . 78.100  94.783  33.175  1.00
5.01   1 . .
ATOM 2942 C     C     . GLY GLY GLY A A 386 386 . 79.030  94.252  34.244  1.00
4.42   1 . .
ATOM 2943 O     O     . GLY GLY GLY A A 386 386 . 78.527  93.729  35.271  1.00
4.50   1 . .
ATOM 2944 N     N     . LEU LEU LEU A A 387 387 . 80.328  94.301  33.986  1.00
3.18   1 . .
ATOM 2945 CA    CA    . LEU LEU LEU A A 387 387 . 81.402  93.809  34.922  1.00
2.01   1 . .
ATOM 2946 CB    CB    . LEU LEU LEU A A 387 387 . 82.710  93.371  34.187  1.00
2.09   1 . .
ATOM 2947 CG    CG    . LEU LEU LEU A A 387 387 . 82.594  92.111  33.360  1.00
2.85   1 . .
ATOM 2948 CD1   CD1   . LEU LEU LEU A A 387 387 . 83.986  91.712  32.818  1.00
6.26   1 . .
ATOM 2949 CD2   CD2   . LEU LEU LEU A A 387 387 . 82.005  90.980  34.193  1.00
2.80   1 . .
ATOM 2950 C     C     . LEU LEU LEU A A 387 387 . 81.741  94.845  35.973  1.00
2.51   1 . .
ATOM 2951 O     O     . LEU LEU LEU A A 387 387 . 82.509  94.562  36.925  1.00
3.19   1 . .
ATOM 2952 N     N     . CYS CYS CYS A A 388 388 . 81.145  96.044  35.819  1.00
3.56   1 . .
ATOM 2953 CA    CA    . CYS CYS CYS A A 388 388 . 81.259  97.153  36.768  1.00
3.80   1 . .
ATOM 2954 CB    CB    . CYS CYS CYS A A 388 388 . 80.540  96.893  38.098  1.00
4.84   1 . .
ATOM 2955 SG    SG    . CYS CYS CYS A A 388 388 . 78.829  96.673  37.951  1.00
10.33  1 . .
ATOM 2956 C     C     . CYS CYS CYS A A 388 388 . 82.684  97.465  37.093  1.00
4.35   1 . .
ATOM 2957 O     O     . CYS CYS CYS A A 388 388 . 82.983  97.752  38.276  1.00
6.73   1 . .
ATOM 2958 N     N     . THR THR THR A A 389 389 . 83.579  97.410  36.096  1.00
2.79   1 . .
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ATOM 2959 CA    CA    . THR THR THR A A 389 389 . 85.011  97.537  36.410  1.00
2.19   1 . .
ATOM 2960 CB    CB    . THR THR THR A A 389 389 . 85.951  96.859  35.414  1.00
3.46   1 . .
ATOM 2961 OG1   OG1   . THR THR THR A A 389 389 . 86.242  97.765  34.338  1.00
3.15   1 . .
ATOM 2962 CG2   CG2   . THR THR THR A A 389 389 . 85.313  95.522  34.860  1.00
2.18   1 . .
ATOM 2963 C     C     . THR THR THR A A 389 389 . 85.531  98.978  36.642  1.00
3.50   1 . .
ATOM 2964 O     O     . THR THR THR A A 389 389 . 86.554  99.135  37.296  1.00
4.58   1 . .
ATOM 2965 N     N     . GLY GLY GLY A A 390 390 . 84.883  100.004 36.075  1.00
2.51   1 . .
ATOM 2966 CA    CA    . GLY GLY GLY A A 390 390 . 85.205  101.385 36.313  1.00
3.20   1 . .
ATOM 2967 C     C     . GLY GLY GLY A A 390 390 . 86.241  101.955 35.366  1.00
2.64   1 . .
ATOM 2968 O     O     . GLY GLY GLY A A 390 390 . 86.555  103.134 35.447  1.00
3.55   1 . .
ATOM 2969 N     N     . GLN GLN GLN A A 391 391 . 86.782  101.155 34.443  1.00
4.17   1 . .
ATOM 2970 CA    CA    . GLN GLN GLN A A 391 391 . 87.833  101.599 33.541  1.00
2.68   1 . .
ATOM 2971 CB    CB    . GLN GLN GLN A A 391 391 . 89.227  101.713 34.217  1.00
5.72   1 . .
ATOM 2972 CG    CG    . GLN GLN GLN A A 391 391 . 89.482  100.803 35.363  1.00
4.50   1 . .
ATOM 2973 CD    CD    . GLN GLN GLN A A 391 391 . 90.942  100.795 35.814  1.00
4.84   1 . .
ATOM 2974 OE1   OE1   . GLN GLN GLN A A 391 391 . 91.774  101.429 35.267  1.00
5.50   1 . .
ATOM 2975 NE2   NE2   . GLN GLN GLN A A 391 391 . 91.200  100.101 36.891  1.00
3.43   1 . .
ATOM 2976 C     C     . GLN GLN GLN A A 391 391 . 87.882  100.797 32.273  1.00
3.47   1 . .
ATOM 2977 O     O     . GLN GLN GLN A A 391 391 . 87.815  99.581  32.311  1.00
2.67   1 . .
ATOM 2978 N     N     . ILE ILE ILE A A 392 392 . 87.993  101.477 31.124  1.00
2.00   1 . .
ATOM 2979 CA    CA    . ILE ILE ILE A A 392 392 . 88.148  100.811 29.805  1.00
2.45   1 . .
ATOM 2980 CB    CB    . ILE ILE ILE A A 392 392 . 86.802  100.750 29.070  1.00
2.12   1 . .
ATOM 2981 CG1   CG1   . ILE ILE ILE A A 392 392 . 86.965  100.036 27.741  1.00
2.10   1 . .
ATOM 2982 CD1   CD1   . ILE ILE ILE A A 392 392 . 85.660  99.703  27.019  1.00
2.00   1 . .
ATOM 2983 CG2   CG2   . ILE ILE ILE A A 392 392 . 86.199  102.172 28.770  1.00
2.00   1 . .
ATOM 2984 C     C     . ILE ILE ILE A A 392 392 . 89.127  101.577 28.963  1.00
2.40   1 . .
ATOM 2985 O     O     . ILE ILE ILE A A 392 392 . 89.094  102.815 28.983  1.00
2.04   1 . .
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ATOM 2986 N     N     . LYS LYS LYS A A 393 393 . 89.987  100.871 28.258  1.00
2.00   1 . .
ATOM 2987 CA    CA    . LYS LYS LYS A A 393 393 . 90.806  101.541 27.258  1.00
2.47   1 . .
ATOM 2988 CB    CB    . LYS LYS LYS A A 393 393 . 92.292  101.375 27.457  1.00
2.50   1 . .
ATOM 2989 CG    CG    . LYS LYS LYS A A 393 393 . 92.896  100.006 27.167  1.00
5.48   1 . .
ATOM 2990 CD    CD    . LYS LYS LYS A A 393 393 . 94.423  99.942  27.407  1.00
2.00   1 . .
ATOM 2991 CE    CE    . LYS LYS LYS A A 393 393 . 95.077  98.906  26.569  1.00
2.00   1 . .
ATOM 2992 NZ    NZ    . LYS LYS LYS A A 393 393 . 96.605  99.028  26.728  1.00
3.21   1 . .
ATOM 2993 C     C     . LYS LYS LYS A A 393 393 . 90.372  100.961 25.889  1.00
2.06   1 . .
ATOM 2994 O     O     . LYS LYS LYS A A 393 393 . 90.319  99.724  25.712  1.00
2.07   1 . .
ATOM 2995 N     N     . THR THR THR A A 394 394 . 89.929  101.810 24.955  1.00
2.55   1 . .
ATOM 2996 CA    CA    . THR THR THR A A 394 394 . 89.465  101.327 23.639  1.00
2.18   1 . .
ATOM 2997 CB    CB    . THR THR THR A A 394 394 . 87.996  100.877 23.703  1.00
2.57   1 . .
ATOM 2998 OG1   OG1   . THR THR THR A A 394 394 . 87.640  100.220 22.475  1.00
2.00   1 . .
ATOM 2999 CG2   CG2   . THR THR THR A A 394 394 . 86.940  101.987 23.951  1.00
3.56   1 . .
ATOM 3000 C     C     . THR THR THR A A 394 394 . 89.738  102.308 22.531  1.00
2.06   1 . .
ATOM 3001 O     O     . THR THR THR A A 394 394 . 89.018  102.348 21.547  1.00
2.30   1 . .
ATOM 3002 N     N     . GLY GLY GLY A A 395 395 . 90.823  103.065 22.704  1.00
2.02   1 . .
ATOM 3003 CA    CA    . GLY GLY GLY A A 395 395 . 91.459  103.858 21.622  1.00
2.33   1 . .
ATOM 3004 C     C     . GLY GLY GLY A A 395 395 . 91.437  105.330 21.917  1.00
2.24   1 . .
ATOM 3005 O     O     . GLY GLY GLY A A 395 395 . 90.790  105.843 22.832  1.00
2.34   1 . .
ATOM 3006 N     N     . ALA ALA ALA A A 396 396 . 92.199  106.034 21.088  1.00
2.23   1 . .
ATOM 3007 CA    CA    . ALA ALA ALA A A 396 396 . 92.045  107.497 20.968  1.00
2.59   1 . .
ATOM 3008 CB    CB    . ALA ALA ALA A A 396 396 . 92.973  107.976 19.889  1.00
2.81   1 . .
ATOM 3009 C     C     . ALA ALA ALA A A 396 396 . 90.584  107.742 20.533  1.00
2.16   1 . .
ATOM 3010 O     O     . ALA ALA ALA A A 396 396 . 89.851  106.805 20.157  1.00
2.00   1 . .
ATOM 3011 N     N     . PRO PRO PRO A A 397 397 . 90.074  108.996 20.692  1.00
2.00   1 . .
ATOM 3012 CA    CA    . PRO PRO PRO A A 397 397 . 88.724  109.254 20.182  1.00
2.00   1 . .
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ATOM 3013 CB    CB    . PRO PRO PRO A A 397 397 . 88.325  110.501 20.994  1.00
2.62   1 . .
ATOM 3014 CG    CG    . PRO PRO PRO A A 397 397 . 89.672  111.207 21.146  1.00
2.01   1 . .
ATOM 3015 CD    CD    . PRO PRO PRO A A 397 397 . 90.637  110.139 21.450  1.00
2.09   1 . .
ATOM 3016 C     C     . PRO PRO PRO A A 397 397 . 88.810  109.554 18.683  1.00
2.32   1 . .
ATOM 3017 O     O     . PRO PRO PRO A A 397 397 . 88.343  110.608 18.201  1.00
2.14   1 . .
ATOM 3018 N     N     . CYS CYS CYS A A 398 398 . 89.374  108.593 17.954  1.00
2.28   1 . .
ATOM 3019 CA    CA    . CYS CYS CYS A A 398 398 . 89.688  108.716 16.535  1.00
2.28   1 . .
ATOM 3020 CB    CB    . CYS CYS CYS A A 398 398 . 91.017  109.417 16.321  1.00
2.45   1 . .
ATOM 3021 SG    SG    . CYS CYS CYS A A 398 398 . 91.665  109.428 14.650  1.00
3.04   1 . .
ATOM 3022 C     C     . CYS CYS CYS A A 398 398 . 89.759  107.259 15.993  1.00
2.26   1 . .
ATOM 3023 O     O     . CYS CYS CYS A A 398 398 . 90.389  106.435 16.597  1.00
2.03   1 . .
ATOM 3024 N     N     . ARG ARG ARG A A 399 399 . 89.139  107.058 14.814  1.00
2.00   1 . .
ATOM 3025 CA    CA    . ARG ARG ARG A A 399 399 . 89.042  105.775 14.064  1.00
2.28   1 . .
ATOM 3026 CB    CB    . ARG ARG ARG A A 399 399 . 90.303  104.876 14.228  1.00
2.16   1 . .
ATOM 3027 CG    CG    . ARG ARG ARG A A 399 399 . 91.578  105.500 13.555  1.00
2.00   1 . .
ATOM 3028 CD    CD    . ARG ARG ARG A A 399 399 . 92.815  104.641 13.968  1.00
2.68   1 . .
ATOM 3029 NE    NE    . ARG ARG ARG A A 399 399 . 92.716  103.347 13.257  1.00
2.50   1 . .
ATOM 3030 CZ    CZ    . ARG ARG ARG A A 399 399 . 93.700  102.835 12.503  1.00
2.94   1 . .
ATOM 3031 NH1   NH1   . ARG ARG ARG A A 399 399 . 94.893  103.456 12.356  1.00
2.23   1 . .
ATOM 3032 NH2   NH2   . ARG ARG ARG A A 399 399 . 93.455  101.624 11.895  1.00
2.00   1 . .
ATOM 3033 C     C     . ARG ARG ARG A A 399 399 . 87.803  105.130 14.657  1.00
2.46   1 . .
ATOM 3034 O     O     . ARG ARG ARG A A 399 399 . 87.713  104.895 15.883  1.00
2.00   1 . .
ATOM 3035 N     N     . SER SER SER A A 400 400 . 86.821  104.765 13.854  1.00
2.00   1 . .
ATOM 3036 CA    CA    . SER SER SER A A 400 400 . 85.519  104.431 14.460  1.00
2.20   1 . .
ATOM 3037 CB    CB    . SER SER SER A A 400 400 . 84.373  104.553 13.446  1.00
2.50   1 . .
ATOM 3038 OG    OG    . SER SER SER A A 400 400 . 84.077  105.945 13.132  1.00
2.39   1 . .
ATOM 3039 C     C     . SER SER SER A A 400 400 . 85.507  102.969 15.058  1.00
2.37   1 . .
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ATOM 3040 O     O     . SER SER SER A A 400 400 . 84.485  102.613 15.667  1.00
2.00   1 . .
ATOM 3041 N     N     . GLU GLU GLU A A 401 401 . 86.515  102.128 14.780  1.00
2.51   1 . .
ATOM 3042 CA    CA    . GLU GLU GLU A A 401 401 . 86.649  100.904 15.549  1.00
2.00   1 . .
ATOM 3043 CB    CB    . GLU GLU GLU A A 401 401 . 87.717  99.951  15.070  1.00
2.11   1 . .
ATOM 3044 CG    CG    . GLU GLU GLU A A 401 401 . 89.144  100.396 15.388  1.00
2.00   1 . .
ATOM 3045 CD    CD    . GLU GLU GLU A A 401 401 . 89.737  101.399 14.309  1.00
2.19   1 . .
ATOM 3046 OE1   OE1   . GLU GLU GLU A A 401 401 . 89.028  101.883 13.402  1.00
2.27   1 . .
ATOM 3047 OE2   OE2   . GLU GLU GLU A A 401 401 . 90.947  101.646 14.456  1.00
2.00   1 . .
ATOM 3048 C     C     . GLU GLU GLU A A 401 401 . 86.888  101.266 17.031  1.00
2.26   1 . .
ATOM 3049 O     O     . GLU GLU GLU A A 401 401 . 86.653  100.405 17.920  1.00
2.09   1 . .
ATOM 3050 N     N     . ARG ARG ARG A A 402 402 . 87.320  102.523 17.347  1.00
2.52   1 . .
ATOM 3051 CA    CA    . ARG ARG ARG A A 402 402 . 87.357  103.002 18.739  1.00
2.06   1 . .
ATOM 3052 CB    CB    . ARG ARG ARG A A 402 402 . 88.521  103.936 18.901  1.00
2.26   1 . .
ATOM 3053 CG    CG    . ARG ARG ARG A A 402 402 . 89.793  103.460 18.108  1.00
2.16   1 . .
ATOM 3054 CD    CD    . ARG ARG ARG A A 402 402 . 90.322  102.070 18.558  1.00
2.00   1 . .
ATOM 3055 NE    NE    . ARG ARG ARG A A 402 402 . 91.199  101.564 17.515  1.00
2.00   1 . .
ATOM 3056 CZ    CZ    . ARG ARG ARG A A 402 402 . 91.794  100.366 17.530  1.00
3.02   1 . .
ATOM 3057 NH1   NH1   . ARG ARG ARG A A 402 402 . 91.713  99.625  18.622  1.00
2.02   1 . .
ATOM 3058 NH2   NH2   . ARG ARG ARG A A 402 402 . 92.458  99.941  16.435  1.00
2.39   1 . .
ATOM 3059 C     C     . ARG ARG ARG A A 402 402 . 86.096  103.758 19.117  1.00
2.00   1 . .
ATOM 3060 O     O     . ARG ARG ARG A A 402 402 . 85.407  103.445 20.104  1.00
2.26   1 . .
ATOM 3061 N     N     . LEU LEU LEU A A 403 403 . 85.734  104.734 18.269  1.00
2.00   1 . .
ATOM 3062 CA    CA    . LEU LEU LEU A A 403 403 . 84.458  105.413 18.573  1.00
2.15   1 . .
ATOM 3063 CB    CB    . LEU LEU LEU A A 403 403 . 84.154  106.596 17.635  1.00
2.07   1 . .
ATOM 3064 CG    CG    . LEU LEU LEU A A 403 403 . 84.981  107.897 17.665  1.00
3.49   1 . .
ATOM 3065 CD1   CD1   . LEU LEU LEU A A 403 403 . 85.290  108.365 19.129  1.00
4.26   1 . .
ATOM 3066 CD2   CD2   . LEU LEU LEU A A 403 403 . 86.216  107.760 16.785  1.00
4.12   1 . .
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ATOM 3067 C     C     . LEU LEU LEU A A 403 403 . 83.221  104.575 18.649  1.00
2.08   1 . .
ATOM 3068 O     O     . LEU LEU LEU A A 403 403 . 82.283  104.885 19.416  1.00
2.17   1 . .
ATOM 3069 N     N     . ALA ALA ALA A A 404 404 . 83.189  103.456 17.925  1.00
2.00   1 . .
ATOM 3070 CA    CA    . ALA ALA ALA A A 404 404 . 81.987  102.626 18.063  1.00
2.01   1 . .
ATOM 3071 CB    CB    . ALA ALA ALA A A 404 404 . 82.026  101.417 17.115  1.00
2.24   1 . .
ATOM 3072 C     C     . ALA ALA ALA A A 404 404 . 81.727  102.190 19.516  1.00
2.10   1 . .
ATOM 3073 O     O     . ALA ALA ALA A A 404 404 . 80.584  102.229 19.985  1.00
2.12   1 . .
ATOM 3074 N     N     . LYS LYS LYS A A 405 405 . 82.808  101.893 20.210  1.00
2.09   1 . .
ATOM 3075 CA    CA    . LYS LYS LYS A A 405 405 . 82.644  101.537 21.647  1.00
2.11   1 . .
ATOM 3076 CB    CB    . LYS LYS LYS A A 405 405 . 83.928  100.935 22.177  1.00
2.19   1 . .
ATOM 3077 CG    CG    . LYS LYS LYS A A 405 405 . 84.202  99.488  21.764  1.00
2.65   1 . .
ATOM 3078 CD    CD    . LYS LYS LYS A A 405 405 . 84.588  99.345  20.282  1.00
3.21   1 . .
ATOM 3079 CE    CE    . LYS LYS LYS A A 405 405 . 85.333  98.024  20.072  1.00
3.99   1 . .
ATOM 3080 NZ    NZ    . LYS LYS LYS A A 405 405 . 85.478  97.742  18.559  1.00
2.37   1 . .
ATOM 3081 C     C     . LYS LYS LYS A A 405 405 . 82.262  102.761 22.497  1.00
2.00   1 . .
ATOM 3082 O     O     . LYS LYS LYS A A 405 405 . 81.408  102.694 23.375  1.00
2.00   1 . .
ATOM 3083 N     N     . TYR TYR TYR A A 406 406 . 82.996  103.871 22.281  1.00
2.13   1 . .
ATOM 3084 CA    CA    . TYR TYR TYR A A 406 406 . 82.741  105.053 23.090  1.00
2.08   1 . .
ATOM 3085 CB    CB    . TYR TYR TYR A A 406 406 . 83.788  106.140 22.813  1.00
2.74   1 . .
ATOM 3086 CG    CG    . TYR TYR TYR A A 406 406 . 85.145  105.812 23.277  1.00
2.00   1 . .
ATOM 3087 CD1   CD1   . TYR TYR TYR A A 406 406 . 85.427  105.416 24.601  1.00
2.12   1 . .
ATOM 3088 CE1   CE1   . TYR TYR TYR A A 406 406 . 86.728  105.115 25.004  1.00
2.00   1 . .
ATOM 3089 CZ    CZ    . TYR TYR TYR A A 406 406 . 87.783  105.189 24.111  1.00
2.54   1 . .
ATOM 3090 OH    OH    . TYR TYR TYR A A 406 406 . 89.070  104.890 24.528  1.00
2.30   1 . .
ATOM 3091 CE2   CE2   . TYR TYR TYR A A 406 406 . 87.527  105.614 22.783  1.00
2.40   1 . .
ATOM 3092 CD2   CD2   . TYR TYR TYR A A 406 406 . 86.256  105.901 22.372  1.00
2.28   1 . .
ATOM 3093 C     C     . TYR TYR TYR A A 406 406 . 81.275  105.558 22.883  1.00
2.00   1 . .
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ATOM 3094 O     O     . TYR TYR TYR A A 406 406 . 80.613  105.984 23.839  1.00
2.00   1 . .
ATOM 3095 N     N     . ASN ASN ASN A A 407 407 . 80.833  105.494 21.625  1.00
2.00   1 . .
ATOM 3096 CA    CA    . ASN ASN ASN A A 407 407 . 79.476  105.907 21.310  1.00
2.16   1 . .
ATOM 3097 CB    CB    . ASN ASN ASN A A 407 407 . 79.253  105.890 19.808  1.00
2.56   1 . .
ATOM 3098 CG    CG    . ASN ASN ASN A A 407 407 . 79.929  107.039 19.140  1.00
2.48   1 . .
ATOM 3099 OD1   OD1   . ASN ASN ASN A A 407 407 . 80.262  108.043 19.731  1.00
2.00   1 . .
ATOM 3100 ND2   ND2   . ASN ASN ASN A A 407 407 . 80.102  106.882 17.776  1.00
2.53   1 . .
ATOM 3101 C     C     . ASN ASN ASN A A 407 407 . 78.472  105.003 22.003  1.00
2.28   1 . .
ATOM 3102 O     O     . ASN ASN ASN A A 407 407 . 77.455  105.491 22.578  1.00
2.00   1 . .
ATOM 3103 N     N     . GLN GLN GLN A A 408 408 . 78.753  103.702 21.961  1.00
2.00   1 . .
ATOM 3104 CA    CA    . GLN GLN GLN A A 408 408 . 77.912  102.772 22.664  1.00
2.40   1 . .
ATOM 3105 CB    CB    . GLN GLN GLN A A 408 408 . 78.366  101.328 22.361  1.00
3.22   1 . .
ATOM 3106 CG    CG    . GLN GLN GLN A A 408 408 . 77.547  100.240 23.119  1.00
2.31   1 . .
ATOM 3107 CD    CD    . GLN GLN GLN A A 408 408 . 76.115  100.130 22.684  1.00
5.00   1 . .
ATOM 3108 OE1   OE1   . GLN GLN GLN A A 408 408 . 75.576  100.960 21.859  1.00
5.02   1 . .
ATOM 3109 NE2   NE2   . GLN GLN GLN A A 408 408 . 75.402  99.118  23.316  1.00
7.60   1 . .
ATOM 3110 C     C     . GLN GLN GLN A A 408 408 . 77.890  103.008 24.173  1.00
2.43   1 . .
ATOM 3111 O     O     . GLN GLN GLN A A 408 408 . 76.852  102.936 24.802  1.00
2.00   1 . .
ATOM 3112 N     N     . LEU LEU LEU A A 409 409 . 79.043  103.330 24.759  1.00
2.00   1 . .
ATOM 3113 CA    CA    . LEU LEU LEU A A 409 409 . 79.043  103.697 26.192  1.00
2.24   1 . .
ATOM 3114 CB    CB    . LEU LEU LEU A A 409 409 . 80.436  103.910 26.734  1.00
2.00   1 . .
ATOM 3115 CG    CG    . LEU LEU LEU A A 409 409 . 81.125  102.573 26.943  1.00
2.00   1 . .
ATOM 3116 CD1   CD1   . LEU LEU LEU A A 409 409 . 82.691  102.797 26.957  1.00
2.00   1 . .
ATOM 3117 CD2   CD2   . LEU LEU LEU A A 409 409 . 80.635  101.872 28.196  1.00
2.43   1 . .
ATOM 3118 C     C     . LEU LEU LEU A A 409 409 . 78.156  104.947 26.446  1.00
2.35   1 . .
ATOM 3119 O     O     . LEU LEU LEU A A 409 409 . 77.396  104.997 27.449  1.00
2.31   1 . .
ATOM 3120 N     N     . MET MET MET A A 410 410 . 78.221  105.949 25.546  1.00
2.24   1 . .
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ATOM 3121 CA    CA    . MET MET MET A A 410 410 . 77.222  107.015 25.706  1.00
2.31   1 . .
ATOM 3122 CB    CB    . MET MET MET A A 410 410 . 77.530  108.193 24.738  1.00
2.53   1 . .
ATOM 3123 CG    CG    . MET MET MET A A 410 410 . 78.851  108.927 25.059  1.00
2.43   1 . .
ATOM 3124 SD    SD    . MET MET MET A A 410 410 . 79.031  110.494 24.117  1.00
3.92   1 . .
ATOM 3125 CE    CE    . MET MET MET A A 410 410 . 79.446  109.796 22.491  1.00
6.63   1 . .
ATOM 3126 C     C     . MET MET MET A A 410 410 . 75.760  106.584 25.617  1.00
3.07   1 . .
ATOM 3127 O     O     . MET MET MET A A 410 410 . 74.885  107.085 26.366  1.00
3.32   1 . .
ATOM 3128 N     N     . ARG ARG ARG A A 411 411 . 75.439  105.695 24.692  1.00
2.81   1 . .
ATOM 3129 CA    CA    . ARG ARG ARG A A 411 411 . 74.085  105.209 24.637  1.00
2.40   1 . .
ATOM 3130 CB    CB    . ARG ARG ARG A A 411 411 . 73.906  104.306 23.446  1.00
2.58   1 . .
ATOM 3131 CG    CG    . ARG ARG ARG A A 411 411 . 74.271  104.906 22.082  1.00
2.00   1 . .
ATOM 3132 CD    CD    . ARG ARG ARG A A 411 411 . 73.640  104.130 20.884  1.00
2.95   1 . .
ATOM 3133 NE    NE    . ARG ARG ARG A A 411 411 . 74.389  104.525 19.651  1.00
5.49   1 . .
ATOM 3134 CZ    CZ    . ARG ARG ARG A A 411 411 . 75.521  103.992 19.193  1.00
4.31   1 . .
ATOM 3135 NH1   NH1   . ARG ARG ARG A A 411 411 . 76.048  102.915 19.790  1.00
3.37   1 . .
ATOM 3136 NH2   NH2   . ARG ARG ARG A A 411 411 . 76.110  104.536 18.109  1.00
5.63   1 . .
ATOM 3137 C     C     . ARG ARG ARG A A 411 411 . 73.641  104.439 25.893  1.00
2.29   1 . .
ATOM 3138 O     O     . ARG ARG ARG A A 411 411 . 72.485  104.551 26.314  1.00
3.50   1 . .
ATOM 3139 N     N     . ILE ILE ILE A A 412 412 . 74.551  103.681 26.480  1.00
2.81   1 . .
ATOM 3140 CA    CA    . ILE ILE ILE A A 412 412 . 74.226  102.924 27.690  1.00
2.53   1 . .
ATOM 3141 CB    CB    . ILE ILE ILE A A 412 412 . 75.432  101.911 28.045  1.00
2.18   1 . .
ATOM 3142 CG1   CG1   . ILE ILE ILE A A 412 412 . 75.623  100.811 26.958  1.00
2.67   1 . .
ATOM 3143 CD1   CD1   . ILE ILE ILE A A 412 412 . 76.846  100.016 27.103  1.00
4.99   1 . .
ATOM 3144 CG2   CG2   . ILE ILE ILE A A 412 412 . 75.330  101.473 29.473  1.00
4.05   1 . .
ATOM 3145 C     C     . ILE ILE ILE A A 412 412 . 73.995  103.906 28.819  1.00
2.93   1 . .
ATOM 3146 O     O     . ILE ILE ILE A A 412 412 . 73.075  103.740 29.627  1.00
3.15   1 . .
ATOM 3147 N     N     . GLU GLU GLU A A 413 413 . 74.855  104.907 28.941  1.00
2.10   1 . .
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ATOM 3148 CA    CA    . GLU GLU GLU A A 413 413 . 74.614  105.927 29.973  1.00
2.50   1 . .
ATOM 3149 CB    CB    . GLU GLU GLU A A 413 413 . 75.759  106.948 29.999  1.00
2.24   1 . .
ATOM 3150 CG    CG    . GLU GLU GLU A A 413 413 . 75.642  108.021 31.140  1.00
3.89   1 . .
ATOM 3151 CD    CD    . GLU GLU GLU A A 413 413 . 76.763  108.886 31.160  1.00
4.27   1 . .
ATOM 3152 OE1   OE1   . GLU GLU GLU A A 413 413 . 76.907  109.623 30.151  1.00
5.19   1 . .
ATOM 3153 OE2   OE2   . GLU GLU GLU A A 413 413 . 77.545  108.809 32.135  1.00
8.43   1 . .
ATOM 3154 C     C     . GLU GLU GLU A A 413 413 . 73.229  106.582 29.840  1.00
3.26   1 . .
ATOM 3155 O     O     . GLU GLU GLU A A 413 413 . 72.460  106.741 30.853  1.00
5.58   1 . .
ATOM 3156 N     N     . GLU GLU GLU A A 414 414 . 72.840  106.910 28.604  1.00
3.85   1 . .
ATOM 3157 CA    CA    . GLU GLU GLU A A 414 414 . 71.536  107.437 28.303  1.00
6.92   1 . .
ATOM 3158 CB    CB    . GLU GLU GLU A A 414 414 . 71.408  107.690 26.787  1.00
6.69   1 . .
ATOM 3159 CG    CG    . GLU GLU GLU A A 414 414 . 70.214  108.417 26.329  1.00
11.57  1 . .
ATOM 3160 CD    CD    . GLU GLU GLU A A 414 414 . 70.356  108.662 24.844  1.00
15.06  1 . .
ATOM 3161 OE1   OE1   . GLU GLU GLU A A 414 414 . 71.331  109.320 24.433  1.00
15.67  1 . .
ATOM 3162 OE2   OE2   . GLU GLU GLU A A 414 414 . 69.517  108.134 24.125  1.00
18.52  1 . .
ATOM 3163 C     C     . GLU GLU GLU A A 414 414 . 70.447  106.491 28.736  1.00
7.87   1 . .
ATOM 3164 O     O     . GLU GLU GLU A A 414 414 . 69.465  106.908 29.322  1.00
10.95  1 . .
ATOM 3165 N     N     . GLU GLU GLU A A 415 415 . 70.674  105.207 28.531  1.00
7.61   1 . .
ATOM 3166 CA    CA    . GLU GLU GLU A A 415 415 . 69.642  104.193 28.808  1.00
8.94   1 . .
ATOM 3167 CB    CB    . GLU GLU GLU A A 415 415 . 70.031  102.862 28.164  1.00
10.67  1 . .
ATOM 3168 CG    CG    . GLU GLU GLU A A 415 415 . 69.143  101.635 28.487  1.00
15.51  1 . .
ATOM 3169 CD    CD    . GLU GLU GLU A A 415 415 . 67.785  101.753 27.908  1.00
22.84  1 . .
ATOM 3170 OE1   OE1   . GLU GLU GLU A A 415 415 . 66.804  101.782 28.694  1.00
27.04  1 . .
ATOM 3171 OE2   OE2   . GLU GLU GLU A A 415 415 . 67.672  101.809 26.667  1.00
25.26  1 . .
ATOM 3172 C     C     . GLU GLU GLU A A 415 415 . 69.443  103.991 30.302  1.00
8.36   1 . .
ATOM 3173 O     O     . GLU GLU GLU A A 415 415 . 68.331  103.664 30.742  1.00
11.57  1 . .
ATOM 3174 N     N     . LEU LEU LEU A A 416 416 . 70.552  104.094 31.050  1.00
8.89   1 . .
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ATOM 3175 CA    CA    . LEU LEU LEU A A 416 416 . 70.508  103.946 32.524  1.00
10.59  1 . .
ATOM 3176 CB    CB    . LEU LEU LEU A A 416 416 . 71.890  103.537 33.099  1.00
8.64   1 . .
ATOM 3177 CG    CG    . LEU LEU LEU A A 416 416 . 72.460  102.159 32.786  1.00
8.63   1 . .
ATOM 3178 CD1   CD1   . LEU LEU LEU A A 416 416 . 73.948  102.123 33.184  1.00
12.93  1 . .
ATOM 3179 CD2   CD2   . LEU LEU LEU A A 416 416 . 71.633  101.079 33.490  1.00
13.93  1 . .
ATOM 3180 C     C     . LEU LEU LEU A A 416 416 . 69.881  105.190 33.238  1.00
13.74  1 . .
ATOM 3181 O     O     . LEU LEU LEU A A 416 416 . 69.295  105.107 34.347  1.00
14.44  1 . .
ATOM 3182 N     N     . GLY GLY GLY A A 417 417 . 70.040  106.366 32.631  1.00
16.35  1 . .
ATOM 3183 CA    CA    . GLY GLY GLY A A 417 417 . 69.500  107.618 33.191  1.00
21.79  1 . .
ATOM 3184 C     C     . GLY GLY GLY A A 417 417 . 70.032  107.929 34.567  1.00
24.73  1 . .
ATOM 3185 O     O     . GLY GLY GLY A A 417 417 . 71.203  107.736 34.804  1.00
26.22  1 . .
ATOM 3186 N     N     . ASP ASP ASP A A 418 418 . 69.167  108.353 35.499  1.00
27.81  1 . .
ATOM 3187 CA    CA    . ASP ASP ASP A A 418 418 . 69.557  108.537 36.921  1.00
30.05  1 . .
ATOM 3188 CB    CB    . ASP ASP ASP A A 418 418 . 68.393  109.083 37.749  1.00
30.74  1 . .
ATOM 3189 CG    CG    . ASP ASP ASP A A 418 418 . 68.592  110.526 38.155  1.00
33.96  1 . .
ATOM 3190 OD1   OD1   . ASP ASP ASP A A 418 418 . 68.504  110.814 39.371  1.00
35.20  1 . .
ATOM 3191 OD2   OD2   . ASP ASP ASP A A 418 418 . 68.832  111.371 37.260  1.00
37.68  1 . .
ATOM 3192 C     C     . ASP ASP ASP A A 418 418 . 70.116  107.320 37.649  1.00
29.95  1 . .
ATOM 3193 O     O     . ASP ASP ASP A A 418 418 . 70.574  107.431 38.788  1.00
31.62  1 . .
ATOM 3194 N     N     . GLU GLU GLU A A 419 419 . 70.061  106.157 37.020  1.00
29.76  1 . .
ATOM 3195 CA    CA    . GLU GLU GLU A A 419 419 . 70.689  104.972 37.574  1.00
29.19  1 . .
ATOM 3196 CB    CB    . GLU GLU GLU A A 419 419 . 69.972  103.734 37.083  1.00
29.84  1 . .
ATOM 3197 CG    CG    . GLU GLU GLU A A 419 419 . 70.380  102.452 37.747  1.00
33.97  1 . .
ATOM 3198 CD    CD    . GLU GLU GLU A A 419 419 . 69.426  101.354 37.389  1.00
39.74  1 . .
ATOM 3199 OE1   OE1   . GLU GLU GLU A A 419 419 . 69.875  100.332 36.790  1.00
41.63  1 . .
ATOM 3200 OE2   OE2   . GLU GLU GLU A A 419 419 . 68.216  101.535 37.679  1.00
40.35  1 . .
ATOM 3201 C     C     . GLU GLU GLU A A 419 419 . 72.151  104.936 37.115  1.00
27.12  1 . .
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ATOM 3202 O     O     . GLU GLU GLU A A 419 419 . 72.929  104.122 37.573  1.00
25.91  1 . .
ATOM 3203 N     N     . ALA ALA ALA A A 420 420 . 72.512  105.809 36.175  1.00
24.85  1 . .
ATOM 3204 CA    CA    . ALA ALA ALA A A 420 420 . 73.904  105.886 35.750  1.00
22.56  1 . .
ATOM 3205 CB    CB    . ALA ALA ALA A A 420 420 . 74.035  106.646 34.401  1.00
22.43  1 . .
ATOM 3206 C     C     . ALA ALA ALA A A 420 420 . 74.789  106.505 36.847  1.00
21.04  1 . .
ATOM 3207 O     O     . ALA ALA ALA A A 420 420 . 74.476  107.570 37.384  1.00
22.65  1 . .
ATOM 3208 N     N     . ARG ARG ARG A A 421 421 . 75.845  105.805 37.249  1.00
18.85  1 . .
ATOM 3209 CA    CA    . ARG ARG ARG A A 421 421 . 76.893  106.425 38.124  1.00
13.40  1 . .
ATOM 3210 CB    CB    . ARG ARG ARG A A 421 421 . 77.000  105.775 39.519  1.00
15.38  1 . .
ATOM 3211 CG    CG    . ARG ARG ARG A A 421 421 . 75.811  105.914 40.476  1.00
16.13  1 . .
ATOM 3212 CD    CD    . ARG ARG ARG A A 421 421 . 75.895  107.177 41.278  1.00
23.03  1 . .
ATOM 3213 NE    NE    . ARG ARG ARG A A 421 421 . 74.585  107.745 41.637  1.00
28.44  1 . .
ATOM 3214 CZ    CZ    . ARG ARG ARG A A 421 421 . 73.410  107.114 41.570  1.00
30.26  1 . .
ATOM 3215 NH1   NH1   . ARG ARG ARG A A 421 421 . 73.338  105.847 41.176  1.00
31.24  1 . .
ATOM 3216 NH2   NH2   . ARG ARG ARG A A 421 421 . 72.295  107.758 41.906  1.00
31.74  1 . .
ATOM 3217 C     C     . ARG ARG ARG A A 421 421 . 78.227  106.232 37.374  1.00
9.64   1 . .
ATOM 3218 O     O     . ARG ARG ARG A A 421 421 . 78.539  105.131 36.903  1.00
10.54  1 . .
ATOM 3219 N     N     . PHE PHE PHE A A 422 422 . 79.012  107.290 37.308  1.00
5.39   1 . .
ATOM 3220 CA    CA    . PHE PHE PHE A A 422 422 . 80.309  107.310 36.702  1.00
4.09   1 . .
ATOM 3221 CB    CB    . PHE PHE PHE A A 422 422 . 80.454  108.720 36.069  1.00
2.44   1 . .
ATOM 3222 CG    CG    . PHE PHE PHE A A 422 422 . 81.709  108.970 35.364  1.00
3.40   1 . .
ATOM 3223 CD1   CD1   . PHE PHE PHE A A 422 422 . 82.054  108.235 34.225  1.00
2.75   1 . .
ATOM 3224 CE1   CE1   . PHE PHE PHE A A 422 422 . 83.245  108.515 33.562  1.00
2.77   1 . .
ATOM 3225 CZ    CZ    . PHE PHE PHE A A 422 422 . 84.102  109.450 34.084  1.00
4.18   1 . .
ATOM 3226 CE2   CE2   . PHE PHE PHE A A 422 422 . 83.751  110.188 35.210  1.00
2.21   1 . .
ATOM 3227 CD2   CD2   . PHE PHE PHE A A 422 422 . 82.556  109.976 35.790  1.00
2.49   1 . .
ATOM 3228 C     C     . PHE PHE PHE A A 422 422 . 81.364  107.009 37.741  1.00
3.43   1 . .
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ATOM 3229 O     O     . PHE PHE PHE A A 422 422 . 81.357  107.547 38.875  1.00
4.49   1 . .
ATOM 3230 N     N     . ALA ALA ALA A A 423 423 . 82.340  106.188 37.344  1.00
3.41   1 . .
ATOM 3231 CA    CA    . ALA ALA ALA A A 423 423 . 83.403  105.843 38.276  1.00
2.58   1 . .
ATOM 3232 CB    CB    . ALA ALA ALA A A 423 423 . 84.208  104.627 37.776  1.00
3.52   1 . .
ATOM 3233 C     C     . ALA ALA ALA A A 423 423 . 84.304  106.948 38.763  1.00
2.52   1 . .
ATOM 3234 O     O     . ALA ALA ALA A A 423 423 . 84.735  106.935 39.898  1.00
3.32   1 . .
ATOM 3235 N     N     . GLY GLY GLY A A 424 424 . 84.605  107.910 37.884  1.00
2.94   1 . .
ATOM 3236 CA    CA    . GLY GLY GLY A A 424 424 . 85.409  109.105 38.255  1.00
2.95   1 . .
ATOM 3237 C     C     . GLY GLY GLY A A 424 424 . 86.738  108.780 38.909  1.00
2.95   1 . .
ATOM 3238 O     O     . GLY GLY GLY A A 424 424 . 87.503  107.879 38.491  1.00
5.32   1 . .
ATOM 3239 N     N     . HIS HIS HIS A A 425 425 . 86.948  109.396 40.087  1.00
2.92   1 . .
ATOM 3240 CA    CA    . HIS HIS HIS A A 425 425 . 88.177  109.140 40.803  1.00
3.55   1 . .
ATOM 3241 CB    CB    . HIS HIS HIS A A 425 425 . 88.336  110.211 41.888  1.00
4.52   1 . .
ATOM 3242 CG    CG    . HIS HIS HIS A A 425 425 . 88.733  111.537 41.324  1.00
5.19   1 . .
ATOM 3243 ND1   ND1   . HIS HIS HIS A A 425 425 . 90.031  111.818 40.917  1.00
7.76   1 . .
ATOM 3244 CE1   CE1   . HIS HIS HIS A A 425 425 . 90.078  113.051 40.452  1.00
9.57   1 . .
ATOM 3245 NE2   NE2   . HIS HIS HIS A A 425 425 . 88.856  113.545 40.470  1.00
6.20   1 . .
ATOM 3246 CD2   CD2   . HIS HIS HIS A A 425 425 . 87.993  112.616 40.990  1.00
7.56   1 . .
ATOM 3247 C     C     . HIS HIS HIS A A 425 425 . 88.214  107.730 41.429  1.00
2.44   1 . .
ATOM 3248 O     O     . HIS HIS HIS A A 425 425 . 89.265  107.328 41.936  1.00
4.22   1 . .
ATOM 3249 N     N     . ASN ASN ASN A A 426 426 . 87.068  107.049 41.490  1.00
3.51   1 . .
ATOM 3250 CA    CA    . ASN ASN ASN A A 426 426 . 87.021  105.640 41.964  1.00
3.81   1 . .
ATOM 3251 CB    CB    . ASN ASN ASN A A 426 426 . 85.762  105.396 42.772  1.00
4.09   1 . .
ATOM 3252 CG    CG    . ASN ASN ASN A A 426 426 . 85.814  106.171 44.020  1.00
3.06   1 . .
ATOM 3253 OD1   OD1   . ASN ASN ASN A A 426 426 . 86.596  105.810 44.938  1.00
10.30  1 . .
ATOM 3254 ND2   ND2   . ASN ASN ASN A A 426 426 . 85.080  107.203 44.094  1.00
2.00   1 . .
ATOM 3255 C     C     . ASN ASN ASN A A 426 426 . 87.140  104.598 40.841  1.00
5.44   1 . .
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ATOM 3256 O     O     . ASN ASN ASN A A 426 426 . 86.758  103.409 40.996  1.00
7.16   1 . .
ATOM 3257 N     N     . PHE PHE PHE A A 427 427 . 87.775  105.022 39.742  1.00
5.22   1 . .
ATOM 3258 CA    CA    . PHE PHE PHE A A 427 427 . 88.069  104.059 38.633  1.00
4.89   1 . .
ATOM 3259 CB    CB    . PHE PHE PHE A A 427 427 . 88.800  104.738 37.445  1.00
6.57   1 . .
ATOM 3260 CG    CG    . PHE PHE PHE A A 427 427 . 90.235  105.033 37.664  1.00
4.39   1 . .
ATOM 3261 CD1   CD1   . PHE PHE PHE A A 427 427 . 90.626  106.189 38.359  1.00
5.74   1 . .
ATOM 3262 CE1   CE1   . PHE PHE PHE A A 427 427 . 91.935  106.464 38.566  1.00
4.67   1 . .
ATOM 3263 CZ    CZ    . PHE PHE PHE A A 427 427 . 92.940  105.647 38.077  1.00
7.27   1 . .
ATOM 3264 CE2   CE2   . PHE PHE PHE A A 427 427 . 92.569  104.488 37.382  1.00
7.38   1 . .
ATOM 3265 CD2   CD2   . PHE PHE PHE A A 427 427 . 91.230  104.198 37.174  1.00
8.36   1 . .
ATOM 3266 C     C     . PHE PHE PHE A A 427 427 . 88.786  102.776 39.061  1.00
5.26   1 . .
ATOM 3267 O     O     . PHE PHE PHE A A 427 427 . 88.480  101.719 38.519  1.00
6.29   1 . .
ATOM 3268 N     N     . ARG ARG ARG A A 428 428 . 89.749  102.826 39.986  1.00
4.37   1 . .
ATOM 3269 CA    CA    . ARG ARG ARG A A 428 428 . 90.350  101.583 40.419  1.00
6.38   1 . .
ATOM 3270 CB    CB    . ARG ARG ARG A A 428 428 . 91.645  101.804 41.164  1.00
7.65   1 . .
ATOM 3271 CG    CG    . ARG ARG ARG A A 428 428 . 92.675  102.539 40.368  1.00
9.66   1 . .
ATOM 3272 CD    CD    . ARG ARG ARG A A 428 428 . 93.839  102.905 41.316  1.00
13.14  1 . .
ATOM 3273 NE    NE    . ARG ARG ARG A A 428 428 . 94.527  101.729 41.808  1.00
14.21  1 . .
ATOM 3274 CZ    CZ    . ARG ARG ARG A A 428 428 . 95.688  101.745 42.458  1.00
13.54  1 . .
ATOM 3275 NH1   NH1   . ARG ARG ARG A A 428 428 . 96.327  102.894 42.699  1.00
16.95  1 . .
ATOM 3276 NH2   NH2   . ARG ARG ARG A A 428 428 . 96.216  100.613 42.875  1.00
16.45  1 . .
ATOM 3277 C     C     . ARG ARG ARG A A 428 428 . 89.393  100.672 41.205  1.00
8.95   1 . .
ATOM 3278 O     O     . ARG ARG ARG A A 428 428 . 89.514  99.423  41.139  1.00
9.36   1 . .
ATOM 3279 N     N     . ASN ASN ASN A A 429 429 . 88.427  101.303 41.882  1.00
10.35  1 . .
ATOM 3280 CA    CA    . ASN ASN ASN A A 429 429 . 87.600  100.702 42.930  1.00
11.62  1 . .
ATOM 3281 CB    CB    . ASN ASN ASN A A 429 429 . 88.281  100.992 44.323  1.00
14.00  1 . .
ATOM 3282 CG    CG    . ASN ASN ASN A A 429 429 . 88.359  102.561 44.721  1.00
17.13  1 . .
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ATOM 3283 OD1   OD1   . ASN ASN ASN A A 429 429 . 88.911  103.431 44.014  1.00
19.66  1 . .
ATOM 3284 ND2   ND2   . ASN ASN ASN A A 429 429 . 87.855  102.862 45.894  1.00
18.20  1 . .
ATOM 3285 C     C     . ASN ASN ASN A A 429 429 . 86.128  101.168 42.938  1.00
11.00  1 . .
ATOM 3286 O     O     . ASN ASN ASN A A 429 429 . 85.691  101.765 43.905  1.00
10.67  1 . .
ATOM 3287 N     N     . PRO PRO PRO A A 430 430 . 85.353  100.974 41.832  1.00
9.46   1 . .
ATOM 3288 CA    CA    . PRO PRO PRO A A 430 430 . 84.043  101.600 41.821  1.00
11.29  1 . .
ATOM 3289 CB    CB    . PRO PRO PRO A A 430 430 . 83.602  101.490 40.356  1.00
11.86  1 . .
ATOM 3290 CG    CG    . PRO PRO PRO A A 430 430 . 84.368  100.438 39.779  1.00
11.14  1 . .
ATOM 3291 CD    CD    . PRO PRO PRO A A 430 430 . 85.651  100.299 40.544  1.00
10.34  1 . .
ATOM 3292 C     C     . PRO PRO PRO A A 430 430 . 82.943  101.014 42.693  1.00
12.30  1 . .
ATOM 3293 O     O     . PRO PRO PRO A A 430 430 . 81.853  101.607 42.745  1.00
10.64  1 . .
ATOM 3294 N     N     . SER SER SER A A 431 431 . 83.202  99.890  43.353  1.00
13.49  1 . .
ATOM 3295 CA    CA    . SER SER SER A A 431 431 . 82.121  99.265  44.164  1.00
15.48  1 . .
ATOM 3296 CB    CB    . SER SER SER A A 431 431 . 82.571  97.927  44.737  1.00
16.02  1 . .
ATOM 3297 OG    OG    . SER SER SER A A 431 431 . 83.762  98.116  45.498  1.00
17.76  1 . .
ATOM 3298 C     C     . SER SER SER A A 431 431 . 81.662  100.207 45.296  1.00
16.11  1 . .
ATOM 3299 O     O     . SER SER SER A A 431 431 . 80.552  100.066 45.862  1.00
17.98  1 . .
ATOM 3300 N     N     . VAL VAL VAL A A 432 432 . 82.508  101.177 45.628  1.00
16.00  1 . .
ATOM 3301 CA    CA    . VAL VAL VAL A A 432 432 . 82.234  102.094 46.749  1.00
15.30  1 . .
ATOM 3302 CB    CB    . VAL VAL VAL A A 432 432 . 83.523  102.748 47.319  1.00
15.62  1 . .
ATOM 3303 CG1   CG1   . VAL VAL VAL A A 432 432 . 84.549  101.644 47.546  1.00
16.06  1 . .
ATOM 3304 CG2   CG2   . VAL VAL VAL A A 432 432 . 84.037  103.896 46.433  1.00
12.78  1 . .
ATOM 3305 C     C     . VAL VAL VAL A A 432 432 . 81.169  103.131 46.517  1.00
15.73  1 . .
ATOM 3306 O     O     . VAL VAL VAL A A 432 432 . 80.743  103.801 47.467  1.00
14.71  1 . .
ATOM 3307 N     N     . LEU LEU LEU A A 433 433 . 80.755  103.286 45.254  1.00
15.21  1 . .
ATOM 3308 CA    CA    . LEU LEU LEU A A 433 433 . 79.732  104.253 44.894  1.00
16.14  1 . .
ATOM 3309 CB    CB    . LEU LEU LEU A A 433 433 . 79.980  104.824 43.476  1.00
15.54  1 . .
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ATOM 3310 CG    CG    . LEU LEU LEU A A 433 433 . 81.338  105.446 43.136  1.00
14.40  1 . .
ATOM 3311 CD1   CD1   . LEU LEU LEU A A 433 433 . 81.455  105.794 41.660  1.00
12.70  1 . .
ATOM 3312 CD2   CD2   . LEU LEU LEU A A 433 433 . 81.630  106.694 43.964  1.00
13.86  1 . .
ATOM 3313 C     C     . LEU LEU LEU A A 433 433 . 78.317  103.626 44.967  1.00
16.15  1 . .
ATOM 3314 O     O     . LEU LEU LEU A A 433 433 . 78.110  102.441 44.625  1.00
18.55  1 . .
ATOM 3315 MG+2  MG+2  . MG2 MG2 MG2 A . 600 600 . 99.107  96.133  26.467  1.00
2.34   1 . .
ATOM 3316 MG+2  MG+2  . MG2 MG2 MG2 A . 601 601 . 99.993  93.975  23.430  1.00
2.63   1 . .
ATOM 3317 O4P   O4P   . 2PG 2PG 2PG A . 602 602 . 96.108  94.576  20.903  1.00
2.90   1 . .
ATOM 3318 P     P     . 2PG 2PG 2PG A . 602 602 . 97.574  94.869  21.211  1.00
2.00   1 . .
ATOM 3319 O2P   O2P   . 2PG 2PG 2PG A . 602 602 . 98.459  95.051  19.981  1.00
2.68   1 . .
ATOM 3320 O3P   O3P   . 2PG 2PG 2PG A . 602 602 . 98.317  93.935  22.163  1.00
2.09   1 . .
ATOM 3321 O1P   O1P   . 2PG 2PG 2PG A . 602 602 . 97.654  96.288  22.020  1.00
2.71   1 . .
ATOM 3322 C2    C2    . 2PG 2PG 2PG A . 602 602 . 96.987  96.177  23.300  1.00
5.74   1 . .
ATOM 3323 C1    C1    . 2PG 2PG 2PG A . 602 602 . 97.917  96.121  24.498  1.00
6.43   1 . .
ATOM 3324 O2    O2    . 2PG 2PG 2PG A . 602 602 . 97.404  96.494  25.597  1.00
4.60   1 . .
ATOM 3325 O1    O1    . 2PG 2PG 2PG A . 602 602 . 99.168  95.717  24.415  1.00
3.55   1 . .
ATOM 3326 C3    C3    . 2PG 2PG 2PG A . 602 602 . 95.748  97.119  23.355  1.00
8.89   1 . .
ATOM 3327 O3    O3    . 2PG 2PG 2PG A . 602 602 . 96.071  98.441  22.983  1.00
7.87   1 . .
ATOM 3328 O     O     . HOH HOH HOH A . 603 603 . 101.096 95.783  26.894  1.00
2.43   1 . .
ATOM 3329 O     O     . HOH HOH HOH A . 604 604 . 101.659 94.131  24.582  1.00
2.86   1 . .
ATOM 3330 O     O     . HOH HOH HOH A . 605 605 . 98.911  92.643  24.763  1.00
2.74   1 . .
ATOM 3331 O3    O3    . TRS TRS TRS A . 606 606 . 107.389 90.915  20.068  1.00
24.51  1 . .
ATOM 3332 C3    C3    . TRS TRS TRS A . 606 606 . 107.341 89.503  20.105  1.00
23.78  1 . .
ATOM 3333 C     C     . TRS TRS TRS A . 606 606 . 106.306 89.068  21.124  1.00
22.20  1 . .
ATOM 3334 N     N     . TRS TRS TRS A . 606 606 . 105.013 89.734  20.760  1.00
21.89  1 . .
ATOM 3335 C2    C2    . TRS TRS TRS A . 606 606 . 106.280 87.517  21.119  1.00
23.17  1 . .
ATOM 3336 O2    O2    . TRS TRS TRS A . 606 606 . 105.327 86.975  20.245  1.00
21.89  1 . .
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ATOM 3337 C1    C1    . TRS TRS TRS A . 606 606 . 106.722 89.530  22.528  1.00
21.63  1 . .
ATOM 3338 O1    O1    . TRS TRS TRS A . 606 606 . 105.954 88.945  23.566  1.00
16.89  1 . .
ATOM 3339 N     N     . SER SER SER B B 1   1   . 53.243  103.696 11.136  1.00
20.86  1 . .
ATOM 3340 CA    CA    . SER SER SER B B 1   1   . 53.637  105.032 11.630  1.00
20.32  1 . .
ATOM 3341 CB    CB    . SER SER SER B B 1   1   . 52.474  105.717 12.361  1.00
20.86  1 . .
ATOM 3342 OG    OG    . SER SER SER B B 1   1   . 51.666  104.760 13.020  1.00
23.36  1 . .
ATOM 3343 C     C     . SER SER SER B B 1   1   . 54.852  104.972 12.565  1.00
19.06  1 . .
ATOM 3344 O     O     . SER SER SER B B 1   1   . 55.213  103.928 13.121  1.00
19.60  1 . .
ATOM 3345 N     N     . ILE ILE ILE B B 2   2   . 55.475  106.124 12.696  1.00
15.90  1 . .
ATOM 3346 CA    CA    . ILE ILE ILE B B 2   2   . 56.563  106.321 13.569  1.00
13.50  1 . .
ATOM 3347 CB    CB    . ILE ILE ILE B B 2   2   . 57.341  107.569 13.181  1.00
12.96  1 . .
ATOM 3348 CG1   CG1   . ILE ILE ILE B B 2   2   . 57.930  107.452 11.745  1.00
11.63  1 . .
ATOM 3349 CD1   CD1   . ILE ILE ILE B B 2   2   . 58.199  108.814 10.972  1.00
11.97  1 . .
ATOM 3350 CG2   CG2   . ILE ILE ILE B B 2   2   . 58.422  107.821 14.166  1.00
13.13  1 . .
ATOM 3351 C     C     . ILE ILE ILE B B 2   2   . 55.985  106.466 14.973  1.00
13.49  1 . .
ATOM 3352 O     O     . ILE ILE ILE B B 2   2   . 54.981  107.221 15.189  1.00
12.03  1 . .
ATOM 3353 N     N     . GLN GLN GLN B B 3   3   . 56.604  105.722 15.894  1.00
11.86  1 . .
ATOM 3354 CA    CA    . GLN GLN GLN B B 3   3   . 56.298  105.730 17.347  1.00
14.62  1 . .
ATOM 3355 CB    CB    . GLN GLN GLN B B 3   3   . 56.472  104.285 17.959  1.00
14.80  1 . .
ATOM 3356 CG    CG    . GLN GLN GLN B B 3   3   . 55.399  103.215 17.515  1.00
17.25  1 . .
ATOM 3357 CD    CD    . GLN GLN GLN B B 3   3   . 55.489  101.890 18.286  1.00
20.16  1 . .
ATOM 3358 OE1   OE1   . GLN GLN GLN B B 3   3   . 56.502  101.595 18.891  1.00
20.27  1 . .
ATOM 3359 NE2   NE2   . GLN GLN GLN B B 3   3   . 54.406  101.101 18.277  1.00
24.18  1 . .
ATOM 3360 C     C     . GLN GLN GLN B B 3   3   . 57.142  106.780 18.121  1.00
13.46  1 . .
ATOM 3361 O     O     . GLN GLN GLN B B 3   3   . 56.656  107.525 18.944  1.00
14.53  1 . .
ATOM 3362 N     N     . LYS LYS LYS B B 4   4   . 58.415  106.890 17.804  1.00
11.63  1 . .
ATOM 3363 CA    CA    . LYS LYS LYS B B 4   4   . 59.307  107.786 18.526  1.00
10.11  1 . .
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ATOM 3364 CB    CB    . LYS LYS LYS B B 4   4   . 59.824  107.071 19.764  1.00
9.35   1 . .
ATOM 3365 CG    CG    . LYS LYS LYS B B 4   4   . 60.491  108.035 20.738  1.00
13.83  1 . .
ATOM 3366 CD    CD    . LYS LYS LYS B B 4   4   . 60.979  107.317 22.003  1.00
17.98  1 . .
ATOM 3367 CE    CE    . LYS LYS LYS B B 4   4   . 61.583  108.252 23.031  1.00
22.35  1 . .
ATOM 3368 NZ    NZ    . LYS LYS LYS B B 4   4   . 63.092  108.281 23.004  1.00
27.13  1 . .
ATOM 3369 C     C     . LYS LYS LYS B B 4   4   . 60.522  108.109 17.703  1.00
10.70  1 . .
ATOM 3370 O     O     . LYS LYS LYS B B 4   4   . 61.025  107.195 17.074  1.00
11.15  1 . .
ATOM 3371 N     N     . ILE ILE ILE B B 5   5   . 60.986  109.373 17.743  1.00
8.95   1 . .
ATOM 3372 CA    CA    . ILE ILE ILE B B 5   5   . 62.281  109.724 17.160  1.00
7.67   1 . .
ATOM 3373 CB    CB    . ILE ILE ILE B B 5   5   . 62.164  110.655 16.005  1.00
8.38   1 . .
ATOM 3374 CG1   CG1   . ILE ILE ILE B B 5   5   . 61.605  109.883 14.804  1.00
6.03   1 . .
ATOM 3375 CD1   CD1   . ILE ILE ILE B B 5   5   . 61.044  110.742 13.702  1.00
9.92   1 . .
ATOM 3376 CG2   CG2   . ILE ILE ILE B B 5   5   . 63.527  111.136 15.681  1.00
8.10   1 . .
ATOM 3377 C     C     . ILE ILE ILE B B 5   5   . 63.141  110.347 18.236  1.00
8.20   1 . .
ATOM 3378 O     O     . ILE ILE ILE B B 5   5   . 62.685  111.184 19.001  1.00
11.44  1 . .
ATOM 3379 N     N     . TRP TRP TRP B B 6   6   . 64.392  109.918 18.332  1.00
6.96   1 . .
ATOM 3380 CA    CA    . TRP TRP TRP B B 6   6   . 65.233  110.479 19.374  1.00
5.98   1 . .
ATOM 3381 CB    CB    . TRP TRP TRP B B 6   6   . 65.180  109.665 20.673  1.00
6.62   1 . .
ATOM 3382 CG    CG    . TRP TRP TRP B B 6   6   . 66.136  110.204 21.676  1.00
8.31   1 . .
ATOM 3383 CD1   CD1   . TRP TRP TRP B B 6   6   . 67.372  109.719 21.987  1.00
12.52  1 . .
ATOM 3384 NE1   NE1   . TRP TRP TRP B B 6   6   . 67.966  110.539 22.914  1.00
11.91  1 . .
ATOM 3385 CE2   CE2   . TRP TRP TRP B B 6   6   . 67.126  111.587 23.202  1.00
12.97  1 . .
ATOM 3386 CD2   CD2   . TRP TRP TRP B B 6   6   . 65.956  111.399 22.453  1.00
12.36  1 . .
ATOM 3387 CE3   CE3   . TRP TRP TRP B B 6   6   . 64.925  112.351 22.555  1.00
14.10  1 . .
ATOM 3388 CZ3   CZ3   . TRP TRP TRP B B 6   6   . 65.072  113.439 23.408  1.00
15.70  1 . .
ATOM 3389 CH2   CH2   . TRP TRP TRP B B 6   6   . 66.246  113.600 24.188  1.00
16.22  1 . .
ATOM 3390 CZ2   CZ2   . TRP TRP TRP B B 6   6   . 67.286  112.682 24.104  1.00
16.36  1 . .
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ATOM 3391 C     C     . TRP TRP TRP B B 6   6   . 66.661  110.609 18.846  1.00
6.77   1 . .
ATOM 3392 O     O     . TRP TRP TRP B B 6   6   . 67.302  109.584 18.426  1.00
7.90   1 . .
ATOM 3393 N     N     . ALA ALA ALA B B 7   7   . 67.110  111.850 18.745  1.00
6.02   1 . .
ATOM 3394 CA    CA    . ALA ALA ALA B B 7   7   . 68.459  112.097 18.291  1.00
4.78   1 . .
ATOM 3395 CB    CB    . ALA ALA ALA B B 7   7   . 68.505  113.315 17.355  1.00
5.11   1 . .
ATOM 3396 C     C     . ALA ALA ALA B B 7   7   . 69.423  112.333 19.437  1.00
4.54   1 . .
ATOM 3397 O     O     . ALA ALA ALA B B 7   7   . 69.028  112.937 20.434  1.00
5.20   1 . .
ATOM 3398 N     N     . ARG ARG ARG B B 8   8   . 70.714  112.092 19.183  1.00
5.12   1 . .
ATOM 3399 CA    CA    . ARG ARG ARG B B 8   8   . 71.774  112.453 20.078  1.00
3.43   1 . .
ATOM 3400 CB    CB    . ARG ARG ARG B B 8   8   . 72.087  111.234 21.018  1.00
3.01   1 . .
ATOM 3401 CG    CG    . ARG ARG ARG B B 8   8   . 72.663  110.031 20.215  1.00
4.95   1 . .
ATOM 3402 CD    CD    . ARG ARG ARG B B 8   8   . 73.042  108.824 21.132  1.00
4.63   1 . .
ATOM 3403 NE    NE    . ARG ARG ARG B B 8   8   . 71.840  108.256 21.761  1.00
7.41   1 . .
ATOM 3404 CZ    CZ    . ARG ARG ARG B B 8   8   . 71.022  107.422 21.114  1.00
6.91   1 . .
ATOM 3405 NH1   NH1   . ARG ARG ARG B B 8   8   . 71.350  107.013 19.898  1.00
6.45   1 . .
ATOM 3406 NH2   NH2   . ARG ARG ARG B B 8   8   . 69.899  106.972 21.672  1.00
11.73  1 . .
ATOM 3407 C     C     . ARG ARG ARG B B 8   8   . 73.039  112.810 19.298  1.00
2.59   1 . .
ATOM 3408 O     O     . ARG ARG ARG B B 8   8   . 73.155  112.519 18.080  1.00
3.92   1 . .
ATOM 3409 N     N     . GLU GLU GLU B B 9   9   . 74.036  113.294 20.022  1.00
3.18   1 . .
ATOM 3410 CA    CA    . GLU GLU GLU B B 9   9   . 75.400  113.630 19.586  1.00
3.54   1 . .
ATOM 3411 CB    CB    . GLU GLU GLU B B 9   9   . 75.807  114.918 20.335  1.00
7.36   1 . .
ATOM 3412 CG    CG    . GLU GLU GLU B B 9   9   . 77.065  115.593 19.918  1.00
9.18   1 . .
ATOM 3413 CD    CD    . GLU GLU GLU B B 9   9   . 77.281  116.804 20.848  1.00
10.84  1 . .
ATOM 3414 OE1   OE1   . GLU GLU GLU B B 9   9   . 77.288  117.935 20.346  1.00
7.20   1 . .
ATOM 3415 OE2   OE2   . GLU GLU GLU B B 9   9   . 77.353  116.633 22.085  1.00
10.38  1 . .
ATOM 3416 C     C     . GLU GLU GLU B B 9   9   . 76.313  112.396 19.835  1.00
5.03   1 . .
ATOM 3417 O     O     . GLU GLU GLU B B 9   9   . 76.409  111.855 20.981  1.00
5.74   1 . .
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ATOM 3418 N     N     . ILE ILE ILE B B 10  10  . 76.905  111.878 18.747  1.00
2.84   1 . .
ATOM 3419 CA    CA    . ILE ILE ILE B B 10  10  . 77.983  110.856 18.880  1.00
2.60   1 . .
ATOM 3420 CB    CB    . ILE ILE ILE B B 10  10  . 77.626  109.554 18.103  1.00
2.18   1 . .
ATOM 3421 CG1   CG1   . ILE ILE ILE B B 10  10  . 77.423  109.868 16.597  1.00
4.42   1 . .
ATOM 3422 CD1   CD1   . ILE ILE ILE B B 10  10  . 77.647  108.564 15.745  1.00
3.66   1 . .
ATOM 3423 CG2   CG2   . ILE ILE ILE B B 10  10  . 76.371  108.942 18.657  1.00
2.79   1 . .
ATOM 3424 C     C     . ILE ILE ILE B B 10  10  . 79.248  111.458 18.300  1.00
2.00   1 . .
ATOM 3425 O     O     . ILE ILE ILE B B 10  10  . 79.205  112.571 17.763  1.00
3.33   1 . .
ATOM 3426 N     N     . LEU LEU LEU B B 11  11  . 80.398  110.769 18.374  1.00
2.08   1 . .
ATOM 3427 CA    CA    . LEU LEU LEU B B 11  11  . 81.622  111.238 17.726  1.00
2.40   1 . .
ATOM 3428 CB    CB    . LEU LEU LEU B B 11  11  . 82.833  111.189 18.639  1.00
2.31   1 . .
ATOM 3429 CG    CG    . LEU LEU LEU B B 11  11  . 82.777  111.881 20.028  1.00
2.35   1 . .
ATOM 3430 CD1   CD1   . LEU LEU LEU B B 11  11  . 84.111  111.946 20.660  1.00
3.34   1 . .
ATOM 3431 CD2   CD2   . LEU LEU LEU B B 11  11  . 82.214  113.346 19.729  1.00
2.64   1 . .
ATOM 3432 C     C     . LEU LEU LEU B B 11  11  . 81.911  110.458 16.441  1.00
2.39   1 . .
ATOM 3433 O     O     . LEU LEU LEU B B 11  11  . 81.691  109.204 16.386  1.00
2.65   1 . .
ATOM 3434 N     N     . ASP ASP ASP B B 12  12  . 82.357  111.197 15.413  1.00
2.54   1 . .
ATOM 3435 CA    CA    . ASP ASP ASP B B 12  12  . 82.722  110.649 14.098  1.00
2.38   1 . .
ATOM 3436 CB    CB    . ASP ASP ASP B B 12  12  . 82.414  111.691 13.031  1.00
2.90   1 . .
ATOM 3437 CG    CG    . ASP ASP ASP B B 12  12  . 83.508  112.754 12.893  1.00
2.63   1 . .
ATOM 3438 OD1   OD1   . ASP ASP ASP B B 12  12  . 84.535  112.777 13.630  1.00
2.10   1 . .
ATOM 3439 OD2   OD2   . ASP ASP ASP B B 12  12  . 83.330  113.647 12.025  1.00
5.17   1 . .
ATOM 3440 C     C     . ASP ASP ASP B B 12  12  . 84.189  110.205 14.180  1.00
2.40   1 . .
ATOM 3441 O     O     . ASP ASP ASP B B 12  12  . 84.828  110.254 15.230  1.00
2.01   1 . .
ATOM 3442 N     N     . SER SER SER B B 13  13  . 84.706  109.761 13.061  1.00
2.00   1 . .
ATOM 3443 CA    CA    . SER SER SER B B 13  13  . 85.960  109.094 13.007  1.00
2.09   1 . .
ATOM 3444 CB    CB    . SER SER SER B B 13  13  . 86.122  108.356 11.667  1.00
2.11   1 . .
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ATOM 3445 OG    OG    . SER SER SER B B 13  13  . 85.986  109.246 10.542  1.00
2.69   1 . .
ATOM 3446 C     C     . SER SER SER B B 13  13  . 87.135  109.950 13.223  1.00
2.02   1 . .
ATOM 3447 O     O     . SER SER SER B B 13  13  . 88.207  109.443 13.422  1.00
2.45   1 . .
ATOM 3448 N     N     . ARG ARG ARG B B 14  14  . 86.947  111.290 13.269  1.00
2.61   1 . .
ATOM 3449 CA    CA    . ARG ARG ARG B B 14  14  . 87.996  112.216 13.574  1.00
2.92   1 . .
ATOM 3450 CB    CB    . ARG ARG ARG B B 14  14  . 87.916  113.399 12.550  1.00
4.84   1 . .
ATOM 3451 CG    CG    . ARG ARG ARG B B 14  14  . 88.796  113.279 11.392  1.00
4.71   1 . .
ATOM 3452 CD    CD    . ARG ARG ARG B B 14  14  . 88.887  114.579 10.513  1.00
6.68   1 . .
ATOM 3453 NE    NE    . ARG ARG ARG B B 14  14  . 87.619  114.917 9.908   1.00
6.46   1 . .
ATOM 3454 CZ    CZ    . ARG ARG ARG B B 14  14  . 87.412  114.910 8.603   1.00
5.94   1 . .
ATOM 3455 NH1   NH1   . ARG ARG ARG B B 14  14  . 88.397  114.563 7.781   1.00
4.04   1 . .
ATOM 3456 NH2   NH2   . ARG ARG ARG B B 14  14  . 86.216  115.262 8.162   1.00
4.88   1 . .
ATOM 3457 C     C     . ARG ARG ARG B B 14  14  . 87.819  112.771 15.014  1.00
2.57   1 . .
ATOM 3458 O     O     . ARG ARG ARG B B 14  14  . 88.663  113.554 15.492  1.00
3.54   1 . .
ATOM 3459 N     N     . GLY GLY GLY B B 15  15  . 86.763  112.340 15.722  1.00
2.00   1 . .
ATOM 3460 CA    CA    . GLY GLY GLY B B 15  15  . 86.554  112.794 17.104  1.00
2.67   1 . .
ATOM 3461 C     C     . GLY GLY GLY B B 15  15  . 85.684  114.022 17.189  1.00
2.00   1 . .
ATOM 3462 O     O     . GLY GLY GLY B B 15  15  . 85.707  114.733 18.193  1.00
2.49   1 . .
ATOM 3463 N     N     . ASN ASN ASN B B 16  16  . 84.971  114.322 16.115  1.00
2.58   1 . .
ATOM 3464 CA    CA    . ASN ASN ASN B B 16  16  . 84.087  115.498 16.115  1.00
2.52   1 . .
ATOM 3465 CB    CB    . ASN ASN ASN B B 16  16  . 84.254  116.278 14.817  1.00
4.31   1 . .
ATOM 3466 CG    CG    . ASN ASN ASN B B 16  16  . 85.593  116.948 14.715  1.00
4.18   1 . .
ATOM 3467 OD1   OD1   . ASN ASN ASN B B 16  16  . 86.026  117.658 15.641  1.00
6.23   1 . .
ATOM 3468 ND2   ND2   . ASN ASN ASN B B 16  16  . 86.271  116.750 13.554  1.00
6.88   1 . .
ATOM 3469 C     C     . ASN ASN ASN B B 16  16  . 82.652  115.073 16.234  1.00
2.30   1 . .
ATOM 3470 O     O     . ASN ASN ASN B B 16  16  . 82.208  113.999 15.730  1.00
2.00   1 . .
ATOM 3471 N     N     . PRO PRO PRO B B 17  17  . 81.841  115.885 16.926  1.00
2.32   1 . .
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ATOM 3472 CA    CA    . PRO PRO PRO B B 17  17  . 80.453  115.532 17.087  1.00
2.33   1 . .
ATOM 3473 CB    CB    . PRO PRO PRO B B 17  17  . 79.927  116.727 17.880  1.00
2.10   1 . .
ATOM 3474 CG    CG    . PRO PRO PRO B B 17  17  . 81.103  117.135 18.766  1.00
2.50   1 . .
ATOM 3475 CD    CD    . PRO PRO PRO B B 17  17  . 82.239  117.048 17.753  1.00
2.68   1 . .
ATOM 3476 C     C     . PRO PRO PRO B B 17  17  . 79.674  115.392 15.767  1.00
2.10   1 . .
ATOM 3477 O     O     . PRO PRO PRO B B 17  17  . 79.987  116.077 14.798  1.00
2.78   1 . .
ATOM 3478 N     N     . THR THR THR B B 18  18  . 78.684  114.505 15.739  1.00
2.44   1 . .
ATOM 3479 CA    CA    . THR THR THR B B 18  18  . 77.776  114.392 14.643  1.00
3.03   1 . .
ATOM 3480 CB    CB    . THR THR THR B B 18  18  . 78.347  113.621 13.423  1.00
2.66   1 . .
ATOM 3481 OG1   OG1   . THR THR THR B B 18  18  . 77.448  113.823 12.308  1.00
3.16   1 . .
ATOM 3482 CG2   CG2   . THR THR THR B B 18  18  . 78.442  112.151 13.735  1.00
3.14   1 . .
ATOM 3483 C     C     . THR THR THR B B 18  18  . 76.440  113.902 15.076  1.00
2.31   1 . .
ATOM 3484 O     O     . THR THR THR B B 18  18  . 76.248  113.512 16.242  1.00
3.81   1 . .
ATOM 3485 N     N     . VAL VAL VAL B B 19  19  . 75.457  113.875 14.179  1.00
2.53   1 . .
ATOM 3486 CA    CA    . VAL VAL VAL B B 19  19  . 74.134  113.500 14.516  1.00
2.67   1 . .
ATOM 3487 CB    CB    . VAL VAL VAL B B 19  19  . 73.165  114.237 13.571  1.00
2.38   1 . .
ATOM 3488 CG1   CG1   . VAL VAL VAL B B 19  19  . 71.778  113.695 13.637  1.00
5.06   1 . .
ATOM 3489 CG2   CG2   . VAL VAL VAL B B 19  19  . 73.201  115.730 13.848  1.00
4.13   1 . .
ATOM 3490 C     C     . VAL VAL VAL B B 19  19  . 73.872  112.025 14.380  1.00
2.64   1 . .
ATOM 3491 O     O     . VAL VAL VAL B B 19  19  . 74.309  111.423 13.385  1.00
3.34   1 . .
ATOM 3492 N     N     . GLU GLU GLU B B 20  20  . 73.209  111.406 15.378  1.00
2.70   1 . .
ATOM 3493 CA    CA    . GLU GLU GLU B B 20  20  . 72.697  110.053 15.267  1.00
3.85   1 . .
ATOM 3494 CB    CB    . GLU GLU GLU B B 20  20  . 73.507  109.073 16.154  1.00
4.10   1 . .
ATOM 3495 CG    CG    . GLU GLU GLU B B 20  20  . 72.850  107.738 16.347  1.00
6.94   1 . .
ATOM 3496 CD    CD    . GLU GLU GLU B B 20  20  . 73.704  106.812 17.155  1.00
7.04   1 . .
ATOM 3497 OE1   OE1   . GLU GLU GLU B B 20  20  . 74.631  106.199 16.596  1.00
5.45   1 . .
ATOM 3498 OE2   OE2   . GLU GLU GLU B B 20  20  . 73.478  106.737 18.370  1.00
6.92   1 . .
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ATOM 3499 C     C     . GLU GLU GLU B B 20  20  . 71.201  110.056 15.615  1.00
2.69   1 . .
ATOM 3500 O     O     . GLU GLU GLU B B 20  20  . 70.786  110.745 16.518  1.00
5.01   1 . .
ATOM 3501 N     N     . VAL VAL VAL B B 21  21  . 70.405  109.299 14.906  1.00
4.23   1 . .
ATOM 3502 CA    CA    . VAL VAL VAL B B 21  21  . 68.973  109.282 15.120  1.00
4.35   1 . .
ATOM 3503 CB    CB    . VAL VAL VAL B B 21  21  . 68.189  109.818 13.878  1.00
3.95   1 . .
ATOM 3504 CG1   CG1   . VAL VAL VAL B B 21  21  . 66.687  109.496 13.988  1.00
5.74   1 . .
ATOM 3505 CG2   CG2   . VAL VAL VAL B B 21  21  . 68.423  111.335 13.713  1.00
5.14   1 . .
ATOM 3506 C     C     . VAL VAL VAL B B 21  21  . 68.560  107.824 15.387  1.00
3.77   1 . .
ATOM 3507 O     O     . VAL VAL VAL B B 21  21  . 68.943  106.895 14.603  1.00
5.24   1 . .
ATOM 3508 N     N     . ASP ASP ASP B B 22  22  . 67.774  107.631 16.447  1.00
5.13   1 . .
ATOM 3509 CA    CA    . ASP ASP ASP B B 22  22  . 67.062  106.361 16.682  1.00
6.39   1 . .
ATOM 3510 CB    CB    . ASP ASP ASP B B 22  22  . 67.065  106.014 18.196  1.00
5.33   1 . .
ATOM 3511 CG    CG    . ASP ASP ASP B B 22  22  . 68.396  105.532 18.725  1.00
6.77   1 . .
ATOM 3512 OD1   OD1   . ASP ASP ASP B B 22  22  . 68.440  105.268 19.933  1.00
13.06  1 . .
ATOM 3513 OD2   OD2   . ASP ASP ASP B B 22  22  . 69.362  105.465 18.012  1.00
7.79   1 . .
ATOM 3514 C     C     . ASP ASP ASP B B 22  22  . 65.608  106.649 16.287  1.00
6.12   1 . .
ATOM 3515 O     O     . ASP ASP ASP B B 22  22  . 65.001  107.640 16.800  1.00
7.34   1 . .
ATOM 3516 N     N     . LEU LEU LEU B B 23  23  . 65.019  105.761 15.474  1.00
5.54   1 . .
ATOM 3517 CA    CA    . LEU LEU LEU B B 23  23  . 63.602  105.795 15.145  1.00
6.68   1 . .
ATOM 3518 CB    CB    . LEU LEU LEU B B 23  23  . 63.411  106.052 13.647  1.00
7.61   1 . .
ATOM 3519 CG    CG    . LEU LEU LEU B B 23  23  . 62.019  106.355 13.086  1.00
9.78   1 . .
ATOM 3520 CD1   CD1   . LEU LEU LEU B B 23  23  . 62.125  107.277 11.844  1.00
9.20   1 . .
ATOM 3521 CD2   CD2   . LEU LEU LEU B B 23  23  . 61.155  105.174 12.828  1.00
10.77  1 . .
ATOM 3522 C     C     . LEU LEU LEU B B 23  23  . 62.960  104.499 15.541  1.00
7.44   1 . .
ATOM 3523 O     O     . LEU LEU LEU B B 23  23  . 63.452  103.420 15.196  1.00
6.23   1 . .
ATOM 3524 N     N     . TYR TYR TYR B B 24  24  . 61.828  104.598 16.219  1.00
9.52   1 . .
ATOM 3525 CA    CA    . TYR TYR TYR B B 24  24  . 61.111  103.418 16.643  1.00
10.84  1 . .
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ATOM 3526 CB    CB    . TYR TYR TYR B B 24  24  . 60.724  103.490 18.122  1.00
11.26  1 . .
ATOM 3527 CG    CG    . TYR TYR TYR B B 24  24  . 61.890  103.593 19.054  1.00
14.28  1 . .
ATOM 3528 CD1   CD1   . TYR TYR TYR B B 24  24  . 62.523  104.820 19.272  1.00
13.57  1 . .
ATOM 3529 CE1   CE1   . TYR TYR TYR B B 24  24  . 63.583  104.926 20.158  1.00
17.11  1 . .
ATOM 3530 CZ    CZ    . TYR TYR TYR B B 24  24  . 64.001  103.810 20.839  1.00
17.78  1 . .
ATOM 3531 OH    OH    . TYR TYR TYR B B 24  24  . 65.051  103.935 21.693  1.00
19.09  1 . .
ATOM 3532 CE2   CE2   . TYR TYR TYR B B 24  24  . 63.411  102.586 20.629  1.00
17.44  1 . .
ATOM 3533 CD2   CD2   . TYR TYR TYR B B 24  24  . 62.346  102.479 19.736  1.00
17.09  1 . .
ATOM 3534 C     C     . TYR TYR TYR B B 24  24  . 59.824  103.226 15.845  1.00
11.72  1 . .
ATOM 3535 O     O     . TYR TYR TYR B B 24  24  . 59.024  104.179 15.639  1.00
11.77  1 . .
ATOM 3536 N     N     . THR THR THR B B 25  25  . 59.621  102.003 15.390  1.00
13.15  1 . .
ATOM 3537 CA    CA    . THR THR THR B B 25  25  . 58.315  101.634 14.879  1.00
13.60  1 . .
ATOM 3538 CB    CB    . THR THR THR B B 25  25  . 58.335  101.304 13.416  1.00
14.65  1 . .
ATOM 3539 OG1   OG1   . THR THR THR B B 25  25  . 59.103  100.115 13.259  1.00
9.62   1 . .
ATOM 3540 CG2   CG2   . THR THR THR B B 25  25  . 58.884  102.485 12.529  1.00
13.98  1 . .
ATOM 3541 C     C     . THR THR THR B B 25  25  . 57.863  100.399 15.634  1.00
14.56  1 . .
ATOM 3542 O     O     . THR THR THR B B 25  25  . 58.563  99.913  16.516  1.00
13.60  1 . .
ATOM 3543 N     N     . ALA ALA ALA B B 26  26  . 56.713  99.873  15.243  1.00
15.07  1 . .
ATOM 3544 CA    CA    . ALA ALA ALA B B 26  26  . 56.233  98.613  15.769  1.00
17.18  1 . .
ATOM 3545 CB    CB    . ALA ALA ALA B B 26  26  . 54.854  98.271  15.217  1.00
17.17  1 . .
ATOM 3546 C     C     . ALA ALA ALA B B 26  26  . 57.232  97.486  15.501  1.00
18.47  1 . .
ATOM 3547 O     O     . ALA ALA ALA B B 26  26  . 57.296  96.531  16.269  1.00
18.49  1 . .
ATOM 3548 N     N     . LYS LYS LYS B B 27  27  . 58.062  97.646  14.471  1.00
19.06  1 . .
ATOM 3549 CA    CA    . LYS LYS LYS B B 27  27  . 59.073  96.649  14.087  1.00
19.42  1 . .
ATOM 3550 CB    CB    . LYS LYS LYS B B 27  27  . 59.393  96.740  12.606  1.00
20.57  1 . .
ATOM 3551 CG    CG    . LYS LYS LYS B B 27  27  . 58.246  96.457  11.678  1.00
21.72  1 . .
ATOM 3552 CD    CD    . LYS LYS LYS B B 27  27  . 58.183  94.971  11.376  1.00
24.03  1 . .
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ATOM 3553 CE    CE    . LYS LYS LYS B B 27  27  . 57.080  94.657  10.393  1.00
23.38  1 . .
ATOM 3554 NZ    NZ    . LYS LYS LYS B B 27  27  . 55.750  95.302  10.701  1.00
26.08  1 . .
ATOM 3555 C     C     . LYS LYS LYS B B 27  27  . 60.367  96.817  14.849  1.00
17.86  1 . .
ATOM 3556 O     O     . LYS LYS LYS B B 27  27  . 61.245  95.975  14.782  1.00
19.28  1 . .
ATOM 3557 N     N     . GLY GLY GLY B B 28  28  . 60.530  97.928  15.531  1.00
15.51  1 . .
ATOM 3558 CA    CA    . GLY GLY GLY B B 28  28  . 61.567  97.973  16.524  1.00
13.96  1 . .
ATOM 3559 C     C     . GLY GLY GLY B B 28  28  . 62.356  99.242  16.384  1.00
11.52  1 . .
ATOM 3560 O     O     . GLY GLY GLY B B 28  28  . 61.776  100.274 16.070  1.00
11.76  1 . .
ATOM 3561 N     N     . LEU LEU LEU B B 29  29  . 63.650  99.142  16.650  1.00
10.66  1 . .
ATOM 3562 CA    CA    . LEU LEU LEU B B 29  29  . 64.570  100.291 16.660  1.00
9.88   1 . .
ATOM 3563 CB    CB    . LEU LEU LEU B B 29  29  . 65.443  100.234 17.925  1.00
10.24  1 . .
ATOM 3564 CG    CG    . LEU LEU LEU B B 29  29  . 66.744  101.063 18.007  1.00
12.55  1 . .
ATOM 3565 CD1   CD1   . LEU LEU LEU B B 29  29  . 66.464  102.579 17.966  1.00
14.81  1 . .
ATOM 3566 CD2   CD2   . LEU LEU LEU B B 29  29  . 67.712  100.682 19.133  1.00
12.40  1 . .
ATOM 3567 C     C     . LEU LEU LEU B B 29  29  . 65.410  100.334 15.402  1.00
9.41   1 . .
ATOM 3568 O     O     . LEU LEU LEU B B 29  29  . 65.899  99.294  14.968  1.00
12.49  1 . .
ATOM 3569 N     N     . PHE PHE PHE B B 30  30  . 65.591  101.522 14.810  1.00
7.61   1 . .
ATOM 3570 CA    CA    . PHE PHE PHE B B 30  30  . 66.395  101.708 13.605  1.00
7.00   1 . .
ATOM 3571 CB    CB    . PHE PHE PHE B B 30  30  . 65.484  101.873 12.347  1.00
6.38   1 . .
ATOM 3572 CG    CG    . PHE PHE PHE B B 30  30  . 64.488  100.772 12.235  1.00
8.48   1 . .
ATOM 3573 CD1   CD1   . PHE PHE PHE B B 30  30  . 64.824  99.604  11.555  1.00
9.88   1 . .
ATOM 3574 CE1   CE1   . PHE PHE PHE B B 30  30  . 63.965  98.472  11.543  1.00
7.95   1 . .
ATOM 3575 CZ    CZ    . PHE PHE PHE B B 30  30  . 62.782  98.540  12.230  1.00
11.41  1 . .
ATOM 3576 CE2   CE2   . PHE PHE PHE B B 30  30  . 62.438  99.717  12.961  1.00
10.13  1 . .
ATOM 3577 CD2   CD2   . PHE PHE PHE B B 30  30  . 63.288  100.836 12.965  1.00
5.96   1 . .
ATOM 3578 C     C     . PHE PHE PHE B B 30  30  . 67.269  102.946 13.888  1.00
5.84   1 . .
ATOM 3579 O     O     . PHE PHE PHE B B 30  30  . 66.802  104.004 14.328  1.00
9.54   1 . .
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ATOM 3580 N     N     . ARG ARG ARG B B 31  31  . 68.559  102.799 13.622  1.00
4.58   1 . .
ATOM 3581 CA    CA    . ARG ARG ARG B B 31  31  . 69.542  103.772 13.981  1.00
3.20   1 . .
ATOM 3582 CB    CB    . ARG ARG ARG B B 31  31  . 70.442  103.208 15.102  1.00
4.00   1 . .
ATOM 3583 CG    CG    . ARG ARG ARG B B 31  31  . 71.471  104.130 15.573  1.00
3.38   1 . .
ATOM 3584 CD    CD    . ARG ARG ARG B B 31  31  . 72.277  103.534 16.737  1.00
6.26   1 . .
ATOM 3585 NE    NE    . ARG ARG ARG B B 31  31  . 71.355  103.456 17.858  1.00
6.07   1 . .
ATOM 3586 CZ    CZ    . ARG ARG ARG B B 31  31  . 71.338  102.531 18.800  1.00
9.92   1 . .
ATOM 3587 NH1   NH1   . ARG ARG ARG B B 31  31  . 70.436  102.601 19.756  1.00
11.74  1 . .
ATOM 3588 NH2   NH2   . ARG ARG ARG B B 31  31  . 72.181  101.549 18.772  1.00
12.49  1 . .
ATOM 3589 C     C     . ARG ARG ARG B B 31  31  . 70.357  104.200 12.777  1.00
3.01   1 . .
ATOM 3590 O     O     . ARG ARG ARG B B 31  31  . 70.780  103.362 11.956  1.00
4.27   1 . .
ATOM 3591 N     N     . ALA ALA ALA B B 32  32  . 70.633  105.501 12.727  1.00
5.08   1 . .
ATOM 3592 CA    CA    . ALA ALA ALA B B 32  32  . 71.486  105.969 11.665  1.00
2.62   1 . .
ATOM 3593 CB    CB    . ALA ALA ALA B B 32  32  . 70.635  106.358 10.415  1.00
2.66   1 . .
ATOM 3594 C     C     . ALA ALA ALA B B 32  32  . 72.323  107.147 12.080  1.00
2.54   1 . .
ATOM 3595 O     O     . ALA ALA ALA B B 32  32  . 71.909  107.893 12.963  1.00
3.22   1 . .
ATOM 3596 N     N     . ALA ALA ALA B B 33  33  . 73.446  107.374 11.417  1.00
3.81   1 . .
ATOM 3597 CA    CA    . ALA ALA ALA B B 33  33  . 74.319  108.497 11.734  1.00
2.71   1 . .
ATOM 3598 CB    CB    . ALA ALA ALA B B 33  33  . 75.599  108.094 12.566  1.00
3.48   1 . .
ATOM 3599 C     C     . ALA ALA ALA B B 33  33  . 74.786  109.239 10.480  1.00
3.55   1 . .
ATOM 3600 O     O     . ALA ALA ALA B B 33  33  . 74.765  108.668 9.391   1.00
2.72   1 . .
ATOM 3601 N     N     . VAL VAL VAL B B 34  34  . 75.189  110.478 10.677  1.00
2.69   1 . .
ATOM 3602 CA    CA    . VAL VAL VAL B B 34  34  . 75.513  111.406 9.567   1.00
2.80   1 . .
ATOM 3603 CB    CB    . VAL VAL VAL B B 34  34  . 74.769  112.765 9.836   1.00
2.57   1 . .
ATOM 3604 CG1   CG1   . VAL VAL VAL B B 34  34  . 75.073  113.776 8.670   1.00
3.55   1 . .
ATOM 3605 CG2   CG2   . VAL VAL VAL B B 34  34  . 73.293  112.467 9.847   1.00
2.89   1 . .
ATOM 3606 C     C     . VAL VAL VAL B B 34  34  . 77.008  111.677 9.469   1.00
2.08   1 . .
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ATOM 3607 O     O     . VAL VAL VAL B B 34  34  . 77.666  111.932 10.439  1.00
3.45   1 . .
ATOM 3608 N     N     . PRO PRO PRO B B 35  35  . 77.588  111.568 8.246   1.00
2.00   1 . .
ATOM 3609 CA    CA    . PRO PRO PRO B B 35  35  . 79.027  111.799 8.092   1.00
2.23   1 . .
ATOM 3610 CB    CB    . PRO PRO PRO B B 35  35  . 79.361  111.057 6.800   1.00
3.44   1 . .
ATOM 3611 CG    CG    . PRO PRO PRO B B 35  35  . 78.124  111.199 5.993   1.00
2.11   1 . .
ATOM 3612 CD    CD    . PRO PRO PRO B B 35  35  . 76.912  111.260 6.975   1.00
2.43   1 . .
ATOM 3613 C     C     . PRO PRO PRO B B 35  35  . 79.315  113.332 7.943   1.00
2.15   1 . .
ATOM 3614 O     O     . PRO PRO PRO B B 35  35  . 78.379  114.136 7.897   1.00
3.59   1 . .
ATOM 3615 N     N     . SER SER SER B B 36  36  . 80.582  113.732 7.856   1.00
2.94   1 . .
ATOM 3616 CA    CA    . SER SER SER B B 36  36  . 80.946  115.127 7.740   1.00
2.55   1 . .
ATOM 3617 CB    CB    . SER SER SER B B 36  36  . 81.176  115.733 9.139   1.00
3.21   1 . .
ATOM 3618 OG    OG    . SER SER SER B B 36  36  . 81.615  117.029 9.027   1.00
5.51   1 . .
ATOM 3619 C     C     . SER SER SER B B 36  36  . 82.208  115.242 6.934   1.00
2.96   1 . .
ATOM 3620 O     O     . SER SER SER B B 36  36  . 83.225  114.562 7.246   1.00
3.76   1 . .
ATOM 3621 N     N     . GLY GLY GLY B B 37  37  . 82.202  116.122 5.922   1.00
2.83   1 . .
ATOM 3622 CA    CA    . GLY GLY GLY B B 37  37  . 83.383  116.355 5.082   1.00
3.19   1 . .
ATOM 3623 C     C     . GLY GLY GLY B B 37  37  . 84.352  117.365 5.639   1.00
2.02   1 . .
ATOM 3624 O     O     . GLY GLY GLY B B 37  37  . 83.986  118.121 6.581   1.00
3.71   1 . .
ATOM 3625 N     N     . ALA ALA ALA B B 38  38  . 85.602  117.321 5.106   1.00
2.63   1 . .
ATOM 3626 CA    CA    . ALA ALA ALA B B 38  38  . 86.613  118.302 5.328   1.00
2.28   1 . .
ATOM 3627 CB    CB    . ALA ALA ALA B B 38  38  . 87.891  117.729 5.750   1.00
2.34   1 . .
ATOM 3628 C     C     . ALA ALA ALA B B 38  38  . 86.789  119.201 4.109   1.00
3.28   1 . .
ATOM 3629 O     O     . ALA ALA ALA B B 38  38  . 86.653  120.462 4.194   1.00
5.89   1 . .
ATOM 3630 N     N     . SER SER SER B B 39  39  . 87.028  118.565 2.970   1.00
3.16   1 . .
ATOM 3631 CA    CA    . SER SER SER B B 39  39  . 87.084  119.379 1.787   1.00
2.51   1 . .
ATOM 3632 CB    CB    . SER SER SER B B 39  39  . 87.973  118.782 0.726   1.00
3.28   1 . .
ATOM 3633 OG    OG    . SER SER SER B B 39  39  . 87.571  117.459 0.410   1.00
3.78   1 . .
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ATOM 3634 C     C     . SER SER SER B B 39  39  . 85.656  119.564 1.270   1.00
3.85   1 . .
ATOM 3635 O     O     . SER SER SER B B 39  39  . 85.296  118.958 0.275   1.00
3.72   1 . .
ATOM 3636 N     N     . THR THR THR B B 40  40  . 84.830  120.395 1.931   1.00
2.33   1 . .
ATOM 3637 CA    CA    . THR THR THR B B 40  40  . 83.393  120.517 1.590   1.00
4.13   1 . .
ATOM 3638 CB    CB    . THR THR THR B B 40  40  . 82.582  120.948 2.842   1.00
2.96   1 . .
ATOM 3639 OG1   OG1   . THR THR THR B B 40  40  . 83.259  122.020 3.537   1.00
5.01   1 . .
ATOM 3640 CG2   CG2   . THR THR THR B B 40  40  . 82.363  119.774 3.771   1.00
3.38   1 . .
ATOM 3641 C     C     . THR THR THR B B 40  40  . 83.231  121.597 0.489   1.00
3.50   1 . .
ATOM 3642 O     O     . THR THR THR B B 40  40  . 83.806  122.710 0.616   1.00
4.41   1 . .
ATOM 3643 N     N     . GLY GLY GLY B B 41  41  . 82.434  121.296 -0.532  1.00
3.44   1 . .
ATOM 3644 CA    CA    . GLY GLY GLY B B 41  41  . 82.175  122.272 -1.615  1.00
2.94   1 . .
ATOM 3645 C     C     . GLY GLY GLY B B 41  41  . 81.331  123.417 -1.111  1.00
2.68   1 . .
ATOM 3646 O     O     . GLY GLY GLY B B 41  41  . 80.459  123.240 -0.246  1.00
3.46   1 . .
ATOM 3647 N     N     . ILE ILE ILE B B 42  42  . 81.506  124.578 -1.753  1.00
2.99   1 . .
ATOM 3648 CA    CA    . ILE ILE ILE B B 42  42  . 80.670  125.738 -1.313  1.00
2.88   1 . .
ATOM 3649 CB    CB    . ILE ILE ILE B B 42  42  . 81.085  127.111 -1.940  1.00
3.71   1 . .
ATOM 3650 CG1   CG1   . ILE ILE ILE B B 42  42  . 80.940  127.028 -3.477  1.00
5.26   1 . .
ATOM 3651 CD1   CD1   . ILE ILE ILE B B 42  42  . 81.150  128.357 -4.211  1.00
7.68   1 . .
ATOM 3652 CG2   CG2   . ILE ILE ILE B B 42  42  . 82.467  127.452 -1.501  1.00
6.53   1 . .
ATOM 3653 C     C     . ILE ILE ILE B B 42  42  . 79.169  125.584 -1.527  1.00
3.22   1 . .
ATOM 3654 O     O     . ILE ILE ILE B B 42  42  . 78.360  126.272 -0.875  1.00
5.29   1 . .
ATOM 3655 N     N     . TYR TYR TYR B B 43  43  . 78.759  124.661 -2.367  1.00
2.31   1 . .
ATOM 3656 CA    CA    . TYR TYR TYR B B 43  43  . 77.404  124.478 -2.706  1.00
2.90   1 . .
ATOM 3657 CB    CB    . TYR TYR TYR B B 43  43  . 77.283  124.244 -4.256  1.00
3.39   1 . .
ATOM 3658 CG    CG    . TYR TYR TYR B B 43  43  . 77.702  125.455 -5.049  1.00
4.11   1 . .
ATOM 3659 CD1   CD1   . TYR TYR TYR B B 43  43  . 78.828  125.393 -5.894  1.00
5.69   1 . .
ATOM 3660 CE1   CE1   . TYR TYR TYR B B 43  43  . 79.280  126.486 -6.649  1.00
2.27   1 . .
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ATOM 3661 CZ    CZ    . TYR TYR TYR B B 43  43  . 78.593  127.702 -6.508  1.00
5.23   1 . .
ATOM 3662 OH    OH    . TYR TYR TYR B B 43  43  . 79.017  128.822 -7.183  1.00
6.51   1 . .
ATOM 3663 CE2   CE2   . TYR TYR TYR B B 43  43  . 77.507  127.812 -5.623  1.00
4.91   1 . .
ATOM 3664 CD2   CD2   . TYR TYR TYR B B 43  43  . 77.043  126.713 -4.909  1.00
4.59   1 . .
ATOM 3665 C     C     . TYR TYR TYR B B 43  43  . 76.710  123.355 -1.957  1.00
2.51   1 . .
ATOM 3666 O     O     . TYR TYR TYR B B 43  43  . 75.519  123.082 -2.211  1.00
3.45   1 . .
ATOM 3667 N     N     . GLU GLU GLU B B 44  44  . 77.409  122.717 -1.021  1.00
3.84   1 . .
ATOM 3668 CA    CA    . GLU GLU GLU B B 44  44  . 76.799  121.614 -0.214  1.00
3.13   1 . .
ATOM 3669 CB    CB    . GLU GLU GLU B B 44  44  . 77.864  120.931 0.672   1.00
3.43   1 . .
ATOM 3670 CG    CG    . GLU GLU GLU B B 44  44  . 78.876  120.169 -0.162  1.00
3.75   1 . .
ATOM 3671 CD    CD    . GLU GLU GLU B B 44  44  . 79.819  119.265 0.630   1.00
3.83   1 . .
ATOM 3672 OE1   OE1   . GLU GLU GLU B B 44  44  . 79.498  118.881 1.789   1.00
2.64   1 . .
ATOM 3673 OE2   OE2   . GLU GLU GLU B B 44  44  . 80.924  118.902 0.116   1.00
5.31   1 . .
ATOM 3674 C     C     . GLU GLU GLU B B 44  44  . 75.716  122.154 0.681   1.00
2.45   1 . .
ATOM 3675 O     O     . GLU GLU GLU B B 44  44  . 75.808  123.325 1.112   1.00
3.84   1 . .
ATOM 3676 N     N     . ALA ALA ALA B B 45  45  . 74.677  121.395 0.931   1.00
3.91   1 . .
ATOM 3677 CA    CA    . ALA ALA ALA B B 45  45  . 73.723  121.814 1.893   1.00
3.33   1 . .
ATOM 3678 CB    CB    . ALA ALA ALA B B 45  45  . 72.707  120.734 2.040   1.00
4.05   1 . .
ATOM 3679 C     C     . ALA ALA ALA B B 45  45  . 74.334  122.067 3.259   1.00
4.19   1 . .
ATOM 3680 O     O     . ALA ALA ALA B B 45  45  . 75.407  121.559 3.549   1.00
4.87   1 . .
ATOM 3681 N     N     . LEU LEU LEU B B 46  46  . 73.653  122.869 4.090   1.00
4.51   1 . .
ATOM 3682 CA    CA    . LEU LEU LEU B B 46  46  . 74.361  123.330 5.265   1.00
3.42   1 . .
ATOM 3683 CB    CB    . LEU LEU LEU B B 46  46  . 73.652  124.554 5.871   1.00
6.54   1 . .
ATOM 3684 CG    CG    . LEU LEU LEU B B 46  46  . 74.229  125.005 7.236   1.00
10.94  1 . .
ATOM 3685 CD1   CD1   . LEU LEU LEU B B 46  46  . 75.650  125.479 6.955   1.00
14.81  1 . .
ATOM 3686 CD2   CD2   . LEU LEU LEU B B 46  46  . 73.401  126.062 7.924   1.00
16.98  1 . .
ATOM 3687 C     C     . LEU LEU LEU B B 46  46  . 74.496  122.301 6.320   1.00
3.64   1 . .
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ATOM 3688 O     O     . LEU LEU LEU B B 46  46  . 73.507  121.775 6.742   1.00
6.21   1 . .
ATOM 3689 N     N     . GLU GLU GLU B B 47  47  . 75.702  122.204 6.853   1.00
4.41   1 . .
ATOM 3690 CA    CA    . GLU GLU GLU B B 47  47  . 75.956  121.328 8.019   1.00
4.33   1 . .
ATOM 3691 CB    CB    . GLU GLU GLU B B 47  47  . 77.365  120.776 7.858   1.00
3.29   1 . .
ATOM 3692 CG    CG    . GLU GLU GLU B B 47  47  . 77.926  120.103 9.111   1.00
3.55   1 . .
ATOM 3693 CD    CD    . GLU GLU GLU B B 47  47  . 79.348  119.562 8.918   1.00
3.18   1 . .
ATOM 3694 OE1   OE1   . GLU GLU GLU B B 47  47  . 79.430  118.405 8.369   1.00
8.70   1 . .
ATOM 3695 OE2   OE2   . GLU GLU GLU B B 47  47  . 80.360  120.153 9.335   1.00
6.85   1 . .
ATOM 3696 C     C     . GLU GLU GLU B B 47  47  . 75.862  122.254 9.198   1.00
6.17   1 . .
ATOM 3697 O     O     . GLU GLU GLU B B 47  47  . 76.703  123.094 9.323   1.00
7.10   1 . .
ATOM 3698 N     N     . LEU LEU LEU B B 48  48  . 74.880  122.059 10.090  1.00
4.44   1 . .
ATOM 3699 CA    CA    . LEU LEU LEU B B 48  48  . 74.639  123.034 11.187  1.00
3.34   1 . .
ATOM 3700 CB    CB    . LEU LEU LEU B B 48  48  . 73.163  123.049 11.620  1.00
4.39   1 . .
ATOM 3701 CG    CG    . LEU LEU LEU B B 48  48  . 72.853  123.991 12.793  1.00
4.52   1 . .
ATOM 3702 CD1   CD1   . LEU LEU LEU B B 48  48  . 73.221  125.446 12.329  1.00
4.84   1 . .
ATOM 3703 CD2   CD2   . LEU LEU LEU B B 48  48  . 71.393  123.936 13.121  1.00
6.73   1 . .
ATOM 3704 C     C     . LEU LEU LEU B B 48  48  . 75.516  122.636 12.384  1.00
3.47   1 . .
ATOM 3705 O     O     . LEU LEU LEU B B 48  48  . 75.341  121.515 12.892  1.00
3.37   1 . .
ATOM 3706 N     N     . ARG ARG ARG B B 49  49  . 76.463  123.515 12.748  1.00
5.47   1 . .
ATOM 3707 CA    CA    . ARG ARG ARG B B 49  49  . 77.296  123.364 13.910  1.00
7.14   1 . .
ATOM 3708 CB    CB    . ARG ARG ARG B B 49  49  . 78.769  123.575 13.551  1.00
8.77   1 . .
ATOM 3709 CG    CG    . ARG ARG ARG B B 49  49  . 79.344  122.552 12.566  1.00
11.83  1 . .
ATOM 3710 CD    CD    . ARG ARG ARG B B 49  49  . 79.850  121.322 13.250  1.00
9.86   1 . .
ATOM 3711 NE    NE    . ARG ARG ARG B B 49  49  . 80.361  120.304 12.335  1.00
9.96   1 . .
ATOM 3712 CZ    CZ    . ARG ARG ARG B B 49  49  . 80.594  119.031 12.668  1.00
6.77   1 . .
ATOM 3713 NH1   NH1   . ARG ARG ARG B B 49  49  . 80.467  118.623 13.932  1.00
5.76   1 . .
ATOM 3714 NH2   NH2   . ARG ARG ARG B B 49  49  . 80.985  118.158 11.763  1.00
6.45   1 . .
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ATOM 3715 C     C     . ARG ARG ARG B B 49  49  . 76.887  124.430 14.930  1.00
6.51   1 . .
ATOM 3716 O     O     . ARG ARG ARG B B 49  49  . 76.342  125.513 14.573  1.00
7.91   1 . .
ATOM 3717 N     N     . ASP ASP ASP B B 50  50  . 77.176  124.155 16.197  1.00
4.93   1 . .
ATOM 3718 CA    CA    . ASP ASP ASP B B 50  50  . 76.749  125.082 17.262  1.00
6.95   1 . .
ATOM 3719 CB    CB    . ASP ASP ASP B B 50  50  . 76.836  124.362 18.595  1.00
5.11   1 . .
ATOM 3720 CG    CG    . ASP ASP ASP B B 50  50  . 75.896  123.183 18.718  1.00
6.14   1 . .
ATOM 3721 OD1   OD1   . ASP ASP ASP B B 50  50  . 74.906  122.963 17.924  1.00
4.35   1 . .
ATOM 3722 OD2   OD2   . ASP ASP ASP B B 50  50  . 76.168  122.366 19.627  1.00
5.22   1 . .
ATOM 3723 C     C     . ASP ASP ASP B B 50  50  . 77.551  126.353 17.380  1.00
8.18   1 . .
ATOM 3724 O     O     . ASP ASP ASP B B 50  50  . 76.980  127.392 17.832  1.00
9.65   1 . .
ATOM 3725 N     N     . GLY GLY GLY B B 51  51  . 78.843  126.229 17.102  1.00
7.80   1 . .
ATOM 3726 CA    CA    . GLY GLY GLY B B 51  51  . 79.839  127.328 17.141  1.00
9.83   1 . .
ATOM 3727 C     C     . GLY GLY GLY B B 51  51  . 80.077  127.845 18.551  1.00
12.20  1 . .
ATOM 3728 O     O     . GLY GLY GLY B B 51  51  . 80.369  129.015 18.757  1.00
12.17  1 . .
ATOM 3729 N     N     . ASP ASP ASP B B 52  52  . 79.948  126.984 19.550  1.00
11.64  1 . .
ATOM 3730 CA    CA    . ASP ASP ASP B B 52  52  . 80.238  127.374 20.893  1.00
12.70  1 . .
ATOM 3731 CB    CB    . ASP ASP ASP B B 52  52  . 79.356  126.602 21.864  1.00
13.01  1 . .
ATOM 3732 CG    CG    . ASP ASP ASP B B 52  52  . 79.769  126.784 23.312  1.00
13.06  1 . .
ATOM 3733 OD1   OD1   . ASP ASP ASP B B 52  52  . 80.786  127.455 23.512  1.00
11.45  1 . .
ATOM 3734 OD2   OD2   . ASP ASP ASP B B 52  52  . 79.129  126.187 24.193  1.00
10.77  1 . .
ATOM 3735 C     C     . ASP ASP ASP B B 52  52  . 81.727  127.106 21.013  1.00
13.41  1 . .
ATOM 3736 O     O     . ASP ASP ASP B B 52  52  . 82.194  125.937 21.088  1.00
14.12  1 . .
ATOM 3737 N     N     . LYS LYS LYS B B 53  53  . 82.493  128.192 21.005  1.00
15.33  1 . .
ATOM 3738 CA    CA    . LYS LYS LYS B B 53  53  . 83.934  128.099 20.881  1.00
16.69  1 . .
ATOM 3739 CB    CB    . LYS LYS LYS B B 53  53  . 84.538  129.510 20.947  1.00
17.29  1 . .
ATOM 3740 CG    CG    . LYS LYS LYS B B 53  53  . 84.153  130.468 19.798  1.00
20.71  1 . .
ATOM 3741 CD    CD    . LYS LYS LYS B B 53  53  . 85.367  130.784 18.936  1.00
24.48  1 . .
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ATOM 3742 CE    CE    . LYS LYS LYS B B 53  53  . 84.961  131.450 17.609  1.00
27.75  1 . .
ATOM 3743 NZ    NZ    . LYS LYS LYS B B 53  53  . 85.146  132.921 17.582  1.00
29.74  1 . .
ATOM 3744 C     C     . LYS LYS LYS B B 53  53  . 84.541  127.221 21.971  1.00
16.01  1 . .
ATOM 3745 O     O     . LYS LYS LYS B B 53  53  . 85.613  126.650 21.767  1.00
15.93  1 . .
ATOM 3746 N     N     . GLN GLN GLN B B 54  54  . 83.841  127.116 23.104  1.00
16.01  1 . .
ATOM 3747 CA    CA    . GLN GLN GLN B B 54  54  . 84.375  126.493 24.316  1.00
15.75  1 . .
ATOM 3748 CB    CB    . GLN GLN GLN B B 54  54  . 83.731  127.140 25.533  1.00
17.31  1 . .
ATOM 3749 CG    CG    . GLN GLN GLN B B 54  54  . 83.857  128.658 25.668  1.00
22.26  1 . .
ATOM 3750 CD    CD    . GLN GLN GLN B B 54  54  . 85.240  129.167 25.347  1.00
25.97  1 . .
ATOM 3751 OE1   OE1   . GLN GLN GLN B B 54  54  . 86.252  128.619 25.806  1.00
27.97  1 . .
ATOM 3752 NE2   NE2   . GLN GLN GLN B B 54  54  . 85.295  130.232 24.536  1.00
28.25  1 . .
ATOM 3753 C     C     . GLN GLN GLN B B 54  54  . 84.044  124.994 24.406  1.00
14.58  1 . .
ATOM 3754 O     O     . GLN GLN GLN B B 54  54  . 84.566  124.265 25.246  1.00
14.92  1 . .
ATOM 3755 N     N     . ARG ARG ARG B B 55  55  . 83.167  124.553 23.510  1.00
12.35  1 . .
ATOM 3756 CA    CA    . ARG ARG ARG B B 55  55  . 82.642  123.181 23.549  1.00
8.99   1 . .
ATOM 3757 CB    CB    . ARG ARG ARG B B 55  55  . 81.143  123.169 23.748  1.00
9.25   1 . .
ATOM 3758 CG    CG    . ARG ARG ARG B B 55  55  . 80.662  121.822 24.143  1.00
10.22  1 . .
ATOM 3759 CD    CD    . ARG ARG ARG B B 55  55  . 79.174  121.769 24.526  1.00
9.26   1 . .
ATOM 3760 NE    NE    . ARG ARG ARG B B 55  55  . 78.822  120.342 24.655  1.00
8.17   1 . .
ATOM 3761 CZ    CZ    . ARG ARG ARG B B 55  55  . 78.484  119.506 23.642  1.00
7.73   1 . .
ATOM 3762 NH1   NH1   . ARG ARG ARG B B 55  55  . 78.320  119.963 22.411  1.00
6.31   1 . .
ATOM 3763 NH2   NH2   . ARG ARG ARG B B 55  55  . 78.237  118.217 23.890  1.00
9.09   1 . .
ATOM 3764 C     C     . ARG ARG ARG B B 55  55  . 82.937  122.431 22.263  1.00
6.28   1 . .
ATOM 3765 O     O     . ARG ARG ARG B B 55  55  . 82.316  122.730 21.217  1.00
7.69   1 . .
ATOM 3766 N     N     . TYR TYR TYR B B 56  56  . 83.853  121.448 22.338  1.00
6.29   1 . .
ATOM 3767 CA    CA    . TYR TYR TYR B B 56  56  . 84.241  120.732 21.149  1.00
5.76   1 . .
ATOM 3768 CB    CB    . TYR TYR TYR B B 56  56  . 83.031  119.975 20.615  1.00
3.82   1 . .
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ATOM 3769 CG    CG    . TYR TYR TYR B B 56  56  . 82.825  118.632 21.302  1.00
3.43   1 . .
ATOM 3770 CD1   CD1   . TYR TYR TYR B B 56  56  . 81.689  118.380 22.057  1.00
3.00   1 . .
ATOM 3771 CE1   CE1   . TYR TYR TYR B B 56  56  . 81.460  117.095 22.672  1.00
4.64   1 . .
ATOM 3772 CZ    CZ    . TYR TYR TYR B B 56  56  . 82.427  116.084 22.538  1.00
2.61   1 . .
ATOM 3773 OH    OH    . TYR TYR TYR B B 56  56  . 82.159  114.837 23.116  1.00
6.28   1 . .
ATOM 3774 CE2   CE2   . TYR TYR TYR B B 56  56  . 83.553  116.280 21.738  1.00
3.40   1 . .
ATOM 3775 CD2   CD2   . TYR TYR TYR B B 56  56  . 83.782  117.569 21.135  1.00
3.10   1 . .
ATOM 3776 C     C     . TYR TYR TYR B B 56  56  . 84.802  121.632 20.068  1.00
6.89   1 . .
ATOM 3777 O     O     . TYR TYR TYR B B 56  56  . 84.551  121.398 18.861  1.00
7.07   1 . .
ATOM 3778 N     N     . LEU LEU LEU B B 57  57  . 85.520  122.681 20.491  1.00
8.56   1 . .
ATOM 3779 CA    CA    . LEU LEU LEU B B 57  57  . 86.115  123.639 19.541  1.00
8.66   1 . .
ATOM 3780 CB    CB    . LEU LEU LEU B B 57  57  . 87.346  123.040 18.821  1.00
10.00  1 . .
ATOM 3781 CG    CG    . LEU LEU LEU B B 57  57  . 88.591  122.696 19.682  1.00
12.26  1 . .
ATOM 3782 CD1   CD1   . LEU LEU LEU B B 57  57  . 88.406  121.396 20.466  1.00
13.08  1 . .
ATOM 3783 CD2   CD2   . LEU LEU LEU B B 57  57  . 89.811  122.484 18.825  1.00
13.10  1 . .
ATOM 3784 C     C     . LEU LEU LEU B B 57  57  . 85.078  124.198 18.541  1.00
9.03   1 . .
ATOM 3785 O     O     . LEU LEU LEU B B 57  57  . 85.385  124.392 17.342  1.00
10.00  1 . .
ATOM 3786 N     N     . GLY GLY GLY B B 58  58  . 83.840  124.417 19.004  1.00
8.04   1 . .
ATOM 3787 CA    CA    . GLY GLY GLY B B 58  58  . 82.750  125.022 18.137  1.00
7.33   1 . .
ATOM 3788 C     C     . GLY GLY GLY B B 58  58  . 82.011  124.040 17.239  1.00
8.15   1 . .
ATOM 3789 O     O     . GLY GLY GLY B B 58  58  . 81.157  124.468 16.449  1.00
7.99   1 . .
ATOM 3790 N     N     . LYS LYS LYS B B 59  59  . 82.338  122.742 17.354  1.00
6.41   1 . .
ATOM 3791 CA    CA    . LYS LYS LYS B B 59  59  . 81.781  121.653 16.480  1.00
5.67   1 . .
ATOM 3792 CB    CB    . LYS LYS LYS B B 59  59  . 82.958  120.806 16.003  1.00
7.85   1 . .
ATOM 3793 CG    CG    . LYS LYS LYS B B 59  59  . 84.002  121.649 15.215  1.00
10.73  1 . .
ATOM 3794 CD    CD    . LYS LYS LYS B B 59  59  . 85.167  120.777 14.751  1.00
18.63  1 . .
ATOM 3795 CE    CE    . LYS LYS LYS B B 59  59  . 86.053  121.534 13.820  1.00
19.56  1 . .
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ATOM 3796 NZ    NZ    . LYS LYS LYS B B 59  59  . 87.106  120.684 13.205  1.00
22.44  1 . .
ATOM 3797 C     C     . LYS LYS LYS B B 59  59  . 80.618  120.838 17.013  1.00
5.21   1 . .
ATOM 3798 O     O     . LYS LYS LYS B B 59  59  . 80.177  119.803 16.401  1.00
4.59   1 . .
ATOM 3799 N     N     . GLY GLY GLY B B 60  60  . 80.041  121.245 18.139  1.00
4.51   1 . .
ATOM 3800 CA    CA    . GLY GLY GLY B B 60  60  . 78.916  120.513 18.706  1.00
3.70   1 . .
ATOM 3801 C     C     . GLY GLY GLY B B 60  60  . 77.768  120.531 17.737  1.00
4.56   1 . .
ATOM 3802 O     O     . GLY GLY GLY B B 60  60  . 77.708  121.437 16.816  1.00
5.34   1 . .
ATOM 3803 N     N     . VAL VAL VAL B B 61  61  . 76.881  119.545 17.861  1.00
3.60   1 . .
ATOM 3804 CA    CA    . VAL VAL VAL B B 61  61  . 75.669  119.515 17.052  1.00
4.46   1 . .
ATOM 3805 CB    CB    . VAL VAL VAL B B 61  61  . 75.714  118.429 15.916  1.00
3.93   1 . .
ATOM 3806 CG1   CG1   . VAL VAL VAL B B 61  61  . 76.883  118.725 15.017  1.00
4.65   1 . .
ATOM 3807 CG2   CG2   . VAL VAL VAL B B 61  61  . 75.822  117.008 16.540  1.00
4.58   1 . .
ATOM 3808 C     C     . VAL VAL VAL B B 61  61  . 74.436  119.483 17.905  1.00
3.11   1 . .
ATOM 3809 O     O     . VAL VAL VAL B B 61  61  . 73.434  118.928 17.514  1.00
3.83   1 . .
ATOM 3810 N     N     . LEU LEU LEU B B 62  62  . 74.487  120.197 19.026  1.00
6.17   1 . .
ATOM 3811 CA    CA    . LEU LEU LEU B B 62  62  . 73.348  120.236 19.912  1.00
6.00   1 . .
ATOM 3812 CB    CB    . LEU LEU LEU B B 62  62  . 73.708  120.923 21.244  1.00
7.11   1 . .
ATOM 3813 CG    CG    . LEU LEU LEU B B 62  62  . 74.794  120.234 22.083  1.00
8.57   1 . .
ATOM 3814 CD1   CD1   . LEU LEU LEU B B 62  62  . 74.958  121.086 23.362  1.00
12.66  1 . .
ATOM 3815 CD2   CD2   . LEU LEU LEU B B 62  62  . 74.423  118.806 22.381  1.00
10.45  1 . .
ATOM 3816 C     C     . LEU LEU LEU B B 62  62  . 72.142  120.909 19.277  1.00
3.92   1 . .
ATOM 3817 O     O     . LEU LEU LEU B B 62  62  . 70.992  120.476 19.455  1.00
4.59   1 . .
ATOM 3818 N     N     . LYS LYS LYS B B 63  63  . 72.397  121.900 18.448  1.00
4.64   1 . .
ATOM 3819 CA    CA    . LYS LYS LYS B B 63  63  . 71.270  122.558 17.752  1.00
4.62   1 . .
ATOM 3820 CB    CB    . LYS LYS LYS B B 63  63  . 71.747  123.866 17.124  1.00
5.87   1 . .
ATOM 3821 CG    CG    . LYS LYS LYS B B 63  63  . 72.304  124.808 18.109  1.00
8.79   1 . .
ATOM 3822 CD    CD    . LYS LYS LYS B B 63  63  . 72.611  126.160 17.456  1.00
11.81  1 . .
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ATOM 3823 CE    CE    . LYS LYS LYS B B 63  63  . 73.477  126.992 18.431  1.00
14.12  1 . .
ATOM 3824 NZ    NZ    . LYS LYS LYS B B 63  63  . 73.994  128.289 17.936  1.00
14.85  1 . .
ATOM 3825 C     C     . LYS LYS LYS B B 63  63  . 70.575  121.700 16.749  1.00
4.30   1 . .
ATOM 3826 O     O     . LYS LYS LYS B B 63  63  . 69.319  121.649 16.713  1.00
6.21   1 . .
ATOM 3827 N     N     . ALA ALA ALA B B 64  64  . 71.349  120.929 15.971  1.00
3.32   1 . .
ATOM 3828 CA    CA    . ALA ALA ALA B B 64  64  . 70.760  119.982 15.045  1.00
4.33   1 . .
ATOM 3829 CB    CB    . ALA ALA ALA B B 64  64  . 71.850  119.366 14.057  1.00
4.87   1 . .
ATOM 3830 C     C     . ALA ALA ALA B B 64  64  . 69.965  118.901 15.787  1.00
4.66   1 . .
ATOM 3831 O     O     . ALA ALA ALA B B 64  64  . 68.862  118.543 15.424  1.00
6.83   1 . .
ATOM 3832 N     N     . VAL VAL VAL B B 65  65  . 70.522  118.437 16.895  1.00
4.60   1 . .
ATOM 3833 CA    CA    . VAL VAL VAL B B 65  65  . 69.836  117.393 17.664  1.00
6.46   1 . .
ATOM 3834 CB    CB    . VAL VAL VAL B B 65  65  . 70.697  116.922 18.834  1.00
7.03   1 . .
ATOM 3835 CG1   CG1   . VAL VAL VAL B B 65  65  . 69.919  116.142 19.815  1.00
5.76   1 . .
ATOM 3836 CG2   CG2   . VAL VAL VAL B B 65  65  . 71.877  116.090 18.328  1.00
5.06   1 . .
ATOM 3837 C     C     . VAL VAL VAL B B 65  65  . 68.511  117.974 18.120  1.00
6.41   1 . .
ATOM 3838 O     O     . VAL VAL VAL B B 65  65  . 67.503  117.311 18.015  1.00
8.39   1 . .
ATOM 3839 N     N     . ASP ASP ASP B B 66  66  . 68.508  119.215 18.620  1.00
7.31   1 . .
ATOM 3840 CA    CA    . ASP ASP ASP B B 66  66  . 67.286  119.809 19.182  1.00
7.34   1 . .
ATOM 3841 CB    CB    . ASP ASP ASP B B 66  66  . 67.596  121.107 19.894  1.00
8.46   1 . .
ATOM 3842 CG    CG    . ASP ASP ASP B B 66  66  . 66.329  121.759 20.447  1.00
14.26  1 . .
ATOM 3843 OD1   OD1   . ASP ASP ASP B B 66  66  . 65.924  122.882 19.993  1.00
20.93  1 . .
ATOM 3844 OD2   OD2   . ASP ASP ASP B B 66  66  . 65.682  121.077 21.261  1.00
16.67  1 . .
ATOM 3845 C     C     . ASP ASP ASP B B 66  66  . 66.223  120.005 18.080  1.00
6.32   1 . .
ATOM 3846 O     O     . ASP ASP ASP B B 66  66  . 64.999  119.866 18.315  1.00
6.08   1 . .
ATOM 3847 N     N     . HIS HIS HIS B B 67  67  . 66.678  120.363 16.885  1.00
6.25   1 . .
ATOM 3848 CA    CA    . HIS HIS HIS B B 67  67  . 65.703  120.514 15.807  1.00
6.37   1 . .
ATOM 3849 CB    CB    . HIS HIS HIS B B 67  67  . 66.326  121.043 14.514  1.00
8.01   1 . .
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ATOM 3850 CG    CG    . HIS HIS HIS B B 67  67  . 66.787  122.466 14.566  1.00
4.87   1 . .
ATOM 3851 ND1   ND1   . HIS HIS HIS B B 67  67  . 65.959  123.515 14.936  1.00
9.14   1 . .
ATOM 3852 CE1   CE1   . HIS HIS HIS B B 67  67  . 66.634  124.643 14.877  1.00
8.83   1 . .
ATOM 3853 NE2   NE2   . HIS HIS HIS B B 67  67  . 67.864  124.391 14.459  1.00
7.72   1 . .
ATOM 3854 CD2   CD2   . HIS HIS HIS B B 67  67  . 67.987  123.032 14.264  1.00
5.75   1 . .
ATOM 3855 C     C     . HIS HIS HIS B B 67  67  . 64.998  119.192 15.517  1.00
6.45   1 . .
ATOM 3856 O     O     . HIS HIS HIS B B 67  67  . 63.785  119.138 15.272  1.00
7.38   1 . .
ATOM 3857 N     N     . ILE ILE ILE B B 68  68  . 65.721  118.080 15.610  1.00
5.50   1 . .
ATOM 3858 CA    CA    . ILE ILE ILE B B 68  68  . 65.044  116.797 15.411  1.00
4.45   1 . .
ATOM 3859 CB    CB    . ILE ILE ILE B B 68  68  . 66.072  115.627 15.312  1.00
2.87   1 . .
ATOM 3860 CG1   CG1   . ILE ILE ILE B B 68  68  . 66.859  115.744 14.011  1.00
3.60   1 . .
ATOM 3861 CD1   CD1   . ILE ILE ILE B B 68  68  . 68.230  115.026 14.066  1.00
6.33   1 . .
ATOM 3862 CG2   CG2   . ILE ILE ILE B B 68  68  . 65.365  114.331 15.385  1.00
4.27   1 . .
ATOM 3863 C     C     . ILE ILE ILE B B 68  68  . 64.101  116.512 16.565  1.00
6.09   1 . .
ATOM 3864 O     O     . ILE ILE ILE B B 68  68  . 62.958  116.312 16.387  1.00
7.89   1 . .
ATOM 3865 N     N     . ASN ASN ASN B B 69  69  . 64.611  116.516 17.760  1.00
8.74   1 . .
ATOM 3866 CA    CA    . ASN ASN ASN B B 69  69  . 63.857  116.148 18.929  1.00
8.99   1 . .
ATOM 3867 CB    CB    . ASN ASN ASN B B 69  69  . 64.774  116.107 20.162  1.00
6.64   1 . .
ATOM 3868 CG    CG    . ASN ASN ASN B B 69  69  . 65.758  114.946 20.147  1.00
7.27   1 . .
ATOM 3869 OD1   OD1   . ASN ASN ASN B B 69  69  . 65.522  113.963 19.506  1.00
6.41   1 . .
ATOM 3870 ND2   ND2   . ASN ASN ASN B B 69  69  . 66.848  115.070 20.877  1.00
5.43   1 . .
ATOM 3871 C     C     . ASN ASN ASN B B 69  69  . 62.676  117.064 19.225  1.00
9.81   1 . .
ATOM 3872 O     O     . ASN ASN ASN B B 69  69  . 61.619  116.601 19.700  1.00
10.37  1 . .
ATOM 3873 N     N     . SER SER SER B B 70  70  . 62.830  118.351 18.915  1.00
11.78  1 . .
ATOM 3874 CA    CA    . SER SER SER B B 70  70  . 61.828  119.334 19.363  1.00
11.69  1 . .
ATOM 3875 CB    CB    . SER SER SER B B 70  70  . 62.516  120.545 19.979  1.00
13.51  1 . .
ATOM 3876 OG    OG    . SER SER SER B B 70  70  . 63.271  120.201 21.134  1.00
15.80  1 . .
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ATOM 3877 C     C     . SER SER SER B B 70  70  . 60.856  119.722 18.269  1.00
12.13  1 . .
ATOM 3878 O     O     . SER SER SER B B 70  70  . 59.733  120.148 18.570  1.00
12.88  1 . .
ATOM 3879 N     N     . THR THR THR B B 71  71  . 61.234  119.440 17.017  1.00
10.57  1 . .
ATOM 3880 CA    CA    . THR THR THR B B 71  71  . 60.508  119.966 15.851  1.00
11.53  1 . .
ATOM 3881 CB    CB    . THR THR THR B B 71  71  . 61.295  121.111 15.197  1.00
11.45  1 . .
ATOM 3882 OG1   OG1   . THR THR THR B B 71  71  . 61.264  122.248 16.043  1.00
10.51  1 . .
ATOM 3883 CG2   CG2   . THR THR THR B B 71  71  . 60.654  121.535 13.898  1.00
12.19  1 . .
ATOM 3884 C     C     . THR THR THR B B 71  71  . 60.154  118.898 14.816  1.00
10.64  1 . .
ATOM 3885 O     O     . THR THR THR B B 71  71  . 58.992  118.665 14.526  1.00
10.81  1 . .
ATOM 3886 N     N     . ILE ILE ILE B B 72  72  . 61.158  118.228 14.264  1.00
9.15   1 . .
ATOM 3887 CA    CA    . ILE ILE ILE B B 72  72  . 60.915  117.213 13.248  1.00
7.84   1 . .
ATOM 3888 CB    CB    . ILE ILE ILE B B 72  72  . 62.251  116.741 12.601  1.00
7.35   1 . .
ATOM 3889 CG1   CG1   . ILE ILE ILE B B 72  72  . 62.975  117.943 11.961  1.00
5.56   1 . .
ATOM 3890 CD1   CD1   . ILE ILE ILE B B 72  72  . 64.385  117.702 11.471  1.00
6.25   1 . .
ATOM 3891 CG2   CG2   . ILE ILE ILE B B 72  72  . 62.043  115.633 11.546  1.00
6.19   1 . .
ATOM 3892 C     C     . ILE ILE ILE B B 72  72  . 60.142  116.025 13.790  1.00
7.90   1 . .
ATOM 3893 O     O     . ILE ILE ILE B B 72  72  . 59.126  115.644 13.268  1.00
7.98   1 . .
ATOM 3894 N     N     . ALA ALA ALA B B 73  73  . 60.651  115.478 14.894  1.00
8.00   1 . .
ATOM 3895 CA    CA    . ALA ALA ALA B B 73  73  . 60.091  114.319 15.548  1.00
7.26   1 . .
ATOM 3896 CB    CB    . ALA ALA ALA B B 73  73  . 60.833  114.054 16.863  1.00
6.02   1 . .
ATOM 3897 C     C     . ALA ALA ALA B B 73  73  . 58.590  114.421 15.779  1.00
6.82   1 . .
ATOM 3898 O     O     . ALA ALA ALA B B 73  73  . 57.844  113.547 15.275  1.00
7.19   1 . .
ATOM 3899 N     N     . PRO PRO PRO B B 74  74  . 58.115  115.502 16.464  1.00
8.28   1 . .
ATOM 3900 CA    CA    . PRO PRO PRO B B 74  74  . 56.669  115.556 16.648  1.00
8.44   1 . .
ATOM 3901 CB    CB    . PRO PRO PRO B B 74  74  . 56.440  116.719 17.618  1.00
8.60   1 . .
ATOM 3902 CG    CG    . PRO PRO PRO B B 74  74  . 57.688  117.390 17.763  1.00
10.22  1 . .
ATOM 3903 CD    CD    . PRO PRO PRO B B 74  74  . 58.812  116.536 17.217  1.00
9.28   1 . .
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ATOM 3904 C     C     . PRO PRO PRO B B 74  74  . 55.822  115.740 15.388  1.00
9.20   1 . .
ATOM 3905 O     O     . PRO PRO PRO B B 74  74  . 54.771  115.147 15.303  1.00
10.04  1 . .
ATOM 3906 N     N     . ALA ALA ALA B B 75  75  . 56.304  116.499 14.409  1.00
8.10   1 . .
ATOM 3907 CA    CA    . ALA ALA ALA B B 75  75  . 55.606  116.646 13.135  1.00
9.07   1 . .
ATOM 3908 CB    CB    . ALA ALA ALA B B 75  75  . 56.345  117.557 12.247  1.00
7.76   1 . .
ATOM 3909 C     C     . ALA ALA ALA B B 75  75  . 55.449  115.300 12.417  1.00
8.50   1 . .
ATOM 3910 O     O     . ALA ALA ALA B B 75  75  . 54.380  114.965 11.953  1.00
8.22   1 . .
ATOM 3911 N     N     . LEU LEU LEU B B 76  76  . 56.541  114.550 12.265  1.00
10.32  1 . .
ATOM 3912 CA    CA    . LEU LEU LEU B B 76  76  . 56.481  113.307 11.482  1.00
9.18   1 . .
ATOM 3913 CB    CB    . LEU LEU LEU B B 76  76  . 57.895  112.746 11.254  1.00
10.07  1 . .
ATOM 3914 CG    CG    . LEU LEU LEU B B 76  76  . 58.935  113.537 10.430  1.00
11.22  1 . .
ATOM 3915 CD1   CD1   . LEU LEU LEU B B 76  76  . 60.138  112.684 9.942   1.00
11.81  1 . .
ATOM 3916 CD2   CD2   . LEU LEU LEU B B 76  76  . 58.351  114.202 9.192   1.00
10.96  1 . .
ATOM 3917 C     C     . LEU LEU LEU B B 76  76  . 55.593  112.294 12.172  1.00
9.86   1 . .
ATOM 3918 O     O     . LEU LEU LEU B B 76  76  . 54.804  111.551 11.546  1.00
12.13  1 . .
ATOM 3919 N     N     . ILE ILE ILE B B 77  77  . 55.728  112.233 13.499  1.00
9.82   1 . .
ATOM 3920 CA    CA    . ILE ILE ILE B B 77  77  . 54.895  111.340 14.273  1.00
12.28  1 . .
ATOM 3921 CB    CB    . ILE ILE ILE B B 77  77  . 55.364  111.312 15.770  1.00
12.29  1 . .
ATOM 3922 CG1   CG1   . ILE ILE ILE B B 77  77  . 56.730  110.609 15.865  1.00
14.98  1 . .
ATOM 3923 CD1   CD1   . ILE ILE ILE B B 77  77  . 57.487  110.877 17.185  1.00
14.69  1 . .
ATOM 3924 CG2   CG2   . ILE ILE ILE B B 77  77  . 54.312  110.620 16.630  1.00
12.27  1 . .
ATOM 3925 C     C     . ILE ILE ILE B B 77  77  . 53.398  111.744 14.080  1.00
11.82  1 . .
ATOM 3926 O     O     . ILE ILE ILE B B 77  77  . 52.541  110.908 13.738  1.00
11.21  1 . .
ATOM 3927 N     N     . SER SER SER B B 78  78  . 53.124  113.042 14.156  1.00
14.25  1 . .
ATOM 3928 CA    CA    . SER SER SER B B 78  78  . 51.733  113.486 14.074  1.00
15.66  1 . .
ATOM 3929 CB    CB    . SER SER SER B B 78  78  . 51.590  114.947 14.510  1.00
16.39  1 . .
ATOM 3930 OG    OG    . SER SER SER B B 78  78  . 51.559  115.030 15.929  1.00
19.30  1 . .
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ATOM 3931 C     C     . SER SER SER B B 78  78  . 51.145  113.207 12.685  1.00
15.07  1 . .
ATOM 3932 O     O     . SER SER SER B B 78  78  . 49.925  112.951 12.562  1.00
14.08  1 . .
ATOM 3933 N     N     . SER SER SER B B 79  79  . 52.012  113.213 11.649  1.00
15.43  1 . .
ATOM 3934 CA    CA    . SER SER SER B B 79  79  . 51.536  112.970 10.273  1.00
15.84  1 . .
ATOM 3935 CB    CB    . SER SER SER B B 79  79  . 52.655  113.096 9.232   1.00
15.54  1 . .
ATOM 3936 OG    OG    . SER SER SER B B 79  79  . 53.531  111.969 9.216   1.00
11.33  1 . .
ATOM 3937 C     C     . SER SER SER B B 79  79  . 50.899  111.617 10.128  1.00
17.05  1 . .
ATOM 3938 O     O     . SER SER SER B B 79  79  . 50.054  111.442 9.278   1.00
18.26  1 . .
ATOM 3939 N     N     . GLY GLY GLY B B 80  80  . 51.332  110.649 10.945  1.00
16.45  1 . .
ATOM 3940 CA    CA    . GLY GLY GLY B B 80  80  . 50.910  109.243 10.772  1.00
16.29  1 . .
ATOM 3941 C     C     . GLY GLY GLY B B 80  80  . 51.365  108.562 9.480   1.00
15.46  1 . .
ATOM 3942 O     O     . GLY GLY GLY B B 80  80  . 50.957  107.437 9.178   1.00
16.42  1 . .
ATOM 3943 N     N     . LEU LEU LEU B B 81  81  . 52.191  109.234 8.693   1.00
14.66  1 . .
ATOM 3944 CA    CA    . LEU LEU LEU B B 81  81  . 52.792  108.623 7.524   1.00
12.76  1 . .
ATOM 3945 CB    CB    . LEU LEU LEU B B 81  81  . 53.678  109.622 6.804   1.00
12.47  1 . .
ATOM 3946 CG    CG    . LEU LEU LEU B B 81  81  . 52.882  110.720 6.107   1.00
10.59  1 . .
ATOM 3947 CD1   CD1   . LEU LEU LEU B B 81  81  . 53.891  111.830 5.854   1.00
9.02   1 . .
ATOM 3948 CD2   CD2   . LEU LEU LEU B B 81  81  . 52.286  110.297 4.814   1.00
9.22   1 . .
ATOM 3949 C     C     . LEU LEU LEU B B 81  81  . 53.627  107.386 7.868   1.00
12.56  1 . .
ATOM 3950 O     O     . LEU LEU LEU B B 81  81  . 54.431  107.388 8.802   1.00
12.37  1 . .
ATOM 3951 N     N     . SER SER SER B B 82  82  . 53.433  106.355 7.061   1.00
14.38  1 . .
ATOM 3952 CA    CA    . SER SER SER B B 82  82  . 54.156  105.101 7.180   1.00
13.79  1 . .
ATOM 3953 CB    CB    . SER SER SER B B 82  82  . 53.541  104.020 6.269   1.00
15.14  1 . .
ATOM 3954 OG    OG    . SER SER SER B B 82  82  . 54.364  102.851 6.216   1.00
18.58  1 . .
ATOM 3955 C     C     . SER SER SER B B 82  82  . 55.597  105.332 6.800   1.00
13.23  1 . .
ATOM 3956 O     O     . SER SER SER B B 82  82  . 55.868  106.142 5.895   1.00
12.32  1 . .
ATOM 3957 N     N     . VAL VAL VAL B B 83  83  . 56.517  104.644 7.467   1.00
12.26  1 . .
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ATOM 3958 CA    CA    . VAL VAL VAL B B 83  83  . 57.926  104.767 7.128   1.00
12.17  1 . .
ATOM 3959 CB    CB    . VAL VAL VAL B B 83  83  . 58.840  104.137 8.163   1.00
11.25  1 . .
ATOM 3960 CG1   CG1   . VAL VAL VAL B B 83  83  . 58.741  104.893 9.517   1.00
6.62   1 . .
ATOM 3961 CG2   CG2   . VAL VAL VAL B B 83  83  . 58.519  102.640 8.354   1.00
12.89  1 . .
ATOM 3962 C     C     . VAL VAL VAL B B 83  83  . 58.282  104.206 5.717   1.00
11.75  1 . .
ATOM 3963 O     O     . VAL VAL VAL B B 83  83  . 59.356  104.389 5.277   1.00
11.87  1 . .
ATOM 3964 N     N     . VAL VAL VAL B B 84  84  . 57.382  103.499 5.042   1.00
12.98  1 . .
ATOM 3965 CA    CA    . VAL VAL VAL B B 84  84  . 57.608  103.081 3.648   1.00
13.62  1 . .
ATOM 3966 CB    CB    . VAL VAL VAL B B 84  84  . 56.543  102.023 3.102   1.00
13.51  1 . .
ATOM 3967 CG1   CG1   . VAL VAL VAL B B 84  84  . 56.382  100.782 4.040   1.00
15.28  1 . .
ATOM 3968 CG2   CG2   . VAL VAL VAL B B 84  84  . 55.199  102.681 2.799   1.00
16.40  1 . .
ATOM 3969 C     C     . VAL VAL VAL B B 84  84  . 57.534  104.321 2.729   1.00
13.83  1 . .
ATOM 3970 O     O     . VAL VAL VAL B B 84  84  . 57.992  104.279 1.588   1.00
13.77  1 . .
ATOM 3971 N     N     . GLU GLU GLU B B 85  85  . 56.921  105.396 3.221   1.00
13.62  1 . .
ATOM 3972 CA    CA    . GLU GLU GLU B B 85  85  . 56.648  106.555 2.378   1.00
14.21  1 . .
ATOM 3973 CB    CB    . GLU GLU GLU B B 85  85  . 55.323  107.219 2.814   1.00
16.34  1 . .
ATOM 3974 CG    CG    . GLU GLU GLU B B 85  85  . 54.258  106.179 3.188   1.00
20.85  1 . .
ATOM 3975 CD    CD    . GLU GLU GLU B B 85  85  . 52.833  106.628 3.030   1.00
25.78  1 . .
ATOM 3976 OE1   OE1   . GLU GLU GLU B B 85  85  . 52.094  106.662 4.051   1.00
26.83  1 . .
ATOM 3977 OE2   OE2   . GLU GLU GLU B B 85  85  . 52.444  106.936 1.873   1.00
30.10  1 . .
ATOM 3978 C     C     . GLU GLU GLU B B 85  85  . 57.836  107.512 2.442   1.00
12.47  1 . .
ATOM 3979 O     O     . GLU GLU GLU B B 85  85  . 57.728  108.631 2.942   1.00
11.50  1 . .
ATOM 3980 N     N     . GLN GLN GLN B B 86  86  . 58.997  107.046 1.958   1.00
13.03  1 . .
ATOM 3981 CA    CA    . GLN GLN GLN B B 86  86  . 60.197  107.837 2.043   1.00
11.07  1 . .
ATOM 3982 CB    CB    . GLN GLN GLN B B 86  86  . 61.284  107.100 1.316   1.00
12.12  1 . .
ATOM 3983 CG    CG    . GLN GLN GLN B B 86  86  . 62.613  107.729 1.420   1.00
9.85   1 . .
ATOM 3984 CD    CD    . GLN GLN GLN B B 86  86  . 63.261  107.494 2.778   1.00
11.12  1 . .
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ATOM 3985 OE1   OE1   . GLN GLN GLN B B 86  86  . 63.243  106.384 3.324   1.00
13.73  1 . .
ATOM 3986 NE2   NE2   . GLN GLN GLN B B 86  86  . 63.891  108.519 3.303   1.00
11.73  1 . .
ATOM 3987 C     C     . GLN GLN GLN B B 86  86  . 60.050  109.261 1.439   1.00
11.07  1 . .
ATOM 3988 O     O     . GLN GLN GLN B B 86  86  . 60.442  110.264 2.054   1.00
10.23  1 . .
ATOM 3989 N     N     . GLU GLU GLU B B 87  87  . 59.515  109.323 0.228   1.00
10.10  1 . .
ATOM 3990 CA    CA    . GLU GLU GLU B B 87  87  . 59.433  110.601 -0.458  1.00
9.32   1 . .
ATOM 3991 CB    CB    . GLU GLU GLU B B 87  87  . 59.071  110.425 -1.936  1.00
10.40  1 . .
ATOM 3992 CG    CG    . GLU GLU GLU B B 87  87  . 58.897  111.762 -2.712  1.00
16.45  1 . .
ATOM 3993 CD    CD    . GLU GLU GLU B B 87  87  . 58.629  111.564 -4.233  1.00
22.85  1 . .
ATOM 3994 OE1   OE1   . GLU GLU GLU B B 87  87  . 58.451  112.578 -4.946  1.00
25.50  1 . .
ATOM 3995 OE2   OE2   . GLU GLU GLU B B 87  87  . 58.598  110.408 -4.712  1.00
22.78  1 . .
ATOM 3996 C     C     . GLU GLU GLU B B 87  87  . 58.483  111.565 0.272   1.00
9.68   1 . .
ATOM 3997 O     O     . GLU GLU GLU B B 87  87  . 58.830  112.742 0.446   1.00
7.38   1 . .
ATOM 3998 N     N     . LYS LYS LYS B B 88  88  . 57.307  111.080 0.705   1.00
8.62   1 . .
ATOM 3999 CA    CA    . LYS LYS LYS B B 88  88  . 56.411  111.907 1.538   1.00
11.38  1 . .
ATOM 4000 CB    CB    . LYS LYS LYS B B 88  88  . 55.163  111.122 1.897   1.00
12.23  1 . .
ATOM 4001 CG    CG    . LYS LYS LYS B B 88  88  . 54.399  110.652 0.698   1.00
14.38  1 . .
ATOM 4002 CD    CD    . LYS LYS LYS B B 88  88  . 53.525  111.728 0.078   1.00
18.33  1 . .
ATOM 4003 CE    CE    . LYS LYS LYS B B 88  88  . 52.081  111.226 -0.065  1.00
20.31  1 . .
ATOM 4004 NZ    NZ    . LYS LYS LYS B B 88  88  . 51.473  111.004 1.310   1.00
24.38  1 . .
ATOM 4005 C     C     . LYS LYS LYS B B 88  88  . 57.060  112.459 2.814   1.00
10.21  1 . .
ATOM 4006 O     O     . LYS LYS LYS B B 88  88  . 56.945  113.654 3.176   1.00
9.48   1 . .
ATOM 4007 N     N     . LEU LEU LEU B B 89  89  . 57.793  111.581 3.477   1.00
9.76   1 . .
ATOM 4008 CA    CA    . LEU LEU LEU B B 89  89  . 58.423  111.942 4.739   1.00
7.81   1 . .
ATOM 4009 CB    CB    . LEU LEU LEU B B 89  89  . 58.817  110.714 5.546   1.00
8.21   1 . .
ATOM 4010 CG    CG    . LEU LEU LEU B B 89  89  . 57.676  110.125 6.439   1.00
7.38   1 . .
ATOM 4011 CD1   CD1   . LEU LEU LEU B B 89  89  . 58.079  108.785 6.962   1.00
8.39   1 . .
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ATOM 4012 CD2   CD2   . LEU LEU LEU B B 89  89  . 57.287  110.959 7.626   1.00
8.15   1 . .
ATOM 4013 C     C     . LEU LEU LEU B B 89  89  . 59.601  112.923 4.552   1.00
7.28   1 . .
ATOM 4014 O     O     . LEU LEU LEU B B 89  89  . 59.671  113.948 5.231   1.00
7.15   1 . .
ATOM 4015 N     N     . ASP ASP ASP B B 90  90  . 60.436  112.678 3.549   1.00
6.93   1 . .
ATOM 4016 CA    CA    . ASP ASP ASP B B 90  90  . 61.555  113.542 3.273   1.00
7.67   1 . .
ATOM 4017 CB    CB    . ASP ASP ASP B B 90  90  . 62.419  112.986 2.151   1.00
7.06   1 . .
ATOM 4018 CG    CG    . ASP ASP ASP B B 90  90  . 63.410  111.974 2.635   1.00
7.76   1 . .
ATOM 4019 OD1   OD1   . ASP ASP ASP B B 90  90  . 63.700  111.958 3.847   1.00
8.23   1 . .
ATOM 4020 OD2   OD2   . ASP ASP ASP B B 90  90  . 63.850  111.149 1.817   1.00
10.50  1 . .
ATOM 4021 C     C     . ASP ASP ASP B B 90  90  . 61.004  114.924 2.882   1.00
8.33   1 . .
ATOM 4022 O     O     . ASP ASP ASP B B 90  90  . 61.546  115.939 3.293   1.00
6.12   1 . .
ATOM 4023 N     N     . ASN ASN ASN B B 91  91  . 59.916  114.921 2.089   1.00
9.65   1 . .
ATOM 4024 CA    CA    . ASN ASN ASN B B 91  91  . 59.395  116.168 1.524   1.00
11.10  1 . .
ATOM 4025 CB    CB    . ASN ASN ASN B B 91  91  . 58.370  115.930 0.404   1.00
12.82  1 . .
ATOM 4026 CG    CG    . ASN ASN ASN B B 91  91  . 58.096  117.189 -0.409  1.00
17.20  1 . .
ATOM 4027 OD1   OD1   . ASN ASN ASN B B 91  91  . 57.031  117.797 -0.291  1.00
23.49  1 . .
ATOM 4028 ND2   ND2   . ASN ASN ASN B B 91  91  . 59.067  117.600 -1.213  1.00
18.09  1 . .
ATOM 4029 C     C     . ASN ASN ASN B B 91  91  . 58.767  116.982 2.643   1.00
10.17  1 . .
ATOM 4030 O     O     . ASN ASN ASN B B 91  91  . 58.894  118.178 2.666   1.00
10.31  1 . .
ATOM 4031 N     N     . LEU LEU LEU B B 92  92  . 58.142  116.303 3.601   1.00
9.80   1 . .
ATOM 4032 CA    CA    . LEU LEU LEU B B 92  92  . 57.533  117.016 4.725   1.00
8.53   1 . .
ATOM 4033 CB    CB    . LEU LEU LEU B B 92  92  . 56.712  116.075 5.611   1.00
9.47   1 . .
ATOM 4034 CG    CG    . LEU LEU LEU B B 92  92  . 56.125  116.645 6.918   1.00
11.03  1 . .
ATOM 4035 CD1   CD1   . LEU LEU LEU B B 92  92  . 55.212  117.959 6.700   1.00
7.95   1 . .
ATOM 4036 CD2   CD2   . LEU LEU LEU B B 92  92  . 55.248  115.578 7.614   1.00
9.53   1 . .
ATOM 4037 C     C     . LEU LEU LEU B B 92  92  . 58.618  117.732 5.502   1.00
8.10   1 . .
ATOM 4038 O     O     . LEU LEU LEU B B 92  92  . 58.499  118.903 5.862   1.00
8.78   1 . .
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ATOM 4039 N     N     . MET MET MET B B 93  93  . 59.720  117.025 5.719   1.00
5.74   1 . .
ATOM 4040 CA    CA    . MET MET MET B B 93  93  . 60.846  117.643 6.393   1.00
5.81   1 . .
ATOM 4041 CB    CB    . MET MET MET B B 93  93  . 61.947  116.618 6.676   1.00
7.24   1 . .
ATOM 4042 CG    CG    . MET MET MET B B 93  93  . 61.634  115.507 7.683   1.00
4.96   1 . .
ATOM 4043 SD    SD    . MET MET MET B B 93  93  . 63.174  114.627 8.227   1.00
7.55   1 . .
ATOM 4044 CE    CE    . MET MET MET B B 93  93  . 63.616  113.588 6.823   1.00
7.51   1 . .
ATOM 4045 C     C     . MET MET MET B B 93  93  . 61.480  118.813 5.641   1.00
6.63   1 . .
ATOM 4046 O     O     . MET MET MET B B 93  93  . 61.881  119.846 6.241   1.00
7.07   1 . .
ATOM 4047 N     N     . LEU LEU LEU B B 94  94  . 61.597  118.667 4.320   1.00
4.88   1 . .
ATOM 4048 CA    CA    . LEU LEU LEU B B 94  94  . 62.059  119.831 3.552   1.00
5.90   1 . .
ATOM 4049 CB    CB    . LEU LEU LEU B B 94  94  . 62.180  119.505 2.068   1.00
5.26   1 . .
ATOM 4050 CG    CG    . LEU LEU LEU B B 94  94  . 63.082  118.410 1.499   1.00
8.52   1 . .
ATOM 4051 CD1   CD1   . LEU LEU LEU B B 94  94  . 63.173  118.345 -0.027  1.00
11.28  1 . .
ATOM 4052 CD2   CD2   . LEU LEU LEU B B 94  94  . 64.396  118.531 2.030   1.00
8.18   1 . .
ATOM 4053 C     C     . LEU LEU LEU B B 94  94  . 61.158  121.067 3.696   1.00
7.47   1 . .
ATOM 4054 O     O     . LEU LEU LEU B B 94  94  . 61.654  122.160 3.786   1.00
8.98   1 . .
ATOM 4055 N     N     . GLU GLU GLU B B 95  95  . 59.847  120.866 3.693   1.00
7.99   1 . .
ATOM 4056 CA    CA    . GLU GLU GLU B B 95  95  . 58.868  121.986 3.798   1.00
10.52  1 . .
ATOM 4057 CB    CB    . GLU GLU GLU B B 95  95  . 57.453  121.478 3.504   1.00
11.15  1 . .
ATOM 4058 CG    CG    . GLU GLU GLU B B 95  95  . 57.351  120.847 2.151   1.00
16.78  1 . .
ATOM 4059 CD    CD    . GLU GLU GLU B B 95  95  . 57.151  121.847 1.050   1.00
24.87  1 . .
ATOM 4060 OE1   OE1   . GLU GLU GLU B B 95  95  . 55.989  121.928 0.582   1.00
29.02  1 . .
ATOM 4061 OE2   OE2   . GLU GLU GLU B B 95  95  . 58.132  122.550 0.660   1.00
24.08  1 . .
ATOM 4062 C     C     . GLU GLU GLU B B 95  95  . 58.951  122.604 5.208   1.00
11.01  1 . .
ATOM 4063 O     O     . GLU GLU GLU B B 95  95  . 58.863  123.810 5.369   1.00
11.88  1 . .
ATOM 4064 N     N     . LEU LEU LEU B B 96  96  . 59.100  121.759 6.231   1.00
10.09  1 . .
ATOM 4065 CA    CA    . LEU LEU LEU B B 96  96  . 59.237  122.263 7.586   1.00
9.55   1 . .
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ATOM 4066 CB    CB    . LEU LEU LEU B B 96  96  . 59.317  121.114 8.600   1.00
10.31  1 . .
ATOM 4067 CG    CG    . LEU LEU LEU B B 96  96  . 58.030  120.543 9.132   1.00
12.04  1 . .
ATOM 4068 CD1   CD1   . LEU LEU LEU B B 96  96  . 58.288  119.157 9.771   1.00
15.65  1 . .
ATOM 4069 CD2   CD2   . LEU LEU LEU B B 96  96  . 57.293  121.475 10.086  1.00
12.66  1 . .
ATOM 4070 C     C     . LEU LEU LEU B B 96  96  . 60.473  123.156 7.745   1.00
10.44  1 . .
ATOM 4071 O     O     . LEU LEU LEU B B 96  96  . 60.442  124.183 8.373   1.00
10.09  1 . .
ATOM 4072 N     N     . ASP ASP ASP B B 97  97  . 61.570  122.745 7.140   1.00
9.72   1 . .
ATOM 4073 CA    CA    . ASP ASP ASP B B 97  97  . 62.748  123.548 7.164   1.00
9.13   1 . .
ATOM 4074 CB    CB    . ASP ASP ASP B B 97  97  . 63.932  122.732 6.599   1.00
11.28  1 . .
ATOM 4075 CG    CG    . ASP ASP ASP B B 97  97  . 65.151  123.579 6.326   1.00
8.90   1 . .
ATOM 4076 OD1   OD1   . ASP ASP ASP B B 97  97  . 66.098  123.601 7.142   1.00
11.49  1 . .
ATOM 4077 OD2   OD2   . ASP ASP ASP B B 97  97  . 65.197  124.225 5.257   1.00
11.60  1 . .
ATOM 4078 C     C     . ASP ASP ASP B B 97  97  . 62.527  124.837 6.336   1.00
9.20   1 . .
ATOM 4079 O     O     . ASP ASP ASP B B 97  97  . 63.014  125.916 6.722   1.00
8.69   1 . .
ATOM 4080 N     N     . GLY GLY GLY B B 98  98  . 61.805  124.726 5.211   1.00
9.00   1 . .
ATOM 4081 CA    CA    . GLY GLY GLY B B 98  98  . 61.443  125.916 4.405   1.00
10.31  1 . .
ATOM 4082 C     C     . GLY GLY GLY B B 98  98  . 62.616  126.664 3.753   1.00
12.04  1 . .
ATOM 4083 O     O     . GLY GLY GLY B B 98  98  . 62.452  127.807 3.283   1.00
14.63  1 . .
ATOM 4084 N     N     . THR THR THR B B 99  99  . 63.805  126.081 3.669   1.00
13.10  1 . .
ATOM 4085 CA    CA    . THR THR THR B B 99  99  . 64.948  126.788 3.025   1.00
11.69  1 . .
ATOM 4086 CB    CB    . THR THR THR B B 99  99  . 66.002  127.261 4.035   1.00
11.48  1 . .
ATOM 4087 OG1   OG1   . THR THR THR B B 99  99  . 66.762  126.135 4.489   1.00
11.11  1 . .
ATOM 4088 CG2   CG2   . THR THR THR B B 99  99  . 65.355  127.974 5.317   1.00
11.61  1 . .
ATOM 4089 C     C     . THR THR THR B B 99  99  . 65.607  125.939 1.945   1.00
13.20  1 . .
ATOM 4090 O     O     . THR THR THR B B 99  99  . 65.588  124.723 2.034   1.00
13.54  1 . .
ATOM 4091 N     N     . GLU GLU GLU B B 100 100 . 66.139  126.564 0.901   1.00
13.59  1 . .
ATOM 4092 CA    CA    . GLU GLU GLU B B 100 100 . 66.676  125.817 -0.201  1.00
14.22  1 . .
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ATOM 4093 CB    CB    . GLU GLU GLU B B 100 100 . 67.143  126.754 -1.320  1.00
15.66  1 . .
ATOM 4094 CG    CG    . GLU GLU GLU B B 100 100 . 67.737  125.984 -2.505  1.00
21.14  1 . .
ATOM 4095 CD    CD    . GLU GLU GLU B B 100 100 . 66.747  124.970 -3.066  1.00
26.95  1 . .
ATOM 4096 OE1   OE1   . GLU GLU GLU B B 100 100 . 65.851  125.390 -3.855  1.00
29.93  1 . .
ATOM 4097 OE2   OE2   . GLU GLU GLU B B 100 100 . 66.847  123.765 -2.685  1.00
30.80  1 . .
ATOM 4098 C     C     . GLU GLU GLU B B 100 100 . 67.840  124.930 0.270   1.00
11.51  1 . .
ATOM 4099 O     O     . GLU GLU GLU B B 100 100 . 67.930  123.772 -0.137  1.00
13.38  1 . .
ATOM 4100 N     N     . ASN ASN ASN B B 101 101 . 68.731  125.472 1.099   1.00
8.59   1 . .
ATOM 4101 CA    CA    . ASN ASN ASN B B 101 101 . 69.915  124.743 1.475   1.00
9.29   1 . .
ATOM 4102 CB    CB    . ASN ASN ASN B B 101 101 . 71.182  125.602 1.383   1.00
9.34   1 . .
ATOM 4103 CG    CG    . ASN ASN ASN B B 101 101 . 71.202  126.748 2.404   1.00
13.99  1 . .
ATOM 4104 OD1   OD1   . ASN ASN ASN B B 101 101 . 72.278  127.123 2.917   1.00
18.47  1 . .
ATOM 4105 ND2   ND2   . ASN ASN ASN B B 101 101 . 70.003  127.296 2.736   1.00
16.05  1 . .
ATOM 4106 C     C     . ASN ASN ASN B B 101 101 . 69.840  124.095 2.825   1.00
7.15   1 . .
ATOM 4107 O     O     . ASN ASN ASN B B 101 101 . 70.856  123.685 3.356   1.00
6.64   1 . .
ATOM 4108 N     N     . LYS LYS LYS B B 102 102 . 68.636  123.990 3.387   1.00
5.26   1 . .
ATOM 4109 CA    CA    . LYS LYS LYS B B 102 102 . 68.474  123.262 4.698   1.00
5.81   1 . .
ATOM 4110 CB    CB    . LYS LYS LYS B B 102 102 . 68.929  121.799 4.613   1.00
6.29   1 . .
ATOM 4111 CG    CG    . LYS LYS LYS B B 102 102 . 68.174  121.026 3.583   1.00
7.29   1 . .
ATOM 4112 CD    CD    . LYS LYS LYS B B 102 102 . 68.626  119.565 3.358   1.00
7.52   1 . .
ATOM 4113 CE    CE    . LYS LYS LYS B B 102 102 . 67.544  118.820 2.546   1.00
7.20   1 . .
ATOM 4114 NZ    NZ    . LYS LYS LYS B B 102 102 . 67.576  119.329 1.196   1.00
7.53   1 . .
ATOM 4115 C     C     . LYS LYS LYS B B 102 102 . 69.184  123.966 5.839   1.00
5.88   1 . .
ATOM 4116 O     O     . LYS LYS LYS B B 102 102 . 69.690  123.331 6.761   1.00
6.32   1 . .
ATOM 4117 N     N     . SER SER SER B B 103 103 . 69.186  125.288 5.814   1.00
6.55   1 . .
ATOM 4118 CA    CA    . SER SER SER B B 103 103 . 69.868  126.100 6.795   1.00
8.28   1 . .
ATOM 4119 CB    CB    . SER SER SER B B 103 103 . 70.335  127.387 6.158   1.00
9.65   1 . .
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ATOM 4120 OG    OG    . SER SER SER B B 103 103 . 69.213  128.058 5.567   1.00
11.17  1 . .
ATOM 4121 C     C     . SER SER SER B B 103 103 . 69.025  126.409 8.049   1.00
8.38   1 . .
ATOM 4122 O     O     . SER SER SER B B 103 103 . 69.546  126.924 9.035   1.00
9.79   1 . .
ATOM 4123 N     N     . LYS LYS LYS B B 104 104 . 67.756  126.022 8.047   1.00
7.75   1 . .
ATOM 4124 CA    CA    . LYS LYS LYS B B 104 104 . 66.898  126.243 9.221   1.00
8.56   1 . .
ATOM 4125 CB    CB    . LYS LYS LYS B B 104 104 . 65.424  126.360 8.774   1.00
8.60   1 . .
ATOM 4126 CG    CG    . LYS LYS LYS B B 104 104 . 64.363  126.527 9.844   1.00
12.56  1 . .
ATOM 4127 CD    CD    . LYS LYS LYS B B 104 104 . 64.596  127.824 10.596  1.00
16.37  1 . .
ATOM 4128 CE    CE    . LYS LYS LYS B B 104 104 . 63.616  128.011 11.772  1.00
17.40  1 . .
ATOM 4129 NZ    NZ    . LYS LYS LYS B B 104 104 . 63.865  129.251 12.528  1.00
16.17  1 . .
ATOM 4130 C     C     . LYS LYS LYS B B 104 104 . 67.176  125.114 10.249  1.00
7.73   1 . .
ATOM 4131 O     O     . LYS LYS LYS B B 104 104 . 67.555  125.375 11.407  1.00
7.68   1 . .
ATOM 4132 N     N     . PHE PHE PHE B B 105 105 . 67.101  123.888 9.795   1.00
7.07   1 . .
ATOM 4133 CA    CA    . PHE PHE PHE B B 105 105 . 67.393  122.717 10.664  1.00
6.46   1 . .
ATOM 4134 CB    CB    . PHE PHE PHE B B 105 105 . 66.422  121.545 10.456  1.00
5.75   1 . .
ATOM 4135 CG    CG    . PHE PHE PHE B B 105 105 . 64.988  121.910 10.658  1.00
7.58   1 . .
ATOM 4136 CD1   CD1   . PHE PHE PHE B B 105 105 . 63.968  121.234 9.984   1.00
8.19   1 . .
ATOM 4137 CE1   CE1   . PHE PHE PHE B B 105 105 . 62.588  121.558 10.221  1.00
11.37  1 . .
ATOM 4138 CZ    CZ    . PHE PHE PHE B B 105 105 . 62.282  122.612 11.129  1.00
11.89  1 . .
ATOM 4139 CE2   CE2   . PHE PHE PHE B B 105 105 . 63.311  123.291 11.790  1.00
9.83   1 . .
ATOM 4140 CD2   CD2   . PHE PHE PHE B B 105 105 . 64.652  122.919 11.555  1.00
10.24  1 . .
ATOM 4141 C     C     . PHE PHE PHE B B 105 105 . 68.810  122.164 10.572  1.00
5.51   1 . .
ATOM 4142 O     O     . PHE PHE PHE B B 105 105 . 69.299  121.561 11.508  1.00
5.40   1 . .
ATOM 4143 N     N     . GLY GLY GLY B B 106 106 . 69.466  122.376 9.445   1.00
5.05   1 . .
ATOM 4144 CA    CA    . GLY GLY GLY B B 106 106 . 70.749  121.766 9.114   1.00
5.88   1 . .
ATOM 4145 C     C     . GLY GLY GLY B B 106 106 . 70.511  120.523 8.291   1.00
3.30   1 . .
ATOM 4146 O     O     . GLY GLY GLY B B 106 106 . 69.558  119.737 8.554   1.00
3.23   1 . .
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ATOM 4147 N     N     . ALA ALA ALA B B 107 107 . 71.342  120.314 7.289   1.00
5.04   1 . .
ATOM 4148 CA    CA    . ALA ALA ALA B B 107 107 . 71.224  119.104 6.450   1.00
3.73   1 . .
ATOM 4149 CB    CB    . ALA ALA ALA B B 107 107 . 72.144  119.162 5.218   1.00
4.10   1 . .
ATOM 4150 C     C     . ALA ALA ALA B B 107 107 . 71.504  117.842 7.255   1.00
3.09   1 . .
ATOM 4151 O     O     . ALA ALA ALA B B 107 107 . 70.972  116.775 6.938   1.00
4.18   1 . .
ATOM 4152 N     N     . ASN ASN ASN B B 108 108 . 72.357  118.006 8.261   1.00
2.75   1 . .
ATOM 4153 CA    CA    . ASN ASN ASN B B 108 108 . 72.693  116.951 9.188   1.00
2.88   1 . .
ATOM 4154 CB    CB    . ASN ASN ASN B B 108 108 . 73.950  117.270 9.978   1.00
3.48   1 . .
ATOM 4155 CG    CG    . ASN ASN ASN B B 108 108 . 73.925  118.626 10.669  1.00
3.87   1 . .
ATOM 4156 OD1   OD1   . ASN ASN ASN B B 108 108 . 73.208  119.555 10.228  1.00
3.95   1 . .
ATOM 4157 ND2   ND2   . ASN ASN ASN B B 108 108 . 74.852  118.813 11.647  1.00
4.23   1 . .
ATOM 4158 C     C     . ASN ASN ASN B B 108 108 . 71.509  116.515 10.012  1.00
3.85   1 . .
ATOM 4159 O     O     . ASN ASN ASN B B 108 108 . 71.412  115.335 10.326  1.00
6.50   1 . .
ATOM 4160 N     N     . ALA ALA ALA B B 109 109 . 70.607  117.431 10.396  1.00
3.84   1 . .
ATOM 4161 CA    CA    . ALA ALA ALA B B 109 109 . 69.362  117.094 11.115  1.00
4.47   1 . .
ATOM 4162 CB    CB    . ALA ALA ALA B B 109 109 . 68.688  118.370 11.576  1.00
5.43   1 . .
ATOM 4163 C     C     . ALA ALA ALA B B 109 109 . 68.404  116.328 10.188  1.00
5.10   1 . .
ATOM 4164 O     O     . ALA ALA ALA B B 109 109 . 67.901  115.222 10.556  1.00
3.13   1 . .
ATOM 4165 N     N     . ILE ILE ILE B B 110 110 . 68.185  116.861 8.972   1.00
5.16   1 . .
ATOM 4166 CA    CA    . ILE ILE ILE B B 110 110 . 67.208  116.223 8.161   1.00
5.67   1 . .
ATOM 4167 CB    CB    . ILE ILE ILE B B 110 110 . 66.838  117.097 6.941   1.00
5.42   1 . .
ATOM 4168 CG1   CG1   . ILE ILE ILE B B 110 110 . 66.230  118.431 7.399   1.00
7.42   1 . .
ATOM 4169 CD1   CD1   . ILE ILE ILE B B 110 110 . 65.784  119.331 6.240   1.00
10.52  1 . .
ATOM 4170 CG2   CG2   . ILE ILE ILE B B 110 110 . 65.948  116.340 5.970   1.00
6.13   1 . .
ATOM 4171 C     C     . ILE ILE ILE B B 110 110 . 67.718  114.800 7.762   1.00
3.76   1 . .
ATOM 4172 O     O     . ILE ILE ILE B B 110 110 . 66.969  113.823 7.649   1.00
3.89   1 . .
ATOM 4173 N     N     . LEU LEU LEU B B 111 111 . 68.999  114.746 7.421   1.00
3.48   1 . .
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ATOM 4174 CA    CA    . LEU LEU LEU B B 111 111 . 69.504  113.502 6.857   1.00
4.19   1 . .
ATOM 4175 CB    CB    . LEU LEU LEU B B 111 111 . 70.958  113.705 6.304   1.00
2.63   1 . .
ATOM 4176 CG    CG    . LEU LEU LEU B B 111 111 . 71.494  112.401 5.705   1.00
3.59   1 . .
ATOM 4177 CD1   CD1   . LEU LEU LEU B B 111 111 . 70.484  111.908 4.591   1.00
5.16   1 . .
ATOM 4178 CD2   CD2   . LEU LEU LEU B B 111 111 . 72.902  112.590 5.212   1.00
4.14   1 . .
ATOM 4179 C     C     . LEU LEU LEU B B 111 111 . 69.475  112.401 7.896   1.00
3.55   1 . .
ATOM 4180 O     O     . LEU LEU LEU B B 111 111 . 69.112  111.266 7.570   1.00
4.19   1 . .
ATOM 4181 N     N     . GLY GLY GLY B B 112 112 . 69.859  112.711 9.151   1.00
4.17   1 . .
ATOM 4182 CA    CA    . GLY GLY GLY B B 112 112 . 69.846  111.642 10.150  1.00
3.96   1 . .
ATOM 4183 C     C     . GLY GLY GLY B B 112 112 . 68.434  111.044 10.221  1.00
3.56   1 . .
ATOM 4184 O     O     . GLY GLY GLY B B 112 112 . 68.214  109.818 10.343  1.00
3.94   1 . .
ATOM 4185 N     N     . VAL VAL VAL B B 113 113 . 67.410  111.887 10.199  1.00
3.24   1 . .
ATOM 4186 CA    CA    . VAL VAL VAL B B 113 113 . 66.064  111.289 10.186  1.00
3.25   1 . .
ATOM 4187 CB    CB    . VAL VAL VAL B B 113 113 . 65.009  112.384 10.483  1.00
4.32   1 . .
ATOM 4188 CG1   CG1   . VAL VAL VAL B B 113 113 . 63.635  111.818 10.452  1.00
3.90   1 . .
ATOM 4189 CG2   CG2   . VAL VAL VAL B B 113 113 . 65.311  113.021 11.845  1.00
4.85   1 . .
ATOM 4190 C     C     . VAL VAL VAL B B 113 113 . 65.712  110.485 8.891   1.00
3.81   1 . .
ATOM 4191 O     O     . VAL VAL VAL B B 113 113 . 65.109  109.426 8.928   1.00
5.75   1 . .
ATOM 4192 N     N     . SER SER SER B B 114 114 . 66.103  111.036 7.740   1.00
4.37   1 . .
ATOM 4193 CA    CA    . SER SER SER B B 114 114 . 65.849  110.470 6.455   1.00
4.16   1 . .
ATOM 4194 CB    CB    . SER SER SER B B 114 114 . 66.501  111.379 5.380   1.00
5.62   1 . .
ATOM 4195 OG    OG    . SER SER SER B B 114 114 . 66.026  110.996 4.121   1.00
6.01   1 . .
ATOM 4196 C     C     . SER SER SER B B 114 114 . 66.428  109.028 6.391   1.00
3.34   1 . .
ATOM 4197 O     O     . SER SER SER B B 114 114 . 65.758  108.086 5.936   1.00
4.03   1 . .
ATOM 4198 N     N     . LEU LEU LEU B B 115 115 . 67.648  108.899 6.899   1.00
4.10   1 . .
ATOM 4199 CA    CA    . LEU LEU LEU B B 115 115 . 68.342  107.614 6.860   1.00
3.94   1 . .
ATOM 4200 CB    CB    . LEU LEU LEU B B 115 115 . 69.817  107.765 7.284   1.00
4.79   1 . .
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ATOM 4201 CG    CG    . LEU LEU LEU B B 115 115 . 70.778  108.561 6.422   1.00
3.81   1 . .
ATOM 4202 CD1   CD1   . LEU LEU LEU B B 115 115 . 72.098  108.805 7.137   1.00
4.13   1 . .
ATOM 4203 CD2   CD2   . LEU LEU LEU B B 115 115 . 70.950  107.898 4.981   1.00
2.49   1 . .
ATOM 4204 C     C     . LEU LEU LEU B B 115 115 . 67.642  106.601 7.778   1.00
3.72   1 . .
ATOM 4205 O     O     . LEU LEU LEU B B 115 115 . 67.457  105.445 7.374   1.00
4.67   1 . .
ATOM 4206 N     N     . ALA ALA ALA B B 116 116 . 67.270  107.053 8.966   1.00
5.42   1 . .
ATOM 4207 CA    CA    . ALA ALA ALA B B 116 116 . 66.649  106.177 9.938   1.00
5.68   1 . .
ATOM 4208 CB    CB    . ALA ALA ALA B B 116 116 . 66.570  106.841 11.271  1.00
6.95   1 . .
ATOM 4209 C     C     . ALA ALA ALA B B 116 116 . 65.283  105.772 9.363   1.00
5.78   1 . .
ATOM 4210 O     O     . ALA ALA ALA B B 116 116 . 64.898  104.586 9.422   1.00
7.63   1 . .
ATOM 4211 N     N     . VAL VAL VAL B B 117 117 . 64.575  106.702 8.703   1.00
7.07   1 . .
ATOM 4212 CA    CA    . VAL VAL VAL B B 117 117 . 63.300  106.350 8.110   1.00
7.02   1 . .
ATOM 4213 CB    CB    . VAL VAL VAL B B 117 117 . 62.646  107.607 7.457   1.00
5.38   1 . .
ATOM 4214 CG1   CG1   . VAL VAL VAL B B 117 117 . 61.665  107.221 6.321   1.00
8.03   1 . .
ATOM 4215 CG2   CG2   . VAL VAL VAL B B 117 117 . 61.964  108.518 8.544   1.00
6.22   1 . .
ATOM 4216 C     C     . VAL VAL VAL B B 117 117 . 63.455  105.262 7.067   1.00
7.80   1 . .
ATOM 4217 O     O     . VAL VAL VAL B B 117 117 . 62.582  104.339 6.966   1.00
6.79   1 . .
ATOM 4218 N     N     . CYS CYS CYS B B 118 118 . 64.510  105.378 6.251   1.00
6.21   1 . .
ATOM 4219 CA    CA    . CYS CYS CYS B B 118 118 . 64.731  104.426 5.163   1.00
8.04   1 . .
ATOM 4220 CB    CB    . CYS CYS CYS B B 118 118 . 65.930  104.789 4.313   1.00
7.88   1 . .
ATOM 4221 SG    SG    . CYS CYS CYS B B 118 118 . 65.992  103.980 2.750   1.00
8.38   1 . .
ATOM 4222 C     C     . CYS CYS CYS B B 118 118 . 64.940  102.990 5.722   1.00
7.16   1 . .
ATOM 4223 O     O     . CYS CYS CYS B B 118 118 . 64.386  102.004 5.193   1.00
9.21   1 . .
ATOM 4224 N     N     . LYS LYS LYS B B 119 119 . 65.716  102.892 6.785   1.00
7.00   1 . .
ATOM 4225 CA    CA    . LYS LYS LYS B B 119 119 . 65.948  101.629 7.434   1.00
7.11   1 . .
ATOM 4226 CB    CB    . LYS LYS LYS B B 119 119 . 67.039  101.803 8.480   1.00
7.02   1 . .
ATOM 4227 CG    CG    . LYS LYS LYS B B 119 119 . 68.407  102.189 7.962   1.00
4.99   1 . .
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ATOM 4228 CD    CD    . LYS LYS LYS B B 119 119 . 69.488  102.374 9.073   1.00
9.20   1 . .
ATOM 4229 CE    CE    . LYS LYS LYS B B 119 119 . 70.776  102.971 8.505   1.00
10.27  1 . .
ATOM 4230 NZ    NZ    . LYS LYS LYS B B 119 119 . 71.992  103.025 9.403   1.00
11.11  1 . .
ATOM 4231 C     C     . LYS LYS LYS B B 119 119 . 64.642  101.044 8.023   1.00
8.31   1 . .
ATOM 4232 O     O     . LYS LYS LYS B B 119 119 . 64.366  99.844  7.861   1.00
8.43   1 . .
ATOM 4233 N     N     . ALA ALA ALA B B 120 120 . 63.805  101.904 8.606   1.00
9.86   1 . .
ATOM 4234 CA    CA    . ALA ALA ALA B B 120 120 . 62.523  101.462 9.147   1.00
8.95   1 . .
ATOM 4235 CB    CB    . ALA ALA ALA B B 120 120 . 61.912  102.589 10.042  1.00
9.28   1 . .
ATOM 4236 C     C     . ALA ALA ALA B B 120 120 . 61.590  101.048 8.025   1.00
10.07  1 . .
ATOM 4237 O     O     . ALA ALA ALA B B 120 120 . 60.743  100.123 8.186   1.00
12.09  1 . .
ATOM 4238 N     N     . GLY GLY GLY B B 121 121 . 61.710  101.728 6.863   1.00
8.15   1 . .
ATOM 4239 CA    CA    . GLY GLY GLY B B 121 121 . 60.878  101.395 5.729   1.00
10.33  1 . .
ATOM 4240 C     C     . GLY GLY GLY B B 121 121 . 61.132  99.988  5.197   1.00
8.43   1 . .
ATOM 4241 O     O     . GLY GLY GLY B B 121 121 . 60.193  99.210  4.835   1.00
9.75   1 . .
ATOM 4242 N     N     . ALA ALA ALA B B 122 122 . 62.420  99.699  5.098   1.00
8.78   1 . .
ATOM 4243 CA    CA    . ALA ALA ALA B B 122 122 . 62.871  98.404  4.707   1.00
10.09  1 . .
ATOM 4244 CB    CB    . ALA ALA ALA B B 122 122 . 64.385  98.341  4.780   1.00
7.66   1 . .
ATOM 4245 C     C     . ALA ALA ALA B B 122 122 . 62.233  97.329  5.608   1.00
10.86  1 . .
ATOM 4246 O     O     . ALA ALA ALA B B 122 122 . 61.633  96.389  5.113   1.00
8.59   1 . .
ATOM 4247 N     N     . ALA ALA ALA B B 123 123 . 62.353  97.502  6.914   1.00
11.80  1 . .
ATOM 4248 CA    CA    . ALA ALA ALA B B 123 123 . 61.752  96.539  7.809   1.00
11.62  1 . .
ATOM 4249 CB    CB    . ALA ALA ALA B B 123 123 . 62.087  96.837  9.195   1.00
11.21  1 . .
ATOM 4250 C     C     . ALA ALA ALA B B 123 123 . 60.259  96.458  7.625   1.00
11.74  1 . .
ATOM 4251 O     O     . ALA ALA ALA B B 123 123 . 59.717  95.378  7.664   1.00
11.03  1 . .
ATOM 4252 N     N     . GLU GLU GLU B B 124 124 . 59.564  97.578  7.424   1.00
13.08  1 . .
ATOM 4253 CA    CA    . GLU GLU GLU B B 124 124 . 58.136  97.486  7.304   1.00
15.87  1 . .
ATOM 4254 CB    CB    . GLU GLU GLU B B 124 124 . 57.490  98.879  7.485   1.00
16.89  1 . .
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ATOM 4255 CG    CG    . GLU GLU GLU B B 124 124 . 55.980  98.952  7.271   1.00
20.08  1 . .
ATOM 4256 CD    CD    . GLU GLU GLU B B 124 124 . 55.141  98.067  8.192   1.00
25.24  1 . .
ATOM 4257 OE1   OE1   . GLU GLU GLU B B 124 124 . 53.917  98.020  7.964   1.00
30.77  1 . .
ATOM 4258 OE2   OE2   . GLU GLU GLU B B 124 124 . 55.660  97.433  9.140   1.00
26.92  1 . .
ATOM 4259 C     C     . GLU GLU GLU B B 124 124 . 57.760  96.769  5.991   1.00
15.89  1 . .
ATOM 4260 O     O     . GLU GLU GLU B B 124 124 . 56.705  96.139  5.917   1.00
18.31  1 . .
ATOM 4261 N     N     . ARG ARG ARG B B 125 125 . 58.644  96.824  4.981   1.00
17.06  1 . .
ATOM 4262 CA    CA    . ARG ARG ARG B B 125 125 . 58.495  96.093  3.717   1.00
16.32  1 . .
ATOM 4263 CB    CB    . ARG ARG ARG B B 125 125 . 59.284  96.793  2.574   1.00
16.99  1 . .
ATOM 4264 CG    CG    . ARG ARG ARG B B 125 125 . 58.770  98.190  2.144   1.00
17.95  1 . .
ATOM 4265 CD    CD    . ARG ARG ARG B B 125 125 . 57.360  98.173  1.561   1.00
20.25  1 . .
ATOM 4266 NE    NE    . ARG ARG ARG B B 125 125 . 57.069  99.377  0.789   1.00
22.94  1 . .
ATOM 4267 CZ    CZ    . ARG ARG ARG B B 125 125 . 55.844  99.781  0.439   1.00
24.76  1 . .
ATOM 4268 NH1   NH1   . ARG ARG ARG B B 125 125 . 54.782  99.089  0.797   1.00
24.90  1 . .
ATOM 4269 NH2   NH2   . ARG ARG ARG B B 125 125 . 55.669  100.902 -0.274  1.00
26.67  1 . .
ATOM 4270 C     C     . ARG ARG ARG B B 125 125 . 58.947  94.618  3.842   1.00
17.22  1 . .
ATOM 4271 O     O     . ARG ARG ARG B B 125 125 . 58.729  93.808  2.910   1.00
18.62  1 . .
ATOM 4272 N     N     . GLU GLU GLU B B 126 126 . 59.553  94.264  4.976   1.00
16.29  1 . .
ATOM 4273 CA    CA    . GLU GLU GLU B B 126 126 . 60.179  92.950  5.159   1.00
16.99  1 . .
ATOM 4274 CB    CB    . GLU GLU GLU B B 126 126 . 59.149  91.811  5.313   1.00
18.62  1 . .
ATOM 4275 CG    CG    . GLU GLU GLU B B 126 126 . 58.350  91.792  6.603   1.00
21.87  1 . .
ATOM 4276 CD    CD    . GLU GLU GLU B B 126 126 . 57.384  90.592  6.681   1.00
26.30  1 . .
ATOM 4277 OE1   OE1   . GLU GLU GLU B B 126 126 . 57.642  89.651  7.467   1.00
29.79  1 . .
ATOM 4278 OE2   OE2   . GLU GLU GLU B B 126 126 . 56.363  90.583  5.951   1.00
27.74  1 . .
ATOM 4279 C     C     . GLU GLU GLU B B 126 126 . 61.112  92.673  3.983   1.00
15.50  1 . .
ATOM 4280 O     O     . GLU GLU GLU B B 126 126 . 60.992  91.660  3.289   1.00
17.33  1 . .
ATOM 4281 N     N     . LEU LEU LEU B B 127 127 . 62.039  93.600  3.762   1.00
13.48  1 . .
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ATOM 4282 CA    CA    . LEU LEU LEU B B 127 127 . 63.103  93.483  2.778   1.00
11.43  1 . .
ATOM 4283 CB    CB    . LEU LEU LEU B B 127 127 . 62.875  94.444  1.582   1.00
12.05  1 . .
ATOM 4284 CG    CG    . LEU LEU LEU B B 127 127 . 61.589  94.221  0.806   1.00
12.98  1 . .
ATOM 4285 CD1   CD1   . LEU LEU LEU B B 127 127 . 61.407  95.429  -0.077  1.00
10.88  1 . .
ATOM 4286 CD2   CD2   . LEU LEU LEU B B 127 127 . 61.642  92.942  -0.005  1.00
14.25  1 . .
ATOM 4287 C     C     . LEU LEU LEU B B 127 127 . 64.395  93.925  3.431   1.00
9.42   1 . .
ATOM 4288 O     O     . LEU LEU LEU B B 127 127 . 64.403  94.841  4.251   1.00
9.34   1 . .
ATOM 4289 N     N     . PRO PRO PRO B B 128 128 . 65.504  93.374  2.961   1.00
9.02   1 . .
ATOM 4290 CA    CA    . PRO PRO PRO B B 128 128 . 66.751  94.022  3.324   1.00
8.27   1 . .
ATOM 4291 CB    CB    . PRO PRO PRO B B 128 128 . 67.819  93.224  2.616   1.00
7.97   1 . .
ATOM 4292 CG    CG    . PRO PRO PRO B B 128 128 . 67.151  92.152  1.916   1.00
12.37  1 . .
ATOM 4293 CD    CD    . PRO PRO PRO B B 128 128 . 65.682  92.268  2.009   1.00
10.21  1 . .
ATOM 4294 C     C     . PRO PRO PRO B B 128 128 . 66.851  95.450  2.799   1.00
7.06   1 . .
ATOM 4295 O     O     . PRO PRO PRO B B 128 128 . 66.186  95.814  1.801   1.00
7.85   1 . .
ATOM 4296 N     N     . LEU LEU LEU B B 129 129 . 67.692  96.242  3.446   1.00
7.15   1 . .
ATOM 4297 CA    CA    . LEU LEU LEU B B 129 129 . 67.775  97.665  3.130   1.00
6.03   1 . .
ATOM 4298 CB    CB    . LEU LEU LEU B B 129 129 . 68.761  98.403  4.043   1.00
5.46   1 . .
ATOM 4299 CG    CG    . LEU LEU LEU B B 129 129 . 69.001  99.866  3.777   1.00
6.20   1 . .
ATOM 4300 CD1   CD1   . LEU LEU LEU B B 129 129 . 67.751  100.740 3.832   1.00
7.10   1 . .
ATOM 4301 CD2   CD2   . LEU LEU LEU B B 129 129 . 70.039  100.424 4.710   1.00
5.46   1 . .
ATOM 4302 C     C     . LEU LEU LEU B B 129 129 . 68.155  97.867  1.659   1.00
6.31   1 . .
ATOM 4303 O     O     . LEU LEU LEU B B 129 129 . 67.488  98.639  0.952   1.00
8.62   1 . .
ATOM 4304 N     N     . TYR TYR TYR B B 130 130 . 69.189  97.149  1.159   1.00
5.60   1 . .
ATOM 4305 CA    CA    . TYR TYR TYR B B 130 130 . 69.549  97.336  -0.319  1.00
6.28   1 . .
ATOM 4306 CB    CB    . TYR TYR TYR B B 130 130 . 70.775  96.509  -0.731  1.00
6.23   1 . .
ATOM 4307 CG    CG    . TYR TYR TYR B B 130 130 . 70.640  95.041  -0.586  1.00
6.48   1 . .
ATOM 4308 CD1   CD1   . TYR TYR TYR B B 130 130 . 70.152  94.264  -1.661  1.00
6.51   1 . .
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ATOM 4309 CE1   CE1   . TYR TYR TYR B B 130 130 . 69.975  92.877  -1.552  1.00
9.33   1 . .
ATOM 4310 CZ    CZ    . TYR TYR TYR B B 130 130 . 70.357  92.245  -0.324  1.00
8.69   1 . .
ATOM 4311 OH    OH    . TYR TYR TYR B B 130 130 . 70.211  90.868  -0.258  1.00
13.01  1 . .
ATOM 4312 CE2   CE2   . TYR TYR TYR B B 130 130 . 70.894  92.984  0.751   1.00
9.07   1 . .
ATOM 4313 CD2   CD2   . TYR TYR TYR B B 130 130 . 71.023  94.417  0.603   1.00
8.03   1 . .
ATOM 4314 C     C     . TYR TYR TYR B B 130 130 . 68.363  97.064  -1.295  1.00
6.52   1 . .
ATOM 4315 O     O     . TYR TYR TYR B B 130 130 . 68.223  97.711  -2.391  1.00
9.25   1 . .
ATOM 4316 N     N     . ARG ARG ARG B B 131 131 . 67.471  96.137  -0.915  1.00
7.87   1 . .
ATOM 4317 CA    CA    . ARG ARG ARG B B 131 131 . 66.262  95.846  -1.730  1.00
9.18   1 . .
ATOM 4318 CB    CB    . ARG ARG ARG B B 131 131 . 65.621  94.484  -1.477  1.00
10.01  1 . .
ATOM 4319 CG    CG    . ARG ARG ARG B B 131 131 . 66.548  93.327  -1.822  1.00
16.60  1 . .
ATOM 4320 CD    CD    . ARG ARG ARG B B 131 131 . 65.727  92.234  -2.527  1.00
25.12  1 . .
ATOM 4321 NE    NE    . ARG ARG ARG B B 131 131 . 66.481  90.998  -2.765  1.00
31.36  1 . .
ATOM 4322 CZ    CZ    . ARG ARG ARG B B 131 131 . 67.026  90.640  -3.933  1.00
34.74  1 . .
ATOM 4323 NH1   NH1   . ARG ARG ARG B B 131 131 . 67.667  89.485  -4.026  1.00
34.86  1 . .
ATOM 4324 NH2   NH2   . ARG ARG ARG B B 131 131 . 66.940  91.425  -5.011  1.00
35.64  1 . .
ATOM 4325 C     C     . ARG ARG ARG B B 131 131 . 65.205  96.885  -1.615  1.00
8.01   1 . .
ATOM 4326 O     O     . ARG ARG ARG B B 131 131 . 64.593  97.258  -2.617  1.00
10.45  1 . .
ATOM 4327 N     N     . HIS HIS HIS B B 132 132 . 64.984  97.383  -0.408  1.00
7.10   1 . .
ATOM 4328 CA    CA    . HIS HIS HIS B B 132 132 . 64.090  98.508  -0.254  1.00
8.19   1 . .
ATOM 4329 CB    CB    . HIS HIS HIS B B 132 132 . 63.969  98.899  1.195   1.00
9.21   1 . .
ATOM 4330 CG    CG    . HIS HIS HIS B B 132 132 . 63.001  100.022 1.445   1.00
8.62   1 . .
ATOM 4331 ND1   ND1   . HIS HIS HIS B B 132 132 . 61.731  100.079 0.882   1.00
7.48   1 . .
ATOM 4332 CE1   CE1   . HIS HIS HIS B B 132 132 . 61.110  101.150 1.335   1.00
8.83   1 . .
ATOM 4333 NE2   NE2   . HIS HIS HIS B B 132 132 . 61.904  101.779 2.182   1.00
5.55   1 . .
ATOM 4334 CD2   CD2   . HIS HIS HIS B B 132 132 . 63.088  101.076 2.284   1.00
9.28   1 . .
ATOM 4335 C     C     . HIS HIS HIS B B 132 132 . 64.509  99.731  -1.110  1.00
8.06   1 . .
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ATOM 4336 O     O     . HIS HIS HIS B B 132 132 . 63.674  100.359 -1.725  1.00
10.11  1 . .
ATOM 4337 N     N     . ILE ILE ILE B B 133 133 . 65.783  100.107 -1.050  1.00
8.93   1 . .
ATOM 4338 CA    CA    . ILE ILE ILE B B 133 133 . 66.340  101.206 -1.814  1.00
6.40   1 . .
ATOM 4339 CB    CB    . ILE ILE ILE B B 133 133 . 67.808  101.420 -1.423  1.00
6.33   1 . .
ATOM 4340 CG1   CG1   . ILE ILE ILE B B 133 133 . 67.879  102.014 0.007   1.00
5.76   1 . .
ATOM 4341 CD1   CD1   . ILE ILE ILE B B 133 133 . 69.356  102.155 0.614   1.00
5.39   1 . .
ATOM 4342 CG2   CG2   . ILE ILE ILE B B 133 133 . 68.551  102.316 -2.464  1.00
4.54   1 . .
ATOM 4343 C     C     . ILE ILE ILE B B 133 133 . 66.177  100.911 -3.309  1.00
6.78   1 . .
ATOM 4344 O     O     . ILE ILE ILE B B 133 133 . 65.717  101.773 -4.088  1.00
7.07   1 . .
ATOM 4345 N     N     . ALA ALA ALA B B 134 134 . 66.535  99.692  -3.744  1.00
7.01   1 . .
ATOM 4346 CA    CA    . ALA ALA ALA B B 134 134 . 66.304  99.319  -5.135  1.00
9.05   1 . .
ATOM 4347 CB    CB    . ALA ALA ALA B B 134 134 . 66.621  97.834  -5.404  1.00
10.10  1 . .
ATOM 4348 C     C     . ALA ALA ALA B B 134 134 . 64.867  99.626  -5.562  1.00
10.31  1 . .
ATOM 4349 O     O     . ALA ALA ALA B B 134 134 . 64.589  100.191 -6.646  1.00
9.51   1 . .
ATOM 4350 N     N     . GLN GLN GLN B B 135 135 . 63.921  99.246  -4.733  1.00
11.87  1 . .
ATOM 4351 CA    CA    . GLN GLN GLN B B 135 135 . 62.536  99.550  -5.107  1.00
11.80  1 . .
ATOM 4352 CB    CB    . GLN GLN GLN B B 135 135 . 61.550  98.717  -4.294  1.00
12.73  1 . .
ATOM 4353 CG    CG    . GLN GLN GLN B B 135 135 . 61.739  97.224  -4.458  1.00
13.31  1 . .
ATOM 4354 CD    CD    . GLN GLN GLN B B 135 135 . 60.746  96.391  -3.607  1.00
21.03  1 . .
ATOM 4355 OE1   OE1   . GLN GLN GLN B B 135 135 . 59.943  96.920  -2.828  1.00
23.07  1 . .
ATOM 4356 NE2   NE2   . GLN GLN GLN B B 135 135 . 60.782  95.090  -3.795  1.00
23.87  1 . .
ATOM 4357 C     C     . GLN GLN GLN B B 135 135 . 62.183  101.054 -5.058  1.00
11.68  1 . .
ATOM 4358 O     O     . GLN GLN GLN B B 135 135 . 61.398  101.547 -5.907  1.00
12.11  1 . .
ATOM 4359 N     N     . LEU LEU LEU B B 136 136 . 62.720  101.795 -4.094  1.00
11.15  1 . .
ATOM 4360 CA    CA    . LEU LEU LEU B B 136 136 . 62.552  103.261 -4.049  1.00
12.06  1 . .
ATOM 4361 CB    CB    . LEU LEU LEU B B 136 136 . 63.243  103.872 -2.851  1.00
12.75  1 . .
ATOM 4362 CG    CG    . LEU LEU LEU B B 136 136 . 62.536  103.677 -1.501  1.00
13.56  1 . .
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ATOM 4363 CD1   CD1   . LEU LEU LEU B B 136 136 . 63.449  104.183 -0.392  1.00
13.62  1 . .
ATOM 4364 CD2   CD2   . LEU LEU LEU B B 136 136 . 61.100  104.304 -1.442  1.00
13.43  1 . .
ATOM 4365 C     C     . LEU LEU LEU B B 136 136 . 63.108  103.892 -5.304  1.00
11.32  1 . .
ATOM 4366 O     O     . LEU LEU LEU B B 136 136 . 62.640  104.976 -5.718  1.00
13.89  1 . .
ATOM 4367 N     N     . ALA ALA ALA B B 137 137 . 64.099  103.223 -5.906  1.00
10.95  1 . .
ATOM 4368 CA    CA    . ALA ALA ALA B B 137 137 . 64.780  103.741 -7.110  1.00
11.49  1 . .
ATOM 4369 CB    CB    . ALA ALA ALA B B 137 137 . 66.252  103.466 -7.069  1.00
10.84  1 . .
ATOM 4370 C     C     . ALA ALA ALA B B 137 137 . 64.230  103.189 -8.413  1.00
11.68  1 . .
ATOM 4371 O     O     . ALA ALA ALA B B 137 137 . 64.625  103.651 -9.459  1.00
12.40  1 . .
ATOM 4372 N     N     . GLY GLY GLY B B 138 138 . 63.356  102.182 -8.336  1.00
12.95  1 . .
ATOM 4373 CA    CA    . GLY GLY GLY B B 138 138 . 62.772  101.563 -9.519  1.00
15.22  1 . .
ATOM 4374 C     C     . GLY GLY GLY B B 138 138 . 63.720  100.602 -10.163 1.00
16.68  1 . .
ATOM 4375 O     O     . GLY GLY GLY B B 138 138 . 63.659  100.420 -11.380 1.00
15.91  1 . .
ATOM 4376 N     N     . ASN ASN ASN B B 139 139 . 64.646  100.010 -9.394  1.00
16.91  1 . .
ATOM 4377 CA    CA    . ASN ASN ASN B B 139 139 . 65.579  99.064  -10.000 1.00
19.01  1 . .
ATOM 4378 CB    CB    . ASN ASN ASN B B 139 139 . 67.008  99.241  -9.493  1.00
18.85  1 . .
ATOM 4379 CG    CG    . ASN ASN ASN B B 139 139 . 67.604  100.567 -9.889  1.00
18.88  1 . .
ATOM 4380 OD1   OD1   . ASN ASN ASN B B 139 139 . 67.362  101.060 -11.024 1.00
24.83  1 . .
ATOM 4381 ND2   ND2   . ASN ASN ASN B B 139 139 . 68.355  101.200 -8.954  1.00
14.52  1 . .
ATOM 4382 C     C     . ASN ASN ASN B B 139 139 . 65.142  97.656  -9.716  1.00
20.42  1 . .
ATOM 4383 O     O     . ASN ASN ASN B B 139 139 . 64.588  97.383  -8.664  1.00
20.12  1 . .
ATOM 4384 N     N     . SER SER SER B B 140 140 . 65.441  96.759  -10.650 1.00
23.79  1 . .
ATOM 4385 CA    CA    . SER SER SER B B 140 140 . 64.860  95.400  -10.686 1.00
27.08  1 . .
ATOM 4386 CB    CB    . SER SER SER B B 140 140 . 63.887  95.284  -11.854 1.00
27.47  1 . .
ATOM 4387 OG    OG    . SER SER SER B B 140 140 . 62.621  95.822  -11.526 1.00
28.28  1 . .
ATOM 4388 C     C     . SER SER SER B B 140 140 . 65.982  94.430  -10.922 1.00
28.71  1 . .
ATOM 4389 O     O     . SER SER SER B B 140 140 . 65.786  93.374  -11.533 1.00
29.61  1 . .
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ATOM 4390 N     N     . ASP ASP ASP B B 141 141 . 67.161  94.838  -10.460 1.00
29.26  1 . .
ATOM 4391 CA    CA    . ASP ASP ASP B B 141 141 . 68.395  94.092  -10.537 1.00
29.22  1 . .
ATOM 4392 CB    CB    . ASP ASP ASP B B 141 141 . 69.020  94.244  -11.921 1.00
30.65  1 . .
ATOM 4393 CG    CG    . ASP ASP ASP B B 141 141 . 69.717  95.582  -12.106 1.00
34.14  1 . .
ATOM 4394 OD1   OD1   . ASP ASP ASP B B 141 141 . 70.965  95.640  -11.915 1.00
38.04  1 . .
ATOM 4395 OD2   OD2   . ASP ASP ASP B B 141 141 . 69.014  96.579  -12.429 1.00
36.10  1 . .
ATOM 4396 C     C     . ASP ASP ASP B B 141 141 . 69.303  94.731  -9.481  1.00
27.57  1 . .
ATOM 4397 O     O     . ASP ASP ASP B B 141 141 . 68.967  95.796  -8.927  1.00
28.79  1 . .
ATOM 4398 N     N     . LEU LEU LEU B B 142 142 . 70.439  94.099  -9.199  1.00
24.38  1 . .
ATOM 4399 CA    CA    . LEU LEU LEU B B 142 142 . 71.383  94.601  -8.207  1.00
20.30  1 . .
ATOM 4400 CB    CB    . LEU LEU LEU B B 142 142 . 71.181  93.905  -6.875  1.00
20.42  1 . .
ATOM 4401 CG    CG    . LEU LEU LEU B B 142 142 . 69.822  93.908  -6.242  1.00
18.91  1 . .
ATOM 4402 CD1   CD1   . LEU LEU LEU B B 142 142 . 69.795  92.747  -5.291  1.00
19.75  1 . .
ATOM 4403 CD2   CD2   . LEU LEU LEU B B 142 142 . 69.656  95.234  -5.476  1.00
12.14  1 . .
ATOM 4404 C     C     . LEU LEU LEU B B 142 142 . 72.752  94.243  -8.676  1.00
18.47  1 . .
ATOM 4405 O     O     . LEU LEU LEU B B 142 142 . 72.917  93.270  -9.402  1.00
18.48  1 . .
ATOM 4406 N     N     . ILE ILE ILE B B 143 143 . 73.742  95.016  -8.276  1.00
15.58  1 . .
ATOM 4407 CA    CA    . ILE ILE ILE B B 143 143 . 75.086  94.664  -8.600  1.00
13.24  1 . .
ATOM 4408 CB    CB    . ILE ILE ILE B B 143 143 . 75.429  95.138  -10.047 1.00
14.73  1 . .
ATOM 4409 CG1   CG1   . ILE ILE ILE B B 143 143 . 76.844  94.756  -10.506 1.00
16.69  1 . .
ATOM 4410 CD1   CD1   . ILE ILE ILE B B 143 143 . 77.011  94.748  -12.068 1.00
19.67  1 . .
ATOM 4411 CG2   CG2   . ILE ILE ILE B B 143 143 . 75.142  96.543  -10.202 1.00
13.59  1 . .
ATOM 4412 C     C     . ILE ILE ILE B B 143 143 . 76.025  95.180  -7.523  1.00
10.56  1 . .
ATOM 4413 O     O     . ILE ILE ILE B B 143 143 . 75.810  96.259  -6.951  1.00
7.93   1 . .
ATOM 4414 N     N     . LEU LEU LEU B B 144 144 . 77.032  94.377  -7.205  1.00
8.39   1 . .
ATOM 4415 CA    CA    . LEU LEU LEU B B 144 144 . 78.096  94.790  -6.279  1.00
6.12   1 . .
ATOM 4416 CB    CB    . LEU LEU LEU B B 144 144 . 78.894  93.546  -5.821  1.00
3.71   1 . .
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ATOM 4417 CG    CG    . LEU LEU LEU B B 144 144 . 78.217  92.777  -4.647  1.00
5.62   1 . .
ATOM 4418 CD1   CD1   . LEU LEU LEU B B 144 144 . 78.130  93.676  -3.466  1.00
10.84  1 . .
ATOM 4419 CD2   CD2   . LEU LEU LEU B B 144 144 . 76.859  92.217  -5.032  1.00
7.17   1 . .
ATOM 4420 C     C     . LEU LEU LEU B B 144 144 . 79.062  95.716  -7.022  1.00
4.63   1 . .
ATOM 4421 O     O     . LEU LEU LEU B B 144 144 . 79.483  95.428  -8.110  1.00
5.11   1 . .
ATOM 4422 N     N     . PRO PRO PRO B B 145 145 . 79.456  96.827  -6.401  1.00
4.99   1 . .
ATOM 4423 CA    CA    . PRO PRO PRO B B 145 145 . 80.344  97.819  -7.011  1.00
3.07   1 . .
ATOM 4424 CB    CB    . PRO PRO PRO B B 145 145 . 80.201  99.009  -6.068  1.00
3.94   1 . .
ATOM 4425 CG    CG    . PRO PRO PRO B B 145 145 . 80.029  98.284  -4.764  1.00
4.32   1 . .
ATOM 4426 CD    CD    . PRO PRO PRO B B 145 145 . 79.064  97.173  -5.039  1.00
3.98   1 . .
ATOM 4427 C     C     . PRO PRO PRO B B 145 145 . 81.819  97.388  -7.028  1.00
3.79   1 . .
ATOM 4428 O     O     . PRO PRO PRO B B 145 145 . 82.212  96.597  -6.133  1.00
3.55   1 . .
ATOM 4429 N     N     . VAL VAL VAL B B 146 146 . 82.642  97.950  -7.915  1.00
2.46   1 . .
ATOM 4430 CA    CA    . VAL VAL VAL B B 146 146 . 84.084  97.921  -7.680  1.00
2.89   1 . .
ATOM 4431 CB    CB    . VAL VAL VAL B B 146 146 . 84.857  98.299  -8.962  1.00
3.53   1 . .
ATOM 4432 CG1   CG1   . VAL VAL VAL B B 146 146 . 86.277  98.415  -8.712  1.00
3.54   1 . .
ATOM 4433 CG2   CG2   . VAL VAL VAL B B 146 146 . 84.552  97.322  -10.088 1.00
3.39   1 . .
ATOM 4434 C     C     . VAL VAL VAL B B 146 146 . 84.380  98.978  -6.563  1.00
3.24   1 . .
ATOM 4435 O     O     . VAL VAL VAL B B 146 146 . 83.858  100.095 -6.628  1.00
2.81   1 . .
ATOM 4436 N     N     . PRO PRO PRO B B 147 147 . 85.101  98.576  -5.516  1.00
3.78   1 . .
ATOM 4437 CA    CA    . PRO PRO PRO B B 147 147 . 85.496  99.546  -4.512  1.00
3.78   1 . .
ATOM 4438 CB    CB    . PRO PRO PRO B B 147 147 . 85.855  98.652  -3.342  1.00
3.64   1 . .
ATOM 4439 CG    CG    . PRO PRO PRO B B 147 147 . 86.584  97.387  -4.087  1.00
4.00   1 . .
ATOM 4440 CD    CD    . PRO PRO PRO B B 147 147 . 85.685  97.225  -5.250  1.00
3.13   1 . .
ATOM 4441 C     C     . PRO PRO PRO B B 147 147 . 86.738  100.304 -4.939  1.00
3.24   1 . .
ATOM 4442 O     O     . PRO PRO PRO B B 147 147 . 87.627  99.719  -5.658  1.00
4.45   1 . .
ATOM 4443 N     N     . ALA ALA ALA B B 148 148 . 86.771  101.605 -4.612  1.00
2.80   1 . .
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ATOM 4444 CA    CA    . ALA ALA ALA B B 148 148 . 87.914  102.479 -4.859  1.00
2.65   1 . .
ATOM 4445 CB    CB    . ALA ALA ALA B B 148 148 . 87.392  103.740 -5.694  1.00
2.54   1 . .
ATOM 4446 C     C     . ALA ALA ALA B B 148 148 . 88.587  102.882 -3.565  1.00
2.72   1 . .
ATOM 4447 O     O     . ALA ALA ALA B B 148 148 . 87.989  103.625 -2.772  1.00
3.26   1 . .
ATOM 4448 N     N     . PHE PHE PHE B B 149 149 . 89.785  102.341 -3.328  1.00
3.61   1 . .
ATOM 4449 CA    CA    . PHE PHE PHE B B 149 149 . 90.477  102.487 -2.061  1.00
3.50   1 . .
ATOM 4450 CB    CB    . PHE PHE PHE B B 149 149 . 91.248  101.190 -1.689  1.00
3.18   1 . .
ATOM 4451 CG    CG    . PHE PHE PHE B B 149 149 . 90.395  99.965  -1.605  1.00
4.67   1 . .
ATOM 4452 CD1   CD1   . PHE PHE PHE B B 149 149 . 89.569  99.727  -0.499  1.00
5.03   1 . .
ATOM 4453 CE1   CE1   . PHE PHE PHE B B 149 149 . 88.824  98.584  -0.461  1.00
3.19   1 . .
ATOM 4454 CZ    CZ    . PHE PHE PHE B B 149 149 . 88.852  97.642  -1.504  1.00
4.81   1 . .
ATOM 4455 CE2   CE2   . PHE PHE PHE B B 149 149 . 89.687  97.871  -2.582  1.00
6.29   1 . .
ATOM 4456 CD2   CD2   . PHE PHE PHE B B 149 149 . 90.450  99.023  -2.632  1.00
3.35   1 . .
ATOM 4457 C     C     . PHE PHE PHE B B 149 149 . 91.481  103.598 -2.066  1.00
2.94   1 . .
ATOM 4458 O     O     . PHE PHE PHE B B 149 149 . 92.513  103.560 -2.775  1.00
3.10   1 . .
ATOM 4459 N     N     . ASN ASN ASN B B 150 150 . 91.266  104.585 -1.207  1.00
3.67   1 . .
ATOM 4460 CA    CA    . ASN ASN ASN B B 150 150 . 92.107  105.736 -1.105  1.00
4.05   1 . .
ATOM 4461 CB    CB    . ASN ASN ASN B B 150 150 . 91.306  106.877 -0.416  1.00
4.42   1 . .
ATOM 4462 CG    CG    . ASN ASN ASN B B 150 150 . 92.067  108.130 -0.242  1.00
6.84   1 . .
ATOM 4463 OD1   OD1   . ASN ASN ASN B B 150 150 . 91.629  108.997 0.536   1.00
8.44   1 . .
ATOM 4464 ND2   ND2   . ASN ASN ASN B B 150 150 . 93.220  108.263 -0.901  1.00
6.28   1 . .
ATOM 4465 C     C     . ASN ASN ASN B B 150 150 . 93.350  105.377 -0.330  1.00
4.94   1 . .
ATOM 4466 O     O     . ASN ASN ASN B B 150 150 . 93.371  105.331 0.892   1.00
5.38   1 . .
ATOM 4467 N     N     . VAL VAL VAL B B 151 151 . 94.389  104.993 -1.062  1.00
6.49   1 . .
ATOM 4468 CA    CA    . VAL VAL VAL B B 151 151 . 95.610  104.463 -0.378  1.00
8.40   1 . .
ATOM 4469 CB    CB    . VAL VAL VAL B B 151 151 . 96.163  103.191 -1.072  1.00
7.82   1 . .
ATOM 4470 CG1   CG1   . VAL VAL VAL B B 151 151 . 95.111  102.122 -1.077  1.00
8.95   1 . .
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ATOM 4471 CG2   CG2   . VAL VAL VAL B B 151 151 . 96.652  103.512 -2.486  1.00
7.95   1 . .
ATOM 4472 C     C     . VAL VAL VAL B B 151 151 . 96.744  105.463 -0.155  1.00
8.98   1 . .
ATOM 4473 O     O     . VAL VAL VAL B B 151 151 . 97.643  105.267 0.674   1.00
10.92  1 . .
ATOM 4474 N     N     . ILE ILE ILE B B 152 152 . 96.780  106.514 -0.933  1.00
11.74  1 . .
ATOM 4475 CA    CA    . ILE ILE ILE B B 152 152 . 97.733  107.576 -0.680  1.00
11.51  1 . .
ATOM 4476 CB    CB    . ILE ILE ILE B B 152 152 . 98.793  107.725 -1.769  1.00
11.77  1 . .
ATOM 4477 CG1   CG1   . ILE ILE ILE B B 152 152 . 99.639  106.436 -1.786  1.00
8.62   1 . .
ATOM 4478 CD1   CD1   . ILE ILE ILE B B 152 152 . 101.012 106.602 -2.345  1.00
7.60   1 . .
ATOM 4479 CG2   CG2   . ILE ILE ILE B B 152 152 . 99.657  108.988 -1.538  1.00
12.62  1 . .
ATOM 4480 C     C     . ILE ILE ILE B B 152 152 . 96.895  108.792 -0.477  1.00
12.90  1 . .
ATOM 4481 O     O     . ILE ILE ILE B B 152 152 . 96.307  109.275 -1.454  1.00
11.14  1 . .
ATOM 4482 N     N     . ASN ASN ASN B B 153 153 . 96.824  109.209 0.806   1.00
13.79  1 . .
ATOM 4483 CA    CA    . ASN ASN ASN B B 153 153 . 95.951  110.310 1.287   1.00
15.46  1 . .
ATOM 4484 CB    CB    . ASN ASN ASN B B 153 153 . 95.567  110.078 2.753   1.00
16.64  1 . .
ATOM 4485 CG    CG    . ASN ASN ASN B B 153 153 . 94.394  109.096 2.944   1.00
14.22  1 . .
ATOM 4486 OD1   OD1   . ASN ASN ASN B B 153 153 . 93.818  108.577 1.992   1.00
16.62  1 . .
ATOM 4487 ND2   ND2   . ASN ASN ASN B B 153 153 . 94.055  108.832 4.215   1.00
8.58   1 . .
ATOM 4488 C     C     . ASN ASN ASN B B 153 153 . 96.675  111.646 1.233   1.00
15.42  1 . .
ATOM 4489 O     O     . ASN ASN ASN B B 153 153 . 97.849  111.789 1.636   1.00
16.30  1 . .
ATOM 4490 N     N     . GLY GLY GLY B B 154 154 . 95.958  112.665 0.823   1.00
13.93  1 . .
ATOM 4491 CA    CA    . GLY GLY GLY B B 154 154 . 96.635  113.889 0.477   1.00
11.90  1 . .
ATOM 4492 C     C     . GLY GLY GLY B B 154 154 . 95.678  115.001 0.824   1.00
11.58  1 . .
ATOM 4493 O     O     . GLY GLY GLY B B 154 154 . 94.622  114.781 1.411   1.00
12.21  1 . .
ATOM 4494 N     N     . GLY GLY GLY B B 155 155 . 96.001  116.173 0.356   0.50
9.27   1 . .
ATOM 4495 CA    CA    . GLY GLY GLY B B 155 155 . 95.052  117.290 0.458   0.50
8.04   1 . .
ATOM 4496 C     C     . GLY GLY GLY B B 155 155 . 94.705  117.566 1.905   0.50
6.12   1 . .
ATOM 4497 O     O     . GLY GLY GLY B B 155 155 . 95.555  117.578 2.768   0.50
5.89   1 . .
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ATOM 4498 N     N     . SER SER SER B B 156 156 . 93.416  117.700 2.144   0.50
5.13   1 . .
ATOM 4499 CA    CA    . SER SER SER B B 156 156 . 92.859  118.178 3.377   0.50
4.33   1 . .
ATOM 4500 CB    CB    . SER SER SER B B 156 156 . 91.442  118.500 3.037   0.50
5.59   1 . .
ATOM 4501 OG    OG    . SER SER SER B B 156 156 . 91.139  117.462 2.121   0.50
5.40   1 . .
ATOM 4502 C     C     . SER SER SER B B 156 156 . 92.740  117.052 4.368   0.50
4.04   1 . .
ATOM 4503 O     O     . SER SER SER B B 156 156 . 92.409  117.320 5.519   0.50
4.47   1 . .
ATOM 4504 N     N     . HIS HIS HIS B B 157 157 . 92.969  115.825 3.903   0.50
4.20   1 . .
ATOM 4505 CA    CA    . HIS HIS HIS B B 157 157 . 92.863  114.542 4.677   0.50
2.65   1 . .
ATOM 4506 CB    CB    . HIS HIS HIS B B 157 157 . 92.268  113.421 3.798   0.50
3.39   1 . .
ATOM 4507 CG    CG    . HIS HIS HIS B B 157 157 . 90.927  113.747 3.172   0.50
2.23   1 . .
ATOM 4508 ND1   ND1   . HIS HIS HIS B B 157 157 . 90.341  112.904 2.243   0.50
2.59   1 . .
ATOM 4509 CE1   CE1   . HIS HIS HIS B B 157 157 . 89.160  113.386 1.905   0.50
2.15   1 . .
ATOM 4510 NE2   NE2   . HIS HIS HIS B B 157 157 . 89.017  114.575 2.476   0.50
3.08   1 . .
ATOM 4511 CD2   CD2   . HIS HIS HIS B B 157 157 . 90.093  114.814 3.289   0.50
2.71   1 . .
ATOM 4512 C     C     . HIS HIS HIS B B 157 157 . 94.140  114.036 5.362   0.50
3.43   1 . .
ATOM 4513 O     O     . HIS HIS HIS B B 157 157 . 94.145  113.057 6.177   0.50
2.49   1 . .
ATOM 4514 N     N     . ALA ALA ALA B B 158 158 . 95.234  114.745 5.141   0.50
3.14   1 . .
ATOM 4515 CA    CA    . ALA ALA ALA B B 158 158 . 96.469  114.197 5.583   0.50
4.08   1 . .
ATOM 4516 CB    CB    . ALA ALA ALA B B 158 158 . 97.015  113.208 4.503   0.50
3.69   1 . .
ATOM 4517 C     C     . ALA ALA ALA B B 158 158 . 97.466  115.286 5.864   0.50
4.19   1 . .
ATOM 4518 O     O     . ALA ALA ALA B B 158 158 . 97.381  116.386 5.317   0.50
4.68   1 . .
ATOM 4519 N     N     . GLY GLY GLY B B 159 159 . 98.415  115.001 6.726   0.50
6.71   1 . .
ATOM 4520 CA    CA    . GLY GLY GLY B B 159 159 . 99.462  115.990 6.932   0.50
9.88   1 . .
ATOM 4521 C     C     . GLY GLY GLY B B 159 159 . 100.686 115.634 6.109   0.50
12.06  1 . .
ATOM 4522 O     O     . GLY GLY GLY B B 159 159 . 101.406 114.723 6.476   0.50
10.57  1 . .
ATOM 4523 N     N     . ASN ASN ASN B B 160 160 . 100.874 116.341 4.983   1.00
15.18  1 . .
ATOM 4524 CA    CA    . ASN ASN ASN B B 160 160 . 102.034 116.262 4.072   1.00
16.90  1 . .
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ATOM 4525 CB    CB    . ASN ASN ASN B B 160 160 . 102.124 114.864 3.417   1.00
17.88  1 . .
ATOM 4526 CG    CG    . ASN ASN ASN B B 160 160 . 101.071 114.636 2.339   1.00
20.90  1 . .
ATOM 4527 OD1   OD1   . ASN ASN ASN B B 160 160 . 99.881  114.966 2.523   1.00
20.65  1 . .
ATOM 4528 ND2   ND2   . ASN ASN ASN B B 160 160 . 101.494 114.025 1.216   1.00
16.08  1 . .
ATOM 4529 C     C     . ASN ASN ASN B B 160 160 . 101.837 117.327 3.019   1.00
17.57  1 . .
ATOM 4530 O     O     . ASN ASN ASN B B 160 160 . 100.754 117.911 2.978   1.00
18.43  1 . .
ATOM 4531 N     N     . LYS LYS LYS B B 161 161 . 102.845 117.590 2.169   1.00
18.13  1 . .
ATOM 4532 CA    CA    . LYS LYS LYS B B 161 161 . 102.774 118.627 1.114   1.00
19.69  1 . .
ATOM 4533 CB    CB    . LYS LYS LYS B B 161 161 . 104.155 118.961 0.616   1.00
20.23  1 . .
ATOM 4534 CG    CG    . LYS LYS LYS B B 161 161 . 105.005 119.864 1.482   1.00
20.04  1 . .
ATOM 4535 CD    CD    . LYS LYS LYS B B 161 161 . 104.889 121.369 1.184   1.00
18.65  1 . .
ATOM 4536 CE    CE    . LYS LYS LYS B B 161 161 . 105.894 122.129 2.080   1.00
19.41  1 . .
ATOM 4537 NZ    NZ    . LYS LYS LYS B B 161 161 . 105.318 122.478 3.427   1.00
19.13  1 . .
ATOM 4538 C     C     . LYS LYS LYS B B 161 161 . 102.035 118.282 -0.198  1.00
20.39  1 . .
ATOM 4539 O     O     . LYS LYS LYS B B 161 161 . 101.879 119.142 -1.079  1.00
21.67  1 . .
ATOM 4540 N     N     . LEU LEU LEU B B 162 162 . 101.673 117.027 -0.367  1.00
19.67  1 . .
ATOM 4541 CA    CA    . LEU LEU LEU B B 162 162 . 101.065 116.571 -1.615  1.00
18.63  1 . .
ATOM 4542 CB    CB    . LEU LEU LEU B B 162 162 . 100.800 115.101 -1.501  1.00
18.20  1 . .
ATOM 4543 CG    CG    . LEU LEU LEU B B 162 162 . 100.406 114.334 -2.772  1.00
18.88  1 . .
ATOM 4544 CD1   CD1   . LEU LEU LEU B B 162 162 . 101.580 114.170 -3.667  1.00
20.73  1 . .
ATOM 4545 CD2   CD2   . LEU LEU LEU B B 162 162 . 99.975  113.038 -2.296  1.00
20.00  1 . .
ATOM 4546 C     C     . LEU LEU LEU B B 162 162 . 99.751  117.365 -1.829  1.00
16.86  1 . .
ATOM 4547 O     O     . LEU LEU LEU B B 162 162 . 98.934  117.418 -0.931  1.00
17.68  1 . .
ATOM 4548 N     N     . ALA ALA ALA B B 163 163 . 99.590  117.997 -2.989  1.00
15.74  1 . .
ATOM 4549 CA    CA    . ALA ALA ALA B B 163 163 . 98.414  118.887 -3.250  1.00
13.99  1 . .
ATOM 4550 CB    CB    . ALA ALA ALA B B 163 163 . 98.726  119.947 -4.316  1.00
15.09  1 . .
ATOM 4551 C     C     . ALA ALA ALA B B 163 163 . 97.112  118.122 -3.593  1.00
12.22  1 . .
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ATOM 4552 O     O     . ALA ALA ALA B B 163 163 . 96.021  118.441 -3.124  1.00
11.59  1 . .
ATOM 4553 N     N     . MET MET MET B B 164 164 . 97.222  117.100 -4.408  1.00
8.38   1 . .
ATOM 4554 CA    CA    . MET MET MET B B 164 164 . 96.017  116.396 -4.804  1.00
7.26   1 . .
ATOM 4555 CB    CB    . MET MET MET B B 164 164 . 96.208  115.684 -6.150  1.00
7.60   1 . .
ATOM 4556 CG    CG    . MET MET MET B B 164 164 . 96.670  116.670 -7.185  1.00
7.47   1 . .
ATOM 4557 SD    SD    . MET MET MET B B 164 164 . 96.900  115.870 -8.787  1.00
7.21   1 . .
ATOM 4558 CE    CE    . MET MET MET B B 164 164 . 97.554  117.263 -9.727  1.00
7.39   1 . .
ATOM 4559 C     C     . MET MET MET B B 164 164 . 95.583  115.515 -3.664  1.00
5.81   1 . .
ATOM 4560 O     O     . MET MET MET B B 164 164 . 96.405  114.984 -2.924  1.00
7.35   1 . .
ATOM 4561 N     N     . GLN GLN GLN B B 165 165 . 94.295  115.364 -3.483  1.00
6.14   1 . .
ATOM 4562 CA    CA    . GLN GLN GLN B B 165 165 . 93.737  114.800 -2.271  1.00
7.91   1 . .
ATOM 4563 CB    CB    . GLN GLN GLN B B 165 165 . 92.271  115.234 -2.167  1.00
8.58   1 . .
ATOM 4564 CG    CG    . GLN GLN GLN B B 165 165 . 91.554  114.829 -0.877  1.00
7.53   1 . .
ATOM 4565 CD    CD    . GLN GLN GLN B B 165 165 . 90.135  115.448 -0.799  1.00
7.22   1 . .
ATOM 4566 OE1   OE1   . GLN GLN GLN B B 165 165 . 89.958  116.574 -0.351  1.00
6.75   1 . .
ATOM 4567 NE2   NE2   . GLN GLN GLN B B 165 165 . 89.152  114.708 -1.274  1.00
7.26   1 . .
ATOM 4568 C     C     . GLN GLN GLN B B 165 165 . 93.816  113.266 -2.179  1.00
7.26   1 . .
ATOM 4569 O     O     . GLN GLN GLN B B 165 165 . 94.151  112.728 -1.124  1.00
9.73   1 . .
ATOM 4570 N     N     . GLU GLU GLU B B 166 166 . 93.411  112.533 -3.232  1.00
7.58   1 . .
ATOM 4571 CA    CA    . GLU GLU GLU B B 166 166 . 93.276  111.066 -3.137  1.00
6.31   1 . .
ATOM 4572 CB    CB    . GLU GLU GLU B B 166 166 . 91.844  110.628 -3.005  1.00
5.86   1 . .
ATOM 4573 CG    CG    . GLU GLU GLU B B 166 166 . 91.034  111.496 -1.985  1.00
5.70   1 . .
ATOM 4574 CD    CD    . GLU GLU GLU B B 166 166 . 89.557  111.180 -1.981  1.00
7.24   1 . .
ATOM 4575 OE1   OE1   . GLU GLU GLU B B 166 166 . 89.125  110.211 -2.682  1.00
7.58   1 . .
ATOM 4576 OE2   OE2   . GLU GLU GLU B B 166 166 . 88.752  111.919 -1.318  1.00
8.33   1 . .
ATOM 4577 C     C     . GLU GLU GLU B B 166 166 . 93.875  110.344 -4.342  1.00
6.36   1 . .
ATOM 4578 O     O     . GLU GLU GLU B B 166 166 . 93.662  110.756 -5.497  1.00
8.26   1 . .
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ATOM 4579 N     N     . PHE PHE PHE B B 167 167 . 94.543  109.244 -4.049  1.00
7.17   1 . .
ATOM 4580 CA    CA    . PHE PHE PHE B B 167 167 . 95.101  108.303 -5.044  1.00
5.15   1 . .
ATOM 4581 CB    CB    . PHE PHE PHE B B 167 167 . 96.674  108.339 -5.068  1.00
4.70   1 . .
ATOM 4582 CG    CG    . PHE PHE PHE B B 167 167 . 97.238  109.674 -5.456  1.00
7.11   1 . .
ATOM 4583 CD1   CD1   . PHE PHE PHE B B 167 167 . 97.288  110.694 -4.535  1.00
10.35  1 . .
ATOM 4584 CE1   CE1   . PHE PHE PHE B B 167 167 . 97.769  111.942 -4.933  1.00
10.16  1 . .
ATOM 4585 CZ    CZ    . PHE PHE PHE B B 167 167 . 98.228  112.139 -6.224  1.00
11.84  1 . .
ATOM 4586 CE2   CE2   . PHE PHE PHE B B 167 167 . 98.186  111.120 -7.125  1.00
9.99   1 . .
ATOM 4587 CD2   CD2   . PHE PHE PHE B B 167 167 . 97.677  109.912 -6.748  1.00
8.85   1 . .
ATOM 4588 C     C     . PHE PHE PHE B B 167 167 . 94.505  106.962 -4.673  1.00
5.00   1 . .
ATOM 4589 O     O     . PHE PHE PHE B B 167 167 . 94.948  106.373 -3.646  1.00
5.85   1 . .
ATOM 4590 N     N     . MET MET MET B B 168 168 . 93.562  106.466 -5.484  1.00
4.06   1 . .
ATOM 4591 CA    CA    . MET MET MET B B 168 168 . 92.766  105.289 -5.195  1.00
3.55   1 . .
ATOM 4592 CB    CB    . MET MET MET B B 168 168 . 91.286  105.535 -5.427  1.00
2.91   1 . .
ATOM 4593 CG    CG    . MET MET MET B B 168 168 . 90.695  106.584 -4.444  1.00
3.57   1 . .
ATOM 4594 SD    SD    . MET MET MET B B 168 168 . 89.050  107.063 -4.911  1.00
5.46   1 . .
ATOM 4595 CE    CE    . MET MET MET B B 168 168 . 89.329  108.661 -5.685  1.00
6.59   1 . .
ATOM 4596 C     C     . MET MET MET B B 168 168 . 93.157  104.118 -6.115  1.00
3.79   1 . .
ATOM 4597 O     O     . MET MET MET B B 168 168 . 93.622  104.300 -7.297  1.00
2.79   1 . .
ATOM 4598 N     N     . ILE ILE ILE B B 169 169 . 93.048  102.914 -5.553  1.00
3.11   1 . .
ATOM 4599 CA    CA    . ILE ILE ILE B B 169 169 . 93.193  101.717 -6.381  1.00
2.09   1 . .
ATOM 4600 CB    CB    . ILE ILE ILE B B 169 169 . 94.257  100.714 -5.785  1.00
2.23   1 . .
ATOM 4601 CG1   CG1   . ILE ILE ILE B B 169 169 . 93.840  100.233 -4.374  1.00
3.47   1 . .
ATOM 4602 CD1   CD1   . ILE ILE ILE B B 169 169 . 94.746  99.070  -3.890  1.00
4.95   1 . .
ATOM 4603 CG2   CG2   . ILE ILE ILE B B 169 169 . 95.639  101.283 -5.925  1.00
3.59   1 . .
ATOM 4604 C     C     . ILE ILE ILE B B 169 169 . 91.772  101.075 -6.552  1.00
3.11   1 . .
ATOM 4605 O     O     . ILE ILE ILE B B 169 169 . 90.979  100.953 -5.571  1.00
3.74   1 . .
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ATOM 4606 N     N     . LEU LEU LEU B B 170 170 . 91.483  100.545 -7.753  1.00
3.38   1 . .
ATOM 4607 CA    CA    . LEU LEU LEU B B 170 170 . 90.206  99.918  -8.110  1.00
3.22   1 . .
ATOM 4608 CB    CB    . LEU LEU LEU B B 170 170 . 89.499  100.758 -9.190  1.00
3.96   1 . .
ATOM 4609 CG    CG    . LEU LEU LEU B B 170 170 . 88.716  102.067 -8.867  1.00
2.69   1 . .
ATOM 4610 CD1   CD1   . LEU LEU LEU B B 170 170 . 89.649  103.235 -8.579  1.00
4.94   1 . .
ATOM 4611 CD2   CD2   . LEU LEU LEU B B 170 170 . 87.701  102.370 -10.039 1.00
6.77   1 . .
ATOM 4612 C     C     . LEU LEU LEU B B 170 170 . 90.407  98.505  -8.702  1.00
4.30   1 . .
ATOM 4613 O     O     . LEU LEU LEU B B 170 170 . 90.852  98.390  -9.869  1.00
5.53   1 . .
ATOM 4614 N     N     . PRO PRO PRO B B 171 171 . 90.033  97.424  -7.966  1.00
3.53   1 . .
ATOM 4615 CA    CA    . PRO PRO PRO B B 171 171 . 90.273  96.084  -8.452  1.00
3.42   1 . .
ATOM 4616 CB    CB    . PRO PRO PRO B B 171 171 . 90.133  95.240  -7.172  1.00
3.69   1 . .
ATOM 4617 CG    CG    . PRO PRO PRO B B 171 171 . 90.401  96.272  -6.001  1.00
4.22   1 . .
ATOM 4618 CD    CD    . PRO PRO PRO B B 171 171 . 89.628  97.424  -6.535  1.00
2.64   1 . .
ATOM 4619 C     C     . PRO PRO PRO B B 171 171 . 89.239  95.649  -9.465  1.00
4.20   1 . .
ATOM 4620 O     O     . PRO PRO PRO B B 171 171 . 88.370  94.843  -9.211  1.00
4.51   1 . .
ATOM 4621 N     N     . VAL VAL VAL B B 172 172 . 89.285  96.294  -10.614 1.00
3.44   1 . .
ATOM 4622 CA    CA    . VAL VAL VAL B B 172 172 . 88.334  96.052  -11.686 1.00
5.43   1 . .
ATOM 4623 CB    CB    . VAL VAL VAL B B 172 172 . 88.517  97.064  -12.884 1.00
5.45   1 . .
ATOM 4624 CG1   CG1   . VAL VAL VAL B B 172 172 . 88.198  98.512  -12.472 1.00
6.50   1 . .
ATOM 4625 CG2   CG2   . VAL VAL VAL B B 172 172 . 89.975  96.995  -13.425 1.00
6.12   1 . .
ATOM 4626 C     C     . VAL VAL VAL B B 172 172 . 88.405  94.595  -12.164 1.00
6.05   1 . .
ATOM 4627 O     O     . VAL VAL VAL B B 172 172 . 87.426  94.073  -12.611 1.00
7.04   1 . .
ATOM 4628 N     N     . GLY GLY GLY B B 173 173 . 89.585  94.022  -12.110 1.00
6.85   1 . .
ATOM 4629 CA    CA    . GLY GLY GLY B B 173 173 . 89.825  92.631  -12.537 1.00
5.98   1 . .
ATOM 4630 C     C     . GLY GLY GLY B B 173 173 . 89.517  91.543  -11.538 1.00
6.62   1 . .
ATOM 4631 O     O     . GLY GLY GLY B B 173 173 . 89.810  90.376  -11.796 1.00
10.51  1 . .
ATOM 4632 N     N     . ALA ALA ALA B B 174 174 . 88.920  91.872  -10.412 1.00
6.28   1 . .
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ATOM 4633 CA    CA    . ALA ALA ALA B B 174 174 . 88.733  90.896  -9.353  1.00
4.60   1 . .
ATOM 4634 CB    CB    . ALA ALA ALA B B 174 174 . 88.486  91.618  -8.040  1.00
4.69   1 . .
ATOM 4635 C     C     . ALA ALA ALA B B 174 174 . 87.578  89.999  -9.709  1.00
5.91   1 . .
ATOM 4636 O     O     . ALA ALA ALA B B 174 174 . 86.733  90.339  -10.537 1.00
6.35   1 . .
ATOM 4637 N     N     . GLU GLU GLU B B 175 175 . 87.518  88.816  -9.099  1.00
6.15   1 . .
ATOM 4638 CA    CA    . GLU GLU GLU B B 175 175 . 86.441  87.855  -9.376  1.00
8.70   1 . .
ATOM 4639 CB    CB    . GLU GLU GLU B B 175 175 . 86.917  86.472  -9.008  1.00
10.15  1 . .
ATOM 4640 CG    CG    . GLU GLU GLU B B 175 175 . 88.288  86.086  -9.620  1.00
17.99  1 . .
ATOM 4641 CD    CD    . GLU GLU GLU B B 175 175 . 88.798  84.789  -9.054  1.00
26.01  1 . .
ATOM 4642 OE1   OE1   . GLU GLU GLU B B 175 175 . 87.951  83.896  -8.843  1.00
30.15  1 . .
ATOM 4643 OE2   OE2   . GLU GLU GLU B B 175 175 . 90.036  84.655  -8.821  1.00
30.21  1 . .
ATOM 4644 C     C     . GLU GLU GLU B B 175 175 . 85.062  88.092  -8.755  1.00
8.00   1 . .
ATOM 4645 O     O     . GLU GLU GLU B B 175 175 . 84.066  87.533  -9.239  1.00
9.01   1 . .
ATOM 4646 N     N     . SER SER SER B B 176 176 . 85.006  88.933  -7.700  1.00
5.71   1 . .
ATOM 4647 CA    CA    . SER SER SER B B 176 176 . 83.787  89.144  -6.953  1.00
4.34   1 . .
ATOM 4648 CB    CB    . SER SER SER B B 176 176 . 83.498  87.908  -6.058  1.00
4.99   1 . .
ATOM 4649 OG    OG    . SER SER SER B B 176 176 . 84.567  87.697  -5.153  1.00
5.58   1 . .
ATOM 4650 C     C     . SER SER SER B B 176 176 . 84.114  90.296  -6.015  1.00
3.46   1 . .
ATOM 4651 O     O     . SER SER SER B B 176 176 . 85.254  90.709  -5.939  1.00
2.73   1 . .
ATOM 4652 N     N     . PHE PHE PHE B B 177 177 . 83.132  90.740  -5.270  1.00
4.58   1 . .
ATOM 4653 CA    CA    . PHE PHE PHE B B 177 177 . 83.412  91.811  -4.321  1.00
3.21   1 . .
ATOM 4654 CB    CB    . PHE PHE PHE B B 177 177 . 82.146  92.367  -3.650  1.00
3.95   1 . .
ATOM 4655 CG    CG    . PHE PHE PHE B B 177 177 . 82.463  93.632  -2.885  1.00
4.12   1 . .
ATOM 4656 CD1   CD1   . PHE PHE PHE B B 177 177 . 82.496  94.835  -3.548  1.00
4.47   1 . .
ATOM 4657 CE1   CE1   . PHE PHE PHE B B 177 177 . 82.873  95.979  -2.893  1.00
4.47   1 . .
ATOM 4658 CZ    CZ    . PHE PHE PHE B B 177 177 . 83.197  95.948  -1.565  1.00
4.94   1 . .
ATOM 4659 CE2   CE2   . PHE PHE PHE B B 177 177 . 83.179  94.762  -0.832  1.00
4.04   1 . .
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ATOM 4660 CD2  CD2  . PHE PHE PHE B B 177 177 . 82.805  93.583  -1.484  1.00
2.53   1 . .
ATOM 4661 C    C    . PHE PHE PHE B B 177 177 . 84.375  91.337  -3.221  1.00
3.59   1 . .
ATOM 4662 O    O    . PHE PHE PHE B B 177 177 . 85.311  92.063  -2.825  1.00
3.68   1 . .
ATOM 4663 N    N    . ARG ARG ARG B B 178 178 . 84.099  90.121  -2.682  1.00
4.17   1 . .
ATOM 4664 CA   CA   . ARG ARG ARG B B 178 178 . 84.985  89.639  -1.642  1.00
5.08   1 . .
ATOM 4665 CB   CB   . ARG ARG ARG B B 178 178 . 84.423  88.345  -1.005  1.00
5.50   1 . .
ATOM 4666 CG   CG   . ARG ARG ARG B B 178 178 . 83.344  88.639  0.041   1.00
12.90  1 . .
ATOM 4667 CD   CD   . ARG ARG ARG B B 178 178 . 82.358  87.454  0.289   1.00
21.77  1 . .
ATOM 4668 NE   NE   . ARG ARG ARG B B 178 178 . 82.119  86.728  -0.956  1.00
26.16  1 . .
ATOM 4669 CZ   CZ   . ARG ARG ARG B B 178 178 . 81.150  85.841  -1.193  1.00
26.93  1 . .
ATOM 4670 NH1  NH1  . ARG ARG ARG B B 178 178 . 80.256  85.553  -0.273  1.00
25.85  1 . .
ATOM 4671 NH2  NH2  . ARG ARG ARG B B 178 178 . 81.066  85.271  -2.391  1.00
28.92  1 . .
ATOM 4672 C    C    . ARG ARG ARG B B 178 178 . 86.449  89.504  -2.169  1.00
3.54   1 . .
ATOM 4673 O    O    . ARG ARG ARG B B 178 178 . 87.430  89.763  -1.433  1.00
4.02   1 . .
ATOM 4674 N    N    . ASP ASP ASP B B 179 179 . 86.610  89.053  -3.438  1.00
4.13   1 . .
ATOM 4675 CA   CA   . ASP ASP ASP B B 179 179 . 87.963  89.006  -4.041  1.00
4.49   1 . .
ATOM 4676 CB   CB   . ASP ASP ASP B B 179 179 . 87.877  88.293  -5.397  1.00
5.93   1 . .
ATOM 4677 CG   CG   . ASP ASP ASP B B 179 179 . 89.235  87.930  -5.940  1.00
6.38   1 . .
ATOM 4678 OD1  OD1  . ASP ASP ASP B B 179 179 . 89.573  88.338  -7.098  1.00
10.40  1 . .
ATOM 4679 OD2  OD2  . ASP ASP ASP B B 179 179 . 90.030  87.345  -5.158  1.00
6.91   1 . .
ATOM 4680 C    C    . ASP ASP ASP B B 179 179 . 88.638  90.407  -4.228  1.00
2.63   1 . .
ATOM 4681 O    O    . ASP ASP ASP B B 179 179 . 89.823  90.588  -4.014  1.00
2.57   1 . .
ATOM 4682 N    N    . ALA ALA ALA B B 180 180 . 87.818  91.404  -4.547  1.00
2.67   1 . .
ATOM 4683 CA   CA   . ALA ALA ALA B B 180 180 . 88.303  92.775  -4.694  1.00
2.58   1 . .
ATOM 4684 CB   CB   . ALA ALA ALA B B 180 180 . 87.189  93.661  -5.263  1.00
4.25   1 . .
ATOM 4685 C    C    . ALA ALA ALA B B 180 180 . 88.845  93.348  -3.390  1.00
2.00   1 . .
ATOM 4686 O    O    . ALA ALA ALA B B 180 180 . 89.848  94.046  -3.335  1.00
2.55   1 . .
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ATOM 4687 N     N     . MET MET MET B B 181 181 . 88.208  92.914  -2.291  1.00
2.50   1 . .
ATOM 4688 CA    CA    . MET MET MET B B 181 181 . 88.658  93.242  -0.872  1.00
2.17   1 . .
ATOM 4689 CB    CB    . MET MET MET B B 181 181 . 87.622  92.791  0.161   1.00
2.42   1 . .
ATOM 4690 CG    CG    . MET MET MET B B 181 181 . 86.275  93.563  0.118   1.00
2.70   1 . .
ATOM 4691 SD    SD    . MET MET MET B B 181 181 . 86.552  95.400  0.228   1.00
3.37   1 . .
ATOM 4692 CE    CE    . MET MET MET B B 181 181 . 87.675  95.436  1.583   1.00
7.07   1 . .
ATOM 4693 C     C     . MET MET MET B B 181 181 . 90.002  92.627  -0.599  1.00
2.00   1 . .
ATOM 4694 O     O     . MET MET MET B B 181 181 . 90.925  93.316  -0.108  1.00
2.04   1 . .
ATOM 4695 N     N     . ARG ARG ARG B B 182 182 . 90.152  91.352  -1.050  1.00
2.25   1 . .
ATOM 4696 CA    CA    . ARG ARG ARG B B 182 182 . 91.480  90.735  -0.923  1.00
2.67   1 . .
ATOM 4697 CB    CB    . ARG ARG ARG B B 182 182 . 91.440  89.280  -1.376  1.00
2.58   1 . .
ATOM 4698 CG    CG    . ARG ARG ARG B B 182 182 . 92.823  88.586  -1.192  1.00
4.96   1 . .
ATOM 4699 CD    CD    . ARG ARG ARG B B 182 182 . 92.689  87.171  -1.511  1.00
8.98   1 . .
ATOM 4700 NE    NE    . ARG ARG ARG B B 182 182 . 92.174  86.927  -2.867  1.00
12.80  1 . .
ATOM 4701 CZ    CZ    . ARG ARG ARG B B 182 182 . 92.932  86.807  -3.961  1.00
17.43  1 . .
ATOM 4702 NH1   NH1   . ARG ARG ARG B B 182 182 . 94.272  86.964  -3.905  1.00
17.07  1 . .
ATOM 4703 NH2   NH2   . ARG ARG ARG B B 182 182 . 92.355  86.552  -5.134  1.00
20.57  1 . .
ATOM 4704 C     C     . ARG ARG ARG B B 182 182 . 92.576  91.510  -1.725  1.00
2.00   1 . .
ATOM 4705 O     O     . ARG ARG ARG B B 182 182 . 93.649  91.758  -1.239  1.00
2.10   1 . .
ATOM 4706 N     N     . LEU LEU LEU B B 183 183 . 92.294  91.838  -2.978  1.00
2.87   1 . .
ATOM 4707 CA    CA    . LEU LEU LEU B B 183 183 . 93.265  92.469  -3.840  1.00
2.92   1 . .
ATOM 4708 CB    CB    . LEU LEU LEU B B 183 183 . 92.701  92.711  -5.201  1.00
3.98   1 . .
ATOM 4709 CG    CG    . LEU LEU LEU B B 183 183 . 92.307  91.503  -6.071  1.00
6.92   1 . .
ATOM 4710 CD1   CD1   . LEU LEU LEU B B 183 183 . 92.402  91.770  -7.629  1.00
6.57   1 . .
ATOM 4711 CD2   CD2   . LEU LEU LEU B B 183 183 . 92.837  90.115  -5.696  1.00
8.15   1 . .
ATOM 4712 C     C     . LEU LEU LEU B B 183 183 . 93.631  93.849  -3.269  1.00
2.26   1 . .
ATOM 4713 O     O     . LEU LEU LEU B B 183 183 . 94.807  94.196  -3.184  1.00
3.18   1 . .
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ATOM 4714 N     N     . GLY GLY GLY B B 184 184 . 92.612  94.612  -2.841  1.00
2.39   1 . .
ATOM 4715 CA    CA    . GLY GLY GLY B B 184 184 . 92.884  95.913  -2.234  1.00
2.19   1 . .
ATOM 4716 C     C     . GLY GLY GLY B B 184 184 . 93.721  95.851  -0.960  1.00
2.05   1 . .
ATOM 4717 O     O     . GLY GLY GLY B B 184 184 . 94.639  96.577  -0.779  1.00
2.76   1 . .
ATOM 4718 N     N     . ALA ALA ALA B B 185 185 . 93.373  94.908  -0.083  1.00
2.44   1 . .
ATOM 4719 CA    CA    . ALA ALA ALA B B 185 185 . 94.101  94.776  1.120   1.00
2.65   1 . .
ATOM 4720 CB    CB    . ALA ALA ALA B B 185 185 . 93.334  93.823  2.040   1.00
2.60   1 . .
ATOM 4721 C     C     . ALA ALA ALA B B 185 185 . 95.518  94.351  0.898   1.00
2.22   1 . .
ATOM 4722 O     O     . ALA ALA ALA B B 185 185 . 96.445  94.858  1.542   1.00
4.46   1 . .
ATOM 4723 N     N     . GLU GLU GLU B B 186 186 . 95.679  93.403  -0.041  1.00
3.06   1 . .
ATOM 4724 CA    CA    . GLU GLU GLU B B 186 186 . 97.038  92.992  -0.341  1.00
2.53   1 . .
ATOM 4725 CB    CB    . GLU GLU GLU B B 186 186 . 97.090  91.772  -1.274  1.00
2.94   1 . .
ATOM 4726 CG    CG    . GLU GLU GLU B B 186 186 . 96.604  90.455  -0.563  1.00
2.97   1 . .
ATOM 4727 CD    CD    . GLU GLU GLU B B 186 186 . 96.617  89.218  -1.425  1.00
6.22   1 . .
ATOM 4728 OE1   OE1   . GLU GLU GLU B B 186 186 . 97.153  89.301  -2.539  1.00
8.94   1 . .
ATOM 4729 OE2   OE2   . GLU GLU GLU B B 186 186 . 96.074  88.152  -1.007  1.00
5.43   1 . .
ATOM 4730 C     C     . GLU GLU GLU B B 186 186 . 97.891  94.082  -0.949  1.00
2.55   1 . .
ATOM 4731 O     O     . GLU GLU GLU B B 186 186 . 99.091  94.195  -0.615  1.00
3.15   1 . .
ATOM 4732 N     N     . VAL VAL VAL B B 187 187 . 97.294  94.881  -1.818  1.00
2.90   1 . .
ATOM 4733 CA    CA    . VAL VAL VAL B B 187 187 . 98.073  95.954  -2.363  1.00
2.79   1 . .
ATOM 4734 CB    CB    . VAL VAL VAL B B 187 187 . 97.352  96.618  -3.572  1.00
3.62   1 . .
ATOM 4735 CG1   CG1   . VAL VAL VAL B B 187 187 . 98.049  97.948  -4.030  1.00
2.78   1 . .
ATOM 4736 CG2   CG2   . VAL VAL VAL B B 187 187 . 97.240  95.621  -4.755  1.00
3.58   1 . .
ATOM 4737 C     C     . VAL VAL VAL B B 187 187 . 98.353  96.999  -1.268  1.00
2.36   1 . .
ATOM 4738 O     O     . VAL VAL VAL B B 187 187 . 99.441  97.574  -1.238  1.00
3.07   1 . .
ATOM 4739 N     N     . TYR TYR TYR B B 188 188 . 97.368  97.309  -0.428  1.00
2.91   1 . .
ATOM 4740 CA    CA    . TYR TYR TYR B B 188 188 . 97.577  98.210  0.718   1.00
3.27   1 . .
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ATOM 4741 CB    CB    . TYR TYR TYR B B 188 188 . 96.259  98.322  1.555   1.00
3.31   1 . .
ATOM 4742 CG    CG    . TYR TYR TYR B B 188 188 . 96.409  99.260  2.705   1.00
4.86   1 . .
ATOM 4743 CD1   CD1   . TYR TYR TYR B B 188 188 . 96.197  100.592 2.561   1.00
2.88   1 . .
ATOM 4744 CE1   CE1   . TYR TYR TYR B B 188 188 . 96.333  101.497 3.645   1.00
2.00   1 . .
ATOM 4745 CZ    CZ    . TYR TYR TYR B B 188 188 . 96.602  100.979 4.882   1.00
3.31   1 . .
ATOM 4746 OH    OH    . TYR TYR TYR B B 188 188 . 96.768  101.741 5.978   1.00
4.27   1 . .
ATOM 4747 CE2   CE2   . TYR TYR TYR B B 188 188 . 96.770  99.655  5.042   1.00
2.13   1 . .
ATOM 4748 CD2   CD2   . TYR TYR TYR B B 188 188 . 96.673  98.780  3.962   1.00
4.45   1 . .
ATOM 4749 C     C     . TYR TYR TYR B B 188 188 . 98.777  97.821  1.610   1.00
3.90   1 . .
ATOM 4750 O     O     . TYR TYR TYR B B 188 188 . 99.656  98.610  1.791   1.00
3.83   1 . .
ATOM 4751 N     N     . HIS HIS HIS B B 189 189 . 98.831  96.542  2.039   1.00
3.10   1 . .
ATOM 4752 CA    CA    . HIS HIS HIS B B 189 189 . 99.932  96.110  2.852   1.00
4.76   1 . .
ATOM 4753 CB    CB    . HIS HIS HIS B B 189 189 . 99.655  94.697  3.445   1.00
3.62   1 . .
ATOM 4754 CG    CG    . HIS HIS HIS B B 189 189 . 98.370  94.593  4.239   1.00
7.98   1 . .
ATOM 4755 ND1   ND1   . HIS HIS HIS B B 189 189 . 98.073  95.430  5.293   1.00
12.17  1 . .
ATOM 4756 CE1   CE1   . HIS HIS HIS B B 189 189 . 96.880  95.141  5.770   1.00
10.23  1 . .
ATOM 4757 NE2   NE2   . HIS HIS HIS B B 189 189 . 96.415  94.095  5.103   1.00
13.00  1 . .
ATOM 4758 CD2   CD2   . HIS HIS HIS B B 189 189 . 97.327  93.731  4.141   1.00
10.40  1 . .
ATOM 4759 C     C     . HIS HIS HIS B B 189 189 . 101.233 96.113  2.066   1.00
4.15   1 . .
ATOM 4760 O     O     . HIS HIS HIS B B 189 189 . 102.297 96.469  2.607   1.00
5.29   1 . .
ATOM 4761 N     N     . THR THR THR B B 190 190 . 101.180 95.775  0.766   1.00
3.15   1 . .
ATOM 4762 CA    CA    . THR THR THR B B 190 190 . 102.411 95.884  -0.053  1.00
4.32   1 . .
ATOM 4763 CB    CB    . THR THR THR B B 190 190 . 102.125 95.373  -1.484  1.00
3.54   1 . .
ATOM 4764 OG1   OG1   . THR THR THR B B 190 190 . 101.654 94.020  -1.448  1.00
7.40   1 . .
ATOM 4765 CG2   CG2   . THR THR THR B B 190 190 . 103.354 95.431  -2.373  1.00
6.56   1 . .
ATOM 4766 C     C     . THR THR THR B B 190 190 . 102.883 97.349  -0.142  1.00
4.68   1 . .
ATOM 4767 O     O     . THR THR THR B B 190 190 . 104.090 97.636  0.036   1.00
5.00   1 . .
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ATOM 4768 N     N     . LEU LEU LEU B B 191 191 . 101.934 98.279  -0.281  1.00
3.34   1 . .
ATOM 4769 CA    CA    . LEU LEU LEU B B 191 191 . 102.301 99.713  -0.402  1.00
2.66   1 . .
ATOM 4770 CB    CB    . LEU LEU LEU B B 191 191 . 101.027 100.469 -0.734  1.00
3.68   1 . .
ATOM 4771 CG    CG    . LEU LEU LEU B B 191 191 . 101.193 101.961 -0.717  1.00
3.77   1 . .
ATOM 4772 CD1   CD1   . LEU LEU LEU B B 191 191 . 102.257 102.480 -1.728  1.00
4.66   1 . .
ATOM 4773 CD2   CD2   . LEU LEU LEU B B 191 191 . 99.793  102.460 -1.006  1.00
4.73   1 . .
ATOM 4774 C     C     . LEU LEU LEU B B 191 191 . 102.984 100.196 0.881   1.00
2.50   1 . .
ATOM 4775 O     O     . LEU LEU LEU B B 191 191 . 103.925 100.937 0.878   1.00
4.59   1 . .
ATOM 4776 N     N     . LYS LYS LYS B B 192 192 . 102.515 99.687  2.038   1.00
2.89   1 . .
ATOM 4777 CA    CA    . LYS LYS LYS B B 192 192 . 103.107 100.085 3.315   1.00
4.27   1 . .
ATOM 4778 CB    CB    . LYS LYS LYS B B 192 192 . 102.321 99.482  4.518   1.00
4.73   1 . .
ATOM 4779 CG    CG    . LYS LYS LYS B B 192 192 . 102.826 99.986  5.873   1.00
5.43   1 . .
ATOM 4780 CD    CD    . LYS LYS LYS B B 192 192 . 101.966 99.486  6.981   1.00
6.32   1 . .
ATOM 4781 CE    CE    . LYS LYS LYS B B 192 192 . 102.393 100.103 8.292   1.00
8.64   1 . .
ATOM 4782 NZ    NZ    . LYS LYS LYS B B 192 192 . 101.594 99.474  9.385   1.00
11.76  1 . .
ATOM 4783 C     C     . LYS LYS LYS B B 192 192 . 104.597 99.781  3.288   1.00
4.26   1 . .
ATOM 4784 O     O     . LYS LYS LYS B B 192 192 . 105.441 100.554 3.742   1.00
4.99   1 . .
ATOM 4785 N     N     . GLY GLY GLY B B 193 193 . 104.930 98.609  2.812   1.00
5.31   1 . .
ATOM 4786 CA    CA    . GLY GLY GLY B B 193 193 . 106.339 98.283  2.754   1.00
5.80   1 . .
ATOM 4787 C     C     . GLY GLY GLY B B 193 193 . 107.137 99.020  1.704   1.00
6.58   1 . .
ATOM 4788 O     O     . GLY GLY GLY B B 193 193 . 108.291 99.338  1.913   1.00
10.26  1 . .
ATOM 4789 N     N     . VAL VAL VAL B B 194 194 . 106.545 99.307  0.570   1.00
6.32   1 . .
ATOM 4790 CA    CA    . VAL VAL VAL B B 194 194 . 107.231 100.135 -0.430  1.00
6.15   1 . .
ATOM 4791 CB    CB    . VAL VAL VAL B B 194 194 . 106.312 100.264 -1.599  1.00
6.81   1 . .
ATOM 4792 CG1   CG1   . VAL VAL VAL B B 194 194 . 106.856 101.319 -2.626  1.00
8.30   1 . .
ATOM 4793 CG2   CG2   . VAL VAL VAL B B 194 194 . 106.076 98.888  -2.233  1.00
10.00  1 . .
ATOM 4794 C     C     . VAL VAL VAL B B 194 194 . 107.565 101.533 0.125   1.00
7.47   1 . .
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ATOM 4795 O     O     . VAL VAL VAL B B 194 194 . 108.683 102.072 -0.036  1.00
9.66   1 . .
ATOM 4796 N     N     . ILE ILE ILE B B 195 195 . 106.614 102.099 0.858   1.00
8.06   1 . .
ATOM 4797 CA    CA    . ILE ILE ILE B B 195 195 . 106.814 103.427 1.494   1.00
7.82   1 . .
ATOM 4798 CB    CB    . ILE ILE ILE B B 195 195 . 105.458 103.987 2.035   1.00
6.40   1 . .
ATOM 4799 CG1   CG1   . ILE ILE ILE B B 195 195 . 104.553 104.393 0.858   1.00
7.94   1 . .
ATOM 4800 CD1   CD1   . ILE ILE ILE B B 195 195 . 103.176 104.763 1.182   1.00
7.09   1 . .
ATOM 4801 CG2   CG2   . ILE ILE ILE B B 195 195 . 105.734 105.184 2.950   1.00
7.69   1 . .
ATOM 4802 C     C     . ILE ILE ILE B B 195 195 . 107.873 103.371 2.593   1.00
9.25   1 . .
ATOM 4803 O     O     . ILE ILE ILE B B 195 195 . 108.800 104.268 2.690   1.00
10.04  1 . .
ATOM 4804 N     N     . LYS LYS LYS B B 196 196 . 107.752 102.331 3.440   1.00
10.11  1 . .
ATOM 4805 CA    CA    . LYS LYS LYS B B 196 196 . 108.717 102.145 4.511   1.00
10.49  1 . .
ATOM 4806 CB    CB    . LYS LYS LYS B B 196 196 . 108.347 100.928 5.402   1.00
11.53  1 . .
ATOM 4807 CG    CG    . LYS LYS LYS B B 196 196 . 109.322 100.626 6.572   1.00
10.61  1 . .
ATOM 4808 CD    CD    . LYS LYS LYS B B 196 196 . 109.033 99.211  7.147   1.00
15.90  1 . .
ATOM 4809 CE    CE    . LYS LYS LYS B B 196 196 . 110.109 98.819  8.230   1.00
21.87  1 . .
ATOM 4810 NZ    NZ    . LYS LYS LYS B B 196 196 . 110.334 97.340  8.376   1.00
21.29  1 . .
ATOM 4811 C     C     . LYS LYS LYS B B 196 196 . 110.115 102.011 3.867   1.00
10.10  1 . .
ATOM 4812 O     O     . LYS LYS LYS B B 196 196 . 111.090 102.617 4.360   1.00
8.96   1 . .
ATOM 4813 N     N     . ASP ASP ASP B B 197 197 . 110.220 101.295 2.737   1.00
11.03  1 . .
ATOM 4814 CA    CA    . ASP ASP ASP B B 197 197 . 111.581 100.973 2.240   1.00
12.03  1 . .
ATOM 4815 CB    CB    . ASP ASP ASP B B 197 197 . 111.570 99.884  1.192   1.00
13.89  1 . .
ATOM 4816 CG    CG    . ASP ASP ASP B B 197 197 . 111.271 98.505  1.745   1.00
14.66  1 . .
ATOM 4817 OD1   OD1   . ASP ASP ASP B B 197 197 . 110.985 97.651  0.896   1.00
16.49  1 . .
ATOM 4818 OD2   OD2   . ASP ASP ASP B B 197 197 . 111.357 98.257  2.981   1.00
17.78  1 . .
ATOM 4819 C     C     . ASP ASP ASP B B 197 197 . 112.168 102.224 1.666   1.00
12.86  1 . .
ATOM 4820 O     O     . ASP ASP ASP B B 197 197 . 113.344 102.429 1.802   1.00
14.09  1 . .
ATOM 4821 N     N     . LYS LYS LYS B B 198 198 . 111.326 103.085 1.104   1.00
9.59   1 . .
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ATOM 4822 CA    CA    . LYS LYS LYS B B 198 198 . 111.862 104.287 0.448   1.00
7.64   1 . .
ATOM 4823 CB    CB    . LYS LYS LYS B B 198 198 . 111.043 104.672 -0.789  1.00
7.85   1 . .
ATOM 4824 CG    CG    . LYS LYS LYS B B 198 198 . 111.702 105.769 -1.609  1.00
10.07  1 . .
ATOM 4825 CD    CD    . LYS LYS LYS B B 198 198 . 110.882 106.055 -2.795  1.00
13.57  1 . .
ATOM 4826 CE    CE    . LYS LYS LYS B B 198 198 . 111.532 107.119 -3.728  1.00
17.37  1 . .
ATOM 4827 NZ    NZ    . LYS LYS LYS B B 198 198 . 110.605 107.290 -4.883  1.00
21.15  1 . .
ATOM 4828 C     C     . LYS LYS LYS B B 198 198 . 111.975 105.477 1.389   1.00
7.87   1 . .
ATOM 4829 O     O     . LYS LYS LYS B B 198 198 . 112.938 106.208 1.344   1.00
11.09  1 . .
ATOM 4830 N     N     . TYR TYR TYR B B 199 199 . 110.970 105.656 2.254   1.00
6.74   1 . .
ATOM 4831 CA    CA    . TYR TYR TYR B B 199 199 . 110.844 106.892 3.034   1.00
7.76   1 . .
ATOM 4832 CB    CB    . TYR TYR TYR B B 199 199 . 109.474 107.542 2.851   1.00
9.17   1 . .
ATOM 4833 CG    CG    . TYR TYR TYR B B 199 199 . 109.209 107.961 1.449   1.00
6.70   1 . .
ATOM 4834 CD1   CD1   . TYR TYR TYR B B 199 199 . 108.427 107.186 0.575   1.00
8.94   1 . .
ATOM 4835 CE1   CE1   . TYR TYR TYR B B 199 199 . 108.205 107.550 -0.718  1.00
8.29   1 . .
ATOM 4836 CZ    CZ    . TYR TYR TYR B B 199 199 . 108.796 108.727 -1.187  1.00
14.45  1 . .
ATOM 4837 OH    OH    . TYR TYR TYR B B 199 199 . 108.631 109.169 -2.479  1.00
20.17  1 . .
ATOM 4838 CE2   CE2   . TYR TYR TYR B B 199 199 . 109.565 109.520 -0.355  1.00
15.01  1 . .
ATOM 4839 CD2   CD2   . TYR TYR TYR B B 199 199 . 109.775 109.126 0.964   1.00
10.31  1 . .
ATOM 4840 C     C     . TYR TYR TYR B B 199 199 . 111.119 106.660 4.515   1.00
8.76   1 . .
ATOM 4841 O     O     . TYR TYR TYR B B 199 199 . 111.250 107.600 5.267   1.00
9.81   1 . .
ATOM 4842 N     N     . GLY GLY GLY B B 200 200 . 111.220 105.408 4.936   1.00
9.15   1 . .
ATOM 4843 CA    CA    . GLY GLY GLY B B 200 200 . 111.367 105.147 6.358   1.00
9.28   1 . .
ATOM 4844 C     C     . GLY GLY GLY B B 200 200 . 110.038 104.927 7.098   1.00
11.57  1 . .
ATOM 4845 O     O     . GLY GLY GLY B B 200 200 . 108.959 105.292 6.623   1.00
10.70  1 . .
ATOM 4846 N     N     . LYS LYS LYS B B 201 201 . 110.145 104.292 8.267   1.00
13.34  1 . .
ATOM 4847 CA    CA    . LYS LYS LYS B B 201 201 . 108.987 103.918 9.071   1.00
14.53  1 . .
ATOM 4848 CB    CB    . LYS LYS LYS B B 201 201 . 109.425 103.121 10.338  1.00
16.08  1 . .
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ATOM 4849 CG    CG    . LYS LYS LYS B B 201 201 . 110.155 103.943 11.417  1.00
18.75  1 . .
ATOM 4850 CD    CD    . LYS LYS LYS B B 201 201 . 110.988 103.109 12.398  1.00
21.51  1 . .
ATOM 4851 CE    CE    . LYS LYS LYS B B 201 201 . 111.665 103.984 13.467  1.00
18.84  1 . .
ATOM 4852 NZ    NZ    . LYS LYS LYS B B 201 201 . 113.141 104.181 13.124  1.00
19.38  1 . .
ATOM 4853 C     C     . LYS LYS LYS B B 201 201 . 108.090 105.125 9.413   1.00
14.02  1 . .
ATOM 4854 O     O     . LYS LYS LYS B B 201 201 . 106.878 105.000 9.471   1.00
14.31  1 . .
ATOM 4855 N     N     . ASP ASP ASP B B 202 202 . 108.683 106.322 9.531   1.00
15.09  1 . .
ATOM 4856 CA    CA    . ASP ASP ASP B B 202 202 . 107.931 107.496 9.991   1.00
15.76  1 . .
ATOM 4857 CB    CB    . ASP ASP ASP B B 202 202 . 108.847 108.745 10.228  1.00
17.36  1 . .
ATOM 4858 CG    CG    . ASP ASP ASP B B 202 202 . 109.758 108.632 11.479  1.00
21.21  1 . .
ATOM 4859 OD1   OD1   . ASP ASP ASP B B 202 202 . 109.786 107.609 12.185  1.00
24.96  1 . .
ATOM 4860 OD2   OD2   . ASP ASP ASP B B 202 202 . 110.496 109.618 11.749  1.00
26.06  1 . .
ATOM 4861 C     C     . ASP ASP ASP B B 202 202 . 106.852 107.854 8.973   1.00
15.18  1 . .
ATOM 4862 O     O     . ASP ASP ASP B B 202 202 . 105.951 108.669 9.226   1.00
17.83  1 . .
ATOM 4863 N     N     . ALA ALA ALA B B 203 203 . 106.961 107.276 7.785   1.00
13.26  1 . .
ATOM 4864 CA    CA    . ALA ALA ALA B B 203 203 . 106.067 107.677 6.701   1.00
11.19  1 . .
ATOM 4865 CB    CB    . ALA ALA ALA B B 203 203 . 106.884 107.822 5.372   1.00
11.37  1 . .
ATOM 4866 C     C     . ALA ALA ALA B B 203 203 . 104.923 106.706 6.537   1.00
9.42   1 . .
ATOM 4867 O     O     . ALA ALA ALA B B 203 203 . 104.129 106.818 5.589   1.00
10.23  1 . .
ATOM 4868 N     N     . THR THR THR B B 204 204 . 104.857 105.724 7.443   1.00
9.69   1 . .
ATOM 4869 CA    CA    . THR THR THR B B 204 204 . 103.839 104.656 7.328   1.00
7.53   1 . .
ATOM 4870 CB    CB    . THR THR THR B B 204 204 . 104.457 103.264 7.528   1.00
8.06   1 . .
ATOM 4871 OG1   OG1   . THR THR THR B B 204 204 . 105.064 103.228 8.814   1.00
9.64   1 . .
ATOM 4872 CG2   CG2   . THR THR THR B B 204 204 . 105.514 103.045 6.465   1.00
9.29   1 . .
ATOM 4873 C     C     . THR THR THR B B 204 204 . 102.603 104.806 8.230   1.00
5.81   1 . .
ATOM 4874 O     O     . THR THR THR B B 204 204 . 101.766 103.901 8.315   1.00
6.58   1 . .
ATOM 4875 N     N     . ASN ASN ASN B B 205 205 . 102.489 105.951 8.904   1.00
6.57   1 . .
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ATOM 4876 CA    CA    . ASN ASN ASN B B 205 205 . 101.262 106.260 9.612   1.00
5.00   1 . .
ATOM 4877 CB    CB    . ASN ASN ASN B B 205 205 . 101.548 107.288 10.730  1.00
6.47   1 . .
ATOM 4878 CG    CG    . ASN ASN ASN B B 205 205 . 102.677 106.837 11.583  1.00
6.57   1 . .
ATOM 4879 OD1   OD1   . ASN ASN ASN B B 205 205 . 102.585 105.809 12.216  1.00
8.60   1 . .
ATOM 4880 ND2   ND2   . ASN ASN ASN B B 205 205 . 103.835 107.509 11.456  1.00
8.17   1 . .
ATOM 4881 C     C     . ASN ASN ASN B B 205 205 . 100.149 106.648 8.676   1.00
5.44   1 . .
ATOM 4882 O     O     . ASN ASN ASN B B 205 205 . 100.404 106.781 7.453   1.00
6.66   1 . .
ATOM 4883 N     N     . VAL VAL VAL B B 206 206 . 98.920  106.755 9.178   1.00
5.31   1 . .
ATOM 4884 CA    CA    . VAL VAL VAL B B 206 206 . 97.793  106.917 8.287   1.00
3.53   1 . .
ATOM 4885 CB    CB    . VAL VAL VAL B B 206 206 . 96.809  105.694 8.296   1.00
4.18   1 . .
ATOM 4886 CG1   CG1   . VAL VAL VAL B B 206 206 . 97.639  104.391 8.015   1.00
3.84   1 . .
ATOM 4887 CG2   CG2   . VAL VAL VAL B B 206 206 . 96.038  105.602 9.682   1.00
3.13   1 . .
ATOM 4888 C     C     . VAL VAL VAL B B 206 206 . 97.058  108.222 8.481   1.00
3.16   1 . .
ATOM 4889 O     O     . VAL VAL VAL B B 206 206 . 97.070  108.827 9.590   1.00
6.07   1 . .
ATOM 4890 N     N     . GLY GLY GLY B B 207 207 . 96.428  108.608 7.377   1.00
4.14   1 . .
ATOM 4891 CA    CA    . GLY GLY GLY B B 207 207 . 95.527  109.789 7.274   1.00
5.55   1 . .
ATOM 4892 C     C     . GLY GLY GLY B B 207 207 . 94.062  109.524 7.669   1.00
4.74   1 . .
ATOM 4893 O     O     . GLY GLY GLY B B 207 207 . 93.710  108.465 8.154   1.00
4.33   1 . .
ATOM 4894 N     N     . ASP ASP ASP B B 208 208 . 93.214  110.544 7.537   1.00
3.26   1 . .
ATOM 4895 CA    CA    . ASP ASP ASP B B 208 208 . 91.817  110.491 7.996   1.00
2.84   1 . .
ATOM 4896 CB    CB    . ASP ASP ASP B B 208 208 . 91.110  111.791 7.611   1.00
2.10   1 . .
ATOM 4897 CG    CG    . ASP ASP ASP B B 208 208 . 91.485  112.951 8.467   1.00
4.26   1 . .
ATOM 4898 OD1   OD1   . ASP ASP ASP B B 208 208 . 92.028  112.748 9.607   1.00
5.93   1 . .
ATOM 4899 OD2   OD2   . ASP ASP ASP B B 208 208 . 91.149  114.069 7.987   1.00
3.49   1 . .
ATOM 4900 C     C     . ASP ASP ASP B B 208 208 . 91.029  109.286 7.399   1.00
2.14   1 . .
ATOM 4901 O     O     . ASP ASP ASP B B 208 208 . 90.168  108.776 8.032   1.00
2.05   1 . .
ATOM 4902 N     N     . GLU GLU GLU B B 209 209 . 91.393  108.914 6.151   1.00
3.19   1 . .
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ATOM 4903 CA    CA    . GLU GLU GLU B B 209 209 . 90.711  107.835 5.391   1.00
2.64   1 . .
ATOM 4904 CB    CB    . GLU GLU GLU B B 209 209 . 90.354  108.242 3.965   1.00
4.08   1 . .
ATOM 4905 CG    CG    . GLU GLU GLU B B 209 209 . 89.334  109.392 3.998   1.00
3.98   1 . .
ATOM 4906 CD    CD    . GLU GLU GLU B B 209 209 . 88.738  109.724 2.634   1.00
7.01   1 . .
ATOM 4907 OE1   OE1   . GLU GLU GLU B B 209 209 . 89.087  109.152 1.580   1.00
6.61   1 . .
ATOM 4908 OE2   OE2   . GLU GLU GLU B B 209 209 . 87.877  110.624 2.616   1.00
11.64  1 . .
ATOM 4909 C     C     . GLU GLU GLU B B 209 209 . 91.471  106.512 5.391   1.00
2.01   1 . .
ATOM 4910 O     O     . GLU GLU GLU B B 209 209 . 91.048  105.605 4.669   1.00
2.94   1 . .
ATOM 4911 N     N     . GLY GLY GLY B B 210 210 . 92.553  106.460 6.156   1.00
3.00   1 . .
ATOM 4912 CA    CA    . GLY GLY GLY B B 210 210 . 93.335  105.267 6.359   1.00
2.32   1 . .
ATOM 4913 C     C     . GLY GLY GLY B B 210 210 . 94.472  104.977 5.386   1.00
2.73   1 . .
ATOM 4914 O     O     . GLY GLY GLY B B 210 210 . 95.094  103.914 5.541   1.00
3.93   1 . .
ATOM 4915 N     N     . GLY GLY GLY B B 211 211 . 94.770  105.922 4.490   1.00
2.69   1 . .
ATOM 4916 CA    CA    . GLY GLY GLY B B 211 211 . 95.868  105.751 3.554   1.00
4.55   1 . .
ATOM 4917 C     C     . GLY GLY GLY B B 211 211 . 97.094  106.428 4.094   1.00
5.33   1 . .
ATOM 4918 O     O     . GLY GLY GLY B B 211 211 . 97.053  107.010 5.129   1.00
4.99   1 . .
ATOM 4919 N     N     . PHE PHE PHE B B 212 212 . 98.227  106.311 3.404   1.00
9.12   1 . .
ATOM 4920 CA    CA    . PHE PHE PHE B B 212 212 . 99.473  106.965 3.785   1.00
11.58  1 . .
ATOM 4921 CB    CB    . PHE PHE PHE B B 212 212 . 100.689 106.020 3.550   1.00
11.04  1 . .
ATOM 4922 CG    CG    . PHE PHE PHE B B 212 212 . 100.436 104.597 3.955   1.00
11.81  1 . .
ATOM 4923 CD1   CD1   . PHE PHE PHE B B 212 212 . 99.984  103.667 3.032   1.00
11.12  1 . .
ATOM 4924 CE1   CE1   . PHE PHE PHE B B 212 212 . 99.733  102.335 3.369   1.00
12.50  1 . .
ATOM 4925 CZ    CZ    . PHE PHE PHE B B 212 212 . 99.927  101.932 4.696   1.00
13.34  1 . .
ATOM 4926 CE2   CE2   . PHE PHE PHE B B 212 212 . 100.384 102.858 5.659   1.00
15.45  1 . .
ATOM 4927 CD2   CD2   . PHE PHE PHE B B 212 212 . 100.631 104.197 5.287   1.00
14.74  1 . .
ATOM 4928 C     C     . PHE PHE PHE B B 212 212 . 99.749  108.367 3.213   1.00
13.38  1 . .
ATOM 4929 O     O     . PHE PHE PHE B B 212 212 . 99.272  108.713 2.136   1.00
13.84  1 . .
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ATOM 4930 N     N     . ALA ALA ALA B B 213 213 . 100.477 109.197 3.975   1.00
15.38  1 . .
ATOM 4931 CA    CA    . ALA ALA ALA B B 213 213 . 100.862 110.546 3.524   1.00
17.53  1 . .
ATOM 4932 CB    CB    . ALA ALA ALA B B 213 213 . 100.224 111.599 4.365   1.00
15.81  1 . .
ATOM 4933 C     C     . ALA ALA ALA B B 213 213 . 102.351 110.698 3.566   1.00
17.53  1 . .
ATOM 4934 O     O     . ALA ALA ALA B B 213 213 . 102.897 111.548 4.293   1.00
17.55  1 . .
ATOM 4935 N     N     . PRO PRO PRO B B 214 214 . 103.050 109.897 2.766   1.00
17.69  1 . .
ATOM 4936 CA    CA    . PRO PRO PRO B B 214 214 . 104.453 110.050 2.819   1.00
18.42  1 . .
ATOM 4937 CB    CB    . PRO PRO PRO B B 214 214 . 104.939 109.081 1.738   1.00
18.21  1 . .
ATOM 4938 CG    CG    . PRO PRO PRO B B 214 214 . 103.850 108.905 0.845   1.00
18.56  1 . .
ATOM 4939 CD    CD    . PRO PRO PRO B B 214 214 . 102.612 109.067 1.635   1.00
17.81  1 . .
ATOM 4940 C     C     . PRO PRO PRO B B 214 214 . 104.767 111.503 2.499   1.00
19.55  1 . .
ATOM 4941 O     O     . PRO PRO PRO B B 214 214 . 103.945 112.216 1.877   1.00
20.73  1 . .
ATOM 4942 N     N     . ASN ASN ASN B B 215 215 . 105.933 111.949 2.954   1.00
20.06  1 . .
ATOM 4943 CA    CA    . ASN ASN ASN B B 215 215 . 106.375 113.310 2.800   1.00
20.66  1 . .
ATOM 4944 CB    CB    . ASN ASN ASN B B 215 215 . 107.427 113.661 3.900   1.00
21.86  1 . .
ATOM 4945 CG    CG    . ASN ASN ASN B B 215 215 . 108.460 112.505 4.199   1.00
24.08  1 . .
ATOM 4946 OD1   OD1   . ASN ASN ASN B B 215 215 . 109.674 112.783 4.331   1.00
28.79  1 . .
ATOM 4947 ND2   ND2   . ASN ASN ASN B B 215 215 . 107.982 111.214 4.315   1.00
19.36  1 . .
ATOM 4948 C     C     . ASN ASN ASN B B 215 215 . 106.842 113.586 1.371   1.00
20.25  1 . .
ATOM 4949 O     O     . ASN ASN ASN B B 215 215 . 108.036 113.672 1.087   1.00
20.36  1 . .
ATOM 4950 N     N     . ILE ILE ILE B B 216 216 . 105.884 113.709 0.445   1.00
19.73  1 . .
ATOM 4951 CA    CA    . ILE ILE ILE B B 216 216 . 106.204 114.036 -0.976  1.00
19.59  1 . .
ATOM 4952 CB    CB    . ILE ILE ILE B B 216 216 . 106.024 112.807 -1.914  1.00
18.82  1 . .
ATOM 4953 CG1   CG1   . ILE ILE ILE B B 216 216 . 104.678 112.115 -1.612  1.00
19.51  1 . .
ATOM 4954 CD1   CD1   . ILE ILE ILE B B 216 216 . 104.074 111.287 -2.754  1.00
10.71  1 . .
ATOM 4955 CG2   CG2   . ILE ILE ILE B B 216 216 . 107.200 111.836 -1.715  1.00
19.75  1 . .
ATOM 4956 C     C     . ILE ILE ILE B B 216 216 . 105.480 115.276 -1.571  1.00
20.11  1 . .
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ATOM 4957 O     O     . ILE ILE ILE B B 216 216 . 104.479 115.707 -1.057  1.00
19.82  1 . .
ATOM 4958 N     N     . LEU LEU LEU B B 217 217 . 106.013 115.853 -2.629  1.00
20.95  1 . .
ATOM 4959 CA    CA    . LEU LEU LEU B B 217 217 . 105.335 116.998 -3.218  1.00
22.19  1 . .
ATOM 4960 CB    CB    . LEU LEU LEU B B 217 217 . 106.325 118.125 -3.536  1.00
23.12  1 . .
ATOM 4961 CG    CG    . LEU LEU LEU B B 217 217 . 105.910 119.452 -4.176  1.00
23.39  1 . .
ATOM 4962 CD1   CD1   . LEU LEU LEU B B 217 217 . 104.643 120.089 -3.541  1.00
22.19  1 . .
ATOM 4963 CD2   CD2   . LEU LEU LEU B B 217 217 . 107.117 120.381 -4.062  1.00
23.39  1 . .
ATOM 4964 C     C     . LEU LEU LEU B B 217 217 . 104.655 116.507 -4.465  1.00
22.93  1 . .
ATOM 4965 O     O     . LEU LEU LEU B B 217 217 . 103.417 116.511 -4.528  1.00
23.66  1 . .
ATOM 4966 N     N     . GLU GLU GLU B B 218 218 . 105.480 116.011 -5.394  1.00
21.81  1 . .
ATOM 4967 CA    CA    . GLU GLU GLU B B 218 218 . 105.076 115.538 -6.724  1.00
20.51  1 . .
ATOM 4968 CB    CB    . GLU GLU GLU B B 218 218 . 106.298 114.992 -7.502  1.00
22.51  1 . .
ATOM 4969 CG    CG    . GLU GLU GLU B B 218 218 . 107.503 116.015 -7.743  1.00
26.57  1 . .
ATOM 4970 CD    CD    . GLU GLU GLU B B 218 218 . 107.305 116.989 -8.942  1.00
30.29  1 . .
ATOM 4971 OE1   OE1   . GLU GLU GLU B B 218 218 . 106.577 116.656 -9.913  1.00
31.98  1 . .
ATOM 4972 OE2   OE2   . GLU GLU GLU B B 218 218 . 107.889 118.099 -8.913  1.00
30.13  1 . .
ATOM 4973 C     C     . GLU GLU GLU B B 218 218 . 103.932 114.524 -6.696  1.00
18.31  1 . .
ATOM 4974 O     O     . GLU GLU GLU B B 218 218 . 104.017 113.450 -6.036  1.00
18.12  1 . .
ATOM 4975 N     N     . ASN ASN ASN B B 219 219 . 102.861 114.845 -7.433  1.00
15.41  1 . .
ATOM 4976 CA    CA    . ASN ASN ASN B B 219 219 . 101.694 113.932 -7.507  1.00
12.56  1 . .
ATOM 4977 CB    CB    . ASN ASN ASN B B 219 219 . 100.437 114.637 -8.033  1.00
12.00  1 . .
ATOM 4978 CG    CG    . ASN ASN ASN B B 219 219 . 100.042 115.800 -7.176  1.00
9.93   1 . .
ATOM 4979 OD1   OD1   . ASN ASN ASN B B 219 219 . 99.350  115.632 -6.198  1.00
12.05  1 . .
ATOM 4980 ND2   ND2   . ASN ASN ASN B B 219 219 . 100.414 116.986 -7.588  1.00
13.51  1 . .
ATOM 4981 C     C     . ASN ASN ASN B B 219 219 . 102.000 112.716 -8.394  1.00
12.30  1 . .
ATOM 4982 O     O     . ASN ASN ASN B B 219 219 . 101.383 111.635 -8.242  1.00
11.31  1 . .
ATOM 4983 N     N     . SER SER SER B B 220 220 . 102.967 112.901 -9.285  1.00
11.74  1 . .
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ATOM 4984 CA    CA    . SER SER SER B B 220 220 . 103.491 111.839 -10.117 1.00
12.00  1 . .
ATOM 4985 CB    CB    . SER SER SER B B 220 220 . 104.495 112.376 -11.138 1.00
12.78  1 . .
ATOM 4986 OG    OG    . SER SER SER B B 220 220 . 105.722 112.787 -10.501 1.00
15.03  1 . .
ATOM 4987 C     C     . SER SER SER B B 220 220 . 104.154 110.763 -9.255  1.00
11.03  1 . .
ATOM 4988 O     O     . SER SER SER B B 220 220 . 104.043 109.585 -9.563  1.00
9.19   1 . .
ATOM 4989 N     N     . GLU GLU GLU B B 221 221 . 104.803 111.166 -8.164  1.00
10.32  1 . .
ATOM 4990 CA    CA    . GLU GLU GLU B B 221 221 . 105.432 110.228 -7.240  1.00
11.20  1 . .
ATOM 4991 CB    CB    . GLU GLU GLU B B 221 221 . 106.405 110.985 -6.313  1.00
12.88  1 . .
ATOM 4992 CG    CG    . GLU GLU GLU B B 221 221 . 107.106 110.188 -5.187  1.00
17.79  1 . .
ATOM 4993 CD    CD    . GLU GLU GLU B B 221 221 . 107.916 108.966 -5.652  1.00
24.51  1 . .
ATOM 4994 OE1   OE1   . GLU GLU GLU B B 221 221 . 108.053 108.739 -6.886  1.00
29.05  1 . .
ATOM 4995 OE2   OE2   . GLU GLU GLU B B 221 221 . 108.402 108.226 -4.755  1.00
25.49  1 . .
ATOM 4996 C     C     . GLU GLU GLU B B 221 221 . 104.385 109.422 -6.461  1.00
10.55  1 . .
ATOM 4997 O     O     . GLU GLU GLU B B 221 221 . 104.602 108.279 -6.146  1.00
10.17  1 . .
ATOM 4998 N     N     . ALA ALA ALA B B 222 222 . 103.240 110.011 -6.161  1.00
10.23  1 . .
ATOM 4999 CA    CA    . ALA ALA ALA B B 222 222 . 102.186 109.194 -5.544  1.00
9.90   1 . .
ATOM 5000 CB    CB    . ALA ALA ALA B B 222 222 . 100.983 110.063 -5.086  1.00
9.27   1 . .
ATOM 5001 C     C     . ALA ALA ALA B B 222 222 . 101.708 108.095 -6.505  1.00
9.08   1 . .
ATOM 5002 O     O     . ALA ALA ALA B B 222 222 . 101.503 106.946 -6.127  1.00
8.54   1 . .
ATOM 5003 N     N     . LEU LEU LEU B B 223 223 . 101.528 108.488 -7.760  1.00
8.51   1 . .
ATOM 5004 CA    CA    . LEU LEU LEU B B 223 223 . 101.086 107.535 -8.780  1.00
7.40   1 . .
ATOM 5005 CB    CB    . LEU LEU LEU B B 223 223 . 100.850 108.291 -10.081 1.00
5.06   1 . .
ATOM 5006 CG    CG    . LEU LEU LEU B B 223 223 . 99.600  109.206 -9.971  1.00
5.95   1 . .
ATOM 5007 CD1   CD1   . LEU LEU LEU B B 223 223 . 99.599  110.073 -11.134 1.00
9.31   1 . .
ATOM 5008 CD2   CD2   . LEU LEU LEU B B 223 223 . 98.380  108.370 -10.070 1.00
6.81   1 . .
ATOM 5009 C     C     . LEU LEU LEU B B 223 223 . 102.119 106.431 -8.958  1.00
6.82   1 . .
ATOM 5010 O     O     . LEU LEU LEU B B 223 223 . 101.739 105.271 -9.107  1.00
7.33   1 . .
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ATOM 5011 N     N     . GLU GLU GLU B B 224 224 . 103.409 106.805 -8.947  1.00
6.37   1 . .
ATOM 5012 CA    CA    . GLU GLU GLU B B 224 224 . 104.499 105.827 -9.114  1.00
9.25   1 . .
ATOM 5013 CB    CB    . GLU GLU GLU B B 224 224 . 105.850 106.538 -9.189  1.00
8.25   1 . .
ATOM 5014 CG    CG    . GLU GLU GLU B B 224 224 . 106.992 105.544 -9.439  1.00
15.23  1 . .
ATOM 5015 CD    CD    . GLU GLU GLU B B 224 224 . 107.164 105.157 -10.907 1.00
21.34  1 . .
ATOM 5016 OE1   OE1   . GLU GLU GLU B B 224 224 . 108.130 104.419 -11.167 1.00
22.94  1 . .
ATOM 5017 OE2   OE2   . GLU GLU GLU B B 224 224 . 106.367 105.583 -11.779 1.00
24.04  1 . .
ATOM 5018 C     C     . GLU GLU GLU B B 224 224 . 104.550 104.830 -7.971  1.00
8.21   1 . .
ATOM 5019 O     O     . GLU GLU GLU B B 224 224 . 104.799 103.644 -8.209  1.00
10.14  1 . .
ATOM 5020 N     N     . LEU LEU LEU B B 225 225 . 104.293 105.309 -6.763  1.00
6.76   1 . .
ATOM 5021 CA    CA    . LEU LEU LEU B B 225 225 . 104.217 104.429 -5.570  1.00
6.60   1 . .
ATOM 5022 CB    CB    . LEU LEU LEU B B 225 225 . 104.097 105.325 -4.322  1.00
7.60   1 . .
ATOM 5023 CG    CG    . LEU LEU LEU B B 225 225 . 105.359 105.957 -3.771  1.00
8.19   1 . .
ATOM 5024 CD1   CD1   . LEU LEU LEU B B 225 225 . 104.928 106.874 -2.594  1.00
9.55   1 . .
ATOM 5025 CD2   CD2   . LEU LEU LEU B B 225 225 . 106.355 104.907 -3.240  1.00
8.92   1 . .
ATOM 5026 C     C     . LEU LEU LEU B B 225 225 . 103.016 103.454 -5.625  1.00
6.65   1 . .
ATOM 5027 O     O     . LEU LEU LEU B B 225 225 . 103.097 102.247 -5.310  1.00
6.00   1 . .
ATOM 5028 N     N     . VAL VAL VAL B B 226 226 . 101.884 103.975 -6.030  1.00
5.66   1 . .
ATOM 5029 CA    CA    . VAL VAL VAL B B 226 226 . 100.718 103.134 -6.200  1.00
5.36   1 . .
ATOM 5030 CB    CB    . VAL VAL VAL B B 226 226 . 99.423  103.952 -6.430  1.00
6.27   1 . .
ATOM 5031 CG1   CG1   . VAL VAL VAL B B 226 226 . 98.286  103.018 -6.663  1.00
6.13   1 . .
ATOM 5032 CG2   CG2   . VAL VAL VAL B B 226 226 . 99.089  104.716 -5.242  1.00
8.58   1 . .
ATOM 5033 C     C     . VAL VAL VAL B B 226 226 . 100.980 102.085 -7.312  1.00
4.24   1 . .
ATOM 5034 O     O     . VAL VAL VAL B B 226 226 . 100.783 100.932 -7.095  1.00
7.17   1 . .
ATOM 5035 N     N     . LYS LYS LYS B B 227 227 . 101.446 102.513 -8.481  1.00
7.51   1 . .
ATOM 5036 CA    CA    . LYS LYS LYS B B 227 227 . 101.843 101.592 -9.567  1.00
9.05   1 . .
ATOM 5037 CB    CB    . LYS LYS LYS B B 227 227 . 102.383 102.437 -10.745 1.00
10.23  1 . .
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ATOM 5038 CG    CG    . LYS LYS LYS B B 227 227 . 102.696 101.573 -12.001 1.00
14.28  1 . .
ATOM 5039 CD    CD    . LYS LYS LYS B B 227 227 . 103.431 102.402 -13.068 1.00
17.97  1 . .
ATOM 5040 CE    CE    . LYS LYS LYS B B 227 227 . 103.634 101.673 -14.364 1.00
18.23  1 . .
ATOM 5041 NZ    NZ    . LYS LYS LYS B B 227 227 . 103.343 102.714 -15.382 1.00
20.16  1 . .
ATOM 5042 C     C     . LYS LYS LYS B B 227 227 . 102.889 100.530 -9.143  1.00
7.90   1 . .
ATOM 5043 O     O     . LYS LYS LYS B B 227 227 . 102.779 99.343  -9.486  1.00
9.33   1 . .
ATOM 5044 N     N     . GLU GLU GLU B B 228 228 . 103.892 100.918 -8.402  1.00
7.02   1 . .
ATOM 5045 CA    CA    . GLU GLU GLU B B 228 228 . 104.802 99.911  -7.840  1.00
10.61  1 . .
ATOM 5046 CB    CB    . GLU GLU GLU B B 228 228 . 106.025 100.498 -7.182  1.00
10.63  1 . .
ATOM 5047 CG    CG    . GLU GLU GLU B B 228 228 . 106.992 99.432  -6.767  1.00
15.58  1 . .
ATOM 5048 CD    CD    . GLU GLU GLU B B 228 228 . 107.878 99.865  -5.647  1.00
23.40  1 . .
ATOM 5049 OE1   OE1   . GLU GLU GLU B B 228 228 . 108.184 99.000  -4.795  1.00
27.06  1 . .
ATOM 5050 OE2   OE2   . GLU GLU GLU B B 228 228 . 108.282 101.054 -5.611  1.00
25.66  1 . .
ATOM 5051 C     C     . GLU GLU GLU B B 228 228 . 104.173 98.913  -6.920  1.00
9.43   1 . .
ATOM 5052 O     O     . GLU GLU GLU B B 228 228 . 104.436 97.715  -7.032  1.00
9.09   1 . .
ATOM 5053 N     N     . ALA ALA ALA B B 229 229 . 103.372 99.392  -5.975  1.00
8.98   1 . .
ATOM 5054 CA    CA    . ALA ALA ALA B B 229 229 . 102.709 98.433  -5.057  1.00
7.80   1 . .
ATOM 5055 CB    CB    . ALA ALA ALA B B 229 229 . 101.907 99.164  -4.054  1.00
6.71   1 . .
ATOM 5056 C     C     . ALA ALA ALA B B 229 229 . 101.799 97.456  -5.786  1.00
8.18   1 . .
ATOM 5057 O     O     . ALA ALA ALA B B 229 229 . 101.798 96.282  -5.474  1.00
8.21   1 . .
ATOM 5058 N     N     . ILE ILE ILE B B 230 230 . 101.050 97.943  -6.785  1.00
7.71   1 . .
ATOM 5059 CA    CA    . ILE ILE ILE B B 230 230 . 100.180 97.090  -7.546  1.00
7.52   1 . .
ATOM 5060 CB    CB    . ILE ILE ILE B B 230 230 . 99.374  97.900  -8.625  1.00
6.24   1 . .
ATOM 5061 CG1   CG1   . ILE ILE ILE B B 230 230 . 98.250  98.761  -8.003  1.00
5.95   1 . .
ATOM 5062 CD1   CD1   . ILE ILE ILE B B 230 230 . 97.783  99.782  -8.936  1.00
8.49   1 . .
ATOM 5063 CG2   CG2   . ILE ILE ILE B B 230 230 . 98.768  96.937  -9.669  1.00
9.94   1 . .
ATOM 5064 C     C     . ILE ILE ILE B B 230 230 . 100.984 95.969  -8.227  1.00
9.20   1 . .
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ATOM 5065 O     O     . ILE ILE ILE B B 230 230 . 100.537 94.809  -8.236  1.00
8.97   1 . .
ATOM 5066 N     N     . ASP ASP ASP B B 231 231 . 102.164 96.337  -8.759  1.00
8.98   1 . .
ATOM 5067 CA    CA    . ASP ASP ASP B B 231 231 . 103.008 95.395  -9.510  1.00
12.04  1 . .
ATOM 5068 CB    CB    . ASP ASP ASP B B 231 231 . 104.049 96.120  -10.354 1.00
13.23  1 . .
ATOM 5069 CG    CG    . ASP ASP ASP B B 231 231 . 104.830 95.162  -11.237 1.00
19.68  1 . .
ATOM 5070 OD1   OD1   . ASP ASP ASP B B 231 231 . 106.019 94.929  -10.944 1.00
24.63  1 . .
ATOM 5071 OD2   OD2   . ASP ASP ASP B B 231 231 . 104.237 94.600  -12.193 1.00
25.79  1 . .
ATOM 5072 C     C     . ASP ASP ASP B B 231 231 . 103.705 94.452  -8.532  1.00
11.41  1 . .
ATOM 5073 O     O     . ASP ASP ASP B B 231 231 . 103.749 93.276  -8.757  1.00
11.70  1 . .
ATOM 5074 N     N     . LYS LYS LYS B B 232 232 . 104.244 94.990  -7.436  1.00
10.63  1 . .
ATOM 5075 CA    CA    . LYS LYS LYS B B 232 232 . 104.933 94.139  -6.427  1.00
11.54  1 . .
ATOM 5076 CB    CB    . LYS LYS LYS B B 232 232 . 105.606 95.006  -5.372  1.00
12.20  1 . .
ATOM 5077 CG    CG    . LYS LYS LYS B B 232 232 . 106.420 94.211  -4.350  1.00
18.17  1 . .
ATOM 5078 CD    CD    . LYS LYS LYS B B 232 232 . 107.175 95.126  -3.384  1.00
20.45  1 . .
ATOM 5079 CE    CE    . LYS LYS LYS B B 232 232 . 107.669 94.350  -2.165  1.00
21.83  1 . .
ATOM 5080 NZ    NZ    . LYS LYS LYS B B 232 232 . 108.836 93.460  -2.477  1.00
23.41  1 . .
ATOM 5081 C     C     . LYS LYS LYS B B 232 232 . 103.939 93.131  -5.801  1.00
9.35   1 . .
ATOM 5082 O     O     . LYS LYS LYS B B 232 232 . 104.288 91.977  -5.503  1.00
10.80  1 . .
ATOM 5083 N     N     . ALA ALA ALA B B 233 233 . 102.684 93.525  -5.643  1.00
7.95   1 . .
ATOM 5084 CA    CA    . ALA ALA ALA B B 233 233 . 101.642 92.606  -5.219  1.00
8.33   1 . .
ATOM 5085 CB    CB    . ALA ALA ALA B B 233 233 . 100.394 93.407  -4.731  1.00
9.08   1 . .
ATOM 5086 C     C     . ALA ALA ALA B B 233 233 . 101.242 91.577  -6.303  1.00
7.93   1 . .
ATOM 5087 O     O     . ALA ALA ALA B B 233 233 . 100.526 90.673  -6.033  1.00
9.59   1 . .
ATOM 5088 N     N     . GLY GLY GLY B B 234 234 . 101.707 91.760  -7.534  1.00
7.83   1 . .
ATOM 5089 CA    CA    . GLY GLY GLY B B 234 234 . 101.364 90.898  -8.649  1.00
7.69   1 . .
ATOM 5090 C     C     . GLY GLY GLY B B 234 234 . 100.021 91.079  -9.348  1.00
8.63   1 . .
ATOM 5091 O     O     . GLY GLY GLY B B 234 234 . 99.582  90.164  -10.075 1.00
9.73   1 . .
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ATOM 5092 N     N     . TYR TYR TYR B B 235 235 . 99.419  92.270  -9.237  1.00
6.72   1 . .
ATOM 5093 CA    CA    . TYR TYR TYR B B 235 235 . 98.076  92.534  -9.759  1.00
4.54   1 . .
ATOM 5094 CB    CB    . TYR TYR TYR B B 235 235 . 97.140  92.952  -8.633  1.00
3.53   1 . .
ATOM 5095 CG    CG    . TYR TYR TYR B B 235 235 . 96.862  91.832  -7.670  1.00
5.42   1 . .
ATOM 5096 CD1   CD1   . TYR TYR TYR B B 235 235 . 97.247  91.928  -6.339  1.00
5.02   1 . .
ATOM 5097 CE1   CE1   . TYR TYR TYR B B 235 235 . 97.001  90.874  -5.456  1.00
6.65   1 . .
ATOM 5098 CZ    CZ    . TYR TYR TYR B B 235 235 . 96.415  89.729  -5.898  1.00
6.56   1 . .
ATOM 5099 OH    OH    . TYR TYR TYR B B 235 235 . 96.210  88.790  -4.921  1.00
8.70   1 . .
ATOM 5100 CE2   CE2   . TYR TYR TYR B B 235 235 . 96.031  89.574  -7.235  1.00
8.79   1 . .
ATOM 5101 CD2   CD2   . TYR TYR TYR B B 235 235 . 96.238  90.650  -8.119  1.00
7.23   1 . .
ATOM 5102 C     C     . TYR TYR TYR B B 235 235 . 98.010  93.609  -10.852 1.00
5.25   1 . .
ATOM 5103 O     O     . TYR TYR TYR B B 235 235 . 96.973  94.243  -11.089 1.00
6.01   1 . .
ATOM 5104 N     N     . THR THR THR B B 236 236 . 99.130  93.803  -11.533 1.00
6.13   1 . .
ATOM 5105 CA    CA    . THR THR THR B B 236 236 . 99.170  94.733  -12.673 1.00
8.92   1 . .
ATOM 5106 CB    CB    . THR THR THR B B 236 236 . 100.544 94.640  -13.352 1.00
10.66  1 . .
ATOM 5107 OG1   OG1   . THR THR THR B B 236 236 . 101.533 94.987  -12.398 1.00
13.05  1 . .
ATOM 5108 CG2   CG2   . THR THR THR B B 236 236 . 100.725 95.649  -14.535 1.00
9.89   1 . .
ATOM 5109 C     C     . THR THR THR B B 236 236 . 97.998  94.512  -13.657 1.00
9.68   1 . .
ATOM 5110 O     O     . THR THR THR B B 236 236 . 97.398  95.464  -14.126 1.00
10.22  1 . .
ATOM 5111 N     N     . GLU GLU GLU B B 237 237 . 97.643  93.299  -14.003 1.00
12.27  1 . .
ATOM 5112 CA    CA    . GLU GLU GLU B B 237 237 . 96.495  93.155  -14.928 1.00
15.05  1 . .
ATOM 5113 CB    CB    . GLU GLU GLU B B 237 237 . 96.457  91.763  -15.592 1.00
17.08  1 . .
ATOM 5114 CG    CG    . GLU GLU GLU B B 237 237 . 97.205  91.677  -16.912 1.00
24.29  1 . .
ATOM 5115 CD    CD    . GLU GLU GLU B B 237 237 . 98.660  92.017  -16.758 1.00
30.83  1 . .
ATOM 5116 OE1   OE1   . GLU GLU GLU B B 237 237 . 99.308  91.440  -15.843 1.00
35.39  1 . .
ATOM 5117 OE2   OE2   . GLU GLU GLU B B 237 237 . 99.151  92.863  -17.543 1.00
33.69  1 . .
ATOM 5118 C     C     . GLU GLU GLU B B 237 237 . 95.130  93.414  -14.333 1.00
13.75  1 . .
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ATOM 5119 O     O     . GLU GLU GLU B B 237 237 . 94.114  93.414  -15.060 1.00
15.95  1 . .
ATOM 5120 N     N     . LYS LYS LYS B B 238 238 . 95.059  93.617  -13.024 1.00
10.88  1 . .
ATOM 5121 CA    CA    . LYS LYS LYS B B 238 238 . 93.764  93.516  -12.389 1.00
9.87   1 . .
ATOM 5122 CB    CB    . LYS LYS LYS B B 238 238 . 93.736  92.294  -11.449 1.00
9.69   1 . .
ATOM 5123 CG    CG    . LYS LYS LYS B B 238 238 . 93.613  90.926  -12.199 1.00
14.20  1 . .
ATOM 5124 CD    CD    . LYS LYS LYS B B 238 238 . 93.436  89.736  -11.211 1.00
17.55  1 . .
ATOM 5125 CE    CE    . LYS LYS LYS B B 238 238 . 93.319  88.404  -11.957 1.00
22.85  1 . .
ATOM 5126 NZ    NZ    . LYS LYS LYS B B 238 238 . 92.238  87.522  -11.448 1.00
24.86  1 . .
ATOM 5127 C     C     . LYS LYS LYS B B 238 238 . 93.338  94.785  -11.650 1.00
7.13   1 . .
ATOM 5128 O     O     . LYS LYS LYS B B 238 238 . 92.181  94.875  -11.243 1.00
6.32   1 . .
ATOM 5129 N     N     . ILE ILE ILE B B 239 239 . 94.265  95.694  -11.383 1.00
5.50   1 . .
ATOM 5130 CA    CA    . ILE ILE ILE B B 239 239 . 93.986  96.920  -10.574 1.00
4.48   1 . .
ATOM 5131 CB    CB    . ILE ILE ILE B B 239 239 . 94.741  96.859  -9.253  1.00
5.61   1 . .
ATOM 5132 CG1   CG1   . ILE ILE ILE B B 239 239 . 94.266  95.609  -8.456  1.00
6.08   1 . .
ATOM 5133 CD1   CD1   . ILE ILE ILE B B 239 239 . 95.098  95.321  -7.141  1.00
3.60   1 . .
ATOM 5134 CG2   CG2   . ILE ILE ILE B B 239 239 . 94.398  98.021  -8.372  1.00
6.81   1 . .
ATOM 5135 C     C     . ILE ILE ILE B B 239 239 . 94.378  98.191  -11.310 1.00
4.51   1 . .
ATOM 5136 O     O     . ILE ILE ILE B B 239 239 . 95.482  98.278  -11.839 1.00
5.71   1 . .
ATOM 5137 N     N     . VAL VAL VAL B B 240 240 . 93.504  99.178  -11.290 1.00
3.93   1 . .
ATOM 5138 CA    CA    . VAL VAL VAL B B 240 240 . 93.765  100.456 -12.017 1.00
3.26   1 . .
ATOM 5139 CB    CB    . VAL VAL VAL B B 240 240 . 92.762  100.666 -13.162 1.00
3.00   1 . .
ATOM 5140 CG1   CG1   . VAL VAL VAL B B 240 240 . 92.962  99.577  -14.266 1.00
5.02   1 . .
ATOM 5141 CG2   CG2   . VAL VAL VAL B B 240 240 . 91.356  100.750 -12.639 1.00
4.20   1 . .
ATOM 5142 C     C     . VAL VAL VAL B B 240 240 . 93.627  101.583 -10.962 1.00
2.83   1 . .
ATOM 5143 O     O     . VAL VAL VAL B B 240 240 . 93.316  101.323 -9.767  1.00
3.22   1 . .
ATOM 5144 N     N     . ILE ILE ILE B B 241 241 . 93.885  102.809 -11.380 1.00
2.86   1 . .
ATOM 5145 CA    CA    . ILE ILE ILE B B 241 241 . 93.959  103.945 -10.470 1.00
3.25   1 . .
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ATOM 5146 CB    CB    . ILE ILE ILE B B 241 241 . 95.380  104.562 -10.535 1.00
2.73   1 . .
ATOM 5147 CG1   CG1   . ILE ILE ILE B B 241 241 . 96.507  103.541 -10.131 1.00
6.72   1 . .
ATOM 5148 CD1   CD1   . ILE ILE ILE B B 241 241 . 97.936  104.049 -10.319 1.00
6.20   1 . .
ATOM 5149 CG2   CG2   . ILE ILE ILE B B 241 241 . 95.490  105.833 -9.718  1.00
3.15   1 . .
ATOM 5150 C     C     . ILE ILE ILE B B 241 241 . 92.952  105.001 -10.722 1.00
3.61   1 . .
ATOM 5151 O     O     . ILE ILE ILE B B 241 241 . 92.664  105.318 -11.866 1.00
4.37   1 . .
ATOM 5152 N     N     . GLY GLY GLY B B 242 242 . 92.341  105.500 -9.639  1.00
3.96   1 . .
ATOM 5153 CA    CA    . GLY GLY GLY B B 242 242 . 91.496  106.675 -9.747  1.00
2.00   1 . .
ATOM 5154 C     C     . GLY GLY GLY B B 242 242 . 91.993  107.787 -8.839  1.00
2.68   1 . .
ATOM 5155 O     O     . GLY GLY GLY B B 242 242 . 92.783  107.533 -7.949  1.00
2.47   1 . .
ATOM 5156 N     N     . MET MET MET B B 243 243 . 91.710  109.057 -9.152  1.00
2.31   1 . .
ATOM 5157 CA    CA    . MET MET MET B B 243 243 . 92.265  110.168 -8.358  1.00
4.71   1 . .
ATOM 5158 CB    CB    . MET MET MET B B 243 243 . 93.227  111.006 -9.205  1.00
5.44   1 . .
ATOM 5159 CG    CG    . MET MET MET B B 243 243 . 94.412  110.238 -9.712  1.00
5.42   1 . .
ATOM 5160 SD    SD    . MET MET MET B B 243 243 . 95.467  111.199 -10.829 1.00
5.56   1 . .
ATOM 5161 CE    CE    . MET MET MET B B 243 243 . 95.991  112.576 -9.754  1.00
8.21   1 . .
ATOM 5162 C     C     . MET MET MET B B 243 243 . 91.125  111.074 -7.964  1.00
3.12   1 . .
ATOM 5163 O     O     . MET MET MET B B 243 243 . 90.114  111.162 -8.745  1.00
4.12   1 . .
ATOM 5164 N     N     . ASP ASP ASP B B 244 244 . 91.235  111.693 -6.771  1.00
4.09   1 . .
ATOM 5165 CA    CA    . ASP ASP ASP B B 244 244 . 90.411  112.863 -6.417  1.00
2.52   1 . .
ATOM 5166 CB    CB    . ASP ASP ASP B B 244 244 . 89.586  112.671 -5.113  1.00
3.80   1 . .
ATOM 5167 CG    CG    . ASP ASP ASP B B 244 244 . 88.618  113.851 -4.835  1.00
3.05   1 . .
ATOM 5168 OD1   OD1   . ASP ASP ASP B B 244 244 . 87.766  113.708 -3.908  1.00
2.60   1 . .
ATOM 5169 OD2   OD2   . ASP ASP ASP B B 244 244 . 88.609  114.817 -5.627  1.00
2.38   1 . .
ATOM 5170 C     C     . ASP ASP ASP B B 244 244 . 91.359  114.051 -6.263  1.00
2.73   1 . .
ATOM 5171 O     O     . ASP ASP ASP B B 244 244 . 92.218  114.119 -5.358  1.00
3.18   1 . .
ATOM 5172 N     N     . VAL VAL VAL B B 245 245 . 91.293  114.986 -7.164  1.00
2.49   1 . .
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ATOM 5173 CA    CA    . VAL VAL VAL B B 245 245 . 92.209  116.088 -7.126  1.00
2.41   1 . .
ATOM 5174 CB    CB    . VAL VAL VAL B B 245 245 . 92.244  116.711 -8.493  1.00
3.06   1 . .
ATOM 5175 CG1   CG1   . VAL VAL VAL B B 245 245 . 93.065  117.993 -8.502  1.00
2.95   1 . .
ATOM 5176 CG2   CG2   . VAL VAL VAL B B 245 245 . 92.923  115.694 -9.483  1.00
2.05   1 . .
ATOM 5177 C     C     . VAL VAL VAL B B 245 245 . 91.727  117.052 -6.052  1.00
2.55   1 . .
ATOM 5178 O     O     . VAL VAL VAL B B 245 245 . 92.509  117.648 -5.333  1.00
4.86   1 . .
ATOM 5179 N     N     . ALA ALA ALA B B 246 246 . 90.402  117.161 -5.922  1.00
3.34   1 . .
ATOM 5180 CA    CA    . ALA ALA ALA B B 246 246 . 89.778  118.229 -5.062  1.00
3.13   1 . .
ATOM 5181 CB    CB    . ALA ALA ALA B B 246 246 . 89.956  117.888 -3.590  1.00
3.29   1 . .
ATOM 5182 C     C     . ALA ALA ALA B B 246 246 . 90.395  119.587 -5.402  1.00
2.99   1 . .
ATOM 5183 O     O     . ALA ALA ALA B B 246 246 . 90.802  120.389 -4.548  1.00
3.39   1 . .
ATOM 5184 N     N     . ALA ALA ALA B B 247 247 . 90.341  119.924 -6.669  1.00
2.58   1 . .
ATOM 5185 CA    CA    . ALA ALA ALA B B 247 247 . 90.914  121.145 -7.147  1.00
4.08   1 . .
ATOM 5186 CB    CB    . ALA ALA ALA B B 247 247 . 90.761  121.178 -8.621  1.00
3.10   1 . .
ATOM 5187 C     C     . ALA ALA ALA B B 247 247 . 90.304  122.464 -6.520  1.00
3.93   1 . .
ATOM 5188 O     O     . ALA ALA ALA B B 247 247 . 90.967  123.494 -6.459  1.00
5.52   1 . .
ATOM 5189 N     N     . SER SER SER B B 248 248 . 89.068  122.413 -6.017  1.00
5.87   1 . .
ATOM 5190 CA    CA    . SER SER SER B B 248 248 . 88.566  123.662 -5.406  1.00
6.11   1 . .
ATOM 5191 CB    CB    . SER SER SER B B 248 248 . 87.156  123.483 -4.969  1.00
5.73   1 . .
ATOM 5192 OG    OG    . SER SER SER B B 248 248 . 86.390  123.204 -6.076  1.00
4.65   1 . .
ATOM 5193 C     C     . SER SER SER B B 248 248 . 89.400  124.044 -4.180  1.00
7.89   1 . .
ATOM 5194 O     O     . SER SER SER B B 248 248 . 89.340  125.181 -3.732  1.00
7.60   1 . .
ATOM 5195 N     N     . GLU GLU GLU B B 249 249 . 90.160  123.118 -3.622  1.00
8.51   1 . .
ATOM 5196 CA    CA    . GLU GLU GLU B B 249 249 . 90.917  123.326 -2.395  1.00
8.32   1 . .
ATOM 5197 CB    CB    . GLU GLU GLU B B 249 249 . 91.259  121.984 -1.718  1.00
8.64   1 . .
ATOM 5198 CG    CG    . GLU GLU GLU B B 249 249 . 90.001  121.299 -1.250  1.00
9.14   1 . .
ATOM 5199 CD    CD    . GLU GLU GLU B B 249 249 . 89.368  122.043 -0.067  1.00
8.69   1 . .
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ATOM 5200 OE1   OE1   . GLU GLU GLU B B 249 249 . 90.155  122.638 0.738   1.00
15.34  1 . .
ATOM 5201 OE2   OE2   . GLU GLU GLU B B 249 249 . 88.126  122.068 0.050   1.00
7.94   1 . .
ATOM 5202 C     C     . GLU GLU GLU B B 249 249 . 92.181  124.116 -2.632  1.00
8.09   1 . .
ATOM 5203 O     O     . GLU GLU GLU B B 249 249 . 92.724  124.733 -1.685  1.00
10.32  1 . .
ATOM 5204 N     N     . PHE PHE PHE B B 250 250 . 92.654  124.141 -3.870  1.00
8.12   1 . .
ATOM 5205 CA    CA    . PHE PHE PHE B B 250 250 . 93.890  124.840 -4.222  1.00
7.98   1 . .
ATOM 5206 CB    CB    . PHE PHE PHE B B 250 250 . 95.100  123.886 -4.486  1.00
8.80   1 . .
ATOM 5207 CG    CG    . PHE PHE PHE B B 250 250 . 94.850  122.836 -5.545  1.00
10.08  1 . .
ATOM 5208 CD1   CD1   . PHE PHE PHE B B 250 250 . 94.611  121.516 -5.178  1.00
11.50  1 . .
ATOM 5209 CE1   CE1   . PHE PHE PHE B B 250 250 . 94.380  120.554 -6.118  1.00
11.26  1 . .
ATOM 5210 CZ    CZ    . PHE PHE PHE B B 250 250 . 94.427  120.889 -7.467  1.00
13.09  1 . .
ATOM 5211 CE2   CE2   . PHE PHE PHE B B 250 250 . 94.604  122.209 -7.855  1.00
10.92  1 . .
ATOM 5212 CD2   CD2   . PHE PHE PHE B B 250 250 . 94.886  123.163 -6.889  1.00
9.77   1 . .
ATOM 5213 C     C     . PHE PHE PHE B B 250 250 . 93.677  125.848 -5.376  1.00
8.11   1 . .
ATOM 5214 O     O     . PHE PHE PHE B B 250 250 . 94.627  126.332 -5.973  1.00
9.00   1 . .
ATOM 5215 N     N     . TYR TYR TYR B B 251 251 . 92.420  126.201 -5.666  1.00
7.54   1 . .
ATOM 5216 CA    CA    . TYR TYR TYR B B 251 251 . 92.098  127.297 -6.551  1.00
8.27   1 . .
ATOM 5217 CB    CB    . TYR TYR TYR B B 251 251 . 90.628  127.244 -6.897  1.00
7.62   1 . .
ATOM 5218 CG    CG    . TYR TYR TYR B B 251 251 . 90.195  128.394 -7.805  1.00
8.95   1 . .
ATOM 5219 CD1   CD1   . TYR TYR TYR B B 251 251 . 90.454  128.380 -9.196  1.00
9.22   1 . .
ATOM 5220 CE1   CE1   . TYR TYR TYR B B 251 251 . 90.031  129.439 -10.020 1.00
11.28  1 . .
ATOM 5221 CZ    CZ    . TYR TYR TYR B B 251 251 . 89.419  130.527 -9.415  1.00
12.08  1 . .
ATOM 5222 OH    OH    . TYR TYR TYR B B 251 251 . 88.989  131.589 -10.167 1.00
14.67  1 . .
ATOM 5223 CE2   CE2   . TYR TYR TYR B B 251 251 . 89.187  130.545 -8.033  1.00
11.68  1 . .
ATOM 5224 CD2   CD2   . TYR TYR TYR B B 251 251 . 89.580  129.530 -7.251  1.00
10.76  1 . .
ATOM 5225 C     C     . TYR TYR TYR B B 251 251 . 92.494  128.639 -5.909  1.00
8.17   1 . .
ATOM 5226 O     O     . TYR TYR TYR B B 251 251 . 92.013  128.949 -4.809  1.00
8.46   1 . .
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ATOM 5227 N     N     . ARG ARG ARG B B 252 252 . 93.320  129.394 -6.622  1.00
8.63   1 . .
ATOM 5228 CA    CA    . ARG ARG ARG B B 252 252 . 93.832  130.690 -6.162  1.00
11.02  1 . .
ATOM 5229 CB    CB    . ARG ARG ARG B B 252 252 . 95.320  130.588 -5.808  1.00
10.98  1 . .
ATOM 5230 CG    CG    . ARG ARG ARG B B 252 252 . 95.704  129.581 -4.731  1.00
12.76  1 . .
ATOM 5231 CD    CD    . ARG ARG ARG B B 252 252 . 95.075  129.944 -3.385  1.00
15.65  1 . .
ATOM 5232 NE    NE    . ARG ARG ARG B B 252 252 . 95.389  128.991 -2.320  1.00
16.77  1 . .
ATOM 5233 CZ    CZ    . ARG ARG ARG B B 252 252 . 94.519  128.136 -1.766  1.00
18.08  1 . .
ATOM 5234 NH1   NH1   . ARG ARG ARG B B 252 252 . 93.254  128.062 -2.167  1.00
19.32  1 . .
ATOM 5235 NH2   NH2   . ARG ARG ARG B B 252 252 . 94.927  127.305 -0.826  1.00
20.82  1 . .
ATOM 5236 C     C     . ARG ARG ARG B B 252 252 . 93.709  131.719 -7.254  1.00
10.64  1 . .
ATOM 5237 O     O     . ARG ARG ARG B B 252 252 . 94.438  131.643 -8.225  1.00
11.61  1 . .
ATOM 5238 N     N     . ASP ASP ASP B B 253 253 . 92.772  132.668 -7.112  1.00
12.48  1 . .
ATOM 5239 CA    CA    . ASP ASP ASP B B 253 253 . 92.757  133.838 -8.011  1.00
12.49  1 . .
ATOM 5240 CB    CB    . ASP ASP ASP B B 253 253 . 94.044  134.673 -7.813  1.00
14.68  1 . .
ATOM 5241 CG    CG    . ASP ASP ASP B B 253 253 . 94.133  135.289 -6.465  1.00
17.58  1 . .
ATOM 5242 OD1   OD1   . ASP ASP ASP B B 253 253 . 95.284  135.543 -6.027  1.00
22.05  1 . .
ATOM 5243 OD2   OD2   . ASP ASP ASP B B 253 253 . 93.073  135.547 -5.835  1.00
18.75  1 . .
ATOM 5244 C     C     . ASP ASP ASP B B 253 253 . 92.641  133.539 -9.493  1.00
11.47  1 . .
ATOM 5245 O     O     . ASP ASP ASP B B 253 253 . 93.279  134.203 -10.308 1.00
11.71  1 . .
ATOM 5246 N     N     . GLY GLY GLY B B 254 254 . 91.850  132.521 -9.870  1.00
10.05  1 . .
ATOM 5247 CA    CA    . GLY GLY GLY B B 254 254 . 91.749  132.153 -11.250 1.00
8.86   1 . .
ATOM 5248 C     C     . GLY GLY GLY B B 254 254 . 92.762  131.137 -11.713 1.00
9.47   1 . .
ATOM 5249 O     O     . GLY GLY GLY B B 254 254 . 92.707  130.728 -12.861 1.00
9.27   1 . .
ATOM 5250 N     N     . LYS LYS LYS B B 255 255 . 93.701  130.784 -10.848 1.00
10.36  1 . .
ATOM 5251 CA    CA    . LYS LYS LYS B B 255 255 . 94.690  129.773 -11.217 1.00
10.26  1 . .
ATOM 5252 CB    CB    . LYS LYS LYS B B 255 255 . 96.091  130.384 -11.318 1.00
11.09  1 . .
ATOM 5253 CG    CG    . LYS LYS LYS B B 255 255 . 96.254  131.402 -12.401 1.00
15.35  1 . .
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ATOM 5254 CD    CD    . LYS LYS LYS B B 255 255 . 97.556  132.092 -12.318 1.00
17.49  1 . .
ATOM 5255 CE    CE    . LYS LYS LYS B B 255 255 . 97.715  132.827 -13.577 1.00
17.45  1 . .
ATOM 5256 NZ    NZ    . LYS LYS LYS B B 255 255 . 99.059  133.391 -13.714 1.00
19.18  1 . .
ATOM 5257 C     C     . LYS LYS LYS B B 255 255 . 94.708  128.687 -10.174 1.00
7.72   1 . .
ATOM 5258 O     O     . LYS LYS LYS B B 255 255 . 93.818  128.597 -9.330  1.00
7.88   1 . .
ATOM 5259 N     N     . TYR TYR TYR B B 256 256 . 95.763  127.881 -10.170 1.00
9.92   1 . .
ATOM 5260 CA    CA    . TYR TYR TYR B B 256 256 . 95.805  126.667 -9.326  1.00
9.69   1 . .
ATOM 5261 CB    CB    . TYR TYR TYR B B 256 256 . 95.446  125.399 -10.173 1.00
7.74   1 . .
ATOM 5262 CG    CG    . TYR TYR TYR B B 256 256 . 93.969  125.371 -10.582 1.00
7.52   1 . .
ATOM 5263 CD1   CD1   . TYR TYR TYR B B 256 256 . 92.991  124.840 -9.740  1.00
5.54   1 . .
ATOM 5264 CE1   CE1   . TYR TYR TYR B B 256 256 . 91.627  124.876 -10.121 1.00
3.99   1 . .
ATOM 5265 CZ    CZ    . TYR TYR TYR B B 256 256 . 91.254  125.421 -11.329 1.00
3.25   1 . .
ATOM 5266 OH    OH    . TYR TYR TYR B B 256 256 . 89.933  125.353 -11.700 1.00
3.33   1 . .
ATOM 5267 CE2   CE2   . TYR TYR TYR B B 256 256 . 92.243  125.892 -12.217 1.00
3.59   1 . .
ATOM 5268 CD2   CD2   . TYR TYR TYR B B 256 256 . 93.549  125.912 -11.824 1.00
6.31   1 . .
ATOM 5269 C     C     . TYR TYR TYR B B 256 256 . 97.212  126.532 -8.744  1.00
11.35  1 . .
ATOM 5270 O     O     . TYR TYR TYR B B 256 256 . 98.198  126.767 -9.450  1.00
12.40  1 . .
ATOM 5271 N     N     . ASP ASP ASP B B 257 257 . 97.249  126.185 -7.459  1.00
13.50  1 . .
ATOM 5272 CA    CA    . ASP ASP ASP B B 257 257 . 98.492  126.171 -6.701  1.00
15.29  1 . .
ATOM 5273 CB    CB    . ASP ASP ASP B B 257 257 . 98.367  126.987 -5.409  1.00
16.47  1 . .
ATOM 5274 CG    CG    . ASP ASP ASP B B 257 257 . 99.712  127.358 -4.817  1.00
20.36  1 . .
ATOM 5275 OD1   OD1   . ASP ASP ASP B B 257 257 . 100.769 127.124 -5.469  1.00
18.79  1 . .
ATOM 5276 OD2   OD2   . ASP ASP ASP B B 257 257 . 99.690  127.908 -3.700  1.00
23.38  1 . .
ATOM 5277 C     C     . ASP ASP ASP B B 257 257 . 98.821  124.753 -6.297  1.00
15.64  1 . .
ATOM 5278 O     O     . ASP ASP ASP B B 257 257 . 98.237  124.230 -5.355  1.00
14.82  1 . .
ATOM 5279 N     N     . LEU LEU LEU B B 258 258 . 99.753  124.143 -7.010  1.00
16.61  1 . .
ATOM 5280 CA    CA    . LEU LEU LEU B B 258 258 . 100.125 122.773 -6.652  1.00
18.15  1 . .
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ATOM 5281 CB    CB    . LEU LEU LEU B B 258 258 . 100.637 121.989 -7.874  1.00
15.51  1 . .
ATOM 5282 CG    CG    . LEU LEU LEU B B 258 258 . 99.681  121.676 -9.045  1.00
12.89  1 . .
ATOM 5283 CD1   CD1   . LEU LEU LEU B B 258 258 . 100.322 120.618 -9.966  1.00
13.06  1 . .
ATOM 5284 CD2   CD2   . LEU LEU LEU B B 258 258 . 98.343  121.188 -8.630  1.00
12.76  1 . .
ATOM 5285 C     C     . LEU LEU LEU B B 258 258 . 101.057 122.653 -5.419  1.00
20.38  1 . .
ATOM 5286 O     O     . LEU LEU LEU B B 258 258 . 101.719 121.642 -5.216  1.00
20.55  1 . .
ATOM 5287 N     N     . ASP ASP ASP B B 259 259 . 101.083 123.709 -4.605  1.00
23.10  1 . .
ATOM 5288 CA    CA    . ASP ASP ASP B B 259 259 . 101.677 123.680 -3.264  1.00
24.28  1 . .
ATOM 5289 CB    CB    . ASP ASP ASP B B 259 259 . 103.144 124.019 -3.318  1.00
23.59  1 . .
ATOM 5290 CG    CG    . ASP ASP ASP B B 259 259 . 103.892 123.340 -2.233  1.00
20.85  1 . .
ATOM 5291 OD1   OD1   . ASP ASP ASP B B 259 259 . 103.215 122.679 -1.374  1.00
22.38  1 . .
ATOM 5292 OD2   OD2   . ASP ASP ASP B B 259 259 . 105.123 123.459 -2.237  1.00
13.45  1 . .
ATOM 5293 C     C     . ASP ASP ASP B B 259 259 . 100.993 124.518 -2.161  1.00
25.77  1 . .
ATOM 5294 O     O     . ASP ASP ASP B B 259 259 . 101.476 124.609 -1.008  1.00
24.18  1 . .
ATOM 5295 N     N     . PHE PHE PHE B B 260 260 . 99.877  125.127 -2.499  1.00
27.43  1 . .
ATOM 5296 CA    CA    . PHE PHE PHE B B 260 260 . 98.983  125.713 -1.498  1.00
29.29  1 . .
ATOM 5297 CB    CB    . PHE PHE PHE B B 260 260 . 97.543  125.475 -1.930  1.00
29.25  1 . .
ATOM 5298 CG    CG    . PHE PHE PHE B B 260 260 . 97.011  124.180 -1.471  1.00
26.96  1 . .
ATOM 5299 CD1   CD1   . PHE PHE PHE B B 260 260 . 96.226  124.096 -0.337  1.00
25.28  1 . .
ATOM 5300 CE1   CE1   . PHE PHE PHE B B 260 260 . 95.752  122.903 0.103   1.00
23.41  1 . .
ATOM 5301 CZ    CZ    . PHE PHE PHE B B 260 260 . 96.077  121.734 -0.601  1.00
24.21  1 . .
ATOM 5302 CE2   CE2   . PHE PHE PHE B B 260 260 . 96.873  121.813 -1.718  1.00
23.26  1 . .
ATOM 5303 CD2   CD2   . PHE PHE PHE B B 260 260 . 97.349  123.013 -2.149  1.00
25.91  1 . .
ATOM 5304 C     C     . PHE PHE PHE B B 260 260 . 99.135  125.284 0.002   1.00
30.93  1 . .
ATOM 5305 O     O     . PHE PHE PHE B B 260 260 . 98.780  126.082 0.899   1.00
31.07  1 . .
ATOM 5306 N     N     . LYS LYS LYS B B 261 261 . 99.591  124.047 0.284   1.00
31.55  1 . .
ATOM 5307 CA    CA    . LYS LYS LYS B B 261 261 . 99.873  123.613 1.678   1.00
32.22  1 . .
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ATOM 5308 CB    CB    . LYS LYS LYS B B 261 261 . 99.808  122.109 1.841   1.00
32.01  1 . .
ATOM 5309 CG    CG    . LYS LYS LYS B B 261 261 . 98.611  121.629 2.625   1.00
30.55  1 . .
ATOM 5310 CD    CD    . LYS LYS LYS B B 261 261 . 98.632  120.122 2.819   1.00
26.86  1 . .
ATOM 5311 CE    CE    . LYS LYS LYS B B 261 261 . 98.988  119.362 1.530   1.00
26.67  1 . .
ATOM 5312 NZ    NZ    . LYS LYS LYS B B 261 261 . 98.703  117.947 1.801   1.00
24.18  1 . .
ATOM 5313 C     C     . LYS LYS LYS B B 261 261 . 101.192 124.106 2.289   1.00
33.21  1 . .
ATOM 5314 O     O     . LYS LYS LYS B B 261 261 . 101.483 123.849 3.464   1.00
33.29  1 . .
ATOM 5315 N     N     . SER SER SER B B 262 262 . 101.989 124.805 1.503   1.00
33.95  1 . .
ATOM 5316 CA    CA    . SER SER SER B B 262 262 . 103.125 125.524 2.051   1.00
35.09  1 . .
ATOM 5317 CB    CB    . SER SER SER B B 262 262 . 104.234 125.537 1.018   1.00
35.06  1 . .
ATOM 5318 OG    OG    . SER SER SER B B 262 262 . 104.675 124.222 0.764   1.00
32.97  1 . .
ATOM 5319 C     C     . SER SER SER B B 262 262 . 102.695 126.964 2.413   1.00
36.33  1 . .
ATOM 5320 O     O     . SER SER SER B B 262 262 . 101.540 127.342 2.172   1.00
36.45  1 . .
ATOM 5321 N     N     . PRO PRO PRO B B 263 263 . 103.601 127.770 3.017   1.00
36.91  1 . .
ATOM 5322 CA    CA    . PRO PRO PRO B B 263 263 . 103.289 129.204 3.154   1.00
37.34  1 . .
ATOM 5323 CB    CB    . PRO PRO PRO B B 263 263 . 104.515 129.752 3.882   1.00
37.46  1 . .
ATOM 5324 CG    CG    . PRO PRO PRO B B 263 263 . 105.042 128.569 4.650   1.00
37.11  1 . .
ATOM 5325 CD    CD    . PRO PRO PRO B B 263 263 . 104.839 127.412 3.742   1.00
37.13  1 . .
ATOM 5326 C     C     . PRO PRO PRO B B 263 263 . 103.125 129.896 1.789   1.00
37.32  1 . .
ATOM 5327 O     O     . PRO PRO PRO B B 263 263 . 103.933 129.644 0.877   1.00
37.72  1 . .
ATOM 5328 N     N     . THR THR THR B B 264 264 . 102.102 130.751 1.666   1.00
37.06  1 . .
ATOM 5329 CA    CA    . THR THR THR B B 264 264 . 101.691 131.376 0.384   1.00
36.76  1 . .
ATOM 5330 CB    CB    . THR THR THR B B 264 264 . 100.692 132.555 0.593   1.00
36.77  1 . .
ATOM 5331 OG1   OG1   . THR THR THR B B 264 264 . 99.404  132.032 0.945   1.00
38.51  1 . .
ATOM 5332 CG2   CG2   . THR THR THR B B 264 264 . 100.516 133.395 -0.667  1.00
37.46  1 . .
ATOM 5333 C     C     . THR THR THR B B 264 264 . 102.858 131.746 -0.553  1.00
36.09  1 . .
ATOM 5334 O     O     . THR THR THR B B 264 264 . 103.981 132.035 -0.091  1.00
36.13  1 . .
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ATOM 5335 N     N     . ASP ASP ASP B B 265 265 . 102.572 131.696 -1.861  1.00
35.12  1 . .
ATOM 5336 CA    CA    . ASP ASP ASP B B 265 265 . 103.508 132.033 -2.927  1.00
34.22  1 . .
ATOM 5337 CB    CB    . ASP ASP ASP B B 265 265 . 104.643 131.005 -2.965  1.00
33.96  1 . .
ATOM 5338 CG    CG    . ASP ASP ASP B B 265 265 . 105.693 131.327 -3.994  1.00
32.95  1 . .
ATOM 5339 OD1   OD1   . ASP ASP ASP B B 265 265 . 105.626 132.413 -4.608  1.00
31.73  1 . .
ATOM 5340 OD2   OD2   . ASP ASP ASP B B 265 265 . 106.579 130.472 -4.197  1.00
30.82  1 . .
ATOM 5341 C     C     . ASP ASP ASP B B 265 265 . 102.779 132.077 -4.282  1.00
34.21  1 . .
ATOM 5342 O     O     . ASP ASP ASP B B 265 265 . 102.690 131.043 -4.973  1.00
34.04  1 . .
ATOM 5343 N     N     . PRO PRO PRO B B 266 266 . 102.252 133.266 -4.672  1.00
33.94  1 . .
ATOM 5344 CA    CA    . PRO PRO PRO B B 266 266 . 101.576 133.449 -5.962  1.00
33.57  1 . .
ATOM 5345 CB    CB    . PRO PRO PRO B B 266 266 . 101.451 134.972 -6.092  1.00
33.27  1 . .
ATOM 5346 CG    CG    . PRO PRO PRO B B 266 266 . 101.315 135.427 -4.727  1.00
34.61  1 . .
ATOM 5347 CD    CD    . PRO PRO PRO B B 266 266 . 102.156 134.493 -3.858  1.00
34.13  1 . .
ATOM 5348 C     C     . PRO PRO PRO B B 266 266 . 102.360 132.910 -7.133  1.00
33.10  1 . .
ATOM 5349 O     O     . PRO PRO PRO B B 266 266 . 101.748 132.514 -8.133  1.00
32.71  1 . .
ATOM 5350 N     N     . SER SER SER B B 267 267 . 103.688 132.839 -6.989  1.00
32.84  1 . .
ATOM 5351 CA    CA    . SER SER SER B B 267 267 . 104.571 132.527 -8.141  1.00
32.49  1 . .
ATOM 5352 CB    CB    . SER SER SER B B 267 267 . 106.022 132.991 -7.907  1.00
32.26  1 . .
ATOM 5353 OG    OG    . SER SER SER B B 267 267 . 106.599 132.425 -6.751  1.00
31.14  1 . .
ATOM 5354 C     C     . SER SER SER B B 267 267 . 104.518 131.070 -8.605  1.00
31.96  1 . .
ATOM 5355 O     O     . SER SER SER B B 267 267 . 104.867 130.746 -9.753  1.00
31.97  1 . .
ATOM 5356 N     N     . ARG ARG ARG B B 268 268 . 104.062 130.200 -7.713  1.00
31.30  1 . .
ATOM 5357 CA    CA    . ARG ARG ARG B B 268 268 . 103.954 128.786 -8.004  1.00
29.86  1 . .
ATOM 5358 CB    CB    . ARG ARG ARG B B 268 268 . 104.195 127.978 -6.725  1.00
30.09  1 . .
ATOM 5359 CG    CG    . ARG ARG ARG B B 268 268 . 103.171 128.209 -5.629  1.00
30.43  1 . .
ATOM 5360 CD    CD    . ARG ARG ARG B B 268 268 . 103.696 127.737 -4.320  1.00
32.33  1 . .
ATOM 5361 NE    NE    . ARG ARG ARG B B 268 268 . 102.824 128.132 -3.225  1.00
35.64  1 . .
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ATOM 5362 CZ    CZ    . ARG ARG ARG B B 268 268 . 103.139 128.013 -1.936  1.00
38.27  1 . .
ATOM 5363 NH1   NH1   . ARG ARG ARG B B 268 268 . 104.312 127.508 -1.563  1.00
39.45  1 . .
ATOM 5364 NH2   NH2   . ARG ARG ARG B B 268 268 . 102.273 128.385 -1.013  1.00
39.76  1 . .
ATOM 5365 C     C     . ARG ARG ARG B B 268 268 . 102.612 128.401 -8.667  1.00
29.00  1 . .
ATOM 5366 O     O     . ARG ARG ARG B B 268 268 . 102.370 127.222 -8.923  1.00
29.00  1 . .
ATOM 5367 N     N     . TYR TYR TYR B B 269 269 . 101.772 129.383 -8.983  1.00
27.14  1 . .
ATOM 5368 CA    CA    . TYR TYR TYR B B 269 269 . 100.447 129.097 -9.552  1.00
25.22  1 . .
ATOM 5369 CB    CB    . TYR TYR TYR B B 269 269 . 99.477  130.284 -9.381  1.00
25.12  1 . .
ATOM 5370 CG    CG    . TYR TYR TYR B B 269 269 . 99.158  130.744 -7.957  1.00
26.67  1 . .
ATOM 5371 CD1   CD1   . TYR TYR TYR B B 269 269 . 98.460  131.950 -7.749  1.00
27.23  1 . .
ATOM 5372 CE1   CE1   . TYR TYR TYR B B 269 269 . 98.158  132.409 -6.484  1.00
29.13  1 . .
ATOM 5373 CZ    CZ    . TYR TYR TYR B B 269 269 . 98.549  131.677 -5.373  1.00
29.86  1 . .
ATOM 5374 OH    OH    . TYR TYR TYR B B 269 269 . 98.227  132.137 -4.112  1.00
29.19  1 . .
ATOM 5375 CE2   CE2   . TYR TYR TYR B B 269 269 . 99.216  130.472 -5.534  1.00
29.14  1 . .
ATOM 5376 CD2   CD2   . TYR TYR TYR B B 269 269 . 99.536  130.012 -6.832  1.00
26.74  1 . .
ATOM 5377 C     C     . TYR TYR TYR B B 269 269 . 100.481 128.662 -11.029 1.00
23.15  1 . .
ATOM 5378 O     O     . TYR TYR TYR B B 269 269 . 101.293 129.143 -11.805 1.00
23.74  1 . .
ATOM 5379 N     N     . ILE ILE ILE B B 270 270 . 99.588  127.743 -11.424 1.00
20.38  1 . .
ATOM 5380 CA    CA    . ILE ILE ILE B B 270 270 . 99.438  127.374 -12.842 1.00
17.22  1 . .
ATOM 5381 CB    CB    . ILE ILE ILE B B 270 270 . 99.942  125.891 -13.122 1.00
17.52  1 . .
ATOM 5382 CG1   CG1   . ILE ILE ILE B B 270 270 . 98.888  124.848 -12.708 1.00
17.50  1 . .
ATOM 5383 CD1   CD1   . ILE ILE ILE B B 270 270 . 99.335  123.419 -13.006 1.00
16.19  1 . .
ATOM 5384 CG2   CG2   . ILE ILE ILE B B 270 270 . 101.376 125.634 -12.524 1.00
16.42  1 . .
ATOM 5385 C     C     . ILE ILE ILE B B 270 270 . 97.990  127.561 -13.369 1.00
15.68  1 . .
ATOM 5386 O     O     . ILE ILE ILE B B 270 270 . 97.055  127.582 -12.571 1.00
15.83  1 . .
ATOM 5387 N     N     . THR THR THR B B 271 271 . 97.831  127.671 -14.691 1.00
13.35  1 . .
ATOM 5388 CA    CA    . THR THR THR B B 271 271 . 96.518  127.774 -15.314 1.00
13.45  1 . .
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ATOM 5389 CB    CB    . THR THR THR B B 271 271 . 96.508  128.459 -16.736 1.00
11.78  1 . .
ATOM 5390 OG1   OG1   . THR THR THR B B 271 271 . 96.822  127.476 -17.744 1.00
13.50  1 . .
ATOM 5391 CG2   CG2   . THR THR THR B B 271 271 . 97.405  129.797 -16.846 1.00
12.31  1 . .
ATOM 5392 C     C     . THR THR THR B B 271 271 . 95.803  126.426 -15.427 1.00
12.72  1 . .
ATOM 5393 O     O     . THR THR THR B B 271 271 . 96.432  125.389 -15.316 1.00
12.32  1 . .
ATOM 5394 N     N     . GLY GLY GLY B B 272 272 . 94.494  126.479 -15.677 1.00
11.18  1 . .
ATOM 5395 CA    CA    . GLY GLY GLY B B 272 272 . 93.674  125.298 -15.872 1.00
11.27  1 . .
ATOM 5396 C     C     . GLY GLY GLY B B 272 272 . 94.204  124.505 -17.056 1.00
10.43  1 . .
ATOM 5397 O     O     . GLY GLY GLY B B 272 272 . 94.093  123.305 -17.084 1.00
10.55  1 . .
ATOM 5398 N     N     . ASP ASP ASP B B 273 273 . 94.748  125.169 -18.069 1.00
11.00  1 . .
ATOM 5399 CA    CA    . ASP ASP ASP B B 273 273 . 95.162  124.468 -19.268 1.00
12.66  1 . .
ATOM 5400 CB    CB    . ASP ASP ASP B B 273 273 . 95.368  125.436 -20.448 1.00
14.48  1 . .
ATOM 5401 CG    CG    . ASP ASP ASP B B 273 273 . 94.220  125.398 -21.478 1.00
17.55  1 . .
ATOM 5402 OD1   OD1   . ASP ASP ASP B B 273 273 . 93.001  125.417 -21.140 1.00
19.19  1 . .
ATOM 5403 OD2   OD2   . ASP ASP ASP B B 273 273 . 94.574  125.395 -22.691 1.00
24.52  1 . .
ATOM 5404 C     C     . ASP ASP ASP B B 273 273 . 96.452  123.721 -18.902 1.00
12.51  1 . .
ATOM 5405 O     O     . ASP ASP ASP B B 273 273 . 96.646  122.555 -19.341 1.00
10.29  1 . .
ATOM 5406 N     N     . GLN GLN GLN B B 274 274 . 97.268  124.333 -18.032 1.00
13.32  1 . .
ATOM 5407 CA    CA    . GLN GLN GLN B B 274 274 . 98.500  123.645 -17.580 1.00
13.90  1 . .
ATOM 5408 CB    CB    . GLN GLN GLN B B 274 274 . 99.490  124.542 -16.840 1.00
14.75  1 . .
ATOM 5409 CG    CG    . GLN GLN GLN B B 274 274 . 99.980  125.731 -17.680 1.00
19.36  1 . .
ATOM 5410 CD    CD    . GLN GLN GLN B B 274 274 . 100.742 126.744 -16.847 1.00
20.49  1 . .
ATOM 5411 OE1   OE1   . GLN GLN GLN B B 274 274 . 100.151 127.612 -16.233 1.00
22.16  1 . .
ATOM 5412 NE2   NE2   . GLN GLN GLN B B 274 274 . 102.065 126.605 -16.799 1.00
23.34  1 . .
ATOM 5413 C     C     . GLN GLN GLN B B 274 274 . 98.175  122.413 -16.769 1.00
12.33  1 . .
ATOM 5414 O     O     . GLN GLN GLN B B 274 274 . 98.797  121.322 -16.953 1.00
11.76  1 . .
ATOM 5415 N     N     . LEU LEU LEU B B 275 275 . 97.163  122.579 -15.922 1.00
10.50  1 . .
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ATOM 5416 CA    CA    . LEU LEU LEU B B 275 275 . 96.666  121.535 -15.074 1.00
9.37   1 . .
ATOM 5417 CB    CB    . LEU LEU LEU B B 275 275 . 95.675  122.110 -14.028 1.00
9.02   1 . .
ATOM 5418 CG    CG    . LEU LEU LEU B B 275 275 . 95.123  121.174 -12.958 1.00
9.25   1 . .
ATOM 5419 CD1   CD1   . LEU LEU LEU B B 275 275 . 96.236  120.536 -12.127 1.00
10.31  1 . .
ATOM 5420 CD2   CD2   . LEU LEU LEU B B 275 275 . 94.179  121.986 -11.985 1.00
5.64   1 . .
ATOM 5421 C     C     . LEU LEU LEU B B 275 275 . 96.132  120.355 -15.912 1.00
8.15   1 . .
ATOM 5422 O     O     . LEU LEU LEU B B 275 275 . 96.631  119.194 -15.740 1.00
8.31   1 . .
ATOM 5423 N     N     . GLY GLY GLY B B 276 276 . 95.271  120.653 -16.883 1.00
6.51   1 . .
ATOM 5424 CA    CA    . GLY GLY GLY B B 276 276 . 94.785  119.698 -17.858 1.00
7.39   1 . .
ATOM 5425 C     C     . GLY GLY GLY B B 276 276 . 95.900  118.945 -18.559 1.00
7.64   1 . .
ATOM 5426 O     O     . GLY GLY GLY B B 276 276 . 95.829  117.707 -18.699 1.00
9.01   1 . .
ATOM 5427 N     N     . ALA ALA ALA B B 277 277 . 96.913  119.666 -19.039 1.00
7.90   1 . .
ATOM 5428 CA    CA    . ALA ALA ALA B B 277 277 . 98.057  118.989 -19.701 1.00
7.48   1 . .
ATOM 5429 CB    CB    . ALA ALA ALA B B 277 277 . 99.110  119.999 -20.250 1.00
10.18  1 . .
ATOM 5430 C     C     . ALA ALA ALA B B 277 277 . 98.735  117.996 -18.728 1.00
7.68   1 . .
ATOM 5431 O     O     . ALA ALA ALA B B 277 277 . 99.116  116.907 -19.182 1.00
10.26  1 . .
ATOM 5432 N     N     . LEU LEU LEU B B 278 278 . 98.864  118.340 -17.436 1.00
7.84   1 . .
ATOM 5433 CA    CA    . LEU LEU LEU B B 278 278 . 99.464  117.437 -16.446 1.00
7.47   1 . .
ATOM 5434 CB    CB    . LEU LEU LEU B B 278 278 . 99.469  118.089 -15.040 1.00
8.37   1 . .
ATOM 5435 CG    CG    . LEU LEU LEU B B 278 278 . 100.240 117.538 -13.833 1.00
10.67  1 . .
ATOM 5436 CD1   CD1   . LEU LEU LEU B B 278 278 . 101.790 117.536 -14.056 1.00
15.68  1 . .
ATOM 5437 CD2   CD2   . LEU LEU LEU B B 278 278 . 99.880  118.379 -12.605 1.00
12.63  1 . .
ATOM 5438 C     C     . LEU LEU LEU B B 278 278 . 98.629  116.169 -16.358 1.00
5.88   1 . .
ATOM 5439 O     O     . LEU LEU LEU B B 278 278 . 99.234  115.047 -16.394 1.00
6.97   1 . .
ATOM 5440 N     N     . TYR TYR TYR B B 279 279 . 97.282  116.305 -16.272 1.00
6.83   1 . .
ATOM 5441 CA    CA    . TYR TYR TYR B B 279 279 . 96.388  115.125 -16.202 1.00
5.92   1 . .
ATOM 5442 CB    CB    . TYR TYR TYR B B 279 279 . 94.971  115.511 -16.061 1.00
4.87   1 . .
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ATOM 5443 CG    CG    . TYR TYR TYR B B 279 279 . 94.633  116.340 -14.855 1.00
2.00   1 . .
ATOM 5444 CD1   CD1   . TYR TYR TYR B B 279 279 . 95.118  116.074 -13.616 1.00
2.53   1 . .
ATOM 5445 CE1   CE1   . TYR TYR TYR B B 279 279 . 94.754  116.885 -12.551 1.00
2.45   1 . .
ATOM 5446 CZ    CZ    . TYR TYR TYR B B 279 279 . 93.792  117.862 -12.653 1.00
3.76   1 . .
ATOM 5447 OH    OH    . TYR TYR TYR B B 279 279 . 93.447  118.636 -11.551 1.00
3.94   1 . .
ATOM 5448 CE2   CE2   . TYR TYR TYR B B 279 279 . 93.251  118.139 -13.905 1.00
2.79   1 . .
ATOM 5449 CD2   CD2   . TYR TYR TYR B B 279 279 . 93.665  117.352 -14.980 1.00
3.88   1 . .
ATOM 5450 C     C     . TYR TYR TYR B B 279 279 . 96.506  114.209 -17.461 1.00
4.60   1 . .
ATOM 5451 O     O     . TYR TYR TYR B B 279 279 . 96.414  112.974 -17.409 1.00
6.17   1 . .
ATOM 5452 N     N     . GLN GLN GLN B B 280 280 . 96.730  114.817 -18.623 1.00
5.59   1 . .
ATOM 5453 CA    CA    . GLN GLN GLN B B 280 280 . 96.885  114.008 -19.823 1.00
5.44   1 . .
ATOM 5454 CB    CB    . GLN GLN GLN B B 280 280 . 96.936  114.921 -21.057 1.00
5.91   1 . .
ATOM 5455 CG    CG    . GLN GLN GLN B B 280 280 . 95.647  115.664 -21.353 1.00
10.74  1 . .
ATOM 5456 CD    CD    . GLN GLN GLN B B 280 280 . 94.583  114.857 -22.093 1.00
14.07  1 . .
ATOM 5457 OE1   OE1   . GLN GLN GLN B B 280 280 . 94.759  113.657 -22.366 1.00
17.33  1 . .
ATOM 5458 NE2   NE2   . GLN GLN GLN B B 280 280 . 93.437  115.526 -22.438 1.00
14.19  1 . .
ATOM 5459 C     C     . GLN GLN GLN B B 280 280 . 98.145  113.180 -19.696 1.00
5.33   1 . .
ATOM 5460 O     O     . GLN GLN GLN B B 280 280 . 98.148  112.019 -20.154 1.00
6.07   1 . .
ATOM 5461 N     N     . ASP ASP ASP B B 281 281 . 99.219  113.736 -19.127 1.00
6.35   1 . .
ATOM 5462 CA    CA    . ASP ASP ASP B B 281 281 . 100.416 112.957 -18.912 1.00
7.81   1 . .
ATOM 5463 CB    CB    . ASP ASP ASP B B 281 281 . 101.607 113.791 -18.398 1.00
9.55   1 . .
ATOM 5464 CG    CG    . ASP ASP ASP B B 281 281 . 102.084 114.807 -19.430 1.00
13.50  1 . .
ATOM 5465 OD1   OD1   . ASP ASP ASP B B 281 281 . 101.735 114.693 -20.657 1.00
17.50  1 . .
ATOM 5466 OD2   OD2   . ASP ASP ASP B B 281 281 . 102.759 115.760 -18.998 1.00
18.74  1 . .
ATOM 5467 C     C     . ASP ASP ASP B B 281 281 . 100.146 111.830 -17.955 1.00
7.49   1 . .
ATOM 5468 O     O     . ASP ASP ASP B B 281 281 . 100.647 110.693 -18.155 1.00
7.71   1 . .
ATOM 5469 N     N     . PHE PHE PHE B B 282 282 . 99.397  112.109 -16.889 1.00
5.64   1 . .
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ATOM 5470 CA    CA    . PHE PHE PHE B B 282 282 . 99.117  111.046 -15.905 1.00
6.04   1 . .
ATOM 5471 CB    CB    . PHE PHE PHE B B 282 282 . 98.283  111.567 -14.732 1.00
5.89   1 . .
ATOM 5472 CG    CG    . PHE PHE PHE B B 282 282 . 98.973  112.537 -13.832 1.00
6.48   1 . .
ATOM 5473 CD1   CD1   . PHE PHE PHE B B 282 282 . 98.230  113.270 -12.924 1.00
9.80   1 . .
ATOM 5474 CE1   CE1   . PHE PHE PHE B B 282 282 . 98.867  114.188 -12.076 1.00
11.74  1 . .
ATOM 5475 CZ    CZ    . PHE PHE PHE B B 282 282 . 100.215 114.332 -12.110 1.00
12.86  1 . .
ATOM 5476 CE2   CE2   . PHE PHE PHE B B 282 282 . 100.962 113.648 -13.004 1.00
10.47  1 . .
ATOM 5477 CD2   CD2   . PHE PHE PHE B B 282 282 . 100.328 112.712 -13.861 1.00
9.32   1 . .
ATOM 5478 C     C     . PHE PHE PHE B B 282 282 . 98.355  109.889 -16.563 1.00
5.42   1 . .
ATOM 5479 O     O     . PHE PHE PHE B B 282 282 . 98.579  108.715 -16.225 1.00
6.36   1 . .
ATOM 5480 N     N     . VAL VAL VAL B B 283 283 . 97.451  110.209 -17.473 1.00
4.64   1 . .
ATOM 5481 CA    CA    . VAL VAL VAL B B 283 283 . 96.612  109.177 -18.072 1.00
5.05   1 . .
ATOM 5482 CB    CB    . VAL VAL VAL B B 283 283 . 95.390  109.815 -18.752 1.00
4.46   1 . .
ATOM 5483 CG1   CG1   . VAL VAL VAL B B 283 283 . 94.663  108.765 -19.700 1.00
5.55   1 . .
ATOM 5484 CG2   CG2   . VAL VAL VAL B B 283 283 . 94.439  110.402 -17.689 1.00
5.60   1 . .
ATOM 5485 C     C     . VAL VAL VAL B B 283 283 . 97.423  108.360 -19.078 1.00
5.09   1 . .
ATOM 5486 O     O     . VAL VAL VAL B B 283 283 . 97.146  107.144 -19.232 1.00
7.35   1 . .
ATOM 5487 N     N     . ARG ARG ARG B B 284 284 . 98.398  109.006 -19.745 1.00
5.76   1 . .
ATOM 5488 CA    CA    . ARG ARG ARG B B 284 284 . 99.265  108.296 -20.692 1.00
5.60   1 . .
ATOM 5489 CB    CB    . ARG ARG ARG B B 284 284 . 100.088 109.275 -21.568 1.00
4.69   1 . .
ATOM 5490 CG    CG    . ARG ARG ARG B B 284 284 . 101.193 108.606 -22.399 1.00
8.13   1 . .
ATOM 5491 CD    CD    . ARG ARG ARG B B 284 284 . 100.586 107.780 -23.590 1.00
11.94  1 . .
ATOM 5492 NE    NE    . ARG ARG ARG B B 284 284 . 99.660  108.560 -24.420 1.00
9.02   1 . .
ATOM 5493 CZ    CZ    . ARG ARG ARG B B 284 284 . 99.998  109.279 -25.510 1.00
12.16  1 . .
ATOM 5494 NH1   NH1   . ARG ARG ARG B B 284 284 . 101.244 109.310 -25.994 1.00
13.02  1 . .
ATOM 5495 NH2   NH2   . ARG ARG ARG B B 284 284 . 99.054  109.967 -26.143 1.00
13.44  1 . .
ATOM 5496 C     C     . ARG ARG ARG B B 284 284 . 100.229 107.395 -19.928 1.00
5.58   1 . .
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ATOM 5497 O     O     . ARG ARG ARG B B 284 284 . 100.540 106.332 -20.391 1.00
6.40   1 . .
ATOM 5498 N     N     . ASP ASP ASP B B 285 285 . 100.716 107.850 -18.783 1.00
5.49   1 . .
ATOM 5499 CA    CA    . ASP ASP ASP B B 285 285 . 101.891 107.217 -18.129 1.00
6.52   1 . .
ATOM 5500 CB    CB    . ASP ASP ASP B B 285 285 . 102.832 108.298 -17.563 1.00
8.56   1 . .
ATOM 5501 CG    CG    . ASP ASP ASP B B 285 285 . 103.544 109.120 -18.617 1.00
10.86  1 . .
ATOM 5502 OD1   OD1   . ASP ASP ASP B B 285 285 . 103.574 108.735 -19.822 1.00
16.44  1 . .
ATOM 5503 OD2   OD2   . ASP ASP ASP B B 285 285 . 104.113 110.166 -18.209 1.00
14.59  1 . .
ATOM 5504 C     C     . ASP ASP ASP B B 285 285 . 101.604 106.259 -16.994 1.00
7.19   1 . .
ATOM 5505 O     O     . ASP ASP ASP B B 285 285 . 102.488 105.527 -16.623 1.00
8.15   1 . .
ATOM 5506 N     N     . TYR TYR TYR B B 286 286 . 100.376 106.287 -16.484 1.00
5.37   1 . .
ATOM 5507 CA    CA    . TYR TYR TYR B B 286 286 . 99.836  105.481 -15.351 1.00
4.61   1 . .
ATOM 5508 CB    CB    . TYR TYR TYR B B 286 286 . 99.786  106.343 -14.080 1.00
5.14   1 . .
ATOM 5509 CG    CG    . TYR TYR TYR B B 286 286 . 101.157 106.905 -13.750 1.00
5.88   1 . .
ATOM 5510 CD1   CD1   . TYR TYR TYR B B 286 286 . 102.122 106.132 -13.110 1.00
7.69   1 . .
ATOM 5511 CE1   CE1   . TYR TYR TYR B B 286 286 . 103.385 106.682 -12.851 1.00
10.37  1 . .
ATOM 5512 CZ    CZ    . TYR TYR TYR B B 286 286 . 103.637 108.040 -13.184 1.00
12.12  1 . .
ATOM 5513 OH    OH    . TYR TYR TYR B B 286 286 . 104.855 108.672 -12.936 1.00
16.02  1 . .
ATOM 5514 CE2   CE2   . TYR TYR TYR B B 286 286 . 102.651 108.805 -13.775 1.00
11.16  1 . .
ATOM 5515 CD2   CD2   . TYR TYR TYR B B 286 286 . 101.439 108.260 -14.012 1.00
9.24   1 . .
ATOM 5516 C     C     . TYR TYR TYR B B 286 286 . 98.470  104.966 -15.717 1.00
4.29   1 . .
ATOM 5517 O     O     . TYR TYR TYR B B 286 286 . 97.767  105.543 -16.548 1.00
3.84   1 . .
ATOM 5518 N     N     . PRO PRO PRO B B 287 287 . 98.027  103.875 -15.044 1.00
3.72   1 . .
ATOM 5519 CA    CA    . PRO PRO PRO B B 287 287 . 96.711  103.302 -15.264 1.00
4.10   1 . .
ATOM 5520 CB    CB    . PRO PRO PRO B B 287 287 . 96.826  101.898 -14.651 1.00
5.64   1 . .
ATOM 5521 CG    CG    . PRO PRO PRO B B 287 287 . 97.893  102.052 -13.624 1.00
5.76   1 . .
ATOM 5522 CD    CD    . PRO PRO PRO B B 287 287 . 98.850  103.070 -14.131 1.00
4.69   1 . .
ATOM 5523 C     C     . PRO PRO PRO B B 287 287 . 95.627  104.092 -14.590 1.00
3.23   1 . .
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ATOM 5524 O     O     . PRO PRO PRO B B 287 287 . 94.737  103.487 -13.955 1.00
3.82   1 . .
ATOM 5525 N     N     . VAL VAL VAL B B 288 288 . 95.598  105.409 -14.863 1.00
3.85   1 . .
ATOM 5526 CA    CA    . VAL VAL VAL B B 288 288 . 94.565  106.306 -14.355 1.00
3.65   1 . .
ATOM 5527 CB    CB    . VAL VAL VAL B B 288 288 . 95.092  107.722 -14.276 1.00
3.80   1 . .
ATOM 5528 CG1   CG1   . VAL VAL VAL B B 288 288 . 93.925  108.721 -13.814 1.00
4.01   1 . .
ATOM 5529 CG2   CG2   . VAL VAL VAL B B 288 288 . 96.271  107.778 -13.322 1.00
6.40   1 . .
ATOM 5530 C     C     . VAL VAL VAL B B 288 288 . 93.308  106.250 -15.205 1.00
3.94   1 . .
ATOM 5531 O     O     . VAL VAL VAL B B 288 288 . 93.336  106.623 -16.434 1.00
3.93   1 . .
ATOM 5532 N     N     . VAL VAL VAL B B 289 289 . 92.186  105.805 -14.606 1.00
2.55   1 . .
ATOM 5533 CA    CA    . VAL VAL VAL B B 289 289 . 90.915  105.595 -15.368 1.00
2.90   1 . .
ATOM 5534 CB    CB    . VAL VAL VAL B B 289 289 . 90.401  104.138 -15.236 1.00
3.35   1 . .
ATOM 5535 CG1   CG1   . VAL VAL VAL B B 289 289 . 91.441  103.120 -15.864 1.00
5.18   1 . .
ATOM 5536 CG2   CG2   . VAL VAL VAL B B 289 289 . 90.094  103.750 -13.741 1.00
5.19   1 . .
ATOM 5537 C     C     . VAL VAL VAL B B 289 289 . 89.791  106.527 -14.961 1.00
2.13   1 . .
ATOM 5538 O     O     . VAL VAL VAL B B 289 289 . 88.684  106.543 -15.530 1.00
3.00   1 . .
ATOM 5539 N     N     . SER SER SER B B 290 290 . 90.081  107.372 -13.985 1.00
2.47   1 . .
ATOM 5540 CA    CA    . SER SER SER B B 290 290 . 89.031  108.206 -13.406 1.00
3.21   1 . .
ATOM 5541 CB    CB    . SER SER SER B B 290 290 . 88.200  107.393 -12.375 1.00
4.28   1 . .
ATOM 5542 OG    OG    . SER SER SER B B 290 290 . 87.135  108.163 -11.765 1.00
2.84   1 . .
ATOM 5543 C     C     . SER SER SER B B 290 290 . 89.717  109.353 -12.672 1.00
2.02   1 . .
ATOM 5544 O     O     . SER SER SER B B 290 290 . 90.693  109.142 -11.936 1.00
4.07   1 . .
ATOM 5545 N     N     . ILE ILE ILE B B 291 291 . 89.215  110.578 -12.878 1.00
2.13   1 . .
ATOM 5546 CA    CA    . ILE ILE ILE B B 291 291 . 89.723  111.717 -12.155 1.00
2.43   1 . .
ATOM 5547 CB    CB    . ILE ILE ILE B B 291 291 . 90.654  112.635 -13.006 1.00
2.35   1 . .
ATOM 5548 CG1   CG1   . ILE ILE ILE B B 291 291 . 91.883  111.837 -13.498 1.00
3.45   1 . .
ATOM 5549 CD1   CD1   . ILE ILE ILE B B 291 291 . 92.860  112.636 -14.411 1.00
3.82   1 . .
ATOM 5550 CG2   CG2   . ILE ILE ILE B B 291 291 . 91.010  113.906 -12.220 1.00
2.86   1 . .
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ATOM 5551 C     C     . ILE ILE ILE B B 291 291 . 88.507  112.509 -11.655 1.00
2.76   1 . .
ATOM 5552 O     O     . ILE ILE ILE B B 291 291 . 87.559  112.867 -12.422 1.00
2.52   1 . .
ATOM 5553 N     N     . GLU GLU GLU B B 292 292 . 88.528  112.779 -10.352 1.00
2.41   1 . .
ATOM 5554 CA    CA    . GLU GLU GLU B B 292 292 . 87.465  113.523 -9.734  1.00
2.00   1 . .
ATOM 5555 CB    CB    . GLU GLU GLU B B 292 292 . 87.075  112.810 -8.420  1.00
2.00   1 . .
ATOM 5556 CG    CG    . GLU GLU GLU B B 292 292 . 85.969  113.482 -7.610  1.00
3.24   1 . .
ATOM 5557 CD    CD    . GLU GLU GLU B B 292 292 . 85.782  112.793 -6.220  1.00
4.41   1 . .
ATOM 5558 OE1   OE1   . GLU GLU GLU B B 292 292 . 85.362  113.483 -5.244  1.00
2.77   1 . .
ATOM 5559 OE2   OE2   . GLU GLU GLU B B 292 292 . 86.032  111.597 -6.076  1.00
5.72   1 . .
ATOM 5560 C     C     . GLU GLU GLU B B 292 292 . 87.916  114.940 -9.365  1.00
2.00   1 . .
ATOM 5561 O     O     . GLU GLU GLU B B 292 292 . 89.087  115.172 -8.996  1.00
2.53   1 . .
ATOM 5562 N     N     . ASP ASP ASP B B 293 293 . 86.991  115.865 -9.562  1.00
2.58   1 . .
ATOM 5563 CA    CA    . ASP ASP ASP B B 293 293 . 87.170  117.307 -9.272  1.00
2.77   1 . .
ATOM 5564 CB    CB    . ASP ASP ASP B B 293 293 . 87.014  117.673 -7.764  1.00
2.00   1 . .
ATOM 5565 CG    CG    . ASP ASP ASP B B 293 293 . 85.615  117.828 -7.368  1.00
2.49   1 . .
ATOM 5566 OD1   OD1   . ASP ASP ASP B B 293 293 . 84.775  117.937 -8.256  1.00
2.00   1 . .
ATOM 5567 OD2   OD2   . ASP ASP ASP B B 293 293 . 85.340  117.851 -6.131  1.00
3.08   1 . .
ATOM 5568 C     C     . ASP ASP ASP B B 293 293 . 88.528  117.784 -9.844  1.00
2.44   1 . .
ATOM 5569 O     O     . ASP ASP ASP B B 293 293 . 89.355  118.365 -9.171  1.00
2.12   1 . .
ATOM 5570 N     N     . PRO PRO PRO B B 294 294 . 88.762  117.577 -11.167 1.00
2.21   1 . .
ATOM 5571 CA    CA    . PRO PRO PRO B B 294 294 . 89.993  118.080 -11.759 1.00
2.20   1 . .
ATOM 5572 CB    CB    . PRO PRO PRO B B 294 294 . 89.938  117.558 -13.231 1.00
2.16   1 . .
ATOM 5573 CG    CG    . PRO PRO PRO B B 294 294 . 88.517  117.251 -13.522 1.00
3.34   1 . .
ATOM 5574 CD    CD    . PRO PRO PRO B B 294 294 . 87.985  116.767 -12.126 1.00
2.05   1 . .
ATOM 5575 C     C     . PRO PRO PRO B B 294 294 . 90.139  119.597 -11.750 1.00
2.00   1 . .
ATOM 5576 O     O     . PRO PRO PRO B B 294 294 . 91.268  120.087 -11.894 1.00
2.00   1 . .
ATOM 5577 N     N     . PHE PHE PHE B B 295 295 . 89.020  120.300 -11.653 1.00
2.15   1 . .
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ATOM 5578 CA    CA    . PHE PHE PHE B B 295 295 . 89.077  121.804 -11.606 1.00
2.14   1 . .
ATOM 5579 CB    CB    . PHE PHE PHE B B 295 295 . 88.687  122.367 -12.999 1.00
2.41   1 . .
ATOM 5580 CG    CG    . PHE PHE PHE B B 295 295 . 89.502  121.748 -14.128 1.00
2.51   1 . .
ATOM 5581 CD1   CD1   . PHE PHE PHE B B 295 295 . 90.852  122.148 -14.316 1.00
3.04   1 . .
ATOM 5582 CE1   CE1   . PHE PHE PHE B B 295 295 . 91.640  121.561 -15.361 1.00
2.85   1 . .
ATOM 5583 CZ    CZ    . PHE PHE PHE B B 295 295 . 91.094  120.560 -16.123 1.00
2.52   1 . .
ATOM 5584 CE2   CE2   . PHE PHE PHE B B 295 295 . 89.797  120.110 -15.966 1.00
3.37   1 . .
ATOM 5585 CD2   CD2   . PHE PHE PHE B B 295 295 . 88.960  120.732 -14.937 1.00
2.95   1 . .
ATOM 5586 C     C     . PHE PHE PHE B B 295 295 . 88.131  122.277 -10.522 1.00
2.00   1 . .
ATOM 5587 O     O     . PHE PHE PHE B B 295 295 . 87.252  121.519 -9.969  1.00
2.00   1 . .
ATOM 5588 N     N     . ASP ASP ASP B B 296 296 . 88.208  123.564 -10.264 1.00
3.12   1 . .
ATOM 5589 CA    CA    . ASP ASP ASP B B 296 296 . 87.336  124.135 -9.264  1.00
2.06   1 . .
ATOM 5590 CB    CB    . ASP ASP ASP B B 296 296 . 87.722  125.635 -9.112  1.00
2.47   1 . .
ATOM 5591 CG    CG    . ASP ASP ASP B B 296 296 . 86.957  126.319 -8.028  1.00
5.52   1 . .
ATOM 5592 OD1   OD1   . ASP ASP ASP B B 296 296 . 87.337  126.145 -6.843  1.00
4.80   1 . .
ATOM 5593 OD2   OD2   . ASP ASP ASP B B 296 296 . 85.919  127.027 -8.343  1.00
2.93   1 . .
ATOM 5594 C     C     . ASP ASP ASP B B 296 296 . 85.847  124.027 -9.567  1.00
3.04   1 . .
ATOM 5595 O     O     . ASP ASP ASP B B 296 296 . 85.422  123.962 -10.781 1.00
2.00   1 . .
ATOM 5596 N     N     . GLN GLN GLN B B 297 297 . 85.044  124.015 -8.530  1.00
2.14   1 . .
ATOM 5597 CA    CA    . GLN GLN GLN B B 297 297 . 83.605  123.870 -8.569  1.00
2.36   1 . .
ATOM 5598 CB    CB    . GLN GLN GLN B B 297 297 . 82.979  123.845 -7.133  1.00
2.29   1 . .
ATOM 5599 CG    CG    . GLN GLN GLN B B 297 297 . 83.210  125.210 -6.422  1.00
2.04   1 . .
ATOM 5600 CD    CD    . GLN GLN GLN B B 297 297 . 83.514  125.057 -4.909  1.00
4.29   1 . .
ATOM 5601 OE1   OE1   . GLN GLN GLN B B 297 297 . 82.972  124.229 -4.204  1.00
5.84   1 . .
ATOM 5602 NE2   NE2   . GLN GLN GLN B B 297 297 . 84.383  125.865 -4.460  1.00
4.23   1 . .
ATOM 5603 C     C     . GLN GLN GLN B B 297 297 . 82.921  124.965 -9.366  1.00
2.51   1 . .
ATOM 5604 O     O     . GLN GLN GLN B B 297 297 . 81.774  124.769 -9.755  1.00
2.07   1 . .
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ATOM 5605 N     N     . ASP ASP ASP B B 298 298 . 83.611  126.087 -9.668  1.00
2.27   1 . .
ATOM 5606 CA    CA    . ASP ASP ASP B B 298 298 . 82.967  127.112 -10.510 1.00
2.53   1 . .
ATOM 5607 CB    CB    . ASP ASP ASP B B 298 298 . 82.977  128.478 -9.800  1.00
2.16   1 . .
ATOM 5608 CG    CG    . ASP ASP ASP B B 298 298 . 81.964  128.590 -8.715  1.00
2.84   1 . .
ATOM 5609 OD1   OD1   . ASP ASP ASP B B 298 298 . 80.801  128.366 -8.985  1.00
4.68   1 . .
ATOM 5610 OD2   OD2   . ASP ASP ASP B B 298 298 . 82.409  128.923 -7.607  1.00
5.84   1 . .
ATOM 5611 C     C     . ASP ASP ASP B B 298 298 . 83.612  127.238 -11.909 1.00
2.29   1 . .
ATOM 5612 O     O     . ASP ASP ASP B B 298 298 . 83.165  128.076 -12.716 1.00
2.11   1 . .
ATOM 5613 N     N     . ASP ASP ASP B B 299 299 . 84.707  126.511 -12.146 1.00
2.10   1 . .
ATOM 5614 CA    CA    . ASP ASP ASP B B 299 299 . 85.500  126.682 -13.416 1.00
2.10   1 . .
ATOM 5615 CB    CB    . ASP ASP ASP B B 299 299 . 86.927  126.344 -13.084 1.00
2.00   1 . .
ATOM 5616 CG    CG    . ASP ASP ASP B B 299 299 . 87.931  126.678 -14.194 1.00
2.00   1 . .
ATOM 5617 OD1   OD1   . ASP ASP ASP B B 299 299 . 87.517  127.162 -15.271 1.00
2.73   1 . .
ATOM 5618 OD2   OD2   . ASP ASP ASP B B 299 299 . 89.169  126.453 -13.921 1.00
4.03   1 . .
ATOM 5619 C     C     . ASP ASP ASP B B 299 299 . 84.924  125.771 -14.505 1.00
2.04   1 . .
ATOM 5620 O     O     . ASP ASP ASP B B 299 299 . 85.619  124.830 -15.021 1.00
2.78   1 . .
ATOM 5621 N     N     . TRP TRP TRP B B 300 300 . 83.650  126.038 -14.816 1.00
2.18   1 . .
ATOM 5622 CA    CA    . TRP TRP TRP B B 300 300 . 82.963  125.281 -15.809 1.00
2.65   1 . .
ATOM 5623 CB    CB    . TRP TRP TRP B B 300 300 . 81.575  125.846 -16.056 1.00
2.48   1 . .
ATOM 5624 CG    CG    . TRP TRP TRP B B 300 300 . 80.658  125.737 -14.884 1.00
2.16   1 . .
ATOM 5625 CD1   CD1   . TRP TRP TRP B B 300 300 . 80.401  126.718 -13.913 1.00
4.39   1 . .
ATOM 5626 NE1   NE1   . TRP TRP TRP B B 300 300 . 79.542  126.237 -13.006 1.00
2.84   1 . .
ATOM 5627 CE2   CE2   . TRP TRP TRP B B 300 300 . 79.130  124.993 -13.391 1.00
3.05   1 . .
ATOM 5628 CD2   CD2   . TRP TRP TRP B B 300 300 . 79.839  124.655 -14.567 1.00
3.43   1 . .
ATOM 5629 CE3   CE3   . TRP TRP TRP B B 300 300 . 79.634  123.386 -15.143 1.00
4.17   1 . .
ATOM 5630 CZ3   CZ3   . TRP TRP TRP B B 300 300 . 78.695  122.497 -14.507 1.00
3.06   1 . .
ATOM 5631 CH2   CH2   . TRP TRP TRP B B 300 300 . 78.031  122.867 -13.334 1.00
4.19   1 . .
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ATOM 5632 CZ2   CZ2   . TRP TRP TRP B B 300 300 . 78.203  124.114 -12.771 1.00
3.83   1 . .
ATOM 5633 C     C     . TRP TRP TRP B B 300 300 . 83.689  125.056 -17.128 1.00
2.03   1 . .
ATOM 5634 O     O     . TRP TRP TRP B B 300 300 . 83.624  123.991 -17.742 1.00
2.97   1 . .
ATOM 5635 N     N     . ALA ALA ALA B B 301 301 . 84.371  126.111 -17.641 1.00
3.67   1 . .
ATOM 5636 CA    CA    . ALA ALA ALA B B 301 301 . 85.063  125.992 -18.889 1.00
2.01   1 . .
ATOM 5637 CB    CB    . ALA ALA ALA B B 301 301 . 85.721  127.327 -19.205 1.00
2.10   1 . .
ATOM 5638 C     C     . ALA ALA ALA B B 301 301 . 86.131  124.913 -18.929 1.00
2.27   1 . .
ATOM 5639 O     O     . ALA ALA ALA B B 301 301 . 86.262  124.209 -19.893 1.00
2.04   1 . .
ATOM 5640 N     N     . ALA ALA ALA B B 302 302 . 86.914  124.834 -17.875 1.00
2.09   1 . .
ATOM 5641 CA    CA    . ALA ALA ALA B B 302 302 . 87.967  123.879 -17.801 1.00
2.11   1 . .
ATOM 5642 CB    CB    . ALA ALA ALA B B 302 302 . 88.795  124.095 -16.583 1.00
3.21   1 . .
ATOM 5643 C     C     . ALA ALA ALA B B 302 302 . 87.388  122.495 -17.788 1.00
2.28   1 . .
ATOM 5644 O     O     . ALA ALA ALA B B 302 302 . 87.988  121.616 -18.448 1.00
3.07   1 . .
ATOM 5645 N     N     . TRP TRP TRP B B 303 303 . 86.280  122.262 -17.077 1.00
2.50   1 . .
ATOM 5646 CA    CA    . TRP TRP TRP B B 303 303 . 85.639  120.908 -16.973 1.00
2.74   1 . .
ATOM 5647 CB    CB    . TRP TRP TRP B B 303 303 . 84.445  120.907 -16.034 1.00
2.10   1 . .
ATOM 5648 CG    CG    . TRP TRP TRP B B 303 303 . 84.756  120.923 -14.546 1.00
3.06   1 . .
ATOM 5649 CD1   CD1   . TRP TRP TRP B B 303 303 . 85.044  121.994 -13.751 1.00
3.71   1 . .
ATOM 5650 NE1   NE1   . TRP TRP TRP B B 303 303 . 85.191  121.581 -12.458 1.00
2.93   1 . .
ATOM 5651 CE2   CE2   . TRP TRP TRP B B 303 303 . 84.952  120.241 -12.367 1.00
3.15   1 . .
ATOM 5652 CD2   CD2   . TRP TRP TRP B B 303 303 . 84.722  119.778 -13.668 1.00
2.31   1 . .
ATOM 5653 CE3   CE3   . TRP TRP TRP B B 303 303 . 84.403  118.443 -13.855 1.00
4.16   1 . .
ATOM 5654 CZ3   CZ3   . TRP TRP TRP B B 303 303 . 84.461  117.608 -12.777 1.00
2.40   1 . .
ATOM 5655 CH2   CH2   . TRP TRP TRP B B 303 303 . 84.743  118.084 -11.494 1.00
4.27   1 . .
ATOM 5656 CZ2   CZ2   . TRP TRP TRP B B 303 303 . 84.984  119.389 -11.259 1.00
2.30   1 . .
ATOM 5657 C     C     . TRP TRP TRP B B 303 303 . 85.197  120.413 -18.343 1.00
2.96   1 . .
ATOM 5658 O     O     . TRP TRP TRP B B 303 303 . 85.516  119.309 -18.742 1.00
3.47   1 . .
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ATOM 5659 N     N     . SER SER SER B B 304 304 . 84.485  121.271 -19.059 1.00
2.00   1 . .
ATOM 5660 CA    CA    . SER SER SER B B 304 304 . 83.897  120.903 -20.310 1.00
2.57   1 . .
ATOM 5661 CB    CB    . SER SER SER B B 304 304 . 82.918  122.034 -20.768 1.00
2.53   1 . .
ATOM 5662 OG    OG    . SER SER SER B B 304 304 . 81.785  122.069 -19.921 1.00
2.37   1 . .
ATOM 5663 C     C     . SER SER SER B B 304 304 . 84.990  120.670 -21.356 1.00
3.01   1 . .
ATOM 5664 O     O     . SER SER SER B B 304 304 . 84.858  119.715 -22.148 1.00
4.01   1 . .
ATOM 5665 N     N     . LYS LYS LYS B B 305 305 . 86.045  121.489 -21.349 1.00
2.52   1 . .
ATOM 5666 CA    CA    . LYS LYS LYS B B 305 305 . 87.192  121.315 -22.278 1.00
5.91   1 . .
ATOM 5667 CB    CB    . LYS LYS LYS B B 305 305 . 88.153  122.514 -22.187 1.00
6.99   1 . .
ATOM 5668 CG    CG    . LYS LYS LYS B B 305 305 . 89.297  122.584 -23.164 1.00
11.79  1 . .
ATOM 5669 CD    CD    . LYS LYS LYS B B 305 305 . 89.985  123.962 -23.087 1.00
18.63  1 . .
ATOM 5670 CE    CE    . LYS LYS LYS B B 305 305 . 90.841  124.292 -24.300 1.00
20.30  1 . .
ATOM 5671 NZ    NZ    . LYS LYS LYS B B 305 305 . 91.692  125.442 -23.965 1.00
21.87  1 . .
ATOM 5672 C     C     . LYS LYS LYS B B 305 305 . 87.937  119.991 -22.068 1.00
5.30   1 . .
ATOM 5673 O     O     . LYS LYS LYS B B 305 305 . 88.193  119.234 -22.981 1.00
5.00   1 . .
ATOM 5674 N     N     . PHE PHE PHE B B 306 306 . 88.233  119.755 -20.804 1.00
4.29   1 . .
ATOM 5675 CA    CA    . PHE PHE PHE B B 306 306 . 89.006  118.573 -20.409 1.00
3.59   1 . .
ATOM 5676 CB    CB    . PHE PHE PHE B B 306 306 . 89.333  118.604 -18.923 1.00
3.66   1 . .
ATOM 5677 CG    CG    . PHE PHE PHE B B 306 306 . 90.264  117.483 -18.540 1.00
3.46   1 . .
ATOM 5678 CD1   CD1   . PHE PHE PHE B B 306 306 . 91.565  117.387 -19.114 1.00
6.19   1 . .
ATOM 5679 CE1   CE1   . PHE PHE PHE B B 306 306 . 92.441  116.303 -18.773 1.00
8.06   1 . .
ATOM 5680 CZ    CZ    . PHE PHE PHE B B 306 306 . 92.000  115.365 -17.878 1.00
6.28   1 . .
ATOM 5681 CE2   CE2   . PHE PHE PHE B B 306 306 . 90.711  115.454 -17.366 1.00
5.45   1 . .
ATOM 5682 CD2   CD2   . PHE PHE PHE B B 306 306 . 89.858  116.534 -17.712 1.00
4.12   1 . .
ATOM 5683 C     C     . PHE PHE PHE B B 306 306 . 88.241  117.309 -20.749 1.00
2.93   1 . .
ATOM 5684 O     O     . PHE PHE PHE B B 306 306 . 88.759  116.396 -21.429 1.00
4.10   1 . .
ATOM 5685 N     N     . THR THR THR B B 307 307 . 86.968  117.311 -20.442 1.00
2.29   1 . .
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ATOM 5686 CA    CA    . THR THR THR B B 307 307 . 86.106  116.138 -20.564 1.00
3.00   1 . .
ATOM 5687 CB    CB    . THR THR THR B B 307 307 . 84.705  116.391 -19.962 1.00
2.66   1 . .
ATOM 5688 OG1   OG1   . THR THR THR B B 307 307 . 84.868  116.400 -18.556 1.00
2.16   1 . .
ATOM 5689 CG2   CG2   . THR THR THR B B 307 307 . 83.787  115.239 -20.237 1.00
3.78   1 . .
ATOM 5690 C     C     . THR THR THR B B 307 307 . 85.996  115.794 -22.023 1.00
3.87   1 . .
ATOM 5691 O     O     . THR THR THR B B 307 307 . 86.021  114.616 -22.375 1.00
4.71   1 . .
ATOM 5692 N     N     . ALA ALA ALA B B 308 308 . 85.929  116.828 -22.876 1.00
3.36   1 . .
ATOM 5693 CA    CA    . ALA ALA ALA B B 308 308 . 85.775  116.569 -24.296 1.00
3.59   1 . .
ATOM 5694 CB    CB    . ALA ALA ALA B B 308 308 . 85.377  117.879 -24.998 1.00
3.17   1 . .
ATOM 5695 C     C     . ALA ALA ALA B B 308 308 . 87.006  116.037 -24.978 1.00
3.76   1 . .
ATOM 5696 O     O     . ALA ALA ALA B B 308 308 . 86.867  115.557 -26.142 1.00
5.62   1 . .
ATOM 5697 N     N     . ASN ASN ASN B B 309 309 . 88.151  116.159 -24.324 1.00
3.40   1 . .
ATOM 5698 CA    CA    . ASN ASN ASN B B 309 309 . 89.504  115.769 -24.819 1.00
4.00   1 . .
ATOM 5699 CB    CB    . ASN ASN ASN B B 309 309 . 90.438  116.987 -24.561 1.00
5.78   1 . .
ATOM 5700 CG    CG    . ASN ASN ASN B B 309 309 . 90.230  118.083 -25.550 1.00
10.63  1 . .
ATOM 5701 OD1   OD1   . ASN ASN ASN B B 309 309 . 89.617  117.890 -26.602 1.00
17.99  1 . .
ATOM 5702 ND2   ND2   . ASN ASN ASN B B 309 309 . 90.688  119.303 -25.182 1.00
18.58  1 . .
ATOM 5703 C     C     . ASN ASN ASN B B 309 309 . 90.106  114.492 -24.203 1.00
3.86   1 . .
ATOM 5704 O     O     . ASN ASN ASN B B 309 309 . 91.310  114.230 -24.320 1.00
5.58   1 . .
ATOM 5705 N     N     . VAL VAL VAL B B 310 310 . 89.284  113.723 -23.500 1.00
3.29   1 . .
ATOM 5706 CA    CA    . VAL VAL VAL B B 310 310 . 89.706  112.494 -22.824 1.00
3.88   1 . .
ATOM 5707 CB    CB    . VAL VAL VAL B B 310 310 . 90.018  112.762 -21.315 1.00
3.34   1 . .
ATOM 5708 CG1   CG1   . VAL VAL VAL B B 310 310 . 91.147  113.739 -21.161 1.00
4.30   1 . .
ATOM 5709 CG2   CG2   . VAL VAL VAL B B 310 310 . 88.753  113.072 -20.453 1.00
3.96   1 . .
ATOM 5710 C     C     . VAL VAL VAL B B 310 310 . 88.655  111.428 -22.924 1.00
2.39   1 . .
ATOM 5711 O     O     . VAL VAL VAL B B 310 310 . 87.432  111.711 -23.115 1.00
2.94   1 . .
ATOM 5712 N     N     . GLY GLY GLY B B 311 311 . 89.071  110.207 -22.677 1.00
2.08   1 . .
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ATOM 5713 CA    CA    . GLY GLY GLY B B 311 311 . 88.156  109.075 -22.693 1.00
2.70   1 . .
ATOM 5714 C     C     . GLY GLY GLY B B 311 311 . 87.952  108.504 -21.305 1.00
2.00   1 . .
ATOM 5715 O     O     . GLY GLY GLY B B 311 311 . 87.154  107.575 -21.126 1.00
4.15   1 . .
ATOM 5716 N     N     . ILE ILE ILE B B 312 312 . 88.644  109.069 -20.307 1.00
2.00   1 . .
ATOM 5717 CA    CA    . ILE ILE ILE B B 312 312 . 88.485  108.550 -18.929 1.00
2.18   1 . .
ATOM 5718 CB    CB    . ILE ILE ILE B B 312 312 . 89.664  108.948 -18.100 1.00
2.91   1 . .
ATOM 5719 CG1   CG1   . ILE ILE ILE B B 312 312 . 89.843  110.445 -17.859 1.00
4.45   1 . .
ATOM 5720 CD1   CD1   . ILE ILE ILE B B 312 312 . 90.767  110.845 -16.684 1.00
5.68   1 . .
ATOM 5721 CG2   CG2   . ILE ILE ILE B B 312 312 . 90.954  108.234 -18.598 1.00
4.10   1 . .
ATOM 5722 C     C     . ILE ILE ILE B B 312 312 . 87.219  108.985 -18.233 1.00
2.06   1 . .
ATOM 5723 O     O     . ILE ILE ILE B B 312 312 . 86.551  109.942 -18.709 1.00
2.25   1 . .
ATOM 5724 N     N     . GLN GLN GLN B B 313 313 . 86.951  108.348 -17.084 1.00
2.37   1 . .
ATOM 5725 CA    CA    . GLN GLN GLN B B 313 313 . 85.844  108.854 -16.278 1.00
2.00   1 . .
ATOM 5726 CB    CB    . GLN GLN GLN B B 313 313 . 85.520  107.833 -15.162 1.00
2.00   1 . .
ATOM 5727 CG    CG    . GLN GLN GLN B B 313 313 . 84.339  108.316 -14.236 1.00
3.50   1 . .
ATOM 5728 CD    CD    . GLN GLN GLN B B 313 313 . 83.799  107.179 -13.447 1.00
3.37   1 . .
ATOM 5729 OE1   OE1   . GLN GLN GLN B B 313 313 . 82.747  106.638 -13.794 1.00
4.50   1 . .
ATOM 5730 NE2   NE2   . GLN GLN GLN B B 313 313 . 84.479  106.834 -12.351 1.00
3.30   1 . .
ATOM 5731 C     C     . GLN GLN GLN B B 313 313 . 86.230  110.209 -15.593 1.00
2.70   1 . .
ATOM 5732 O     O     . GLN GLN GLN B B 313 313 . 87.353  110.340 -15.114 1.00
2.00   1 . .
ATOM 5733 N     N     . ILE ILE ILE B B 314 314 . 85.311  111.182 -15.602 1.00
2.20   1 . .
ATOM 5734 CA    CA    . ILE ILE ILE B B 314 314 . 85.531  112.499 -14.992 1.00
2.30   1 . .
ATOM 5735 CB    CB    . ILE ILE ILE B B 314 314 . 85.488  113.657 -16.054 1.00
2.84   1 . .
ATOM 5736 CG1   CG1   . ILE ILE ILE B B 314 314 . 86.574  113.519 -17.096 1.00
4.42   1 . .
ATOM 5737 CD1   CD1   . ILE ILE ILE B B 314 314 . 88.041  113.558 -16.623 1.00
3.11   1 . .
ATOM 5738 CG2   CG2   . ILE ILE ILE B B 314 314 . 85.522  115.066 -15.383 1.00
2.30   1 . .
ATOM 5739 C     C     . ILE ILE ILE B B 314 314 . 84.413  112.662 -14.005 1.00
2.02   1 . .
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ATOM 5740 O     O     . ILE ILE ILE B B 314 314 . 83.270  112.731 -14.382 1.00
2.61   1 . .
ATOM 5741 N     N     . VAL VAL VAL B B 315 315 . 84.759  112.787 -12.705 1.00
2.22   1 . .
ATOM 5742 CA    CA    . VAL VAL VAL B B 315 315 . 83.748  112.723 -11.662 1.00
2.12   1 . .
ATOM 5743 CB    CB    . VAL VAL VAL B B 315 315 . 84.079  111.713 -10.528 1.00
2.48   1 . .
ATOM 5744 CG1   CG1   . VAL VAL VAL B B 315 315 . 82.881  111.523 -9.590  1.00
3.06   1 . .
ATOM 5745 CG2   CG2   . VAL VAL VAL B B 315 315 . 84.503  110.383 -11.103 1.00
2.00   1 . .
ATOM 5746 C     C     . VAL VAL VAL B B 315 315 . 83.524  114.097 -11.039 1.00
2.45   1 . .
ATOM 5747 O     O     . VAL VAL VAL B B 315 315 . 84.440  114.715 -10.614 1.00
2.65   1 . .
ATOM 5748 N     N     . GLY GLY GLY B B 316 316 . 82.279  114.526 -11.051 1.00
2.07   1 . .
ATOM 5749 CA    CA    . GLY GLY GLY B B 316 316 . 81.891  115.728 -10.375 1.00
2.00   1 . .
ATOM 5750 C     C     . GLY GLY GLY B B 316 316 . 81.645  115.338 -8.895  1.00
2.25   1 . .
ATOM 5751 O     O     . GLY GLY GLY B B 316 316 . 80.852  114.402 -8.569  1.00
2.69   1 . .
ATOM 5752 N     N     . ASP ASP ASP B B 317 317 . 82.235  116.151 -8.054  1.00
2.21   1 . .
ATOM 5753 CA    CA    . ASP ASP ASP B B 317 317 . 81.998  116.068 -6.603  1.00
2.76   1 . .
ATOM 5754 CB    CB    . ASP ASP ASP B B 317 317 . 83.262  115.556 -5.907  1.00
2.34   1 . .
ATOM 5755 CG    CG    . ASP ASP ASP B B 317 317 . 83.139  115.586 -4.371  1.00
3.49   1 . .
ATOM 5756 OD1   OD1   . ASP ASP ASP B B 317 317 . 84.203  115.457 -3.645  1.00
2.26   1 . .
ATOM 5757 OD2   OD2   . ASP ASP ASP B B 317 317 . 81.979  115.618 -3.909  1.00
2.01   1 . .
ATOM 5758 C     C     . ASP ASP ASP B B 317 317 . 81.569  117.481 -6.071  1.00
2.00   1 . .
ATOM 5759 O     O     . ASP ASP ASP B B 317 317 . 80.400  117.765 -5.873  1.00
3.29   1 . .
ATOM 5760 N     N     . ASP ASP ASP B B 318 318 . 82.538  118.341 -5.784  1.00
2.04   1 . .
ATOM 5761 CA    CA    . ASP ASP ASP B B 318 318 . 82.217  119.712 -5.453  1.00
2.46   1 . .
ATOM 5762 CB    CB    . ASP ASP ASP B B 318 318 . 83.433  120.454 -4.933  1.00
2.68   1 . .
ATOM 5763 CG    CG    . ASP ASP ASP B B 318 318 . 83.967  119.883 -3.633  1.00
3.05   1 . .
ATOM 5764 OD1   OD1   . ASP ASP ASP B B 318 318 . 83.181  119.238 -2.848  1.00
4.97   1 . .
ATOM 5765 OD2   OD2   . ASP ASP ASP B B 318 318 . 85.190  120.067 -3.445  1.00
3.36   1 . .
ATOM 5766 C     C     . ASP ASP ASP B B 318 318 . 81.510  120.426 -6.593  1.00
2.53   1 . .
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ATOM 5767 O     O     . ASP ASP ASP B B 318 318 . 80.695  121.350 -6.325  1.00
2.46   1 . .
ATOM 5768 N     N     . LEU LEU LEU B B 319 319 . 81.776  120.010 -7.844  1.00
2.58   1 . .
ATOM 5769 CA    CA    . LEU LEU LEU B B 319 319 . 80.992  120.622 -8.942  1.00
2.06   1 . .
ATOM 5770 CB    CB    . LEU LEU LEU B B 319 319 . 81.450  119.956 -10.257 1.00
2.88   1 . .
ATOM 5771 CG    CG    . LEU LEU LEU B B 319 319 . 80.833  120.541 -11.526 1.00
3.11   1 . .
ATOM 5772 CD1   CD1   . LEU LEU LEU B B 319 319 . 81.391  121.948 -11.864 1.00
3.07   1 . .
ATOM 5773 CD2   CD2   . LEU LEU LEU B B 319 319 . 81.169  119.605 -12.723 1.00
2.56   1 . .
ATOM 5774 C     C     . LEU LEU LEU B B 319 319 . 79.507  120.444 -8.825  1.00
2.18   1 . .
ATOM 5775 O     O     . LEU LEU LEU B B 319 319 . 78.718  121.354 -9.052  1.00
2.81   1 . .
ATOM 5776 N     N     . THR THR THR B B 320 320 . 79.080  119.229 -8.415  1.00
2.00   1 . .
ATOM 5777 CA    CA    . THR THR THR B B 320 320 . 77.689  118.744 -8.521  1.00
2.59   1 . .
ATOM 5778 CB    CB    . THR THR THR B B 320 320 . 77.631  117.397 -9.240  1.00
2.44   1 . .
ATOM 5779 OG1   OG1   . THR THR THR B B 320 320 . 78.738  116.598 -8.819  1.00
3.09   1 . .
ATOM 5780 CG2   CG2   . THR THR THR B B 320 320 . 77.731  117.681 -10.801 1.00
4.95   1 . .
ATOM 5781 C     C     . THR THR THR B B 320 320 . 76.932  118.688 -7.227  1.00
2.00   1 . .
ATOM 5782 O     O     . THR THR THR B B 320 320 . 75.677  118.822 -7.238  1.00
2.59   1 . .
ATOM 5783 N     N     . VAL VAL VAL B B 321 321 . 77.715  118.572 -6.129  1.00
3.33   1 . .
ATOM 5784 CA    CA    . VAL VAL VAL B B 321 321 . 77.178  118.427 -4.723  1.00
2.92   1 . .
ATOM 5785 CB    CB    . VAL VAL VAL B B 321 321 . 77.120  119.763 -3.991  1.00
2.62   1 . .
ATOM 5786 CG1   CG1   . VAL VAL VAL B B 321 321 . 78.562  120.310 -3.865  1.00
2.62   1 . .
ATOM 5787 CG2   CG2   . VAL VAL VAL B B 321 321 . 76.182  120.698 -4.782  1.00
5.51   1 . .
ATOM 5788 C     C     . VAL VAL VAL B B 321 321 . 75.868  117.643 -4.615  1.00
2.38   1 . .
ATOM 5789 O     O     . VAL VAL VAL B B 321 321 . 74.909  118.018 -3.931  1.00
4.27   1 . .
ATOM 5790 N     N     . THR THR THR B B 322 322 . 75.805  116.515 -5.317  1.00
2.24   1 . .
ATOM 5791 CA    CA    . THR THR THR B B 322 322 . 74.656  115.613 -5.304  1.00
2.43   1 . .
ATOM 5792 CB    CB    . THR THR THR B B 322 322 . 74.702  114.763 -3.976  1.00
3.47   1 . .
ATOM 5793 OG1   OG1   . THR THR THR B B 322 322 . 76.016  114.258 -3.920  1.00
2.81   1 . .
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ATOM 5794 CG2   CG2   . THR THR THR B B 322 322 . 73.779  113.577 -4.001  1.00
4.13   1 . .
ATOM 5795 C     C     . THR THR THR B B 322 322 . 73.364  116.381 -5.480  1.00
2.95   1 . .
ATOM 5796 O     O     . THR THR THR B B 322 322 . 72.330  116.097 -4.857  1.00
3.23   1 . .
ATOM 5797 N     N     . ASN ASN ASN B B 323 323 . 73.409  117.422 -6.333  1.00
2.59   1 . .
ATOM 5798 CA    CA    . ASN ASN ASN B B 323 323 . 72.264  118.340 -6.334  1.00
4.80   1 . .
ATOM 5799 CB    CB    . ASN ASN ASN B B 323 323 . 72.774  119.720 -5.911  1.00
5.86   1 . .
ATOM 5800 CG    CG    . ASN ASN ASN B B 323 323 . 71.717  120.714 -5.858  1.00
8.22   1 . .
ATOM 5801 OD1   OD1   . ASN ASN ASN B B 323 323 . 70.747  120.635 -6.662  1.00
10.74  1 . .
ATOM 5802 ND2   ND2   . ASN ASN ASN B B 323 323 . 71.841  121.669 -4.934  1.00
8.19   1 . .
ATOM 5803 C     C     . ASN ASN ASN B B 323 323 . 71.682  118.425 -7.730  1.00
4.39   1 . .
ATOM 5804 O     O     . ASN ASN ASN B B 323 323 . 72.389  118.803 -8.646  1.00
6.23   1 . .
ATOM 5805 N     N     . PRO PRO PRO B B 324 324 . 70.465  117.980 -7.916  1.00
4.98   1 . .
ATOM 5806 CA    CA    . PRO PRO PRO B B 324 324 . 69.837  117.965 -9.272  1.00
4.74   1 . .
ATOM 5807 CB    CB    . PRO PRO PRO B B 324 324 . 68.389  117.621 -8.962  1.00
6.02   1 . .
ATOM 5808 CG    CG    . PRO PRO PRO B B 324 324 . 68.499  116.731 -7.714  1.00
4.43   1 . .
ATOM 5809 CD    CD    . PRO PRO PRO B B 324 324 . 69.615  117.317 -6.915  1.00
5.94   1 . .
ATOM 5810 C     C     . PRO PRO PRO B B 324 324 . 69.948  119.281 -10.091 1.00
6.60   1 . .
ATOM 5811 O     O     . PRO PRO PRO B B 324 324 . 70.160  119.232 -11.359 1.00
8.09   1 . .
ATOM 5812 N     N     . LYS LYS LYS B B 325 325 . 69.819  120.424 -9.412  1.00
6.52   1 . .
ATOM 5813 CA    CA    . LYS LYS LYS B B 325 325 . 70.026  121.709 -10.102 1.00
7.23   1 . .
ATOM 5814 CB    CB    . LYS LYS LYS B B 325 325 . 69.735  122.884 -9.183  1.00
8.47   1 . .
ATOM 5815 CG    CG    . LYS LYS LYS B B 325 325 . 68.345  122.756 -8.610  1.00
11.96  1 . .
ATOM 5816 CD    CD    . LYS LYS LYS B B 325 325 . 67.996  123.851 -7.573  1.00
20.31  1 . .
ATOM 5817 CE    CE    . LYS LYS LYS B B 325 325 . 66.510  123.712 -7.155  1.00
23.24  1 . .
ATOM 5818 NZ    NZ    . LYS LYS LYS B B 325 325 . 65.868  125.018 -6.855  1.00
24.41  1 . .
ATOM 5819 C     C     . LYS LYS LYS B B 325 325 . 71.402  121.863 -10.752 1.00
6.80   1 . .
ATOM 5820 O     O     . LYS LYS LYS B B 325 325 . 71.492  122.304 -11.913 1.00
8.98   1 . .
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ATOM 5821 N     N     . ARG ARG ARG B B 326 326 . 72.456  121.485 -10.035 1.00
4.69   1 . .
ATOM 5822 CA    CA    . ARG ARG ARG B B 326 326 . 73.820  121.609 -10.569 1.00
2.94   1 . .
ATOM 5823 CB    CB    . ARG ARG ARG B B 326 326 . 74.888  121.504 -9.459  1.00
4.95   1 . .
ATOM 5824 CG    CG    . ARG ARG ARG B B 326 326 . 74.633  122.398 -8.264  1.00
5.51   1 . .
ATOM 5825 CD    CD    . ARG ARG ARG B B 326 326 . 75.454  123.623 -8.292  1.00
6.89   1 . .
ATOM 5826 NE    NE    . ARG ARG ARG B B 326 326 . 76.879  123.431 -8.581  1.00
6.04   1 . .
ATOM 5827 CZ    CZ    . ARG ARG ARG B B 326 326 . 77.661  124.450 -8.974  1.00
4.85   1 . .
ATOM 5828 NH1   NH1   . ARG ARG ARG B B 326 326 . 77.184  125.703 -9.051  1.00
4.32   1 . .
ATOM 5829 NH2   NH2   . ARG ARG ARG B B 326 326 . 78.919  124.227 -9.293  1.00
2.62   1 . .
ATOM 5830 C     C     . ARG ARG ARG B B 326 326 . 74.125  120.499 -11.567 1.00
4.61   1 . .
ATOM 5831 O     O     . ARG ARG ARG B B 326 326 . 74.887  120.691 -12.492 1.00
4.36   1 . .
ATOM 5832 N     N     . ILE ILE ILE B B 327 327 . 73.667  119.297 -11.259 1.00
3.92   1 . .
ATOM 5833 CA    CA    . ILE ILE ILE B B 327 327 . 73.758  118.216 -12.222 1.00
2.90   1 . .
ATOM 5834 CB    CB    . ILE ILE ILE B B 327 327 . 73.160  116.926 -11.624 1.00
3.93   1 . .
ATOM 5835 CG1   CG1   . ILE ILE ILE B B 327 327 . 73.995  116.515 -10.390 1.00
2.40   1 . .
ATOM 5836 CD1   CD1   . ILE ILE ILE B B 327 327 . 73.224  115.527 -9.413  1.00
4.87   1 . .
ATOM 5837 CG2   CG2   . ILE ILE ILE B B 327 327 . 72.988  115.813 -12.729 1.00
4.67   1 . .
ATOM 5838 C     C     . ILE ILE ILE B B 327 327 . 73.146  118.548 -13.585 1.00
4.36   1 . .
ATOM 5839 O     O     . ILE ILE ILE B B 327 327 . 73.783  118.210 -14.582 1.00
2.48   1 . .
ATOM 5840 N     N     . GLU GLU GLU B B 328 328 . 71.956  119.124 -13.621 1.00
4.82   1 . .
ATOM 5841 CA    CA    . GLU GLU GLU B B 328 328 . 71.365  119.631 -14.886 1.00
5.73   1 . .
ATOM 5842 CB    CB    . GLU GLU GLU B B 328 328 . 70.060  120.362 -14.614 1.00
6.53   1 . .
ATOM 5843 CG    CG    . GLU GLU GLU B B 328 328 . 68.888  119.404 -14.198 1.00
12.02  1 . .
ATOM 5844 CD    CD    . GLU GLU GLU B B 328 328 . 68.235  118.659 -15.381 1.00
20.11  1 . .
ATOM 5845 OE1   OE1   . GLU GLU GLU B B 328 328 . 68.747  118.800 -16.529 1.00
23.16  1 . .
ATOM 5846 OE2   OE2   . GLU GLU GLU B B 328 328 . 67.204  117.949 -15.172 1.00
21.67  1 . .
ATOM 5847 C     C     . GLU GLU GLU B B 328 328 . 72.300  120.500 -15.689 1.00
5.31   1 . .
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ATOM 5848 O     O     . GLU GLU GLU B B 328 328 . 72.439  120.306 -16.934 1.00
4.51   1 . .
ATOM 5849 N     N     . ARG ARG ARG B B 329 329 . 72.918  121.466 -15.005 1.00
4.20   1 . .
ATOM 5850 CA    CA    . ARG ARG ARG B B 329 329 . 73.880  122.352 -15.620 1.00
4.20   1 . .
ATOM 5851 CB    CB    . ARG ARG ARG B B 329 329 . 74.358  123.496 -14.690 1.00
4.07   1 . .
ATOM 5852 CG    CG    . ARG ARG ARG B B 329 329 . 75.280  124.433 -15.348 1.00
5.99   1 . .
ATOM 5853 CD    CD    . ARG ARG ARG B B 329 329 . 75.552  125.649 -14.496 1.00
3.66   1 . .
ATOM 5854 NE    NE    . ARG ARG ARG B B 329 329 . 76.550  126.515 -15.184 1.00
4.12   1 . .
ATOM 5855 CZ    CZ    . ARG ARG ARG B B 329 329 . 77.036  127.627 -14.650 1.00
5.31   1 . .
ATOM 5856 NH1   NH1   . ARG ARG ARG B B 329 329 . 76.709  127.986 -13.385 1.00
5.73   1 . .
ATOM 5857 NH2   NH2   . ARG ARG ARG B B 329 329 . 77.875  128.350 -15.365 1.00
5.33   1 . .
ATOM 5858 C     C     . ARG ARG ARG B B 329 329 . 75.096  121.594 -16.137 1.00
4.14   1 . .
ATOM 5859 O     O     . ARG ARG ARG B B 329 329 . 75.525  121.760 -17.289 1.00
3.37   1 . .
ATOM 5860 N     N     . ALA ALA ALA B B 330 330 . 75.597  120.683 -15.311 1.00
3.39   1 . .
ATOM 5861 CA    CA    . ALA ALA ALA B B 330 330 . 76.717  119.875 -15.771 1.00
3.25   1 . .
ATOM 5862 CB    CB    . ALA ALA ALA B B 330 330 . 77.315  119.082 -14.608 1.00
2.64   1 . .
ATOM 5863 C     C     . ALA ALA ALA B B 330 330 . 76.383  118.952 -16.935 1.00
2.56   1 . .
ATOM 5864 O     O     . ALA ALA ALA B B 330 330 . 77.197  118.714 -17.803 1.00
3.53   1 . .
ATOM 5865 N     N     . VAL VAL VAL B B 331 331 . 75.141  118.479 -16.978 1.00
2.43   1 . .
ATOM 5866 CA    CA    . VAL VAL VAL B B 331 331 . 74.711  117.663 -18.104 1.00
2.78   1 . .
ATOM 5867 CB    CB    . VAL VAL VAL B B 331 331 . 73.284  117.061 -17.867 1.00
3.39   1 . .
ATOM 5868 CG1   CG1   . VAL VAL VAL B B 331 331 . 72.696  116.502 -19.133 1.00
4.58   1 . .
ATOM 5869 CG2   CG2   . VAL VAL VAL B B 331 331 . 73.271  115.931 -16.811 1.00
5.27   1 . .
ATOM 5870 C     C     . VAL VAL VAL B B 331 331 . 74.632  118.520 -19.380 1.00
4.40   1 . .
ATOM 5871 O     O     . VAL VAL VAL B B 331 331 . 75.110  118.077 -20.426 1.00
5.62   1 . .
ATOM 5872 N     N     . GLU GLU GLU B B 332 332 . 74.063  119.738 -19.246 1.00
4.47   1 . .
ATOM 5873 CA    CA    . GLU GLU GLU B B 332 332 . 73.912  120.599 -20.420 1.00
5.79   1 . .
ATOM 5874 CB    CB    . GLU GLU GLU B B 332 332 . 73.149  121.837 -20.002 1.00
5.45   1 . .
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ATOM 5875 CG    CG    . GLU GLU GLU B B 332 332 . 72.506  122.678 -21.152 1.00
13.21  1 . .
ATOM 5876 CD    CD    . GLU GLU GLU B B 332 332 . 73.479  123.349 -22.092 1.00
20.00  1 . .
ATOM 5877 OE1   OE1   . GLU GLU GLU B B 332 332 . 74.529  123.888 -21.638 1.00
21.71  1 . .
ATOM 5878 OE2   OE2   . GLU GLU GLU B B 332 332 . 73.147  123.382 -23.294 1.00
24.62  1 . .
ATOM 5879 C     C     . GLU GLU GLU B B 332 332 . 75.278  120.969 -20.952 1.00
4.83   1 . .
ATOM 5880 O     O     . GLU GLU GLU B B 332 332 . 75.506  120.952 -22.173 1.00
7.92   1 . .
ATOM 5881 N     N     . GLU GLU GLU B B 333 333 . 76.237  121.339 -20.080 1.00
3.75   1 . .
ATOM 5882 CA    CA    . GLU GLU GLU B B 333 333 . 77.549  121.765 -20.466 1.00
3.15   1 . .
ATOM 5883 CB    CB    . GLU GLU GLU B B 333 333 . 78.104  122.739 -19.454 1.00
3.11   1 . .
ATOM 5884 CG    CG    . GLU GLU GLU B B 333 333 . 77.111  123.926 -19.304 1.00
6.08   1 . .
ATOM 5885 CD    CD    . GLU GLU GLU B B 333 333 . 77.665  125.099 -18.545 1.00
6.32   1 . .
ATOM 5886 OE1   OE1   . GLU GLU GLU B B 333 333 . 76.780  125.831 -17.998 1.00
5.76   1 . .
ATOM 5887 OE2   OE2   . GLU GLU GLU B B 333 333 . 78.942  125.289 -18.509 1.00
7.31   1 . .
ATOM 5888 C     C     . GLU GLU GLU B B 333 333 . 78.539  120.615 -20.709 1.00
2.88   1 . .
ATOM 5889 O     O     . GLU GLU GLU B B 333 333 . 79.701  120.835 -21.084 1.00
2.85   1 . .
ATOM 5890 N     N     . LYS LYS LYS B B 334 334 . 78.074  119.375 -20.571 1.00
2.99   1 . .
ATOM 5891 CA    CA    . LYS LYS LYS B B 334 334 . 78.996  118.227 -20.698 1.00
3.48   1 . .
ATOM 5892 CB    CB    . LYS LYS LYS B B 334 334 . 79.303  117.966 -22.196 1.00
3.65   1 . .
ATOM 5893 CG    CG    . LYS LYS LYS B B 334 334 . 77.977  117.612 -22.961 1.00
4.00   1 . .
ATOM 5894 CD    CD    . LYS LYS LYS B B 334 334 . 78.325  116.934 -24.273 1.00
10.16  1 . .
ATOM 5895 CE    CE    . LYS LYS LYS B B 334 334 . 77.171  117.068 -25.270 1.00
12.68  1 . .
ATOM 5896 NZ    NZ    . LYS LYS LYS B B 334 334 . 76.003  116.512 -24.664 1.00
15.55  1 . .
ATOM 5897 C     C     . LYS LYS LYS B B 334 334 . 80.278  118.421 -19.877 1.00
2.39   1 . .
ATOM 5898 O     O     . LYS LYS LYS B B 334 334 . 81.414  118.217 -20.366 1.00
3.16   1 . .
ATOM 5899 N     N     . ALA ALA ALA B B 335 335 . 80.094  118.902 -18.632 1.00
2.37   1 . .
ATOM 5900 CA    CA    . ALA ALA ALA B B 335 335 . 81.235  119.202 -17.714 1.00
2.30   1 . .
ATOM 5901 CB    CB    . ALA ALA ALA B B 335 335 . 80.709  119.969 -16.576 1.00
3.37   1 . .
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ATOM 5902 C     C     . ALA ALA ALA B B 335 335 . 81.943  117.937 -17.184 1.00
2.07   1 . .
ATOM 5903 O     O     . ALA ALA ALA B B 335 335 . 83.157  117.974 -16.944 1.00
2.00   1 . .
ATOM 5904 N     N     . CYS CYS CYS B B 336 336 . 81.176  116.824 -17.102 1.00
2.54   1 . .
ATOM 5905 CA    CA    . CYS CYS CYS B B 336 336 . 81.729  115.595 -16.461 1.00
2.68   1 . .
ATOM 5906 CB    CB    . CYS CYS CYS B B 336 336 . 81.759  115.708 -14.887 1.00
2.55   1 . .
ATOM 5907 SG    SG    . CYS CYS CYS B B 336 336 . 80.155  115.982 -14.167 1.00
2.97   1 . .
ATOM 5908 C     C     . CYS CYS CYS B B 336 336 . 80.889  114.427 -16.915 1.00
2.46   1 . .
ATOM 5909 O     O     . CYS CYS CYS B B 336 336 . 79.929  114.642 -17.630 1.00
3.70   1 . .
ATOM 5910 N     N     . ASN ASN ASN B B 337 337 . 81.213  113.181 -16.527 1.00
2.41   1 . .
ATOM 5911 CA    CA    . ASN ASN ASN B B 337 337 . 80.403  112.091 -17.009 1.00
3.17   1 . .
ATOM 5912 CB    CB    . ASN ASN ASN B B 337 337 . 81.073  111.394 -18.236 1.00
2.96   1 . .
ATOM 5913 CG    CG    . ASN ASN ASN B B 337 337 . 82.545  110.952 -17.939 1.00
2.44   1 . .
ATOM 5914 OD1   OD1   . ASN ASN ASN B B 337 337 . 82.902  110.510 -16.830 1.00
2.99   1 . .
ATOM 5915 ND2   ND2   . ASN ASN ASN B B 337 337 . 83.403  111.044 -18.916 1.00
3.43   1 . .
ATOM 5916 C     C     . ASN ASN ASN B B 337 337 . 80.131  111.079 -15.879 1.00
2.14   1 . .
ATOM 5917 O     O     . ASN ASN ASN B B 337 337 . 79.749  109.953 -16.104 1.00
3.37   1 . .
ATOM 5918 N     N     . CYS CYS CYS B B 338 338 . 80.414  111.506 -14.666 1.00
2.50   1 . .
ATOM 5919 CA    CA    . CYS CYS CYS B B 338 338 . 80.139  110.650 -13.482 1.00
2.10   1 . .
ATOM 5920 CB    CB    . CYS CYS CYS B B 338 338 . 81.364  109.777 -13.182 1.00
2.18   1 . .
ATOM 5921 SG    SG    . CYS CYS CYS B B 338 338 . 81.078  108.589 -11.774 1.00
3.53   1 . .
ATOM 5922 C     C     . CYS CYS CYS B B 338 338 . 79.836  111.559 -12.323 1.00
2.60   1 . .
ATOM 5923 O     O     . CYS CYS CYS B B 338 338 . 80.439  112.618 -12.198 1.00
2.00   1 . .
ATOM 5924 N     N     . LEU LEU LEU B B 339 339 . 78.836  111.132 -11.572 1.00
2.26   1 . .
ATOM 5925 CA    CA    . LEU LEU LEU B B 339 339 . 78.432  111.882 -10.339 1.00
2.45   1 . .
ATOM 5926 CB    CB    . LEU LEU LEU B B 339 339 . 76.916  111.900 -10.238 1.00
2.85   1 . .
ATOM 5927 CG    CG    . LEU LEU LEU B B 339 339 . 76.265  112.436 -8.961  1.00
2.17   1 . .
ATOM 5928 CD1   CD1   . LEU LEU LEU B B 339 339 . 76.572  113.933 -8.936  1.00
4.97   1 . .
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ATOM 5929 CD2   CD2   . LEU LEU LEU B B 339 339 . 74.817  112.181 -8.949  1.00
2.64   1 . .
ATOM 5930 C     C     . LEU LEU LEU B B 339 339 . 79.037  111.200 -9.103  1.00
2.00   1 . .
ATOM 5931 O     O     . LEU LEU LEU B B 339 339 . 78.820  109.986 -8.933  1.00
3.14   1 . .
ATOM 5932 N     N     . LEU LEU LEU B B 340 340 . 79.655  111.955 -8.220  1.00
3.18   1 . .
ATOM 5933 CA    CA    . LEU LEU LEU B B 340 340 . 79.914  111.413 -6.861  1.00
2.55   1 . .
ATOM 5934 CB    CB    . LEU LEU LEU B B 340 340 . 81.140  112.099 -6.263  1.00
2.52   1 . .
ATOM 5935 CG    CG    . LEU LEU LEU B B 340 340 . 81.638  111.254 -5.148  1.00
3.13   1 . .
ATOM 5936 CD1   CD1   . LEU LEU LEU B B 340 340 . 82.371  110.102 -5.769  1.00
4.23   1 . .
ATOM 5937 CD2   CD2   . LEU LEU LEU B B 340 340 . 82.621  112.059 -4.193  1.00
2.37   1 . .
ATOM 5938 C     C     . LEU LEU LEU B B 340 340 . 78.675  111.567 -5.974  1.00
2.69   1 . .
ATOM 5939 O     O     . LEU LEU LEU B B 340 340 . 78.147  112.717 -5.779  1.00
3.64   1 . .
ATOM 5940 N     N     . LEU LEU LEU B B 341 341 . 78.160  110.480 -5.388  1.00
2.62   1 . .
ATOM 5941 CA    CA    . LEU LEU LEU B B 341 341 . 76.872  110.534 -4.741  1.00
2.00   1 . .
ATOM 5942 CB    CB    . LEU LEU LEU B B 341 341 . 75.944  109.338 -5.118  1.00
2.32   1 . .
ATOM 5943 CG    CG    . LEU LEU LEU B B 341 341 . 74.471  109.591 -4.810  1.00
2.29   1 . .
ATOM 5944 CD1   CD1   . LEU LEU LEU B B 341 341 . 73.737  110.427 -5.866  1.00
6.38   1 . .
ATOM 5945 CD2   CD2   . LEU LEU LEU B B 341 341 . 73.743  108.271 -4.712  1.00
7.47   1 . .
ATOM 5946 C     C     . LEU LEU LEU B B 341 341 . 77.111  110.611 -3.173  1.00
2.40   1 . .
ATOM 5947 O     O     . LEU LEU LEU B B 341 341 . 77.486  109.587 -2.566  1.00
2.87   1 . .
ATOM 5948 N     N     . LYS LYS LYS B B 342 342 . 76.827  111.787 -2.588  1.00
3.75   1 . .
ATOM 5949 CA    CA    . LYS LYS LYS B B 342 342 . 77.066  112.016 -1.164  1.00
3.58   1 . .
ATOM 5950 CB    CB    . LYS LYS LYS B B 342 342 . 78.095  113.083 -0.883  1.00
2.73   1 . .
ATOM 5951 CG    CG    . LYS LYS LYS B B 342 342 . 79.541  112.598 -1.110  1.00
5.08   1 . .
ATOM 5952 CD    CD    . LYS LYS LYS B B 342 342 . 80.449  113.741 -1.102  1.00
2.90   1 . .
ATOM 5953 CE    CE    . LYS LYS LYS B B 342 342 . 81.888  113.353 -0.881  1.00
4.21   1 . .
ATOM 5954 NZ    NZ    . LYS LYS LYS B B 342 342 . 82.862  114.378 -1.245  1.00
5.92   1 . .
ATOM 5955 C     C     . LYS LYS LYS B B 342 342 . 75.744  112.411 -0.615  1.00
2.55   1 . .
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ATOM 5956 O     O     . LYS LYS LYS B B 342 342 . 75.344  113.553 -0.843  1.00
3.32   1 . .
ATOM 5957 N     N     . VAL VAL VAL B B 343 343 . 75.031  111.516 0.082   1.00
2.41   1 . .
ATOM 5958 CA    CA    . VAL VAL VAL B B 343 343 . 73.787  111.833 0.715   1.00
2.85   1 . .
ATOM 5959 CB    CB    . VAL VAL VAL B B 343 343 . 73.287  110.638 1.615   1.00
3.61   1 . .
ATOM 5960 CG1   CG1   . VAL VAL VAL B B 343 343 . 72.899  109.480 0.756   1.00
3.82   1 . .
ATOM 5961 CG2   CG2   . VAL VAL VAL B B 343 343 . 74.377  110.171 2.563   1.00
4.88   1 . .
ATOM 5962 C     C     . VAL VAL VAL B B 343 343 . 73.820  113.144 1.516   1.00
2.77   1 . .
ATOM 5963 O     O     . VAL VAL VAL B B 343 343 . 72.838  113.908 1.555   1.00
3.21   1 . .
ATOM 5964 N     N     . ASN ASN ASN B B 344 344 . 74.927  113.424 2.182   1.00
2.17   1 . .
ATOM 5965 CA    CA    . ASN ASN ASN B B 344 344 . 74.926  114.621 3.050   1.00
2.28   1 . .
ATOM 5966 CB    CB    . ASN ASN ASN B B 344 344 . 75.797  114.487 4.325   1.00
3.30   1 . .
ATOM 5967 CG    CG    . ASN ASN ASN B B 344 344 . 77.231  114.928 4.128   1.00
2.81   1 . .
ATOM 5968 OD1   OD1   . ASN ASN ASN B B 344 344 . 77.964  114.504 3.220   1.00
3.56   1 . .
ATOM 5969 ND2   ND2   . ASN ASN ASN B B 344 344 . 77.679  115.817 5.019   1.00
5.45   1 . .
ATOM 5970 C     C     . ASN ASN ASN B B 344 344 . 75.263  115.910 2.287   1.00
3.75   1 . .
ATOM 5971 O     O     . ASN ASN ASN B B 344 344 . 75.262  116.950 2.897   1.00
4.55   1 . .
ATOM 5972 N     N     . GLN GLN GLN B B 345 345 . 75.601  115.822 1.004   1.00
3.84   1 . .
ATOM 5973 CA    CA    . GLN GLN GLN B B 345 345 . 75.803  117.083 0.255   1.00
2.93   1 . .
ATOM 5974 CB    CB    . GLN GLN GLN B B 345 345 . 76.632  116.869 -1.032  1.00
3.04   1 . .
ATOM 5975 CG    CG    . GLN GLN GLN B B 345 345 . 78.080  116.708 -0.852  1.00
3.26   1 . .
ATOM 5976 CD    CD    . GLN GLN GLN B B 345 345 . 78.855  116.521 -2.126  1.00
3.91   1 . .
ATOM 5977 OE1   OE1   . GLN GLN GLN B B 345 345 . 79.941  117.037 -2.218  1.00
4.49   1 . .
ATOM 5978 NE2   NE2   . GLN GLN GLN B B 345 345 . 78.310  115.816 -3.120  1.00
2.00   1 . .
ATOM 5979 C     C     . GLN GLN GLN B B 345 345 . 74.408  117.657 -0.052  1.00
2.40   1 . .
ATOM 5980 O     O     . GLN GLN GLN B B 345 345 . 74.259  118.855 -0.385  1.00
3.99   1 . .
ATOM 5981 N     N     . ILE ILE ILE B B 346 346 . 73.389  116.838 -0.049  1.00
2.84   1 . .
ATOM 5982 CA    CA    . ILE ILE ILE B B 346 346 . 72.052  117.305 -0.415  1.00
3.60   1 . .
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ATOM 5983 CB    CB    . ILE ILE ILE B B 346 346 . 71.578  116.616 -1.737  1.00
3.90   1 . .
ATOM 5984 CG1   CG1   . ILE ILE ILE B B 346 346 . 70.294  117.259 -2.279  1.00
4.13   1 . .
ATOM 5985 CD1   CD1   . ILE ILE ILE B B 346 346 . 70.582  118.720 -2.817  1.00
6.28   1 . .
ATOM 5986 CG2   CG2   . ILE ILE ILE B B 346 346 . 71.402  115.115 -1.496  1.00
3.72   1 . .
ATOM 5987 C     C     . ILE ILE ILE B B 346 346 . 71.034  117.174 0.726   1.00
4.33   1 . .
ATOM 5988 O     O     . ILE ILE ILE B B 346 346 . 70.171  118.036 0.890   1.00
4.70   1 . .
ATOM 5989 N     N     . GLY GLY GLY B B 347 347 . 71.144  116.110 1.511   1.00
4.62   1 . .
ATOM 5990 CA    CA    . GLY GLY GLY B B 347 347 . 70.495  116.065 2.832   1.00
3.15   1 . .
ATOM 5991 C     C     . GLY GLY GLY B B 347 347 . 69.281  115.218 3.012   1.00
2.65   1 . .
ATOM 5992 O     O     . GLY GLY GLY B B 347 347 . 68.736  115.233 4.106   1.00
5.72   1 . .
ATOM 5993 N     N     . SER SER SER B B 348 348 . 68.849  114.447 2.011   1.00
3.00   1 . .
ATOM 5994 CA    CA    . SER SER SER B B 348 348 . 67.767  113.474 2.198   1.00
2.95   1 . .
ATOM 5995 CB    CB    . SER SER SER B B 348 348 . 66.346  114.009 1.861   1.00
3.83   1 . .
ATOM 5996 OG    OG    . SER SER SER B B 348 348 . 66.191  114.317 0.463   1.00
4.32   1 . .
ATOM 5997 C     C     . SER SER SER B B 348 348 . 68.056  112.304 1.289   1.00
3.61   1 . .
ATOM 5998 O     O     . SER SER SER B B 348 348 . 68.732  112.442 0.302   1.00
3.50   1 . .
ATOM 5999 N     N     . VAL VAL VAL B B 349 349 . 67.526  111.146 1.651   1.00
4.60   1 . .
ATOM 6000 CA    CA    . VAL VAL VAL B B 349 349 . 67.638  109.913 0.830   1.00
4.78   1 . .
ATOM 6001 CB    CB    . VAL VAL VAL B B 349 349 . 67.018  108.679 1.574   1.00
3.69   1 . .
ATOM 6002 CG1   CG1   . VAL VAL VAL B B 349 349 . 66.893  107.533 0.673   1.00
6.08   1 . .
ATOM 6003 CG2   CG2   . VAL VAL VAL B B 349 349 . 67.867  108.342 2.810   1.00
6.23   1 . .
ATOM 6004 C     C     . VAL VAL VAL B B 349 349 . 66.937  110.197 -0.509  1.00
4.21   1 . .
ATOM 6005 O     O     . VAL VAL VAL B B 349 349 . 67.463  109.856 -1.600  1.00
4.82   1 . .
ATOM 6006 N     N     . THR THR THR B B 350 350 . 65.778  110.812 -0.423  1.00
4.35   1 . .
ATOM 6007 CA    CA    . THR THR THR B B 350 350 . 64.906  111.029 -1.610  1.00
5.74   1 . .
ATOM 6008 CB    CB    . THR THR THR B B 350 350 . 63.517  111.669 -1.145  1.00
5.23   1 . .
ATOM 6009 OG1   OG1   . THR THR THR B B 350 350 . 62.716  110.655 -0.494  1.00
5.83   1 . .
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ATOM 6010 CG2   CG2   . THR THR THR B B 350 350 . 62.681  112.236 -2.327  1.00
8.39   1 . .
ATOM 6011 C     C     . THR THR THR B B 350 350 . 65.650  111.860 -2.680  1.00
5.10   1 . .
ATOM 6012 O     O     . THR THR THR B B 350 350 . 65.621  111.544 -3.884  1.00
5.33   1 . .
ATOM 6013 N     N     . GLU GLU GLU B B 351 351 . 66.320  112.918 -2.236  1.00
5.10   1 . .
ATOM 6014 CA    CA    . GLU GLU GLU B B 351 351 . 66.989  113.781 -3.200  1.00
3.70   1 . .
ATOM 6015 CB    CB    . GLU GLU GLU B B 351 351 . 67.306  115.117 -2.574  1.00
5.77   1 . .
ATOM 6016 CG    CG    . GLU GLU GLU B B 351 351 . 66.022  115.954 -2.241  1.00
4.81   1 . .
ATOM 6017 CD    CD    . GLU GLU GLU B B 351 351 . 66.483  117.131 -1.411  1.00
7.53   1 . .
ATOM 6018 OE1   OE1   . GLU GLU GLU B B 351 351 . 66.872  116.948 -0.239  1.00
8.59   1 . .
ATOM 6019 OE2   OE2   . GLU GLU GLU B B 351 351 . 66.566  118.245 -1.918  1.00
13.87  1 . .
ATOM 6020 C     C     . GLU GLU GLU B B 351 351 . 68.250  113.087 -3.719  1.00
4.36   1 . .
ATOM 6021 O     O     . GLU GLU GLU B B 351 351 . 68.687  113.370 -4.832  1.00
4.59   1 . .
ATOM 6022 N     N     . ALA ALA ALA B B 352 352 . 68.887  112.265 -2.897  1.00
2.94   1 . .
ATOM 6023 CA    CA    . ALA ALA ALA B B 352 352 . 70.086  111.641 -3.417  1.00
4.15   1 . .
ATOM 6024 CB    CB    . ALA ALA ALA B B 352 352 . 70.917  111.022 -2.294  1.00
4.79   1 . .
ATOM 6025 C     C     . ALA ALA ALA B B 352 352 . 69.693  110.615 -4.442  1.00
3.78   1 . .
ATOM 6026 O     O     . ALA ALA ALA B B 352 352 . 70.415  110.380 -5.441  1.00
5.69   1 . .
ATOM 6027 N     N     . ILE ILE ILE B B 353 353 . 68.594  109.925 -4.186  1.00
4.28   1 . .
ATOM 6028 CA    CA    . ILE ILE ILE B B 353 353 . 68.129  109.000 -5.187  1.00
5.40   1 . .
ATOM 6029 CB    CB    . ILE ILE ILE B B 353 353 . 66.962  108.126 -4.663  1.00
5.22   1 . .
ATOM 6030 CG1   CG1   . ILE ILE ILE B B 353 353 . 67.469  107.276 -3.502  1.00
5.90   1 . .
ATOM 6031 CD1   CD1   . ILE ILE ILE B B 353 353 . 66.287  106.421 -2.839  1.00
7.21   1 . .
ATOM 6032 CG2   CG2   . ILE ILE ILE B B 353 353 . 66.395  107.261 -5.816  1.00
6.79   1 . .
ATOM 6033 C     C     . ILE ILE ILE B B 353 353 . 67.742  109.682 -6.515  1.00
5.00   1 . .
ATOM 6034 O     O     . ILE ILE ILE B B 353 353 . 68.105  109.187 -7.596  1.00
7.12   1 . .
ATOM 6035 N     N     . GLN GLN GLN B B 354 354 . 67.020  110.798 -6.392  1.00
5.04   1 . .
ATOM 6036 CA    CA    . GLN GLN GLN B B 354 354 . 66.723  111.661 -7.566  1.00
6.45   1 . .
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ATOM 6037 CB    CB    . GLN GLN GLN B B 354 354 . 65.850  112.864 -7.161  1.00
7.56   1 . .
ATOM 6038 CG    CG    . GLN GLN GLN B B 354 354 . 65.937  114.068 -8.098  1.00
12.72  1 . .
ATOM 6039 CD    CD    . GLN GLN GLN B B 354 354 . 65.124  115.271 -7.612  1.00
20.02  1 . .
ATOM 6040 OE1   OE1   . GLN GLN GLN B B 354 354 . 64.852  115.426 -6.393  1.00
22.61  1 . .
ATOM 6041 NE2   NE2   . GLN GLN GLN B B 354 354 . 64.721  116.136 -8.563  1.00
22.87  1 . .
ATOM 6042 C     C     . GLN GLN GLN B B 354 354 . 67.959  112.090 -8.293  1.00
6.81   1 . .
ATOM 6043 O     O     . GLN GLN GLN B B 354 354 . 67.984  112.107 -9.557  1.00
7.76   1 . .
ATOM 6044 N     N     . ALA ALA ALA B B 355 355 . 68.994  112.492 -7.552  1.00
5.35   1 . .
ATOM 6045 CA    CA    . ALA ALA ALA B B 355 355 . 70.241  112.895 -8.228  1.00
4.28   1 . .
ATOM 6046 CB    CB    . ALA ALA ALA B B 355 355 . 71.240  113.464 -7.236  1.00
4.33   1 . .
ATOM 6047 C     C     . ALA ALA ALA B B 355 355 . 70.859  111.716 -8.986  1.00
4.36   1 . .
ATOM 6048 O     O     . ALA ALA ALA B B 355 355 . 71.370  111.856 -10.066 1.00
5.43   1 . .
ATOM 6049 N     N     . CYS CYS CYS B B 356 356 . 70.818  110.536 -8.351  1.00
4.51   1 . .
ATOM 6050 CA    CA    . CYS CYS CYS B B 356 356 . 71.452  109.339 -9.003  1.00
3.53   1 . .
ATOM 6051 CB    CB    . CYS CYS CYS B B 356 356 . 71.388  108.149 -8.068  1.00
3.39   1 . .
ATOM 6052 SG    SG    . CYS CYS CYS B B 356 356 . 72.134  106.612 -8.709  1.00
5.38   1 . .
ATOM 6053 C     C     . CYS CYS CYS B B 356 356 . 70.766  108.996 -10.303 1.00
4.78   1 . .
ATOM 6054 O     O     . CYS CYS CYS B B 356 356 . 71.397  108.760 -11.332 1.00
5.61   1 . .
ATOM 6055 N     N     . LYS LYS LYS B B 357 357 . 69.458  109.025 -10.243 1.00
4.35   1 . .
ATOM 6056 CA    CA    . LYS LYS LYS B B 357 357 . 68.634  108.744 -11.394 1.00
6.10   1 . .
ATOM 6057 CB    CB    . LYS LYS LYS B B 357 357 . 67.186  108.625 -10.975 1.00
6.96   1 . .
ATOM 6058 CG    CG    . LYS LYS LYS B B 357 357 . 66.911  107.272 -10.234 1.00
10.79  1 . .
ATOM 6059 CD    CD    . LYS LYS LYS B B 357 357 . 65.484  107.169 -9.693  1.00
17.40  1 . .
ATOM 6060 CE    CE    . LYS LYS LYS B B 357 357 . 64.460  106.993 -10.842 1.00
19.22  1 . .
ATOM 6061 NZ    NZ    . LYS LYS LYS B B 357 357 . 64.448  105.583 -11.299 1.00
24.17  1 . .
ATOM 6062 C     C     . LYS LYS LYS B B 357 357 . 68.794  109.703 -12.540 1.00
6.44   1 . .
ATOM 6063 O     O     . LYS LYS LYS B B 357 357 . 68.910  109.297 -13.711 1.00
6.99   1 . .
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ATOM 6064 N     N     . LEU LEU LEU B B 358 358 . 68.861  110.993 -12.191 1.00
5.88   1 . .
ATOM 6065 CA    CA    . LEU LEU LEU B B 358 358 . 69.173  112.004 -13.192 1.00
5.71   1 . .
ATOM 6066 CB    CB    . LEU LEU LEU B B 358 358 . 69.202  113.372 -12.490 1.00
6.37   1 . .
ATOM 6067 CG    CG    . LEU LEU LEU B B 358 358 . 69.357  114.564 -13.430 1.00
7.54   1 . .
ATOM 6068 CD1   CD1   . LEU LEU LEU B B 358 358 . 68.129  114.592 -14.433 1.00
6.55   1 . .
ATOM 6069 CD2   CD2   . LEU LEU LEU B B 358 358 . 69.326  115.894 -12.665 1.00
5.25   1 . .
ATOM 6070 C     C     . LEU LEU LEU B B 358 358 . 70.487  111.746 -13.889 1.00
5.74   1 . .
ATOM 6071 O     O     . LEU LEU LEU B B 358 358 . 70.584  111.916 -15.166 1.00
6.64   1 . .
ATOM 6072 N     N     . ALA ALA ALA B B 359 359 . 71.531  111.485 -13.099 1.00
5.05   1 . .
ATOM 6073 CA    CA    . ALA ALA ALA B B 359 359 . 72.837  111.224 -13.728 1.00
4.28   1 . .
ATOM 6074 CB    CB    . ALA ALA ALA B B 359 359 . 73.917  110.894 -12.736 1.00
5.41   1 . .
ATOM 6075 C     C     . ALA ALA ALA B B 359 359 . 72.693  110.044 -14.698 1.00
4.33   1 . .
ATOM 6076 O     O     . ALA ALA ALA B B 359 359 . 73.095  110.097 -15.850 1.00
5.42   1 . .
ATOM 6077 N     N     . GLN GLN GLN B B 360 360 . 72.139  108.958 -14.189 1.00
3.57   1 . .
ATOM 6078 CA    CA    . GLN GLN GLN B B 360 360 . 72.054  107.665 -14.948 1.00
5.78   1 . .
ATOM 6079 CB    CB    . GLN GLN GLN B B 360 360 . 71.463  106.595 -14.028 1.00
5.08   1 . .
ATOM 6080 CG    CG    . GLN GLN GLN B B 360 360 . 72.476  106.129 -12.911 1.00
4.06   1 . .
ATOM 6081 CD    CD    . GLN GLN GLN B B 360 360 . 71.883  105.060 -12.019 1.00
8.25   1 . .
ATOM 6082 OE1   OE1   . GLN GLN GLN B B 360 360 . 70.661  105.062 -11.710 1.00
9.48   1 . .
ATOM 6083 NE2   NE2   . GLN GLN GLN B B 360 360 . 72.777  104.179 -11.494 1.00
9.90   1 . .
ATOM 6084 C     C     . GLN GLN GLN B B 360 360 . 71.205  107.836 -16.189 1.00
6.02   1 . .
ATOM 6085 O     O     . GLN GLN GLN B B 360 360 . 71.552  107.287 -17.224 1.00
5.07   1 . .
ATOM 6086 N     N     . GLU GLU GLU B B 361 361 . 70.078  108.551 -16.084 1.00
7.79   1 . .
ATOM 6087 CA    CA    . GLU GLU GLU B B 361 361 . 69.194  108.877 -17.263 1.00
9.42   1 . .
ATOM 6088 CB    CB    . GLU GLU GLU B B 361 361 . 68.132  109.867 -16.834 1.00
10.25  1 . .
ATOM 6089 CG    CG    . GLU GLU GLU B B 361 361 . 66.818  109.349 -16.331 1.00
17.20  1 . .
ATOM 6090 CD    CD    . GLU GLU GLU B B 361 361 . 65.791  110.504 -16.216 1.00
25.94  1 . .
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ATOM 6091 OE1   OE1   . GLU GLU GLU B B 361 361 . 66.179  111.603 -15.699 1.00
28.56  1 . .
ATOM 6092 OE2   OE2   . GLU GLU GLU B B 361 361 . 64.605  110.327 -16.654 1.00
27.69  1 . .
ATOM 6093 C     C     . GLU GLU GLU B B 361 361 . 69.976  109.554 -18.362 1.00
7.78   1 . .
ATOM 6094 O     O     . GLU GLU GLU B B 361 361 . 69.644  109.401 -19.555 1.00
9.57   1 . .
ATOM 6095 N     N     . ASN ASN ASN B B 362 362 . 71.012  110.299 -17.957 1.00
5.91   1 . .
ATOM 6096 CA    CA    . ASN ASN ASN B B 362 362 . 71.826  111.072 -18.860 1.00
5.63   1 . .
ATOM 6097 CB    CB    . ASN ASN ASN B B 362 362 . 72.044  112.444 -18.286 1.00
5.71   1 . .
ATOM 6098 CG    CG    . ASN ASN ASN B B 362 362 . 70.843  113.326 -18.519 1.00
5.96   1 . .
ATOM 6099 OD1   OD1   . ASN ASN ASN B B 362 362 . 70.603  113.749 -19.680 1.00
8.57   1 . .
ATOM 6100 ND2   ND2   . ASN ASN ASN B B 362 362 . 70.046  113.553 -17.479 1.00
8.09   1 . .
ATOM 6101 C     C     . ASN ASN ASN B B 362 362 . 73.112  110.423 -19.312 1.00
4.17   1 . .
ATOM 6102 O     O     . ASN ASN ASN B B 362 362 . 74.018  111.076 -19.867 1.00
7.81   1 . .
ATOM 6103 N     N     . GLY GLY GLY B B 363 363 . 73.248  109.147 -18.977 1.00
5.08   1 . .
ATOM 6104 CA    CA    . GLY GLY GLY B B 363 363 . 74.366  108.387 -19.458 1.00
4.73   1 . .
ATOM 6105 C     C     . GLY GLY GLY B B 363 363 . 75.600  108.529 -18.615 1.00
5.03   1 . .
ATOM 6106 O     O     . GLY GLY GLY B B 363 363 . 76.641  108.105 -19.046 1.00
7.18   1 . .
ATOM 6107 N     N     . TRP TRP TRP B B 364 364 . 75.476  109.087 -17.412 1.00
3.27   1 . .
ATOM 6108 CA    CA    . TRP TRP TRP B B 364 364 . 76.600  109.161 -16.496 1.00
3.42   1 . .
ATOM 6109 CB    CB    . TRP TRP TRP B B 364 364 . 76.409  110.343 -15.505 1.00
3.01   1 . .
ATOM 6110 CG    CG    . TRP TRP TRP B B 364 364 . 76.526  111.772 -16.050 1.00
4.86   1 . .
ATOM 6111 CD1   CD1   . TRP TRP TRP B B 364 364 . 76.410  112.246 -17.375 1.00
3.69   1 . .
ATOM 6112 NE1   NE1   . TRP TRP TRP B B 364 364 . 76.501  113.628 -17.392 1.00
4.39   1 . .
ATOM 6113 CE2   CE2   . TRP TRP TRP B B 364 364 . 76.676  114.067 -16.101 1.00
4.77   1 . .
ATOM 6114 CD2   CD2   . TRP TRP TRP B B 364 364 . 76.657  112.937 -15.247 1.00
5.85   1 . .
ATOM 6115 CE3   CE3   . TRP TRP TRP B B 364 364 . 76.754  113.131 -13.855 1.00
3.76   1 . .
ATOM 6116 CZ3   CZ3   . TRP TRP TRP B B 364 364 . 76.957  114.370 -13.392 1.00
6.42   1 . .
ATOM 6117 CH2   CH2   . TRP TRP TRP B B 364 364 . 76.921  115.495 -14.239 1.00
4.25   1 . .
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ATOM 6118 CZ2   CZ2   . TRP TRP TRP B B 364 364 . 76.810  115.378 -15.601 1.00
4.32   1 . .
ATOM 6119 C     C     . TRP TRP TRP B B 364 364 . 76.834  107.922 -15.636 1.00
2.87   1 . .
ATOM 6120 O     O     . TRP TRP TRP B B 364 364 . 75.922  107.182 -15.410 1.00
4.91   1 . .
ATOM 6121 N     N     . GLY GLY GLY B B 365 365 . 78.091  107.717 -15.256 1.00
3.65   1 . .
ATOM 6122 CA    CA    . GLY GLY GLY B B 365 365 . 78.389  106.818 -14.127 1.00
4.02   1 . .
ATOM 6123 C     C     . GLY GLY GLY B B 365 365 . 77.940  107.480 -12.803 1.00
3.78   1 . .
ATOM 6124 O     O     . GLY GLY GLY B B 365 365 . 77.649  108.697 -12.744 1.00
4.31   1 . .
ATOM 6125 N     N     . VAL VAL VAL B B 366 366 . 77.883  106.678 -11.742 1.00
4.00   1 . .
ATOM 6126 CA    CA    . VAL VAL VAL B B 366 366 . 77.694  107.272 -10.394 1.00
2.96   1 . .
ATOM 6127 CB    CB    . VAL VAL VAL B B 366 366 . 76.226  107.185 -9.951  1.00
3.91   1 . .
ATOM 6128 CG1   CG1   . VAL VAL VAL B B 366 366 . 76.040  107.687 -8.495  1.00
4.10   1 . .
ATOM 6129 CG2   CG2   . VAL VAL VAL B B 366 366 . 75.301  107.888 -10.858 1.00
4.28   1 . .
ATOM 6130 C     C     . VAL VAL VAL B B 366 366 . 78.580  106.450 -9.443  1.00
2.34   1 . .
ATOM 6131 O     O     . VAL VAL VAL B B 366 366 . 78.560  105.219 -9.416  1.00
2.60   1 . .
ATOM 6132 N     N     . MET MET MET B B 367 367 . 79.362  107.170 -8.681  1.00
2.81   1 . .
ATOM 6133 CA    CA    . MET MET MET B B 367 367 . 80.194  106.545 -7.641  1.00
2.54   1 . .
ATOM 6134 CB    CB    . MET MET MET B B 367 367 . 81.632  106.913 -7.866  1.00
2.37   1 . .
ATOM 6135 CG    CG    . MET MET MET B B 367 367 . 82.581  106.379 -6.788  1.00
2.41   1 . .
ATOM 6136 SD    SD    . MET MET MET B B 367 367 . 84.284  106.822 -6.786  1.00
4.17   1 . .
ATOM 6137 CE    CE    . MET MET MET B B 367 367 . 85.053  105.811 -8.100  1.00
4.84   1 . .
ATOM 6138 C     C     . MET MET MET B B 367 367 . 79.663  107.030 -6.295  1.00
2.33   1 . .
ATOM 6139 O     O     . MET MET MET B B 367 367 . 79.781  108.213 -5.971  1.00
2.05   1 . .
ATOM 6140 N     N     . VAL VAL VAL B B 368 368 . 79.111  106.095 -5.495  1.00
2.65   1 . .
ATOM 6141 CA    CA    . VAL VAL VAL B B 368 368 . 78.693  106.374 -4.130  1.00
2.15   1 . .
ATOM 6142 CB    CB    . VAL VAL VAL B B 368 368 . 77.839  105.207 -3.603  1.00
3.26   1 . .
ATOM 6143 CG1   CG1   . VAL VAL VAL B B 368 368 . 77.473  105.427 -2.111  1.00
2.60   1 . .
ATOM 6144 CG2   CG2   . VAL VAL VAL B B 368 368 . 76.580  105.096 -4.434  1.00
3.34   1 . .
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ATOM 6145 C     C     . VAL VAL VAL B B 368 368 . 79.911  106.681 -3.275  1.00
2.54   1 . .
ATOM 6146 O     O     . VAL VAL VAL B B 368 368 . 80.987  106.087 -3.452  1.00
2.66   1 . .
ATOM 6147 N     N     . SER SER SER B B 369 369 . 79.742  107.625 -2.327  1.00
2.51   1 . .
ATOM 6148 CA    CA    . SER SER SER B B 369 369 . 80.912  108.031 -1.556  1.00
2.09   1 . .
ATOM 6149 CB    CB    . SER SER SER B B 369 369 . 81.487  109.370 -2.098  1.00
2.00   1 . .
ATOM 6150 OG    OG    . SER SER SER B B 369 369 . 82.691  109.726 -1.456  1.00
2.21   1 . .
ATOM 6151 C     C     . SER SER SER B B 369 369 . 80.606  108.245 -0.042  1.00
2.75   1 . .
ATOM 6152 O     O     . SER SER SER B B 369 369 . 79.529  108.702 0.331   1.00
2.19   1 . .
ATOM 6153 N     N     . HIS HIS HIS B B 370 370 . 81.615  107.937 0.740   1.00
2.30   1 . .
ATOM 6154 CA    CA    . HIS HIS HIS B B 370 370 . 81.691  108.332 2.159   1.00
2.00   1 . .
ATOM 6155 CB    CB    . HIS HIS HIS B B 370 370 . 82.791  107.523 2.856   1.00
2.34   1 . .
ATOM 6156 CG    CG    . HIS HIS HIS B B 370 370 . 84.186  107.733 2.283   1.00
2.46   1 . .
ATOM 6157 ND1   ND1   . HIS HIS HIS B B 370 370 . 85.312  107.341 2.970   1.00
3.10   1 . .
ATOM 6158 CE1   CE1   . HIS HIS HIS B B 370 370 . 86.387  107.579 2.240   1.00
2.33   1 . .
ATOM 6159 NE2   NE2   . HIS HIS HIS B B 370 370 . 86.013  108.170 1.123   1.00
3.42   1 . .
ATOM 6160 CD2   CD2   . HIS HIS HIS B B 370 370 . 84.635  108.203 1.089   1.00
4.36   1 . .
ATOM 6161 C     C     . HIS HIS HIS B B 370 370 . 82.032  109.840 2.221   1.00
2.82   1 . .
ATOM 6162 O     O     . HIS HIS HIS B B 370 370 . 82.216  110.531 1.167   1.00
2.03   1 . .
ATOM 6163 N     N     . ARG ARG ARG B B 371 371 . 82.180  110.323 3.437   1.00
2.94   1 . .
ATOM 6164 CA    CA    . ARG ARG ARG B B 371 371 . 82.922  111.556 3.729   1.00
2.97   1 . .
ATOM 6165 CB    CB    . ARG ARG ARG B B 371 371 . 82.051  112.618 4.489   1.00
2.46   1 . .
ATOM 6166 CG    CG    . ARG ARG ARG B B 371 371 . 80.723  113.031 3.945   1.00
2.51   1 . .
ATOM 6167 CD    CD    . ARG ARG ARG B B 371 371 . 80.841  113.486 2.528   1.00
3.02   1 . .
ATOM 6168 NE    NE    . ARG ARG ARG B B 371 371 . 81.813  114.584 2.276   1.00
2.19   1 . .
ATOM 6169 CZ    CZ    . ARG ARG ARG B B 371 371 . 81.424  115.820 1.974   1.00
2.11   1 . .
ATOM 6170 NH1   NH1   . ARG ARG ARG B B 371 371 . 80.094  116.103 1.998   1.00
2.91   1 . .
ATOM 6171 NH2   NH2   . ARG ARG ARG B B 371 371 . 82.367  116.727 1.662   1.00
3.45   1 . .
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ATOM 6172 C     C     . ARG ARG ARG B B 371 371 . 84.179  111.270 4.486   1.00
2.99   1 . .
ATOM 6173 O     O     . ARG ARG ARG B B 371 371 . 84.304  110.140 5.042   1.00
2.94   1 . .
ATOM 6174 N     N     . SER SER SER B B 372 372 . 85.148  112.177 4.476   1.00
2.69   1 . .
ATOM 6175 CA    CA    . SER SER SER B B 372 372 . 86.363  111.931 5.196   1.00
2.52   1 . .
ATOM 6176 CB    CB    . SER SER SER B B 372 372 . 87.409  112.989 4.915   1.00
2.91   1 . .
ATOM 6177 OG    OG    . SER SER SER B B 372 372 . 86.954  114.296 5.224   1.00
2.07   1 . .
ATOM 6178 C     C     . SER SER SER B B 372 372 . 86.143  111.794 6.705   1.00
2.74   1 . .
ATOM 6179 O     O     . SER SER SER B B 372 372 . 86.961  111.160 7.378   1.00
2.94   1 . .
ATOM 6180 N     N     . GLY GLY GLY B B 373 373 . 85.042  112.326 7.208   1.00
2.45   1 . .
ATOM 6181 CA    CA    . GLY GLY GLY B B 373 373 . 84.673  112.120 8.605   1.00
2.58   1 . .
ATOM 6182 C     C     . GLY GLY GLY B B 373 373 . 83.521  111.164 8.533   1.00
2.00   1 . .
ATOM 6183 O     O     . GLY GLY GLY B B 373 373 . 82.417  111.483 8.076   1.00
2.32   1 . .
ATOM 6184 N     N     . GLU GLU GLU B B 374 374 . 83.771  109.938 8.957   1.00
2.22   1 . .
ATOM 6185 CA    CA    . GLU GLU GLU B B 374 374 . 82.686  108.933 8.853   1.00
2.47   1 . .
ATOM 6186 CB    CB    . GLU GLU GLU B B 374 374 . 83.141  107.716 7.988   1.00
2.35   1 . .
ATOM 6187 CG    CG    . GLU GLU GLU B B 374 374 . 82.622  107.895 6.537   1.00
2.11   1 . .
ATOM 6188 CD    CD    . GLU GLU GLU B B 374 374 . 81.129  107.818 6.398   1.00
2.66   1 . .
ATOM 6189 OE1   OE1   . GLU GLU GLU B B 374 374 . 80.409  107.229 7.246   1.00
2.89   1 . .
ATOM 6190 OE2   OE2   . GLU GLU GLU B B 374 374 . 80.644  108.327 5.318   1.00
2.50   1 . .
ATOM 6191 C     C     . GLU GLU GLU B B 374 374 . 82.259  108.407 10.223  1.00
2.00   1 . .
ATOM 6192 O     O     . GLU GLU GLU B B 374 374 . 82.728  108.880 11.249  1.00
2.95   1 . .
ATOM 6193 N     N     . THR THR THR B B 375 375 . 81.300  107.531 10.198  1.00
2.17   1 . .
ATOM 6194 CA    CA    . THR THR THR B B 375 375 . 80.896  106.831 11.435  1.00
2.01   1 . .
ATOM 6195 CB    CB    . THR THR THR B B 375 375 . 79.510  107.289 11.933  1.00
2.75   1 . .
ATOM 6196 OG1   OG1   . THR THR THR B B 375 375 . 78.494  106.740 11.073  1.00
2.00   1 . .
ATOM 6197 CG2   CG2   . THR THR THR B B 375 375 . 79.417  108.842 11.939  1.00
2.27   1 . .
ATOM 6198 C     C     . THR THR THR B B 375 375 . 80.776  105.335 11.185  1.00
2.45   1 . .
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ATOM 6199 O     O     . THR THR THR B B 375 375 . 81.059  104.851 10.080  1.00
3.19   1 . .
ATOM 6200 N     N     . GLU GLU GLU B B 376 376 . 80.449  104.594 12.239  1.00
2.73   1 . .
ATOM 6201 CA    CA    . GLU GLU GLU B B 376 376 . 80.167  103.156 12.151  1.00
2.89   1 . .
ATOM 6202 CB    CB    . GLU GLU GLU B B 376 376 . 80.067  102.672 13.631  1.00
3.25   1 . .
ATOM 6203 CG    CG    . GLU GLU GLU B B 376 376 . 78.962  103.293 14.468  1.00
2.79   1 . .
ATOM 6204 CD    CD    . GLU GLU GLU B B 376 376 . 79.528  104.350 15.403  1.00
4.21   1 . .
ATOM 6205 OE1   OE1   . GLU GLU GLU B B 376 376 . 80.337  105.197 14.887  1.00
4.57   1 . .
ATOM 6206 OE2   OE2   . GLU GLU GLU B B 376 376 . 79.177  104.356 16.612  1.00
2.80   1 . .
ATOM 6207 C     C     . GLU GLU GLU B B 376 376 . 78.895  102.827 11.286  1.00
2.32   1 . .
ATOM 6208 O     O     . GLU GLU GLU B B 376 376 . 78.504  101.684 11.115  1.00
4.22   1 . .
ATOM 6209 N     N     . ASP ASP ASP B B 377 377 . 78.186  103.851 10.783  1.00
2.27   1 . .
ATOM 6210 CA    CA    . ASP ASP ASP B B 377 377 . 77.004  103.657 9.972   1.00
2.00   1 . .
ATOM 6211 CB    CB    . ASP ASP ASP B B 377 377 . 76.425  105.054 9.632   1.00
2.75   1 . .
ATOM 6212 CG    CG    . ASP ASP ASP B B 377 377 . 75.133  104.988 8.868   1.00
4.38   1 . .
ATOM 6213 OD1   OD1   . ASP ASP ASP B B 377 377 . 75.190  104.890 7.617   1.00
5.10   1 . .
ATOM 6214 OD2   OD2   . ASP ASP ASP B B 377 377 . 74.035  105.065 9.522   1.00
3.40   1 . .
ATOM 6215 C     C     . ASP ASP ASP B B 377 377 . 77.410  102.941 8.667   1.00
2.36   1 . .
ATOM 6216 O     O     . ASP ASP ASP B B 377 377 . 78.574  103.153 8.170   1.00
3.44   1 . .
ATOM 6217 N     N     . THR THR THR B B 378 378 . 76.558  102.095 8.118   1.00
2.77   1 . .
ATOM 6218 CA    CA    . THR THR THR B B 378 378 . 76.964  101.425 6.860   1.00
3.48   1 . .
ATOM 6219 CB    CB    . THR THR THR B B 378 378 . 77.158  99.894  7.096   1.00
3.19   1 . .
ATOM 6220 OG1   OG1   . THR THR THR B B 378 378 . 75.975  99.329  7.629   1.00
3.48   1 . .
ATOM 6221 CG2   CG2   . THR THR THR B B 378 378 . 78.313  99.615  8.083   1.00
2.73   1 . .
ATOM 6222 C     C     . THR THR THR B B 378 378 . 75.900  101.567 5.785   1.00
2.02   1 . .
ATOM 6223 O     O     . THR THR THR B B 378 378 . 75.851  100.809 4.828   1.00
2.34   1 . .
ATOM 6224 N     N     . PHE PHE PHE B B 379 379 . 75.036  102.560 5.952   1.00
3.33   1 . .
ATOM 6225 CA    CA    . PHE PHE PHE B B 379 379 . 73.985  102.877 4.929   1.00
3.22   1 . .
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ATOM 6226 CB    CB    . PHE PHE PHE B B 379 379 . 73.287  104.260 5.222   1.00
3.13   1 . .
ATOM 6227 CG    CG    . PHE PHE PHE B B 379 379 . 72.047  104.532 4.362   1.00
2.70   1 . .
ATOM 6228 CD1   CD1   . PHE PHE PHE B B 379 379 . 72.173  105.225 3.152   1.00
3.90   1 . .
ATOM 6229 CE1   CE1   . PHE PHE PHE B B 379 379 . 71.037  105.510 2.371   1.00
3.42   1 . .
ATOM 6230 CZ    CZ    . PHE PHE PHE B B 379 379 . 69.767  105.075 2.731   1.00
4.25   1 . .
ATOM 6231 CE2   CE2   . PHE PHE PHE B B 379 379 . 69.627  104.365 3.951   1.00
5.30   1 . .
ATOM 6232 CD2   CD2   . PHE PHE PHE B B 379 379 . 70.790  104.126 4.744   1.00
5.67   1 . .
ATOM 6233 C     C     . PHE PHE PHE B B 379 379 . 74.505  102.840 3.485   1.00
2.31   1 . .
ATOM 6234 O     O     . PHE PHE PHE B B 379 379 . 73.815  102.336 2.585   1.00
3.04   1 . .
ATOM 6235 N     N     . ILE ILE ILE B B 380 380 . 75.661  103.459 3.238   1.00
2.27   1 . .
ATOM 6236 CA    CA    . ILE ILE ILE B B 380 380 . 76.077  103.642 1.869   1.00
2.85   1 . .
ATOM 6237 CB    CB    . ILE ILE ILE B B 380 380 . 77.158  104.687 1.660   1.00
2.33   1 . .
ATOM 6238 CG1   CG1   . ILE ILE ILE B B 380 380 . 78.488  104.282 2.356   1.00
2.57   1 . .
ATOM 6239 CD1   CD1   . ILE ILE ILE B B 380 380 . 79.673  105.188 2.136   1.00
2.35   1 . .
ATOM 6240 CG2   CG2   . ILE ILE ILE B B 380 380 . 76.683  106.190 2.046   1.00
4.76   1 . .
ATOM 6241 C     C     . ILE ILE ILE B B 380 380 . 76.417  102.308 1.178   1.00
3.87   1 . .
ATOM 6242 O     O     . ILE ILE ILE B B 380 380 . 76.386  102.240 -0.042  1.00
3.30   1 . .
ATOM 6243 N     N     . ALA ALA ALA B B 381 381 . 76.649  101.264 1.972   1.00
2.48   1 . .
ATOM 6244 CA    CA    . ALA ALA ALA B B 381 381 . 76.925  99.943  1.396   1.00
2.87   1 . .
ATOM 6245 CB    CB    . ALA ALA ALA B B 381 381 . 77.421  98.983  2.419   1.00
2.21   1 . .
ATOM 6246 C     C     . ALA ALA ALA B B 381 381 . 75.610  99.402  0.788   1.00
2.02   1 . .
ATOM 6247 O     O     . ALA ALA ALA B B 381 381 . 75.575  98.990  -0.423  1.00
5.30   1 . .
ATOM 6248 N     N     . ASP ASP ASP B B 382 382 . 74.478  99.538  1.492   1.00
3.58   1 . .
ATOM 6249 CA    CA    . ASP ASP ASP B B 382 382 . 73.250  99.122  0.932   1.00
2.76   1 . .
ATOM 6250 CB    CB    . ASP ASP ASP B B 382 382 . 72.133  99.020  1.986   1.00
4.40   1 . .
ATOM 6251 CG    CG    . ASP ASP ASP B B 382 382 . 72.348  97.850  2.986   1.00
4.57   1 . .
ATOM 6252 OD1   OD1   . ASP ASP ASP B B 382 382 . 73.391  97.899  3.710   1.00
6.44   1 . .
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ATOM 6253 OD2   OD2   . ASP ASP ASP B B 382 382 . 71.490  96.883  2.940   1.00
5.74   1 . .
ATOM 6254 C     C     . ASP ASP ASP B B 382 382 . 72.782  100.071 -0.214  1.00
3.33   1 . .
ATOM 6255 O     O     . ASP ASP ASP B B 382 382 . 72.170  99.601  -1.167  1.00
2.17   1 . .
ATOM 6256 N     N     . LEU LEU LEU B B 383 383 . 73.116  101.360 -0.097  1.00
3.01   1 . .
ATOM 6257 CA    CA    . LEU LEU LEU B B 383 383 . 72.691  102.334 -1.091  1.00
2.87   1 . .
ATOM 6258 CB    CB    . LEU LEU LEU B B 383 383 . 73.151  103.689 -0.617  1.00
2.20   1 . .
ATOM 6259 CG    CG    . LEU LEU LEU B B 383 383 . 72.801  104.839 -1.601  1.00
3.00   1 . .
ATOM 6260 CD1   CD1   . LEU LEU LEU B B 383 383 . 71.213  105.083 -1.618  1.00
3.68   1 . .
ATOM 6261 CD2   CD2   . LEU LEU LEU B B 383 383 . 73.598  106.051 -1.145  1.00
2.37   1 . .
ATOM 6262 C     C     . LEU LEU LEU B B 383 383 . 73.340  102.019 -2.471  1.00
2.93   1 . .
ATOM 6263 O     O     . LEU LEU LEU B B 383 383 . 72.654  102.038 -3.512  1.00
3.51   1 . .
ATOM 6264 N     N     . VAL VAL VAL B B 384 384 . 74.621  101.739 -2.490  1.00
4.23   1 . .
ATOM 6265 CA    CA    . VAL VAL VAL B B 384 384 . 75.307  101.505 -3.791  1.00
3.68   1 . .
ATOM 6266 CB    CB    . VAL VAL VAL B B 384 384 . 76.804  101.560 -3.643  1.00
3.44   1 . .
ATOM 6267 CG1   CG1   . VAL VAL VAL B B 384 384 . 77.271  100.363 -2.850  1.00
3.28   1 . .
ATOM 6268 CG2   CG2   . VAL VAL VAL B B 384 384 . 77.507  101.596 -5.095  1.00
2.58   1 . .
ATOM 6269 C     C     . VAL VAL VAL B B 384 384 . 74.837  100.273 -4.468  1.00
4.65   1 . .
ATOM 6270 O     O     . VAL VAL VAL B B 384 384 . 74.833  100.201 -5.709  1.00
4.96   1 . .
ATOM 6271 N     N     . VAL VAL VAL B B 385 385 . 74.399  99.297  -3.702  1.00
5.12   1 . .
ATOM 6272 CA    CA    . VAL VAL VAL B B 385 385 . 73.870  98.056  -4.330  1.00
2.96   1 . .
ATOM 6273 CB    CB    . VAL VAL VAL B B 385 385 . 73.961  96.855  -3.341  1.00
2.37   1 . .
ATOM 6274 CG1   CG1   . VAL VAL VAL B B 385 385 . 73.382  95.566  -3.999  1.00
4.11   1 . .
ATOM 6275 CG2   CG2   . VAL VAL VAL B B 385 385 . 75.440  96.625  -2.998  1.00
3.36   1 . .
ATOM 6276 C     C     . VAL VAL VAL B B 385 385 . 72.468  98.283  -4.841  1.00
5.11   1 . .
ATOM 6277 O     O     . VAL VAL VAL B B 385 385 . 72.142  97.958  -6.018  1.00
5.55   1 . .
ATOM 6278 N     N     . GLY GLY GLY B B 386 386 . 71.689  98.878  -3.981  1.00
5.66   1 . .
ATOM 6279 CA    CA    . GLY GLY GLY B B 386 386 . 70.287  99.192  -4.261  1.00
5.41   1 . .
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ATOM 6280 C     C     . GLY GLY GLY B B 386 386 . 70.182  100.109 -5.505  1.00
5.75   1 . .
ATOM 6281 O     O     . GLY GLY GLY B B 386 386 . 69.288  99.917  -6.340  1.00
6.46   1 . .
ATOM 6282 N     N     . LEU LEU LEU B B 387 387 . 71.104  101.080 -5.631  1.00
5.41   1 . .
ATOM 6283 CA    CA    . LEU LEU LEU B B 387 387 . 71.139  102.016 -6.791  1.00
5.08   1 . .
ATOM 6284 CB    CB    . LEU LEU LEU B B 387 387 . 71.676  103.387 -6.349  1.00
4.97   1 . .
ATOM 6285 CG    CG    . LEU LEU LEU B B 387 387 . 70.814  104.148 -5.335  1.00
5.99   1 . .
ATOM 6286 CD1   CD1   . LEU LEU LEU B B 387 387 . 71.355  105.511 -4.984  1.00
5.60   1 . .
ATOM 6287 CD2   CD2   . LEU LEU LEU B B 387 387 . 69.423  104.274 -5.859  1.00
5.99   1 . .
ATOM 6288 C     C     . LEU LEU LEU B B 387 387 . 71.914  101.442 -7.995  1.00
5.68   1 . .
ATOM 6289 O     O     . LEU LEU LEU B B 387 387 . 71.956  102.053 -9.122  1.00
7.54   1 . .
ATOM 6290 N     N     . CYS CYS CYS B B 388 388 . 72.549  100.266 -7.796  1.00
6.20   1 . .
ATOM 6291 CA    CA    . CYS CYS CYS B B 388 388 . 73.259  99.575  -8.906  1.00
8.44   1 . .
ATOM 6292 CB    CB    . CYS CYS CYS B B 388 388 . 72.232  99.131  -9.950  1.00
7.72   1 . .
ATOM 6293 SG    SG    . CYS CYS CYS B B 388 388 . 71.069  97.914  -9.412  1.00
18.13  1 . .
ATOM 6294 C     C     . CYS CYS CYS B B 388 388 . 74.262  100.447 -9.652  1.00
8.45   1 . .
ATOM 6295 O     O     . CYS CYS CYS B B 388 388 . 74.356  100.406 -10.915 1.00
10.77  1 . .
ATOM 6296 N     N     . THR THR THR B B 389 389 . 75.014  101.236 -8.925  1.00
5.48   1 . .
ATOM 6297 CA    CA    . THR THR THR B B 389 389 . 75.833  102.185 -9.639  1.00
4.36   1 . .
ATOM 6298 CB    CB    . THR THR THR B B 389 389 . 76.146  103.438 -8.782  1.00
3.85   1 . .
ATOM 6299 OG1   OG1   . THR THR THR B B 389 389 . 77.265  103.179 -7.913  1.00
3.50   1 . .
ATOM 6300 CG2   CG2   . THR THR THR B B 389 389 . 75.020  103.916 -8.023  1.00
3.52   1 . .
ATOM 6301 C     C     . THR THR THR B B 389 389 . 77.170  101.591 -10.034 1.00
4.72   1 . .
ATOM 6302 O     O     . THR THR THR B B 389 389 . 77.841  102.119 -10.886 1.00
5.64   1 . .
ATOM 6303 N     N     . GLY GLY GLY B B 390 390 . 77.558  100.463 -9.482  1.00
2.39   1 . .
ATOM 6304 CA    CA    . GLY GLY GLY B B 390 390 . 78.852  99.877  -9.877  1.00
3.26   1 . .
ATOM 6305 C     C     . GLY GLY GLY B B 390 390 . 80.175  100.310 -9.326  1.00
2.51   1 . .
ATOM 6306 O     O     . GLY GLY GLY B B 390 390 . 81.204  99.710  -9.624  1.00
2.66   1 . .
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ATOM 6307 N     N     . GLN GLN GLN B B 391 391 . 80.144  101.360 -8.526  1.00
2.55   1 . .
ATOM 6308 CA    CA    . GLN GLN GLN B B 391 391 . 81.404  101.916 -7.952  1.00
3.11   1 . .
ATOM 6309 CB    CB    . GLN GLN GLN B B 391 391 . 82.154  102.864 -8.921  1.00
3.80   1 . .
ATOM 6310 CG    CG    . GLN GLN GLN B B 391 391 . 81.370  103.434 -10.030 1.00
4.04   1 . .
ATOM 6311 CD    CD    . GLN GLN GLN B B 391 391 . 82.095  104.463 -10.863 1.00
3.58   1 . .
ATOM 6312 OE1   OE1   . GLN GLN GLN B B 391 391 . 83.233  104.809 -10.613 1.00
4.19   1 . .
ATOM 6313 NE2   NE2   . GLN GLN GLN B B 391 391 . 81.396  104.958 -11.871 1.00
5.89   1 . .
ATOM 6314 C     C     . GLN GLN GLN B B 391 391 . 81.095  102.637 -6.671  1.00
2.66   1 . .
ATOM 6315 O     O     . GLN GLN GLN B B 391 391 . 80.105  103.338 -6.533  1.00
3.56   1 . .
ATOM 6316 N     N     . ILE ILE ILE B B 392 392 . 81.985  102.396 -5.706  1.00
2.95   1 . .
ATOM 6317 CA    CA    . ILE ILE ILE B B 392 392 . 81.867  103.058 -4.415  1.00
2.55   1 . .
ATOM 6318 CB    CB    . ILE ILE ILE B B 392 392 . 81.125  102.209 -3.329  1.00
3.01   1 . .
ATOM 6319 CG1   CG1   . ILE ILE ILE B B 392 392 . 81.089  103.005 -2.005  1.00
2.49   1 . .
ATOM 6320 CD1   CD1   . ILE ILE ILE B B 392 392 . 80.214  102.463 -0.965  1.00
2.37   1 . .
ATOM 6321 CG2   CG2   . ILE ILE ILE B B 392 392 . 81.867  100.865 -3.125  1.00
4.87   1 . .
ATOM 6322 C     C     . ILE ILE ILE B B 392 392 . 83.284  103.396 -3.985  1.00
2.39   1 . .
ATOM 6323 O     O     . ILE ILE ILE B B 392 392 . 84.241  102.609 -4.186  1.00
2.68   1 . .
ATOM 6324 N     N     . LYS LYS LYS B B 393 393 . 83.474  104.591 -3.399  1.00
2.73   1 . .
ATOM 6325 CA    CA    . LYS LYS LYS B B 393 393 . 84.639  104.877 -2.640  1.00
2.00   1 . .
ATOM 6326 CB    CB    . LYS LYS LYS B B 393 393 . 85.483  106.054 -3.208  1.00
2.88   1 . .
ATOM 6327 CG    CG    . LYS LYS LYS B B 393 393 . 84.866  107.449 -3.019  1.00
2.74   1 . .
ATOM 6328 CD    CD    . LYS LYS LYS B B 393 393 . 85.865  108.502 -3.570  1.00
3.60   1 . .
ATOM 6329 CE    CE    . LYS LYS LYS B B 393 393 . 85.577  109.882 -2.943  1.00
3.60   1 . .
ATOM 6330 NZ    NZ    . LYS LYS LYS B B 393 393 . 86.535  110.905 -3.445  1.00
3.49   1 . .
ATOM 6331 C     C     . LYS LYS LYS B B 393 393 . 84.283  105.100 -1.168  1.00
3.04   1 . .
ATOM 6332 O     O     . LYS LYS LYS B B 393 393 . 83.423  105.900 -0.860  1.00
2.06   1 . .
ATOM 6333 N     N     . THR THR THR B B 394 394 . 84.933  104.350 -0.279  1.00
2.75   1 . .
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ATOM 6334 CA    CA    . THR THR THR B B 394 394 . 84.685  104.528 1.154   1.00
2.00   1 . .
ATOM 6335 CB    CB    . THR THR THR B B 394 394 . 83.399  103.781 1.532   1.00
2.33   1 . .
ATOM 6336 OG1   OG1   . THR THR THR B B 394 394 . 83.058  104.068 2.907   1.00
2.33   1 . .
ATOM 6337 CG2   CG2   . THR THR THR B B 394 394 . 83.483  102.237 1.335   1.00
2.89   1 . .
ATOM 6338 C     C     . THR THR THR B B 394 394 . 85.907  104.223 2.004   1.00
2.05   1 . .
ATOM 6339 O     O     . THR THR THR B B 394 394 . 85.758  103.736 3.105   1.00
2.06   1 . .
ATOM 6340 N     N     . GLY GLY GLY B B 395 395 . 87.056  104.593 1.499   1.00
2.01   1 . .
ATOM 6341 CA    CA    . GLY GLY GLY B B 395 395 . 88.298  104.565 2.262   1.00
2.76   1 . .
ATOM 6342 C     C     . GLY GLY GLY B B 395 395 . 89.352  103.555 1.836   1.00
2.54   1 . .
ATOM 6343 O     O     . GLY GLY GLY B B 395 395 . 89.094  102.658 1.026   1.00
2.87   1 . .
ATOM 6344 N     N     . ALA ALA ALA B B 396 396 . 90.586  103.751 2.337   1.00
2.12   1 . .
ATOM 6345 CA    CA    . ALA ALA ALA B B 396 396 . 91.556  102.637 2.390   1.00
2.60   1 . .
ATOM 6346 CB    CB    . ALA ALA ALA B B 396 396 . 92.851  103.027 3.095   1.00
2.93   1 . .
ATOM 6347 C     C     . ALA ALA ALA B B 396 396 . 90.930  101.457 3.110   1.00
2.44   1 . .
ATOM 6348 O     O     . ALA ALA ALA B B 396 396 . 89.934  101.629 3.814   1.00
2.03   1 . .
ATOM 6349 N     N     . PRO PRO PRO B B 397 397 . 91.497  100.217 2.936   1.00
2.44   1 . .
ATOM 6350 CA    CA    . PRO PRO PRO B B 397 397 . 91.001  99.094  3.737   1.00
2.03   1 . .
ATOM 6351 CB    CB    . PRO PRO PRO B B 397 397 . 91.541  97.896  2.959   1.00
4.05   1 . .
ATOM 6352 CG    CG    . PRO PRO PRO B B 397 397 . 92.757  98.354  2.282   1.00
2.00   1 . .
ATOM 6353 CD    CD    . PRO PRO PRO B B 397 397 . 92.532  99.803  1.963   1.00
2.61   1 . .
ATOM 6354 C     C     . PRO PRO PRO B B 397 397 . 91.662  99.155  5.141   1.00
2.95   1 . .
ATOM 6355 O     O     . PRO PRO PRO B B 397 397 . 92.357  98.208  5.581   1.00
3.03   1 . .
ATOM 6356 N     N     . CYS CYS CYS B B 398 398 . 91.399  100.282 5.824   1.00
2.10   1 . .
ATOM 6357 CA    CA    . CYS CYS CYS B B 398 398 . 92.021  100.565 7.088   1.00
2.35   1 . .
ATOM 6358 CB    CB    . CYS CYS CYS B B 398 398 . 93.429  101.088 6.851   1.00
2.51   1 . .
ATOM 6359 SG    SG    . CYS CYS CYS B B 398 398 . 94.274  101.655 8.354   1.00
2.58   1 . .
ATOM 6360 C     C     . CYS CYS CYS B B 398 398 . 91.172  101.620 7.779   1.00
3.91   1 . .
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ATOM 6361 O     O     . CYS CYS CYS B B 398 398 . 90.692  102.550 7.129   1.00
2.52   1 . .
ATOM 6362 N     N     . ARG ARG ARG B B 399 399 . 90.974  101.400 9.051   1.00
2.00   1 . .
ATOM 6363 CA    CA    . ARG ARG ARG B B 399 399 . 90.035  102.191 9.945   1.00
2.27   1 . .
ATOM 6364 CB    CB    . ARG ARG ARG B B 399 399 . 90.139  103.708 9.701   1.00
2.00   1 . .
ATOM 6365 CG    CG    . ARG ARG ARG B B 399 399 . 91.604  104.223 9.856   1.00
2.80   1 . .
ATOM 6366 CD    CD    . ARG ARG ARG B B 399 399 . 91.789  105.741 9.462   1.00
3.39   1 . .
ATOM 6367 NE    NE    . ARG ARG ARG B B 399 399 . 90.783  106.560 10.148  1.00
2.99   1 . .
ATOM 6368 CZ    CZ    . ARG ARG ARG B B 399 399 . 91.079  107.720 10.759  1.00
3.52   1 . .
ATOM 6369 NH1   NH1   . ARG ARG ARG B B 399 399 . 92.363  108.169 10.727  1.00
4.04   1 . .
ATOM 6370 NH2   NH2   . ARG ARG ARG B B 399 399 . 90.081  108.433 11.359  1.00
3.11   1 . .
ATOM 6371 C     C     . ARG ARG ARG B B 399 399 . 88.583  101.700 9.748   1.00
2.00   1 . .
ATOM 6372 O     O     . ARG ARG ARG B B 399 399 . 88.055  101.666 8.675   1.00
2.00   1 . .
ATOM 6373 N     N     . SER SER SER B B 400 400 . 87.901  101.315 10.836  1.00
2.00   1 . .
ATOM 6374 CA    CA    . SER SER SER B B 400 400 . 86.675  100.578 10.636  1.00
2.00   1 . .
ATOM 6375 CB    CB    . SER SER SER B B 400 400 . 86.344  99.682  11.845  1.00
2.00   1 . .
ATOM 6376 OG    OG    . SER SER SER B B 400 400 . 87.329  98.665  12.106  1.00
2.50   1 . .
ATOM 6377 C     C     . SER SER SER B B 400 400 . 85.478  101.450 10.305  1.00
2.00   1 . .
ATOM 6378 O     O     . SER SER SER B B 400 400 . 84.462  100.951 9.930   1.00
2.00   1 . .
ATOM 6379 N     N     . GLU GLU GLU B B 401 401 . 85.639  102.769 10.309  1.00
2.00   1 . .
ATOM 6380 CA    CA    . GLU GLU GLU B B 401 401 . 84.558  103.540 9.674   1.00
2.00   1 . .
ATOM 6381 CB    CB    . GLU GLU GLU B B 401 401 . 84.688  105.001 10.037  1.00
2.35   1 . .
ATOM 6382 CG    CG    . GLU GLU GLU B B 401 401 . 85.763  105.732 9.361   1.00
3.09   1 . .
ATOM 6383 CD    CD    . GLU GLU GLU B B 401 401 . 87.085  105.654 10.043  1.00
2.74   1 . .
ATOM 6384 OE1   OE1   . GLU GLU GLU B B 401 401 . 87.206  104.917 11.026  1.00
2.01   1 . .
ATOM 6385 OE2   OE2   . GLU GLU GLU B B 401 401 . 88.070  106.354 9.601   1.00
2.00   1 . .
ATOM 6386 C     C     . GLU GLU GLU B B 401 401 . 84.589  103.337 8.120   1.00
2.24   1 . .
ATOM 6387 O     O     . GLU GLU GLU B B 401 401 . 83.585  103.651 7.451   1.00
2.00   1 . .
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ATOM 6388 N     N     . ARG ARG ARG B B 402 402 . 85.688  102.768 7.673   1.00
2.00   1 . .
ATOM 6389 CA    CA    . ARG ARG ARG B B 402 402 . 85.816  102.369 6.246   1.00
2.19   1 . .
ATOM 6390 CB    CB    . ARG ARG ARG B B 402 402 . 87.198  102.635 5.703   1.00
2.70   1 . .
ATOM 6391 CG    CG    . ARG ARG ARG B B 402 402 . 87.867  103.990 6.048   1.00
2.64   1 . .
ATOM 6392 CD    CD    . ARG ARG ARG B B 402 402 . 87.053  105.239 5.663   1.00
2.12   1 . .
ATOM 6393 NE    NE    . ARG ARG ARG B B 402 402 . 87.387  106.324 6.557   1.00
2.00   1 . .
ATOM 6394 CZ    CZ    . ARG ARG ARG B B 402 402 . 86.853  107.546 6.549   1.00
2.00   1 . .
ATOM 6395 NH1   NH1   . ARG ARG ARG B B 402 402 . 85.974  107.924 5.628   1.00
3.09   1 . .
ATOM 6396 NH2   NH2   . ARG ARG ARG B B 402 402 . 87.180  108.347 7.554   1.00
2.33   1 . .
ATOM 6397 C     C     . ARG ARG ARG B B 402 402 . 85.441  100.900 6.050   1.00
2.02   1 . .
ATOM 6398 O     O     . ARG ARG ARG B B 402 402 . 84.538  100.553 5.282   1.00
2.00   1 . .
ATOM 6399 N     N     . LEU LEU LEU B B 403 403 . 86.117  100.037 6.816   1.00
2.55   1 . .
ATOM 6400 CA    CA    . LEU LEU LEU B B 403 403 . 85.823  98.603  6.756   1.00
2.03   1 . .
ATOM 6401 CB    CB    . LEU LEU LEU B B 403 403 . 86.741  97.756  7.650   1.00
2.00   1 . .
ATOM 6402 CG    CG    . LEU LEU LEU B B 403 403 . 88.163  97.462  7.242   1.00
2.43   1 . .
ATOM 6403 CD1   CD1   . LEU LEU LEU B B 403 403 . 88.308  97.223  5.702   1.00
2.00   1 . .
ATOM 6404 CD2   CD2   . LEU LEU LEU B B 403 403 . 89.088  98.581  7.744   1.00
2.44   1 . .
ATOM 6405 C     C     . LEU LEU LEU B B 403 403 . 84.438  98.255  7.111   1.00
2.11   1 . .
ATOM 6406 O     O     . LEU LEU LEU B B 403 403 . 83.921  97.274  6.541   1.00
2.00   1 . .
ATOM 6407 N     N     . ALA ALA ALA B B 404 404 . 83.800  99.029  7.993   1.00
2.00   1 . .
ATOM 6408 CA    CA    . ALA ALA ALA B B 404 404 . 82.358  98.688  8.219   1.00
2.18   1 . .
ATOM 6409 CB    CB    . ALA ALA ALA B B 404 404 . 81.746  99.551  9.253   1.00
2.96   1 . .
ATOM 6410 C     C     . ALA ALA ALA B B 404 404 . 81.532  98.678  6.949   1.00
3.01   1 . .
ATOM 6411 O     O     . ALA ALA ALA B B 404 404 . 80.676  97.810  6.768   1.00
2.22   1 . .
ATOM 6412 N     N     . LYS LYS LYS B B 405 405 . 81.819  99.600  6.038   1.00
2.00   1 . .
ATOM 6413 CA    CA    . LYS LYS LYS B B 405 405 . 81.094  99.547  4.732   1.00
2.00   1 . .
ATOM 6414 CB    CB    . LYS LYS LYS B B 405 405 . 81.206  100.859 3.907   1.00
2.31   1 . .
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ATOM 6415 CG    CG    . LYS LYS LYS B B 405 405 . 80.422  102.024 4.369   1.00
2.30   1 . .
ATOM 6416 CD    CD    . LYS LYS LYS B B 405 405 . 81.060  102.606 5.707   1.00
2.27   1 . .
ATOM 6417 CE    CE    . LYS LYS LYS B B 405 405 . 80.601  104.070 5.932   1.00
2.18   1 . .
ATOM 6418 NZ    NZ    . LYS LYS LYS B B 405 405 . 80.756  104.469 7.401   1.00
2.09   1 . .
ATOM 6419 C     C     . LYS LYS LYS B B 405 405 . 81.548  98.404  3.838   1.00
2.88   1 . .
ATOM 6420 O     O     . LYS LYS LYS B B 405 405 . 80.733  97.766  3.295   1.00
2.00   1 . .
ATOM 6421 N     N     . TYR TYR TYR B B 406 406 . 82.857  98.209  3.735   1.00
2.55   1 . .
ATOM 6422 CA    CA    . TYR TYR TYR B B 406 406 . 83.379  97.104  2.933   1.00
2.00   1 . .
ATOM 6423 CB    CB    . TYR TYR TYR B B 406 406 . 84.893  97.230  2.837   1.00
2.56   1 . .
ATOM 6424 CG    CG    . TYR TYR TYR B B 406 406 . 85.352  98.454  2.119   1.00
2.39   1 . .
ATOM 6425 CD1   CD1   . TYR TYR TYR B B 406 406 . 84.900  98.747  0.781   1.00
2.13   1 . .
ATOM 6426 CE1   CE1   . TYR TYR TYR B B 406 406 . 85.387  99.867  0.089   1.00
2.05   1 . .
ATOM 6427 CZ    CZ    . TYR TYR TYR B B 406 406 . 86.329  100.701 0.738   1.00
2.33   1 . .
ATOM 6428 OH    OH    . TYR TYR TYR B B 406 406 . 86.742  101.813 0.035   1.00
2.25   1 . .
ATOM 6429 CE2   CE2   . TYR TYR TYR B B 406 406 . 86.765  100.415 2.018   1.00
4.80   1 . .
ATOM 6430 CD2   CD2   . TYR TYR TYR B B 406 406 . 86.312  99.290  2.690   1.00
2.68   1 . .
ATOM 6431 C     C     . TYR TYR TYR B B 406 406 . 82.899  95.763  3.463   1.00
2.19   1 . .
ATOM 6432 O     O     . TYR TYR TYR B B 406 406 . 82.504  94.861  2.668   1.00
2.21   1 . .
ATOM 6433 N     N     . ASN ASN ASN B B 407 407 . 82.845  95.612  4.790   1.00
2.40   1 . .
ATOM 6434 CA    CA    . ASN ASN ASN B B 407 407 . 82.434  94.325  5.279   1.00
2.07   1 . .
ATOM 6435 CB    CB    . ASN ASN ASN B B 407 407 . 82.658  94.257  6.823   1.00
2.00   1 . .
ATOM 6436 CG    CG    . ASN ASN ASN B B 407 407 . 84.121  94.200  7.185   1.00
2.18   1 . .
ATOM 6437 OD1   OD1   . ASN ASN ASN B B 407 407 . 84.916  93.621  6.431   1.00
2.16   1 . .
ATOM 6438 ND2   ND2   . ASN ASN ASN B B 407 407 . 84.444  94.584  8.437   1.00
2.00   1 . .
ATOM 6439 C     C     . ASN ASN ASN B B 407 407 . 80.927  94.111  5.040   1.00
2.00   1 . .
ATOM 6440 O     O     . ASN ASN ASN B B 407 407 . 80.494  93.047  4.691   1.00
2.03   1 . .
ATOM 6441 N     N     . GLN GLN GLN B B 408 408 . 80.128  95.201  5.115   1.00
2.09   1 . .
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ATOM 6442 CA    CA    . GLN GLN GLN B B 408 408 . 78.737  95.098  4.800   1.00
2.08   1 . .
ATOM 6443 CB    CB    . GLN GLN GLN B B 408 408 . 78.002  96.437  5.208   1.00
2.17   1 . .
ATOM 6444 CG    CG    . GLN GLN GLN B B 408 408 . 76.509  96.505  4.926   1.00
2.21   1 . .
ATOM 6445 CD    CD    . GLN GLN GLN B B 408 408 . 75.584  95.531  5.596   1.00
2.26   1 . .
ATOM 6446 OE1   OE1   . GLN GLN GLN B B 408 408 . 76.027  94.676  6.362   1.00
4.45   1 . .
ATOM 6447 NE2   NE2   . GLN GLN GLN B B 408 408 . 74.293  95.558  5.222   1.00
5.50   1 . .
ATOM 6448 C     C     . GLN GLN GLN B B 408 408 . 78.507  94.713  3.306   1.00
2.08   1 . .
ATOM 6449 O     O     . GLN GLN GLN B B 408 408 . 77.591  93.890  2.992   1.00
2.52   1 . .
ATOM 6450 N     N     . LEU LEU LEU B B 409 409 . 79.301  95.308  2.419   1.00
3.02   1 . .
ATOM 6451 CA    CA    . LEU LEU LEU B B 409 409 . 79.247  94.900  1.018   1.00
2.09   1 . .
ATOM 6452 CB    CB    . LEU LEU LEU B B 409 409 . 80.088  95.760  0.143   1.00
2.21   1 . .
ATOM 6453 CG    CG    . LEU LEU LEU B B 409 409 . 79.535  97.179  -0.067  1.00
2.19   1 . .
ATOM 6454 CD1   CD1   . LEU LEU LEU B B 409 409 . 80.605  98.027  -0.684  1.00
2.98   1 . .
ATOM 6455 CD2   CD2   . LEU LEU LEU B B 409 409 . 78.356  97.181  -1.056  1.00
4.91   1 . .
ATOM 6456 C     C     . LEU LEU LEU B B 409 409 . 79.558  93.391  0.821   1.00
2.01   1 . .
ATOM 6457 O     O     . LEU LEU LEU B B 409 409 . 78.878  92.708  0.028   1.00
2.00   1 . .
ATOM 6458 N     N     . MET MET MET B B 410 410 . 80.508  92.862  1.593   1.00
2.59   1 . .
ATOM 6459 CA    CA    . MET MET MET B B 410 410 . 80.776  91.431  1.512   1.00
3.15   1 . .
ATOM 6460 CB    CB    . MET MET MET B B 410 410 . 82.031  91.124  2.334   1.00
2.21   1 . .
ATOM 6461 CG    CG    . MET MET MET B B 410 410 . 83.366  91.599  1.763   1.00
5.03   1 . .
ATOM 6462 SD    SD    . MET MET MET B B 410 410 . 84.823  90.730  2.296   1.00
4.74   1 . .
ATOM 6463 CE    CE    . MET MET MET B B 410 410 . 84.964  91.468  3.915   1.00
7.43   1 . .
ATOM 6464 C     C     . MET MET MET B B 410 410 . 79.570  90.654  2.016   1.00
2.62   1 . .
ATOM 6465 O     O     . MET MET MET B B 410 410 . 79.252  89.624  1.424   1.00
2.71   1 . .
ATOM 6466 N     N     . ARG ARG ARG B B 411 411 . 78.902  91.104  3.078   1.00
3.54   1 . .
ATOM 6467 CA    CA    . ARG ARG ARG B B 411 411 . 77.693  90.415  3.542   1.00
2.46   1 . .
ATOM 6468 CB    CB    . ARG ARG ARG B B 411 411 . 77.200  91.009  4.884   1.00
2.77   1 . .
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ATOM 6469 CG    CG    . ARG ARG ARG B B 411 411 . 78.208  90.893  6.043   1.00
3.16   1 . .
ATOM 6470 CD    CD    . ARG ARG ARG B B 411 411 . 77.526  91.381  7.422   1.00
2.26   1 . .
ATOM 6471 NE    NE    . ARG ARG ARG B B 411 411 . 78.637  91.689  8.314   1.00
2.73   1 . .
ATOM 6472 CZ    CZ    . ARG ARG ARG B B 411 411 . 79.101  92.923  8.569   1.00
3.45   1 . .
ATOM 6473 NH1   NH1   . ARG ARG ARG B B 411 411 . 78.489  93.995  8.042   1.00
2.50   1 . .
ATOM 6474 NH2   NH2   . ARG ARG ARG B B 411 411 . 80.191  93.110  9.368   1.00
3.05   1 . .
ATOM 6475 C     C     . ARG ARG ARG B B 411 411 . 76.561  90.437  2.529   1.00
3.13   1 . .
ATOM 6476 O     O     . ARG ARG ARG B B 411 411 . 75.823  89.472  2.361   1.00
3.97   1 . .
ATOM 6477 N     N     . ILE ILE ILE B B 412 412 . 76.430  91.577  1.831   1.00
2.99   1 . .
ATOM 6478 CA    CA    . ILE ILE ILE B B 412 412 . 75.362  91.695  0.906   1.00
3.63   1 . .
ATOM 6479 CB    CB    . ILE ILE ILE B B 412 412 . 75.251  93.183  0.385   1.00
3.00   1 . .
ATOM 6480 CG1   CG1   . ILE ILE ILE B B 412 412 . 74.694  94.050  1.476   1.00
2.70   1 . .
ATOM 6481 CD1   CD1   . ILE ILE ILE B B 412 412 . 74.830  95.598  1.137   1.00
2.00   1 . .
ATOM 6482 CG2   CG2   . ILE ILE ILE B B 412 412 . 74.350  93.238  -0.879  1.00
5.83   1 . .
ATOM 6483 C     C     . ILE ILE ILE B B 412 412 . 75.654  90.729  -0.254  1.00
3.94   1 . .
ATOM 6484 O     O     . ILE ILE ILE B B 412 412 . 74.715  90.034  -0.684  1.00
5.03   1 . .
ATOM 6485 N     N     . GLU GLU GLU B B 413 413 . 76.913  90.655  -0.704  1.00
3.20   1 . .
ATOM 6486 CA    CA    . GLU GLU GLU B B 413 413 . 77.298  89.702  -1.737  1.00
3.92   1 . .
ATOM 6487 CB    CB    . GLU GLU GLU B B 413 413 . 78.825  89.836  -2.047  1.00
3.67   1 . .
ATOM 6488 CG    CG    . GLU GLU GLU B B 413 413 . 79.187  88.936  -3.318  1.00
5.20   1 . .
ATOM 6489 CD    CD    . GLU GLU GLU B B 413 413 . 80.562  89.116  -3.820  1.00
6.97   1 . .
ATOM 6490 OE1   OE1   . GLU GLU GLU B B 413 413 . 81.532  88.781  -3.128  1.00
8.80   1 . .
ATOM 6491 OE2   OE2   . GLU GLU GLU B B 413 413 . 80.672  89.619  -4.954  1.00
8.72   1 . .
ATOM 6492 C     C     . GLU GLU GLU B B 413 413 . 76.990  88.232  -1.341  1.00
5.33   1 . .
ATOM 6493 O     O     . GLU GLU GLU B B 413 413 . 76.462  87.442  -2.131  1.00
5.39   1 . .
ATOM 6494 N     N     . GLU GLU GLU B B 414 414 . 77.336  87.882  -0.114  1.00
5.85   1 . .
ATOM 6495 CA    CA    . GLU GLU GLU B B 414 414 . 77.063  86.544  0.355   1.00
5.89   1 . .
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ATOM 6496 CB    CB    . GLU GLU GLU B B 414 414 . 77.576  86.433  1.793   1.00
5.96   1 . .
ATOM 6497 CG    CG    . GLU GLU GLU B B 414 414 . 77.412  85.144  2.526   1.00
9.04   1 . .
ATOM 6498 CD    CD    . GLU GLU GLU B B 414 414 . 77.893  85.302  3.954   1.00
10.29  1 . .
ATOM 6499 OE1   OE1   . GLU GLU GLU B B 414 414 . 79.087  85.738  4.123   1.00
13.48  1 . .
ATOM 6500 OE2   OE2   . GLU GLU GLU B B 414 414 . 77.103  84.978  4.895   1.00
10.90  1 . .
ATOM 6501 C     C     . GLU GLU GLU B B 414 414 . 75.568  86.318  0.362   1.00
7.33   1 . .
ATOM 6502 O     O     . GLU GLU GLU B B 414 414 . 75.107  85.246  0.029   1.00
9.14   1 . .
ATOM 6503 N     N     . GLU GLU GLU B B 415 415 . 74.813  87.364  0.715   1.00
10.10  1 . .
ATOM 6504 CA    CA    . GLU GLU GLU B B 415 415 . 73.386  87.270  0.875   1.00
10.63  1 . .
ATOM 6505 CB    CB    . GLU GLU GLU B B 415 415 . 72.901  88.568  1.497   1.00
11.81  1 . .
ATOM 6506 CG    CG    . GLU GLU GLU B B 415 415 . 71.383  88.692  1.633   1.00
16.90  1 . .
ATOM 6507 CD    CD    . GLU GLU GLU B B 415 415 . 70.925  88.199  2.946   1.00
23.12  1 . .
ATOM 6508 OE1   OE1   . GLU GLU GLU B B 415 415 . 71.363  88.801  3.966   1.00
26.42  1 . .
ATOM 6509 OE2   OE2   . GLU GLU GLU B B 415 415 . 70.116  87.245  2.959   1.00
26.22  1 . .
ATOM 6510 C     C     . GLU GLU GLU B B 415 415 . 72.706  87.023  -0.462  1.00
12.77  1 . .
ATOM 6511 O     O     . GLU GLU GLU B B 415 415 . 71.718  86.227  -0.574  1.00
13.57  1 . .
ATOM 6512 N     N     . LEU LEU LEU B B 416 416 . 73.221  87.675  -1.504  1.00
14.36  1 . .
ATOM 6513 CA    CA    . LEU LEU LEU B B 416 416 . 72.583  87.557  -2.832  1.00
16.82  1 . .
ATOM 6514 CB    CB    . LEU LEU LEU B B 416 416 . 73.105  88.635  -3.772  1.00
15.53  1 . .
ATOM 6515 CG    CG    . LEU LEU LEU B B 416 416 . 72.483  89.989  -3.497  1.00
15.21  1 . .
ATOM 6516 CD1   CD1   . LEU LEU LEU B B 416 416 . 73.341  91.133  -4.057  1.00
14.37  1 . .
ATOM 6517 CD2   CD2   . LEU LEU LEU B B 416 416 . 71.036  90.005  -4.016  1.00
16.49  1 . .
ATOM 6518 C     C     . LEU LEU LEU B B 416 416 . 72.840  86.169  -3.399  1.00
19.03  1 . .
ATOM 6519 O     O     . LEU LEU LEU B B 416 416 . 72.216  85.761  -4.386  1.00
20.58  1 . .
ATOM 6520 N     N     . GLY GLY GLY B B 417 417 . 73.741  85.432  -2.752  1.00
21.56  1 . .
ATOM 6521 CA    CA    . GLY GLY GLY B B 417 417 . 74.109  84.084  -3.186  1.00
24.47  1 . .
ATOM 6522 C     C     . GLY GLY GLY B B 417 417 . 74.393  83.983  -4.677  1.00
26.34  1 . .
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ATOM 6523 O     O     . GLY GLY GLY B B 417 417 . 75.243  84.696  -5.201  1.00
25.55  1 . .
ATOM 6524 N     N     . ASP ASP ASP B B 418 418 . 73.688  83.050  -5.320  1.00
29.19  1 . .
ATOM 6525 CA    CA    . ASP ASP ASP B B 418 418 . 73.722  82.839  -6.768  1.00
31.44  1 . .
ATOM 6526 CB    CB    . ASP ASP ASP B B 418 418 . 72.716  81.739  -7.136  1.00
32.21  1 . .
ATOM 6527 CG    CG    . ASP ASP ASP B B 418 418 . 73.373  80.366  -7.253  1.00
34.75  1 . .
ATOM 6528 OD1   OD1   . ASP ASP ASP B B 418 418 . 72.686  79.319  -7.084  1.00
34.95  1 . .
ATOM 6529 OD2   OD2   . ASP ASP ASP B B 418 418 . 74.593  80.348  -7.523  1.00
37.87  1 . .
ATOM 6530 C     C     . ASP ASP ASP B B 418 418 . 73.449  84.090  -7.627  1.00
31.39  1 . .
ATOM 6531 O     O     . ASP ASP ASP B B 418 418 . 74.020  84.231  -8.720  1.00
32.62  1 . .
ATOM 6532 N     N     . GLU GLU GLU B B 419 419 . 72.568  84.965  -7.128  1.00
30.47  1 . .
ATOM 6533 CA    CA    . GLU GLU GLU B B 419 419 . 72.148  86.208  -7.796  1.00
29.04  1 . .
ATOM 6534 CB    CB    . GLU GLU GLU B B 419 419 . 70.929  86.799  -7.082  1.00
30.28  1 . .
ATOM 6535 CG    CG    . GLU GLU GLU B B 419 419 . 69.544  86.219  -7.401  1.00
33.87  1 . .
ATOM 6536 CD    CD    . GLU GLU GLU B B 419 419 . 68.527  87.325  -7.663  1.00
39.55  1 . .
ATOM 6537 OE1   OE1   . GLU GLU GLU B B 419 419 . 68.310  88.178  -6.769  1.00
41.78  1 . .
ATOM 6538 OE2   OE2   . GLU GLU GLU B B 419 419 . 67.959  87.372  -8.781  1.00
41.23  1 . .
ATOM 6539 C     C     . GLU GLU GLU B B 419 419 . 73.228  87.320  -7.880  1.00
26.97  1 . .
ATOM 6540 O     O     . GLU GLU GLU B B 419 419 . 73.041  88.318  -8.612  1.00
26.43  1 . .
ATOM 6541 N     N     . ALA ALA ALA B B 420 420 . 74.317  87.191  -7.117  1.00
23.69  1 . .
ATOM 6542 CA    CA    . ALA ALA ALA B B 420 420 . 75.383  88.210  -7.122  1.00
21.65  1 . .
ATOM 6543 CB    CB    . ALA ALA ALA B B 420 420 . 76.323  88.042  -5.876  1.00
21.61  1 . .
ATOM 6544 C     C     . ALA ALA ALA B B 420 420 . 76.217  88.334  -8.420  1.00
20.65  1 . .
ATOM 6545 O     O     . ALA ALA ALA B B 420 420 . 76.916  87.382  -8.849  1.00
21.73  1 . .
ATOM 6546 N     N     . ARG ARG ARG B B 421 421 . 76.155  89.519  -9.036  1.00
18.78  1 . .
ATOM 6547 CA    CA    . ARG ARG ARG B B 421 421 . 77.116  89.907  -10.087 1.00
17.94  1 . .
ATOM 6548 CB    CB    . ARG ARG ARG B B 421 421 . 76.426  90.306  -11.388 1.00
18.74  1 . .
ATOM 6549 CG    CG    . ARG ARG ARG B B 421 421 . 74.963  89.974  -11.523 1.00
23.29  1 . .
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ATOM 6550 CD    CD    . ARG ARG ARG B B 421 421 . 74.175  91.241  -11.277 1.00
29.38  1 . .
ATOM 6551 NE    NE    . ARG ARG ARG B B 421 421 . 72.728  91.057  -11.370 1.00
32.90  1 . .
ATOM 6552 CZ    CZ    . ARG ARG ARG B B 421 421 . 71.964  91.507  -12.365 1.00
34.91  1 . .
ATOM 6553 NH1   NH1   . ARG ARG ARG B B 421 421 . 70.660  91.282  -12.337 1.00
36.62  1 . .
ATOM 6554 NH2   NH2   . ARG ARG ARG B B 421 421 . 72.488  92.171  -13.391 1.00
33.93  1 . .
ATOM 6555 C     C     . ARG ARG ARG B B 421 421 . 78.004  91.051  -9.557  1.00
14.98  1 . .
ATOM 6556 O     O     . ARG ARG ARG B B 421 421 . 77.604  91.762  -8.645  1.00
16.78  1 . .
ATOM 6557 N     N     . PHE PHE PHE B B 422 422 . 79.208  91.179  -10.107 1.00
12.03  1 . .
ATOM 6558 CA    CA    . PHE PHE PHE B B 422 422 . 80.219  92.112  -9.626  1.00
8.24   1 . .
ATOM 6559 CB    CB    . PHE PHE PHE B B 422 422 . 81.462  91.365  -9.119  1.00
8.12   1 . .
ATOM 6560 CG    CG    . PHE PHE PHE B B 422 422 . 82.660  92.244  -8.883  1.00
6.72   1 . .
ATOM 6561 CD1   CD1   . PHE PHE PHE B B 422 422 . 82.628  93.269  -7.911  1.00
4.39   1 . .
ATOM 6562 CE1   CE1   . PHE PHE PHE B B 422 422 . 83.705  94.006  -7.663  1.00
3.75   1 . .
ATOM 6563 CZ    CZ    . PHE PHE PHE B B 422 422 . 84.876  93.889  -8.457  1.00
3.42   1 . .
ATOM 6564 CE2   CE2   . PHE PHE PHE B B 422 422 . 84.932  92.881  -9.445  1.00
7.05   1 . .
ATOM 6565 CD2   CD2   . PHE PHE PHE B B 422 422 . 83.832  92.084  -9.643  1.00
8.37   1 . .
ATOM 6566 C     C     . PHE PHE PHE B B 422 422 . 80.568  92.986  -10.794 1.00
6.65   1 . .
ATOM 6567 O     O     . PHE PHE PHE B B 422 422 . 80.762  92.486  -11.898 1.00
8.02   1 . .
ATOM 6568 N     N     . ALA ALA ALA B B 423 423 . 80.616  94.307  -10.592 1.00
5.75   1 . .
ATOM 6569 CA    CA    . ALA ALA ALA B B 423 423 . 80.698  95.215  -11.754 1.00
5.40   1 . .
ATOM 6570 CB    CB    . ALA ALA ALA B B 423 423 . 80.596  96.718  -11.331 1.00
5.24   1 . .
ATOM 6571 C     C     . ALA ALA ALA B B 423 423 . 81.914  94.995  -12.585 1.00
5.97   1 . .
ATOM 6572 O     O     . ALA ALA ALA B B 423 423 . 81.814  95.115  -13.804 1.00
7.14   1 . .
ATOM 6573 N     N     . GLY GLY GLY B B 424 424 . 83.031  94.739  -11.931 1.00
6.48   1 . .
ATOM 6574 CA    CA    . GLY GLY GLY B B 424 424 . 84.297  94.425  -12.569 1.00
8.08   1 . .
ATOM 6575 C     C     . GLY GLY GLY B B 424 424 . 84.656  95.512  -13.588 1.00
10.59  1 . .
ATOM 6576 O     O     . GLY GLY GLY B B 424 424 . 84.606  96.713  -13.327 1.00
10.60  1 . .
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ATOM 6577 N     N     . HIS HIS HIS B B 425 425 . 84.936  95.079  -14.807 1.00
9.70   1 . .
ATOM 6578 CA    CA    . HIS HIS HIS B B 425 425 . 85.383  95.957  -15.825 1.00
11.40  1 . .
ATOM 6579 CB    CB    . HIS HIS HIS B B 425 425 . 85.994  95.095  -16.921 1.00
11.19  1 . .
ATOM 6580 CG    CG    . HIS HIS HIS B B 425 425 . 87.365  94.631  -16.560 1.00
11.02  1 . .
ATOM 6581 ND1   ND1   . HIS HIS HIS B B 425 425 . 87.680  93.303  -16.371 1.00
14.58  1 . .
ATOM 6582 CE1   CE1   . HIS HIS HIS B B 425 425 . 88.952  93.212  -16.032 1.00
11.59  1 . .
ATOM 6583 NE2   NE2   . HIS HIS HIS B B 425 425 . 89.463  94.434  -15.975 1.00
14.01  1 . .
ATOM 6584 CD2   CD2   . HIS HIS HIS B B 425 425 . 88.484  95.333  -16.286 1.00
11.47  1 . .
ATOM 6585 C     C     . HIS HIS HIS B B 425 425 . 84.358  96.904  -16.352 1.00
11.53  1 . .
ATOM 6586 O     O     . HIS HIS HIS B B 425 425 . 84.707  97.883  -17.000 1.00
13.10  1 . .
ATOM 6587 N     N     . ASN ASN ASN B B 426 426 . 83.107  96.633  -16.034 1.00
9.52   1 . .
ATOM 6588 CA    CA    . ASN ASN ASN B B 426 426 . 82.010  97.503  -16.424 1.00
10.25  1 . .
ATOM 6589 CB    CB    . ASN ASN ASN B B 426 426 . 80.804  96.670  -16.815 1.00
11.76  1 . .
ATOM 6590 CG    CG    . ASN ASN ASN B B 426 426 . 80.917  96.083  -18.201 1.00
15.85  1 . .
ATOM 6591 OD1   OD1   . ASN ASN ASN B B 426 426 . 80.992  96.809  -19.218 1.00
23.37  1 . .
ATOM 6592 ND2   ND2   . ASN ASN ASN B B 426 426 . 80.862  94.785  -18.262 1.00
18.53  1 . .
ATOM 6593 C     C     . ASN ASN ASN B B 426 426 . 81.601  98.472  -15.296 1.00
7.81   1 . .
ATOM 6594 O     O     . ASN ASN ASN B B 426 426 . 80.436  98.882  -15.175 1.00
9.21   1 . .
ATOM 6595 N     N     . PHE PHE PHE B B 427 427 . 82.549  98.823  -14.460 1.00
4.55   1 . .
ATOM 6596 CA    CA    . PHE PHE PHE B B 427 427 . 82.205  99.692  -13.306 1.00
4.45   1 . .
ATOM 6597 CB    CB    . PHE PHE PHE B B 427 427 . 83.383  99.903  -12.421 1.00
4.79   1 . .
ATOM 6598 CG    CG    . PHE PHE PHE B B 427 427 . 84.416  100.793 -12.984 1.00
5.76   1 . .
ATOM 6599 CD1   CD1   . PHE PHE PHE B B 427 427 . 85.342  100.288 -13.897 1.00
5.54   1 . .
ATOM 6600 CE1   CE1   . PHE PHE PHE B B 427 427 . 86.371  101.121 -14.391 1.00
7.38   1 . .
ATOM 6601 CZ    CZ    . PHE PHE PHE B B 427 427 . 86.468  102.396 -13.922 1.00
6.21   1 . .
ATOM 6602 CE2   CE2   . PHE PHE PHE B B 427 427 . 85.529  102.900 -12.967 1.00
3.17   1 . .
ATOM 6603 CD2   CD2   . PHE PHE PHE B B 427 427 . 84.518  102.113 -12.552 1.00
2.19   1 . .
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ATOM 6604 C     C     . PHE PHE PHE B B 427 427 . 81.572  101.022 -13.738 1.00
3.40   1 . .
ATOM 6605 O     O     . PHE PHE PHE B B 427 427 . 80.652  101.559 -13.088 1.00
3.91   1 . .
ATOM 6606 N     N     . ARG ARG ARG B B 428 428 . 82.019  101.500 -14.897 1.00
5.90   1 . .
ATOM 6607 CA    CA    . ARG ARG ARG B B 428 428 . 81.540  102.779 -15.432 1.00
7.57   1 . .
ATOM 6608 CB    CB    . ARG ARG ARG B B 428 428 . 82.479  103.339 -16.505 1.00
6.87   1 . .
ATOM 6609 CG    CG    . ARG ARG ARG B B 428 428 . 83.821  103.839 -15.984 1.00
9.02   1 . .
ATOM 6610 CD    CD    . ARG ARG ARG B B 428 428 . 84.783  104.347 -17.110 1.00
6.50   1 . .
ATOM 6611 NE    NE    . ARG ARG ARG B B 428 428 . 84.121  105.461 -17.765 1.00
5.37   1 . .
ATOM 6612 CZ    CZ    . ARG ARG ARG B B 428 428 . 84.612  106.134 -18.828 1.00
5.50   1 . .
ATOM 6613 NH1   NH1   . ARG ARG ARG B B 428 428 . 85.845  105.908 -19.269 1.00
7.24   1 . .
ATOM 6614 NH2   NH2   . ARG ARG ARG B B 428 428 . 83.897  107.151 -19.336 1.00
9.62   1 . .
ATOM 6615 C     C     . ARG ARG ARG B B 428 428 . 80.127  102.594 -15.931 1.00
9.21   1 . .
ATOM 6616 O     O     . ARG ARG ARG B B 428 428 . 79.291  103.483 -15.817 1.00
13.22  1 . .
ATOM 6617 N     N     . ASN ASN ASN B B 429 429 . 79.804  101.449 -16.537 1.00
11.78  1 . .
ATOM 6618 CA    CA    . ASN ASN ASN B B 429 429 . 78.419  101.345 -16.997 1.00
12.55  1 . .
ATOM 6619 CB    CB    . ASN ASN ASN B B 429 429 . 78.298  101.742 -18.457 1.00
13.89  1 . .
ATOM 6620 CG    CG    . ASN ASN ASN B B 429 429 . 79.017  100.783 -19.370 1.00
16.45  1 . .
ATOM 6621 OD1   OD1   . ASN ASN ASN B B 429 429 . 78.590  100.577 -20.519 1.00
21.33  1 . .
ATOM 6622 ND2   ND2   . ASN ASN ASN B B 429 429 . 80.119  100.163 -18.874 1.00
18.21  1 . .
ATOM 6623 C     C     . ASN ASN ASN B B 429 429 . 77.910  99.930  -16.790 1.00
13.90  1 . .
ATOM 6624 O     O     . ASN ASN ASN B B 429 429 . 77.817  99.111  -17.749 1.00
13.85  1 . .
ATOM 6625 N     N     . PRO PRO PRO B B 430 430 . 77.600  99.622  -15.530 1.00
14.40  1 . .
ATOM 6626 CA    CA    . PRO PRO PRO B B 430 430 . 77.232  98.279  -15.067 1.00
16.24  1 . .
ATOM 6627 CB    CB    . PRO PRO PRO B B 430 430 . 77.161  98.479  -13.556 1.00
15.98  1 . .
ATOM 6628 CG    CG    . PRO PRO PRO B B 430 430 . 76.763  99.906  -13.405 1.00
15.71  1 . .
ATOM 6629 CD    CD    . PRO PRO PRO B B 430 430 . 77.623  100.585 -14.408 1.00
13.58  1 . .
ATOM 6630 C     C     . PRO PRO PRO B B 430 430 . 75.887  97.810  -15.574 1.00
19.05  1 . .
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ATOM 6631 O     O     . PRO PRO PRO B B 430 430 . 75.567  96.620  -15.477 1.00
19.26  1 . .
ATOM 6632 N     N     . SER SER SER B B 431 431 . 75.107  98.752  -16.099 1.00
21.90  1 . .
ATOM 6633 CA    CA    . SER SER SER B B 431 431 . 73.774  98.477  -16.591 1.00
25.53  1 . .
ATOM 6634 CB    CB    . SER SER SER B B 431 431 . 73.153  99.742  -17.165 1.00
26.06  1 . .
ATOM 6635 OG    OG    . SER SER SER B B 431 431 . 73.648  99.998  -18.464 1.00
27.08  1 . .
ATOM 6636 C     C     . SER SER SER B B 431 431 . 73.739  97.404  -17.665 1.00
26.55  1 . .
ATOM 6637 O     O     . SER SER SER B B 431 431 . 72.656  96.959  -18.000 1.00
28.18  1 . .
ATOM 6638 N     N     . VAL VAL VAL B B 432 432 . 74.900  97.008  -18.196 1.00
27.14  1 . .
ATOM 6639 CA    CA    . VAL VAL VAL B B 432 432 . 74.984  95.949  -19.224 1.00
27.67  1 . .
ATOM 6640 CB    CB    . VAL VAL VAL B B 432 432 . 76.183  96.134  -20.201 1.00
27.74  1 . .
ATOM 6641 CG1   CG1   . VAL VAL VAL B B 432 432 . 76.144  97.512  -20.875 1.00
27.37  1 . .
ATOM 6642 CG2   CG2   . VAL VAL VAL B B 432 432 . 77.544  95.864  -19.523 1.00
27.86  1 . .
ATOM 6643 C     C     . VAL VAL VAL B B 432 432 . 75.022  94.545  -18.631 1.00
28.26  1 . .
ATOM 6644 O     O     . VAL VAL VAL B B 432 432 . 75.119  94.372  -17.410 1.00
27.55  1 . .
ATOM 6645 MG+2  MG+2  . MG2 MG2 MG2 B B 440 440 . 86.035  114.571 -3.635  1.00
2.80   1 . .
ATOM 6646 MG+2  MG+2  . MG2 MG2 MG2 B B 441 441 . 85.699  117.153 -0.559  1.00
3.39   1 . .
ATOM 6647 O3P   O3P   . PEP PEP PEP B B 442 442 . 84.976  116.143 1.109   1.00
3.00   1 . .
ATOM 6648 P     P     . PEP PEP PEP B B 442 442 . 85.584  115.103 2.039   1.00
2.32   1 . .
ATOM 6649 O1P   O1P   . PEP PEP PEP B B 442 442 . 84.479  114.272 2.611   1.00
3.44   1 . .
ATOM 6650 O2P   O2P   . PEP PEP PEP B B 442 442 . 86.607  115.717 2.959   1.00
2.45   1 . .
ATOM 6651 O2    O2    . PEP PEP PEP B B 442 442 . 86.465  114.150 1.110   1.00
3.40   1 . .
ATOM 6652 C2    C2    . PEP PEP PEP B B 442 442 . 85.649  113.531 0.147   1.00
3.58   1 . .
ATOM 6653 C3    C3    . PEP PEP PEP B B 442 442 . 85.578  111.995 0.279   1.00
10.42  1 . .
ATOM 6654 C1    C1    . PEP PEP PEP B B 442 442 . 85.894  114.112 -1.243  1.00
5.40   1 . .
ATOM 6655 O1    O1    . PEP PEP PEP B B 442 442 . 86.347  115.311 -1.403  1.00
4.25   1 . .
ATOM 6656 "O2'" "O2'" . PEP PEP PEP B B 442 442 . 85.566  113.346 -2.212  1.00
5.89   1 . .
ATOM 6657 O     O     . HOH HOH HOH B B 446 446 . 86.791  116.405 -4.476  1.00
2.00   1 . .
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ATOM 6658 O     O     . HOH HOH HOH B B 447 447 . 86.486  118.137 -2.195  1.00
3.82   1 . .
ATOM 6659 O     O     . HOH HOH HOH B B 448 448 . 83.754  117.064 -1.432  1.00
5.39   1 . .
ATOM 6660 N     N     . GLY GLY GLY B B 555 555 . 96.030  116.495 0.096   0.50
7.08   1 . .
ATOM 6661 CA    CA    . GLY GLY GLY B B 555 555 . 95.572  117.949 -0.127  0.50
5.20   1 . .
ATOM 6662 C     C     . GLY GLY GLY B B 555 555 . 95.539  118.929 1.044   0.50
4.82   1 . .
ATOM 6663 O     O     . GLY GLY GLY B B 555 555 . 96.480  119.004 1.810   0.50
3.60   1 . .
ATOM 6664 N     N     . SER SER SER B B 556 556 . 94.426  119.648 1.174   0.50
4.98   1 . .
ATOM 6665 CA    CA    . SER SER SER B B 556 556 . 94.302  120.776 2.128   0.50
5.28   1 . .
ATOM 6666 CB    CB    . SER SER SER B B 556 556 . 92.908  121.351 2.080   0.50
5.83   1 . .
ATOM 6667 OG    OG    . SER SER SER B B 556 556 . 92.649  121.831 3.394   0.50
10.88  1 . .
ATOM 6668 C     C     . SER SER SER B B 556 556 . 94.510  120.410 3.581   0.50
5.55   1 . .
ATOM 6669 O     O     . SER SER SER B B 556 556 . 94.704  121.317 4.427   0.50
5.82   1 . .
ATOM 6670 N     N     . HIS HIS HIS B B 557 557 . 94.411  119.107 3.887   0.50
5.82   1 . .
ATOM 6671 CA    CA    . HIS HIS HIS B B 557 557 . 94.433  118.669 5.294   0.50
5.42   1 . .
ATOM 6672 CB    CB    . HIS HIS HIS B B 557 557 . 93.031  118.196 5.729   0.50
4.60   1 . .
ATOM 6673 CG    CG    . HIS HIS HIS B B 557 557 . 91.965  119.250 5.666   0.50
5.50   1 . .
ATOM 6674 ND1   ND1   . HIS HIS HIS B B 557 557 . 91.187  119.471 4.548   0.50
5.38   1 . .
ATOM 6675 CE1   CE1   . HIS HIS HIS B B 557 557 . 90.332  120.454 4.791   0.50
3.49   1 . .
ATOM 6676 NE2   NE2   . HIS HIS HIS B B 557 557 . 90.491  120.845 6.043   0.50
4.98   1 . .
ATOM 6677 CD2   CD2   . HIS HIS HIS B B 557 557 . 91.487  120.088 6.619   0.50
6.03   1 . .
ATOM 6678 C     C     . HIS HIS HIS B B 557 557 . 95.407  117.538 5.496   0.50
7.07   1 . .
ATOM 6679 O     O     . HIS HIS HIS B B 557 557 . 95.164  116.601 6.296   0.50
8.12   1 . .
ATOM 6680 N     N     . ALA ALA ALA B B 558 558 . 96.520  117.570 4.784   0.50
7.48   1 . .
ATOM 6681 CA    CA    . ALA ALA ALA B B 558 558 . 97.285  116.337 4.727   0.50
8.96   1 . .
ATOM 6682 CB    CB    . ALA ALA ALA B B 558 558 . 97.610  116.017 3.333   0.50
8.59   1 . .
ATOM 6683 C     C     . ALA ALA ALA B B 558 558 . 98.520  116.230 5.615   0.50
10.17  1 . .
ATOM 6684 O     O     . ALA ALA ALA B B 558 558 . 99.406  117.110 5.588   0.50
10.40  1 . .
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ATOM 6685 N     N     . GLY GLY GLY B B 559 559 . 98.578  115.135 6.375   0.50
10.81  1 . .
ATOM 6686 CA    CA    . GLY GLY GLY B B 559 559 . 99.703  114.899 7.268   0.50
12.19  1 . .
ATOM 6687 C     C     . GLY GLY GLY B B 559 559 . 100.944 114.479 6.520   0.50
11.30  1 . .
ATOM 6688 O     O     . GLY GLY GLY B B 559 559 . 102.017 115.029 6.713   0.50
10.93  1 . .
ATOM 6689 O     O     . HOH HOH HOH S . 1   1   . 95.217  88.492  18.858  1.00
2.26   1 . .
ATOM 6690 O     O     . HOH HOH HOH S . 2   2   . 87.880  92.335  26.333  1.00
2.08   1 . .
ATOM 6691 O     O     . HOH HOH HOH S . 3   3   . 90.217  90.802  23.446  1.00
2.62   1 . .
ATOM 6692 O     O     . HOH HOH HOH S . 4   4   . 82.262  107.009 14.678  1.00
2.77   1 . .
ATOM 6693 O     O     . HOH HOH HOH S . 5   5   . 92.953  103.711 24.522  1.00
2.20   1 . .
ATOM 6694 O     O     . HOH HOH HOH S . 6   6   . 88.310  110.291 9.641   1.00
2.19   1 . .
ATOM 6695 O     O     . HOH HOH HOH S . 7   7   . 84.098  94.886  21.337  1.00
2.83   1 . .
ATOM 6696 O     O     . HOH HOH HOH S . 8   8   . 80.464  123.023 -4.173  1.00
2.76   1 . .
ATOM 6697 O     O     . HOH HOH HOH S . 9   9   . 92.133  80.254  10.596  1.00
2.81   1 . .
ATOM 6698 O     O     . HOH HOH HOH S . 10  10  . 79.941  96.405  8.979   1.00
2.39   1 . .
ATOM 6699 O     O     . HOH HOH HOH S . 11  11  . 96.310  86.511  20.364  1.00
4.98   1 . .
ATOM 6700 O     O     . HOH HOH HOH S . 12  12  . 92.771  90.270  12.260  1.00
3.94   1 . .
ATOM 6701 O     O     . HOH HOH HOH S . 13  13  . 93.611  81.789  3.755   1.00
4.00   1 . .
ATOM 6702 O     O     . HOH HOH HOH S . 14  14  . 94.824  101.775 24.254  1.00
3.22   1 . .
ATOM 6703 O     O     . HOH HOH HOH S . 15  15  . 86.603  96.419  10.917  1.00
3.28   1 . .
ATOM 6704 O     O     . HOH HOH HOH S . 16  16  . 90.771  86.293  14.414  1.00
4.82   1 . .
ATOM 6705 O     O     . HOH HOH HOH S . 17  17  . 84.844  92.027  19.695  1.00
3.12   1 . .
ATOM 6706 O     O     . HOH HOH HOH S . 18  18  . 84.262  108.620 46.229  1.00
2.48   1 . .
ATOM 6707 O     O     . HOH HOH HOH S . 19  19  . 104.664 97.892  21.209  1.00
4.11   1 . .
ATOM 6708 O     O     . HOH HOH HOH S . 20  20  . 88.667  93.023  23.331  1.00
2.59   1 . .
ATOM 6709 O     O     . HOH HOH HOH S . 21  21  . 87.060  120.477 -5.413  1.00
3.66   1 . .
ATOM 6710 O     O     . HOH HOH HOH S . 22  22  . 86.778  93.887  21.203  1.00
2.62   1 . .
ATOM 6711 O     O     . HOH HOH HOH S . 23  23  . 82.376  112.028 -21.584 1.00
7.75   1 . .
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ATOM 6712 O     O     . HOH HOH HOH S . 24  24  . 96.072  83.039  4.559   1.00
5.85   1 . .
ATOM 6713 O     O     . HOH HOH HOH S . 25  25  . 102.562 111.339 11.831  1.00
7.74   1 . .
ATOM 6714 O     O     . HOH HOH HOH S . 26  26  . 88.399  105.385 -0.897  1.00
4.06   1 . .
ATOM 6715 O     O     . HOH HOH HOH S . 27  27  . 85.576  110.797 -21.124 1.00
5.32   1 . .
ATOM 6716 O     O     . HOH HOH HOH S . 28  28  . 86.219  93.407  17.534  1.00
2.72   1 . .
ATOM 6717 O     O     . HOH HOH HOH S . 29  29  . 94.160  84.846  20.746  1.00
2.89   1 . .
ATOM 6718 O     O     . HOH HOH HOH S . 30  30  . 94.146  99.187  13.890  1.00
2.00   1 . .
ATOM 6719 O     O     . HOH HOH HOH S . 31  31  . 78.273  115.485 -6.208  1.00
3.98   1 . .
ATOM 6720 O     O     . HOH HOH HOH S . 32  32  . 92.046  87.055  16.849  1.00
2.70   1 . .
ATOM 6721 O     O     . HOH HOH HOH S . 33  33  . 85.195  128.481 -16.193 1.00
2.00   1 . .
ATOM 6722 O     O     . HOH HOH HOH S . 34  34  . 93.201  112.454 13.852  1.00
2.60   1 . .
ATOM 6723 O     O     . HOH HOH HOH S . 35  35  . 78.629  119.707 4.255   1.00
3.95   1 . .
ATOM 6724 O     O     . HOH HOH HOH S . 36  36  . 102.253 86.556  27.423  1.00
3.32   1 . .
ATOM 6725 O     O     . HOH HOH HOH S . 37  37  . 77.305  116.515 8.555   1.00
4.72   1 . .
ATOM 6726 O     O     . HOH HOH HOH S . 38  38  . 95.791  90.293  30.910  1.00
5.79   1 . .
ATOM 6727 O     O     . HOH HOH HOH S . 39  39  . 82.362  100.048 34.378  1.00
4.93   1 . .
ATOM 6728 O     O     . HOH HOH HOH S . 40  40  . 97.751  100.948 8.467   1.00
5.44   1 . .
ATOM 6729 O     O     . HOH HOH HOH S . 41  41  . 77.914  107.726 4.833   1.00
4.83   1 . .
ATOM 6730 O     O     . HOH HOH HOH S . 42  42  . 89.701  74.535  25.017  1.00
10.33  1 . .
ATOM 6731 O     O     . HOH HOH HOH S . 43  43  . 75.482  117.338 6.862   1.00
9.20   1 . .
ATOM 6732 O     O     . HOH HOH HOH S . 44  44  . 76.918  104.970 5.481   1.00
4.18   1 . .
ATOM 6733 O     O     . HOH HOH HOH S . 45  45  . 103.781 106.564 43.735  1.00
10.69  1 . .
ATOM 6734 O     O     . HOH HOH HOH S . 46  46  . 112.427 108.053 27.685  1.00
7.92   1 . .
ATOM 6735 O     O     . HOH HOH HOH S . 47  47  . 78.528  102.421 18.161  1.00
2.24   1 . .
ATOM 6736 O     O     . HOH HOH HOH S . 48  48  . 96.255  101.147 11.083  1.00
7.31   1 . .
ATOM 6737 O     O     . HOH HOH HOH S . 50  50  . 74.025  121.913 15.368  1.00
5.25   1 . .
ATOM 6738 O     O     . HOH HOH HOH S . 51  51  . 84.999  115.596 11.229  1.00
7.15   1 . .
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ATOM 6739 O     O     . HOH HOH HOH S . 52  52  . 112.841 102.648 18.064  1.00
12.21  1 . .
ATOM 6740 O     O     . HOH HOH HOH S . 53  53  . 77.957  122.708 21.403  1.00
4.62   1 . .
ATOM 6741 O     O     . HOH HOH HOH S . 54  54  . 68.600  75.127  28.261  1.00
9.74   1 . .
ATOM 6742 O     O     . HOH HOH HOH S . 55  55  . 76.296  108.906 -0.012  1.00
5.07   1 . .
ATOM 6743 O     O     . HOH HOH HOH S . 56  56  . 79.827  117.825 5.727   1.00
4.86   1 . .
ATOM 6744 O     O     . HOH HOH HOH S . 57  57  . 95.299  93.252  12.646  1.00
6.60   1 . .
ATOM 6745 O     O     . HOH HOH HOH S . 58  58  . 101.849 110.403 39.507  1.00
7.82   1 . .
ATOM 6746 O     O     . HOH HOH HOH S . 59  59  . 82.850  118.483 -22.709 1.00
4.18   1 . .
ATOM 6747 O     O     . HOH HOH HOH S . 60  60  . 80.173  114.531 24.778  1.00
5.71   1 . .
ATOM 6748 O     O     . HOH HOH HOH S . 61  61  . 74.755  67.342  15.534  1.00
5.19   1 . .
ATOM 6749 O     O     . HOH HOH HOH S . 62  62  . 75.941  119.085 4.592   1.00
4.66   1 . .
ATOM 6750 O     O     . HOH HOH HOH S . 63  63  . 75.855  107.663 7.132   1.00
3.32   1 . .
ATOM 6751 O     O     . HOH HOH HOH S . 64  64  . 75.621  80.874  32.246  1.00
9.73   1 . .
ATOM 6752 O     O     . HOH HOH HOH S . 65  65  . 97.227  77.182  9.952   1.00
8.75   1 . .
ATOM 6753 O     O     . HOH HOH HOH S . 66  66  . 77.254  96.038  22.073  1.00
7.70   1 . .
ATOM 6754 O     O     . HOH HOH HOH S . 67  67  . 97.720  102.052 32.233  1.00
4.80   1 . .
ATOM 6755 O     O     . HOH HOH HOH S . 68  68  . 74.340  83.925  27.183  1.00
4.98   1 . .
ATOM 6756 O     O     . HOH HOH HOH S . 69  69  . 78.855  127.496 -10.481 1.00
4.36   1 . .
ATOM 6757 O     O     . HOH HOH HOH S . 70  70  . 95.796  82.810  27.879  1.00
5.00   1 . .
ATOM 6758 O     O     . HOH HOH HOH S . 71  71  . 81.901  81.981  5.374   1.00
6.31   1 . .
ATOM 6759 O     O     . HOH HOH HOH S . 72  72  . 78.076  109.399 2.495   1.00
5.59   1 . .
ATOM 6760 O     O     . HOH HOH HOH S . 73  73  . 100.831 102.543 -17.245 1.00
17.22  1 . .
ATOM 6761 O     O     . HOH HOH HOH S . 74  74  . 84.799  128.401 -6.411  1.00
5.34   1 . .
ATOM 6762 O     O     . HOH HOH HOH S . 75  75  . 77.336  112.017 2.339   1.00
3.26   1 . .
ATOM 6763 O     O     . HOH HOH HOH S . 76  76  . 76.542  98.800  -7.336  1.00
5.93   1 . .
ATOM 6764 O     O     . HOH HOH HOH S . 77  77  . 93.173  73.854  12.024  1.00
9.61   1 . .
ATOM 6765 O     O     . HOH HOH HOH S . 78  78  . 88.193  109.116 -9.446  1.00
2.96   1 . .
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ATOM 6766 O     O     . HOH HOH HOH S . 79  79  . 73.634  120.976 -2.434  1.00
6.91   1 . .
ATOM 6767 O     O     . HOH HOH HOH S . 80  80  . 95.262  113.089 12.126  1.00
11.72  1 . .
ATOM 6768 O     O     . HOH HOH HOH S . 81  81  . 85.240  120.879 -7.992  1.00
5.11   1 . .
ATOM 6769 O     O     . HOH HOH HOH S . 82  82  . 106.296 95.917  0.011   1.00
12.04  1 . .
ATOM 6770 O     O     . HOH HOH HOH S . 83  83  . 112.679 112.574 21.069  1.00
9.09   1 . .
ATOM 6771 O     O     . HOH HOH HOH S . 84  84  . 79.201  127.985 -17.876 1.00
7.23   1 . .
ATOM 6772 O     O     . HOH HOH HOH S . 85  85  . 102.374 117.159 -9.956  1.00
26.60  1 . .
ATOM 6773 O     O     . HOH HOH HOH S . 87  87  . 85.509  124.820 -1.630  1.00
10.31  1 . .
ATOM 6774 O     O     . HOH HOH HOH S . 88  88  . 84.317  83.752  4.803   1.00
9.58   1 . .
ATOM 6775 O     O     . HOH HOH HOH S . 89  89  . 96.280  100.046 31.123  1.00
5.21   1 . .
ATOM 6776 O     O     . HOH HOH HOH S . 90  90  . 85.893  109.404 -7.739  1.00
5.01   1 . .
ATOM 6777 O     O     . HOH HOH HOH S . 91  91  . 82.361  120.071 7.577   1.00
11.73  1 . .
ATOM 6778 O     O     . HOH HOH HOH S . 92  92  . 88.809  98.566  38.341  1.00
9.99   1 . .
ATOM 6779 O     O     . HOH HOH HOH S . 93  93  . 92.579  111.557 1.203   1.00
15.29  1 . .
ATOM 6780 O     O     . HOH HOH HOH S . 94  94  . 70.172  113.763 22.914  1.00
10.60  1 . .
ATOM 6781 O     O     . HOH HOH HOH S . 95  95  . 76.587  116.432 11.396  1.00
6.58   1 . .
ATOM 6782 O     O     . HOH HOH HOH S . 96  96  . 84.557  113.077 38.554  1.00
10.03  1 . .
ATOM 6783 O     O     . HOH HOH HOH S . 97  97  . 61.407  104.350 3.288   1.00
10.03  1 . .
ATOM 6784 O     O     . HOH HOH HOH S . 98  98  . 79.254  116.833 26.422  1.00
11.85  1 . .
ATOM 6785 O     O     . HOH HOH HOH S . 99  99  . 99.473  102.718 20.535  1.00
4.26   1 . .
ATOM 6786 O     O     . HOH HOH HOH S . 100 100 . 93.349  118.940 -2.965  1.00
9.83   1 . .
ATOM 6787 O     O     . HOH HOH HOH S . 101 101 . 104.430 93.430  27.225  1.00
5.94   1 . .
ATOM 6788 O     O     . HOH HOH HOH S . 102 102 . 78.975  114.814 -20.222 1.00
11.86  1 . .
ATOM 6789 O     O     . HOH HOH HOH S . 103 103 . 76.404  67.611  17.338  1.00
5.90   1 . .
ATOM 6790 O     O     . HOH HOH HOH S . 104 104 . 80.006  123.693 19.891  1.00
3.73   1 . .
ATOM 6791 O     O     . HOH HOH HOH S . 105 105 . 88.191  88.687  0.885   1.00
4.88   1 . .
ATOM 6792 O     O     . HOH HOH HOH S . 106 106 . 67.975  123.975 17.848  1.00
9.63   1 . .
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ATOM 6793 O     O     . HOH HOH HOH S . 107 107 . 80.382  93.157  12.878  1.00
12.60  1 . .
ATOM 6794 O     O     . HOH HOH HOH S . 108 108 . 74.422  125.565 -18.724 1.00
12.98  1 . .
ATOM 6795 O     O     . HOH HOH HOH S . 109 109 . 78.367  103.901 -12.701 1.00
7.87   1 . .
ATOM 6796 O     O     . HOH HOH HOH S . 110 110 . 81.433  115.498 12.419  1.00
5.27   1 . .
ATOM 6797 O     O     . HOH HOH HOH S . 111 111 . 90.597  105.094 41.789  1.00
4.42   1 . .
ATOM 6798 O     O     . HOH HOH HOH S . 112 112 . 74.420  76.111  11.800  1.00
7.64   1 . .
ATOM 6799 O     O     . HOH HOH HOH S . 113 113 . 110.470 108.771 14.917  1.00
15.44  1 . .
ATOM 6800 O     O     . HOH HOH HOH S . 114 114 . 91.937  110.983 11.735  1.00
4.32   1 . .
ATOM 6801 O     O     . HOH HOH HOH S . 115 115 . 77.255  124.647 23.436  1.00
9.33   1 . .
ATOM 6802 O     O     . HOH HOH HOH S . 116 116 . 73.117  81.901  32.488  1.00
11.09  1 . .
ATOM 6803 O     O     . HOH HOH HOH S . 117 117 . 85.267  125.240 -22.272 1.00
8.12   1 . .
ATOM 6804 O     O     . HOH HOH HOH S . 118 118 . 72.652  69.219  14.963  1.00
13.42  1 . .
ATOM 6805 O     O     . HOH HOH HOH S . 119 119 . 88.067  108.155 -1.016  1.00
9.71   1 . .
ATOM 6806 O     O     . HOH HOH HOH S . 120 120 . 96.535  123.360 20.151  1.00
7.15   1 . .
ATOM 6807 O     O     . HOH HOH HOH S . 121 121 . 73.642  91.505  16.553  1.00
14.49  1 . .
ATOM 6808 O     O     . HOH HOH HOH S . 122 122 . 81.200  124.791 -19.654 1.00
6.77   1 . .
ATOM 6809 O     O     . HOH HOH HOH S . 123 123 . 75.048  78.282  31.604  1.00
12.33  1 . .
ATOM 6810 O     O     . HOH HOH HOH S . 124 124 . 111.721 105.174 23.027  1.00
8.93   1 . .
ATOM 6811 O     O     . HOH HOH HOH S . 125 125 . 82.892  77.527  6.175   1.00
10.13  1 . .
ATOM 6812 O     O     . HOH HOH HOH S . 126 126 . 79.114  99.219  14.992  1.00
6.96   1 . .
ATOM 6813 O     O     . HOH HOH HOH S . 127 127 . 104.498 91.987  30.032  1.00
11.25  1 . .
ATOM 6814 O     O     . HOH HOH HOH S . 128 128 . 103.721 123.079 20.545  1.00
7.93   1 . .
ATOM 6815 O     O     . HOH HOH HOH S . 129 129 . 121.625 98.981  35.899  1.00
12.61  1 . .
ATOM 6816 O     O     . HOH HOH HOH S . 130 130 . 75.197  127.902 15.002  1.00
13.03  1 . .
ATOM 6817 O     O     . HOH HOH HOH S . 131 131 . 73.420  97.451  24.752  1.00
10.86  1 . .
ATOM 6818 O     O     . HOH HOH HOH S . 132 132 . 109.725 89.371  25.138  1.00
10.44  1 . .
ATOM 6819 O     O     . HOH HOH HOH S . 133 133 . 70.469  119.299 21.746  1.00
12.67  1 . .
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ATOM 6820 O     O     . HOH HOH HOH S . 134 134 . 89.224  74.084  9.566   1.00
8.34   1 . .
ATOM 6821 O     O     . HOH HOH HOH S . 135 135 . 92.267  118.555 -0.435  1.00
9.85   1 . .
ATOM 6822 O     O     . HOH HOH HOH S . 136 136 . 99.465  93.052  44.082  1.00
11.76  1 . .
ATOM 6823 O     O     . HOH HOH HOH S . 137 137 . 104.233 91.170  23.737  1.00
8.65   1 . .
ATOM 6824 O     O     . HOH HOH HOH S . 138 138 . 91.902  85.401  19.085  1.00
7.37   1 . .
ATOM 6825 O     O     . HOH HOH HOH S . 139 139 . 65.955  121.718 0.777   1.00
10.55  1 . .
ATOM 6826 O     O     . HOH HOH HOH S . 140 140 . 78.292  108.095 8.649   1.00
5.26   1 . .
ATOM 6827 O     O     . HOH HOH HOH S . 141 141 . 98.450  82.916  18.584  1.00
11.46  1 . .
ATOM 6828 O     O     . HOH HOH HOH S . 142 142 . 106.425 98.688  23.278  1.00
4.21   1 . .
ATOM 6829 O     O     . HOH HOH HOH S . 143 143 . 54.636  101.401 13.808  1.00
19.23  1 . .
ATOM 6830 O     O     . HOH HOH HOH S . 144 144 . 98.029  88.658  15.990  1.00
8.39   1 . .
ATOM 6831 O     O     . HOH HOH HOH S . 145 145 . 100.071 102.350 9.452   1.00
13.19  1 . .
ATOM 6832 O     O     . HOH HOH HOH S . 146 146 . 77.071  68.725  21.799  1.00
10.44  1 . .
ATOM 6833 O     O     . HOH HOH HOH S . 147 147 . 76.791  76.104  9.947   1.00
11.57  1 . .
ATOM 6834 O     O     . HOH HOH HOH S . 148 148 . 98.013  100.842 45.300  1.00
20.56  1 . .
ATOM 6835 O     O     . HOH HOH HOH S . 149 149 . 79.325  71.002  6.956   1.00
21.45  1 . .
ATOM 6836 O     O     . HOH HOH HOH S . 150 150 . 79.885  88.630  -11.364 1.00
12.80  1 . .
ATOM 6837 O     O     . HOH HOH HOH S . 151 151 . 75.291  109.695 27.530  1.00
12.22  1 . .
ATOM 6838 O     O     . HOH HOH HOH S . 152 152 . 67.890  77.157  30.311  1.00
8.58   1 . .
ATOM 6839 O     O     . HOH HOH HOH S . 153 153 . 70.868  86.633  32.479  1.00
9.20   1 . .
ATOM 6840 O     O     . HOH HOH HOH S . 154 154 . 76.688  104.544 -18.353 1.00
68.41  1 . .
ATOM 6841 O     O     . HOH HOH HOH S . 155 155 . 54.058  108.536 11.067  1.00
15.86  1 . .
ATOM 6842 O     O     . HOH HOH HOH S . 156 156 . 69.701  126.795 14.908  1.00
21.22  1 . .
ATOM 6843 O     O     . HOH HOH HOH S . 157 157 . 108.266 108.635 41.666  1.00
18.27  1 . .
ATOM 6844 O     O     . HOH HOH HOH S . 158 158 . 96.442  116.688 35.053  1.00
13.15  1 . .
ATOM 6845 O     O     . HOH HOH HOH S . 159 159 . 86.443  123.359 23.169  1.00
15.00  1 . .
ATOM 6846 O     O     . HOH HOH HOH S . 160 160 . 71.264  75.269  20.943  1.00
12.80  1 . .
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ATOM 6847 O     O     . HOH HOH HOH S . 161 161 . 76.346  115.151 -20.045 1.00
8.97   1 . .
ATOM 6848 O     O     . HOH HOH HOH S . 162 162 . 78.730  99.272  12.417  1.00
6.91   1 . .
ATOM 6849 O     O     . HOH HOH HOH S . 163 163 . 88.854  86.367  -0.451  1.00
14.56  1 . .
ATOM 6850 O     O     . HOH HOH HOH S . 164 164 . 68.161  127.742 12.820  1.00
15.35  1 . .
ATOM 6851 O     O     . HOH HOH HOH S . 165 165 . 56.278  108.376 -0.427  1.00
14.98  1 . .
ATOM 6852 O     O     . HOH HOH HOH S . 166 166 . 64.439  122.213 3.177   1.00
14.42  1 . .
ATOM 6853 O     O     . HOH HOH HOH S . 167 167 . 59.364  99.493  10.602  1.00
14.19  1 . .
ATOM 6854 O     O     . HOH HOH HOH S . 168 168 . 83.785  67.395  24.049  1.00
11.92  1 . .
ATOM 6855 O     O     . HOH HOH HOH S . 169 169 . 89.298  85.733  -3.150  1.00
10.13  1 . .
ATOM 6856 O     O     . HOH HOH HOH S . 170 170 . 73.264  114.189 22.720  1.00
18.35  1 . .
ATOM 6857 O     O     . HOH HOH HOH S . 171 171 . 78.316  72.245  28.960  1.00
15.04  1 . .
ATOM 6858 O     O     . HOH HOH HOH S . 172 172 . 93.414  72.364  14.232  1.00
12.19  1 . .
ATOM 6859 O     O     . HOH HOH HOH S . 173 173 . 98.032  80.235  13.486  1.00
16.19  1 . .
ATOM 6860 O     O     . HOH HOH HOH S . 174 174 . 83.495  100.479 -17.088 1.00
14.68  1 . .
ATOM 6861 O     O     . HOH HOH HOH S . 175 175 . 84.901  114.987 -27.659 1.00
11.05  1 . .
ATOM 6862 O     O     . HOH HOH HOH S . 176 176 . 90.785  76.232  26.800  1.00
7.09   1 . .
ATOM 6863 O     O     . HOH HOH HOH S . 177 177 . 78.414  94.992  18.182  1.00
8.93   1 . .
ATOM 6864 O     O     . HOH HOH HOH S . 178 178 . 58.135  125.381 3.037   1.00
11.34  1 . .
ATOM 6865 O     O     . HOH HOH HOH S . 179 179 . 74.445  101.291 9.835   1.00
14.76  1 . .
ATOM 6866 O     O     . HOH HOH HOH S . 180 180 . 80.001  123.916 2.303   1.00
20.17  1 . .
ATOM 6867 O     O     . HOH HOH HOH S . 181 181 . 85.565  118.562 18.124  1.00
10.42  1 . .
ATOM 6868 O     O     . HOH HOH HOH S . 182 182 . 75.529  97.426  9.472   1.00
12.94  1 . .
ATOM 6869 O     O     . HOH HOH HOH S . 183 183 . 91.117  114.262 14.095  1.00
11.55  1 . .
ATOM 6870 O     O     . HOH HOH HOH S . 184 184 . 96.758  111.289 -22.116 1.00
11.98  1 . .
ATOM 6871 O     O     . HOH HOH HOH S . 185 185 . 99.809  97.209  44.946  1.00
11.61  1 . .
ATOM 6872 O     O     . HOH HOH HOH S . 186 186 . 94.409  123.323 33.346  1.00
24.17  1 . .
ATOM 6873 O     O     . HOH HOH HOH S . 187 187 . 82.306  91.654  37.929  1.00
21.31  1 . .
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ATOM 6874 O     O     . HOH HOH HOH S . 188 188 . 105.771 111.408 7.518   1.00
23.72  1 . .
ATOM 6875 O     O     . HOH HOH HOH S . 189 189 . 73.666  99.123  6.152   1.00
8.40   1 . .
ATOM 6876 O     O     . HOH HOH HOH S . 190 190 . 70.313  119.547 -18.284 1.00
25.50  1 . .
ATOM 6877 O     O     . HOH HOH HOH S . 191 191 . 106.221 109.572 12.821  1.00
17.95  1 . .
ATOM 6878 O     O     . HOH HOH HOH S . 192 192 . 104.256 123.789 12.155  1.00
17.51  1 . .
ATOM 6879 O     O     . HOH HOH HOH S . 193 193 . 99.206  92.668  7.224   1.00
29.30  1 . .
ATOM 6880 O     O     . HOH HOH HOH S . 194 194 . 74.129  99.485  19.861  1.00
18.43  1 . .
ATOM 6881 O     O     . HOH HOH HOH S . 195 195 . 96.901  108.663 -23.310 1.00
24.66  1 . .
ATOM 6882 O     O     . HOH HOH HOH S . 196 196 . 78.785  119.973 27.558  1.00
11.05  1 . .
ATOM 6883 O     O     . HOH HOH HOH S . 197 197 . 99.931  89.866  -3.327  1.00
11.70  1 . .
ATOM 6884 O     O     . HOH HOH HOH S . 198 198 . 91.090  132.871 -4.785  1.00
15.89  1 . .
ATOM 6885 O     O     . HOH HOH HOH S . 199 199 . 86.542  91.448  -13.038 1.00
9.57   1 . .
ATOM 6886 O     O     . HOH HOH HOH S . 200 200 . 59.689  111.264 19.738  1.00
21.66  1 . .
ATOM 6887 O     O     . HOH HOH HOH S . 201 201 . 77.376  85.460  -3.702  1.00
20.04  1 . .
ATOM 6888 O     O     . HOH HOH HOH S . 202 202 . 101.929 108.344 6.194   1.00
10.60  1 . .
ATOM 6889 O     O     . HOH HOH HOH S . 204 204 . 105.330 93.506  44.872  1.00
20.09  1 . .
ATOM 6890 O     O     . HOH HOH HOH S . 205 205 . 96.888  74.412  16.382  1.00
22.38  1 . .
ATOM 6891 O     O     . HOH HOH HOH S . 206 206 . 76.707  98.905  18.768  1.00
22.12  1 . .
ATOM 6892 O     O     . HOH HOH HOH S . 207 207 . 56.690  120.239 15.242  1.00
20.21  1 . .
ATOM 6893 O     O     . HOH HOH HOH S . 208 208 . 97.535  98.158  -13.519 1.00
15.89  1 . .
ATOM 6894 O     O     . HOH HOH HOH S . 209 209 . 71.173  95.280  5.030   1.00
16.10  1 . .
ATOM 6895 O     O     . HOH HOH HOH S . 210 210 . 84.112  112.730 -23.598 1.00
17.04  1 . .
ATOM 6896 O     O     . HOH HOH HOH S . 211 211 . 111.773 115.310 20.513  1.00
13.13  1 . .
ATOM 6897 O     O     . HOH HOH HOH S . 212 212 . 91.864  109.463 -22.121 1.00
12.37  1 . .
ATOM 6898 O     O     . HOH HOH HOH S . 213 213 . 77.198  129.751 -10.806 1.00
15.50  1 . .
ATOM 6899 O     O     . HOH HOH HOH S . 214 214 . 86.948  96.474  39.206  1.00
15.31  1 . .
ATOM 6900 O     O     . HOH HOH HOH S . 215 215 . 84.148  117.434 9.661   1.00
9.24   1 . .
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ATOM 6901 O     O     . HOH HOH HOH S . 216 216 . 84.643  109.224 42.234  1.00
15.33  1 . .
ATOM 6902 O     O     . HOH HOH HOH S . 217 217 . 69.301  100.117 12.529  1.00
13.65  1 . .
ATOM 6903 O     O     . HOH HOH HOH S . 218 218 . 104.056 115.626 -10.591 1.00
13.74  1 . .
ATOM 6904 O     O     . HOH HOH HOH S . 219 219 . 69.089  121.272 -0.139  1.00
17.07  1 . .
ATOM 6905 O     O     . HOH HOH HOH S . 220 220 . 75.292  101.774 -17.093 1.00
20.77  1 . .
ATOM 6906 O     O     . HOH HOH HOH S . 221 221 . 65.555  79.695  19.198  1.00
21.46  1 . .
ATOM 6907 O     O     . HOH HOH HOH S . 222 222 . 112.342 115.896 16.298  1.00
43.22  1 . .
ATOM 6908 O     O     . HOH HOH HOH S . 223 223 . 78.860  130.398 -13.492 1.00
8.22   1 . .
ATOM 6909 O     O     . HOH HOH HOH S . 224 224 . 94.276  99.060  40.458  1.00
6.88   1 . .
ATOM 6910 O     O     . HOH HOH HOH S . 225 225 . 86.136  122.226 -1.826  1.00
9.40   1 . .
ATOM 6911 O     O     . HOH HOH HOH S . 226 226 . 89.071  117.958 12.899  1.00
13.83  1 . .
ATOM 6912 O     O     . HOH HOH HOH S . 228 228 . 71.698  94.938  23.716  1.00
13.09  1 . .
ATOM 6913 O     O     . HOH HOH HOH S . 229 229 . 79.025  98.287  42.102  1.00
51.39  1 . .
ATOM 6914 O     O     . HOH HOH HOH S . 230 230 . 69.055  95.351  6.098   1.00
13.84  1 . .
ATOM 6915 O     O     . HOH HOH HOH S . 231 231 . 101.056 85.136  21.078  1.00
15.01  1 . .
ATOM 6916 O     O     . HOH HOH HOH S . 232 232 . 54.880  102.539 9.631   1.00
22.50  1 . .
ATOM 6917 O     O     . HOH HOH HOH S . 233 233 . 86.136  78.641  5.584   1.00
7.77   1 . .
ATOM 6918 O     O     . HOH HOH HOH S . 234 234 . 101.490 91.249  -14.312 1.00
41.04  1 . .
ATOM 6919 O     O     . HOH HOH HOH S . 235 235 . 72.814  99.913  38.134  1.00
20.25  1 . .
ATOM 6920 O     O     . HOH HOH HOH S . 236 236 . 102.999 86.312  19.652  1.00
14.85  1 . .
ATOM 6921 O     O     . HOH HOH HOH S . 237 237 . 107.177 95.580  16.469  1.00
14.34  1 . .
ATOM 6922 O     O     . HOH HOH HOH S . 238 238 . 101.355 120.942 -18.049 1.00
36.68  1 . .
ATOM 6923 O     O     . HOH HOH HOH S . 239 239 . 100.590 95.191  45.790  1.00
21.35  1 . .
ATOM 6924 O     O     . HOH HOH HOH S . 240 240 . 81.542  130.718 20.992  1.00
23.84  1 . .
ATOM 6925 O     O     . HOH HOH HOH S . 241 241 . 79.502  117.371 28.876  1.00
16.88  1 . .
ATOM 6926 O     O     . HOH HOH HOH S . 242 242 . 100.453 100.692 43.849  1.00
18.89  1 . .
ATOM 6927 O     O     . HOH HOH HOH S . 243 243 . 103.694 110.989 -21.579 1.00
20.42  1 . .
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ATOM 6928 O     O     . HOH HOH HOH S . 244 244 . 87.864  67.368  26.221  1.00
19.54  1 . .
ATOM 6929 O     O     . HOH HOH HOH S . 245 245 . 97.953  90.811  44.904  1.00
17.35  1 . .
ATOM 6930 O     O     . HOH HOH HOH S . 246 246 . 103.568 89.652  18.190  1.00
54.08  1 . .
ATOM 6931 O     O     . HOH HOH HOH S . 247 247 . 77.945  114.165 23.171  1.00
24.07  1 . .
ATOM 6932 O     O     . HOH HOH HOH S . 248 248 . 89.597  66.740  22.235  1.00
29.13  1 . .
ATOM 6933 O     O     . HOH HOH HOH S . 249 249 . 118.233 94.007  33.087  1.00
17.94  1 . .
ATOM 6934 O     O     . HOH HOH HOH S . 250 250 . 118.292 95.072  36.564  1.00
13.48  1 . .
ATOM 6935 O     O     . HOH HOH HOH S . 251 251 . 108.541 115.113 -4.560  1.00
33.58  1 . .
ATOM 6936 O     O     . HOH HOH HOH S . 252 252 . 76.592  95.165  41.926  1.00
24.35  1 . .
ATOM 6937 O     O     . HOH HOH HOH S . 253 253 . 67.723  84.798  21.446  1.00
8.90   1 . .
ATOM 6938 O     O     . HOH HOH HOH S . 254 254 . 101.822 97.507  -12.018 1.00
19.46  1 . .
ATOM 6939 O     O     . HOH HOH HOH S . 255 255 . 98.666  115.175 0.226   1.00
71.40  1 . .
ATOM 6940 O     O     . HOH HOH HOH S . 256 256 . 67.493  80.015  23.131  1.00
12.23  1 . .
ATOM 6941 O     O     . HOH HOH HOH S . 257 257 . 112.379 109.581 40.610  1.00
27.89  1 . .
ATOM 6942 O     O     . HOH HOH HOH S . 258 258 . 78.799  73.029  31.843  1.00
26.30  1 . .
ATOM 6943 O     O     . HOH HOH HOH S . 259 259 . 85.856  98.218  44.025  1.00
16.80  1 . .
ATOM 6944 O     O     . HOH HOH HOH S . 260 260 . 121.882 104.082 35.929  1.00
17.30  1 . .
ATOM 6945 O     O     . HOH HOH HOH S . 261 261 . 105.013 92.471  17.967  1.00
19.11  1 . .
ATOM 6946 O     O     . HOH HOH HOH S . 262 262 . 101.843 92.321  -11.447 1.00
18.89  1 . .
ATOM 6947 O     O     . HOH HOH HOH S . 263 263 . 65.869  97.508  8.151   1.00
19.55  1 . .
ATOM 6948 O     O     . HOH HOH HOH S . 264 264 . 93.897  79.800  1.997   1.00
11.40  1 . .
ATOM 6949 O     O     . HOH HOH HOH S . 265 265 . 94.927  105.785 -18.469 1.00
12.92  1 . .
ATOM 6950 O     O     . HOH HOH HOH S . 266 266 . 76.439  108.889 34.618  1.00
37.83  1 . .
ATOM 6951 O     O     . HOH HOH HOH S . 268 268 . 75.154  101.984 40.552  1.00
21.33  1 . .
ATOM 6952 O     O     . HOH HOH HOH S . 270 270 . 91.573  87.870  -8.544  1.00
26.60  1 . .
ATOM 6953 O     O     . HOH HOH HOH S . 271 271 . 82.281  109.042 40.892  1.00
14.91  1 . .
ATOM 6954 O     O     . HOH HOH HOH S . 272 272 . 71.616  84.413  33.883  1.00
26.60  1 . .
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ATOM 6955 O     O     . HOH HOH HOH S . 273 273 . 86.758  83.213  39.052  1.00
15.83  1 . .
ATOM 6956 O     O     . HOH HOH HOH S . 274 274 . 75.438  104.659 -14.579 1.00
21.55  1 . .
ATOM 6957 O     O     . HOH HOH HOH S . 276 276 . 69.712  92.103  37.546  1.00
40.38  1 . .
ATOM 6958 O     O     . HOH HOH HOH S . 277 277 . 87.333  127.570 -4.653  1.00
21.06  1 . .
ATOM 6959 O     O     . HOH HOH HOH S . 278 278 . 98.956  80.320  28.321  1.00
19.21  1 . .
ATOM 6960 O     O     . HOH HOH HOH S . 279 279 . 91.216  124.496 -19.601 1.00
22.58  1 . .
ATOM 6961 O     O     . HOH HOH HOH S . 280 280 . 79.394  83.298  31.551  1.00
18.84  1 . .
ATOM 6962 O     O     . HOH HOH HOH S . 281 281 . 69.896  123.981 -13.306 1.00
24.75  1 . .
ATOM 6963 O     O     . HOH HOH HOH S . 282 282 . 60.073  99.081  -1.244  1.00
21.11  1 . .
ATOM 6964 O     O     . HOH HOH HOH S . 283 283 . 88.828  122.862 26.083  1.00
12.27  1 . .
ATOM 6965 O     O     . HOH HOH HOH S . 284 284 . 64.297  109.454 24.834  1.00
42.74  1 . .
ATOM 6966 O     O     . HOH HOH HOH S . 285 285 . 114.469 107.375 39.316  1.00
15.14  1 . .
ATOM 6967 O     O     . HOH HOH HOH S . 286 286 . 48.159  113.674 14.926  1.00
20.26  1 . .
ATOM 6968 O     O     . HOH HOH HOH S . 287 287 . 97.277  112.704 6.622   1.00
18.96  1 . .
ATOM 6969 O     O     . HOH HOH HOH S . 288 288 . 92.898  79.022  26.780  1.00
15.99  1 . .
ATOM 6970 O     O     . HOH HOH HOH S . 289 289 . 115.013 106.678 24.989  1.00
22.23  1 . .
ATOM 6971 O     O     . HOH HOH HOH S . 290 290 . 81.556  131.074 -6.118  1.00
12.11  1 . .
ATOM 6972 O     O     . HOH HOH HOH S . 291 291 . 99.107  82.177  21.138  1.00
19.66  1 . .
ATOM 6973 O     O     . HOH HOH HOH S . 292 292 . 67.449  120.455 -5.864  1.00
27.90  1 . .
ATOM 6974 O     O     . HOH HOH HOH S . 293 293 . 77.608  130.999 -6.808  1.00
23.35  1 . .
ATOM 6975 O     O     . HOH HOH HOH S . 294 294 . 83.311  87.681  3.735   1.00
21.50  1 . .
ATOM 6976 O     O     . HOH HOH HOH S . 295 295 . 81.543  106.937 -16.440 1.00
21.24  1 . .
ATOM 6977 O     O     . HOH HOH HOH S . 296 296 . 101.651 79.121  1.869   1.00
20.12  1 . .
ATOM 6978 O     O     . HOH HOH HOH S . 297 297 . 73.891  84.633  8.171   1.00
16.23  1 . .
ATOM 6979 O     O     . HOH HOH HOH S . 298 298 . 106.337 117.144 1.423   1.00
15.55  1 . .
ATOM 6980 O     O     . HOH HOH HOH S . 299 299 . 77.085  125.687 10.898  1.00
21.89  1 . .
ATOM 6981 O     O     . HOH HOH HOH S . 300 300 . 112.239 87.163  37.579  1.00
22.11  1 . .
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ATOM 6982 O     O     . HOH HOH HOH S . 301 301 . 88.175  96.492  41.349  1.00
36.98  1 . .
ATOM 6983 O     O     . HOH HOH HOH S . 302 302 . 64.891  95.198  6.803   1.00
13.83  1 . .
ATOM 6984 O     O     . HOH HOH HOH S . 303 303 . 70.918  91.277  22.066  1.00
12.50  1 . .
ATOM 6985 O     O     . HOH HOH HOH S . 304 304 . 69.395  103.737 -9.554  1.00
24.50  1 . .
ATOM 6986 O     O     . HOH HOH HOH S . 305 305 . 74.472  102.054 -21.574 1.00
37.56  1 . .
ATOM 6987 O     O     . HOH HOH HOH S . 306 306 . 94.104  97.791  42.953  1.00
21.39  1 . .
ATOM 6988 O     O     . HOH HOH HOH S . 307 307 . 58.531  106.978 -1.111  1.00
20.34  1 . .
ATOM 6989 O     O     . HOH HOH HOH S . 308 308 . 99.321  94.367  9.856   1.00
15.33  1 . .
ATOM 6990 O     O     . HOH HOH HOH S . 309 309 . 77.412  100.317 16.804  1.00
3.69   1 . .
ATOM 6991 O     O     . HOH HOH HOH S . 310 310 . 78.022  97.031  10.829  1.00
4.39   1 . .
ATOM 6992 O     O     . HOH HOH HOH S . 311 311 . 80.627  114.130 -22.362 1.00
7.56   1 . .
ATOM 6993 O     O     . HOH HOH HOH S . 312 312 . 76.512  66.437  19.853  1.00
6.93   1 . .
ATOM 6994 O     O     . HOH HOH HOH S . 313 313 . 81.757  109.597 45.485  1.00
9.09   1 . .
ATOM 6995 O     O     . HOH HOH HOH S . 314 314 . 82.283  115.911 -23.894 1.00
6.88   1 . .
ATOM 6996 O     O     . HOH HOH HOH S . 315 315 . 95.161  80.254  26.926  1.00
6.83   1 . .
ATOM 6997 O     O     . HOH HOH HOH S . 317 317 . 117.321 101.778 25.325  1.00
15.84  1 . .
ATOM 6998 O     O     . HOH HOH HOH S . 318 318 . 91.601  72.849  9.739   1.00
13.33  1 . .
ATOM 6999 O     O     . HOH HOH HOH S . 319 319 . 69.094  115.866 23.978  1.00
12.49  1 . .
ATOM 7000 O     O     . HOH HOH HOH S . 320 320 . 70.021  99.704  16.486  1.00
21.97  1 . .
ATOM 7001 O     O     . HOH HOH HOH S . 321 321 . 89.196  116.223 -28.666 1.00
13.60  1 . .
ATOM 7002 O     O     . HOH HOH HOH S . 322 322 . 71.715  122.315 -0.915  1.00
12.07  1 . .
ATOM 7003 O     O     . HOH HOH HOH S . 323 323 . 87.976  104.983 -17.834 1.00
11.05  1 . .
ATOM 7004 O     O     . HOH HOH HOH S . 324 324 . 109.536 86.529  27.400  1.00
10.33  1 . .
ATOM 7005 O     O     . HOH HOH HOH S . 325 325 . 93.713  111.476 -22.441 1.00
19.97  1 . .
ATOM 7006 O     O     . HOH HOH HOH S . 326 326 . 92.903  106.236 42.277  1.00
18.69  1 . .
ATOM 7007 O     O     . HOH HOH HOH S . 327 327 . 74.148  103.865 12.375  1.00
16.39  1 . .
ATOM 7008 O     O     . HOH HOH HOH S . 328 328 . 103.914 109.320 43.797  1.00
13.74  1 . .
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ATOM 7009 O     O     . HOH HOH HOH S . 329 329 . 75.319  101.444 15.524  1.00
17.38  1 . .
ATOM 7010 O     O     . HOH HOH HOH S . 330 330 . 81.862  69.245  24.164  1.00
10.87  1 . .
ATOM 7011 O     O     . HOH HOH HOH S . 331 331 . 94.286  77.918  3.935   1.00
20.31  1 . .
ATOM 7012 O     O     . HOH HOH HOH S . 332 332 . 67.463  120.525 -2.621  1.00
16.92  1 . .
ATOM 7013 O     O     . HOH HOH HOH S . 333 333 . 92.054  123.838 22.385  1.00
27.16  1 . .
ATOM 7014 O     O     . HOH HOH HOH S . 334 334 . 110.488 101.260 -2.111  1.00
15.39  1 . .
ATOM 7015 O     O     . HOH HOH HOH S . 335 335 . 87.075  87.610  3.148   1.00
11.21  1 . .
ATOM 7016 O     O     . HOH HOH HOH S . 336 336 . 74.722  94.839  8.728   1.00
20.94  1 . .
ATOM 7017 O     O     . HOH HOH HOH S . 337 337 . 78.175  94.497  12.155  1.00
17.99  1 . .
ATOM 7018 O     O     . HOH HOH HOH S . 338 338 . 82.971  113.614 -26.028 1.00
26.41  1 . .
ATOM 7019 O     O     . HOH HOH HOH S . 339 339 . 81.531  120.050 -24.611 1.00
26.48  1 . .
ATOM 7020 O     O     . HOH HOH HOH S . 340 340 . 117.081 104.982 23.765  1.00
57.01  1 . .
ATOM 7021 O     O     . HOH HOH HOH S . 341 341 . 117.369 104.069 27.258  1.00
30.85  1 . .
ATOM 7022 O     O     . HOH HOH HOH S . 342 342 . 92.940  72.613  7.403   1.00
26.95  1 . .
ATOM 7023 O     O     . HOH HOH HOH S . 343 343 . 89.549  74.419  6.634   1.00
15.35  1 . .
ATOM 7024 O     O     . HOH HOH HOH S . 344 344 . 68.174  117.744 22.186  1.00
37.26  1 . .
ATOM 7025 O     O     . HOH HOH HOH S . 345 345 . 69.020  115.961 27.098  1.00
27.35  1 . .
ATOM 7026 O     O     . HOH HOH HOH S . 346 346 . 85.810  117.118 -29.048 1.00
25.73  1 . .
ATOM 7027 O     O     . HOH HOH HOH S . 347 347 . 87.496  118.627 -27.890 1.00
32.32  1 . .
ATOM 7028 O     O     . HOH HOH HOH S . 348 348 . 69.856  123.669 -4.160  1.00
13.21  1 . .
ATOM 7029 O     O     . HOH HOH HOH S . 349 349 . 73.969  124.921 -3.342  1.00
34.47  1 . .
ATOM 7030 O     O     . HOH HOH HOH S . 350 350 . 87.584  102.175 -17.519 1.00
19.15  1 . .
ATOM 7031 O     O     . HOH HOH HOH S . 351 351 . 111.497 87.627  31.331  1.00
19.89  1 . .
ATOM 7032 O     O     . HOH HOH HOH S . 352 352 . 97.861  112.476 -24.272 1.00
20.66  1 . .
ATOM 7033 O     O     . HOH HOH HOH S . 353 353 . 91.807  108.716 42.645  1.00
20.15  1 . .
ATOM 7034 O     O     . HOH HOH HOH S . 354 354 . 94.820  107.334 40.707  1.00
16.21  1 . .
ATOM 7035 O     O     . HOH HOH HOH S . 355 355 . 97.021  105.789 41.005  1.00
20.55  1 . .
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ATOM 7036 O     O     . HOH HOH HOH S . 356 356 . 90.646  106.179 46.223  1.00
22.38  1 . .
ATOM 7037 O     O     . HOH HOH HOH S . 357 357 . 75.483  104.463 14.603  1.00
26.46  1 . .
ATOM 7038 O     O     . HOH HOH HOH S . 358 358 . 107.262 106.352 43.907  1.00
24.23  1 . .
ATOM 7039 O     O     . HOH HOH HOH S . 359 359 . 106.495 110.485 43.220  1.00
21.73  1 . .
ATOM 7040 O     O     . HOH HOH HOH S . 360 360 . 72.747  100.290 12.750  1.00
33.32  1 . .
ATOM 7041 O     O     . HOH HOH HOH S . 361 361 . 79.456  68.167  22.694  1.00
13.42  1 . .
ATOM 7042 O     O     . HOH HOH HOH S . 362 362 . 81.068  68.535  26.874  1.00
12.03  1 . .
ATOM 7043 O     O     . HOH HOH HOH S . 363 363 . 80.820  70.904  28.790  1.00
18.03  1 . .
ATOM 7044 O     O     . HOH HOH HOH S . 364 364 . 83.570  65.234  22.269  1.00
9.72   1 . .
ATOM 7045 O     O     . HOH HOH HOH S . 365 365 . 77.874  67.265  24.867  1.00
123.61 1 . .
ATOM 7046 O     O     . HOH HOH HOH S . 366 366 . 75.581  68.264  24.197  1.00
15.50  1 . .
ATOM 7047 O     O     . HOH HOH HOH S . 367 367 . 96.603  77.238  4.547   1.00
48.10  1 . .
ATOM 7048 O     O     . HOH HOH HOH S . 368 368 . 97.140  74.535  5.018   1.00
44.00  1 . .
ATOM 7049 O     O     . HOH HOH HOH S . 369 369 . 92.231  79.612  -0.085  1.00
19.81  1 . .
ATOM 7050 O     O     . HOH HOH HOH S . 370 370 . 66.795  118.541 -4.557  1.00
14.05  1 . .
ATOM 7051 O     O     . HOH HOH HOH S . 371 371 . 113.186 101.424 -2.182  1.00
27.71  1 . .
ATOM 7052 O     O     . HOH HOH HOH S . 372 372 . 86.241  84.522  2.715   1.00
20.54  1 . .
ATOM 7053 O     O     . HOH HOH HOH S . 373 373 . 72.669  92.064  8.366   1.00
32.40  1 . .
ATOM 7054 O     O     . HOH HOH HOH S . 374 374 . 77.347  121.088 -24.702 1.00
37.93  1 . .
ATOM 7055 O     O     . HOH HOH HOH S . 375 375 . 86.146  122.110 -25.885 1.00
53.20  1 . .
ATOM 7056 O     O     . HOH HOH HOH S . 376 376 . 88.071  120.165 -25.414 1.00
25.08  1 . .
ATOM 7057 O     O     . HOH HOH HOH S . 377 377 . 119.441 105.235 19.931  1.00
44.95  1 . .
ATOM 7058 O     O     . HOH HOH HOH S . 378 378 . 89.058  99.174  -16.297 1.00
27.32  1 . .
ATOM 7059 O     O     . HOH HOH HOH S . 379 379 . 92.702  96.523  -16.488 1.00
29.14  1 . .
ATOM 7060 O     O     . HOH HOH HOH S . 380 380 . 113.467 86.199  33.817  1.00
40.09  1 . .
ATOM 7061 O     O     . HOH HOH HOH S . 381 381 . 109.244 82.209  26.984  1.00
39.28  1 . .
ATOM 7062 O     O     . HOH HOH HOH S . 382 382 . 96.495  108.865 -26.133 1.00
23.04  1 . .
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ATOM 7063 O     O     . HOH HOH HOH S . 383 383 . 96.151  106.363 -22.313 1.00
32.28  1 . .
ATOM 7064 O     O     . HOH HOH HOH S . 384 384 . 100.052 116.632 -21.910 1.00
18.37  1 . .
ATOM 7065 O     O     . HOH HOH HOH S . 385 385 . 92.146  102.541 45.230  1.00
26.48  1 . .
ATOM 7066 O     O     . HOH HOH HOH S . 386 386 . 99.803  87.048  17.334  1.00
17.21  1 . .
ATOM 7067 O     O     . HOH HOH HOH S . 387 387 . 98.480  85.531  19.108  1.00
16.32  1 . .
ATOM 7068 O     O     . HOH HOH HOH S . 388 388 . 98.754  85.397  14.691  1.00
21.93  1 . .
ATOM 7069 O     O     . HOH HOH HOH S . 389 389 . 90.638  83.896  -2.123  1.00
13.93  1 . .
ATOM 7070 O     O     . HOH HOH HOH S . 390 390 . 92.280  116.475 16.085  1.00
15.28  1 . .
ATOM 7071 O     O     . HOH HOH HOH S . 391 391 . 94.671  114.774 9.536   1.00
21.53  1 . .
ATOM 7072 O     O     . HOH HOH HOH S . 392 392 . 96.834  115.910 9.835   1.00
16.16  1 . .
ATOM 7073 O     O     . HOH HOH HOH S . 394 394 . 79.373  122.102 4.703   1.00
15.73  1 . .
ATOM 7074 O     O     . HOH HOH HOH S . 395 395 . 77.855  123.832 5.549   1.00
31.18  1 . .
ATOM 7075 O     O     . HOH HOH HOH S . 396 396 . 82.731  124.455 2.828   1.00
39.86  1 . .
ATOM 7076 O     O     . HOH HOH HOH S . 397 397 . 77.139  124.448 3.137   1.00
16.64  1 . .
ATOM 7077 O     O     . HOH HOH HOH S . 414 414 . 73.935  125.561 -11.402 1.00
26.45  1 . .
ATOM 7078 O     O     . HOH HOH HOH S . 415 415 . 93.354  79.117  32.168  1.00
17.57  1 . .
ATOM 7079 O     O     . HOH HOH HOH S . 416 416 . 82.922  79.541  4.510   1.00
14.99  1 . .
ATOM 7080 O     O     . HOH HOH HOH S . 417 417 . 100.379 99.631  -13.343 1.00
28.47  1 . .
ATOM 7081 O     O     . HOH HOH HOH S . 418 418 . 84.034  131.133 -4.979  1.00
28.26  1 . .
ATOM 7082 O     O     . HOH HOH HOH S . 419 419 . 86.841  131.289 -4.449  1.00
22.94  1 . .
ATOM 7083 O     O     . HOH HOH HOH S . 420 420 . 86.297  129.529 -9.252  1.00
16.08  1 . .
ATOM 7084 O     O     . HOH HOH HOH S . 421 421 . 113.699 115.581 22.697  1.00
28.67  1 . .
ATOM 7085 O     O     . HOH HOH HOH S . 422 422 . 115.270 112.564 20.356  1.00
22.10  1 . .
ATOM 7086 O     O     . HOH HOH HOH S . 423 423 . 115.143 110.938 17.319  1.00
41.45  1 . .
ATOM 7087 O     O     . HOH HOH HOH S . 424 424 . 116.060 116.737 22.873  1.00
13.49  1 . .
ATOM 7088 O     O     . HOH HOH HOH S . 425 425 . 115.618 118.951 24.104  1.00
21.40  1 . .
ATOM 7089 O     O     . HOH HOH HOH S . 426 426 . 105.175 114.684 -12.797 1.00
73.40  1 . .
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ATOM 7090 O     O     . HOH HOH HOH S . 427 427 . 80.089  83.164  3.620   1.00
18.93  1 . .
ATOM 7091 O     O     . HOH HOH HOH S . 428 428 . 86.091  119.203 8.957   1.00
18.30  1 . .
ATOM 7092 O     O     . HOH HOH HOH S . 429 429 . 75.371  112.210 23.424  1.00
22.36  1 . .
ATOM 7093 O     O     . HOH HOH HOH S . 430 430 . 82.335  111.575 39.542  1.00
16.10  1 . .
ATOM 7094 O     O     . HOH HOH HOH S . 431 431 . 78.709  110.745 38.696  1.00
84.17  1 . .
ATOM 7095 O     O     . HOH HOH HOH S . 432 432 . 77.456  115.283 32.027  1.00
23.47  1 . .
ATOM 7096 O     O     . HOH HOH HOH S . 433 433 . 76.084  114.660 30.543  1.00
27.48  1 . .
ATOM 7097 O     O     . HOH HOH HOH S . 434 434 . 101.800 124.764 21.240  1.00
33.94  1 . .
ATOM 7098 O     O     . HOH HOH HOH S . 435 435 . 70.405  92.463  19.516  1.00
29.03  1 . .
ATOM 7099 O     O     . HOH HOH HOH S . 436 436 . 79.274  92.728  15.526  1.00
19.33  1 . .
ATOM 7100 O     O     . HOH HOH HOH S . 437 437 . 121.238 100.854 38.117  1.00
14.48  1 . .
ATOM 7101 O     O     . HOH HOH HOH S . 438 438 . 118.767 102.335 37.956  1.00
17.67  1 . .
ATOM 7102 O     O     . HOH HOH HOH S . 439 439 . 120.599 99.043  40.526  1.00
23.44  1 . .
ATOM 7103 O     O     . HOH HOH HOH S . 440 440 . 120.558 100.523 43.616  1.00
77.84  1 . .
ATOM 7104 O     O     . HOH HOH HOH S . 441 441 . 117.070 104.571 42.163  1.00
65.16  1 . .
ATOM 7105 O     O     . HOH HOH HOH S . 442 442 . 119.138 104.823 36.348  1.00
21.73  1 . .
ATOM 7106 O     O     . HOH HOH HOH S . 443 443 . 120.153 93.518  34.842  1.00
20.45  1 . .
ATOM 7107 O     O     . HOH HOH HOH S . 444 444 . 122.628 93.044  33.538  1.00
19.16  1 . .
ATOM 7108 O     O     . HOH HOH HOH S . 445 445 . 120.359 95.344  38.609  1.00
17.99  1 . .
ATOM 7109 O     O     . HOH HOH HOH S . 446 446 . 76.131  128.121 10.427  1.00
48.39  1 . .
ATOM 7110 O     O     . HOH HOH HOH S . 447 447 . 71.358  129.856 16.939  1.00
22.67  1 . .
ATOM 7111 O     O     . HOH HOH HOH S . 448 448 . 71.373  117.069 23.061  1.00
24.38  1 . .
ATOM 7112 O     O     . HOH HOH HOH S . 449 449 . 96.978  97.446  45.596  1.00
27.08  1 . .
ATOM 7113 O     O     . HOH HOH HOH S . 450 450 . 95.376  93.513  45.617  1.00
67.76  1 . .
ATOM 7114 O     O     . HOH HOH HOH S . 451 451 . 56.341  100.386 10.767  1.00
24.83  1 . .
ATOM 7115 O     O     . HOH HOH HOH S . 452 452 . 99.131  92.347  13.925  1.00
30.97  1 . .
ATOM 7116 O     O     . HOH HOH HOH S . 453 453 . 104.915 101.443 10.622  1.00
38.48  1 . .
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ATOM 7117 O     O     . HOH HOH HOH S . 454 454 . 104.074 99.615  12.902  1.00
31.08  1 . .
ATOM 7118 O     O     . HOH HOH HOH S . 455 455 . 98.196  106.500 12.016  1.00
16.77  1 . .
ATOM 7119 O     O     . HOH HOH HOH S . 456 456 . 100.501 102.619 11.800  1.00
17.12  1 . .
ATOM 7120 O     O     . HOH HOH HOH S . 457 457 . 81.246  87.180  -9.099  1.00
22.00  1 . .
ATOM 7121 O     O     . HOH HOH HOH S . 458 458 . 79.634  85.877  -5.674  1.00
38.60  1 . .
ATOM 7122 O     O     . HOH HOH HOH S . 459 459 . 73.565  110.860 28.649  1.00
20.16  1 . .
ATOM 7123 O     O     . HOH HOH HOH S . 460 460 . 72.750  113.172 27.064  1.00
72.62  1 . .
ATOM 7124 O     O     . HOH HOH HOH S . 461 461 . 74.209  112.727 30.671  1.00
88.43  1 . .
ATOM 7125 O     O     . HOH HOH HOH S . 462 462 . 74.161  110.405 33.036  1.00
25.74  1 . .
ATOM 7126 O     O     . HOH HOH HOH S . 463 463 . 72.222  109.182 32.289  1.00
21.19  1 . .
ATOM 7127 O     O     . HOH HOH HOH S . 464 464 . 68.780  80.066  32.875  1.00
18.92  1 . .
ATOM 7128 O     O     . HOH HOH HOH S . 465 465 . 65.784  76.458  24.802  1.00
32.61  1 . .
ATOM 7129 O     O     . HOH HOH HOH S . 466 466 . 67.599  74.904  17.740  1.00
77.29  1 . .
ATOM 7130 O     O     . HOH HOH HOH S . 467 467 . 67.019  70.640  20.463  1.00
29.79  1 . .
ATOM 7131 O     O     . HOH HOH HOH S . 468 468 . 74.659  113.242 -21.097 1.00
22.20  1 . .
ATOM 7132 O     O     . HOH HOH HOH S . 469 469 . 74.104  117.544 -22.994 1.00
24.89  1 . .
ATOM 7133 O     O     . HOH HOH HOH S . 470 470 . 71.963  113.970 -22.015 1.00
24.88  1 . .
ATOM 7134 O     O     . HOH HOH HOH S . 471 471 . 67.702  129.799 10.696  1.00
45.30  1 . .
ATOM 7135 O     O     . HOH HOH HOH S . 472 472 . 55.220  110.160 -3.325  1.00
34.23  1 . .
ATOM 7136 O     O     . HOH HOH HOH S . 473 473 . 62.738  108.066 -1.795  1.00
25.31  1 . .
ATOM 7137 O     O     . HOH HOH HOH S . 474 474 . 96.433  71.161  18.950  1.00
24.43  1 . .
ATOM 7138 O     O     . HOH HOH HOH S . 475 475 . 94.486  69.977  18.744  1.00
34.47  1 . .
ATOM 7139 O     O     . HOH HOH HOH S . 476 476 . 89.769  76.594  29.232  1.00
23.14  1 . .
ATOM 7140 O     O     . HOH HOH HOH S . 477 477 . 89.074  77.496  31.522  1.00
37.93  1 . .
ATOM 7141 O     O     . HOH HOH HOH S . 478 478 . 90.462  79.796  31.960  1.00
13.91  1 . .
ATOM 7142 O     O     . HOH HOH HOH S . 479 479 . 87.831  119.348 15.436  1.00
22.99  1 . .
ATOM 7143 O     O     . HOH HOH HOH S . 480 480 . 103.457 95.233  46.431  1.00
12.96  1 . .
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ATOM 7144 O     O     . HOH HOH HOH S . 481 481 . 91.251  121.977 35.347  1.00
38.63  1 . .
ATOM 7145 O     O     . HOH HOH HOH S . 482 482 . 82.300  91.299  41.506  1.00
75.96  1 . .
ATOM 7146 O     O     . HOH HOH HOH S . 483 483 . 106.126 111.404 10.833  1.00
28.37  1 . .
ATOM 7147 O     O     . HOH HOH HOH S . 484 484 . 70.840  119.457 -21.108 1.00
14.51  1 . .
ATOM 7148 O     O     . HOH HOH HOH S . 485 485 . 70.623  123.911 -16.329 1.00
23.33  1 . .
ATOM 7149 O     O     . HOH HOH HOH S . 486 486 . 68.941  115.908 -19.918 1.00
21.76  1 . .
ATOM 7150 O     O     . HOH HOH HOH S . 487 487 . 103.616 122.314 9.079   1.00
26.91  1 . .
ATOM 7151 O     O     . HOH HOH HOH S . 488 488 . 75.121  118.446 27.196  1.00
43.25  1 . .
ATOM 7152 O     O     . HOH HOH HOH S . 489 489 . 98.545  87.066  -0.635  1.00
36.73  1 . .
ATOM 7153 O     O     . HOH HOH HOH S . 490 490 . 87.657  90.063  -15.376 1.00
29.53  1 . .
ATOM 7154 O     O     . HOH HOH HOH S . 491 491 . 58.188  113.344 19.177  1.00
17.43  1 . .
ATOM 7155 O     O     . HOH HOH HOH S . 492 492 . 96.443  99.000  -16.523 1.00
29.53  1 . .
ATOM 7156 O     O     . HOH HOH HOH S . 493 493 . 68.395  98.278  7.599   1.00
17.09  1 . .
ATOM 7157 O     O     . HOH HOH HOH S . 494 494 . 103.372 81.549  22.290  1.00
31.85  1 . .
ATOM 7158 O     O     . HOH HOH HOH S . 495 495 . 89.484  104.966 -20.018 1.00
19.97  1 . .
ATOM 7159 O     O     . HOH HOH HOH S . 496 496 . 73.799  91.418  -7.545  1.00
29.79  1 . .
ATOM 7160 O     O     . HOH HOH HOH S . 497 497 . 93.022  118.311 -22.469 1.00
14.86  1 . .
ATOM 7161 O     O     . HOH HOH HOH S . 498 498 . 122.671 99.388  31.245  1.00
15.81  1 . .
ATOM 7162 O     O     . HOH HOH HOH S . 499 499 . 103.447 108.781 8.806   1.00
21.71  1 . .
ATOM 7163 O     O     . HOH HOH HOH S . 500 500 . 90.752  122.232 -19.345 1.00
16.70  1 . .
ATOM 7164 O     O     . HOH HOH HOH S . 501 501 . 96.681  91.373  14.148  1.00
17.22  1 . .
ATOM 7165 O     O     . HOH HOH HOH S . 502 502 . 111.180 106.966 9.601   1.00
33.32  1 . .
ATOM 7166 O     O     . HOH HOH HOH S . 503 503 . 95.957  134.980 -10.856 1.00
16.46  1 . .
ATOM 7167 O     O     . HOH HOH HOH S . 504 504 . 91.955  78.306  29.763  1.00
22.09  1 . .
ATOM 7168 O     O     . HOH HOH HOH S . 505 505 . 99.802  112.089 -27.954 1.00
26.10  1 . .
ATOM 7169 O     O     . HOH HOH HOH S . 506 506 . 60.757  93.422  9.157   1.00
38.95  1 . .
ATOM 7170 O     O     . HOH HOH HOH S . 507 507 . 112.044 96.389  39.020  1.00
25.07  1 . .
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ATOM 7171 O     O     . HOH HOH HOH S . 508 508 . 68.559  126.517 17.378  1.00
18.74  1 . .
ATOM 7172 O     O     . HOH HOH HOH S . 509 509 . 104.049 106.342 -21.154 1.00
15.67  1 . .
ATOM 7173 O     O     . HOH HOH HOH S . 510 510 . 105.758 97.697  6.490   1.00
22.01  1 . .
ATOM 7174 O     O     . HOH HOH HOH S . 511 511 . 73.317  92.798  -16.261 1.00
28.02  1 . .
ATOM 7175 O     O     . HOH HOH HOH S . 512 512 . 110.547 119.840 15.259  0.50
42.94  1 . .
ATOM 7176 O     O     . HOH HOH HOH S . 513 513 . 77.571  110.793 -21.908 1.00
33.80  1 . .
ATOM 7177 O     O     . HOH HOH HOH S . 514 514 . 117.379 104.992 34.395  1.00
22.90  1 . .
ATOM 7178 O     O     . HOH HOH HOH S . 515 515 . 63.223  123.546 16.038  1.00
13.33  1 . .
ATOM 7179 O     O     . HOH HOH HOH S . 516 516 . 75.329  125.922 21.550  1.00
20.00  1 . .
ATOM 7180 O     O     . HOH HOH HOH S . 517 517 . 111.376 91.432  43.394  1.00
24.15  1 . .
ATOM 7181 O     O     . HOH HOH HOH S . 518 518 . 95.797  91.112  5.266   1.00
32.42  1 . .
ATOM 7182 O     O     . HOH HOH HOH S . 519 519 . 101.117 118.581 -4.860  1.00
20.37  1 . .
ATOM 7183 O     O     . HOH HOH HOH S . 520 520 . 101.300 125.036 -8.900  1.00
25.73  1 . .
ATOM 7184 O     O     . HOH HOH HOH S . 521 521 . 76.156  123.784 25.621  1.00
27.28  1 . .
ATOM 7185 O     O     . HOH HOH HOH S . 522 522 . 84.091  118.250 35.813  1.00
28.70  1 . .
ATOM 7186 O     O     . HOH HOH HOH S . 523 523 . 97.237  83.258  44.225  1.00
15.63  1 . .
ATOM 7187 O     O     . HOH HOH HOH S . 524 524 . 104.042 124.741 24.435  1.00
27.30  1 . .
ATOM 7188 O     O     . HOH HOH HOH S . 525 525 . 62.223  86.041  28.062  1.00
23.14  1 . .
ATOM 7189 O     O     . HOH HOH HOH S . 526 526 . 111.353 101.026 41.763  1.00
21.45  1 . .
ATOM 7190 O     O     . HOH HOH HOH S . 527 527 . 55.264  113.201 19.271  1.00
38.42  1 . .
ATOM 7191 O     O     . HOH HOH HOH S . 528 528 . 71.715  99.710  25.256  1.00
34.68  1 . .
ATOM 7192 O     O     . HOH HOH HOH S . 529 529 . 102.914 113.892 39.594  1.00
20.19  1 . .
ATOM 7193 O     O     . HOH HOH HOH S . 530 530 . 70.507  111.687 24.749  1.00
34.85  1 . .
ATOM 7194 O     O     . HOH HOH HOH S . 531 531 . 100.107 87.860  -6.775  1.00
46.12  1 . .
ATOM 7195 O     O     . HOH HOH HOH S . 532 532 . 112.319 110.514 15.733  1.00
33.36  1 . .
ATOM 7196 O     O     . HOH HOH HOH S . 533 533 . 70.151  104.798 24.228  1.00
23.22  1 . .
ATOM 7197 O     O     . HOH HOH HOH S . 534 534 . 109.114 93.300  19.028  1.00
17.93  1 . .
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ATOM 7198 O     O     . HOH HOH HOH S . 537 537 . 85.882  73.466  30.454  1.00
30.59  1 . .
ATOM 7199 O     O     . HOH HOH HOH S . 538 538 . 95.856  103.834 31.589  1.00
15.61  1 . .
ATOM 7200 O     O     . HOH HOH HOH S . 539 539 . 66.451  129.797 0.852   1.00
22.70  1 . .
ATOM 7201 O     O     . HOH HOH HOH S . 540 540 . 72.160  128.366 10.044  1.00
56.81  1 . .
ATOM 7202 O     O     . HOH HOH HOH S . 541 541 . 109.425 117.424 12.608  1.00
23.36  1 . .
ATOM 7203 O     O     . HOH HOH HOH S . 542 542 . 55.097  114.767 -0.609  1.00
24.26  1 . .
ATOM 7204 O     O     . HOH HOH HOH S . 543 543 . 84.281  119.884 11.414  1.00
36.94  1 . .
ATOM 7205 O     O     . HOH HOH HOH S . 544 544 . 88.434  118.338 8.991   1.00
29.42  1 . .
ATOM 7206 O     O     . HOH HOH HOH S . 545 545 . 65.703  112.221 -11.041 1.00
19.13  1 . .
ATOM 7207 O     O     . HOH HOH HOH S . 546 546 . 54.838  115.410 1.951   1.00
28.39  1 . .
ATOM 7208 O     O     . HOH HOH HOH S . 547 547 . 117.561 112.173 21.630  1.00
34.87  1 . .
ATOM 7209 O     O     . HOH HOH HOH S . 548 548 . 84.816  125.817 0.899   1.00
21.56  1 . .
ATOM 7210 O     O     . HOH HOH HOH S . 549 549 . 86.193  123.445 0.996   1.00
38.35  1 . .
ATOM 7211 O     O     . HOH HOH HOH S . 550 550 . 99.776  77.008  3.163   1.00
27.25  1 . .
ATOM 7212 O     O     . HOH HOH HOH S . 552 552 . 77.575  111.215 36.334  1.00
18.15  1 . .
ATOM 7213 O     O     . HOH HOH HOH S . 553 553 . 53.032  113.915 17.850  1.00
30.98  1 . .
ATOM 7214 O     O     . HOH HOH HOH S . 554 554 . 48.420  111.133 7.370   1.00
33.92  1 . .
ATOM 7215 O     O     . HOH HOH HOH S . 555 555 . 84.199  121.717 30.235  1.00
20.50  1 . .
ATOM 7216 O     O     . HOH HOH HOH S . 556 556 . 68.941  92.378  23.916  1.00
14.65  1 . .
ATOM 7217 O     O     . HOH HOH HOH S . 557 557 . 74.584  69.865  26.473  1.00
18.85  1 . .
ATOM 7218 O     O     . HOH HOH HOH S . 558 558 . 61.316  98.080  -8.667  1.00
30.17  1 . .
ATOM 7219 O     O     . HOH HOH HOH S . 559 559 . 113.947 95.109  17.083  1.00
30.65  1 . .
ATOM 7220 O     O     . HOH HOH HOH S . 561 561 . 112.358 89.048  23.841  1.00
20.57  1 . .
ATOM 7221 O     O     . HOH HOH HOH S . 562 562 . 65.171  88.966  31.745  1.00
45.74  1 . .
ATOM 7222 O     O     . HOH HOH HOH S . 563 563 . 91.771  92.032  -15.414 1.00
21.94  1 . .
ATOM 7223 O     O     . HOH HOH HOH S . 564 564 . 105.703 133.807 -0.459  1.00
22.12  1 . .
ATOM 7224 O     O     . HOH HOH HOH S . 565 565 . 76.987  74.879  8.149   1.00
23.71  1 . .
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ATOM 7225 O     O     . HOH HOH HOH S . 566 566 . 91.131  98.242  43.247  1.00
18.23  1 . .
ATOM 7226 O     O     . HOH HOH HOH S . 567 567 . 92.126  114.920 11.223  1.00
21.95  1 . .
ATOM 7227 O     O     . HOH HOH HOH S . 568 568 . 73.353  92.854  22.239  1.00
19.05  1 . .
ATOM 7228 O     O     . HOH HOH HOH S . 569 569 . 82.139  97.486  41.006  1.00
64.31  1 . .
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23.83  1 . .
ATOM 7230 O     O     . HOH HOH HOH S . 572 572 . 102.482 80.095  32.360  1.00
24.83  1 . .
ATOM 7231 O     O     . HOH HOH HOH S . 573 573 . 89.768  72.419  28.110  1.00
51.08  1 . .
ATOM 7232 O     O     . HOH HOH HOH S . 574 574 . 86.960  124.814 26.439  1.00
40.90  1 . .
ATOM 7233 O     O     . HOH HOH HOH S . 575 575 . 85.899  71.742  10.735  1.00
48.48  1 . .
ATOM 7234 O     O     . HOH HOH HOH S . 576 576 . 98.929  117.895 33.882  1.00
34.64  1 . .
ATOM 7235 O     O     . HOH HOH HOH S . 577 577 . 108.394 118.185 10.093  1.00
23.17  1 . .
ATOM 7236 O     O     . HOH HOH HOH S . 578 578 . 77.523  126.988 3.439   1.00
22.29  1 . .
ATOM 7237 O     O     . HOH HOH HOH S . 580 580 . 83.244  76.781  33.901  1.00
38.00  1 . .
ATOM 7238 O     O     . HOH HOH HOH S . 581 581 . 105.931 104.153 -14.345 1.00
30.66  1 . .
ATOM 7239 O     O     . HOH HOH HOH S . 583 583 . 73.334  91.862  4.657   1.00
30.82  1 . .
ATOM 7240 O     O     . HOH HOH HOH S . 584 584 . 82.118  126.373 14.328  1.00
28.91  1 . .
ATOM 7241 O     O     . HOH HOH HOH S . 585 585 . 111.109 97.110  45.831  1.00
25.78  1 . .
ATOM 7242 O     O     . HOH HOH HOH S . 586 586 . 107.317 123.265 13.035  1.00
36.73  1 . .
ATOM 7243 O     O     . HOH HOH HOH S . 589 589 . 76.143  100.274 45.062  1.00
27.50  1 . .
ATOM 7244 O     O     . HOH HOH HOH S . 591 591 . 81.751  92.148  -14.313 1.00
19.46  1 . .
ATOM 7245 O     O     . HOH HOH HOH S . 592 592 . 66.800  97.159  -12.967 1.00
39.07  1 . .
ATOM 7246 O     O     . HOH HOH HOH S . 593 593 . 107.002 92.056  46.679  1.00
20.29  1 . .
ATOM 7247 O     O     . HOH HOH HOH S . 594 594 . 76.893  93.892  -15.192 1.00
40.51  1 . .
ATOM 7248 O     O     . HOH HOH HOH S . 596 596 . 103.036 91.577  -1.079  1.00
27.26  1 . .
ATOM 7249 O     O     . HOH HOH HOH S . 597 597 . 114.031 105.384 41.734  1.00
27.98  1 . .
ATOM 7250 O     O     . HOH HOH HOH S . 598 598 . 72.021  81.163  -3.697  1.00
35.70  1 . .
ATOM 7251 O     O     . HOH HOH HOH S . 599 599 . 105.706 98.723  8.857   1.00
20.98  1 . .
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ATOM 7252 O     O     . HOH HOH HOH S . 601 601 . 87.884  81.939  -0.159  1.00
25.25  1 . .
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21.38  1 . .
ATOM 7254 O     O     . HOH HOH HOH S . 603 603 . 106.346 124.141 -4.116  1.00
29.62  1 . .
ATOM 7255 O     O     . HOH HOH HOH S . 604 604 . 98.127  90.579  -12.905 1.00
28.45  1 . .
ATOM 7256 O     O     . HOH HOH HOH S . 605 605 . 90.610  122.028 -27.170 1.00
51.40  1 . .
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21.64  1 . .
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21.94  1 . .
ATOM 7259 O     O     . HOH HOH HOH S . 608 608 . 74.086  96.791  21.417  1.00
35.32  1 . .
ATOM 7260 O     O     . HOH HOH HOH S . 609 609 . 71.764  92.895  36.994  1.00
15.94  1 . .
ATOM 7261 O     O     . HOH HOH HOH S . 612 612 . 76.514  83.033  -0.757  1.00
33.86  1 . .
ATOM 7262 O     O     . HOH HOH HOH S . 613 613 . 110.224 98.817  -2.901  1.00
37.21  1 . .
ATOM 7263 O     O     . HOH HOH HOH S . 614 614 . 93.958  123.661 19.810  1.00
41.67  1 . .
ATOM 7264 O     O     . HOH HOH HOH S . 615 615 . 114.310 101.025 39.362  1.00
56.14  1 . .
ATOM 7265 O     O     . HOH HOH HOH S . 616 616 . 102.740 116.325 37.412  1.00
29.73  1 . .
ATOM 7266 O     O     . HOH HOH HOH S . 617 617 . 114.474 118.072 26.255  1.00
28.97  1 . .
ATOM 7267 O     O     . HOH HOH HOH S . 618 618 . 96.778  120.832 13.622  1.00
30.49  1 . .
ATOM 7268 O     O     . HOH HOH HOH S . 620 620 . 84.049  83.100  39.195  1.00
54.88  1 . .
ATOM 7269 O     O     . HOH HOH HOH S . 621 621 . 96.055  111.246 -27.057 1.00
27.03  1 . .
ATOM 7270 O     O     . HOH HOH HOH S . 623 623 . 77.708  107.605 -21.565 1.00
16.01  1 . .
ATOM 7271 O     O     . HOH HOH HOH S . 626 626 . 57.235  108.921 20.480  1.00
40.26  1 . .
ATOM 7272 O     O     . HOH HOH HOH S . 630 630 . 86.486  83.524  41.720  1.00
24.46  1 . .
ATOM 7273 O     O     . HOH HOH HOH S . 632 632 . 79.714  88.416  -7.070  1.00
53.33  1 . .
ATOM 7274 O     O     . HOH HOH HOH S . 633 633 . 72.628  89.814  38.882  1.00
26.51  1 . .
ATOM 7275 O     O     . HOH HOH HOH S . 634 634 . 102.678 118.634 -17.871 1.00
35.37  1 . .
ATOM 7276 O     O     . HOH HOH HOH S . 635 635 . 71.672  96.815  7.681   1.00
27.17  1 . .
ATOM 7277 O     O     . HOH HOH HOH S . 636 636 . 84.477  92.639  -15.393 1.00
26.28  1 . .
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0.0076  -0.0099 1 .
2    CA    CA    . SER SER SER A A 1   1   . 0.2077 0.1588 0.2098 -0.0061
0.0142  -0.0030 1 .
3    CB    CB    . SER SER SER A A 1   1   . 0.2097 0.1802 0.2318 -0.0163
0.0107  0.0036  1 .
4    OG    OG    . SER SER SER A A 1   1   . 0.2973 0.1943 0.2270 -0.0501 -
0.0178 0.0184  1 .
5    C     C     . SER SER SER A A 1   1   . 0.1686 0.1478 0.1952 0.0020
0.0120  0.0034  1 .
6    O     O     . SER SER SER A A 1   1   . 0.1863 0.1011 0.1786 0.0172
0.0192  -0.0134 1 .
7    N     N     . ILE ILE ILE A A 2   2   . 0.1811 0.1225 0.1631 0.0040
0.0245  0.0003  1 .
8    CA    CA    . ILE ILE ILE A A 2   2   . 0.1195 0.0794 0.1222 0.0006
0.0131  -0.0010 1 .
9    CB    CB    . ILE ILE ILE A A 2   2   . 0.1403 0.0649 0.1211 -0.0055
0.0175  0.0154  1 .
10   CG1   CG1   . ILE ILE ILE A A 2   2   . 0.1124 0.0900 0.0989 -0.0043
0.0241  -0.0243 1 .
11   CD1   CD1   . ILE ILE ILE A A 2   2   . 0.1237 0.0746 0.1566 0.0040
0.0134  -0.0263 1 .
12   CG2   CG2   . ILE ILE ILE A A 2   2   . 0.0933 0.0429 0.1058 0.0066
0.0184  0.0205  1 .
13   C     C     . ILE ILE ILE A A 2   2   . 0.1215 0.0987 0.1354 -0.0038
0.0108  0.0007  1 .
14   O     O     . ILE ILE ILE A A 2   2   . 0.0886 0.0740 0.1220 -0.0225
0.0276  -0.0053 1 .
15   N     N     . GLN GLN GLN A A 3   3   . 0.0945 0.0787 0.1410 0.0007
0.0045  0.0018  1 .
16   CA    CA    . GLN GLN GLN A A 3   3   . 0.1052 0.0744 0.1401 -0.0016
0.0035  -0.0051 1 .
17   CB    CB    . GLN GLN GLN A A 3   3   . 0.1231 0.0720 0.1532 0.0068
0.0027  -0.0023 1 .
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18   CG    CG    . GLN GLN GLN A A 3   3   . 0.1447 0.1485 0.2240 -0.0073
0.0026  0.0014  1 .
19   CD    CD    . GLN GLN GLN A A 3   3   . 0.2107 0.2239 0.3083 0.0424
0.0279  -0.0086 1 .
20   OE1   OE1   . GLN GLN GLN A A 3   3   . 0.2983 0.2393 0.3726 0.0448
0.0567  -0.0226 1 .
21   NE2   NE2   . GLN GLN GLN A A 3   3   . 0.1519 0.2516 0.3372 0.0795
0.0366  -0.0085 1 .
22   C     C     . GLN GLN GLN A A 3   3   . 0.1160 0.1022 0.1379 -0.0127 -
0.0010 -0.0011 1 .
23   O     O     . GLN GLN GLN A A 3   3   . 0.1250 0.1345 0.1851 -0.0102 -
0.0097 -0.0162 1 .
24   N     N     . LYS LYS LYS A A 4   4   . 0.1070 0.0984 0.0975 -0.0063
0.0034  -0.0050 1 .
25   CA    CA    . LYS LYS LYS A A 4   4   . 0.0819 0.1008 0.1016 -0.0129 -
0.0051 0.0004  1 .
26   CB    CB    . LYS LYS LYS A A 4   4   . 0.1039 0.1050 0.0862 -0.0087 -
0.0124 -0.0021 1 .
27   CG    CG    . LYS LYS LYS A A 4   4   . 0.1689 0.1609 0.1751 0.0076
0.0060  0.0035  1 .
28   CD    CD    . LYS LYS LYS A A 4   4   . 0.2884 0.3118 0.1935 -0.0050 -
0.0024 -0.0054 1 .
29   CE    CE    . LYS LYS LYS A A 4   4   . 0.3208 0.3426 0.2932 0.0014
0.0274  -0.0074 1 .
30   NZ    NZ    . LYS LYS LYS A A 4   4   . 0.3782 0.3909 0.3212 0.0099
0.0202  0.0151  1 .
31   C     C     . LYS LYS LYS A A 4   4   . 0.0561 0.0516 0.0578 -0.0081 -
0.0067 -0.0163 1 .
32   O     O     . LYS LYS LYS A A 4   4   . 0.0469 0.0299 0.0681 0.0014  -
0.0030 -0.0140 1 .
33   N     N     . ILE ILE ILE A A 5   5   . 0.0521 0.0335 0.0658 -0.0107 -
0.0122 -0.0067 1 .
34   CA    CA    . ILE ILE ILE A A 5   5   . 0.0390 0.0441 0.0355 -0.0125 -
0.0034 -0.0050 1 .
35   CB    CB    . ILE ILE ILE A A 5   5   . 0.0382 0.0267 0.0714 0.0007  -
0.0049 0.0076  1 .
36   CG1   CG1   . ILE ILE ILE A A 5   5   . 0.0784 0.0606 0.0402 -0.0050 -
0.0269 -0.0041 1 .
37   CD1   CD1   . ILE ILE ILE A A 5   5   . 0.0382 0.0386 0.0765 -0.0020 -
0.0221 0.0166  1 .
38   CG2   CG2   . ILE ILE ILE A A 5   5   . 0.0382 0.0539 0.0841 -0.0162 -
0.0192 0.0086  1 .
39   C     C     . ILE ILE ILE A A 5   5   . 0.0326 0.0391 0.0615 -0.0088
0.0118  -0.0073 1 .
40   O     O     . ILE ILE ILE A A 5   5   . 0.0762 0.0514 0.0880 -0.0221
0.0297  -0.0091 1 .
41   N     N     . TRP TRP TRP A A 6   6   . 0.0334 0.0253 0.0367 -0.0004
0.0096  -0.0005 1 .
42   CA    CA    . TRP TRP TRP A A 6   6   . 0.0533 0.0531 0.0452 -0.0056
0.0056  -0.0071 1 .
43   CB    CB    . TRP TRP TRP A A 6   6   . 0.0498 0.0759 0.0765 -0.0001 -
0.0042 -0.0200 1 .
44   CG    CG    . TRP TRP TRP A A 6   6   . 0.0608 0.0942 0.0836 0.0042
0.0002  -0.0086 1 .
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45   CD1   CD1   . TRP TRP TRP A A 6   6   . 0.1479 0.1209 0.1120 -0.0339 -
0.0007 -0.0067 1 .
46   NE1   NE1   . TRP TRP TRP A A 6   6   . 0.0885 0.1364 0.0674 -0.0193 -
0.0349 0.0030  1 .
47   CE2   CE2   . TRP TRP TRP A A 6   6   . 0.1310 0.1170 0.1417 0.0254
0.0109  -0.0037 1 .
48   CD2   CD2   . TRP TRP TRP A A 6   6   . 0.0952 0.0775 0.0817 -0.0345 -
0.0197 -0.0252 1 .
49   CE3   CE3   . TRP TRP TRP A A 6   6   . 0.1542 0.0718 0.1064 0.0010  -
0.0001 0.0218  1 .
50   CZ3   CZ3   . TRP TRP TRP A A 6   6   . 0.0994 0.0802 0.1678 -0.0358 -
0.0161 -0.0147 1 .
51   CH2   CH2   . TRP TRP TRP A A 6   6   . 0.1280 0.1100 0.1155 -0.0001 -
0.0221 -0.0193 1 .
52   CZ2   CZ2   . TRP TRP TRP A A 6   6   . 0.1417 0.1060 0.0880 -0.0192 -
0.0094 -0.0259 1 .
53   C     C     . TRP TRP TRP A A 6   6   . 0.0267 0.0253 0.0263 0.0000
0.0012  0.0000  1 .
54   O     O     . TRP TRP TRP A A 6   6   . 0.0325 0.0273 0.0598 -0.0012
0.0099  -0.0077 1 .
55   N     N     . ALA ALA ALA A A 7   7   . 0.0410 0.0404 0.0473 -0.0147 -
0.0032 0.0083  1 .
56   CA    CA    . ALA ALA ALA A A 7   7   . 0.0335 0.0275 0.0309 -0.0043 -
0.0068 0.0035  1 .
57   CB    CB    . ALA ALA ALA A A 7   7   . 0.0575 0.0514 0.0420 -0.0126 -
0.0202 0.0171  1 .
58   C     C     . ALA ALA ALA A A 7   7   . 0.0353 0.0265 0.0293 -0.0035 -
0.0063 0.0022  1 .
59   O     O     . ALA ALA ALA A A 7   7   . 0.0423 0.0283 0.0271 0.0066  -
0.0050 -0.0015 1 .
60   N     N     . ARG ARG ARG A A 8   8   . 0.0290 0.0254 0.0280 0.0000  -
0.0030 -0.0001 1 .
61   CA    CA    . ARG ARG ARG A A 8   8   . 0.0262 0.0254 0.0273 -0.0002
0.0013  -0.0004 1 .
62   CB    CB    . ARG ARG ARG A A 8   8   . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
63   CG    CG    . ARG ARG ARG A A 8   8   . 0.0722 0.0285 0.0431 0.0048
0.0002  0.0069  1 .
64   CD    CD    . ARG ARG ARG A A 8   8   . 0.0337 0.0264 0.0325 -0.0029 -
0.0078 0.0027  1 .
65   NE    NE    . ARG ARG ARG A A 8   8   . 0.0323 0.0357 0.0255 -0.0016 -
0.0001 0.0015  1 .
66   CZ    CZ    . ARG ARG ARG A A 8   8   . 0.0259 0.0336 0.0276 0.0023  -
0.0005 -0.0023 1 .
67   NH1   NH1   . ARG ARG ARG A A 8   8   . 0.0416 0.0328 0.0814 -0.0005 -
0.0248 -0.0108 1 .
68   NH2   NH2   . ARG ARG ARG A A 8   8   . 0.0414 0.0541 0.0493 0.0058
0.0021  0.0070  1 .
69   C     C     . ARG ARG ARG A A 8   8   . 0.0272 0.0392 0.0309 0.0050
0.0013  0.0046  1 .
70   O     O     . ARG ARG ARG A A 8   8   . 0.0293 0.0269 0.0259 -0.0025
0.0015  -0.0009 1 .
71   N     N     . GLU GLU GLU A A 9   9   . 0.0302 0.0341 0.0341 0.0050
0.0001  0.0057  1 .
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72   CA    CA    . GLU GLU GLU A A 9   9   . 0.0275 0.0401 0.0336 0.0057  -
0.0042 -0.0111 1 .
73   CB    CB    . GLU GLU GLU A A 9   9   . 0.0705 0.0964 0.0565 0.0098  -
0.0010 -0.0154 1 .
74   CG    CG    . GLU GLU GLU A A 9   9   . 0.0936 0.1536 0.0877 0.0409  -
0.0040 -0.0117 1 .
75   CD    CD    . GLU GLU GLU A A 9   9   . 0.0960 0.1529 0.0877 0.0567  -
0.0150 0.0079  1 .
76   OE1   OE1   . GLU GLU GLU A A 9   9   . 0.0327 0.0305 0.0409 0.0056  -
0.0027 -0.0003 1 .
77   OE2   OE2   . GLU GLU GLU A A 9   9   . 0.1489 0.1376 0.1112 0.0658
0.0221  -0.0240 1 .
78   C     C     . GLU GLU GLU A A 9   9   . 0.0286 0.0306 0.0291 -0.0042 -
0.0035 0.0045  1 .
79   O     O     . GLU GLU GLU A A 9   9   . 0.0715 0.0324 0.0482 -0.0180 -
0.0325 0.0127  1 .
80   N     N     . ILE ILE ILE A A 10  10  . 0.0291 0.0255 0.0351 -0.0004
0.0058  -0.0003 1 .
81   CA    CA    . ILE ILE ILE A A 10  10  . 0.0253 0.0315 0.0305 0.0002
0.0002  0.0056  1 .
82   CB    CB    . ILE ILE ILE A A 10  10  . 0.0267 0.0276 0.0301 -0.0017 -
0.0025 0.0033  1 .
83   CG1   CG1   . ILE ILE ILE A A 10  10  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
84   CD1   CD1   . ILE ILE ILE A A 10  10  . 0.0487 0.0260 0.0603 0.0040
0.0286  0.0049  1 .
85   CG2   CG2   . ILE ILE ILE A A 10  10  . 0.0307 0.0310 0.0312 -0.0055 -
0.0056 0.0058  1 .
86   C     C     . ILE ILE ILE A A 10  10  . 0.0256 0.0256 0.0257 0.0003  -
0.0003 -0.0003 1 .
87   O     O     . ILE ILE ILE A A 10  10  . 0.0507 0.0272 0.0284 -0.0042 -
0.0048 0.0024  1 .
88   N     N     . LEU LEU LEU A A 11  11  . 0.0356 0.0260 0.0303 -0.0027
0.0071  -0.0019 1 .
89   CA    CA    . LEU LEU LEU A A 11  11  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
90   CB    CB    . LEU LEU LEU A A 11  11  . 0.0477 0.0302 0.0264 0.0105  -
0.0050 -0.0023 1 .
91   CG    CG    . LEU LEU LEU A A 11  11  . 0.0324 0.0314 0.0259 0.0065
0.0021  0.0019  1 .
92   CD1   CD1   . LEU LEU LEU A A 11  11  . 0.0297 0.0284 0.0254 -0.0037
0.0005  -0.0004 1 .
93   CD2   CD2   . LEU LEU LEU A A 11  11  . 0.0402 0.0253 0.0253 0.0007  -
0.0001 0.0000  1 .
94   C     C     . LEU LEU LEU A A 11  11  . 0.0254 0.0350 0.0289 0.0009
0.0005  0.0059  1 .
95   O     O     . LEU LEU LEU A A 11  11  . 0.0256 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
96   N     N     . ASP ASP ASP A A 12  12  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
97   CA    CA    . ASP ASP ASP A A 12  12  . 0.0294 0.0289 0.0261 0.0038
0.0018  0.0017  1 .
98   CB    CB    . ASP ASP ASP A A 12  12  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
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99   CG    CG    . ASP ASP ASP A A 12  12  . 0.0561 0.0760 0.0547 0.0100  -
0.0102 0.0038  1 .
100  OD1   OD1   . ASP ASP ASP A A 12  12  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
101  OD2   OD2   . ASP ASP ASP A A 12  12  . 0.0450 0.0294 0.0262 -0.0090 -
0.0043 0.0019  1 .
102  C     C     . ASP ASP ASP A A 12  12  . 0.0270 0.0277 0.0286 0.0020  -
0.0023 -0.0028 1 .
103  O     O     . ASP ASP ASP A A 12  12  . 0.0263 0.0253 0.0257 -0.0002
0.0006  -0.0001 1 .
104  N     N     . SER SER SER A A 13  13  . 0.0313 0.0307 0.0282 -0.0005
0.0024  0.0030  1 .
105  CA    CA    . SER SER SER A A 13  13  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
106  CB    CB    . SER SER SER A A 13  13  . 0.0357 0.0253 0.0279 0.0002  -
0.0052 -0.0001 1 .
107  OG    OG    . SER SER SER A A 13  13  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
108  C     C     . SER SER SER A A 13  13  . 0.0290 0.0253 0.0259 0.0000
0.0014  0.0000  1 .
109  O     O     . SER SER SER A A 13  13  . 0.0421 0.0348 0.0276 0.0126
0.0062  0.0047  1 .
110  N     N     . ARG ARG ARG A A 14  14  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
111  CA    CA    . ARG ARG ARG A A 14  14  . 0.0298 0.0299 0.0379 0.0025
0.0033  -0.0037 1 .
112  CB    CB    . ARG ARG ARG A A 14  14  . 0.0428 0.0511 0.0425 0.0129  -
0.0035 -0.0097 1 .
113  CG    CG    . ARG ARG ARG A A 14  14  . 0.0330 0.0755 0.0701 -0.0153
0.0152  -0.0129 1 .
114  CD    CD    . ARG ARG ARG A A 14  14  . 0.0724 0.0871 0.0939 0.0034
0.0425  -0.0048 1 .
115  NE    NE    . ARG ARG ARG A A 14  14  . 0.1257 0.1419 0.1253 -0.0189
0.0133  -0.0101 1 .
116  CZ    CZ    . ARG ARG ARG A A 14  14  . 0.0436 0.1056 0.0919 -0.0267
0.0041  -0.0286 1 .
117  NH1   NH1   . ARG ARG ARG A A 14  14  . 0.0349 0.0450 0.0724 -0.0106
0.0146  -0.0214 1 .
118  NH2   NH2   . ARG ARG ARG A A 14  14  . 0.1033 0.1168 0.1409 0.0076
0.0119  -0.0140 1 .
119  C     C     . ARG ARG ARG A A 14  14  . 0.0269 0.0277 0.0253 0.0019
0.0002  0.0003  1 .
120  O     O     . ARG ARG ARG A A 14  14  . 0.0436 0.0303 0.0363 -0.0064
0.0139  -0.0038 1 .
121  N     N     . GLY GLY GLY A A 15  15  . 0.0287 0.0253 0.0253 0.0004
0.0001  0.0000  1 .
122  CA    CA    . GLY GLY GLY A A 15  15  . 0.0293 0.0253 0.0304 -0.0001
0.0045  -0.0001 1 .
123  C     C     . GLY GLY GLY A A 15  15  . 0.0351 0.0447 0.0331 0.0108  -
0.0074 -0.0042 1 .
124  O     O     . GLY GLY GLY A A 15  15  . 0.0858 0.0328 0.0431 0.0192
0.0126  -0.0006 1 .
125  N     N     . ASN ASN ASN A A 16  16  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
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126  CA    CA    . ASN ASN ASN A A 16  16  . 0.0278 0.0356 0.0377 -0.0026
0.0009  -0.0105 1 .
127  CB    CB    . ASN ASN ASN A A 16  16  . 0.0288 0.0271 0.0334 0.0025
0.0053  0.0038  1 .
128  CG    CG    . ASN ASN ASN A A 16  16  . 0.0272 0.0328 0.0372 -0.0037
0.0047  -0.0094 1 .
129  OD1   OD1   . ASN ASN ASN A A 16  16  . 0.0960 0.1234 0.0490 0.0171
0.0072  -0.0190 1 .
130  ND2   ND2   . ASN ASN ASN A A 16  16  . 0.0914 0.0758 0.0988 0.0091  -
0.0088 -0.0494 1 .
131  C     C     . ASN ASN ASN A A 16  16  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
132  O     O     . ASN ASN ASN A A 16  16  . 0.0310 0.0276 0.0333 0.0036  -
0.0067 -0.0042 1 .
133  N     N     . PRO PRO PRO A A 17  17  . 0.0254 0.0274 0.0265 0.0004  -
0.0002 -0.0014 1 .
134  CA    CA    . PRO PRO PRO A A 17  17  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
135  CB    CB    . PRO PRO PRO A A 17  17  . 0.0290 0.0254 0.0256 0.0005
0.0011  0.0001  1 .
136  CG    CG    . PRO PRO PRO A A 17  17  . 0.0333 0.0283 0.0547 -0.0049
0.0153  -0.0094 1 .
137  CD    CD    . PRO PRO PRO A A 17  17  . 0.0278 0.0276 0.0285 0.0023  -
0.0025 -0.0025 1 .
138  C     C     . PRO PRO PRO A A 17  17  . 0.0281 0.0255 0.0273 0.0008  -
0.0024 -0.0006 1 .
139  O     O     . PRO PRO PRO A A 17  17  . 0.0362 0.0269 0.0273 0.0041  -
0.0046 -0.0017 1 .
140  N     N     . THR THR THR A A 18  18  . 0.0290 0.0253 0.0254 -0.0004
0.0005  0.0000  1 .
141  CA    CA    . THR THR THR A A 18  18  . 0.0384 0.0253 0.0286 -0.0001
0.0065  0.0000  1 .
142  CB    CB    . THR THR THR A A 18  18  . 0.0256 0.0276 0.0253 0.0008  -
0.0001 -0.0002 1 .
143  OG1   OG1   . THR THR THR A A 18  18  . 0.0255 0.0257 0.0253 0.0003
0.0000  0.0000  1 .
144  CG2   CG2   . THR THR THR A A 18  18  . 0.0472 0.0299 0.0260 0.0100
0.0038  0.0017  1 .
145  C     C     . THR THR THR A A 18  18  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
146  O     O     . THR THR THR A A 18  18  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
147  N     N     . VAL VAL VAL A A 19  19  . 0.0255 0.0254 0.0253 0.0001
0.0000  0.0000  1 .
148  CA    CA    . VAL VAL VAL A A 19  19  . 0.0257 0.0300 0.0279 -0.0014
0.0011  -0.0035 1 .
149  CB    CB    . VAL VAL VAL A A 19  19  . 0.0269 0.0378 0.0353 0.0044  -
0.0040 -0.0111 1 .
150  CG1   CG1   . VAL VAL VAL A A 19  19  . 0.0283 0.0258 0.0625 0.0011
0.0104  0.0042  1 .
151  CG2   CG2   . VAL VAL VAL A A 19  19  . 0.0394 0.0570 0.0306 0.0211  -
0.0087 -0.0130 1 .
152  C     C     . VAL VAL VAL A A 19  19  . 0.0260 0.0257 0.0285 -0.0005 -
0.0014 0.0011  1 .
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153  O     O     . VAL VAL VAL A A 19  19  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
154  N     N     . GLU GLU GLU A A 20  20  . 0.0313 0.0260 0.0275 0.0020
0.0036  0.0012  1 .
155  CA    CA    . GLU GLU GLU A A 20  20  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
156  CB    CB    . GLU GLU GLU A A 20  20  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
157  CG    CG    . GLU GLU GLU A A 20  20  . 0.0646 0.0437 0.0444 0.0239
0.0195  0.0179  1 .
158  CD    CD    . GLU GLU GLU A A 20  20  . 0.0943 0.0410 0.0654 0.0016  -
0.0251 0.0214  1 .
159  OE1   OE1   . GLU GLU GLU A A 20  20  . 0.0803 0.0255 0.0421 0.0035  -
0.0304 -0.0019 1 .
160  OE2   OE2   . GLU GLU GLU A A 20  20  . 0.0921 0.0263 0.0328 0.0016  -
0.0113 0.0020  1 .
161  C     C     . GLU GLU GLU A A 20  20  . 0.0298 0.0259 0.0329 0.0016
0.0058  0.0021  1 .
162  O     O     . GLU GLU GLU A A 20  20  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
163  N     N     . VAL VAL VAL A A 21  21  . 0.0387 0.0269 0.0320 -0.0030 -
0.0094 0.0018  1 .
164  CA    CA    . VAL VAL VAL A A 21  21  . 0.0347 0.0416 0.0310 0.0066  -
0.0005 0.0077  1 .
165  CB    CB    . VAL VAL VAL A A 21  21  . 0.0324 0.0336 0.0267 -0.0077 -
0.0032 0.0034  1 .
166  CG1   CG1   . VAL VAL VAL A A 21  21  . 0.0372 0.0485 0.0510 -0.0163
0.0008  0.0036  1 .
167  CG2   CG2   . VAL VAL VAL A A 21  21  . 0.0786 0.0412 0.0469 0.0064  -
0.0143 -0.0181 1 .
168  C     C     . VAL VAL VAL A A 21  21  . 0.0255 0.0268 0.0255 0.0006
0.0002  0.0006  1 .
169  O     O     . VAL VAL VAL A A 21  21  . 0.0257 0.0268 0.0259 0.0008
0.0005  0.0009  1 .
170  N     N     . ASP ASP ASP A A 22  22  . 0.0412 0.0260 0.0264 -0.0033 -
0.0041 0.0008  1 .
171  CA    CA    . ASP ASP ASP A A 22  22  . 0.0264 0.0326 0.0332 0.0028
0.0029  0.0076  1 .
172  CB    CB    . ASP ASP ASP A A 22  22  . 0.0454 0.0281 0.0334 -0.0075 -
0.0128 0.0048  1 .
173  CG    CG    . ASP ASP ASP A A 22  22  . 0.0654 0.0797 0.0593 -0.0365
0.0167  0.0087  1 .
174  OD1   OD1   . ASP ASP ASP A A 22  22  . 0.1158 0.1045 0.0930 -0.0124 -
0.0001 0.0441  1 .
175  OD2   OD2   . ASP ASP ASP A A 22  22  . 0.0622 0.0870 0.1071 -0.0404 -
0.0346 0.0086  1 .
176  C     C     . ASP ASP ASP A A 22  22  . 0.0456 0.0281 0.0307 -0.0021 -
0.0070 0.0034  1 .
177  O     O     . ASP ASP ASP A A 22  22  . 0.0867 0.0268 0.0405 0.0040
0.0194  0.0025  1 .
178  N     N     . LEU LEU LEU A A 23  23  . 0.0514 0.0626 0.0853 0.0008
0.0125  0.0089  1 .
179  CA    CA    . LEU LEU LEU A A 23  23  . 0.0401 0.0541 0.0649 0.0022  -
0.0143 0.0190  1 .
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180  CB    CB    . LEU LEU LEU A A 23  23  . 0.0957 0.0570 0.0740 -0.0207 -
0.0211 0.0391  1 .
181  CG    CG    . LEU LEU LEU A A 23  23  . 0.0444 0.0529 0.0810 -0.0089
0.0013  0.0354  1 .
182  CD1   CD1   . LEU LEU LEU A A 23  23  . 0.0927 0.0582 0.0567 -0.0055 -
0.0137 -0.0187 1 .
183  CD2   CD2   . LEU LEU LEU A A 23  23  . 0.0539 0.0377 0.0782 0.0013
0.0090  -0.0061 1 .
184  C     C     . LEU LEU LEU A A 23  23  . 0.0313 0.0403 0.0739 0.0088
0.0079  0.0027  1 .
185  O     O     . LEU LEU LEU A A 23  23  . 0.0684 0.0571 0.1151 -0.0079
0.0160  -0.0003 1 .
186  N     N     . TYR TYR TYR A A 24  24  . 0.0348 0.0312 0.0796 0.0053
0.0137  -0.0020 1 .
187  CA    CA    . TYR TYR TYR A A 24  24  . 0.0468 0.0400 0.0699 -0.0004 -
0.0011 0.0101  1 .
188  CB    CB    . TYR TYR TYR A A 24  24  . 0.0616 0.0564 0.0901 -0.0196 -
0.0022 -0.0030 1 .
189  CG    CG    . TYR TYR TYR A A 24  24  . 0.0916 0.0707 0.0807 -0.0245
0.0059  -0.0105 1 .
190  CD1   CD1   . TYR TYR TYR A A 24  24  . 0.0861 0.1048 0.1429 -0.0451 -
0.0215 0.0192  1 .
191  CE1   CE1   . TYR TYR TYR A A 24  24  . 0.0747 0.1324 0.1329 -0.0641
0.0001  0.0505  1 .
192  CZ    CZ    . TYR TYR TYR A A 24  24  . 0.1382 0.1895 0.1989 -0.0221 -
0.0165 0.0318  1 .
193  OH    OH    . TYR TYR TYR A A 24  24  . 0.1494 0.2570 0.2299 -0.0336 -
0.0395 0.0466  1 .
194  CE2   CE2   . TYR TYR TYR A A 24  24  . 0.1126 0.1903 0.1240 0.0226  -
0.0262 0.0798  1 .
195  CD2   CD2   . TYR TYR TYR A A 24  24  . 0.1013 0.1496 0.1259 -0.0457 -
0.0436 0.0494  1 .
196  C     C     . TYR TYR TYR A A 24  24  . 0.0646 0.0705 0.0838 0.0145
0.0097  0.0079  1 .
197  O     O     . TYR TYR TYR A A 24  24  . 0.0781 0.0595 0.1140 -0.0093
0.0235  0.0010  1 .
198  N     N     . THR THR THR A A 25  25  . 0.0964 0.1035 0.0959 0.0025
0.0208  0.0058  1 .
199  CA    CA    . THR THR THR A A 25  25  . 0.1085 0.0901 0.1360 0.0022
0.0069  0.0057  1 .
200  CB    CB    . THR THR THR A A 25  25  . 0.0901 0.0736 0.1249 -0.0059 -
0.0006 0.0181  1 .
201  OG1   OG1   . THR THR THR A A 25  25  . 0.1190 0.0904 0.2001 0.0100
0.0157  -0.0232 1 .
202  CG2   CG2   . THR THR THR A A 25  25  . 0.0811 0.1165 0.1572 0.0215  -
0.0312 0.0105  1 .
203  C     C     . THR THR THR A A 25  25  . 0.1239 0.1092 0.1258 -0.0005 -
0.0001 0.0131  1 .
204  O     O     . THR THR THR A A 25  25  . 0.1178 0.1198 0.1284 0.0157  -
0.0198 0.0030  1 .
205  N     N     . ALA ALA ALA A A 26  26  . 0.1304 0.1195 0.1556 0.0033
0.0031  0.0162  1 .
206  CA    CA    . ALA ALA ALA A A 26  26  . 0.1495 0.1437 0.1670 0.0037
0.0017  0.0177  1 .
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207  CB    CB    . ALA ALA ALA A A 26  26  . 0.1369 0.1203 0.1965 0.0030
0.0114  0.0245  1 .
208  C     C     . ALA ALA ALA A A 26  26  . 0.1637 0.1477 0.1763 0.0109  -
0.0082 0.0113  1 .
209  O     O     . ALA ALA ALA A A 26  26  . 0.2120 0.1520 0.1934 0.0390  -
0.0217 0.0223  1 .
210  N     N     . LYS LYS LYS A A 27  27  . 0.1832 0.1754 0.1746 0.0009
0.0047  0.0103  1 .
211  CA    CA    . LYS LYS LYS A A 27  27  . 0.1995 0.1809 0.1903 0.0049
0.0147  0.0118  1 .
212  CB    CB    . LYS LYS LYS A A 27  27  . 0.1747 0.1748 0.1672 0.0114
0.0060  0.0297  1 .
213  CG    CG    . LYS LYS LYS A A 27  27  . 0.2427 0.2206 0.2331 -0.0012
0.0228  0.0253  1 .
214  CD    CD    . LYS LYS LYS A A 27  27  . 0.2897 0.2804 0.2810 -0.0088
0.0435  -0.0178 1 .
215  CE    CE    . LYS LYS LYS A A 27  27  . 0.3230 0.3054 0.2361 0.0017
0.0292  -0.0119 1 .
216  NZ    NZ    . LYS LYS LYS A A 27  27  . 0.3243 0.3883 0.1062 0.0039
0.0485  0.0222  1 .
217  C     C     . LYS LYS LYS A A 27  27  . 0.1909 0.1919 0.1989 0.0090
0.0155  0.0046  1 .
218  O     O     . LYS LYS LYS A A 27  27  . 0.2158 0.1995 0.2253 0.0153
0.0229  0.0242  1 .
219  N     N     . GLY GLY GLY A A 28  28  . 0.1901 0.1923 0.1872 0.0121
0.0149  -0.0006 1 .
220  CA    CA    . GLY GLY GLY A A 28  28  . 0.1746 0.1698 0.1911 0.0021
0.0049  0.0162  1 .
221  C     C     . GLY GLY GLY A A 28  28  . 0.1510 0.1295 0.1748 0.0114
0.0026  0.0181  1 .
222  O     O     . GLY GLY GLY A A 28  28  . 0.1937 0.1126 0.1783 -0.0092 -
0.0048 0.0328  1 .
223  N     N     . LEU LEU LEU A A 29  29  . 0.1217 0.1103 0.1473 0.0019
0.0098  0.0379  1 .
224  CA    CA    . LEU LEU LEU A A 29  29  . 0.1280 0.1056 0.1245 0.0179
0.0029  0.0230  1 .
225  CB    CB    . LEU LEU LEU A A 29  29  . 0.1590 0.1223 0.1424 0.0120
0.0013  0.0465  1 .
226  CG    CG    . LEU LEU LEU A A 29  29  . 0.1819 0.2138 0.1495 -0.0122
0.0105  0.0483  1 .
227  CD1   CD1   . LEU LEU LEU A A 29  29  . 0.2413 0.2449 0.1343 -0.0006 -
0.0315 0.0804  1 .
228  CD2   CD2   . LEU LEU LEU A A 29  29  . 0.1857 0.2587 0.1291 -0.0100 -
0.0447 0.0394  1 .
229  C     C     . LEU LEU LEU A A 29  29  . 0.0981 0.0696 0.1024 0.0182  -
0.0030 0.0107  1 .
230  O     O     . LEU LEU LEU A A 29  29  . 0.1463 0.1052 0.1048 0.0212  -
0.0210 -0.0158 1 .
231  N     N     . PHE PHE PHE A A 30  30  . 0.0573 0.0571 0.0589 0.0127
0.0028  0.0045  1 .
232  CA    CA    . PHE PHE PHE A A 30  30  . 0.0597 0.0474 0.0593 -0.0048
0.0182  -0.0024 1 .
233  CB    CB    . PHE PHE PHE A A 30  30  . 0.0574 0.0734 0.0937 0.0018
0.0090  0.0351  1 .
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234  CG    CG    . PHE PHE PHE A A 30  30  . 0.0698 0.0887 0.0641 -0.0045
0.0176  0.0058  1 .
235  CD1   CD1   . PHE PHE PHE A A 30  30  . 0.0678 0.1005 0.0855 -0.0216
0.0409  0.0157  1 .
236  CE1   CE1   . PHE PHE PHE A A 30  30  . 0.0890 0.1163 0.1570 0.0330
0.0137  0.0338  1 .
237  CZ    CZ    . PHE PHE PHE A A 30  30  . 0.1239 0.0944 0.1245 0.0121
0.0187  0.0038  1 .
238  CE2   CE2   . PHE PHE PHE A A 30  30  . 0.1128 0.0880 0.1259 -0.0071
0.0537  0.0324  1 .
239  CD2   CD2   . PHE PHE PHE A A 30  30  . 0.0967 0.0862 0.1208 -0.0180
0.0576  0.0017  1 .
240  C     C     . PHE PHE PHE A A 30  30  . 0.0716 0.0583 0.1000 0.0038
0.0182  -0.0096 1 .
241  O     O     . PHE PHE PHE A A 30  30  . 0.1265 0.0621 0.1538 -0.0108
0.0217  -0.0299 1 .
242  N     N     . ARG ARG ARG A A 31  31  . 0.0357 0.0279 0.0589 -0.0027
0.0111  0.0034  1 .
243  CA    CA    . ARG ARG ARG A A 31  31  . 0.0410 0.0253 0.0368 0.0008
0.0134  0.0007  1 .
244  CB    CB    . ARG ARG ARG A A 31  31  . 0.0704 0.0328 0.0513 0.0157
0.0312  0.0079  1 .
245  CG    CG    . ARG ARG ARG A A 31  31  . 0.0294 0.0305 0.0592 0.0046
0.0118  0.0133  1 .
246  CD    CD    . ARG ARG ARG A A 31  31  . 0.0868 0.0999 0.0406 -0.0088
0.0237  0.0178  1 .
247  NE    NE    . ARG ARG ARG A A 31  31  . 0.0813 0.0938 0.0708 -0.0307
0.0224  0.0310  1 .
248  CZ    CZ    . ARG ARG ARG A A 31  31  . 0.1010 0.1100 0.1055 -0.0099
0.0239  0.0110  1 .
249  NH1   NH1   . ARG ARG ARG A A 31  31  . 0.1091 0.0692 0.1171 0.0373
0.0864  0.0301  1 .
250  NH2   NH2   . ARG ARG ARG A A 31  31  . 0.1268 0.1466 0.1218 0.0056  -
0.0133 -0.0195 1 .
251  C     C     . ARG ARG ARG A A 31  31  . 0.0577 0.0385 0.0456 0.0077
0.0049  -0.0035 1 .
252  O     O     . ARG ARG ARG A A 31  31  . 0.0506 0.0262 0.0424 -0.0047
0.0208  -0.0038 1 .
253  N     N     . ALA ALA ALA A A 32  32  . 0.0325 0.0340 0.0326 -0.0074
0.0071  -0.0067 1 .
254  CA    CA    . ALA ALA ALA A A 32  32  . 0.0284 0.0273 0.0258 0.0024
0.0013  0.0010  1 .
255  CB    CB    . ALA ALA ALA A A 32  32  . 0.0500 0.0254 0.0453 -0.0018
0.0222  -0.0017 1 .
256  C     C     . ALA ALA ALA A A 32  32  . 0.0321 0.0317 0.0297 0.0018
0.0018  -0.0042 1 .
257  O     O     . ALA ALA ALA A A 32  32  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
258  N     N     . ALA ALA ALA A A 33  33  . 0.0303 0.0258 0.0283 -0.0016
0.0038  -0.0012 1 .
259  CA    CA    . ALA ALA ALA A A 33  33  . 0.0261 0.0253 0.0357 0.0001
0.0029  0.0005  1 .
260  CB    CB    . ALA ALA ALA A A 33  33  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
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261  C     C     . ALA ALA ALA A A 33  33  . 0.0300 0.0253 0.0260 0.0000
0.0017  0.0000  1 .
262  O     O     . ALA ALA ALA A A 33  33  . 0.0630 0.0318 0.0547 0.0080  -
0.0121 0.0084  1 .
263  N     N     . VAL VAL VAL A A 34  34  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
264  CA    CA    . VAL VAL VAL A A 34  34  . 0.0309 0.0277 0.0291 0.0036  -
0.0046 -0.0030 1 .
265  CB    CB    . VAL VAL VAL A A 34  34  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
266  CG1   CG1   . VAL VAL VAL A A 34  34  . 0.0263 0.0273 0.0259 0.0014  -
0.0007 -0.0011 1 .
267  CG2   CG2   . VAL VAL VAL A A 34  34  . 0.0358 0.0284 0.0337 -0.0057
0.0093  -0.0051 1 .
268  C     C     . VAL VAL VAL A A 34  34  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
269  O     O     . VAL VAL VAL A A 34  34  . 0.0314 0.0261 0.0265 -0.0022
0.0027  -0.0010 1 .
270  N     N     . PRO PRO PRO A A 35  35  . 0.0311 0.0302 0.0273 -0.0007 -
0.0034 0.0000  1 .
271  CA    CA    . PRO PRO PRO A A 35  35  . 0.0255 0.0253 0.0254 0.0001
0.0001  0.0000  1 .
272  CB    CB    . PRO PRO PRO A A 35  35  . 0.0318 0.0255 0.0276 0.0010
0.0038  0.0006  1 .
273  CG    CG    . PRO PRO PRO A A 35  35  . 0.0277 0.0305 0.0260 -0.0035
0.0012  -0.0018 1 .
274  CD    CD    . PRO PRO PRO A A 35  35  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
275  C     C     . PRO PRO PRO A A 35  35  . 0.0274 0.0338 0.0283 -0.0042 -
0.0025 0.0050  1 .
276  O     O     . PRO PRO PRO A A 35  35  . 0.0284 0.0259 0.0370 -0.0013
0.0060  -0.0026 1 .
277  N     N     . SER SER SER A A 36  36  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
278  CA    CA    . SER SER SER A A 36  36  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
279  CB    CB    . SER SER SER A A 36  36  . 0.0447 0.0397 0.0304 0.0167  -
0.0099 -0.0085 1 .
280  OG    OG    . SER SER SER A A 36  36  . 0.0370 0.0577 0.0562 -0.0116 -
0.0052 -0.0008 1 .
281  C     C     . SER SER SER A A 36  36  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
282  O     O     . SER SER SER A A 36  36  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
283  N     N     . GLY GLY GLY A A 37  37  . 0.0349 0.0344 0.0296 -0.0062
0.0032  -0.0061 1 .
284  CA    CA    . GLY GLY GLY A A 37  37  . 0.0253 0.0366 0.0274 0.0001
0.0000  0.0049  1 .
285  C     C     . GLY GLY GLY A A 37  37  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
286  O     O     . GLY GLY GLY A A 37  37  . 0.0273 0.0286 0.0293 0.0025
0.0028  0.0036  1 .
287  N     N     . ALA ALA ALA A A 38  38  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
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288  CA    CA    . ALA ALA ALA A A 38  38  . 0.0258 0.0260 0.0262 0.0005  -
0.0006 -0.0008 1 .
289  CB    CB    . ALA ALA ALA A A 38  38  . 0.0298 0.0445 0.0370 -0.0069
0.0014  0.0076  1 .
290  C     C     . ALA ALA ALA A A 38  38  . 0.0307 0.0305 0.0335 0.0025
0.0001  -0.0056 1 .
291  O     O     . ALA ALA ALA A A 38  38  . 0.0408 0.0412 0.0622 0.0053
0.0158  -0.0115 1 .
292  N     N     . SER SER SER A A 39  39  . 0.0546 0.0361 0.0343 -0.0126
0.0031  0.0054  1 .
293  CA    CA    . SER SER SER A A 39  39  . 0.0459 0.0366 0.0449 0.0075  -
0.0018 -0.0135 1 .
294  CB    CB    . SER SER SER A A 39  39  . 0.0431 0.0456 0.0885 -0.0161 -
0.0200 0.0028  1 .
295  OG    OG    . SER SER SER A A 39  39  . 0.0260 0.0329 0.0339 0.0011  -
0.0002 -0.0074 1 .
296  C     C     . SER SER SER A A 39  39  . 0.0415 0.0487 0.0465 -0.0141 -
0.0106 -0.0032 1 .
297  O     O     . SER SER SER A A 39  39  . 0.0364 0.0334 0.0329 0.0089
0.0006  -0.0022 1 .
298  N     N     . THR THR THR A A 40  40  . 0.0254 0.0254 0.0335 0.0001  -
0.0008 -0.0010 1 .
299  CA    CA    . THR THR THR A A 40  40  . 0.0308 0.0395 0.0379 -0.0088 -
0.0083 0.0134  1 .
300  CB    CB    . THR THR THR A A 40  40  . 0.0320 0.0253 0.0311 -0.0001 -
0.0062 0.0001  1 .
301  OG1   OG1   . THR THR THR A A 40  40  . 0.0704 0.0345 0.0641 -0.0040 -
0.0418 0.0037  1 .
302  CG2   CG2   . THR THR THR A A 40  40  . 0.0280 0.0285 0.0301 -0.0029 -
0.0035 0.0039  1 .
303  C     C     . THR THR THR A A 40  40  . 0.0401 0.0334 0.0309 -0.0002 -
0.0039 0.0061  1 .
304  O     O     . THR THR THR A A 40  40  . 0.0369 0.0715 0.0887 -0.0042 -
0.0189 0.0142  1 .
305  N     N     . GLY GLY GLY A A 41  41  . 0.0282 0.0390 0.0392 0.0051  -
0.0063 -0.0114 1 .
306  CA    CA    . GLY GLY GLY A A 41  41  . 0.0347 0.0336 0.0383 0.0087  -
0.0056 -0.0059 1 .
307  C     C     . GLY GLY GLY A A 41  41  . 0.0545 0.0397 0.0461 0.0096  -
0.0204 -0.0022 1 .
308  O     O     . GLY GLY GLY A A 41  41  . 0.0639 0.0427 0.0813 0.0255  -
0.0041 -0.0079 1 .
309  N     N     . ILE ILE ILE A A 42  42  . 0.0284 0.0371 0.0619 0.0041  -
0.0027 -0.0183 1 .
310  CA    CA    . ILE ILE ILE A A 42  42  . 0.0418 0.0429 0.0431 0.0125  -
0.0142 -0.0041 1 .
311  CB    CB    . ILE ILE ILE A A 42  42  . 0.0613 0.0534 0.0453 -0.0037 -
0.0176 -0.0019 1 .
312  CG1   CG1   . ILE ILE ILE A A 42  42  . 0.0598 0.1233 0.0443 0.0252  -
0.0238 -0.0243 1 .
313  CD1   CD1   . ILE ILE ILE A A 42  42  . 0.1025 0.1769 0.1062 0.0203  -
0.0237 -0.0431 1 .
314  CG2   CG2   . ILE ILE ILE A A 42  42  . 0.0463 0.0949 0.0670 0.0021
0.0160  -0.0435 1 .
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315  C     C     . ILE ILE ILE A A 42  42  . 0.0402 0.0389 0.0421 0.0131  -
0.0083 -0.0024 1 .
316  O     O     . ILE ILE ILE A A 42  42  . 0.0797 0.0498 0.0391 0.0115  -
0.0206 -0.0103 1 .
317  N     N     . TYR TYR TYR A A 43  43  . 0.0699 0.0719 0.0379 0.0015  -
0.0012 0.0120  1 .
318  CA    CA    . TYR TYR TYR A A 43  43  . 0.0403 0.0412 0.0365 0.0041  -
0.0114 -0.0022 1 .
319  CB    CB    . TYR TYR TYR A A 43  43  . 0.0708 0.0725 0.0493 0.0164  -
0.0320 -0.0037 1 .
320  CG    CG    . TYR TYR TYR A A 43  43  . 0.0609 0.0860 0.0994 -0.0132 -
0.0253 -0.0124 1 .
321  CD1   CD1   . TYR TYR TYR A A 43  43  . 0.1418 0.1449 0.0827 -0.0230 -
0.0434 0.0126  1 .
322  CE1   CE1   . TYR TYR TYR A A 43  43  . 0.1160 0.0950 0.1339 0.0501
0.0335  -0.0257 1 .
323  CZ    CZ    . TYR TYR TYR A A 43  43  . 0.1385 0.1106 0.2040 0.0078  -
0.0404 -0.0149 1 .
324  OH    OH    . TYR TYR TYR A A 43  43  . 0.1052 0.1125 0.1877 0.0554
0.0038  -0.0257 1 .
325  CE2   CE2   . TYR TYR TYR A A 43  43  . 0.1017 0.1076 0.2029 -0.0119 -
0.0249 -0.0107 1 .
326  CD2   CD2   . TYR TYR TYR A A 43  43  . 0.0767 0.0708 0.0936 -0.0029 -
0.0295 -0.0015 1 .
327  C     C     . TYR TYR TYR A A 43  43  . 0.0401 0.0469 0.0277 0.0050
0.0051  0.0052  1 .
328  O     O     . TYR TYR TYR A A 43  43  . 0.0726 0.0293 0.0752 0.0126  -
0.0163 0.0010  1 .
329  N     N     . GLU GLU GLU A A 44  44  . 0.0454 0.0303 0.0708 0.0042  -
0.0136 0.0093  1 .
330  CA    CA    . GLU GLU GLU A A 44  44  . 0.0531 0.0253 0.0362 -0.0012 -
0.0174 0.0007  1 .
331  CB    CB    . GLU GLU GLU A A 44  44  . 0.0532 0.0279 0.0354 0.0086  -
0.0168 -0.0051 1 .
332  CG    CG    . GLU GLU GLU A A 44  44  . 0.0595 0.0333 0.0434 0.0062
0.0060  -0.0097 1 .
333  CD    CD    . GLU GLU GLU A A 44  44  . 0.0539 0.0587 0.0514 0.0131  -
0.0166 0.0134  1 .
334  OE1   OE1   . GLU GLU GLU A A 44  44  . 0.0455 0.0259 0.0347 0.0031  -
0.0077 -0.0005 1 .
335  OE2   OE2   . GLU GLU GLU A A 44  44  . 0.0311 0.0317 0.0348 -0.0039 -
0.0068 0.0070  1 .
336  C     C     . GLU GLU GLU A A 44  44  . 0.0257 0.0275 0.0402 0.0009  -
0.0025 -0.0058 1 .
337  O     O     . GLU GLU GLU A A 44  44  . 0.0468 0.0460 0.0437 0.0090  -
0.0155 0.0045  1 .
338  N     N     . ALA ALA ALA A A 45  45  . 0.0384 0.0340 0.0481 0.0015
0.0040  -0.0130 1 .
339  CA    CA    . ALA ALA ALA A A 45  45  . 0.0254 0.0253 0.0256 0.0000  -
0.0002 0.0001  1 .
340  CB    CB    . ALA ALA ALA A A 45  45  . 0.0329 0.0262 0.0315 -0.0025
0.0068  -0.0023 1 .
341  C     C     . ALA ALA ALA A A 45  45  . 0.0552 0.0360 0.0395 -0.0089 -
0.0039 -0.0093 1 .
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342  O     O     . ALA ALA ALA A A 45  45  . 0.0850 0.0380 0.0642 -0.0145 -
0.0327 0.0070  1 .
343  N     N     . LEU LEU LEU A A 46  46  . 0.0693 0.0325 0.0549 0.0113  -
0.0096 -0.0022 1 .
344  CA    CA    . LEU LEU LEU A A 46  46  . 0.0580 0.0434 0.0500 -0.0076 -
0.0103 -0.0094 1 .
345  CB    CB    . LEU LEU LEU A A 46  46  . 0.0465 0.0516 0.0311 0.0206  -
0.0031 -0.0088 1 .
346  CG    CG    . LEU LEU LEU A A 46  46  . 0.1399 0.1791 0.1208 0.0016
0.0256  -0.0159 1 .
347  CD1   CD1   . LEU LEU LEU A A 46  46  . 0.1574 0.2145 0.0912 0.0636  -
0.0562 0.0544  1 .
348  CD2   CD2   . LEU LEU LEU A A 46  46  . 0.1018 0.1949 0.1613 0.0157
0.0207  -0.0015 1 .
349  C     C     . LEU LEU LEU A A 46  46  . 0.0508 0.0462 0.0649 0.0001  -
0.0038 -0.0007 1 .
350  O     O     . LEU LEU LEU A A 46  46  . 0.0766 0.0487 0.0796 -0.0038 -
0.0060 -0.0268 1 .
351  N     N     . GLU GLU GLU A A 47  47  . 0.0568 0.0253 0.0258 0.0001  -
0.0006 -0.0001 1 .
352  CA    CA    . GLU GLU GLU A A 47  47  . 0.0264 0.0253 0.0253 -0.0002 -
0.0002 0.0000  1 .
353  CB    CB    . GLU GLU GLU A A 47  47  . 0.0324 0.0371 0.0399 -0.0089
0.0029  -0.0067 1 .
354  CG    CG    . GLU GLU GLU A A 47  47  . 0.0348 0.0254 0.0321 0.0008  -
0.0042 0.0000  1 .
355  CD    CD    . GLU GLU GLU A A 47  47  . 0.0854 0.0584 0.0630 -0.0042
0.0285  0.0261  1 .
356  OE1   OE1   . GLU GLU GLU A A 47  47  . 0.0469 0.0580 0.0670 -0.0053
0.0100  -0.0108 1 .
357  OE2   OE2   . GLU GLU GLU A A 47  47  . 0.0641 0.0410 0.0699 -0.0182 -
0.0137 -0.0104 1 .
358  C     C     . GLU GLU GLU A A 47  47  . 0.0323 0.0311 0.0320 -0.0060
0.0068  -0.0059 1 .
359  O     O     . GLU GLU GLU A A 47  47  . 0.0297 0.0297 0.0415 -0.0043
0.0067  -0.0071 1 .
360  N     N     . LEU LEU LEU A A 48  48  . 0.0295 0.0281 0.0259 -0.0034
0.0016  -0.0013 1 .
361  CA    CA    . LEU LEU LEU A A 48  48  . 0.0317 0.0254 0.0302 0.0007
0.0056  0.0006  1 .
362  CB    CB    . LEU LEU LEU A A 48  48  . 0.0304 0.0343 0.0361 -0.0007
0.0074  -0.0004 1 .
363  CG    CG    . LEU LEU LEU A A 48  48  . 0.0657 0.0281 0.0714 -0.0043
0.0050  0.0098  1 .
364  CD1   CD1   . LEU LEU LEU A A 48  48  . 0.0487 0.0900 0.0458 0.0037
0.0218  -0.0004 1 .
365  CD2   CD2   . LEU LEU LEU A A 48  48  . 0.0606 0.0582 0.0732 0.0048  -
0.0398 -0.0151 1 .
366  C     C     . LEU LEU LEU A A 48  48  . 0.0253 0.0304 0.0315 0.0000
0.0000  0.0056  1 .
367  O     O     . LEU LEU LEU A A 48  48  . 0.0364 0.0400 0.0317 0.0128
0.0084  0.0096  1 .
368  N     N     . ARG ARG ARG A A 49  49  . 0.0488 0.0320 0.0271 0.0126
0.0064  0.0034  1 .
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369  CA    CA    . ARG ARG ARG A A 49  49  . 0.0649 0.0530 0.0443 -0.0015
0.0117  -0.0052 1 .
370  CB    CB    . ARG ARG ARG A A 49  49  . 0.0816 0.0325 0.0620 0.0137
0.0022  -0.0056 1 .
371  CG    CG    . ARG ARG ARG A A 49  49  . 0.1384 0.0385 0.1078 -0.0148
0.0216  -0.0325 1 .
372  CD    CD    . ARG ARG ARG A A 49  49  . 0.1255 0.1220 0.1517 0.0560
0.0065  -0.0492 1 .
373  NE    NE    . ARG ARG ARG A A 49  49  . 0.0858 0.0685 0.0808 0.0286  -
0.0012 -0.0305 1 .
374  CZ    CZ    . ARG ARG ARG A A 49  49  . 0.0661 0.0708 0.0619 0.0260  -
0.0006 -0.0329 1 .
375  NH1   NH1   . ARG ARG ARG A A 49  49  . 0.0594 0.0482 0.1027 -0.0094
0.0000  -0.0103 1 .
376  NH2   NH2   . ARG ARG ARG A A 49  49  . 0.0703 0.0591 0.0799 0.0109  -
0.0041 -0.0421 1 .
377  C     C     . ARG ARG ARG A A 49  49  . 0.0580 0.0437 0.0472 0.0177
0.0050  0.0014  1 .
378  O     O     . ARG ARG ARG A A 49  49  . 0.0904 0.0609 0.0548 0.0337  -
0.0067 -0.0083 1 .
379  N     N     . ASP ASP ASP A A 50  50  . 0.0569 0.0310 0.0397 0.0044
0.0106  -0.0059 1 .
380  CA    CA    . ASP ASP ASP A A 50  50  . 0.0608 0.0570 0.0539 0.0108  -
0.0046 -0.0150 1 .
381  CB    CB    . ASP ASP ASP A A 50  50  . 0.0426 0.0269 0.0289 -0.0041
0.0007  -0.0017 1 .
382  CG    CG    . ASP ASP ASP A A 50  50  . 0.0255 0.0356 0.0314 -0.0015
0.0012  -0.0079 1 .
383  OD1   OD1   . ASP ASP ASP A A 50  50  . 0.0345 0.0258 0.0264 -0.0021
0.0032  -0.0007 1 .
384  OD2   OD2   . ASP ASP ASP A A 50  50  . 0.0782 0.0483 0.0305 -0.0029
0.0109  -0.0087 1 .
385  C     C     . ASP ASP ASP A A 50  50  . 0.0766 0.0428 0.0818 0.0126
0.0100  -0.0055 1 .
386  O     O     . ASP ASP ASP A A 50  50  . 0.1081 0.0314 0.0715 0.0181
0.0281  0.0066  1 .
387  N     N     . GLY GLY GLY A A 51  51  . 0.0952 0.0913 0.1122 -0.0025 -
0.0036 0.0000  1 .
388  CA    CA    . GLY GLY GLY A A 51  51  . 0.0990 0.0961 0.1058 0.0080
0.0127  -0.0062 1 .
389  C     C     . GLY GLY GLY A A 51  51  . 0.1121 0.1114 0.1199 0.0220
0.0142  0.0108  1 .
390  O     O     . GLY GLY GLY A A 51  51  . 0.1685 0.1567 0.1569 0.0266
0.0447  0.0147  1 .
391  N     N     . ASP ASP ASP A A 52  52  . 0.1236 0.0975 0.1008 0.0222  -
0.0026 0.0100  1 .
392  CA    CA    . ASP ASP ASP A A 52  52  . 0.1291 0.1263 0.1391 0.0148
0.0137  0.0034  1 .
393  CB    CB    . ASP ASP ASP A A 52  52  . 0.1387 0.1215 0.1320 0.0208  -
0.0042 -0.0029 1 .
394  CG    CG    . ASP ASP ASP A A 52  52  . 0.1596 0.1596 0.1442 0.0163
0.0183  0.0046  1 .
395  OD1   OD1   . ASP ASP ASP A A 52  52  . 0.2286 0.2472 0.0450 0.0026
0.0189  -0.0497 1 .
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396  OD2   OD2   . ASP ASP ASP A A 52  52  . 0.2971 0.1545 0.1883 0.0685
0.0723  0.0070  1 .
397  C     C     . ASP ASP ASP A A 52  52  . 0.1643 0.1525 0.1826 0.0218
0.0195  0.0035  1 .
398  O     O     . ASP ASP ASP A A 52  52  . 0.1188 0.1296 0.1641 0.0379
0.0347  0.0143  1 .
399  N     N     . LYS LYS LYS A A 53  53  . 0.1756 0.1811 0.2051 0.0091
0.0276  -0.0032 1 .
400  CA    CA    . LYS LYS LYS A A 53  53  . 0.2392 0.2395 0.2636 0.0109
0.0221  -0.0049 1 .
401  CB    CB    . LYS LYS LYS A A 53  53  . 0.2430 0.2503 0.2786 0.0132
0.0222  0.0029  1 .
402  CG    CG    . LYS LYS LYS A A 53  53  . 0.2785 0.2842 0.2998 0.0045
0.0011  -0.0039 1 .
403  CD    CD    . LYS LYS LYS A A 53  53  . 0.3615 0.3170 0.3812 -0.0144 -
0.0138 -0.0170 1 .
404  CE    CE    . LYS LYS LYS A A 53  53  . 0.4053 0.3188 0.4626 -0.0471 -
0.0408 -0.0083 1 .
405  NZ    NZ    . LYS LYS LYS A A 53  53  . 0.4389 0.2906 0.4714 -0.0133 -
0.0298 -0.0002 1 .
406  C     C     . LYS LYS LYS A A 53  53  . 0.2428 0.2397 0.2590 0.0154
0.0256  -0.0048 1 .
407  O     O     . LYS LYS LYS A A 53  53  . 0.2684 0.2576 0.2921 0.0152
0.0256  -0.0016 1 .
408  N     N     . GLN GLN GLN A A 54  54  . 0.2527 0.2527 0.2547 0.0219
0.0192  -0.0008 1 .
409  CA    CA    . GLN GLN GLN A A 54  54  . 0.2638 0.2688 0.2499 0.0168
0.0154  -0.0031 1 .
410  CB    CB    . GLN GLN GLN A A 54  54  . 0.2793 0.2802 0.2451 0.0124
0.0088  -0.0059 1 .
411  CG    CG    . GLN GLN GLN A A 54  54  . 0.3042 0.3418 0.3285 0.0053
0.0256  0.0070  1 .
412  CD    CD    . GLN GLN GLN A A 54  54  . 0.3626 0.3963 0.3765 -0.0187
0.0239  0.0236  1 .
413  OE1   OE1   . GLN GLN GLN A A 54  54  . 0.3871 0.4245 0.4032 0.0086
0.0070  0.0342  1 .
414  NE2   NE2   . GLN GLN GLN A A 54  54  . 0.3040 0.4350 0.3650 -0.0044
0.0336  0.0301  1 .
415  C     C     . GLN GLN GLN A A 54  54  . 0.2552 0.2579 0.2228 0.0219
0.0040  -0.0062 1 .
416  O     O     . GLN GLN GLN A A 54  54  . 0.2673 0.2718 0.2423 0.0106
0.0099  -0.0091 1 .
417  N     N     . ARG ARG ARG A A 55  55  . 0.2156 0.2278 0.1977 0.0198
0.0217  0.0115  1 .
418  CA    CA    . ARG ARG ARG A A 55  55  . 0.1879 0.1639 0.1489 0.0127
0.0151  0.0037  1 .
419  CB    CB    . ARG ARG ARG A A 55  55  . 0.1911 0.1815 0.1492 0.0045
0.0134  0.0039  1 .
420  CG    CG    . ARG ARG ARG A A 55  55  . 0.1250 0.1674 0.1312 -0.0013
0.0096  0.0097  1 .
421  CD    CD    . ARG ARG ARG A A 55  55  . 0.1218 0.0898 0.1616 0.0372  -
0.0213 0.0456  1 .
422  NE    NE    . ARG ARG ARG A A 55  55  . 0.0769 0.0606 0.0714 0.0172
0.0298  0.0391  1 .
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423  CZ    CZ    . ARG ARG ARG A A 55  55  . 0.1239 0.0983 0.0343 0.0253  -
0.0140 0.0180  1 .
424  NH1   NH1   . ARG ARG ARG A A 55  55  . 0.0504 0.0482 0.0449 0.0171  -
0.0056 0.0104  1 .
425  NH2   NH2   . ARG ARG ARG A A 55  55  . 0.0878 0.0485 0.0556 -0.0036
0.0290  -0.0150 1 .
426  C     C     . ARG ARG ARG A A 55  55  . 0.1681 0.1241 0.1193 0.0112
0.0190  0.0093  1 .
427  O     O     . ARG ARG ARG A A 55  55  . 0.1774 0.1056 0.1187 0.0240
0.0065  0.0146  1 .
428  N     N     . TYR TYR TYR A A 56  56  . 0.1378 0.1025 0.0965 0.0198
0.0334  0.0177  1 .
429  CA    CA    . TYR TYR TYR A A 56  56  . 0.1298 0.0947 0.0942 0.0118
0.0262  0.0187  1 .
430  CB    CB    . TYR TYR TYR A A 56  56  . 0.1056 0.1182 0.0965 0.0165
0.0362  0.0114  1 .
431  CG    CG    . TYR TYR TYR A A 56  56  . 0.1118 0.0695 0.0650 -0.0043
0.0304  0.0206  1 .
432  CD1   CD1   . TYR TYR TYR A A 56  56  . 0.0465 0.0539 0.0385 0.0141
0.0000  -0.0158 1 .
433  CE1   CE1   . TYR TYR TYR A A 56  56  . 0.1123 0.0662 0.0658 -0.0072
0.0003  0.0046  1 .
434  CZ    CZ    . TYR TYR TYR A A 56  56  . 0.0800 0.0554 0.0738 0.0403  -
0.0115 -0.0041 1 .
435  OH    OH    . TYR TYR TYR A A 56  56  . 0.1090 0.0643 0.0467 0.0233
0.0103  -0.0030 1 .
436  CE2   CE2   . TYR TYR TYR A A 56  56  . 0.1175 0.0621 0.0271 0.0266
0.0091  0.0076  1 .
437  CD2   CD2   . TYR TYR TYR A A 56  56  . 0.0734 0.0764 0.0708 -0.0098
0.0137  -0.0161 1 .
438  C     C     . TYR TYR TYR A A 56  56  . 0.1395 0.1017 0.1171 0.0175
0.0198  0.0012  1 .
439  O     O     . TYR TYR TYR A A 56  56  . 0.1397 0.1113 0.1173 0.0307
0.0166  0.0043  1 .
440  N     N     . LEU LEU LEU A A 57  57  . 0.1584 0.1355 0.1496 0.0101
0.0267  0.0073  1 .
441  CA    CA    . LEU LEU LEU A A 57  57  . 0.1635 0.1599 0.1631 0.0034
0.0128  -0.0021 1 .
442  CB    CB    . LEU LEU LEU A A 57  57  . 0.2107 0.1910 0.2084 -0.0028
0.0146  0.0012  1 .
443  CG    CG    . LEU LEU LEU A A 57  57  . 0.2467 0.2138 0.2308 -0.0059
0.0166  0.0012  1 .
444  CD1   CD1   . LEU LEU LEU A A 57  57  . 0.2282 0.2199 0.2828 0.0026  -
0.0201 0.0038  1 .
445  CD2   CD2   . LEU LEU LEU A A 57  57  . 0.3074 0.2340 0.2865 -0.0222
0.0188  0.0005  1 .
446  C     C     . LEU LEU LEU A A 57  57  . 0.1452 0.1697 0.1541 0.0102
0.0148  -0.0015 1 .
447  O     O     . LEU LEU LEU A A 57  57  . 0.1548 0.2062 0.1761 -0.0025
0.0162  -0.0043 1 .
448  N     N     . GLY GLY GLY A A 58  58  . 0.1326 0.1344 0.1197 0.0213
0.0129  0.0081  1 .
449  CA    CA    . GLY GLY GLY A A 58  58  . 0.0992 0.1219 0.1125 0.0216
0.0230  -0.0035 1 .
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450  C     C     . GLY GLY GLY A A 58  58  . 0.0771 0.0757 0.0995 0.0091
0.0167  0.0058  1 .
451  O     O     . GLY GLY GLY A A 58  58  . 0.1037 0.1233 0.1024 0.0489
0.0191  -0.0121 1 .
452  N     N     . LYS LYS LYS A A 59  59  . 0.0615 0.0288 0.0778 0.0041
0.0159  -0.0008 1 .
453  CA    CA    . LYS LYS LYS A A 59  59  . 0.0565 0.0282 0.0880 -0.0047 -
0.0038 -0.0110 1 .
454  CB    CB    . LYS LYS LYS A A 59  59  . 0.0518 0.0347 0.0898 0.0123
0.0077  -0.0114 1 .
455  CG    CG    . LYS LYS LYS A A 59  59  . 0.1196 0.1134 0.2246 -0.0160 -
0.0339 -0.0216 1 .
456  CD    CD    . LYS LYS LYS A A 59  59  . 0.1877 0.1519 0.2455 -0.0086 -
0.0529 -0.0631 1 .
457  CE    CE    . LYS LYS LYS A A 59  59  . 0.1871 0.0992 0.3024 -0.0844 -
0.0318 -0.0734 1 .
458  NZ    NZ    . LYS LYS LYS A A 59  59  . 0.1640 0.1529 0.3839 -0.1181 -
0.0287 -0.0728 1 .
459  C     C     . LYS LYS LYS A A 59  59  . 0.0274 0.0254 0.0414 0.0005  -
0.0014 0.0001  1 .
460  O     O     . LYS LYS LYS A A 59  59  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
461  N     N     . GLY GLY GLY A A 60  60  . 0.0332 0.0294 0.0289 0.0056  -
0.0053 -0.0038 1 .
462  CA    CA    . GLY GLY GLY A A 60  60  . 0.0353 0.0254 0.0293 -0.0010
0.0063  -0.0006 1 .
463  C     C     . GLY GLY GLY A A 60  60  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
464  O     O     . GLY GLY GLY A A 60  60  . 0.0300 0.0265 0.0296 -0.0001 -
0.0040 -0.0008 1 .
465  N     N     . VAL VAL VAL A A 61  61  . 0.0253 0.0415 0.0358 0.0006  -
0.0005 -0.0130 1 .
466  CA    CA    . VAL VAL VAL A A 61  61  . 0.0358 0.0304 0.0422 -0.0017 -
0.0058 -0.0071 1 .
467  CB    CB    . VAL VAL VAL A A 61  61  . 0.0429 0.0254 0.0576 -0.0011 -
0.0238 0.0015  1 .
468  CG1   CG1   . VAL VAL VAL A A 61  61  . 0.0254 0.0594 0.0727 0.0016  -
0.0019 -0.0402 1 .
469  CG2   CG2   . VAL VAL VAL A A 61  61  . 0.0287 0.0371 0.0255 0.0063
0.0009  0.0016  1 .
470  C     C     . VAL VAL VAL A A 61  61  . 0.0269 0.0288 0.0438 -0.0024
0.0055  -0.0081 1 .
471  O     O     . VAL VAL VAL A A 61  61  . 0.0274 0.0254 0.0347 -0.0005
0.0045  -0.0010 1 .
472  N     N     . LEU LEU LEU A A 62  62  . 0.0425 0.0366 0.0389 -0.0004 -
0.0134 0.0062  1 .
473  CA    CA    . LEU LEU LEU A A 62  62  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
474  CB    CB    . LEU LEU LEU A A 62  62  . 0.0363 0.0282 0.0375 0.0057  -
0.0116 -0.0060 1 .
475  CG    CG    . LEU LEU LEU A A 62  62  . 0.0272 0.0257 0.0268 -0.0008
0.0017  -0.0007 1 .
476  CD1   CD1   . LEU LEU LEU A A 62  62  . 0.0827 0.0517 0.0293 0.0350
0.0149  0.0085  1 .
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477  CD2   CD2   . LEU LEU LEU A A 62  62  . 0.0412 0.0478 0.0642 -0.0077 -
0.0183 0.0271  1 .
478  C     C     . LEU LEU LEU A A 62  62  . 0.0279 0.0254 0.0258 0.0004  -
0.0012 -0.0002 1 .
479  O     O     . LEU LEU LEU A A 62  62  . 0.0715 0.0445 0.0359 0.0168
0.0219  0.0063  1 .
480  N     N     . LYS LYS LYS A A 63  63  . 0.0280 0.0339 0.0394 -0.0048
0.0062  -0.0110 1 .
481  CA    CA    . LYS LYS LYS A A 63  63  . 0.0327 0.0293 0.0282 0.0054
0.0046  0.0033  1 .
482  CB    CB    . LYS LYS LYS A A 63  63  . 0.0307 0.0377 0.0407 -0.0027
0.0066  0.0054  1 .
483  CG    CG    . LYS LYS LYS A A 63  63  . 0.0437 0.0358 0.0519 -0.0093
0.0039  -0.0142 1 .
484  CD    CD    . LYS LYS LYS A A 63  63  . 0.0958 0.0785 0.0915 0.0000  -
0.0529 -0.0329 1 .
485  CE    CE    . LYS LYS LYS A A 63  63  . 0.1197 0.0691 0.1210 -0.0316 -
0.0615 0.0064  1 .
486  NZ    NZ    . LYS LYS LYS A A 63  63  . 0.0797 0.1127 0.2081 -0.0269 -
0.0374 -0.0380 1 .
487  C     C     . LYS LYS LYS A A 63  63  . 0.0317 0.0362 0.0253 -0.0083
0.0002  -0.0002 1 .
488  O     O     . LYS LYS LYS A A 63  63  . 0.0372 0.0264 0.0302 -0.0034 -
0.0015 0.0011  1 .
489  N     N     . ALA ALA ALA A A 64  64  . 0.0389 0.0253 0.0305 0.0008
0.0084  0.0005  1 .
490  CA    CA    . ALA ALA ALA A A 64  64  . 0.0257 0.0253 0.0254 0.0000
0.0002  0.0000  1 .
491  CB    CB    . ALA ALA ALA A A 64  64  . 0.0573 0.0256 0.0360 -0.0030 -
0.0185 0.0017  1 .
492  C     C     . ALA ALA ALA A A 64  64  . 0.0295 0.0274 0.0254 -0.0030 -
0.0006 0.0004  1 .
493  O     O     . ALA ALA ALA A A 64  64  . 0.0363 0.0322 0.0337 -0.0008
0.0061  -0.0063 1 .
494  N     N     . VAL VAL VAL A A 65  65  . 0.0255 0.0267 0.0274 0.0006  -
0.0007 -0.0017 1 .
495  CA    CA    . VAL VAL VAL A A 65  65  . 0.0279 0.0256 0.0307 0.0009  -
0.0038 -0.0013 1 .
496  CB    CB    . VAL VAL VAL A A 65  65  . 0.0263 0.0289 0.0382 0.0019  -
0.0036 -0.0068 1 .
497  CG1   CG1   . VAL VAL VAL A A 65  65  . 0.0559 0.0394 0.0425 0.0069  -
0.0096 0.0111  1 .
498  CG2   CG2   . VAL VAL VAL A A 65  65  . 0.0287 0.0254 0.0634 -0.0006
0.0113  -0.0023 1 .
499  C     C     . VAL VAL VAL A A 65  65  . 0.0351 0.0265 0.0377 -0.0027
0.0033  -0.0031 1 .
500  O     O     . VAL VAL VAL A A 65  65  . 0.0264 0.0280 0.0388 0.0017
0.0038  0.0060  1 .
501  N     N     . ASP ASP ASP A A 66  66  . 0.0369 0.0295 0.0285 -0.0069
0.0061  -0.0036 1 .
502  CA    CA    . ASP ASP ASP A A 66  66  . 0.0262 0.0278 0.0278 -0.0015 -
0.0015 0.0024  1 .
503  CB    CB    . ASP ASP ASP A A 66  66  . 0.1017 0.0426 0.0386 -0.0020
0.0115  -0.0051 1 .
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504  CG    CG    . ASP ASP ASP A A 66  66  . 0.1466 0.0877 0.0803 0.0167
0.0036  -0.0151 1 .
505  OD1   OD1   . ASP ASP ASP A A 66  66  . 0.2339 0.2044 0.1206 -0.0108
0.0029  0.0486  1 .
506  OD2   OD2   . ASP ASP ASP A A 66  66  . 0.2844 0.2816 0.2910 0.0852  -
0.0118 0.0021  1 .
507  C     C     . ASP ASP ASP A A 66  66  . 0.0383 0.0388 0.0266 -0.0131
0.0037  -0.0040 1 .
508  O     O     . ASP ASP ASP A A 66  66  . 0.0503 0.0306 0.0275 -0.0066
0.0040  0.0012  1 .
509  N     N     . HIS HIS HIS A A 67  67  . 0.0580 0.0308 0.0453 0.0117  -
0.0051 0.0031  1 .
510  CA    CA    . HIS HIS HIS A A 67  67  . 0.0285 0.0263 0.0267 0.0016  -
0.0020 -0.0011 1 .
511  CB    CB    . HIS HIS HIS A A 67  67  . 0.0406 0.0586 0.0312 0.0047  -
0.0077 -0.0102 1 .
512  CG    CG    . HIS HIS HIS A A 67  67  . 0.0655 0.0288 0.0664 0.0089
0.0119  -0.0047 1 .
513  ND1   ND1   . HIS HIS HIS A A 67  67  . 0.1133 0.0785 0.1230 0.0422
0.0295  -0.0395 1 .
514  CE1   CE1   . HIS HIS HIS A A 67  67  . 0.0704 0.0885 0.1193 0.0252  -
0.0194 -0.0024 1 .
515  NE2   NE2   . HIS HIS HIS A A 67  67  . 0.0972 0.0664 0.0713 0.0057
0.0167  0.0010  1 .
516  CD2   CD2   . HIS HIS HIS A A 67  67  . 0.0950 0.0402 0.1084 0.0041  -
0.0009 -0.0149 1 .
517  C     C     . HIS HIS HIS A A 67  67  . 0.0327 0.0314 0.0261 -0.0067 -
0.0025 0.0022  1 .
518  O     O     . HIS HIS HIS A A 67  67  . 0.0342 0.0325 0.0329 -0.0080 -
0.0082 0.0074  1 .
519  N     N     . ILE ILE ILE A A 68  68  . 0.0253 0.0253 0.0255 0.0000  -
0.0001 0.0000  1 .
520  CA    CA    . ILE ILE ILE A A 68  68  . 0.0345 0.0254 0.0257 -0.0011 -
0.0019 0.0002  1 .
521  CB    CB    . ILE ILE ILE A A 68  68  . 0.0390 0.0257 0.0258 -0.0025 -
0.0025 0.0004  1 .
522  CG1   CG1   . ILE ILE ILE A A 68  68  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
523  CD1   CD1   . ILE ILE ILE A A 68  68  . 0.0498 0.0331 0.0294 0.0131  -
0.0055 -0.0044 1 .
524  CG2   CG2   . ILE ILE ILE A A 68  68  . 0.0360 0.0262 0.0685 -0.0030 -
0.0215 0.0062  1 .
525  C     C     . ILE ILE ILE A A 68  68  . 0.0272 0.0273 0.0268 -0.0019
0.0015  -0.0015 1 .
526  O     O     . ILE ILE ILE A A 68  68  . 0.0336 0.0399 0.0445 0.0099
0.0102  0.0165  1 .
527  N     N     . ASN ASN ASN A A 69  69  . 0.0371 0.0253 0.0387 -0.0003 -
0.0125 0.0004  1 .
528  CA    CA    . ASN ASN ASN A A 69  69  . 0.0267 0.0268 0.0498 -0.0014 -
0.0059 0.0060  1 .
529  CB    CB    . ASN ASN ASN A A 69  69  . 0.0479 0.0355 0.0273 0.0152  -
0.0067 -0.0045 1 .
530  CG    CG    . ASN ASN ASN A A 69  69  . 0.0548 0.0338 0.0689 -0.0121
0.0069  -0.0151 1 .
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531  OD1   OD1   . ASN ASN ASN A A 69  69  . 0.0693 0.0335 0.0499 -0.0153
0.0011  0.0079  1 .
532  ND2   ND2   . ASN ASN ASN A A 69  69  . 0.0368 0.0253 0.0314 -0.0007 -
0.0084 0.0005  1 .
533  C     C     . ASN ASN ASN A A 69  69  . 0.0487 0.0302 0.0433 -0.0040 -
0.0094 0.0093  1 .
534  O     O     . ASN ASN ASN A A 69  69  . 0.0882 0.0559 0.0924 -0.0023 -
0.0010 0.0288  1 .
535  N     N     . SER SER SER A A 70  70  . 0.0506 0.0355 0.0406 -0.0155 -
0.0179 0.0123  1 .
536  CA    CA    . SER SER SER A A 70  70  . 0.0737 0.0353 0.0563 -0.0036
0.0042  0.0068  1 .
537  CB    CB    . SER SER SER A A 70  70  . 0.1087 0.0347 0.0403 -0.0024 -
0.0064 0.0118  1 .
538  OG    OG    . SER SER SER A A 70  70  . 0.1922 0.1024 0.0599 0.0155  -
0.0209 0.0260  1 .
539  C     C     . SER SER SER A A 70  70  . 0.0667 0.0373 0.0440 -0.0128 -
0.0195 0.0034  1 .
540  O     O     . SER SER SER A A 70  70  . 0.0751 0.0283 0.0718 -0.0057 -
0.0100 -0.0091 1 .
541  N     N     . THR THR THR A A 71  71  . 0.0390 0.0275 0.0264 -0.0055 -
0.0039 0.0015  1 .
542  CA    CA    . THR THR THR A A 71  71  . 0.0345 0.0305 0.0254 -0.0069
0.0010  -0.0008 1 .
543  CB    CB    . THR THR THR A A 71  71  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
544  OG1   OG1   . THR THR THR A A 71  71  . 0.0277 0.0320 0.0339 0.0032
0.0036  0.0076  1 .
545  CG2   CG2   . THR THR THR A A 71  71  . 0.0266 0.0254 0.0262 -0.0004
0.0011  -0.0003 1 .
546  C     C     . THR THR THR A A 71  71  . 0.0262 0.0253 0.0264 -0.0001
0.0010  -0.0002 1 .
547  O     O     . THR THR THR A A 71  71  . 0.0392 0.0335 0.0460 -0.0107
0.0169  -0.0130 1 .
548  N     N     . ILE ILE ILE A A 72  72  . 0.0299 0.0261 0.0270 -0.0018 -
0.0028 0.0011  1 .
549  CA    CA    . ILE ILE ILE A A 72  72  . 0.0309 0.0270 0.0532 -0.0029 -
0.0098 0.0066  1 .
550  CB    CB    . ILE ILE ILE A A 72  72  . 0.0633 0.0316 0.0305 -0.0153 -
0.0036 0.0006  1 .
551  CG1   CG1   . ILE ILE ILE A A 72  72  . 0.0619 0.0275 0.0611 -0.0081
0.0253  -0.0031 1 .
552  CD1   CD1   . ILE ILE ILE A A 72  72  . 0.0661 0.0585 0.0355 -0.0368 -
0.0204 0.0184  1 .
553  CG2   CG2   . ILE ILE ILE A A 72  72  . 0.0258 0.0325 0.0341 -0.0019 -
0.0021 0.0080  1 .
554  C     C     . ILE ILE ILE A A 72  72  . 0.0309 0.0267 0.0298 -0.0017
0.0016  -0.0023 1 .
555  O     O     . ILE ILE ILE A A 72  72  . 0.0260 0.0288 0.0434 -0.0015
0.0035  -0.0079 1 .
556  N     N     . ALA ALA ALA A A 73  73  . 0.0402 0.0301 0.0359 0.0085  -
0.0114 -0.0065 1 .
557  CA    CA    . ALA ALA ALA A A 73  73  . 0.0376 0.0407 0.0528 -0.0136 -
0.0045 0.0023  1 .
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558  CB    CB    . ALA ALA ALA A A 73  73  . 0.0724 0.0511 0.0979 -0.0175 -
0.0041 0.0179  1 .
559  C     C     . ALA ALA ALA A A 73  73  . 0.0596 0.0272 0.0689 -0.0052
0.0067  0.0059  1 .
560  O     O     . ALA ALA ALA A A 73  73  . 0.0736 0.0523 0.0889 -0.0173
0.0050  -0.0119 1 .
561  N     N     . PRO PRO PRO A A 74  74  . 0.0479 0.0466 0.0733 0.0016
0.0204  -0.0084 1 .
562  CA    CA    . PRO PRO PRO A A 74  74  . 0.0377 0.0291 0.0732 -0.0034 -
0.0021 -0.0109 1 .
563  CB    CB    . PRO PRO PRO A A 74  74  . 0.0258 0.0491 0.0673 0.0020  -
0.0044 -0.0076 1 .
564  CG    CG    . PRO PRO PRO A A 74  74  . 0.0268 0.0425 0.0996 0.0050  -
0.0032 -0.0150 1 .
565  CD    CD    . PRO PRO PRO A A 74  74  . 0.0612 0.0320 0.0465 -0.0007
0.0062  0.0115  1 .
566  C     C     . PRO PRO PRO A A 74  74  . 0.0416 0.0280 0.0700 0.0045
0.0065  -0.0059 1 .
567  O     O     . PRO PRO PRO A A 74  74  . 0.0510 0.0363 0.1065 -0.0134
0.0052  -0.0071 1 .
568  N     N     . ALA ALA ALA A A 75  75  . 0.0545 0.0296 0.0681 -0.0096 -
0.0187 0.0002  1 .
569  CA    CA    . ALA ALA ALA A A 75  75  . 0.0626 0.0484 0.0925 -0.0028 -
0.0138 -0.0059 1 .
570  CB    CB    . ALA ALA ALA A A 75  75  . 0.0568 0.0363 0.0736 -0.0186
0.0021  -0.0024 1 .
571  C     C     . ALA ALA ALA A A 75  75  . 0.0821 0.0485 0.0716 0.0020
0.0029  0.0017  1 .
572  O     O     . ALA ALA ALA A A 75  75  . 0.0725 0.0412 0.1041 -0.0236 -
0.0017 -0.0169 1 .
573  N     N     . LEU LEU LEU A A 76  76  . 0.0759 0.0326 0.1149 -0.0136
0.0046  -0.0094 1 .
574  CA    CA    . LEU LEU LEU A A 76  76  . 0.0638 0.0470 0.0982 -0.0046
0.0116  -0.0024 1 .
575  CB    CB    . LEU LEU LEU A A 76  76  . 0.0306 0.0390 0.0871 0.0084
0.0052  0.0039  1 .
576  CG    CG    . LEU LEU LEU A A 76  76  . 0.0451 0.0313 0.1085 -0.0086 -
0.0183 -0.0039 1 .
577  CD1   CD1   . LEU LEU LEU A A 76  76  . 0.1407 0.0653 0.0376 -0.0674
0.0109  -0.0091 1 .
578  CD2   CD2   . LEU LEU LEU A A 76  76  . 0.0655 0.1221 0.1221 0.0149
0.0612  0.0044  1 .
579  C     C     . LEU LEU LEU A A 76  76  . 0.0914 0.0548 0.1040 -0.0079
0.0165  -0.0043 1 .
580  O     O     . LEU LEU LEU A A 76  76  . 0.1069 0.0509 0.1359 -0.0184
0.0349  0.0076  1 .
581  N     N     . ILE ILE ILE A A 77  77  . 0.0789 0.0532 0.1148 -0.0082
0.0069  0.0182  1 .
582  CA    CA    . ILE ILE ILE A A 77  77  . 0.1121 0.0875 0.1196 0.0010  -
0.0029 -0.0009 1 .
583  CB    CB    . ILE ILE ILE A A 77  77  . 0.0901 0.0850 0.1377 0.0179  -
0.0118 0.0145  1 .
584  CG1   CG1   . ILE ILE ILE A A 77  77  . 0.1053 0.0631 0.1368 0.0338  -
0.0071 0.0105  1 .
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585  CD1   CD1   . ILE ILE ILE A A 77  77  . 0.1007 0.1508 0.1253 -0.0311
0.0033  0.0477  1 .
586  CG2   CG2   . ILE ILE ILE A A 77  77  . 0.1291 0.0934 0.1616 0.0076
0.0226  -0.0388 1 .
587  C     C     . ILE ILE ILE A A 77  77  . 0.0981 0.0786 0.1263 -0.0099 -
0.0015 -0.0072 1 .
588  O     O     . ILE ILE ILE A A 77  77  . 0.1022 0.0837 0.1460 -0.0108 -
0.0174 0.0037  1 .
589  N     N     . SER SER SER A A 78  78  . 0.0975 0.0735 0.1298 -0.0083 -
0.0192 -0.0001 1 .
590  CA    CA    . SER SER SER A A 78  78  . 0.1165 0.0818 0.1313 -0.0142
0.0084  -0.0034 1 .
591  CB    CB    . SER SER SER A A 78  78  . 0.0723 0.0921 0.1328 0.0025  -
0.0188 0.0059  1 .
592  OG    OG    . SER SER SER A A 78  78  . 0.1812 0.0891 0.2295 -0.0517
0.0254  -0.0023 1 .
593  C     C     . SER SER SER A A 78  78  . 0.1128 0.0954 0.1212 -0.0154 -
0.0018 0.0056  1 .
594  O     O     . SER SER SER A A 78  78  . 0.1202 0.1321 0.1301 -0.0276
0.0347  0.0000  1 .
595  N     N     . SER SER SER A A 79  79  . 0.1259 0.0537 0.1071 -0.0112
0.0000  0.0017  1 .
596  CA    CA    . SER SER SER A A 79  79  . 0.1375 0.0978 0.1313 0.0096  -
0.0073 0.0056  1 .
597  CB    CB    . SER SER SER A A 79  79  . 0.1505 0.0943 0.1394 0.0067  -
0.0123 0.0090  1 .
598  OG    OG    . SER SER SER A A 79  79  . 0.1582 0.0333 0.1520 0.0186
0.0080  0.0261  1 .
599  C     C     . SER SER SER A A 79  79  . 0.1323 0.1157 0.1113 -0.0005 -
0.0023 -0.0015 1 .
600  O     O     . SER SER SER A A 79  79  . 0.1736 0.1189 0.1605 -0.0095 -
0.0117 0.0245  1 .
601  N     N     . GLY GLY GLY A A 80  80  . 0.1389 0.1189 0.1542 0.0044
0.0063  0.0149  1 .
602  CA    CA    . GLY GLY GLY A A 80  80  . 0.1070 0.1207 0.1329 -0.0100
0.0187  0.0124  1 .
603  C     C     . GLY GLY GLY A A 80  80  . 0.1075 0.1237 0.1445 -0.0101
0.0069  0.0203  1 .
604  O     O     . GLY GLY GLY A A 80  80  . 0.1149 0.1444 0.1623 -0.0168
0.0248  0.0102  1 .
605  N     N     . LEU LEU LEU A A 81  81  . 0.1276 0.1184 0.1256 -0.0236
0.0045  0.0321  1 .
606  CA    CA    . LEU LEU LEU A A 81  81  . 0.1077 0.1188 0.1258 -0.0086
0.0118  0.0210  1 .
607  CB    CB    . LEU LEU LEU A A 81  81  . 0.1026 0.1096 0.1256 0.0009  -
0.0160 0.0100  1 .
608  CG    CG    . LEU LEU LEU A A 81  81  . 0.0887 0.1217 0.1263 0.0138  -
0.0045 0.0026  1 .
609  CD1   CD1   . LEU LEU LEU A A 81  81  . 0.0748 0.0801 0.0754 -0.0516 -
0.0053 -0.0015 1 .
610  CD2   CD2   . LEU LEU LEU A A 81  81  . 0.1672 0.1245 0.0965 0.0066  -
0.0072 0.0230  1 .
611  C     C     . LEU LEU LEU A A 81  81  . 0.1268 0.1252 0.1272 -0.0085
0.0101  0.0204  1 .
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612  O     O     . LEU LEU LEU A A 81  81  . 0.1222 0.1103 0.0932 -0.0260
0.0032  0.0185  1 .
613  N     N     . SER SER SER A A 82  82  . 0.1069 0.1157 0.1076 -0.0228
0.0242  0.0105  1 .
614  CA    CA    . SER SER SER A A 82  82  . 0.0978 0.0901 0.0943 -0.0194
0.0239  -0.0130 1 .
615  CB    CB    . SER SER SER A A 82  82  . 0.1093 0.1381 0.1182 -0.0087
0.0412  -0.0038 1 .
616  OG    OG    . SER SER SER A A 82  82  . 0.1133 0.1124 0.1685 -0.0734
0.0299  -0.0163 1 .
617  C     C     . SER SER SER A A 82  82  . 0.0766 0.0892 0.0923 -0.0098
0.0104  0.0050  1 .
618  O     O     . SER SER SER A A 82  82  . 0.0854 0.0647 0.0696 -0.0117
0.0002  -0.0316 1 .
619  N     N     . VAL VAL VAL A A 83  83  . 0.0770 0.0539 0.0965 -0.0019
0.0029  -0.0064 1 .
620  CA    CA    . VAL VAL VAL A A 83  83  . 0.0808 0.0708 0.0802 -0.0015
0.0097  0.0001  1 .
621  CB    CB    . VAL VAL VAL A A 83  83  . 0.0571 0.0503 0.0525 -0.0211
0.0108  -0.0114 1 .
622  CG1   CG1   . VAL VAL VAL A A 83  83  . 0.0537 0.0436 0.0662 -0.0219
0.0333  -0.0273 1 .
623  CG2   CG2   . VAL VAL VAL A A 83  83  . 0.0728 0.0490 0.0914 0.0092
0.0290  -0.0268 1 .
624  C     C     . VAL VAL VAL A A 83  83  . 0.0655 0.0749 0.0725 -0.0108
0.0074  -0.0045 1 .
625  O     O     . VAL VAL VAL A A 83  83  . 0.0587 0.0876 0.0859 -0.0152 -
0.0136 -0.0047 1 .
626  N     N     . VAL VAL VAL A A 84  84  . 0.0821 0.0688 0.1022 -0.0127
0.0165  0.0020  1 .
627  CA    CA    . VAL VAL VAL A A 84  84  . 0.0631 0.0831 0.0766 -0.0011
0.0252  0.0128  1 .
628  CB    CB    . VAL VAL VAL A A 84  84  . 0.0801 0.0828 0.0909 0.0130
0.0224  0.0082  1 .
629  CG1   CG1   . VAL VAL VAL A A 84  84  . 0.1105 0.1294 0.1144 0.0003  -
0.0175 0.0206  1 .
630  CG2   CG2   . VAL VAL VAL A A 84  84  . 0.0913 0.0722 0.1162 -0.0253
0.0481  -0.0055 1 .
631  C     C     . VAL VAL VAL A A 84  84  . 0.0757 0.0814 0.0884 -0.0062
0.0312  0.0210  1 .
632  O     O     . VAL VAL VAL A A 84  84  . 0.0804 0.1045 0.0990 -0.0195
0.0377  0.0018  1 .
633  N     N     . GLU GLU GLU A A 85  85  . 0.1031 0.0929 0.1053 -0.0026
0.0350  0.0033  1 .
634  CA    CA    . GLU GLU GLU A A 85  85  . 0.0674 0.0829 0.1152 -0.0134
0.0179  -0.0036 1 .
635  CB    CB    . GLU GLU GLU A A 85  85  . 0.1046 0.0785 0.1048 0.0119
0.0211  -0.0014 1 .
636  CG    CG    . GLU GLU GLU A A 85  85  . 0.1138 0.1787 0.1352 -0.0132
0.0228  -0.0158 1 .
637  CD    CD    . GLU GLU GLU A A 85  85  . 0.1694 0.1680 0.1558 -0.0008
0.0349  -0.0003 1 .
638  OE1   OE1   . GLU GLU GLU A A 85  85  . 0.1656 0.2331 0.1785 -0.0644
0.0522  0.0337  1 .
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639  OE2   OE2   . GLU GLU GLU A A 85  85  . 0.1770 0.2009 0.2059 -0.0565
0.0683  0.0278  1 .
640  C     C     . GLU GLU GLU A A 85  85  . 0.0684 0.0395 0.0797 -0.0080
0.0371  -0.0052 1 .
641  O     O     . GLU GLU GLU A A 85  85  . 0.0694 0.0479 0.1127 -0.0285
0.0270  -0.0002 1 .
642  N     N     . GLN GLN GLN A A 86  86  . 0.0757 0.0530 0.0554 -0.0328
0.0224  -0.0033 1 .
643  CA    CA    . GLN GLN GLN A A 86  86  . 0.0673 0.0732 0.0662 -0.0086
0.0122  0.0000  1 .
644  CB    CB    . GLN GLN GLN A A 86  86  . 0.0973 0.0872 0.0542 -0.0047
0.0215  0.0069  1 .
645  CG    CG    . GLN GLN GLN A A 86  86  . 0.0475 0.0582 0.0579 -0.0151 -
0.0031 0.0090  1 .
646  CD    CD    . GLN GLN GLN A A 86  86  . 0.0480 0.0264 0.0540 -0.0013
0.0051  0.0050  1 .
647  OE1   OE1   . GLN GLN GLN A A 86  86  . 0.0499 0.0392 0.0650 -0.0153 -
0.0076 0.0175  1 .
648  NE2   NE2   . GLN GLN GLN A A 86  86  . 0.0255 0.0299 0.0528 0.0010  -
0.0025 -0.0112 1 .
649  C     C     . GLN GLN GLN A A 86  86  . 0.0640 0.0350 0.0364 0.0065
0.0138  -0.0049 1 .
650  O     O     . GLN GLN GLN A A 86  86  . 0.0371 0.0366 0.0443 -0.0112 -
0.0128 0.0140  1 .
651  N     N     . GLU GLU GLU A A 87  87  . 0.0950 0.0327 0.0598 0.0054  -
0.0040 -0.0066 1 .
652  CA    CA    . GLU GLU GLU A A 87  87  . 0.0809 0.0510 0.0580 -0.0119 -
0.0180 0.0110  1 .
653  CB    CB    . GLU GLU GLU A A 87  87  . 0.0988 0.0818 0.0789 -0.0276 -
0.0221 -0.0110 1 .
654  CG    CG    . GLU GLU GLU A A 87  87  . 0.1688 0.0912 0.1257 0.0178  -
0.0191 0.0004  1 .
655  CD    CD    . GLU GLU GLU A A 87  87  . 0.2758 0.1588 0.1526 0.0253  -
0.0166 -0.0215 1 .
656  OE1   OE1   . GLU GLU GLU A A 87  87  . 0.3150 0.1999 0.1664 -0.0012
0.0154  -0.0195 1 .
657  OE2   OE2   . GLU GLU GLU A A 87  87  . 0.2956 0.2185 0.1857 0.0400  -
0.0593 -0.0156 1 .
658  C     C     . GLU GLU GLU A A 87  87  . 0.0716 0.0704 0.0699 -0.0087 -
0.0001 -0.0032 1 .
659  O     O     . GLU GLU GLU A A 87  87  . 0.1164 0.0555 0.0972 0.0103
0.0052  0.0233  1 .
660  N     N     . LYS LYS LYS A A 88  88  . 0.1134 0.0714 0.0843 0.0000
0.0092  0.0173  1 .
661  CA    CA    . LYS LYS LYS A A 88  88  . 0.0919 0.0789 0.0837 -0.0121
0.0097  -0.0101 1 .
662  CB    CB    . LYS LYS LYS A A 88  88  . 0.1082 0.0942 0.1161 -0.0024
0.0047  0.0079  1 .
663  CG    CG    . LYS LYS LYS A A 88  88  . 0.0961 0.1311 0.1223 -0.0240
0.0181  -0.0112 1 .
664  CD    CD    . LYS LYS LYS A A 88  88  . 0.1044 0.1824 0.1276 -0.0274
0.0516  0.0236  1 .
665  CE    CE    . LYS LYS LYS A A 88  88  . 0.1085 0.1763 0.1261 -0.0405
0.0206  -0.0703 1 .
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666  NZ    NZ    . LYS LYS LYS A A 88  88  . 0.1715 0.3251 0.2376 0.0336  -
0.0029 -0.0008 1 .
667  C     C     . LYS LYS LYS A A 88  88  . 0.0969 0.0579 0.0789 0.0034
0.0163  0.0054  1 .
668  O     O     . LYS LYS LYS A A 88  88  . 0.0770 0.0427 0.0586 0.0105
0.0392  0.0154  1 .
669  N     N     . LEU LEU LEU A A 89  89  . 0.0817 0.0419 0.0527 -0.0144
0.0074  0.0051  1 .
670  CA    CA    . LEU LEU LEU A A 89  89  . 0.0478 0.0389 0.0361 -0.0174 -
0.0020 0.0002  1 .
671  CB    CB    . LEU LEU LEU A A 89  89  . 0.0415 0.0457 0.0374 -0.0176
0.0023  0.0011  1 .
672  CG    CG    . LEU LEU LEU A A 89  89  . 0.0532 0.0409 0.0266 -0.0208 -
0.0061 0.0046  1 .
673  CD1   CD1   . LEU LEU LEU A A 89  89  . 0.0283 0.0410 0.0667 -0.0046 -
0.0101 0.0077  1 .
674  CD2   CD2   . LEU LEU LEU A A 89  89  . 0.0659 0.0254 0.0359 -0.0023
0.0207  -0.0012 1 .
675  C     C     . LEU LEU LEU A A 89  89  . 0.0469 0.0391 0.0366 0.0000
0.0115  0.0075  1 .
676  O     O     . LEU LEU LEU A A 89  89  . 0.0657 0.0451 0.0591 0.0065  -
0.0256 0.0139  1 .
677  N     N     . ASP ASP ASP A A 90  90  . 0.0503 0.0377 0.0430 -0.0105 -
0.0054 0.0137  1 .
678  CA    CA    . ASP ASP ASP A A 90  90  . 0.0600 0.0381 0.0496 -0.0009
0.0067  0.0088  1 .
679  CB    CB    . ASP ASP ASP A A 90  90  . 0.0756 0.0447 0.0276 -0.0174
0.0101  -0.0015 1 .
680  CG    CG    . ASP ASP ASP A A 90  90  . 0.0994 0.0634 0.0848 0.0135  -
0.0065 0.0022  1 .
681  OD1   OD1   . ASP ASP ASP A A 90  90  . 0.0897 0.0384 0.0682 -0.0109
0.0005  -0.0112 1 .
682  OD2   OD2   . ASP ASP ASP A A 90  90  . 0.1489 0.0694 0.0317 -0.0250
0.0259  -0.0113 1 .
683  C     C     . ASP ASP ASP A A 90  90  . 0.0859 0.0283 0.0615 -0.0119
0.0104  -0.0069 1 .
684  O     O     . ASP ASP ASP A A 90  90  . 0.0347 0.0365 0.0752 0.0101
0.0022  0.0069  1 .
685  N     N     . ASN ASN ASN A A 91  91  . 0.0711 0.0336 0.0660 -0.0159 -
0.0154 0.0059  1 .
686  CA    CA    . ASN ASN ASN A A 91  91  . 0.0867 0.0450 0.0591 0.0092
0.0107  0.0177  1 .
687  CB    CB    . ASN ASN ASN A A 91  91  . 0.0923 0.0553 0.0584 -0.0261 -
0.0034 0.0268  1 .
688  CG    CG    . ASN ASN ASN A A 91  91  . 0.1765 0.0941 0.1090 -0.0277 -
0.0090 0.0147  1 .
689  OD1   OD1   . ASN ASN ASN A A 91  91  . 0.1051 0.1640 0.1889 -0.0437 -
0.0568 -0.0082 1 .
690  ND2   ND2   . ASN ASN ASN A A 91  91  . 0.1959 0.2177 0.1531 -0.0365
0.0143  -0.0586 1 .
691  C     C     . ASN ASN ASN A A 91  91  . 0.0605 0.0515 0.0615 0.0063
0.0080  0.0165  1 .
692  O     O     . ASN ASN ASN A A 91  91  . 0.0704 0.0667 0.1055 0.0381
0.0121  -0.0162 1 .
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693  N     N     . LEU LEU LEU A A 92  92  . 0.0537 0.0496 0.0777 0.0012
0.0192  0.0004  1 .
694  CA    CA    . LEU LEU LEU A A 92  92  . 0.0819 0.0556 0.0671 -0.0120
0.0093  0.0228  1 .
695  CB    CB    . LEU LEU LEU A A 92  92  . 0.1210 0.0908 0.1274 -0.0139 -
0.0078 0.0191  1 .
696  CG    CG    . LEU LEU LEU A A 92  92  . 0.1762 0.1160 0.1717 -0.0093 -
0.0091 0.0397  1 .
697  CD1   CD1   . LEU LEU LEU A A 92  92  . 0.2455 0.0960 0.2281 0.0064  -
0.0300 0.0667  1 .
698  CD2   CD2   . LEU LEU LEU A A 92  92  . 0.1576 0.1040 0.1313 -0.0142 -
0.0807 0.0665  1 .
699  C     C     . LEU LEU LEU A A 92  92  . 0.0807 0.0552 0.0908 -0.0027
0.0311  0.0087  1 .
700  O     O     . LEU LEU LEU A A 92  92  . 0.0937 0.0554 0.0577 -0.0040
0.0298  0.0117  1 .
701  N     N     . MET MET MET A A 93  93  . 0.0680 0.0623 0.0777 -0.0091
0.0261  0.0110  1 .
702  CA    CA    . MET MET MET A A 93  93  . 0.0410 0.0259 0.0281 -0.0032
0.0066  -0.0013 1 .
703  CB    CB    . MET MET MET A A 93  93  . 0.0811 0.0447 0.0705 -0.0247
0.0120  0.0136  1 .
704  CG    CG    . MET MET MET A A 93  93  . 0.1006 0.0473 0.0660 0.0025  -
0.0053 0.0295  1 .
705  SD    SD    . MET MET MET A A 93  93  . 0.0532 0.0305 0.0410 -0.0062
0.0139  0.0026  1 .
706  CE    CE    . MET MET MET A A 93  93  . 0.1077 0.0362 0.1068 0.0254  -
0.0221 -0.0219 1 .
707  C     C     . MET MET MET A A 93  93  . 0.0654 0.0297 0.0518 -0.0019
0.0057  0.0102  1 .
708  O     O     . MET MET MET A A 93  93  . 0.0366 0.0342 0.0433 0.0092  -
0.0061 -0.0003 1 .
709  N     N     . LEU LEU LEU A A 94  94  . 0.0578 0.0309 0.0603 0.0023  -
0.0069 0.0038  1 .
710  CA    CA    . LEU LEU LEU A A 94  94  . 0.0389 0.0544 0.0490 -0.0072 -
0.0146 -0.0064 1 .
711  CB    CB    . LEU LEU LEU A A 94  94  . 0.0452 0.0617 0.0399 0.0090
0.0001  -0.0104 1 .
712  CG    CG    . LEU LEU LEU A A 94  94  . 0.1529 0.1075 0.1122 -0.0340 -
0.0091 0.0007  1 .
713  CD1   CD1   . LEU LEU LEU A A 94  94  . 0.2143 0.1178 0.1196 -0.0868 -
0.0241 -0.0108 1 .
714  CD2   CD2   . LEU LEU LEU A A 94  94  . 0.1422 0.1862 0.0846 -0.0386 -
0.0120 0.0307  1 .
715  C     C     . LEU LEU LEU A A 94  94  . 0.0439 0.0555 0.0366 -0.0019 -
0.0117 0.0120  1 .
716  O     O     . LEU LEU LEU A A 94  94  . 0.0602 0.0433 0.0479 0.0229
0.0039  0.0106  1 .
717  N     N     . GLU GLU GLU A A 95  95  . 0.0405 0.0356 0.0483 0.0047  -
0.0187 -0.0049 1 .
718  CA    CA    . GLU GLU GLU A A 95  95  . 0.0790 0.0578 0.0510 0.0094  -
0.0176 0.0042  1 .
719  CB    CB    . GLU GLU GLU A A 95  95  . 0.1054 0.0375 0.0555 0.0204
0.0265  0.0189  1 .
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720  CG    CG    . GLU GLU GLU A A 95  95  . 0.2002 0.1243 0.0952 0.0299  -
0.0055 -0.0116 1 .
721  CD    CD    . GLU GLU GLU A A 95  95  . 0.2970 0.3045 0.2168 -0.0038 -
0.0185 -0.0188 1 .
722  OE1   OE1   . GLU GLU GLU A A 95  95  . 0.3618 0.3406 0.2368 0.0231  -
0.0472 0.0236  1 .
723  OE2   OE2   . GLU GLU GLU A A 95  95  . 0.3638 0.3682 0.2753 -0.0563 -
0.0271 -0.0464 1 .
724  C     C     . GLU GLU GLU A A 95  95  . 0.0864 0.0494 0.0647 0.0226
0.0110  0.0040  1 .
725  O     O     . GLU GLU GLU A A 95  95  . 0.0979 0.0655 0.0557 0.0229  -
0.0043 0.0301  1 .
726  N     N     . LEU LEU LEU A A 96  96  . 0.0605 0.0513 0.0513 0.0099  -
0.0161 -0.0014 1 .
727  CA    CA    . LEU LEU LEU A A 96  96  . 0.0728 0.0437 0.0536 0.0006  -
0.0165 0.0100  1 .
728  CB    CB    . LEU LEU LEU A A 96  96  . 0.0476 0.0548 0.0530 0.0030  -
0.0210 -0.0083 1 .
729  CG    CG    . LEU LEU LEU A A 96  96  . 0.0650 0.0416 0.0585 -0.0219 -
0.0164 0.0029  1 .
730  CD1   CD1   . LEU LEU LEU A A 96  96  . 0.1045 0.0386 0.0642 0.0096  -
0.0284 -0.0221 1 .
731  CD2   CD2   . LEU LEU LEU A A 96  96  . 0.1387 0.0339 0.0986 0.0272  -
0.0315 -0.0190 1 .
732  C     C     . LEU LEU LEU A A 96  96  . 0.0607 0.0410 0.0411 0.0167  -
0.0120 0.0038  1 .
733  O     O     . LEU LEU LEU A A 96  96  . 0.0926 0.0447 0.0363 0.0032
0.0003  -0.0145 1 .
734  N     N     . ASP ASP ASP A A 97  97  . 0.0654 0.0277 0.0345 0.0019  -
0.0047 -0.0047 1 .
735  CA    CA    . ASP ASP ASP A A 97  97  . 0.0676 0.0278 0.0323 0.0101  -
0.0138 -0.0028 1 .
736  CB    CB    . ASP ASP ASP A A 97  97  . 0.0603 0.0258 0.0270 0.0041
0.0076  0.0009  1 .
737  CG    CG    . ASP ASP ASP A A 97  97  . 0.0638 0.0304 0.0479 -0.0090 -
0.0180 0.0107  1 .
738  OD1   OD1   . ASP ASP ASP A A 97  97  . 0.0742 0.0477 0.0447 0.0018
0.0006  0.0005  1 .
739  OD2   OD2   . ASP ASP ASP A A 97  97  . 0.0837 0.0888 0.0627 0.0088  -
0.0024 0.0259  1 .
740  C     C     . ASP ASP ASP A A 97  97  . 0.0749 0.0578 0.0655 0.0137  -
0.0047 -0.0017 1 .
741  O     O     . ASP ASP ASP A A 97  97  . 0.0556 0.0322 0.0608 0.0059  -
0.0142 -0.0004 1 .
742  N     N     . GLY GLY GLY A A 98  98  . 0.0772 0.0555 0.0620 0.0176  -
0.0046 0.0280  1 .
743  CA    CA    . GLY GLY GLY A A 98  98  . 0.0840 0.0616 0.0936 0.0062  -
0.0084 0.0358  1 .
744  C     C     . GLY GLY GLY A A 98  98  . 0.0902 0.0681 0.0952 0.0066  -
0.0391 0.0280  1 .
745  O     O     . GLY GLY GLY A A 98  98  . 0.1609 0.0834 0.1623 0.0103  -
0.0242 0.0374  1 .
746  N     N     . THR THR THR A A 99  99  . 0.0867 0.0643 0.0960 0.0041  -
0.0075 0.0091  1 .
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747  CA    CA    . THR THR THR A A 99  99  . 0.0928 0.0575 0.0769 0.0141  -
0.0063 -0.0009 1 .
748  CB    CB    . THR THR THR A A 99  99  . 0.0915 0.0459 0.0904 0.0162
0.0029  0.0030  1 .
749  OG1   OG1   . THR THR THR A A 99  99  . 0.0920 0.0386 0.0560 0.0267
0.0325  0.0068  1 .
750  CG2   CG2   . THR THR THR A A 99  99  . 0.1061 0.0701 0.0921 0.0572  -
0.0103 0.0095  1 .
751  C     C     . THR THR THR A A 99  99  . 0.0959 0.0719 0.0956 0.0143  -
0.0067 0.0016  1 .
752  O     O     . THR THR THR A A 99  99  . 0.1080 0.1164 0.1193 0.0013
0.0142  -0.0065 1 .
753  N     N     . GLU GLU GLU A A 100 100 . 0.1051 0.0808 0.0696 -0.0094 -
0.0117 0.0069  1 .
754  CA    CA    . GLU GLU GLU A A 100 100 . 0.1209 0.0844 0.0861 0.0016  -
0.0223 0.0098  1 .
755  CB    CB    . GLU GLU GLU A A 100 100 . 0.1394 0.1135 0.1100 0.0060  -
0.0195 0.0301  1 .
756  CG    CG    . GLU GLU GLU A A 100 100 . 0.2510 0.1613 0.2125 -0.0144
0.0019  -0.0161 1 .
757  CD    CD    . GLU GLU GLU A A 100 100 . 0.3361 0.3109 0.3079 -0.0112
0.0415  0.0082  1 .
758  OE1   OE1   . GLU GLU GLU A A 100 100 . 0.4216 0.3426 0.3344 -0.0408
0.0040  0.0514  1 .
759  OE2   OE2   . GLU GLU GLU A A 100 100 . 0.4061 0.3330 0.3870 -0.0130
0.0318  -0.0434 1 .
760  C     C     . GLU GLU GLU A A 100 100 . 0.1144 0.0930 0.0767 0.0081  -
0.0058 0.0074  1 .
761  O     O     . GLU GLU GLU A A 100 100 . 0.1341 0.0922 0.0630 0.0082  -
0.0225 -0.0015 1 .
762  N     N     . ASN ASN ASN A A 101 101 . 0.0832 0.0768 0.0636 0.0001  -
0.0348 0.0298  1 .
763  CA    CA    . ASN ASN ASN A A 101 101 . 0.0965 0.0547 0.0560 0.0012  -
0.0255 0.0150  1 .
764  CB    CB    . ASN ASN ASN A A 101 101 . 0.1168 0.0943 0.1092 0.0052  -
0.0372 0.0244  1 .
765  CG    CG    . ASN ASN ASN A A 101 101 . 0.2225 0.1714 0.1766 0.0034  -
0.0232 0.0015  1 .
766  OD1   OD1   . ASN ASN ASN A A 101 101 . 0.2371 0.2546 0.2756 -0.0537 -
0.0653 -0.0116 1 .
767  ND2   ND2   . ASN ASN ASN A A 101 101 . 0.2002 0.2040 0.2978 -0.0216 -
0.0522 0.0301  1 .
768  C     C     . ASN ASN ASN A A 101 101 . 0.0714 0.0415 0.0429 -0.0107 -
0.0269 0.0010  1 .
769  O     O     . ASN ASN ASN A A 101 101 . 0.0633 0.0265 0.0482 0.0021  -
0.0108 0.0041  1 .
770  N     N     . LYS LYS LYS A A 102 102 . 0.0476 0.0365 0.0378 -0.0048 -
0.0157 0.0073  1 .
771  CA    CA    . LYS LYS LYS A A 102 102 . 0.0289 0.0267 0.0255 0.0022
0.0007  0.0005  1 .
772  CB    CB    . LYS LYS LYS A A 102 102 . 0.0389 0.0391 0.0270 0.0133
0.0031  0.0039  1 .
773  CG    CG    . LYS LYS LYS A A 102 102 . 0.0313 0.0253 0.0270 -0.0005
0.0032  -0.0003 1 .
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774  CD    CD    . LYS LYS LYS A A 102 102 . 0.0354 0.0426 0.0254 0.0132  -
0.0011 -0.0014 1 .
775  CE    CE    . LYS LYS LYS A A 102 102 . 0.0299 0.0585 0.0460 0.0102
0.0096  0.0239  1 .
776  NZ    NZ    . LYS LYS LYS A A 102 102 . 0.0284 0.0346 0.0476 0.0035
0.0047  -0.0034 1 .
777  C     C     . LYS LYS LYS A A 102 102 . 0.0364 0.0254 0.0360 -0.0001
0.0074  -0.0008 1 .
778  O     O     . LYS LYS LYS A A 102 102 . 0.0297 0.0331 0.0324 0.0058  -
0.0056 -0.0074 1 .
779  N     N     . SER SER SER A A 103 103 . 0.0444 0.0394 0.0263 0.0164  -
0.0043 -0.0037 1 .
780  CA    CA    . SER SER SER A A 103 103 . 0.0377 0.0334 0.0580 0.0081
0.0087  -0.0028 1 .
781  CB    CB    . SER SER SER A A 103 103 . 0.0634 0.0644 0.0513 0.0223
0.0062  -0.0217 1 .
782  OG    OG    . SER SER SER A A 103 103 . 0.0695 0.1533 0.1612 0.0354
0.0670  -0.0047 1 .
783  C     C     . SER SER SER A A 103 103 . 0.0587 0.0608 0.0428 -0.0076
0.0057  -0.0076 1 .
784  O     O     . SER SER SER A A 103 103 . 0.0557 0.0593 0.0758 -0.0031
0.0128  -0.0402 1 .
785  N     N     . LYS LYS LYS A A 104 104 . 0.0567 0.0264 0.0466 -0.0057
0.0062  0.0000  1 .
786  CA    CA    . LYS LYS LYS A A 104 104 . 0.0776 0.0538 0.0588 0.0069
0.0069  -0.0056 1 .
787  CB    CB    . LYS LYS LYS A A 104 104 . 0.0808 0.0335 0.0300 0.0200  -
0.0039 0.0005  1 .
788  CG    CG    . LYS LYS LYS A A 104 104 . 0.0433 0.0515 0.0943 -0.0207
0.0018  0.0083  1 .
789  CD    CD    . LYS LYS LYS A A 104 104 . 0.0988 0.1121 0.1599 -0.0400 -
0.0533 0.0201  1 .
790  CE    CE    . LYS LYS LYS A A 104 104 . 0.1589 0.1039 0.1619 -0.0321
0.0063  0.0356  1 .
791  NZ    NZ    . LYS LYS LYS A A 104 104 . 0.1512 0.0874 0.0555 -0.0200
0.0270  -0.0422 1 .
792  C     C     . LYS LYS LYS A A 104 104 . 0.0393 0.0678 0.0315 0.0018  -
0.0043 -0.0135 1 .
793  O     O     . LYS LYS LYS A A 104 104 . 0.0724 0.0747 0.0544 0.0140
0.0039  0.0088  1 .
794  N     N     . PHE PHE PHE A A 105 105 . 0.0258 0.0266 0.0361 0.0008  -
0.0023 -0.0037 1 .
795  CA    CA    . PHE PHE PHE A A 105 105 . 0.0429 0.0277 0.0262 -0.0064 -
0.0039 0.0014  1 .
796  CB    CB    . PHE PHE PHE A A 105 105 . 0.0595 0.0327 0.0529 0.0087  -
0.0037 0.0108  1 .
797  CG    CG    . PHE PHE PHE A A 105 105 . 0.0814 0.0326 0.0579 -0.0009 -
0.0107 -0.0148 1 .
798  CD1   CD1   . PHE PHE PHE A A 105 105 . 0.1065 0.0293 0.0843 -0.0159 -
0.0221 0.0113  1 .
799  CE1   CE1   . PHE PHE PHE A A 105 105 . 0.0401 0.0873 0.0726 -0.0303 -
0.0018 0.0037  1 .
800  CZ    CZ    . PHE PHE PHE A A 105 105 . 0.0328 0.0754 0.1033 0.0161
0.0085  -0.0143 1 .
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801  CE2   CE2   . PHE PHE PHE A A 105 105 . 0.1115 0.0669 0.0876 -0.0329 -
0.0025 0.0434  1 .
802  CD2   CD2   . PHE PHE PHE A A 105 105 . 0.0805 0.0311 0.0396 -0.0066 -
0.0236 -0.0018 1 .
803  C     C     . PHE PHE PHE A A 105 105 . 0.0325 0.0284 0.0348 -0.0047 -
0.0082 0.0054  1 .
804  O     O     . PHE PHE PHE A A 105 105 . 0.0451 0.0341 0.0441 -0.0017
0.0160  0.0056  1 .
805  N     N     . GLY GLY GLY A A 106 106 . 0.0610 0.0337 0.0386 0.0111  -
0.0127 0.0025  1 .
806  CA    CA    . GLY GLY GLY A A 106 106 . 0.0329 0.0324 0.0352 0.0022
0.0035  0.0083  1 .
807  C     C     . GLY GLY GLY A A 106 106 . 0.0258 0.0258 0.0356 -0.0005 -
0.0023 0.0022  1 .
808  O     O     . GLY GLY GLY A A 106 106 . 0.0430 0.0321 0.0508 0.0106
0.0211  0.0130  1 .
809  N     N     . ALA ALA ALA A A 107 107 . 0.0360 0.0270 0.0308 0.0033
0.0061  0.0008  1 .
810  CA    CA    . ALA ALA ALA A A 107 107 . 0.0304 0.0253 0.0256 -0.0005
0.0012  -0.0001 1 .
811  CB    CB    . ALA ALA ALA A A 107 107 . 0.0253 0.0360 0.0379 0.0005
0.0006  0.0116  1 .
812  C     C     . ALA ALA ALA A A 107 107 . 0.0275 0.0259 0.0349 -0.0012
0.0045  -0.0025 1 .
813  O     O     . ALA ALA ALA A A 107 107 . 0.0255 0.0257 0.0349 0.0002
0.0012  0.0020  1 .
814  N     N     . ASN ASN ASN A A 108 108 . 0.0254 0.0269 0.0258 0.0003
0.0002  0.0009  1 .
815  CA    CA    . ASN ASN ASN A A 108 108 . 0.0323 0.0337 0.0262 0.0076
0.0024  0.0027  1 .
816  CB    CB    . ASN ASN ASN A A 108 108 . 0.0254 0.0331 0.0262 -0.0010 -
0.0003 0.0026  1 .
817  CG    CG    . ASN ASN ASN A A 108 108 . 0.0254 0.0253 0.0254 0.0000
0.0001  0.0000  1 .
818  OD1   OD1   . ASN ASN ASN A A 108 108 . 0.0308 0.0276 0.0254 -0.0035
0.0007  -0.0005 1 .
819  ND2   ND2   . ASN ASN ASN A A 108 108 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
820  C     C     . ASN ASN ASN A A 108 108 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
821  O     O     . ASN ASN ASN A A 108 108 . 0.0521 0.0278 0.0413 0.0062  -
0.0037 0.0032  1 .
822  N     N     . ALA ALA ALA A A 109 109 . 0.0309 0.0297 0.0262 -0.0049 -
0.0023 0.0020  1 .
823  CA    CA    . ALA ALA ALA A A 109 109 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
824  CB    CB    . ALA ALA ALA A A 109 109 . 0.0332 0.0256 0.0256 -0.0014 -
0.0016 0.0003  1 .
825  C     C     . ALA ALA ALA A A 109 109 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
826  O     O     . ALA ALA ALA A A 109 109 . 0.0267 0.0309 0.0324 0.0028
0.0031  0.0063  1 .
827  N     N     . ILE ILE ILE A A 110 110 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
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828  CA    CA    . ILE ILE ILE A A 110 110 . 0.0372 0.0382 0.0272 0.0124  -
0.0047 -0.0049 1 .
829  CB    CB    . ILE ILE ILE A A 110 110 . 0.0431 0.0259 0.0270 0.0031  -
0.0055 -0.0009 1 .
830  CG1   CG1   . ILE ILE ILE A A 110 110 . 0.0290 0.0256 0.0255 0.0010  -
0.0009 -0.0002 1 .
831  CD1   CD1   . ILE ILE ILE A A 110 110 . 0.0674 0.0582 0.0982 0.0221  -
0.0390 0.0073  1 .
832  CG2   CG2   . ILE ILE ILE A A 110 110 . 0.0353 0.0481 0.0288 -0.0151 -
0.0059 0.0090  1 .
833  C     C     . ILE ILE ILE A A 110 110 . 0.0259 0.0257 0.0318 -0.0005
0.0019  -0.0016 1 .
834  O     O     . ILE ILE ILE A A 110 110 . 0.0264 0.0257 0.0308 0.0006
0.0024  0.0014  1 .
835  N     N     . LEU LEU LEU A A 111 111 . 0.0357 0.0262 0.0334 0.0003
0.0084  -0.0008 1 .
836  CA    CA    . LEU LEU LEU A A 111 111 . 0.0335 0.0253 0.0304 0.0000  -
0.0064 0.0000  1 .
837  CB    CB    . LEU LEU LEU A A 111 111 . 0.0312 0.0288 0.0346 -0.0045
0.0074  -0.0057 1 .
838  CG    CG    . LEU LEU LEU A A 111 111 . 0.0465 0.0344 0.0279 -0.0139
0.0074  -0.0048 1 .
839  CD1   CD1   . LEU LEU LEU A A 111 111 . 0.0379 0.0361 0.0257 0.0117  -
0.0023 -0.0022 1 .
840  CD2   CD2   . LEU LEU LEU A A 111 111 . 0.0571 0.0678 0.0583 -0.0295
0.0300  -0.0197 1 .
841  C     C     . LEU LEU LEU A A 111 111 . 0.0354 0.0315 0.0335 0.0046  -
0.0029 0.0041  1 .
842  O     O     . LEU LEU LEU A A 111 111 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
843  N     N     . GLY GLY GLY A A 112 112 . 0.0276 0.0253 0.0276 -0.0001
0.0023  -0.0001 1 .
844  CA    CA    . GLY GLY GLY A A 112 112 . 0.0304 0.0304 0.0593 0.0049  -
0.0126 -0.0132 1 .
845  C     C     . GLY GLY GLY A A 112 112 . 0.0450 0.0563 0.0619 -0.0117
0.0100  0.0090  1 .
846  O     O     . GLY GLY GLY A A 112 112 . 0.0255 0.0267 0.0465 0.0003  -
0.0011 -0.0055 1 .
847  N     N     . VAL VAL VAL A A 113 113 . 0.0310 0.0265 0.0349 0.0026
0.0073  0.0034  1 .
848  CA    CA    . VAL VAL VAL A A 113 113 . 0.0309 0.0314 0.0449 -0.0042
0.0073  -0.0109 1 .
849  CB    CB    . VAL VAL VAL A A 113 113 . 0.0356 0.0291 0.0261 -0.0062
0.0028  -0.0017 1 .
850  CG1   CG1   . VAL VAL VAL A A 113 113 . 0.0505 0.0270 0.0577 -0.0062
0.0285  -0.0071 1 .
851  CG2   CG2   . VAL VAL VAL A A 113 113 . 0.0253 0.0255 0.0677 0.0000
0.0005  0.0032  1 .
852  C     C     . VAL VAL VAL A A 113 113 . 0.0379 0.0318 0.0399 -0.0056
0.0016  0.0068  1 .
853  O     O     . VAL VAL VAL A A 113 113 . 0.0255 0.0253 0.0304 -0.0001
0.0010  -0.0004 1 .
854  N     N     . SER SER SER A A 114 114 . 0.0329 0.0256 0.0263 -0.0016 -
0.0027 0.0005  1 .
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855  CA    CA    . SER SER SER A A 114 114 . 0.0264 0.0258 0.0254 -0.0007
0.0003  -0.0002 1 .
856  CB    CB    . SER SER SER A A 114 114 . 0.0263 0.0256 0.0254 -0.0005
0.0003  -0.0001 1 .
857  OG    OG    . SER SER SER A A 114 114 . 0.0487 0.0501 0.0424 0.0048
0.0000  -0.0202 1 .
858  C     C     . SER SER SER A A 114 114 . 0.0276 0.0357 0.0270 -0.0045
0.0018  -0.0042 1 .
859  O     O     . SER SER SER A A 114 114 . 0.0279 0.0268 0.0322 -0.0019
0.0042  -0.0032 1 .
860  N     N     . LEU LEU LEU A A 115 115 . 0.0284 0.0253 0.0386 -0.0003 -
0.0064 0.0008  1 .
861  CA    CA    . LEU LEU LEU A A 115 115 . 0.0346 0.0256 0.0366 0.0001  -
0.0099 0.0003  1 .
862  CB    CB    . LEU LEU LEU A A 115 115 . 0.0270 0.0307 0.0279 0.0030
0.0021  0.0037  1 .
863  CG    CG    . LEU LEU LEU A A 115 115 . 0.0351 0.0460 0.0289 0.0121
0.0008  -0.0034 1 .
864  CD1   CD1   . LEU LEU LEU A A 115 115 . 0.0359 0.0260 0.0310 -0.0028
0.0078  -0.0020 1 .
865  CD2   CD2   . LEU LEU LEU A A 115 115 . 0.0504 0.0670 0.0580 -0.0052 -
0.0267 -0.0074 1 .
866  C     C     . LEU LEU LEU A A 115 115 . 0.0286 0.0390 0.0369 -0.0048 -
0.0046 0.0009  1 .
867  O     O     . LEU LEU LEU A A 115 115 . 0.0358 0.0335 0.0324 0.0075
0.0053  0.0004  1 .
868  N     N     . ALA ALA ALA A A 116 116 . 0.0281 0.0324 0.0266 0.0045  -
0.0019 -0.0030 1 .
869  CA    CA    . ALA ALA ALA A A 116 116 . 0.0350 0.0608 0.0400 -0.0153
0.0009  0.0113  1 .
870  CB    CB    . ALA ALA ALA A A 116 116 . 0.0276 0.0410 0.0580 0.0060
0.0087  0.0226  1 .
871  C     C     . ALA ALA ALA A A 116 116 . 0.0291 0.0320 0.0329 0.0050
0.0053  0.0071  1 .
872  O     O     . ALA ALA ALA A A 116 116 . 0.0494 0.0350 0.0569 -0.0105
0.0122  0.0059  1 .
873  N     N     . VAL VAL VAL A A 117 117 . 0.0602 0.0312 0.0510 -0.0079
0.0183  0.0039  1 .
874  CA    CA    . VAL VAL VAL A A 117 117 . 0.0621 0.0585 0.0473 0.0061
0.0148  0.0070  1 .
875  CB    CB    . VAL VAL VAL A A 117 117 . 0.0790 0.0700 0.0590 0.0098
0.0377  -0.0015 1 .
876  CG1   CG1   . VAL VAL VAL A A 117 117 . 0.0626 0.0346 0.0382 -0.0053
0.0118  0.0071  1 .
877  CG2   CG2   . VAL VAL VAL A A 117 117 . 0.0701 0.0313 0.0675 0.0155
0.0125  0.0094  1 .
878  C     C     . VAL VAL VAL A A 117 117 . 0.0293 0.0483 0.0444 -0.0013
0.0086  -0.0066 1 .
879  O     O     . VAL VAL VAL A A 117 117 . 0.0417 0.0286 0.0430 -0.0074
0.0170  -0.0076 1 .
880  N     N     . CYS CYS CYS A A 118 118 . 0.0401 0.0454 0.0409 -0.0172
0.0152  -0.0177 1 .
881  CA    CA    . CYS CYS CYS A A 118 118 . 0.0422 0.0342 0.0386 -0.0076
0.0142  -0.0091 1 .
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882  CB    CB    . CYS CYS CYS A A 118 118 . 0.0510 0.0711 0.0531 0.0088
0.0135  -0.0171 1 .
883  SG    SG    . CYS CYS CYS A A 118 118 . 0.0475 0.0380 0.0451 0.0011
0.0207  0.0036  1 .
884  C     C     . CYS CYS CYS A A 118 118 . 0.0270 0.0472 0.0309 0.0047  -
0.0025 -0.0110 1 .
885  O     O     . CYS CYS CYS A A 118 118 . 0.0482 0.0361 0.0357 -0.0080
0.0096  0.0037  1 .
886  N     N     . LYS LYS LYS A A 119 119 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
887  CA    CA    . LYS LYS LYS A A 119 119 . 0.0310 0.0288 0.0256 -0.0045
0.0012  -0.0010 1 .
888  CB    CB    . LYS LYS LYS A A 119 119 . 0.0412 0.0439 0.0324 -0.0105 -
0.0019 0.0102  1 .
889  CG    CG    . LYS LYS LYS A A 119 119 . 0.0344 0.0379 0.0373 -0.0107 -
0.0104 0.0123  1 .
890  CD    CD    . LYS LYS LYS A A 119 119 . 0.1103 0.1035 0.0927 -0.0003
0.0319  -0.0129 1 .
891  CE    CE    . LYS LYS LYS A A 119 119 . 0.0979 0.1115 0.0809 0.0245  -
0.0391 0.0072  1 .
892  NZ    NZ    . LYS LYS LYS A A 119 119 . 0.1138 0.0512 0.0645 -0.0250
0.0156  -0.0026 1 .
893  C     C     . LYS LYS LYS A A 119 119 . 0.0390 0.0331 0.0503 0.0083  -
0.0075 0.0029  1 .
894  O     O     . LYS LYS LYS A A 119 119 . 0.0467 0.0502 0.0573 0.0115
0.0125  -0.0146 1 .
895  N     N     . ALA ALA ALA A A 120 120 . 0.0276 0.0254 0.0436 -0.0005 -
0.0064 0.0014  1 .
896  CA    CA    . ALA ALA ALA A A 120 120 . 0.0461 0.0592 0.0667 -0.0076
0.0033  -0.0096 1 .
897  CB    CB    . ALA ALA ALA A A 120 120 . 0.0372 0.0324 0.0819 -0.0086 -
0.0053 -0.0030 1 .
898  C     C     . ALA ALA ALA A A 120 120 . 0.0400 0.0866 0.0661 -0.0060
0.0023  -0.0032 1 .
899  O     O     . ALA ALA ALA A A 120 120 . 0.0502 0.0678 0.0826 0.0041
0.0145  0.0158  1 .
900  N     N     . GLY GLY GLY A A 121 121 . 0.0525 0.0405 0.0500 0.0062
0.0201  0.0162  1 .
901  CA    CA    . GLY GLY GLY A A 121 121 . 0.0729 0.0833 0.0596 -0.0114
0.0203  0.0074  1 .
902  C     C     . GLY GLY GLY A A 121 121 . 0.0759 0.0602 0.0842 -0.0035
0.0283  0.0134  1 .
903  O     O     . GLY GLY GLY A A 121 121 . 0.0555 0.0594 0.0674 -0.0008
0.0350  -0.0081 1 .
904  N     N     . ALA ALA ALA A A 122 122 . 0.0730 0.0732 0.1033 -0.0146
0.0236  -0.0083 1 .
905  CA    CA    . ALA ALA ALA A A 122 122 . 0.0660 0.0597 0.0942 -0.0109
0.0195  0.0023  1 .
906  CB    CB    . ALA ALA ALA A A 122 122 . 0.0363 0.0464 0.0642 -0.0059
0.0180  0.0031  1 .
907  C     C     . ALA ALA ALA A A 122 122 . 0.0474 0.0393 0.0709 -0.0058
0.0102  -0.0047 1 .
908  O     O     . ALA ALA ALA A A 122 122 . 0.0696 0.0589 0.1083 -0.0330
0.0312  -0.0143 1 .
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909  N     N     . ALA ALA ALA A A 123 123 . 0.0621 0.0423 0.0771 -0.0064 -
0.0099 0.0106  1 .
910  CA    CA    . ALA ALA ALA A A 123 123 . 0.0959 0.0647 0.1061 0.0111  -
0.0004 -0.0023 1 .
911  CB    CB    . ALA ALA ALA A A 123 123 . 0.1143 0.0598 0.1017 -0.0084
0.0223  -0.0056 1 .
912  C     C     . ALA ALA ALA A A 123 123 . 0.0867 0.1013 0.1068 0.0058
0.0027  0.0078  1 .
913  O     O     . ALA ALA ALA A A 123 123 . 0.0988 0.0936 0.1274 0.0011
0.0217  0.0278  1 .
914  N     N     . GLU GLU GLU A A 124 124 . 0.0967 0.0903 0.1456 -0.0113
0.0249  0.0009  1 .
915  CA    CA    . GLU GLU GLU A A 124 124 . 0.1140 0.1116 0.1344 -0.0095
0.0146  -0.0007 1 .
916  CB    CB    . GLU GLU GLU A A 124 124 . 0.1178 0.1153 0.1595 -0.0080
0.0119  -0.0234 1 .
917  CG    CG    . GLU GLU GLU A A 124 124 . 0.1976 0.1695 0.1832 -0.0464
0.0000  -0.0108 1 .
918  CD    CD    . GLU GLU GLU A A 124 124 . 0.2119 0.2625 0.2372 -0.0133 -
0.0265 -0.0129 1 .
919  OE1   OE1   . GLU GLU GLU A A 124 124 . 0.1788 0.2504 0.2259 -0.0656 -
0.0345 -0.0284 1 .
920  OE2   OE2   . GLU GLU GLU A A 124 124 . 0.2523 0.3800 0.3117 0.0092
0.0320  -0.0401 1 .
921  C     C     . GLU GLU GLU A A 124 124 . 0.1099 0.1190 0.1381 -0.0005
0.0100  -0.0222 1 .
922  O     O     . GLU GLU GLU A A 124 124 . 0.1029 0.1399 0.1458 -0.0170
0.0035  -0.0297 1 .
923  N     N     . ARG ARG ARG A A 125 125 . 0.1050 0.1213 0.1141 0.0171  -
0.0116 -0.0194 1 .
924  CA    CA    . ARG ARG ARG A A 125 125 . 0.1111 0.1375 0.1125 0.0058
0.0136  -0.0076 1 .
925  CB    CB    . ARG ARG ARG A A 125 125 . 0.0984 0.1215 0.1043 0.0099
0.0011  -0.0018 1 .
926  CG    CG    . ARG ARG ARG A A 125 125 . 0.1146 0.1567 0.1405 -0.0009
0.0291  0.0131  1 .
927  CD    CD    . ARG ARG ARG A A 125 125 . 0.1251 0.0461 0.0873 -0.0441
0.0259  -0.0027 1 .
928  NE    NE    . ARG ARG ARG A A 125 125 . 0.1840 0.1279 0.0968 -0.0304
0.0078  0.0243  1 .
929  CZ    CZ    . ARG ARG ARG A A 125 125 . 0.1488 0.0803 0.1008 -0.0284 -
0.0072 -0.0159 1 .
930  NH1   NH1   . ARG ARG ARG A A 125 125 . 0.2159 0.1435 0.1575 -0.0230 -
0.0075 -0.0212 1 .
931  NH2   NH2   . ARG ARG ARG A A 125 125 . 0.1415 0.1392 0.0899 0.0361  -
0.0027 -0.0098 1 .
932  C     C     . ARG ARG ARG A A 125 125 . 0.1077 0.1259 0.1113 -0.0009
0.0002  -0.0174 1 .
933  O     O     . ARG ARG ARG A A 125 125 . 0.1336 0.1498 0.1466 -0.0099
0.0202  -0.0152 1 .
934  N     N     . GLU GLU GLU A A 126 126 . 0.1306 0.1169 0.1349 0.0074
0.0031  -0.0131 1 .
935  CA    CA    . GLU GLU GLU A A 126 126 . 0.1482 0.1403 0.1679 0.0053
0.0035  -0.0098 1 .
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936  CB    CB    . GLU GLU GLU A A 126 126 . 0.1452 0.1419 0.1813 0.0104
0.0017  -0.0185 1 .
937  CG    CG    . GLU GLU GLU A A 126 126 . 0.2290 0.2368 0.2096 0.0163  -
0.0144 0.0068  1 .
938  CD    CD    . GLU GLU GLU A A 126 126 . 0.3242 0.2906 0.3164 -0.0162 -
0.0074 -0.0242 1 .
939  OE1   OE1   . GLU GLU GLU A A 126 126 . 0.2987 0.3483 0.3731 -0.0398
0.0116  -0.0195 1 .
940  OE2   OE2   . GLU GLU GLU A A 126 126 . 0.4026 0.3545 0.3164 0.0253
0.0231  -0.0301 1 .
941  C     C     . GLU GLU GLU A A 126 126 . 0.1274 0.1213 0.1655 0.0061
0.0137  -0.0243 1 .
942  O     O     . GLU GLU GLU A A 126 126 . 0.1679 0.1631 0.1897 -0.0096
0.0283  -0.0279 1 .
943  N     N     . LEU LEU LEU A A 127 127 . 0.1033 0.0987 0.1457 -0.0152 -
0.0165 -0.0223 1 .
944  CA    CA    . LEU LEU LEU A A 127 127 . 0.0831 0.0955 0.1110 -0.0159
0.0039  -0.0165 1 .
945  CB    CB    . LEU LEU LEU A A 127 127 . 0.0814 0.0831 0.1173 -0.0179
0.0072  -0.0184 1 .
946  CG    CG    . LEU LEU LEU A A 127 127 . 0.1388 0.1542 0.1540 0.0099
0.0169  0.0064  1 .
947  CD1   CD1   . LEU LEU LEU A A 127 127 . 0.1029 0.1619 0.0819 0.0016
0.0402  0.0707  1 .
948  CD2   CD2   . LEU LEU LEU A A 127 127 . 0.1257 0.1718 0.1811 0.0122
0.0592  -0.0185 1 .
949  C     C     . LEU LEU LEU A A 127 127 . 0.0892 0.0816 0.1014 -0.0098
0.0035  -0.0114 1 .
950  O     O     . LEU LEU LEU A A 127 127 . 0.1233 0.1270 0.1453 0.0041
0.0003  -0.0419 1 .
951  N     N     . PRO PRO PRO A A 128 128 . 0.0752 0.0817 0.1031 -0.0140
0.0045  -0.0165 1 .
952  CA    CA    . PRO PRO PRO A A 128 128 . 0.0747 0.0797 0.0850 -0.0019
0.0065  -0.0107 1 .
953  CB    CB    . PRO PRO PRO A A 128 128 . 0.0514 0.0634 0.1232 -0.0147
0.0103  -0.0086 1 .
954  CG    CG    . PRO PRO PRO A A 128 128 . 0.0906 0.1088 0.0328 -0.0169
0.0068  -0.0137 1 .
955  CD    CD    . PRO PRO PRO A A 128 128 . 0.0625 0.0719 0.0822 -0.0302
0.0049  -0.0218 1 .
956  C     C     . PRO PRO PRO A A 128 128 . 0.0703 0.0852 0.0787 -0.0010
0.0050  -0.0124 1 .
957  O     O     . PRO PRO PRO A A 128 128 . 0.0612 0.0626 0.0830 -0.0267
0.0309  0.0003  1 .
958  N     N     . LEU LEU LEU A A 129 129 . 0.0451 0.0628 0.0474 -0.0052
0.0168  0.0044  1 .
959  CA    CA    . LEU LEU LEU A A 129 129 . 0.0572 0.0443 0.0618 0.0013  -
0.0025 0.0081  1 .
960  CB    CB    . LEU LEU LEU A A 129 129 . 0.0722 0.0453 0.0825 0.0033
0.0047  0.0297  1 .
961  CG    CG    . LEU LEU LEU A A 129 129 . 0.0253 0.0415 0.0337 -0.0003
0.0002  -0.0117 1 .
962  CD1   CD1   . LEU LEU LEU A A 129 129 . 0.0348 0.0509 0.0541 -0.0155 -
0.0165 0.0271  1 .
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963  CD2   CD2   . LEU LEU LEU A A 129 129 . 0.0522 0.0594 0.0349 -0.0248 -
0.0143 0.0085  1 .
964  C     C     . LEU LEU LEU A A 129 129 . 0.0776 0.0532 0.0521 0.0019
0.0027  0.0078  1 .
965  O     O     . LEU LEU LEU A A 129 129 . 0.0497 0.0571 0.0620 0.0027
0.0221  0.0018  1 .
966  N     N     . TYR TYR TYR A A 130 130 . 0.0615 0.0465 0.0725 -0.0032
0.0056  -0.0068 1 .
967  CA    CA    . TYR TYR TYR A A 130 130 . 0.0609 0.0420 0.0372 0.0026  -
0.0138 -0.0089 1 .
968  CB    CB    . TYR TYR TYR A A 130 130 . 0.0278 0.0290 0.0471 -0.0027 -
0.0004 0.0043  1 .
969  CG    CG    . TYR TYR TYR A A 130 130 . 0.0534 0.0255 0.0378 -0.0026
0.0187  -0.0017 1 .
970  CD1   CD1   . TYR TYR TYR A A 130 130 . 0.0361 0.0508 0.0581 -0.0002
0.0188  0.0009  1 .
971  CE1   CE1   . TYR TYR TYR A A 130 130 . 0.0377 0.0852 0.0792 0.0199
0.0170  0.0245  1 .
972  CZ    CZ    . TYR TYR TYR A A 130 130 . 0.0823 0.1173 0.0993 0.0199  -
0.0037 0.0050  1 .
973  OH    OH    . TYR TYR TYR A A 130 130 . 0.1047 0.0733 0.2066 0.0173  -
0.0390 0.0090  1 .
974  CE2   CE2   . TYR TYR TYR A A 130 130 . 0.0461 0.0717 0.0862 0.0310
0.0002  0.0031  1 .
975  CD2   CD2   . TYR TYR TYR A A 130 130 . 0.0277 0.0475 0.0852 0.0057  -
0.0063 0.0038  1 .
976  C     C     . TYR TYR TYR A A 130 130 . 0.0462 0.0433 0.0518 0.0092  -
0.0039 -0.0008 1 .
977  O     O     . TYR TYR TYR A A 130 130 . 0.0824 0.0726 0.0351 0.0186  -
0.0199 -0.0173 1 .
978  N     N     . ARG ARG ARG A A 131 131 . 0.0877 0.0999 0.0763 -0.0077 -
0.0056 0.0130  1 .
979  CA    CA    . ARG ARG ARG A A 131 131 . 0.1007 0.0662 0.0589 -0.0017
0.0058  -0.0038 1 .
980  CB    CB    . ARG ARG ARG A A 131 131 . 0.1186 0.0673 0.0921 0.0095
0.0155  -0.0006 1 .
981  CG    CG    . ARG ARG ARG A A 131 131 . 0.2161 0.1644 0.1601 0.0000  -
0.0153 -0.0280 1 .
982  CD    CD    . ARG ARG ARG A A 131 131 . 0.2787 0.3087 0.2115 -0.0095
0.0150  0.0181  1 .
983  NE    NE    . ARG ARG ARG A A 131 131 . 0.2960 0.3116 0.3126 -0.0037
0.0230  -0.0001 1 .
984  CZ    CZ    . ARG ARG ARG A A 131 131 . 0.2741 0.3297 0.3276 0.0091
0.0047  -0.0202 1 .
985  NH1   NH1   . ARG ARG ARG A A 131 131 . 0.2433 0.2465 0.2983 0.0287
0.0480  -0.0286 1 .
986  NH2   NH2   . ARG ARG ARG A A 131 131 . 0.2244 0.3102 0.4376 0.0407  -
0.0041 -0.0247 1 .
987  C     C     . ARG ARG ARG A A 131 131 . 0.1039 0.0721 0.0748 -0.0046
0.0044  -0.0027 1 .
988  O     O     . ARG ARG ARG A A 131 131 . 0.1241 0.0763 0.0636 -0.0144
0.0215  -0.0092 1 .
989  N     N     . HIS HIS HIS A A 132 132 . 0.0821 0.0605 0.0699 -0.0180 -
0.0066 -0.0072 1 .
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990  CA    CA    . HIS HIS HIS A A 132 132 . 0.0702 0.0585 0.0562 0.0066
0.0143  -0.0060 1 .
991  CB    CB    . HIS HIS HIS A A 132 132 . 0.0671 0.0677 0.0516 -0.0273 -
0.0107 -0.0078 1 .
992  CG    CG    . HIS HIS HIS A A 132 132 . 0.1103 0.0772 0.0765 0.0190
0.0157  0.0027  1 .
993  ND1   ND1   . HIS HIS HIS A A 132 132 . 0.0414 0.0942 0.1540 -0.0058
0.0451  -0.0050 1 .
994  CE1   CE1   . HIS HIS HIS A A 132 132 . 0.1487 0.0478 0.0999 -0.0011
0.0344  0.0122  1 .
995  NE2   NE2   . HIS HIS HIS A A 132 132 . 0.1023 0.0562 0.0922 0.0099
0.0179  0.0103  1 .
996  CD2   CD2   . HIS HIS HIS A A 132 132 . 0.0770 0.0479 0.0477 -0.0014
0.0000  0.0173  1 .
997  C     C     . HIS HIS HIS A A 132 132 . 0.0447 0.0440 0.0324 -0.0184 -
0.0022 0.0048  1 .
998  O     O     . HIS HIS HIS A A 132 132 . 0.0756 0.0505 0.0598 -0.0177
0.0175  -0.0078 1 .
999  N     N     . ILE ILE ILE A A 133 133 . 0.0388 0.0400 0.0675 -0.0129
0.0151  -0.0123 1 .
1000 CA    CA    . ILE ILE ILE A A 133 133 . 0.0406 0.0387 0.0305 -0.0046 -
0.0029 0.0084  1 .
1001 CB    CB    . ILE ILE ILE A A 133 133 . 0.0440 0.0557 0.0448 0.0005  -
0.0068 0.0035  1 .
1002 CG1   CG1   . ILE ILE ILE A A 133 133 . 0.0689 0.0255 0.0274 -0.0030 -
0.0096 0.0006  1 .
1003 CD1   CD1   . ILE ILE ILE A A 133 133 . 0.0289 0.0297 0.0581 0.0014
0.0108  0.0044  1 .
1004 CG2   CG2   . ILE ILE ILE A A 133 133 . 0.0302 0.0260 0.0499 0.0018  -
0.0110 -0.0041 1 .
1005 C     C     . ILE ILE ILE A A 133 133 . 0.0490 0.0332 0.0510 0.0026
0.0007  -0.0139 1 .
1006 O     O     . ILE ILE ILE A A 133 133 . 0.0324 0.0531 0.0482 -0.0137 -
0.0121 0.0219  1 .
1007 N     N     . ALA ALA ALA A A 134 134 . 0.0686 0.0648 0.0615 0.0026
0.0377  -0.0089 1 .
1008 CA    CA    . ALA ALA ALA A A 134 134 . 0.0886 0.0568 0.0616 0.0108
0.0221  -0.0034 1 .
1009 CB    CB    . ALA ALA ALA A A 134 134 . 0.1141 0.0662 0.0632 0.0339
0.0305  0.0022  1 .
1010 C     C     . ALA ALA ALA A A 134 134 . 0.0774 0.0726 0.0624 -0.0090
0.0195  -0.0048 1 .
1011 O     O     . ALA ALA ALA A A 134 134 . 0.0954 0.0523 0.0756 -0.0208
0.0282  0.0023  1 .
1012 N     N     . GLN GLN GLN A A 135 135 . 0.0907 0.0853 0.0578 -0.0072
0.0274  0.0096  1 .
1013 CA    CA    . GLN GLN GLN A A 135 135 . 0.1069 0.0903 0.0696 0.0023
0.0352  0.0217  1 .
1014 CB    CB    . GLN GLN GLN A A 135 135 . 0.1011 0.1071 0.0947 -0.0031
0.0361  0.0060  1 .
1015 CG    CG    . GLN GLN GLN A A 135 135 . 0.1214 0.1045 0.0770 -0.0052
0.0641  0.0230  1 .
1016 CD    CD    . GLN GLN GLN A A 135 135 . 0.1621 0.1876 0.2097 0.0325
0.0567  -0.0009 1 .
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1017 OE1   OE1   . GLN GLN GLN A A 135 135 . 0.2897 0.2073 0.2716 0.0802
0.1066  0.0347  1 .
1018 NE2   NE2   . GLN GLN GLN A A 135 135 . 0.1354 0.1929 0.2040 0.0190
0.1372  -0.0115 1 .
1019 C     C     . GLN GLN GLN A A 135 135 . 0.1393 0.0935 0.0779 0.0137
0.0227  0.0014  1 .
1020 O     O     . GLN GLN GLN A A 135 135 . 0.1670 0.1061 0.0925 0.0201
0.0536  0.0322  1 .
1021 N     N     . LEU LEU LEU A A 136 136 . 0.1084 0.0863 0.1066 0.0131
0.0177  0.0179  1 .
1022 CA    CA    . LEU LEU LEU A A 136 136 . 0.0910 0.0649 0.0754 0.0106
0.0219  -0.0115 1 .
1023 CB    CB    . LEU LEU LEU A A 136 136 . 0.0877 0.0667 0.0641 -0.0111
0.0382  -0.0061 1 .
1024 CG    CG    . LEU LEU LEU A A 136 136 . 0.0767 0.0659 0.0766 -0.0281
0.0365  0.0052  1 .
1025 CD1   CD1   . LEU LEU LEU A A 136 136 . 0.0872 0.0494 0.0260 -0.0186
0.0068  -0.0019 1 .
1026 CD2   CD2   . LEU LEU LEU A A 136 136 . 0.1573 0.0458 0.0855 -0.0112
0.0476  0.0235  1 .
1027 C     C     . LEU LEU LEU A A 136 136 . 0.1092 0.0784 0.0974 0.0091
0.0064  -0.0026 1 .
1028 O     O     . LEU LEU LEU A A 136 136 . 0.1545 0.0654 0.1146 -0.0076
0.0340  0.0051  1 .
1029 N     N     . ALA ALA ALA A A 137 137 . 0.1084 0.0875 0.0987 -0.0247
0.0042  0.0080  1 .
1030 CA    CA    . ALA ALA ALA A A 137 137 . 0.1153 0.1193 0.1033 -0.0182
0.0103  0.0183  1 .
1031 CB    CB    . ALA ALA ALA A A 137 137 . 0.0960 0.0684 0.0824 -0.0077 -
0.0055 0.0296  1 .
1032 C     C     . ALA ALA ALA A A 137 137 . 0.1322 0.1299 0.1166 -0.0076
0.0087  0.0169  1 .
1033 O     O     . ALA ALA ALA A A 137 137 . 0.1536 0.1763 0.1283 -0.0025
0.0146  0.0338  1 .
1034 N     N     . GLY GLY GLY A A 138 138 . 0.1384 0.1581 0.1196 0.0029
0.0136  0.0290  1 .
1035 CA    CA    . GLY GLY GLY A A 138 138 . 0.1896 0.1818 0.1283 0.0113
0.0100  0.0203  1 .
1036 C     C     . GLY GLY GLY A A 138 138 . 0.1922 0.1842 0.1497 -0.0048
0.0018  0.0197  1 .
1037 O     O     . GLY GLY GLY A A 138 138 . 0.1795 0.1820 0.1166 0.0061
0.0064  0.0271  1 .
1038 N     N     . ASN ASN ASN A A 139 139 . 0.1964 0.1978 0.1574 0.0062
0.0013  0.0195  1 .
1039 CA    CA    . ASN ASN ASN A A 139 139 . 0.2018 0.1940 0.1658 -0.0136
0.0118  0.0183  1 .
1040 CB    CB    . ASN ASN ASN A A 139 139 . 0.1948 0.2262 0.1708 -0.0108
0.0095  0.0131  1 .
1041 CG    CG    . ASN ASN ASN A A 139 139 . 0.2085 0.2146 0.1734 -0.0070
0.0276  0.0271  1 .
1042 OD1   OD1   . ASN ASN ASN A A 139 139 . 0.2676 0.2675 0.1180 -0.0139 -
0.0023 -0.0183 1 .
1043 ND2   ND2   . ASN ASN ASN A A 139 139 . 0.0948 0.0925 0.1012 0.0189
0.0466  -0.0097 1 .
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1044 C     C     . ASN ASN ASN A A 139 139 . 0.2082 0.2185 0.1808 -0.0083
0.0124  0.0013  1 .
1045 O     O     . ASN ASN ASN A A 139 139 . 0.2017 0.2079 0.1883 -0.0235
0.0359  -0.0052 1 .
1046 N     N     . SER SER SER A A 140 140 . 0.2215 0.2207 0.2142 0.0030
0.0093  -0.0046 1 .
1047 CA    CA    . SER SER SER A A 140 140 . 0.2353 0.2578 0.2272 0.0011
0.0131  -0.0061 1 .
1048 CB    CB    . SER SER SER A A 140 140 . 0.2307 0.2628 0.2328 0.0054
0.0257  -0.0115 1 .
1049 OG    OG    . SER SER SER A A 140 140 . 0.2921 0.3616 0.2800 0.0178
0.0155  -0.0124 1 .
1050 C     C     . SER SER SER A A 140 140 . 0.2387 0.2531 0.2301 0.0031
0.0099  -0.0170 1 .
1051 O     O     . SER SER SER A A 140 140 . 0.2233 0.2624 0.2662 0.0079
0.0070  -0.0350 1 .
1052 N     N     . ASP ASP ASP A A 141 141 . 0.2270 0.2537 0.2128 -0.0003
0.0076  -0.0079 1 .
1053 CA    CA    . ASP ASP ASP A A 141 141 . 0.2384 0.2456 0.2339 -0.0062
0.0003  0.0061  1 .
1054 CB    CB    . ASP ASP ASP A A 141 141 . 0.2476 0.2492 0.2394 -0.0025
0.0000  0.0158  1 .
1055 CG    CG    . ASP ASP ASP A A 141 141 . 0.2852 0.3001 0.2886 -0.0127
0.0036  0.0139  1 .
1056 OD1   OD1   . ASP ASP ASP A A 141 141 . 0.3616 0.3704 0.3240 -0.0412
0.0088  0.0631  1 .
1057 OD2   OD2   . ASP ASP ASP A A 141 141 . 0.2986 0.3635 0.3816 -0.0263 -
0.0085 -0.0012 1 .
1058 C     C     . ASP ASP ASP A A 141 141 . 0.2142 0.2187 0.2120 -0.0045 -
0.0049 0.0050  1 .
1059 O     O     . ASP ASP ASP A A 141 141 . 0.2407 0.2396 0.2539 0.0045  -
0.0235 -0.0075 1 .
1060 N     N     . LEU LEU LEU A A 142 142 . 0.1691 0.1790 0.1735 -0.0167 -
0.0034 0.0022  1 .
1061 CA    CA    . LEU LEU LEU A A 142 142 . 0.1494 0.1212 0.1189 -0.0074 -
0.0015 -0.0011 1 .
1062 CB    CB    . LEU LEU LEU A A 142 142 . 0.1331 0.1113 0.1100 0.0013
0.0057  -0.0212 1 .
1063 CG    CG    . LEU LEU LEU A A 142 142 . 0.1403 0.1414 0.1488 0.0102
0.0100  -0.0165 1 .
1064 CD1   CD1   . LEU LEU LEU A A 142 142 . 0.1799 0.2179 0.2036 0.0107  -
0.0176 -0.0168 1 .
1065 CD2   CD2   . LEU LEU LEU A A 142 142 . 0.1127 0.1285 0.2023 -0.0099
0.0544  -0.0446 1 .
1066 C     C     . LEU LEU LEU A A 142 142 . 0.1046 0.1098 0.0784 -0.0085 -
0.0115 -0.0115 1 .
1067 O     O     . LEU LEU LEU A A 142 142 . 0.1234 0.1414 0.0743 -0.0057 -
0.0250 -0.0036 1 .
1068 N     N     . ILE ILE ILE A A 143 143 . 0.1022 0.0852 0.0371 0.0026
0.0048  0.0207  1 .
1069 CA    CA    . ILE ILE ILE A A 143 143 . 0.0995 0.0931 0.0476 -0.0100
0.0089  0.0024  1 .
1070 CB    CB    . ILE ILE ILE A A 143 143 . 0.1436 0.1477 0.0937 0.0069  -
0.0048 0.0457  1 .
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1071 CG1   CG1   . ILE ILE ILE A A 143 143 . 0.1307 0.1651 0.0964 -0.0148
0.0274  0.0293  1 .
1072 CD1   CD1   . ILE ILE ILE A A 143 143 . 0.2392 0.1015 0.1407 -0.0832 -
0.0391 0.0070  1 .
1073 CG2   CG2   . ILE ILE ILE A A 143 143 . 0.1400 0.1512 0.1235 -0.0124
0.0423  0.0126  1 .
1074 C     C     . ILE ILE ILE A A 143 143 . 0.0737 0.0473 0.0321 0.0052  -
0.0006 0.0119  1 .
1075 O     O     . ILE ILE ILE A A 143 143 . 0.0585 0.0671 0.0367 0.0271
0.0191  0.0130  1 .
1076 N     N     . LEU LEU LEU A A 144 144 . 0.0486 0.0398 0.0386 -0.0092 -
0.0009 0.0079  1 .
1077 CA    CA    . LEU LEU LEU A A 144 144 . 0.0309 0.0277 0.0264 -0.0001
0.0001  -0.0016 1 .
1078 CB    CB    . LEU LEU LEU A A 144 144 . 0.0441 0.0305 0.0275 0.0099  -
0.0064 -0.0033 1 .
1079 CG    CG    . LEU LEU LEU A A 144 144 . 0.0375 0.0616 0.0443 0.0092
0.0066  -0.0161 1 .
1080 CD1   CD1   . LEU LEU LEU A A 144 144 . 0.0843 0.0707 0.0331 0.0243  -
0.0072 -0.0186 1 .
1081 CD2   CD2   . LEU LEU LEU A A 144 144 . 0.0809 0.0770 0.1099 -0.0371
0.0392  -0.0036 1 .
1082 C     C     . LEU LEU LEU A A 144 144 . 0.0312 0.0309 0.0292 0.0057  -
0.0048 -0.0047 1 .
1083 O     O     . LEU LEU LEU A A 144 144 . 0.0762 0.0897 0.0299 0.0015  -
0.0004 -0.0172 1 .
1084 N     N     . PRO PRO PRO A A 145 145 . 0.0282 0.0282 0.0256 0.0029
0.0009  0.0009  1 .
1085 CA    CA    . PRO PRO PRO A A 145 145 . 0.0284 0.0253 0.0254 0.0002
0.0007  0.0000  1 .
1086 CB    CB    . PRO PRO PRO A A 145 145 . 0.0264 0.0256 0.0255 0.0006  -
0.0005 -0.0003 1 .
1087 CG    CG    . PRO PRO PRO A A 145 145 . 0.0285 0.0391 0.0273 0.0066
0.0025  0.0053  1 .
1088 CD    CD    . PRO PRO PRO A A 145 145 . 0.0294 0.0329 0.0253 -0.0056 -
0.0001 0.0001  1 .
1089 C     C     . PRO PRO PRO A A 145 145 . 0.0254 0.0298 0.0260 0.0007  -
0.0003 -0.0018 1 .
1090 O     O     . PRO PRO PRO A A 145 145 . 0.0372 0.0253 0.0269 0.0003
0.0041  0.0000  1 .
1091 N     N     . VAL VAL VAL A A 146 146 . 0.0435 0.0265 0.0253 0.0046
0.0003  0.0000  1 .
1092 CA    CA    . VAL VAL VAL A A 146 146 . 0.0342 0.0297 0.0321 -0.0062
0.0077  -0.0054 1 .
1093 CB    CB    . VAL VAL VAL A A 146 146 . 0.0352 0.0370 0.0362 -0.0062
0.0054  -0.0112 1 .
1094 CG1   CG1   . VAL VAL VAL A A 146 146 . 0.0259 0.0480 0.0376 0.0038
0.0028  0.0167  1 .
1095 CG2   CG2   . VAL VAL VAL A A 146 146 . 0.0461 0.0269 0.0376 -0.0057
0.0160  -0.0044 1 .
1096 C     C     . VAL VAL VAL A A 146 146 . 0.0460 0.0271 0.0360 -0.0059
0.0143  -0.0044 1 .
1097 O     O     . VAL VAL VAL A A 146 146 . 0.0535 0.0423 0.0345 0.0033
0.0083  -0.0095 1 .
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1098 N     N     . PRO PRO PRO A A 147 147 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
1099 CA    CA    . PRO PRO PRO A A 147 147 . 0.0271 0.0253 0.0260 0.0000
0.0011  0.0000  1 .
1100 CB    CB    . PRO PRO PRO A A 147 147 . 0.0357 0.0269 0.0256 0.0041  -
0.0019 -0.0007 1 .
1101 CG    CG    . PRO PRO PRO A A 147 147 . 0.0750 0.0255 0.0546 -0.0030
0.0011  0.0005  1 .
1102 CD    CD    . PRO PRO PRO A A 147 147 . 0.0330 0.0318 0.0281 0.0070  -
0.0046 -0.0043 1 .
1103 C     C     . PRO PRO PRO A A 147 147 . 0.0445 0.0279 0.0327 -0.0006
0.0115  0.0008  1 .
1104 O     O     . PRO PRO PRO A A 147 147 . 0.0382 0.0266 0.0277 -0.0041 -
0.0055 0.0017  1 .
1105 N     N     . ALA ALA ALA A A 148 148 . 0.0297 0.0263 0.0289 0.0021
0.0039  0.0019  1 .
1106 CA    CA    . ALA ALA ALA A A 148 148 . 0.0548 0.0368 0.0295 -0.0104 -
0.0107 0.0023  1 .
1107 CB    CB    . ALA ALA ALA A A 148 148 . 0.0311 0.0271 0.0255 -0.0032 -
0.0009 0.0005  1 .
1108 C     C     . ALA ALA ALA A A 148 148 . 0.0430 0.0298 0.0292 -0.0056
0.0083  -0.0028 1 .
1109 O     O     . ALA ALA ALA A A 148 148 . 0.0343 0.0256 0.0261 0.0016  -
0.0026 -0.0005 1 .
1110 N     N     . PHE PHE PHE A A 149 149 . 0.0495 0.0287 0.0255 0.0090  -
0.0021 -0.0008 1 .
1111 CA    CA    . PHE PHE PHE A A 149 149 . 0.0283 0.0254 0.0302 0.0006  -
0.0038 -0.0008 1 .
1112 CB    CB    . PHE PHE PHE A A 149 149 . 0.0307 0.0255 0.0304 -0.0010 -
0.0052 0.0009  1 .
1113 CG    CG    . PHE PHE PHE A A 149 149 . 0.0270 0.0278 0.0270 0.0011
0.0017  0.0013  1 .
1114 CD1   CD1   . PHE PHE PHE A A 149 149 . 0.0426 0.0253 0.0302 0.0007  -
0.0092 -0.0004 1 .
1115 CE1   CE1   . PHE PHE PHE A A 149 149 . 0.0387 0.0270 0.0302 -0.0048
0.0080  -0.0029 1 .
1116 CZ    CZ    . PHE PHE PHE A A 149 149 . 0.0476 0.0339 0.0543 0.0138  -
0.0254 -0.0158 1 .
1117 CE2   CE2   . PHE PHE PHE A A 149 149 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
1118 CD2   CD2   . PHE PHE PHE A A 149 149 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
1119 C     C     . PHE PHE PHE A A 149 149 . 0.0275 0.0257 0.0256 -0.0009
0.0008  -0.0003 1 .
1120 O     O     . PHE PHE PHE A A 149 149 . 0.0309 0.0260 0.0274 -0.0019
0.0034  -0.0012 1 .
1121 N     N     . ASN ASN ASN A A 150 150 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
1122 CA    CA    . ASN ASN ASN A A 150 150 . 0.0268 0.0254 0.0264 -0.0004
0.0013  -0.0003 1 .
1123 CB    CB    . ASN ASN ASN A A 150 150 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
1124 CG    CG    . ASN ASN ASN A A 150 150 . 0.0303 0.0316 0.0318 0.0055  -
0.0056 -0.0063 1 .
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1125 OD1   OD1   . ASN ASN ASN A A 150 150 . 0.0935 0.0438 0.0720 0.0094
0.0131  -0.0181 1 .
1126 ND2   ND2   . ASN ASN ASN A A 150 150 . 0.0276 0.0261 0.0657 0.0014  -
0.0096 -0.0058 1 .
1127 C     C     . ASN ASN ASN A A 150 150 . 0.0261 0.0314 0.0256 -0.0021 -
0.0005 0.0014  1 .
1128 O     O     . ASN ASN ASN A A 150 150 . 0.0277 0.0267 0.0326 -0.0018
0.0042  -0.0032 1 .
1129 N     N     . VAL VAL VAL A A 151 151 . 0.0276 0.0256 0.0255 0.0008
0.0006  0.0002  1 .
1130 CA    CA    . VAL VAL VAL A A 151 151 . 0.0395 0.0268 0.0328 -0.0046
0.0103  -0.0034 1 .
1131 CB    CB    . VAL VAL VAL A A 151 151 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
1132 CG1   CG1   . VAL VAL VAL A A 151 151 . 0.0332 0.0291 0.0376 -0.0055
0.0098  -0.0068 1 .
1133 CG2   CG2   . VAL VAL VAL A A 151 151 . 0.0509 0.0398 0.0708 -0.0135
0.0164  0.0073  1 .
1134 C     C     . VAL VAL VAL A A 151 151 . 0.0288 0.0284 0.0278 -0.0033
0.0030  -0.0028 1 .
1135 O     O     . VAL VAL VAL A A 151 151 . 0.0254 0.0254 0.0256 -0.0001 -
0.0002 0.0001  1 .
1136 N     N     . ILE ILE ILE A A 152 152 . 0.0266 0.0269 0.0266 0.0013  -
0.0012 -0.0014 1 .
1137 CA    CA    . ILE ILE ILE A A 152 152 . 0.0253 0.0289 0.0409 -0.0004
0.0008  -0.0075 1 .
1138 CB    CB    . ILE ILE ILE A A 152 152 . 0.0255 0.0502 0.0614 -0.0021
0.0026  -0.0299 1 .
1139 CG1   CG1   . ILE ILE ILE A A 152 152 . 0.0387 0.0644 0.1014 -0.0121 -
0.0239 -0.0042 1 .
1140 CD1   CD1   . ILE ILE ILE A A 152 152 . 0.0322 0.0383 0.1305 0.0014  -
0.0082 -0.0365 1 .
1141 CG2   CG2   . ILE ILE ILE A A 152 152 . 0.0458 0.0511 0.0482 0.0064  -
0.0003 -0.0234 1 .
1142 C     C     . ILE ILE ILE A A 152 152 . 0.0304 0.0342 0.0309 -0.0009 -
0.0013 -0.0065 1 .
1143 O     O     . ILE ILE ILE A A 152 152 . 0.0400 0.0341 0.0404 -0.0114
0.0148  -0.0115 1 .
1144 N     N     . ASN ASN ASN A A 153 153 . 0.0431 0.0317 0.0413 -0.0043
0.0094  -0.0099 1 .
1145 CA    CA    . ASN ASN ASN A A 153 153 . 0.0432 0.0286 0.0341 0.0032
0.0001  -0.0016 1 .
1146 CB    CB    . ASN ASN ASN A A 153 153 . 0.0314 0.0278 0.0527 0.0034  -
0.0044 -0.0059 1 .
1147 CG    CG    . ASN ASN ASN A A 153 153 . 0.0390 0.0277 0.0268 -0.0057
0.0046  -0.0019 1 .
1148 OD1   OD1   . ASN ASN ASN A A 153 153 . 0.0726 0.0448 0.0601 0.0301
0.0012  -0.0020 1 .
1149 ND2   ND2   . ASN ASN ASN A A 153 153 . 0.0258 0.0278 0.0263 0.0011  -
0.0006 -0.0015 1 .
1150 C     C     . ASN ASN ASN A A 153 153 . 0.0435 0.0290 0.0279 0.0004
0.0059  0.0016  1 .
1151 O     O     . ASN ASN ASN A A 153 153 . 0.0494 0.0315 0.0713 -0.0088
0.0021  -0.0043 1 .
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1152 N     N     . GLY GLY GLY A A 154 154 . 0.0260 0.0421 0.0574 0.0034  -
0.0048 -0.0232 1 .
1153 CA    CA    . GLY GLY GLY A A 154 154 . 0.0313 0.0256 0.0669 -0.0013
0.0157  -0.0036 1 .
1154 C     C     . GLY GLY GLY A A 154 154 . 0.0458 0.0445 0.0768 -0.0119
0.0036  -0.0271 1 .
1155 O     O     . GLY GLY GLY A A 154 154 . 0.0259 0.0533 0.0561 -0.0038
0.0036  -0.0145 1 .
1156 N     N     . GLY GLY GLY A A 155 155 . 0.0670 0.0441 0.0725 0.0034  -
0.0060 -0.0223 1 .
1157 CA    CA    . GLY GLY GLY A A 155 155 . 0.0254 0.0482 0.0588 -0.0015 -
0.0010 -0.0047 1 .
1158 C     C     . GLY GLY GLY A A 155 155 . 0.0757 0.0530 0.0695 0.0046
0.0101  0.0002  1 .
1159 O     O     . GLY GLY GLY A A 155 155 . 0.0981 0.0795 0.0492 -0.0017
0.0157  -0.0042 1 .
1160 N     N     . SER SER SER A A 156 156 . 0.0566 0.0622 0.0615 0.0050
0.0168  0.0067  1 .
1161 CA    CA    . SER SER SER A A 156 156 . 0.0591 0.0365 0.0844 -0.0066
0.0076  -0.0156 1 .
1162 CB    CB    . SER SER SER A A 156 156 . 0.0363 0.0341 0.0725 0.0000  -
0.0032 0.0046  1 .
1163 OG    OG    . SER SER SER A A 156 156 . 0.0854 0.0718 0.1108 -0.0039 -
0.0264 -0.0203 1 .
1164 C     C     . SER SER SER A A 156 156 . 0.0862 0.0627 0.0712 -0.0057 -
0.0018 -0.0058 1 .
1165 O     O     . SER SER SER A A 156 156 . 0.0835 0.0400 0.0532 -0.0109 -
0.0066 -0.0172 1 .
1166 N     N     . HIS HIS HIS A A 157 157 . 0.0467 0.0402 0.0587 0.0013  -
0.0007 -0.0035 1 .
1167 CA    CA    . HIS HIS HIS A A 157 157 . 0.0304 0.0424 0.0409 -0.0018 -
0.0083 0.0015  1 .
1168 CB    CB    . HIS HIS HIS A A 157 157 . 0.0285 0.0336 0.0317 -0.0051
0.0045  -0.0073 1 .
1169 CG    CG    . HIS HIS HIS A A 157 157 . 0.0585 0.0439 0.0416 0.0109
0.0126  -0.0090 1 .
1170 ND1   ND1   . HIS HIS HIS A A 157 157 . 0.0274 0.0386 0.0459 -0.0048 -
0.0019 -0.0022 1 .
1171 CE1   CE1   . HIS HIS HIS A A 157 157 . 0.0450 0.0253 0.0451 -0.0008 -
0.0197 0.0008  1 .
1172 NE2   NE2   . HIS HIS HIS A A 157 157 . 0.0267 0.0334 0.0257 -0.0033
0.0007  -0.0018 1 .
1173 CD2   CD2   . HIS HIS HIS A A 157 157 . 0.0439 0.0389 0.0254 -0.0158 -
0.0012 0.0011  1 .
1174 C     C     . HIS HIS HIS A A 157 157 . 0.0420 0.0304 0.0772 -0.0031 -
0.0013 -0.0150 1 .
1175 O     O     . HIS HIS HIS A A 157 157 . 0.0280 0.0464 0.0323 0.0019  -
0.0043 -0.0041 1 .
1176 N     N     . ALA ALA ALA A A 158 158 . 0.0505 0.0418 0.0661 -0.0046
0.0164  -0.0247 1 .
1177 CA    CA    . ALA ALA ALA A A 158 158 . 0.0544 0.0602 0.0695 0.0026
0.0232  -0.0144 1 .
1178 CB    CB    . ALA ALA ALA A A 158 158 . 0.0640 0.0700 0.0897 0.0195
0.0353  0.0002  1 .
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1179 C     C     . ALA ALA ALA A A 158 158 . 0.0703 0.0714 0.0848 -0.0039
0.0138  -0.0184 1 .
1180 O     O     . ALA ALA ALA A A 158 158 . 0.0941 0.0935 0.1309 -0.0115
0.0116  -0.0296 1 .
1181 N     N     . GLY GLY GLY A A 159 159 . 0.0929 0.0842 0.0917 -0.0271
0.0309  -0.0089 1 .
1182 CA    CA    . GLY GLY GLY A A 159 159 . 0.0709 0.0917 0.1056 -0.0081
0.0351  -0.0077 1 .
1183 C     C     . GLY GLY GLY A A 159 159 . 0.0992 0.1056 0.1166 -0.0166
0.0116  0.0014  1 .
1184 O     O     . GLY GLY GLY A A 159 159 . 0.1428 0.0765 0.1083 -0.0114
0.0227  -0.0133 1 .
1185 N     N     . ASN ASN ASN A A 160 160 . 0.0536 0.0944 0.1078 -0.0165
0.0039  0.0041  1 .
1186 CA    CA    . ASN ASN ASN A A 160 160 . 0.0730 0.0675 0.0939 -0.0053
0.0121  -0.0272 1 .
1187 CB    CB    . ASN ASN ASN A A 160 160 . 0.0528 0.0912 0.0944 -0.0176
0.0230  -0.0141 1 .
1188 CG    CG    . ASN ASN ASN A A 160 160 . 0.0416 0.0458 0.0505 -0.0014
0.0021  -0.0033 1 .
1189 OD1   OD1   . ASN ASN ASN A A 160 160 . 0.0420 0.0474 0.0797 0.0029
0.0132  -0.0284 1 .
1190 ND2   ND2   . ASN ASN ASN A A 160 160 . 0.0456 0.0497 0.0671 -0.0155
0.0079  -0.0280 1 .
1191 C     C     . ASN ASN ASN A A 160 160 . 0.0837 0.0916 0.0967 -0.0047
0.0140  -0.0079 1 .
1192 O     O     . ASN ASN ASN A A 160 160 . 0.0851 0.0585 0.0702 0.0028
0.0181  -0.0243 1 .
1193 N     N     . LYS LYS LYS A A 161 161 . 0.1080 0.0963 0.1102 0.0004
0.0118  -0.0254 1 .
1194 CA    CA    . LYS LYS LYS A A 161 161 . 0.0889 0.1074 0.1070 -0.0078
0.0108  -0.0081 1 .
1195 CB    CB    . LYS LYS LYS A A 161 161 . 0.1070 0.1378 0.1396 -0.0265
0.0425  -0.0055 1 .
1196 CG    CG    . LYS LYS LYS A A 161 161 . 0.0925 0.1664 0.1106 -0.0223
0.0094  -0.0272 1 .
1197 CD    CD    . LYS LYS LYS A A 161 161 . 0.1248 0.2447 0.2302 -0.0575
0.0165  -0.0133 1 .
1198 CE    CE    . LYS LYS LYS A A 161 161 . 0.1706 0.2668 0.1964 -0.0866 -
0.0245 -0.0354 1 .
1199 NZ    NZ    . LYS LYS LYS A A 161 161 . 0.1939 0.3240 0.3435 -0.1126 -
0.0373 -0.0242 1 .
1200 C     C     . LYS LYS LYS A A 161 161 . 0.0882 0.0818 0.1065 0.0076
0.0149  -0.0058 1 .
1201 O     O     . LYS LYS LYS A A 161 161 . 0.1089 0.1076 0.1082 -0.0004
0.0040  0.0068  1 .
1202 N     N     . LEU LEU LEU A A 162 162 . 0.0749 0.0770 0.1004 -0.0013
0.0214  -0.0027 1 .
1203 CA    CA    . LEU LEU LEU A A 162 162 . 0.0473 0.0582 0.0714 0.0137  -
0.0055 0.0087  1 .
1204 CB    CB    . LEU LEU LEU A A 162 162 . 0.0400 0.0794 0.0722 0.0223
0.0019  0.0093  1 .
1205 CG    CG    . LEU LEU LEU A A 162 162 . 0.0254 0.0411 0.0413 0.0014  -
0.0014 -0.0158 1 .
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1206 CD1   CD1   . LEU LEU LEU A A 162 162 . 0.0267 0.0835 0.0390 0.0089  -
0.0043 -0.0282 1 .
1207 CD2   CD2   . LEU LEU LEU A A 162 162 . 0.0600 0.0411 0.0768 0.0231  -
0.0178 -0.0075 1 .
1208 C     C     . LEU LEU LEU A A 162 162 . 0.0531 0.0483 0.0690 -0.0069 -
0.0095 -0.0146 1 .
1209 O     O     . LEU LEU LEU A A 162 162 . 0.0502 0.0585 0.0785 -0.0050 -
0.0178 -0.0190 1 .
1210 N     N     . ALA ALA ALA A A 163 163 . 0.0338 0.0378 0.0637 0.0096  -
0.0039 -0.0121 1 .
1211 CA    CA    . ALA ALA ALA A A 163 163 . 0.0345 0.0470 0.0468 0.0073  -
0.0131 -0.0037 1 .
1212 CB    CB    . ALA ALA ALA A A 163 163 . 0.0390 0.0405 0.0592 0.0009  -
0.0214 -0.0039 1 .
1213 C     C     . ALA ALA ALA A A 163 163 . 0.0255 0.0393 0.0368 0.0019  -
0.0017 -0.0127 1 .
1214 O     O     . ALA ALA ALA A A 163 163 . 0.0518 0.0696 0.0734 0.0052
0.0151  -0.0035 1 .
1215 N     N     . MET MET MET A A 164 164 . 0.0342 0.0443 0.0445 -0.0090
0.0014  -0.0150 1 .
1216 CA    CA    . MET MET MET A A 164 164 . 0.0323 0.0514 0.0441 0.0058  -
0.0088 -0.0201 1 .
1217 CB    CB    . MET MET MET A A 164 164 . 0.0310 0.0441 0.0405 -0.0045 -
0.0046 -0.0094 1 .
1218 CG    CG    . MET MET MET A A 164 164 . 0.0752 0.0412 0.0373 0.0212  -
0.0174 -0.0010 1 .
1219 SD    SD    . MET MET MET A A 164 164 . 0.0895 0.0767 0.0978 -0.0029 -
0.0172 -0.0294 1 .
1220 CE    CE    . MET MET MET A A 164 164 . 0.0850 0.0399 0.1021 -0.0009 -
0.0394 -0.0265 1 .
1221 C     C     . MET MET MET A A 164 164 . 0.0330 0.0451 0.0526 -0.0076 -
0.0051 0.0139  1 .
1222 O     O     . MET MET MET A A 164 164 . 0.0432 0.0516 0.0623 -0.0150 -
0.0044 0.0097  1 .
1223 N     N     . GLN GLN GLN A A 165 165 . 0.0269 0.0338 0.0638 -0.0037
0.0050  -0.0103 1 .
1224 CA    CA    . GLN GLN GLN A A 165 165 . 0.0334 0.0311 0.0382 0.0050  -
0.0043 -0.0080 1 .
1225 CB    CB    . GLN GLN GLN A A 165 165 . 0.0257 0.0273 0.0324 0.0008  -
0.0016 -0.0037 1 .
1226 CG    CG    . GLN GLN GLN A A 165 165 . 0.0374 0.0452 0.0288 -0.0155
0.0065  -0.0083 1 .
1227 CD    CD    . GLN GLN GLN A A 165 165 . 0.0260 0.0365 0.0450 0.0014
0.0001  -0.0124 1 .
1228 OE1   OE1   . GLN GLN GLN A A 165 165 . 0.0391 0.0413 0.0703 -0.0116 -
0.0028 -0.0141 1 .
1229 NE2   NE2   . GLN GLN GLN A A 165 165 . 0.0253 0.0353 0.0371 0.0000
0.0000  -0.0109 1 .
1230 C     C     . GLN GLN GLN A A 165 165 . 0.0254 0.0253 0.0258 0.0000  -
0.0002 0.0000  1 .
1231 O     O     . GLN GLN GLN A A 165 165 . 0.0542 0.0457 0.0372 -0.0024
0.0185  -0.0023 1 .
1232 N     N     . GLU GLU GLU A A 166 166 . 0.0522 0.0281 0.0418 0.0047  -
0.0068 -0.0066 1 .
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1233 CA    CA    . GLU GLU GLU A A 166 166 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
1234 CB    CB    . GLU GLU GLU A A 166 166 . 0.0261 0.0254 0.0274 0.0003  -
0.0013 -0.0005 1 .
1235 CG    CG    . GLU GLU GLU A A 166 166 . 0.0379 0.0311 0.0386 0.0085  -
0.0129 -0.0087 1 .
1236 CD    CD    . GLU GLU GLU A A 166 166 . 0.0696 0.0618 0.0627 0.0235  -
0.0096 0.0100  1 .
1237 OE1   OE1   . GLU GLU GLU A A 166 166 . 0.0413 0.0537 0.0982 -0.0130 -
0.0036 0.0163  1 .
1238 OE2   OE2   . GLU GLU GLU A A 166 166 . 0.1083 0.0618 0.0766 -0.0251
0.0065  -0.0103 1 .
1239 C     C     . GLU GLU GLU A A 166 166 . 0.0329 0.0376 0.0269 0.0096  -
0.0035 -0.0044 1 .
1240 O     O     . GLU GLU GLU A A 166 166 . 0.0406 0.0256 0.0605 0.0022  -
0.0232 -0.0033 1 .
1241 N     N     . PHE PHE PHE A A 167 167 . 0.0403 0.0318 0.0410 -0.0045 -
0.0085 -0.0048 1 .
1242 CA    CA    . PHE PHE PHE A A 167 167 . 0.0339 0.0358 0.0493 -0.0016
0.0082  -0.0144 1 .
1243 CB    CB    . PHE PHE PHE A A 167 167 . 0.0576 0.0437 0.0906 0.0072
0.0066  -0.0183 1 .
1244 CG    CG    . PHE PHE PHE A A 167 167 . 0.0316 0.0742 0.0502 0.0028  -
0.0037 -0.0345 1 .
1245 CD1   CD1   . PHE PHE PHE A A 167 167 . 0.0650 0.0616 0.1035 -0.0092
0.0199  -0.0260 1 .
1246 CE1   CE1   . PHE PHE PHE A A 167 167 . 0.0620 0.0529 0.0710 -0.0241 -
0.0313 0.0068  1 .
1247 CZ    CZ    . PHE PHE PHE A A 167 167 . 0.0281 0.0698 0.0650 -0.0023 -
0.0103 -0.0005 1 .
1248 CE2   CE2   . PHE PHE PHE A A 167 167 . 0.0584 0.0501 0.0776 -0.0165
0.0199  -0.0305 1 .
1249 CD2   CD2   . PHE PHE PHE A A 167 167 . 0.0393 0.0639 0.0764 0.0030  -
0.0260 0.0048  1 .
1250 C     C     . PHE PHE PHE A A 167 167 . 0.0277 0.0273 0.0276 0.0022  -
0.0023 -0.0021 1 .
1251 O     O     . PHE PHE PHE A A 167 167 . 0.0477 0.0333 0.0523 -0.0133
0.0045  -0.0043 1 .
1252 N     N     . MET MET MET A A 168 168 . 0.0256 0.0253 0.0255 0.0000
0.0002  0.0000  1 .
1253 CA    CA    . MET MET MET A A 168 168 . 0.0271 0.0331 0.0307 -0.0009
0.0011  0.0020  1 .
1254 CB    CB    . MET MET MET A A 168 168 . 0.0457 0.0323 0.0371 0.0104  -
0.0016 -0.0052 1 .
1255 CG    CG    . MET MET MET A A 168 168 . 0.0256 0.0273 0.0273 -0.0008
0.0008  -0.0020 1 .
1256 SD    SD    . MET MET MET A A 168 168 . 0.0663 0.0493 0.0597 -0.0089 -
0.0072 -0.0017 1 .
1257 CE    CE    . MET MET MET A A 168 168 . 0.0566 0.0904 0.0898 -0.0187 -
0.0149 -0.0466 1 .
1258 C     C     . MET MET MET A A 168 168 . 0.0313 0.0253 0.0427 -0.0003 -
0.0102 0.0006  1 .
1259 O     O     . MET MET MET A A 168 168 . 0.0458 0.0357 0.0302 0.0081  -
0.0066 -0.0070 1 .
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1260 N     N     . ILE ILE ILE A A 169 169 . 0.0332 0.0286 0.0310 0.0012
0.0003  0.0042  1 .
1261 CA    CA    . ILE ILE ILE A A 169 169 . 0.0436 0.0285 0.0256 0.0066
0.0018  0.0003  1 .
1262 CB    CB    . ILE ILE ILE A A 169 169 . 0.0273 0.0303 0.0311 -0.0031 -
0.0034 0.0054  1 .
1263 CG1   CG1   . ILE ILE ILE A A 169 169 . 0.0257 0.0305 0.0281 -0.0015 -
0.0011 0.0038  1 .
1264 CD1   CD1   . ILE ILE ILE A A 169 169 . 0.0312 0.0261 0.0382 0.0022  -
0.0087 -0.0033 1 .
1265 CG2   CG2   . ILE ILE ILE A A 169 169 . 0.0642 0.0536 0.0420 -0.0298
0.0006  0.0090  1 .
1266 C     C     . ILE ILE ILE A A 169 169 . 0.0289 0.0270 0.0391 0.0025  -
0.0070 -0.0049 1 .
1267 O     O     . ILE ILE ILE A A 169 169 . 0.0318 0.0306 0.0384 0.0057  -
0.0083 -0.0065 1 .
1268 N     N     . LEU LEU LEU A A 170 170 . 0.0258 0.0271 0.0274 0.0009  -
0.0010 -0.0019 1 .
1269 CA    CA    . LEU LEU LEU A A 170 170 . 0.0519 0.0416 0.0268 -0.0001 -
0.0020 -0.0048 1 .
1270 CB    CB    . LEU LEU LEU A A 170 170 . 0.0424 0.0253 0.0332 -0.0001 -
0.0116 0.0001  1 .
1271 CG    CG    . LEU LEU LEU A A 170 170 . 0.0418 0.0300 0.0662 0.0042
0.0253  0.0091  1 .
1272 CD1   CD1   . LEU LEU LEU A A 170 170 . 0.0422 0.0434 0.0668 0.0175
0.0265  0.0274  1 .
1273 CD2   CD2   . LEU LEU LEU A A 170 170 . 0.1222 0.0795 0.0585 0.0160
0.0038  0.0407  1 .
1274 C     C     . LEU LEU LEU A A 170 170 . 0.0311 0.0261 0.0258 0.0021  -
0.0017 -0.0006 1 .
1275 O     O     . LEU LEU LEU A A 170 170 . 0.0404 0.0253 0.0307 -0.0005 -
0.0090 0.0003  1 .
1276 N     N     . PRO PRO PRO A A 171 171 . 0.0254 0.0419 0.0300 -0.0014
0.0007  -0.0088 1 .
1277 CA    CA    . PRO PRO PRO A A 171 171 . 0.0314 0.0390 0.0310 0.0013  -
0.0051 -0.0054 1 .
1278 CB    CB    . PRO PRO PRO A A 171 171 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
1279 CG    CG    . PRO PRO PRO A A 171 171 . 0.0732 0.0430 0.0457 0.0180
0.0027  -0.0138 1 .
1280 CD    CD    . PRO PRO PRO A A 171 171 . 0.0260 0.0255 0.0265 0.0004  -
0.0009 -0.0005 1 .
1281 C     C     . PRO PRO PRO A A 171 171 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
1282 O     O     . PRO PRO PRO A A 171 171 . 0.0299 0.0356 0.0373 -0.0068
0.0074  -0.0111 1 .
1283 N     N     . VAL VAL VAL A A 172 172 . 0.0283 0.0262 0.0327 -0.0013
0.0041  -0.0011 1 .
1284 CA    CA    . VAL VAL VAL A A 172 172 . 0.0371 0.0282 0.0287 -0.0058 -
0.0063 0.0031  1 .
1285 CB    CB    . VAL VAL VAL A A 172 172 . 0.0729 0.0368 0.0503 0.0197  -
0.0057 0.0019  1 .
1286 CG1   CG1   . VAL VAL VAL A A 172 172 . 0.0304 0.0348 0.0256 0.0069  -
0.0013 -0.0018 1 .
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1287 CG2   CG2   . VAL VAL VAL A A 172 172 . 0.0842 0.0265 0.0451 -0.0009
0.0338  -0.0012 1 .
1288 C     C     . VAL VAL VAL A A 172 172 . 0.0254 0.0309 0.0264 -0.0008
0.0003  -0.0025 1 .
1289 O     O     . VAL VAL VAL A A 172 172 . 0.0532 0.0480 0.0375 -0.0250
0.0182  -0.0166 1 .
1290 N     N     . GLY GLY GLY A A 173 173 . 0.0357 0.0270 0.0292 -0.0042 -
0.0064 0.0025  1 .
1291 CA    CA    . GLY GLY GLY A A 173 173 . 0.0503 0.0256 0.0298 0.0000  -
0.0081 0.0007  1 .
1292 C     C     . GLY GLY GLY A A 173 173 . 0.0258 0.0265 0.0479 0.0007  -
0.0032 -0.0053 1 .
1293 O     O     . GLY GLY GLY A A 173 173 . 0.0725 0.0480 0.0552 -0.0061 -
0.0213 -0.0108 1 .
1294 N     N     . ALA ALA ALA A A 174 174 . 0.0734 0.0309 0.0314 0.0036  -
0.0164 -0.0029 1 .
1295 CA    CA    . ALA ALA ALA A A 174 174 . 0.0308 0.0325 0.0428 0.0032  -
0.0044 -0.0112 1 .
1296 CB    CB    . ALA ALA ALA A A 174 174 . 0.0953 0.0275 0.0320 0.0119
0.0216  0.0036  1 .
1297 C     C     . ALA ALA ALA A A 174 174 . 0.0412 0.0331 0.0365 0.0100  -
0.0125 -0.0093 1 .
1298 O     O     . ALA ALA ALA A A 174 174 . 0.0431 0.0669 0.0428 -0.0114
0.0155  -0.0214 1 .
1299 N     N     . GLU GLU GLU A A 175 175 . 0.0611 0.0566 0.0533 0.0052  -
0.0140 -0.0073 1 .
1300 CA    CA    . GLU GLU GLU A A 175 175 . 0.0863 0.0804 0.0897 -0.0001 -
0.0048 -0.0225 1 .
1301 CB    CB    . GLU GLU GLU A A 175 175 . 0.1259 0.0806 0.1172 -0.0105 -
0.0085 -0.0180 1 .
1302 CG    CG    . GLU GLU GLU A A 175 175 . 0.2618 0.1816 0.2388 -0.0055 -
0.0223 -0.0354 1 .
1303 CD    CD    . GLU GLU GLU A A 175 175 . 0.3924 0.3416 0.2975 0.0316
0.0114  -0.0389 1 .
1304 OE1   OE1   . GLU GLU GLU A A 175 175 . 0.4117 0.4425 0.3948 0.0525  -
0.0083 -0.0340 1 .
1305 OE2   OE2   . GLU GLU GLU A A 175 175 . 0.3985 0.3309 0.3984 0.0748
0.0313  -0.0661 1 .
1306 C     C     . GLU GLU GLU A A 175 175 . 0.0898 0.0828 0.0929 -0.0025
0.0088  -0.0150 1 .
1307 O     O     . GLU GLU GLU A A 175 175 . 0.0974 0.1124 0.0842 -0.0022
0.0131  -0.0233 1 .
1308 N     N     . SER SER SER A A 176 176 . 0.0848 0.0789 0.0653 0.0029
0.0077  -0.0175 1 .
1309 CA    CA    . SER SER SER A A 176 176 . 0.0449 0.0521 0.0369 -0.0014
0.0052  0.0050  1 .
1310 CB    CB    . SER SER SER A A 176 176 . 0.0621 0.0596 0.0695 -0.0095
0.0272  0.0199  1 .
1311 OG    OG    . SER SER SER A A 176 176 . 0.0538 0.0754 0.0494 -0.0004
0.0258  0.0056  1 .
1312 C     C     . SER SER SER A A 176 176 . 0.0367 0.0386 0.0331 -0.0011
0.0069  -0.0076 1 .
1313 O     O     . SER SER SER A A 176 176 . 0.0412 0.0280 0.0272 0.0024
0.0048  -0.0002 1 .
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1314 N     N     . PHE PHE PHE A A 177 177 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
1315 CA    CA    . PHE PHE PHE A A 177 177 . 0.0364 0.0362 0.0304 0.0043  -
0.0020 -0.0073 1 .
1316 CB    CB    . PHE PHE PHE A A 177 177 . 0.0645 0.0332 0.0318 0.0046
0.0069  0.0021  1 .
1317 CG    CG    . PHE PHE PHE A A 177 177 . 0.0263 0.0424 0.0288 0.0041  -
0.0018 -0.0078 1 .
1318 CD1   CD1   . PHE PHE PHE A A 177 177 . 0.0706 0.0447 0.0899 0.0079
0.0168  0.0353  1 .
1319 CE1   CE1   . PHE PHE PHE A A 177 177 . 0.0472 0.0284 0.0262 -0.0081 -
0.0028 0.0012  1 .
1320 CZ    CZ    . PHE PHE PHE A A 177 177 . 0.0472 0.0274 0.0453 -0.0018
0.0009  -0.0063 1 .
1321 CE2   CE2   . PHE PHE PHE A A 177 177 . 0.0324 0.0270 0.0292 -0.0035 -
0.0052 0.0026  1 .
1322 CD2   CD2   . PHE PHE PHE A A 177 177 . 0.0259 0.0267 0.0271 -0.0009 -
0.0010 0.0016  1 .
1323 C     C     . PHE PHE PHE A A 177 177 . 0.0253 0.0278 0.0273 0.0000
0.0000  -0.0022 1 .
1324 O     O     . PHE PHE PHE A A 177 177 . 0.0467 0.0350 0.0337 0.0070
0.0092  0.0087  1 .
1325 N     N     . ARG ARG ARG A A 178 178 . 0.0323 0.0276 0.0253 -0.0040
0.0003  -0.0002 1 .
1326 CA    CA    . ARG ARG ARG A A 178 178 . 0.0286 0.0342 0.0355 0.0051
0.0045  0.0055  1 .
1327 CB    CB    . ARG ARG ARG A A 178 178 . 0.0261 0.0268 0.0283 0.0011
0.0015  0.0021  1 .
1328 CG    CG    . ARG ARG ARG A A 178 178 . 0.1445 0.0765 0.1231 0.0130  -
0.0089 0.0264  1 .
1329 CD    CD    . ARG ARG ARG A A 178 178 . 0.1706 0.1953 0.2579 -0.0211 -
0.0219 0.0055  1 .
1330 NE    NE    . ARG ARG ARG A A 178 178 . 0.3190 0.2787 0.3114 -0.0081 -
0.0163 0.0205  1 .
1331 CZ    CZ    . ARG ARG ARG A A 178 178 . 0.3017 0.2673 0.3118 -0.0070 -
0.0050 -0.0046 1 .
1332 NH1   NH1   . ARG ARG ARG A A 178 178 . 0.3048 0.2291 0.3320 0.0133  -
0.0342 -0.0157 1 .
1333 NH2   NH2   . ARG ARG ARG A A 178 178 . 0.1835 0.3171 0.3241 -0.0423 -
0.0131 -0.0099 1 .
1334 C     C     . ARG ARG ARG A A 178 178 . 0.0389 0.0337 0.0349 0.0098
0.0056  0.0011  1 .
1335 O     O     . ARG ARG ARG A A 178 178 . 0.0325 0.0312 0.0332 0.0065
0.0075  0.0068  1 .
1336 N     N     . ASP ASP ASP A A 179 179 . 0.0342 0.0348 0.0412 0.0067
0.0011  -0.0075 1 .
1337 CA    CA    . ASP ASP ASP A A 179 179 . 0.0280 0.0346 0.0320 0.0025
0.0015  -0.0049 1 .
1338 CB    CB    . ASP ASP ASP A A 179 179 . 0.0567 0.0261 0.0584 -0.0050
0.0322  -0.0051 1 .
1339 CG    CG    . ASP ASP ASP A A 179 179 . 0.0961 0.0759 0.0558 0.0062
0.0095  -0.0311 1 .
1340 OD1   OD1   . ASP ASP ASP A A 179 179 . 0.1115 0.1268 0.0648 -0.0270 -
0.0196 -0.0179 1 .
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1341 OD2   OD2   . ASP ASP ASP A A 179 179 . 0.1442 0.0563 0.1610 -0.0125
0.0282  0.0067  1 .
1342 C     C     . ASP ASP ASP A A 179 179 . 0.0274 0.0259 0.0256 0.0011
0.0008  0.0004  1 .
1343 O     O     . ASP ASP ASP A A 179 179 . 0.0377 0.0253 0.0254 -0.0004
0.0011  0.0000  1 .
1344 N     N     . ALA ALA ALA A A 180 180 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
1345 CA    CA    . ALA ALA ALA A A 180 180 . 0.0457 0.0479 0.0335 0.0041
0.0101  0.0104  1 .
1346 CB    CB    . ALA ALA ALA A A 180 180 . 0.0521 0.0436 0.0297 0.0221
0.0090  0.0076  1 .
1347 C     C     . ALA ALA ALA A A 180 180 . 0.0282 0.0256 0.0262 -0.0009
0.0016  -0.0005 1 .
1348 O     O     . ALA ALA ALA A A 180 180 . 0.0360 0.0263 0.0298 0.0029
0.0052  0.0008  1 .
1349 N     N     . MET MET MET A A 181 181 . 0.0279 0.0268 0.0272 0.0019
0.0022  0.0017  1 .
1350 CA    CA    . MET MET MET A A 181 181 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
1351 CB    CB    . MET MET MET A A 181 181 . 0.0263 0.0420 0.0424 -0.0026 -
0.0032 -0.0003 1 .
1352 CG    CG    . MET MET MET A A 181 181 . 0.0304 0.0256 0.0263 0.0012
0.0023  0.0005  1 .
1353 SD    SD    . MET MET MET A A 181 181 . 0.0491 0.0310 0.0311 -0.0062
0.0004  -0.0049 1 .
1354 CE    CE    . MET MET MET A A 181 181 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
1355 C     C     . MET MET MET A A 181 181 . 0.0333 0.0258 0.0299 0.0019
0.0061  0.0014  1 .
1356 O     O     . MET MET MET A A 181 181 . 0.0342 0.0339 0.0466 -0.0008
0.0090  0.0092  1 .
1357 N     N     . ARG ARG ARG A A 182 182 . 0.0471 0.0309 0.0523 0.0110
0.0243  0.0122  1 .
1358 CA    CA    . ARG ARG ARG A A 182 182 . 0.0562 0.0261 0.0374 0.0051
0.0193  0.0031  1 .
1359 CB    CB    . ARG ARG ARG A A 182 182 . 0.0381 0.0366 0.0458 0.0120
0.0162  0.0152  1 .
1360 CG    CG    . ARG ARG ARG A A 182 182 . 0.0711 0.0267 0.0864 -0.0066
0.0502  -0.0089 1 .
1361 CD    CD    . ARG ARG ARG A A 182 182 . 0.0695 0.0685 0.1468 0.0048
0.0188  -0.0133 1 .
1362 NE    NE    . ARG ARG ARG A A 182 182 . 0.2080 0.0771 0.2239 -0.0243
0.0356  0.0298  1 .
1363 CZ    CZ    . ARG ARG ARG A A 182 182 . 0.2389 0.1688 0.1811 -0.0161
0.0332  -0.0004 1 .
1364 NH1   NH1   . ARG ARG ARG A A 182 182 . 0.2179 0.1522 0.2232 -0.0178
0.0175  -0.0399 1 .
1365 NH2   NH2   . ARG ARG ARG A A 182 182 . 0.2493 0.2009 0.2347 0.0082
0.0248  0.0258  1 .
1366 C     C     . ARG ARG ARG A A 182 182 . 0.0431 0.0269 0.0358 -0.0002
0.0124  -0.0019 1 .
1367 O     O     . ARG ARG ARG A A 182 182 . 0.0448 0.0284 0.0347 0.0017
0.0110  -0.0020 1 .
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1368 N     N     . LEU LEU LEU A A 183 183 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
1369 CA    CA    . LEU LEU LEU A A 183 183 . 0.0268 0.0262 0.0319 0.0011  -
0.0031 -0.0025 1 .
1370 CB    CB    . LEU LEU LEU A A 183 183 . 0.0388 0.0297 0.0392 0.0070  -
0.0105 -0.0075 1 .
1371 CG    CG    . LEU LEU LEU A A 183 183 . 0.0454 0.0290 0.0258 0.0086
0.0031  0.0013  1 .
1372 CD1   CD1   . LEU LEU LEU A A 183 183 . 0.0438 0.0577 0.0416 -0.0244
0.0010  -0.0026 1 .
1373 CD2   CD2   . LEU LEU LEU A A 183 183 . 0.1108 0.0381 0.0467 -0.0285 -
0.0314 0.0048  1 .
1374 C     C     . LEU LEU LEU A A 183 183 . 0.0487 0.0319 0.0274 -0.0124
0.0069  -0.0037 1 .
1375 O     O     . LEU LEU LEU A A 183 183 . 0.0334 0.0410 0.0569 -0.0070
0.0157  -0.0170 1 .
1376 N     N     . GLY GLY GLY A A 184 184 . 0.0351 0.0256 0.0383 -0.0016
0.0112  -0.0019 1 .
1377 CA    CA    . GLY GLY GLY A A 184 184 . 0.0537 0.0295 0.0305 -0.0036
0.0116  -0.0028 1 .
1378 C     C     . GLY GLY GLY A A 184 184 . 0.0386 0.0308 0.0345 0.0079
0.0019  -0.0014 1 .
1379 O     O     . GLY GLY GLY A A 184 184 . 0.0364 0.0253 0.0371 -0.0006
0.0114  -0.0006 1 .
1380 N     N     . ALA ALA ALA A A 185 185 . 0.0343 0.0331 0.0399 -0.0026
0.0022  -0.0106 1 .
1381 CA    CA    . ALA ALA ALA A A 185 185 . 0.0349 0.0270 0.0486 -0.0034
0.0109  -0.0014 1 .
1382 CB    CB    . ALA ALA ALA A A 185 185 . 0.0524 0.0281 0.0561 0.0087  -
0.0030 0.0001  1 .
1383 C     C     . ALA ALA ALA A A 185 185 . 0.0396 0.0280 0.0534 -0.0014
0.0127  -0.0078 1 .
1384 O     O     . ALA ALA ALA A A 185 185 . 0.0754 0.0258 0.0394 0.0048
0.0265  0.0025  1 .
1385 N     N     . GLU GLU GLU A A 186 186 . 0.0323 0.0263 0.0254 -0.0026 -
0.0009 0.0003  1 .
1386 CA    CA    . GLU GLU GLU A A 186 186 . 0.0253 0.0253 0.0255 0.0000
0.0000  0.0000  1 .
1387 CB    CB    . GLU GLU GLU A A 186 186 . 0.0433 0.0284 0.0306 0.0074
0.0098  0.0040  1 .
1388 CG    CG    . GLU GLU GLU A A 186 186 . 0.0263 0.0391 0.0488 0.0037  -
0.0048 -0.0180 1 .
1389 CD    CD    . GLU GLU GLU A A 186 186 . 0.0438 0.0537 0.0556 0.0197
0.0106  -0.0020 1 .
1390 OE1   OE1   . GLU GLU GLU A A 186 186 . 0.0864 0.0650 0.0690 -0.0007 -
0.0099 -0.0074 1 .
1391 OE2   OE2   . GLU GLU GLU A A 186 186 . 0.0489 0.0574 0.0651 0.0048  -
0.0247 -0.0202 1 .
1392 C     C     . GLU GLU GLU A A 186 186 . 0.0304 0.0290 0.0266 -0.0043
0.0025  -0.0021 1 .
1393 O     O     . GLU GLU GLU A A 186 186 . 0.0512 0.0331 0.0466 -0.0034
0.0143  -0.0118 1 .
1394 N     N     . VAL VAL VAL A A 187 187 . 0.0308 0.0274 0.0316 -0.0033
0.0058  -0.0036 1 .
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1395 CA    CA    . VAL VAL VAL A A 187 187 . 0.0338 0.0282 0.0341 -0.0018
0.0046  -0.0049 1 .
1396 CB    CB    . VAL VAL VAL A A 187 187 . 0.0261 0.0614 0.0313 -0.0053
0.0021  -0.0147 1 .
1397 CG1   CG1   . VAL VAL VAL A A 187 187 . 0.0405 0.0255 0.0461 0.0017  -
0.0177 -0.0020 1 .
1398 CG2   CG2   . VAL VAL VAL A A 187 187 . 0.0429 0.0351 0.0315 0.0115
0.0059  0.0008  1 .
1399 C     C     . VAL VAL VAL A A 187 187 . 0.0476 0.0563 0.0377 -0.0184
0.0066  -0.0183 1 .
1400 O     O     . VAL VAL VAL A A 187 187 . 0.0273 0.0534 0.0272 -0.0075
0.0019  -0.0072 1 .
1401 N     N     . TYR TYR TYR A A 188 188 . 0.0455 0.0340 0.0394 -0.0082
0.0109  -0.0070 1 .
1402 CA    CA    . TYR TYR TYR A A 188 188 . 0.0334 0.0312 0.0266 -0.0069
0.0033  -0.0028 1 .
1403 CB    CB    . TYR TYR TYR A A 188 188 . 0.0293 0.0381 0.0322 -0.0071
0.0052  -0.0094 1 .
1404 CG    CG    . TYR TYR TYR A A 188 188 . 0.0259 0.0314 0.0303 0.0019  -
0.0017 -0.0055 1 .
1405 CD1   CD1   . TYR TYR TYR A A 188 188 . 0.0263 0.0396 0.0415 0.0038
0.0040  0.0152  1 .
1406 CE1   CE1   . TYR TYR TYR A A 188 188 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
1407 CZ    CZ    . TYR TYR TYR A A 188 188 . 0.0416 0.0259 0.0310 -0.0016 -
0.0009 0.0016  1 .
1408 OH    OH    . TYR TYR TYR A A 188 188 . 0.0260 0.0253 0.0255 0.0001
0.0003  0.0001  1 .
1409 CE2   CE2   . TYR TYR TYR A A 188 188 . 0.0309 0.0350 0.0290 0.0073  -
0.0045 -0.0060 1 .
1410 CD2   CD2   . TYR TYR TYR A A 188 188 . 0.0337 0.0325 0.0402 0.0077
0.0111  0.0103  1 .
1411 C     C     . TYR TYR TYR A A 188 188 . 0.0273 0.0253 0.0294 -0.0002 -
0.0028 0.0004  1 .
1412 O     O     . TYR TYR TYR A A 188 188 . 0.0370 0.0289 0.0295 0.0062  -
0.0037 -0.0010 1 .
1413 N     N     . HIS HIS HIS A A 189 189 . 0.0439 0.0344 0.0261 0.0082
0.0012  -0.0014 1 .
1414 CA    CA    . HIS HIS HIS A A 189 189 . 0.0359 0.0256 0.0633 0.0018  -
0.0014 -0.0007 1 .
1415 CB    CB    . HIS HIS HIS A A 189 189 . 0.0444 0.0463 0.0561 0.0161  -
0.0021 -0.0018 1 .
1416 CG    CG    . HIS HIS HIS A A 189 189 . 0.0344 0.0758 0.0465 0.0151  -
0.0056 0.0118  1 .
1417 ND1   ND1   . HIS HIS HIS A A 189 189 . 0.1257 0.0929 0.1287 -0.0395
0.0031  -0.0150 1 .
1418 CE1   CE1   . HIS HIS HIS A A 189 189 . 0.0926 0.0386 0.0305 -0.0107
0.0070  0.0060  1 .
1419 NE2   NE2   . HIS HIS HIS A A 189 189 . 0.0568 0.0867 0.0881 0.0032
0.0137  -0.0016 1 .
1420 CD2   CD2   . HIS HIS HIS A A 189 189 . 0.0617 0.0596 0.0852 -0.0278 -
0.0280 -0.0008 1 .
1421 C     C     . HIS HIS HIS A A 189 189 . 0.0505 0.0325 0.0295 -0.0083 -
0.0025 0.0050  1 .
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1422 O     O     . HIS HIS HIS A A 189 189 . 0.0371 0.0726 0.0707 0.0012
0.0216  -0.0142 1 .
1423 N     N     . THR THR THR A A 190 190 . 0.0465 0.0381 0.0540 0.0078  -
0.0035 -0.0180 1 .
1424 CA    CA    . THR THR THR A A 190 190 . 0.0645 0.0445 0.0770 -0.0108
0.0001  -0.0109 1 .
1425 CB    CB    . THR THR THR A A 190 190 . 0.0522 0.0388 0.0590 -0.0179
0.0028  -0.0068 1 .
1426 OG1   OG1   . THR THR THR A A 190 190 . 0.0602 0.0295 0.0769 -0.0062 -
0.0021 -0.0121 1 .
1427 CG2   CG2   . THR THR THR A A 190 190 . 0.1204 0.0750 0.1349 -0.0213 -
0.0005 -0.0449 1 .
1428 C     C     . THR THR THR A A 190 190 . 0.0578 0.0372 0.0536 0.0035
0.0099  0.0042  1 .
1429 O     O     . THR THR THR A A 190 190 . 0.0424 0.0462 0.1061 -0.0178
0.0004  -0.0144 1 .
1430 N     N     . LEU LEU LEU A A 191 191 . 0.0771 0.0480 0.0848 -0.0037
0.0026  0.0163  1 .
1431 CA    CA    . LEU LEU LEU A A 191 191 . 0.0601 0.0490 0.0440 0.0098  -
0.0008 0.0195  1 .
1432 CB    CB    . LEU LEU LEU A A 191 191 . 0.0542 0.0452 0.0526 -0.0033
0.0021  0.0228  1 .
1433 CG    CG    . LEU LEU LEU A A 191 191 . 0.0535 0.0265 0.0671 -0.0059 -
0.0343 0.0072  1 .
1434 CD1   CD1   . LEU LEU LEU A A 191 191 . 0.0834 0.0734 0.1290 -0.0510
0.0047  -0.0224 1 .
1435 CD2   CD2   . LEU LEU LEU A A 191 191 . 0.0767 0.0720 0.1120 -0.0100 -
0.0244 0.0401  1 .
1436 C     C     . LEU LEU LEU A A 191 191 . 0.0391 0.0421 0.0565 0.0036  -
0.0076 -0.0079 1 .
1437 O     O     . LEU LEU LEU A A 191 191 . 0.0702 0.0467 0.0423 -0.0246
0.0209  -0.0039 1 .
1438 N     N     . LYS LYS LYS A A 192 192 . 0.0494 0.0338 0.0406 -0.0134 -
0.0043 0.0022  1 .
1439 CA    CA    . LYS LYS LYS A A 192 192 . 0.0428 0.0319 0.0387 -0.0106
0.0051  -0.0020 1 .
1440 CB    CB    . LYS LYS LYS A A 192 192 . 0.0358 0.0263 0.0294 -0.0033
0.0065  -0.0020 1 .
1441 CG    CG    . LYS LYS LYS A A 192 192 . 0.0849 0.1109 0.0805 -0.0521
0.0061  0.0066  1 .
1442 CD    CD    . LYS LYS LYS A A 192 192 . 0.1174 0.1138 0.0917 -0.0182 -
0.0039 -0.0326 1 .
1443 CE    CE    . LYS LYS LYS A A 192 192 . 0.1644 0.1308 0.0918 -0.0339 -
0.0173 -0.0411 1 .
1444 NZ    NZ    . LYS LYS LYS A A 192 192 . 0.0859 0.1682 0.1118 0.0073  -
0.0417 0.0052  1 .
1445 C     C     . LYS LYS LYS A A 192 192 . 0.0411 0.0345 0.0362 -0.0120
0.0131  -0.0100 1 .
1446 O     O     . LYS LYS LYS A A 192 192 . 0.0352 0.0429 0.0334 -0.0066
0.0060  -0.0116 1 .
1447 N     N     . GLY GLY GLY A A 193 193 . 0.0435 0.0312 0.0316 -0.0103 -
0.0106 0.0060  1 .
1448 CA    CA    . GLY GLY GLY A A 193 193 . 0.0482 0.0312 0.0542 -0.0017 -
0.0101 -0.0110 1 .
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1449 C     C     . GLY GLY GLY A A 193 193 . 0.0547 0.0416 0.0530 -0.0136
0.0018  -0.0174 1 .
1450 O     O     . GLY GLY GLY A A 193 193 . 0.1110 0.0791 0.0876 -0.0164
0.0067  0.0143  1 .
1451 N     N     . VAL VAL VAL A A 194 194 . 0.0382 0.0385 0.0656 -0.0120
0.0043  -0.0128 1 .
1452 CA    CA    . VAL VAL VAL A A 194 194 . 0.0751 0.0776 0.0763 -0.0033 -
0.0074 -0.0210 1 .
1453 CB    CB    . VAL VAL VAL A A 194 194 . 0.0351 0.0899 0.0545 -0.0032 -
0.0125 -0.0083 1 .
1454 CG1   CG1   . VAL VAL VAL A A 194 194 . 0.0436 0.1848 0.1243 -0.0434 -
0.0265 0.0040  1 .
1455 CG2   CG2   . VAL VAL VAL A A 194 194 . 0.0593 0.0675 0.0909 -0.0147 -
0.0164 -0.0383 1 .
1456 C     C     . VAL VAL VAL A A 194 194 . 0.0460 0.0490 0.0810 -0.0126
0.0050  -0.0201 1 .
1457 O     O     . VAL VAL VAL A A 194 194 . 0.0989 0.0663 0.1292 -0.0042
0.0325  -0.0287 1 .
1458 N     N     . ILE ILE ILE A A 195 195 . 0.0609 0.0630 0.0597 0.0007  -
0.0092 -0.0135 1 .
1459 CA    CA    . ILE ILE ILE A A 195 195 . 0.0713 0.0350 0.0741 -0.0079
0.0070  -0.0019 1 .
1460 CB    CB    . ILE ILE ILE A A 195 195 . 0.0744 0.0284 0.0831 -0.0089 -
0.0009 -0.0091 1 .
1461 CG1   CG1   . ILE ILE ILE A A 195 195 . 0.0601 0.0329 0.0519 -0.0146
0.0184  -0.0126 1 .
1462 CD1   CD1   . ILE ILE ILE A A 195 195 . 0.0944 0.0991 0.0768 -0.0489
0.0205  0.0275  1 .
1463 CG2   CG2   . ILE ILE ILE A A 195 195 . 0.0793 0.0791 0.0534 -0.0325 -
0.0002 0.0020  1 .
1464 C     C     . ILE ILE ILE A A 195 195 . 0.0533 0.0433 0.0534 0.0014
0.0071  -0.0086 1 .
1465 O     O     . ILE ILE ILE A A 195 195 . 0.0563 0.0460 0.0871 -0.0094
0.0162  0.0159  1 .
1466 N     N     . LYS LYS LYS A A 196 196 . 0.0814 0.0386 0.0802 0.0080
0.0083  -0.0243 1 .
1467 CA    CA    . LYS LYS LYS A A 196 196 . 0.0938 0.0817 0.1004 -0.0229
0.0087  -0.0102 1 .
1468 CB    CB    . LYS LYS LYS A A 196 196 . 0.0948 0.0911 0.1025 -0.0152
0.0149  -0.0025 1 .
1469 CG    CG    . LYS LYS LYS A A 196 196 . 0.1769 0.1483 0.1441 -0.0264 -
0.0041 -0.0181 1 .
1470 CD    CD    . LYS LYS LYS A A 196 196 . 0.1906 0.2635 0.2730 0.0265
0.0040  0.0243  1 .
1471 CE    CE    . LYS LYS LYS A A 196 196 . 0.2941 0.2972 0.2979 0.0253  -
0.0090 0.0048  1 .
1472 NZ    NZ    . LYS LYS LYS A A 196 196 . 0.4080 0.3356 0.3534 0.0315  -
0.0031 0.0046  1 .
1473 C     C     . LYS LYS LYS A A 196 196 . 0.0947 0.0867 0.1196 -0.0277
0.0071  -0.0127 1 .
1474 O     O     . LYS LYS LYS A A 196 196 . 0.1104 0.0854 0.0995 -0.0232
0.0195  -0.0199 1 .
1475 N     N     . ASP ASP ASP A A 197 197 . 0.1219 0.1048 0.1420 -0.0325 -
0.0077 -0.0167 1 .
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1476 CA    CA    . ASP ASP ASP A A 197 197 . 0.1145 0.0943 0.1572 -0.0245
0.0003  0.0089  1 .
1477 CB    CB    . ASP ASP ASP A A 197 197 . 0.1245 0.1273 0.1824 -0.0386 -
0.0105 -0.0060 1 .
1478 CG    CG    . ASP ASP ASP A A 197 197 . 0.1869 0.1383 0.2275 -0.0181 -
0.0021 -0.0038 1 .
1479 OD1   OD1   . ASP ASP ASP A A 197 197 . 0.2584 0.1568 0.2297 0.0035  -
0.0006 -0.0518 1 .
1480 OD2   OD2   . ASP ASP ASP A A 197 197 . 0.2425 0.1855 0.2375 -0.0404
0.0061  -0.0101 1 .
1481 C     C     . ASP ASP ASP A A 197 197 . 0.1053 0.0847 0.1518 -0.0270 -
0.0089 0.0151  1 .
1482 O     O     . ASP ASP ASP A A 197 197 . 0.1233 0.0947 0.1614 -0.0124
0.0372  0.0538  1 .
1483 N     N     . LYS LYS LYS A A 198 198 . 0.0977 0.0975 0.1089 -0.0059 -
0.0207 0.0084  1 .
1484 CA    CA    . LYS LYS LYS A A 198 198 . 0.0763 0.0750 0.0801 -0.0149 -
0.0280 0.0050  1 .
1485 CB    CB    . LYS LYS LYS A A 198 198 . 0.0776 0.0633 0.0550 0.0032  -
0.0240 -0.0121 1 .
1486 CG    CG    . LYS LYS LYS A A 198 198 . 0.0754 0.1065 0.0892 -0.0344 -
0.0039 -0.0257 1 .
1487 CD    CD    . LYS LYS LYS A A 198 198 . 0.1355 0.1401 0.1115 -0.0212 -
0.0259 -0.0031 1 .
1488 CE    CE    . LYS LYS LYS A A 198 198 . 0.1342 0.1358 0.0909 -0.0580
0.0001  0.0264  1 .
1489 NZ    NZ    . LYS LYS LYS A A 198 198 . 0.1521 0.0678 0.1076 -0.0464 -
0.0077 -0.0010 1 .
1490 C     C     . LYS LYS LYS A A 198 198 . 0.0779 0.0977 0.0680 -0.0200 -
0.0171 0.0105  1 .
1491 O     O     . LYS LYS LYS A A 198 198 . 0.0810 0.1128 0.0924 -0.0435 -
0.0216 -0.0061 1 .
1492 N     N     . TYR TYR TYR A A 199 199 . 0.0886 0.0882 0.0606 -0.0138 -
0.0118 -0.0135 1 .
1493 CA    CA    . TYR TYR TYR A A 199 199 . 0.0944 0.1040 0.0971 -0.0076 -
0.0001 -0.0058 1 .
1494 CB    CB    . TYR TYR TYR A A 199 199 . 0.0796 0.0796 0.0886 0.0120
0.0134  -0.0184 1 .
1495 CG    CG    . TYR TYR TYR A A 199 199 . 0.0885 0.0497 0.0722 -0.0256
0.0223  0.0134  1 .
1496 CD1   CD1   . TYR TYR TYR A A 199 199 . 0.0936 0.0547 0.0812 -0.0132
0.0123  -0.0403 1 .
1497 CE1   CE1   . TYR TYR TYR A A 199 199 . 0.0727 0.0809 0.0807 -0.0114
0.0034  -0.0062 1 .
1498 CZ    CZ    . TYR TYR TYR A A 199 199 . 0.0804 0.0368 0.1014 -0.0252
0.0172  -0.0080 1 .
1499 OH    OH    . TYR TYR TYR A A 199 199 . 0.1326 0.1176 0.1452 -0.0234
0.0168  -0.0138 1 .
1500 CE2   CE2   . TYR TYR TYR A A 199 199 . 0.1380 0.0934 0.0878 -0.0368
0.0115  0.0005  1 .
1501 CD2   CD2   . TYR TYR TYR A A 199 199 . 0.0760 0.1123 0.1264 0.0259  -
0.0059 -0.0058 1 .
1502 C     C     . TYR TYR TYR A A 199 199 . 0.0910 0.1101 0.0981 0.0008  -
0.0054 -0.0026 1 .
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1503 O     O     . TYR TYR TYR A A 199 199 . 0.1079 0.1439 0.0696 -0.0029
0.0086  -0.0086 1 .
1504 N     N     . GLY GLY GLY A A 200 200 . 0.1389 0.1237 0.0898 -0.0042 -
0.0152 0.0101  1 .
1505 CA    CA    . GLY GLY GLY A A 200 200 . 0.1138 0.0968 0.0989 -0.0284 -
0.0320 0.0077  1 .
1506 C     C     . GLY GLY GLY A A 200 200 . 0.1297 0.1193 0.1242 -0.0327 -
0.0225 0.0204  1 .
1507 O     O     . GLY GLY GLY A A 200 200 . 0.1214 0.0900 0.0557 -0.0275 -
0.0163 0.0111  1 .
1508 N     N     . LYS LYS LYS A A 201 201 . 0.1410 0.1304 0.1061 -0.0256 -
0.0302 0.0218  1 .
1509 CA    CA    . LYS LYS LYS A A 201 201 . 0.1638 0.1644 0.1368 -0.0176 -
0.0260 0.0177  1 .
1510 CB    CB    . LYS LYS LYS A A 201 201 . 0.1776 0.1875 0.1790 -0.0035 -
0.0310 0.0163  1 .
1511 CG    CG    . LYS LYS LYS A A 201 201 . 0.2659 0.2563 0.2311 -0.0071 -
0.0234 -0.0038 1 .
1512 CD    CD    . LYS LYS LYS A A 201 201 . 0.3444 0.3307 0.2982 0.0294
0.0124  0.0336  1 .
1513 CE    CE    . LYS LYS LYS A A 201 201 . 0.3445 0.3922 0.3415 0.0098  -
0.0115 0.0281  1 .
1514 NZ    NZ    . LYS LYS LYS A A 201 201 . 0.3894 0.3929 0.2998 0.0270  -
0.0517 0.0252  1 .
1515 C     C     . LYS LYS LYS A A 201 201 . 0.1622 0.1738 0.1201 -0.0090 -
0.0270 0.0147  1 .
1516 O     O     . LYS LYS LYS A A 201 201 . 0.1931 0.1587 0.1584 -0.0190 -
0.0182 0.0328  1 .
1517 N     N     . ASP ASP ASP A A 202 202 . 0.1563 0.1447 0.0880 -0.0053 -
0.0255 0.0001  1 .
1518 CA    CA    . ASP ASP ASP A A 202 202 . 0.1550 0.1504 0.1296 0.0056  -
0.0051 0.0020  1 .
1519 CB    CB    . ASP ASP ASP A A 202 202 . 0.1666 0.2022 0.1548 -0.0064 -
0.0096 0.0083  1 .
1520 CG    CG    . ASP ASP ASP A A 202 202 . 0.2313 0.2578 0.2337 -0.0192 -
0.0060 0.0027  1 .
1521 OD1   OD1   . ASP ASP ASP A A 202 202 . 0.2919 0.3384 0.2900 -0.0463
0.0110  0.0213  1 .
1522 OD2   OD2   . ASP ASP ASP A A 202 202 . 0.3119 0.3751 0.2644 -0.0101 -
0.0406 0.0174  1 .
1523 C     C     . ASP ASP ASP A A 202 202 . 0.1410 0.1279 0.1128 0.0120
0.0001  -0.0118 1 .
1524 O     O     . ASP ASP ASP A A 202 202 . 0.1407 0.0974 0.0990 0.0005
0.0140  -0.0469 1 .
1525 N     N     . ALA ALA ALA A A 203 203 . 0.0905 0.1184 0.0836 0.0105  -
0.0064 -0.0050 1 .
1526 CA    CA    . ALA ALA ALA A A 203 203 . 0.0892 0.0820 0.0934 -0.0037
0.0013  -0.0011 1 .
1527 CB    CB    . ALA ALA ALA A A 203 203 . 0.1235 0.1031 0.0756 -0.0091
0.0151  -0.0015 1 .
1528 C     C     . ALA ALA ALA A A 203 203 . 0.0843 0.0737 0.0646 -0.0149
0.0109  0.0072  1 .
1529 O     O     . ALA ALA ALA A A 203 203 . 0.0952 0.0592 0.0687 0.0085
0.0092  -0.0132 1 .
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1530 N     N     . THR THR THR A A 204 204 . 0.0720 0.0476 0.0818 -0.0245
0.0152  0.0025  1 .
1531 CA    CA    . THR THR THR A A 204 204 . 0.0668 0.0654 0.0729 -0.0152
0.0034  -0.0193 1 .
1532 CB    CB    . THR THR THR A A 204 204 . 0.0777 0.0782 0.0917 -0.0167 -
0.0061 -0.0265 1 .
1533 OG1   OG1   . THR THR THR A A 204 204 . 0.1061 0.0944 0.1024 0.0151
0.0496  -0.0206 1 .
1534 CG2   CG2   . THR THR THR A A 204 204 . 0.1833 0.0785 0.0880 -0.0204
0.0218  -0.0577 1 .
1535 C     C     . THR THR THR A A 204 204 . 0.0593 0.0717 0.0802 -0.0057
0.0035  -0.0259 1 .
1536 O     O     . THR THR THR A A 204 204 . 0.0736 0.1017 0.0731 -0.0210
0.0136  0.0041  1 .
1537 N     N     . ASN ASN ASN A A 205 205 . 0.0347 0.0491 0.0457 -0.0146
0.0064  -0.0141 1 .
1538 CA    CA    . ASN ASN ASN A A 205 205 . 0.0485 0.0465 0.0437 -0.0137
0.0134  -0.0197 1 .
1539 CB    CB    . ASN ASN ASN A A 205 205 . 0.0604 0.0666 0.0505 0.0092
0.0209  -0.0037 1 .
1540 CG    CG    . ASN ASN ASN A A 205 205 . 0.1171 0.1601 0.0534 0.0486  -
0.0267 -0.0155 1 .
1541 OD1   OD1   . ASN ASN ASN A A 205 205 . 0.1341 0.2273 0.1047 0.1009  -
0.0780 -0.0737 1 .
1542 ND2   ND2   . ASN ASN ASN A A 205 205 . 0.2246 0.2355 0.0499 0.0135
0.0049  0.0015  1 .
1543 C     C     . ASN ASN ASN A A 205 205 . 0.0350 0.0409 0.0416 -0.0087
0.0117  -0.0067 1 .
1544 O     O     . ASN ASN ASN A A 205 205 . 0.0282 0.0281 0.0272 -0.0028
0.0023  -0.0023 1 .
1545 N     N     . VAL VAL VAL A A 206 206 . 0.0289 0.0478 0.0426 -0.0090
0.0079  -0.0197 1 .
1546 CA    CA    . VAL VAL VAL A A 206 206 . 0.0457 0.0401 0.0559 -0.0137
0.0131  -0.0131 1 .
1547 CB    CB    . VAL VAL VAL A A 206 206 . 0.0287 0.0581 0.0731 -0.0072 -
0.0069 -0.0100 1 .
1548 CG1   CG1   . VAL VAL VAL A A 206 206 . 0.0776 0.0481 0.0671 -0.0297 -
0.0219 -0.0013 1 .
1549 CG2   CG2   . VAL VAL VAL A A 206 206 . 0.0742 0.0851 0.0479 0.0051
0.0081  -0.0346 1 .
1550 C     C     . VAL VAL VAL A A 206 206 . 0.0416 0.0565 0.0692 -0.0037
0.0097  -0.0052 1 .
1551 O     O     . VAL VAL VAL A A 206 206 . 0.0980 0.0636 0.1143 -0.0050 -
0.0008 -0.0043 1 .
1552 N     N     . GLY GLY GLY A A 207 207 . 0.0432 0.0265 0.0578 0.0043
0.0213  0.0061  1 .
1553 CA    CA    . GLY GLY GLY A A 207 207 . 0.0543 0.0289 0.0417 0.0022
0.0122  0.0072  1 .
1554 C     C     . GLY GLY GLY A A 207 207 . 0.0490 0.0326 0.0584 0.0034  -
0.0018 0.0147  1 .
1555 O     O     . GLY GLY GLY A A 207 207 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
1556 N     N     . ASP ASP ASP A A 208 208 . 0.0553 0.0269 0.0598 0.0068
0.0078  0.0006  1 .
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1557 CA    CA    . ASP ASP ASP A A 208 208 . 0.0279 0.0253 0.0465 0.0002
0.0063  0.0006  1 .
1558 CB    CB    . ASP ASP ASP A A 208 208 . 0.0270 0.0371 0.0660 0.0022  -
0.0077 -0.0028 1 .
1559 CG    CG    . ASP ASP ASP A A 208 208 . 0.0363 0.0411 0.0569 0.0123  -
0.0180 -0.0184 1 .
1560 OD1   OD1   . ASP ASP ASP A A 208 208 . 0.0953 0.0755 0.0491 -0.0045
0.0071  0.0054  1 .
1561 OD2   OD2   . ASP ASP ASP A A 208 208 . 0.0856 0.0758 0.0655 0.0167
0.0008  -0.0128 1 .
1562 C     C     . ASP ASP ASP A A 208 208 . 0.0253 0.0255 0.0373 0.0000
0.0004  0.0015  1 .
1563 O     O     . ASP ASP ASP A A 208 208 . 0.0392 0.0314 0.0473 -0.0088 -
0.0045 -0.0004 1 .
1564 N     N     . GLU GLU GLU A A 209 209 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
1565 CA    CA    . GLU GLU GLU A A 209 209 . 0.0265 0.0255 0.0254 0.0005
0.0004  0.0002  1 .
1566 CB    CB    . GLU GLU GLU A A 209 209 . 0.0325 0.0359 0.0395 -0.0087 -
0.0101 0.0123  1 .
1567 CG    CG    . GLU GLU GLU A A 209 209 . 0.0343 0.0546 0.0319 0.0162
0.0077  0.0139  1 .
1568 CD    CD    . GLU GLU GLU A A 209 209 . 0.0924 0.0609 0.0330 0.0200
0.0185  -0.0032 1 .
1569 OE1   OE1   . GLU GLU GLU A A 209 209 . 0.0645 0.0446 0.0446 -0.0095 -
0.0044 -0.0168 1 .
1570 OE2   OE2   . GLU GLU GLU A A 209 209 . 0.0476 0.0320 0.0762 -0.0104
0.0113  -0.0145 1 .
1571 C     C     . GLU GLU GLU A A 209 209 . 0.0253 0.0253 0.0256 0.0000
0.0000  -0.0001 1 .
1572 O     O     . GLU GLU GLU A A 209 209 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
1573 N     N     . GLY GLY GLY A A 210 210 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
1574 CA    CA    . GLY GLY GLY A A 210 210 . 0.0256 0.0253 0.0286 0.0001
0.0010  0.0004  1 .
1575 C     C     . GLY GLY GLY A A 210 210 . 0.0258 0.0258 0.0274 0.0005  -
0.0010 -0.0010 1 .
1576 O     O     . GLY GLY GLY A A 210 210 . 0.0320 0.0491 0.0588 -0.0034
0.0130  0.0066  1 .
1577 N     N     . GLY GLY GLY A A 211 211 . 0.0253 0.0317 0.0291 0.0004  -
0.0003 -0.0049 1 .
1578 CA    CA    . GLY GLY GLY A A 211 211 . 0.0277 0.0263 0.0283 -0.0015
0.0027  -0.0017 1 .
1579 C     C     . GLY GLY GLY A A 211 211 . 0.0477 0.0337 0.0341 -0.0017
0.0047  0.0077  1 .
1580 O     O     . GLY GLY GLY A A 211 211 . 0.0435 0.0334 0.0568 -0.0121
0.0239  -0.0159 1 .
1581 N     N     . PHE PHE PHE A A 212 212 . 0.0333 0.0336 0.0437 -0.0061
0.0080  -0.0001 1 .
1582 CA    CA    . PHE PHE PHE A A 212 212 . 0.0417 0.0318 0.0551 -0.0041
0.0188  0.0018  1 .
1583 CB    CB    . PHE PHE PHE A A 212 212 . 0.0606 0.0298 0.0476 -0.0052
0.0180  -0.0096 1 .
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1584 CG    CG    . PHE PHE PHE A A 212 212 . 0.0574 0.0429 0.0405 -0.0105
0.0078  0.0111  1 .
1585 CD1   CD1   . PHE PHE PHE A A 212 212 . 0.0584 0.0361 0.1006 -0.0142
0.0245  0.0056  1 .
1586 CE1   CE1   . PHE PHE PHE A A 212 212 . 0.0385 0.0355 0.0350 -0.0101 -
0.0060 0.0086  1 .
1587 CZ    CZ    . PHE PHE PHE A A 212 212 . 0.0728 0.0545 0.0390 0.0294  -
0.0149 -0.0099 1 .
1588 CE2   CE2   . PHE PHE PHE A A 212 212 . 0.0696 0.0429 0.0632 -0.0146 -
0.0124 -0.0168 1 .
1589 CD2   CD2   . PHE PHE PHE A A 212 212 . 0.0488 0.0475 0.0253 -0.0228
0.0010  -0.0010 1 .
1590 C     C     . PHE PHE PHE A A 212 212 . 0.0635 0.0417 0.0539 -0.0119
0.0124  0.0072  1 .
1591 O     O     . PHE PHE PHE A A 212 212 . 0.0649 0.0510 0.0583 -0.0070
0.0133  -0.0201 1 .
1592 N     N     . ALA ALA ALA A A 213 213 . 0.0522 0.0429 0.0474 -0.0142
0.0244  -0.0130 1 .
1593 CA    CA    . ALA ALA ALA A A 213 213 . 0.0391 0.0419 0.0666 -0.0140
0.0185  -0.0127 1 .
1594 CB    CB    . ALA ALA ALA A A 213 213 . 0.0789 0.0561 0.0741 -0.0041
0.0073  -0.0161 1 .
1595 C     C     . ALA ALA ALA A A 213 213 . 0.0586 0.0542 0.0488 -0.0154
0.0254  -0.0050 1 .
1596 O     O     . ALA ALA ALA A A 213 213 . 0.0665 0.0947 0.0623 0.0021
0.0332  -0.0247 1 .
1597 N     N     . PRO PRO PRO A A 214 214 . 0.0420 0.0633 0.0474 -0.0178
0.0114  -0.0112 1 .
1598 CA    CA    . PRO PRO PRO A A 214 214 . 0.0595 0.0794 0.0501 -0.0164
0.0051  0.0046  1 .
1599 CB    CB    . PRO PRO PRO A A 214 214 . 0.0775 0.0722 0.0564 -0.0172 -
0.0130 0.0152  1 .
1600 CG    CG    . PRO PRO PRO A A 214 214 . 0.0371 0.0457 0.0423 -0.0148 -
0.0136 0.0155  1 .
1601 CD    CD    . PRO PRO PRO A A 214 214 . 0.0294 0.0809 0.0341 -0.0151
0.0060  -0.0221 1 .
1602 C     C     . PRO PRO PRO A A 214 214 . 0.0750 0.0497 0.0466 -0.0036
0.0064  0.0016  1 .
1603 O     O     . PRO PRO PRO A A 214 214 . 0.0764 0.0836 0.0706 -0.0152 -
0.0087 0.0105  1 .
1604 N     N     . ASN ASN ASN A A 215 215 . 0.1121 0.1078 0.1179 -0.0196
0.0035  0.0094  1 .
1605 CA    CA    . ASN ASN ASN A A 215 215 . 0.1140 0.1221 0.1286 -0.0198
0.0145  0.0013  1 .
1606 CB    CB    . ASN ASN ASN A A 215 215 . 0.1363 0.1657 0.1550 -0.0179
0.0184  -0.0012 1 .
1607 CG    CG    . ASN ASN ASN A A 215 215 . 0.1839 0.2108 0.2283 -0.0305
0.0329  0.0323  1 .
1608 OD1   OD1   . ASN ASN ASN A A 215 215 . 0.2762 0.2766 0.3588 -0.0827
0.0420  0.0654  1 .
1609 ND2   ND2   . ASN ASN ASN A A 215 215 . 0.2091 0.1691 0.1681 -0.0162
0.1294  0.0543  1 .
1610 C     C     . ASN ASN ASN A A 215 215 . 0.1123 0.1111 0.1164 -0.0234
0.0088  0.0053  1 .
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1611 O     O     . ASN ASN ASN A A 215 215 . 0.0979 0.1608 0.1705 -0.0432
0.0082  -0.0024 1 .
1612 N     N     . ILE ILE ILE A A 216 216 . 0.0963 0.0936 0.0909 -0.0132
0.0030  0.0009  1 .
1613 CA    CA    . ILE ILE ILE A A 216 216 . 0.0897 0.0833 0.0883 -0.0236
0.0079  -0.0006 1 .
1614 CB    CB    . ILE ILE ILE A A 216 216 . 0.0845 0.0851 0.0884 -0.0182
0.0171  0.0000  1 .
1615 CG1   CG1   . ILE ILE ILE A A 216 216 . 0.1003 0.0508 0.0443 -0.0154
0.0242  -0.0207 1 .
1616 CD1   CD1   . ILE ILE ILE A A 216 216 . 0.0618 0.0624 0.0854 0.0088
0.0280  -0.0300 1 .
1617 CG2   CG2   . ILE ILE ILE A A 216 216 . 0.0768 0.0958 0.1709 -0.0194 -
0.0122 -0.0125 1 .
1618 C     C     . ILE ILE ILE A A 216 216 . 0.0806 0.0959 0.1014 -0.0109
0.0084  -0.0116 1 .
1619 O     O     . ILE ILE ILE A A 216 216 . 0.1183 0.0854 0.1265 -0.0147
0.0305  -0.0185 1 .
1620 N     N     . LEU LEU LEU A A 217 217 . 0.1106 0.1026 0.0863 -0.0060 -
0.0027 -0.0035 1 .
1621 CA    CA    . LEU LEU LEU A A 217 217 . 0.1004 0.0775 0.1055 -0.0066
0.0064  -0.0012 1 .
1622 CB    CB    . LEU LEU LEU A A 217 217 . 0.0894 0.0508 0.0730 -0.0048
0.0170  -0.0241 1 .
1623 CG    CG    . LEU LEU LEU A A 217 217 . 0.1048 0.1070 0.1753 -0.0040
0.0192  -0.0041 1 .
1624 CD1   CD1   . LEU LEU LEU A A 217 217 . 0.1613 0.0800 0.1165 0.0058
0.0293  -0.0217 1 .
1625 CD2   CD2   . LEU LEU LEU A A 217 217 . 0.1318 0.0902 0.1758 -0.0729
0.0031  0.0453  1 .
1626 C     C     . LEU LEU LEU A A 217 217 . 0.1308 0.0853 0.1077 -0.0035
0.0028  -0.0079 1 .
1627 O     O     . LEU LEU LEU A A 217 217 . 0.0921 0.0597 0.1168 -0.0370 -
0.0073 -0.0020 1 .
1628 N     N     . GLU GLU GLU A A 218 218 . 0.1181 0.0745 0.1084 -0.0183
0.0063  -0.0267 1 .
1629 CA    CA    . GLU GLU GLU A A 218 218 . 0.1096 0.0811 0.1143 -0.0228
0.0158  -0.0185 1 .
1630 CB    CB    . GLU GLU GLU A A 218 218 . 0.1293 0.0814 0.1206 -0.0120
0.0298  -0.0315 1 .
1631 CG    CG    . GLU GLU GLU A A 218 218 . 0.1509 0.1090 0.2371 -0.0365
0.0172  -0.0184 1 .
1632 CD    CD    . GLU GLU GLU A A 218 218 . 0.3017 0.2988 0.3288 -0.0334 -
0.0221 0.0079  1 .
1633 OE1   OE1   . GLU GLU GLU A A 218 218 . 0.3614 0.3354 0.4355 -0.0691
0.0008  -0.0158 1 .
1634 OE2   OE2   . GLU GLU GLU A A 218 218 . 0.3650 0.2866 0.4328 -0.0563 -
0.0122 0.0158  1 .
1635 C     C     . GLU GLU GLU A A 218 218 . 0.1144 0.0939 0.1080 -0.0178
0.0048  -0.0113 1 .
1636 O     O     . GLU GLU GLU A A 218 218 . 0.1059 0.1146 0.1700 -0.0266
0.0297  -0.0042 1 .
1637 N     N     . ASN ASN ASN A A 219 219 . 0.1012 0.0747 0.1236 -0.0017
0.0042  -0.0153 1 .
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1638 CA    CA    . ASN ASN ASN A A 219 219 . 0.0957 0.0971 0.1011 -0.0122 -
0.0144 -0.0079 1 .
1639 CB    CB    . ASN ASN ASN A A 219 219 . 0.0949 0.1007 0.1273 -0.0203 -
0.0167 -0.0191 1 .
1640 CG    CG    . ASN ASN ASN A A 219 219 . 0.0774 0.0984 0.0987 -0.0063
0.0024  0.0056  1 .
1641 OD1   OD1   . ASN ASN ASN A A 219 219 . 0.1166 0.1231 0.2036 0.0555  -
0.0394 -0.0245 1 .
1642 ND2   ND2   . ASN ASN ASN A A 219 219 . 0.0283 0.0752 0.0741 0.0058
0.0097  -0.0072 1 .
1643 C     C     . ASN ASN ASN A A 219 219 . 0.0898 0.0933 0.1081 -0.0062 -
0.0143 -0.0138 1 .
1644 O     O     . ASN ASN ASN A A 219 219 . 0.0729 0.1151 0.1271 -0.0059 -
0.0152 -0.0223 1 .
1645 N     N     . SER SER SER A A 220 220 . 0.0854 0.0779 0.0984 -0.0178 -
0.0150 -0.0152 1 .
1646 CA    CA    . SER SER SER A A 220 220 . 0.1008 0.1064 0.1194 -0.0115 -
0.0204 -0.0136 1 .
1647 CB    CB    . SER SER SER A A 220 220 . 0.1086 0.1404 0.1095 -0.0281 -
0.0213 -0.0154 1 .
1648 OG    OG    . SER SER SER A A 220 220 . 0.1112 0.1629 0.1542 -0.0379 -
0.0158 -0.0261 1 .
1649 C     C     . SER SER SER A A 220 220 . 0.0800 0.0948 0.0944 -0.0215 -
0.0213 -0.0102 1 .
1650 O     O     . SER SER SER A A 220 220 . 0.1073 0.0963 0.1329 -0.0192 -
0.0250 -0.0124 1 .
1651 N     N     . GLU GLU GLU A A 221 221 . 0.1141 0.1031 0.1344 -0.0041 -
0.0077 -0.0133 1 .
1652 CA    CA    . GLU GLU GLU A A 221 221 . 0.0964 0.0878 0.1023 -0.0108 -
0.0013 -0.0089 1 .
1653 CB    CB    . GLU GLU GLU A A 221 221 . 0.1057 0.0789 0.1102 0.0014  -
0.0080 -0.0048 1 .
1654 CG    CG    . GLU GLU GLU A A 221 221 . 0.1407 0.0904 0.0690 -0.0245
0.0135  0.0075  1 .
1655 CD    CD    . GLU GLU GLU A A 221 221 . 0.2098 0.0974 0.1470 -0.0135 -
0.0194 -0.0223 1 .
1656 OE1   OE1   . GLU GLU GLU A A 221 221 . 0.1473 0.1115 0.1573 0.0205  -
0.0307 -0.0070 1 .
1657 OE2   OE2   . GLU GLU GLU A A 221 221 . 0.2139 0.1011 0.1523 -0.0126 -
0.0093 -0.0392 1 .
1658 C     C     . GLU GLU GLU A A 221 221 . 0.0930 0.0771 0.0864 0.0011  -
0.0118 -0.0141 1 .
1659 O     O     . GLU GLU GLU A A 221 221 . 0.1278 0.0963 0.1152 -0.0069 -
0.0132 -0.0172 1 .
1660 N     N     . ALA ALA ALA A A 222 222 . 0.0698 0.0675 0.1020 -0.0076 -
0.0038 0.0121  1 .
1661 CA    CA    . ALA ALA ALA A A 222 222 . 0.0543 0.0332 0.0486 0.0034  -
0.0045 -0.0040 1 .
1662 CB    CB    . ALA ALA ALA A A 222 222 . 0.0563 0.0265 0.0783 -0.0045
0.0039  0.0046  1 .
1663 C     C     . ALA ALA ALA A A 222 222 . 0.0569 0.0347 0.0498 -0.0033 -
0.0063 -0.0053 1 .
1664 O     O     . ALA ALA ALA A A 222 222 . 0.0466 0.0462 0.0656 0.0077  -
0.0197 -0.0271 1 .
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1665 N     N     . LEU LEU LEU A A 223 223 . 0.0546 0.0519 0.0662 -0.0008
0.0019  -0.0037 1 .
1666 CA    CA    . LEU LEU LEU A A 223 223 . 0.0753 0.0442 0.0665 0.0052  -
0.0083 0.0052  1 .
1667 CB    CB    . LEU LEU LEU A A 223 223 . 0.0727 0.0395 0.0531 0.0143  -
0.0091 -0.0129 1 .
1668 CG    CG    . LEU LEU LEU A A 223 223 . 0.0547 0.0313 0.0983 -0.0016 -
0.0267 0.0185  1 .
1669 CD1   CD1   . LEU LEU LEU A A 223 223 . 0.0895 0.0761 0.0796 0.0459  -
0.0280 0.0074  1 .
1670 CD2   CD2   . LEU LEU LEU A A 223 223 . 0.0558 0.0727 0.0498 0.0149  -
0.0271 -0.0091 1 .
1671 C     C     . LEU LEU LEU A A 223 223 . 0.0649 0.0301 0.0650 0.0081  -
0.0012 -0.0047 1 .
1672 O     O     . LEU LEU LEU A A 223 223 . 0.1030 0.0580 0.0908 0.0151  -
0.0044 -0.0219 1 .
1673 N     N     . GLU GLU GLU A A 224 224 . 0.0761 0.0668 0.0827 0.0176  -
0.0140 -0.0014 1 .
1674 CA    CA    . GLU GLU GLU A A 224 224 . 0.0685 0.0624 0.0916 -0.0058 -
0.0012 -0.0138 1 .
1675 CB    CB    . GLU GLU GLU A A 224 224 . 0.0993 0.0894 0.1082 -0.0107
0.0327  -0.0254 1 .
1676 CG    CG    . GLU GLU GLU A A 224 224 . 0.1034 0.1306 0.1928 -0.0148
0.0036  -0.0016 1 .
1677 CD    CD    . GLU GLU GLU A A 224 224 . 0.2010 0.1533 0.1831 -0.0211 -
0.0202 0.0082  1 .
1678 OE1   OE1   . GLU GLU GLU A A 224 224 . 0.2539 0.1450 0.2194 0.0430  -
0.0147 0.0437  1 .
1679 OE2   OE2   . GLU GLU GLU A A 224 224 . 0.2684 0.1351 0.2075 -0.0117 -
0.0406 0.0227  1 .
1680 C     C     . GLU GLU GLU A A 224 224 . 0.0678 0.0560 0.0619 -0.0020
0.0184  -0.0140 1 .
1681 O     O     . GLU GLU GLU A A 224 224 . 0.0920 0.0468 0.1181 0.0049
0.0039  -0.0332 1 .
1682 N     N     . LEU LEU LEU A A 225 225 . 0.0740 0.0433 0.0696 -0.0092 -
0.0126 -0.0234 1 .
1683 CA    CA    . LEU LEU LEU A A 225 225 . 0.0661 0.0504 0.0738 -0.0095 -
0.0007 -0.0156 1 .
1684 CB    CB    . LEU LEU LEU A A 225 225 . 0.0835 0.0914 0.0845 -0.0047
0.0107  -0.0254 1 .
1685 CG    CG    . LEU LEU LEU A A 225 225 . 0.0741 0.0775 0.1215 0.0289
0.0119  0.0037  1 .
1686 CD1   CD1   . LEU LEU LEU A A 225 225 . 0.0665 0.0550 0.1091 0.0119
0.0178  0.0198  1 .
1687 CD2   CD2   . LEU LEU LEU A A 225 225 . 0.1203 0.0605 0.1084 -0.0127 -
0.0133 0.0138  1 .
1688 C     C     . LEU LEU LEU A A 225 225 . 0.0775 0.0571 0.0809 -0.0034
0.0096  -0.0106 1 .
1689 O     O     . LEU LEU LEU A A 225 225 . 0.0602 0.0506 0.1082 -0.0181
0.0152  -0.0260 1 .
1690 N     N     . VAL VAL VAL A A 226 226 . 0.0949 0.0630 0.0973 0.0007
0.0069  -0.0247 1 .
1691 CA    CA    . VAL VAL VAL A A 226 226 . 0.0776 0.0699 0.0833 -0.0055
0.0026  -0.0175 1 .
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1692 CB    CB    . VAL VAL VAL A A 226 226 . 0.0737 0.0779 0.0815 0.0121
0.0049  -0.0041 1 .
1693 CG1   CG1   . VAL VAL VAL A A 226 226 . 0.0341 0.0738 0.0604 -0.0091
0.0166  -0.0289 1 .
1694 CG2   CG2   . VAL VAL VAL A A 226 226 . 0.0751 0.0736 0.0995 0.0084  -
0.0548 0.0051  1 .
1695 C     C     . VAL VAL VAL A A 226 226 . 0.0978 0.0866 0.1002 0.0034  -
0.0019 -0.0090 1 .
1696 O     O     . VAL VAL VAL A A 226 226 . 0.1088 0.0955 0.1144 0.0112
0.0065  -0.0127 1 .
1697 N     N     . LYS LYS LYS A A 227 227 . 0.1083 0.0901 0.0945 -0.0133 -
0.0004 -0.0380 1 .
1698 CA    CA    . LYS LYS LYS A A 227 227 . 0.1279 0.0924 0.1111 0.0000
0.0063  -0.0342 1 .
1699 CB    CB    . LYS LYS LYS A A 227 227 . 0.1016 0.1080 0.0973 -0.0216
0.0148  -0.0480 1 .
1700 CG    CG    . LYS LYS LYS A A 227 227 . 0.1922 0.1762 0.1443 -0.0229 -
0.0164 -0.0628 1 .
1701 CD    CD    . LYS LYS LYS A A 227 227 . 0.2466 0.2164 0.2513 0.0293  -
0.0462 -0.0340 1 .
1702 CE    CE    . LYS LYS LYS A A 227 227 . 0.3146 0.2744 0.2723 0.0403  -
0.0386 -0.0505 1 .
1703 NZ    NZ    . LYS LYS LYS A A 227 227 . 0.3251 0.2137 0.2592 0.0111  -
0.0966 -0.1007 1 .
1704 C     C     . LYS LYS LYS A A 227 227 . 0.1221 0.0923 0.1060 0.0007
0.0019  -0.0215 1 .
1705 O     O     . LYS LYS LYS A A 227 227 . 0.0721 0.0641 0.0930 0.0203  -
0.0027 -0.0357 1 .
1706 N     N     . GLU GLU GLU A A 228 228 . 0.1328 0.0865 0.1268 0.0003
0.0012  -0.0260 1 .
1707 CA    CA    . GLU GLU GLU A A 228 228 . 0.1240 0.0885 0.1292 0.0035  -
0.0146 -0.0104 1 .
1708 CB    CB    . GLU GLU GLU A A 228 228 . 0.1223 0.1086 0.1525 0.0039  -
0.0291 -0.0002 1 .
1709 CG    CG    . GLU GLU GLU A A 228 228 . 0.2351 0.1697 0.2174 0.0064  -
0.0484 0.0361  1 .
1710 CD    CD    . GLU GLU GLU A A 228 228 . 0.3375 0.2503 0.2870 -0.0073 -
0.0349 0.0042  1 .
1711 OE1   OE1   . GLU GLU GLU A A 228 228 . 0.3605 0.2174 0.4095 -0.0074 -
0.0245 0.0104  1 .
1712 OE2   OE2   . GLU GLU GLU A A 228 228 . 0.3700 0.3190 0.3386 -0.0112 -
0.0879 0.0395  1 .
1713 C     C     . GLU GLU GLU A A 228 228 . 0.1133 0.0815 0.1173 -0.0012 -
0.0163 -0.0269 1 .
1714 O     O     . GLU GLU GLU A A 228 228 . 0.1004 0.0890 0.1318 0.0004  -
0.0148 -0.0277 1 .
1715 N     N     . ALA ALA ALA A A 229 229 . 0.0863 0.0727 0.0739 -0.0110 -
0.0154 -0.0292 1 .
1716 CA    CA    . ALA ALA ALA A A 229 229 . 0.0719 0.0660 0.0653 -0.0026 -
0.0014 -0.0150 1 .
1717 CB    CB    . ALA ALA ALA A A 229 229 . 0.0823 0.0504 0.0645 -0.0102
0.0172  -0.0027 1 .
1718 C     C     . ALA ALA ALA A A 229 229 . 0.0816 0.0624 0.0538 -0.0037 -
0.0103 -0.0202 1 .
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1719 O     O     . ALA ALA ALA A A 229 229 . 0.1060 0.0841 0.0815 0.0005  -
0.0069 -0.0126 1 .
1720 N     N     . ILE ILE ILE A A 230 230 . 0.0754 0.0508 0.0774 -0.0083 -
0.0125 -0.0151 1 .
1721 CA    CA    . ILE ILE ILE A A 230 230 . 0.0947 0.0613 0.1030 -0.0077
0.0080  -0.0305 1 .
1722 CB    CB    . ILE ILE ILE A A 230 230 . 0.0669 0.0595 0.0882 0.0145
0.0063  -0.0402 1 .
1723 CG1   CG1   . ILE ILE ILE A A 230 230 . 0.0447 0.0430 0.0868 0.0011  -
0.0261 -0.0231 1 .
1724 CD1   CD1   . ILE ILE ILE A A 230 230 . 0.0567 0.1046 0.1091 -0.0028 -
0.0511 0.0104  1 .
1725 CG2   CG2   . ILE ILE ILE A A 230 230 . 0.1378 0.0751 0.1104 -0.0264
0.0561  -0.0267 1 .
1726 C     C     . ILE ILE ILE A A 230 230 . 0.0830 0.0600 0.1136 -0.0031
0.0056  -0.0329 1 .
1727 O     O     . ILE ILE ILE A A 230 230 . 0.1152 0.0843 0.1604 0.0062
0.0061  -0.0375 1 .
1728 N     N     . ASP ASP ASP A A 231 231 . 0.1108 0.0746 0.1260 -0.0060
0.0113  -0.0387 1 .
1729 CA    CA    . ASP ASP ASP A A 231 231 . 0.1358 0.0794 0.1207 -0.0071
0.0025  -0.0167 1 .
1730 CB    CB    . ASP ASP ASP A A 231 231 . 0.1366 0.1336 0.1549 -0.0039 -
0.0128 -0.0095 1 .
1731 CG    CG    . ASP ASP ASP A A 231 231 . 0.2206 0.1533 0.2001 -0.0107 -
0.0216 -0.0149 1 .
1732 OD1   OD1   . ASP ASP ASP A A 231 231 . 0.2607 0.2808 0.3152 0.0143  -
0.0662 -0.0181 1 .
1733 OD2   OD2   . ASP ASP ASP A A 231 231 . 0.3142 0.2954 0.2307 -0.0852 -
0.0452 -0.0126 1 .
1734 C     C     . ASP ASP ASP A A 231 231 . 0.1249 0.0904 0.1381 0.0030
0.0023  -0.0218 1 .
1735 O     O     . ASP ASP ASP A A 231 231 . 0.1026 0.0730 0.1348 0.0112
0.0223  -0.0226 1 .
1736 N     N     . LYS LYS LYS A A 232 232 . 0.1427 0.0710 0.1114 -0.0095 -
0.0052 -0.0059 1 .
1737 CA    CA    . LYS LYS LYS A A 232 232 . 0.1386 0.0810 0.1269 -0.0136 -
0.0146 -0.0135 1 .
1738 CB    CB    . LYS LYS LYS A A 232 232 . 0.1455 0.1174 0.1305 -0.0103 -
0.0159 -0.0065 1 .
1739 CG    CG    . LYS LYS LYS A A 232 232 . 0.2083 0.1976 0.2320 0.0056  -
0.0033 0.0001  1 .
1740 CD    CD    . LYS LYS LYS A A 232 232 . 0.3177 0.3323 0.2766 0.0116
0.0327  0.0069  1 .
1741 CE    CE    . LYS LYS LYS A A 232 232 . 0.3484 0.3346 0.3000 -0.0083
0.0234  -0.0269 1 .
1742 NZ    NZ    . LYS LYS LYS A A 232 232 . 0.3900 0.3969 0.3130 0.0129
0.0303  0.0067  1 .
1743 C     C     . LYS LYS LYS A A 232 232 . 0.1457 0.0930 0.1429 0.0041  -
0.0052 -0.0028 1 .
1744 O     O     . LYS LYS LYS A A 232 232 . 0.1884 0.0762 0.1420 0.0030  -
0.0155 -0.0099 1 .
1745 N     N     . ALA ALA ALA A A 233 233 . 0.1260 0.0667 0.1272 -0.0094 -
0.0040 -0.0212 1 .
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1746 CA    CA    . ALA ALA ALA A A 233 233 . 0.1140 0.0776 0.1137 -0.0088
0.0035  -0.0221 1 .
1747 CB    CB    . ALA ALA ALA A A 233 233 . 0.0934 0.0496 0.1024 -0.0286
0.0020  -0.0315 1 .
1748 C     C     . ALA ALA ALA A A 233 233 . 0.1135 0.0681 0.1122 -0.0008
0.0012  -0.0176 1 .
1749 O     O     . ALA ALA ALA A A 233 233 . 0.1120 0.0985 0.1058 -0.0027
0.0129  -0.0197 1 .
1750 N     N     . GLY GLY GLY A A 234 234 . 0.1015 0.0802 0.0963 -0.0238
0.0029  0.0088  1 .
1751 CA    CA    . GLY GLY GLY A A 234 234 . 0.1313 0.0557 0.1192 -0.0048
0.0148  -0.0103 1 .
1752 C     C     . GLY GLY GLY A A 234 234 . 0.1191 0.1044 0.1019 -0.0032
0.0244  -0.0087 1 .
1753 O     O     . GLY GLY GLY A A 234 234 . 0.1392 0.1143 0.1226 0.0068
0.0605  -0.0103 1 .
1754 N     N     . TYR TYR TYR A A 235 235 . 0.0961 0.0824 0.0748 -0.0064
0.0035  -0.0086 1 .
1755 CA    CA    . TYR TYR TYR A A 235 235 . 0.0945 0.0886 0.0815 0.0035
0.0049  -0.0126 1 .
1756 CB    CB    . TYR TYR TYR A A 235 235 . 0.0993 0.0743 0.0829 0.0037  -
0.0113 -0.0085 1 .
1757 CG    CG    . TYR TYR TYR A A 235 235 . 0.0791 0.0681 0.0501 0.0002  -
0.0234 -0.0251 1 .
1758 CD1   CD1   . TYR TYR TYR A A 235 235 . 0.0750 0.0481 0.0298 0.0089
0.0097  0.0092  1 .
1759 CE1   CE1   . TYR TYR TYR A A 235 235 . 0.0435 0.0370 0.0475 -0.0059 -
0.0103 0.0028  1 .
1760 CZ    CZ    . TYR TYR TYR A A 235 235 . 0.0820 0.0869 0.0911 0.0126
0.0049  -0.0079 1 .
1761 OH    OH    . TYR TYR TYR A A 235 235 . 0.1224 0.1000 0.0997 0.0088  -
0.0261 0.0365  1 .
1762 CE2   CE2   . TYR TYR TYR A A 235 235 . 0.1139 0.0685 0.0821 -0.0034 -
0.0126 -0.0110 1 .
1763 CD2   CD2   . TYR TYR TYR A A 235 235 . 0.0966 0.0583 0.0562 -0.0008 -
0.0084 -0.0313 1 .
1764 C     C     . TYR TYR TYR A A 235 235 . 0.1001 0.0754 0.0667 0.0045  -
0.0014 -0.0081 1 .
1765 O     O     . TYR TYR TYR A A 235 235 . 0.0762 0.0654 0.0715 0.0200  -
0.0341 0.0139  1 .
1766 N     N     . THR THR THR A A 236 236 . 0.0880 0.0763 0.0609 0.0168
0.0036  -0.0313 1 .
1767 CA    CA    . THR THR THR A A 236 236 . 0.1177 0.1246 0.1059 0.0045  -
0.0019 -0.0171 1 .
1768 CB    CB    . THR THR THR A A 236 236 . 0.1401 0.1271 0.1353 -0.0065 -
0.0012 -0.0001 1 .
1769 OG1   OG1   . THR THR THR A A 236 236 . 0.1540 0.2315 0.1406 -0.0407
0.0035  0.0039  1 .
1770 CG2   CG2   . THR THR THR A A 236 236 . 0.1269 0.1308 0.1101 -0.0335
0.0001  0.0272  1 .
1771 C     C     . THR THR THR A A 236 236 . 0.1567 0.1376 0.1477 0.0061  -
0.0034 -0.0189 1 .
1772 O     O     . THR THR THR A A 236 236 . 0.1882 0.1282 0.1209 -0.0026 -
0.0100 -0.0406 1 .
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1773 N     N     . GLU GLU GLU A A 237 237 . 0.1662 0.1647 0.1553 -0.0065
0.0025  -0.0222 1 .
1774 CA    CA    . GLU GLU GLU A A 237 237 . 0.1887 0.1863 0.1826 -0.0057
0.0115  -0.0162 1 .
1775 CB    CB    . GLU GLU GLU A A 237 237 . 0.2276 0.2038 0.1877 -0.0177
0.0020  -0.0277 1 .
1776 CG    CG    . GLU GLU GLU A A 237 237 . 0.3054 0.2431 0.2900 -0.0330
0.0207  0.0031  1 .
1777 CD    CD    . GLU GLU GLU A A 237 237 . 0.3712 0.3142 0.3085 -0.0403 -
0.0162 0.0023  1 .
1778 OE1   OE1   . GLU GLU GLU A A 237 237 . 0.3759 0.2676 0.3142 -0.0447
0.0101  0.0350  1 .
1779 OE2   OE2   . GLU GLU GLU A A 237 237 . 0.4865 0.3556 0.3286 -0.0371
0.0163  -0.0135 1 .
1780 C     C     . GLU GLU GLU A A 237 237 . 0.1759 0.1832 0.1590 -0.0043
0.0112  -0.0216 1 .
1781 O     O     . GLU GLU GLU A A 237 237 . 0.1886 0.2049 0.1716 -0.0126
0.0301  -0.0186 1 .
1782 N     N     . LYS LYS LYS A A 238 238 . 0.1215 0.1151 0.0982 -0.0068
0.0000  -0.0327 1 .
1783 CA    CA    . LYS LYS LYS A A 238 238 . 0.1084 0.0976 0.1035 0.0072
0.0125  -0.0352 1 .
1784 CB    CB    . LYS LYS LYS A A 238 238 . 0.1263 0.1139 0.1080 0.0035
0.0094  -0.0186 1 .
1785 CG    CG    . LYS LYS LYS A A 238 238 . 0.1685 0.0985 0.1255 0.0202
0.0100  -0.0587 1 .
1786 CD    CD    . LYS LYS LYS A A 238 238 . 0.1721 0.1610 0.1316 0.0118
0.0134  -0.0362 1 .
1787 CE    CE    . LYS LYS LYS A A 238 238 . 0.2671 0.1735 0.2062 0.0315
0.0528  -0.0279 1 .
1788 NZ    NZ    . LYS LYS LYS A A 238 238 . 0.2806 0.2919 0.2475 -0.0306
0.0314  -0.0650 1 .
1789 C     C     . LYS LYS LYS A A 238 238 . 0.0800 0.0370 0.0746 0.0100
0.0066  -0.0196 1 .
1790 O     O     . LYS LYS LYS A A 238 238 . 0.0858 0.0852 0.0678 0.0253
0.0080  -0.0286 1 .
1791 N     N     . ILE ILE ILE A A 239 239 . 0.0814 0.0376 0.0516 0.0139  -
0.0017 -0.0156 1 .
1792 CA    CA    . ILE ILE ILE A A 239 239 . 0.0483 0.0395 0.0413 0.0058
0.0031  -0.0132 1 .
1793 CB    CB    . ILE ILE ILE A A 239 239 . 0.0258 0.0418 0.0365 0.0030  -
0.0025 -0.0136 1 .
1794 CG1   CG1   . ILE ILE ILE A A 239 239 . 0.0394 0.0317 0.0277 0.0094  -
0.0058 -0.0039 1 .
1795 CD1   CD1   . ILE ILE ILE A A 239 239 . 0.0869 0.0817 0.0536 0.0052  -
0.0051 -0.0220 1 .
1796 CG2   CG2   . ILE ILE ILE A A 239 239 . 0.0719 0.0433 0.0943 -0.0075
0.0095  -0.0351 1 .
1797 C     C     . ILE ILE ILE A A 239 239 . 0.0384 0.0457 0.0548 0.0043
0.0093  -0.0176 1 .
1798 O     O     . ILE ILE ILE A A 239 239 . 0.0711 0.0606 0.0766 0.0043
0.0152  -0.0288 1 .
1799 N     N     . VAL VAL VAL A A 240 240 . 0.0294 0.0389 0.0405 0.0010
0.0079  0.0030  1 .
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1800 CA    CA    . VAL VAL VAL A A 240 240 . 0.0555 0.0432 0.0333 0.0093
0.0044  -0.0030 1 .
1801 CB    CB    . VAL VAL VAL A A 240 240 . 0.0374 0.0503 0.0397 -0.0060 -
0.0102 -0.0021 1 .
1802 CG1   CG1   . VAL VAL VAL A A 240 240 . 0.1145 0.1219 0.1010 -0.0298
0.0015  -0.0324 1 .
1803 CG2   CG2   . VAL VAL VAL A A 240 240 . 0.0704 0.0773 0.0426 -0.0359
0.0180  0.0009  1 .
1804 C     C     . VAL VAL VAL A A 240 240 . 0.0361 0.0482 0.0254 0.0035
0.0007  0.0013  1 .
1805 O     O     . VAL VAL VAL A A 240 240 . 0.0515 0.0729 0.0480 -0.0206 -
0.0133 -0.0118 1 .
1806 N     N     . ILE ILE ILE A A 241 241 . 0.0283 0.0492 0.0326 0.0064  -
0.0043 -0.0063 1 .
1807 CA    CA    . ILE ILE ILE A A 241 241 . 0.0377 0.0374 0.0357 -0.0021
0.0000  -0.0110 1 .
1808 CB    CB    . ILE ILE ILE A A 241 241 . 0.0257 0.0607 0.0496 -0.0036 -
0.0009 0.0069  1 .
1809 CG1   CG1   . ILE ILE ILE A A 241 241 . 0.0415 0.0371 0.0331 -0.0132 -
0.0030 0.0000  1 .
1810 CD1   CD1   . ILE ILE ILE A A 241 241 . 0.0652 0.0469 0.0453 -0.0269
0.0038  0.0055  1 .
1811 CG2   CG2   . ILE ILE ILE A A 241 241 . 0.0742 0.0476 0.0403 -0.0185 -
0.0151 -0.0068 1 .
1812 C     C     . ILE ILE ILE A A 241 241 . 0.0512 0.0450 0.0524 -0.0036 -
0.0115 0.0008  1 .
1813 O     O     . ILE ILE ILE A A 241 241 . 0.0796 0.0558 0.0581 0.0146  -
0.0197 -0.0305 1 .
1814 N     N     . GLY GLY GLY A A 242 242 . 0.0492 0.0503 0.0626 0.0051
0.0005  -0.0110 1 .
1815 CA    CA    . GLY GLY GLY A A 242 242 . 0.0519 0.0355 0.0277 0.0147  -
0.0020 -0.0032 1 .
1816 C     C     . GLY GLY GLY A A 242 242 . 0.0529 0.0267 0.0492 -0.0059
0.0232  -0.0058 1 .
1817 O     O     . GLY GLY GLY A A 242 242 . 0.0755 0.0521 0.0471 0.0127  -
0.0154 -0.0239 1 .
1818 N     N     . MET MET MET A A 243 243 . 0.0364 0.0515 0.0536 -0.0044 -
0.0161 -0.0045 1 .
1819 CA    CA    . MET MET MET A A 243 243 . 0.0419 0.0535 0.0520 -0.0044 -
0.0125 -0.0180 1 .
1820 CB    CB    . MET MET MET A A 243 243 . 0.0342 0.0593 0.0881 0.0137  -
0.0189 -0.0121 1 .
1821 CG    CG    . MET MET MET A A 243 243 . 0.0906 0.0753 0.0707 -0.0212 -
0.0057 -0.0401 1 .
1822 SD    SD    . MET MET MET A A 243 243 . 0.1001 0.0972 0.1214 -0.0062 -
0.0188 -0.0259 1 .
1823 CE    CE    . MET MET MET A A 243 243 . 0.1537 0.1870 0.1609 0.0082  -
0.0207 -0.0653 1 .
1824 C     C     . MET MET MET A A 243 243 . 0.0635 0.0503 0.0575 0.0162
0.0152  0.0048  1 .
1825 O     O     . MET MET MET A A 243 243 . 0.0790 0.0348 0.0483 -0.0005
0.0069  -0.0074 1 .
1826 N     N     . ASP ASP ASP A A 244 244 . 0.0650 0.0300 0.0512 0.0125  -
0.0062 -0.0064 1 .
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1827 CA    CA    . ASP ASP ASP A A 244 244 . 0.0382 0.0340 0.0449 0.0059
0.0014  -0.0101 1 .
1828 CB    CB    . ASP ASP ASP A A 244 244 . 0.0647 0.0476 0.0719 -0.0021 -
0.0008 -0.0026 1 .
1829 CG    CG    . ASP ASP ASP A A 244 244 . 0.0557 0.0532 0.0505 0.0143  -
0.0219 -0.0244 1 .
1830 OD1   OD1   . ASP ASP ASP A A 244 244 . 0.0420 0.0316 0.0938 0.0081
0.0048  -0.0073 1 .
1831 OD2   OD2   . ASP ASP ASP A A 244 244 . 0.0456 0.0633 0.0367 0.0039  -
0.0136 0.0060  1 .
1832 C     C     . ASP ASP ASP A A 244 244 . 0.0495 0.0254 0.0681 -0.0015
0.0023  -0.0015 1 .
1833 O     O     . ASP ASP ASP A A 244 244 . 0.0564 0.0522 0.0501 0.0005  -
0.0092 -0.0245 1 .
1834 N     N     . VAL VAL VAL A A 245 245 . 0.0529 0.0270 0.0520 0.0068
0.0031  0.0002  1 .
1835 CA    CA    . VAL VAL VAL A A 245 245 . 0.0528 0.0411 0.0671 -0.0115
0.0044  -0.0011 1 .
1836 CB    CB    . VAL VAL VAL A A 245 245 . 0.0803 0.0552 0.0504 0.0139
0.0318  -0.0051 1 .
1837 CG1   CG1   . VAL VAL VAL A A 245 245 . 0.0405 0.0702 0.0744 -0.0052 -
0.0159 -0.0318 1 .
1838 CG2   CG2   . VAL VAL VAL A A 245 245 . 0.0579 0.0726 0.0625 -0.0314
0.0041  -0.0289 1 .
1839 C     C     . VAL VAL VAL A A 245 245 . 0.0416 0.0356 0.0330 -0.0117 -
0.0112 0.0081  1 .
1840 O     O     . VAL VAL VAL A A 245 245 . 0.0473 0.0671 0.0696 -0.0031 -
0.0099 -0.0162 1 .
1841 N     N     . ALA ALA ALA A A 246 246 . 0.0621 0.0522 0.0471 -0.0114 -
0.0015 0.0036  1 .
1842 CA    CA    . ALA ALA ALA A A 246 246 . 0.0454 0.0443 0.0616 -0.0095 -
0.0095 -0.0053 1 .
1843 CB    CB    . ALA ALA ALA A A 246 246 . 0.0827 0.0913 0.0869 0.0039  -
0.0002 -0.0055 1 .
1844 C     C     . ALA ALA ALA A A 246 246 . 0.0532 0.0482 0.0566 0.0071  -
0.0030 -0.0072 1 .
1845 O     O     . ALA ALA ALA A A 246 246 . 0.0421 0.0550 0.0564 0.0096  -
0.0107 0.0032  1 .
1846 N     N     . ALA ALA ALA A A 247 247 . 0.0606 0.0631 0.0549 -0.0106 -
0.0134 -0.0160 1 .
1847 CA    CA    . ALA ALA ALA A A 247 247 . 0.0647 0.0602 0.0739 0.0103
0.0108  -0.0146 1 .
1848 CB    CB    . ALA ALA ALA A A 247 247 . 0.0579 0.0650 0.0904 0.0028
0.0198  -0.0032 1 .
1849 C     C     . ALA ALA ALA A A 247 247 . 0.0662 0.0515 0.0801 0.0007
0.0002  -0.0005 1 .
1850 O     O     . ALA ALA ALA A A 247 247 . 0.0504 0.0540 0.0621 -0.0191
0.0069  -0.0275 1 .
1851 N     N     . SER SER SER A A 248 248 . 0.0285 0.0333 0.0720 0.0050  -
0.0122 -0.0193 1 .
1852 CA    CA    . SER SER SER A A 248 248 . 0.0489 0.0377 0.0703 0.0107  -
0.0004 -0.0130 1 .
1853 CB    CB    . SER SER SER A A 248 248 . 0.0271 0.0279 0.0570 -0.0017 -
0.0032 -0.0017 1 .
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1854 OG    OG    . SER SER SER A A 248 248 . 0.0883 0.0827 0.1046 0.0288
0.0114  -0.0008 1 .
1855 C     C     . SER SER SER A A 248 248 . 0.0644 0.0617 0.0610 0.0139
0.0010  -0.0136 1 .
1856 O     O     . SER SER SER A A 248 248 . 0.0731 0.0697 0.0671 0.0372  -
0.0403 -0.0204 1 .
1857 N     N     . GLU GLU GLU A A 249 249 . 0.0832 0.0605 0.0536 0.0168  -
0.0116 0.0078  1 .
1858 CA    CA    . GLU GLU GLU A A 249 249 . 0.0639 0.0453 0.0356 0.0064
0.0037  -0.0131 1 .
1859 CB    CB    . GLU GLU GLU A A 249 249 . 0.0418 0.0575 0.0551 -0.0129 -
0.0200 0.0048  1 .
1860 CG    CG    . GLU GLU GLU A A 249 249 . 0.0675 0.0659 0.0799 0.0026  -
0.0109 -0.0380 1 .
1861 CD    CD    . GLU GLU GLU A A 249 249 . 0.0533 0.0555 0.0470 0.0213  -
0.0231 -0.0113 1 .
1862 OE1   OE1   . GLU GLU GLU A A 249 249 . 0.1894 0.0852 0.0788 -0.0061 -
0.0216 -0.0196 1 .
1863 OE2   OE2   . GLU GLU GLU A A 249 249 . 0.1352 0.0986 0.1024 -0.0240 -
0.0300 0.0160  1 .
1864 C     C     . GLU GLU GLU A A 249 249 . 0.0604 0.0675 0.0669 0.0132  -
0.0130 -0.0108 1 .
1865 O     O     . GLU GLU GLU A A 249 249 . 0.0632 0.1222 0.1051 0.0348  -
0.0288 -0.0025 1 .
1866 N     N     . PHE PHE PHE A A 250 250 . 0.0768 0.1080 0.0900 -0.0079
0.0006  -0.0155 1 .
1867 CA    CA    . PHE PHE PHE A A 250 250 . 0.0694 0.0927 0.1027 -0.0017
0.0007  -0.0134 1 .
1868 CB    CB    . PHE PHE PHE A A 250 250 . 0.0716 0.0936 0.0908 -0.0023 -
0.0058 -0.0145 1 .
1869 CG    CG    . PHE PHE PHE A A 250 250 . 0.0445 0.0934 0.0726 -0.0100 -
0.0250 -0.0081 1 .
1870 CD1   CD1   . PHE PHE PHE A A 250 250 . 0.0255 0.0654 0.0577 0.0014  -
0.0015 0.0127  1 .
1871 CE1   CE1   . PHE PHE PHE A A 250 250 . 0.0460 0.0325 0.0618 -0.0084 -
0.0253 0.0057  1 .
1872 CZ    CZ    . PHE PHE PHE A A 250 250 . 0.0698 0.0699 0.0747 0.0289  -
0.0457 -0.0221 1 .
1873 CE2   CE2   . PHE PHE PHE A A 250 250 . 0.0641 0.0427 0.1052 0.0249  -
0.0065 -0.0074 1 .
1874 CD2   CD2   . PHE PHE PHE A A 250 250 . 0.0553 0.1042 0.0705 0.0091  -
0.0345 -0.0309 1 .
1875 C     C     . PHE PHE PHE A A 250 250 . 0.0815 0.0907 0.1220 0.0036  -
0.0073 -0.0109 1 .
1876 O     O     . PHE PHE PHE A A 250 250 . 0.0716 0.0762 0.1351 0.0110  -
0.0145 -0.0284 1 .
1877 N     N     . TYR TYR TYR A A 251 251 . 0.0928 0.1044 0.1283 0.0072  -
0.0076 -0.0174 1 .
1878 CA    CA    . TYR TYR TYR A A 251 251 . 0.1197 0.1017 0.1159 0.0108  -
0.0004 -0.0168 1 .
1879 CB    CB    . TYR TYR TYR A A 251 251 . 0.0692 0.1296 0.1311 0.0030
0.0097  -0.0208 1 .
1880 CG    CG    . TYR TYR TYR A A 251 251 . 0.1428 0.0777 0.1428 -0.0335
0.0018  -0.0043 1 .
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1881 CD1   CD1   . TYR TYR TYR A A 251 251 . 0.1499 0.1643 0.1264 -0.0078 -
0.0134 -0.0003 1 .
1882 CE1   CE1   . TYR TYR TYR A A 251 251 . 0.1526 0.2113 0.1278 0.0004  -
0.0572 -0.0442 1 .
1883 CZ    CZ    . TYR TYR TYR A A 251 251 . 0.1713 0.2262 0.2182 0.0546  -
0.0123 0.0077  1 .
1884 OH    OH    . TYR TYR TYR A A 251 251 . 0.2650 0.3045 0.2201 0.0576
0.0140  0.0521  1 .
1885 CE2   CE2   . TYR TYR TYR A A 251 251 . 0.2021 0.1447 0.2047 0.0466  -
0.0088 0.0077  1 .
1886 CD2   CD2   . TYR TYR TYR A A 251 251 . 0.1770 0.0950 0.1861 0.0335
0.0056  0.0067  1 .
1887 C     C     . TYR TYR TYR A A 251 251 . 0.1401 0.1508 0.1636 0.0159  -
0.0017 -0.0167 1 .
1888 O     O     . TYR TYR TYR A A 251 251 . 0.1016 0.1267 0.1561 0.0382
0.0136  -0.0473 1 .
1889 N     N     . ARG ARG ARG A A 252 252 . 0.1608 0.1770 0.1733 0.0131  -
0.0042 -0.0046 1 .
1890 CA    CA    . ARG ARG ARG A A 252 252 . 0.2136 0.2425 0.2287 0.0064  -
0.0028 -0.0019 1 .
1891 CB    CB    . ARG ARG ARG A A 252 252 . 0.2093 0.2421 0.2323 0.0097  -
0.0067 0.0084  1 .
1892 CG    CG    . ARG ARG ARG A A 252 252 . 0.1686 0.2480 0.2055 0.0073
0.0087  -0.0005 1 .
1893 CD    CD    . ARG ARG ARG A A 252 252 . 0.0959 0.2320 0.2071 -0.0093
0.0579  -0.0138 1 .
1894 NE    NE    . ARG ARG ARG A A 252 252 . 0.1465 0.1943 0.2249 -0.0025
0.0029  -0.0249 1 .
1895 CZ    CZ    . ARG ARG ARG A A 252 252 . 0.1466 0.1942 0.1625 -0.0229 -
0.0183 -0.0142 1 .
1896 NH1   NH1   . ARG ARG ARG A A 252 252 . 0.1133 0.1822 0.1465 0.0034  -
0.0390 0.0193  1 .
1897 NH2   NH2   . ARG ARG ARG A A 252 252 . 0.1446 0.1659 0.2327 0.0022  -
0.0187 0.0036  1 .
1898 C     C     . ARG ARG ARG A A 252 252 . 0.2551 0.2796 0.2692 0.0093  -
0.0075 -0.0017 1 .
1899 O     O     . ARG ARG ARG A A 252 252 . 0.2585 0.3091 0.2432 0.0050  -
0.0115 -0.0054 1 .
1900 N     N     . ASP ASP ASP A A 253 253 . 0.3000 0.3120 0.3041 0.0179  -
0.0057 -0.0020 1 .
1901 CA    CA    . ASP ASP ASP A A 253 253 . 0.3244 0.3311 0.3282 0.0143  -
0.0088 -0.0011 1 .
1902 CB    CB    . ASP ASP ASP A A 253 253 . 0.3371 0.3584 0.3473 0.0145  -
0.0061 0.0072  1 .
1903 CG    CG    . ASP ASP ASP A A 253 253 . 0.3918 0.3697 0.3796 0.0072  -
0.0175 0.0019  1 .
1904 OD1   OD1   . ASP ASP ASP A A 253 253 . 0.4175 0.4043 0.4613 0.0370  -
0.0187 0.0049  1 .
1905 OD2   OD2   . ASP ASP ASP A A 253 253 . 0.4110 0.4297 0.4006 0.0064
0.0071  -0.0114 1 .
1906 C     C     . ASP ASP ASP A A 253 253 . 0.3191 0.3135 0.3194 0.0128  -
0.0061 -0.0081 1 .
1907 O     O     . ASP ASP ASP A A 253 253 . 0.3371 0.3225 0.3560 0.0118  -
0.0055 -0.0134 1 .
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1908 N     N     . GLY GLY GLY A A 254 254 . 0.3040 0.2827 0.3062 0.0123  -
0.0123 -0.0139 1 .
1909 CA    CA    . GLY GLY GLY A A 254 254 . 0.2665 0.2285 0.2585 0.0105  -
0.0143 -0.0178 1 .
1910 C     C     . GLY GLY GLY A A 254 254 . 0.2416 0.2096 0.2337 0.0019  -
0.0103 -0.0171 1 .
1911 O     O     . GLY GLY GLY A A 254 254 . 0.2494 0.1980 0.2356 -0.0058 -
0.0229 -0.0278 1 .
1912 N     N     . LYS LYS LYS A A 255 255 . 0.2035 0.1663 0.2067 0.0165  -
0.0109 -0.0250 1 .
1913 CA    CA    . LYS LYS LYS A A 255 255 . 0.1861 0.1681 0.1981 0.0016  -
0.0095 -0.0121 1 .
1914 CB    CB    . LYS LYS LYS A A 255 255 . 0.1690 0.1681 0.2078 0.0009  -
0.0107 -0.0128 1 .
1915 CG    CG    . LYS LYS LYS A A 255 255 . 0.2279 0.1592 0.2463 0.0088  -
0.0349 0.0149  1 .
1916 CD    CD    . LYS LYS LYS A A 255 255 . 0.2463 0.2700 0.3384 -0.0068 -
0.0416 0.0097  1 .
1917 CE    CE    . LYS LYS LYS A A 255 255 . 0.3194 0.2539 0.3757 -0.0024 -
0.0514 0.0377  1 .
1918 NZ    NZ    . LYS LYS LYS A A 255 255 . 0.3283 0.2713 0.4105 -0.0357 -
0.0370 0.0409  1 .
1919 C     C     . LYS LYS LYS A A 255 255 . 0.1726 0.1495 0.1856 0.0112  -
0.0041 -0.0106 1 .
1920 O     O     . LYS LYS LYS A A 255 255 . 0.1810 0.1373 0.1917 0.0274  -
0.0130 -0.0215 1 .
1921 N     N     . TYR TYR TYR A A 256 256 . 0.1557 0.1508 0.1622 0.0029  -
0.0042 -0.0062 1 .
1922 CA    CA    . TYR TYR TYR A A 256 256 . 0.1312 0.1383 0.1406 0.0096
0.0016  -0.0099 1 .
1923 CB    CB    . TYR TYR TYR A A 256 256 . 0.0957 0.1389 0.1400 -0.0104 -
0.0045 -0.0167 1 .
1924 CG    CG    . TYR TYR TYR A A 256 256 . 0.0921 0.1253 0.0545 0.0113  -
0.0139 -0.0195 1 .
1925 CD1   CD1   . TYR TYR TYR A A 256 256 . 0.0659 0.0700 0.0611 -0.0099 -
0.0095 -0.0134 1 .
1926 CE1   CE1   . TYR TYR TYR A A 256 256 . 0.1352 0.1242 0.1198 0.0108  -
0.0285 -0.0034 1 .
1927 CZ    CZ    . TYR TYR TYR A A 256 256 . 0.0789 0.1240 0.0483 0.0181
0.0158  -0.0084 1 .
1928 OH    OH    . TYR TYR TYR A A 256 256 . 0.0514 0.0824 0.1227 0.0332  -
0.0173 0.0134  1 .
1929 CE2   CE2   . TYR TYR TYR A A 256 256 . 0.1070 0.0956 0.0523 0.0082  -
0.0004 -0.0433 1 .
1930 CD2   CD2   . TYR TYR TYR A A 256 256 . 0.1566 0.1326 0.0962 0.0075  -
0.0015 -0.0392 1 .
1931 C     C     . TYR TYR TYR A A 256 256 . 0.1286 0.1367 0.1477 0.0052  -
0.0040 -0.0108 1 .
1932 O     O     . TYR TYR TYR A A 256 256 . 0.1312 0.1338 0.1291 -0.0011
0.0007  -0.0179 1 .
1933 N     N     . ASP ASP ASP A A 257 257 . 0.1228 0.1405 0.1384 0.0285  -
0.0041 -0.0062 1 .
1934 CA    CA    . ASP ASP ASP A A 257 257 . 0.1310 0.1331 0.1492 0.0077
0.0047  -0.0138 1 .
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1935 CB    CB    . ASP ASP ASP A A 257 257 . 0.1257 0.1398 0.1623 0.0146
0.0041  -0.0230 1 .
1936 CG    CG    . ASP ASP ASP A A 257 257 . 0.1580 0.1492 0.1596 -0.0034
0.0121  -0.0334 1 .
1937 OD1   OD1   . ASP ASP ASP A A 257 257 . 0.2322 0.1495 0.2391 -0.0002
0.0362  -0.0282 1 .
1938 OD2   OD2   . ASP ASP ASP A A 257 257 . 0.1859 0.1480 0.1507 0.0398  -
0.0130 -0.0325 1 .
1939 C     C     . ASP ASP ASP A A 257 257 . 0.1271 0.1205 0.1462 0.0000  -
0.0155 -0.0062 1 .
1940 O     O     . ASP ASP ASP A A 257 257 . 0.1298 0.1056 0.1578 -0.0089 -
0.0007 -0.0302 1 .
1941 N     N     . LEU LEU LEU A A 258 258 . 0.1470 0.1271 0.1459 -0.0014 -
0.0153 -0.0102 1 .
1942 CA    CA    . LEU LEU LEU A A 258 258 . 0.1259 0.1203 0.1399 -0.0048 -
0.0141 -0.0208 1 .
1943 CB    CB    . LEU LEU LEU A A 258 258 . 0.1173 0.1022 0.1197 -0.0018 -
0.0115 -0.0112 1 .
1944 CG    CG    . LEU LEU LEU A A 258 258 . 0.1406 0.1264 0.1470 -0.0025
0.0013  -0.0273 1 .
1945 CD1   CD1   . LEU LEU LEU A A 258 258 . 0.1070 0.0659 0.1467 0.0113  -
0.0568 -0.0299 1 .
1946 CD2   CD2   . LEU LEU LEU A A 258 258 . 0.1486 0.1197 0.2330 0.0162  -
0.0576 -0.0153 1 .
1947 C     C     . LEU LEU LEU A A 258 258 . 0.1214 0.1059 0.1441 -0.0111 -
0.0127 -0.0181 1 .
1948 O     O     . LEU LEU LEU A A 258 258 . 0.1175 0.0903 0.1353 -0.0082 -
0.0235 -0.0487 1 .
1949 N     N     . ASP ASP ASP A A 259 259 . 0.1057 0.0666 0.1498 -0.0160 -
0.0069 -0.0124 1 .
1950 CA    CA    . ASP ASP ASP A A 259 259 . 0.1138 0.1043 0.1584 -0.0108
0.0052  -0.0119 1 .
1951 CB    CB    . ASP ASP ASP A A 259 259 . 0.1086 0.1021 0.1630 -0.0203
0.0067  -0.0032 1 .
1952 CG    CG    . ASP ASP ASP A A 259 259 . 0.1481 0.1656 0.1936 -0.0286 -
0.0081 0.0246  1 .
1953 OD1   OD1   . ASP ASP ASP A A 259 259 . 0.2409 0.1793 0.1394 -0.0219 -
0.0044 -0.0225 1 .
1954 OD2   OD2   . ASP ASP ASP A A 259 259 . 0.1580 0.2611 0.2167 -0.0388
0.0409  -0.0097 1 .
1955 C     C     . ASP ASP ASP A A 259 259 . 0.1091 0.1057 0.1281 -0.0104 -
0.0034 -0.0108 1 .
1956 O     O     . ASP ASP ASP A A 259 259 . 0.1109 0.0995 0.1315 -0.0072 -
0.0186 -0.0186 1 .
1957 N     N     . PHE PHE PHE A A 260 260 . 0.1008 0.1052 0.1485 0.0020  -
0.0129 -0.0157 1 .
1958 CA    CA    . PHE PHE PHE A A 260 260 . 0.0925 0.1080 0.1159 0.0078  -
0.0103 -0.0221 1 .
1959 CB    CB    . PHE PHE PHE A A 260 260 . 0.0910 0.1103 0.1208 0.0030  -
0.0234 -0.0164 1 .
1960 CG    CG    . PHE PHE PHE A A 260 260 . 0.0563 0.0990 0.1067 0.0174
0.0134  -0.0213 1 .
1961 CD1   CD1   . PHE PHE PHE A A 260 260 . 0.0932 0.0381 0.1257 0.0132  -
0.0287 -0.0357 1 .
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1962 CE1   CE1   . PHE PHE PHE A A 260 260 . 0.1234 0.1265 0.1377 -0.0300 -
0.0598 -0.0227 1 .
1963 CZ    CZ    . PHE PHE PHE A A 260 260 . 0.0867 0.0773 0.0896 0.0321  -
0.0586 -0.0137 1 .
1964 CE2   CE2   . PHE PHE PHE A A 260 260 . 0.1060 0.1359 0.1180 0.0147  -
0.0119 -0.0327 1 .
1965 CD2   CD2   . PHE PHE PHE A A 260 260 . 0.0441 0.0489 0.0961 0.0161
0.0066  -0.0201 1 .
1966 C     C     . PHE PHE PHE A A 260 260 . 0.1134 0.1256 0.1374 0.0076  -
0.0139 -0.0106 1 .
1967 O     O     . PHE PHE PHE A A 260 260 . 0.1296 0.1417 0.1531 0.0229  -
0.0256 -0.0200 1 .
1968 N     N     . LYS LYS LYS A A 261 261 . 0.1209 0.1534 0.1564 0.0147  -
0.0011 -0.0034 1 .
1969 CA    CA    . LYS LYS LYS A A 261 261 . 0.1260 0.1429 0.1629 0.0087
0.0016  0.0028  1 .
1970 CB    CB    . LYS LYS LYS A A 261 261 . 0.1065 0.1453 0.1591 0.0063
0.0117  0.0221  1 .
1971 CG    CG    . LYS LYS LYS A A 261 261 . 0.0941 0.0586 0.1332 -0.0031
0.0171  0.0135  1 .
1972 CD    CD    . LYS LYS LYS A A 261 261 . 0.0259 0.0704 0.0863 -0.0022 -
0.0052 -0.0043 1 .
1973 CE    CE    . LYS LYS LYS A A 261 261 . 0.0312 0.0807 0.0313 -0.0181 -
0.0060 0.0183  1 .
1974 NZ    NZ    . LYS LYS LYS A A 261 261 . 0.1003 0.0303 0.1446 0.0089
0.0748  -0.0042 1 .
1975 C     C     . LYS LYS LYS A A 261 261 . 0.1335 0.1654 0.1649 0.0129
0.0074  0.0099  1 .
1976 O     O     . LYS LYS LYS A A 261 261 . 0.1467 0.2118 0.1701 0.0016
0.0226  -0.0216 1 .
1977 N     N     . SER SER SER A A 262 262 . 0.1551 0.1487 0.1695 0.0000
0.0065  -0.0130 1 .
1978 CA    CA    . SER SER SER A A 262 262 . 0.1613 0.1732 0.2029 0.0113
0.0063  -0.0046 1 .
1979 CB    CB    . SER SER SER A A 262 262 . 0.1670 0.1422 0.2010 0.0066
0.0151  -0.0195 1 .
1980 OG    OG    . SER SER SER A A 262 262 . 0.1410 0.1933 0.2831 -0.0108 -
0.0152 0.0463  1 .
1981 C     C     . SER SER SER A A 262 262 . 0.1767 0.1761 0.1960 0.0159
0.0157  -0.0079 1 .
1982 O     O     . SER SER SER A A 262 262 . 0.1529 0.1866 0.1336 0.0267  -
0.0014 -0.0068 1 .
1983 N     N     . PRO PRO PRO A A 263 263 . 0.2067 0.2125 0.2184 0.0233
0.0217  -0.0027 1 .
1984 CA    CA    . PRO PRO PRO A A 263 263 . 0.2223 0.2225 0.2373 0.0193
0.0211  -0.0074 1 .
1985 CB    CB    . PRO PRO PRO A A 263 263 . 0.2138 0.2144 0.2350 0.0190
0.0255  -0.0010 1 .
1986 CG    CG    . PRO PRO PRO A A 263 263 . 0.2287 0.2321 0.2450 0.0084
0.0359  0.0097  1 .
1987 CD    CD    . PRO PRO PRO A A 263 263 . 0.2231 0.2203 0.2251 0.0107
0.0281  -0.0053 1 .
1988 C     C     . PRO PRO PRO A A 263 263 . 0.2334 0.2520 0.2552 0.0088
0.0165  -0.0082 1 .
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1989 O     O     . PRO PRO PRO A A 263 263 . 0.2367 0.2540 0.2485 0.0266
0.0178  -0.0261 1 .
1990 N     N     . THR THR THR A A 264 264 . 0.2593 0.2629 0.2719 0.0078
0.0000  -0.0104 1 .
1991 CA    CA    . THR THR THR A A 264 264 . 0.2867 0.2927 0.2883 0.0036  -
0.0038 -0.0088 1 .
1992 CB    CB    . THR THR THR A A 264 264 . 0.2885 0.2838 0.2867 -0.0041 -
0.0115 -0.0091 1 .
1993 OG1   OG1   . THR THR THR A A 264 264 . 0.2884 0.3750 0.3296 -0.0076 -
0.0167 -0.0073 1 .
1994 CG2   CG2   . THR THR THR A A 264 264 . 0.2653 0.2860 0.2803 -0.0112 -
0.0099 -0.0168 1 .
1995 C     C     . THR THR THR A A 264 264 . 0.2853 0.2841 0.2933 0.0078  -
0.0058 -0.0068 1 .
1996 O     O     . THR THR THR A A 264 264 . 0.3150 0.3132 0.3012 0.0141  -
0.0058 -0.0103 1 .
1997 N     N     . ASP ASP ASP A A 265 265 . 0.2871 0.2937 0.2871 0.0107  -
0.0081 -0.0057 1 .
1998 CA    CA    . ASP ASP ASP A A 265 265 . 0.2790 0.2910 0.3001 0.0080  -
0.0065 -0.0045 1 .
1999 CB    CB    . ASP ASP ASP A A 265 265 . 0.2801 0.2996 0.3043 0.0011  -
0.0121 -0.0010 1 .
2000 CG    CG    . ASP ASP ASP A A 265 265 . 0.3006 0.3020 0.3020 -0.0103 -
0.0114 -0.0107 1 .
2001 OD1   OD1   . ASP ASP ASP A A 265 265 . 0.2743 0.3384 0.2995 -0.0366 -
0.0093 -0.0291 1 .
2002 OD2   OD2   . ASP ASP ASP A A 265 265 . 0.3169 0.3309 0.2781 -0.0146 -
0.0033 -0.0104 1 .
2003 C     C     . ASP ASP ASP A A 265 265 . 0.2711 0.2785 0.2954 0.0061  -
0.0004 -0.0033 1 .
2004 O     O     . ASP ASP ASP A A 265 265 . 0.2439 0.2910 0.3047 0.0128
0.0143  -0.0194 1 .
2005 N     N     . PRO PRO PRO A A 266 266 . 0.2601 0.2674 0.2966 0.0056  -
0.0042 0.0027  1 .
2006 CA    CA    . PRO PRO PRO A A 266 266 . 0.2672 0.2565 0.2879 0.0083  -
0.0078 0.0029  1 .
2007 CB    CB    . PRO PRO PRO A A 266 266 . 0.2591 0.2566 0.2890 0.0095  -
0.0056 0.0003  1 .
2008 CG    CG    . PRO PRO PRO A A 266 266 . 0.2604 0.2737 0.3041 0.0027  -
0.0118 0.0071  1 .
2009 CD    CD    . PRO PRO PRO A A 266 266 . 0.2683 0.2690 0.2963 0.0029  -
0.0079 -0.0034 1 .
2010 C     C     . PRO PRO PRO A A 266 266 . 0.2635 0.2445 0.2827 0.0089  -
0.0089 0.0064  1 .
2011 O     O     . PRO PRO PRO A A 266 266 . 0.2744 0.2314 0.2886 0.0099  -
0.0211 0.0039  1 .
2012 N     N     . SER SER SER A A 267 267 . 0.2714 0.2529 0.2959 0.0134  -
0.0076 -0.0003 1 .
2013 CA    CA    . SER SER SER A A 267 267 . 0.2725 0.2686 0.2850 0.0098  -
0.0064 -0.0025 1 .
2014 CB    CB    . SER SER SER A A 267 267 . 0.2875 0.2762 0.2900 0.0182  -
0.0020 -0.0059 1 .
2015 OG    OG    . SER SER SER A A 267 267 . 0.3180 0.2865 0.3326 0.0043
0.0117  0.0012  1 .
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2016 C     C     . SER SER SER A A 267 267 . 0.2658 0.2639 0.2779 0.0128  -
0.0128 -0.0044 1 .
2017 O     O     . SER SER SER A A 267 267 . 0.2712 0.2816 0.2864 0.0194  -
0.0128 0.0019  1 .
2018 N     N     . ARG ARG ARG A A 268 268 . 0.2515 0.2353 0.2674 0.0104  -
0.0067 -0.0019 1 .
2019 CA    CA    . ARG ARG ARG A A 268 268 . 0.2277 0.1949 0.2380 0.0089  -
0.0076 -0.0125 1 .
2020 CB    CB    . ARG ARG ARG A A 268 268 . 0.2150 0.1752 0.2227 0.0054  -
0.0030 -0.0135 1 .
2021 CG    CG    . ARG ARG ARG A A 268 268 . 0.2093 0.1853 0.2394 0.0222  -
0.0048 -0.0165 1 .
2022 CD    CD    . ARG ARG ARG A A 268 268 . 0.2133 0.2052 0.1637 -0.0084
0.0267  -0.0702 1 .
2023 NE    NE    . ARG ARG ARG A A 268 268 . 0.2023 0.1770 0.1693 -0.0003
0.0416  -0.0665 1 .
2024 CZ    CZ    . ARG ARG ARG A A 268 268 . 0.1612 0.1730 0.1538 -0.0260
0.0716  -0.0399 1 .
2025 NH1   NH1   . ARG ARG ARG A A 268 268 . 0.2050 0.1037 0.2299 0.0192
0.0816  -0.0643 1 .
2026 NH2   NH2   . ARG ARG ARG A A 268 268 . 0.2554 0.1912 0.2606 0.0457
0.0739  0.0012  1 .
2027 C     C     . ARG ARG ARG A A 268 268 . 0.2247 0.1899 0.2328 0.0096  -
0.0058 -0.0122 1 .
2028 O     O     . ARG ARG ARG A A 268 268 . 0.1998 0.1515 0.2534 0.0356  -
0.0103 -0.0087 1 .
2029 N     N     . TYR TYR TYR A A 269 269 . 0.2223 0.1882 0.2172 0.0169  -
0.0087 -0.0130 1 .
2030 CA    CA    . TYR TYR TYR A A 269 269 . 0.2054 0.1975 0.2120 0.0047  -
0.0177 -0.0217 1 .
2031 CB    CB    . TYR TYR TYR A A 269 269 . 0.2179 0.2007 0.1987 0.0065  -
0.0119 -0.0211 1 .
2032 CG    CG    . TYR TYR TYR A A 269 269 . 0.2182 0.1812 0.1974 -0.0053 -
0.0286 -0.0358 1 .
2033 CD1   CD1   . TYR TYR TYR A A 269 269 . 0.1926 0.1815 0.1714 0.0010  -
0.0056 -0.0786 1 .
2034 CE1   CE1   . TYR TYR TYR A A 269 269 . 0.1815 0.2098 0.1587 0.0183  -
0.0177 -0.0406 1 .
2035 CZ    CZ    . TYR TYR TYR A A 269 269 . 0.2416 0.2092 0.1804 0.0202  -
0.0292 -0.0403 1 .
2036 OH    OH    . TYR TYR TYR A A 269 269 . 0.2925 0.2390 0.2000 -0.0100 -
0.0351 -0.0308 1 .
2037 CE2   CE2   . TYR TYR TYR A A 269 269 . 0.2653 0.1613 0.1914 0.0160  -
0.0288 -0.0505 1 .
2038 CD2   CD2   . TYR TYR TYR A A 269 269 . 0.2696 0.1987 0.2182 0.0303  -
0.0044 -0.0402 1 .
2039 C     C     . TYR TYR TYR A A 269 269 . 0.1835 0.1839 0.1797 0.0059  -
0.0128 -0.0114 1 .
2040 O     O     . TYR TYR TYR A A 269 269 . 0.1742 0.1953 0.2003 0.0088  -
0.0229 -0.0094 1 .
2041 N     N     . ILE ILE ILE A A 270 270 . 0.1684 0.1477 0.1777 -0.0041 -
0.0174 -0.0084 1 .
2042 CA    CA    . ILE ILE ILE A A 270 270 . 0.1352 0.1261 0.1364 0.0062  -
0.0190 -0.0047 1 .
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2043 CB    CB    . ILE ILE ILE A A 270 270 . 0.1530 0.1176 0.1570 0.0089  -
0.0170 -0.0111 1 .
2044 CG1   CG1   . ILE ILE ILE A A 270 270 . 0.1482 0.1127 0.1713 0.0175  -
0.0384 -0.0255 1 .
2045 CD1   CD1   . ILE ILE ILE A A 270 270 . 0.1438 0.1976 0.1480 -0.0053 -
0.0379 -0.1023 1 .
2046 CG2   CG2   . ILE ILE ILE A A 270 270 . 0.1252 0.1375 0.1728 -0.0292 -
0.0465 0.0041  1 .
2047 C     C     . ILE ILE ILE A A 270 270 . 0.1337 0.1303 0.1415 -0.0042 -
0.0133 -0.0144 1 .
2048 O     O     . ILE ILE ILE A A 270 270 . 0.1648 0.1446 0.1141 0.0054  -
0.0191 -0.0389 1 .
2049 N     N     . THR THR THR A A 271 271 . 0.1211 0.1265 0.1242 0.0173  -
0.0184 -0.0187 1 .
2050 CA    CA    . THR THR THR A A 271 271 . 0.1295 0.1393 0.1223 0.0170  -
0.0188 -0.0193 1 .
2051 CB    CB    . THR THR THR A A 271 271 . 0.1518 0.1471 0.1364 0.0270  -
0.0311 -0.0242 1 .
2052 OG1   OG1   . THR THR THR A A 271 271 . 0.1470 0.1363 0.1066 0.0006  -
0.0617 -0.0495 1 .
2053 CG2   CG2   . THR THR THR A A 271 271 . 0.1680 0.1819 0.1651 0.0331
0.0020  -0.0342 1 .
2054 C     C     . THR THR THR A A 271 271 . 0.1265 0.1253 0.1235 0.0034  -
0.0198 -0.0067 1 .
2055 O     O     . THR THR THR A A 271 271 . 0.1477 0.0895 0.0949 -0.0047 -
0.0424 0.0196  1 .
2056 N     N     . GLY GLY GLY A A 272 272 . 0.1227 0.1195 0.1134 0.0041
0.0006  -0.0055 1 .
2057 CA    CA    . GLY GLY GLY A A 272 272 . 0.1052 0.1235 0.1277 0.0007
0.0010  0.0000  1 .
2058 C     C     . GLY GLY GLY A A 272 272 . 0.1246 0.1495 0.1652 0.0084  -
0.0080 -0.0088 1 .
2059 O     O     . GLY GLY GLY A A 272 272 . 0.1136 0.1324 0.1910 0.0122
0.0038  -0.0325 1 .
2060 N     N     . ASP ASP ASP A A 273 273 . 0.1127 0.1464 0.1592 -0.0112 -
0.0161 -0.0020 1 .
2061 CA    CA    . ASP ASP ASP A A 273 273 . 0.1264 0.1529 0.1500 -0.0029 -
0.0189 -0.0097 1 .
2062 CB    CB    . ASP ASP ASP A A 273 273 . 0.1427 0.1547 0.1434 -0.0216 -
0.0399 -0.0194 1 .
2063 CG    CG    . ASP ASP ASP A A 273 273 . 0.1839 0.2038 0.1486 0.0162  -
0.0202 0.0010  1 .
2064 OD1   OD1   . ASP ASP ASP A A 273 273 . 0.2743 0.2712 0.2545 -0.0298 -
0.0845 0.0080  1 .
2065 OD2   OD2   . ASP ASP ASP A A 273 273 . 0.2474 0.2266 0.1707 0.0560  -
0.0570 0.0075  1 .
2066 C     C     . ASP ASP ASP A A 273 273 . 0.1173 0.1300 0.1377 -0.0187 -
0.0150 -0.0066 1 .
2067 O     O     . ASP ASP ASP A A 273 273 . 0.0992 0.1482 0.1138 -0.0175 -
0.0256 -0.0060 1 .
2068 N     N     . GLN GLN GLN A A 274 274 . 0.1230 0.1436 0.1332 -0.0187 -
0.0215 -0.0199 1 .
2069 CA    CA    . GLN GLN GLN A A 274 274 . 0.1134 0.1305 0.1373 -0.0173 -
0.0207 -0.0243 1 .
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2070 CB    CB    . GLN GLN GLN A A 274 274 . 0.1348 0.1364 0.1480 -0.0118 -
0.0110 -0.0228 1 .
2071 CG    CG    . GLN GLN GLN A A 274 274 . 0.1418 0.1370 0.1506 -0.0131 -
0.0169 -0.0469 1 .
2072 CD    CD    . GLN GLN GLN A A 274 274 . 0.1606 0.1694 0.1479 -0.0194 -
0.0050 0.0120  1 .
2073 OE1   OE1   . GLN GLN GLN A A 274 274 . 0.1246 0.1409 0.1783 -0.0180 -
0.0596 -0.0171 1 .
2074 NE2   NE2   . GLN GLN GLN A A 274 274 . 0.0776 0.1718 0.1631 -0.0317
0.0766  0.0103  1 .
2075 C     C     . GLN GLN GLN A A 274 274 . 0.1166 0.1169 0.1472 0.0019  -
0.0138 -0.0103 1 .
2076 O     O     . GLN GLN GLN A A 274 274 . 0.1130 0.1355 0.1238 0.0119  -
0.0378 -0.0360 1 .
2077 N     N     . LEU LEU LEU A A 275 275 . 0.0848 0.1253 0.1184 0.0159  -
0.0208 -0.0125 1 .
2078 CA    CA    . LEU LEU LEU A A 275 275 . 0.1143 0.1012 0.1358 0.0108  -
0.0302 -0.0156 1 .
2079 CB    CB    . LEU LEU LEU A A 275 275 . 0.1204 0.1085 0.1315 -0.0112 -
0.0466 -0.0171 1 .
2080 CG    CG    . LEU LEU LEU A A 275 275 . 0.1086 0.1108 0.1449 0.0226  -
0.0402 0.0017  1 .
2081 CD1   CD1   . LEU LEU LEU A A 275 275 . 0.1688 0.1820 0.1161 -0.0089 -
0.0546 0.0194  1 .
2082 CD2   CD2   . LEU LEU LEU A A 275 275 . 0.0577 0.0847 0.1609 -0.0091 -
0.0646 0.0381  1 .
2083 C     C     . LEU LEU LEU A A 275 275 . 0.1212 0.1138 0.1254 0.0079  -
0.0291 -0.0095 1 .
2084 O     O     . LEU LEU LEU A A 275 275 . 0.1089 0.0930 0.1339 0.0220  -
0.0292 -0.0219 1 .
2085 N     N     . GLY GLY GLY A A 276 276 . 0.1242 0.1029 0.1300 -0.0012 -
0.0199 -0.0057 1 .
2086 CA    CA    . GLY GLY GLY A A 276 276 . 0.0869 0.1034 0.0874 -0.0074 -
0.0307 -0.0104 1 .
2087 C     C     . GLY GLY GLY A A 276 276 . 0.1245 0.1138 0.1356 0.0094  -
0.0177 -0.0155 1 .
2088 O     O     . GLY GLY GLY A A 276 276 . 0.1155 0.1174 0.1248 0.0048  -
0.0147 -0.0287 1 .
2089 N     N     . ALA ALA ALA A A 277 277 . 0.1314 0.1114 0.1450 -0.0116 -
0.0131 -0.0066 1 .
2090 CA    CA    . ALA ALA ALA A A 277 277 . 0.1490 0.1094 0.1310 0.0033  -
0.0118 -0.0092 1 .
2091 CB    CB    . ALA ALA ALA A A 277 277 . 0.1554 0.1181 0.1314 0.0121  -
0.0141 -0.0171 1 .
2092 C     C     . ALA ALA ALA A A 277 277 . 0.1525 0.1196 0.1448 0.0070  -
0.0162 -0.0033 1 .
2093 O     O     . ALA ALA ALA A A 277 277 . 0.1335 0.0965 0.1693 0.0115  -
0.0212 -0.0319 1 .
2094 N     N     . LEU LEU LEU A A 278 278 . 0.1358 0.0880 0.1136 0.0011  -
0.0222 0.0117  1 .
2095 CA    CA    . LEU LEU LEU A A 278 278 . 0.1252 0.1046 0.1114 0.0092  -
0.0188 -0.0031 1 .
2096 CB    CB    . LEU LEU LEU A A 278 278 . 0.1014 0.0950 0.1033 -0.0098 -
0.0459 0.0032  1 .
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2097 CG    CG    . LEU LEU LEU A A 278 278 . 0.1197 0.1070 0.1281 -0.0321 -
0.0022 0.0042  1 .
2098 CD1   CD1   . LEU LEU LEU A A 278 278 . 0.0830 0.0758 0.1748 -0.0491 -
0.0181 0.0507  1 .
2099 CD2   CD2   . LEU LEU LEU A A 278 278 . 0.0940 0.1612 0.1113 -0.0385 -
0.0353 0.0090  1 .
2100 C     C     . LEU LEU LEU A A 278 278 . 0.1351 0.1006 0.1013 0.0026  -
0.0156 -0.0052 1 .
2101 O     O     . LEU LEU LEU A A 278 278 . 0.1355 0.0979 0.0913 0.0277  -
0.0217 -0.0396 1 .
2102 N     N     . TYR TYR TYR A A 279 279 . 0.1173 0.0824 0.0809 0.0114  -
0.0259 -0.0290 1 .
2103 CA    CA    . TYR TYR TYR A A 279 279 . 0.1048 0.0723 0.0849 0.0057  -
0.0101 -0.0310 1 .
2104 CB    CB    . TYR TYR TYR A A 279 279 . 0.0872 0.0796 0.0858 0.0287  -
0.0064 -0.0417 1 .
2105 CG    CG    . TYR TYR TYR A A 279 279 . 0.0750 0.0825 0.0874 -0.0099
0.0013  -0.0252 1 .
2106 CD1   CD1   . TYR TYR TYR A A 279 279 . 0.0265 0.0770 0.1200 -0.0001
0.0080  -0.0468 1 .
2107 CE1   CE1   . TYR TYR TYR A A 279 279 . 0.1177 0.0893 0.1002 0.0058  -
0.0306 -0.0224 1 .
2108 CZ    CZ    . TYR TYR TYR A A 279 279 . 0.0648 0.0659 0.0636 0.0272
0.0098  -0.0212 1 .
2109 OH    OH    . TYR TYR TYR A A 279 279 . 0.0889 0.1210 0.1058 -0.0089 -
0.0483 -0.0575 1 .
2110 CE2   CE2   . TYR TYR TYR A A 279 279 . 0.0494 0.0505 0.0984 0.0206  -
0.0300 -0.0307 1 .
2111 CD2   CD2   . TYR TYR TYR A A 279 279 . 0.0681 0.1279 0.0751 0.0282
0.0115  -0.0219 1 .
2112 C     C     . TYR TYR TYR A A 279 279 . 0.1099 0.1096 0.0917 0.0135  -
0.0337 -0.0396 1 .
2113 O     O     . TYR TYR TYR A A 279 279 . 0.1293 0.0778 0.1314 0.0050  -
0.0454 -0.0693 1 .
2114 N     N     . GLN GLN GLN A A 280 280 . 0.1272 0.1113 0.1046 0.0040  -
0.0308 -0.0305 1 .
2115 CA    CA    . GLN GLN GLN A A 280 280 . 0.1296 0.1346 0.0996 0.0146  -
0.0226 -0.0095 1 .
2116 CB    CB    . GLN GLN GLN A A 280 280 . 0.1233 0.1534 0.1363 -0.0054 -
0.0294 -0.0096 1 .
2117 CG    CG    . GLN GLN GLN A A 280 280 . 0.1875 0.1851 0.1458 0.0086  -
0.0422 0.0153  1 .
2118 CD    CD    . GLN GLN GLN A A 280 280 . 0.1978 0.1525 0.1715 0.0326  -
0.0285 -0.0284 1 .
2119 OE1   OE1   . GLN GLN GLN A A 280 280 . 0.1871 0.1324 0.1703 0.0179  -
0.1014 -0.0142 1 .
2120 NE2   NE2   . GLN GLN GLN A A 280 280 . 0.2186 0.2129 0.1390 -0.0098 -
0.0309 -0.0288 1 .
2121 C     C     . GLN GLN GLN A A 280 280 . 0.1307 0.1299 0.1164 0.0000  -
0.0116 -0.0252 1 .
2122 O     O     . GLN GLN GLN A A 280 280 . 0.1004 0.0867 0.1029 0.0146  -
0.0309 -0.0087 1 .
2123 N     N     . ASP ASP ASP A A 281 281 . 0.1349 0.1342 0.1265 0.0020  -
0.0186 -0.0258 1 .
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2124 CA    CA    . ASP ASP ASP A A 281 281 . 0.1384 0.1325 0.1272 -0.0122 -
0.0113 -0.0324 1 .
2125 CB    CB    . ASP ASP ASP A A 281 281 . 0.1329 0.1490 0.1466 0.0080  -
0.0017 -0.0274 1 .
2126 CG    CG    . ASP ASP ASP A A 281 281 . 0.1697 0.2060 0.1764 -0.0064 -
0.0127 -0.0236 1 .
2127 OD1   OD1   . ASP ASP ASP A A 281 281 . 0.2274 0.3031 0.2727 -0.0254 -
0.0527 0.0310  1 .
2128 OD2   OD2   . ASP ASP ASP A A 281 281 . 0.1863 0.2877 0.2831 0.0196  -
0.0471 0.0120  1 .
2129 C     C     . ASP ASP ASP A A 281 281 . 0.1399 0.1178 0.1417 0.0008  -
0.0152 -0.0308 1 .
2130 O     O     . ASP ASP ASP A A 281 281 . 0.1265 0.0730 0.1416 0.0047  -
0.0406 -0.0226 1 .
2131 N     N     . PHE PHE PHE A A 282 282 . 0.1262 0.0964 0.1373 -0.0200 -
0.0147 -0.0145 1 .
2132 CA    CA    . PHE PHE PHE A A 282 282 . 0.1232 0.0935 0.1232 -0.0030 -
0.0126 -0.0105 1 .
2133 CB    CB    . PHE PHE PHE A A 282 282 . 0.1177 0.1111 0.1232 -0.0129 -
0.0212 -0.0007 1 .
2134 CG    CG    . PHE PHE PHE A A 282 282 . 0.1171 0.0866 0.0940 0.0139  -
0.0427 -0.0067 1 .
2135 CD1   CD1   . PHE PHE PHE A A 282 282 . 0.1468 0.0960 0.1146 0.0270  -
0.0470 -0.0188 1 .
2136 CE1   CE1   . PHE PHE PHE A A 282 282 . 0.1125 0.1478 0.1504 0.0018  -
0.0646 0.0287  1 .
2137 CZ    CZ    . PHE PHE PHE A A 282 282 . 0.1539 0.1274 0.1415 0.0276  -
0.0405 0.0367  1 .
2138 CE2   CE2   . PHE PHE PHE A A 282 282 . 0.1812 0.1346 0.1342 0.0504  -
0.0630 0.0322  1 .
2139 CD2   CD2   . PHE PHE PHE A A 282 282 . 0.1062 0.1083 0.1276 0.0372  -
0.0531 0.0073  1 .
2140 C     C     . PHE PHE PHE A A 282 282 . 0.1230 0.0950 0.1237 -0.0084 -
0.0208 -0.0148 1 .
2141 O     O     . PHE PHE PHE A A 282 282 . 0.1497 0.1092 0.1478 -0.0019 -
0.0185 -0.0267 1 .
2142 N     N     . VAL VAL VAL A A 283 283 . 0.1209 0.0901 0.1083 -0.0175 -
0.0214 -0.0174 1 .
2143 CA    CA    . VAL VAL VAL A A 283 283 . 0.1382 0.1069 0.1253 -0.0067 -
0.0145 -0.0257 1 .
2144 CB    CB    . VAL VAL VAL A A 283 283 . 0.1569 0.1175 0.1248 -0.0023 -
0.0187 -0.0186 1 .
2145 CG1   CG1   . VAL VAL VAL A A 283 283 . 0.1431 0.1319 0.1393 -0.0200 -
0.0077 -0.0426 1 .
2146 CG2   CG2   . VAL VAL VAL A A 283 283 . 0.1379 0.1027 0.1846 -0.0355 -
0.0143 -0.0253 1 .
2147 C     C     . VAL VAL VAL A A 283 283 . 0.1515 0.1277 0.1299 -0.0007 -
0.0095 -0.0218 1 .
2148 O     O     . VAL VAL VAL A A 283 283 . 0.1582 0.1360 0.0858 -0.0189
0.0019  -0.0469 1 .
2149 N     N     . ARG ARG ARG A A 284 284 . 0.1729 0.1281 0.1403 -0.0085 -
0.0004 -0.0386 1 .
2150 CA    CA    . ARG ARG ARG A A 284 284 . 0.1885 0.1492 0.1669 -0.0081 -
0.0005 -0.0410 1 .
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2151 CB    CB    . ARG ARG ARG A A 284 284 . 0.1772 0.1692 0.1946 -0.0018
0.0096  -0.0188 1 .
2152 CG    CG    . ARG ARG ARG A A 284 284 . 0.2277 0.2082 0.2198 -0.0214
0.0256  -0.0552 1 .
2153 CD    CD    . ARG ARG ARG A A 284 284 . 0.2716 0.1903 0.2373 -0.0251
0.0134  -0.0884 1 .
2154 NE    NE    . ARG ARG ARG A A 284 284 . 0.2447 0.1686 0.2669 -0.0405
0.0036  -0.0531 1 .
2155 CZ    CZ    . ARG ARG ARG A A 284 284 . 0.2598 0.2089 0.3095 -0.0358 -
0.0128 -0.0189 1 .
2156 NH1   NH1   . ARG ARG ARG A A 284 284 . 0.3096 0.3286 0.2617 -0.0145 -
0.0300 0.0067  1 .
2157 NH2   NH2   . ARG ARG ARG A A 284 284 . 0.2253 0.2348 0.2713 -0.0509 -
0.0248 -0.0344 1 .
2158 C     C     . ARG ARG ARG A A 284 284 . 0.1736 0.1541 0.1382 -0.0022
0.0024  -0.0355 1 .
2159 O     O     . ARG ARG ARG A A 284 284 . 0.2112 0.0979 0.1510 0.0000
0.0094  -0.0557 1 .
2160 N     N     . ASP ASP ASP A A 285 285 . 0.1629 0.1390 0.1127 -0.0005 -
0.0005 -0.0324 1 .
2161 CA    CA    . ASP ASP ASP A A 285 285 . 0.1383 0.1257 0.1219 -0.0034 -
0.0133 -0.0241 1 .
2162 CB    CB    . ASP ASP ASP A A 285 285 . 0.1236 0.1277 0.1253 0.0002  -
0.0069 -0.0055 1 .
2163 CG    CG    . ASP ASP ASP A A 285 285 . 0.1426 0.1934 0.1812 0.0173  -
0.0191 -0.0106 1 .
2164 OD1   OD1   . ASP ASP ASP A A 285 285 . 0.0800 0.2799 0.1963 0.0506  -
0.0507 0.0013  1 .
2165 OD2   OD2   . ASP ASP ASP A A 285 285 . 0.2024 0.2839 0.1227 0.0214  -
0.0022 -0.0089 1 .
2166 C     C     . ASP ASP ASP A A 285 285 . 0.1151 0.1074 0.1295 0.0026  -
0.0082 -0.0053 1 .
2167 O     O     . ASP ASP ASP A A 285 285 . 0.1407 0.1395 0.1545 -0.0057 -
0.0230 -0.0161 1 .
2168 N     N     . TYR TYR TYR A A 286 286 . 0.1053 0.1010 0.1122 0.0162  -
0.0121 -0.0130 1 .
2169 CA    CA    . TYR TYR TYR A A 286 286 . 0.1003 0.0978 0.0773 0.0118  -
0.0208 -0.0155 1 .
2170 CB    CB    . TYR TYR TYR A A 286 286 . 0.0997 0.1181 0.0409 0.0094
0.0104  -0.0129 1 .
2171 CG    CG    . TYR TYR TYR A A 286 286 . 0.1131 0.0931 0.0800 -0.0430 -
0.0203 -0.0181 1 .
2172 CD1   CD1   . TYR TYR TYR A A 286 286 . 0.1911 0.1546 0.1696 0.0236  -
0.0287 -0.0044 1 .
2173 CE1   CE1   . TYR TYR TYR A A 286 286 . 0.1948 0.1940 0.2066 -0.0304 -
0.0066 -0.0398 1 .
2174 CZ    CZ    . TYR TYR TYR A A 286 286 . 0.2207 0.1980 0.2159 -0.0073
0.0286  -0.0372 1 .
2175 OH    OH    . TYR TYR TYR A A 286 286 . 0.2818 0.2328 0.2464 -0.0797
0.0429  -0.1050 1 .
2176 CE2   CE2   . TYR TYR TYR A A 286 286 . 0.1797 0.2180 0.0763 -0.0336 -
0.0133 -0.0322 1 .
2177 CD2   CD2   . TYR TYR TYR A A 286 286 . 0.1770 0.1913 0.0965 -0.0128 -
0.0153 -0.0305 1 .
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2178 C     C     . TYR TYR TYR A A 286 286 . 0.1011 0.0897 0.0862 0.0113  -
0.0152 -0.0176 1 .
2179 O     O     . TYR TYR TYR A A 286 286 . 0.0930 0.0813 0.0931 0.0079  -
0.0508 0.0095  1 .
2180 N     N     . PRO PRO PRO A A 287 287 . 0.0845 0.0683 0.0871 0.0006  -
0.0197 -0.0301 1 .
2181 CA    CA    . PRO PRO PRO A A 287 287 . 0.0861 0.0458 0.0785 0.0142  -
0.0054 -0.0210 1 .
2182 CB    CB    . PRO PRO PRO A A 287 287 . 0.0677 0.0338 0.0730 0.0156  -
0.0163 -0.0165 1 .
2183 CG    CG    . PRO PRO PRO A A 287 287 . 0.0759 0.0792 0.0712 0.0193  -
0.0104 -0.0312 1 .
2184 CD    CD    . PRO PRO PRO A A 287 287 . 0.0766 0.0756 0.0906 -0.0123 -
0.0023 -0.0246 1 .
2185 C     C     . PRO PRO PRO A A 287 287 . 0.0584 0.0476 0.0636 -0.0159 -
0.0099 -0.0180 1 .
2186 O     O     . PRO PRO PRO A A 287 287 . 0.0491 0.0636 0.0584 -0.0120 -
0.0093 -0.0171 1 .
2187 N     N     . VAL VAL VAL A A 288 288 . 0.0549 0.0589 0.0454 -0.0071 -
0.0084 -0.0214 1 .
2188 CA    CA    . VAL VAL VAL A A 288 288 . 0.0473 0.0544 0.0408 -0.0004 -
0.0061 -0.0127 1 .
2189 CB    CB    . VAL VAL VAL A A 288 288 . 0.0461 0.0598 0.0643 -0.0077 -
0.0221 -0.0041 1 .
2190 CG1   CG1   . VAL VAL VAL A A 288 288 . 0.0660 0.0647 0.0510 -0.0176
0.0001  -0.0240 1 .
2191 CG2   CG2   . VAL VAL VAL A A 288 288 . 0.0916 0.0884 0.0691 -0.0181
0.0040  -0.0307 1 .
2192 C     C     . VAL VAL VAL A A 288 288 . 0.0422 0.0571 0.0715 -0.0071 -
0.0182 -0.0031 1 .
2193 O     O     . VAL VAL VAL A A 288 288 . 0.0691 0.0708 0.0496 -0.0077 -
0.0064 -0.0065 1 .
2194 N     N     . VAL VAL VAL A A 289 289 . 0.0643 0.0417 0.0785 -0.0088
0.0019  -0.0079 1 .
2195 CA    CA    . VAL VAL VAL A A 289 289 . 0.0811 0.0381 0.0820 -0.0165 -
0.0044 -0.0066 1 .
2196 CB    CB    . VAL VAL VAL A A 289 289 . 0.0843 0.0367 0.0801 -0.0074 -
0.0132 -0.0216 1 .
2197 CG1   CG1   . VAL VAL VAL A A 289 289 . 0.1246 0.0424 0.1251 -0.0362
0.0014  -0.0203 1 .
2198 CG2   CG2   . VAL VAL VAL A A 289 289 . 0.0928 0.0435 0.0745 -0.0314 -
0.0168 0.0205  1 .
2199 C     C     . VAL VAL VAL A A 289 289 . 0.0785 0.0371 0.0590 -0.0035 -
0.0140 -0.0177 1 .
2200 O     O     . VAL VAL VAL A A 289 289 . 0.1238 0.0748 0.0706 -0.0206 -
0.0299 -0.0257 1 .
2201 N     N     . SER SER SER A A 290 290 . 0.0845 0.0372 0.0738 -0.0068 -
0.0120 -0.0103 1 .
2202 CA    CA    . SER SER SER A A 290 290 . 0.0505 0.0402 0.0780 -0.0068 -
0.0143 -0.0202 1 .
2203 CB    CB    . SER SER SER A A 290 290 . 0.0622 0.0374 0.0680 -0.0142 -
0.0055 -0.0144 1 .
2204 OG    OG    . SER SER SER A A 290 290 . 0.0736 0.0253 0.0714 -0.0014 -
0.0471 0.0014  1 .
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2205 C     C     . SER SER SER A A 290 290 . 0.0751 0.0490 0.0478 -0.0136 -
0.0227 -0.0093 1 .
2206 O     O     . SER SER SER A A 290 290 . 0.0717 0.0581 0.0569 0.0030  -
0.0105 -0.0085 1 .
2207 N     N     . ILE ILE ILE A A 291 291 . 0.0744 0.0440 0.0632 0.0116  -
0.0137 -0.0197 1 .
2208 CA    CA    . ILE ILE ILE A A 291 291 . 0.0701 0.0316 0.0646 -0.0010 -
0.0171 -0.0021 1 .
2209 CB    CB    . ILE ILE ILE A A 291 291 . 0.0733 0.0545 0.0916 -0.0108 -
0.0272 0.0031  1 .
2210 CG1   CG1   . ILE ILE ILE A A 291 291 . 0.0814 0.0707 0.1358 0.0188  -
0.0559 -0.0110 1 .
2211 CD1   CD1   . ILE ILE ILE A A 291 291 . 0.1072 0.1049 0.1645 0.0026  -
0.1017 -0.0350 1 .
2212 CG2   CG2   . ILE ILE ILE A A 291 291 . 0.0839 0.0580 0.1095 -0.0081 -
0.0536 -0.0039 1 .
2213 C     C     . ILE ILE ILE A A 291 291 . 0.0751 0.0556 0.0622 0.0057  -
0.0161 -0.0131 1 .
2214 O     O     . ILE ILE ILE A A 291 291 . 0.0786 0.0350 0.0743 0.0189  -
0.0165 -0.0172 1 .
2215 N     N     . GLU GLU GLU A A 292 292 . 0.0555 0.0450 0.0390 0.0173
0.0029  0.0131  1 .
2216 CA    CA    . GLU GLU GLU A A 292 292 . 0.0537 0.0484 0.0391 -0.0021 -
0.0167 -0.0082 1 .
2217 CB    CB    . GLU GLU GLU A A 292 292 . 0.0370 0.0277 0.0268 0.0053  -
0.0042 -0.0019 1 .
2218 CG    CG    . GLU GLU GLU A A 292 292 . 0.0575 0.0545 0.0613 0.0208  -
0.0322 -0.0130 1 .
2219 CD    CD    . GLU GLU GLU A A 292 292 . 0.0742 0.0740 0.0635 0.0068  -
0.0233 0.0011  1 .
2220 OE1   OE1   . GLU GLU GLU A A 292 292 . 0.0570 0.0524 0.0599 0.0027
0.0000  -0.0304 1 .
2221 OE2   OE2   . GLU GLU GLU A A 292 292 . 0.0494 0.0476 0.0964 0.0116
0.0046  -0.0061 1 .
2222 C     C     . GLU GLU GLU A A 292 292 . 0.0569 0.0745 0.0547 -0.0046 -
0.0037 -0.0034 1 .
2223 O     O     . GLU GLU GLU A A 292 292 . 0.0756 0.0520 0.0765 -0.0149 -
0.0165 0.0159  1 .
2224 N     N     . ASP ASP ASP A A 293 293 . 0.0563 0.0637 0.0535 0.0040  -
0.0201 -0.0102 1 .
2225 CA    CA    . ASP ASP ASP A A 293 293 . 0.0789 0.0804 0.0628 0.0039  -
0.0070 -0.0086 1 .
2226 CB    CB    . ASP ASP ASP A A 293 293 . 0.0864 0.0765 0.0575 0.0014  -
0.0127 -0.0018 1 .
2227 CG    CG    . ASP ASP ASP A A 293 293 . 0.1161 0.0795 0.0596 -0.0040 -
0.0103 -0.0158 1 .
2228 OD1   OD1   . ASP ASP ASP A A 293 293 . 0.1290 0.0907 0.0838 -0.0198 -
0.0018 0.0101  1 .
2229 OD2   OD2   . ASP ASP ASP A A 293 293 . 0.0450 0.0268 0.0332 0.0054  -
0.0124 -0.0034 1 .
2230 C     C     . ASP ASP ASP A A 293 293 . 0.0764 0.0472 0.0758 0.0112  -
0.0080 0.0045  1 .
2231 O     O     . ASP ASP ASP A A 293 293 . 0.0906 0.0543 0.0580 0.0208
0.0101  -0.0179 1 .
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2232 N     N     . PRO PRO PRO A A 294 294 . 0.0641 0.0400 0.0550 0.0155  -
0.0076 -0.0085 1 .
2233 CA    CA    . PRO PRO PRO A A 294 294 . 0.0470 0.0654 0.0691 0.0079
0.0049  -0.0085 1 .
2234 CB    CB    . PRO PRO PRO A A 294 294 . 0.0393 0.0324 0.0621 -0.0022
0.0112  -0.0154 1 .
2235 CG    CG    . PRO PRO PRO A A 294 294 . 0.0699 0.0842 0.0719 0.0040  -
0.0038 -0.0040 1 .
2236 CD    CD    . PRO PRO PRO A A 294 294 . 0.0482 0.0857 0.0571 0.0368  -
0.0095 -0.0092 1 .
2237 C     C     . PRO PRO PRO A A 294 294 . 0.0598 0.0498 0.0696 0.0060  -
0.0023 -0.0185 1 .
2238 O     O     . PRO PRO PRO A A 294 294 . 0.0807 0.0544 0.0879 -0.0031
0.0104  -0.0015 1 .
2239 N     N     . PHE PHE PHE A A 295 295 . 0.0456 0.0516 0.0637 0.0165  -
0.0098 -0.0031 1 .
2240 CA    CA    . PHE PHE PHE A A 295 295 . 0.0761 0.0701 0.0755 0.0215  -
0.0225 -0.0230 1 .
2241 CB    CB    . PHE PHE PHE A A 295 295 . 0.0773 0.0798 0.0876 0.0003  -
0.0072 -0.0114 1 .
2242 CG    CG    . PHE PHE PHE A A 295 295 . 0.1150 0.1143 0.0862 0.0142  -
0.0197 -0.0087 1 .
2243 CD1   CD1   . PHE PHE PHE A A 295 295 . 0.0843 0.0682 0.0429 0.0078  -
0.0322 -0.0044 1 .
2244 CE1   CE1   . PHE PHE PHE A A 295 295 . 0.1116 0.1388 0.0879 0.0127  -
0.0091 -0.0309 1 .
2245 CZ    CZ    . PHE PHE PHE A A 295 295 . 0.1402 0.0940 0.1266 0.0508
0.0017  -0.0464 1 .
2246 CE2   CE2   . PHE PHE PHE A A 295 295 . 0.1736 0.1261 0.1495 -0.0067 -
0.0459 -0.0805 1 .
2247 CD2   CD2   . PHE PHE PHE A A 295 295 . 0.1432 0.1100 0.0793 -0.0120 -
0.0385 -0.0532 1 .
2248 C     C     . PHE PHE PHE A A 295 295 . 0.0624 0.0519 0.0857 0.0094  -
0.0087 -0.0095 1 .
2249 O     O     . PHE PHE PHE A A 295 295 . 0.0933 0.0718 0.0742 0.0138  -
0.0245 -0.0160 1 .
2250 N     N     . ASP ASP ASP A A 296 296 . 0.1353 0.0765 0.1083 0.0214  -
0.0054 -0.0193 1 .
2251 CA    CA    . ASP ASP ASP A A 296 296 . 0.1119 0.0677 0.1081 0.0226
0.0050  -0.0079 1 .
2252 CB    CB    . ASP ASP ASP A A 296 296 . 0.1252 0.0959 0.1201 0.0269  -
0.0044 -0.0132 1 .
2253 CG    CG    . ASP ASP ASP A A 296 296 . 0.0421 0.0488 0.0931 -0.0143 -
0.0144 -0.0059 1 .
2254 OD1   OD1   . ASP ASP ASP A A 296 296 . 0.1621 0.1117 0.1770 -0.0152 -
0.0471 -0.0358 1 .
2255 OD2   OD2   . ASP ASP ASP A A 296 296 . 0.1525 0.0957 0.1660 -0.0371 -
0.0035 0.0116  1 .
2256 C     C     . ASP ASP ASP A A 296 296 . 0.1148 0.0932 0.1103 0.0134  -
0.0019 -0.0127 1 .
2257 O     O     . ASP ASP ASP A A 296 296 . 0.1216 0.0779 0.1147 0.0245  -
0.0133 0.0047  1 .
2258 N     N     . GLN GLN GLN A A 297 297 . 0.0881 0.0612 0.1000 0.0091  -
0.0074 -0.0182 1 .
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2259 CA    CA    . GLN GLN GLN A A 297 297 . 0.1055 0.0935 0.0820 -0.0063 -
0.0152 -0.0075 1 .
2260 CB    CB    . GLN GLN GLN A A 297 297 . 0.0752 0.0794 0.0472 -0.0028
0.0094  -0.0289 1 .
2261 CG    CG    . GLN GLN GLN A A 297 297 . 0.0470 0.0869 0.0371 -0.0011
0.0107  -0.0204 1 .
2262 CD    CD    . GLN GLN GLN A A 297 297 . 0.0253 0.0275 0.0307 0.0000
0.0000  0.0034  1 .
2263 OE1   OE1   . GLN GLN GLN A A 297 297 . 0.1038 0.0803 0.0995 -0.0009 -
0.0236 -0.0015 1 .
2264 NE2   NE2   . GLN GLN GLN A A 297 297 . 0.0502 0.0897 0.0913 0.0387
0.0243  0.0244  1 .
2265 C     C     . GLN GLN GLN A A 297 297 . 0.1000 0.0884 0.0831 -0.0062 -
0.0211 -0.0157 1 .
2266 O     O     . GLN GLN GLN A A 297 297 . 0.1450 0.1343 0.1253 -0.0149 -
0.0337 0.0020  1 .
2267 N     N     . ASP ASP ASP A A 298 298 . 0.1458 0.1184 0.1181 0.0143  -
0.0391 -0.0137 1 .
2268 CA    CA    . ASP ASP ASP A A 298 298 . 0.1666 0.1263 0.1338 0.0191  -
0.0233 0.0008  1 .
2269 CB    CB    . ASP ASP ASP A A 298 298 . 0.2042 0.1499 0.1485 0.0216  -
0.0226 -0.0171 1 .
2270 CG    CG    . ASP ASP ASP A A 298 298 . 0.1812 0.1826 0.1973 0.0163  -
0.0317 0.0020  1 .
2271 OD1   OD1   . ASP ASP ASP A A 298 298 . 0.2606 0.1289 0.2803 -0.0055 -
0.0902 0.0570  1 .
2272 OD2   OD2   . ASP ASP ASP A A 298 298 . 0.2954 0.2753 0.2525 0.0328  -
0.0546 0.0080  1 .
2273 C     C     . ASP ASP ASP A A 298 298 . 0.1728 0.1437 0.1350 0.0213  -
0.0209 0.0017  1 .
2274 O     O     . ASP ASP ASP A A 298 298 . 0.1582 0.1083 0.0863 0.0353  -
0.0501 -0.0002 1 .
2275 N     N     . ASP ASP ASP A A 299 299 . 0.1546 0.1457 0.1306 0.0100  -
0.0209 -0.0091 1 .
2276 CA    CA    . ASP ASP ASP A A 299 299 . 0.1748 0.1414 0.1546 0.0079  -
0.0089 -0.0070 1 .
2277 CB    CB    . ASP ASP ASP A A 299 299 . 0.1653 0.1389 0.1403 0.0062  -
0.0055 -0.0133 1 .
2278 CG    CG    . ASP ASP ASP A A 299 299 . 0.1699 0.1714 0.1749 -0.0150
0.0100  0.0014  1 .
2279 OD1   OD1   . ASP ASP ASP A A 299 299 . 0.2001 0.1719 0.2274 0.0273  -
0.0426 -0.0062 1 .
2280 OD2   OD2   . ASP ASP ASP A A 299 299 . 0.1824 0.1106 0.0953 0.0212  -
0.0860 -0.0135 1 .
2281 C     C     . ASP ASP ASP A A 299 299 . 0.1620 0.1464 0.1564 0.0208  -
0.0015 -0.0071 1 .
2282 O     O     . ASP ASP ASP A A 299 299 . 0.1792 0.1268 0.1838 0.0322  -
0.0092 -0.0047 1 .
2283 N     N     . TRP TRP TRP A A 300 300 . 0.1641 0.1396 0.1815 0.0328  -
0.0146 0.0090  1 .
2284 CA    CA    . TRP TRP TRP A A 300 300 . 0.1858 0.1566 0.1796 0.0259  -
0.0197 0.0019  1 .
2285 CB    CB    . TRP TRP TRP A A 300 300 . 0.1745 0.1580 0.1993 0.0340  -
0.0189 -0.0010 1 .
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2286 CG    CG    . TRP TRP TRP A A 300 300 . 0.1900 0.1396 0.1687 0.0160  -
0.0109 -0.0322 1 .
2287 CD1   CD1   . TRP TRP TRP A A 300 300 . 0.1776 0.1581 0.1496 0.0437  -
0.0255 -0.0116 1 .
2288 NE1   NE1   . TRP TRP TRP A A 300 300 . 0.1854 0.1405 0.1742 0.0060  -
0.0059 -0.0151 1 .
2289 CE2   CE2   . TRP TRP TRP A A 300 300 . 0.1630 0.1200 0.1272 -0.0014 -
0.0197 0.0080  1 .
2290 CD2   CD2   . TRP TRP TRP A A 300 300 . 0.1699 0.1645 0.1220 0.0275  -
0.0140 -0.0323 1 .
2291 CE3   CE3   . TRP TRP TRP A A 300 300 . 0.1896 0.1526 0.1859 0.0562
0.0031  -0.0438 1 .
2292 CZ3   CZ3   . TRP TRP TRP A A 300 300 . 0.1736 0.1493 0.1507 0.0229  -
0.0067 -0.0122 1 .
2293 CH2   CH2   . TRP TRP TRP A A 300 300 . 0.1314 0.1494 0.1788 -0.0240
0.0121  0.0093  1 .
2294 CZ2   CZ2   . TRP TRP TRP A A 300 300 . 0.1925 0.0877 0.1157 -0.0180
0.0073  0.0128  1 .
2295 C     C     . TRP TRP TRP A A 300 300 . 0.1975 0.1698 0.1990 0.0271  -
0.0166 0.0074  1 .
2296 O     O     . TRP TRP TRP A A 300 300 . 0.2274 0.1820 0.1849 0.0521  -
0.0452 0.0008  1 .
2297 N     N     . ALA ALA ALA A A 301 301 . 0.1948 0.1689 0.1965 0.0238  -
0.0254 -0.0018 1 .
2298 CA    CA    . ALA ALA ALA A A 301 301 . 0.2063 0.1847 0.2053 0.0172  -
0.0169 -0.0034 1 .
2299 CB    CB    . ALA ALA ALA A A 301 301 . 0.2059 0.1812 0.2180 0.0292  -
0.0269 -0.0055 1 .
2300 C     C     . ALA ALA ALA A A 301 301 . 0.1903 0.1726 0.1796 0.0318  -
0.0174 0.0030  1 .
2301 O     O     . ALA ALA ALA A A 301 301 . 0.2012 0.1641 0.1531 0.0489  -
0.0111 0.0114  1 .
2302 N     N     . ALA ALA ALA A A 302 302 . 0.1671 0.1622 0.1605 0.0189  -
0.0100 0.0011  1 .
2303 CA    CA    . ALA ALA ALA A A 302 302 . 0.1639 0.1570 0.1466 0.0240  -
0.0128 -0.0096 1 .
2304 CB    CB    . ALA ALA ALA A A 302 302 . 0.1736 0.1467 0.1577 0.0106  -
0.0087 0.0035  1 .
2305 C     C     . ALA ALA ALA A A 302 302 . 0.1595 0.1555 0.1468 0.0236  -
0.0376 0.0000  1 .
2306 O     O     . ALA ALA ALA A A 302 302 . 0.1104 0.1554 0.1212 0.0552  -
0.0617 -0.0226 1 .
2307 N     N     . TRP TRP TRP A A 303 303 . 0.1409 0.1544 0.1460 0.0214  -
0.0231 0.0007  1 .
2308 CA    CA    . TRP TRP TRP A A 303 303 . 0.1323 0.1367 0.1452 0.0263  -
0.0281 -0.0067 1 .
2309 CB    CB    . TRP TRP TRP A A 303 303 . 0.1443 0.1350 0.1392 0.0354  -
0.0423 -0.0278 1 .
2310 CG    CG    . TRP TRP TRP A A 303 303 . 0.1237 0.1298 0.1260 0.0367  -
0.0201 -0.0178 1 .
2311 CD1   CD1   . TRP TRP TRP A A 303 303 . 0.1230 0.1236 0.1426 0.0298  -
0.0204 -0.0273 1 .
2312 NE1   NE1   . TRP TRP TRP A A 303 303 . 0.1281 0.1132 0.1189 0.0296  -
0.0183 -0.0010 1 .
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2313 CE2   CE2   . TRP TRP TRP A A 303 303 . 0.0831 0.0864 0.0651 0.0120  -
0.0039 -0.0321 1 .
2314 CD2   CD2   . TRP TRP TRP A A 303 303 . 0.1090 0.1406 0.0890 0.0357  -
0.0338 -0.0290 1 .
2315 CE3   CE3   . TRP TRP TRP A A 303 303 . 0.1130 0.0615 0.1152 0.0563  -
0.0286 -0.0176 1 .
2316 CZ3   CZ3   . TRP TRP TRP A A 303 303 . 0.1385 0.0978 0.1144 0.0199  -
0.0331 0.0002  1 .
2317 CH2   CH2   . TRP TRP TRP A A 303 303 . 0.0598 0.0483 0.0731 0.0240
0.0301  0.0093  1 .
2318 CZ2   CZ2   . TRP TRP TRP A A 303 303 . 0.0861 0.0414 0.1080 0.0312  -
0.0057 -0.0046 1 .
2319 C     C     . TRP TRP TRP A A 303 303 . 0.1582 0.1463 0.1479 0.0179  -
0.0226 -0.0027 1 .
2320 O     O     . TRP TRP TRP A A 303 303 . 0.1440 0.1482 0.1416 0.0485  -
0.0441 -0.0098 1 .
2321 N     N     . SER SER SER A A 304 304 . 0.1677 0.1438 0.1638 0.0213  -
0.0364 0.0014  1 .
2322 CA    CA    . SER SER SER A A 304 304 . 0.1867 0.1456 0.1710 0.0033  -
0.0204 0.0101  1 .
2323 CB    CB    . SER SER SER A A 304 304 . 0.2197 0.1510 0.1885 -0.0007 -
0.0281 0.0199  1 .
2324 OG    OG    . SER SER SER A A 304 304 . 0.2648 0.1774 0.1695 -0.0159 -
0.0355 0.0381  1 .
2325 C     C     . SER SER SER A A 304 304 . 0.1837 0.1615 0.1793 0.0025  -
0.0246 0.0000  1 .
2326 O     O     . SER SER SER A A 304 304 . 0.1950 0.1803 0.1962 -0.0134 -
0.0417 -0.0254 1 .
2327 N     N     . LYS LYS LYS A A 305 305 . 0.1891 0.1707 0.1983 0.0145  -
0.0255 -0.0021 1 .
2328 CA    CA    . LYS LYS LYS A A 305 305 . 0.2085 0.1780 0.2018 0.0115  -
0.0128 -0.0157 1 .
2329 CB    CB    . LYS LYS LYS A A 305 305 . 0.2039 0.1591 0.2056 0.0208  -
0.0057 -0.0185 1 .
2330 CG    CG    . LYS LYS LYS A A 305 305 . 0.1965 0.2134 0.2012 0.0054
0.0315  -0.0113 1 .
2331 CD    CD    . LYS LYS LYS A A 305 305 . 0.2335 0.2396 0.2484 0.0208
0.0460  0.0318  1 .
2332 CE    CE    . LYS LYS LYS A A 305 305 . 0.2732 0.2757 0.2732 0.0283
0.0006  0.0497  1 .
2333 NZ    NZ    . LYS LYS LYS A A 305 305 . 0.2642 0.2373 0.2887 -0.0053
0.0160  0.1011  1 .
2334 C     C     . LYS LYS LYS A A 305 305 . 0.2124 0.1787 0.1936 0.0106  -
0.0155 -0.0174 1 .
2335 O     O     . LYS LYS LYS A A 305 305 . 0.2306 0.2127 0.2139 0.0022  -
0.0283 -0.0425 1 .
2336 N     N     . PHE PHE PHE A A 306 306 . 0.1897 0.1582 0.1858 -0.0017 -
0.0308 -0.0200 1 .
2337 CA    CA    . PHE PHE PHE A A 306 306 . 0.1759 0.1629 0.1462 0.0010  -
0.0262 -0.0079 1 .
2338 CB    CB    . PHE PHE PHE A A 306 306 . 0.1853 0.1512 0.1535 -0.0087 -
0.0282 -0.0104 1 .
2339 CG    CG    . PHE PHE PHE A A 306 306 . 0.1501 0.1476 0.1224 -0.0064 -
0.0497 0.0052  1 .
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2340 CD1   CD1   . PHE PHE PHE A A 306 306 . 0.1490 0.1521 0.1388 -0.0363 -
0.0230 0.0337  1 .
2341 CE1   CE1   . PHE PHE PHE A A 306 306 . 0.1471 0.1836 0.1201 -0.0178 -
0.0076 0.0455  1 .
2342 CZ    CZ    . PHE PHE PHE A A 306 306 . 0.1324 0.1314 0.1347 -0.0366 -
0.0094 0.0336  1 .
2343 CE2   CE2   . PHE PHE PHE A A 306 306 . 0.1167 0.1106 0.2182 -0.0093 -
0.0350 0.0576  1 .
2344 CD2   CD2   . PHE PHE PHE A A 306 306 . 0.0829 0.0828 0.1435 0.0196  -
0.0401 0.0539  1 .
2345 C     C     . PHE PHE PHE A A 306 306 . 0.1802 0.1498 0.1306 -0.0026 -
0.0158 -0.0145 1 .
2346 O     O     . PHE PHE PHE A A 306 306 . 0.2071 0.1568 0.1202 0.0055  -
0.0088 -0.0292 1 .
2347 N     N     . THR THR THR A A 307 307 . 0.1741 0.1585 0.1308 0.0038  -
0.0065 -0.0092 1 .
2348 CA    CA    . THR THR THR A A 307 307 . 0.1450 0.1342 0.1274 0.0059  -
0.0044 -0.0034 1 .
2349 CB    CB    . THR THR THR A A 307 307 . 0.1449 0.1399 0.1261 0.0146  -
0.0048 -0.0112 1 .
2350 OG1   OG1   . THR THR THR A A 307 307 . 0.1613 0.1385 0.1042 0.0231  -
0.0466 -0.0003 1 .
2351 CG2   CG2   . THR THR THR A A 307 307 . 0.1445 0.1317 0.1319 0.0131
0.0085  0.0042  1 .
2352 C     C     . THR THR THR A A 307 307 . 0.1466 0.1454 0.1249 0.0074  -
0.0115 -0.0057 1 .
2353 O     O     . THR THR THR A A 307 307 . 0.1159 0.1735 0.0744 0.0004  -
0.0164 -0.0037 1 .
2354 N     N     . ALA ALA ALA A A 308 308 . 0.1209 0.1604 0.1399 0.0132  -
0.0010 -0.0121 1 .
2355 CA    CA    . ALA ALA ALA A A 308 308 . 0.1419 0.1513 0.1437 0.0146  -
0.0031 -0.0129 1 .
2356 CB    CB    . ALA ALA ALA A A 308 308 . 0.1341 0.1417 0.1730 0.0076  -
0.0024 -0.0044 1 .
2357 C     C     . ALA ALA ALA A A 308 308 . 0.1516 0.1607 0.1599 0.0061  -
0.0036 -0.0110 1 .
2358 O     O     . ALA ALA ALA A A 308 308 . 0.1847 0.1668 0.1385 0.0107  -
0.0014 -0.0187 1 .
2359 N     N     . ASN ASN ASN A A 309 309 . 0.1815 0.1808 0.1696 0.0053  -
0.0098 -0.0047 1 .
2360 CA    CA    . ASN ASN ASN A A 309 309 . 0.1857 0.1836 0.1875 0.0000  -
0.0153 -0.0061 1 .
2361 CB    CB    . ASN ASN ASN A A 309 309 . 0.2057 0.2054 0.1877 0.0056  -
0.0020 -0.0014 1 .
2362 CG    CG    . ASN ASN ASN A A 309 309 . 0.2308 0.2889 0.2436 -0.0013 -
0.0135 0.0107  1 .
2363 OD1   OD1   . ASN ASN ASN A A 309 309 . 0.2942 0.4033 0.2977 0.0412  -
0.0168 0.0691  1 .
2364 ND2   ND2   . ASN ASN ASN A A 309 309 . 0.3402 0.3247 0.2385 -0.0336
0.0143  -0.0043 1 .
2365 C     C     . ASN ASN ASN A A 309 309 . 0.1887 0.1751 0.1770 -0.0033 -
0.0106 -0.0038 1 .
2366 O     O     . ASN ASN ASN A A 309 309 . 0.2333 0.1957 0.2202 -0.0041 -
0.0197 0.0059  1 .
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2367 N     N     . VAL VAL VAL A A 310 310 . 0.1816 0.1628 0.1544 0.0037  -
0.0224 -0.0130 1 .
2368 CA    CA    . VAL VAL VAL A A 310 310 . 0.1689 0.1459 0.1224 -0.0012 -
0.0319 -0.0061 1 .
2369 CB    CB    . VAL VAL VAL A A 310 310 . 0.1541 0.1641 0.1206 -0.0096 -
0.0253 0.0009  1 .
2370 CG1   CG1   . VAL VAL VAL A A 310 310 . 0.1843 0.1519 0.1812 -0.0194 -
0.0030 0.0279  1 .
2371 CG2   CG2   . VAL VAL VAL A A 310 310 . 0.1744 0.1001 0.0890 0.0165  -
0.0348 0.0036  1 .
2372 C     C     . VAL VAL VAL A A 310 310 . 0.1778 0.1543 0.1086 -0.0044 -
0.0324 -0.0233 1 .
2373 O     O     . VAL VAL VAL A A 310 310 . 0.2066 0.1953 0.1365 -0.0079 -
0.0332 -0.0028 1 .
2374 N     N     . GLY GLY GLY A A 311 311 . 0.1613 0.1582 0.1242 -0.0039 -
0.0424 -0.0114 1 .
2375 CA    CA    . GLY GLY GLY A A 311 311 . 0.1434 0.1525 0.1060 0.0020  -
0.0387 -0.0089 1 .
2376 C     C     . GLY GLY GLY A A 311 311 . 0.1215 0.1253 0.1161 -0.0013 -
0.0301 -0.0039 1 .
2377 O     O     . GLY GLY GLY A A 311 311 . 0.1037 0.1885 0.1095 -0.0086 -
0.0264 -0.0040 1 .
2378 N     N     . ILE ILE ILE A A 312 312 . 0.0915 0.0921 0.1156 -0.0045 -
0.0222 -0.0113 1 .
2379 CA    CA    . ILE ILE ILE A A 312 312 . 0.1003 0.0715 0.0947 -0.0094 -
0.0212 -0.0128 1 .
2380 CB    CB    . ILE ILE ILE A A 312 312 . 0.1054 0.1016 0.0914 0.0014  -
0.0158 -0.0235 1 .
2381 CG1   CG1   . ILE ILE ILE A A 312 312 . 0.0800 0.1125 0.1147 -0.0134 -
0.0339 -0.0108 1 .
2382 CD1   CD1   . ILE ILE ILE A A 312 312 . 0.0972 0.1705 0.1166 -0.0582 -
0.0046 0.0263  1 .
2383 CG2   CG2   . ILE ILE ILE A A 312 312 . 0.1030 0.0655 0.0793 -0.0404 -
0.0014 0.0000  1 .
2384 C     C     . ILE ILE ILE A A 312 312 . 0.0866 0.0795 0.0855 -0.0118 -
0.0069 0.0007  1 .
2385 O     O     . ILE ILE ILE A A 312 312 . 0.1154 0.0673 0.0669 0.0084  -
0.0253 -0.0254 1 .
2386 N     N     . GLN GLN GLN A A 313 313 . 0.0817 0.0577 0.0504 -0.0190
0.0074  -0.0275 1 .
2387 CA    CA    . GLN GLN GLN A A 313 313 . 0.0597 0.0697 0.0656 -0.0104 -
0.0036 -0.0123 1 .
2388 CB    CB    . GLN GLN GLN A A 313 313 . 0.0391 0.0693 0.0500 -0.0139 -
0.0105 -0.0117 1 .
2389 CG    CG    . GLN GLN GLN A A 313 313 . 0.0672 0.0337 0.0450 -0.0096
0.0057  -0.0121 1 .
2390 CD    CD    . GLN GLN GLN A A 313 313 . 0.0455 0.0274 0.0345 0.0065
0.0136  0.0044  1 .
2391 OE1   OE1   . GLN GLN GLN A A 313 313 . 0.0710 0.0557 0.0572 -0.0194
0.0178  -0.0311 1 .
2392 NE2   NE2   . GLN GLN GLN A A 313 313 . 0.0727 0.0415 0.0559 0.0267  -
0.0001 -0.0011 1 .
2393 C     C     . GLN GLN GLN A A 313 313 . 0.0848 0.0672 0.0489 -0.0207 -
0.0001 -0.0204 1 .
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2394 O     O     . GLN GLN GLN A A 313 313 . 0.0677 0.0806 0.0399 -0.0228 -
0.0063 -0.0143 1 .
2395 N     N     . ILE ILE ILE A A 314 314 . 0.0482 0.0604 0.0310 0.0207  -
0.0088 -0.0141 1 .
2396 CA    CA    . ILE ILE ILE A A 314 314 . 0.0472 0.0510 0.0336 0.0107  -
0.0133 -0.0050 1 .
2397 CB    CB    . ILE ILE ILE A A 314 314 . 0.0329 0.0429 0.0369 0.0115  -
0.0011 -0.0008 1 .
2398 CG1   CG1   . ILE ILE ILE A A 314 314 . 0.0934 0.0415 0.0512 0.0161
0.0078  -0.0065 1 .
2399 CD1   CD1   . ILE ILE ILE A A 314 314 . 0.1034 0.0629 0.0814 -0.0184
0.0104  -0.0451 1 .
2400 CG2   CG2   . ILE ILE ILE A A 314 314 . 0.0610 0.0784 0.0591 0.0059  -
0.0025 -0.0423 1 .
2401 C     C     . ILE ILE ILE A A 314 314 . 0.0295 0.0403 0.0476 0.0019  -
0.0093 0.0009  1 .
2402 O     O     . ILE ILE ILE A A 314 314 . 0.0712 0.0656 0.0410 -0.0301 -
0.0228 0.0055  1 .
2403 N     N     . VAL VAL VAL A A 315 315 . 0.0259 0.0429 0.0501 0.0033  -
0.0028 -0.0126 1 .
2404 CA    CA    . VAL VAL VAL A A 315 315 . 0.0562 0.0412 0.0778 0.0046  -
0.0190 -0.0111 1 .
2405 CB    CB    . VAL VAL VAL A A 315 315 . 0.0633 0.0303 0.0547 0.0119  -
0.0265 -0.0045 1 .
2406 CG1   CG1   . VAL VAL VAL A A 315 315 . 0.0412 0.0403 0.0478 0.0011  -
0.0168 0.0071  1 .
2407 CG2   CG2   . VAL VAL VAL A A 315 315 . 0.0375 0.0305 0.0435 0.0079  -
0.0149 -0.0097 1 .
2408 C     C     . VAL VAL VAL A A 315 315 . 0.0467 0.0462 0.0421 0.0009  -
0.0091 -0.0168 1 .
2409 O     O     . VAL VAL VAL A A 315 315 . 0.0444 0.0604 0.0565 -0.0084
0.0052  -0.0171 1 .
2410 N     N     . GLY GLY GLY A A 316 316 . 0.0258 0.0306 0.0254 0.0015  -
0.0002 -0.0008 1 .
2411 CA    CA    . GLY GLY GLY A A 316 316 . 0.0560 0.0421 0.0411 0.0166  -
0.0215 -0.0092 1 .
2412 C     C     . GLY GLY GLY A A 316 316 . 0.0369 0.0297 0.0347 0.0061  -
0.0102 -0.0048 1 .
2413 O     O     . GLY GLY GLY A A 316 316 . 0.0599 0.0381 0.0520 0.0088  -
0.0211 -0.0032 1 .
2414 N     N     . ASP ASP ASP A A 317 317 . 0.0540 0.0292 0.0390 0.0106  -
0.0198 -0.0073 1 .
2415 CA    CA    . ASP ASP ASP A A 317 317 . 0.0433 0.0302 0.0411 -0.0004 -
0.0160 0.0029  1 .
2416 CB    CB    . ASP ASP ASP A A 317 317 . 0.0609 0.0333 0.0261 -0.0169 -
0.0054 0.0025  1 .
2417 CG    CG    . ASP ASP ASP A A 317 317 . 0.0543 0.0593 0.0447 -0.0314 -
0.0237 0.0256  1 .
2418 OD1   OD1   . ASP ASP ASP A A 317 317 . 0.0359 0.0270 0.0349 -0.0032
0.0014  0.0021  1 .
2419 OD2   OD2   . ASP ASP ASP A A 317 317 . 0.0285 0.0335 0.0264 0.0028
0.0004  0.0028  1 .
2420 C     C     . ASP ASP ASP A A 317 317 . 0.0467 0.0472 0.0504 -0.0083 -
0.0227 0.0047  1 .
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2421 O     O     . ASP ASP ASP A A 317 317 . 0.0603 0.0454 0.0770 0.0056  -
0.0021 0.0311  1 .
2422 N     N     . ASP ASP ASP A A 318 318 . 0.0529 0.0484 0.0353 0.0211  -
0.0099 -0.0009 1 .
2423 CA    CA    . ASP ASP ASP A A 318 318 . 0.0520 0.0294 0.0358 0.0066  -
0.0003 -0.0051 1 .
2424 CB    CB    . ASP ASP ASP A A 318 318 . 0.0364 0.0258 0.0405 0.0023  -
0.0130 -0.0027 1 .
2425 CG    CG    . ASP ASP ASP A A 318 318 . 0.0826 0.0368 0.0610 0.0132
0.0122  -0.0138 1 .
2426 OD1   OD1   . ASP ASP ASP A A 318 318 . 0.0568 0.0424 0.0729 0.0172  -
0.0109 0.0123  1 .
2427 OD2   OD2   . ASP ASP ASP A A 318 318 . 0.0884 0.0566 0.0672 0.0243
0.0072  0.0086  1 .
2428 C     C     . ASP ASP ASP A A 318 318 . 0.0634 0.0380 0.0352 0.0029  -
0.0057 -0.0037 1 .
2429 O     O     . ASP ASP ASP A A 318 318 . 0.0774 0.0286 0.0617 -0.0005 -
0.0013 -0.0006 1 .
2430 N     N     . LEU LEU LEU A A 319 319 . 0.0646 0.0576 0.0584 -0.0217 -
0.0149 -0.0032 1 .
2431 CA    CA    . LEU LEU LEU A A 319 319 . 0.0943 0.0667 0.0560 -0.0120 -
0.0174 -0.0091 1 .
2432 CB    CB    . LEU LEU LEU A A 319 319 . 0.0865 0.0703 0.0493 -0.0022 -
0.0124 -0.0107 1 .
2433 CG    CG    . LEU LEU LEU A A 319 319 . 0.0850 0.0538 0.0810 0.0179  -
0.0436 -0.0196 1 .
2434 CD1   CD1   . LEU LEU LEU A A 319 319 . 0.0636 0.0290 0.0894 -0.0051
0.0390  -0.0111 1 .
2435 CD2   CD2   . LEU LEU LEU A A 319 319 . 0.0737 0.0811 0.0698 0.0158  -
0.0143 -0.0146 1 .
2436 C     C     . LEU LEU LEU A A 319 319 . 0.0605 0.0350 0.0619 -0.0074 -
0.0132 -0.0132 1 .
2437 O     O     . LEU LEU LEU A A 319 319 . 0.0894 0.0805 0.0517 -0.0022 -
0.0166 -0.0075 1 .
2438 N     N     . THR THR THR A A 320 320 . 0.0710 0.0727 0.0599 0.0014  -
0.0122 -0.0100 1 .
2439 CA    CA    . THR THR THR A A 320 320 . 0.0431 0.0522 0.0383 0.0087  -
0.0119 -0.0065 1 .
2440 CB    CB    . THR THR THR A A 320 320 . 0.0444 0.0436 0.0381 0.0140  -
0.0155 -0.0103 1 .
2441 OG1   OG1   . THR THR THR A A 320 320 . 0.0705 0.0341 0.1084 0.0088  -
0.0208 0.0118  1 .
2442 CG2   CG2   . THR THR THR A A 320 320 . 0.0724 0.0442 0.0457 0.0195  -
0.0144 0.0072  1 .
2443 C     C     . THR THR THR A A 320 320 . 0.0513 0.0461 0.0327 -0.0084 -
0.0138 0.0035  1 .
2444 O     O     . THR THR THR A A 320 320 . 0.0399 0.0305 0.0362 -0.0063 -
0.0123 0.0064  1 .
2445 N     N     . VAL VAL VAL A A 321 321 . 0.0305 0.0344 0.0299 0.0059  -
0.0031 -0.0009 1 .
2446 CA    CA    . VAL VAL VAL A A 321 321 . 0.0437 0.0402 0.0302 0.0078  -
0.0067 0.0024  1 .
2447 CB    CB    . VAL VAL VAL A A 321 321 . 0.0529 0.0258 0.0263 0.0037  -
0.0037 -0.0004 1 .
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2448 CG1   CG1   . VAL VAL VAL A A 321 321 . 0.0555 0.0356 0.0261 0.0111  -
0.0031 -0.0029 1 .
2449 CG2   CG2   . VAL VAL VAL A A 321 321 . 0.0734 0.0390 0.0673 0.0217  -
0.0211 0.0017  1 .
2450 C     C     . VAL VAL VAL A A 321 321 . 0.0387 0.0297 0.0282 -0.0015 -
0.0019 0.0036  1 .
2451 O     O     . VAL VAL VAL A A 321 321 . 0.0298 0.0253 0.0412 0.0004
0.0085  0.0009  1 .
2452 N     N     . THR THR THR A A 322 322 . 0.0291 0.0265 0.0396 -0.0020
0.0069  -0.0034 1 .
2453 CA    CA    . THR THR THR A A 322 322 . 0.0310 0.0295 0.0280 0.0002  -
0.0034 0.0014  1 .
2454 CB    CB    . THR THR THR A A 322 322 . 0.0346 0.0462 0.0407 -0.0080 -
0.0074 0.0179  1 .
2455 OG1   OG1   . THR THR THR A A 322 322 . 0.0846 0.0325 0.0600 0.0193
0.0171  0.0108  1 .
2456 CG2   CG2   . THR THR THR A A 322 322 . 0.0274 0.0599 0.0272 -0.0024
0.0005  -0.0081 1 .
2457 C     C     . THR THR THR A A 322 322 . 0.0368 0.0510 0.0393 -0.0085
0.0055  -0.0068 1 .
2458 O     O     . THR THR THR A A 322 322 . 0.0341 0.0626 0.0339 0.0069  -
0.0086 -0.0075 1 .
2459 N     N     . ASN ASN ASN A A 323 323 . 0.0290 0.0446 0.0472 0.0037
0.0009  0.0193  1 .
2460 CA    CA    . ASN ASN ASN A A 323 323 . 0.0571 0.0268 0.0374 -0.0011
0.0176  0.0011  1 .
2461 CB    CB    . ASN ASN ASN A A 323 323 . 0.0782 0.0547 0.0606 -0.0146
0.0323  0.0081  1 .
2462 CG    CG    . ASN ASN ASN A A 323 323 . 0.0965 0.0632 0.0660 0.0289
0.0208  0.0207  1 .
2463 OD1   OD1   . ASN ASN ASN A A 323 323 . 0.2392 0.0736 0.1610 0.0120
0.0127  0.0697  1 .
2464 ND2   ND2   . ASN ASN ASN A A 323 323 . 0.1758 0.0694 0.0820 0.0268  -
0.0374 0.0122  1 .
2465 C     C     . ASN ASN ASN A A 323 323 . 0.0849 0.0729 0.0750 -0.0071 -
0.0030 0.0226  1 .
2466 O     O     . ASN ASN ASN A A 323 323 . 0.0996 0.0550 0.0631 -0.0107 -
0.0260 0.0321  1 .
2467 N     N     . PRO PRO PRO A A 324 324 . 0.0870 0.0741 0.0891 -0.0006 -
0.0123 -0.0030 1 .
2468 CA    CA    . PRO PRO PRO A A 324 324 . 0.1396 0.1195 0.1227 -0.0064 -
0.0031 0.0025  1 .
2469 CB    CB    . PRO PRO PRO A A 324 324 . 0.1504 0.1368 0.1362 -0.0219 -
0.0059 0.0074  1 .
2470 CG    CG    . PRO PRO PRO A A 324 324 . 0.1345 0.1241 0.1276 0.0040  -
0.0025 -0.0035 1 .
2471 CD    CD    . PRO PRO PRO A A 324 324 . 0.1128 0.0965 0.1231 -0.0067 -
0.0064 0.0180  1 .
2472 C     C     . PRO PRO PRO A A 324 324 . 0.1536 0.1146 0.1287 0.0055  -
0.0087 0.0003  1 .
2473 O     O     . PRO PRO PRO A A 324 324 . 0.1703 0.1166 0.1310 0.0008  -
0.0122 0.0086  1 .
2474 N     N     . LYS LYS LYS A A 325 325 . 0.1631 0.1439 0.1148 0.0113  -
0.0024 0.0070  1 .
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2475 CA    CA    . LYS LYS LYS A A 325 325 . 0.1699 0.1529 0.1389 0.0029  -
0.0063 0.0084  1 .
2476 CB    CB    . LYS LYS LYS A A 325 325 . 0.2038 0.1707 0.1448 0.0073  -
0.0025 0.0160  1 .
2477 CG    CG    . LYS LYS LYS A A 325 325 . 0.2346 0.2505 0.1930 -0.0018
0.0163  0.0129  1 .
2478 CD    CD    . LYS LYS LYS A A 325 325 . 0.3050 0.2981 0.2996 -0.0387
0.0380  0.0154  1 .
2479 CE    CE    . LYS LYS LYS A A 325 325 . 0.3277 0.3138 0.3154 -0.0102
0.0439  -0.0021 1 .
2480 NZ    NZ    . LYS LYS LYS A A 325 325 . 0.3626 0.3509 0.3037 -0.0146
0.0778  -0.0188 1 .
2481 C     C     . LYS LYS LYS A A 325 325 . 0.1622 0.1153 0.1105 -0.0047 -
0.0187 0.0109  1 .
2482 O     O     . LYS LYS LYS A A 325 325 . 0.1312 0.1102 0.1548 0.0421  -
0.0399 0.0302  1 .
2483 N     N     . ARG ARG ARG A A 326 326 . 0.1454 0.0651 0.1049 -0.0050 -
0.0143 0.0234  1 .
2484 CA    CA    . ARG ARG ARG A A 326 326 . 0.0864 0.0750 0.0812 -0.0006 -
0.0100 -0.0040 1 .
2485 CB    CB    . ARG ARG ARG A A 326 326 . 0.1263 0.0861 0.0912 0.0162
0.0158  -0.0010 1 .
2486 CG    CG    . ARG ARG ARG A A 326 326 . 0.1650 0.1340 0.1212 -0.0067
0.0069  -0.0450 1 .
2487 CD    CD    . ARG ARG ARG A A 326 326 . 0.2804 0.2487 0.0914 0.0141
0.0419  0.0194  1 .
2488 NE    NE    . ARG ARG ARG A A 326 326 . 0.3044 0.3319 0.1668 0.0123
0.0345  0.0127  1 .
2489 CZ    CZ    . ARG ARG ARG A A 326 326 . 0.3359 0.3386 0.1790 -0.0063 -
0.0008 -0.0110 1 .
2490 NH1   NH1   . ARG ARG ARG A A 326 326 . 0.3620 0.3236 0.1877 -0.0229
0.0082  -0.0258 1 .
2491 NH2   NH2   . ARG ARG ARG A A 326 326 . 0.3528 0.3965 0.2467 0.0286
0.0338  -0.0156 1 .
2492 C     C     . ARG ARG ARG A A 326 326 . 0.0919 0.0949 0.0888 0.0080  -
0.0010 -0.0063 1 .
2493 O     O     . ARG ARG ARG A A 326 326 . 0.0871 0.0746 0.0926 0.0276
0.0045  0.0031  1 .
2494 N     N     . ILE ILE ILE A A 327 327 . 0.0741 0.0620 0.0459 0.0291  -
0.0123 0.0104  1 .
2495 CA    CA    . ILE ILE ILE A A 327 327 . 0.0898 0.0953 0.0827 0.0005  -
0.0089 0.0121  1 .
2496 CB    CB    . ILE ILE ILE A A 327 327 . 0.0700 0.0797 0.0847 0.0037  -
0.0093 0.0059  1 .
2497 CG1   CG1   . ILE ILE ILE A A 327 327 . 0.0274 0.0449 0.0520 -0.0051 -
0.0031 -0.0051 1 .
2498 CD1   CD1   . ILE ILE ILE A A 327 327 . 0.0674 0.0880 0.0855 -0.0219 -
0.0462 0.0021  1 .
2499 CG2   CG2   . ILE ILE ILE A A 327 327 . 0.0893 0.0916 0.0757 -0.0456
0.0022  0.0211  1 .
2500 C     C     . ILE ILE ILE A A 327 327 . 0.0973 0.0822 0.0707 0.0089  -
0.0150 0.0135  1 .
2501 O     O     . ILE ILE ILE A A 327 327 . 0.1203 0.1396 0.0640 0.0204  -
0.0212 0.0175  1 .
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2502 N     N     . GLU GLU GLU A A 328 328 . 0.1427 0.1291 0.0817 -0.0021 -
0.0227 0.0152  1 .
2503 CA    CA    . GLU GLU GLU A A 328 328 . 0.1534 0.1205 0.1056 0.0012  -
0.0190 0.0236  1 .
2504 CB    CB    . GLU GLU GLU A A 328 328 . 0.1571 0.1021 0.1080 0.0127  -
0.0269 0.0493  1 .
2505 CG    CG    . GLU GLU GLU A A 328 328 . 0.1957 0.1701 0.1730 0.0015
0.0078  0.0090  1 .
2506 CD    CD    . GLU GLU GLU A A 328 328 . 0.2697 0.2731 0.2198 -0.0102
0.0189  0.0188  1 .
2507 OE1   OE1   . GLU GLU GLU A A 328 328 . 0.2466 0.3577 0.3222 -0.0034 -
0.0022 0.0086  1 .
2508 OE2   OE2   . GLU GLU GLU A A 328 328 . 0.2418 0.2776 0.3320 -0.0438 -
0.0298 0.0160  1 .
2509 C     C     . GLU GLU GLU A A 328 328 . 0.1251 0.1115 0.1009 0.0083  -
0.0071 0.0174  1 .
2510 O     O     . GLU GLU GLU A A 328 328 . 0.1323 0.1229 0.1005 -0.0107
0.0060  0.0073  1 .
2511 N     N     . ARG ARG ARG A A 329 329 . 0.1352 0.0992 0.1138 -0.0002 -
0.0099 0.0120  1 .
2512 CA    CA    . ARG ARG ARG A A 329 329 . 0.1593 0.1270 0.1378 0.0054  -
0.0146 0.0209  1 .
2513 CB    CB    . ARG ARG ARG A A 329 329 . 0.1560 0.1133 0.1486 -0.0032 -
0.0118 0.0252  1 .
2514 CG    CG    . ARG ARG ARG A A 329 329 . 0.1727 0.1734 0.1623 0.0323  -
0.0363 0.0519  1 .
2515 CD    CD    . ARG ARG ARG A A 329 329 . 0.2075 0.1685 0.1752 0.0194  -
0.0270 0.0738  1 .
2516 NE    NE    . ARG ARG ARG A A 329 329 . 0.2637 0.2706 0.1958 0.0332  -
0.0041 0.0712  1 .
2517 CZ    CZ    . ARG ARG ARG A A 329 329 . 0.2848 0.1899 0.2380 0.0201
0.0110  0.0432  1 .
2518 NH1   NH1   . ARG ARG ARG A A 329 329 . 0.3252 0.2286 0.2411 -0.0013
0.0330  0.0269  1 .
2519 NH2   NH2   . ARG ARG ARG A A 329 329 . 0.3354 0.2254 0.2803 -0.0030 -
0.0053 0.0255  1 .
2520 C     C     . ARG ARG ARG A A 329 329 . 0.1652 0.1464 0.1599 0.0025  -
0.0215 0.0179  1 .
2521 O     O     . ARG ARG ARG A A 329 329 . 0.1907 0.1867 0.1577 0.0095  -
0.0366 0.0137  1 .
2522 N     N     . ALA ALA ALA A A 330 330 . 0.1397 0.1521 0.1286 0.0187  -
0.0106 0.0218  1 .
2523 CA    CA    . ALA ALA ALA A A 330 330 . 0.1555 0.1503 0.1214 0.0246  -
0.0087 0.0111  1 .
2524 CB    CB    . ALA ALA ALA A A 330 330 . 0.1276 0.1415 0.0978 0.0316  -
0.0046 0.0219  1 .
2525 C     C     . ALA ALA ALA A A 330 330 . 0.1633 0.1455 0.1314 0.0213  -
0.0148 0.0074  1 .
2526 O     O     . ALA ALA ALA A A 330 330 . 0.1543 0.1373 0.1135 0.0086  -
0.0440 0.0142  1 .
2527 N     N     . VAL VAL VAL A A 331 331 . 0.1820 0.1697 0.1379 0.0175  -
0.0074 0.0081  1 .
2528 CA    CA    . VAL VAL VAL A A 331 331 . 0.2165 0.1691 0.1432 0.0168  -
0.0096 -0.0052 1 .
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2529 CB    CB    . VAL VAL VAL A A 331 331 . 0.2097 0.1634 0.1575 0.0145  -
0.0043 -0.0050 1 .
2530 CG1   CG1   . VAL VAL VAL A A 331 331 . 0.2574 0.1494 0.1606 0.0073  -
0.0037 -0.0200 1 .
2531 CG2   CG2   . VAL VAL VAL A A 331 331 . 0.2108 0.0856 0.1094 0.0032
0.0040  -0.0324 1 .
2532 C     C     . VAL VAL VAL A A 331 331 . 0.2422 0.2026 0.1778 0.0134  -
0.0235 -0.0003 1 .
2533 O     O     . VAL VAL VAL A A 331 331 . 0.2549 0.2074 0.1575 0.0036  -
0.0421 0.0122  1 .
2534 N     N     . GLU GLU GLU A A 332 332 . 0.2588 0.2208 0.1949 0.0160  -
0.0248 -0.0019 1 .
2535 CA    CA    . GLU GLU GLU A A 332 332 . 0.2655 0.2528 0.2284 0.0080  -
0.0249 -0.0018 1 .
2536 CB    CB    . GLU GLU GLU A A 332 332 . 0.2703 0.2719 0.2369 0.0171  -
0.0146 -0.0062 1 .
2537 CG    CG    . GLU GLU GLU A A 332 332 . 0.3229 0.3199 0.2917 0.0242  -
0.0190 0.0062  1 .
2538 CD    CD    . GLU GLU GLU A A 332 332 . 0.3868 0.4120 0.3220 0.0261  -
0.0018 0.0098  1 .
2539 OE1   OE1   . GLU GLU GLU A A 332 332 . 0.4146 0.4550 0.3674 0.0162  -
0.0287 -0.0031 1 .
2540 OE2   OE2   . GLU GLU GLU A A 332 332 . 0.4019 0.4082 0.2887 0.0718
0.0251  -0.0183 1 .
2541 C     C     . GLU GLU GLU A A 332 332 . 0.2645 0.2452 0.2267 0.0018  -
0.0233 0.0000  1 .
2542 O     O     . GLU GLU GLU A A 332 332 . 0.2819 0.2329 0.2266 -0.0090 -
0.0495 -0.0100 1 .
2543 N     N     . GLU GLU GLU A A 333 333 . 0.2436 0.2135 0.2103 0.0041  -
0.0307 0.0169  1 .
2544 CA    CA    . GLU GLU GLU A A 333 333 . 0.2131 0.1955 0.1913 0.0091  -
0.0289 0.0138  1 .
2545 CB    CB    . GLU GLU GLU A A 333 333 . 0.2224 0.2131 0.2233 0.0171  -
0.0261 0.0057  1 .
2546 CG    CG    . GLU GLU GLU A A 333 333 . 0.2678 0.2035 0.2688 0.0071  -
0.0189 -0.0106 1 .
2547 CD    CD    . GLU GLU GLU A A 333 333 . 0.3205 0.2768 0.3319 0.0025
0.0010  -0.0422 1 .
2548 OE1   OE1   . GLU GLU GLU A A 333 333 . 0.3845 0.2179 0.3911 -0.0248 -
0.0299 -0.0658 1 .
2549 OE2   OE2   . GLU GLU GLU A A 333 333 . 0.3781 0.3081 0.4269 -0.0472
0.0121  -0.0301 1 .
2550 C     C     . GLU GLU GLU A A 333 333 . 0.2000 0.1823 0.1591 0.0079  -
0.0240 0.0124  1 .
2551 O     O     . GLU GLU GLU A A 333 333 . 0.2083 0.1529 0.0986 0.0067  -
0.0487 0.0142  1 .
2552 N     N     . LYS LYS LYS A A 334 334 . 0.1786 0.1442 0.1237 0.0125  -
0.0232 0.0082  1 .
2553 CA    CA    . LYS LYS LYS A A 334 334 . 0.1898 0.1599 0.1500 0.0008  -
0.0129 0.0022  1 .
2554 CB    CB    . LYS LYS LYS A A 334 334 . 0.1784 0.1539 0.1545 0.0028  -
0.0231 -0.0159 1 .
2555 CG    CG    . LYS LYS LYS A A 334 334 . 0.2668 0.2187 0.1980 0.0052
0.0160  -0.0044 1 .
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2556 CD    CD    . LYS LYS LYS A A 334 334 . 0.2872 0.2976 0.2513 -0.0101 -
0.0135 -0.0464 1 .
2557 CE    CE    . LYS LYS LYS A A 334 334 . 0.3540 0.3507 0.3254 -0.0002 -
0.0002 -0.0830 1 .
2558 NZ    NZ    . LYS LYS LYS A A 334 334 . 0.3319 0.3336 0.3326 -0.0265 -
0.0067 -0.0791 1 .
2559 C     C     . LYS LYS LYS A A 334 334 . 0.1780 0.1446 0.1375 0.0025  -
0.0125 0.0022  1 .
2560 O     O     . LYS LYS LYS A A 334 334 . 0.2018 0.1558 0.1520 -0.0013 -
0.0162 -0.0123 1 .
2561 N     N     . ALA ALA ALA A A 335 335 . 0.1609 0.1224 0.1141 0.0181  -
0.0263 -0.0011 1 .
2562 CA    CA    . ALA ALA ALA A A 335 335 . 0.1455 0.1139 0.1144 0.0258  -
0.0198 -0.0088 1 .
2563 CB    CB    . ALA ALA ALA A A 335 335 . 0.1918 0.1208 0.1002 0.0270  -
0.0277 -0.0006 1 .
2564 C     C     . ALA ALA ALA A A 335 335 . 0.1289 0.0932 0.0872 0.0078  -
0.0264 -0.0154 1 .
2565 O     O     . ALA ALA ALA A A 335 335 . 0.1057 0.1231 0.0768 0.0111  -
0.0518 -0.0302 1 .
2566 N     N     . CYS CYS CYS A A 336 336 . 0.1088 0.0819 0.0851 0.0233  -
0.0150 -0.0271 1 .
2567 CA    CA    . CYS CYS CYS A A 336 336 . 0.1167 0.0727 0.0840 0.0041  -
0.0190 0.0060  1 .
2568 CB    CB    . CYS CYS CYS A A 336 336 . 0.1083 0.0774 0.0920 -0.0224 -
0.0170 0.0042  1 .
2569 SG    SG    . CYS CYS CYS A A 336 336 . 0.0994 0.0713 0.0776 0.0162  -
0.0149 0.0078  1 .
2570 C     C     . CYS CYS CYS A A 336 336 . 0.0916 0.0691 0.0915 0.0063  -
0.0149 0.0013  1 .
2571 O     O     . CYS CYS CYS A A 336 336 . 0.1151 0.1251 0.0963 0.0166  -
0.0295 0.0197  1 .
2572 N     N     . ASN ASN ASN A A 337 337 . 0.0725 0.0713 0.0805 -0.0061 -
0.0197 -0.0122 1 .
2573 CA    CA    . ASN ASN ASN A A 337 337 . 0.0580 0.0698 0.0746 0.0063  -
0.0108 -0.0261 1 .
2574 CB    CB    . ASN ASN ASN A A 337 337 . 0.0871 0.0782 0.0738 0.0148  -
0.0016 -0.0281 1 .
2575 CG    CG    . ASN ASN ASN A A 337 337 . 0.0931 0.0504 0.1168 0.0197  -
0.0256 -0.0029 1 .
2576 OD1   OD1   . ASN ASN ASN A A 337 337 . 0.1486 0.1084 0.1395 0.0025  -
0.0687 -0.0419 1 .
2577 ND2   ND2   . ASN ASN ASN A A 337 337 . 0.0800 0.0672 0.0522 0.0162  -
0.0170 -0.0333 1 .
2578 C     C     . ASN ASN ASN A A 337 337 . 0.0664 0.0510 0.0454 0.0119
0.0100  -0.0060 1 .
2579 O     O     . ASN ASN ASN A A 337 337 . 0.0672 0.0625 0.0596 0.0056
0.0103  -0.0173 1 .
2580 N     N     . CYS CYS CYS A A 338 338 . 0.0650 0.0255 0.0398 -0.0028 -
0.0240 0.0017  1 .
2581 CA    CA    . CYS CYS CYS A A 338 338 . 0.0377 0.0459 0.0608 -0.0011 -
0.0209 0.0010  1 .
2582 CB    CB    . CYS CYS CYS A A 338 338 . 0.0552 0.0378 0.0270 0.0081  -
0.0072 -0.0021 1 .
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2583 SG    SG    . CYS CYS CYS A A 338 338 . 0.0514 0.0512 0.0714 0.0068  -
0.0146 -0.0070 1 .
2584 C     C     . CYS CYS CYS A A 338 338 . 0.0303 0.0303 0.0496 0.0017
0.0065  0.0106  1 .
2585 O     O     . CYS CYS CYS A A 338 338 . 0.0721 0.0262 0.0465 -0.0027 -
0.0118 -0.0031 1 .
2586 N     N     . LEU LEU LEU A A 339 339 . 0.0675 0.0505 0.0269 0.0016  -
0.0082 0.0002  1 .
2587 CA    CA    . LEU LEU LEU A A 339 339 . 0.0262 0.0261 0.0260 -0.0008
0.0008  -0.0007 1 .
2588 CB    CB    . LEU LEU LEU A A 339 339 . 0.0259 0.0260 0.0261 -0.0006 -
0.0006 0.0007  1 .
2589 CG    CG    . LEU LEU LEU A A 339 339 . 0.0368 0.0669 0.0521 -0.0131 -
0.0117 -0.0064 1 .
2590 CD1   CD1   . LEU LEU LEU A A 339 339 . 0.0600 0.1096 0.0361 0.0123  -
0.0085 -0.0294 1 .
2591 CD2   CD2   . LEU LEU LEU A A 339 339 . 0.0641 0.0828 0.0581 -0.0204 -
0.0172 -0.0252 1 .
2592 C     C     . LEU LEU LEU A A 339 339 . 0.0256 0.0254 0.0264 0.0001  -
0.0005 -0.0003 1 .
2593 O     O     . LEU LEU LEU A A 339 339 . 0.0318 0.0313 0.0293 -0.0062
0.0051  -0.0049 1 .
2594 N     N     . LEU LEU LEU A A 340 340 . 0.0357 0.0278 0.0288 -0.0051 -
0.0060 0.0029  1 .
2595 CA    CA    . LEU LEU LEU A A 340 340 . 0.0386 0.0316 0.0253 -0.0091 -
0.0002 0.0001  1 .
2596 CB    CB    . LEU LEU LEU A A 340 340 . 0.0305 0.0289 0.0336 0.0038  -
0.0056 -0.0027 1 .
2597 CG    CG    . LEU LEU LEU A A 340 340 . 0.0362 0.0332 0.0374 0.0093
0.0114  0.0098  1 .
2598 CD1   CD1   . LEU LEU LEU A A 340 340 . 0.0561 0.0754 0.1019 0.0384
0.0075  0.0223  1 .
2599 CD2   CD2   . LEU LEU LEU A A 340 340 . 0.0812 0.0658 0.0398 0.0107  -
0.0155 0.0168  1 .
2600 C     C     . LEU LEU LEU A A 340 340 . 0.0254 0.0253 0.0256 0.0000
0.0001  0.0000  1 .
2601 O     O     . LEU LEU LEU A A 340 340 . 0.0614 0.0348 0.0344 0.0007
0.0077  -0.0082 1 .
2602 N     N     . LEU LEU LEU A A 341 341 . 0.0254 0.0254 0.0253 -0.0001
0.0000  0.0000  1 .
2603 CA    CA    . LEU LEU LEU A A 341 341 . 0.0270 0.0259 0.0286 -0.0010
0.0023  -0.0014 1 .
2604 CB    CB    . LEU LEU LEU A A 341 341 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2605 CG    CG    . LEU LEU LEU A A 341 341 . 0.0816 0.0355 0.0680 0.0203  -
0.0242 0.0007  1 .
2606 CD1   CD1   . LEU LEU LEU A A 341 341 . 0.0620 0.0783 0.1027 0.0047
0.0173  0.0624  1 .
2607 CD2   CD2   . LEU LEU LEU A A 341 341 . 0.0399 0.0325 0.0542 -0.0061
0.0184  -0.0025 1 .
2608 C     C     . LEU LEU LEU A A 341 341 . 0.0495 0.0386 0.0378 0.0044  -
0.0118 -0.0024 1 .
2609 O     O     . LEU LEU LEU A A 341 341 . 0.0340 0.0278 0.0273 0.0046  -
0.0041 -0.0022 1 .
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2610 N     N     . LYS LYS LYS A A 342 342 . 0.0253 0.0279 0.0268 -0.0001
0.0001  -0.0020 1 .
2611 CA    CA    . LYS LYS LYS A A 342 342 . 0.0311 0.0276 0.0378 0.0006  -
0.0026 0.0046  1 .
2612 CB    CB    . LYS LYS LYS A A 342 342 . 0.0283 0.0322 0.0254 0.0045
0.0005  0.0008  1 .
2613 CG    CG    . LYS LYS LYS A A 342 342 . 0.0406 0.0381 0.0434 0.0115
0.0052  0.0122  1 .
2614 CD    CD    . LYS LYS LYS A A 342 342 . 0.0827 0.0420 0.0296 -0.0310 -
0.0106 0.0056  1 .
2615 CE    CE    . LYS LYS LYS A A 342 342 . 0.0303 0.0335 0.0299 -0.0027 -
0.0019 0.0061  1 .
2616 NZ    NZ    . LYS LYS LYS A A 342 342 . 0.0864 0.1130 0.0522 0.0032  -
0.0153 -0.0225 1 .
2617 C     C     . LYS LYS LYS A A 342 342 . 0.0293 0.0295 0.0285 0.0041  -
0.0036 -0.0036 1 .
2618 O     O     . LYS LYS LYS A A 342 342 . 0.0525 0.0260 0.0363 0.0045  -
0.0173 -0.0028 1 .
2619 N     N     . VAL VAL VAL A A 343 343 . 0.0258 0.0287 0.0258 -0.0013 -
0.0005 0.0013  1 .
2620 CA    CA    . VAL VAL VAL A A 343 343 . 0.0410 0.0413 0.0273 0.0062  -
0.0055 -0.0032 1 .
2621 CB    CB    . VAL VAL VAL A A 343 343 . 0.0623 0.0416 0.0264 0.0203  -
0.0020 0.0011  1 .
2622 CG1   CG1   . VAL VAL VAL A A 343 343 . 0.0836 0.0789 0.0347 0.0086
0.0068  0.0114  1 .
2623 CG2   CG2   . VAL VAL VAL A A 343 343 . 0.0264 0.0253 0.0253 0.0001  -
0.0001 0.0000  1 .
2624 C     C     . VAL VAL VAL A A 343 343 . 0.0455 0.0425 0.0320 0.0063  -
0.0006 0.0099  1 .
2625 O     O     . VAL VAL VAL A A 343 343 . 0.0762 0.0363 0.0392 -0.0067
0.0043  -0.0077 1 .
2626 N     N     . ASN ASN ASN A A 344 344 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2627 CA    CA    . ASN ASN ASN A A 344 344 . 0.0359 0.0259 0.0271 0.0025  -
0.0043 -0.0010 1 .
2628 CB    CB    . ASN ASN ASN A A 344 344 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2629 CG    CG    . ASN ASN ASN A A 344 344 . 0.0384 0.0405 0.0263 0.0141
0.0035  0.0038  1 .
2630 OD1   OD1   . ASN ASN ASN A A 344 344 . 0.0378 0.0382 0.0667 -0.0094
0.0131  0.0028  1 .
2631 ND2   ND2   . ASN ASN ASN A A 344 344 . 0.0379 0.0437 0.0338 0.0114
0.0072  0.0124  1 .
2632 C     C     . ASN ASN ASN A A 344 344 . 0.0254 0.0255 0.0255 0.0001  -
0.0001 -0.0002 1 .
2633 O     O     . ASN ASN ASN A A 344 344 . 0.0264 0.0274 0.0446 -0.0015
0.0047  -0.0064 1 .
2634 N     N     . GLN GLN GLN A A 345 345 . 0.0594 0.0367 0.0311 0.0183  -
0.0027 -0.0044 1 .
2635 CA    CA    . GLN GLN GLN A A 345 345 . 0.0418 0.0328 0.0316 0.0111  -
0.0102 -0.0069 1 .
2636 CB    CB    . GLN GLN GLN A A 345 345 . 0.0274 0.0519 0.0290 -0.0075 -
0.0028 0.0099  1 .
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2637 CG    CG    . GLN GLN GLN A A 345 345 . 0.0280 0.0321 0.0290 -0.0042 -
0.0031 0.0050  1 .
2638 CD    CD    . GLN GLN GLN A A 345 345 . 0.0317 0.0442 0.0524 -0.0110 -
0.0094 0.0169  1 .
2639 OE1   OE1   . GLN GLN GLN A A 345 345 . 0.0684 0.0369 0.0326 0.0190  -
0.0174 -0.0085 1 .
2640 NE2   NE2   . GLN GLN GLN A A 345 345 . 0.0280 0.0356 0.0496 0.0053
0.0081  0.0158  1 .
2641 C     C     . GLN GLN GLN A A 345 345 . 0.0256 0.0281 0.0283 0.0007  -
0.0009 -0.0028 1 .
2642 O     O     . GLN GLN GLN A A 345 345 . 0.0682 0.0372 0.0470 0.0173  -
0.0162 0.0002  1 .
2643 N     N     . ILE ILE ILE A A 346 346 . 0.0617 0.0339 0.0421 -0.0171
0.0024  0.0018  1 .
2644 CA    CA    . ILE ILE ILE A A 346 346 . 0.0341 0.0293 0.0288 -0.0057 -
0.0044 0.0024  1 .
2645 CB    CB    . ILE ILE ILE A A 346 346 . 0.0268 0.0318 0.0313 0.0031
0.0030  0.0062  1 .
2646 CG1   CG1   . ILE ILE ILE A A 346 346 . 0.0826 0.0455 0.0996 -0.0145 -
0.0098 0.0007  1 .
2647 CD1   CD1   . ILE ILE ILE A A 346 346 . 0.0494 0.0314 0.0285 0.0121  -
0.0088 -0.0044 1 .
2648 CG2   CG2   . ILE ILE ILE A A 346 346 . 0.0332 0.0514 0.0474 0.0096
0.0031  -0.0134 1 .
2649 C     C     . ILE ILE ILE A A 346 346 . 0.0304 0.0287 0.0393 0.0031  -
0.0060 -0.0004 1 .
2650 O     O     . ILE ILE ILE A A 346 346 . 0.0687 0.0274 0.0761 -0.0087
0.0053  -0.0052 1 .
2651 N     N     . GLY GLY GLY A A 347 347 . 0.0412 0.0290 0.0259 0.0077  -
0.0031 -0.0015 1 .
2652 CA    CA    . GLY GLY GLY A A 347 347 . 0.0256 0.0261 0.0287 0.0004
0.0009  0.0016  1 .
2653 C     C     . GLY GLY GLY A A 347 347 . 0.0349 0.0300 0.0422 -0.0051 -
0.0101 0.0089  1 .
2654 O     O     . GLY GLY GLY A A 347 347 . 0.0655 0.0516 0.0290 0.0151  -
0.0024 0.0076  1 .
2655 N     N     . SER SER SER A A 348 348 . 0.0263 0.0261 0.0415 0.0000  -
0.0009 0.0036  1 .
2656 CA    CA    . SER SER SER A A 348 348 . 0.0316 0.0275 0.0304 0.0037
0.0056  0.0033  1 .
2657 CB    CB    . SER SER SER A A 348 348 . 0.0693 0.0337 0.0799 -0.0019 -
0.0142 0.0210  1 .
2658 OG    OG    . SER SER SER A A 348 348 . 0.0438 0.0260 0.0296 -0.0030
0.0059  -0.0002 1 .
2659 C     C     . SER SER SER A A 348 348 . 0.0331 0.0294 0.0317 -0.0052 -
0.0059 0.0050  1 .
2660 O     O     . SER SER SER A A 348 348 . 0.0623 0.0589 0.0461 -0.0039 -
0.0081 0.0260  1 .
2661 N     N     . VAL VAL VAL A A 349 349 . 0.0485 0.0448 0.0419 -0.0114
0.0072  0.0105  1 .
2662 CA    CA    . VAL VAL VAL A A 349 349 . 0.0268 0.0264 0.0321 -0.0013 -
0.0032 0.0028  1 .
2663 CB    CB    . VAL VAL VAL A A 349 349 . 0.0282 0.0523 0.0390 0.0089
0.0063  0.0192  1 .
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2664 CG1   CG1   . VAL VAL VAL A A 349 349 . 0.0660 0.0549 0.0728 0.0086
0.0262  0.0347  1 .
2665 CG2   CG2   . VAL VAL VAL A A 349 349 . 0.0381 0.0480 0.0623 -0.0043 -
0.0067 0.0289  1 .
2666 C     C     . VAL VAL VAL A A 349 349 . 0.0255 0.0253 0.0254 0.0000
0.0001  0.0000  1 .
2667 O     O     . VAL VAL VAL A A 349 349 . 0.0445 0.0394 0.0372 0.0163  -
0.0062 -0.0035 1 .
2668 N     N     . THR THR THR A A 350 350 . 0.0309 0.0253 0.0396 -0.0002
0.0089  -0.0004 1 .
2669 CA    CA    . THR THR THR A A 350 350 . 0.0499 0.0331 0.0501 -0.0045
0.0050  0.0018  1 .
2670 CB    CB    . THR THR THR A A 350 350 . 0.0261 0.0291 0.0526 -0.0017 -
0.0047 0.0101  1 .
2671 OG1   OG1   . THR THR THR A A 350 350 . 0.0471 0.0433 0.0654 0.0168
0.0227  0.0100  1 .
2672 CG2   CG2   . THR THR THR A A 350 350 . 0.0475 0.0847 0.0747 0.0018
0.0278  -0.0120 1 .
2673 C     C     . THR THR THR A A 350 350 . 0.0439 0.0297 0.0297 0.0090
0.0091  0.0044  1 .
2674 O     O     . THR THR THR A A 350 350 . 0.0731 0.0399 0.0306 -0.0104 -
0.0066 -0.0049 1 .
2675 N     N     . GLU GLU GLU A A 351 351 . 0.0414 0.0342 0.0432 -0.0008
0.0035  0.0121  1 .
2676 CA    CA    . GLU GLU GLU A A 351 351 . 0.0515 0.0286 0.0396 -0.0013 -
0.0084 0.0054  1 .
2677 CB    CB    . GLU GLU GLU A A 351 351 . 0.0977 0.0351 0.0527 0.0081
0.0204  0.0161  1 .
2678 CG    CG    . GLU GLU GLU A A 351 351 . 0.0808 0.0434 0.0788 0.0049
0.0003  -0.0307 1 .
2679 CD    CD    . GLU GLU GLU A A 351 351 . 0.0665 0.0520 0.0655 -0.0050 -
0.0120 -0.0168 1 .
2680 OE1   OE1   . GLU GLU GLU A A 351 351 . 0.0841 0.0657 0.0561 0.0163  -
0.0125 0.0040  1 .
2681 OE2   OE2   . GLU GLU GLU A A 351 351 . 0.1106 0.0724 0.1140 0.0207
0.0092  0.0084  1 .
2682 C     C     . GLU GLU GLU A A 351 351 . 0.0483 0.0306 0.0317 0.0052
0.0016  0.0054  1 .
2683 O     O     . GLU GLU GLU A A 351 351 . 0.0651 0.0595 0.0478 0.0054  -
0.0231 0.0000  1 .
2684 N     N     . ALA ALA ALA A A 352 352 . 0.0723 0.0370 0.0651 0.0000  -
0.0031 -0.0054 1 .
2685 CA    CA    . ALA ALA ALA A A 352 352 . 0.0288 0.0254 0.0442 -0.0005
0.0008  -0.0007 1 .
2686 CB    CB    . ALA ALA ALA A A 352 352 . 0.0411 0.0699 0.0471 0.0015  -
0.0061 0.0112  1 .
2687 C     C     . ALA ALA ALA A A 352 352 . 0.0396 0.0399 0.0325 -0.0001 -
0.0007 0.0102  1 .
2688 O     O     . ALA ALA ALA A A 352 352 . 0.0915 0.0632 0.0436 0.0010
0.0169  -0.0175 1 .
2689 N     N     . ILE ILE ILE A A 353 353 . 0.0597 0.0434 0.0412 0.0124
0.0061  0.0052  1 .
2690 CA    CA    . ILE ILE ILE A A 353 353 . 0.0604 0.0531 0.0514 0.0015
0.0025  0.0051  1 .
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2691 CB    CB    . ILE ILE ILE A A 353 353 . 0.0540 0.0360 0.0420 0.0051
0.0177  0.0106  1 .
2692 CG1   CG1   . ILE ILE ILE A A 353 353 . 0.0321 0.0371 0.0575 0.0089  -
0.0148 -0.0194 1 .
2693 CD1   CD1   . ILE ILE ILE A A 353 353 . 0.0585 0.1184 0.0840 -0.0023 -
0.0005 0.0054  1 .
2694 CG2   CG2   . ILE ILE ILE A A 353 353 . 0.0351 0.0982 0.0450 -0.0108
0.0004  0.0340  1 .
2695 C     C     . ILE ILE ILE A A 353 353 . 0.0667 0.0562 0.0459 0.0083
0.0088  -0.0006 1 .
2696 O     O     . ILE ILE ILE A A 353 353 . 0.0916 0.0813 0.0599 -0.0143 -
0.0144 -0.0063 1 .
2697 N     N     . GLN GLN GLN A A 354 354 . 0.0867 0.0572 0.0592 -0.0068 -
0.0019 0.0284  1 .
2698 CA    CA    . GLN GLN GLN A A 354 354 . 0.0690 0.0696 0.0439 0.0037  -
0.0045 0.0016  1 .
2699 CB    CB    . GLN GLN GLN A A 354 354 . 0.0974 0.0669 0.0483 0.0072  -
0.0180 0.0257  1 .
2700 CG    CG    . GLN GLN GLN A A 354 354 . 0.1533 0.1653 0.1398 0.0029  -
0.0327 0.0026  1 .
2701 CD    CD    . GLN GLN GLN A A 354 354 . 0.2321 0.1377 0.1618 0.0220  -
0.0525 0.0560  1 .
2702 OE1   OE1   . GLN GLN GLN A A 354 354 . 0.3245 0.1815 0.2094 -0.0332 -
0.0417 0.1010  1 .
2703 NE2   NE2   . GLN GLN GLN A A 354 354 . 0.2758 0.1334 0.2096 0.0284  -
0.0060 0.0422  1 .
2704 C     C     . GLN GLN GLN A A 354 354 . 0.0767 0.0435 0.0522 -0.0101
0.0000  0.0087  1 .
2705 O     O     . GLN GLN GLN A A 354 354 . 0.0841 0.0377 0.0475 -0.0077 -
0.0157 -0.0003 1 .
2706 N     N     . ALA ALA ALA A A 355 355 . 0.0655 0.0429 0.0338 -0.0020 -
0.0140 0.0087  1 .
2707 CA    CA    . ALA ALA ALA A A 355 355 . 0.0724 0.0410 0.0535 0.0032  -
0.0074 -0.0035 1 .
2708 CB    CB    . ALA ALA ALA A A 355 355 . 0.0738 0.0432 0.0615 0.0166  -
0.0148 0.0145  1 .
2709 C     C     . ALA ALA ALA A A 355 355 . 0.0337 0.0254 0.0373 -0.0009 -
0.0097 0.0008  1 .
2710 O     O     . ALA ALA ALA A A 355 355 . 0.0405 0.0615 0.0354 0.0234  -
0.0123 -0.0190 1 .
2711 N     N     . CYS CYS CYS A A 356 356 . 0.0356 0.0303 0.0659 -0.0068
0.0176  -0.0095 1 .
2712 CA    CA    . CYS CYS CYS A A 356 356 . 0.0430 0.0262 0.0490 -0.0036 -
0.0004 0.0022  1 .
2713 CB    CB    . CYS CYS CYS A A 356 356 . 0.0312 0.0371 0.0328 0.0064
0.0007  -0.0050 1 .
2714 SG    SG    . CYS CYS CYS A A 356 356 . 0.0734 0.0381 0.0448 0.0113
0.0058  -0.0124 1 .
2715 C     C     . CYS CYS CYS A A 356 356 . 0.0361 0.0356 0.0479 -0.0105
0.0034  -0.0039 1 .
2716 O     O     . CYS CYS CYS A A 356 356 . 0.0768 0.0542 0.0394 -0.0035 -
0.0001 0.0201  1 .
2717 N     N     . LYS LYS LYS A A 357 357 . 0.0652 0.0749 0.0592 -0.0015
0.0282  0.0130  1 .
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2718 CA    CA    . LYS LYS LYS A A 357 357 . 0.0918 0.1041 0.0639 -0.0151
0.0192  0.0086  1 .
2719 CB    CB    . LYS LYS LYS A A 357 357 . 0.0940 0.0769 0.0681 -0.0220
0.0184  0.0256  1 .
2720 CG    CG    . LYS LYS LYS A A 357 357 . 0.1370 0.1911 0.1638 -0.0320 -
0.0120 0.0432  1 .
2721 CD    CD    . LYS LYS LYS A A 357 357 . 0.2153 0.2204 0.2094 -0.0741
0.0124  0.0273  1 .
2722 CE    CE    . LYS LYS LYS A A 357 357 . 0.2728 0.2822 0.2080 -0.0707 -
0.0061 0.0483  1 .
2723 NZ    NZ    . LYS LYS LYS A A 357 357 . 0.2933 0.3485 0.2835 -0.0527
0.0160  0.0466  1 .
2724 C     C     . LYS LYS LYS A A 357 357 . 0.0675 0.0831 0.0427 -0.0002
0.0177  0.0101  1 .
2725 O     O     . LYS LYS LYS A A 357 357 . 0.1109 0.0925 0.0616 -0.0044 -
0.0085 0.0149  1 .
2726 N     N     . LEU LEU LEU A A 358 358 . 0.0847 0.0896 0.0418 -0.0003 -
0.0008 0.0138  1 .
2727 CA    CA    . LEU LEU LEU A A 358 358 . 0.0702 0.0811 0.0619 -0.0028
0.0077  0.0088  1 .
2728 CB    CB    . LEU LEU LEU A A 358 358 . 0.0902 0.1114 0.0930 -0.0114
0.0048  0.0014  1 .
2729 CG    CG    . LEU LEU LEU A A 358 358 . 0.0876 0.1229 0.0809 0.0162
0.0377  0.0076  1 .
2730 CD1   CD1   . LEU LEU LEU A A 358 358 . 0.1378 0.1083 0.1213 0.0382
0.0121  0.0295  1 .
2731 CD2   CD2   . LEU LEU LEU A A 358 358 . 0.1104 0.0866 0.0704 0.0719  -
0.0054 -0.0091 1 .
2732 C     C     . LEU LEU LEU A A 358 358 . 0.0783 0.0617 0.0454 -0.0046 -
0.0105 0.0061  1 .
2733 O     O     . LEU LEU LEU A A 358 358 . 0.1119 0.0804 0.0438 0.0115  -
0.0035 -0.0001 1 .
2734 N     N     . ALA ALA ALA A A 359 359 . 0.0744 0.0544 0.0484 -0.0163
0.0082  0.0086  1 .
2735 CA    CA    . ALA ALA ALA A A 359 359 . 0.0990 0.0802 0.0455 -0.0127
0.0131  0.0214  1 .
2736 CB    CB    . ALA ALA ALA A A 359 359 . 0.1037 0.0858 0.0345 -0.0004
0.0058  0.0230  1 .
2737 C     C     . ALA ALA ALA A A 359 359 . 0.1013 0.0774 0.0638 -0.0009
0.0089  0.0052  1 .
2738 O     O     . ALA ALA ALA A A 359 359 . 0.1206 0.0972 0.0822 -0.0189
0.0127  0.0136  1 .
2739 N     N     . GLN GLN GLN A A 360 360 . 0.0927 0.0634 0.0409 -0.0023
0.0170  0.0201  1 .
2740 CA    CA    . GLN GLN GLN A A 360 360 . 0.1272 0.0833 0.0552 0.0120
0.0011  0.0076  1 .
2741 CB    CB    . GLN GLN GLN A A 360 360 . 0.1216 0.0787 0.0582 -0.0068
0.0094  0.0207  1 .
2742 CG    CG    . GLN GLN GLN A A 360 360 . 0.1167 0.0444 0.0325 0.0078
0.0028  0.0117  1 .
2743 CD    CD    . GLN GLN GLN A A 360 360 . 0.0980 0.0632 0.0620 0.0060
0.0516  0.0056  1 .
2744 OE1   OE1   . GLN GLN GLN A A 360 360 . 0.1724 0.0827 0.0914 0.0051
0.0222  0.0327  1 .
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2745 NE2   NE2   . GLN GLN GLN A A 360 360 . 0.0593 0.0721 0.0684 -0.0068 -
0.0027 -0.0158 1 .
2746 C     C     . GLN GLN GLN A A 360 360 . 0.1512 0.1119 0.0773 0.0036
0.0017  0.0115  1 .
2747 O     O     . GLN GLN GLN A A 360 360 . 0.1540 0.1298 0.0791 0.0049  -
0.0043 -0.0110 1 .
2748 N     N     . GLU GLU GLU A A 361 361 . 0.1434 0.1057 0.0758 0.0028
0.0052  0.0011  1 .
2749 CA    CA    . GLU GLU GLU A A 361 361 . 0.1623 0.1362 0.0996 0.0007  -
0.0140 0.0086  1 .
2750 CB    CB    . GLU GLU GLU A A 361 361 . 0.1700 0.1490 0.1032 -0.0094
0.0020  0.0018  1 .
2751 CG    CG    . GLU GLU GLU A A 361 361 . 0.1929 0.2194 0.1969 0.0193  -
0.0068 0.0091  1 .
2752 CD    CD    . GLU GLU GLU A A 361 361 . 0.2764 0.2706 0.2795 -0.0002
0.0083  -0.0258 1 .
2753 OE1   OE1   . GLU GLU GLU A A 361 361 . 0.3149 0.2219 0.3087 0.0026
0.0103  0.0213  1 .
2754 OE2   OE2   . GLU GLU GLU A A 361 361 . 0.3071 0.3468 0.3105 -0.0258
0.0168  -0.0337 1 .
2755 C     C     . GLU GLU GLU A A 361 361 . 0.1617 0.1350 0.1000 -0.0079 -
0.0085 -0.0087 1 .
2756 O     O     . GLU GLU GLU A A 361 361 . 0.2012 0.1681 0.1069 -0.0086 -
0.0284 -0.0052 1 .
2757 N     N     . ASN ASN ASN A A 362 362 . 0.1636 0.1103 0.0704 -0.0127 -
0.0175 -0.0007 1 .
2758 CA    CA    . ASN ASN ASN A A 362 362 . 0.1409 0.1169 0.0902 0.0075
0.0006  0.0003  1 .
2759 CB    CB    . ASN ASN ASN A A 362 362 . 0.1578 0.1037 0.0952 0.0104  -
0.0290 -0.0061 1 .
2760 CG    CG    . ASN ASN ASN A A 362 362 . 0.1765 0.1285 0.1334 -0.0006 -
0.0211 0.0220  1 .
2761 OD1   OD1   . ASN ASN ASN A A 362 362 . 0.2132 0.1642 0.1142 0.0811  -
0.0464 0.0060  1 .
2762 ND2   ND2   . ASN ASN ASN A A 362 362 . 0.2655 0.1032 0.0895 0.0549  -
0.0207 -0.0300 1 .
2763 C     C     . ASN ASN ASN A A 362 362 . 0.1327 0.1105 0.0707 -0.0020
0.0041  0.0054  1 .
2764 O     O     . ASN ASN ASN A A 362 362 . 0.1424 0.1487 0.1123 0.0142
0.0154  0.0121  1 .
2765 N     N     . GLY GLY GLY A A 363 363 . 0.1197 0.1132 0.0514 0.0007
0.0323  -0.0075 1 .
2766 CA    CA    . GLY GLY GLY A A 363 363 . 0.1129 0.1194 0.0673 -0.0160
0.0023  -0.0082 1 .
2767 C     C     . GLY GLY GLY A A 363 363 . 0.1412 0.1138 0.0739 -0.0142
0.0044  -0.0177 1 .
2768 O     O     . GLY GLY GLY A A 363 363 . 0.1573 0.1277 0.0662 -0.0302
0.0064  -0.0111 1 .
2769 N     N     . TRP TRP TRP A A 364 364 . 0.1003 0.0859 0.0388 -0.0307
0.0002  -0.0256 1 .
2770 CA    CA    . TRP TRP TRP A A 364 364 . 0.1020 0.0738 0.0530 -0.0034
0.0009  -0.0247 1 .
2771 CB    CB    . TRP TRP TRP A A 364 364 . 0.0844 0.0649 0.0635 0.0129
0.0169  -0.0173 1 .
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2772 CG    CG    . TRP TRP TRP A A 364 364 . 0.0987 0.0702 0.0609 0.0080  -
0.0173 -0.0327 1 .
2773 CD1   CD1   . TRP TRP TRP A A 364 364 . 0.0975 0.0747 0.0691 0.0208  -
0.0345 -0.0442 1 .
2774 NE1   NE1   . TRP TRP TRP A A 364 364 . 0.1067 0.1120 0.0532 0.0088  -
0.0075 -0.0386 1 .
2775 CE2   CE2   . TRP TRP TRP A A 364 364 . 0.1126 0.0934 0.0627 0.0484  -
0.0079 -0.0320 1 .
2776 CD2   CD2   . TRP TRP TRP A A 364 364 . 0.0674 0.0338 0.0394 -0.0073
0.0182  0.0035  1 .
2777 CE3   CE3   . TRP TRP TRP A A 364 364 . 0.0655 0.0767 0.0487 0.0068  -
0.0289 -0.0164 1 .
2778 CZ3   CZ3   . TRP TRP TRP A A 364 364 . 0.0679 0.0432 0.0878 0.0020  -
0.0449 0.0142  1 .
2779 CH2   CH2   . TRP TRP TRP A A 364 364 . 0.0807 0.0554 0.0946 -0.0044 -
0.0558 -0.0152 1 .
2780 CZ2   CZ2   . TRP TRP TRP A A 364 364 . 0.1093 0.0797 0.0395 0.0158
0.0259  0.0226  1 .
2781 C     C     . TRP TRP TRP A A 364 364 . 0.0653 0.0573 0.0490 -0.0004
0.0185  -0.0222 1 .
2782 O     O     . TRP TRP TRP A A 364 364 . 0.0743 0.0667 0.0478 0.0021
0.0042  -0.0255 1 .
2783 N     N     . GLY GLY GLY A A 365 365 . 0.0938 0.0508 0.0544 0.0385  -
0.0037 0.0037  1 .
2784 CA    CA    . GLY GLY GLY A A 365 365 . 0.0450 0.0616 0.0371 0.0228  -
0.0071 -0.0016 1 .
2785 C     C     . GLY GLY GLY A A 365 365 . 0.0443 0.0410 0.0648 -0.0008 -
0.0130 -0.0037 1 .
2786 O     O     . GLY GLY GLY A A 365 365 . 0.0386 0.0356 0.0484 0.0117  -
0.0175 -0.0154 1 .
2787 N     N     . VAL VAL VAL A A 366 366 . 0.0498 0.0521 0.0350 -0.0136
0.0003  -0.0138 1 .
2788 CA    CA    . VAL VAL VAL A A 366 366 . 0.0322 0.0515 0.0261 -0.0127
0.0020  -0.0044 1 .
2789 CB    CB    . VAL VAL VAL A A 366 366 . 0.0387 0.0495 0.0378 -0.0053 -
0.0062 -0.0120 1 .
2790 CG1   CG1   . VAL VAL VAL A A 366 366 . 0.0341 0.0773 0.0503 0.0129  -
0.0143 -0.0137 1 .
2791 CG2   CG2   . VAL VAL VAL A A 366 366 . 0.0297 0.0300 0.0270 -0.0045
0.0027  -0.0028 1 .
2792 C     C     . VAL VAL VAL A A 366 366 . 0.0380 0.0394 0.0381 0.0033
0.0030  -0.0022 1 .
2793 O     O     . VAL VAL VAL A A 366 366 . 0.0262 0.0264 0.0253 0.0009  -
0.0001 -0.0001 1 .
2794 N     N     . MET MET MET A A 367 367 . 0.0316 0.0299 0.0286 0.0054
0.0046  0.0039  1 .
2795 CA    CA    . MET MET MET A A 367 367 . 0.0483 0.0306 0.0308 -0.0099 -
0.0106 0.0038  1 .
2796 CB    CB    . MET MET MET A A 367 367 . 0.0376 0.0304 0.0292 0.0079
0.0069  0.0045  1 .
2797 CG    CG    . MET MET MET A A 367 367 . 0.0401 0.0426 0.0344 0.0160  -
0.0116 -0.0125 1 .
2798 SD    SD    . MET MET MET A A 367 367 . 0.0721 0.0501 0.0339 -0.0012 -
0.0088 -0.0084 1 .
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2799 CE    CE    . MET MET MET A A 367 367 . 0.1600 0.0889 0.1202 -0.0028
0.0064  -0.0616 1 .
2800 C     C     . MET MET MET A A 367 367 . 0.0353 0.0369 0.0260 0.0107  -
0.0027 -0.0029 1 .
2801 O     O     . MET MET MET A A 367 367 . 0.0469 0.0285 0.0310 0.0083  -
0.0111 -0.0043 1 .
2802 N     N     . VAL VAL VAL A A 368 368 . 0.0408 0.0302 0.0302 0.0006  -
0.0036 -0.0046 1 .
2803 CA    CA    . VAL VAL VAL A A 368 368 . 0.0273 0.0304 0.0261 -0.0031
0.0012  -0.0020 1 .
2804 CB    CB    . VAL VAL VAL A A 368 368 . 0.0342 0.0316 0.0254 0.0053
0.0009  0.0009  1 .
2805 CG1   CG1   . VAL VAL VAL A A 368 368 . 0.0258 0.0451 0.0421 -0.0032
0.0030  -0.0182 1 .
2806 CG2   CG2   . VAL VAL VAL A A 368 368 . 0.0260 0.0275 0.0275 0.0012  -
0.0012 -0.0022 1 .
2807 C     C     . VAL VAL VAL A A 368 368 . 0.0419 0.0274 0.0257 -0.0059 -
0.0024 0.0009  1 .
2808 O     O     . VAL VAL VAL A A 368 368 . 0.0586 0.0256 0.0305 -0.0032 -
0.0132 0.0012  1 .
2809 N     N     . SER SER SER A A 369 369 . 0.0255 0.0253 0.0253 0.0000
0.0001  0.0000  1 .
2810 CA    CA    . SER SER SER A A 369 369 . 0.0330 0.0257 0.0408 0.0006
0.0097  0.0019  1 .
2811 CB    CB    . SER SER SER A A 369 369 . 0.0262 0.0334 0.0330 0.0027
0.0026  0.0079  1 .
2812 OG    OG    . SER SER SER A A 369 369 . 0.0476 0.0285 0.0267 -0.0084
0.0057  -0.0021 1 .
2813 C     C     . SER SER SER A A 369 369 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2814 O     O     . SER SER SER A A 369 369 . 0.0791 0.0337 0.0446 0.0197
0.0138  0.0092  1 .
2815 N     N     . HIS HIS HIS A A 370 370 . 0.0323 0.0259 0.0258 0.0020  -
0.0018 -0.0005 1 .
2816 CA    CA    . HIS HIS HIS A A 370 370 . 0.0259 0.0253 0.0256 0.0000
0.0004  0.0000  1 .
2817 CB    CB    . HIS HIS HIS A A 370 370 . 0.0443 0.0257 0.0253 0.0028
0.0000  0.0000  1 .
2818 CG    CG    . HIS HIS HIS A A 370 370 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2819 ND1   ND1   . HIS HIS HIS A A 370 370 . 0.0260 0.0379 0.0358 0.0021
0.0019  0.0115  1 .
2820 CE1   CE1   . HIS HIS HIS A A 370 370 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2821 NE2   NE2   . HIS HIS HIS A A 370 370 . 0.0310 0.0254 0.0329 -0.0008
0.0066  -0.0010 1 .
2822 CD2   CD2   . HIS HIS HIS A A 370 370 . 0.0255 0.0253 0.0311 0.0000  -
0.0011 0.0003  1 .
2823 C     C     . HIS HIS HIS A A 370 370 . 0.0256 0.0307 0.0345 0.0012  -
0.0004 0.0008  1 .
2824 O     O     . HIS HIS HIS A A 370 370 . 0.0321 0.0280 0.0293 0.0042
0.0051  0.0032  1 .
2825 N     N     . ARG ARG ARG A A 371 371 . 0.0262 0.0264 0.0254 -0.0010
0.0003  -0.0004 1 .
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2826 CA    CA    . ARG ARG ARG A A 371 371 . 0.0305 0.0256 0.0334 -0.0013 -
0.0065 0.0016  1 .
2827 CB    CB    . ARG ARG ARG A A 371 371 . 0.0256 0.0271 0.0265 -0.0007
0.0006  -0.0014 1 .
2828 CG    CG    . ARG ARG ARG A A 371 371 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2829 CD    CD    . ARG ARG ARG A A 371 371 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2830 NE    NE    . ARG ARG ARG A A 371 371 . 0.0289 0.0396 0.0303 0.0069  -
0.0041 -0.0084 1 .
2831 CZ    CZ    . ARG ARG ARG A A 371 371 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2832 NH1   NH1   . ARG ARG ARG A A 371 371 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2833 NH2   NH2   . ARG ARG ARG A A 371 371 . 0.0329 0.0253 0.0259 -0.0006 -
0.0022 0.0001  1 .
2834 C     C     . ARG ARG ARG A A 371 371 . 0.0290 0.0308 0.0271 -0.0045 -
0.0026 0.0031  1 .
2835 O     O     . ARG ARG ARG A A 371 371 . 0.0256 0.0253 0.0253 0.0000
0.0001  0.0000  1 .
2836 N     N     . SER SER SER A A 372 372 . 0.0253 0.0374 0.0254 -0.0005
0.0000  0.0013  1 .
2837 CA    CA    . SER SER SER A A 372 372 . 0.0869 0.0332 0.0536 0.0040  -
0.0060 0.0113  1 .
2838 CB    CB    . SER SER SER A A 372 372 . 0.0632 0.0936 0.0373 -0.0376 -
0.0015 0.0207  1 .
2839 OG    OG    . SER SER SER A A 372 372 . 0.2631 0.2267 0.1281 -0.0630 -
0.0385 0.0292  1 .
2840 C     C     . SER SER SER A A 372 372 . 0.0536 0.0354 0.0255 -0.0024
0.0021  -0.0010 1 .
2841 O     O     . SER SER SER A A 372 372 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2842 N     N     . GLY GLY GLY A A 373 373 . 0.0433 0.0451 0.0276 -0.0157
0.0047  -0.0015 1 .
2843 CA    CA    . GLY GLY GLY A A 373 373 . 0.0259 0.0253 0.0256 0.0000  -
0.0004 0.0000  1 .
2844 C     C     . GLY GLY GLY A A 373 373 . 0.0264 0.0288 0.0255 -0.0019
0.0005  -0.0009 1 .
2845 O     O     . GLY GLY GLY A A 373 373 . 0.0447 0.0320 0.0410 0.0114
0.0174  0.0102  1 .
2846 N     N     . GLU GLU GLU A A 374 374 . 0.0332 0.0270 0.0256 -0.0037
0.0016  -0.0007 1 .
2847 CA    CA    . GLU GLU GLU A A 374 374 . 0.0451 0.0253 0.0253 -0.0008
0.0000  0.0000  1 .
2848 CB    CB    . GLU GLU GLU A A 374 374 . 0.0461 0.0259 0.0262 -0.0034
0.0043  -0.0007 1 .
2849 CG    CG    . GLU GLU GLU A A 374 374 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2850 CD    CD    . GLU GLU GLU A A 374 374 . 0.0256 0.0296 0.0307 -0.0012
0.0013  -0.0048 1 .
2851 OE1   OE1   . GLU GLU GLU A A 374 374 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2852 OE2   OE2   . GLU GLU GLU A A 374 374 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
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2853 C     C     . GLU GLU GLU A A 374 374 . 0.0253 0.0253 0.0256 0.0000
0.0000  0.0000  1 .
2854 O     O     . GLU GLU GLU A A 374 374 . 0.0436 0.0253 0.0290 0.0009  -
0.0082 -0.0004 1 .
2855 N     N     . THR THR THR A A 375 375 . 0.0323 0.0296 0.0266 0.0038
0.0003  0.0019  1 .
2856 CA    CA    . THR THR THR A A 375 375 . 0.0256 0.0255 0.0302 -0.0003 -
0.0013 0.0011  1 .
2857 CB    CB    . THR THR THR A A 375 375 . 0.0304 0.0302 0.0419 -0.0050
0.0092  -0.0090 1 .
2858 OG1   OG1   . THR THR THR A A 375 375 . 0.0389 0.0253 0.0271 0.0000
0.0050  0.0000  1 .
2859 CG2   CG2   . THR THR THR A A 375 375 . 0.0372 0.0360 0.0547 0.0108  -
0.0162 -0.0122 1 .
2860 C     C     . THR THR THR A A 375 375 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2861 O     O     . THR THR THR A A 375 375 . 0.0285 0.0253 0.0312 -0.0002 -
0.0043 0.0003  1 .
2862 N     N     . GLU GLU GLU A A 376 376 . 0.0256 0.0291 0.0296 -0.0010 -
0.0011 0.0040  1 .
2863 CA    CA    . GLU GLU GLU A A 376 376 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2864 CB    CB    . GLU GLU GLU A A 376 376 . 0.0318 0.0359 0.0281 -0.0081 -
0.0005 -0.0004 1 .
2865 CG    CG    . GLU GLU GLU A A 376 376 . 0.0457 0.0618 0.0292 -0.0224
0.0044  -0.0107 1 .
2866 CD    CD    . GLU GLU GLU A A 376 376 . 0.0325 0.0258 0.0394 -0.0019 -
0.0100 0.0026  1 .
2867 OE1   OE1   . GLU GLU GLU A A 376 376 . 0.0476 0.0390 0.0620 0.0046
0.0281  0.0021  1 .
2868 OE2   OE2   . GLU GLU GLU A A 376 376 . 0.0295 0.0257 0.0315 0.0013
0.0050  0.0016  1 .
2869 C     C     . GLU GLU GLU A A 376 376 . 0.0332 0.0289 0.0445 0.0016  -
0.0002 0.0079  1 .
2870 O     O     . GLU GLU GLU A A 376 376 . 0.0425 0.0327 0.0339 0.0112
0.0121  0.0080  1 .
2871 N     N     . ASP ASP ASP A A 377 377 . 0.0256 0.0272 0.0263 0.0002
0.0000  0.0013  1 .
2872 CA    CA    . ASP ASP ASP A A 377 377 . 0.0292 0.0320 0.0283 0.0051
0.0034  0.0045  1 .
2873 CB    CB    . ASP ASP ASP A A 377 377 . 0.0353 0.0264 0.0294 0.0033
0.0064  0.0021  1 .
2874 CG    CG    . ASP ASP ASP A A 377 377 . 0.0554 0.0326 0.0273 -0.0144 -
0.0050 0.0017  1 .
2875 OD1   OD1   . ASP ASP ASP A A 377 377 . 0.1025 0.0504 0.0641 -0.0082 -
0.0025 0.0154  1 .
2876 OD2   OD2   . ASP ASP ASP A A 377 377 . 0.0400 0.0572 0.0842 -0.0142
0.0272  -0.0141 1 .
2877 C     C     . ASP ASP ASP A A 377 377 . 0.0267 0.0277 0.0276 -0.0018 -
0.0018 0.0023  1 .
2878 O     O     . ASP ASP ASP A A 377 377 . 0.0350 0.0414 0.0307 -0.0053 -
0.0005 -0.0081 1 .
2879 N     N     . THR THR THR A A 378 378 . 0.0278 0.0258 0.0380 -0.0011
0.0056  -0.0026 1 .
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2880 CA    CA    . THR THR THR A A 378 378 . 0.0318 0.0340 0.0253 0.0075
0.0001  0.0001  1 .
2881 CB    CB    . THR THR THR A A 378 378 . 0.0258 0.0278 0.0266 0.0006
0.0001  0.0016  1 .
2882 OG1   OG1   . THR THR THR A A 378 378 . 0.0721 0.0454 0.0657 0.0038  -
0.0160 0.0123  1 .
2883 CG2   CG2   . THR THR THR A A 378 378 . 0.0471 0.0401 0.0253 -0.0123
0.0006  -0.0006 1 .
2884 C     C     . THR THR THR A A 378 378 . 0.0323 0.0257 0.0392 0.0007  -
0.0020 0.0020  1 .
2885 O     O     . THR THR THR A A 378 378 . 0.0258 0.0258 0.0254 -0.0005
0.0002  -0.0002 1 .
2886 N     N     . PHE PHE PHE A A 379 379 . 0.0355 0.0258 0.0307 -0.0023 -
0.0074 0.0017  1 .
2887 CA    CA    . PHE PHE PHE A A 379 379 . 0.0394 0.0275 0.0279 -0.0056
0.0061  -0.0024 1 .
2888 CB    CB    . PHE PHE PHE A A 379 379 . 0.0486 0.0253 0.0327 -0.0012
0.0131  -0.0007 1 .
2889 CG    CG    . PHE PHE PHE A A 379 379 . 0.0308 0.0357 0.0361 0.0001  -
0.0046 0.0083  1 .
2890 CD1   CD1   . PHE PHE PHE A A 379 379 . 0.0604 0.0416 0.0415 -0.0041 -
0.0086 0.0159  1 .
2891 CE1   CE1   . PHE PHE PHE A A 379 379 . 0.0515 0.0266 0.0282 0.0058
0.0087  0.0019  1 .
2892 CZ    CZ    . PHE PHE PHE A A 379 379 . 0.0331 0.0257 0.0275 0.0018
0.0042  0.0010  1 .
2893 CE2   CE2   . PHE PHE PHE A A 379 379 . 0.0254 0.0407 0.0629 -0.0012 -
0.0019 0.0241  1 .
2894 CD2   CD2   . PHE PHE PHE A A 379 379 . 0.0540 0.0367 0.0826 0.0130
0.0300  0.0255  1 .
2895 C     C     . PHE PHE PHE A A 379 379 . 0.0358 0.0316 0.0473 -0.0075
0.0006  -0.0050 1 .
2896 O     O     . PHE PHE PHE A A 379 379 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2897 N     N     . ILE ILE ILE A A 380 380 . 0.0255 0.0254 0.0284 -0.0001
0.0007  -0.0006 1 .
2898 CA    CA    . ILE ILE ILE A A 380 380 . 0.0367 0.0279 0.0304 0.0054
0.0076  0.0036  1 .
2899 CB    CB    . ILE ILE ILE A A 380 380 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2900 CG1   CG1   . ILE ILE ILE A A 380 380 . 0.0272 0.0337 0.0308 -0.0040 -
0.0033 0.0068  1 .
2901 CD1   CD1   . ILE ILE ILE A A 380 380 . 0.0346 0.0261 0.0265 -0.0028 -
0.0033 0.0010  1 .
2902 CG2   CG2   . ILE ILE ILE A A 380 380 . 0.0349 0.0298 0.0255 0.0065
0.0014  0.0009  1 .
2903 C     C     . ILE ILE ILE A A 380 380 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2904 O     O     . ILE ILE ILE A A 380 380 . 0.0275 0.0254 0.0342 -0.0004 -
0.0044 0.0009  1 .
2905 N     N     . ALA ALA ALA A A 381 381 . 0.0355 0.0406 0.0280 0.0125
0.0052  0.0064  1 .
2906 CA    CA    . ALA ALA ALA A A 381 381 . 0.0255 0.0258 0.0260 0.0002
0.0003  0.0005  1 .
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2907 CB    CB    . ALA ALA ALA A A 381 381 . 0.0268 0.0362 0.0253 0.0041
0.0000  -0.0002 1 .
2908 C     C     . ALA ALA ALA A A 381 381 . 0.0339 0.0337 0.0288 0.0061  -
0.0049 -0.0019 1 .
2909 O     O     . ALA ALA ALA A A 381 381 . 0.0386 0.0286 0.0368 0.0058
0.0085  0.0014  1 .
2910 N     N     . ASP ASP ASP A A 382 382 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2911 CA    CA    . ASP ASP ASP A A 382 382 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2912 CB    CB    . ASP ASP ASP A A 382 382 . 0.0254 0.0290 0.0308 0.0005
0.0006  0.0045  1 .
2913 CG    CG    . ASP ASP ASP A A 382 382 . 0.0256 0.0370 0.0596 -0.0017 -
0.0028 0.0200  1 .
2914 OD1   OD1   . ASP ASP ASP A A 382 382 . 0.1054 0.1025 0.0313 0.0209
0.0184  0.0162  1 .
2915 OD2   OD2   . ASP ASP ASP A A 382 382 . 0.0888 0.0382 0.0695 0.0122
0.0329  -0.0034 1 .
2916 C     C     . ASP ASP ASP A A 382 382 . 0.0305 0.0258 0.0259 -0.0017
0.0017  -0.0005 1 .
2917 O     O     . ASP ASP ASP A A 382 382 . 0.0302 0.0407 0.0261 -0.0087
0.0020  -0.0035 1 .
2918 N     N     . LEU LEU LEU A A 383 383 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2919 CA    CA    . LEU LEU LEU A A 383 383 . 0.0317 0.0263 0.0273 0.0025
0.0035  0.0014  1 .
2920 CB    CB    . LEU LEU LEU A A 383 383 . 0.0297 0.0394 0.0254 0.0078
0.0005  0.0010  1 .
2921 CG    CG    . LEU LEU LEU A A 383 383 . 0.0308 0.0334 0.0300 0.0066
0.0050  0.0061  1 .
2922 CD1   CD1   . LEU LEU LEU A A 383 383 . 0.0286 0.0294 0.0331 0.0019  -
0.0027 -0.0056 1 .
2923 CD2   CD2   . LEU LEU LEU A A 383 383 . 0.0470 0.0837 0.0446 0.0113
0.0163  -0.0105 1 .
2924 C     C     . LEU LEU LEU A A 383 383 . 0.0458 0.0257 0.0267 0.0023  -
0.0020 0.0002  1 .
2925 O     O     . LEU LEU LEU A A 383 383 . 0.0266 0.0254 0.0254 -0.0003
0.0003  -0.0001 1 .
2926 N     N     . VAL VAL VAL A A 384 384 . 0.0284 0.0277 0.0255 -0.0027
0.0007  -0.0006 1 .
2927 CA    CA    . VAL VAL VAL A A 384 384 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2928 CB    CB    . VAL VAL VAL A A 384 384 . 0.0276 0.0253 0.0256 0.0000  -
0.0008 0.0000  1 .
2929 CG1   CG1   . VAL VAL VAL A A 384 384 . 0.0555 0.0296 0.0342 0.0111  -
0.0163 -0.0061 1 .
2930 CG2   CG2   . VAL VAL VAL A A 384 384 . 0.0372 0.0372 0.0413 -0.0077
0.0047  -0.0129 1 .
2931 C     C     . VAL VAL VAL A A 384 384 . 0.0304 0.0259 0.0315 0.0010
0.0053  0.0015  1 .
2932 O     O     . VAL VAL VAL A A 384 384 . 0.0362 0.0268 0.0253 0.0040
0.0007  0.0002  1 .
2933 N     N     . VAL VAL VAL A A 385 385 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
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2934 CA    CA    . VAL VAL VAL A A 385 385 . 0.0339 0.0274 0.0480 0.0042
0.0140  0.0068  1 .
2935 CB    CB    . VAL VAL VAL A A 385 385 . 0.0362 0.0261 0.0253 0.0021
0.0004  0.0001  1 .
2936 CG1   CG1   . VAL VAL VAL A A 385 385 . 0.0300 0.0549 0.0813 -0.0100
0.0039  0.0121  1 .
2937 CG2   CG2   . VAL VAL VAL A A 385 385 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2938 C     C     . VAL VAL VAL A A 385 385 . 0.0773 0.0491 0.0586 -0.0013
0.0080  0.0147  1 .
2939 O     O     . VAL VAL VAL A A 385 385 . 0.0851 0.0385 0.0559 -0.0050
0.0007  0.0046  1 .
2940 N     N     . GLY GLY GLY A A 386 386 . 0.0545 0.0462 0.0496 -0.0036
0.0027  0.0143  1 .
2941 CA    CA    . GLY GLY GLY A A 386 386 . 0.0718 0.0450 0.0734 -0.0106 -
0.0068 0.0094  1 .
2942 C     C     . GLY GLY GLY A A 386 386 . 0.0705 0.0438 0.0537 -0.0091
0.0023  0.0180  1 .
2943 O     O     . GLY GLY GLY A A 386 386 . 0.0752 0.0611 0.0344 -0.0163
0.0174  0.0038  1 .
2944 N     N     . LEU LEU LEU A A 387 387 . 0.0379 0.0286 0.0542 -0.0053 -
0.0050 0.0074  1 .
2945 CA    CA    . LEU LEU LEU A A 387 387 . 0.0253 0.0256 0.0253 0.0000
0.0000  0.0001  1 .
2946 CB    CB    . LEU LEU LEU A A 387 387 . 0.0265 0.0265 0.0261 0.0012
0.0010  0.0009  1 .
2947 CG    CG    . LEU LEU LEU A A 387 387 . 0.0260 0.0527 0.0294 0.0036
0.0010  0.0010  1 .
2948 CD1   CD1   . LEU LEU LEU A A 387 387 . 0.0406 0.1270 0.0701 0.0286
0.0185  0.0018  1 .
2949 CD2   CD2   . LEU LEU LEU A A 387 387 . 0.0342 0.0297 0.0423 -0.0045
0.0013  -0.0066 1 .
2950 C     C     . LEU LEU LEU A A 387 387 . 0.0337 0.0255 0.0359 -0.0012 -
0.0094 0.0013  1 .
2951 O     O     . LEU LEU LEU A A 387 387 . 0.0412 0.0429 0.0371 0.0056
0.0079  0.0138  1 .
2952 N     N     . CYS CYS CYS A A 388 388 . 0.0578 0.0369 0.0404 0.0073
0.0036  0.0042  1 .
2953 CA    CA    . CYS CYS CYS A A 388 388 . 0.0590 0.0387 0.0466 -0.0212 -
0.0098 0.0047  1 .
2954 CB    CB    . CYS CYS CYS A A 388 388 . 0.0656 0.0767 0.0415 -0.0038 -
0.0119 -0.0068 1 .
2955 SG    SG    . CYS CYS CYS A A 388 388 . 0.1259 0.1332 0.1331 0.0079
0.0052  -0.0066 1 .
2956 C     C     . CYS CYS CYS A A 388 388 . 0.0399 0.0629 0.0622 0.0097  -
0.0213 -0.0007 1 .
2957 O     O     . CYS CYS CYS A A 388 388 . 0.0876 0.1044 0.0636 -0.0014 -
0.0094 -0.0031 1 .
2958 N     N     . THR THR THR A A 389 389 . 0.0438 0.0323 0.0299 0.0041  -
0.0072 -0.0048 1 .
2959 CA    CA    . THR THR THR A A 389 389 . 0.0259 0.0316 0.0256 -0.0019
0.0004  -0.0014 1 .
2960 CB    CB    . THR THR THR A A 389 389 . 0.0431 0.0289 0.0593 0.0056
0.0104  -0.0038 1 .
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2961 OG1   OG1   . THR THR THR A A 389 389 . 0.0543 0.0384 0.0269 -0.0102
0.0008  -0.0042 1 .
2962 CG2   CG2   . THR THR THR A A 389 389 . 0.0285 0.0264 0.0278 -0.0018 -
0.0028 0.0016  1 .
2963 C     C     . THR THR THR A A 389 389 . 0.0386 0.0466 0.0477 -0.0040 -
0.0039 0.0069  1 .
2964 O     O     . THR THR THR A A 389 389 . 0.0587 0.0825 0.0327 0.0004  -
0.0024 0.0085  1 .
2965 N     N     . GLY GLY GLY A A 390 390 . 0.0355 0.0339 0.0257 -0.0093 -
0.0021 0.0019  1 .
2966 CA    CA    . GLY GLY GLY A A 390 390 . 0.0439 0.0401 0.0376 0.0007
0.0056  -0.0009 1 .
2967 C     C     . GLY GLY GLY A A 390 390 . 0.0428 0.0319 0.0254 0.0107  -
0.0015 -0.0009 1 .
2968 O     O     . GLY GLY GLY A A 390 390 . 0.0803 0.0286 0.0257 -0.0119 -
0.0012 -0.0002 1 .
2969 N     N     . GLN GLN GLN A A 391 391 . 0.0809 0.0317 0.0456 0.0167
0.0167  0.0096  1 .
2970 CA    CA    . GLN GLN GLN A A 391 391 . 0.0261 0.0268 0.0488 0.0003
0.0027  0.0056  1 .
2971 CB    CB    . GLN GLN GLN A A 391 391 . 0.0796 0.0619 0.0757 0.0003  -
0.0219 0.0358  1 .
2972 CG    CG    . GLN GLN GLN A A 391 391 . 0.0639 0.0399 0.0669 0.0129  -
0.0024 0.0197  1 .
2973 CD    CD    . GLN GLN GLN A A 391 391 . 0.0637 0.0604 0.0595 -0.0134
0.0158  0.0027  1 .
2974 OE1   OE1   . GLN GLN GLN A A 391 391 . 0.0785 0.0953 0.0351 0.0185  -
0.0141 0.0146  1 .
2975 NE2   NE2   . GLN GLN GLN A A 391 391 . 0.0386 0.0583 0.0332 0.0194  -
0.0092 -0.0110 1 .
2976 C     C     . GLN GLN GLN A A 391 391 . 0.0479 0.0314 0.0524 0.0032
0.0112  0.0121  1 .
2977 O     O     . GLN GLN GLN A A 391 391 . 0.0505 0.0253 0.0256 -0.0002
0.0028  0.0000  1 .
2978 N     N     . ILE ILE ILE A A 392 392 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2979 CA    CA    . ILE ILE ILE A A 392 392 . 0.0280 0.0264 0.0386 -0.0016
0.0059  -0.0037 1 .
2980 CB    CB    . ILE ILE ILE A A 392 392 . 0.0277 0.0265 0.0262 0.0017  -
0.0014 -0.0010 1 .
2981 CG1   CG1   . ILE ILE ILE A A 392 392 . 0.0257 0.0269 0.0269 -0.0007 -
0.0007 0.0016  1 .
2982 CD1   CD1   . ILE ILE ILE A A 392 392 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2983 CG2   CG2   . ILE ILE ILE A A 392 392 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2984 C     C     . ILE ILE ILE A A 392 392 . 0.0402 0.0256 0.0253 -0.0021 -
0.0005 0.0000  1 .
2985 O     O     . ILE ILE ILE A A 392 392 . 0.0265 0.0254 0.0255 0.0003
0.0005  0.0001  1 .
2986 N     N     . LYS LYS LYS A A 393 393 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2987 CA    CA    . LYS LYS LYS A A 393 393 . 0.0291 0.0304 0.0342 -0.0044
0.0058  -0.0067 1 .
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2988 CB    CB    . LYS LYS LYS A A 393 393 . 0.0329 0.0331 0.0290 0.0077  -
0.0053 -0.0053 1 .
2989 CG    CG    . LYS LYS LYS A A 393 393 . 0.0446 0.0716 0.0918 -0.0066 -
0.0037 0.0080  1 .
2990 CD    CD    . LYS LYS LYS A A 393 393 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2991 CE    CE    . LYS LYS LYS A A 393 393 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2992 NZ    NZ    . LYS LYS LYS A A 393 393 . 0.0350 0.0399 0.0471 -0.0118 -
0.0145 0.0178  1 .
2993 C     C     . LYS LYS LYS A A 393 393 . 0.0260 0.0263 0.0257 -0.0008 -
0.0005 0.0006  1 .
2994 O     O     . LYS LYS LYS A A 393 393 . 0.0266 0.0257 0.0262 0.0007  -
0.0011 -0.0006 1 .
2995 N     N     . THR THR THR A A 394 394 . 0.0393 0.0314 0.0260 -0.0092 -
0.0032 0.0021  1 .
2996 CA    CA    . THR THR THR A A 394 394 . 0.0309 0.0256 0.0262 0.0005  -
0.0019 -0.0004 1 .
2997 CB    CB    . THR THR THR A A 394 394 . 0.0352 0.0367 0.0254 0.0106
0.0011  0.0011  1 .
2998 OG1   OG1   . THR THR THR A A 394 394 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
2999 CG2   CG2   . THR THR THR A A 394 394 . 0.0539 0.0459 0.0353 0.0239
0.0076  0.0043  1 .
3000 C     C     . THR THR THR A A 394 394 . 0.0256 0.0257 0.0269 0.0003  -
0.0007 -0.0007 1 .
3001 O     O     . THR THR THR A A 394 394 . 0.0318 0.0277 0.0276 -0.0039 -
0.0038 0.0023  1 .
3002 N     N     . GLY GLY GLY A A 395 395 . 0.0256 0.0253 0.0255 -0.0001
0.0002  0.0000  1 .
3003 CA    CA    . GLY GLY GLY A A 395 395 . 0.0347 0.0278 0.0260 -0.0049
0.0025  -0.0013 1 .
3004 C     C     . GLY GLY GLY A A 395 395 . 0.0309 0.0262 0.0280 0.0022
0.0039  0.0015  1 .
3005 O     O     . GLY GLY GLY A A 395 395 . 0.0292 0.0286 0.0311 -0.0036
0.0046  -0.0042 1 .
3006 N     N     . ALA ALA ALA A A 396 396 . 0.0253 0.0283 0.0311 -0.0001 -
0.0002 0.0042  1 .
3007 CA    CA    . ALA ALA ALA A A 396 396 . 0.0304 0.0260 0.0419 -0.0018
0.0091  -0.0033 1 .
3008 CB    CB    . ALA ALA ALA A A 396 396 . 0.0310 0.0350 0.0408 -0.0074 -
0.0093 0.0123  1 .
3009 C     C     . ALA ALA ALA A A 396 396 . 0.0258 0.0279 0.0283 -0.0009
0.0008  -0.0027 1 .
3010 O     O     . ALA ALA ALA A A 396 396 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3011 N     N     . PRO PRO PRO A A 397 397 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3012 CA    CA    . PRO PRO PRO A A 397 397 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3013 CB    CB    . PRO PRO PRO A A 397 397 . 0.0307 0.0336 0.0352 -0.0067
0.0073  -0.0090 1 .
3014 CG    CG    . PRO PRO PRO A A 397 397 . 0.0253 0.0253 0.0256 0.0000
0.0000  0.0000  1 .
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3015 CD    CD    . PRO PRO PRO A A 397 397 . 0.0255 0.0285 0.0253 -0.0007
0.0000  0.0002  1 .
3016 C     C     . PRO PRO PRO A A 397 397 . 0.0316 0.0307 0.0259 0.0058
0.0018  0.0017  1 .
3017 O     O     . PRO PRO PRO A A 397 397 . 0.0292 0.0253 0.0267 0.0003  -
0.0023 -0.0002 1 .
3018 N     N     . CYS CYS CYS A A 398 398 . 0.0345 0.0255 0.0266 -0.0013 -
0.0034 0.0005  1 .
3019 CA    CA    . CYS CYS CYS A A 398 398 . 0.0342 0.0253 0.0271 -0.0001
0.0040  0.0000  1 .
3020 CB    CB    . CYS CYS CYS A A 398 398 . 0.0314 0.0295 0.0320 0.0050  -
0.0063 -0.0053 1 .
3021 SG    SG    . CYS CYS CYS A A 398 398 . 0.0380 0.0306 0.0467 -0.0032
0.0151  -0.0078 1 .
3022 C     C     . CYS CYS CYS A A 398 398 . 0.0290 0.0263 0.0304 0.0019
0.0038  0.0021  1 .
3023 O     O     . CYS CYS CYS A A 398 398 . 0.0262 0.0254 0.0253 -0.0003 -
0.0001 0.0000  1 .
3024 N     N     . ARG ARG ARG A A 399 399 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3025 CA    CA    . ARG ARG ARG A A 399 399 . 0.0324 0.0269 0.0273 0.0034  -
0.0037 -0.0018 1 .
3026 CB    CB    . ARG ARG ARG A A 399 399 . 0.0253 0.0303 0.0264 0.0002
0.0001  0.0023  1 .
3027 CG    CG    . ARG ARG ARG A A 399 399 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3028 CD    CD    . ARG ARG ARG A A 399 399 . 0.0299 0.0388 0.0330 0.0048
0.0028  -0.0041 1 .
3029 NE    NE    . ARG ARG ARG A A 399 399 . 0.0372 0.0270 0.0306 -0.0044
0.0079  -0.0029 1 .
3030 CZ    CZ    . ARG ARG ARG A A 399 399 . 0.0270 0.0281 0.0564 -0.0021
0.0072  -0.0094 1 .
3031 NH1   NH1   . ARG ARG ARG A A 399 399 . 0.0268 0.0254 0.0324 0.0003  -
0.0032 -0.0007 1 .
3032 NH2   NH2   . ARG ARG ARG A A 399 399 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3033 C     C     . ARG ARG ARG A A 399 399 . 0.0294 0.0257 0.0383 0.0013
0.0073  0.0023  1 .
3034 O     O     . ARG ARG ARG A A 399 399 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3035 N     N     . SER SER SER A A 400 400 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3036 CA    CA    . SER SER SER A A 400 400 . 0.0259 0.0286 0.0290 0.0013
0.0014  0.0035  1 .
3037 CB    CB    . SER SER SER A A 400 400 . 0.0268 0.0253 0.0428 0.0001
0.0051  0.0003  1 .
3038 OG    OG    . SER SER SER A A 400 400 . 0.0254 0.0343 0.0308 0.0010
0.0008  0.0070  1 .
3039 C     C     . SER SER SER A A 400 400 . 0.0334 0.0283 0.0284 0.0049  -
0.0041 -0.0024 1 .
3040 O     O     . SER SER SER A A 400 400 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3041 N     N     . GLU GLU GLU A A 401 401 . 0.0253 0.0405 0.0295 0.0000
0.0000  0.0080  1 .
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3042 CA    CA    . GLU GLU GLU A A 401 401 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3043 CB    CB    . GLU GLU GLU A A 401 401 . 0.0281 0.0260 0.0259 -0.0014
0.0013  -0.0006 1 .
3044 CG    CG    . GLU GLU GLU A A 401 401 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3045 CD    CD    . GLU GLU GLU A A 401 401 . 0.0269 0.0296 0.0266 0.0026  -
0.0014 -0.0024 1 .
3046 OE1   OE1   . GLU GLU GLU A A 401 401 . 0.0271 0.0297 0.0294 -0.0028
0.0027  -0.0042 1 .
3047 OE2   OE2   . GLU GLU GLU A A 401 401 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3048 C     C     . GLU GLU GLU A A 401 401 . 0.0327 0.0271 0.0260 -0.0036 -
0.0023 0.0011  1 .
3049 O     O     . GLU GLU GLU A A 401 401 . 0.0275 0.0258 0.0259 -0.0011
0.0009  -0.0004 1 .
3050 N     N     . ARG ARG ARG A A 402 402 . 0.0424 0.0255 0.0278 -0.0018
0.0066  -0.0007 1 .
3051 CA    CA    . ARG ARG ARG A A 402 402 . 0.0272 0.0253 0.0255 0.0000
0.0006  0.0000  1 .
3052 CB    CB    . ARG ARG ARG A A 402 402 . 0.0286 0.0267 0.0306 -0.0021
0.0041  -0.0027 1 .
3053 CG    CG    . ARG ARG ARG A A 402 402 . 0.0268 0.0263 0.0290 0.0012
0.0023  0.0019  1 .
3054 CD    CD    . ARG ARG ARG A A 402 402 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3055 NE    NE    . ARG ARG ARG A A 402 402 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3056 CZ    CZ    . ARG ARG ARG A A 402 402 . 0.0312 0.0436 0.0396 0.0069
0.0092  0.0098  1 .
3057 NH1   NH1   . ARG ARG ARG A A 402 402 . 0.0255 0.0254 0.0255 -0.0001 -
0.0002 0.0001  1 .
3058 NH2   NH2   . ARG ARG ARG A A 402 402 . 0.0336 0.0262 0.0310 -0.0027
0.0069  -0.0022 1 .
3059 C     C     . ARG ARG ARG A A 402 402 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3060 O     O     . ARG ARG ARG A A 402 402 . 0.0281 0.0261 0.0314 -0.0015 -
0.0041 0.0022  1 .
3061 N     N     . LEU LEU LEU A A 403 403 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3062 CA    CA    . LEU LEU LEU A A 403 403 . 0.0270 0.0288 0.0258 0.0024
0.0006  0.0010  1 .
3063 CB    CB    . LEU LEU LEU A A 403 403 . 0.0266 0.0253 0.0264 0.0000  -
0.0012 0.0000  1 .
3064 CG    CG    . LEU LEU LEU A A 403 403 . 0.0652 0.0368 0.0304 -0.0151
0.0133  -0.0031 1 .
3065 CD1   CD1   . LEU LEU LEU A A 403 403 . 0.0611 0.0570 0.0436 0.0030  -
0.0107 -0.0227 1 .
3066 CD2   CD2   . LEU LEU LEU A A 403 403 . 0.0379 0.0296 0.0887 0.0074
0.0282  0.0166  1 .
3067 C     C     . LEU LEU LEU A A 403 403 . 0.0281 0.0253 0.0254 0.0004
0.0004  0.0000  1 .
3068 O     O     . LEU LEU LEU A A 403 403 . 0.0269 0.0258 0.0294 0.0009  -
0.0026 -0.0015 1 .
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3069 N     N     . ALA ALA ALA A A 404 404 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3070 CA    CA    . ALA ALA ALA A A 404 404 . 0.0254 0.0253 0.0255 0.0000  -
0.0001 0.0000  1 .
3071 CB    CB    . ALA ALA ALA A A 404 404 . 0.0339 0.0255 0.0254 0.0012  -
0.0009 -0.0001 1 .
3072 C     C     . ALA ALA ALA A A 404 404 . 0.0272 0.0255 0.0270 0.0006  -
0.0018 -0.0006 1 .
3073 O     O     . ALA ALA ALA A A 404 404 . 0.0282 0.0269 0.0254 -0.0021 -
0.0006 0.0004  1 .
3074 N     N     . LYS LYS LYS A A 405 405 . 0.0281 0.0257 0.0255 -0.0011 -
0.0007 0.0003  1 .
3075 CA    CA    . LYS LYS LYS A A 405 405 . 0.0270 0.0262 0.0270 0.0012
0.0016  0.0012  1 .
3076 CB    CB    . LYS LYS LYS A A 405 405 . 0.0264 0.0307 0.0259 0.0024
0.0008  0.0018  1 .
3077 CG    CG    . LYS LYS LYS A A 405 405 . 0.0436 0.0314 0.0255 -0.0105
0.0020  -0.0011 1 .
3078 CD    CD    . LYS LYS LYS A A 405 405 . 0.0555 0.0411 0.0253 0.0218
0.0005  0.0003  1 .
3079 CE    CE    . LYS LYS LYS A A 405 405 . 0.0983 0.0265 0.0268 0.0078
0.0072  0.0002  1 .
3080 NZ    NZ    . LYS LYS LYS A A 405 405 . 0.0357 0.0258 0.0285 -0.0023
0.0057  -0.0013 1 .
3081 C     C     . LYS LYS LYS A A 405 405 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3082 O     O     . LYS LYS LYS A A 405 405 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3083 N     N     . TYR TYR TYR A A 406 406 . 0.0290 0.0260 0.0256 -0.0016 -
0.0010 0.0004  1 .
3084 CA    CA    . TYR TYR TYR A A 406 406 . 0.0253 0.0261 0.0276 -0.0001 -
0.0001 0.0014  1 .
3085 CB    CB    . TYR TYR TYR A A 406 406 . 0.0400 0.0354 0.0283 -0.0122
0.0067  -0.0055 1 .
3086 CG    CG    . TYR TYR TYR A A 406 406 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3087 CD1   CD1   . TYR TYR TYR A A 406 406 . 0.0253 0.0266 0.0287 -0.0002
0.0004  -0.0020 1 .
3088 CE1   CE1   . TYR TYR TYR A A 406 406 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3089 CZ    CZ    . TYR TYR TYR A A 406 406 . 0.0254 0.0349 0.0362 0.0011  -
0.0012 -0.0102 1 .
3090 OH    OH    . TYR TYR TYR A A 406 406 . 0.0348 0.0253 0.0273 -0.0002 -
0.0043 0.0001  1 .
3091 CE2   CE2   . TYR TYR TYR A A 406 406 . 0.0372 0.0253 0.0283 0.0006
0.0060  0.0003  1 .
3092 CD2   CD2   . TYR TYR TYR A A 406 406 . 0.0281 0.0293 0.0291 -0.0033
0.0032  -0.0038 1 .
3093 C     C     . TYR TYR TYR A A 406 406 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3094 O     O     . TYR TYR TYR A A 406 406 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3095 N     N     . ASN ASN ASN A A 407 407 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
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3096 CA    CA    . ASN ASN ASN A A 407 407 . 0.0300 0.0257 0.0264 -0.0013 -
0.0023 0.0006  1 .
3097 CB    CB    . ASN ASN ASN A A 407 407 . 0.0253 0.0370 0.0347 0.0004
0.0003  0.0104  1 .
3098 CG    CG    . ASN ASN ASN A A 407 407 . 0.0286 0.0253 0.0403 0.0004
0.0070  0.0008  1 .
3099 OD1   OD1   . ASN ASN ASN A A 407 407 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3100 ND2   ND2   . ASN ASN ASN A A 407 407 . 0.0319 0.0389 0.0253 0.0094
0.0006  0.0009  1 .
3101 C     C     . ASN ASN ASN A A 407 407 . 0.0262 0.0317 0.0285 0.0024
0.0017  0.0045  1 .
3102 O     O     . ASN ASN ASN A A 407 407 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3103 N     N     . GLN GLN GLN A A 408 408 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3104 CA    CA    . GLN GLN GLN A A 408 408 . 0.0302 0.0348 0.0261 -0.0068
0.0019  -0.0027 1 .
3105 CB    CB    . GLN GLN GLN A A 408 408 . 0.0512 0.0427 0.0285 -0.0195
0.0030  0.0004  1 .
3106 CG    CG    . GLN GLN GLN A A 408 408 . 0.0258 0.0262 0.0357 0.0006
0.0022  0.0031  1 .
3107 CD    CD    . GLN GLN GLN A A 408 408 . 0.0640 0.0576 0.0682 0.0022
0.0129  0.0360  1 .
3108 OE1   OE1   . GLN GLN GLN A A 408 408 . 0.0527 0.0809 0.0569 -0.0070
0.0111  0.0295  1 .
3109 NE2   NE2   . GLN GLN GLN A A 408 408 . 0.0969 0.0951 0.0966 -0.0427
0.0302  0.0327  1 .
3110 C     C     . GLN GLN GLN A A 408 408 . 0.0286 0.0337 0.0299 -0.0035
0.0035  -0.0057 1 .
3111 O     O     . GLN GLN GLN A A 408 408 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3112 N     N     . LEU LEU LEU A A 409 409 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3113 CA    CA    . LEU LEU LEU A A 409 409 . 0.0269 0.0270 0.0311 -0.0016
0.0031  -0.0031 1 .
3114 CB    CB    . LEU LEU LEU A A 409 409 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3115 CG    CG    . LEU LEU LEU A A 409 409 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3116 CD1   CD1   . LEU LEU LEU A A 409 409 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3117 CD2   CD2   . LEU LEU LEU A A 409 409 . 0.0388 0.0253 0.0280 0.0002  -
0.0060 0.0000  1 .
3118 C     C     . LEU LEU LEU A A 409 409 . 0.0308 0.0328 0.0258 0.0064
0.0016  0.0019  1 .
3119 O     O     . LEU LEU LEU A A 409 409 . 0.0256 0.0348 0.0273 -0.0016 -
0.0007 0.0043  1 .
3120 N     N     . MET MET MET A A 410 410 . 0.0330 0.0265 0.0255 0.0029
0.0005  0.0003  1 .
3121 CA    CA    . MET MET MET A A 410 410 . 0.0335 0.0287 0.0255 0.0053  -
0.0013 -0.0008 1 .
3122 CB    CB    . MET MET MET A A 410 410 . 0.0372 0.0275 0.0314 0.0050
0.0085  0.0036  1 .
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3123 CG    CG    . MET MET MET A A 410 410 . 0.0291 0.0334 0.0295 0.0056
0.0040  0.0058  1 .
3124 SD    SD    . MET MET MET A A 410 410 . 0.0781 0.0354 0.0352 0.0057
0.0086  0.0081  1 .
3125 CE    CE    . MET MET MET A A 410 410 . 0.1467 0.0535 0.0517 0.0094
0.0440  -0.0134 1 .
3126 C     C     . MET MET MET A A 410 410 . 0.0550 0.0279 0.0336 0.0088
0.0157  0.0046  1 .
3127 O     O     . MET MET MET A A 410 410 . 0.0352 0.0489 0.0417 0.0006
0.0092  -0.0130 1 .
3128 N     N     . ARG ARG ARG A A 411 411 . 0.0354 0.0409 0.0302 -0.0125 -
0.0070 0.0087  1 .
3129 CA    CA    . ARG ARG ARG A A 411 411 . 0.0273 0.0350 0.0286 0.0043
0.0025  0.0056  1 .
3130 CB    CB    . ARG ARG ARG A A 411 411 . 0.0353 0.0284 0.0341 -0.0055
0.0093  -0.0052 1 .
3131 CG    CG    . ARG ARG ARG A A 411 411 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3132 CD    CD    . ARG ARG ARG A A 411 411 . 0.0455 0.0411 0.0253 -0.0179
0.0004  -0.0004 1 .
3133 NE    NE    . ARG ARG ARG A A 411 411 . 0.0425 0.0971 0.0691 0.0085
0.0268  0.0020  1 .
3134 CZ    CZ    . ARG ARG ARG A A 411 411 . 0.0780 0.0376 0.0481 0.0028
0.0072  -0.0060 1 .
3135 NH1   NH1   . ARG ARG ARG A A 411 411 . 0.0346 0.0463 0.0468 -0.0133 -
0.0063 0.0030  1 .
3136 NH2   NH2   . ARG ARG ARG A A 411 411 . 0.0973 0.0571 0.0596 0.0191
0.0003  0.0062  1 .
3137 C     C     . ARG ARG ARG A A 411 411 . 0.0284 0.0291 0.0295 0.0034
0.0036  0.0040  1 .
3138 O     O     . ARG ARG ARG A A 411 411 . 0.0339 0.0665 0.0324 0.0188
0.0078  0.0170  1 .
3139 N     N     . ILE ILE ILE A A 412 412 . 0.0387 0.0387 0.0290 0.0134
0.0071  0.0071  1 .
3140 CA    CA    . ILE ILE ILE A A 412 412 . 0.0276 0.0396 0.0286 0.0057
0.0027  0.0069  1 .
3141 CB    CB    . ILE ILE ILE A A 412 412 . 0.0281 0.0276 0.0271 0.0025
0.0022  0.0020  1 .
3142 CG1   CG1   . ILE ILE ILE A A 412 412 . 0.0339 0.0353 0.0320 -0.0067 -
0.0039 -0.0018 1 .
3143 CD1   CD1   . ILE ILE ILE A A 412 412 . 0.0736 0.0721 0.0436 0.0291
0.0034  -0.0209 1 .
3144 CG2   CG2   . ILE ILE ILE A A 412 412 . 0.0463 0.0574 0.0499 -0.0095 -
0.0226 0.0121  1 .
3145 C     C     . ILE ILE ILE A A 412 412 . 0.0388 0.0340 0.0383 -0.0036
0.0041  0.0083  1 .
3146 O     O     . ILE ILE ILE A A 412 412 . 0.0312 0.0550 0.0334 0.0023
0.0053  -0.0076 1 .
3147 N     N     . GLU GLU GLU A A 413 413 . 0.0268 0.0273 0.0254 -0.0017
0.0004  -0.0005 1 .
3148 CA    CA    . GLU GLU GLU A A 413 413 . 0.0388 0.0287 0.0274 -0.0035
0.0015  0.0017  1 .
3149 CB    CB    . GLU GLU GLU A A 413 413 . 0.0299 0.0273 0.0279 -0.0030 -
0.0034 0.0023  1 .
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3150 CG    CG    . GLU GLU GLU A A 413 413 . 0.0372 0.0367 0.0739 -0.0094
0.0063  -0.0154 1 .
3151 CD    CD    . GLU GLU GLU A A 413 413 . 0.0440 0.0577 0.0604 0.0042
0.0140  -0.0123 1 .
3152 OE1   OE1   . GLU GLU GLU A A 413 413 . 0.0463 0.0699 0.0809 -0.0052
0.0225  0.0140  1 .
3153 OE2   OE2   . GLU GLU GLU A A 413 413 . 0.1155 0.1237 0.0811 -0.0112
0.0017  0.0124  1 .
3154 C     C     . GLU GLU GLU A A 413 413 . 0.0319 0.0528 0.0389 -0.0060
0.0089  -0.0028 1 .
3155 O     O     . GLU GLU GLU A A 413 413 . 0.0961 0.0787 0.0372 0.0075
0.0280  0.0096  1 .
3156 N     N     . GLU GLU GLU A A 414 414 . 0.0508 0.0533 0.0421 0.0049
0.0117  0.0198  1 .
3157 CA    CA    . GLU GLU GLU A A 414 414 . 0.0953 0.0898 0.0779 0.0087
0.0070  0.0109  1 .
3158 CB    CB    . GLU GLU GLU A A 414 414 . 0.0798 0.0993 0.0751 0.0304  -
0.0135 0.0195  1 .
3159 CG    CG    . GLU GLU GLU A A 414 414 . 0.1795 0.1473 0.1128 0.0044  -
0.0112 0.0124  1 .
3160 CD    CD    . GLU GLU GLU A A 414 414 . 0.2196 0.2465 0.1061 0.0307  -
0.0047 0.0284  1 .
3161 OE1   OE1   . GLU GLU GLU A A 414 414 . 0.2805 0.1920 0.1226 0.0505
0.0307  0.0260  1 .
3162 OE2   OE2   . GLU GLU GLU A A 414 414 . 0.2937 0.2966 0.1132 0.0001
0.0224  -0.0036 1 .
3163 C     C     . GLU GLU GLU A A 414 414 . 0.0889 0.1134 0.0966 0.0111
0.0082  0.0130  1 .
3164 O     O     . GLU GLU GLU A A 414 414 . 0.1184 0.1466 0.1511 0.0197  -
0.0027 0.0052  1 .
3165 N     N     . GLU GLU GLU A A 415 415 . 0.1100 0.0956 0.0834 -0.0014
0.0119  -0.0078 1 .
3166 CA    CA    . GLU GLU GLU A A 415 415 . 0.1105 0.1216 0.1075 -0.0041
0.0125  0.0000  1 .
3167 CB    CB    . GLU GLU GLU A A 415 415 . 0.1356 0.1237 0.1459 0.0087
0.0058  0.0001  1 .
3168 CG    CG    . GLU GLU GLU A A 415 415 . 0.1948 0.2045 0.1899 -0.0250
0.0429  0.0005  1 .
3169 CD    CD    . GLU GLU GLU A A 415 415 . 0.2693 0.2935 0.3050 -0.0130
0.0155  -0.0075 1 .
3170 OE1   OE1   . GLU GLU GLU A A 415 415 . 0.3713 0.3458 0.3101 -0.0460
0.0550  -0.0065 1 .
3171 OE2   OE2   . GLU GLU GLU A A 415 415 . 0.3154 0.3313 0.3130 0.0108
0.0687  0.0644  1 .
3172 C     C     . GLU GLU GLU A A 415 415 . 0.0963 0.1175 0.1035 -0.0005
0.0176  -0.0062 1 .
3173 O     O     . GLU GLU GLU A A 415 415 . 0.1419 0.1365 0.1612 0.0035
0.0091  0.0058  1 .
3174 N     N     . LEU LEU LEU A A 416 416 . 0.1257 0.1243 0.0877 0.0206
0.0119  -0.0127 1 .
3175 CA    CA    . LEU LEU LEU A A 416 416 . 0.1429 0.1543 0.1051 -0.0005
0.0260  0.0192  1 .
3176 CB    CB    . LEU LEU LEU A A 416 416 . 0.1301 0.1137 0.0845 -0.0007
0.0444  0.0226  1 .
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3177 CG    CG    . LEU LEU LEU A A 416 416 . 0.1217 0.1590 0.0470 0.0029
0.0287  0.0428  1 .
3178 CD1   CD1   . LEU LEU LEU A A 416 416 . 0.1184 0.2153 0.1575 0.0649
0.0182  0.0018  1 .
3179 CD2   CD2   . LEU LEU LEU A A 416 416 . 0.1875 0.1266 0.2152 -0.0325
0.0217  0.0455  1 .
3180 C     C     . LEU LEU LEU A A 416 416 . 0.1914 0.1765 0.1541 -0.0102
0.0378  0.0041  1 .
3181 O     O     . LEU LEU LEU A A 416 416 . 0.2044 0.2066 0.1374 -0.0288
0.0464  0.0002  1 .
3182 N     N     . GLY GLY GLY A A 417 417 . 0.2252 0.2142 0.1818 -0.0009
0.0399  0.0216  1 .
3183 CA    CA    . GLY GLY GLY A A 417 417 . 0.2872 0.2723 0.2681 -0.0017
0.0337  -0.0035 1 .
3184 C     C     . GLY GLY GLY A A 417 417 . 0.3087 0.3210 0.3097 -0.0093
0.0157  -0.0046 1 .
3185 O     O     . GLY GLY GLY A A 417 417 . 0.3182 0.3505 0.3274 -0.0153
0.0358  -0.0194 1 .
3186 N     N     . ASP ASP ASP A A 418 418 . 0.3498 0.3627 0.3440 -0.0077
0.0160  -0.0149 1 .
3187 CA    CA    . ASP ASP ASP A A 418 418 . 0.3704 0.3941 0.3771 -0.0099
0.0011  -0.0085 1 .
3188 CB    CB    . ASP ASP ASP A A 418 418 . 0.3879 0.4022 0.3776 -0.0095
0.0046  -0.0095 1 .
3189 CG    CG    . ASP ASP ASP A A 418 418 . 0.4300 0.4274 0.4327 -0.0211 -
0.0065 0.0059  1 .
3190 OD1   OD1   . ASP ASP ASP A A 418 418 . 0.4497 0.4404 0.4473 -0.0134 -
0.0269 0.0041  1 .
3191 OD2   OD2   . ASP ASP ASP A A 418 418 . 0.5007 0.4922 0.4387 -0.0434 -
0.0053 0.0369  1 .
3192 C     C     . ASP ASP ASP A A 418 418 . 0.3698 0.3894 0.3785 -0.0100
0.0042  -0.0066 1 .
3193 O     O     . ASP ASP ASP A A 418 418 . 0.3892 0.4102 0.4017 -0.0070
0.0065  -0.0063 1 .
3194 N     N     . GLU GLU GLU A A 419 419 . 0.3647 0.3902 0.3755 -0.0086
0.0068  -0.0056 1 .
3195 CA    CA    . GLU GLU GLU A A 419 419 . 0.3637 0.3785 0.3667 -0.0050
0.0071  -0.0042 1 .
3196 CB    CB    . GLU GLU GLU A A 419 419 . 0.3652 0.3944 0.3742 -0.0073
0.0113  -0.0043 1 .
3197 CG    CG    . GLU GLU GLU A A 419 419 . 0.4342 0.4299 0.4266 0.0125
0.0273  0.0066  1 .
3198 CD    CD    . GLU GLU GLU A A 419 419 . 0.5191 0.4893 0.5013 -0.0102
0.0333  0.0002  1 .
3199 OE1   OE1   . GLU GLU GLU A A 419 419 . 0.5432 0.5099 0.5287 0.0093
0.0621  0.0088  1 .
3200 OE2   OE2   . GLU GLU GLU A A 419 419 . 0.5323 0.4884 0.5125 0.0200
0.0421  -0.0119 1 .
3201 C     C     . GLU GLU GLU A A 419 419 . 0.3426 0.3461 0.3417 -0.0117
0.0039  -0.0087 1 .
3202 O     O     . GLU GLU GLU A A 419 419 . 0.3374 0.3266 0.3205 -0.0212 -
0.0084 0.0066  1 .
3203 N     N     . ALA ALA ALA A A 420 420 . 0.3175 0.3167 0.3097 -0.0021 -
0.0036 -0.0133 1 .
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3204 CA    CA    . ALA ALA ALA A A 420 420 . 0.2847 0.2841 0.2881 -0.0014
0.0001  -0.0169 1 .
3205 CB    CB    . ALA ALA ALA A A 420 420 . 0.2738 0.2783 0.3000 0.0055
0.0032  -0.0080 1 .
3206 C     C     . ALA ALA ALA A A 420 420 . 0.2520 0.2698 0.2777 0.0042  -
0.0029 -0.0156 1 .
3207 O     O     . ALA ALA ALA A A 420 420 . 0.2795 0.2779 0.3030 -0.0038 -
0.0040 -0.0184 1 .
3208 N     N     . ARG ARG ARG A A 421 421 . 0.2272 0.2430 0.2460 -0.0056
0.0056  -0.0252 1 .
3209 CA    CA    . ARG ARG ARG A A 421 421 . 0.1571 0.1767 0.1753 -0.0055
0.0137  -0.0207 1 .
3210 CB    CB    . ARG ARG ARG A A 421 421 . 0.1713 0.2007 0.2121 -0.0103
0.0392  -0.0150 1 .
3211 CG    CG    . ARG ARG ARG A A 421 421 . 0.1673 0.2349 0.2105 0.0133
0.0324  -0.0362 1 .
3212 CD    CD    . ARG ARG ARG A A 421 421 . 0.2987 0.2846 0.2914 0.0263
0.0143  -0.0476 1 .
3213 NE    NE    . ARG ARG ARG A A 421 421 . 0.3273 0.3980 0.3553 0.0281
0.0110  -0.0168 1 .
3214 CZ    CZ    . ARG ARG ARG A A 421 421 . 0.3906 0.3943 0.3646 -0.0147
0.0188  0.0047  1 .
3215 NH1   NH1   . ARG ARG ARG A A 421 421 . 0.3957 0.4139 0.3771 -0.0196
0.0219  -0.0096 1 .
3216 NH2   NH2   . ARG ARG ARG A A 421 421 . 0.4140 0.4244 0.3673 0.0023
0.0090  0.0309  1 .
3217 C     C     . ARG ARG ARG A A 421 421 . 0.1274 0.1139 0.1249 -0.0131
0.0136  -0.0141 1 .
3218 O     O     . ARG ARG ARG A A 421 421 . 0.1332 0.1394 0.1278 -0.0149
0.0443  -0.0310 1 .
3219 N     N     . PHE PHE PHE A A 422 422 . 0.0742 0.0765 0.0541 -0.0025
0.0348  0.0119  1 .
3220 CA    CA    . PHE PHE PHE A A 422 422 . 0.0493 0.0400 0.0660 -0.0014
0.0030  0.0049  1 .
3221 CB    CB    . PHE PHE PHE A A 422 422 . 0.0260 0.0258 0.0406 0.0006
0.0033  0.0028  1 .
3222 CG    CG    . PHE PHE PHE A A 422 422 . 0.0550 0.0437 0.0302 -0.0019 -
0.0047 -0.0040 1 .
3223 CD1   CD1   . PHE PHE PHE A A 422 422 . 0.0290 0.0389 0.0364 -0.0070
0.0063  -0.0121 1 .
3224 CE1   CE1   . PHE PHE PHE A A 422 422 . 0.0376 0.0417 0.0259 -0.0141
0.0022  -0.0023 1 .
3225 CZ    CZ    . PHE PHE PHE A A 422 422 . 0.0579 0.0521 0.0486 -0.0171 -
0.0069 -0.0160 1 .
3226 CE2   CE2   . PHE PHE PHE A A 422 422 . 0.0264 0.0317 0.0259 0.0026  -
0.0008 -0.0020 1 .
3227 CD2   CD2   . PHE PHE PHE A A 422 422 . 0.0389 0.0296 0.0259 -0.0076
0.0029  -0.0016 1 .
3228 C     C     . PHE PHE PHE A A 422 422 . 0.0496 0.0440 0.0367 -0.0015
0.0158  -0.0054 1 .
3229 O     O     . PHE PHE PHE A A 422 422 . 0.0654 0.0663 0.0388 -0.0015 -
0.0012 -0.0234 1 .
3230 N     N     . ALA ALA ALA A A 423 423 . 0.0419 0.0354 0.0523 0.0096
0.0192  0.0066  1 .
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3231 CA    CA    . ALA ALA ALA A A 423 423 . 0.0374 0.0275 0.0330 0.0022
0.0000  0.0037  1 .
3232 CB    CB    . ALA ALA ALA A A 423 423 . 0.0511 0.0538 0.0287 -0.0025
0.0094  -0.0012 1 .
3233 C     C     . ALA ALA ALA A A 423 423 . 0.0356 0.0322 0.0276 0.0024
0.0040  -0.0012 1 .
3234 O     O     . ALA ALA ALA A A 423 423 . 0.0554 0.0410 0.0297 0.0017  -
0.0097 -0.0049 1 .
3235 N     N     . GLY GLY GLY A A 424 424 . 0.0457 0.0329 0.0329 -0.0123 -
0.0070 0.0036  1 .
3236 CA    CA    . GLY GLY GLY A A 424 424 . 0.0589 0.0260 0.0270 0.0015  -
0.0054 -0.0010 1 .
3237 C     C     . GLY GLY GLY A A 424 424 . 0.0279 0.0488 0.0354 -0.0058
0.0038  -0.0154 1 .
3238 O     O     . GLY GLY GLY A A 424 424 . 0.0784 0.0638 0.0596 -0.0158
0.0057  -0.0225 1 .
3239 N     N     . HIS HIS HIS A A 425 425 . 0.0484 0.0319 0.0305 -0.0068 -
0.0028 -0.0038 1 .
3240 CA    CA    . HIS HIS HIS A A 425 425 . 0.0491 0.0356 0.0501 0.0054  -
0.0075 -0.0160 1 .
3241 CB    CB    . HIS HIS HIS A A 425 425 . 0.0807 0.0436 0.0473 0.0008  -
0.0116 -0.0191 1 .
3242 CG    CG    . HIS HIS HIS A A 425 425 . 0.0849 0.0456 0.0666 0.0052
0.0245  -0.0159 1 .
3243 ND1   ND1   . HIS HIS HIS A A 425 425 . 0.0855 0.1162 0.0930 -0.0396 -
0.0160 -0.0229 1 .
3244 CE1   CE1   . HIS HIS HIS A A 425 425 . 0.1266 0.1201 0.1168 0.0154  -
0.0398 -0.0152 1 .
3245 NE2   NE2   . HIS HIS HIS A A 425 425 . 0.0922 0.0701 0.0733 -0.0155 -
0.0051 -0.0430 1 .
3246 CD2   CD2   . HIS HIS HIS A A 425 425 . 0.1088 0.1117 0.0667 -0.0076 -
0.0043 -0.0103 1 .
3247 C     C     . HIS HIS HIS A A 425 425 . 0.0361 0.0309 0.0256 0.0078  -
0.0018 -0.0013 1 .
3248 O     O     . HIS HIS HIS A A 425 425 . 0.0550 0.0541 0.0511 0.0080  -
0.0071 -0.0117 1 .
3249 N     N     . ASN ASN ASN A A 426 426 . 0.0513 0.0386 0.0432 0.0058
0.0071  -0.0122 1 .
3250 CA    CA    . ASN ASN ASN A A 426 426 . 0.0522 0.0478 0.0447 -0.0241
0.0049  -0.0082 1 .
3251 CB    CB    . ASN ASN ASN A A 426 426 . 0.0645 0.0487 0.0423 0.0038
0.0130  0.0031  1 .
3252 CG    CG    . ASN ASN ASN A A 426 426 . 0.0331 0.0456 0.0375 0.0032  -
0.0081 -0.0118 1 .
3253 OD1   OD1   . ASN ASN ASN A A 426 426 . 0.1871 0.1291 0.0749 0.0308  -
0.0536 -0.0141 1 .
3254 ND2   ND2   . ASN ASN ASN A A 426 426 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3255 C     C     . ASN ASN ASN A A 426 426 . 0.0698 0.0739 0.0628 -0.0158
0.0228  -0.0166 1 .
3256 O     O     . ASN ASN ASN A A 426 426 . 0.1057 0.0793 0.0868 0.0009
0.0389  -0.0182 1 .
3257 N     N     . PHE PHE PHE A A 427 427 . 0.0946 0.0680 0.0357 -0.0224
0.0132  -0.0160 1 .
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3258 CA    CA    . PHE PHE PHE A A 427 427 . 0.0827 0.0610 0.0417 -0.0095
0.0056  -0.0242 1 .
3259 CB    CB    . PHE PHE PHE A A 427 427 . 0.1007 0.0722 0.0767 -0.0093 -
0.0036 -0.0044 1 .
3260 CG    CG    . PHE PHE PHE A A 427 427 . 0.0848 0.0463 0.0355 0.0205
0.0147  -0.0044 1 .
3261 CD1   CD1   . PHE PHE PHE A A 427 427 . 0.1076 0.0485 0.0617 -0.0164 -
0.0247 0.0192  1 .
3262 CE1   CE1   . PHE PHE PHE A A 427 427 . 0.0785 0.0345 0.0644 0.0091  -
0.0136 0.0141  1 .
3263 CZ    CZ    . PHE PHE PHE A A 427 427 . 0.0701 0.1125 0.0934 -0.0105
0.0099  0.0131  1 .
3264 CE2   CE2   . PHE PHE PHE A A 427 427 . 0.0957 0.0609 0.1236 0.0468
0.0294  -0.0001 1 .
3265 CD2   CD2   . PHE PHE PHE A A 427 427 . 0.1187 0.0761 0.1227 0.0124
0.0145  0.0167  1 .
3266 C     C     . PHE PHE PHE A A 427 427 . 0.0888 0.0653 0.0457 -0.0053 -
0.0018 -0.0271 1 .
3267 O     O     . PHE PHE PHE A A 427 427 . 0.1104 0.0681 0.0604 -0.0214 -
0.0007 -0.0084 1 .
3268 N     N     . ARG ARG ARG A A 428 428 . 0.0662 0.0442 0.0553 0.0013
0.0034  -0.0235 1 .
3269 CA    CA    . ARG ARG ARG A A 428 428 . 0.0860 0.0784 0.0781 0.0081  -
0.0057 -0.0080 1 .
3270 CB    CB    . ARG ARG ARG A A 428 428 . 0.0985 0.0856 0.1064 -0.0068
0.0090  -0.0292 1 .
3271 CG    CG    . ARG ARG ARG A A 428 428 . 0.1037 0.1364 0.1267 -0.0141 -
0.0083 -0.0177 1 .
3272 CD    CD    . ARG ARG ARG A A 428 428 . 0.1542 0.1958 0.1492 0.0064  -
0.0391 -0.0386 1 .
3273 NE    NE    . ARG ARG ARG A A 428 428 . 0.2212 0.1392 0.1793 -0.0119 -
0.0097 -0.0525 1 .
3274 CZ    CZ    . ARG ARG ARG A A 428 428 . 0.1947 0.1808 0.1390 -0.0114 -
0.0005 -0.0392 1 .
3275 NH1   NH1   . ARG ARG ARG A A 428 428 . 0.2752 0.2264 0.1423 -0.0138 -
0.0064 -0.0721 1 .
3276 NH2   NH2   . ARG ARG ARG A A 428 428 . 0.2814 0.1906 0.1529 -0.0083 -
0.0044 -0.0580 1 .
3277 C     C     . ARG ARG ARG A A 428 428 . 0.1310 0.1021 0.1067 0.0032  -
0.0012 -0.0023 1 .
3278 O     O     . ARG ARG ARG A A 428 428 . 0.1657 0.0815 0.1083 -0.0124 -
0.0071 0.0357  1 .
3279 N     N     . ASN ASN ASN A A 429 429 . 0.1457 0.1313 0.1161 0.0107  -
0.0084 0.0178  1 .
3280 CA    CA    . ASN ASN ASN A A 429 429 . 0.1596 0.1656 0.1163 -0.0086
0.0024  -0.0011 1 .
3281 CB    CB    . ASN ASN ASN A A 429 429 . 0.2009 0.1947 0.1362 -0.0010 -
0.0054 -0.0040 1 .
3282 CG    CG    . ASN ASN ASN A A 429 429 . 0.2411 0.2266 0.1830 -0.0144
0.0183  -0.0133 1 .
3283 OD1   OD1   . ASN ASN ASN A A 429 429 . 0.3926 0.2321 0.1223 0.0368
0.0534  -0.0102 1 .
3284 ND2   ND2   . ASN ASN ASN A A 429 429 . 0.2492 0.2853 0.1570 -0.0244 -
0.0224 -0.0536 1 .
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3285 C     C     . ASN ASN ASN A A 429 429 . 0.1525 0.1529 0.1122 -0.0114 -
0.0035 0.0044  1 .
3286 O     O     . ASN ASN ASN A A 429 429 . 0.1306 0.1656 0.1092 -0.0364 -
0.0231 0.0032  1 .
3287 N     N     . PRO PRO PRO A A 430 430 . 0.1450 0.1251 0.0891 -0.0131
0.0040  0.0026  1 .
3288 CA    CA    . PRO PRO PRO A A 430 430 . 0.1566 0.1512 0.1209 -0.0237
0.0047  0.0051  1 .
3289 CB    CB    . PRO PRO PRO A A 430 430 . 0.1747 0.1558 0.1202 -0.0089
0.0039  0.0132  1 .
3290 CG    CG    . PRO PRO PRO A A 430 430 . 0.1712 0.1338 0.1181 -0.0188
0.0150  0.0095  1 .
3291 CD    CD    . PRO PRO PRO A A 430 430 . 0.1684 0.1265 0.0977 -0.0164 -
0.0075 -0.0245 1 .
3292 C     C     . PRO PRO PRO A A 430 430 . 0.1642 0.1648 0.1382 -0.0301
0.0049  -0.0092 1 .
3293 O     O     . PRO PRO PRO A A 430 430 . 0.1256 0.1554 0.1231 -0.0599 -
0.0298 0.0057  1 .
3294 N     N     . SER SER SER A A 431 431 . 0.1844 0.1924 0.1357 -0.0345
0.0067  -0.0043 1 .
3295 CA    CA    . SER SER SER A A 431 431 . 0.1909 0.2125 0.1846 -0.0358 -
0.0063 0.0086  1 .
3296 CB    CB    . SER SER SER A A 431 431 . 0.1995 0.2129 0.1961 -0.0349 -
0.0050 0.0073  1 .
3297 OG    OG    . SER SER SER A A 431 431 . 0.2191 0.2239 0.2317 -0.0534 -
0.0261 0.0448  1 .
3298 C     C     . SER SER SER A A 431 431 . 0.1990 0.2335 0.1794 -0.0258
0.0015  -0.0010 1 .
3299 O     O     . SER SER SER A A 431 431 . 0.2341 0.2470 0.2018 -0.0308 -
0.0059 0.0079  1 .
3300 N     N     . VAL VAL VAL A A 432 432 . 0.2042 0.2300 0.1736 -0.0121
0.0011  -0.0009 1 .
3301 CA    CA    . VAL VAL VAL A A 432 432 . 0.2020 0.2267 0.1525 -0.0070 -
0.0162 -0.0041 1 .
3302 CB    CB    . VAL VAL VAL A A 432 432 . 0.2083 0.2451 0.1401 -0.0112 -
0.0163 -0.0155 1 .
3303 CG1   CG1   . VAL VAL VAL A A 432 432 . 0.2433 0.2553 0.1116 0.0308  -
0.0225 -0.0523 1 .
3304 CG2   CG2   . VAL VAL VAL A A 432 432 . 0.1703 0.2311 0.0841 -0.0199 -
0.0549 -0.0455 1 .
3305 C     C     . VAL VAL VAL A A 432 432 . 0.2062 0.2244 0.1668 -0.0057 -
0.0015 0.0067  1 .
3306 O     O     . VAL VAL VAL A A 432 432 . 0.2024 0.2048 0.1517 -0.0054 -
0.0041 0.0313  1 .
3307 N     N     . LEU LEU LEU A A 433 433 . 0.1989 0.2249 0.1541 -0.0134 -
0.0104 0.0074  1 .
3308 CA    CA    . LEU LEU LEU A A 433 433 . 0.2166 0.2309 0.1656 -0.0063 -
0.0002 -0.0036 1 .
3309 CB    CB    . LEU LEU LEU A A 433 433 . 0.2050 0.2300 0.1552 -0.0010 -
0.0193 -0.0008 1 .
3310 CG    CG    . LEU LEU LEU A A 433 433 . 0.2374 0.2062 0.1032 -0.0243
0.0208  -0.0074 1 .
3311 CD1   CD1   . LEU LEU LEU A A 433 433 . 0.1805 0.2134 0.0885 0.0137  -
0.0272 0.0265  1 .
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3312 CD2   CD2   . LEU LEU LEU A A 433 433 . 0.2306 0.1939 0.1021 -0.0202
0.0770  -0.0375 1 .
3313 C     C     . LEU LEU LEU A A 433 433 . 0.2253 0.2232 0.1649 -0.0179 -
0.0118 0.0059  1 .
3314 O     O     . LEU LEU LEU A A 433 433 . 0.2510 0.2593 0.1943 -0.0197 -
0.0326 -0.0140 1 .
3315 MG+2  MG+2  . MG2 MG2 MG2 A . 600 600 . 0.0260 0.0266 0.0361 0.0009  -
0.0028 -0.0037 1 .
3316 MG+2  MG+2  . MG2 MG2 MG2 A . 601 601 . 0.0254 0.0303 0.0440 0.0007  -
0.0013 -0.0096 1 .
3317 O4P   O4P   . 2PG 2PG 2PG A . 602 602 . 0.0330 0.0325 0.0446 -0.0074 -
0.0121 0.0117  1 .
3318 P     P     . 2PG 2PG 2PG A . 602 602 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3319 O2P   O2P   . 2PG 2PG 2PG A . 602 602 . 0.0283 0.0270 0.0463 -0.0005
0.0028  -0.0058 1 .
3320 O3P   O3P   . 2PG 2PG 2PG A . 602 602 . 0.0258 0.0276 0.0260 0.0010
0.0005  0.0012  1 .
3321 O1P   O1P   . 2PG 2PG 2PG A . 602 602 . 0.0353 0.0337 0.0336 -0.0023
0.0038  -0.0082 1 .
3322 C2    C2    . 2PG 2PG 2PG A . 602 602 . 0.0700 0.0734 0.0746 0.0022
0.0320  -0.0085 1 .
3323 C1    C1    . 2PG 2PG 2PG A . 602 602 . 0.0527 0.1013 0.0902 0.0018
0.0274  -0.0098 1 .
3324 O2    O2    . 2PG 2PG 2PG A . 602 602 . 0.0499 0.0513 0.0733 0.0027
0.0238  -0.0225 1 .
3325 O1    O1    . 2PG 2PG 2PG A . 602 602 . 0.0330 0.0280 0.0737 0.0030  -
0.0079 -0.0108 1 .
3326 C3    C3    . 2PG 2PG 2PG A . 602 602 . 0.0535 0.1264 0.1576 -0.0094 -
0.0155 -0.0085 1 .
3327 O3    O3    . 2PG 2PG 2PG A . 602 602 . 0.0965 0.1145 0.0880 0.0224  -
0.0161 0.0238  1 .
3328 O     O     . HOH HOH HOH A . 603 603 . 0.0259 0.0351 0.0312 0.0024  -
0.0019 -0.0076 1 .
3329 O     O     . HOH HOH HOH A . 604 604 . 0.0285 0.0362 0.0439 0.0059  -
0.0077 -0.0142 1 .
3330 O     O     . HOH HOH HOH A . 605 605 . 0.0281 0.0274 0.0483 -0.0017 -
0.0026 -0.0029 1 .
3331 O3    O3    . TRS TRS TRS A . 606 606 . 0.3116 0.2822 0.3373 -0.0471
0.0208  -0.0055 1 .
3332 C3    C3    . TRS TRS TRS A . 606 606 . 0.2979 0.2807 0.3250 -0.0137
0.0112  -0.0137 1 .
3333 C     C     . TRS TRS TRS A . 606 606 . 0.2823 0.2634 0.2975 -0.0221
0.0088  -0.0189 1 .
3334 N     N     . TRS TRS TRS A . 606 606 . 0.2921 0.2533 0.2860 -0.0145
0.0079  -0.0154 1 .
3335 C2    C2    . TRS TRS TRS A . 606 606 . 0.2977 0.2816 0.3009 -0.0114
0.0083  -0.0206 1 .
3336 O2    O2    . TRS TRS TRS A . 606 606 . 0.2286 0.2754 0.3276 -0.0673
0.0187  -0.0217 1 .
3337 C1    C1    . TRS TRS TRS A . 606 606 . 0.2792 0.2581 0.2843 -0.0163
0.0009  -0.0205 1 .
3338 O1    O1    . TRS TRS TRS A . 606 606 . 0.2289 0.1798 0.2329 -0.0175 -
0.0189 -0.0796 1 .
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3339 N     N     . SER SER SER B B 1   1   . 0.2658 0.2741 0.2524 0.0007
0.0014  -0.0015 1 .
3340 CA    CA    . SER SER SER B B 1   1   . 0.2535 0.2637 0.2546 -0.0041
0.0058  0.0048  1 .
3341 CB    CB    . SER SER SER B B 1   1   . 0.2629 0.2696 0.2597 -0.0136
0.0159  0.0055  1 .
3342 OG    OG    . SER SER SER B B 1   1   . 0.3120 0.3270 0.2485 -0.0461
0.0207  0.0248  1 .
3343 C     C     . SER SER SER B B 1   1   . 0.2426 0.2419 0.2396 0.0071
0.0055  0.0070  1 .
3344 O     O     . SER SER SER B B 1   1   . 0.2568 0.2559 0.2320 0.0132
0.0040  0.0096  1 .
3345 N     N     . ILE ILE ILE B B 2   2   . 0.2046 0.1969 0.2025 0.0202
0.0080  0.0009  1 .
3346 CA    CA    . ILE ILE ILE B B 2   2   . 0.1772 0.1613 0.1742 0.0220
0.0116  0.0008  1 .
3347 CB    CB    . ILE ILE ILE B B 2   2   . 0.1711 0.1584 0.1628 0.0137
0.0275  -0.0051 1 .
3348 CG1   CG1   . ILE ILE ILE B B 2   2   . 0.1654 0.1344 0.1420 0.0082
0.0352  0.0275  1 .
3349 CD1   CD1   . ILE ILE ILE B B 2   2   . 0.1614 0.1042 0.1891 0.0096  -
0.0392 0.0129  1 .
3350 CG2   CG2   . ILE ILE ILE B B 2   2   . 0.1550 0.1771 0.1666 0.0501  -
0.0021 -0.0375 1 .
3351 C     C     . ILE ILE ILE B B 2   2   . 0.1670 0.1656 0.1798 0.0188
0.0139  0.0007  1 .
3352 O     O     . ILE ILE ILE B B 2   2   . 0.1194 0.1615 0.1761 0.0196  -
0.0006 0.0088  1 .
3353 N     N     . GLN GLN GLN B B 3   3   . 0.1514 0.1395 0.1597 0.0204
0.0106  0.0107  1 .
3354 CA    CA    . GLN GLN GLN B B 3   3   . 0.1836 0.1857 0.1860 0.0124
0.0128  0.0150  1 .
3355 CB    CB    . GLN GLN GLN B B 3   3   . 0.1767 0.1827 0.2029 0.0189
0.0052  0.0074  1 .
3356 CG    CG    . GLN GLN GLN B B 3   3   . 0.2098 0.2113 0.2342 0.0024
0.0065  0.0037  1 .
3357 CD    CD    . GLN GLN GLN B B 3   3   . 0.2489 0.2302 0.2869 0.0204  -
0.0239 -0.0015 1 .
3358 OE1   OE1   . GLN GLN GLN B B 3   3   . 0.2510 0.2357 0.2832 0.0492  -
0.0408 -0.0062 1 .
3359 NE2   NE2   . GLN GLN GLN B B 3   3   . 0.2729 0.2945 0.3512 -0.0007 -
0.0109 0.0007  1 .
3360 C     C     . GLN GLN GLN B B 3   3   . 0.1640 0.1805 0.1668 0.0184
0.0139  0.0130  1 .
3361 O     O     . GLN GLN GLN B B 3   3   . 0.1737 0.2086 0.1695 0.0353
0.0284  0.0132  1 .
3362 N     N     . LYS LYS LYS B B 4   4   . 0.1356 0.1654 0.1407 0.0232
0.0218  0.0109  1 .
3363 CA    CA    . LYS LYS LYS B B 4   4   . 0.1320 0.1431 0.1089 0.0166
0.0244  0.0160  1 .
3364 CB    CB    . LYS LYS LYS B B 4   4   . 0.1071 0.1382 0.1098 0.0180
0.0398  0.0422  1 .
3365 CG    CG    . LYS LYS LYS B B 4   4   . 0.1787 0.2178 0.1287 0.0115
0.0329  0.0335  1 .
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3366 CD    CD    . LYS LYS LYS B B 4   4   . 0.2486 0.2194 0.2150 0.0517  -
0.0129 0.0874  1 .
3367 CE    CE    . LYS LYS LYS B B 4   4   . 0.3049 0.2239 0.3204 0.0293  -
0.0077 0.0707  1 .
3368 NZ    NZ    . LYS LYS LYS B B 4   4   . 0.3533 0.2812 0.3963 0.0510
0.0092  0.0884  1 .
3369 C     C     . LYS LYS LYS B B 4   4   . 0.1340 0.1407 0.1316 0.0155
0.0057  0.0072  1 .
3370 O     O     . LYS LYS LYS B B 4   4   . 0.1509 0.1500 0.1225 0.0252
0.0107  0.0000  1 .
3371 N     N     . ILE ILE ILE B B 5   5   . 0.1135 0.1284 0.0981 -0.0117
0.0123  0.0154  1 .
3372 CA    CA    . ILE ILE ILE B B 5   5   . 0.0826 0.0993 0.1095 -0.0039
0.0071  0.0042  1 .
3373 CB    CB    . ILE ILE ILE B B 5   5   . 0.0917 0.1158 0.1106 -0.0031
0.0203  0.0044  1 .
3374 CG1   CG1   . ILE ILE ILE B B 5   5   . 0.0402 0.0752 0.1135 0.0050  -
0.0102 0.0423  1 .
3375 CD1   CD1   . ILE ILE ILE B B 5   5   . 0.1532 0.0858 0.1377 0.0556  -
0.0511 0.0355  1 .
3376 CG2   CG2   . ILE ILE ILE B B 5   5   . 0.0505 0.0991 0.1579 0.0163
0.0154  0.0119  1 .
3377 C     C     . ILE ILE ILE B B 5   5   . 0.0921 0.1007 0.1185 0.0036
0.0041  0.0011  1 .
3378 O     O     . ILE ILE ILE B B 5   5   . 0.1190 0.1626 0.1531 0.0234
0.0097  0.0047  1 .
3379 N     N     . TRP TRP TRP B B 6   6   . 0.0858 0.0719 0.1067 0.0149
0.0062  0.0183  1 .
3380 CA    CA    . TRP TRP TRP B B 6   6   . 0.0759 0.0676 0.0836 0.0110
0.0120  0.0197  1 .
3381 CB    CB    . TRP TRP TRP B B 6   6   . 0.0995 0.0836 0.0684 0.0124
0.0081  0.0109  1 .
3382 CG    CG    . TRP TRP TRP B B 6   6   . 0.1072 0.1148 0.0935 0.0011
0.0024  0.0100  1 .
3383 CD1   CD1   . TRP TRP TRP B B 6   6   . 0.1727 0.1761 0.1269 -0.0194 -
0.0216 0.0353  1 .
3384 NE1   NE1   . TRP TRP TRP B B 6   6   . 0.2190 0.1630 0.0705 -0.0254
0.0101  0.0103  1 .
3385 CE2   CE2   . TRP TRP TRP B B 6   6   . 0.1596 0.1953 0.1378 -0.0152 -
0.0065 0.0204  1 .
3386 CD2   CD2   . TRP TRP TRP B B 6   6   . 0.1899 0.1585 0.1210 0.0018  -
0.0126 0.0069  1 .
3387 CE3   CE3   . TRP TRP TRP B B 6   6   . 0.1443 0.2306 0.1608 0.0138
0.0092  0.0068  1 .
3388 CZ3   CZ3   . TRP TRP TRP B B 6   6   . 0.1983 0.2575 0.1405 0.0181
0.0114  0.0089  1 .
3389 CH2   CH2   . TRP TRP TRP B B 6   6   . 0.1696 0.2623 0.1843 0.0243
0.0104  0.0101  1 .
3390 CZ2   CZ2   . TRP TRP TRP B B 6   6   . 0.2379 0.2007 0.1828 0.0335
0.0286  -0.0049 1 .
3391 C     C     . TRP TRP TRP B B 6   6   . 0.0740 0.0782 0.1048 0.0176
0.0019  0.0135  1 .
3392 O     O     . TRP TRP TRP B B 6   6   . 0.1082 0.0884 0.1034 0.0025
0.0239  -0.0171 1 .
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3393 N     N     . ALA ALA ALA B B 7   7   . 0.0621 0.0745 0.0921 0.0117  -
0.0111 0.0179  1 .
3394 CA    CA    . ALA ALA ALA B B 7   7   . 0.0645 0.0557 0.0613 0.0159
0.0211  0.0251  1 .
3395 CB    CB    . ALA ALA ALA B B 7   7   . 0.0612 0.0477 0.0850 -0.0081
0.0121  0.0310  1 .
3396 C     C     . ALA ALA ALA B B 7   7   . 0.0615 0.0500 0.0609 0.0200
0.0100  0.0267  1 .
3397 O     O     . ALA ALA ALA B B 7   7   . 0.0901 0.0717 0.0354 0.0161
0.0026  0.0212  1 .
3398 N     N     . ARG ARG ARG B B 8   8   . 0.0673 0.0633 0.0638 0.0175
0.0033  0.0195  1 .
3399 CA    CA    . ARG ARG ARG B B 8   8   . 0.0600 0.0358 0.0344 0.0182
0.0061  0.0004  1 .
3400 CB    CB    . ARG ARG ARG B B 8   8   . 0.0346 0.0417 0.0377 0.0123
0.0107  0.0142  1 .
3401 CG    CG    . ARG ARG ARG B B 8   8   . 0.0890 0.0726 0.0263 0.0382
0.0080  0.0054  1 .
3402 CD    CD    . ARG ARG ARG B B 8   8   . 0.0572 0.0592 0.0596 0.0270
0.0074  -0.0126 1 .
3403 NE    NE    . ARG ARG ARG B B 8   8   . 0.0957 0.0847 0.1011 -0.0050 -
0.0206 0.0183  1 .
3404 CZ    CZ    . ARG ARG ARG B B 8   8   . 0.0865 0.0858 0.0901 -0.0016
0.0220  0.0274  1 .
3405 NH1   NH1   . ARG ARG ARG B B 8   8   . 0.1092 0.0834 0.0522 -0.0017 -
0.0322 -0.0282 1 .
3406 NH2   NH2   . ARG ARG ARG B B 8   8   . 0.1498 0.1845 0.1114 -0.0489 -
0.0056 0.0666  1 .
3407 C     C     . ARG ARG ARG B B 8   8   . 0.0391 0.0294 0.0297 0.0068
0.0007  0.0020  1 .
3408 O     O     . ARG ARG ARG B B 8   8   . 0.0416 0.0673 0.0398 -0.0005
0.0088  -0.0205 1 .
3409 N     N     . GLU GLU GLU B B 9   9   . 0.0343 0.0501 0.0363 0.0026
0.0029  -0.0015 1 .
3410 CA    CA    . GLU GLU GLU B B 9   9   . 0.0598 0.0343 0.0401 0.0157
0.0198  0.0066  1 .
3411 CB    CB    . GLU GLU GLU B B 9   9   . 0.1013 0.1204 0.0579 -0.0172
0.0041  0.0295  1 .
3412 CG    CG    . GLU GLU GLU B B 9   9   . 0.1198 0.1209 0.1079 -0.0070
0.0086  0.0140  1 .
3413 CD    CD    . GLU GLU GLU B B 9   9   . 0.1752 0.1177 0.1189 -0.0206 -
0.0284 0.0092  1 .
3414 OE1   OE1   . GLU GLU GLU B B 9   9   . 0.1265 0.1069 0.0401 -0.0189
0.0373  -0.0163 1 .
3415 OE2   OE2   . GLU GLU GLU B B 9   9   . 0.2058 0.0933 0.0950 0.0110  -
0.0107 0.0073  1 .
3416 C     C     . GLU GLU GLU B B 9   9   . 0.0663 0.0736 0.0511 0.0113
0.0122  0.0164  1 .
3417 O     O     . GLU GLU GLU B B 9   9   . 0.0976 0.0810 0.0396 0.0634
0.0162  0.0141  1 .
3418 N     N     . ILE ILE ILE B B 10  10  . 0.0381 0.0436 0.0261 0.0153
0.0032  0.0039  1 .
3419 CA    CA    . ILE ILE ILE B B 10  10  . 0.0463 0.0270 0.0253 0.0060
0.0009  0.0002  1 .
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3420 CB    CB    . ILE ILE ILE B B 10  10  . 0.0256 0.0314 0.0256 0.0007  -
0.0002 -0.0013 1 .
3421 CG1   CG1   . ILE ILE ILE B B 10  10  . 0.0835 0.0514 0.0329 0.0167
0.0060  0.0139  1 .
3422 CD1   CD1   . ILE ILE ILE B B 10  10  . 0.0559 0.0348 0.0481 0.0158  -
0.0223 -0.0144 1 .
3423 CG2   CG2   . ILE ILE ILE B B 10  10  . 0.0432 0.0339 0.0286 -0.0033 -
0.0076 0.0019  1 .
3424 C     C     . ILE ILE ILE B B 10  10  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3425 O     O     . ILE ILE ILE B B 10  10  . 0.0308 0.0484 0.0471 0.0066  -
0.0084 0.0014  1 .
3426 N     N     . LEU LEU LEU B B 11  11  . 0.0256 0.0256 0.0278 0.0003  -
0.0009 -0.0008 1 .
3427 CA    CA    . LEU LEU LEU B B 11  11  . 0.0343 0.0306 0.0261 0.0069
0.0026  0.0020  1 .
3428 CB    CB    . LEU LEU LEU B B 11  11  . 0.0352 0.0265 0.0261 -0.0025 -
0.0010 -0.0003 1 .
3429 CG    CG    . LEU LEU LEU B B 11  11  . 0.0254 0.0305 0.0331 0.0007  -
0.0009 -0.0064 1 .
3430 CD1   CD1   . LEU LEU LEU B B 11  11  . 0.0616 0.0327 0.0325 -0.0128 -
0.0161 0.0056  1 .
3431 CD2   CD2   . LEU LEU LEU B B 11  11  . 0.0386 0.0253 0.0363 0.0003  -
0.0121 -0.0003 1 .
3432 C     C     . LEU LEU LEU B B 11  11  . 0.0345 0.0259 0.0304 -0.0023
0.0068  -0.0017 1 .
3433 O     O     . LEU LEU LEU B B 11  11  . 0.0493 0.0256 0.0257 0.0025
0.0032  0.0003  1 .
3434 N     N     . ASP ASP ASP B B 12  12  . 0.0391 0.0292 0.0280 0.0073
0.0061  0.0032  1 .
3435 CA    CA    . ASP ASP ASP B B 12  12  . 0.0315 0.0329 0.0258 0.0068
0.0017  0.0019  1 .
3436 CB    CB    . ASP ASP ASP B B 12  12  . 0.0566 0.0278 0.0258 -0.0088 -
0.0039 0.0011  1 .
3437 CG    CG    . ASP ASP ASP B B 12  12  . 0.0379 0.0311 0.0307 0.0003
0.0023  -0.0052 1 .
3438 OD1   OD1   . ASP ASP ASP B B 12  12  . 0.0259 0.0257 0.0281 0.0005
0.0013  0.0010  1 .
3439 OD2   OD2   . ASP ASP ASP B B 12  12  . 0.0869 0.0507 0.0586 0.0215  -
0.0100 0.0202  1 .
3440 C     C     . ASP ASP ASP B B 12  12  . 0.0255 0.0347 0.0310 -0.0013 -
0.0010 0.0073  1 .
3441 O     O     . ASP ASP ASP B B 12  12  . 0.0257 0.0253 0.0253 -0.0001
0.0000  0.0000  1 .
3442 N     N     . SER SER SER B B 13  13  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3443 CA    CA    . SER SER SER B B 13  13  . 0.0283 0.0254 0.0255 0.0006
0.0007  0.0001  1 .
3444 CB    CB    . SER SER SER B B 13  13  . 0.0290 0.0256 0.0253 0.0011
0.0004  0.0001  1 .
3445 OG    OG    . SER SER SER B B 13  13  . 0.0386 0.0299 0.0336 0.0061  -
0.0048 0.0012  1 .
3446 C     C     . SER SER SER B B 13  13  . 0.0260 0.0253 0.0254 0.0001
0.0002  0.0000  1 .
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3447 O     O     . SER SER SER B B 13  13  . 0.0357 0.0266 0.0307 0.0037
0.0074  0.0026  1 .
3448 N     N     . ARG ARG ARG B B 14  14  . 0.0459 0.0257 0.0274 0.0028
0.0066  0.0009  1 .
3449 CA    CA    . ARG ARG ARG B B 14  14  . 0.0351 0.0330 0.0426 0.0085
0.0105  0.0105  1 .
3450 CB    CB    . ARG ARG ARG B B 14  14  . 0.0955 0.0336 0.0546 -0.0100
0.0214  0.0048  1 .
3451 CG    CG    . ARG ARG ARG B B 14  14  . 0.0733 0.0265 0.0791 0.0022
0.0030  -0.0074 1 .
3452 CD    CD    . ARG ARG ARG B B 14  14  . 0.0820 0.0676 0.1041 0.0305  -
0.0270 0.0267  1 .
3453 NE    NE    . ARG ARG ARG B B 14  14  . 0.1006 0.0589 0.0857 0.0069  -
0.0166 0.0146  1 .
3454 CZ    CZ    . ARG ARG ARG B B 14  14  . 0.0833 0.0588 0.0836 0.0053  -
0.0140 -0.0111 1 .
3455 NH1   NH1   . ARG ARG ARG B B 14  14  . 0.0710 0.0480 0.0344 0.0048  -
0.0123 0.0099  1 .
3456 NH2   NH2   . ARG ARG ARG B B 14  14  . 0.0779 0.0409 0.0666 -0.0094 -
0.0182 0.0253  1 .
3457 C     C     . ARG ARG ARG B B 14  14  . 0.0428 0.0293 0.0255 -0.0083
0.0020  -0.0009 1 .
3458 O     O     . ARG ARG ARG B B 14  14  . 0.0506 0.0530 0.0307 -0.0259
0.0115  -0.0113 1 .
3459 N     N     . GLY GLY GLY B B 15  15  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3460 CA    CA    . GLY GLY GLY B B 15  15  . 0.0414 0.0307 0.0292 0.0093
0.0035  0.0020  1 .
3461 C     C     . GLY GLY GLY B B 15  15  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3462 O     O     . GLY GLY GLY B B 15  15  . 0.0366 0.0261 0.0319 0.0005
0.0021  0.0023  1 .
3463 N     N     . ASN ASN ASN B B 16  16  . 0.0441 0.0270 0.0268 0.0041
0.0000  -0.0010 1 .
3464 CA    CA    . ASN ASN ASN B B 16  16  . 0.0429 0.0265 0.0262 0.0045  -
0.0034 -0.0008 1 .
3465 CB    CB    . ASN ASN ASN B B 16  16  . 0.0670 0.0358 0.0609 -0.0093
0.0134  0.0131  1 .
3466 CG    CG    . ASN ASN ASN B B 16  16  . 0.0406 0.0481 0.0699 -0.0184
0.0058  -0.0013 1 .
3467 OD1   OD1   . ASN ASN ASN B B 16  16  . 0.1029 0.0799 0.0538 -0.0106
0.0173  0.0338  1 .
3468 ND2   ND2   . ASN ASN ASN B B 16  16  . 0.1132 0.0632 0.0850 0.0315
0.0180  0.0134  1 .
3469 C     C     . ASN ASN ASN B B 16  16  . 0.0312 0.0302 0.0257 0.0054
0.0016  0.0015  1 .
3470 O     O     . ASN ASN ASN B B 16  16  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
3471 N     N     . PRO PRO PRO B B 17  17  . 0.0295 0.0263 0.0322 0.0016
0.0012  -0.0010 1 .
3472 CA    CA    . PRO PRO PRO B B 17  17  . 0.0302 0.0263 0.0320 -0.0014
0.0039  -0.0025 1 .
3473 CB    CB    . PRO PRO PRO B B 17  17  . 0.0269 0.0253 0.0273 0.0002
0.0017  0.0002  1 .
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3474 CG    CG    . PRO PRO PRO B B 17  17  . 0.0384 0.0259 0.0307 -0.0027
0.0083  -0.0017 1 .
3475 CD    CD    . PRO PRO PRO B B 17  17  . 0.0336 0.0316 0.0364 -0.0072
0.0096  -0.0083 1 .
3476 C     C     . PRO PRO PRO B B 17  17  . 0.0263 0.0268 0.0264 0.0012
0.0010  0.0013  1 .
3477 O     O     . PRO PRO PRO B B 17  17  . 0.0427 0.0332 0.0295 0.0099
0.0013  -0.0022 1 .
3478 N     N     . THR THR THR B B 18  18  . 0.0361 0.0310 0.0253 0.0078
0.0008  0.0006  1 .
3479 CA    CA    . THR THR THR B B 18  18  . 0.0457 0.0362 0.0329 0.0134  -
0.0020 -0.0053 1 .
3480 CB    CB    . THR THR THR B B 18  18  . 0.0437 0.0318 0.0256 0.0109
0.0022  0.0013  1 .
3481 OG1   OG1   . THR THR THR B B 18  18  . 0.0387 0.0525 0.0285 0.0191
0.0066  0.0094  1 .
3482 CG2   CG2   . THR THR THR B B 18  18  . 0.0629 0.0254 0.0308 -0.0018 -
0.0144 0.0007  1 .
3483 C     C     . THR THR THR B B 18  18  . 0.0361 0.0258 0.0257 0.0023  -
0.0022 -0.0004 1 .
3484 O     O     . THR THR THR B B 18  18  . 0.0690 0.0403 0.0351 0.0010
0.0100  0.0103  1 .
3485 N     N     . VAL VAL VAL B B 19  19  . 0.0306 0.0398 0.0255 -0.0034
0.0006  -0.0017 1 .
3486 CA    CA    . VAL VAL VAL B B 19  19  . 0.0431 0.0311 0.0271 0.0101
0.0057  0.0032  1 .
3487 CB    CB    . VAL VAL VAL B B 19  19  . 0.0319 0.0327 0.0257 0.0069
0.0016  0.0017  1 .
3488 CG1   CG1   . VAL VAL VAL B B 19  19  . 0.0875 0.0654 0.0392 -0.0114
0.0210  0.0121  1 .
3489 CG2   CG2   . VAL VAL VAL B B 19  19  . 0.0567 0.0426 0.0574 0.0207
0.0046  0.0138  1 .
3490 C     C     . VAL VAL VAL B B 19  19  . 0.0264 0.0276 0.0460 0.0016
0.0048  0.0069  1 .
3491 O     O     . VAL VAL VAL B B 19  19  . 0.0522 0.0440 0.0307 0.0140  -
0.0037 0.0054  1 .
3492 N     N     . GLU GLU GLU B B 20  20  . 0.0323 0.0427 0.0275 0.0110  -
0.0039 -0.0062 1 .
3493 CA    CA    . GLU GLU GLU B B 20  20  . 0.0515 0.0440 0.0505 0.0140
0.0026  0.0181  1 .
3494 CB    CB    . GLU GLU GLU B B 20  20  . 0.0370 0.0412 0.0776 0.0014  -
0.0094 0.0012  1 .
3495 CG    CG    . GLU GLU GLU B B 20  20  . 0.1198 0.0745 0.0693 -0.0017
0.0121  0.0044  1 .
3496 CD    CD    . GLU GLU GLU B B 20  20  . 0.0766 0.1363 0.0544 0.0479  -
0.0039 -0.0209 1 .
3497 OE1   OE1   . GLU GLU GLU B B 20  20  . 0.0897 0.0707 0.0465 0.0238  -
0.0008 -0.0163 1 .
3498 OE2   OE2   . GLU GLU GLU B B 20  20  . 0.1277 0.0852 0.0498 0.0647
0.0307  0.0337  1 .
3499 C     C     . GLU GLU GLU B B 20  20  . 0.0360 0.0334 0.0325 0.0058
0.0000  0.0060  1 .
3500 O     O     . GLU GLU GLU B B 20  20  . 0.0612 0.0673 0.0618 0.0260  -
0.0087 0.0143  1 .
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3501 N     N     . VAL VAL VAL B B 21  21  . 0.0461 0.0450 0.0693 0.0132
0.0158  0.0290  1 .
3502 CA    CA    . VAL VAL VAL B B 21  21  . 0.0548 0.0590 0.0515 0.0092
0.0029  0.0174  1 .
3503 CB    CB    . VAL VAL VAL B B 21  21  . 0.0527 0.0372 0.0600 0.0133
0.0183  0.0199  1 .
3504 CG1   CG1   . VAL VAL VAL B B 21  21  . 0.0828 0.0425 0.0928 0.0124  -
0.0102 -0.0246 1 .
3505 CG2   CG2   . VAL VAL VAL B B 21  21  . 0.0849 0.0473 0.0631 -0.0080
0.0063  0.0270  1 .
3506 C     C     . VAL VAL VAL B B 21  21  . 0.0516 0.0449 0.0464 0.0108
0.0112  0.0142  1 .
3507 O     O     . VAL VAL VAL B B 21  21  . 0.0837 0.0393 0.0760 0.0261  -
0.0007 0.0104  1 .
3508 N     N     . ASP ASP ASP B B 22  22  . 0.0786 0.0511 0.0649 0.0070  -
0.0048 0.0281  1 .
3509 CA    CA    . ASP ASP ASP B B 22  22  . 0.0948 0.0732 0.0748 0.0068  -
0.0007 0.0185  1 .
3510 CB    CB    . ASP ASP ASP B B 22  22  . 0.0738 0.0791 0.0493 0.0139  -
0.0142 0.0272  1 .
3511 CG    CG    . ASP ASP ASP B B 22  22  . 0.1038 0.0583 0.0951 0.0210
0.0154  0.0105  1 .
3512 OD1   OD1   . ASP ASP ASP B B 22  22  . 0.2057 0.1787 0.1115 -0.0110 -
0.0385 0.0895  1 .
3513 OD2   OD2   . ASP ASP ASP B B 22  22  . 0.0711 0.1200 0.1047 0.0073
0.0116  0.0771  1 .
3514 C     C     . ASP ASP ASP B B 22  22  . 0.0900 0.0736 0.0687 0.0035
0.0012  0.0083  1 .
3515 O     O     . ASP ASP ASP B B 22  22  . 0.1057 0.0730 0.1000 0.0123  -
0.0087 0.0110  1 .
3516 N     N     . LEU LEU LEU B B 23  23  . 0.0810 0.0720 0.0574 0.0092
0.0103  -0.0029 1 .
3517 CA    CA    . LEU LEU LEU B B 23  23  . 0.0974 0.0758 0.0804 -0.0016
0.0083  0.0144  1 .
3518 CB    CB    . LEU LEU LEU B B 23  23  . 0.1180 0.0736 0.0974 0.0066
0.0102  0.0072  1 .
3519 CG    CG    . LEU LEU LEU B B 23  23  . 0.1204 0.1398 0.1112 0.0280
0.0198  -0.0033 1 .
3520 CD1   CD1   . LEU LEU LEU B B 23  23  . 0.1704 0.1347 0.0444 0.0503  -
0.0491 -0.0321 1 .
3521 CD2   CD2   . LEU LEU LEU B B 23  23  . 0.1113 0.1376 0.1604 0.0770
0.0292  -0.0360 1 .
3522 C     C     . LEU LEU LEU B B 23  23  . 0.1003 0.0795 0.1027 -0.0034
0.0087  0.0155  1 .
3523 O     O     . LEU LEU LEU B B 23  23  . 0.0585 0.0729 0.1051 -0.0191
0.0317  0.0243  1 .
3524 N     N     . TYR TYR TYR B B 24  24  . 0.1127 0.1267 0.1220 0.0138
0.0103  0.0119  1 .
3525 CA    CA    . TYR TYR TYR B B 24  24  . 0.1435 0.1364 0.1318 0.0195
0.0050  0.0207  1 .
3526 CB    CB    . TYR TYR TYR B B 24  24  . 0.1387 0.1542 0.1348 0.0169  -
0.0160 0.0164  1 .
3527 CG    CG    . TYR TYR TYR B B 24  24  . 0.1622 0.2116 0.1685 0.0262  -
0.0088 0.0180  1 .
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3528 CD1   CD1   . TYR TYR TYR B B 24  24  . 0.1684 0.1951 0.1521 0.0269  -
0.0140 0.0204  1 .
3529 CE1   CE1   . TYR TYR TYR B B 24  24  . 0.2185 0.2268 0.2045 0.0471  -
0.0429 -0.0007 1 .
3530 CZ    CZ    . TYR TYR TYR B B 24  24  . 0.2196 0.2247 0.2311 0.0295  -
0.0128 0.0439  1 .
3531 OH    OH    . TYR TYR TYR B B 24  24  . 0.2826 0.2362 0.2064 0.0617  -
0.0504 0.0939  1 .
3532 CE2   CE2   . TYR TYR TYR B B 24  24  . 0.2142 0.2322 0.2163 0.0424  -
0.0026 0.0030  1 .
3533 CD2   CD2   . TYR TYR TYR B B 24  24  . 0.1969 0.2410 0.2113 0.0443
0.0257  0.0462  1 .
3534 C     C     . TYR TYR TYR B B 24  24  . 0.1363 0.1556 0.1531 -0.0013
0.0108  0.0117  1 .
3535 O     O     . TYR TYR TYR B B 24  24  . 0.1649 0.1495 0.1326 -0.0066
0.0007  0.0412  1 .
3536 N     N     . THR THR THR B B 25  25  . 0.1663 0.1631 0.1703 0.0058
0.0095  0.0209  1 .
3537 CA    CA    . THR THR THR B B 25  25  . 0.1723 0.1676 0.1767 -0.0002 -
0.0056 0.0263  1 .
3538 CB    CB    . THR THR THR B B 25  25  . 0.1883 0.1730 0.1949 0.0097
0.0064  0.0207  1 .
3539 OG1   OG1   . THR THR THR B B 25  25  . 0.1312 0.1053 0.1290 -0.0059
0.0100  0.0505  1 .
3540 CG2   CG2   . THR THR THR B B 25  25  . 0.1848 0.1896 0.1567 -0.0082 -
0.0466 0.0409  1 .
3541 C     C     . THR THR THR B B 25  25  . 0.1841 0.1779 0.1912 0.0022  -
0.0054 0.0256  1 .
3542 O     O     . THR THR THR B B 25  25  . 0.1562 0.1733 0.1873 -0.0049 -
0.0187 0.0357  1 .
3543 N     N     . ALA ALA ALA B B 26  26  . 0.1779 0.1981 0.1965 0.0081  -
0.0175 0.0220  1 .
3544 CA    CA    . ALA ALA ALA B B 26  26  . 0.2120 0.2143 0.2262 0.0042  -
0.0116 0.0120  1 .
3545 CB    CB    . ALA ALA ALA B B 26  26  . 0.2078 0.2225 0.2219 0.0312  -
0.0231 0.0084  1 .
3546 C     C     . ALA ALA ALA B B 26  26  . 0.2310 0.2280 0.2424 0.0093  -
0.0021 0.0112  1 .
3547 O     O     . ALA ALA ALA B B 26  26  . 0.2407 0.2244 0.2374 0.0089
0.0141  0.0215  1 .
3548 N     N     . LYS LYS LYS B B 27  27  . 0.2469 0.2418 0.2354 0.0113  -
0.0020 0.0121  1 .
3549 CA    CA    . LYS LYS LYS B B 27  27  . 0.2472 0.2403 0.2502 0.0004  -
0.0054 0.0121  1 .
3550 CB    CB    . LYS LYS LYS B B 27  27  . 0.2577 0.2579 0.2657 -0.0005 -
0.0015 0.0178  1 .
3551 CG    CG    . LYS LYS LYS B B 27  27  . 0.2582 0.2689 0.2980 -0.0171 -
0.0095 0.0016  1 .
3552 CD    CD    . LYS LYS LYS B B 27  27  . 0.3349 0.2576 0.3205 -0.0203 -
0.0130 0.0044  1 .
3553 CE    CE    . LYS LYS LYS B B 27  27  . 0.3670 0.2570 0.2642 -0.0366 -
0.0088 -0.0197 1 .
3554 NZ    NZ    . LYS LYS LYS B B 27  27  . 0.4004 0.2712 0.3192 -0.0110 -
0.0222 -0.0351 1 .
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3555 C     C     . LYS LYS LYS B B 27  27  . 0.2342 0.2159 0.2286 0.0023
0.0003  0.0134  1 .
3556 O     O     . LYS LYS LYS B B 27  27  . 0.2507 0.2176 0.2642 0.0059  -
0.0087 0.0254  1 .
3557 N     N     . GLY GLY GLY B B 28  28  . 0.2122 0.1924 0.1846 -0.0057
0.0032  0.0270  1 .
3558 CA    CA    . GLY GLY GLY B B 28  28  . 0.1813 0.1651 0.1838 -0.0111
0.0099  0.0108  1 .
3559 C     C     . GLY GLY GLY B B 28  28  . 0.1473 0.1494 0.1408 -0.0118
0.0249  0.0241  1 .
3560 O     O     . GLY GLY GLY B B 28  28  . 0.1538 0.1436 0.1492 0.0014
0.0393  0.0137  1 .
3561 N     N     . LEU LEU LEU B B 29  29  . 0.1393 0.1369 0.1285 0.0052
0.0056  0.0195  1 .
3562 CA    CA    . LEU LEU LEU B B 29  29  . 0.1209 0.1216 0.1328 0.0136
0.0023  0.0055  1 .
3563 CB    CB    . LEU LEU LEU B B 29  29  . 0.1053 0.1262 0.1573 0.0193  -
0.0035 0.0289  1 .
3564 CG    CG    . LEU LEU LEU B B 29  29  . 0.1608 0.1406 0.1752 0.0013  -
0.0276 0.0341  1 .
3565 CD1   CD1   . LEU LEU LEU B B 29  29  . 0.2076 0.1394 0.2156 -0.0320 -
0.0324 0.0381  1 .
3566 CD2   CD2   . LEU LEU LEU B B 29  29  . 0.1528 0.1302 0.1878 -0.0295 -
0.0290 0.0386  1 .
3567 C     C     . LEU LEU LEU B B 29  29  . 0.1064 0.1084 0.1427 0.0043  -
0.0058 0.0152  1 .
3568 O     O     . LEU LEU LEU B B 29  29  . 0.1353 0.1404 0.1986 -0.0037
0.0124  0.0010  1 .
3569 N     N     . PHE PHE PHE B B 30  30  . 0.0852 0.0843 0.1195 -0.0088 -
0.0103 0.0007  1 .
3570 CA    CA    . PHE PHE PHE B B 30  30  . 0.0770 0.0811 0.1078 -0.0022 -
0.0067 0.0016  1 .
3571 CB    CB    . PHE PHE PHE B B 30  30  . 0.0625 0.0557 0.1240 0.0046  -
0.0140 0.0079  1 .
3572 CG    CG    . PHE PHE PHE B B 30  30  . 0.0998 0.0920 0.1301 -0.0007
0.0013  0.0183  1 .
3573 CD1   CD1   . PHE PHE PHE B B 30  30  . 0.1356 0.1261 0.1137 -0.0238 -
0.0626 -0.0035 1 .
3574 CE1   CE1   . PHE PHE PHE B B 30  30  . 0.1080 0.0646 0.1295 -0.0086
0.0055  0.0021  1 .
3575 CZ    CZ    . PHE PHE PHE B B 30  30  . 0.1392 0.0917 0.2026 -0.0092
0.0266  0.0273  1 .
3576 CE2   CE2   . PHE PHE PHE B B 30  30  . 0.1354 0.0969 0.1526 -0.0224
0.0182  0.0287  1 .
3577 CD2   CD2   . PHE PHE PHE B B 30  30  . 0.0404 0.0764 0.1095 0.0055  -
0.0074 -0.0041 1 .
3578 C     C     . PHE PHE PHE B B 30  30  . 0.0642 0.0662 0.0914 0.0027
0.0092  0.0068  1 .
3579 O     O     . PHE PHE PHE B B 30  30  . 0.1045 0.1106 0.1473 -0.0181
0.0294  -0.0109 1 .
3580 N     N     . ARG ARG ARG B B 31  31  . 0.0437 0.0681 0.0622 -0.0136
0.0113  0.0114  1 .
3581 CA    CA    . ARG ARG ARG B B 31  31  . 0.0450 0.0469 0.0295 0.0078
0.0052  0.0093  1 .
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3582 CB    CB    . ARG ARG ARG B B 31  31  . 0.0442 0.0500 0.0575 0.0116  -
0.0021 0.0223  1 .
3583 CG    CG    . ARG ARG ARG B B 31  31  . 0.0288 0.0488 0.0506 0.0040  -
0.0020 0.0187  1 .
3584 CD    CD    . ARG ARG ARG B B 31  31  . 0.0562 0.0915 0.0900 -0.0096 -
0.0437 0.0003  1 .
3585 NE    NE    . ARG ARG ARG B B 31  31  . 0.0855 0.0618 0.0831 0.0294  -
0.0151 0.0124  1 .
3586 CZ    CZ    . ARG ARG ARG B B 31  31  . 0.1409 0.1135 0.1225 -0.0027 -
0.0139 -0.0018 1 .
3587 NH1   NH1   . ARG ARG ARG B B 31  31  . 0.1652 0.2008 0.0801 -0.0957 -
0.0114 0.0234  1 .
3588 NH2   NH2   . ARG ARG ARG B B 31  31  . 0.1641 0.1213 0.1889 0.0300  -
0.0807 0.0148  1 .
3589 C     C     . ARG ARG ARG B B 31  31  . 0.0467 0.0273 0.0401 0.0053
0.0142  0.0055  1 .
3590 O     O     . ARG ARG ARG B B 31  31  . 0.0701 0.0439 0.0482 -0.0068
0.0093  0.0177  1 .
3591 N     N     . ALA ALA ALA B B 32  32  . 0.0714 0.0575 0.0639 -0.0061
0.0203  0.0164  1 .
3592 CA    CA    . ALA ALA ALA B B 32  32  . 0.0253 0.0466 0.0274 0.0008
0.0002  0.0067  1 .
3593 CB    CB    . ALA ALA ALA B B 32  32  . 0.0323 0.0422 0.0262 0.0067  -
0.0024 -0.0012 1 .
3594 C     C     . ALA ALA ALA B B 32  32  . 0.0273 0.0382 0.0310 0.0028
0.0006  0.0079  1 .
3595 O     O     . ALA ALA ALA B B 32  32  . 0.0306 0.0399 0.0516 0.0058  -
0.0026 -0.0172 1 .
3596 N     N     . ALA ALA ALA B B 33  33  . 0.0450 0.0557 0.0439 0.0219
0.0111  0.0209  1 .
3597 CA    CA    . ALA ALA ALA B B 33  33  . 0.0333 0.0397 0.0298 0.0038  -
0.0013 0.0066  1 .
3598 CB    CB    . ALA ALA ALA B B 33  33  . 0.0307 0.0485 0.0527 0.0112
0.0100  0.0198  1 .
3599 C     C     . ALA ALA ALA B B 33  33  . 0.0478 0.0359 0.0511 -0.0008 -
0.0006 0.0165  1 .
3600 O     O     . ALA ALA ALA B B 33  33  . 0.0400 0.0324 0.0308 0.0102
0.0090  0.0062  1 .
3601 N     N     . VAL VAL VAL B B 34  34  . 0.0452 0.0262 0.0305 0.0042
0.0102  0.0021  1 .
3602 CA    CA    . VAL VAL VAL B B 34  34  . 0.0454 0.0259 0.0349 -0.0016
0.0015  0.0019  1 .
3603 CB    CB    . VAL VAL VAL B B 34  34  . 0.0316 0.0392 0.0267 0.0093  -
0.0030 -0.0044 1 .
3604 CG1   CG1   . VAL VAL VAL B B 34  34  . 0.0458 0.0312 0.0576 0.0107
0.0228  0.0104  1 .
3605 CG2   CG2   . VAL VAL VAL B B 34  34  . 0.0391 0.0394 0.0314 0.0065  -
0.0030 -0.0091 1 .
3606 C     C     . VAL VAL VAL B B 34  34  . 0.0253 0.0263 0.0271 0.0000
0.0000  0.0013  1 .
3607 O     O     . VAL VAL VAL B B 34  34  . 0.0689 0.0367 0.0253 0.0223  -
0.0002 -0.0001 1 .
3608 N     N     . PRO PRO PRO B B 35  35  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
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3609 CA    CA    . PRO PRO PRO B B 35  35  . 0.0261 0.0265 0.0319 -0.0006
0.0019  -0.0027 1 .
3610 CB    CB    . PRO PRO PRO B B 35  35  . 0.0473 0.0497 0.0335 0.0098  -
0.0118 0.0008  1 .
3611 CG    CG    . PRO PRO PRO B B 35  35  . 0.0253 0.0292 0.0253 -0.0003
0.0000  -0.0003 1 .
3612 CD    CD    . PRO PRO PRO B B 35  35  . 0.0335 0.0263 0.0323 -0.0004
0.0072  0.0003  1 .
3613 C     C     . PRO PRO PRO B B 35  35  . 0.0255 0.0290 0.0269 0.0009
0.0006  0.0024  1 .
3614 O     O     . PRO PRO PRO B B 35  35  . 0.0577 0.0427 0.0360 0.0112  -
0.0009 0.0117  1 .
3615 N     N     . SER SER SER B B 36  36  . 0.0343 0.0374 0.0400 -0.0059 -
0.0087 0.0129  1 .
3616 CA    CA    . SER SER SER B B 36  36  . 0.0329 0.0315 0.0324 0.0066  -
0.0022 -0.0004 1 .
3617 CB    CB    . SER SER SER B B 36  36  . 0.0422 0.0355 0.0443 -0.0014
0.0047  -0.0137 1 .
3618 OG    OG    . SER SER SER B B 36  36  . 0.0832 0.0733 0.0528 0.0089
0.0150  0.0355  1 .
3619 C     C     . SER SER SER B B 36  36  . 0.0519 0.0270 0.0336 0.0041  -
0.0067 -0.0037 1 .
3620 O     O     . SER SER SER B B 36  36  . 0.0488 0.0440 0.0497 0.0016  -
0.0226 0.0053  1 .
3621 N     N     . GLY GLY GLY B B 37  37  . 0.0516 0.0297 0.0260 0.0108
0.0044  0.0018  1 .
3622 CA    CA    . GLY GLY GLY B B 37  37  . 0.0514 0.0374 0.0323 -0.0036 -
0.0067 0.0023  1 .
3623 C     C     . GLY GLY GLY B B 37  37  . 0.0254 0.0258 0.0253 -0.0002
0.0000  0.0000  1 .
3624 O     O     . GLY GLY GLY B B 37  37  . 0.0425 0.0392 0.0591 0.0032
0.0241  0.0053  1 .
3625 N     N     . ALA ALA ALA B B 38  38  . 0.0268 0.0384 0.0346 -0.0036 -
0.0017 -0.0015 1 .
3626 CA    CA    . ALA ALA ALA B B 38  38  . 0.0356 0.0255 0.0253 0.0014  -
0.0001 0.0000  1 .
3627 CB    CB    . ALA ALA ALA B B 38  38  . 0.0305 0.0256 0.0326 0.0012
0.0062  0.0014  1 .
3628 C     C     . ALA ALA ALA B B 38  38  . 0.0630 0.0286 0.0329 0.0112
0.0169  0.0050  1 .
3629 O     O     . ALA ALA ALA B B 38  38  . 0.1055 0.0492 0.0690 0.0125
0.0007  -0.0005 1 .
3630 N     N     . SER SER SER B B 39  39  . 0.0654 0.0264 0.0282 0.0055
0.0036  -0.0003 1 .
3631 CA    CA    . SER SER SER B B 39  39  . 0.0401 0.0294 0.0256 0.0007  -
0.0007 0.0011  1 .
3632 CB    CB    . SER SER SER B B 39  39  . 0.0636 0.0334 0.0276 0.0033  -
0.0084 -0.0026 1 .
3633 OG    OG    . SER SER SER B B 39  39  . 0.0759 0.0288 0.0389 -0.0114
0.0173  -0.0013 1 .
3634 C     C     . SER SER SER B B 39  39  . 0.0453 0.0510 0.0498 0.0040  -
0.0043 -0.0057 1 .
3635 O     O     . SER SER SER B B 39  39  . 0.0784 0.0299 0.0331 -0.0155
0.0036  -0.0019 1 .
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3636 N     N     . THR THR THR B B 40  40  . 0.0278 0.0317 0.0289 0.0040
0.0030  0.0048  1 .
3637 CA    CA    . THR THR THR B B 40  40  . 0.0609 0.0617 0.0341 0.0122  -
0.0012 0.0163  1 .
3638 CB    CB    . THR THR THR B B 40  40  . 0.0540 0.0305 0.0277 0.0063
0.0012  0.0033  1 .
3639 OG1   OG1   . THR THR THR B B 40  40  . 0.0829 0.0543 0.0530 0.0235
0.0101  0.0022  1 .
3640 CG2   CG2   . THR THR THR B B 40  40  . 0.0599 0.0276 0.0407 0.0082
0.0128  0.0050  1 .
3641 C     C     . THR THR THR B B 40  40  . 0.0479 0.0382 0.0469 -0.0119 -
0.0163 0.0166  1 .
3642 O     O     . THR THR THR B B 40  40  . 0.0674 0.0301 0.0700 -0.0121 -
0.0060 -0.0059 1 .
3643 N     N     . GLY GLY GLY B B 41  41  . 0.0630 0.0340 0.0334 0.0119  -
0.0116 0.0010  1 .
3644 CA    CA    . GLY GLY GLY B B 41  41  . 0.0606 0.0256 0.0253 0.0030
0.0005  0.0000  1 .
3645 C     C     . GLY GLY GLY B B 41  41  . 0.0376 0.0376 0.0265 0.0123
0.0039  0.0039  1 .
3646 O     O     . GLY GLY GLY B B 41  41  . 0.0576 0.0283 0.0452 0.0096
0.0187  0.0064  1 .
3647 N     N     . ILE ILE ILE B B 42  42  . 0.0609 0.0253 0.0272 -0.0007 -
0.0082 0.0001  1 .
3648 CA    CA    . ILE ILE ILE B B 42  42  . 0.0417 0.0337 0.0340 0.0117
0.0119  0.0085  1 .
3649 CB    CB    . ILE ILE ILE B B 42  42  . 0.0488 0.0418 0.0502 -0.0114 -
0.0071 0.0192  1 .
3650 CG1   CG1   . ILE ILE ILE B B 42  42  . 0.0931 0.0397 0.0667 -0.0183 -
0.0194 -0.0028 1 .
3651 CD1   CD1   . ILE ILE ILE B B 42  42  . 0.1421 0.0571 0.0923 -0.0260
0.0058  0.0302  1 .
3652 CG2   CG2   . ILE ILE ILE B B 42  42  . 0.0693 0.0973 0.0814 0.0049  -
0.0014 0.0089  1 .
3653 C     C     . ILE ILE ILE B B 42  42  . 0.0472 0.0390 0.0361 0.0028  -
0.0024 -0.0005 1 .
3654 O     O     . ILE ILE ILE B B 42  42  . 0.0804 0.0680 0.0525 0.0158
0.0248  -0.0175 1 .
3655 N     N     . TYR TYR TYR B B 43  43  . 0.0363 0.0261 0.0253 0.0029  -
0.0001 0.0000  1 .
3656 CA    CA    . TYR TYR TYR B B 43  43  . 0.0421 0.0364 0.0316 -0.0003
0.0065  -0.0065 1 .
3657 CB    CB    . TYR TYR TYR B B 43  43  . 0.0396 0.0557 0.0332 0.0142  -
0.0018 -0.0130 1 .
3658 CG    CG    . TYR TYR TYR B B 43  43  . 0.0541 0.0500 0.0520 0.0108
0.0259  0.0013  1 .
3659 CD1   CD1   . TYR TYR TYR B B 43  43  . 0.0580 0.0909 0.0671 0.0156
0.0361  0.0067  1 .
3660 CE1   CE1   . TYR TYR TYR B B 43  43  . 0.0281 0.0261 0.0321 0.0014  -
0.0043 -0.0022 1 .
3661 CZ    CZ    . TYR TYR TYR B B 43  43  . 0.0669 0.0422 0.0895 0.0263
0.0130  0.0120  1 .
3662 OH    OH    . TYR TYR TYR B B 43  43  . 0.0745 0.0421 0.1307 0.0205
0.0232  0.0118  1 .
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3663 CE2   CE2   . TYR TYR TYR B B 43  43  . 0.0818 0.0567 0.0481 0.0309
0.0095  0.0227  1 .
3664 CD2   CD2   . TYR TYR TYR B B 43  43  . 0.0829 0.0387 0.0528 -0.0200
0.0132  -0.0171 1 .
3665 C     C     . TYR TYR TYR B B 43  43  . 0.0356 0.0340 0.0254 0.0095
0.0012  0.0011  1 .
3666 O     O     . TYR TYR TYR B B 43  43  . 0.0571 0.0282 0.0455 0.0094  -
0.0161 -0.0059 1 .
3667 N     N     . GLU GLU GLU B B 44  44  . 0.0689 0.0457 0.0311 0.0097
0.0088  -0.0066 1 .
3668 CA    CA    . GLU GLU GLU B B 44  44  . 0.0422 0.0418 0.0346 0.0140
0.0106  0.0052  1 .
3669 CB    CB    . GLU GLU GLU B B 44  44  . 0.0647 0.0400 0.0255 0.0240
0.0027  0.0016  1 .
3670 CG    CG    . GLU GLU GLU B B 44  44  . 0.0650 0.0408 0.0365 0.0183
0.0200  0.0065  1 .
3671 CD    CD    . GLU GLU GLU B B 44  44  . 0.0465 0.0649 0.0341 0.0290
0.0136  0.0186  1 .
3672 OE1   OE1   . GLU GLU GLU B B 44  44  . 0.0333 0.0302 0.0367 0.0062
0.0095  0.0074  1 .
3673 OE2   OE2   . GLU GLU GLU B B 44  44  . 0.0899 0.0629 0.0489 0.0163
0.0113  -0.0079 1 .
3674 C     C     . GLU GLU GLU B B 44  44  . 0.0337 0.0283 0.0311 -0.0018
0.0069  -0.0018 1 .
3675 O     O     . GLU GLU GLU B B 44  44  . 0.0614 0.0407 0.0438 0.0084
0.0147  -0.0076 1 .
3676 N     N     . ALA ALA ALA B B 45  45  . 0.0662 0.0540 0.0282 0.0055
0.0052  0.0086  1 .
3677 CA    CA    . ALA ALA ALA B B 45  45  . 0.0472 0.0519 0.0275 0.0104
0.0013  -0.0059 1 .
3678 CB    CB    . ALA ALA ALA B B 45  45  . 0.0416 0.0628 0.0495 -0.0238
0.0153  -0.0173 1 .
3679 C     C     . ALA ALA ALA B B 45  45  . 0.0486 0.0623 0.0483 0.0003
0.0056  -0.0077 1 .
3680 O     O     . ALA ALA ALA B B 45  45  . 0.0964 0.0533 0.0351 0.0254  -
0.0182 0.0034  1 .
3681 N     N     . LEU LEU LEU B B 46  46  . 0.0709 0.0405 0.0599 0.0255  -
0.0099 -0.0013 1 .
3682 CA    CA    . LEU LEU LEU B B 46  46  . 0.0434 0.0373 0.0490 0.0131  -
0.0066 -0.0120 1 .
3683 CB    CB    . LEU LEU LEU B B 46  46  . 0.1043 0.0480 0.0961 0.0186  -
0.0178 -0.0392 1 .
3684 CG    CG    . LEU LEU LEU B B 46  46  . 0.1899 0.1158 0.1099 0.0046  -
0.0165 -0.0268 1 .
3685 CD1   CD1   . LEU LEU LEU B B 46  46  . 0.2182 0.1934 0.1510 -0.0187
0.0357  0.0004  1 .
3686 CD2   CD2   . LEU LEU LEU B B 46  46  . 0.2516 0.2222 0.1711 0.0026
0.0222  -0.0632 1 .
3687 C     C     . LEU LEU LEU B B 46  46  . 0.0376 0.0501 0.0506 -0.0021 -
0.0046 -0.0020 1 .
3688 O     O     . LEU LEU LEU B B 46  46  . 0.0996 0.0741 0.0620 0.0146
0.0159  -0.0014 1 .
3689 N     N     . GLU GLU GLU B B 47  47  . 0.0594 0.0713 0.0367 0.0198  -
0.0086 0.0128  1 .
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3690 CA    CA    . GLU GLU GLU B B 47  47  . 0.0615 0.0652 0.0378 0.0123  -
0.0019 0.0056  1 .
3691 CB    CB    . GLU GLU GLU B B 47  47  . 0.0262 0.0731 0.0254 0.0065  -
0.0002 -0.0018 1 .
3692 CG    CG    . GLU GLU GLU B B 47  47  . 0.0521 0.0418 0.0410 -0.0023 -
0.0128 0.0135  1 .
3693 CD    CD    . GLU GLU GLU B B 47  47  . 0.0480 0.0288 0.0438 -0.0029
0.0155  -0.0069 1 .
3694 OE1   OE1   . GLU GLU GLU B B 47  47  . 0.1726 0.0899 0.0680 0.0442
0.0110  -0.0430 1 .
3695 OE2   OE2   . GLU GLU GLU B B 47  47  . 0.1161 0.0943 0.0497 -0.0110
0.0189  0.0349  1 .
3696 C     C     . GLU GLU GLU B B 47  47  . 0.0780 0.0881 0.0683 -0.0050
0.0090  0.0038  1 .
3697 O     O     . GLU GLU GLU B B 47  47  . 0.1075 0.0993 0.0627 0.0011
0.0151  -0.0151 1 .
3698 N     N     . LEU LEU LEU B B 48  48  . 0.0631 0.0642 0.0411 0.0207
0.0142  -0.0091 1 .
3699 CA    CA    . LEU LEU LEU B B 48  48  . 0.0659 0.0346 0.0263 0.0194
0.0064  0.0030  1 .
3700 CB    CB    . LEU LEU LEU B B 48  48  . 0.0681 0.0372 0.0614 0.0118  -
0.0114 0.0013  1 .
3701 CG    CG    . LEU LEU LEU B B 48  48  . 0.0626 0.0344 0.0745 0.0181  -
0.0177 -0.0050 1 .
3702 CD1   CD1   . LEU LEU LEU B B 48  48  . 0.1202 0.0301 0.0333 0.0211
0.0268  0.0061  1 .
3703 CD2   CD2   . LEU LEU LEU B B 48  48  . 0.0966 0.0722 0.0867 -0.0531
0.0256  0.0002  1 .
3704 C     C     . LEU LEU LEU B B 48  48  . 0.0483 0.0411 0.0422 -0.0006 -
0.0058 -0.0154 1 .
3705 O     O     . LEU LEU LEU B B 48  48  . 0.0502 0.0430 0.0348 0.0150
0.0129  0.0028  1 .
3706 N     N     . ARG ARG ARG B B 49  49  . 0.0744 0.0569 0.0763 0.0022  -
0.0040 -0.0220 1 .
3707 CA    CA    . ARG ARG ARG B B 49  49  . 0.1170 0.0725 0.0819 0.0174
0.0097  -0.0190 1 .
3708 CB    CB    . ARG ARG ARG B B 49  49  . 0.1400 0.0966 0.0964 -0.0094
0.0142  -0.0323 1 .
3709 CG    CG    . ARG ARG ARG B B 49  49  . 0.1884 0.1604 0.1004 0.0579
0.0128  -0.0411 1 .
3710 CD    CD    . ARG ARG ARG B B 49  49  . 0.2057 0.1138 0.0550 0.0427  -
0.0053 -0.0450 1 .
3711 NE    NE    . ARG ARG ARG B B 49  49  . 0.1570 0.1177 0.1036 0.0525
0.0409  0.0117  1 .
3712 CZ    CZ    . ARG ARG ARG B B 49  49  . 0.1184 0.0889 0.0497 0.0678  -
0.0149 0.0066  1 .
3713 NH1   NH1   . ARG ARG ARG B B 49  49  . 0.1003 0.0484 0.0699 0.0240
0.0523  0.0055  1 .
3714 NH2   NH2   . ARG ARG ARG B B 49  49  . 0.1340 0.0644 0.0467 0.0616
0.0145  -0.0007 1 .
3715 C     C     . ARG ARG ARG B B 49  49  . 0.1142 0.0678 0.0651 0.0124
0.0126  -0.0140 1 .
3716 O     O     . ARG ARG ARG B B 49  49  . 0.1305 0.0761 0.0939 0.0350
0.0013  0.0240  1 .
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3717 N     N     . ASP ASP ASP B B 50  50  . 0.0947 0.0580 0.0347 0.0285
0.0023  -0.0129 1 .
3718 CA    CA    . ASP ASP ASP B B 50  50  . 0.1133 0.0603 0.0905 0.0176
0.0034  -0.0248 1 .
3719 CB    CB    . ASP ASP ASP B B 50  50  . 0.0833 0.0636 0.0472 0.0250  -
0.0083 -0.0013 1 .
3720 CG    CG    . ASP ASP ASP B B 50  50  . 0.0863 0.0716 0.0752 0.0348  -
0.0033 -0.0381 1 .
3721 OD1   OD1   . ASP ASP ASP B B 50  50  . 0.0478 0.0700 0.0472 0.0316
0.0195  0.0262  1 .
3722 OD2   OD2   . ASP ASP ASP B B 50  50  . 0.0999 0.0704 0.0281 0.0388  -
0.0044 -0.0102 1 .
3723 C     C     . ASP ASP ASP B B 50  50  . 0.1236 0.0865 0.1007 0.0127  -
0.0100 -0.0069 1 .
3724 O     O     . ASP ASP ASP B B 50  50  . 0.1640 0.0962 0.1065 0.0332  -
0.0128 -0.0158 1 .
3725 N     N     . GLY GLY GLY B B 51  51  . 0.1256 0.0786 0.0921 0.0161
0.0091  -0.0089 1 .
3726 CA    CA    . GLY GLY GLY B B 51  51  . 0.1306 0.1032 0.1395 0.0095  -
0.0115 0.0071  1 .
3727 C     C     . GLY GLY GLY B B 51  51  . 0.1784 0.1179 0.1670 -0.0001
0.0005  -0.0065 1 .
3728 O     O     . GLY GLY GLY B B 51  51  . 0.2007 0.1029 0.1587 -0.0262 -
0.0194 -0.0196 1 .
3729 N     N     . ASP ASP ASP B B 52  52  . 0.1630 0.1282 0.1508 0.0026
0.0041  -0.0042 1 .
3730 CA    CA    . ASP ASP ASP B B 52  52  . 0.1840 0.1392 0.1592 0.0040
0.0041  -0.0171 1 .
3731 CB    CB    . ASP ASP ASP B B 52  52  . 0.1799 0.1574 0.1567 0.0059  -
0.0028 -0.0231 1 .
3732 CG    CG    . ASP ASP ASP B B 52  52  . 0.2006 0.1559 0.1396 0.0038
0.0093  -0.0357 1 .
3733 OD1   OD1   . ASP ASP ASP B B 52  52  . 0.1510 0.1409 0.1429 0.0224  -
0.0674 -0.0247 1 .
3734 OD2   OD2   . ASP ASP ASP B B 52  52  . 0.1400 0.1478 0.1212 0.0378
0.0558  -0.0597 1 .
3735 C     C     . ASP ASP ASP B B 52  52  . 0.1909 0.1464 0.1721 0.0017
0.0068  -0.0073 1 .
3736 O     O     . ASP ASP ASP B B 52  52  . 0.2091 0.1418 0.1854 0.0252
0.0253  -0.0336 1 .
3737 N     N     . LYS LYS LYS B B 53  53  . 0.2118 0.1736 0.1971 -0.0072
0.0018  -0.0174 1 .
3738 CA    CA    . LYS LYS LYS B B 53  53  . 0.2282 0.1942 0.2117 -0.0161 -
0.0072 0.0021  1 .
3739 CB    CB    . LYS LYS LYS B B 53  53  . 0.2322 0.1918 0.2329 -0.0322 -
0.0109 0.0038  1 .
3740 CG    CG    . LYS LYS LYS B B 53  53  . 0.2768 0.2619 0.2481 -0.0318 -
0.0296 -0.0030 1 .
3741 CD    CD    . LYS LYS LYS B B 53  53  . 0.3234 0.3088 0.2979 -0.0489
0.0005  0.0068  1 .
3742 CE    CE    . LYS LYS LYS B B 53  53  . 0.3626 0.3446 0.3471 -0.0466 -
0.0270 0.0121  1 .
3743 NZ    NZ    . LYS LYS LYS B B 53  53  . 0.3939 0.3398 0.3960 -0.0444 -
0.0373 0.0211  1 .
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3744 C     C     . LYS LYS LYS B B 53  53  . 0.2292 0.1759 0.2029 -0.0109 -
0.0057 0.0010  1 .
3745 O     O     . LYS LYS LYS B B 53  53  . 0.2340 0.1789 0.1923 -0.0096 -
0.0039 0.0205  1 .
3746 N     N     . GLN GLN GLN B B 54  54  . 0.2231 0.1792 0.2059 -0.0012 -
0.0039 0.0025  1 .
3747 CA    CA    . GLN GLN GLN B B 54  54  . 0.2197 0.1830 0.1957 0.0047  -
0.0076 0.0020  1 .
3748 CB    CB    . GLN GLN GLN B B 54  54  . 0.2443 0.1993 0.2142 0.0164  -
0.0167 0.0004  1 .
3749 CG    CG    . GLN GLN GLN B B 54  54  . 0.3181 0.2424 0.2849 -0.0024
0.0001  0.0200  1 .
3750 CD    CD    . GLN GLN GLN B B 54  54  . 0.3500 0.3194 0.3170 -0.0194
0.0228  0.0354  1 .
3751 OE1   OE1   . GLN GLN GLN B B 54  54  . 0.4001 0.3488 0.3138 0.0173
0.0085  0.0433  1 .
3752 NE2   NE2   . GLN GLN GLN B B 54  54  . 0.4106 0.3655 0.2972 -0.0380
0.0686  0.0653  1 .
3753 C     C     . GLN GLN GLN B B 54  54  . 0.2009 0.1793 0.1735 0.0160  -
0.0078 -0.0125 1 .
3754 O     O     . GLN GLN GLN B B 54  54  . 0.2085 0.1951 0.1630 0.0285
0.0049  -0.0199 1 .
3755 N     N     . ARG ARG ARG B B 55  55  . 0.1662 0.1396 0.1634 0.0080
0.0010  -0.0298 1 .
3756 CA    CA    . ARG ARG ARG B B 55  55  . 0.1431 0.0917 0.1066 0.0090  -
0.0015 -0.0256 1 .
3757 CB    CB    . ARG ARG ARG B B 55  55  . 0.1423 0.1006 0.1085 0.0072
0.0069  -0.0097 1 .
3758 CG    CG    . ARG ARG ARG B B 55  55  . 0.1456 0.1076 0.1352 -0.0055 -
0.0046 -0.0297 1 .
3759 CD    CD    . ARG ARG ARG B B 55  55  . 0.1170 0.1310 0.1038 0.0339  -
0.0307 -0.0092 1 .
3760 NE    NE    . ARG ARG ARG B B 55  55  . 0.1371 0.1051 0.0683 -0.0331 -
0.0447 -0.0263 1 .
3761 CZ    CZ    . ARG ARG ARG B B 55  55  . 0.1655 0.0790 0.0491 0.0230  -
0.0019 -0.0073 1 .
3762 NH1   NH1   . ARG ARG ARG B B 55  55  . 0.0742 0.0733 0.0920 0.0367
0.0075  -0.0038 1 .
3763 NH2   NH2   . ARG ARG ARG B B 55  55  . 0.1950 0.0500 0.1004 0.0010
0.0004  -0.0430 1 .
3764 C     C     . ARG ARG ARG B B 55  55  . 0.1024 0.0606 0.0753 0.0271
0.0000  -0.0231 1 .
3765 O     O     . ARG ARG ARG B B 55  55  . 0.1456 0.0551 0.0912 0.0300
0.0004  -0.0221 1 .
3766 N     N     . TYR TYR TYR B B 56  56  . 0.0806 0.0641 0.0943 0.0124  -
0.0225 -0.0223 1 .
3767 CA    CA    . TYR TYR TYR B B 56  56  . 0.0762 0.0640 0.0786 0.0078  -
0.0177 0.0008  1 .
3768 CB    CB    . TYR TYR TYR B B 56  56  . 0.0294 0.0331 0.0824 0.0034  -
0.0073 0.0086  1 .
3769 CG    CG    . TYR TYR TYR B B 56  56  . 0.0506 0.0277 0.0520 -0.0051
0.0109  0.0033  1 .
3770 CD1   CD1   . TYR TYR TYR B B 56  56  . 0.0419 0.0300 0.0420 0.0082
0.0107  0.0030  1 .
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3771 CE1   CE1   . TYR TYR TYR B B 56  56  . 0.0853 0.0609 0.0299 0.0378
0.0025  0.0088  1 .
3772 CZ    CZ    . TYR TYR TYR B B 56  56  . 0.0402 0.0260 0.0329 -0.0032
0.0106  -0.0023 1 .
3773 OH    OH    . TYR TYR TYR B B 56  56  . 0.0985 0.0633 0.0768 -0.0235 -
0.0271 -0.0059 1 .
3774 CE2   CE2   . TYR TYR TYR B B 56  56  . 0.0557 0.0399 0.0332 -0.0024
0.0050  0.0097  1 .
3775 CD2   CD2   . TYR TYR TYR B B 56  56  . 0.0316 0.0375 0.0486 0.0081
0.0097  0.0088  1 .
3776 C     C     . TYR TYR TYR B B 56  56  . 0.0798 0.0984 0.0833 0.0101  -
0.0057 -0.0069 1 .
3777 O     O     . TYR TYR TYR B B 56  56  . 0.1015 0.0825 0.0846 0.0117  -
0.0184 -0.0125 1 .
3778 N     N     . LEU LEU LEU B B 57  57  . 0.1285 0.0841 0.1126 0.0206
0.0083  -0.0090 1 .
3779 CA    CA    . LEU LEU LEU B B 57  57  . 0.1190 0.0892 0.1206 -0.0033
0.0126  -0.0050 1 .
3780 CB    CB    . LEU LEU LEU B B 57  57  . 0.1474 0.0998 0.1326 0.0099
0.0118  0.0262  1 .
3781 CG    CG    . LEU LEU LEU B B 57  57  . 0.1357 0.1508 0.1790 -0.0160
0.0067  0.0198  1 .
3782 CD1   CD1   . LEU LEU LEU B B 57  57  . 0.2038 0.1335 0.1594 0.0271
0.0132  0.0367  1 .
3783 CD2   CD2   . LEU LEU LEU B B 57  57  . 0.1678 0.1439 0.1860 -0.0316
0.0101  -0.0438 1 .
3784 C     C     . LEU LEU LEU B B 57  57  . 0.1308 0.0992 0.1130 -0.0017
0.0125  -0.0051 1 .
3785 O     O     . LEU LEU LEU B B 57  57  . 0.1588 0.0908 0.1303 -0.0021
0.0166  -0.0006 1 .
3786 N     N     . GLY GLY GLY B B 58  58  . 0.0959 0.0936 0.1157 -0.0034 -
0.0206 -0.0140 1 .
3787 CA    CA    . GLY GLY GLY B B 58  58  . 0.0943 0.0766 0.1074 0.0021  -
0.0194 0.0020  1 .
3788 C     C     . GLY GLY GLY B B 58  58  . 0.1137 0.1012 0.0948 0.0093  -
0.0035 0.0049  1 .
3789 O     O     . GLY GLY GLY B B 58  58  . 0.0959 0.0970 0.1104 0.0165
0.0037  0.0006  1 .
3790 N     N     . LYS LYS LYS B B 59  59  . 0.0876 0.0753 0.0803 0.0103
0.0037  0.0053  1 .
3791 CA    CA    . LYS LYS LYS B B 59  59  . 0.0839 0.0674 0.0638 0.0272  -
0.0030 0.0015  1 .
3792 CB    CB    . LYS LYS LYS B B 59  59  . 0.1125 0.0584 0.1271 0.0350
0.0010  0.0041  1 .
3793 CG    CG    . LYS LYS LYS B B 59  59  . 0.1243 0.1160 0.1673 0.0194
0.0206  -0.0058 1 .
3794 CD    CD    . LYS LYS LYS B B 59  59  . 0.1805 0.2061 0.3211 0.0390
0.0050  -0.0103 1 .
3795 CE    CE    . LYS LYS LYS B B 59  59  . 0.2066 0.2451 0.2914 0.0180  -
0.0188 0.0006  1 .
3796 NZ    NZ    . LYS LYS LYS B B 59  59  . 0.2466 0.2467 0.3591 0.0690  -
0.0503 0.0092  1 .
3797 C     C     . LYS LYS LYS B B 59  59  . 0.0919 0.0467 0.0591 0.0165  -
0.0082 -0.0012 1 .
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3798 O     O     . LYS LYS LYS B B 59  59  . 0.0729 0.0490 0.0525 0.0020
0.0227  -0.0144 1 .
3799 N     N     . GLY GLY GLY B B 60  60  . 0.0777 0.0406 0.0531 0.0275
0.0056  0.0078  1 .
3800 CA    CA    . GLY GLY GLY B B 60  60  . 0.0715 0.0313 0.0376 0.0112  -
0.0029 0.0023  1 .
3801 C     C     . GLY GLY GLY B B 60  60  . 0.0790 0.0555 0.0387 0.0141
0.0091  -0.0090 1 .
3802 O     O     . GLY GLY GLY B B 60  60  . 0.0987 0.0394 0.0645 0.0191
0.0218  -0.0116 1 .
3803 N     N     . VAL VAL VAL B B 61  61  . 0.0626 0.0402 0.0338 0.0135
0.0067  -0.0060 1 .
3804 CA    CA    . VAL VAL VAL B B 61  61  . 0.0733 0.0405 0.0557 0.0161
0.0125  -0.0035 1 .
3805 CB    CB    . VAL VAL VAL B B 61  61  . 0.0674 0.0478 0.0340 0.0181
0.0115  0.0069  1 .
3806 CG1   CG1   . VAL VAL VAL B B 61  61  . 0.0525 0.0675 0.0565 -0.0059
0.0041  0.0108  1 .
3807 CG2   CG2   . VAL VAL VAL B B 61  61  . 0.0955 0.0434 0.0348 0.0356
0.0228  0.0113  1 .
3808 C     C     . VAL VAL VAL B B 61  61  . 0.0467 0.0348 0.0367 0.0130
0.0007  0.0047  1 .
3809 O     O     . VAL VAL VAL B B 61  61  . 0.0514 0.0486 0.0455 0.0193
0.0073  -0.0073 1 .
3810 N     N     . LEU LEU LEU B B 62  62  . 0.0800 0.0748 0.0794 0.0322  -
0.0026 -0.0057 1 .
3811 CA    CA    . LEU LEU LEU B B 62  62  . 0.0842 0.0933 0.0502 0.0204  -
0.0056 0.0035  1 .
3812 CB    CB    . LEU LEU LEU B B 62  62  . 0.1084 0.1061 0.0556 0.0352  -
0.0239 0.0032  1 .
3813 CG    CG    . LEU LEU LEU B B 62  62  . 0.1171 0.1361 0.0722 0.0486  -
0.0227 -0.0045 1 .
3814 CD1   CD1   . LEU LEU LEU B B 62  62  . 0.2242 0.2011 0.0555 0.1031  -
0.0159 0.0069  1 .
3815 CD2   CD2   . LEU LEU LEU B B 62  62  . 0.1229 0.1613 0.1128 0.0475  -
0.0354 0.0430  1 .
3816 C     C     . LEU LEU LEU B B 62  62  . 0.0587 0.0529 0.0373 0.0221
0.0028  -0.0104 1 .
3817 O     O     . LEU LEU LEU B B 62  62  . 0.0692 0.0701 0.0350 0.0380
0.0040  -0.0069 1 .
3818 N     N     . LYS LYS LYS B B 63  63  . 0.0788 0.0611 0.0364 0.0281  -
0.0050 -0.0175 1 .
3819 CA    CA    . LYS LYS LYS B B 63  63  . 0.0558 0.0618 0.0579 0.0198
0.0131  0.0056  1 .
3820 CB    CB    . LYS LYS LYS B B 63  63  . 0.0915 0.0574 0.0740 0.0137
0.0140  0.0120  1 .
3821 CG    CG    . LYS LYS LYS B B 63  63  . 0.1093 0.1045 0.1200 -0.0039 -
0.0070 0.0122  1 .
3822 CD    CD    . LYS LYS LYS B B 63  63  . 0.1719 0.0672 0.2094 0.0541
0.0018  0.0478  1 .
3823 CE    CE    . LYS LYS LYS B B 63  63  . 0.2732 0.1520 0.1111 0.0167
0.0019  0.0424  1 .
3824 NZ    NZ    . LYS LYS LYS B B 63  63  . 0.2322 0.1080 0.2238 0.0187
0.0642  -0.0115 1 .
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3825 C     C     . LYS LYS LYS B B 63  63  . 0.0476 0.0438 0.0718 0.0192
0.0209  0.0106  1 .
3826 O     O     . LYS LYS LYS B B 63  63  . 0.0735 0.0620 0.1005 0.0170
0.0048  0.0078  1 .
3827 N     N     . ALA ALA ALA B B 64  64  . 0.0472 0.0448 0.0341 0.0126
0.0136  0.0058  1 .
3828 CA    CA    . ALA ALA ALA B B 64  64  . 0.0574 0.0522 0.0549 0.0179
0.0216  0.0134  1 .
3829 CB    CB    . ALA ALA ALA B B 64  64  . 0.0647 0.0678 0.0523 0.0224
0.0272  0.0000  1 .
3830 C     C     . ALA ALA ALA B B 64  64  . 0.0565 0.0559 0.0645 0.0180
0.0087  0.0045  1 .
3831 O     O     . ALA ALA ALA B B 64  64  . 0.1066 0.0909 0.0616 0.0231  -
0.0227 0.0046  1 .
3832 N     N     . VAL VAL VAL B B 65  65  . 0.0709 0.0515 0.0523 0.0233
0.0063  0.0010  1 .
3833 CA    CA    . VAL VAL VAL B B 65  65  . 0.0817 0.0883 0.0751 0.0101  -
0.0013 -0.0013 1 .
3834 CB    CB    . VAL VAL VAL B B 65  65  . 0.0916 0.0982 0.0772 0.0227  -
0.0016 -0.0119 1 .
3835 CG1   CG1   . VAL VAL VAL B B 65  65  . 0.0303 0.0673 0.1210 -0.0049
0.0218  -0.0155 1 .
3836 CG2   CG2   . VAL VAL VAL B B 65  65  . 0.0646 0.0482 0.0793 0.0154  -
0.0455 -0.0133 1 .
3837 C     C     . VAL VAL VAL B B 65  65  . 0.0799 0.0818 0.0815 0.0085  -
0.0036 0.0015  1 .
3838 O     O     . VAL VAL VAL B B 65  65  . 0.1136 0.1134 0.0915 -0.0022 -
0.0002 -0.0094 1 .
3839 N     N     . ASP ASP ASP B B 66  66  . 0.0911 0.0999 0.0864 0.0247
0.0106  0.0099  1 .
3840 CA    CA    . ASP ASP ASP B B 66  66  . 0.1036 0.0861 0.0889 0.0170
0.0061  0.0134  1 .
3841 CB    CB    . ASP ASP ASP B B 66  66  . 0.1089 0.0919 0.1205 0.0308
0.0147  0.0025  1 .
3842 CG    CG    . ASP ASP ASP B B 66  66  . 0.1832 0.1696 0.1890 0.0370
0.0315  0.0131  1 .
3843 OD1   OD1   . ASP ASP ASP B B 66  66  . 0.2404 0.2406 0.3143 0.1227  -
0.0421 0.0330  1 .
3844 OD2   OD2   . ASP ASP ASP B B 66  66  . 0.2704 0.2657 0.0971 0.0637
0.0635  -0.0059 1 .
3845 C     C     . ASP ASP ASP B B 66  66  . 0.0892 0.0757 0.0751 0.0098
0.0059  0.0153  1 .
3846 O     O     . ASP ASP ASP B B 66  66  . 0.0959 0.0725 0.0626 0.0554  -
0.0053 0.0075  1 .
3847 N     N     . HIS HIS HIS B B 67  67  . 0.0928 0.0715 0.0731 0.0185
0.0180  -0.0077 1 .
3848 CA    CA    . HIS HIS HIS B B 67  67  . 0.0852 0.0817 0.0749 0.0087
0.0212  0.0032  1 .
3849 CB    CB    . HIS HIS HIS B B 67  67  . 0.1074 0.1042 0.0927 -0.0023
0.0467  0.0117  1 .
3850 CG    CG    . HIS HIS HIS B B 67  67  . 0.0561 0.0681 0.0607 0.0322
0.0106  -0.0057 1 .
3851 ND1   ND1   . HIS HIS HIS B B 67  67  . 0.1243 0.0701 0.1525 0.0628  -
0.0026 -0.0268 1 .
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3852 CE1   CE1   . HIS HIS HIS B B 67  67  . 0.1189 0.0818 0.1347 0.0525
0.0384  -0.0288 1 .
3853 NE2   NE2   . HIS HIS HIS B B 67  67  . 0.1090 0.0858 0.0983 0.0468
0.0146  0.0030  1 .
3854 CD2   CD2   . HIS HIS HIS B B 67  67  . 0.0500 0.0607 0.1075 0.0149
0.0082  0.0139  1 .
3855 C     C     . HIS HIS HIS B B 67  67  . 0.0848 0.0838 0.0762 0.0174
0.0127  -0.0083 1 .
3856 O     O     . HIS HIS HIS B B 67  67  . 0.1074 0.0978 0.0752 0.0439  -
0.0061 -0.0113 1 .
3857 N     N     . ILE ILE ILE B B 68  68  . 0.0691 0.0446 0.0951 0.0103
0.0236  0.0022  1 .
3858 CA    CA    . ILE ILE ILE B B 68  68  . 0.0467 0.0533 0.0690 0.0137
0.0136  -0.0014 1 .
3859 CB    CB    . ILE ILE ILE B B 68  68  . 0.0361 0.0374 0.0352 0.0114
0.0103  0.0109  1 .
3860 CG1   CG1   . ILE ILE ILE B B 68  68  . 0.0347 0.0725 0.0293 0.0078
0.0059  0.0078  1 .
3861 CD1   CD1   . ILE ILE ILE B B 68  68  . 0.1168 0.0403 0.0832 0.0297
0.0419  -0.0007 1 .
3862 CG2   CG2   . ILE ILE ILE B B 68  68  . 0.0464 0.0740 0.0417 0.0300
0.0120  0.0093  1 .
3863 C     C     . ILE ILE ILE B B 68  68  . 0.0676 0.0701 0.0936 0.0229
0.0001  0.0126  1 .
3864 O     O     . ILE ILE ILE B B 68  68  . 0.0866 0.0884 0.1247 0.0088  -
0.0067 0.0188  1 .
3865 N     N     . ASN ASN ASN B B 69  69  . 0.1161 0.1159 0.0999 0.0181  -
0.0049 -0.0032 1 .
3866 CA    CA    . ASN ASN ASN B B 69  69  . 0.1018 0.1172 0.1222 0.0317
0.0064  0.0129  1 .
3867 CB    CB    . ASN ASN ASN B B 69  69  . 0.0611 0.0877 0.1032 0.0339  -
0.0045 -0.0021 1 .
3868 CG    CG    . ASN ASN ASN B B 69  69  . 0.0999 0.0761 0.1002 0.0352  -
0.0008 -0.0249 1 .
3869 OD1   OD1   . ASN ASN ASN B B 69  69  . 0.1024 0.0753 0.0659 -0.0083 -
0.0528 0.0204  1 .
3870 ND2   ND2   . ASN ASN ASN B B 69  69  . 0.0739 0.0674 0.0647 0.0360  -
0.0140 0.0029  1 .
3871 C     C     . ASN ASN ASN B B 69  69  . 0.1249 0.1191 0.1287 0.0262
0.0134  0.0057  1 .
3872 O     O     . ASN ASN ASN B B 69  69  . 0.0951 0.1413 0.1574 0.0296  -
0.0018 0.0091  1 .
3873 N     N     . SER SER SER B B 70  70  . 0.1507 0.1384 0.1583 0.0375
0.0166  -0.0018 1 .
3874 CA    CA    . SER SER SER B B 70  70  . 0.1422 0.1506 0.1514 0.0359
0.0077  -0.0074 1 .
3875 CB    CB    . SER SER SER B B 70  70  . 0.1804 0.1595 0.1731 0.0464
0.0146  -0.0186 1 .
3876 OG    OG    . SER SER SER B B 70  70  . 0.1429 0.2514 0.2060 0.0823
0.0432  -0.0486 1 .
3877 C     C     . SER SER SER B B 70  70  . 0.1573 0.1533 0.1501 0.0240
0.0034  0.0004  1 .
3878 O     O     . SER SER SER B B 70  70  . 0.1904 0.1682 0.1306 0.0365  -
0.0016 -0.0016 1 .
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3879 N     N     . THR THR THR B B 71  71  . 0.1412 0.1369 0.1232 0.0287  -
0.0113 0.0045  1 .
3880 CA    CA    . THR THR THR B B 71  71  . 0.1531 0.1479 0.1369 0.0188  -
0.0060 0.0107  1 .
3881 CB    CB    . THR THR THR B B 71  71  . 0.1507 0.1478 0.1363 0.0012  -
0.0103 0.0040  1 .
3882 OG1   OG1   . THR THR THR B B 71  71  . 0.1400 0.1316 0.1276 0.0214
0.0139  0.0292  1 .
3883 CG2   CG2   . THR THR THR B B 71  71  . 0.1799 0.1667 0.1163 0.0167  -
0.0424 -0.0248 1 .
3884 C     C     . THR THR THR B B 71  71  . 0.1354 0.1442 0.1246 0.0125
0.0010  0.0164  1 .
3885 O     O     . THR THR THR B B 71  71  . 0.1394 0.1455 0.1256 0.0120  -
0.0055 0.0234  1 .
3886 N     N     . ILE ILE ILE B B 72  72  . 0.1215 0.1245 0.1015 0.0285
0.0124  0.0167  1 .
3887 CA    CA    . ILE ILE ILE B B 72  72  . 0.0936 0.0998 0.1042 0.0153
0.0015  0.0153  1 .
3888 CB    CB    . ILE ILE ILE B B 72  72  . 0.0916 0.1069 0.0808 0.0195
0.0143  0.0195  1 .
3889 CG1   CG1   . ILE ILE ILE B B 72  72  . 0.0578 0.0937 0.0598 -0.0316
0.0272  -0.0054 1 .
3890 CD1   CD1   . ILE ILE ILE B B 72  72  . 0.0804 0.0845 0.0724 0.0261  -
0.0128 0.0316  1 .
3891 CG2   CG2   . ILE ILE ILE B B 72  72  . 0.0420 0.0913 0.1017 0.0104  -
0.0166 0.0493  1 .
3892 C     C     . ILE ILE ILE B B 72  72  . 0.1010 0.1118 0.0871 0.0175
0.0068  0.0075  1 .
3893 O     O     . ILE ILE ILE B B 72  72  . 0.1167 0.0949 0.0914 0.0300
0.0006  0.0161  1 .
3894 N     N     . ALA ALA ALA B B 73  73  . 0.1164 0.0981 0.0892 0.0291
0.0054  0.0112  1 .
3895 CA    CA    . ALA ALA ALA B B 73  73  . 0.0963 0.0967 0.0826 0.0183  -
0.0005 0.0105  1 .
3896 CB    CB    . ALA ALA ALA B B 73  73  . 0.0557 0.0858 0.0869 0.0216  -
0.0184 0.0280  1 .
3897 C     C     . ALA ALA ALA B B 73  73  . 0.0974 0.0832 0.0785 0.0144
0.0071  0.0118  1 .
3898 O     O     . ALA ALA ALA B B 73  73  . 0.0942 0.1010 0.0779 0.0023  -
0.0109 0.0049  1 .
3899 N     N     . PRO PRO PRO B B 74  74  . 0.1107 0.0989 0.1050 0.0239
0.0094  0.0098  1 .
3900 CA    CA    . PRO PRO PRO B B 74  74  . 0.1140 0.0989 0.1076 0.0192
0.0142  0.0084  1 .
3901 CB    CB    . PRO PRO PRO B B 74  74  . 0.1336 0.0935 0.0994 0.0287
0.0122  0.0051  1 .
3902 CG    CG    . PRO PRO PRO B B 74  74  . 0.1029 0.1702 0.1151 0.0419
0.0365  -0.0145 1 .
3903 CD    CD    . PRO PRO PRO B B 74  74  . 0.1324 0.0959 0.1243 0.0598
0.0094  0.0052  1 .
3904 C     C     . PRO PRO PRO B B 74  74  . 0.1257 0.1077 0.1159 0.0174
0.0128  0.0017  1 .
3905 O     O     . PRO PRO PRO B B 74  74  . 0.1142 0.1417 0.1256 0.0278
0.0030  0.0318  1 .
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3906 N     N     . ALA ALA ALA B B 75  75  . 0.1083 0.0889 0.1102 0.0292
0.0207  0.0052  1 .
3907 CA    CA    . ALA ALA ALA B B 75  75  . 0.1124 0.1102 0.1217 0.0057
0.0021  0.0023  1 .
3908 CB    CB    . ALA ALA ALA B B 75  75  . 0.1016 0.1169 0.0760 0.0098  -
0.0082 -0.0040 1 .
3909 C     C     . ALA ALA ALA B B 75  75  . 0.1016 0.1034 0.1180 0.0117  -
0.0018 -0.0066 1 .
3910 O     O     . ALA ALA ALA B B 75  75  . 0.0808 0.0973 0.1339 0.0121  -
0.0129 0.0077  1 .
3911 N     N     . LEU LEU LEU B B 76  76  . 0.1212 0.1322 0.1386 0.0251  -
0.0106 -0.0041 1 .
3912 CA    CA    . LEU LEU LEU B B 76  76  . 0.1123 0.1172 0.1190 0.0493  -
0.0055 -0.0004 1 .
3913 CB    CB    . LEU LEU LEU B B 76  76  . 0.1217 0.1306 0.1302 0.0443
0.0010  -0.0032 1 .
3914 CG    CG    . LEU LEU LEU B B 76  76  . 0.1251 0.1243 0.1766 0.0530
0.0116  0.0200  1 .
3915 CD1   CD1   . LEU LEU LEU B B 76  76  . 0.0974 0.1568 0.1945 0.0697
0.0132  0.0290  1 .
3916 CD2   CD2   . LEU LEU LEU B B 76  76  . 0.1236 0.1655 0.1273 0.0549
0.0192  0.0198  1 .
3917 C     C     . LEU LEU LEU B B 76  76  . 0.1197 0.1252 0.1294 0.0461  -
0.0079 -0.0098 1 .
3918 O     O     . LEU LEU LEU B B 76  76  . 0.1511 0.1297 0.1798 0.0471  -
0.0113 0.0192  1 .
3919 N     N     . ILE ILE ILE B B 77  77  . 0.1184 0.1309 0.1236 0.0617
0.0013  0.0006  1 .
3920 CA    CA    . ILE ILE ILE B B 77  77  . 0.1507 0.1508 0.1650 0.0519
0.0005  0.0161  1 .
3921 CB    CB    . ILE ILE ILE B B 77  77  . 0.1540 0.1447 0.1680 0.0685  -
0.0053 0.0078  1 .
3922 CG1   CG1   . ILE ILE ILE B B 77  77  . 0.1883 0.1577 0.2233 0.0503  -
0.0247 0.0412  1 .
3923 CD1   CD1   . ILE ILE ILE B B 77  77  . 0.2179 0.1637 0.1766 0.0772  -
0.0282 0.0792  1 .
3924 CG2   CG2   . ILE ILE ILE B B 77  77  . 0.1387 0.1315 0.1960 0.1042  -
0.0062 0.0072  1 .
3925 C     C     . ILE ILE ILE B B 77  77  . 0.1439 0.1550 0.1502 0.0391
0.0115  0.0130  1 .
3926 O     O     . ILE ILE ILE B B 77  77  . 0.1300 0.1638 0.1319 0.0545
0.0353  0.0541  1 .
3927 N     N     . SER SER SER B B 78  78  . 0.1726 0.1906 0.1780 0.0273
0.0024  0.0104  1 .
3928 CA    CA    . SER SER SER B B 78  78  . 0.1935 0.2040 0.1973 0.0184
0.0025  0.0089  1 .
3929 CB    CB    . SER SER SER B B 78  78  . 0.2021 0.2127 0.2080 0.0166  -
0.0019 0.0045  1 .
3930 OG    OG    . SER SER SER B B 78  78  . 0.2444 0.2587 0.2300 0.0053
0.0278  -0.0136 1 .
3931 C     C     . SER SER SER B B 78  78  . 0.1909 0.1991 0.1824 0.0128
0.0009  0.0112  1 .
3932 O     O     . SER SER SER B B 78  78  . 0.1835 0.1971 0.1540 0.0260  -
0.0241 0.0244  1 .
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3933 N     N     . SER SER SER B B 79  79  . 0.2103 0.1891 0.1869 0.0241
0.0048  0.0068  1 .
3934 CA    CA    . SER SER SER B B 79  79  . 0.2111 0.1892 0.2013 0.0231
0.0025  0.0148  1 .
3935 CB    CB    . SER SER SER B B 79  79  . 0.2037 0.1797 0.2070 0.0310
0.0059  0.0132  1 .
3936 OG    OG    . SER SER SER B B 79  79  . 0.1452 0.1104 0.1749 0.0309
0.0114  0.0401  1 .
3937 C     C     . SER SER SER B B 79  79  . 0.2272 0.2074 0.2132 0.0186  -
0.0035 0.0080  1 .
3938 O     O     . SER SER SER B B 79  79  . 0.2443 0.2145 0.2350 0.0248  -
0.0153 0.0107  1 .
3939 N     N     . GLY GLY GLY B B 80  80  . 0.2301 0.1968 0.1978 0.0162  -
0.0008 0.0121  1 .
3940 CA    CA    . GLY GLY GLY B B 80  80  . 0.2157 0.2048 0.1982 -0.0007 -
0.0043 0.0160  1 .
3941 C     C     . GLY GLY GLY B B 80  80  . 0.1992 0.1789 0.2094 0.0108  -
0.0024 0.0172  1 .
3942 O     O     . GLY GLY GLY B B 80  80  . 0.1859 0.2126 0.2253 -0.0046 -
0.0175 0.0333  1 .
3943 N     N     . LEU LEU LEU B B 81  81  . 0.1839 0.1783 0.1945 0.0229
0.0076  0.0181  1 .
3944 CA    CA    . LEU LEU LEU B B 81  81  . 0.1715 0.1464 0.1667 0.0182
0.0040  0.0177  1 .
3945 CB    CB    . LEU LEU LEU B B 81  81  . 0.1647 0.1382 0.1708 0.0167
0.0018  0.0247  1 .
3946 CG    CG    . LEU LEU LEU B B 81  81  . 0.1149 0.1310 0.1562 0.0436
0.0082  0.0174  1 .
3947 CD1   CD1   . LEU LEU LEU B B 81  81  . 0.1325 0.1214 0.0885 0.0101
0.0064  0.0736  1 .
3948 CD2   CD2   . LEU LEU LEU B B 81  81  . 0.0324 0.1093 0.2087 -0.0212
0.0105  0.0266  1 .
3949 C     C     . LEU LEU LEU B B 81  81  . 0.1638 0.1539 0.1593 0.0118
0.0051  0.0149  1 .
3950 O     O     . LEU LEU LEU B B 81  81  . 0.1579 0.1481 0.1640 0.0054
0.0008  0.0336  1 .
3951 N     N     . SER SER SER B B 82  82  . 0.1823 0.1700 0.1940 -0.0042 -
0.0022 0.0115  1 .
3952 CA    CA    . SER SER SER B B 82  82  . 0.1749 0.1641 0.1848 0.0085  -
0.0073 0.0010  1 .
3953 CB    CB    . SER SER SER B B 82  82  . 0.1891 0.1836 0.2025 0.0146  -
0.0334 0.0003  1 .
3954 OG    OG    . SER SER SER B B 82  82  . 0.2190 0.2124 0.2744 0.0150  -
0.0302 -0.0272 1 .
3955 C     C     . SER SER SER B B 82  82  . 0.1800 0.1584 0.1643 -0.0010 -
0.0010 0.0046  1 .
3956 O     O     . SER SER SER B B 82  82  . 0.1864 0.1420 0.1395 0.0076  -
0.0004 0.0191  1 .
3957 N     N     . VAL VAL VAL B B 83  83  . 0.1523 0.1617 0.1515 -0.0069
0.0146  0.0219  1 .
3958 CA    CA    . VAL VAL VAL B B 83  83  . 0.1466 0.1545 0.1609 -0.0030
0.0060  0.0085  1 .
3959 CB    CB    . VAL VAL VAL B B 83  83  . 0.1296 0.1424 0.1553 -0.0033
0.0124  0.0097  1 .
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3960 CG1   CG1   . VAL VAL VAL B B 83  83  . 0.0462 0.0982 0.1071 0.0094  -
0.0374 0.0148  1 .
3961 CG2   CG2   . VAL VAL VAL B B 83  83  . 0.1573 0.1411 0.1910 0.0268
0.0195  -0.0020 1 .
3962 C     C     . VAL VAL VAL B B 83  83  . 0.1433 0.1450 0.1580 0.0043
0.0103  0.0157  1 .
3963 O     O     . VAL VAL VAL B B 83  83  . 0.1490 0.1446 0.1573 0.0129
0.0119  0.0317  1 .
3964 N     N     . VAL VAL VAL B B 84  84  . 0.1639 0.1531 0.1758 0.0018
0.0009  0.0053  1 .
3965 CA    CA    . VAL VAL VAL B B 84  84  . 0.1753 0.1576 0.1846 -0.0056 -
0.0073 0.0169  1 .
3966 CB    CB    . VAL VAL VAL B B 84  84  . 0.1673 0.1619 0.1839 -0.0079 -
0.0013 0.0182  1 .
3967 CG1   CG1   . VAL VAL VAL B B 84  84  . 0.1889 0.1553 0.2361 0.0193  -
0.0253 0.0186  1 .
3968 CG2   CG2   . VAL VAL VAL B B 84  84  . 0.2044 0.1862 0.2323 0.0156  -
0.0086 0.0097  1 .
3969 C     C     . VAL VAL VAL B B 84  84  . 0.1756 0.1697 0.1800 -0.0107 -
0.0039 0.0127  1 .
3970 O     O     . VAL VAL VAL B B 84  84  . 0.1666 0.1762 0.1804 -0.0345 -
0.0183 0.0093  1 .
3971 N     N     . GLU GLU GLU B B 85  85  . 0.1551 0.1749 0.1875 -0.0055
0.0012  0.0045  1 .
3972 CA    CA    . GLU GLU GLU B B 85  85  . 0.1652 0.1758 0.1988 0.0026
0.0032  0.0093  1 .
3973 CB    CB    . GLU GLU GLU B B 85  85  . 0.1946 0.2012 0.2251 0.0116
0.0094  0.0073  1 .
3974 CG    CG    . GLU GLU GLU B B 85  85  . 0.2563 0.2544 0.2815 0.0068
0.0026  0.0285  1 .
3975 CD    CD    . GLU GLU GLU B B 85  85  . 0.3311 0.3032 0.3451 0.0487  -
0.0333 0.0529  1 .
3976 OE1   OE1   . GLU GLU GLU B B 85  85  . 0.3499 0.3132 0.3562 0.0958  -
0.0534 0.0991  1 .
3977 OE2   OE2   . GLU GLU GLU B B 85  85  . 0.4229 0.3623 0.3584 0.0479  -
0.0435 0.0258  1 .
3978 C     C     . GLU GLU GLU B B 85  85  . 0.1478 0.1578 0.1682 0.0102
0.0061  0.0178  1 .
3979 O     O     . GLU GLU GLU B B 85  85  . 0.1465 0.1578 0.1325 0.0090
0.0151  0.0285  1 .
3980 N     N     . GLN GLN GLN B B 86  86  . 0.1594 0.1639 0.1714 0.0110
0.0074  0.0041  1 .
3981 CA    CA    . GLN GLN GLN B B 86  86  . 0.1427 0.1340 0.1437 0.0162
0.0063  0.0197  1 .
3982 CB    CB    . GLN GLN GLN B B 86  86  . 0.1465 0.1659 0.1478 0.0161
0.0013  0.0054  1 .
3983 CG    CG    . GLN GLN GLN B B 86  86  . 0.1083 0.1165 0.1493 0.0146
0.0093  -0.0094 1 .
3984 CD    CD    . GLN GLN GLN B B 86  86  . 0.1573 0.1079 0.1572 0.0279
0.0097  0.0152  1 .
3985 OE1   OE1   . GLN GLN GLN B B 86  86  . 0.1339 0.2123 0.1754 -0.0214
0.0387  0.0211  1 .
3986 NE2   NE2   . GLN GLN GLN B B 86  86  . 0.1265 0.1436 0.1752 0.0261
0.0442  -0.0292 1 .
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3987 C     C     . GLN GLN GLN B B 86  86  . 0.1425 0.1370 0.1411 0.0212
0.0044  0.0172  1 .
3988 O     O     . GLN GLN GLN B B 86  86  . 0.1032 0.1363 0.1492 0.0147
0.0114  0.0350  1 .
3989 N     N     . GLU GLU GLU B B 87  87  . 0.1362 0.1193 0.1282 0.0028
0.0038  -0.0161 1 .
3990 CA    CA    . GLU GLU GLU B B 87  87  . 0.1281 0.1246 0.1015 0.0107  -
0.0063 0.0069  1 .
3991 CB    CB    . GLU GLU GLU B B 87  87  . 0.1443 0.1503 0.1004 -0.0066
0.0157  0.0005  1 .
3992 CG    CG    . GLU GLU GLU B B 87  87  . 0.2698 0.1931 0.1618 0.0242  -
0.0378 0.0072  1 .
3993 CD    CD    . GLU GLU GLU B B 87  87  . 0.3931 0.2919 0.1831 0.0522  -
0.0551 0.0084  1 .
3994 OE1   OE1   . GLU GLU GLU B B 87  87  . 0.4570 0.3222 0.1897 0.0512  -
0.0383 0.0367  1 .
3995 OE2   OE2   . GLU GLU GLU B B 87  87  . 0.3930 0.2853 0.1871 0.1055  -
0.0983 0.0079  1 .
3996 C     C     . GLU GLU GLU B B 87  87  . 0.1318 0.1331 0.1029 0.0030  -
0.0020 0.0022  1 .
3997 O     O     . GLU GLU GLU B B 87  87  . 0.1057 0.0965 0.0779 0.0152  -
0.0121 0.0124  1 .
3998 N     N     . LYS LYS LYS B B 88  88  . 0.1027 0.1083 0.1164 -0.0021 -
0.0205 0.0048  1 .
3999 CA    CA    . LYS LYS LYS B B 88  88  . 0.1458 0.1484 0.1381 -0.0013 -
0.0057 0.0209  1 .
4000 CB    CB    . LYS LYS LYS B B 88  88  . 0.1434 0.1675 0.1535 -0.0068 -
0.0071 0.0118  1 .
4001 CG    CG    . LYS LYS LYS B B 88  88  . 0.1904 0.1545 0.2013 0.0195  -
0.0265 0.0152  1 .
4002 CD    CD    . LYS LYS LYS B B 88  88  . 0.2420 0.1592 0.2950 -0.0030 -
0.0292 0.0562  1 .
4003 CE    CE    . LYS LYS LYS B B 88  88  . 0.2843 0.2310 0.2562 -0.0609
0.0133  0.0618  1 .
4004 NZ    NZ    . LYS LYS LYS B B 88  88  . 0.4348 0.2413 0.2499 -0.0818 -
0.0046 0.1402  1 .
4005 C     C     . LYS LYS LYS B B 88  88  . 0.1332 0.1311 0.1235 -0.0008
0.0003  0.0172  1 .
4006 O     O     . LYS LYS LYS B B 88  88  . 0.1140 0.1223 0.1235 0.0269
0.0002  0.0245  1 .
4007 N     N     . LEU LEU LEU B B 89  89  . 0.1175 0.1264 0.1266 0.0075  -
0.0104 0.0194  1 .
4008 CA    CA    . LEU LEU LEU B B 89  89  . 0.0956 0.0980 0.1029 -0.0019 -
0.0161 -0.0026 1 .
4009 CB    CB    . LEU LEU LEU B B 89  89  . 0.0819 0.1127 0.1171 -0.0112 -
0.0112 0.0165  1 .
4010 CG    CG    . LEU LEU LEU B B 89  89  . 0.0742 0.0911 0.1150 -0.0152 -
0.0082 0.0088  1 .
4011 CD1   CD1   . LEU LEU LEU B B 89  89  . 0.1195 0.0958 0.1033 0.0319  -
0.0163 0.0257  1 .
4012 CD2   CD2   . LEU LEU LEU B B 89  89  . 0.0592 0.1080 0.1423 0.0529  -
0.0015 -0.0050 1 .
4013 C     C     . LEU LEU LEU B B 89  89  . 0.0762 0.1068 0.0935 0.0094  -
0.0109 0.0132  1 .
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4014 O     O     . LEU LEU LEU B B 89  89  . 0.1137 0.1102 0.0476 0.0103  -
0.0213 0.0286  1 .
4015 N     N     . ASP ASP ASP B B 90  90  . 0.0918 0.1072 0.0643 0.0170  -
0.0234 -0.0095 1 .
4016 CA    CA    . ASP ASP ASP B B 90  90  . 0.1073 0.0974 0.0864 0.0183  -
0.0027 0.0056  1 .
4017 CB    CB    . ASP ASP ASP B B 90  90  . 0.1000 0.0916 0.0765 0.0136  -
0.0006 0.0219  1 .
4018 CG    CG    . ASP ASP ASP B B 90  90  . 0.0997 0.0894 0.1055 0.0047  -
0.0018 -0.0102 1 .
4019 OD1   OD1   . ASP ASP ASP B B 90  90  . 0.1081 0.1124 0.0921 0.0522
0.0022  -0.0035 1 .
4020 OD2   OD2   . ASP ASP ASP B B 90  90  . 0.1570 0.1351 0.1067 0.0512
0.0029  0.0142  1 .
4021 C     C     . ASP ASP ASP B B 90  90  . 0.1160 0.1072 0.0931 0.0109  -
0.0005 0.0072  1 .
4022 O     O     . ASP ASP ASP B B 90  90  . 0.0703 0.0639 0.0984 0.0080
0.0038  0.0030  1 .
4023 N     N     . ASN ASN ASN B B 91  91  . 0.1244 0.1239 0.1180 0.0147
0.0086  0.0153  1 .
4024 CA    CA    . ASN ASN ASN B B 91  91  . 0.1518 0.1351 0.1347 0.0114  -
0.0050 0.0123  1 .
4025 CB    CB    . ASN ASN ASN B B 91  91  . 0.1630 0.1558 0.1680 -0.0015 -
0.0122 0.0082  1 .
4026 CG    CG    . ASN ASN ASN B B 91  91  . 0.2284 0.2206 0.2043 -0.0014 -
0.0310 0.0060  1 .
4027 OD1   OD1   . ASN ASN ASN B B 91  91  . 0.3159 0.2966 0.2797 0.0383  -
0.0562 -0.0359 1 .
4028 ND2   ND2   . ASN ASN ASN B B 91  91  . 0.2330 0.2829 0.1713 -0.0030 -
0.0430 0.0054  1 .
4029 C     C     . ASN ASN ASN B B 91  91  . 0.1323 0.1169 0.1371 0.0147
0.0114  0.0165  1 .
4030 O     O     . ASN ASN ASN B B 91  91  . 0.1328 0.1167 0.1421 0.0371
0.0022  0.0038  1 .
4031 N     N     . LEU LEU LEU B B 92  92  . 0.1332 0.1273 0.1118 0.0246
0.0133  0.0209  1 .
4032 CA    CA    . LEU LEU LEU B B 92  92  . 0.1120 0.1094 0.1025 0.0259
0.0102  0.0182  1 .
4033 CB    CB    . LEU LEU LEU B B 92  92  . 0.1437 0.1051 0.1110 0.0135
0.0022  0.0286  1 .
4034 CG    CG    . LEU LEU LEU B B 92  92  . 0.1523 0.1110 0.1556 0.0260
0.0291  0.0263  1 .
4035 CD1   CD1   . LEU LEU LEU B B 92  92  . 0.1266 0.0590 0.1164 -0.0135 -
0.0012 0.0540  1 .
4036 CD2   CD2   . LEU LEU LEU B B 92  92  . 0.1598 0.0513 0.1510 0.0433
0.0079  0.0413  1 .
4037 C     C     . LEU LEU LEU B B 92  92  . 0.1079 0.1100 0.0896 0.0283
0.0013  0.0176  1 .
4038 O     O     . LEU LEU LEU B B 92  92  . 0.0841 0.1243 0.1249 0.0426
0.0002  0.0023  1 .
4039 N     N     . MET MET MET B B 93  93  . 0.0543 0.0968 0.0668 0.0400  -
0.0034 0.0210  1 .
4040 CA    CA    . MET MET MET B B 93  93  . 0.0751 0.0766 0.0689 0.0057  -
0.0086 0.0062  1 .
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4041 CB    CB    . MET MET MET B B 93  93  . 0.1125 0.0858 0.0765 0.0168  -
0.0140 0.0254  1 .
4042 CG    CG    . MET MET MET B B 93  93  . 0.0670 0.0763 0.0450 0.0263
0.0120  0.0285  1 .
4043 SD    SD    . MET MET MET B B 93  93  . 0.0734 0.1256 0.0876 0.0479  -
0.0055 0.0227  1 .
4044 CE    CE    . MET MET MET B B 93  93  . 0.0788 0.1072 0.0991 0.0167
0.0208  0.0375  1 .
4045 C     C     . MET MET MET B B 93  93  . 0.0814 0.0995 0.0710 0.0094  -
0.0097 0.0143  1 .
4046 O     O     . MET MET MET B B 93  93  . 0.0840 0.1013 0.0833 0.0162
0.0021  0.0045  1 .
4047 N     N     . LEU LEU LEU B B 94  94  . 0.0516 0.0800 0.0539 0.0263
0.0013  0.0058  1 .
4048 CA    CA    . LEU LEU LEU B B 94  94  . 0.0651 0.0842 0.0746 0.0121  -
0.0015 -0.0024 1 .
4049 CB    CB    . LEU LEU LEU B B 94  94  . 0.0521 0.1045 0.0429 0.0106  -
0.0039 -0.0106 1 .
4050 CG    CG    . LEU LEU LEU B B 94  94  . 0.1015 0.1220 0.1000 0.0456  -
0.0044 -0.0139 1 .
4051 CD1   CD1   . LEU LEU LEU B B 94  94  . 0.1817 0.1438 0.1029 0.0688  -
0.0160 -0.0501 1 .
4052 CD2   CD2   . LEU LEU LEU B B 94  94  . 0.0786 0.1739 0.0583 -0.0060 -
0.0251 -0.0516 1 .
4053 C     C     . LEU LEU LEU B B 94  94  . 0.0948 0.0922 0.0966 0.0143  -
0.0029 0.0022  1 .
4054 O     O     . LEU LEU LEU B B 94  94  . 0.1182 0.1086 0.1144 0.0286  -
0.0125 0.0098  1 .
4055 N     N     . GLU GLU GLU B B 95  95  . 0.0949 0.1068 0.1019 0.0352
0.0008  -0.0091 1 .
4056 CA    CA    . GLU GLU GLU B B 95  95  . 0.1347 0.1298 0.1351 0.0311  -
0.0029 -0.0060 1 .
4057 CB    CB    . GLU GLU GLU B B 95  95  . 0.1408 0.1272 0.1555 0.0364  -
0.0026 0.0120  1 .
4058 CG    CG    . GLU GLU GLU B B 95  95  . 0.1876 0.2318 0.2182 0.0193  -
0.0228 -0.0081 1 .
4059 CD    CD    . GLU GLU GLU B B 95  95  . 0.3219 0.3242 0.2986 -0.0200 -
0.0113 0.0338  1 .
4060 OE1   OE1   . GLU GLU GLU B B 95  95  . 0.3419 0.3992 0.3615 -0.0197 -
0.0181 0.0641  1 .
4061 OE2   OE2   . GLU GLU GLU B B 95  95  . 0.3309 0.2834 0.3005 -0.0484 -
0.0336 0.0313  1 .
4062 C     C     . GLU GLU GLU B B 95  95  . 0.1524 0.1370 0.1287 0.0338
0.0109  0.0021  1 .
4063 O     O     . GLU GLU GLU B B 95  95  . 0.1829 0.1296 0.1387 0.0405
0.0214  0.0055  1 .
4064 N     N     . LEU LEU LEU B B 96  96  . 0.1360 0.1191 0.1280 0.0340
0.0124  0.0143  1 .
4065 CA    CA    . LEU LEU LEU B B 96  96  . 0.1434 0.1189 0.1004 0.0328
0.0016  0.0289  1 .
4066 CB    CB    . LEU LEU LEU B B 96  96  . 0.1630 0.1010 0.1276 0.0508
0.0017  0.0278  1 .
4067 CG    CG    . LEU LEU LEU B B 96  96  . 0.1696 0.1297 0.1581 0.0597  -
0.0298 0.0559  1 .
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4068 CD1   CD1   . LEU LEU LEU B B 96  96  . 0.2542 0.1493 0.1911 0.0707
0.0131  0.0675  1 .
4069 CD2   CD2   . LEU LEU LEU B B 96  96  . 0.1472 0.1867 0.1470 -0.0157 -
0.0423 -0.0317 1 .
4070 C     C     . LEU LEU LEU B B 96  96  . 0.1478 0.1297 0.1191 0.0306  -
0.0007 0.0190  1 .
4071 O     O     . LEU LEU LEU B B 96  96  . 0.1449 0.0959 0.1424 0.0422  -
0.0116 0.0128  1 .
4072 N     N     . ASP ASP ASP B B 97  97  . 0.1310 0.1220 0.1164 0.0430  -
0.0032 0.0273  1 .
4073 CA    CA    . ASP ASP ASP B B 97  97  . 0.1209 0.0969 0.1289 0.0279  -
0.0016 0.0146  1 .
4074 CB    CB    . ASP ASP ASP B B 97  97  . 0.1655 0.1266 0.1365 0.0263
0.0072  0.0088  1 .
4075 CG    CG    . ASP ASP ASP B B 97  97  . 0.1349 0.0784 0.1247 0.0165  -
0.0106 0.0111  1 .
4076 OD1   OD1   . ASP ASP ASP B B 97  97  . 0.1997 0.1080 0.1286 -0.0047 -
0.0182 0.0459  1 .
4077 OD2   OD2   . ASP ASP ASP B B 97  97  . 0.1673 0.1531 0.1203 0.0637
0.0176  0.0250  1 .
4078 C     C     . ASP ASP ASP B B 97  97  . 0.1239 0.1013 0.1242 0.0316
0.0008  0.0061  1 .
4079 O     O     . ASP ASP ASP B B 97  97  . 0.1155 0.0689 0.1456 0.0299  -
0.0115 0.0258  1 .
4080 N     N     . GLY GLY GLY B B 98  98  . 0.1370 0.0756 0.1291 0.0315  -
0.0135 0.0220  1 .
4081 CA    CA    . GLY GLY GLY B B 98  98  . 0.1517 0.1095 0.1302 0.0471  -
0.0024 0.0211  1 .
4082 C     C     . GLY GLY GLY B B 98  98  . 0.1663 0.1146 0.1766 0.0328  -
0.0053 0.0321  1 .
4083 O     O     . GLY GLY GLY B B 98  98  . 0.2004 0.1440 0.2112 0.0485  -
0.0086 0.0468  1 .
4084 N     N     . THR THR THR B B 99  99  . 0.1791 0.1314 0.1872 0.0344
0.0034  0.0220  1 .
4085 CA    CA    . THR THR THR B B 99  99  . 0.1600 0.1088 0.1751 0.0494
0.0079  0.0187  1 .
4086 CB    CB    . THR THR THR B B 99  99  . 0.1723 0.1017 0.1620 0.0589
0.0067  0.0012  1 .
4087 OG1   OG1   . THR THR THR B B 99  99  . 0.1723 0.0970 0.1527 0.0871
0.0027  0.0489  1 .
4088 CG2   CG2   . THR THR THR B B 99  99  . 0.1589 0.1344 0.1477 0.0470
0.0584  0.0179  1 .
4089 C     C     . THR THR THR B B 99  99  . 0.1798 0.1478 0.1736 0.0282
0.0045  0.0197  1 .
4090 O     O     . THR THR THR B B 99  99  . 0.1844 0.1346 0.1954 0.0355
0.0071  0.0111  1 .
4091 N     N     . GLU GLU GLU B B 100 100 . 0.1760 0.1657 0.1744 0.0342
0.0092  0.0154  1 .
4092 CA    CA    . GLU GLU GLU B B 100 100 . 0.1854 0.1777 0.1770 0.0229
0.0002  0.0191  1 .
4093 CB    CB    . GLU GLU GLU B B 100 100 . 0.2063 0.1922 0.1961 0.0222
0.0091  0.0232  1 .
4094 CG    CG    . GLU GLU GLU B B 100 100 . 0.2695 0.2795 0.2540 0.0143
0.0205  -0.0067 1 .
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4095 CD    CD    . GLU GLU GLU B B 100 100 . 0.3217 0.3604 0.3416 -0.0113
0.0088  -0.0188 1 .
4096 OE1   OE1   . GLU GLU GLU B B 100 100 . 0.3536 0.4306 0.3529 0.0081
0.0139  0.0171  1 .
4097 OE2   OE2   . GLU GLU GLU B B 100 100 . 0.3491 0.3916 0.4292 0.0394  -
0.0142 0.0078  1 .
4098 C     C     . GLU GLU GLU B B 100 100 . 0.1588 0.1307 0.1479 0.0166
0.0002  0.0268  1 .
4099 O     O     . GLU GLU GLU B B 100 100 . 0.1853 0.1582 0.1647 0.0212  -
0.0243 0.0106  1 .
4100 N     N     . ASN ASN ASN B B 101 101 . 0.1259 0.1059 0.0942 0.0178
0.0062  0.0406  1 .
4101 CA    CA    . ASN ASN ASN B B 101 101 . 0.1198 0.1209 0.1121 0.0065
0.0070  0.0306  1 .
4102 CB    CB    . ASN ASN ASN B B 101 101 . 0.1089 0.1354 0.1103 0.0057
0.0045  0.0417  1 .
4103 CG    CG    . ASN ASN ASN B B 101 101 . 0.1699 0.1949 0.1668 0.0035
0.0124  0.0143  1 .
4104 OD1   OD1   . ASN ASN ASN B B 101 101 . 0.2546 0.2988 0.1482 0.0079  -
0.0294 0.0644  1 .
4105 ND2   ND2   . ASN ASN ASN B B 101 101 . 0.1707 0.2045 0.2343 -0.0062 -
0.0037 -0.0628 1 .
4106 C     C     . ASN ASN ASN B B 101 101 . 0.0784 0.1176 0.0755 0.0031
0.0139  0.0268  1 .
4107 O     O     . ASN ASN ASN B B 101 101 . 0.0853 0.0985 0.0684 0.0056
0.0254  0.0251  1 .
4108 N     N     . LYS LYS LYS B B 102 102 . 0.0545 0.0927 0.0523 0.0079
0.0260  0.0229  1 .
4109 CA    CA    . LYS LYS LYS B B 102 102 . 0.0939 0.0715 0.0554 0.0248
0.0017  0.0065  1 .
4110 CB    CB    . LYS LYS LYS B B 102 102 . 0.0814 0.0703 0.0873 0.0057  -
0.0088 0.0207  1 .
4111 CG    CG    . LYS LYS LYS B B 102 102 . 0.1298 0.0815 0.0655 0.0278
0.0041  -0.0046 1 .
4112 CD    CD    . LYS LYS LYS B B 102 102 . 0.1383 0.0759 0.0712 0.0353
0.0009  0.0131  1 .
4113 CE    CE    . LYS LYS LYS B B 102 102 . 0.1117 0.0802 0.0815 0.0614
0.0058  0.0291  1 .
4114 NZ    NZ    . LYS LYS LYS B B 102 102 . 0.1577 0.0770 0.0514 0.0360  -
0.0060 -0.0139 1 .
4115 C     C     . LYS LYS LYS B B 102 102 . 0.0722 0.0813 0.0699 0.0158
0.0069  -0.0036 1 .
4116 O     O     . LYS LYS LYS B B 102 102 . 0.0913 0.0590 0.0897 0.0457
0.0163  0.0025  1 .
4117 N     N     . SER SER SER B B 103 103 . 0.0854 0.0824 0.0808 0.0129
0.0091  0.0202  1 .
4118 CA    CA    . SER SER SER B B 103 103 . 0.1217 0.1026 0.0901 0.0078
0.0017  0.0039  1 .
4119 CB    CB    . SER SER SER B B 103 103 . 0.1397 0.0933 0.1332 0.0086
0.0020  -0.0010 1 .
4120 OG    OG    . SER SER SER B B 103 103 . 0.1310 0.1023 0.1909 -0.0144 -
0.0175 0.0218  1 .
4121 C     C     . SER SER SER B B 103 103 . 0.1269 0.1005 0.0908 0.0077  -
0.0048 -0.0039 1 .
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4122 O     O     . SER SER SER B B 103 103 . 0.1899 0.0916 0.0904 0.0048  -
0.0332 -0.0009 1 .
4123 N     N     . LYS LYS LYS B B 104 104 . 0.1188 0.0885 0.0869 0.0203  -
0.0010 0.0087  1 .
4124 CA    CA    . LYS LYS LYS B B 104 104 . 0.1188 0.0991 0.1073 0.0146  -
0.0042 0.0045  1 .
4125 CB    CB    . LYS LYS LYS B B 104 104 . 0.1180 0.0929 0.1159 0.0222  -
0.0047 0.0083  1 .
4126 CG    CG    . LYS LYS LYS B B 104 104 . 0.1694 0.1225 0.1853 0.0280
0.0326  0.0005  1 .
4127 CD    CD    . LYS LYS LYS B B 104 104 . 0.2473 0.1564 0.2182 -0.0208
0.0584  0.0058  1 .
4128 CE    CE    . LYS LYS LYS B B 104 104 . 0.1691 0.2357 0.2561 0.0325
0.0692  -0.0398 1 .
4129 NZ    NZ    . LYS LYS LYS B B 104 104 . 0.1570 0.2320 0.2252 0.0481
0.0924  -0.0303 1 .
4130 C     C     . LYS LYS LYS B B 104 104 . 0.1072 0.0893 0.0973 0.0041  -
0.0079 0.0105  1 .
4131 O     O     . LYS LYS LYS B B 104 104 . 0.1016 0.0938 0.0961 0.0282  -
0.0041 0.0112  1 .
4132 N     N     . PHE PHE PHE B B 105 105 . 0.1141 0.0861 0.0684 0.0177  -
0.0054 -0.0005 1 .
4133 CA    CA    . PHE PHE PHE B B 105 105 . 0.0961 0.0734 0.0759 0.0088  -
0.0086 0.0079  1 .
4134 CB    CB    . PHE PHE PHE B B 105 105 . 0.0988 0.0676 0.0519 0.0005  -
0.0015 -0.0222 1 .
4135 CG    CG    . PHE PHE PHE B B 105 105 . 0.1024 0.0902 0.0953 0.0081  -
0.0127 -0.0109 1 .
4136 CD1   CD1   . PHE PHE PHE B B 105 105 . 0.1306 0.1234 0.0571 0.0269
0.0100  -0.0007 1 .
4137 CE1   CE1   . PHE PHE PHE B B 105 105 . 0.1516 0.1680 0.1121 0.0732  -
0.0322 0.0197  1 .
4138 CZ    CZ    . PHE PHE PHE B B 105 105 . 0.1381 0.1909 0.1226 0.0199
0.0160  -0.0123 1 .
4139 CE2   CE2   . PHE PHE PHE B B 105 105 . 0.0968 0.1412 0.1354 0.0309
0.0007  -0.0091 1 .
4140 CD2   CD2   . PHE PHE PHE B B 105 105 . 0.1231 0.1311 0.1347 0.0491
0.0194  -0.0462 1 .
4141 C     C     . PHE PHE PHE B B 105 105 . 0.0937 0.0552 0.0602 0.0227
0.0234  0.0105  1 .
4142 O     O     . PHE PHE PHE B B 105 105 . 0.0525 0.0988 0.0537 0.0439  -
0.0046 0.0009  1 .
4143 N     N     . GLY GLY GLY B B 106 106 . 0.0808 0.0529 0.0582 0.0240
0.0426  0.0172  1 .
4144 CA    CA    . GLY GLY GLY B B 106 106 . 0.0739 0.0656 0.0838 0.0207
0.0099  0.0036  1 .
4145 C     C     . GLY GLY GLY B B 106 106 . 0.0353 0.0350 0.0549 0.0098
0.0133  0.0131  1 .
4146 O     O     . GLY GLY GLY B B 106 106 . 0.0481 0.0344 0.0402 0.0130
0.0107  0.0020  1 .
4147 N     N     . ALA ALA ALA B B 107 107 . 0.0784 0.0478 0.0652 0.0234  -
0.0014 0.0163  1 .
4148 CA    CA    . ALA ALA ALA B B 107 107 . 0.0635 0.0301 0.0481 0.0107
0.0196  0.0007  1 .
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4149 CB    CB    . ALA ALA ALA B B 107 107 . 0.0678 0.0448 0.0431 0.0177
0.0130  -0.0074 1 .
4150 C     C     . ALA ALA ALA B B 107 107 . 0.0489 0.0357 0.0328 -0.0049
0.0075  0.0022  1 .
4151 O     O     . ALA ALA ALA B B 107 107 . 0.0858 0.0336 0.0393 0.0129
0.0183  0.0107  1 .
4152 N     N     . ASN ASN ASN B B 108 108 . 0.0453 0.0337 0.0253 0.0130  -
0.0011 -0.0007 1 .
4153 CA    CA    . ASN ASN ASN B B 108 108 . 0.0495 0.0270 0.0329 0.0058
0.0005  -0.0012 1 .
4154 CB    CB    . ASN ASN ASN B B 108 108 . 0.0662 0.0356 0.0304 0.0204  -
0.0122 -0.0058 1 .
4155 CG    CG    . ASN ASN ASN B B 108 108 . 0.0435 0.0441 0.0590 0.0075  -
0.0028 0.0001  1 .
4156 OD1   OD1   . ASN ASN ASN B B 108 108 . 0.0607 0.0532 0.0359 0.0289
0.0017  -0.0051 1 .
4157 ND2   ND2   . ASN ASN ASN B B 108 108 . 0.0575 0.0667 0.0364 0.0084
0.0107  0.0199  1 .
4158 C     C     . ASN ASN ASN B B 108 108 . 0.0396 0.0459 0.0607 0.0060  -
0.0023 0.0102  1 .
4159 O     O     . ASN ASN ASN B B 108 108 . 0.0901 0.0449 0.1119 0.0329
0.0008  0.0162  1 .
4160 N     N     . ALA ALA ALA B B 109 109 . 0.0494 0.0455 0.0510 0.0002
0.0022  0.0082  1 .
4161 CA    CA    . ALA ALA ALA B B 109 109 . 0.0642 0.0493 0.0561 0.0171
0.0049  -0.0002 1 .
4162 CB    CB    . ALA ALA ALA B B 109 109 . 0.0750 0.0443 0.0869 0.0163
0.0056  -0.0230 1 .
4163 C     C     . ALA ALA ALA B B 109 109 . 0.0837 0.0525 0.0575 0.0128  -
0.0005 -0.0006 1 .
4164 O     O     . ALA ALA ALA B B 109 109 . 0.0444 0.0385 0.0360 -0.0034 -
0.0012 0.0115  1 .
4165 N     N     . ILE ILE ILE B B 110 110 . 0.0806 0.0564 0.0590 0.0225  -
0.0063 -0.0014 1 .
4166 CA    CA    . ILE ILE ILE B B 110 110 . 0.0870 0.0720 0.0565 0.0107
0.0104  0.0078  1 .
4167 CB    CB    . ILE ILE ILE B B 110 110 . 0.0788 0.0588 0.0683 0.0310
0.0099  0.0182  1 .
4168 CG1   CG1   . ILE ILE ILE B B 110 110 . 0.1313 0.0695 0.0810 0.0201
0.0316  0.0295  1 .
4169 CD1   CD1   . ILE ILE ILE B B 110 110 . 0.1787 0.0894 0.1315 0.0476
0.0520  0.0569  1 .
4170 CG2   CG2   . ILE ILE ILE B B 110 110 . 0.0728 0.0518 0.1082 -0.0005 -
0.0057 0.0358  1 .
4171 C     C     . ILE ILE ILE B B 110 110 . 0.0494 0.0493 0.0441 0.0107
0.0195  0.0009  1 .
4172 O     O     . ILE ILE ILE B B 110 110 . 0.0551 0.0560 0.0367 0.0213
0.0130  0.0000  1 .
4173 N     N     . LEU LEU LEU B B 111 111 . 0.0530 0.0397 0.0394 -0.0044
0.0157  -0.0109 1 .
4174 CA    CA    . LEU LEU LEU B B 111 111 . 0.0492 0.0408 0.0691 0.0183
0.0208  0.0098  1 .
4175 CB    CB    . LEU LEU LEU B B 111 111 . 0.0259 0.0431 0.0310 -0.0032
0.0018  -0.0100 1 .
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4176 CG    CG    . LEU LEU LEU B B 111 111 . 0.0526 0.0320 0.0516 0.0075
0.0143  0.0052  1 .
4177 CD1   CD1   . LEU LEU LEU B B 111 111 . 0.0499 0.0662 0.0798 0.0050
0.0241  -0.0300 1 .
4178 CD2   CD2   . LEU LEU LEU B B 111 111 . 0.0395 0.0472 0.0703 0.0151  -
0.0093 -0.0248 1 .
4179 C     C     . LEU LEU LEU B B 111 111 . 0.0476 0.0421 0.0451 -0.0139
0.0030  -0.0002 1 .
4180 O     O     . LEU LEU LEU B B 111 111 . 0.0875 0.0368 0.0349 0.0263  -
0.0051 -0.0038 1 .
4181 N     N     . GLY GLY GLY B B 112 112 . 0.0487 0.0719 0.0376 0.0159
0.0003  0.0212  1 .
4182 CA    CA    . GLY GLY GLY B B 112 112 . 0.0612 0.0557 0.0335 -0.0141 -
0.0170 0.0051  1 .
4183 C     C     . GLY GLY GLY B B 112 112 . 0.0447 0.0344 0.0561 0.0082
0.0089  0.0058  1 .
4184 O     O     . GLY GLY GLY B B 112 112 . 0.0365 0.0479 0.0650 0.0035
0.0012  0.0295  1 .
4185 N     N     . VAL VAL VAL B B 113 113 . 0.0379 0.0527 0.0325 0.0146  -
0.0011 0.0072  1 .
4186 CA    CA    . VAL VAL VAL B B 113 113 . 0.0381 0.0418 0.0436 0.0090  -
0.0003 -0.0042 1 .
4187 CB    CB    . VAL VAL VAL B B 113 113 . 0.0454 0.0561 0.0626 0.0045  -
0.0146 0.0016  1 .
4188 CG1   CG1   . VAL VAL VAL B B 113 113 . 0.0376 0.0697 0.0406 0.0230
0.0005  0.0052  1 .
4189 CG2   CG2   . VAL VAL VAL B B 113 113 . 0.0708 0.0564 0.0567 0.0337  -
0.0163 0.0004  1 .
4190 C     C     . VAL VAL VAL B B 113 113 . 0.0514 0.0435 0.0499 0.0030
0.0023  0.0053  1 .
4191 O     O     . VAL VAL VAL B B 113 113 . 0.0739 0.0870 0.0575 0.0295
0.0052  0.0171  1 .
4192 N     N     . SER SER SER B B 114 114 . 0.0572 0.0664 0.0424 0.0080
0.0182  0.0015  1 .
4193 CA    CA    . SER SER SER B B 114 114 . 0.0631 0.0319 0.0630 0.0118
0.0040  0.0115  1 .
4194 CB    CB    . SER SER SER B B 114 114 . 0.0761 0.0723 0.0649 0.0084  -
0.0032 0.0138  1 .
4195 OG    OG    . SER SER SER B B 114 114 . 0.1102 0.0415 0.0765 0.0235
0.0038  0.0013  1 .
4196 C     C     . SER SER SER B B 114 114 . 0.0445 0.0378 0.0445 0.0095
0.0156  0.0006  1 .
4197 O     O     . SER SER SER B B 114 114 . 0.0546 0.0618 0.0365 0.0325
0.0161  0.0188  1 .
4198 N     N     . LEU LEU LEU B B 115 115 . 0.0698 0.0571 0.0286 0.0168
0.0109  0.0082  1 .
4199 CA    CA    . LEU LEU LEU B B 115 115 . 0.0494 0.0519 0.0484 0.0010  -
0.0033 0.0243  1 .
4200 CB    CB    . LEU LEU LEU B B 115 115 . 0.0511 0.0690 0.0617 0.0041
0.0005  0.0110  1 .
4201 CG    CG    . LEU LEU LEU B B 115 115 . 0.0316 0.0548 0.0582 -0.0007 -
0.0137 0.0105  1 .
4202 CD1   CD1   . LEU LEU LEU B B 115 115 . 0.0437 0.0812 0.0319 -0.0313 -
0.0064 0.0078  1 .
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4203 CD2   CD2   . LEU LEU LEU B B 115 115 . 0.0308 0.0331 0.0304 0.0065
0.0053  0.0063  1 .
4204 C     C     . LEU LEU LEU B B 115 115 . 0.0504 0.0468 0.0440 0.0094
0.0059  0.0198  1 .
4205 O     O     . LEU LEU LEU B B 115 115 . 0.0624 0.0692 0.0457 0.0007
0.0020  0.0299  1 .
4206 N     N     . ALA ALA ALA B B 116 116 . 0.0713 0.0551 0.0796 0.0048
0.0154  0.0310  1 .
4207 CA    CA    . ALA ALA ALA B B 116 116 . 0.0844 0.0742 0.0571 0.0093
0.0141  0.0150  1 .
4208 CB    CB    . ALA ALA ALA B B 116 116 . 0.1044 0.0698 0.0896 0.0065
0.0093  0.0002  1 .
4209 C     C     . ALA ALA ALA B B 116 116 . 0.0685 0.0578 0.0932 0.0147
0.0040  0.0272  1 .
4210 O     O     . ALA ALA ALA B B 116 116 . 0.0911 0.0861 0.1124 -0.0065 -
0.0268 0.0291  1 .
4211 N     N     . VAL VAL VAL B B 117 117 . 0.0979 0.0926 0.0780 0.0051  -
0.0064 0.0336  1 .
4212 CA    CA    . VAL VAL VAL B B 117 117 . 0.0956 0.0780 0.0929 0.0101  -
0.0057 0.0161  1 .
4213 CB    CB    . VAL VAL VAL B B 117 117 . 0.0800 0.0835 0.0407 0.0169  -
0.0082 0.0247  1 .
4214 CG1   CG1   . VAL VAL VAL B B 117 117 . 0.1156 0.1077 0.0816 -0.0206 -
0.0110 0.0140  1 .
4215 CG2   CG2   . VAL VAL VAL B B 117 117 . 0.0468 0.1086 0.0808 0.0422
0.0127  0.0290  1 .
4216 C     C     . VAL VAL VAL B B 117 117 . 0.1058 0.0954 0.0951 -0.0022
0.0049  0.0057  1 .
4217 O     O     . VAL VAL VAL B B 117 117 . 0.0775 0.0907 0.0897 0.0135
0.0324  0.0057  1 .
4218 N     N     . CYS CYS CYS B B 118 118 . 0.0978 0.0680 0.0700 0.0159
0.0013  0.0010  1 .
4219 CA    CA    . CYS CYS CYS B B 118 118 . 0.1209 0.0799 0.1047 0.0050
0.0020  0.0008  1 .
4220 CB    CB    . CYS CYS CYS B B 118 118 . 0.1190 0.0690 0.1111 -0.0073
0.0227  0.0018  1 .
4221 SG    SG    . CYS CYS CYS B B 118 118 . 0.1250 0.0871 0.1063 0.0231
0.0072  0.0135  1 .
4222 C     C     . CYS CYS CYS B B 118 118 . 0.0916 0.0689 0.1115 0.0155
0.0052  0.0027  1 .
4223 O     O     . CYS CYS CYS B B 118 118 . 0.1081 0.1068 0.1350 0.0348
0.0027  -0.0203 1 .
4224 N     N     . LYS LYS LYS B B 119 119 . 0.0944 0.0827 0.0886 0.0085
0.0073  0.0000  1 .
4225 CA    CA    . LYS LYS LYS B B 119 119 . 0.0924 0.0803 0.0974 0.0031
0.0098  0.0117  1 .
4226 CB    CB    . LYS LYS LYS B B 119 119 . 0.1022 0.0944 0.0699 0.0121
0.0124  0.0271  1 .
4227 CG    CG    . LYS LYS LYS B B 119 119 . 0.0816 0.0699 0.0381 0.0475
0.0141  0.0055  1 .
4228 CD    CD    . LYS LYS LYS B B 119 119 . 0.1138 0.0904 0.1451 0.0038
0.0037  -0.0397 1 .
4229 CE    CE    . LYS LYS LYS B B 119 119 . 0.1538 0.0998 0.1366 0.0760
0.0306  0.0195  1 .
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4230 NZ    NZ    . LYS LYS LYS B B 119 119 . 0.1961 0.0801 0.1459 0.0639
0.0170  -0.0417 1 .
4231 C     C     . LYS LYS LYS B B 119 119 . 0.1008 0.1002 0.1145 0.0117  -
0.0026 0.0020  1 .
4232 O     O     . LYS LYS LYS B B 119 119 . 0.1013 0.0975 0.1216 0.0165  -
0.0198 0.0245  1 .
4233 N     N     . ALA ALA ALA B B 120 120 . 0.1148 0.1347 0.1250 0.0162
0.0027  0.0109  1 .
4234 CA    CA    . ALA ALA ALA B B 120 120 . 0.1165 0.1077 0.1158 0.0128  -
0.0007 0.0186  1 .
4235 CB    CB    . ALA ALA ALA B B 120 120 . 0.1059 0.1218 0.1246 -0.0090 -
0.0028 -0.0163 1 .
4236 C     C     . ALA ALA ALA B B 120 120 . 0.1444 0.1141 0.1240 0.0001
0.0045  0.0160  1 .
4237 O     O     . ALA ALA ALA B B 120 120 . 0.1688 0.1425 0.1481 -0.0105 -
0.0036 0.0533  1 .
4238 N     N     . GLY GLY GLY B B 121 121 . 0.1104 0.0927 0.1063 0.0059
0.0129  0.0236  1 .
4239 CA    CA    . GLY GLY GLY B B 121 121 . 0.1516 0.1187 0.1222 0.0207
0.0044  0.0056  1 .
4240 C     C     . GLY GLY GLY B B 121 121 . 0.1329 0.1003 0.0870 0.0048
0.0077  0.0239  1 .
4241 O     O     . GLY GLY GLY B B 121 121 . 0.1521 0.1097 0.1085 0.0044
0.0004  0.0508  1 .
4242 N     N     . ALA ALA ALA B B 122 122 . 0.1428 0.1119 0.0789 0.0144  -
0.0140 0.0310  1 .
4243 CA    CA    . ALA ALA ALA B B 122 122 . 0.1456 0.1156 0.1222 0.0072
0.0029  0.0269  1 .
4244 CB    CB    . ALA ALA ALA B B 122 122 . 0.1153 0.0828 0.0928 0.0024  -
0.0201 0.0186  1 .
4245 C     C     . ALA ALA ALA B B 122 122 . 0.1542 0.1265 0.1320 -0.0004
0.0011  0.0234  1 .
4246 O     O     . ALA ALA ALA B B 122 122 . 0.1126 0.0944 0.1193 0.0107
0.0009  0.0481  1 .
4247 N     N     . ALA ALA ALA B B 123 123 . 0.1640 0.1401 0.1440 0.0015
0.0112  0.0212  1 .
4248 CA    CA    . ALA ALA ALA B B 123 123 . 0.1491 0.1344 0.1577 0.0030
0.0111  0.0109  1 .
4249 CB    CB    . ALA ALA ALA B B 123 123 . 0.1498 0.1268 0.1490 -0.0108
0.0065  0.0134  1 .
4250 C     C     . ALA ALA ALA B B 123 123 . 0.1533 0.1300 0.1628 0.0062  -
0.0025 0.0084  1 .
4251 O     O     . ALA ALA ALA B B 123 123 . 0.0922 0.1330 0.1937 -0.0091 -
0.0268 -0.0073 1 .
4252 N     N     . GLU GLU GLU B B 124 124 . 0.1766 0.1351 0.1852 0.0137  -
0.0003 0.0100  1 .
4253 CA    CA    . GLU GLU GLU B B 124 124 . 0.2045 0.1798 0.2185 0.0160  -
0.0020 0.0122  1 .
4254 CB    CB    . GLU GLU GLU B B 124 124 . 0.2156 0.1965 0.2293 0.0168  -
0.0049 0.0001  1 .
4255 CG    CG    . GLU GLU GLU B B 124 124 . 0.2311 0.2470 0.2847 0.0412
0.0095  0.0052  1 .
4256 CD    CD    . GLU GLU GLU B B 124 124 . 0.3113 0.3056 0.3417 0.0252
0.0250  0.0266  1 .
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4257 OE1   OE1   . GLU GLU GLU B B 124 124 . 0.3677 0.3629 0.4382 0.0093
0.0000  0.0264  1 .
4258 OE2   OE2   . GLU GLU GLU B B 124 124 . 0.3145 0.3720 0.3364 0.0573
0.0259  0.0016  1 .
4259 C     C     . GLU GLU GLU B B 124 124 . 0.2038 0.1849 0.2151 0.0109
0.0052  0.0068  1 .
4260 O     O     . GLU GLU GLU B B 124 124 . 0.2335 0.2190 0.2432 0.0080
0.0177  0.0069  1 .
4261 N     N     . ARG ARG ARG B B 125 125 . 0.2109 0.2020 0.2350 0.0026
0.0050  0.0124  1 .
4262 CA    CA    . ARG ARG ARG B B 125 125 . 0.2032 0.2006 0.2161 -0.0085
0.0035  0.0075  1 .
4263 CB    CB    . ARG ARG ARG B B 125 125 . 0.1963 0.2114 0.2377 -0.0169 -
0.0055 0.0019  1 .
4264 CG    CG    . ARG ARG ARG B B 125 125 . 0.2247 0.2050 0.2523 -0.0039
0.0153  -0.0045 1 .
4265 CD    CD    . ARG ARG ARG B B 125 125 . 0.2694 0.2318 0.2681 -0.0040 -
0.0069 0.0038  1 .
4266 NE    NE    . ARG ARG ARG B B 125 125 . 0.3133 0.2681 0.2899 0.0323  -
0.0039 0.0225  1 .
4267 CZ    CZ    . ARG ARG ARG B B 125 125 . 0.3246 0.2699 0.3462 0.0300  -
0.0061 0.0399  1 .
4268 NH1   NH1   . ARG ARG ARG B B 125 125 . 0.3304 0.2732 0.3425 0.0635
0.0180  0.0653  1 .
4269 NH2   NH2   . ARG ARG ARG B B 125 125 . 0.3454 0.2922 0.3754 0.0168  -
0.0180 0.0670  1 .
4270 C     C     . ARG ARG ARG B B 125 125 . 0.2078 0.2150 0.2314 -0.0048
0.0010  -0.0047 1 .
4271 O     O     . ARG ARG ARG B B 125 125 . 0.2224 0.2195 0.2653 -0.0084
0.0008  -0.0056 1 .
4272 N     N     . GLU GLU GLU B B 126 126 . 0.2024 0.1990 0.2176 -0.0055
0.0172  0.0079  1 .
4273 CA    CA    . GLU GLU GLU B B 126 126 . 0.2126 0.2091 0.2239 -0.0165
0.0131  0.0033  1 .
4274 CB    CB    . GLU GLU GLU B B 126 126 . 0.2237 0.2402 0.2433 -0.0213
0.0091  0.0113  1 .
4275 CG    CG    . GLU GLU GLU B B 126 126 . 0.2838 0.2825 0.2644 -0.0296
0.0274  0.0103  1 .
4276 CD    CD    . GLU GLU GLU B B 126 126 . 0.3251 0.3286 0.3455 -0.0408
0.0148  0.0434  1 .
4277 OE1   OE1   . GLU GLU GLU B B 126 126 . 0.3839 0.3536 0.3943 -0.0241
0.0236  0.0601  1 .
4278 OE2   OE2   . GLU GLU GLU B B 126 126 . 0.3337 0.3460 0.3741 -0.0186
0.0210  0.0742  1 .
4279 C     C     . GLU GLU GLU B B 126 126 . 0.2062 0.1859 0.1966 -0.0172
0.0088  0.0030  1 .
4280 O     O     . GLU GLU GLU B B 126 126 . 0.2293 0.2026 0.2263 -0.0421
0.0103  0.0074  1 .
4281 N     N     . LEU LEU LEU B B 127 127 . 0.1773 0.1733 0.1613 -0.0150
0.0155  0.0052  1 .
4282 CA    CA    . LEU LEU LEU B B 127 127 . 0.1391 0.1577 0.1376 -0.0021
0.0003  0.0174  1 .
4283 CB    CB    . LEU LEU LEU B B 127 127 . 0.1274 0.1675 0.1630 0.0173
0.0021  0.0231  1 .
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4284 CG    CG    . LEU LEU LEU B B 127 127 . 0.1816 0.1562 0.1551 0.0019  -
0.0256 0.0270  1 .
4285 CD1   CD1   . LEU LEU LEU B B 127 127 . 0.1113 0.1942 0.1077 0.0188  -
0.0127 0.0712  1 .
4286 CD2   CD2   . LEU LEU LEU B B 127 127 . 0.2484 0.0710 0.2220 0.0291  -
0.0562 0.0801  1 .
4287 C     C     . LEU LEU LEU B B 127 127 . 0.1133 0.1218 0.1225 0.0044  -
0.0013 0.0226  1 .
4288 O     O     . LEU LEU LEU B B 127 127 . 0.1045 0.1429 0.1072 0.0073  -
0.0121 0.0456  1 .
4289 N     N     . PRO PRO PRO B B 128 128 . 0.1205 0.1007 0.1214 0.0035  -
0.0020 0.0152  1 .
4290 CA    CA    . PRO PRO PRO B B 128 128 . 0.1079 0.0863 0.1199 -0.0023 -
0.0043 0.0094  1 .
4291 CB    CB    . PRO PRO PRO B B 128 128 . 0.1193 0.0823 0.1011 0.0069  -
0.0014 0.0284  1 .
4292 CG    CG    . PRO PRO PRO B B 128 128 . 0.1267 0.1556 0.1876 0.0021  -
0.0291 -0.0130 1 .
4293 CD    CD    . PRO PRO PRO B B 128 128 . 0.1192 0.1179 0.1508 0.0027
0.0110  0.0011  1 .
4294 C     C     . PRO PRO PRO B B 128 128 . 0.0972 0.0844 0.0867 -0.0003 -
0.0069 0.0177  1 .
4295 O     O     . PRO PRO PRO B B 128 128 . 0.1017 0.0860 0.1104 -0.0055 -
0.0197 0.0429  1 .
4296 N     N     . LEU LEU LEU B B 129 129 . 0.0748 0.0911 0.1055 0.0063  -
0.0122 0.0190  1 .
4297 CA    CA    . LEU LEU LEU B B 129 129 . 0.0737 0.0593 0.0961 0.0043  -
0.0096 0.0134  1 .
4298 CB    CB    . LEU LEU LEU B B 129 129 . 0.0759 0.0639 0.0676 0.0147
0.0000  0.0005  1 .
4299 CG    CG    . LEU LEU LEU B B 129 129 . 0.0576 0.0884 0.0896 0.0072  -
0.0075 0.0177  1 .
4300 CD1   CD1   . LEU LEU LEU B B 129 129 . 0.0716 0.1274 0.0705 0.0282
0.0302  -0.0281 1 .
4301 CD2   CD2   . LEU LEU LEU B B 129 129 . 0.0582 0.1006 0.0485 -0.0225 -
0.0045 0.0398  1 .
4302 C     C     . LEU LEU LEU B B 129 129 . 0.0915 0.0670 0.0810 0.0078  -
0.0062 0.0183  1 .
4303 O     O     . LEU LEU LEU B B 129 129 . 0.1213 0.0808 0.1253 0.0093  -
0.0255 0.0264  1 .
4304 N     N     . TYR TYR TYR B B 130 130 . 0.0808 0.0650 0.0667 0.0038  -
0.0073 0.0205  1 .
4305 CA    CA    . TYR TYR TYR B B 130 130 . 0.0816 0.0836 0.0733 -0.0114
0.0233  0.0000  1 .
4306 CB    CB    . TYR TYR TYR B B 130 130 . 0.0879 0.0519 0.0966 -0.0112 -
0.0241 -0.0015 1 .
4307 CG    CG    . TYR TYR TYR B B 130 130 . 0.1062 0.0622 0.0775 0.0422  -
0.0041 0.0090  1 .
4308 CD1   CD1   . TYR TYR TYR B B 130 130 . 0.1117 0.0546 0.0807 0.0144  -
0.0459 0.0212  1 .
4309 CE1   CE1   . TYR TYR TYR B B 130 130 . 0.1709 0.0675 0.1159 0.0222  -
0.0524 -0.0025 1 .
4310 CZ    CZ    . TYR TYR TYR B B 130 130 . 0.1650 0.0645 0.1003 0.0155  -
0.0405 0.0042  1 .
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4311 OH    OH    . TYR TYR TYR B B 130 130 . 0.2383 0.0464 0.2095 0.0182  -
0.0019 -0.0375 1 .
4312 CE2   CE2   . TYR TYR TYR B B 130 130 . 0.1501 0.0531 0.1412 -0.0379 -
0.0338 0.0206  1 .
4313 CD2   CD2   . TYR TYR TYR B B 130 130 . 0.1443 0.0802 0.0806 0.0200  -
0.0145 0.0263  1 .
4314 C     C     . TYR TYR TYR B B 130 130 . 0.0918 0.0863 0.0693 0.0122
0.0069  0.0185  1 .
4315 O     O     . TYR TYR TYR B B 130 130 . 0.1299 0.1208 0.1005 0.0322
0.0102  0.0327  1 .
4316 N     N     . ARG ARG ARG B B 131 131 . 0.1023 0.1086 0.0879 0.0078  -
0.0013 0.0183  1 .
4317 CA    CA    . ARG ARG ARG B B 131 131 . 0.1198 0.1210 0.1078 -0.0086 -
0.0154 0.0083  1 .
4318 CB    CB    . ARG ARG ARG B B 131 131 . 0.1204 0.1397 0.1200 -0.0053 -
0.0141 0.0161  1 .
4319 CG    CG    . ARG ARG ARG B B 131 131 . 0.2188 0.1886 0.2232 0.0024  -
0.0168 0.0028  1 .
4320 CD    CD    . ARG ARG ARG B B 131 131 . 0.3370 0.3063 0.3109 -0.0499 -
0.0119 -0.0310 1 .
4321 NE    NE    . ARG ARG ARG B B 131 131 . 0.4183 0.3629 0.4102 -0.0004
0.0196  0.0135  1 .
4322 CZ    CZ    . ARG ARG ARG B B 131 131 . 0.4586 0.4237 0.4376 0.0110
0.0292  0.0011  1 .
4323 NH1   NH1   . ARG ARG ARG B B 131 131 . 0.4483 0.4151 0.4612 0.0077
0.0436  0.0135  1 .
4324 NH2   NH2   . ARG ARG ARG B B 131 131 . 0.4833 0.4437 0.4272 0.0031
0.0335  0.0051  1 .
4325 C     C     . ARG ARG ARG B B 131 131 . 0.1010 0.0980 0.1053 -0.0171 -
0.0113 0.0052  1 .
4326 O     O     . ARG ARG ARG B B 131 131 . 0.1421 0.1370 0.1177 -0.0028 -
0.0139 0.0202  1 .
4327 N     N     . HIS HIS HIS B B 132 132 . 0.0931 0.0814 0.0950 -0.0205 -
0.0109 0.0139  1 .
4328 CA    CA    . HIS HIS HIS B B 132 132 . 0.1127 0.0963 0.1021 -0.0030 -
0.0136 0.0079  1 .
4329 CB    CB    . HIS HIS HIS B B 132 132 . 0.1161 0.1112 0.1226 -0.0032 -
0.0083 0.0081  1 .
4330 CG    CG    . HIS HIS HIS B B 132 132 . 0.1129 0.0978 0.1166 0.0220  -
0.0414 0.0411  1 .
4331 ND1   ND1   . HIS HIS HIS B B 132 132 . 0.0544 0.0984 0.1314 0.0070  -
0.0035 0.0187  1 .
4332 CE1   CE1   . HIS HIS HIS B B 132 132 . 0.1055 0.0918 0.1381 -0.0130 -
0.0263 0.0071  1 .
4333 NE2   NE2   . HIS HIS HIS B B 132 132 . 0.0369 0.0812 0.0926 0.0043  -
0.0162 0.0431  1 .
4334 CD2   CD2   . HIS HIS HIS B B 132 132 . 0.1003 0.0946 0.1575 0.0706  -
0.0102 0.0096  1 .
4335 C     C     . HIS HIS HIS B B 132 132 . 0.0999 0.0962 0.1100 -0.0053 -
0.0135 0.0082  1 .
4336 O     O     . HIS HIS HIS B B 132 132 . 0.1704 0.1107 0.1031 0.0042  -
0.0191 0.0184  1 .
4337 N     N     . ILE ILE ILE B B 133 133 . 0.1199 0.0910 0.1284 0.0024  -
0.0091 0.0124  1 .
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4338 CA    CA    . ILE ILE ILE B B 133 133 . 0.0870 0.0682 0.0877 0.0050  -
0.0042 0.0146  1 .
4339 CB    CB    . ILE ILE ILE B B 133 133 . 0.0990 0.0479 0.0933 0.0015  -
0.0076 0.0347  1 .
4340 CG1   CG1   . ILE ILE ILE B B 133 133 . 0.0785 0.0699 0.0701 -0.0202 -
0.0484 0.0130  1 .
4341 CD1   CD1   . ILE ILE ILE B B 133 133 . 0.0291 0.0750 0.1007 -0.0023 -
0.0168 0.0047  1 .
4342 CG2   CG2   . ILE ILE ILE B B 133 133 . 0.0786 0.0479 0.0460 0.0040  -
0.0034 0.0211  1 .
4343 C     C     . ILE ILE ILE B B 133 133 . 0.1020 0.0737 0.0816 0.0204  -
0.0075 0.0139  1 .
4344 O     O     . ILE ILE ILE B B 133 133 . 0.1117 0.0547 0.1020 0.0036  -
0.0215 0.0201  1 .
4345 N     N     . ALA ALA ALA B B 134 134 . 0.1169 0.0633 0.0862 0.0203  -
0.0062 0.0200  1 .
4346 CA    CA    . ALA ALA ALA B B 134 134 . 0.1368 0.1031 0.1037 0.0237
0.0037  0.0168  1 .
4347 CB    CB    . ALA ALA ALA B B 134 134 . 0.1569 0.1010 0.1257 0.0319  -
0.0051 0.0036  1 .
4348 C     C     . ALA ALA ALA B B 134 134 . 0.1275 0.1513 0.1129 0.0055  -
0.0061 0.0170  1 .
4349 O     O     . ALA ALA ALA B B 134 134 . 0.1380 0.1441 0.0792 -0.0034 -
0.0026 0.0201  1 .
4350 N     N     . GLN GLN GLN B B 135 135 . 0.1482 0.1814 0.1211 0.0055
0.0006  0.0078  1 .
4351 CA    CA    . GLN GLN GLN B B 135 135 . 0.1336 0.1776 0.1369 0.0101  -
0.0087 0.0098  1 .
4352 CB    CB    . GLN GLN GLN B B 135 135 . 0.1698 0.1744 0.1394 0.0113  -
0.0089 0.0115  1 .
4353 CG    CG    . GLN GLN GLN B B 135 135 . 0.1736 0.1658 0.1660 -0.0305 -
0.0167 0.0202  1 .
4354 CD    CD    . GLN GLN GLN B B 135 135 . 0.2770 0.2621 0.2599 -0.0404
0.0268  0.0322  1 .
4355 OE1   OE1   . GLN GLN GLN B B 135 135 . 0.2767 0.3054 0.2944 -0.0668
0.0292  -0.0069 1 .
4356 NE2   NE2   . GLN GLN GLN B B 135 135 . 0.3033 0.2607 0.3428 -0.0078
0.0110  0.0420  1 .
4357 C     C     . GLN GLN GLN B B 135 135 . 0.1405 0.1678 0.1352 0.0014
0.0004  0.0127  1 .
4358 O     O     . GLN GLN GLN B B 135 135 . 0.1610 0.1688 0.1304 0.0176  -
0.0013 0.0012  1 .
4359 N     N     . LEU LEU LEU B B 136 136 . 0.1520 0.1490 0.1227 0.0184
0.0022  0.0077  1 .
4360 CA    CA    . LEU LEU LEU B B 136 136 . 0.1615 0.1641 0.1325 0.0036  -
0.0012 0.0077  1 .
4361 CB    CB    . LEU LEU LEU B B 136 136 . 0.1655 0.1839 0.1350 0.0068
0.0002  0.0004  1 .
4362 CG    CG    . LEU LEU LEU B B 136 136 . 0.1761 0.1984 0.1407 0.0192
0.0090  0.0112  1 .
4363 CD1   CD1   . LEU LEU LEU B B 136 136 . 0.2070 0.1687 0.1417 0.0000  -
0.0254 0.0325  1 .
4364 CD2   CD2   . LEU LEU LEU B B 136 136 . 0.2041 0.1826 0.1236 0.0294
0.0331  -0.0460 1 .
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4365 C     C     . LEU LEU LEU B B 136 136 . 0.1555 0.1458 0.1285 0.0070  -
0.0015 0.0190  1 .
4366 O     O     . LEU LEU LEU B B 136 136 . 0.1909 0.1675 0.1692 0.0447  -
0.0074 0.0199  1 .
4367 N     N     . ALA ALA ALA B B 137 137 . 0.1595 0.1388 0.1177 0.0026  -
0.0031 -0.0021 1 .
4368 CA    CA    . ALA ALA ALA B B 137 137 . 0.1658 0.1326 0.1380 -0.0178 -
0.0054 -0.0059 1 .
4369 CB    CB    . ALA ALA ALA B B 137 137 . 0.1564 0.1410 0.1141 -0.0361 -
0.0065 -0.0207 1 .
4370 C     C     . ALA ALA ALA B B 137 137 . 0.1609 0.1479 0.1346 -0.0209 -
0.0059 -0.0018 1 .
4371 O     O     . ALA ALA ALA B B 137 137 . 0.1822 0.1518 0.1369 0.0024  -
0.0124 -0.0184 1 .
4372 N     N     . GLY GLY GLY B B 138 138 . 0.1733 0.1607 0.1578 -0.0277 -
0.0155 -0.0142 1 .
4373 CA    CA    . GLY GLY GLY B B 138 138 . 0.2050 0.2016 0.1716 -0.0234 -
0.0178 0.0036  1 .
4374 C     C     . GLY GLY GLY B B 138 138 . 0.2262 0.2135 0.1937 -0.0144 -
0.0227 -0.0004 1 .
4375 O     O     . GLY GLY GLY B B 138 138 . 0.2447 0.2080 0.1518 -0.0096 -
0.0426 0.0147  1 .
4376 N     N     . ASN ASN ASN B B 139 139 . 0.2321 0.2108 0.1996 -0.0086 -
0.0236 0.0111  1 .
4377 CA    CA    . ASN ASN ASN B B 139 139 . 0.2534 0.2348 0.2339 -0.0060 -
0.0105 -0.0006 1 .
4378 CB    CB    . ASN ASN ASN B B 139 139 . 0.2519 0.2387 0.2253 -0.0137 -
0.0180 0.0061  1 .
4379 CG    CG    . ASN ASN ASN B B 139 139 . 0.2583 0.2486 0.2101 -0.0086 -
0.0184 0.0243  1 .
4380 OD1   OD1   . ASN ASN ASN B B 139 139 . 0.3042 0.4032 0.2359 -0.0303 -
0.0627 0.0056  1 .
4381 ND2   ND2   . ASN ASN ASN B B 139 139 . 0.2210 0.2412 0.0894 -0.0156
0.0087  0.0114  1 .
4382 C     C     . ASN ASN ASN B B 139 139 . 0.2741 0.2446 0.2568 -0.0114 -
0.0096 -0.0040 1 .
4383 O     O     . ASN ASN ASN B B 139 139 . 0.2848 0.2280 0.2516 -0.0052 -
0.0024 -0.0331 1 .
4384 N     N     . SER SER SER B B 140 140 . 0.3177 0.2902 0.2959 -0.0005 -
0.0016 -0.0105 1 .
4385 CA    CA    . SER SER SER B B 140 140 . 0.3483 0.3331 0.3472 -0.0006 -
0.0044 -0.0122 1 .
4386 CB    CB    . SER SER SER B B 140 140 . 0.3485 0.3362 0.3590 -0.0074 -
0.0051 -0.0191 1 .
4387 OG    OG    . SER SER SER B B 140 140 . 0.3410 0.3399 0.3934 -0.0068
0.0221  -0.0306 1 .
4388 C     C     . SER SER SER B B 140 140 . 0.3713 0.3518 0.3675 0.0024  -
0.0073 -0.0112 1 .
4389 O     O     . SER SER SER B B 140 140 . 0.3880 0.3650 0.3717 -0.0023 -
0.0125 -0.0131 1 .
4390 N     N     . ASP ASP ASP B B 141 141 . 0.3753 0.3660 0.3703 0.0010  -
0.0119 -0.0073 1 .
4391 CA    CA    . ASP ASP ASP B B 141 141 . 0.3744 0.3632 0.3723 0.0009  -
0.0073 -0.0079 1 .
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4392 CB    CB    . ASP ASP ASP B B 141 141 . 0.3904 0.3825 0.3918 0.0068  -
0.0049 -0.0004 1 .
4393 CG    CG    . ASP ASP ASP B B 141 141 . 0.4287 0.4104 0.4578 -0.0005 -
0.0072 -0.0040 1 .
4394 OD1   OD1   . ASP ASP ASP B B 141 141 . 0.4435 0.4717 0.5298 0.0239  -
0.0248 -0.0221 1 .
4395 OD2   OD2   . ASP ASP ASP B B 141 141 . 0.4654 0.3978 0.5085 0.0090
0.0059  0.0078  1 .
4396 C     C     . ASP ASP ASP B B 141 141 . 0.3557 0.3366 0.3551 0.0056  -
0.0032 -0.0055 1 .
4397 O     O     . ASP ASP ASP B B 141 141 . 0.3814 0.3377 0.3749 0.0008  -
0.0038 -0.0087 1 .
4398 N     N     . LEU LEU LEU B B 142 142 . 0.3178 0.3014 0.3069 -0.0003 -
0.0057 -0.0103 1 .
4399 CA    CA    . LEU LEU LEU B B 142 142 . 0.2716 0.2376 0.2619 -0.0002
0.0038  -0.0039 1 .
4400 CB    CB    . LEU LEU LEU B B 142 142 . 0.2759 0.2380 0.2619 0.0120  -
0.0005 -0.0128 1 .
4401 CG    CG    . LEU LEU LEU B B 142 142 . 0.2619 0.1890 0.2674 0.0142  -
0.0040 -0.0168 1 .
4402 CD1   CD1   . LEU LEU LEU B B 142 142 . 0.2468 0.2059 0.2975 0.0235  -
0.0221 0.0005  1 .
4403 CD2   CD2   . LEU LEU LEU B B 142 142 . 0.1592 0.0894 0.2127 -0.0169 -
0.0190 -0.0237 1 .
4404 C     C     . LEU LEU LEU B B 142 142 . 0.2484 0.2203 0.2329 -0.0019 -
0.0047 -0.0045 1 .
4405 O     O     . LEU LEU LEU B B 142 142 . 0.2524 0.2277 0.2220 0.0069  -
0.0047 0.0153  1 .
4406 N     N     . ILE ILE ILE B B 143 143 . 0.2109 0.1980 0.1830 -0.0004 -
0.0013 0.0094  1 .
4407 CA    CA    . ILE ILE ILE B B 143 143 . 0.1875 0.1576 0.1580 -0.0042 -
0.0002 0.0029  1 .
4408 CB    CB    . ILE ILE ILE B B 143 143 . 0.1957 0.1810 0.1826 -0.0042
0.0059  0.0079  1 .
4409 CG1   CG1   . ILE ILE ILE B B 143 143 . 0.1991 0.2303 0.2048 -0.0036
0.0245  -0.0141 1 .
4410 CD1   CD1   . ILE ILE ILE B B 143 143 . 0.2548 0.2713 0.2211 0.0154
0.0548  -0.0447 1 .
4411 CG2   CG2   . ILE ILE ILE B B 143 143 . 0.1900 0.1498 0.1763 -0.0035
0.0320  0.0098  1 .
4412 C     C     . ILE ILE ILE B B 143 143 . 0.1493 0.1191 0.1325 0.0032
0.0053  0.0139  1 .
4413 O     O     . ILE ILE ILE B B 143 143 . 0.1456 0.0623 0.0934 -0.0001
0.0053  0.0240  1 .
4414 N     N     . LEU LEU LEU B B 144 144 . 0.1278 0.0970 0.0939 -0.0046 -
0.0082 0.0312  1 .
4415 CA    CA    . LEU LEU LEU B B 144 144 . 0.0824 0.0582 0.0918 0.0024  -
0.0074 0.0178  1 .
4416 CB    CB    . LEU LEU LEU B B 144 144 . 0.0444 0.0435 0.0530 0.0003
0.0060  0.0218  1 .
4417 CG    CG    . LEU LEU LEU B B 144 144 . 0.0965 0.0510 0.0660 -0.0255 -
0.0267 0.0321  1 .
4418 CD1   CD1   . LEU LEU LEU B B 144 144 . 0.2207 0.1252 0.0657 0.0147
0.0412  0.0078  1 .
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4419 CD2   CD2   . LEU LEU LEU B B 144 144 . 0.0614 0.1290 0.0817 -0.0344 -
0.0138 0.0734  1 .
4420 C     C     . LEU LEU LEU B B 144 144 . 0.0863 0.0358 0.0537 0.0138  -
0.0031 0.0137  1 .
4421 O     O     . LEU LEU LEU B B 144 144 . 0.1105 0.0331 0.0503 0.0098  -
0.0021 0.0126  1 .
4422 N     N     . PRO PRO PRO B B 145 145 . 0.0892 0.0502 0.0503 -0.0003
0.0035  0.0073  1 .
4423 CA    CA    . PRO PRO PRO B B 145 145 . 0.0458 0.0259 0.0449 -0.0020 -
0.0026 -0.0024 1 .
4424 CB    CB    . PRO PRO PRO B B 145 145 . 0.0649 0.0543 0.0303 -0.0183
0.0134  -0.0032 1 .
4425 CG    CG    . PRO PRO PRO B B 145 145 . 0.0812 0.0415 0.0413 -0.0061 -
0.0142 0.0154  1 .
4426 CD    CD    . PRO PRO PRO B B 145 145 . 0.0631 0.0566 0.0315 0.0007
0.0145  -0.0040 1 .
4427 C     C     . PRO PRO PRO B B 145 145 . 0.0564 0.0393 0.0480 -0.0032
0.0058  -0.0007 1 .
4428 O     O     . PRO PRO PRO B B 145 145 . 0.0520 0.0404 0.0424 -0.0141 -
0.0005 0.0117  1 .
4429 N     N     . VAL VAL VAL B B 146 146 . 0.0377 0.0256 0.0299 0.0003  -
0.0039 -0.0011 1 .
4430 CA    CA    . VAL VAL VAL B B 146 146 . 0.0482 0.0321 0.0294 0.0001
0.0021  -0.0051 1 .
4431 CB    CB    . VAL VAL VAL B B 146 146 . 0.0590 0.0374 0.0377 -0.0159 -
0.0060 0.0100  1 .
4432 CG1   CG1   . VAL VAL VAL B B 146 146 . 0.0467 0.0355 0.0522 0.0147
0.0240  0.0165  1 .
4433 CG2   CG2   . VAL VAL VAL B B 146 146 . 0.0360 0.0338 0.0589 0.0010
0.0072  -0.0148 1 .
4434 C     C     . VAL VAL VAL B B 146 146 . 0.0497 0.0329 0.0402 0.0022  -
0.0103 -0.0098 1 .
4435 O     O     . VAL VAL VAL B B 146 146 . 0.0531 0.0269 0.0268 0.0066  -
0.0064 -0.0015 1 .
4436 N     N     . PRO PRO PRO B B 147 147 . 0.0712 0.0337 0.0387 0.0123  -
0.0026 -0.0089 1 .
4437 CA    CA    . PRO PRO PRO B B 147 147 . 0.0723 0.0327 0.0385 -0.0067 -
0.0107 -0.0018 1 .
4438 CB    CB    . PRO PRO PRO B B 147 147 . 0.0780 0.0263 0.0338 0.0072  -
0.0211 -0.0028 1 .
4439 CG    CG    . PRO PRO PRO B B 147 147 . 0.0519 0.0557 0.0443 0.0282
0.0013  0.0045  1 .
4440 CD    CD    . PRO PRO PRO B B 147 147 . 0.0443 0.0321 0.0424 0.0114  -
0.0180 -0.0108 1 .
4441 C     C     . PRO PRO PRO B B 147 147 . 0.0553 0.0416 0.0262 0.0142
0.0008  0.0033  1 .
4442 O     O     . PRO PRO PRO B B 147 147 . 0.0723 0.0466 0.0502 0.0222
0.0170  0.0004  1 .
4443 N     N     . ALA ALA ALA B B 148 148 . 0.0494 0.0292 0.0278 0.0096
0.0077  0.0031  1 .
4444 CA    CA    . ALA ALA ALA B B 148 148 . 0.0387 0.0352 0.0266 0.0034  -
0.0009 -0.0035 1 .
4445 CB    CB    . ALA ALA ALA B B 148 148 . 0.0374 0.0278 0.0310 0.0055
0.0083  0.0038  1 .
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4446 C     C     . ALA ALA ALA B B 148 148 . 0.0311 0.0427 0.0294 0.0101
0.0049  0.0084  1 .
4447 O     O     . ALA ALA ALA B B 148 148 . 0.0555 0.0329 0.0351 0.0001
0.0009  0.0086  1 .
4448 N     N     . PHE PHE PHE B B 149 149 . 0.0378 0.0481 0.0509 0.0136  -
0.0037 0.0098  1 .
4449 CA    CA    . PHE PHE PHE B B 149 149 . 0.0466 0.0458 0.0406 0.0196
0.0037  -0.0023 1 .
4450 CB    CB    . PHE PHE PHE B B 149 149 . 0.0417 0.0410 0.0380 0.0160
0.0084  0.0084  1 .
4451 CG    CG    . PHE PHE PHE B B 149 149 . 0.0640 0.0753 0.0381 -0.0044
0.0013  -0.0002 1 .
4452 CD1   CD1   . PHE PHE PHE B B 149 149 . 0.0824 0.0685 0.0401 0.0106
0.0034  0.0146  1 .
4453 CE1   CE1   . PHE PHE PHE B B 149 149 . 0.0460 0.0335 0.0417 0.0128  -
0.0182 -0.0110 1 .
4454 CZ    CZ    . PHE PHE PHE B B 149 149 . 0.0610 0.0642 0.0574 0.0347
0.0030  -0.0098 1 .
4455 CE2   CE2   . PHE PHE PHE B B 149 149 . 0.1275 0.0802 0.0313 -0.0238
0.0062  0.0079  1 .
4456 CD2   CD2   . PHE PHE PHE B B 149 149 . 0.0637 0.0341 0.0293 0.0149
0.0038  0.0048  1 .
4457 C     C     . PHE PHE PHE B B 149 149 . 0.0376 0.0411 0.0329 0.0093  -
0.0014 0.0068  1 .
4458 O     O     . PHE PHE PHE B B 149 149 . 0.0436 0.0467 0.0272 0.0198
0.0058  0.0063  1 .
4459 N     N     . ASN ASN ASN B B 150 150 . 0.0513 0.0576 0.0303 0.0288
0.0038  0.0030  1 .
4460 CA    CA    . ASN ASN ASN B B 150 150 . 0.0510 0.0584 0.0443 0.0261
0.0108  0.0014  1 .
4461 CB    CB    . ASN ASN ASN B B 150 150 . 0.0825 0.0408 0.0445 0.0255
0.0065  -0.0058 1 .
4462 CG    CG    . ASN ASN ASN B B 150 150 . 0.0892 0.0904 0.0800 0.0148  -
0.0111 0.0214  1 .
4463 OD1   OD1   . ASN ASN ASN B B 150 150 . 0.1584 0.0835 0.0787 0.0758  -
0.0135 -0.0058 1 .
4464 ND2   ND2   . ASN ASN ASN B B 150 150 . 0.1208 0.0600 0.0578 0.0571
0.0276  0.0130  1 .
4465 C     C     . ASN ASN ASN B B 150 150 . 0.0709 0.0723 0.0442 0.0116
0.0080  0.0041  1 .
4466 O     O     . ASN ASN ASN B B 150 150 . 0.0795 0.0939 0.0310 0.0031
0.0078  -0.0171 1 .
4467 N     N     . VAL VAL VAL B B 151 151 . 0.0725 0.1038 0.0703 0.0386
0.0152  -0.0033 1 .
4468 CA    CA    . VAL VAL VAL B B 151 151 . 0.1049 0.1343 0.0798 0.0555
0.0109  -0.0027 1 .
4469 CB    CB    . VAL VAL VAL B B 151 151 . 0.1142 0.1084 0.0742 0.0484  -
0.0005 0.0001  1 .
4470 CG1   CG1   . VAL VAL VAL B B 151 151 . 0.1387 0.0945 0.1067 0.0680
0.0497  -0.0113 1 .
4471 CG2   CG2   . VAL VAL VAL B B 151 151 . 0.0987 0.1547 0.0487 0.0539  -
0.0281 0.0065  1 .
4472 C     C     . VAL VAL VAL B B 151 151 . 0.1131 0.1371 0.0910 0.0498
0.0013  -0.0182 1 .
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4473 O     O     . VAL VAL VAL B B 151 151 . 0.1254 0.1831 0.1061 0.0625
0.0064  -0.0213 1 .
4474 N     N     . ILE ILE ILE B B 152 152 . 0.1533 0.1513 0.1413 0.0387  -
0.0114 -0.0203 1 .
4475 CA    CA    . ILE ILE ILE B B 152 152 . 0.1512 0.1377 0.1484 0.0427  -
0.0253 -0.0008 1 .
4476 CB    CB    . ILE ILE ILE B B 152 152 . 0.1627 0.1239 0.1604 0.0409  -
0.0112 -0.0097 1 .
4477 CG1   CG1   . ILE ILE ILE B B 152 152 . 0.0930 0.0886 0.1457 0.0431
0.0269  0.0369  1 .
4478 CD1   CD1   . ILE ILE ILE B B 152 152 . 0.0702 0.0611 0.1574 -0.0220
0.0745  -0.0510 1 .
4479 CG2   CG2   . ILE ILE ILE B B 152 152 . 0.1671 0.1571 0.1553 0.0413  -
0.0478 -0.0282 1 .
4480 C     C     . ILE ILE ILE B B 152 152 . 0.1757 0.1562 0.1580 0.0504  -
0.0097 -0.0267 1 .
4481 O     O     . ILE ILE ILE B B 152 152 . 0.1603 0.1153 0.1476 0.0753  -
0.0243 -0.0336 1 .
4482 N     N     . ASN ASN ASN B B 153 153 . 0.1956 0.1612 0.1671 0.0439  -
0.0241 -0.0182 1 .
4483 CA    CA    . ASN ASN ASN B B 153 153 . 0.2098 0.1986 0.1788 0.0276  -
0.0064 -0.0116 1 .
4484 CB    CB    . ASN ASN ASN B B 153 153 . 0.2273 0.2225 0.1822 0.0234
0.0107  -0.0147 1 .
4485 CG    CG    . ASN ASN ASN B B 153 153 . 0.2261 0.1622 0.1520 0.0282
0.0199  0.0012  1 .
4486 OD1   OD1   . ASN ASN ASN B B 153 153 . 0.2523 0.2218 0.1571 0.0261
0.0355  0.0107  1 .
4487 ND2   ND2   . ASN ASN ASN B B 153 153 . 0.1630 0.0583 0.1045 -0.0202
0.0644  0.0074  1 .
4488 C     C     . ASN ASN ASN B B 153 153 . 0.2049 0.1922 0.1885 0.0219  -
0.0201 -0.0048 1 .
4489 O     O     . ASN ASN ASN B B 153 153 . 0.2204 0.2135 0.1853 0.0285  -
0.0377 -0.0227 1 .
4490 N     N     . GLY GLY GLY B B 154 154 . 0.1874 0.1871 0.1548 0.0118  -
0.0273 -0.0047 1 .
4491 CA    CA    . GLY GLY GLY B B 154 154 . 0.1559 0.1454 0.1506 0.0317  -
0.0401 0.0053  1 .
4492 C     C     . GLY GLY GLY B B 154 154 . 0.1660 0.1512 0.1226 0.0180  -
0.0259 -0.0158 1 .
4493 O     O     . GLY GLY GLY B B 154 154 . 0.1810 0.1247 0.1581 0.0561  -
0.0173 -0.0260 1 .
4494 N     N     . GLY GLY GLY B B 155 155 . 0.1330 0.1005 0.1184 0.0132  -
0.0276 -0.0163 1 .
4495 CA    CA    . GLY GLY GLY B B 155 155 . 0.0994 0.1175 0.0884 0.0123  -
0.0087 -0.0053 1 .
4496 C     C     . GLY GLY GLY B B 155 155 . 0.0775 0.0878 0.0670 -0.0039 -
0.0103 -0.0050 1 .
4497 O     O     . GLY GLY GLY B B 155 155 . 0.0584 0.1090 0.0561 -0.0049 -
0.0252 0.0210  1 .
4498 N     N     . SER SER SER B B 156 156 . 0.0678 0.0812 0.0458 -0.0094 -
0.0045 -0.0053 1 .
4499 CA    CA    . SER SER SER B B 156 156 . 0.0609 0.0646 0.0388 -0.0047
0.0088  0.0000  1 .
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4500 CB    CB    . SER SER SER B B 156 156 . 0.0852 0.0971 0.0301 0.0082  -
0.0156 -0.0045 1 .
4501 OG    OG    . SER SER SER B B 156 156 . 0.0578 0.0862 0.0610 -0.0445
0.0015  -0.0028 1 .
4502 C     C     . SER SER SER B B 156 156 . 0.0651 0.0530 0.0351 -0.0134
0.0100  -0.0001 1 .
4503 O     O     . SER SER SER B B 156 156 . 0.0734 0.0518 0.0446 -0.0324
0.0247  -0.0112 1 .
4504 N     N     . HIS HIS HIS B B 157 157 . 0.0705 0.0544 0.0345 -0.0009
0.0120  0.0024  1 .
4505 CA    CA    . HIS HIS HIS B B 157 157 . 0.0407 0.0346 0.0254 -0.0042
0.0012  -0.0006 1 .
4506 CB    CB    . HIS HIS HIS B B 157 157 . 0.0511 0.0497 0.0280 0.0067  -
0.0027 -0.0080 1 .
4507 CG    CG    . HIS HIS HIS B B 157 157 . 0.0266 0.0266 0.0316 0.0012
0.0028  0.0028  1 .
4508 ND1   ND1   . HIS HIS HIS B B 157 157 . 0.0388 0.0292 0.0301 0.0023
0.0004  0.0041  1 .
4509 CE1   CE1   . HIS HIS HIS B B 157 157 . 0.0254 0.0283 0.0278 0.0006
0.0005  0.0027  1 .
4510 NE2   NE2   . HIS HIS HIS B B 157 157 . 0.0327 0.0581 0.0261 0.0155  -
0.0025 -0.0052 1 .
4511 CD2   CD2   . HIS HIS HIS B B 157 157 . 0.0333 0.0346 0.0348 -0.0086
0.0087  -0.0094 1 .
4512 C     C     . HIS HIS HIS B B 157 157 . 0.0512 0.0368 0.0420 0.0036
0.0056  -0.0013 1 .
4513 O     O     . HIS HIS HIS B B 157 157 . 0.0300 0.0266 0.0381 0.0024
0.0077  0.0040  1 .
4514 N     N     . ALA ALA ALA B B 158 158 . 0.0302 0.0563 0.0325 0.0120  -
0.0011 -0.0036 1 .
4515 CA    CA    . ALA ALA ALA B B 158 158 . 0.0375 0.0704 0.0471 0.0122  -
0.0063 0.0015  1 .
4516 CB    CB    . ALA ALA ALA B B 158 158 . 0.0312 0.0680 0.0408 0.0158
0.0095  0.0257  1 .
4517 C     C     . ALA ALA ALA B B 158 158 . 0.0449 0.0696 0.0447 0.0034
0.0016  -0.0059 1 .
4518 O     O     . ALA ALA ALA B B 158 158 . 0.0364 0.0685 0.0726 0.0008  -
0.0188 -0.0270 1 .
4519 N     N     . GLY GLY GLY B B 159 159 . 0.0733 0.0921 0.0894 0.0022  -
0.0072 0.0050  1 .
4520 CA    CA    . GLY GLY GLY B B 159 159 . 0.1234 0.1284 0.1234 -0.0074 -
0.0048 0.0055  1 .
4521 C     C     . GLY GLY GLY B B 159 159 . 0.1499 0.1614 0.1467 0.0071
0.0000  -0.0028 1 .
4522 O     O     . GLY GLY GLY B B 159 159 . 0.1409 0.1373 0.1233 -0.0024 -
0.0037 -0.0014 1 .
4523 N     N     . ASN ASN ASN B B 160 160 . 0.1987 0.1823 0.1955 0.0071  -
0.0010 0.0158  1 .
4524 CA    CA    . ASN ASN ASN B B 160 160 . 0.2075 0.2272 0.2074 0.0047  -
0.0029 -0.0209 1 .
4525 CB    CB    . ASN ASN ASN B B 160 160 . 0.2203 0.2347 0.2242 0.0086  -
0.0144 -0.0171 1 .
4526 CG    CG    . ASN ASN ASN B B 160 160 . 0.2339 0.2924 0.2675 0.0346  -
0.0207 -0.0237 1 .
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4527 OD1   OD1   . ASN ASN ASN B B 160 160 . 0.2412 0.2979 0.2451 0.0558
0.0260  -0.0107 1 .
4528 ND2   ND2   . ASN ASN ASN B B 160 160 . 0.1757 0.2446 0.1907 0.0123  -
0.0571 0.0127  1 .
4529 C     C     . ASN ASN ASN B B 160 160 . 0.2191 0.2105 0.2378 -0.0088 -
0.0136 -0.0258 1 .
4530 O     O     . ASN ASN ASN B B 160 160 . 0.2363 0.2279 0.2360 -0.0201 -
0.0209 -0.0421 1 .
4531 N     N     . LYS LYS LYS B B 161 161 . 0.2166 0.2464 0.2258 -0.0037 -
0.0077 -0.0412 1 .
4532 CA    CA    . LYS LYS LYS B B 161 161 . 0.2414 0.2558 0.2506 -0.0077 -
0.0204 -0.0328 1 .
4533 CB    CB    . LYS LYS LYS B B 161 161 . 0.2356 0.2699 0.2632 -0.0161 -
0.0235 -0.0340 1 .
4534 CG    CG    . LYS LYS LYS B B 161 161 . 0.2617 0.2465 0.2532 -0.0058 -
0.0398 -0.0387 1 .
4535 CD    CD    . LYS LYS LYS B B 161 161 . 0.2337 0.2608 0.2139 -0.0140 -
0.0401 0.0286  1 .
4536 CE    CE    . LYS LYS LYS B B 161 161 . 0.1951 0.2824 0.2597 -0.0026 -
0.0632 0.0432  1 .
4537 NZ    NZ    . LYS LYS LYS B B 161 161 . 0.1709 0.3044 0.2513 0.0090  -
0.1425 0.0240  1 .
4538 C     C     . LYS LYS LYS B B 161 161 . 0.2448 0.2694 0.2603 0.0018  -
0.0208 -0.0238 1 .
4539 O     O     . LYS LYS LYS B B 161 161 . 0.2727 0.2830 0.2674 0.0116  -
0.0382 -0.0268 1 .
4540 N     N     . LEU LEU LEU B B 162 162 . 0.2384 0.2601 0.2486 0.0154  -
0.0305 -0.0324 1 .
4541 CA    CA    . LEU LEU LEU B B 162 162 . 0.2243 0.2485 0.2348 0.0235  -
0.0292 -0.0315 1 .
4542 CB    CB    . LEU LEU LEU B B 162 162 . 0.2198 0.2407 0.2309 0.0309  -
0.0348 -0.0468 1 .
4543 CG    CG    . LEU LEU LEU B B 162 162 . 0.2242 0.2779 0.2152 0.0225  -
0.0265 -0.0608 1 .
4544 CD1   CD1   . LEU LEU LEU B B 162 162 . 0.2529 0.2778 0.2567 0.0940  -
0.0175 -0.0692 1 .
4545 CD2   CD2   . LEU LEU LEU B B 162 162 . 0.2477 0.2570 0.2550 0.0638  -
0.0209 -0.0574 1 .
4546 C     C     . LEU LEU LEU B B 162 162 . 0.1940 0.2266 0.2197 0.0156  -
0.0329 -0.0297 1 .
4547 O     O     . LEU LEU LEU B B 162 162 . 0.2112 0.2350 0.2255 0.0305  -
0.0397 -0.0396 1 .
4548 N     N     . ALA ALA ALA B B 163 163 . 0.1943 0.1875 0.2160 0.0213  -
0.0237 -0.0447 1 .
4549 CA    CA    . ALA ALA ALA B B 163 163 . 0.1570 0.1775 0.1969 0.0095  -
0.0294 -0.0368 1 .
4550 CB    CB    . ALA ALA ALA B B 163 163 . 0.1820 0.1757 0.2155 0.0040  -
0.0161 -0.0555 1 .
4551 C     C     . ALA ALA ALA B B 163 163 . 0.1428 0.1547 0.1665 0.0138  -
0.0237 -0.0507 1 .
4552 O     O     . ALA ALA ALA B B 163 163 . 0.1193 0.1688 0.1520 0.0158  -
0.0386 -0.0785 1 .
4553 N     N     . MET MET MET B B 164 164 . 0.0906 0.1069 0.1208 0.0295  -
0.0262 -0.0385 1 .
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4554 CA    CA    . MET MET MET B B 164 164 . 0.0905 0.0897 0.0955 0.0137  -
0.0117 -0.0303 1 .
4555 CB    CB    . MET MET MET B B 164 164 . 0.0986 0.1054 0.0847 0.0135  -
0.0246 -0.0229 1 .
4556 CG    CG    . MET MET MET B B 164 164 . 0.1389 0.0800 0.0648 0.0086  -
0.0196 -0.0434 1 .
4557 SD    SD    . MET MET MET B B 164 164 . 0.1157 0.0812 0.0767 0.0052  -
0.0350 -0.0434 1 .
4558 CE    CE    . MET MET MET B B 164 164 . 0.1107 0.1219 0.0480 -0.0572 -
0.0256 -0.0124 1 .
4559 C     C     . MET MET MET B B 164 164 . 0.0814 0.0674 0.0719 0.0158  -
0.0177 -0.0232 1 .
4560 O     O     . MET MET MET B B 164 164 . 0.0862 0.0903 0.1027 0.0373  -
0.0293 -0.0332 1 .
4561 N     N     . GLN GLN GLN B B 165 165 . 0.0834 0.0759 0.0737 0.0333  -
0.0119 -0.0193 1 .
4562 CA    CA    . GLN GLN GLN B B 165 165 . 0.1132 0.0988 0.0885 0.0308  -
0.0169 -0.0127 1 .
4563 CB    CB    . GLN GLN GLN B B 165 165 . 0.1127 0.0997 0.1136 0.0350
0.0030  -0.0103 1 .
4564 CG    CG    . GLN GLN GLN B B 165 165 . 0.0602 0.1342 0.0917 0.0489  -
0.0266 0.0057  1 .
4565 CD    CD    . GLN GLN GLN B B 165 165 . 0.0884 0.0713 0.1145 0.0515
0.0043  -0.0150 1 .
4566 OE1   OE1   . GLN GLN GLN B B 165 165 . 0.1454 0.0685 0.0425 0.0235  -
0.0245 -0.0265 1 .
4567 NE2   NE2   . GLN GLN GLN B B 165 165 . 0.0980 0.1091 0.0686 0.0397
0.0050  -0.0310 1 .
4568 C     C     . GLN GLN GLN B B 165 165 . 0.1228 0.0826 0.0702 0.0290  -
0.0094 -0.0099 1 .
4569 O     O     . GLN GLN GLN B B 165 165 . 0.1619 0.1253 0.0823 0.0564  -
0.0175 -0.0235 1 .
4570 N     N     . GLU GLU GLU B B 166 166 . 0.1268 0.0844 0.0765 0.0391  -
0.0169 -0.0162 1 .
4571 CA    CA    . GLU GLU GLU B B 166 166 . 0.1103 0.0827 0.0465 0.0334  -
0.0151 0.0043  1 .
4572 CB    CB    . GLU GLU GLU B B 166 166 . 0.0924 0.0732 0.0570 0.0459  -
0.0180 0.0086  1 .
4573 CG    CG    . GLU GLU GLU B B 166 166 . 0.1188 0.0625 0.0353 0.0088  -
0.0015 -0.0191 1 .
4574 CD    CD    . GLU GLU GLU B B 166 166 . 0.0938 0.0929 0.0881 0.0364  -
0.0274 0.0131  1 .
4575 OE1   OE1   . GLU GLU GLU B B 166 166 . 0.1294 0.0722 0.0864 0.0416  -
0.0051 0.0122  1 .
4576 OE2   OE2   . GLU GLU GLU B B 166 166 . 0.1939 0.0814 0.0411 0.0272  -
0.0268 -0.0271 1 .
4577 C     C     . GLU GLU GLU B B 166 166 . 0.0989 0.0887 0.0540 0.0324  -
0.0142 -0.0024 1 .
4578 O     O     . GLU GLU GLU B B 166 166 . 0.1551 0.0831 0.0756 0.0509  -
0.0203 0.0204  1 .
4579 N     N     . PHE PHE PHE B B 167 167 . 0.1196 0.0855 0.0672 0.0253  -
0.0112 -0.0290 1 .
4580 CA    CA    . PHE PHE PHE B B 167 167 . 0.0713 0.0870 0.0370 0.0230  -
0.0061 -0.0157 1 .
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4581 CB    CB    . PHE PHE PHE B B 167 167 . 0.0681 0.0509 0.0594 0.0158  -
0.0140 -0.0069 1 .
4582 CG    CG    . PHE PHE PHE B B 167 167 . 0.0781 0.0988 0.0929 0.0133  -
0.0263 0.0055  1 .
4583 CD1   CD1   . PHE PHE PHE B B 167 167 . 0.1484 0.1053 0.1395 0.0133  -
0.0364 0.0189  1 .
4584 CE1   CE1   . PHE PHE PHE B B 167 167 . 0.1841 0.0598 0.1419 -0.0164 -
0.0147 -0.0284 1 .
4585 CZ    CZ    . PHE PHE PHE B B 167 167 . 0.1621 0.1183 0.1693 0.0187  -
0.0070 -0.0583 1 .
4586 CE2   CE2   . PHE PHE PHE B B 167 167 . 0.1533 0.1081 0.1178 0.0083  -
0.0382 -0.0163 1 .
4587 CD2   CD2   . PHE PHE PHE B B 167 167 . 0.0907 0.0972 0.1483 0.0009
0.0020  0.0084  1 .
4588 C     C     . PHE PHE PHE B B 167 167 . 0.0828 0.0752 0.0320 0.0238  -
0.0181 -0.0012 1 .
4589 O     O     . PHE PHE PHE B B 167 167 . 0.0779 0.0940 0.0501 0.0503  -
0.0078 -0.0128 1 .
4590 N     N     . MET MET MET B B 168 168 . 0.0514 0.0399 0.0629 0.0028
0.0125  0.0056  1 .
4591 CA    CA    . MET MET MET B B 168 168 . 0.0620 0.0330 0.0398 0.0023  -
0.0049 -0.0105 1 .
4592 CB    CB    . MET MET MET B B 168 168 . 0.0453 0.0312 0.0341 0.0108
0.0132  0.0071  1 .
4593 CG    CG    . MET MET MET B B 168 168 . 0.0518 0.0435 0.0401 0.0098  -
0.0152 -0.0150 1 .
4594 SD    SD    . MET MET MET B B 168 168 . 0.0732 0.0600 0.0740 0.0269
0.0211  -0.0074 1 .
4595 CE    CE    . MET MET MET B B 168 168 . 0.1175 0.0734 0.0594 0.0666
0.0560  0.0405  1 .
4596 C     C     . MET MET MET B B 168 168 . 0.0830 0.0271 0.0338 0.0047
0.0194  -0.0001 1 .
4597 O     O     . MET MET MET B B 168 168 . 0.0502 0.0296 0.0260 0.0045
0.0040  0.0010  1 .
4598 N     N     . ILE ILE ILE B B 169 169 . 0.0656 0.0253 0.0271 -0.0008
0.0084  -0.0001 1 .
4599 CA    CA    . ILE ILE ILE B B 169 169 . 0.0266 0.0260 0.0267 0.0009
0.0014  0.0009  1 .
4600 CB    CB    . ILE ILE ILE B B 169 169 . 0.0286 0.0285 0.0273 0.0033
0.0026  0.0025  1 .
4601 CG1   CG1   . ILE ILE ILE B B 169 169 . 0.0431 0.0565 0.0324 0.0235
0.0112  0.0148  1 .
4602 CD1   CD1   . ILE ILE ILE B B 169 169 . 0.0562 0.0797 0.0521 0.0410
0.0287  0.0381  1 .
4603 CG2   CG2   . ILE ILE ILE B B 169 169 . 0.0480 0.0356 0.0526 0.0034  -
0.0119 0.0125  1 .
4604 C     C     . ILE ILE ILE B B 169 169 . 0.0531 0.0314 0.0335 -0.0101
0.0133  -0.0027 1 .
4605 O     O     . ILE ILE ILE B B 169 169 . 0.0548 0.0568 0.0305 0.0267
0.0098  0.0052  1 .
4606 N     N     . LEU LEU LEU B B 170 170 . 0.0548 0.0460 0.0274 0.0245
0.0000  0.0008  1 .
4607 CA    CA    . LEU LEU LEU B B 170 170 . 0.0673 0.0278 0.0272 0.0103
0.0089  0.0022  1 .
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4608 CB    CB    . LEU LEU LEU B B 170 170 . 0.0619 0.0462 0.0422 0.0276
0.0038  0.0038  1 .
4609 CG    CG    . LEU LEU LEU B B 170 170 . 0.0356 0.0294 0.0369 0.0065  -
0.0071 -0.0042 1 .
4610 CD1   CD1   . LEU LEU LEU B B 170 170 . 0.0586 0.0458 0.0831 -0.0245 -
0.0207 0.0047  1 .
4611 CD2   CD2   . LEU LEU LEU B B 170 170 . 0.0711 0.0999 0.0859 -0.0232 -
0.0042 0.0354  1 .
4612 C     C     . LEU LEU LEU B B 170 170 . 0.0811 0.0337 0.0485 0.0214
0.0291  0.0123  1 .
4613 O     O     . LEU LEU LEU B B 170 170 . 0.1065 0.0547 0.0489 0.0412
0.0263  0.0246  1 .
4614 N     N     . PRO PRO PRO B B 171 171 . 0.0611 0.0373 0.0357 0.0207
0.0193  0.0111  1 .
4615 CA    CA    . PRO PRO PRO B B 171 171 . 0.0490 0.0421 0.0387 0.0197
0.0072  0.0039  1 .
4616 CB    CB    . PRO PRO PRO B B 171 171 . 0.0748 0.0397 0.0256 0.0141  -
0.0037 -0.0009 1 .
4617 CG    CG    . PRO PRO PRO B B 171 171 . 0.0720 0.0603 0.0279 0.0379  -
0.0046 -0.0067 1 .
4618 CD    CD    . PRO PRO PRO B B 171 171 . 0.0435 0.0267 0.0302 0.0050
0.0094  0.0026  1 .
4619 C     C     . PRO PRO PRO B B 171 171 . 0.0608 0.0452 0.0533 -0.0030
0.0059  -0.0127 1 .
4620 O     O     . PRO PRO PRO B B 171 171 . 0.0845 0.0505 0.0362 0.0014
0.0221  0.0086  1 .
4621 N     N     . VAL VAL VAL B B 172 172 . 0.0414 0.0435 0.0459 0.0119
0.0123  0.0029  1 .
4622 CA    CA    . VAL VAL VAL B B 172 172 . 0.0985 0.0515 0.0562 -0.0021
0.0086  -0.0139 1 .
4623 CB    CB    . VAL VAL VAL B B 172 172 . 0.0896 0.0375 0.0800 0.0241
0.0251  -0.0023 1 .
4624 CG1   CG1   . VAL VAL VAL B B 172 172 . 0.1369 0.0394 0.0703 -0.0081
0.0311  -0.0244 1 .
4625 CG2   CG2   . VAL VAL VAL B B 172 172 . 0.0759 0.0819 0.0746 -0.0007
0.0019  -0.0415 1 .
4626 C     C     . VAL VAL VAL B B 172 172 . 0.1009 0.0585 0.0701 0.0030
0.0116  0.0135  1 .
4627 O     O     . VAL VAL VAL B B 172 172 . 0.1249 0.0690 0.0733 -0.0066 -
0.0016 -0.0103 1 .
4628 N     N     . GLY GLY GLY B B 173 173 . 0.1168 0.0460 0.0974 0.0018
0.0259  0.0080  1 .
4629 CA    CA    . GLY GLY GLY B B 173 173 . 0.1061 0.0487 0.0723 0.0166
0.0147  -0.0266 1 .
4630 C     C     . GLY GLY GLY B B 173 173 . 0.1178 0.0578 0.0756 0.0026
0.0194  -0.0245 1 .
4631 O     O     . GLY GLY GLY B B 173 173 . 0.2021 0.0922 0.1048 0.0353
0.0548  0.0026  1 .
4632 N     N     . ALA ALA ALA B B 174 174 . 0.1162 0.0681 0.0543 0.0101
0.0107  -0.0053 1 .
4633 CA    CA    . ALA ALA ALA B B 174 174 . 0.0912 0.0377 0.0455 0.0075
0.0012  -0.0151 1 .
4634 CB    CB    . ALA ALA ALA B B 174 174 . 0.0795 0.0576 0.0408 0.0169
0.0105  -0.0035 1 .
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4635 C     C     . ALA ALA ALA B B 174 174 . 0.0955 0.0644 0.0645 0.0044
0.0000  0.0049  1 .
4636 O     O     . ALA ALA ALA B B 174 174 . 0.0927 0.0734 0.0752 0.0179  -
0.0083 -0.0067 1 .
4637 N     N     . GLU GLU GLU B B 175 175 . 0.1192 0.0395 0.0747 0.0206  -
0.0025 -0.0040 1 .
4638 CA    CA    . GLU GLU GLU B B 175 175 . 0.1217 0.1000 0.1089 0.0080  -
0.0005 -0.0129 1 .
4639 CB    CB    . GLU GLU GLU B B 175 175 . 0.1445 0.1049 0.1361 0.0002  -
0.0109 0.0050  1 .
4640 CG    CG    . GLU GLU GLU B B 175 175 . 0.2445 0.2168 0.2221 0.0083
0.0272  -0.0108 1 .
4641 CD    CD    . GLU GLU GLU B B 175 175 . 0.3480 0.2917 0.3486 0.0273
0.0003  0.0312  1 .
4642 OE1   OE1   . GLU GLU GLU B B 175 175 . 0.3788 0.3441 0.4225 -0.0016
0.0099  0.0486  1 .
4643 OE2   OE2   . GLU GLU GLU B B 175 175 . 0.3669 0.3485 0.4321 0.0109
0.0211  0.0307  1 .
4644 C     C     . GLU GLU GLU B B 175 175 . 0.1206 0.0871 0.0962 -0.0241
0.0054  -0.0073 1 .
4645 O     O     . GLU GLU GLU B B 175 175 . 0.1289 0.1182 0.0953 -0.0120
0.0194  -0.0323 1 .
4646 N     N     . SER SER SER B B 176 176 . 0.0964 0.0553 0.0651 -0.0049
0.0339  -0.0012 1 .
4647 CA    CA    . SER SER SER B B 176 176 . 0.0791 0.0426 0.0432 0.0105
0.0060  0.0090  1 .
4648 CB    CB    . SER SER SER B B 176 176 . 0.0819 0.0256 0.0821 0.0032
0.0149  -0.0014 1 .
4649 OG    OG    . SER SER SER B B 176 176 . 0.0881 0.0685 0.0553 0.0120
0.0128  0.0055  1 .
4650 C     C     . SER SER SER B B 176 176 . 0.0514 0.0382 0.0416 0.0108  -
0.0014 0.0073  1 .
4651 O     O     . SER SER SER B B 176 176 . 0.0495 0.0254 0.0289 -0.0013 -
0.0093 0.0005  1 .
4652 N     N     . PHE PHE PHE B B 177 177 . 0.0752 0.0359 0.0629 0.0074
0.0092  0.0043  1 .
4653 CA    CA    . PHE PHE PHE B B 177 177 . 0.0439 0.0386 0.0395 0.0059
0.0001  -0.0031 1 .
4654 CB    CB    . PHE PHE PHE B B 177 177 . 0.0552 0.0340 0.0605 0.0057
0.0099  -0.0137 1 .
4655 CG    CG    . PHE PHE PHE B B 177 177 . 0.0755 0.0395 0.0416 0.0150  -
0.0160 -0.0127 1 .
4656 CD1   CD1   . PHE PHE PHE B B 177 177 . 0.0591 0.0629 0.0479 -0.0095 -
0.0099 0.0095  1 .
4657 CE1   CE1   . PHE PHE PHE B B 177 177 . 0.1103 0.0328 0.0266 0.0157  -
0.0010 0.0022  1 .
4658 CZ    CZ    . PHE PHE PHE B B 177 177 . 0.1029 0.0261 0.0585 0.0077  -
0.0359 -0.0039 1 .
4659 CE2   CE2   . PHE PHE PHE B B 177 177 . 0.0666 0.0507 0.0360 -0.0324 -
0.0210 0.0164  1 .
4660 CD2   CD2   . PHE PHE PHE B B 177 177 . 0.0301 0.0344 0.0316 -0.0021 -
0.0050 -0.0004 1 .
4661 C     C     . PHE PHE PHE B B 177 177 . 0.0560 0.0367 0.0438 -0.0079
0.0069  0.0071  1 .
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4662 O     O     . PHE PHE PHE B B 177 177 . 0.0642 0.0330 0.0425 0.0165
0.0179  0.0100  1 .
4663 N     N     . ARG ARG ARG B B 178 178 . 0.0859 0.0333 0.0390 -0.0037 -
0.0024 0.0104  1 .
4664 CA    CA    . ARG ARG ARG B B 178 178 . 0.0803 0.0452 0.0673 -0.0114 -
0.0047 -0.0030 1 .
4665 CB    CB    . ARG ARG ARG B B 178 178 . 0.0813 0.0464 0.0811 -0.0261 -
0.0096 0.0099  1 .
4666 CG    CG    . ARG ARG ARG B B 178 178 . 0.1414 0.1807 0.1678 0.0037  -
0.0051 -0.0097 1 .
4667 CD    CD    . ARG ARG ARG B B 178 178 . 0.3337 0.2116 0.2816 -0.0472
0.0208  -0.0136 1 .
4668 NE    NE    . ARG ARG ARG B B 178 178 . 0.3488 0.3299 0.3151 -0.0486 -
0.0135 -0.0343 1 .
4669 CZ    CZ    . ARG ARG ARG B B 178 178 . 0.3896 0.2758 0.3576 -0.0588
0.0191  -0.0002 1 .
4670 NH1   NH1   . ARG ARG ARG B B 178 178 . 0.3836 0.2277 0.3709 -0.0761
0.0253  0.0115  1 .
4671 NH2   NH2   . ARG ARG ARG B B 178 178 . 0.4395 0.2871 0.3722 -0.0364 -
0.0317 -0.0184 1 .
4672 C     C     . ARG ARG ARG B B 178 178 . 0.0496 0.0399 0.0448 -0.0102 -
0.0027 -0.0129 1 .
4673 O     O     . ARG ARG ARG B B 178 178 . 0.0738 0.0270 0.0518 0.0078  -
0.0073 0.0019  1 .
4674 N     N     . ASP ASP ASP B B 179 179 . 0.0585 0.0455 0.0528 0.0177
0.0064  0.0111  1 .
4675 CA    CA    . ASP ASP ASP B B 179 179 . 0.0474 0.0594 0.0636 0.0023
0.0165  -0.0010 1 .
4676 CB    CB    . ASP ASP ASP B B 179 179 . 0.0745 0.0838 0.0670 0.0201
0.0121  -0.0098 1 .
4677 CG    CG    . ASP ASP ASP B B 179 179 . 0.0771 0.0789 0.0864 0.0335
0.0224  0.0015  1 .
4678 OD1   OD1   . ASP ASP ASP B B 179 179 . 0.1770 0.1029 0.1152 0.0208
0.0198  0.0315  1 .
4679 OD2   OD2   . ASP ASP ASP B B 179 179 . 0.1024 0.0782 0.0817 0.0022
0.0087  -0.0165 1 .
4680 C     C     . ASP ASP ASP B B 179 179 . 0.0274 0.0353 0.0369 0.0035  -
0.0038 -0.0017 1 .
4681 O     O     . ASP ASP ASP B B 179 179 . 0.0400 0.0276 0.0299 0.0046
0.0077  0.0018  1 .
4682 N     N     . ALA ALA ALA B B 180 180 . 0.0493 0.0264 0.0257 0.0052  -
0.0029 -0.0006 1 .
4683 CA    CA    . ALA ALA ALA B B 180 180 . 0.0261 0.0278 0.0438 0.0014
0.0026  0.0033  1 .
4684 CB    CB    . ALA ALA ALA B B 180 180 . 0.0431 0.0583 0.0599 0.0153  -
0.0171 0.0028  1 .
4685 C     C     . ALA ALA ALA B B 180 180 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
4686 O     O     . ALA ALA ALA B B 180 180 . 0.0370 0.0330 0.0267 0.0026
0.0040  0.0004  1 .
4687 N     N     . MET MET MET B B 181 181 . 0.0367 0.0267 0.0313 -0.0040
0.0082  -0.0029 1 .
4688 CA    CA    . MET MET MET B B 181 181 . 0.0272 0.0297 0.0253 0.0028
0.0000  -0.0001 1 .
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4689 CB    CB    . MET MET MET B B 181 181 . 0.0323 0.0274 0.0320 0.0038
0.0068  0.0037  1 .
4690 CG    CG    . MET MET MET B B 181 181 . 0.0253 0.0380 0.0393 -0.0006
0.0007  -0.0133 1 .
4691 SD    SD    . MET MET MET B B 181 181 . 0.0529 0.0350 0.0401 0.0135
0.0021  0.0053  1 .
4692 CE    CE    . MET MET MET B B 181 181 . 0.1214 0.0690 0.0781 -0.0055 -
0.0096 -0.0339 1 .
4693 C     C     . MET MET MET B B 181 181 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
4694 O     O     . MET MET MET B B 181 181 . 0.0259 0.0254 0.0260 0.0003
0.0006  0.0003  1 .
4695 N     N     . ARG ARG ARG B B 182 182 . 0.0313 0.0280 0.0262 0.0040
0.0023  0.0015  1 .
4696 CA    CA    . ARG ARG ARG B B 182 182 . 0.0316 0.0309 0.0390 0.0015
0.0064  -0.0045 1 .
4697 CB    CB    . ARG ARG ARG B B 182 182 . 0.0382 0.0344 0.0253 0.0108  -
0.0005 -0.0004 1 .
4698 CG    CG    . ARG ARG ARG B B 182 182 . 0.0556 0.0649 0.0679 0.0235
0.0053  0.0252  1 .
4699 CD    CD    . ARG ARG ARG B B 182 182 . 0.1399 0.0786 0.1227 0.0065  -
0.0130 0.0331  1 .
4700 NE    NE    . ARG ARG ARG B B 182 182 . 0.1763 0.1265 0.1834 0.0307  -
0.0019 -0.0205 1 .
4701 CZ    CZ    . ARG ARG ARG B B 182 182 . 0.2238 0.2109 0.2273 0.0283
0.0154  0.0349  1 .
4702 NH1   NH1   . ARG ARG ARG B B 182 182 . 0.1954 0.2011 0.2518 0.0179
0.1111  -0.0025 1 .
4703 NH2   NH2   . ARG ARG ARG B B 182 182 . 0.2194 0.2966 0.2656 0.0331
0.0427  -0.0343 1 .
4704 C     C     . ARG ARG ARG B B 182 182 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
4705 O     O     . ARG ARG ARG B B 182 182 . 0.0276 0.0256 0.0264 0.0009
0.0015  0.0006  1 .
4706 N     N     . LEU LEU LEU B B 183 183 . 0.0352 0.0273 0.0462 0.0032
0.0051  -0.0026 1 .
4707 CA    CA    . LEU LEU LEU B B 183 183 . 0.0485 0.0345 0.0277 0.0123  -
0.0025 -0.0038 1 .
4708 CB    CB    . LEU LEU LEU B B 183 183 . 0.0709 0.0425 0.0376 0.0249  -
0.0142 -0.0024 1 .
4709 CG    CG    . LEU LEU LEU B B 183 183 . 0.1471 0.0604 0.0554 -0.0057 -
0.0249 0.0025  1 .
4710 CD1   CD1   . LEU LEU LEU B B 183 183 . 0.1128 0.0742 0.0625 0.0214
0.0224  -0.0315 1 .
4711 CD2   CD2   . LEU LEU LEU B B 183 183 . 0.1580 0.0999 0.0518 0.0174
0.0177  0.0074  1 .
4712 C     C     . LEU LEU LEU B B 183 183 . 0.0308 0.0296 0.0253 -0.0048 -
0.0004 0.0003  1 .
4713 O     O     . LEU LEU LEU B B 183 183 . 0.0375 0.0552 0.0279 0.0191  -
0.0056 -0.0089 1 .
4714 N     N     . GLY GLY GLY B B 184 184 . 0.0359 0.0275 0.0275 0.0047
0.0048  0.0022  1 .
4715 CA    CA    . GLY GLY GLY B B 184 184 . 0.0267 0.0288 0.0276 0.0022
0.0017  0.0028  1 .
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4716 C     C     . GLY GLY GLY B B 184 184 . 0.0256 0.0254 0.0266 0.0001
0.0006  0.0003  1 .
4717 O     O     . GLY GLY GLY B B 184 184 . 0.0311 0.0305 0.0429 0.0053
0.0045  0.0062  1 .
4718 N     N     . ALA ALA ALA B B 185 185 . 0.0358 0.0280 0.0289 0.0052  -
0.0002 0.0006  1 .
4719 CA    CA    . ALA ALA ALA B B 185 185 . 0.0403 0.0337 0.0265 0.0112
0.0042  0.0031  1 .
4720 CB    CB    . ALA ALA ALA B B 185 185 . 0.0376 0.0329 0.0281 0.0096
0.0058  0.0045  1 .
4721 C     C     . ALA ALA ALA B B 185 185 . 0.0310 0.0279 0.0253 0.0037  -
0.0001 -0.0001 1 .
4722 O     O     . ALA ALA ALA B B 185 185 . 0.0663 0.0503 0.0527 0.0043
0.0237  -0.0157 1 .
4723 N     N     . GLU GLU GLU B B 186 186 . 0.0537 0.0338 0.0288 0.0123  -
0.0041 -0.0048 1 .
4724 CA    CA    . GLU GLU GLU B B 186 186 . 0.0320 0.0349 0.0290 0.0074
0.0035  0.0024  1 .
4725 CB    CB    . GLU GLU GLU B B 186 186 . 0.0448 0.0366 0.0300 0.0101
0.0081  0.0013  1 .
4726 CG    CG    . GLU GLU GLU B B 186 186 . 0.0536 0.0260 0.0329 0.0046
0.0146  0.0023  1 .
4727 CD    CD    . GLU GLU GLU B B 186 186 . 0.1269 0.0531 0.0560 0.0073
0.0338  0.0126  1 .
4728 OE1   OE1   . GLU GLU GLU B B 186 186 . 0.1368 0.0912 0.1116 0.0279
0.0771  0.0204  1 .
4729 OE2   OE2   . GLU GLU GLU B B 186 186 . 0.0986 0.0362 0.0713 -0.0110
0.0316  0.0020  1 .
4730 C     C     . GLU GLU GLU B B 186 186 . 0.0373 0.0330 0.0265 0.0096  -
0.0022 -0.0016 1 .
4731 O     O     . GLU GLU GLU B B 186 186 . 0.0414 0.0450 0.0329 -0.0085
0.0070  -0.0058 1 .
4732 N     N     . VAL VAL VAL B B 187 187 . 0.0360 0.0333 0.0407 -0.0023
0.0125  -0.0050 1 .
4733 CA    CA    . VAL VAL VAL B B 187 187 . 0.0413 0.0348 0.0299 -0.0060 -
0.0015 0.0062  1 .
4734 CB    CB    . VAL VAL VAL B B 187 187 . 0.0622 0.0414 0.0339 0.0045  -
0.0168 0.0018  1 .
4735 CG1   CG1   . VAL VAL VAL B B 187 187 . 0.0352 0.0400 0.0302 -0.0002
0.0030  -0.0077 1 .
4736 CG2   CG2   . VAL VAL VAL B B 187 187 . 0.0595 0.0488 0.0276 0.0248
0.0063  0.0021  1 .
4737 C     C     . VAL VAL VAL B B 187 187 . 0.0253 0.0254 0.0388 0.0000
0.0003  -0.0011 1 .
4738 O     O     . VAL VAL VAL B B 187 187 . 0.0362 0.0295 0.0509 0.0022
0.0139  -0.0024 1 .
4739 N     N     . TYR TYR TYR B B 188 188 . 0.0554 0.0295 0.0255 0.0009
0.0019  0.0006  1 .
4740 CA    CA    . TYR TYR TYR B B 188 188 . 0.0322 0.0538 0.0379 -0.0027
0.0057  -0.0115 1 .
4741 CB    CB    . TYR TYR TYR B B 188 188 . 0.0432 0.0351 0.0474 0.0073
0.0041  -0.0102 1 .
4742 CG    CG    . TYR TYR TYR B B 188 188 . 0.0904 0.0592 0.0350 -0.0005
0.0250  0.0011  1 .
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4743 CD1   CD1   . TYR TYR TYR B B 188 188 . 0.0445 0.0335 0.0312 0.0125
0.0106  0.0070  1 .
4744 CE1   CE1   . TYR TYR TYR B B 188 188 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
4745 CZ    CZ    . TYR TYR TYR B B 188 188 . 0.0468 0.0509 0.0281 -0.0234
0.0077  -0.0084 1 .
4746 OH    OH    . TYR TYR TYR B B 188 188 . 0.0673 0.0395 0.0553 -0.0228
0.0086  -0.0117 1 .
4747 CE2   CE2   . TYR TYR TYR B B 188 188 . 0.0256 0.0263 0.0290 -0.0005 -
0.0010 0.0019  1 .
4748 CD2   CD2   . TYR TYR TYR B B 188 188 . 0.0844 0.0585 0.0259 0.0443
0.0061  0.0046  1 .
4749 C     C     . TYR TYR TYR B B 188 188 . 0.0578 0.0385 0.0518 0.0004
0.0120  -0.0063 1 .
4750 O     O     . TYR TYR TYR B B 188 188 . 0.0513 0.0503 0.0438 0.0160
0.0177  0.0009  1 .
4751 N     N     . HIS HIS HIS B B 189 189 . 0.0318 0.0309 0.0550 0.0020  -
0.0062 0.0090  1 .
4752 CA    CA    . HIS HIS HIS B B 189 189 . 0.0753 0.0523 0.0532 -0.0022 -
0.0097 0.0246  1 .
4753 CB    CB    . HIS HIS HIS B B 189 189 . 0.0506 0.0374 0.0493 -0.0038 -
0.0056 0.0170  1 .
4754 CG    CG    . HIS HIS HIS B B 189 189 . 0.0994 0.1093 0.0945 -0.0280
0.0136  0.0454  1 .
4755 ND1   ND1   . HIS HIS HIS B B 189 189 . 0.1590 0.1107 0.1927 -0.0445
0.0499  0.0246  1 .
4756 CE1   CE1   . HIS HIS HIS B B 189 189 . 0.1078 0.1235 0.1573 -0.0070
0.0488  0.0389  1 .
4757 NE2   NE2   . HIS HIS HIS B B 189 189 . 0.1276 0.2073 0.1590 -0.0251
0.0249  0.0366  1 .
4758 CD2   CD2   . HIS HIS HIS B B 189 189 . 0.1526 0.1498 0.0925 -0.0188 -
0.0178 0.0563  1 .
4759 C     C     . HIS HIS HIS B B 189 189 . 0.0585 0.0493 0.0498 0.0082  -
0.0169 0.0126  1 .
4760 O     O     . HIS HIS HIS B B 189 189 . 0.0417 0.0658 0.0932 0.0079  -
0.0110 0.0097  1 .
4761 N     N     . THR THR THR B B 190 190 . 0.0466 0.0355 0.0374 0.0089
0.0063  -0.0054 1 .
4762 CA    CA    . THR THR THR B B 190 190 . 0.0515 0.0560 0.0564 0.0080
0.0058  -0.0067 1 .
4763 CB    CB    . THR THR THR B B 190 190 . 0.0386 0.0645 0.0313 0.0125
0.0036  -0.0028 1 .
4764 OG1   OG1   . THR THR THR B B 190 190 . 0.1015 0.0976 0.0821 0.0100
0.0253  0.0098  1 .
4765 CG2   CG2   . THR THR THR B B 190 190 . 0.0580 0.1126 0.0786 0.0094
0.0214  -0.0367 1 .
4766 C     C     . THR THR THR B B 190 190 . 0.0549 0.0673 0.0557 0.0162  -
0.0056 0.0064  1 .
4767 O     O     . THR THR THR B B 190 190 . 0.0514 0.0714 0.0669 -0.0035
0.0111  -0.0038 1 .
4768 N     N     . LEU LEU LEU B B 191 191 . 0.0495 0.0425 0.0346 0.0204  -
0.0081 -0.0068 1 .
4769 CA    CA    . LEU LEU LEU B B 191 191 . 0.0331 0.0420 0.0258 0.0114
0.0020  0.0029  1 .
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4770 CB    CB    . LEU LEU LEU B B 191 191 . 0.0409 0.0520 0.0468 0.0176
0.0102  0.0017  1 .
4771 CG    CG    . LEU LEU LEU B B 191 191 . 0.0532 0.0544 0.0355 0.0284
0.0165  0.0167  1 .
4772 CD1   CD1   . LEU LEU LEU B B 191 191 . 0.0494 0.0807 0.0470 0.0365
0.0229  0.0347  1 .
4773 CD2   CD2   . LEU LEU LEU B B 191 191 . 0.0349 0.1040 0.0406 0.0274
0.0083  0.0212  1 .
4774 C     C     . LEU LEU LEU B B 191 191 . 0.0420 0.0266 0.0264 -0.0009
0.0030  0.0006  1 .
4775 O     O     . LEU LEU LEU B B 191 191 . 0.0599 0.0724 0.0417 0.0289
0.0112  0.0265  1 .
4776 N     N     . LYS LYS LYS B B 192 192 . 0.0434 0.0277 0.0385 0.0066
0.0154  0.0056  1 .
4777 CA    CA    . LYS LYS LYS B B 192 192 . 0.0391 0.0576 0.0654 0.0158
0.0156  0.0001  1 .
4778 CB    CB    . LYS LYS LYS B B 192 192 . 0.0924 0.0263 0.0607 -0.0035
0.0029  -0.0055 1 .
4779 CG    CG    . LYS LYS LYS B B 192 192 . 0.0880 0.0532 0.0651 -0.0014 -
0.0147 0.0053  1 .
4780 CD    CD    . LYS LYS LYS B B 192 192 . 0.1210 0.0855 0.0334 -0.0371 -
0.0213 0.0135  1 .
4781 CE    CE    . LYS LYS LYS B B 192 192 . 0.1474 0.1010 0.0797 -0.0244 -
0.0118 0.0148  1 .
4782 NZ    NZ    . LYS LYS LYS B B 192 192 . 0.2020 0.1666 0.0780 -0.0420
0.0388  -0.0188 1 .
4783 C     C     . LYS LYS LYS B B 192 192 . 0.0490 0.0544 0.0583 0.0167
0.0042  -0.0173 1 .
4784 O     O     . LYS LYS LYS B B 192 192 . 0.0488 0.0482 0.0924 -0.0060
0.0384  -0.0002 1 .
4785 N     N     . GLY GLY GLY B B 193 193 . 0.0817 0.0448 0.0752 0.0065
0.0050  0.0030  1 .
4786 CA    CA    . GLY GLY GLY B B 193 193 . 0.0713 0.0610 0.0879 0.0051
0.0186  0.0213  1 .
4787 C     C     . GLY GLY GLY B B 193 193 . 0.0784 0.0748 0.0966 0.0126
0.0095  0.0159  1 .
4788 O     O     . GLY GLY GLY B B 193 193 . 0.1289 0.1058 0.1549 0.0113  -
0.0089 0.0029  1 .
4789 N     N     . VAL VAL VAL B B 194 194 . 0.0822 0.0708 0.0869 0.0131
0.0051  0.0123  1 .
4790 CA    CA    . VAL VAL VAL B B 194 194 . 0.0768 0.0846 0.0723 0.0111
0.0329  0.0031  1 .
4791 CB    CB    . VAL VAL VAL B B 194 194 . 0.0664 0.1072 0.0849 0.0131
0.0283  0.0030  1 .
4792 CG1   CG1   . VAL VAL VAL B B 194 194 . 0.0549 0.1281 0.1324 -0.0020
0.0269  0.0230  1 .
4793 CG2   CG2   . VAL VAL VAL B B 194 194 . 0.1247 0.1395 0.1154 0.0196
0.0495  0.0253  1 .
4794 C     C     . VAL VAL VAL B B 194 194 . 0.0788 0.0876 0.1171 0.0107
0.0234  0.0080  1 .
4795 O     O     . VAL VAL VAL B B 194 194 . 0.1080 0.1071 0.1517 0.0128
0.0342  0.0272  1 .
4796 N     N     . ILE ILE ILE B B 195 195 . 0.0877 0.0937 0.1247 0.0193
0.0151  0.0069  1 .
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4797 CA    CA    . ILE ILE ILE B B 195 195 . 0.0935 0.0909 0.1126 0.0174
0.0161  0.0083  1 .
4798 CB    CB    . ILE ILE ILE B B 195 195 . 0.0814 0.1059 0.0556 0.0000
0.0396  0.0135  1 .
4799 CG1   CG1   . ILE ILE ILE B B 195 195 . 0.0737 0.1048 0.1232 0.0221
0.0310  0.0128  1 .
4800 CD1   CD1   . ILE ILE ILE B B 195 195 . 0.0558 0.1090 0.1043 0.0205
0.0386  0.0302  1 .
4801 CG2   CG2   . ILE ILE ILE B B 195 195 . 0.1132 0.0587 0.1201 0.0264
0.0019  0.0392  1 .
4802 C     C     . ILE ILE ILE B B 195 195 . 0.1088 0.1138 0.1288 -0.0027
0.0201  0.0085  1 .
4803 O     O     . ILE ILE ILE B B 195 195 . 0.1113 0.1475 0.1225 0.0074
0.0256  0.0112  1 .
4804 N     N     . LYS LYS LYS B B 196 196 . 0.1320 0.1281 0.1237 0.0001  -
0.0047 0.0198  1 .
4805 CA    CA    . LYS LYS LYS B B 196 196 . 0.1304 0.1340 0.1341 0.0049
0.0052  0.0219  1 .
4806 CB    CB    . LYS LYS LYS B B 196 196 . 0.1668 0.1327 0.1386 0.0157  -
0.0017 0.0136  1 .
4807 CG    CG    . LYS LYS LYS B B 196 196 . 0.1489 0.1408 0.1131 0.0182
0.0074  0.0159  1 .
4808 CD    CD    . LYS LYS LYS B B 196 196 . 0.2046 0.1900 0.2094 -0.0782 -
0.0413 0.0144  1 .
4809 CE    CE    . LYS LYS LYS B B 196 196 . 0.2674 0.2977 0.2657 -0.0165 -
0.0413 0.0565  1 .
4810 NZ    NZ    . LYS LYS LYS B B 196 196 . 0.2459 0.3060 0.2569 -0.0058 -
0.0224 0.0203  1 .
4811 C     C     . LYS LYS LYS B B 196 196 . 0.1363 0.1187 0.1285 0.0039
0.0105  0.0100  1 .
4812 O     O     . LYS LYS LYS B B 196 196 . 0.0812 0.1326 0.1265 0.0123
0.0160  0.0079  1 .
4813 N     N     . ASP ASP ASP B B 197 197 . 0.1387 0.1392 0.1412 0.0028
0.0276  0.0137  1 .
4814 CA    CA    . ASP ASP ASP B B 197 197 . 0.1510 0.1376 0.1683 0.0003
0.0204  0.0290  1 .
4815 CB    CB    . ASP ASP ASP B B 197 197 . 0.1649 0.1822 0.1805 0.0062
0.0322  0.0310  1 .
4816 CG    CG    . ASP ASP ASP B B 197 197 . 0.1653 0.1679 0.2238 0.0062
0.0225  0.0108  1 .
4817 OD1   OD1   . ASP ASP ASP B B 197 197 . 0.2054 0.2061 0.2148 0.0030
0.0280  0.0012  1 .
4818 OD2   OD2   . ASP ASP ASP B B 197 197 . 0.2392 0.1869 0.2494 -0.0216
0.0503  0.0354  1 .
4819 C     C     . ASP ASP ASP B B 197 197 . 0.1538 0.1611 0.1737 -0.0048
0.0145  0.0204  1 .
4820 O     O     . ASP ASP ASP B B 197 197 . 0.1519 0.1655 0.2177 -0.0179
0.0185  0.0342  1 .
4821 N     N     . LYS LYS LYS B B 198 198 . 0.1314 0.1098 0.1231 0.0069
0.0102  0.0085  1 .
4822 CA    CA    . LYS LYS LYS B B 198 198 . 0.0959 0.0950 0.0991 0.0078
0.0015  0.0171  1 .
4823 CB    CB    . LYS LYS LYS B B 198 198 . 0.0906 0.0922 0.1154 0.0223  -
0.0142 0.0086  1 .
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4824 CG    CG    . LYS LYS LYS B B 198 198 . 0.1234 0.1438 0.1151 -0.0093
0.0137  -0.0063 1 .
4825 CD    CD    . LYS LYS LYS B B 198 198 . 0.1771 0.1556 0.1826 0.0025
0.0090  0.0609  1 .
4826 CE    CE    . LYS LYS LYS B B 198 198 . 0.2706 0.1752 0.2142 -0.0226
0.0363  0.0614  1 .
4827 NZ    NZ    . LYS LYS LYS B B 198 198 . 0.2342 0.3091 0.2601 -0.0532
0.0456  0.0927  1 .
4828 C     C     . LYS LYS LYS B B 198 198 . 0.0966 0.0962 0.1060 0.0027
0.0066  0.0196  1 .
4829 O     O     . LYS LYS LYS B B 198 198 . 0.1169 0.1406 0.1639 0.0033  -
0.0087 0.0099  1 .
4830 N     N     . TYR TYR TYR B B 199 199 . 0.0852 0.0884 0.0824 0.0049
0.0215  0.0193  1 .
4831 CA    CA    . TYR TYR TYR B B 199 199 . 0.0930 0.1050 0.0966 0.0085
0.0093  -0.0017 1 .
4832 CB    CB    . TYR TYR TYR B B 199 199 . 0.1029 0.1200 0.1254 0.0146
0.0155  -0.0119 1 .
4833 CG    CG    . TYR TYR TYR B B 199 199 . 0.0728 0.0820 0.0996 0.0271
0.0192  -0.0079 1 .
4834 CD1   CD1   . TYR TYR TYR B B 199 199 . 0.1151 0.1139 0.1106 0.0300
0.0168  -0.0109 1 .
4835 CE1   CE1   . TYR TYR TYR B B 199 199 . 0.0822 0.1312 0.1015 0.0725
0.0230  -0.0005 1 .
4836 CZ    CZ    . TYR TYR TYR B B 199 199 . 0.1829 0.1842 0.1817 0.0242
0.0076  0.0178  1 .
4837 OH    OH    . TYR TYR TYR B B 199 199 . 0.2796 0.3027 0.1841 0.0207
0.0369  0.0371  1 .
4838 CE2   CE2   . TYR TYR TYR B B 199 199 . 0.1963 0.2135 0.1605 0.0231
0.0210  0.0204  1 .
4839 CD2   CD2   . TYR TYR TYR B B 199 199 . 0.1481 0.1167 0.1267 -0.0044
0.0101  0.0040  1 .
4840 C     C     . TYR TYR TYR B B 199 199 . 0.1092 0.1043 0.1192 0.0044
0.0006  0.0074  1 .
4841 O     O     . TYR TYR TYR B B 199 199 . 0.0926 0.1300 0.1500 -0.0018 -
0.0110 -0.0051 1 .
4842 N     N     . GLY GLY GLY B B 200 200 . 0.1143 0.0952 0.1380 -0.0144
0.0085  0.0029  1 .
4843 CA    CA    . GLY GLY GLY B B 200 200 . 0.1236 0.1084 0.1205 0.0062
0.0276  -0.0020 1 .
4844 C     C     . GLY GLY GLY B B 200 200 . 0.1458 0.1489 0.1449 0.0117
0.0239  0.0080  1 .
4845 O     O     . GLY GLY GLY B B 200 200 . 0.1202 0.1642 0.1222 0.0000
0.0260  0.0084  1 .
4846 N     N     . LYS LYS LYS B B 201 201 . 0.1835 0.1784 0.1447 0.0147
0.0280  -0.0004 1 .
4847 CA    CA    . LYS LYS LYS B B 201 201 . 0.1826 0.1844 0.1848 -0.0043
0.0215  -0.0112 1 .
4848 CB    CB    . LYS LYS LYS B B 201 201 . 0.2044 0.1968 0.2096 0.0023
0.0235  -0.0003 1 .
4849 CG    CG    . LYS LYS LYS B B 201 201 . 0.2088 0.2599 0.2436 0.0073
0.0199  -0.0204 1 .
4850 CD    CD    . LYS LYS LYS B B 201 201 . 0.2807 0.2679 0.2686 -0.0216
0.0226  0.0132  1 .
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4851 CE    CE    . LYS LYS LYS B B 201 201 . 0.2396 0.1646 0.3115 -0.0211
0.0178  0.0337  1 .
4852 NZ    NZ    . LYS LYS LYS B B 201 201 . 0.2497 0.1282 0.3584 0.0079
0.0601  0.0677  1 .
4853 C     C     . LYS LYS LYS B B 201 201 . 0.1761 0.1699 0.1865 -0.0067
0.0197  -0.0165 1 .
4854 O     O     . LYS LYS LYS B B 201 201 . 0.1909 0.1756 0.1770 -0.0261
0.0424  -0.0211 1 .
4855 N     N     . ASP ASP ASP B B 202 202 . 0.1916 0.1726 0.2089 -0.0182
0.0335  -0.0097 1 .
4856 CA    CA    . ASP ASP ASP B B 202 202 . 0.1979 0.1904 0.2104 -0.0097
0.0397  -0.0187 1 .
4857 CB    CB    . ASP ASP ASP B B 202 202 . 0.2182 0.2058 0.2355 -0.0090
0.0465  -0.0233 1 .
4858 CG    CG    . ASP ASP ASP B B 202 202 . 0.2578 0.2775 0.2705 -0.0055
0.0533  -0.0305 1 .
4859 OD1   OD1   . ASP ASP ASP B B 202 202 . 0.3161 0.3038 0.3282 0.0231
0.0588  -0.0014 1 .
4860 OD2   OD2   . ASP ASP ASP B B 202 202 . 0.3155 0.3628 0.3116 -0.0189
0.0540  -0.0791 1 .
4861 C     C     . ASP ASP ASP B B 202 202 . 0.1968 0.1737 0.2061 -0.0113
0.0363  -0.0077 1 .
4862 O     O     . ASP ASP ASP B B 202 202 . 0.2237 0.2092 0.2446 -0.0056
0.0423  -0.0270 1 .
4863 N     N     . ALA ALA ALA B B 203 203 . 0.1836 0.1468 0.1731 -0.0173
0.0280  0.0118  1 .
4864 CA    CA    . ALA ALA ALA B B 203 203 . 0.1525 0.1374 0.1351 0.0009
0.0315  -0.0007 1 .
4865 CB    CB    . ALA ALA ALA B B 203 203 . 0.1551 0.1403 0.1363 0.0085
0.0435  0.0125  1 .
4866 C     C     . ALA ALA ALA B B 203 203 . 0.1323 0.1107 0.1147 0.0103
0.0307  0.0049  1 .
4867 O     O     . ALA ALA ALA B B 203 203 . 0.1450 0.1096 0.1341 -0.0075
0.0244  0.0135  1 .
4868 N     N     . THR THR THR B B 204 204 . 0.1356 0.1096 0.1228 0.0096
0.0325  -0.0117 1 .
4869 CA    CA    . THR THR THR B B 204 204 . 0.1105 0.0803 0.0951 0.0061
0.0360  0.0066  1 .
4870 CB    CB    . THR THR THR B B 204 204 . 0.1110 0.0934 0.1016 0.0250
0.0241  -0.0299 1 .
4871 OG1   OG1   . THR THR THR B B 204 204 . 0.1154 0.0953 0.1553 0.0337
0.0359  0.0210  1 .
4872 CG2   CG2   . THR THR THR B B 204 204 . 0.1365 0.1017 0.1145 0.0031
0.0636  0.0226  1 .
4873 C     C     . THR THR THR B B 204 204 . 0.0821 0.0702 0.0683 0.0040
0.0245  -0.0107 1 .
4874 O     O     . THR THR THR B B 204 204 . 0.0965 0.0771 0.0763 0.0065
0.0107  -0.0172 1 .
4875 N     N     . ASN ASN ASN B B 205 205 . 0.1046 0.0675 0.0773 0.0008
0.0140  0.0042  1 .
4876 CA    CA    . ASN ASN ASN B B 205 205 . 0.0781 0.0633 0.0486 -0.0032
0.0101  -0.0147 1 .
4877 CB    CB    . ASN ASN ASN B B 205 205 . 0.0775 0.0923 0.0757 -0.0162
0.0187  -0.0252 1 .
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4878 CG    CG    . ASN ASN ASN B B 205 205 . 0.0642 0.1001 0.0851 -0.0047
0.0404  -0.0125 1 .
4879 OD1   OD1   . ASN ASN ASN B B 205 205 . 0.1325 0.1116 0.0825 -0.0240
0.0174  -0.0022 1 .
4880 ND2   ND2   . ASN ASN ASN B B 205 205 . 0.0828 0.0684 0.1589 -0.0186
0.0540  -0.0729 1 .
4881 C     C     . ASN ASN ASN B B 205 205 . 0.0764 0.0691 0.0608 -0.0068
0.0226  -0.0121 1 .
4882 O     O     . ASN ASN ASN B B 205 205 . 0.1000 0.0728 0.0799 0.0096
0.0361  0.0029  1 .
4883 N     N     . VAL VAL VAL B B 206 206 . 0.0699 0.0615 0.0702 -0.0030
0.0146  -0.0389 1 .
4884 CA    CA    . VAL VAL VAL B B 206 206 . 0.0362 0.0412 0.0565 -0.0014
0.0184  -0.0032 1 .
4885 CB    CB    . VAL VAL VAL B B 206 206 . 0.0673 0.0400 0.0513 -0.0050
0.0151  -0.0188 1 .
4886 CG1   CG1   . VAL VAL VAL B B 206 206 . 0.0423 0.0477 0.0559 -0.0145
0.0156  -0.0005 1 .
4887 CG2   CG2   . VAL VAL VAL B B 206 206 . 0.0263 0.0510 0.0414 -0.0051
0.0040  -0.0202 1 .
4888 C     C     . VAL VAL VAL B B 206 206 . 0.0347 0.0373 0.0478 -0.0079
0.0140  -0.0088 1 .
4889 O     O     . VAL VAL VAL B B 206 206 . 0.0642 0.0760 0.0903 -0.0128
0.0066  -0.0196 1 .
4890 N     N     . GLY GLY GLY B B 207 207 . 0.0479 0.0395 0.0698 0.0020
0.0018  -0.0062 1 .
4891 CA    CA    . GLY GLY GLY B B 207 207 . 0.0668 0.0635 0.0804 0.0123  -
0.0079 0.0013  1 .
4892 C     C     . GLY GLY GLY B B 207 207 . 0.0649 0.0549 0.0600 0.0020
0.0010  0.0055  1 .
4893 O     O     . GLY GLY GLY B B 207 207 . 0.0409 0.0486 0.0749 -0.0172
0.0053  -0.0203 1 .
4894 N     N     . ASP ASP ASP B B 208 208 . 0.0274 0.0330 0.0633 0.0030  -
0.0006 -0.0120 1 .
4895 CA    CA    . ASP ASP ASP B B 208 208 . 0.0255 0.0254 0.0567 0.0001
0.0026  0.0021  1 .
4896 CB    CB    . ASP ASP ASP B B 208 208 . 0.0256 0.0253 0.0286 0.0000  -
0.0010 0.0002  1 .
4897 CG    CG    . ASP ASP ASP B B 208 208 . 0.0507 0.0522 0.0587 -0.0111
0.0099  0.0211  1 .
4898 OD1   OD1   . ASP ASP ASP B B 208 208 . 0.0830 0.0558 0.0864 -0.0258 -
0.0237 -0.0206 1 .
4899 OD2   OD2   . ASP ASP ASP B B 208 208 . 0.0458 0.0369 0.0498 0.0089
0.0198  0.0022  1 .
4900 C     C     . ASP ASP ASP B B 208 208 . 0.0293 0.0253 0.0267 0.0003
0.0024  0.0002  1 .
4901 O     O     . ASP ASP ASP B B 208 208 . 0.0253 0.0259 0.0267 0.0000
0.0000  -0.0009 1 .
4902 N     N     . GLU GLU GLU B B 209 209 . 0.0440 0.0386 0.0384 -0.0034
0.0080  -0.0125 1 .
4903 CA    CA    . GLU GLU GLU B B 209 209 . 0.0304 0.0304 0.0394 -0.0051
0.0084  -0.0085 1 .
4904 CB    CB    . GLU GLU GLU B B 209 209 . 0.0613 0.0255 0.0682 -0.0019 -
0.0024 -0.0022 1 .
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4905 CG    CG    . GLU GLU GLU B B 209 209 . 0.0509 0.0532 0.0468 0.0146
0.0224  0.0067  1 .
4906 CD    CD    . GLU GLU GLU B B 209 209 . 0.1240 0.1020 0.0403 -0.0117
0.0223  0.0247  1 .
4907 OE1   OE1   . GLU GLU GLU B B 209 209 . 0.1183 0.0458 0.0871 0.0180
0.0592  0.0091  1 .
4908 OE2   OE2   . GLU GLU GLU B B 209 209 . 0.1580 0.1605 0.1237 0.0310
0.0235  0.0270  1 .
4909 C     C     . GLU GLU GLU B B 209 209 . 0.0254 0.0253 0.0255 0.0000
0.0001  0.0000  1 .
4910 O     O     . GLU GLU GLU B B 209 209 . 0.0430 0.0321 0.0366 -0.0002
0.0140  0.0009  1 .
4911 N     N     . GLY GLY GLY B B 210 210 . 0.0447 0.0285 0.0408 -0.0078
0.0173  -0.0070 1 .
4912 CA    CA    . GLY GLY GLY B B 210 210 . 0.0288 0.0281 0.0312 0.0027
0.0044  0.0038  1 .
4913 C     C     . GLY GLY GLY B B 210 210 . 0.0400 0.0253 0.0383 -0.0007
0.0138  -0.0006 1 .
4914 O     O     . GLY GLY GLY B B 210 210 . 0.0569 0.0384 0.0539 -0.0037
0.0300  -0.0042 1 .
4915 N     N     . GLY GLY GLY B B 211 211 . 0.0317 0.0269 0.0434 -0.0032
0.0107  -0.0054 1 .
4916 CA    CA    . GLY GLY GLY B B 211 211 . 0.0680 0.0505 0.0543 0.0005
0.0339  -0.0065 1 .
4917 C     C     . GLY GLY GLY B B 211 211 . 0.0885 0.0694 0.0443 0.0195
0.0104  -0.0011 1 .
4918 O     O     . GLY GLY GLY B B 211 211 . 0.0750 0.0507 0.0637 0.0013
0.0287  -0.0227 1 .
4919 N     N     . PHE PHE PHE B B 212 212 . 0.1215 0.1486 0.0763 0.0152
0.0353  -0.0071 1 .
4920 CA    CA    . PHE PHE PHE B B 212 212 . 0.1611 0.1712 0.1075 0.0189
0.0105  -0.0156 1 .
4921 CB    CB    . PHE PHE PHE B B 212 212 . 0.1524 0.1585 0.1085 0.0103
0.0075  -0.0205 1 .
4922 CG    CG    . PHE PHE PHE B B 212 212 . 0.1515 0.1749 0.1222 0.0228
0.0289  0.0178  1 .
4923 CD1   CD1   . PHE PHE PHE B B 212 212 . 0.1010 0.2052 0.1161 0.0198  -
0.0078 0.0350  1 .
4924 CE1   CE1   . PHE PHE PHE B B 212 212 . 0.0999 0.2382 0.1365 -0.0105 -
0.0203 0.0670  1 .
4925 CZ    CZ    . PHE PHE PHE B B 212 212 . 0.1181 0.2534 0.1351 0.0131  -
0.0029 0.0669  1 .
4926 CE2   CE2   . PHE PHE PHE B B 212 212 . 0.1434 0.2303 0.2131 0.0261
0.0367  0.0242  1 .
4927 CD2   CD2   . PHE PHE PHE B B 212 212 . 0.1696 0.2339 0.1563 0.0443  -
0.0277 0.0163  1 .
4928 C     C     . PHE PHE PHE B B 212 212 . 0.1868 0.1703 0.1513 0.0344
0.0003  -0.0296 1 .
4929 O     O     . PHE PHE PHE B B 212 212 . 0.2031 0.1833 0.1394 0.0362  -
0.0069 -0.0563 1 .
4930 N     N     . ALA ALA ALA B B 213 213 . 0.2009 0.1869 0.1966 0.0287  -
0.0224 -0.0195 1 .
4931 CA    CA    . ALA ALA ALA B B 213 213 . 0.2309 0.2119 0.2230 0.0178  -
0.0197 -0.0211 1 .
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4932 CB    CB    . ALA ALA ALA B B 213 213 . 0.2185 0.1915 0.1904 0.0206  -
0.0118 -0.0254 1 .
4933 C     C     . ALA ALA ALA B B 213 213 . 0.2394 0.2126 0.2139 0.0095  -
0.0222 -0.0267 1 .
4934 O     O     . ALA ALA ALA B B 213 213 . 0.2537 0.1852 0.2276 -0.0147 -
0.0428 -0.0183 1 .
4935 N     N     . PRO PRO PRO B B 214 214 . 0.2374 0.2187 0.2159 0.0164  -
0.0241 -0.0203 1 .
4936 CA    CA    . PRO PRO PRO B B 214 214 . 0.2429 0.2352 0.2217 0.0139  -
0.0163 -0.0273 1 .
4937 CB    CB    . PRO PRO PRO B B 214 214 . 0.2395 0.2292 0.2229 0.0341  -
0.0200 -0.0277 1 .
4938 CG    CG    . PRO PRO PRO B B 214 214 . 0.2418 0.2129 0.2502 0.0131  -
0.0160 -0.0233 1 .
4939 CD    CD    . PRO PRO PRO B B 214 214 . 0.2519 0.2054 0.2194 0.0138  -
0.0119 -0.0338 1 .
4940 C     C     . PRO PRO PRO B B 214 214 . 0.2553 0.2496 0.2377 0.0240  -
0.0297 -0.0228 1 .
4941 O     O     . PRO PRO PRO B B 214 214 . 0.2555 0.2658 0.2661 0.0346  -
0.0488 -0.0465 1 .
4942 N     N     . ASN ASN ASN B B 215 215 . 0.2504 0.2656 0.2460 0.0137  -
0.0266 -0.0233 1 .
4943 CA    CA    . ASN ASN ASN B B 215 215 . 0.2523 0.2722 0.2603 0.0203  -
0.0287 -0.0142 1 .
4944 CB    CB    . ASN ASN ASN B B 215 215 . 0.2716 0.2893 0.2694 0.0073  -
0.0299 -0.0146 1 .
4945 CG    CG    . ASN ASN ASN B B 215 215 . 0.2839 0.3257 0.3051 -0.0010 -
0.0433 0.0186  1 .
4946 OD1   OD1   . ASN ASN ASN B B 215 215 . 0.2776 0.4381 0.3781 -0.0231 -
0.0186 0.0380  1 .
4947 ND2   ND2   . ASN ASN ASN B B 215 215 . 0.2519 0.3077 0.1758 0.0064  -
0.0809 0.0768  1 .
4948 C     C     . ASN ASN ASN B B 215 215 . 0.2545 0.2632 0.2515 0.0212  -
0.0280 -0.0159 1 .
4949 O     O     . ASN ASN ASN B B 215 215 . 0.2552 0.2795 0.2388 0.0293  -
0.0514 -0.0247 1 .
4950 N     N     . ILE ILE ILE B B 216 216 . 0.2426 0.2585 0.2484 0.0237  -
0.0254 -0.0263 1 .
4951 CA    CA    . ILE ILE ILE B B 216 216 . 0.2572 0.2391 0.2477 0.0189  -
0.0316 -0.0148 1 .
4952 CB    CB    . ILE ILE ILE B B 216 216 . 0.2408 0.2249 0.2491 0.0190  -
0.0326 -0.0116 1 .
4953 CG1   CG1   . ILE ILE ILE B B 216 216 . 0.2576 0.2522 0.2313 -0.0095 -
0.0376 -0.0295 1 .
4954 CD1   CD1   . ILE ILE ILE B B 216 216 . 0.1207 0.1139 0.1724 0.0154
0.0479  -0.0711 1 .
4955 CG2   CG2   . ILE ILE ILE B B 216 216 . 0.2653 0.2190 0.2660 0.0203  -
0.0249 -0.0363 1 .
4956 C     C     . ILE ILE ILE B B 216 216 . 0.2648 0.2439 0.2552 0.0063  -
0.0313 -0.0155 1 .
4957 O     O     . ILE ILE ILE B B 216 216 . 0.2542 0.2422 0.2566 0.0080  -
0.0538 -0.0235 1 .
4958 N     N     . LEU LEU LEU B B 217 217 . 0.2756 0.2565 0.2638 -0.0030 -
0.0323 -0.0274 1 .
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4959 CA    CA    . LEU LEU LEU B B 217 217 . 0.2778 0.2805 0.2845 -0.0006 -
0.0200 -0.0213 1 .
4960 CB    CB    . LEU LEU LEU B B 217 217 . 0.2949 0.2870 0.2965 -0.0017 -
0.0196 -0.0281 1 .
4961 CG    CG    . LEU LEU LEU B B 217 217 . 0.2933 0.2932 0.3022 -0.0074 -
0.0215 -0.0322 1 .
4962 CD1   CD1   . LEU LEU LEU B B 217 217 . 0.3232 0.2599 0.2597 -0.0043 -
0.0362 -0.1183 1 .
4963 CD2   CD2   . LEU LEU LEU B B 217 217 . 0.3184 0.2843 0.2859 -0.0192 -
0.0326 -0.0090 1 .
4964 C     C     . LEU LEU LEU B B 217 217 . 0.2772 0.3006 0.2933 0.0032  -
0.0203 -0.0209 1 .
4965 O     O     . LEU LEU LEU B B 217 217 . 0.2730 0.3199 0.3058 0.0138  -
0.0205 -0.0190 1 .
4966 N     N     . GLU GLU GLU B B 218 218 . 0.2656 0.2822 0.2809 0.0048  -
0.0191 -0.0163 1 .
4967 CA    CA    . GLU GLU GLU B B 218 218 . 0.2581 0.2542 0.2666 0.0064  -
0.0139 -0.0026 1 .
4968 CB    CB    . GLU GLU GLU B B 218 218 . 0.2884 0.2749 0.2918 0.0037  -
0.0079 -0.0020 1 .
4969 CG    CG    . GLU GLU GLU B B 218 218 . 0.3239 0.3442 0.3410 -0.0100 -
0.0045 0.0019  1 .
4970 CD    CD    . GLU GLU GLU B B 218 218 . 0.3840 0.4014 0.3654 -0.0326
0.0067  0.0235  1 .
4971 OE1   OE1   . GLU GLU GLU B B 218 218 . 0.4347 0.4698 0.3104 -0.0119
0.0109  0.0248  1 .
4972 OE2   OE2   . GLU GLU GLU B B 218 218 . 0.3596 0.4050 0.3802 -0.0243
0.0143  0.0364  1 .
4973 C     C     . GLU GLU GLU B B 218 218 . 0.2309 0.2221 0.2425 0.0115  -
0.0270 -0.0026 1 .
4974 O     O     . GLU GLU GLU B B 218 218 . 0.2215 0.2064 0.2603 0.0164  -
0.0461 0.0057  1 .
4975 N     N     . ASN ASN ASN B B 219 219 . 0.1973 0.1700 0.2183 0.0237  -
0.0311 -0.0083 1 .
4976 CA    CA    . ASN ASN ASN B B 219 219 . 0.1625 0.1381 0.1765 0.0273  -
0.0278 -0.0084 1 .
4977 CB    CB    . ASN ASN ASN B B 219 219 . 0.1599 0.1310 0.1650 0.0270  -
0.0350 -0.0202 1 .
4978 CG    CG    . ASN ASN ASN B B 219 219 . 0.1308 0.1366 0.1098 0.0078  -
0.0642 -0.0215 1 .
4979 OD1   OD1   . ASN ASN ASN B B 219 219 . 0.1417 0.1465 0.1695 0.0102  -
0.0518 -0.0615 1 .
4980 ND2   ND2   . ASN ASN ASN B B 219 219 . 0.2296 0.1649 0.1187 -0.0204 -
0.0548 -0.0460 1 .
4981 C     C     . ASN ASN ASN B B 219 219 . 0.1628 0.1422 0.1623 0.0174  -
0.0210 -0.0122 1 .
4982 O     O     . ASN ASN ASN B B 219 219 . 0.1542 0.1385 0.1368 0.0320
0.0108  -0.0262 1 .
4983 N     N     . SER SER SER B B 220 220 . 0.1538 0.1274 0.1646 0.0193  -
0.0197 -0.0012 1 .
4984 CA    CA    . SER SER SER B B 220 220 . 0.1604 0.1348 0.1606 0.0089  -
0.0189 -0.0039 1 .
4985 CB    CB    . SER SER SER B B 220 220 . 0.1651 0.1480 0.1722 -0.0039 -
0.0239 0.0144  1 .
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4986 OG    OG    . SER SER SER B B 220 220 . 0.1982 0.1426 0.2302 -0.0029 -
0.0500 0.0206  1 .
4987 C     C     . SER SER SER B B 220 220 . 0.1522 0.1193 0.1474 0.0065  -
0.0148 -0.0036 1 .
4988 O     O     . SER SER SER B B 220 220 . 0.1281 0.0881 0.1327 0.0310
0.0091  -0.0210 1 .
4989 N     N     . GLU GLU GLU B B 221 221 . 0.1377 0.1095 0.1448 -0.0079 -
0.0073 -0.0075 1 .
4990 CA    CA    . GLU GLU GLU B B 221 221 . 0.1320 0.1431 0.1503 0.0000  -
0.0069 -0.0107 1 .
4991 CB    CB    . GLU GLU GLU B B 221 221 . 0.1630 0.1665 0.1597 -0.0038 -
0.0072 -0.0286 1 .
4992 CG    CG    . GLU GLU GLU B B 221 221 . 0.2128 0.2267 0.2364 0.0215  -
0.0195 -0.0256 1 .
4993 CD    CD    . GLU GLU GLU B B 221 221 . 0.2958 0.2997 0.3356 0.0678
0.0078  -0.0151 1 .
4994 OE1   OE1   . GLU GLU GLU B B 221 221 . 0.3466 0.4010 0.3560 0.0670
0.0281  -0.0307 1 .
4995 OE2   OE2   . GLU GLU GLU B B 221 221 . 0.2616 0.3342 0.3725 0.0610
0.0222  0.0134  1 .
4996 C     C     . GLU GLU GLU B B 221 221 . 0.1170 0.1341 0.1497 -0.0024 -
0.0077 -0.0217 1 .
4997 O     O     . GLU GLU GLU B B 221 221 . 0.1158 0.1207 0.1499 0.0083
0.0027  -0.0082 1 .
4998 N     N     . ALA ALA ALA B B 222 222 . 0.1195 0.1182 0.1508 0.0135  -
0.0106 -0.0331 1 .
4999 CA    CA    . ALA ALA ALA B B 222 222 . 0.1133 0.1306 0.1321 0.0122  -
0.0090 -0.0248 1 .
5000 CB    CB    . ALA ALA ALA B B 222 222 . 0.1062 0.1139 0.1318 0.0329  -
0.0180 -0.0503 1 .
5001 C     C     . ALA ALA ALA B B 222 222 . 0.1240 0.1131 0.1080 0.0134
0.0029  -0.0136 1 .
5002 O     O     . ALA ALA ALA B B 222 222 . 0.1095 0.1080 0.1068 0.0220  -
0.0207 -0.0196 1 .
5003 N     N     . LEU LEU LEU B B 223 223 . 0.1080 0.1140 0.1013 0.0156  -
0.0249 -0.0181 1 .
5004 CA    CA    . LEU LEU LEU B B 223 223 . 0.1056 0.0972 0.0782 0.0262  -
0.0174 -0.0116 1 .
5005 CB    CB    . LEU LEU LEU B B 223 223 . 0.0643 0.0719 0.0561 0.0218  -
0.0178 -0.0138 1 .
5006 CG    CG    . LEU LEU LEU B B 223 223 . 0.0803 0.0808 0.0649 0.0273  -
0.0012 -0.0192 1 .
5007 CD1   CD1   . LEU LEU LEU B B 223 223 . 0.1334 0.0970 0.1233 0.0207
0.0066  0.0203  1 .
5008 CD2   CD2   . LEU LEU LEU B B 223 223 . 0.0738 0.0710 0.1137 0.0428
0.0088  0.0092  1 .
5009 C     C     . LEU LEU LEU B B 223 223 . 0.1049 0.0878 0.0664 0.0175  -
0.0110 0.0016  1 .
5010 O     O     . LEU LEU LEU B B 223 223 . 0.0929 0.1057 0.0797 0.0230  -
0.0395 0.0063  1 .
5011 N     N     . GLU GLU GLU B B 224 224 . 0.0956 0.0922 0.0542 0.0379  -
0.0179 -0.0061 1 .
5012 CA    CA    . GLU GLU GLU B B 224 224 . 0.1306 0.1228 0.0978 0.0267  -
0.0136 0.0251  1 .
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5013 CB    CB    . GLU GLU GLU B B 224 224 . 0.1289 0.0903 0.0942 0.0267  -
0.0129 0.0298  1 .
5014 CG    CG    . GLU GLU GLU B B 224 224 . 0.1843 0.2087 0.1855 0.0217
0.0150  0.0048  1 .
5015 CD    CD    . GLU GLU GLU B B 224 224 . 0.2809 0.3069 0.2226 0.0115
0.0117  -0.0272 1 .
5016 OE1   OE1   . GLU GLU GLU B B 224 224 . 0.3298 0.3198 0.2219 0.0373
0.0414  -0.0806 1 .
5017 OE2   OE2   . GLU GLU GLU B B 224 224 . 0.2945 0.3817 0.2372 -0.0141 -
0.0134 0.0047  1 .
5018 C     C     . GLU GLU GLU B B 224 224 . 0.1151 0.1066 0.0899 0.0254  -
0.0125 0.0192  1 .
5019 O     O     . GLU GLU GLU B B 224 224 . 0.1399 0.1281 0.1171 0.0186  -
0.0206 0.0411  1 .
5020 N     N     . LEU LEU LEU B B 225 225 . 0.1123 0.0708 0.0737 0.0289  -
0.0064 0.0170  1 .
5021 CA    CA    . LEU LEU LEU B B 225 225 . 0.1128 0.0837 0.0541 0.0130  -
0.0033 0.0060  1 .
5022 CB    CB    . LEU LEU LEU B B 225 225 . 0.1058 0.0849 0.0979 0.0043
0.0055  -0.0140 1 .
5023 CG    CG    . LEU LEU LEU B B 225 225 . 0.1042 0.1011 0.1057 0.0279  -
0.0512 -0.0028 1 .
5024 CD1   CD1   . LEU LEU LEU B B 225 225 . 0.1240 0.0983 0.1403 0.0433  -
0.0634 -0.0024 1 .
5025 CD2   CD2   . LEU LEU LEU B B 225 225 . 0.1352 0.1108 0.0927 0.0469  -
0.0666 0.0135  1 .
5026 C     C     . LEU LEU LEU B B 225 225 . 0.1094 0.0923 0.0510 0.0132  -
0.0008 -0.0070 1 .
5027 O     O     . LEU LEU LEU B B 225 225 . 0.0933 0.1003 0.0344 0.0286  -
0.0050 -0.0255 1 .
5028 N     N     . VAL VAL VAL B B 226 226 . 0.0929 0.0831 0.0390 0.0189  -
0.0024 0.0010  1 .
5029 CA    CA    . VAL VAL VAL B B 226 226 . 0.0740 0.0754 0.0540 0.0202
0.0066  0.0013  1 .
5030 CB    CB    . VAL VAL VAL B B 226 226 . 0.0944 0.0855 0.0581 0.0256  -
0.0159 0.0103  1 .
5031 CG1   CG1   . VAL VAL VAL B B 226 226 . 0.1013 0.0538 0.0776 0.0113  -
0.0026 0.0256  1 .
5032 CG2   CG2   . VAL VAL VAL B B 226 226 . 0.1033 0.0873 0.1351 0.0161  -
0.0196 -0.0125 1 .
5033 C     C     . VAL VAL VAL B B 226 226 . 0.0692 0.0581 0.0336 0.0130
0.0034  0.0020  1 .
5034 O     O     . VAL VAL VAL B B 226 226 . 0.1147 0.0777 0.0798 0.0424
0.0338  0.0245  1 .
5035 N     N     . LYS LYS LYS B B 227 227 . 0.1100 0.0976 0.0778 0.0243
0.0234  0.0011  1 .
5036 CA    CA    . LYS LYS LYS B B 227 227 . 0.1399 0.1110 0.0928 0.0238
0.0235  0.0055  1 .
5037 CB    CB    . LYS LYS LYS B B 227 227 . 0.1505 0.1325 0.1056 0.0305
0.0252  0.0082  1 .
5038 CG    CG    . LYS LYS LYS B B 227 227 . 0.2436 0.1464 0.1526 0.0251
0.0501  -0.0183 1 .
5039 CD    CD    . LYS LYS LYS B B 227 227 . 0.2773 0.2131 0.1921 0.0126
0.0801  0.0038  1 .
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5040 CE    CE    . LYS LYS LYS B B 227 227 . 0.2434 0.2363 0.2128 0.0000
0.1076  0.0026  1 .
5041 NZ    NZ    . LYS LYS LYS B B 227 227 . 0.2675 0.2611 0.2372 -0.0184
0.1201  0.0151  1 .
5042 C     C     . LYS LYS LYS B B 227 227 . 0.1221 0.0937 0.0843 0.0131
0.0235  0.0017  1 .
5043 O     O     . LYS LYS LYS B B 227 227 . 0.1439 0.1167 0.0936 0.0354
0.0288  -0.0008 1 .
5044 N     N     . GLU GLU GLU B B 228 228 . 0.1101 0.0847 0.0717 0.0204
0.0335  -0.0036 1 .
5045 CA    CA    . GLU GLU GLU B B 228 228 . 0.1523 0.1333 0.1175 0.0195
0.0301  0.0059  1 .
5046 CB    CB    . GLU GLU GLU B B 228 228 . 0.1440 0.1264 0.1336 0.0186
0.0208  -0.0017 1 .
5047 CG    CG    . GLU GLU GLU B B 228 228 . 0.2152 0.1810 0.1954 0.0147
0.0218  0.0223  1 .
5048 CD    CD    . GLU GLU GLU B B 228 228 . 0.3311 0.3049 0.2528 -0.0149
0.0119  -0.0205 1 .
5049 OE1   OE1   . GLU GLU GLU B B 228 228 . 0.3928 0.3110 0.3243 -0.0257
0.0014  -0.0042 1 .
5050 OE2   OE2   . GLU GLU GLU B B 228 228 . 0.4066 0.3107 0.2576 -0.0226
0.0307  -0.0141 1 .
5051 C     C     . GLU GLU GLU B B 228 228 . 0.1365 0.1109 0.1106 0.0147
0.0240  0.0047  1 .
5052 O     O     . GLU GLU GLU B B 228 228 . 0.1397 0.1167 0.0890 0.0616
0.0465  -0.0083 1 .
5053 N     N     . ALA ALA ALA B B 229 229 . 0.1330 0.1007 0.1075 0.0211
0.0274  0.0116  1 .
5054 CA    CA    . ALA ALA ALA B B 229 229 . 0.1142 0.0981 0.0840 0.0182
0.0249  0.0201  1 .
5055 CB    CB    . ALA ALA ALA B B 229 229 . 0.1269 0.0686 0.0593 0.0343
0.0251  -0.0081 1 .
5056 C     C     . ALA ALA ALA B B 229 229 . 0.1351 0.0823 0.0933 0.0252
0.0212  0.0165  1 .
5057 O     O     . ALA ALA ALA B B 229 229 . 0.1611 0.0745 0.0761 0.0139
0.0594  0.0404  1 .
5058 N     N     . ILE ILE ILE B B 230 230 . 0.1069 0.1090 0.0768 0.0244
0.0068  0.0053  1 .
5059 CA    CA    . ILE ILE ILE B B 230 230 . 0.1090 0.0954 0.0813 0.0170
0.0132  0.0062  1 .
5060 CB    CB    . ILE ILE ILE B B 230 230 . 0.0849 0.0659 0.0860 0.0243
0.0093  0.0092  1 .
5061 CG1   CG1   . ILE ILE ILE B B 230 230 . 0.0903 0.0646 0.0711 0.0284
0.0308  0.0424  1 .
5062 CD1   CD1   . ILE ILE ILE B B 230 230 . 0.1853 0.0806 0.0565 0.0590
0.0212  0.0214  1 .
5063 CG2   CG2   . ILE ILE ILE B B 230 230 . 0.1636 0.1339 0.0798 0.0606
0.0209  -0.0072 1 .
5064 C     C     . ILE ILE ILE B B 230 230 . 0.1304 0.1074 0.1118 0.0106
0.0284  0.0077  1 .
5065 O     O     . ILE ILE ILE B B 230 230 . 0.1437 0.1054 0.0918 0.0221
0.0472  -0.0072 1 .
5066 N     N     . ASP ASP ASP B B 231 231 . 0.1289 0.1007 0.1113 0.0156
0.0194  -0.0065 1 .
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5067 CA    CA    . ASP ASP ASP B B 231 231 . 0.1446 0.1609 0.1517 0.0127
0.0181  0.0032  1 .
5068 CB    CB    . ASP ASP ASP B B 231 231 . 0.1782 0.1801 0.1443 0.0010
0.0086  -0.0051 1 .
5069 CG    CG    . ASP ASP ASP B B 231 231 . 0.2301 0.2727 0.2449 0.0313
0.0171  -0.0093 1 .
5070 OD1   OD1   . ASP ASP ASP B B 231 231 . 0.2621 0.3661 0.3073 0.0538  -
0.0417 0.0129  1 .
5071 OD2   OD2   . ASP ASP ASP B B 231 231 . 0.3532 0.3457 0.2806 0.0044  -
0.0024 -0.0454 1 .
5072 C     C     . ASP ASP ASP B B 231 231 . 0.1484 0.1478 0.1370 0.0055
0.0242  0.0050  1 .
5073 O     O     . ASP ASP ASP B B 231 231 . 0.1769 0.1379 0.1297 -0.0182
0.0388  0.0022  1 .
5074 N     N     . LYS LYS LYS B B 232 232 . 0.1351 0.1466 0.1220 0.0099  -
0.0027 0.0120  1 .
5075 CA    CA    . LYS LYS LYS B B 232 232 . 0.1483 0.1405 0.1496 0.0216
0.0007  0.0151  1 .
5076 CB    CB    . LYS LYS LYS B B 232 232 . 0.1541 0.1503 0.1591 0.0197  -
0.0030 0.0128  1 .
5077 CG    CG    . LYS LYS LYS B B 232 232 . 0.2273 0.2493 0.2135 0.0207  -
0.0122 0.0153  1 .
5078 CD    CD    . LYS LYS LYS B B 232 232 . 0.2749 0.2497 0.2521 0.0258  -
0.0056 -0.0314 1 .
5079 CE    CE    . LYS LYS LYS B B 232 232 . 0.2747 0.2934 0.2613 0.0400  -
0.0095 -0.0197 1 .
5080 NZ    NZ    . LYS LYS LYS B B 232 232 . 0.2754 0.3341 0.2797 0.0785  -
0.0336 0.0432  1 .
5081 C     C     . LYS LYS LYS B B 232 232 . 0.1237 0.1120 0.1194 0.0260
0.0076  0.0258  1 .
5082 O     O     . LYS LYS LYS B B 232 232 . 0.1190 0.1304 0.1610 0.0531
0.0159  0.0381  1 .
5083 N     N     . ALA ALA ALA B B 233 233 . 0.1104 0.1073 0.0842 0.0215
0.0124  0.0143  1 .
5084 CA    CA    . ALA ALA ALA B B 233 233 . 0.1173 0.1035 0.0955 0.0273
0.0133  -0.0058 1 .
5085 CB    CB    . ALA ALA ALA B B 233 233 . 0.1381 0.1035 0.1031 0.0189
0.0276  -0.0329 1 .
5086 C     C     . ALA ALA ALA B B 233 233 . 0.1128 0.0909 0.0975 0.0070
0.0032  -0.0008 1 .
5087 O     O     . ALA ALA ALA B B 233 233 . 0.1316 0.1284 0.1043 0.0006
0.0166  0.0065  1 .
5088 N     N     . GLY GLY GLY B B 234 234 . 0.0968 0.1047 0.0959 0.0158  -
0.0010 0.0111  1 .
5089 CA    CA    . GLY GLY GLY B B 234 234 . 0.1081 0.0756 0.1082 0.0166
0.0015  0.0058  1 .
5090 C     C     . GLY GLY GLY B B 234 234 . 0.1059 0.1046 0.1171 0.0076
0.0053  -0.0039 1 .
5091 O     O     . GLY GLY GLY B B 234 234 . 0.1396 0.0933 0.1368 0.0076
0.0330  -0.0103 1 .
5092 N     N     . TYR TYR TYR B B 235 235 . 0.1026 0.0739 0.0788 0.0148
0.0144  0.0124  1 .
5093 CA    CA    . TYR TYR TYR B B 235 235 . 0.0661 0.0690 0.0375 0.0041
0.0103  -0.0099 1 .
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5094 CB    CB    . TYR TYR TYR B B 235 235 . 0.0639 0.0312 0.0390 0.0150
0.0230  0.0089  1 .
5095 CG    CG    . TYR TYR TYR B B 235 235 . 0.0934 0.0632 0.0493 0.0077  -
0.0015 0.0125  1 .
5096 CD1   CD1   . TYR TYR TYR B B 235 235 . 0.0889 0.0568 0.0449 0.0295
0.0272  0.0008  1 .
5097 CE1   CE1   . TYR TYR TYR B B 235 235 . 0.1073 0.0771 0.0680 -0.0466
0.0131  -0.0043 1 .
5098 CZ    CZ    . TYR TYR TYR B B 235 235 . 0.1281 0.0362 0.0848 0.0280
0.0086  -0.0115 1 .
5099 OH    OH    . TYR TYR TYR B B 235 235 . 0.1407 0.0764 0.1134 0.0425
0.0136  0.0003  1 .
5100 CE2   CE2   . TYR TYR TYR B B 235 235 . 0.1554 0.0554 0.1230 -0.0475
0.0044  0.0093  1 .
5101 CD2   CD2   . TYR TYR TYR B B 235 235 . 0.1088 0.0782 0.0876 0.0127  -
0.0240 0.0211  1 .
5102 C     C     . TYR TYR TYR B B 235 235 . 0.0738 0.0606 0.0647 0.0077
0.0064  -0.0018 1 .
5103 O     O     . TYR TYR TYR B B 235 235 . 0.0967 0.0844 0.0473 -0.0018
0.0068  -0.0212 1 .
5104 N     N     . THR THR THR B B 236 236 . 0.0952 0.0791 0.0587 0.0105
0.0210  0.0088  1 .
5105 CA    CA    . THR THR THR B B 236 236 . 0.1421 0.0992 0.0973 0.0119
0.0204  0.0147  1 .
5106 CB    CB    . THR THR THR B B 236 236 . 0.1475 0.1236 0.1337 0.0106
0.0200  0.0241  1 .
5107 OG1   OG1   . THR THR THR B B 236 236 . 0.2033 0.1631 0.1294 0.0205
0.0199  0.0210  1 .
5108 CG2   CG2   . THR THR THR B B 236 236 . 0.1455 0.1361 0.0941 -0.0255
0.0021  0.0283  1 .
5109 C     C     . THR THR THR B B 236 236 . 0.1419 0.1210 0.1049 0.0059
0.0309  0.0069  1 .
5110 O     O     . THR THR THR B B 236 236 . 0.1507 0.1382 0.0993 0.0342
0.0340  0.0073  1 .
5111 N     N     . GLU GLU GLU B B 237 237 . 0.1996 0.1539 0.1125 0.0136
0.0297  -0.0140 1 .
5112 CA    CA    . GLU GLU GLU B B 237 237 . 0.2049 0.1922 0.1744 0.0046
0.0144  -0.0106 1 .
5113 CB    CB    . GLU GLU GLU B B 237 237 . 0.2464 0.2041 0.1982 -0.0067
0.0084  -0.0116 1 .
5114 CG    CG    . GLU GLU GLU B B 237 237 . 0.3123 0.3123 0.2983 0.0049
0.0397  -0.0228 1 .
5115 CD    CD    . GLU GLU GLU B B 237 237 . 0.3772 0.3858 0.4081 -0.0318
0.0069  -0.0166 1 .
5116 OE1   OE1   . GLU GLU GLU B B 237 237 . 0.4508 0.4299 0.4639 -0.0079
0.0026  0.0115  1 .
5117 OE2   OE2   . GLU GLU GLU B B 237 237 . 0.4566 0.4134 0.4098 -0.0072
0.0366  0.0008  1 .
5118 C     C     . GLU GLU GLU B B 237 237 . 0.2003 0.1758 0.1463 0.0060
0.0106  -0.0111 1 .
5119 O     O     . GLU GLU GLU B B 237 237 . 0.2362 0.2162 0.1533 -0.0095
0.0089  -0.0047 1 .
5120 N     N     . LYS LYS LYS B B 238 238 . 0.1638 0.1368 0.1127 0.0019
0.0069  0.0017  1 .
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5121 CA    CA    . LYS LYS LYS B B 238 238 . 0.1500 0.1157 0.1089 0.0079
0.0066  -0.0001 1 .
5122 CB    CB    . LYS LYS LYS B B 238 238 . 0.1515 0.0928 0.1237 0.0140
0.0114  -0.0114 1 .
5123 CG    CG    . LYS LYS LYS B B 238 238 . 0.2187 0.1385 0.1823 -0.0003
0.0114  -0.0256 1 .
5124 CD    CD    . LYS LYS LYS B B 238 238 . 0.2346 0.2204 0.2116 0.0136
0.0194  0.0220  1 .
5125 CE    CE    . LYS LYS LYS B B 238 238 . 0.3122 0.2514 0.3044 -0.0443
0.0183  0.0296  1 .
5126 NZ    NZ    . LYS LYS LYS B B 238 238 . 0.3239 0.2532 0.3673 -0.0673
0.0040  0.0670  1 .
5127 C     C     . LYS LYS LYS B B 238 238 . 0.1011 0.0947 0.0751 0.0148
0.0138  0.0041  1 .
5128 O     O     . LYS LYS LYS B B 238 238 . 0.1021 0.0731 0.0648 0.0597
0.0079  -0.0009 1 .
5129 N     N     . ILE ILE ILE B B 239 239 . 0.1089 0.0572 0.0426 0.0218
0.0151  -0.0131 1 .
5130 CA    CA    . ILE ILE ILE B B 239 239 . 0.0935 0.0405 0.0360 0.0254
0.0108  -0.0031 1 .
5131 CB    CB    . ILE ILE ILE B B 239 239 . 0.0923 0.0625 0.0584 0.0241  -
0.0121 -0.0168 1 .
5132 CG1   CG1   . ILE ILE ILE B B 239 239 . 0.0638 0.0636 0.1034 0.0072  -
0.0217 0.0026  1 .
5133 CD1   CD1   . ILE ILE ILE B B 239 239 . 0.0329 0.0576 0.0461 0.0103  -
0.0049 -0.0246 1 .
5134 CG2   CG2   . ILE ILE ILE B B 239 239 . 0.1264 0.0616 0.0705 0.0533
0.0029  -0.0176 1 .
5135 C     C     . ILE ILE ILE B B 239 239 . 0.0671 0.0600 0.0442 0.0216
0.0208  0.0077  1 .
5136 O     O     . ILE ILE ILE B B 239 239 . 0.0834 0.0630 0.0705 -0.0018
0.0452  -0.0183 1 .
5137 N     N     . VAL VAL VAL B B 240 240 . 0.0892 0.0306 0.0294 0.0183
0.0162  0.0046  1 .
5138 CA    CA    . VAL VAL VAL B B 240 240 . 0.0708 0.0272 0.0255 -0.0093 -
0.0034 0.0007  1 .
5139 CB    CB    . VAL VAL VAL B B 240 240 . 0.0408 0.0298 0.0433 0.0036
0.0005  -0.0079 1 .
5140 CG1   CG1   . VAL VAL VAL B B 240 240 . 0.1183 0.0290 0.0435 0.0085  -
0.0018 -0.0074 1 .
5141 CG2   CG2   . VAL VAL VAL B B 240 240 . 0.0791 0.0438 0.0365 0.0315
0.0215  0.0129  1 .
5142 C     C     . VAL VAL VAL B B 240 240 . 0.0456 0.0269 0.0349 -0.0045
0.0134  -0.0036 1 .
5143 O     O     . VAL VAL VAL B B 240 240 . 0.0471 0.0417 0.0332 0.0074
0.0078  0.0110  1 .
5144 N     N     . ILE ILE ILE B B 241 241 . 0.0530 0.0279 0.0277 0.0085  -
0.0082 -0.0025 1 .
5145 CA    CA    . ILE ILE ILE B B 241 241 . 0.0489 0.0456 0.0287 0.0100
0.0071  -0.0014 1 .
5146 CB    CB    . ILE ILE ILE B B 241 241 . 0.0269 0.0434 0.0332 0.0054  -
0.0036 -0.0119 1 .
5147 CG1   CG1   . ILE ILE ILE B B 241 241 . 0.0913 0.0572 0.1067 0.0379
0.0071  0.0102  1 .
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5148 CD1   CD1   . ILE ILE ILE B B 241 241 . 0.0844 0.0566 0.0944 0.0266  -
0.0415 -0.0091 1 .
5149 CG2   CG2   . ILE ILE ILE B B 241 241 . 0.0415 0.0351 0.0431 -0.0041
0.0153  -0.0091 1 .
5150 C     C     . ILE ILE ILE B B 241 241 . 0.0542 0.0551 0.0276 0.0121  -
0.0064 -0.0075 1 .
5151 O     O     . ILE ILE ILE B B 241 241 . 0.0855 0.0423 0.0380 0.0298
0.0275  0.0131  1 .
5152 N     N     . GLY GLY GLY B B 242 242 . 0.0486 0.0652 0.0368 0.0275
0.0088  0.0026  1 .
5153 CA    CA    . GLY GLY GLY B B 242 242 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5154 C     C     . GLY GLY GLY B B 242 242 . 0.0375 0.0367 0.0277 -0.0043
0.0053  -0.0020 1 .
5155 O     O     . GLY GLY GLY B B 242 242 . 0.0400 0.0261 0.0275 0.0033  -
0.0057 -0.0013 1 .
5156 N     N     . MET MET MET B B 243 243 . 0.0259 0.0303 0.0314 0.0017
0.0018  0.0055  1 .
5157 CA    CA    . MET MET MET B B 243 243 . 0.0708 0.0581 0.0500 0.0176
0.0105  -0.0017 1 .
5158 CB    CB    . MET MET MET B B 243 243 . 0.0627 0.0586 0.0853 0.0170  -
0.0036 0.0085  1 .
5159 CG    CG    . MET MET MET B B 243 243 . 0.0690 0.0937 0.0433 -0.0035
0.0243  -0.0193 1 .
5160 SD    SD    . MET MET MET B B 243 243 . 0.0817 0.0641 0.0654 -0.0121
0.0121  -0.0178 1 .
5161 CE    CE    . MET MET MET B B 243 243 . 0.0902 0.1225 0.0989 -0.0397 -
0.0257 -0.0522 1 .
5162 C     C     . MET MET MET B B 243 243 . 0.0467 0.0353 0.0362 0.0146  -
0.0127 -0.0085 1 .
5163 O     O     . MET MET MET B B 243 243 . 0.0513 0.0690 0.0361 0.0073  -
0.0066 -0.0213 1 .
5164 N     N     . ASP ASP ASP B B 244 244 . 0.0645 0.0623 0.0286 0.0194
0.0092  -0.0009 1 .
5165 CA    CA    . ASP ASP ASP B B 244 244 . 0.0412 0.0290 0.0254 0.0074
0.0010  0.0006  1 .
5166 CB    CB    . ASP ASP ASP B B 244 244 . 0.0559 0.0422 0.0460 0.0221
0.0194  0.0113  1 .
5167 CG    CG    . ASP ASP ASP B B 244 244 . 0.0577 0.0306 0.0273 0.0131
0.0080  0.0032  1 .
5168 OD1   OD1   . ASP ASP ASP B B 244 244 . 0.0288 0.0396 0.0301 0.0064
0.0030  0.0031  1 .
5169 OD2   OD2   . ASP ASP ASP B B 244 244 . 0.0277 0.0265 0.0361 -0.0017
0.0051  -0.0035 1 .
5170 C     C     . ASP ASP ASP B B 244 244 . 0.0474 0.0294 0.0269 0.0030  -
0.0025 -0.0025 1 .
5171 O     O     . ASP ASP ASP B B 244 244 . 0.0423 0.0292 0.0489 0.0058  -
0.0200 -0.0063 1 .
5172 N     N     . VAL VAL VAL B B 245 245 . 0.0258 0.0393 0.0293 0.0026
0.0014  0.0075  1 .
5173 CA    CA    . VAL VAL VAL B B 245 245 . 0.0357 0.0273 0.0284 0.0027  -
0.0056 -0.0014 1 .
5174 CB    CB    . VAL VAL VAL B B 245 245 . 0.0384 0.0318 0.0460 0.0029
0.0016  0.0112  1 .
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5175 CG1   CG1   . VAL VAL VAL B B 245 245 . 0.0412 0.0366 0.0340 -0.0134 -
0.0117 0.0099  1 .
5176 CG2   CG2   . VAL VAL VAL B B 245 245 . 0.0265 0.0258 0.0254 -0.0007
0.0004  -0.0002 1 .
5177 C     C     . VAL VAL VAL B B 245 245 . 0.0274 0.0387 0.0306 0.0053  -
0.0033 -0.0084 1 .
5178 O     O     . VAL VAL VAL B B 245 245 . 0.0483 0.0643 0.0718 0.0151  -
0.0031 -0.0154 1 .
5179 N     N     . ALA ALA ALA B B 246 246 . 0.0415 0.0438 0.0415 0.0149  -
0.0052 -0.0131 1 .
5180 CA    CA    . ALA ALA ALA B B 246 246 . 0.0555 0.0336 0.0296 0.0037
0.0060  -0.0041 1 .
5181 CB    CB    . ALA ALA ALA B B 246 246 . 0.0604 0.0344 0.0300 0.0118
0.0054  0.0062  1 .
5182 C     C     . ALA ALA ALA B B 246 246 . 0.0469 0.0391 0.0276 -0.0105 -
0.0036 -0.0019 1 .
5183 O     O     . ALA ALA ALA B B 246 246 . 0.0646 0.0296 0.0343 0.0130  -
0.0188 -0.0062 1 .
5184 N     N     . ALA ALA ALA B B 247 247 . 0.0469 0.0255 0.0256 0.0023
0.0025  0.0002  1 .
5185 CA    CA    . ALA ALA ALA B B 247 247 . 0.0578 0.0310 0.0660 0.0001
0.0009  -0.0152 1 .
5186 CB    CB    . ALA ALA ALA B B 247 247 . 0.0463 0.0365 0.0349 0.0148  -
0.0079 -0.0076 1 .
5187 C     C     . ALA ALA ALA B B 247 247 . 0.0535 0.0376 0.0580 0.0118
0.0042  -0.0134 1 .
5188 O     O     . ALA ALA ALA B B 247 247 . 0.0720 0.0696 0.0679 0.0207  -
0.0156 -0.0377 1 .
5189 N     N     . SER SER SER B B 248 248 . 0.0851 0.0514 0.0865 0.0314  -
0.0141 -0.0309 1 .
5190 CA    CA    . SER SER SER B B 248 248 . 0.1017 0.0475 0.0830 0.0287  -
0.0040 -0.0271 1 .
5191 CB    CB    . SER SER SER B B 248 248 . 0.0735 0.0683 0.0758 0.0166  -
0.0247 -0.0460 1 .
5192 OG    OG    . SER SER SER B B 248 248 . 0.0644 0.0628 0.0492 0.0100  -
0.0206 -0.0266 1 .
5193 C     C     . SER SER SER B B 248 248 . 0.1117 0.0784 0.1094 0.0301  -
0.0105 -0.0333 1 .
5194 O     O     . SER SER SER B B 248 248 . 0.1347 0.0509 0.1029 0.0351  -
0.0254 -0.0402 1 .
5195 N     N     . GLU GLU GLU B B 249 249 . 0.1259 0.0972 0.1001 0.0305  -
0.0118 -0.0182 1 .
5196 CA    CA    . GLU GLU GLU B B 249 249 . 0.1214 0.0838 0.1106 0.0225  -
0.0178 -0.0328 1 .
5197 CB    CB    . GLU GLU GLU B B 249 249 . 0.1351 0.0904 0.1025 0.0303  -
0.0050 -0.0383 1 .
5198 CG    CG    . GLU GLU GLU B B 249 249 . 0.1538 0.1112 0.0821 0.0132  -
0.0086 -0.0351 1 .
5199 CD    CD    . GLU GLU GLU B B 249 249 . 0.1290 0.1028 0.0982 0.0227  -
0.0371 -0.0321 1 .
5200 OE1   OE1   . GLU GLU GLU B B 249 249 . 0.1960 0.2075 0.1792 -0.0016 -
0.1341 -0.0239 1 .
5201 OE2   OE2   . GLU GLU GLU B B 249 249 . 0.1177 0.0932 0.0905 0.0334
0.0021  -0.0321 1 .
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5202 C     C     . GLU GLU GLU B B 249 249 . 0.1161 0.0863 0.1048 0.0160  -
0.0116 -0.0248 1 .
5203 O     O     . GLU GLU GLU B B 249 249 . 0.1565 0.1462 0.0892 0.0314  -
0.0481 -0.0578 1 .
5204 N     N     . PHE PHE PHE B B 250 250 . 0.1342 0.0798 0.0944 0.0171  -
0.0274 -0.0447 1 .
5205 CA    CA    . PHE PHE PHE B B 250 250 . 0.1114 0.0729 0.1187 0.0118  -
0.0145 -0.0412 1 .
5206 CB    CB    . PHE PHE PHE B B 250 250 . 0.1435 0.0648 0.1261 0.0146  -
0.0407 -0.0443 1 .
5207 CG    CG    . PHE PHE PHE B B 250 250 . 0.1477 0.0906 0.1446 0.0137  -
0.0312 -0.0292 1 .
5208 CD1   CD1   . PHE PHE PHE B B 250 250 . 0.1437 0.1158 0.1772 0.0095  -
0.0383 -0.0060 1 .
5209 CE1   CE1   . PHE PHE PHE B B 250 250 . 0.1100 0.1487 0.1690 0.0495  -
0.0334 -0.0211 1 .
5210 CZ    CZ    . PHE PHE PHE B B 250 250 . 0.1730 0.1350 0.1894 0.0035  -
0.0482 -0.0127 1 .
5211 CE2   CE2   . PHE PHE PHE B B 250 250 . 0.1729 0.1031 0.1389 0.0088  -
0.0346 -0.0507 1 .
5212 CD2   CD2   . PHE PHE PHE B B 250 250 . 0.1315 0.1088 0.1307 0.0238  -
0.0445 -0.0737 1 .
5213 C     C     . PHE PHE PHE B B 250 250 . 0.1119 0.0888 0.1071 0.0000  -
0.0132 -0.0381 1 .
5214 O     O     . PHE PHE PHE B B 250 250 . 0.1089 0.0852 0.1477 -0.0063 -
0.0117 -0.0418 1 .
5215 N     N     . TYR TYR TYR B B 251 251 . 0.1037 0.0591 0.1237 -0.0133 -
0.0262 -0.0278 1 .
5216 CA    CA    . TYR TYR TYR B B 251 251 . 0.1014 0.0819 0.1307 -0.0054 -
0.0341 -0.0267 1 .
5217 CB    CB    . TYR TYR TYR B B 251 251 . 0.0867 0.0496 0.1530 0.0150  -
0.0270 0.0015  1 .
5218 CG    CG    . TYR TYR TYR B B 251 251 . 0.1436 0.0887 0.1075 0.0343  -
0.0457 0.0142  1 .
5219 CD1   CD1   . TYR TYR TYR B B 251 251 . 0.1719 0.0458 0.1324 0.0112  -
0.0267 0.0269  1 .
5220 CE1   CE1   . TYR TYR TYR B B 251 251 . 0.1665 0.1313 0.1306 0.0062  -
0.0497 0.0141  1 .
5221 CZ    CZ    . TYR TYR TYR B B 251 251 . 0.1776 0.1276 0.1536 0.0394  -
0.0191 0.0049  1 .
5222 OH    OH    . TYR TYR TYR B B 251 251 . 0.1862 0.2135 0.1577 0.1030  -
0.0568 -0.0185 1 .
5223 CE2   CE2   . TYR TYR TYR B B 251 251 . 0.1678 0.1095 0.1662 0.0570  -
0.0505 -0.0448 1 .
5224 CD2   CD2   . TYR TYR TYR B B 251 251 . 0.1824 0.1073 0.1190 0.0000  -
0.0499 -0.0453 1 .
5225 C     C     . TYR TYR TYR B B 251 251 . 0.1108 0.0796 0.1200 0.0070  -
0.0192 -0.0252 1 .
5226 O     O     . TYR TYR TYR B B 251 251 . 0.1176 0.0900 0.1137 0.0018  -
0.0576 -0.0579 1 .
5227 N     N     . ARG ARG ARG B B 252 252 . 0.1301 0.0519 0.1460 0.0026  -
0.0158 -0.0509 1 .
5228 CA    CA    . ARG ARG ARG B B 252 252 . 0.1453 0.1046 0.1687 -0.0122 -
0.0304 -0.0337 1 .
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5229 CB    CB    . ARG ARG ARG B B 252 252 . 0.1358 0.1025 0.1789 -0.0229 -
0.0232 -0.0306 1 .
5230 CG    CG    . ARG ARG ARG B B 252 252 . 0.1751 0.1117 0.1980 -0.0019 -
0.0439 -0.0090 1 .
5231 CD    CD    . ARG ARG ARG B B 252 252 . 0.2298 0.1495 0.2151 -0.0204
0.0087  -0.0231 1 .
5232 NE    NE    . ARG ARG ARG B B 252 252 . 0.2456 0.1819 0.2095 0.0062  -
0.0535 -0.0388 1 .
5233 CZ    CZ    . ARG ARG ARG B B 252 252 . 0.2649 0.2191 0.2030 -0.0011 -
0.0170 -0.0267 1 .
5234 NH1   NH1   . ARG ARG ARG B B 252 252 . 0.2871 0.2055 0.2414 0.0524  -
0.0094 0.0030  1 .
5235 NH2   NH2   . ARG ARG ARG B B 252 252 . 0.3163 0.2777 0.1971 -0.0204 -
0.0619 -0.0610 1 .
5236 C     C     . ARG ARG ARG B B 252 252 . 0.1373 0.1138 0.1529 -0.0106 -
0.0311 -0.0305 1 .
5237 O     O     . ARG ARG ARG B B 252 252 . 0.1175 0.1401 0.1834 0.0135  -
0.0386 -0.0201 1 .
5238 N     N     . ASP ASP ASP B B 253 253 . 0.1590 0.1395 0.1755 -0.0009 -
0.0230 -0.0063 1 .
5239 CA    CA    . ASP ASP ASP B B 253 253 . 0.1630 0.1143 0.1971 0.0039  -
0.0192 0.0016  1 .
5240 CB    CB    . ASP ASP ASP B B 253 253 . 0.1828 0.1436 0.2310 0.0042  -
0.0133 -0.0009 1 .
5241 CG    CG    . ASP ASP ASP B B 253 253 . 0.2198 0.1961 0.2517 -0.0070 -
0.0162 -0.0048 1 .
5242 OD1   OD1   . ASP ASP ASP B B 253 253 . 0.2560 0.2021 0.3794 -0.0717 -
0.0121 0.0015  1 .
5243 OD2   OD2   . ASP ASP ASP B B 253 253 . 0.2313 0.1939 0.2869 -0.0273
0.0366  -0.0975 1 .
5244 C     C     . ASP ASP ASP B B 253 253 . 0.1483 0.0976 0.1898 0.0041  -
0.0026 -0.0029 1 .
5245 O     O     . ASP ASP ASP B B 253 253 . 0.1492 0.0717 0.2238 0.0143  -
0.0124 -0.0076 1 .
5246 N     N     . GLY GLY GLY B B 254 254 . 0.1417 0.0686 0.1716 0.0122  -
0.0161 -0.0116 1 .
5247 CA    CA    . GLY GLY GLY B B 254 254 . 0.1088 0.0784 0.1494 0.0252
0.0075  0.0089  1 .
5248 C     C     . GLY GLY GLY B B 254 254 . 0.1193 0.0845 0.1558 0.0084  -
0.0082 0.0050  1 .
5249 O     O     . GLY GLY GLY B B 254 254 . 0.1257 0.0902 0.1362 0.0291
0.0144  -0.0020 1 .
5250 N     N     . LYS LYS LYS B B 255 255 . 0.1342 0.1003 0.1590 0.0012  -
0.0085 0.0069  1 .
5251 CA    CA    . LYS LYS LYS B B 255 255 . 0.1255 0.1167 0.1475 -0.0099 -
0.0084 -0.0182 1 .
5252 CB    CB    . LYS LYS LYS B B 255 255 . 0.1321 0.1106 0.1785 -0.0182
0.0016  -0.0077 1 .
5253 CG    CG    . LYS LYS LYS B B 255 255 . 0.1947 0.1953 0.1929 -0.0359 -
0.0120 -0.0014 1 .
5254 CD    CD    . LYS LYS LYS B B 255 255 . 0.2005 0.2184 0.2455 -0.0755 -
0.0051 -0.0030 1 .
5255 CE    CE    . LYS LYS LYS B B 255 255 . 0.2112 0.1838 0.2679 -0.0172 -
0.0024 -0.0036 1 .
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5256 NZ    NZ    . LYS LYS LYS B B 255 255 . 0.2059 0.1646 0.3580 -0.0712 -
0.0054 -0.0347 1 .
5257 C     C     . LYS LYS LYS B B 255 255 . 0.0980 0.0608 0.1343 -0.0125 -
0.0142 -0.0258 1 .
5258 O     O     . LYS LYS LYS B B 255 255 . 0.1112 0.0414 0.1469 -0.0090 -
0.0172 -0.0336 1 .
5259 N     N     . TYR TYR TYR B B 256 256 . 0.1251 0.0905 0.1613 -0.0152 -
0.0126 -0.0393 1 .
5260 CA    CA    . TYR TYR TYR B B 256 256 . 0.1363 0.0956 0.1360 0.0001  -
0.0299 -0.0364 1 .
5261 CB    CB    . TYR TYR TYR B B 256 256 . 0.1214 0.0474 0.1250 -0.0216 -
0.0271 -0.0309 1 .
5262 CG    CG    . TYR TYR TYR B B 256 256 . 0.1182 0.0521 0.1154 -0.0039 -
0.0184 -0.0280 1 .
5263 CD1   CD1   . TYR TYR TYR B B 256 256 . 0.0587 0.0595 0.0921 -0.0068 -
0.0396 -0.0172 1 .
5264 CE1   CE1   . TYR TYR TYR B B 256 256 . 0.0544 0.0426 0.0543 -0.0224 -
0.0290 0.0224  1 .
5265 CZ    CZ    . TYR TYR TYR B B 256 256 . 0.0560 0.0359 0.0315 -0.0180 -
0.0118 0.0068  1 .
5266 OH    OH    . TYR TYR TYR B B 256 256 . 0.0368 0.0315 0.0581 -0.0053
0.0129  -0.0142 1 .
5267 CE2   CE2   . TYR TYR TYR B B 256 256 . 0.0580 0.0255 0.0526 0.0029
0.0299  0.0026  1 .
5268 CD2   CD2   . TYR TYR TYR B B 256 256 . 0.0922 0.0512 0.0961 -0.0310
0.0030  0.0001  1 .
5269 C     C     . TYR TYR TYR B B 256 256 . 0.1400 0.1212 0.1700 -0.0064 -
0.0148 -0.0323 1 .
5270 O     O     . TYR TYR TYR B B 256 256 . 0.1262 0.1437 0.2009 0.0018  -
0.0287 -0.0348 1 .
5271 N     N     . ASP ASP ASP B B 257 257 . 0.1602 0.1561 0.1964 0.0066  -
0.0538 -0.0179 1 .
5272 CA    CA    . ASP ASP ASP B B 257 257 . 0.1856 0.1893 0.2061 0.0076  -
0.0488 -0.0244 1 .
5273 CB    CB    . ASP ASP ASP B B 257 257 . 0.2109 0.1990 0.2160 0.0087  -
0.0465 -0.0209 1 .
5274 CG    CG    . ASP ASP ASP B B 257 257 . 0.2251 0.2920 0.2565 0.0038  -
0.0241 -0.0165 1 .
5275 OD1   OD1   . ASP ASP ASP B B 257 257 . 0.2543 0.2128 0.2467 -0.0277
0.0060  0.0870  1 .
5276 OD2   OD2   . ASP ASP ASP B B 257 257 . 0.2744 0.3341 0.2797 0.0192  -
0.0948 -0.0420 1 .
5277 C     C     . ASP ASP ASP B B 257 257 . 0.1949 0.1852 0.2141 0.0037  -
0.0439 -0.0227 1 .
5278 O     O     . ASP ASP ASP B B 257 257 . 0.1897 0.1567 0.2164 -0.0006 -
0.0562 -0.0290 1 .
5279 N     N     . LEU LEU LEU B B 258 258 . 0.2034 0.1953 0.2324 0.0082  -
0.0367 -0.0280 1 .
5280 CA    CA    . LEU LEU LEU B B 258 258 . 0.2318 0.2162 0.2415 0.0200  -
0.0288 -0.0288 1 .
5281 CB    CB    . LEU LEU LEU B B 258 258 . 0.2053 0.1766 0.2070 0.0242  -
0.0326 -0.0277 1 .
5282 CG    CG    . LEU LEU LEU B B 258 258 . 0.1654 0.1538 0.1704 0.0177  -
0.0209 -0.0319 1 .
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5283 CD1   CD1   . LEU LEU LEU B B 258 258 . 0.1606 0.1343 0.2011 0.0317  -
0.0258 -0.0260 1 .
5284 CD2   CD2   . LEU LEU LEU B B 258 258 . 0.1480 0.1701 0.1668 -0.0059
0.0014  -0.0057 1 .
5285 C     C     . LEU LEU LEU B B 258 258 . 0.2611 0.2433 0.2697 0.0234  -
0.0303 -0.0293 1 .
5286 O     O     . LEU LEU LEU B B 258 258 . 0.2740 0.2185 0.2880 0.0337  -
0.0369 -0.0433 1 .
5287 N     N     . ASP ASP ASP B B 259 259 . 0.2950 0.2841 0.2982 0.0180  -
0.0204 -0.0322 1 .
5288 CA    CA    . ASP ASP ASP B B 259 259 . 0.3022 0.3111 0.3089 0.0102  -
0.0149 -0.0200 1 .
5289 CB    CB    . ASP ASP ASP B B 259 259 . 0.2979 0.2879 0.3105 0.0099  -
0.0117 -0.0186 1 .
5290 CG    CG    . ASP ASP ASP B B 259 259 . 0.2594 0.2387 0.2939 0.0078
0.0108  0.0073  1 .
5291 OD1   OD1   . ASP ASP ASP B B 259 259 . 0.3088 0.1648 0.3765 0.0259
0.0147  0.0699  1 .
5292 OD2   OD2   . ASP ASP ASP B B 259 259 . 0.1922 0.1018 0.2168 0.0062  -
0.0024 -0.0144 1 .
5293 C     C     . ASP ASP ASP B B 259 259 . 0.3197 0.3250 0.3342 0.0126  -
0.0118 -0.0256 1 .
5294 O     O     . ASP ASP ASP B B 259 259 . 0.3046 0.3048 0.3092 0.0091  -
0.0181 -0.0249 1 .
5295 N     N     . PHE PHE PHE B B 260 260 . 0.3457 0.3463 0.3499 0.0074  -
0.0185 -0.0155 1 .
5296 CA    CA    . PHE PHE PHE B B 260 260 . 0.3722 0.3642 0.3762 0.0184  -
0.0104 -0.0222 1 .
5297 CB    CB    . PHE PHE PHE B B 260 260 . 0.3777 0.3629 0.3708 0.0177  -
0.0167 -0.0308 1 .
5298 CG    CG    . PHE PHE PHE B B 260 260 . 0.3465 0.3256 0.3522 0.0401  -
0.0154 -0.0384 1 .
5299 CD1   CD1   . PHE PHE PHE B B 260 260 . 0.3197 0.2941 0.3467 0.0594  -
0.0271 -0.0556 1 .
5300 CE1   CE1   . PHE PHE PHE B B 260 260 . 0.2797 0.3044 0.3050 0.0809  -
0.0509 -0.0502 1 .
5301 CZ    CZ    . PHE PHE PHE B B 260 260 . 0.3068 0.3116 0.3015 0.0924  -
0.0390 -0.0530 1 .
5302 CE2   CE2   . PHE PHE PHE B B 260 260 . 0.2557 0.3029 0.3250 0.0759  -
0.0607 -0.0392 1 .
5303 CD2   CD2   . PHE PHE PHE B B 260 260 . 0.2961 0.3294 0.3587 0.0640  -
0.0553 -0.0373 1 .
5304 C     C     . PHE PHE PHE B B 260 260 . 0.3948 0.3911 0.3890 0.0215  -
0.0140 -0.0178 1 .
5305 O     O     . PHE PHE PHE B B 260 260 . 0.3981 0.3920 0.3902 0.0323  -
0.0228 -0.0291 1 .
5306 N     N     . LYS LYS LYS B B 261 261 . 0.4031 0.3912 0.4042 0.0194  -
0.0072 -0.0189 1 .
5307 CA    CA    . LYS LYS LYS B B 261 261 . 0.4089 0.4060 0.4092 0.0123  -
0.0019 -0.0127 1 .
5308 CB    CB    . LYS LYS LYS B B 261 261 . 0.4008 0.4134 0.4020 0.0177  -
0.0036 -0.0193 1 .
5309 CG    CG    . LYS LYS LYS B B 261 261 . 0.4219 0.3990 0.3397 0.0135  -
0.0186 -0.0181 1 .
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5310 CD    CD    . LYS LYS LYS B B 261 261 . 0.4132 0.3883 0.2190 0.0422  -
0.0484 -0.0781 1 .
5311 CE    CE    . LYS LYS LYS B B 261 261 . 0.4106 0.3799 0.2229 0.0336  -
0.0873 -0.1160 1 .
5312 NZ    NZ    . LYS LYS LYS B B 261 261 . 0.4040 0.3792 0.1354 0.0737  -
0.1445 -0.1648 1 .
5313 C     C     . LYS LYS LYS B B 261 261 . 0.4151 0.4177 0.4287 0.0151  -
0.0008 -0.0098 1 .
5314 O     O     . LYS LYS LYS B B 261 261 . 0.4112 0.4162 0.4371 0.0147
0.0037  -0.0082 1 .
5315 N     N     . SER SER SER B B 262 262 . 0.4266 0.4207 0.4426 0.0091
0.0021  -0.0068 1 .
5316 CA    CA    . SER SER SER B B 262 262 . 0.4378 0.4432 0.4520 -0.0066 -
0.0044 -0.0057 1 .
5317 CB    CB    . SER SER SER B B 262 262 . 0.4375 0.4461 0.4484 -0.0059 -
0.0042 -0.0049 1 .
5318 OG    OG    . SER SER SER B B 262 262 . 0.3990 0.4353 0.4181 -0.0578 -
0.0227 -0.0143 1 .
5319 C     C     . SER SER SER B B 262 262 . 0.4571 0.4569 0.4660 -0.0048 -
0.0023 -0.0009 1 .
5320 O     O     . SER SER SER B B 262 262 . 0.4535 0.4579 0.4736 -0.0140 -
0.0046 -0.0013 1 .
5321 N     N     . PRO PRO PRO B B 263 263 . 0.4681 0.4656 0.4687 -0.0050 -
0.0026 0.0003  1 .
5322 CA    CA    . PRO PRO PRO B B 263 263 . 0.4753 0.4722 0.4710 -0.0030 -
0.0007 -0.0018 1 .
5323 CB    CB    . PRO PRO PRO B B 263 263 . 0.4768 0.4771 0.4693 -0.0007 -
0.0026 -0.0010 1 .
5324 CG    CG    . PRO PRO PRO B B 263 263 . 0.4690 0.4711 0.4699 -0.0003
0.0006  0.0027  1 .
5325 CD    CD    . PRO PRO PRO B B 263 263 . 0.4708 0.4652 0.4745 -0.0062 -
0.0030 0.0012  1 .
5326 C     C     . PRO PRO PRO B B 263 263 . 0.4762 0.4713 0.4705 -0.0049 -
0.0021 -0.0003 1 .
5327 O     O     . PRO PRO PRO B B 263 263 . 0.4836 0.4792 0.4704 -0.0093 -
0.0033 0.0030  1 .
5328 N     N     . THR THR THR B B 264 264 . 0.4774 0.4652 0.4652 -0.0099
0.0003  -0.0024 1 .
5329 CA    CA    . THR THR THR B B 264 264 . 0.4729 0.4625 0.4610 -0.0099 -
0.0014 -0.0033 1 .
5330 CB    CB    . THR THR THR B B 264 264 . 0.4756 0.4591 0.4620 -0.0119
0.0022  -0.0052 1 .
5331 OG1   OG1   . THR THR THR B B 264 264 . 0.4936 0.4789 0.4906 -0.0233 -
0.0107 -0.0191 1 .
5332 CG2   CG2   . THR THR THR B B 264 264 . 0.4977 0.4708 0.4546 -0.0095 -
0.0104 -0.0096 1 .
5333 C     C     . THR THR THR B B 264 264 . 0.4648 0.4532 0.4532 -0.0120 -
0.0004 0.0007  1 .
5334 O     O     . THR THR THR B B 264 264 . 0.4662 0.4540 0.4522 -0.0059
0.0011  0.0111  1 .
5335 N     N     . ASP ASP ASP B B 265 265 . 0.4499 0.4415 0.4430 -0.0090 -
0.0005 0.0034  1 .
5336 CA    CA    . ASP ASP ASP B B 265 265 . 0.4422 0.4287 0.4290 -0.0022 -
0.0039 -0.0044 1 .
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5337 CB    CB    . ASP ASP ASP B B 265 265 . 0.4406 0.4271 0.4225 -0.0042 -
0.0037 -0.0087 1 .
5338 CG    CG    . ASP ASP ASP B B 265 265 . 0.4336 0.4252 0.3930 -0.0030 -
0.0103 -0.0273 1 .
5339 OD1   OD1   . ASP ASP ASP B B 265 265 . 0.4526 0.4295 0.3234 -0.0127
0.0060  -0.0356 1 .
5340 OD2   OD2   . ASP ASP ASP B B 265 265 . 0.3609 0.4625 0.3475 -0.0002 -
0.0598 -0.0128 1 .
5341 C     C     . ASP ASP ASP B B 265 265 . 0.4424 0.4264 0.4308 0.0000  -
0.0042 -0.0030 1 .
5342 O     O     . ASP ASP ASP B B 265 265 . 0.4500 0.4193 0.4239 0.0004  -
0.0089 0.0000  1 .
5343 N     N     . PRO PRO PRO B B 266 266 . 0.4349 0.4244 0.4303 -0.0002 -
0.0042 -0.0034 1 .
5344 CA    CA    . PRO PRO PRO B B 266 266 . 0.4282 0.4238 0.4231 -0.0008 -
0.0016 -0.0027 1 .
5345 CB    CB    . PRO PRO PRO B B 266 266 . 0.4254 0.4181 0.4205 -0.0013 -
0.0035 -0.0066 1 .
5346 CG    CG    . PRO PRO PRO B B 266 266 . 0.4452 0.4343 0.4353 0.0049
0.0026  -0.0016 1 .
5347 CD    CD    . PRO PRO PRO B B 266 266 . 0.4373 0.4284 0.4308 0.0065  -
0.0056 -0.0073 1 .
5348 C     C     . PRO PRO PRO B B 266 266 . 0.4164 0.4224 0.4186 -0.0028
0.0020  -0.0006 1 .
5349 O     O     . PRO PRO PRO B B 266 266 . 0.4041 0.4307 0.4079 0.0023  -
0.0040 0.0072  1 .
5350 N     N     . SER SER SER B B 267 267 . 0.4130 0.4176 0.4170 -0.0098 -
0.0011 -0.0003 1 .
5351 CA    CA    . SER SER SER B B 267 267 . 0.4040 0.4125 0.4180 -0.0084
0.0009  -0.0068 1 .
5352 CB    CB    . SER SER SER B B 267 267 . 0.4042 0.4053 0.4160 -0.0092 -
0.0012 -0.0021 1 .
5353 OG    OG    . SER SER SER B B 267 267 . 0.3794 0.4051 0.3987 -0.0250
0.0118  -0.0114 1 .
5354 C     C     . SER SER SER B B 267 267 . 0.3991 0.4013 0.4136 -0.0074 -
0.0023 0.0003  1 .
5355 O     O     . SER SER SER B B 267 267 . 0.3912 0.3972 0.4261 -0.0082 -
0.0023 -0.0112 1 .
5356 N     N     . ARG ARG ARG B B 268 268 . 0.3903 0.3949 0.4040 -0.0066 -
0.0039 -0.0032 1 .
5357 CA    CA    . ARG ARG ARG B B 268 268 . 0.3723 0.3758 0.3865 -0.0072 -
0.0097 -0.0021 1 .
5358 CB    CB    . ARG ARG ARG B B 268 268 . 0.3764 0.3720 0.3946 -0.0084 -
0.0041 0.0003  1 .
5359 CG    CG    . ARG ARG ARG B B 268 268 . 0.3905 0.3725 0.3930 -0.0186 -
0.0127 -0.0075 1 .
5360 CD    CD    . ARG ARG ARG B B 268 268 . 0.4126 0.4173 0.3983 -0.0170 -
0.0192 0.0113  1 .
5361 NE    NE    . ARG ARG ARG B B 268 268 . 0.4251 0.4634 0.4656 -0.0018 -
0.0013 0.0009  1 .
5362 CZ    CZ    . ARG ARG ARG B B 268 268 . 0.4770 0.5026 0.4741 -0.0031
0.0071  -0.0219 1 .
5363 NH1   NH1   . ARG ARG ARG B B 268 268 . 0.4668 0.5375 0.4946 -0.0086
0.0091  -0.0259 1 .
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5364 NH2   NH2   . ARG ARG ARG B B 268 268 . 0.5041 0.4886 0.5178 0.0142
0.0272  -0.0470 1 .
5365 C     C     . ARG ARG ARG B B 268 268 . 0.3610 0.3610 0.3798 -0.0044 -
0.0067 -0.0008 1 .
5366 O     O     . ARG ARG ARG B B 268 268 . 0.3638 0.3631 0.3746 -0.0025 -
0.0104 0.0012  1 .
5367 N     N     . TYR TYR TYR B B 269 269 . 0.3325 0.3338 0.3648 -0.0032 -
0.0037 -0.0086 1 .
5368 CA    CA    . TYR TYR TYR B B 269 269 . 0.3125 0.3025 0.3430 -0.0063 -
0.0046 -0.0107 1 .
5369 CB    CB    . TYR TYR TYR B B 269 269 . 0.3054 0.3033 0.3456 -0.0019 -
0.0022 -0.0073 1 .
5370 CG    CG    . TYR TYR TYR B B 269 269 . 0.3347 0.3201 0.3583 -0.0222 -
0.0051 -0.0026 1 .
5371 CD1   CD1   . TYR TYR TYR B B 269 269 . 0.3274 0.3417 0.3654 -0.0130
0.0069  -0.0026 1 .
5372 CE1   CE1   . TYR TYR TYR B B 269 269 . 0.3644 0.3614 0.3809 -0.0247 -
0.0027 -0.0142 1 .
5373 CZ    CZ    . TYR TYR TYR B B 269 269 . 0.3778 0.3700 0.3867 -0.0038 -
0.0155 -0.0145 1 .
5374 OH    OH    . TYR TYR TYR B B 269 269 . 0.3909 0.3400 0.3780 -0.0410 -
0.0729 -0.0549 1 .
5375 CE2   CE2   . TYR TYR TYR B B 269 269 . 0.3534 0.3653 0.3883 -0.0015 -
0.0229 -0.0173 1 .
5376 CD2   CD2   . TYR TYR TYR B B 269 269 . 0.3231 0.3371 0.3555 -0.0128 -
0.0267 -0.0103 1 .
5377 C     C     . TYR TYR TYR B B 269 269 . 0.2804 0.2746 0.3244 -0.0054 -
0.0001 -0.0118 1 .
5378 O     O     . TYR TYR TYR B B 269 269 . 0.2821 0.2723 0.3473 -0.0109 -
0.0094 -0.0216 1 .
5379 N     N     . ILE ILE ILE B B 270 270 . 0.2460 0.2385 0.2897 -0.0033
0.0017  -0.0138 1 .
5380 CA    CA    . ILE ILE ILE B B 270 270 . 0.2085 0.1867 0.2590 0.0038
0.0001  -0.0104 1 .
5381 CB    CB    . ILE ILE ILE B B 270 270 . 0.2204 0.1872 0.2578 0.0093
0.0048  -0.0078 1 .
5382 CG1   CG1   . ILE ILE ILE B B 270 270 . 0.2302 0.1758 0.2588 -0.0064 -
0.0137 -0.0200 1 .
5383 CD1   CD1   . ILE ILE ILE B B 270 270 . 0.1747 0.1625 0.2779 -0.0090 -
0.0088 -0.0200 1 .
5384 CG2   CG2   . ILE ILE ILE B B 270 270 . 0.2118 0.1681 0.2437 0.0019
0.0015  -0.0470 1 .
5385 C     C     . ILE ILE ILE B B 270 270 . 0.1978 0.1677 0.2303 0.0128  -
0.0001 -0.0020 1 .
5386 O     O     . ILE ILE ILE B B 270 270 . 0.1809 0.1719 0.2483 0.0215  -
0.0191 0.0009  1 .
5387 N     N     . THR THR THR B B 271 271 . 0.1676 0.1126 0.2270 0.0120  -
0.0082 -0.0051 1 .
5388 CA    CA    . THR THR THR B B 271 271 . 0.1822 0.1209 0.2078 -0.0043
0.0038  0.0013  1 .
5389 CB    CB    . THR THR THR B B 271 271 . 0.1501 0.1071 0.1901 -0.0244
0.0189  0.0002  1 .
5390 OG1   OG1   . THR THR THR B B 271 271 . 0.2328 0.0500 0.2298 0.0001
0.0601  0.0485  1 .
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5391 CG2   CG2   . THR THR THR B B 271 271 . 0.1532 0.0821 0.2323 -0.0021
0.0284  0.0221  1 .
5392 C     C     . THR THR THR B B 271 271 . 0.1713 0.1198 0.1918 0.0058  -
0.0019 -0.0029 1 .
5393 O     O     . THR THR THR B B 271 271 . 0.1778 0.0924 0.1978 0.0142  -
0.0080 -0.0151 1 .
5394 N     N     . GLY GLY GLY B B 272 272 . 0.1569 0.1023 0.1655 0.0027  -
0.0064 -0.0045 1 .
5395 CA    CA    . GLY GLY GLY B B 272 272 . 0.1585 0.1182 0.1512 0.0107
0.0016  0.0138  1 .
5396 C     C     . GLY GLY GLY B B 272 272 . 0.1457 0.0998 0.1507 0.0080
0.0161  0.0117  1 .
5397 O     O     . GLY GLY GLY B B 272 272 . 0.1478 0.0941 0.1586 0.0217
0.0177  0.0046  1 .
5398 N     N     . ASP ASP ASP B B 273 273 . 0.1555 0.1165 0.1459 0.0134
0.0095  0.0334  1 .
5399 CA    CA    . ASP ASP ASP B B 273 273 . 0.1810 0.1318 0.1683 0.0113
0.0078  0.0290  1 .
5400 CB    CB    . ASP ASP ASP B B 273 273 . 0.2149 0.1540 0.1812 -0.0069
0.0060  0.0406  1 .
5401 CG    CG    . ASP ASP ASP B B 273 273 . 0.2312 0.1971 0.2385 0.0068  -
0.0087 0.0120  1 .
5402 OD1   OD1   . ASP ASP ASP B B 273 273 . 0.2793 0.1186 0.3311 -0.0182
0.0248  -0.0229 1 .
5403 OD2   OD2   . ASP ASP ASP B B 273 273 . 0.3018 0.3464 0.2832 0.0386  -
0.0138 -0.0131 1 .
5404 C     C     . ASP ASP ASP B B 273 273 . 0.1700 0.1405 0.1648 0.0051
0.0090  0.0182  1 .
5405 O     O     . ASP ASP ASP B B 273 273 . 0.1298 0.0967 0.1641 0.0323
0.0131  0.0098  1 .
5406 N     N     . GLN GLN GLN B B 274 274 . 0.1771 0.1500 0.1789 0.0093
0.0114  0.0061  1 .
5407 CA    CA    . GLN GLN GLN B B 274 274 . 0.1752 0.1596 0.1934 0.0034
0.0202  -0.0033 1 .
5408 CB    CB    . GLN GLN GLN B B 274 274 . 0.1862 0.1821 0.1921 0.0042
0.0265  -0.0248 1 .
5409 CG    CG    . GLN GLN GLN B B 274 274 . 0.2604 0.2215 0.2537 -0.0206
0.0235  -0.0168 1 .
5410 CD    CD    . GLN GLN GLN B B 274 274 . 0.2351 0.1972 0.3460 -0.0474
0.0108  -0.0193 1 .
5411 OE1   OE1   . GLN GLN GLN B B 274 274 . 0.2191 0.2353 0.3873 -0.0532
0.0567  -0.0189 1 .
5412 NE2   NE2   . GLN GLN GLN B B 274 274 . 0.2661 0.2192 0.4014 0.0031
0.0564  -0.0499 1 .
5413 C     C     . GLN GLN GLN B B 274 274 . 0.1549 0.1357 0.1778 0.0137
0.0210  -0.0045 1 .
5414 O     O     . GLN GLN GLN B B 274 274 . 0.1505 0.0864 0.2098 0.0056
0.0151  0.0069  1 .
5415 N     N     . LEU LEU LEU B B 275 275 . 0.1224 0.1132 0.1631 0.0192
0.0176  0.0074  1 .
5416 CA    CA    . LEU LEU LEU B B 275 275 . 0.1174 0.1026 0.1358 0.0127
0.0124  0.0029  1 .
5417 CB    CB    . LEU LEU LEU B B 275 275 . 0.1101 0.1008 0.1315 0.0180
0.0135  -0.0038 1 .
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5418 CG    CG    . LEU LEU LEU B B 275 275 . 0.1291 0.1039 0.1183 0.0136
0.0174  -0.0113 1 .
5419 CD1   CD1   . LEU LEU LEU B B 275 275 . 0.1422 0.0597 0.1897 -0.0095 -
0.0029 0.0061  1 .
5420 CD2   CD2   . LEU LEU LEU B B 275 275 . 0.0874 0.0621 0.0648 0.0098
0.0492  0.0038  1 .
5421 C     C     . LEU LEU LEU B B 275 275 . 0.1062 0.0878 0.1155 0.0075  -
0.0023 -0.0027 1 .
5422 O     O     . LEU LEU LEU B B 275 275 . 0.1149 0.0863 0.1145 0.0122  -
0.0108 0.0113  1 .
5423 N     N     . GLY GLY GLY B B 276 276 . 0.0605 0.0673 0.1193 -0.0018
0.0046  0.0026  1 .
5424 CA    CA    . GLY GLY GLY B B 276 276 . 0.1016 0.0858 0.0934 0.0077
0.0063  0.0061  1 .
5425 C     C     . GLY GLY GLY B B 276 276 . 0.1085 0.0727 0.1089 0.0074
0.0068  0.0059  1 .
5426 O     O     . GLY GLY GLY B B 276 276 . 0.1343 0.0754 0.1324 0.0186  -
0.0030 0.0473  1 .
5427 N     N     . ALA ALA ALA B B 277 277 . 0.0938 0.0871 0.1192 0.0039
0.0221  0.0200  1 .
5428 CA    CA    . ALA ALA ALA B B 277 277 . 0.0910 0.0759 0.1172 -0.0067
0.0271  0.0324  1 .
5429 CB    CB    . ALA ALA ALA B B 277 277 . 0.1157 0.1032 0.1677 -0.0059
0.0212  0.0322  1 .
5430 C     C     . ALA ALA ALA B B 277 277 . 0.0995 0.0852 0.1070 0.0035
0.0065  0.0118  1 .
5431 O     O     . ALA ALA ALA B B 277 277 . 0.1076 0.1255 0.1567 0.0030
0.0068  0.0137  1 .
5432 N     N     . LEU LEU LEU B B 278 278 . 0.0896 0.0797 0.1285 -0.0069 -
0.0113 0.0029  1 .
5433 CA    CA    . LEU LEU LEU B B 278 278 . 0.0900 0.0903 0.1033 -0.0022 -
0.0048 0.0040  1 .
5434 CB    CB    . LEU LEU LEU B B 278 278 . 0.1087 0.1069 0.1023 0.0061  -
0.0034 0.0009  1 .
5435 CG    CG    . LEU LEU LEU B B 278 278 . 0.0745 0.1823 0.1486 0.0041  -
0.0215 -0.0107 1 .
5436 CD1   CD1   . LEU LEU LEU B B 278 278 . 0.1224 0.2435 0.2297 0.0342
0.0093  -0.0511 1 .
5437 CD2   CD2   . LEU LEU LEU B B 278 278 . 0.0845 0.2242 0.1710 0.0087  -
0.0901 -0.0168 1 .
5438 C     C     . LEU LEU LEU B B 278 278 . 0.0728 0.0591 0.0912 0.0023  -
0.0064 -0.0032 1 .
5439 O     O     . LEU LEU LEU B B 278 278 . 0.0870 0.0616 0.1160 0.0016  -
0.0136 -0.0187 1 .
5440 N     N     . TYR TYR TYR B B 279 279 . 0.0974 0.0842 0.0778 0.0079  -
0.0001 0.0024  1 .
5441 CA    CA    . TYR TYR TYR B B 279 279 . 0.0894 0.0731 0.0625 0.0097  -
0.0008 0.0001  1 .
5442 CB    CB    . TYR TYR TYR B B 279 279 . 0.0840 0.0549 0.0460 0.0014  -
0.0027 0.0014  1 .
5443 CG    CG    . TYR TYR TYR B B 279 279 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5444 CD1   CD1   . TYR TYR TYR B B 279 279 . 0.0254 0.0256 0.0450 0.0002  -
0.0013 -0.0018 1 .
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5445 CE1   CE1   . TYR TYR TYR B B 279 279 . 0.0359 0.0265 0.0305 0.0035
0.0074  0.0024  1 .
5446 CZ    CZ    . TYR TYR TYR B B 279 279 . 0.0588 0.0414 0.0425 0.0067  -
0.0233 -0.0084 1 .
5447 OH    OH    . TYR TYR TYR B B 279 279 . 0.0484 0.0566 0.0444 0.0184  -
0.0078 -0.0004 1 .
5448 CE2   CE2   . TYR TYR TYR B B 279 279 . 0.0439 0.0361 0.0259 0.0131  -
0.0023 -0.0009 1 .
5449 CD2   CD2   . TYR TYR TYR B B 279 279 . 0.0618 0.0530 0.0326 0.0318  -
0.0163 -0.0142 1 .
5450 C     C     . TYR TYR TYR B B 279 279 . 0.0763 0.0544 0.0439 0.0050  -
0.0066 0.0051  1 .
5451 O     O     . TYR TYR TYR B B 279 279 . 0.1030 0.0738 0.0575 0.0126
0.0044  -0.0203 1 .
5452 N     N     . GLN GLN GLN B B 280 280 . 0.0808 0.1015 0.0301 0.0090
0.0131  -0.0073 1 .
5453 CA    CA    . GLN GLN GLN B B 280 280 . 0.0801 0.0589 0.0674 0.0118
0.0124  -0.0156 1 .
5454 CB    CB    . GLN GLN GLN B B 280 280 . 0.1024 0.0631 0.0589 0.0013  -
0.0003 -0.0113 1 .
5455 CG    CG    . GLN GLN GLN B B 280 280 . 0.1265 0.1307 0.1507 0.0400
0.0008  -0.0253 1 .
5456 CD    CD    . GLN GLN GLN B B 280 280 . 0.1922 0.1461 0.1963 0.0379  -
0.0104 -0.0063 1 .
5457 OE1   OE1   . GLN GLN GLN B B 280 280 . 0.2974 0.1840 0.1768 0.0399
0.0366  -0.0003 1 .
5458 NE2   NE2   . GLN GLN GLN B B 280 280 . 0.1355 0.1801 0.2233 0.0325  -
0.0436 -0.0316 1 .
5459 C     C     . GLN GLN GLN B B 280 280 . 0.0795 0.0524 0.0705 0.0030
0.0106  -0.0061 1 .
5460 O     O     . GLN GLN GLN B B 280 280 . 0.0799 0.0637 0.0867 0.0086
0.0196  -0.0336 1 .
5461 N     N     . ASP ASP ASP B B 281 281 . 0.1099 0.0808 0.0502 0.0069
0.0009  -0.0004 1 .
5462 CA    CA    . ASP ASP ASP B B 281 281 . 0.1026 0.0952 0.0987 -0.0016
0.0052  -0.0062 1 .
5463 CB    CB    . ASP ASP ASP B B 281 281 . 0.1153 0.1145 0.1328 -0.0146
0.0105  0.0059  1 .
5464 CG    CG    . ASP ASP ASP B B 281 281 . 0.1739 0.1833 0.1557 -0.0285
0.0037  0.0272  1 .
5465 OD1   OD1   . ASP ASP ASP B B 281 281 . 0.2945 0.2256 0.1448 -0.0569
0.0263  0.1427  1 .
5466 OD2   OD2   . ASP ASP ASP B B 281 281 . 0.1544 0.2313 0.3263 -0.0711
0.0315  0.0132  1 .
5467 C     C     . ASP ASP ASP B B 281 281 . 0.0923 0.1002 0.0919 -0.0052 -
0.0015 -0.0081 1 .
5468 O     O     . ASP ASP ASP B B 281 281 . 0.1163 0.0883 0.0880 0.0176  -
0.0105 -0.0044 1 .
5469 N     N     . PHE PHE PHE B B 282 282 . 0.0787 0.0695 0.0658 0.0012
0.0075  -0.0186 1 .
5470 CA    CA    . PHE PHE PHE B B 282 282 . 0.0825 0.0645 0.0824 -0.0072
0.0058  -0.0098 1 .
5471 CB    CB    . PHE PHE PHE B B 282 282 . 0.0886 0.0740 0.0609 -0.0174
0.0077  -0.0162 1 .
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5472 CG    CG    . PHE PHE PHE B B 282 282 . 0.1257 0.0627 0.0578 0.0158
0.0010  0.0067  1 .
5473 CD1   CD1   . PHE PHE PHE B B 282 282 . 0.1402 0.0911 0.1407 0.0380
0.0202  -0.0263 1 .
5474 CE1   CE1   . PHE PHE PHE B B 282 282 . 0.1131 0.1860 0.1469 0.0326  -
0.0050 -0.0392 1 .
5475 CZ    CZ    . PHE PHE PHE B B 282 282 . 0.1619 0.1795 0.1471 -0.0028 -
0.0046 -0.0211 1 .
5476 CE2   CE2   . PHE PHE PHE B B 282 282 . 0.1614 0.1017 0.1344 0.0006  -
0.0637 -0.0331 1 .
5477 CD2   CD2   . PHE PHE PHE B B 282 282 . 0.1460 0.0995 0.1082 -0.0101 -
0.0292 -0.0526 1 .
5478 C     C     . PHE PHE PHE B B 282 282 . 0.0770 0.0659 0.0629 0.0030
0.0026  -0.0109 1 .
5479 O     O     . PHE PHE PHE B B 282 282 . 0.0852 0.0779 0.0782 0.0000  -
0.0162 -0.0048 1 .
5480 N     N     . VAL VAL VAL B B 283 283 . 0.0640 0.0478 0.0642 0.0048
0.0005  -0.0030 1 .
5481 CA    CA    . VAL VAL VAL B B 283 283 . 0.0690 0.0755 0.0472 0.0197  -
0.0023 -0.0079 1 .
5482 CB    CB    . VAL VAL VAL B B 283 283 . 0.0690 0.0545 0.0458 0.0284
0.0039  0.0016  1 .
5483 CG1   CG1   . VAL VAL VAL B B 283 283 . 0.0523 0.0749 0.0835 0.0336
0.0054  0.0031  1 .
5484 CG2   CG2   . VAL VAL VAL B B 283 283 . 0.0850 0.0810 0.0466 0.0550
0.0070  -0.0036 1 .
5485 C     C     . VAL VAL VAL B B 283 283 . 0.0964 0.0474 0.0494 0.0057  -
0.0005 0.0057  1 .
5486 O     O     . VAL VAL VAL B B 283 283 . 0.1273 0.0962 0.0555 0.0043  -
0.0403 -0.0184 1 .
5487 N     N     . ARG ARG ARG B B 284 284 . 0.0781 0.0781 0.0624 0.0191  -
0.0007 -0.0089 1 .
5488 CA    CA    . ARG ARG ARG B B 284 284 . 0.0949 0.0645 0.0533 0.0113  -
0.0113 -0.0029 1 .
5489 CB    CB    . ARG ARG ARG B B 284 284 . 0.0923 0.0547 0.0309 -0.0015 -
0.0007 -0.0004 1 .
5490 CG    CG    . ARG ARG ARG B B 284 284 . 0.1192 0.1204 0.0693 -0.0163 -
0.0017 -0.0106 1 .
5491 CD    CD    . ARG ARG ARG B B 284 284 . 0.1369 0.1540 0.1626 -0.0611 -
0.0454 0.0154  1 .
5492 NE    NE    . ARG ARG ARG B B 284 284 . 0.1278 0.0892 0.1257 -0.0170 -
0.0197 0.0209  1 .
5493 CZ    CZ    . ARG ARG ARG B B 284 284 . 0.1536 0.1927 0.1155 0.0096  -
0.0112 0.0419  1 .
5494 NH1   NH1   . ARG ARG ARG B B 284 284 . 0.2048 0.2412 0.0486 -0.0031 -
0.0058 -0.0072 1 .
5495 NH2   NH2   . ARG ARG ARG B B 284 284 . 0.1764 0.2801 0.0542 0.0407
0.0011  0.0710  1 .
5496 C     C     . ARG ARG ARG B B 284 284 . 0.1032 0.0524 0.0562 0.0242  -
0.0141 -0.0022 1 .
5497 O     O     . ARG ARG ARG B B 284 284 . 0.0882 0.0758 0.0790 0.0082  -
0.0228 -0.0144 1 .
5498 N     N     . ASP ASP ASP B B 285 285 . 0.0790 0.0640 0.0653 0.0213  -
0.0159 -0.0146 1 .
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5499 CA    CA    . ASP ASP ASP B B 285 285 . 0.0956 0.0806 0.0715 0.0218  -
0.0043 -0.0014 1 .
5500 CB    CB    . ASP ASP ASP B B 285 285 . 0.1249 0.1044 0.0958 0.0127
0.0003  -0.0122 1 .
5501 CG    CG    . ASP ASP ASP B B 285 285 . 0.1482 0.1540 0.1101 0.0026  -
0.0106 -0.0042 1 .
5502 OD1   OD1   . ASP ASP ASP B B 285 285 . 0.2902 0.1870 0.1473 0.0000  -
0.0199 0.0249  1 .
5503 OD2   OD2   . ASP ASP ASP B B 285 285 . 0.1463 0.2010 0.2067 -0.0156
0.0086  0.0200  1 .
5504 C     C     . ASP ASP ASP B B 285 285 . 0.1031 0.0702 0.0997 0.0134  -
0.0029 -0.0096 1 .
5505 O     O     . ASP ASP ASP B B 285 285 . 0.1178 0.0817 0.1101 0.0128  -
0.0217 -0.0104 1 .
5506 N     N     . TYR TYR TYR B B 286 286 . 0.0720 0.0609 0.0707 0.0147
0.0284  0.0040  1 .
5507 CA    CA    . TYR TYR TYR B B 286 286 . 0.0655 0.0446 0.0649 0.0161
0.0060  0.0018  1 .
5508 CB    CB    . TYR TYR TYR B B 286 286 . 0.0588 0.0776 0.0587 0.0143
0.0061  -0.0071 1 .
5509 CG    CG    . TYR TYR TYR B B 286 286 . 0.0690 0.0599 0.0943 0.0247
0.0077  0.0077  1 .
5510 CD1   CD1   . TYR TYR TYR B B 286 286 . 0.1187 0.0624 0.1111 0.0394
0.0021  -0.0262 1 .
5511 CE1   CE1   . TYR TYR TYR B B 286 286 . 0.1182 0.1428 0.1330 0.0025  -
0.0615 0.0064  1 .
5512 CZ    CZ    . TYR TYR TYR B B 286 286 . 0.1402 0.1551 0.1653 0.0124  -
0.0316 0.0293  1 .
5513 OH    OH    . TYR TYR TYR B B 286 286 . 0.2306 0.1692 0.2087 -0.0388 -
0.0087 -0.0120 1 .
5514 CE2   CE2   . TYR TYR TYR B B 286 286 . 0.1664 0.1451 0.1124 -0.0123 -
0.0231 0.0490  1 .
5515 CD2   CD2   . TYR TYR TYR B B 286 286 . 0.1122 0.0831 0.1557 0.0233
0.0013  0.0231  1 .
5516 C     C     . TYR TYR TYR B B 286 286 . 0.0694 0.0328 0.0606 0.0172
0.0074  -0.0022 1 .
5517 O     O     . TYR TYR TYR B B 286 286 . 0.0707 0.0393 0.0356 0.0119
0.0188  -0.0002 1 .
5518 N     N     . PRO PRO PRO B B 287 287 . 0.0376 0.0513 0.0523 -0.0026
0.0136  0.0145  1 .
5519 CA    CA    . PRO PRO PRO B B 287 287 . 0.0569 0.0431 0.0557 0.0094
0.0044  0.0116  1 .
5520 CB    CB    . PRO PRO PRO B B 287 287 . 0.0720 0.0553 0.0870 0.0194
0.0014  0.0373  1 .
5521 CG    CG    . PRO PRO PRO B B 287 287 . 0.0549 0.0675 0.0962 -0.0031 -
0.0094 0.0042  1 .
5522 CD    CD    . PRO PRO PRO B B 287 287 . 0.0764 0.0512 0.0504 0.0240
0.0255  0.0032  1 .
5523 C     C     . PRO PRO PRO B B 287 287 . 0.0361 0.0367 0.0498 0.0081
0.0056  0.0042  1 .
5524 O     O     . PRO PRO PRO B B 287 287 . 0.0577 0.0371 0.0502 0.0006
0.0213  0.0117  1 .
5525 N     N     . VAL VAL VAL B B 288 288 . 0.0520 0.0466 0.0475 -0.0012
0.0125  0.0045  1 .
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5526 CA    CA    . VAL VAL VAL B B 288 288 . 0.0414 0.0536 0.0434 0.0039
0.0004  0.0031  1 .
5527 CB    CB    . VAL VAL VAL B B 288 288 . 0.0446 0.0591 0.0407 0.0146  -
0.0080 0.0104  1 .
5528 CG1   CG1   . VAL VAL VAL B B 288 288 . 0.0685 0.0407 0.0432 0.0226
0.0070  -0.0039 1 .
5529 CG2   CG2   . VAL VAL VAL B B 288 288 . 0.0346 0.1086 0.0999 0.0173  -
0.0040 0.0130  1 .
5530 C     C     . VAL VAL VAL B B 288 288 . 0.0545 0.0655 0.0294 -0.0026
0.0008  0.0127  1 .
5531 O     O     . VAL VAL VAL B B 288 288 . 0.0491 0.0629 0.0371 0.0020  -
0.0022 0.0206  1 .
5532 N     N     . VAL VAL VAL B B 289 289 . 0.0260 0.0435 0.0274 -0.0034
0.0011  -0.0061 1 .
5533 CA    CA    . VAL VAL VAL B B 289 289 . 0.0400 0.0431 0.0268 0.0127  -
0.0039 -0.0017 1 .
5534 CB    CB    . VAL VAL VAL B B 289 289 . 0.0460 0.0392 0.0421 0.0118
0.0120  -0.0014 1 .
5535 CG1   CG1   . VAL VAL VAL B B 289 289 . 0.0793 0.0639 0.0535 0.0073
0.0128  0.0170  1 .
5536 CG2   CG2   . VAL VAL VAL B B 289 289 . 0.0685 0.0696 0.0589 0.0320  -
0.0294 -0.0050 1 .
5537 C     C     . VAL VAL VAL B B 289 289 . 0.0260 0.0272 0.0275 0.0011  -
0.0012 -0.0020 1 .
5538 O     O     . VAL VAL VAL B B 289 289 . 0.0420 0.0380 0.0340 0.0024
0.0106  0.0063  1 .
5539 N     N     . SER SER SER B B 290 290 . 0.0378 0.0284 0.0276 0.0061
0.0053  0.0026  1 .
5540 CA    CA    . SER SER SER B B 290 290 . 0.0358 0.0377 0.0484 0.0081
0.0052  -0.0071 1 .
5541 CB    CB    . SER SER SER B B 290 290 . 0.0395 0.0492 0.0739 0.0049
0.0177  -0.0181 1 .
5542 OG    OG    . SER SER SER B B 290 290 . 0.0508 0.0310 0.0261 0.0120
0.0032  0.0014  1 .
5543 C     C     . SER SER SER B B 290 290 . 0.0253 0.0253 0.0259 0.0000  -
0.0001 -0.0001 1 .
5544 O     O     . SER SER SER B B 290 290 . 0.0729 0.0513 0.0304 -0.0026
0.0139  -0.0059 1 .
5545 N     N     . ILE ILE ILE B B 291 291 . 0.0289 0.0265 0.0256 0.0020  -
0.0010 -0.0006 1 .
5546 CA    CA    . ILE ILE ILE B B 291 291 . 0.0353 0.0253 0.0314 0.0006  -
0.0078 -0.0005 1 .
5547 CB    CB    . ILE ILE ILE B B 291 291 . 0.0280 0.0350 0.0261 0.0051  -
0.0014 -0.0027 1 .
5548 CG1   CG1   . ILE ILE ILE B B 291 291 . 0.0433 0.0613 0.0262 0.0254  -
0.0041 -0.0059 1 .
5549 CD1   CD1   . ILE ILE ILE B B 291 291 . 0.0638 0.0294 0.0516 -0.0114 -
0.0275 0.0059  1 .
5550 CG2   CG2   . ILE ILE ILE B B 291 291 . 0.0256 0.0267 0.0564 0.0006
0.0029  0.0067  1 .
5551 C     C     . ILE ILE ILE B B 291 291 . 0.0302 0.0489 0.0257 0.0107
0.0014  0.0031  1 .
5552 O     O     . ILE ILE ILE B B 291 291 . 0.0376 0.0327 0.0255 0.0095  -
0.0017 -0.0013 1 .
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5553 N     N     . GLU GLU GLU B B 292 292 . 0.0322 0.0281 0.0312 0.0044  -
0.0064 -0.0040 1 .
5554 CA    CA    . GLU GLU GLU B B 292 292 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5555 CB    CB    . GLU GLU GLU B B 292 292 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5556 CG    CG    . GLU GLU GLU B B 292 292 . 0.0569 0.0365 0.0298 0.0188
0.0119  0.0070  1 .
5557 CD    CD    . GLU GLU GLU B B 292 292 . 0.0950 0.0369 0.0353 0.0055
0.0259  0.0042  1 .
5558 OE1   OE1   . GLU GLU GLU B B 292 292 . 0.0478 0.0301 0.0273 0.0103
0.0067  0.0031  1 .
5559 OE2   OE2   . GLU GLU GLU B B 292 292 . 0.0903 0.0499 0.0769 0.0135  -
0.0105 -0.0102 1 .
5560 C     C     . GLU GLU GLU B B 292 292 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5561 O     O     . GLU GLU GLU B B 292 292 . 0.0322 0.0257 0.0380 0.0016  -
0.0094 -0.0021 1 .
5562 N     N     . ASP ASP ASP B B 293 293 . 0.0381 0.0254 0.0343 0.0011
0.0107  0.0009  1 .
5563 CA    CA    . ASP ASP ASP B B 293 293 . 0.0320 0.0372 0.0357 -0.0083
0.0076  -0.0111 1 .
5564 CB    CB    . ASP ASP ASP B B 293 293 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5565 CG    CG    . ASP ASP ASP B B 293 293 . 0.0422 0.0264 0.0260 0.0043
0.0035  0.0009  1 .
5566 OD1   OD1   . ASP ASP ASP B B 293 293 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5567 OD2   OD2   . ASP ASP ASP B B 293 293 . 0.0611 0.0300 0.0257 0.0130
0.0038  0.0014  1 .
5568 C     C     . ASP ASP ASP B B 293 293 . 0.0328 0.0272 0.0328 0.0000
0.0071  0.0006  1 .
5569 O     O     . ASP ASP ASP B B 293 293 . 0.0289 0.0256 0.0258 0.0010  -
0.0013 -0.0003 1 .
5570 N     N     . PRO PRO PRO B B 294 294 . 0.0304 0.0277 0.0259 0.0034
0.0018  0.0012  1 .
5571 CA    CA    . PRO PRO PRO B B 294 294 . 0.0306 0.0255 0.0273 -0.0011 -
0.0032 0.0007  1 .
5572 CB    CB    . PRO PRO PRO B B 294 294 . 0.0301 0.0253 0.0267 0.0002
0.0023  0.0000  1 .
5573 CG    CG    . PRO PRO PRO B B 294 294 . 0.0410 0.0535 0.0321 -0.0210 -
0.0103 0.0138  1 .
5574 CD    CD    . PRO PRO PRO B B 294 294 . 0.0262 0.0263 0.0253 -0.0009 -
0.0002 0.0002  1 .
5575 C     C     . PRO PRO PRO B B 294 294 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5576 O     O     . PRO PRO PRO B B 294 294 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5577 N     N     . PHE PHE PHE B B 295 295 . 0.0293 0.0255 0.0266 0.0009  -
0.0023 -0.0005 1 .
5578 CA    CA    . PHE PHE PHE B B 295 295 . 0.0296 0.0253 0.0264 -0.0001 -
0.0021 0.0000  1 .
5579 CB    CB    . PHE PHE PHE B B 295 295 . 0.0384 0.0273 0.0255 0.0052  -
0.0017 -0.0006 1 .
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5580 CG    CG    . PHE PHE PHE B B 295 295 . 0.0301 0.0349 0.0301 -0.0067 -
0.0036 0.0059  1 .
5581 CD1   CD1   . PHE PHE PHE B B 295 295 . 0.0319 0.0533 0.0302 -0.0002
0.0041  0.0078  1 .
5582 CE1   CE1   . PHE PHE PHE B B 295 295 . 0.0259 0.0377 0.0446 -0.0024 -
0.0030 0.0155  1 .
5583 CZ    CZ    . PHE PHE PHE B B 295 295 . 0.0326 0.0356 0.0274 0.0087
0.0039  0.0046  1 .
5584 CE2   CE2   . PHE PHE PHE B B 295 295 . 0.0387 0.0630 0.0264 0.0224
0.0038  0.0064  1 .
5585 CD2   CD2   . PHE PHE PHE B B 295 295 . 0.0452 0.0402 0.0267 0.0172
0.0053  0.0045  1 .
5586 C     C     . PHE PHE PHE B B 295 295 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5587 O     O     . PHE PHE PHE B B 295 295 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5588 N     N     . ASP ASP ASP B B 296 296 . 0.0428 0.0501 0.0253 -0.0208
0.0000  0.0000  1 .
5589 CA    CA    . ASP ASP ASP B B 296 296 . 0.0255 0.0263 0.0262 0.0005  -
0.0004 -0.0010 1 .
5590 CB    CB    . ASP ASP ASP B B 296 296 . 0.0328 0.0259 0.0351 -0.0022
0.0085  -0.0025 1 .
5591 CG    CG    . ASP ASP ASP B B 296 296 . 0.0938 0.0714 0.0442 0.0197  -
0.0244 -0.0203 1 .
5592 OD1   OD1   . ASP ASP ASP B B 296 296 . 0.0947 0.0407 0.0469 -0.0034 -
0.0320 -0.0086 1 .
5593 OD2   OD2   . ASP ASP ASP B B 296 296 . 0.0466 0.0253 0.0393 0.0007  -
0.0172 -0.0005 1 .
5594 C     C     . ASP ASP ASP B B 296 296 . 0.0548 0.0263 0.0342 -0.0053 -
0.0162 0.0029  1 .
5595 O     O     . ASP ASP ASP B B 296 296 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5596 N     N     . GLN GLN GLN B B 297 297 . 0.0253 0.0260 0.0299 -0.0001 -
0.0003 0.0018  1 .
5597 CA    CA    . GLN GLN GLN B B 297 297 . 0.0327 0.0259 0.0308 0.0007
0.0006  0.0018  1 .
5598 CB    CB    . GLN GLN GLN B B 297 297 . 0.0336 0.0256 0.0279 -0.0014 -
0.0046 0.0008  1 .
5599 CG    CG    . GLN GLN GLN B B 297 297 . 0.0264 0.0255 0.0253 0.0004  -
0.0002 -0.0001 1 .
5600 CD    CD    . GLN GLN GLN B B 297 297 . 0.0679 0.0668 0.0281 -0.0031 -
0.0035 0.0105  1 .
5601 OE1   OE1   . GLN GLN GLN B B 297 297 . 0.1166 0.0263 0.0789 0.0017  -
0.0118 0.0069  1 .
5602 NE2   NE2   . GLN GLN GLN B B 297 297 . 0.0618 0.0543 0.0444 0.0249  -
0.0102 0.0068  1 .
5603 C     C     . GLN GLN GLN B B 297 297 . 0.0367 0.0310 0.0277 -0.0067 -
0.0027 0.0033  1 .
5604 O     O     . GLN GLN GLN B B 297 297 . 0.0257 0.0270 0.0258 0.0008
0.0004  0.0009  1 .
5605 N     N     . ASP ASP ASP B B 298 298 . 0.0322 0.0279 0.0260 -0.0042
0.0022  -0.0013 1 .
5606 CA    CA    . ASP ASP ASP B B 298 298 . 0.0410 0.0257 0.0295 0.0007
0.0077  0.0000  1 .
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5607 CB    CB    . ASP ASP ASP B B 298 298 . 0.0284 0.0254 0.0280 -0.0006
0.0028  -0.0006 1 .
5608 CG    CG    . ASP ASP ASP B B 298 298 . 0.0253 0.0361 0.0462 -0.0007 -
0.0010 0.0150  1 .
5609 OD1   OD1   . ASP ASP ASP B B 298 298 . 0.0460 0.0349 0.0968 0.0119  -
0.0187 -0.0229 1 .
5610 OD2   OD2   . ASP ASP ASP B B 298 298 . 0.0819 0.0747 0.0649 -0.0053
0.0351  -0.0273 1 .
5611 C     C     . ASP ASP ASP B B 298 298 . 0.0256 0.0307 0.0307 0.0013
0.0013  0.0054  1 .
5612 O     O     . ASP ASP ASP B B 298 298 . 0.0289 0.0253 0.0258 0.0000  -
0.0014 0.0000  1 .
5613 N     N     . ASP ASP ASP B B 299 299 . 0.0290 0.0253 0.0253 0.0003
0.0000  0.0000  1 .
5614 CA    CA    . ASP ASP ASP B B 299 299 . 0.0259 0.0267 0.0270 0.0009  -
0.0010 -0.0015 1 .
5615 CB    CB    . ASP ASP ASP B B 299 299 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5616 CG    CG    . ASP ASP ASP B B 299 299 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5617 OD1   OD1   . ASP ASP ASP B B 299 299 . 0.0275 0.0275 0.0486 -0.0017 -
0.0029 -0.0015 1 .
5618 OD2   OD2   . ASP ASP ASP B B 299 299 . 0.0524 0.0292 0.0715 0.0040  -
0.0095 -0.0133 1 .
5619 C     C     . ASP ASP ASP B B 299 299 . 0.0255 0.0253 0.0267 0.0000  -
0.0005 -0.0002 1 .
5620 O     O     . ASP ASP ASP B B 299 299 . 0.0359 0.0416 0.0279 0.0131
0.0052  0.0065  1 .
5621 N     N     . TRP TRP TRP B B 300 300 . 0.0287 0.0268 0.0270 -0.0022 -
0.0024 0.0016  1 .
5622 CA    CA    . TRP TRP TRP B B 300 300 . 0.0303 0.0326 0.0377 -0.0011 -
0.0026 0.0093  1 .
5623 CB    CB    . TRP TRP TRP B B 300 300 . 0.0256 0.0340 0.0345 0.0015
0.0016  0.0089  1 .
5624 CG    CG    . TRP TRP TRP B B 300 300 . 0.0263 0.0290 0.0265 0.0019  -
0.0010 -0.0021 1 .
5625 CD1   CD1   . TRP TRP TRP B B 300 300 . 0.0561 0.0471 0.0633 0.0075
0.0076  -0.0066 1 .
5626 NE1   NE1   . TRP TRP TRP B B 300 300 . 0.0316 0.0314 0.0448 0.0046
0.0063  -0.0013 1 .
5627 CE2   CE2   . TRP TRP TRP B B 300 300 . 0.0311 0.0412 0.0433 0.0006
0.0088  -0.0075 1 .
5628 CD2   CD2   . TRP TRP TRP B B 300 300 . 0.0546 0.0414 0.0342 0.0208  -
0.0161 -0.0112 1 .
5629 CE3   CE3   . TRP TRP TRP B B 300 300 . 0.0733 0.0295 0.0555 -0.0090 -
0.0259 -0.0015 1 .
5630 CZ3   CZ3   . TRP TRP TRP B B 300 300 . 0.0301 0.0499 0.0361 -0.0081 -
0.0044 -0.0012 1 .
5631 CH2   CH2   . TRP TRP TRP B B 300 300 . 0.0793 0.0413 0.0383 0.0020  -
0.0203 0.0084  1 .
5632 CZ2   CZ2   . TRP TRP TRP B B 300 300 . 0.0511 0.0302 0.0641 -0.0113 -
0.0183 0.0081  1 .
5633 C     C     . TRP TRP TRP B B 300 300 . 0.0253 0.0255 0.0263 0.0000
0.0001  0.0004  1 .
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5634 O     O     . TRP TRP TRP B B 300 300 . 0.0401 0.0382 0.0342 0.0119  -
0.0012 0.0044  1 .
5635 N     N     . ALA ALA ALA B B 301 301 . 0.0494 0.0435 0.0464 -0.0136
0.0060  0.0109  1 .
5636 CA    CA    . ALA ALA ALA B B 301 301 . 0.0255 0.0253 0.0254 0.0000
0.0001  0.0000  1 .
5637 CB    CB    . ALA ALA ALA B B 301 301 . 0.0272 0.0254 0.0271 0.0005
0.0018  0.0004  1 .
5638 C     C     . ALA ALA ALA B B 301 301 . 0.0285 0.0256 0.0320 -0.0010
0.0046  -0.0014 1 .
5639 O     O     . ALA ALA ALA B B 301 301 . 0.0262 0.0256 0.0255 -0.0005
0.0003  -0.0002 1 .
5640 N     N     . ALA ALA ALA B B 302 302 . 0.0266 0.0259 0.0266 0.0009
0.0013  0.0009  1 .
5641 CA    CA    . ALA ALA ALA B B 302 302 . 0.0267 0.0272 0.0261 0.0016
0.0010  0.0012  1 .
5642 CB    CB    . ALA ALA ALA B B 302 302 . 0.0627 0.0267 0.0324 -0.0004
0.0028  0.0031  1 .
5643 C     C     . ALA ALA ALA B B 302 302 . 0.0345 0.0254 0.0266 0.0005  -
0.0023 -0.0004 1 .
5644 O     O     . ALA ALA ALA B B 302 302 . 0.0370 0.0357 0.0440 0.0074
0.0053  -0.0061 1 .
5645 N     N     . TRP TRP TRP B B 303 303 . 0.0263 0.0260 0.0424 -0.0008 -
0.0042 0.0035  1 .
5646 CA    CA    . TRP TRP TRP B B 303 303 . 0.0378 0.0323 0.0341 -0.0093 -
0.0072 0.0058  1 .
5647 CB    CB    . TRP TRP TRP B B 303 303 . 0.0271 0.0253 0.0274 0.0000  -
0.0019 0.0000  1 .
5648 CG    CG    . TRP TRP TRP B B 303 303 . 0.0584 0.0316 0.0262 -0.0143
0.0031  -0.0011 1 .
5649 CD1   CD1   . TRP TRP TRP B B 303 303 . 0.0652 0.0419 0.0336 0.0113  -
0.0136 -0.0108 1 .
5650 NE1   NE1   . TRP TRP TRP B B 303 303 . 0.0478 0.0347 0.0288 0.0145  -
0.0088 -0.0057 1 .
5651 CE2   CE2   . TRP TRP TRP B B 303 303 . 0.0402 0.0403 0.0390 -0.0149 -
0.0143 0.0143  1 .
5652 CD2   CD2   . TRP TRP TRP B B 303 303 . 0.0346 0.0269 0.0262 0.0038  -
0.0029 -0.0012 1 .
5653 CE3   CE3   . TRP TRP TRP B B 303 303 . 0.0783 0.0421 0.0376 -0.0031
0.0234  -0.0071 1 .
5654 CZ3   CZ3   . TRP TRP TRP B B 303 303 . 0.0325 0.0254 0.0331 -0.0010 -
0.0075 0.0010  1 .
5655 CH2   CH2   . TRP TRP TRP B B 303 303 . 0.0599 0.0595 0.0429 0.0118
0.0204  -0.0058 1 .
5656 CZ2   CZ2   . TRP TRP TRP B B 303 303 . 0.0314 0.0296 0.0261 0.0051
0.0022  0.0018  1 .
5657 C     C     . TRP TRP TRP B B 303 303 . 0.0533 0.0267 0.0324 -0.0057
0.0053  -0.0022 1 .
5658 O     O     . TRP TRP TRP B B 303 303 . 0.0655 0.0343 0.0318 0.0190  -
0.0162 -0.0076 1 .
5659 N     N     . SER SER SER B B 304 304 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5660 CA    CA    . SER SER SER B B 304 304 . 0.0334 0.0350 0.0290 0.0088  -
0.0054 -0.0060 1 .
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5661 CB    CB    . SER SER SER B B 304 304 . 0.0451 0.0254 0.0255 -0.0013 -
0.0021 0.0001  1 .
5662 OG    OG    . SER SER SER B B 304 304 . 0.0304 0.0256 0.0338 -0.0013 -
0.0066 0.0017  1 .
5663 C     C     . SER SER SER B B 304 304 . 0.0379 0.0324 0.0441 0.0058  -
0.0025 0.0077  1 .
5664 O     O     . SER SER SER B B 304 304 . 0.0828 0.0366 0.0330 0.0121  -
0.0032 0.0074  1 .
5665 N     N     . LYS LYS LYS B B 305 305 . 0.0403 0.0292 0.0260 0.0076  -
0.0033 -0.0016 1 .
5666 CA    CA    . LYS LYS LYS B B 305 305 . 0.0786 0.0787 0.0673 0.0106  -
0.0050 0.0073  1 .
5667 CB    CB    . LYS LYS LYS B B 305 305 . 0.0855 0.0996 0.0804 -0.0122
0.0010  0.0122  1 .
5668 CG    CG    . LYS LYS LYS B B 305 305 . 0.1463 0.1381 0.1634 -0.0129
0.0040  -0.0366 1 .
5669 CD    CD    . LYS LYS LYS B B 305 305 . 0.2226 0.1912 0.2938 -0.0221
0.0339  -0.0080 1 .
5670 CE    CE    . LYS LYS LYS B B 305 305 . 0.2278 0.2407 0.3027 -0.0430
0.0127  -0.0027 1 .
5671 NZ    NZ    . LYS LYS LYS B B 305 305 . 0.1911 0.2519 0.3877 -0.1338
0.0987  0.0431  1 .
5672 C     C     . LYS LYS LYS B B 305 305 . 0.0836 0.0634 0.0542 -0.0052
0.0088  -0.0052 1 .
5673 O     O     . LYS LYS LYS B B 305 305 . 0.0759 0.0684 0.0456 0.0054  -
0.0059 0.0058  1 .
5674 N     N     . PHE PHE PHE B B 306 306 . 0.0596 0.0549 0.0485 0.0105  -
0.0080 0.0213  1 .
5675 CA    CA    . PHE PHE PHE B B 306 306 . 0.0436 0.0556 0.0370 0.0107  -
0.0092 0.0075  1 .
5676 CB    CB    . PHE PHE PHE B B 306 306 . 0.0444 0.0475 0.0469 0.0203  -
0.0098 -0.0134 1 .
5677 CG    CG    . PHE PHE PHE B B 306 306 . 0.0323 0.0442 0.0550 0.0115  -
0.0144 -0.0236 1 .
5678 CD1   CD1   . PHE PHE PHE B B 306 306 . 0.0875 0.0726 0.0750 0.0229
0.0238  -0.0309 1 .
5679 CE1   CE1   . PHE PHE PHE B B 306 306 . 0.1153 0.0880 0.1029 -0.0007 -
0.0023 -0.0048 1 .
5680 CZ    CZ    . PHE PHE PHE B B 306 306 . 0.1026 0.0702 0.0655 0.0126
0.0094  -0.0393 1 .
5681 CE2   CE2   . PHE PHE PHE B B 306 306 . 0.0809 0.0525 0.0735 0.0334
0.0041  -0.0159 1 .
5682 CD2   CD2   . PHE PHE PHE B B 306 306 . 0.0608 0.0466 0.0491 0.0275  -
0.0290 -0.0225 1 .
5683 C     C     . PHE PHE PHE B B 306 306 . 0.0497 0.0351 0.0262 0.0155
0.0046  0.0029  1 .
5684 O     O     . PHE PHE PHE B B 306 306 . 0.0676 0.0543 0.0339 0.0169
0.0118  -0.0061 1 .
5685 N     N     . THR THR THR B B 307 307 . 0.0361 0.0254 0.0253 -0.0010
0.0000  0.0000  1 .
5686 CA    CA    . THR THR THR B B 307 307 . 0.0372 0.0506 0.0259 0.0050
0.0006  -0.0033 1 .
5687 CB    CB    . THR THR THR B B 307 307 . 0.0390 0.0351 0.0268 0.0034
0.0006  -0.0035 1 .
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5688 OG1   OG1   . THR THR THR B B 307 307 . 0.0310 0.0255 0.0253 0.0010
0.0005  0.0000  1 .
5689 CG2   CG2   . THR THR THR B B 307 307 . 0.0593 0.0506 0.0336 -0.0156 -
0.0165 0.0054  1 .
5690 C     C     . THR THR THR B B 307 307 . 0.0813 0.0369 0.0286 -0.0024 -
0.0105 -0.0034 1 .
5691 O     O     . THR THR THR B B 307 307 . 0.0911 0.0439 0.0437 0.0344  -
0.0140 -0.0103 1 .
5692 N     N     . ALA ALA ALA B B 308 308 . 0.0722 0.0274 0.0278 0.0015
0.0009  -0.0022 1 .
5693 CA    CA    . ALA ALA ALA B B 308 308 . 0.0562 0.0477 0.0321 0.0154  -
0.0145 -0.0067 1 .
5694 CB    CB    . ALA ALA ALA B B 308 308 . 0.0469 0.0357 0.0376 0.0146
0.0089  0.0080  1 .
5695 C     C     . ALA ALA ALA B B 308 308 . 0.0612 0.0433 0.0380 0.0079  -
0.0025 -0.0092 1 .
5696 O     O     . ALA ALA ALA B B 308 308 . 0.0747 0.0859 0.0529 0.0304  -
0.0005 -0.0343 1 .
5697 N     N     . ASN ASN ASN B B 309 309 . 0.0451 0.0516 0.0325 0.0224
0.0075  0.0105  1 .
5698 CA    CA    . ASN ASN ASN B B 309 309 . 0.0607 0.0358 0.0554 0.0047  -
0.0053 0.0036  1 .
5699 CB    CB    . ASN ASN ASN B B 309 309 . 0.0679 0.0741 0.0777 -0.0022 -
0.0030 -0.0153 1 .
5700 CG    CG    . ASN ASN ASN B B 309 309 . 0.1683 0.1132 0.1223 -0.0155 -
0.0026 0.0009  1 .
5701 OD1   OD1   . ASN ASN ASN B B 309 309 . 0.3013 0.1853 0.1967 -0.0403 -
0.0322 -0.0200 1 .
5702 ND2   ND2   . ASN ASN ASN B B 309 309 . 0.2695 0.2020 0.2342 -0.0403
0.0231  -0.0278 1 .
5703 C     C     . ASN ASN ASN B B 309 309 . 0.0597 0.0424 0.0445 -0.0052
0.0016  -0.0076 1 .
5704 O     O     . ASN ASN ASN B B 309 309 . 0.0715 0.0839 0.0567 -0.0071 -
0.0118 0.0163  1 .
5705 N     N     . VAL VAL VAL B B 310 310 . 0.0588 0.0350 0.0310 -0.0151
0.0064  -0.0064 1 .
5706 CA    CA    . VAL VAL VAL B B 310 310 . 0.0489 0.0611 0.0374 0.0050  -
0.0163 -0.0084 1 .
5707 CB    CB    . VAL VAL VAL B B 310 310 . 0.0428 0.0451 0.0391 -0.0131
0.0150  -0.0083 1 .
5708 CG1   CG1   . VAL VAL VAL B B 310 310 . 0.0546 0.0357 0.0728 -0.0041 -
0.0372 0.0068  1 .
5709 CG2   CG2   . VAL VAL VAL B B 310 310 . 0.0477 0.0605 0.0422 0.0280  -
0.0194 -0.0244 1 .
5710 C     C     . VAL VAL VAL B B 310 310 . 0.0267 0.0389 0.0253 0.0043  -
0.0001 -0.0005 1 .
5711 O     O     . VAL VAL VAL B B 310 310 . 0.0395 0.0442 0.0279 0.0100
0.0039  -0.0014 1 .
5712 N     N     . GLY GLY GLY B B 311 311 . 0.0253 0.0283 0.0253 -0.0003
0.0000  -0.0003 1 .
5713 CA    CA    . GLY GLY GLY B B 311 311 . 0.0302 0.0395 0.0328 0.0029  -
0.0027 0.0070  1 .
5714 C     C     . GLY GLY GLY B B 311 311 . 0.0253 0.0254 0.0253 0.0000
0.0000  0.0000  1 .
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5715 O     O     . GLY GLY GLY B B 311 311 . 0.0604 0.0698 0.0275 0.0113  -
0.0002 -0.0095 1 .
5716 N     N     . ILE ILE ILE B B 312 312 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5717 CA    CA    . ILE ILE ILE B B 312 312 . 0.0268 0.0305 0.0253 -0.0028 -
0.0003 0.0005  1 .
5718 CB    CB    . ILE ILE ILE B B 312 312 . 0.0489 0.0348 0.0268 0.0018  -
0.0056 -0.0014 1 .
5719 CG1   CG1   . ILE ILE ILE B B 312 312 . 0.0794 0.0607 0.0286 -0.0053 -
0.0134 0.0019  1 .
5720 CD1   CD1   . ILE ILE ILE B B 312 312 . 0.0757 0.0706 0.0695 -0.0080 -
0.0434 -0.0104 1 .
5721 CG2   CG2   . ILE ILE ILE B B 312 312 . 0.0528 0.0553 0.0474 -0.0147
0.0210  0.0001  1 .
5722 C     C     . ILE ILE ILE B B 312 312 . 0.0277 0.0253 0.0253 0.0002
0.0000  0.0000  1 .
5723 O     O     . ILE ILE ILE B B 312 312 . 0.0268 0.0321 0.0265 0.0031  -
0.0013 -0.0028 1 .
5724 N     N     . GLN GLN GLN B B 313 313 . 0.0257 0.0387 0.0254 -0.0023 -
0.0002 0.0013  1 .
5725 CA    CA    . GLN GLN GLN B B 313 313 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5726 CB    CB    . GLN GLN GLN B B 313 313 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5727 CG    CG    . GLN GLN GLN B B 313 313 . 0.0443 0.0394 0.0489 0.0103
0.0207  0.0083  1 .
5728 CD    CD    . GLN GLN GLN B B 313 313 . 0.0269 0.0721 0.0289 0.0061
0.0021  0.0035  1 .
5729 OE1   OE1   . GLN GLN GLN B B 313 313 . 0.0695 0.0259 0.0753 -0.0042 -
0.0088 0.0040  1 .
5730 NE2   NE2   . GLN GLN GLN B B 313 313 . 0.0258 0.0409 0.0585 0.0028
0.0042  0.0227  1 .
5731 C     C     . GLN GLN GLN B B 313 313 . 0.0357 0.0353 0.0312 0.0092
0.0057  0.0028  1 .
5732 O     O     . GLN GLN GLN B B 313 313 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5733 N     N     . ILE ILE ILE B B 314 314 . 0.0312 0.0268 0.0253 0.0030
0.0005  0.0002  1 .
5734 CA    CA    . ILE ILE ILE B B 314 314 . 0.0350 0.0262 0.0262 -0.0030 -
0.0030 0.0009  1 .
5735 CB    CB    . ILE ILE ILE B B 314 314 . 0.0572 0.0253 0.0254 -0.0010
0.0021  0.0000  1 .
5736 CG1   CG1   . ILE ILE ILE B B 314 314 . 0.0595 0.0616 0.0469 -0.0076
0.0176  0.0109  1 .
5737 CD1   CD1   . ILE ILE ILE B B 314 314 . 0.0460 0.0397 0.0324 0.0172
0.0121  0.0101  1 .
5738 CG2   CG2   . ILE ILE ILE B B 314 314 . 0.0336 0.0253 0.0284 0.0003
0.0050  0.0002  1 .
5739 C     C     . ILE ILE ILE B B 314 314 . 0.0255 0.0253 0.0258 0.0000  -
0.0002 0.0000  1 .
5740 O     O     . ILE ILE ILE B B 314 314 . 0.0403 0.0298 0.0290 -0.0082 -
0.0075 0.0041  1 .
5741 N     N     . VAL VAL VAL B B 315 315 . 0.0330 0.0253 0.0258 0.0000  -
0.0019 0.0000  1 .
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5742 CA    CA    . VAL VAL VAL B B 315 315 . 0.0258 0.0263 0.0282 0.0007  -
0.0012 -0.0017 1 .
5743 CB    CB    . VAL VAL VAL B B 315 315 . 0.0275 0.0394 0.0272 -0.0004
0.0012  -0.0043 1 .
5744 CG1   CG1   . VAL VAL VAL B B 315 315 . 0.0385 0.0459 0.0317 0.0165  -
0.0092 -0.0115 1 .
5745 CG2   CG2   . VAL VAL VAL B B 315 315 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5746 C     C     . VAL VAL VAL B B 315 315 . 0.0371 0.0276 0.0281 -0.0042
0.0049  -0.0010 1 .
5747 O     O     . VAL VAL VAL B B 315 315 . 0.0429 0.0277 0.0299 -0.0065 -
0.0090 0.0033  1 .
5748 N     N     . GLY GLY GLY B B 316 316 . 0.0278 0.0254 0.0253 0.0005
0.0003  0.0000  1 .
5749 CA    CA    . GLY GLY GLY B B 316 316 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5750 C     C     . GLY GLY GLY B B 316 316 . 0.0253 0.0284 0.0316 0.0000
0.0001  0.0044  1 .
5751 O     O     . GLY GLY GLY B B 316 316 . 0.0397 0.0355 0.0270 0.0019  -
0.0035 0.0024  1 .
5752 N     N     . ASP ASP ASP B B 317 317 . 0.0289 0.0289 0.0258 0.0036
0.0014  0.0014  1 .
5753 CA    CA    . ASP ASP ASP B B 317 317 . 0.0339 0.0453 0.0256 0.0123  -
0.0012 -0.0022 1 .
5754 CB    CB    . ASP ASP ASP B B 317 317 . 0.0318 0.0313 0.0258 0.0062  -
0.0018 -0.0017 1 .
5755 CG    CG    . ASP ASP ASP B B 317 317 . 0.0518 0.0496 0.0311 0.0253
0.0123  0.0118  1 .
5756 OD1   OD1   . ASP ASP ASP B B 317 317 . 0.0255 0.0318 0.0284 -0.0012
0.0008  -0.0044 1 .
5757 OD2   OD2   . ASP ASP ASP B B 317 317 . 0.0256 0.0254 0.0253 -0.0001 -
0.0001 0.0000  1 .
5758 C     C     . ASP ASP ASP B B 317 317 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5759 O     O     . ASP ASP ASP B B 317 317 . 0.0389 0.0367 0.0492 0.0124  -
0.0008 -0.0015 1 .
5760 N     N     . ASP ASP ASP B B 318 318 . 0.0267 0.0253 0.0256 -0.0001 -
0.0006 0.0000  1 .
5761 CA    CA    . ASP ASP ASP B B 318 318 . 0.0306 0.0373 0.0254 0.0079  -
0.0006 -0.0010 1 .
5762 CB    CB    . ASP ASP ASP B B 318 318 . 0.0321 0.0375 0.0319 -0.0024
0.0010  0.0081  1 .
5763 CG    CG    . ASP ASP ASP B B 318 318 . 0.0313 0.0431 0.0416 0.0103  -
0.0098 -0.0170 1 .
5764 OD1   OD1   . ASP ASP ASP B B 318 318 . 0.0584 0.0771 0.0532 0.0278  -
0.0177 -0.0058 1 .
5765 OD2   OD2   . ASP ASP ASP B B 318 318 . 0.0541 0.0343 0.0392 0.0108  -
0.0023 0.0073  1 .
5766 C     C     . ASP ASP ASP B B 318 318 . 0.0408 0.0269 0.0281 -0.0045
0.0066  -0.0019 1 .
5767 O     O     . ASP ASP ASP B B 318 318 . 0.0262 0.0326 0.0347 0.0019
0.0014  0.0077  1 .
5768 N     N     . LEU LEU LEU B B 319 319 . 0.0282 0.0388 0.0308 0.0055  -
0.0018 -0.0070 1 .
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5769 CA    CA    . LEU LEU LEU B B 319 319 . 0.0269 0.0255 0.0255 0.0006  -
0.0005 -0.0002 1 .
5770 CB    CB    . LEU LEU LEU B B 319 319 . 0.0417 0.0409 0.0267 0.0160
0.0048  0.0047  1 .
5771 CG    CG    . LEU LEU LEU B B 319 319 . 0.0584 0.0253 0.0342 0.0000  -
0.0171 0.0000  1 .
5772 CD1   CD1   . LEU LEU LEU B B 319 319 . 0.0504 0.0371 0.0291 -0.0171
0.0098  -0.0067 1 .
5773 CD2   CD2   . LEU LEU LEU B B 319 319 . 0.0274 0.0357 0.0342 0.0047  -
0.0043 -0.0096 1 .
5774 C     C     . LEU LEU LEU B B 319 319 . 0.0317 0.0256 0.0254 0.0013
0.0008  0.0001  1 .
5775 O     O     . LEU LEU LEU B B 319 319 . 0.0556 0.0256 0.0255 0.0028  -
0.0023 -0.0002 1 .
5776 N     N     . THR THR THR B B 320 320 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5777 CA    CA    . THR THR THR B B 320 320 . 0.0427 0.0302 0.0253 0.0092
0.0009  0.0005  1 .
5778 CB    CB    . THR THR THR B B 320 320 . 0.0334 0.0328 0.0266 -0.0077 -
0.0032 0.0030  1 .
5779 OG1   OG1   . THR THR THR B B 320 320 . 0.0308 0.0291 0.0574 0.0037
0.0112  0.0109  1 .
5780 CG2   CG2   . THR THR THR B B 320 320 . 0.1004 0.0539 0.0335 0.0152
0.0201  -0.0044 1 .
5781 C     C     . THR THR THR B B 320 320 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5782 O     O     . THR THR THR B B 320 320 . 0.0405 0.0300 0.0278 0.0084
0.0061  0.0034  1 .
5783 N     N     . VAL VAL VAL B B 321 321 . 0.0687 0.0319 0.0258 0.0169
0.0049  0.0019  1 .
5784 CA    CA    . VAL VAL VAL B B 321 321 . 0.0573 0.0258 0.0278 0.0039
0.0077  0.0008  1 .
5785 CB    CB    . VAL VAL VAL B B 321 321 . 0.0319 0.0329 0.0345 0.0047
0.0006  -0.0057 1 .
5786 CG1   CG1   . VAL VAL VAL B B 321 321 . 0.0326 0.0253 0.0414 0.0000
0.0108  -0.0001 1 .
5787 CG2   CG2   . VAL VAL VAL B B 321 321 . 0.1133 0.0493 0.0468 0.0248  -
0.0086 -0.0211 1 .
5788 C     C     . VAL VAL VAL B B 321 321 . 0.0304 0.0344 0.0253 0.0068
0.0000  0.0000  1 .
5789 O     O     . VAL VAL VAL B B 321 321 . 0.0779 0.0419 0.0421 0.0243  -
0.0108 0.0038  1 .
5790 N     N     . THR THR THR B B 322 322 . 0.0331 0.0260 0.0259 -0.0001 -
0.0012 0.0006  1 .
5791 CA    CA    . THR THR THR B B 322 322 . 0.0268 0.0363 0.0290 0.0027
0.0014  0.0064  1 .
5792 CB    CB    . THR THR THR B B 322 322 . 0.0265 0.0677 0.0374 0.0065
0.0035  0.0226  1 .
5793 OG1   OG1   . THR THR THR B B 322 322 . 0.0283 0.0494 0.0290 0.0086
0.0033  0.0094  1 .
5794 CG2   CG2   . THR THR THR B B 322 322 . 0.0792 0.0477 0.0296 0.0345
0.0142  0.0095  1 .
5795 C     C     . THR THR THR B B 322 322 . 0.0303 0.0373 0.0444 0.0070
0.0093  0.0149  1 .
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5796 O     O     . THR THR THR B B 322 322 . 0.0550 0.0275 0.0401 0.0057
0.0068  0.0051  1 .
5797 N     N     . ASN ASN ASN B B 323 323 . 0.0305 0.0400 0.0277 0.0087
0.0035  0.0060  1 .
5798 CA    CA    . ASN ASN ASN B B 323 323 . 0.0755 0.0631 0.0436 0.0207
0.0061  0.0070  1 .
5799 CB    CB    . ASN ASN ASN B B 323 323 . 0.0973 0.0779 0.0473 0.0179  -
0.0021 0.0211  1 .
5800 CG    CG    . ASN ASN ASN B B 323 323 . 0.1116 0.1489 0.0517 0.0378
0.0073  -0.0038 1 .
5801 OD1   OD1   . ASN ASN ASN B B 323 323 . 0.1397 0.1232 0.1452 0.0193  -
0.0252 -0.0516 1 .
5802 ND2   ND2   . ASN ASN ASN B B 323 323 . 0.1089 0.1010 0.1013 0.0548  -
0.0110 -0.0151 1 .
5803 C     C     . ASN ASN ASN B B 323 323 . 0.0608 0.0516 0.0545 0.0192
0.0006  0.0033  1 .
5804 O     O     . ASN ASN ASN B B 323 323 . 0.0961 0.0778 0.0627 0.0204
0.0139  0.0198  1 .
5805 N     N     . PRO PRO PRO B B 324 324 . 0.0761 0.0513 0.0616 0.0230  -
0.0099 0.0151  1 .
5806 CA    CA    . PRO PRO PRO B B 324 324 . 0.0773 0.0705 0.0322 -0.0046
0.0028  -0.0007 1 .
5807 CB    CB    . PRO PRO PRO B B 324 324 . 0.0771 0.0732 0.0781 0.0098
0.0029  0.0018  1 .
5808 CG    CG    . PRO PRO PRO B B 324 324 . 0.0496 0.0549 0.0638 -0.0060 -
0.0113 0.0023  1 .
5809 CD    CD    . PRO PRO PRO B B 324 324 . 0.0739 0.0791 0.0725 -0.0033
0.0070  0.0004  1 .
5810 C     C     . PRO PRO PRO B B 324 324 . 0.1092 0.0719 0.0694 0.0038  -
0.0162 -0.0024 1 .
5811 O     O     . PRO PRO PRO B B 324 324 . 0.1222 0.0956 0.0896 0.0167  -
0.0151 -0.0040 1 .
5812 N     N     . LYS LYS LYS B B 325 325 . 0.0855 0.0807 0.0814 0.0216
0.0084  0.0036  1 .
5813 CA    CA    . LYS LYS LYS B B 325 325 . 0.1047 0.0772 0.0926 0.0251  -
0.0043 0.0203  1 .
5814 CB    CB    . LYS LYS LYS B B 325 325 . 0.1211 0.1118 0.0887 0.0271  -
0.0148 0.0218  1 .
5815 CG    CG    . LYS LYS LYS B B 325 325 . 0.1326 0.1490 0.1728 0.0489
0.0037  0.0312  1 .
5816 CD    CD    . LYS LYS LYS B B 325 325 . 0.2428 0.2588 0.2699 0.0645
0.0090  -0.0293 1 .
5817 CE    CE    . LYS LYS LYS B B 325 325 . 0.2414 0.3381 0.3033 0.0371
0.0040  -0.0301 1 .
5818 NZ    NZ    . LYS LYS LYS B B 325 325 . 0.2806 0.3263 0.3203 0.0410  -
0.0373 0.0137  1 .
5819 C     C     . LYS LYS LYS B B 325 325 . 0.1016 0.0671 0.0896 0.0149  -
0.0021 0.0133  1 .
5820 O     O     . LYS LYS LYS B B 325 325 . 0.1267 0.1123 0.1020 -0.0012 -
0.0104 0.0271  1 .
5821 N     N     . ARG ARG ARG B B 326 326 . 0.0739 0.0298 0.0742 -0.0032 -
0.0120 0.0122  1 .
5822 CA    CA    . ARG ARG ARG B B 326 326 . 0.0407 0.0451 0.0259 0.0170
0.0016  0.0024  1 .
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5823 CB    CB    . ARG ARG ARG B B 326 326 . 0.0539 0.0649 0.0690 -0.0050 -
0.0178 -0.0323 1 .
5824 CG    CG    . ARG ARG ARG B B 326 326 . 0.0489 0.0748 0.0854 -0.0010
0.0112  -0.0475 1 .
5825 CD    CD    . ARG ARG ARG B B 326 326 . 0.0655 0.0676 0.1286 -0.0202
0.0570  -0.0017 1 .
5826 NE    NE    . ARG ARG ARG B B 326 326 . 0.0528 0.0645 0.1121 0.0219
0.0142  -0.0133 1 .
5827 CZ    CZ    . ARG ARG ARG B B 326 326 . 0.0801 0.0505 0.0536 0.0149
0.0137  0.0266  1 .
5828 NH1   NH1   . ARG ARG ARG B B 326 326 . 0.0479 0.0465 0.0696 0.0188
0.0016  -0.0140 1 .
5829 NH2   NH2   . ARG ARG ARG B B 326 326 . 0.0310 0.0369 0.0316 0.0082
0.0060  0.0085  1 .
5830 C     C     . ARG ARG ARG B B 326 326 . 0.0690 0.0507 0.0555 -0.0095 -
0.0091 0.0031  1 .
5831 O     O     . ARG ARG ARG B B 326 326 . 0.0760 0.0583 0.0312 -0.0095
0.0000  0.0135  1 .
5832 N     N     . ILE ILE ILE B B 327 327 . 0.0712 0.0256 0.0521 -0.0010 -
0.0188 0.0017  1 .
5833 CA    CA    . ILE ILE ILE B B 327 327 . 0.0500 0.0328 0.0271 -0.0039 -
0.0066 0.0008  1 .
5834 CB    CB    . ILE ILE ILE B B 327 327 . 0.0645 0.0451 0.0394 -0.0087 -
0.0225 0.0049  1 .
5835 CG1   CG1   . ILE ILE ILE B B 327 327 . 0.0399 0.0259 0.0253 0.0031
0.0004  0.0000  1 .
5836 CD1   CD1   . ILE ILE ILE B B 327 327 . 0.0932 0.0380 0.0536 -0.0170
0.0172  0.0099  1 .
5837 CG2   CG2   . ILE ILE ILE B B 327 327 . 0.0859 0.0340 0.0573 0.0084
0.0083  -0.0137 1 .
5838 C     C     . ILE ILE ILE B B 327 327 . 0.0562 0.0735 0.0359 0.0111  -
0.0154 0.0006  1 .
5839 O     O     . ILE ILE ILE B B 327 327 . 0.0393 0.0292 0.0258 0.0073  -
0.0026 -0.0013 1 .
5840 N     N     . GLU GLU GLU B B 328 328 . 0.0724 0.0614 0.0493 0.0011  -
0.0170 0.0094  1 .
5841 CA    CA    . GLU GLU GLU B B 328 328 . 0.0715 0.0819 0.0642 0.0103  -
0.0005 0.0019  1 .
5842 CB    CB    . GLU GLU GLU B B 328 328 . 0.0710 0.0672 0.1096 0.0332  -
0.0056 0.0190  1 .
5843 CG    CG    . GLU GLU GLU B B 328 328 . 0.1466 0.1590 0.1508 -0.0001
0.0078  0.0327  1 .
5844 CD    CD    . GLU GLU GLU B B 328 328 . 0.2621 0.2540 0.2477 -0.0339
0.0277  -0.0280 1 .
5845 OE1   OE1   . GLU GLU GLU B B 328 328 . 0.3330 0.3388 0.2081 -0.0333
0.0230  -0.0413 1 .
5846 OE2   OE2   . GLU GLU GLU B B 328 328 . 0.2622 0.2812 0.2797 -0.0217
0.0385  -0.0026 1 .
5847 C     C     . GLU GLU GLU B B 328 328 . 0.0456 0.0815 0.0745 0.0105  -
0.0065 0.0010  1 .
5848 O     O     . GLU GLU GLU B B 328 328 . 0.0581 0.0668 0.0464 -0.0028
0.0226  -0.0170 1 .
5849 N     N     . ARG ARG ARG B B 329 329 . 0.0400 0.0702 0.0491 0.0208  -
0.0068 -0.0077 1 .
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5850 CA    CA    . ARG ARG ARG B B 329 329 . 0.0571 0.0527 0.0494 0.0084  -
0.0117 -0.0040 1 .
5851 CB    CB    . ARG ARG ARG B B 329 329 . 0.0572 0.0436 0.0536 0.0128  -
0.0003 -0.0194 1 .
5852 CG    CG    . ARG ARG ARG B B 329 329 . 0.0693 0.0734 0.0848 0.0290  -
0.0291 0.0147  1 .
5853 CD    CD    . ARG ARG ARG B B 329 329 . 0.0430 0.0496 0.0464 -0.0169
0.0042  0.0087  1 .
5854 NE    NE    . ARG ARG ARG B B 329 329 . 0.0464 0.0481 0.0619 0.0031  -
0.0091 0.0060  1 .
5855 CZ    CZ    . ARG ARG ARG B B 329 329 . 0.0291 0.0880 0.0846 -0.0069
0.0144  -0.0123 1 .
5856 NH1   NH1   . ARG ARG ARG B B 329 329 . 0.0768 0.0905 0.0503 -0.0341
0.0162  0.0183  1 .
5857 NH2   NH2   . ARG ARG ARG B B 329 329 . 0.0789 0.0532 0.0703 0.0013
0.0038  0.0249  1 .
5858 C     C     . ARG ARG ARG B B 329 329 . 0.0541 0.0431 0.0600 0.0107  -
0.0041 0.0082  1 .
5859 O     O     . ARG ARG ARG B B 329 329 . 0.0379 0.0428 0.0471 0.0133
0.0013  0.0100  1 .
5860 N     N     . ALA ALA ALA B B 330 330 . 0.0479 0.0339 0.0470 0.0104  -
0.0155 -0.0007 1 .
5861 CA    CA    . ALA ALA ALA B B 330 330 . 0.0316 0.0459 0.0459 -0.0010 -
0.0029 0.0062  1 .
5862 CB    CB    . ALA ALA ALA B B 330 330 . 0.0298 0.0415 0.0289 0.0044
0.0001  0.0067  1 .
5863 C     C     . ALA ALA ALA B B 330 330 . 0.0346 0.0271 0.0355 0.0014  -
0.0033 0.0033  1 .
5864 O     O     . ALA ALA ALA B B 330 330 . 0.0468 0.0385 0.0485 0.0124  -
0.0091 0.0055  1 .
5865 N     N     . VAL VAL VAL B B 331 331 . 0.0262 0.0277 0.0384 0.0014
0.0034  0.0056  1 .
5866 CA    CA    . VAL VAL VAL B B 331 331 . 0.0427 0.0318 0.0310 0.0005
0.0070  0.0045  1 .
5867 CB    CB    . VAL VAL VAL B B 331 331 . 0.0273 0.0439 0.0573 -0.0047 -
0.0057 0.0028  1 .
5868 CG1   CG1   . VAL VAL VAL B B 331 331 . 0.0524 0.0587 0.0628 -0.0048 -
0.0277 -0.0121 1 .
5869 CG2   CG2   . VAL VAL VAL B B 331 331 . 0.1104 0.0556 0.0341 0.0137  -
0.0136 -0.0158 1 .
5870 C     C     . VAL VAL VAL B B 331 331 . 0.0772 0.0432 0.0465 0.0043
0.0157  0.0030  1 .
5871 O     O     . VAL VAL VAL B B 331 331 . 0.0828 0.0383 0.0924 -0.0071
0.0014  -0.0115 1 .
5872 N     N     . GLU GLU GLU B B 332 332 . 0.0793 0.0476 0.0427 0.0133  -
0.0059 0.0163  1 .
5873 CA    CA    . GLU GLU GLU B B 332 332 . 0.1050 0.0654 0.0494 0.0198  -
0.0153 0.0235  1 .
5874 CB    CB    . GLU GLU GLU B B 332 332 . 0.1015 0.0657 0.0398 0.0238  -
0.0102 0.0176  1 .
5875 CG    CG    . GLU GLU GLU B B 332 332 . 0.2032 0.1402 0.1585 0.0285  -
0.0317 0.0454  1 .
5876 CD    CD    . GLU GLU GLU B B 332 332 . 0.2659 0.2324 0.2615 0.0379
0.0120  0.0205  1 .
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5877 OE1   OE1   . GLU GLU GLU B B 332 332 . 0.2818 0.2401 0.3027 0.0631  -
0.0428 0.0059  1 .
5878 OE2   OE2   . GLU GLU GLU B B 332 332 . 0.3509 0.3137 0.2706 0.0448  -
0.0317 0.0010  1 .
5879 C     C     . GLU GLU GLU B B 332 332 . 0.0854 0.0527 0.0453 0.0146  -
0.0141 0.0165  1 .
5880 O     O     . GLU GLU GLU B B 332 332 . 0.1230 0.1028 0.0749 0.0149  -
0.0192 0.0116  1 .
5881 N     N     . GLU GLU GLU B B 333 333 . 0.0680 0.0374 0.0372 0.0077  -
0.0119 0.0074  1 .
5882 CA    CA    . GLU GLU GLU B B 333 333 . 0.0527 0.0369 0.0299 0.0165
0.0043  0.0052  1 .
5883 CB    CB    . GLU GLU GLU B B 333 333 . 0.0491 0.0409 0.0279 0.0193
0.0078  0.0063  1 .
5884 CG    CG    . GLU GLU GLU B B 333 333 . 0.0600 0.0523 0.1184 0.0261
0.0164  -0.0124 1 .
5885 CD    CD    . GLU GLU GLU B B 333 333 . 0.0759 0.0885 0.0757 0.0163
0.0095  -0.0249 1 .
5886 OE1   OE1   . GLU GLU GLU B B 333 333 . 0.0977 0.0516 0.0694 0.0419  -
0.0114 0.0025  1 .
5887 OE2   OE2   . GLU GLU GLU B B 333 333 . 0.1101 0.0434 0.1241 -0.0016 -
0.0072 -0.0090 1 .
5888 C     C     . GLU GLU GLU B B 333 333 . 0.0443 0.0339 0.0311 0.0128  -
0.0104 -0.0070 1 .
5889 O     O     . GLU GLU GLU B B 333 333 . 0.0445 0.0349 0.0288 0.0050
0.0031  0.0057  1 .
5890 N     N     . LYS LYS LYS B B 334 334 . 0.0352 0.0456 0.0325 0.0018
0.0076  0.0065  1 .
5891 CA    CA    . LYS LYS LYS B B 334 334 . 0.0424 0.0484 0.0412 0.0068  -
0.0097 -0.0131 1 .
5892 CB    CB    . LYS LYS LYS B B 334 334 . 0.0339 0.0667 0.0378 0.0122  -
0.0103 -0.0158 1 .
5893 CG    CG    . LYS LYS LYS B B 334 334 . 0.0382 0.0554 0.0582 -0.0152 -
0.0106 -0.0045 1 .
5894 CD    CD    . LYS LYS LYS B B 334 334 . 0.1654 0.1502 0.0703 0.0195  -
0.0419 -0.0204 1 .
5895 CE    CE    . LYS LYS LYS B B 334 334 . 0.1030 0.1861 0.1925 0.0163  -
0.0264 -0.0778 1 .
5896 NZ    NZ    . LYS LYS LYS B B 334 334 . 0.2097 0.1842 0.1969 -0.0561 -
0.0302 -0.0596 1 .
5897 C     C     . LYS LYS LYS B B 334 334 . 0.0259 0.0319 0.0330 0.0019
0.0021  0.0070  1 .
5898 O     O     . LYS LYS LYS B B 334 334 . 0.0460 0.0482 0.0255 0.0130
0.0021  0.0013  1 .
5899 N     N     . ALA ALA ALA B B 335 335 . 0.0315 0.0258 0.0325 0.0017  -
0.0067 -0.0019 1 .
5900 CA    CA    . ALA ALA ALA B B 335 335 . 0.0280 0.0327 0.0264 0.0045
0.0017  0.0029  1 .
5901 CB    CB    . ALA ALA ALA B B 335 335 . 0.0290 0.0264 0.0723 -0.0004
0.0075  -0.0067 1 .
5902 C     C     . ALA ALA ALA B B 335 335 . 0.0258 0.0254 0.0272 0.0002
0.0009  0.0005  1 .
5903 O     O     . ALA ALA ALA B B 335 335 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
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5904 N     N     . CYS CYS CYS B B 336 336 . 0.0412 0.0264 0.0289 0.0025
0.0031  -0.0009 1 .
5905 CA    CA    . CYS CYS CYS B B 336 336 . 0.0493 0.0272 0.0253 0.0067  -
0.0008 -0.0002 1 .
5906 CB    CB    . CYS CYS CYS B B 336 336 . 0.0299 0.0371 0.0297 -0.0007 -
0.0002 0.0071  1 .
5907 SG    SG    . CYS CYS CYS B B 336 336 . 0.0459 0.0258 0.0408 0.0029  -
0.0041 -0.0014 1 .
5908 C     C     . CYS CYS CYS B B 336 336 . 0.0351 0.0301 0.0282 0.0068
0.0002  0.0004  1 .
5909 O     O     . CYS CYS CYS B B 336 336 . 0.0602 0.0366 0.0436 -0.0113 -
0.0126 0.0016  1 .
5910 N     N     . ASN ASN ASN B B 337 337 . 0.0355 0.0299 0.0260 -0.0032 -
0.0025 0.0012  1 .
5911 CA    CA    . ASN ASN ASN B B 337 337 . 0.0482 0.0302 0.0420 0.0013
0.0016  0.0090  1 .
5912 CB    CB    . ASN ASN ASN B B 337 337 . 0.0581 0.0260 0.0283 0.0046  -
0.0012 0.0000  1 .
5913 CG    CG    . ASN ASN ASN B B 337 337 . 0.0372 0.0256 0.0297 0.0019
0.0072  0.0011  1 .
5914 OD1   OD1   . ASN ASN ASN B B 337 337 . 0.0548 0.0331 0.0254 0.0152  -
0.0020 -0.0010 1 .
5915 ND2   ND2   . ASN ASN ASN B B 337 337 . 0.0702 0.0259 0.0341 -0.0051
0.0199  -0.0022 1 .
5916 C     C     . ASN ASN ASN B B 337 337 . 0.0263 0.0286 0.0261 -0.0018 -
0.0009 0.0016  1 .
5917 O     O     . ASN ASN ASN B B 337 337 . 0.0529 0.0410 0.0339 -0.0043 -
0.0076 0.0110  1 .
5918 N     N     . CYS CYS CYS B B 338 338 . 0.0410 0.0257 0.0280 -0.0026
0.0065  -0.0011 1 .
5919 CA    CA    . CYS CYS CYS B B 338 338 . 0.0266 0.0277 0.0253 0.0017
0.0001  0.0001  1 .
5920 CB    CB    . CYS CYS CYS B B 338 338 . 0.0312 0.0261 0.0254 0.0022
0.0009  0.0003  1 .
5921 SG    SG    . CYS CYS CYS B B 338 338 . 0.0535 0.0437 0.0368 -0.0080 -
0.0140 0.0125  1 .
5922 C     C     . CYS CYS CYS B B 338 338 . 0.0334 0.0285 0.0367 0.0050  -
0.0095 -0.0060 1 .
5923 O     O     . CYS CYS CYS B B 338 338 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5924 N     N     . LEU LEU LEU B B 339 339 . 0.0304 0.0272 0.0280 0.0031  -
0.0037 -0.0022 1 .
5925 CA    CA    . LEU LEU LEU B B 339 339 . 0.0326 0.0350 0.0254 0.0084
0.0008  0.0009  1 .
5926 CB    CB    . LEU LEU LEU B B 339 339 . 0.0453 0.0311 0.0317 -0.0102
0.0113  -0.0057 1 .
5927 CG    CG    . LEU LEU LEU B B 339 339 . 0.0268 0.0269 0.0284 0.0016  -
0.0022 -0.0022 1 .
5928 CD1   CD1   . LEU LEU LEU B B 339 339 . 0.0925 0.0514 0.0448 -0.0259
0.0301  -0.0017 1 .
5929 CD2   CD2   . LEU LEU LEU B B 339 339 . 0.0393 0.0323 0.0285 -0.0099 -
0.0067 0.0047  1 .
5930 C     C     . LEU LEU LEU B B 339 339 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
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5931 O     O     . LEU LEU LEU B B 339 339 . 0.0648 0.0272 0.0272 0.0064  -
0.0087 -0.0015 1 .
5932 N     N     . LEU LEU LEU B B 340 340 . 0.0452 0.0409 0.0345 0.0176
0.0135  0.0119  1 .
5933 CA    CA    . LEU LEU LEU B B 340 340 . 0.0319 0.0341 0.0306 -0.0076 -
0.0059 0.0068  1 .
5934 CB    CB    . LEU LEU LEU B B 340 340 . 0.0417 0.0274 0.0264 -0.0058 -
0.0042 0.0015  1 .
5935 CG    CG    . LEU LEU LEU B B 340 340 . 0.0424 0.0313 0.0450 -0.0097 -
0.0181 0.0108  1 .
5936 CD1   CD1   . LEU LEU LEU B B 340 340 . 0.0882 0.0464 0.0260 0.0364  -
0.0066 -0.0038 1 .
5937 CD2   CD2   . LEU LEU LEU B B 340 340 . 0.0315 0.0254 0.0328 -0.0008 -
0.0068 0.0009  1 .
5938 C     C     . LEU LEU LEU B B 340 340 . 0.0414 0.0301 0.0307 0.0088  -
0.0093 -0.0051 1 .
5939 O     O     . LEU LEU LEU B B 340 340 . 0.0555 0.0377 0.0451 0.0189
0.0232  0.0155  1 .
5940 N     N     . LEU LEU LEU B B 341 341 . 0.0372 0.0345 0.0278 0.0007  -
0.0045 0.0022  1 .
5941 CA    CA    . LEU LEU LEU B B 341 341 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5942 CB    CB    . LEU LEU LEU B B 341 341 . 0.0254 0.0295 0.0331 0.0000  -
0.0001 0.0056  1 .
5943 CG    CG    . LEU LEU LEU B B 341 341 . 0.0341 0.0267 0.0262 0.0035
0.0028  0.0011  1 .
5944 CD1   CD1   . LEU LEU LEU B B 341 341 . 0.1089 0.1024 0.0311 0.0184
0.0161  -0.0105 1 .
5945 CD2   CD2   . LEU LEU LEU B B 341 341 . 0.0805 0.1015 0.1018 -0.0409 -
0.0273 -0.0335 1 .
5946 C     C     . LEU LEU LEU B B 341 341 . 0.0379 0.0272 0.0260 0.0049
0.0030  0.0012  1 .
5947 O     O     . LEU LEU LEU B B 341 341 . 0.0510 0.0321 0.0258 0.0132  -
0.0036 -0.0019 1 .
5948 N     N     . LYS LYS LYS B B 342 342 . 0.0538 0.0590 0.0294 -0.0056
0.0108  -0.0034 1 .
5949 CA    CA    . LYS LYS LYS B B 342 342 . 0.0545 0.0468 0.0346 0.0212  -
0.0151 -0.0079 1 .
5950 CB    CB    . LYS LYS LYS B B 342 342 . 0.0297 0.0432 0.0307 0.0083
0.0044  0.0098  1 .
5951 CG    CG    . LYS LYS LYS B B 342 342 . 0.1008 0.0663 0.0256 0.0184
0.0008  0.0038  1 .
5952 CD    CD    . LYS LYS LYS B B 342 342 . 0.0279 0.0436 0.0385 -0.0069 -
0.0058 0.0155  1 .
5953 CE    CE    . LYS LYS LYS B B 342 342 . 0.0498 0.0719 0.0380 0.0142
0.0066  0.0242  1 .
5954 NZ    NZ    . LYS LYS LYS B B 342 342 . 0.0897 0.0282 0.1067 -0.0071 -
0.0161 0.0146  1 .
5955 C     C     . LYS LYS LYS B B 342 342 . 0.0329 0.0301 0.0335 -0.0049
0.0072  -0.0031 1 .
5956 O     O     . LYS LYS LYS B B 342 342 . 0.0578 0.0375 0.0307 0.0173
0.0071  0.0072  1 .
5957 N     N     . VAL VAL VAL B B 343 343 . 0.0345 0.0296 0.0275 0.0063
0.0044  0.0030  1 .
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5958 CA    CA    . VAL VAL VAL B B 343 343 . 0.0307 0.0369 0.0405 -0.0007 -
0.0049 0.0117  1 .
5959 CB    CB    . VAL VAL VAL B B 343 343 . 0.0477 0.0377 0.0516 0.0129  -
0.0055 0.0079  1 .
5960 CG1   CG1   . VAL VAL VAL B B 343 343 . 0.0556 0.0608 0.0286 0.0325  -
0.0001 0.0011  1 .
5961 CG2   CG2   . VAL VAL VAL B B 343 343 . 0.0599 0.0634 0.0620 0.0198  -
0.0055 0.0111  1 .
5962 C     C     . VAL VAL VAL B B 343 343 . 0.0331 0.0431 0.0289 0.0117
0.0053  0.0080  1 .
5963 O     O     . VAL VAL VAL B B 343 343 . 0.0472 0.0447 0.0298 0.0206
0.0099  0.0093  1 .
5964 N     N     . ASN ASN ASN B B 344 344 . 0.0254 0.0254 0.0315 -0.0001 -
0.0006 0.0010  1 .
5965 CA    CA    . ASN ASN ASN B B 344 344 . 0.0297 0.0258 0.0312 0.0000
0.0031  0.0012  1 .
5966 CB    CB    . ASN ASN ASN B B 344 344 . 0.0675 0.0313 0.0263 -0.0127 -
0.0016 0.0019  1 .
5967 CG    CG    . ASN ASN ASN B B 344 344 . 0.0518 0.0253 0.0294 -0.0003
0.0104  -0.0001 1 .
5968 OD1   OD1   . ASN ASN ASN B B 344 344 . 0.0521 0.0403 0.0427 0.0141  -
0.0063 -0.0040 1 .
5969 ND2   ND2   . ASN ASN ASN B B 344 344 . 0.1088 0.0515 0.0466 0.0087  -
0.0073 0.0220  1 .
5970 C     C     . ASN ASN ASN B B 344 344 . 0.0723 0.0358 0.0343 -0.0042
0.0082  0.0080  1 .
5971 O     O     . ASN ASN ASN B B 344 344 . 0.0997 0.0369 0.0359 0.0081
0.0185  0.0100  1 .
5972 N     N     . GLN GLN GLN B B 345 345 . 0.0687 0.0329 0.0442 0.0026  -
0.0004 0.0118  1 .
5973 CA    CA    . GLN GLN GLN B B 345 345 . 0.0382 0.0384 0.0346 -0.0031 -
0.0033 0.0110  1 .
5974 CB    CB    . GLN GLN GLN B B 345 345 . 0.0273 0.0519 0.0361 0.0072
0.0046  0.0170  1 .
5975 CG    CG    . GLN GLN GLN B B 345 345 . 0.0458 0.0505 0.0274 0.0201
0.0064  0.0059  1 .
5976 CD    CD    . GLN GLN GLN B B 345 345 . 0.0613 0.0476 0.0395 0.0264
0.0133  0.0150  1 .
5977 OE1   OE1   . GLN GLN GLN B B 345 345 . 0.0468 0.0577 0.0660 0.0229
0.0139  -0.0008 1 .
5978 NE2   NE2   . GLN GLN GLN B B 345 345 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
5979 C     C     . GLN GLN GLN B B 345 345 . 0.0399 0.0253 0.0260 -0.0002
0.0020  0.0000  1 .
5980 O     O     . GLN GLN GLN B B 345 345 . 0.0819 0.0373 0.0321 0.0241  -
0.0028 0.0021  1 .
5981 N     N     . ILE ILE ILE B B 346 346 . 0.0325 0.0406 0.0347 0.0043
0.0080  0.0074  1 .
5982 CA    CA    . ILE ILE ILE B B 346 346 . 0.0547 0.0449 0.0369 0.0119
0.0036  0.0048  1 .
5983 CB    CB    . ILE ILE ILE B B 346 346 . 0.0471 0.0492 0.0519 0.0143  -
0.0051 0.0027  1 .
5984 CG1   CG1   . ILE ILE ILE B B 346 346 . 0.0531 0.0483 0.0553 0.0165  -
0.0074 0.0147  1 .
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5985 CD1   CD1   . ILE ILE ILE B B 346 346 . 0.0936 0.0516 0.0934 -0.0157 -
0.0324 -0.0021 1 .
5986 CG2   CG2   . ILE ILE ILE B B 346 346 . 0.0528 0.0353 0.0532 0.0144  -
0.0129 -0.0140 1 .
5987 C     C     . ILE ILE ILE B B 346 346 . 0.0709 0.0417 0.0518 0.0267
0.0121  0.0048  1 .
5988 O     O     . ILE ILE ILE B B 346 346 . 0.0667 0.0516 0.0600 0.0321
0.0062  -0.0021 1 .
5989 N     N     . GLY GLY GLY B B 347 347 . 0.0841 0.0435 0.0479 0.0034
0.0224  0.0099  1 .
5990 CA    CA    . GLY GLY GLY B B 347 347 . 0.0448 0.0343 0.0406 0.0124
0.0097  0.0095  1 .
5991 C     C     . GLY GLY GLY B B 347 347 . 0.0407 0.0338 0.0260 0.0055  -
0.0031 -0.0018 1 .
5992 O     O     . GLY GLY GLY B B 347 347 . 0.0814 0.0797 0.0562 0.0007
0.0229  -0.0039 1 .
5993 N     N     . SER SER SER B B 348 348 . 0.0590 0.0259 0.0291 -0.0044 -
0.0113 0.0015  1 .
5994 CA    CA    . SER SER SER B B 348 348 . 0.0429 0.0322 0.0370 0.0104  -
0.0106 -0.0044 1 .
5995 CB    CB    . SER SER SER B B 348 348 . 0.0565 0.0456 0.0433 0.0142  -
0.0074 0.0115  1 .
5996 OG    OG    . SER SER SER B B 348 348 . 0.0680 0.0351 0.0607 0.0187
0.0091  0.0074  1 .
5997 C     C     . SER SER SER B B 348 348 . 0.0517 0.0546 0.0309 0.0075  -
0.0119 -0.0014 1 .
5998 O     O     . SER SER SER B B 348 348 . 0.0450 0.0524 0.0354 0.0188  -
0.0095 -0.0020 1 .
5999 N     N     . VAL VAL VAL B B 349 349 . 0.0841 0.0644 0.0261 -0.0062 -
0.0013 0.0056  1 .
6000 CA    CA    . VAL VAL VAL B B 349 349 . 0.0803 0.0563 0.0450 -0.0086
0.0030  0.0178  1 .
6001 CB    CB    . VAL VAL VAL B B 349 349 . 0.0638 0.0357 0.0407 0.0034
0.0115  0.0120  1 .
6002 CG1   CG1   . VAL VAL VAL B B 349 349 . 0.0896 0.0507 0.0907 -0.0250 -
0.0127 0.0363  1 .
6003 CG2   CG2   . VAL VAL VAL B B 349 349 . 0.1003 0.0839 0.0525 -0.0099 -
0.0053 0.0228  1 .
6004 C     C     . VAL VAL VAL B B 349 349 . 0.0643 0.0571 0.0386 0.0193
0.0028  0.0025  1 .
6005 O     O     . VAL VAL VAL B B 349 349 . 0.0751 0.0693 0.0386 0.0010
0.0062  0.0236  1 .
6006 N     N     . THR THR THR B B 350 350 . 0.0588 0.0763 0.0302 -0.0072
0.0007  0.0078  1 .
6007 CA    CA    . THR THR THR B B 350 350 . 0.0650 0.0827 0.0702 0.0073  -
0.0014 0.0148  1 .
6008 CB    CB    . THR THR THR B B 350 350 . 0.0658 0.0865 0.0463 -0.0094
0.0150  0.0073  1 .
6009 OG1   OG1   . THR THR THR B B 350 350 . 0.0919 0.0470 0.0823 0.0299  -
0.0053 -0.0143 1 .
6010 CG2   CG2   . THR THR THR B B 350 350 . 0.0255 0.1625 0.1305 -0.0056
0.0016  0.0042  1 .
6011 C     C     . THR THR THR B B 350 350 . 0.0588 0.0747 0.0600 0.0049  -
0.0120 0.0058  1 .
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6012 O     O     . THR THR THR B B 350 350 . 0.0457 0.0724 0.0843 0.0166
0.0121  0.0130  1 .
6013 N     N     . GLU GLU GLU B B 351 351 . 0.0682 0.0591 0.0663 -0.0012 -
0.0097 0.0186  1 .
6014 CA    CA    . GLU GLU GLU B B 351 351 . 0.0351 0.0480 0.0572 -0.0044
0.0068  0.0044  1 .
6015 CB    CB    . GLU GLU GLU B B 351 351 . 0.0942 0.0694 0.0555 0.0345
0.0029  0.0090  1 .
6016 CG    CG    . GLU GLU GLU B B 351 351 . 0.0259 0.0734 0.0834 -0.0046
0.0020  0.0126  1 .
6017 CD    CD    . GLU GLU GLU B B 351 351 . 0.1185 0.0619 0.1057 0.0547  -
0.0290 0.0007  1 .
6018 OE1   OE1   . GLU GLU GLU B B 351 351 . 0.1378 0.1032 0.0851 0.0339
0.0084  -0.0061 1 .
6019 OE2   OE2   . GLU GLU GLU B B 351 351 . 0.1791 0.1503 0.1975 0.0141
0.0039  0.0611  1 .
6020 C     C     . GLU GLU GLU B B 351 351 . 0.0647 0.0533 0.0477 0.0170  -
0.0080 -0.0049 1 .
6021 O     O     . GLU GLU GLU B B 351 351 . 0.0649 0.0562 0.0531 0.0028
0.0014  -0.0034 1 .
6022 N     N     . ALA ALA ALA B B 352 352 . 0.0384 0.0377 0.0354 0.0123  -
0.0002 -0.0031 1 .
6023 CA    CA    . ALA ALA ALA B B 352 352 . 0.0524 0.0636 0.0418 0.0260  -
0.0035 -0.0005 1 .
6024 CB    CB    . ALA ALA ALA B B 352 352 . 0.0497 0.0610 0.0712 0.0205  -
0.0081 0.0213  1 .
6025 C     C     . ALA ALA ALA B B 352 352 . 0.0502 0.0521 0.0412 0.0119  -
0.0007 0.0179  1 .
6026 O     O     . ALA ALA ALA B B 352 352 . 0.1019 0.0460 0.0681 0.0352
0.0047  0.0158  1 .
6027 N     N     . ILE ILE ILE B B 353 353 . 0.0553 0.0456 0.0617 0.0106  -
0.0137 0.0103  1 .
6028 CA    CA    . ILE ILE ILE B B 353 353 . 0.0752 0.0622 0.0675 -0.0005 -
0.0038 0.0187  1 .
6029 CB    CB    . ILE ILE ILE B B 353 353 . 0.0340 0.0471 0.1171 0.0081  -
0.0004 0.0148  1 .
6030 CG1   CG1   . ILE ILE ILE B B 353 353 . 0.0854 0.1051 0.0334 -0.0442
0.0118  -0.0034 1 .
6031 CD1   CD1   . ILE ILE ILE B B 353 353 . 0.1195 0.0841 0.0702 -0.0052
0.0407  0.0376  1 .
6032 CG2   CG2   . ILE ILE ILE B B 353 353 . 0.0653 0.0783 0.1142 0.0215  -
0.0165 -0.0041 1 .
6033 C     C     . ILE ILE ILE B B 353 353 . 0.0705 0.0591 0.0601 0.0069  -
0.0159 0.0058  1 .
6034 O     O     . ILE ILE ILE B B 353 353 . 0.0964 0.0873 0.0866 0.0115  -
0.0110 0.0011  1 .
6035 N     N     . GLN GLN GLN B B 354 354 . 0.0819 0.0577 0.0517 0.0167  -
0.0010 0.0237  1 .
6036 CA    CA    . GLN GLN GLN B B 354 354 . 0.0896 0.0832 0.0722 0.0343  -
0.0128 0.0207  1 .
6037 CB    CB    . GLN GLN GLN B B 354 354 . 0.1190 0.0867 0.0813 0.0333  -
0.0166 -0.0123 1 .
6038 CG    CG    . GLN GLN GLN B B 354 354 . 0.1741 0.1562 0.1529 0.0736
0.0002  0.0117  1 .
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6039 CD    CD    . GLN GLN GLN B B 354 354 . 0.2770 0.2320 0.2515 0.0834
0.0216  -0.0276 1 .
6040 OE1   OE1   . GLN GLN GLN B B 354 354 . 0.2750 0.3139 0.2700 0.1408
0.0481  -0.0567 1 .
6041 NE2   NE2   . GLN GLN GLN B B 354 354 . 0.2507 0.3122 0.3059 0.0840  -
0.0162 0.0158  1 .
6042 C     C     . GLN GLN GLN B B 354 354 . 0.1054 0.0776 0.0755 0.0080  -
0.0220 0.0201  1 .
6043 O     O     . GLN GLN GLN B B 354 354 . 0.1068 0.1151 0.0728 -0.0035
0.0210  0.0069  1 .
6044 N     N     . ALA ALA ALA B B 355 355 . 0.0707 0.0707 0.0620 0.0092  -
0.0283 0.0227  1 .
6045 CA    CA    . ALA ALA ALA B B 355 355 . 0.0607 0.0602 0.0414 0.0230  -
0.0021 0.0164  1 .
6046 CB    CB    . ALA ALA ALA B B 355 355 . 0.0603 0.0562 0.0478 0.0097
0.0133  0.0102  1 .
6047 C     C     . ALA ALA ALA B B 355 355 . 0.0616 0.0478 0.0562 0.0183
0.0062  0.0230  1 .
6048 O     O     . ALA ALA ALA B B 355 355 . 0.0796 0.0538 0.0726 0.0296  -
0.0192 0.0106  1 .
6049 N     N     . CYS CYS CYS B B 356 356 . 0.0839 0.0349 0.0526 0.0223
0.0027  0.0064  1 .
6050 CA    CA    . CYS CYS CYS B B 356 356 . 0.0672 0.0351 0.0315 0.0196
0.0008  -0.0016 1 .
6051 CB    CB    . CYS CYS CYS B B 356 356 . 0.0533 0.0320 0.0435 0.0110  -
0.0007 0.0062  1 .
6052 SG    SG    . CYS CYS CYS B B 356 356 . 0.0861 0.0575 0.0607 0.0158  -
0.0029 0.0062  1 .
6053 C     C     . CYS CYS CYS B B 356 356 . 0.0728 0.0498 0.0588 0.0121
0.0065  -0.0030 1 .
6054 O     O     . CYS CYS CYS B B 356 356 . 0.1034 0.0495 0.0601 -0.0002 -
0.0047 -0.0222 1 .
6055 N     N     . LYS LYS LYS B B 357 357 . 0.0592 0.0464 0.0594 -0.0113 -
0.0041 -0.0227 1 .
6056 CA    CA    . LYS LYS LYS B B 357 357 . 0.0971 0.0845 0.0500 -0.0039 -
0.0038 -0.0069 1 .
6057 CB    CB    . LYS LYS LYS B B 357 357 . 0.0803 0.1036 0.0803 0.0180  -
0.0155 0.0036  1 .
6058 CG    CG    . LYS LYS LYS B B 357 357 . 0.1462 0.1296 0.1339 0.0033  -
0.0182 0.0164  1 .
6059 CD    CD    . LYS LYS LYS B B 357 357 . 0.2075 0.2547 0.1988 -0.0201 -
0.0023 -0.0151 1 .
6060 CE    CE    . LYS LYS LYS B B 357 357 . 0.2323 0.2659 0.2320 -0.0004 -
0.0101 -0.0092 1 .
6061 NZ    NZ    . LYS LYS LYS B B 357 357 . 0.3350 0.2744 0.3089 -0.0416
0.0146  -0.0038 1 .
6062 C     C     . LYS LYS LYS B B 357 357 . 0.1006 0.0748 0.0691 0.0213  -
0.0139 -0.0092 1 .
6063 O     O     . LYS LYS LYS B B 357 357 . 0.0780 0.1168 0.0705 0.0274  -
0.0213 -0.0101 1 .
6064 N     N     . LEU LEU LEU B B 358 358 . 0.0880 0.0572 0.0782 0.0002  -
0.0093 0.0104  1 .
6065 CA    CA    . LEU LEU LEU B B 358 358 . 0.0937 0.0575 0.0655 0.0091  -
0.0163 0.0042  1 .
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6066 CB    CB    . LEU LEU LEU B B 358 358 . 0.0970 0.0525 0.0925 -0.0239 -
0.0102 -0.0046 1 .
6067 CG    CG    . LEU LEU LEU B B 358 358 . 0.1274 0.0645 0.0945 -0.0192 -
0.0321 0.0094  1 .
6068 CD1   CD1   . LEU LEU LEU B B 358 358 . 0.0794 0.1088 0.0604 -0.0218 -
0.0115 0.0291  1 .
6069 CD2   CD2   . LEU LEU LEU B B 358 358 . 0.0579 0.1065 0.0350 -0.0377
0.0071  -0.0257 1 .
6070 C     C     . LEU LEU LEU B B 358 358 . 0.1036 0.0671 0.0473 -0.0010 -
0.0133 0.0015  1 .
6071 O     O     . LEU LEU LEU B B 358 358 . 0.1171 0.1042 0.0310 0.0053
0.0076  -0.0159 1 .
6072 N     N     . ALA ALA ALA B B 359 359 . 0.0686 0.0502 0.0728 0.0154  -
0.0123 -0.0081 1 .
6073 CA    CA    . ALA ALA ALA B B 359 359 . 0.0625 0.0554 0.0445 0.0100  -
0.0068 0.0117  1 .
6074 CB    CB    . ALA ALA ALA B B 359 359 . 0.0844 0.0787 0.0424 0.0031  -
0.0244 -0.0206 1 .
6075 C     C     . ALA ALA ALA B B 359 359 . 0.0500 0.0633 0.0512 -0.0133 -
0.0193 -0.0008 1 .
6076 O     O     . ALA ALA ALA B B 359 359 . 0.0618 0.0786 0.0653 -0.0098
0.0071  -0.0364 1 .
6077 N     N     . GLN GLN GLN B B 360 360 . 0.0685 0.0265 0.0405 -0.0072 -
0.0256 0.0042  1 .
6078 CA    CA    . GLN GLN GLN B B 360 360 . 0.0801 0.0722 0.0672 -0.0078 -
0.0104 -0.0136 1 .
6079 CB    CB    . GLN GLN GLN B B 360 360 . 0.0711 0.0573 0.0644 -0.0124 -
0.0225 -0.0075 1 .
6080 CG    CG    . GLN GLN GLN B B 360 360 . 0.0724 0.0381 0.0437 0.0236  -
0.0137 -0.0106 1 .
6081 CD    CD    . GLN GLN GLN B B 360 360 . 0.0743 0.1015 0.1374 0.0247  -
0.0416 0.0287  1 .
6082 OE1   OE1   . GLN GLN GLN B B 360 360 . 0.1502 0.0879 0.1219 0.0038
0.0092  0.0217  1 .
6083 NE2   NE2   . GLN GLN GLN B B 360 360 . 0.1883 0.0516 0.1362 0.0371  -
0.0297 0.0365  1 .
6084 C     C     . GLN GLN GLN B B 360 360 . 0.0894 0.0801 0.0592 -0.0039 -
0.0063 -0.0022 1 .
6085 O     O     . GLN GLN GLN B B 360 360 . 0.0701 0.0718 0.0506 0.0019  -
0.0060 -0.0266 1 .
6086 N     N     . GLU GLU GLU B B 361 361 . 0.1004 0.1084 0.0870 -0.0049 -
0.0309 -0.0001 1 .
6087 CA    CA    . GLU GLU GLU B B 361 361 . 0.1288 0.1239 0.1049 0.0000  -
0.0194 0.0110  1 .
6088 CB    CB    . GLU GLU GLU B B 361 361 . 0.1290 0.1550 0.1053 0.0203  -
0.0013 0.0101  1 .
6089 CG    CG    . GLU GLU GLU B B 361 361 . 0.1902 0.2361 0.2271 -0.0205 -
0.0236 -0.0059 1 .
6090 CD    CD    . GLU GLU GLU B B 361 361 . 0.3079 0.3020 0.3755 0.0038
0.0006  -0.0207 1 .
6091 OE1   OE1   . GLU GLU GLU B B 361 361 . 0.3088 0.3467 0.4295 -0.0585 -
0.0135 -0.0205 1 .
6092 OE2   OE2   . GLU GLU GLU B B 361 361 . 0.3320 0.3422 0.3778 -0.0519
0.0102  0.0108  1 .
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6093 C     C     . GLU GLU GLU B B 361 361 . 0.1015 0.1018 0.0920 -0.0007 -
0.0204 0.0053  1 .
6094 O     O     . GLU GLU GLU B B 361 361 . 0.1238 0.1226 0.1172 -0.0062 -
0.0340 0.0273  1 .
6095 N     N     . ASN ASN ASN B B 362 362 . 0.0855 0.0680 0.0708 -0.0002 -
0.0276 0.0216  1 .
6096 CA    CA    . ASN ASN ASN B B 362 362 . 0.0707 0.0764 0.0665 -0.0081 -
0.0218 0.0049  1 .
6097 CB    CB    . ASN ASN ASN B B 362 362 . 0.0997 0.0651 0.0521 0.0060  -
0.0107 -0.0257 1 .
6098 CG    CG    . ASN ASN ASN B B 362 362 . 0.0964 0.0632 0.0667 -0.0210 -
0.0247 0.0331  1 .
6099 OD1   OD1   . ASN ASN ASN B B 362 362 . 0.1227 0.1074 0.0955 0.0190  -
0.0281 0.0642  1 .
6100 ND2   ND2   . ASN ASN ASN B B 362 362 . 0.1025 0.0514 0.1533 -0.0302 -
0.0032 0.0248  1 .
6101 C     C     . ASN ASN ASN B B 362 362 . 0.0647 0.0541 0.0396 -0.0141 -
0.0025 -0.0083 1 .
6102 O     O     . ASN ASN ASN B B 362 362 . 0.1210 0.0969 0.0787 -0.0213 -
0.0005 0.0125  1 .
6103 N     N     . GLY GLY GLY B B 363 363 . 0.0647 0.0793 0.0488 -0.0104 -
0.0220 -0.0180 1 .
6104 CA    CA    . GLY GLY GLY B B 363 363 . 0.0727 0.0601 0.0467 -0.0066 -
0.0208 -0.0083 1 .
6105 C     C     . GLY GLY GLY B B 363 363 . 0.0490 0.0706 0.0712 0.0104  -
0.0163 -0.0174 1 .
6106 O     O     . GLY GLY GLY B B 363 363 . 0.1061 0.1253 0.0413 -0.0090
0.0240  -0.0322 1 .
6107 N     N     . TRP TRP TRP B B 364 364 . 0.0481 0.0343 0.0418 0.0141  -
0.0003 0.0017  1 .
6108 CA    CA    . TRP TRP TRP B B 364 364 . 0.0587 0.0364 0.0347 0.0023  -
0.0146 0.0047  1 .
6109 CB    CB    . TRP TRP TRP B B 364 364 . 0.0460 0.0338 0.0344 0.0079  -
0.0079 -0.0088 1 .
6110 CG    CG    . TRP TRP TRP B B 364 364 . 0.0947 0.0459 0.0438 0.0133  -
0.0357 -0.0081 1 .
6111 CD1   CD1   . TRP TRP TRP B B 364 364 . 0.0565 0.0501 0.0334 0.0242
0.0137  0.0071  1 .
6112 NE1   NE1   . TRP TRP TRP B B 364 364 . 0.0802 0.0467 0.0397 -0.0180 -
0.0241 0.0003  1 .
6113 CE2   CE2   . TRP TRP TRP B B 364 364 . 0.0761 0.0502 0.0547 0.0016  -
0.0162 -0.0095 1 .
6114 CD2   CD2   . TRP TRP TRP B B 364 364 . 0.1333 0.0488 0.0400 -0.0203 -
0.0099 -0.0145 1 .
6115 CE3   CE3   . TRP TRP TRP B B 364 364 . 0.0709 0.0426 0.0293 -0.0039 -
0.0129 0.0035  1 .
6116 CZ3   CZ3   . TRP TRP TRP B B 364 364 . 0.0863 0.0530 0.1047 0.0106  -
0.0189 0.0164  1 .
6117 CH2   CH2   . TRP TRP TRP B B 364 364 . 0.0886 0.0473 0.0257 -0.0372 -
0.0050 0.0029  1 .
6118 CZ2   CZ2   . TRP TRP TRP B B 364 364 . 0.0625 0.0575 0.0440 -0.0119
0.0150  0.0141  1 .
6119 C     C     . TRP TRP TRP B B 364 364 . 0.0404 0.0321 0.0363 -0.0071
0.0076  0.0013  1 .
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6120 O     O     . TRP TRP TRP B B 364 364 . 0.0851 0.0535 0.0479 0.0165
0.0044  0.0230  1 .
6121 N     N     . GLY GLY GLY B B 365 365 . 0.0726 0.0366 0.0292 0.0231  -
0.0136 -0.0066 1 .
6122 CA    CA    . GLY GLY GLY B B 365 365 . 0.0742 0.0357 0.0426 0.0131  -
0.0092 -0.0128 1 .
6123 C     C     . GLY GLY GLY B B 365 365 . 0.0593 0.0551 0.0289 0.0093  -
0.0054 -0.0054 1 .
6124 O     O     . GLY GLY GLY B B 365 365 . 0.0749 0.0543 0.0344 0.0003  -
0.0074 0.0152  1 .
6125 N     N     . VAL VAL VAL B B 366 366 . 0.0583 0.0652 0.0286 0.0031  -
0.0049 -0.0105 1 .
6126 CA    CA    . VAL VAL VAL B B 366 366 . 0.0431 0.0427 0.0266 0.0176  -
0.0048 -0.0047 1 .
6127 CB    CB    . VAL VAL VAL B B 366 366 . 0.0540 0.0627 0.0318 0.0171  -
0.0091 -0.0154 1 .
6128 CG1   CG1   . VAL VAL VAL B B 366 366 . 0.0505 0.0698 0.0352 0.0244
0.0132  0.0048  1 .
6129 CG2   CG2   . VAL VAL VAL B B 366 366 . 0.0717 0.0540 0.0370 0.0329
0.0146  0.0042  1 .
6130 C     C     . VAL VAL VAL B B 366 366 . 0.0363 0.0259 0.0264 0.0026
0.0035  0.0008  1 .
6131 O     O     . VAL VAL VAL B B 366 366 . 0.0314 0.0276 0.0396 -0.0001 -
0.0048 -0.0047 1 .
6132 N     N     . MET MET MET B B 367 367 . 0.0309 0.0446 0.0311 0.0060
0.0012  0.0098  1 .
6133 CA    CA    . MET MET MET B B 367 367 . 0.0319 0.0375 0.0268 -0.0014 -
0.0023 0.0033  1 .
6134 CB    CB    . MET MET MET B B 367 367 . 0.0259 0.0257 0.0382 0.0005  -
0.0029 -0.0023 1 .
6135 CG    CG    . MET MET MET B B 367 367 . 0.0338 0.0254 0.0324 0.0007  -
0.0077 -0.0007 1 .
6136 SD    SD    . MET MET MET B B 367 367 . 0.0631 0.0496 0.0456 0.0286
0.0019  -0.0058 1 .
6137 CE    CE    . MET MET MET B B 367 367 . 0.0778 0.0519 0.0540 0.0373
0.0388  0.0276  1 .
6138 C     C     . MET MET MET B B 367 367 . 0.0299 0.0262 0.0325 0.0020
0.0057  0.0025  1 .
6139 O     O     . MET MET MET B B 367 367 . 0.0253 0.0267 0.0259 0.0001
0.0000  -0.0009 1 .
6140 N     N     . VAL VAL VAL B B 368 368 . 0.0409 0.0298 0.0297 0.0082
0.0076  0.0043  1 .
6141 CA    CA    . VAL VAL VAL B B 368 368 . 0.0294 0.0253 0.0267 0.0000  -
0.0024 0.0000  1 .
6142 CB    CB    . VAL VAL VAL B B 368 368 . 0.0347 0.0529 0.0362 0.0161
0.0101  0.0173  1 .
6143 CG1   CG1   . VAL VAL VAL B B 368 368 . 0.0366 0.0368 0.0254 0.0114  -
0.0013 -0.0013 1 .
6144 CG2   CG2   . VAL VAL VAL B B 368 368 . 0.0556 0.0255 0.0456 -0.0022 -
0.0134 0.0016  1 .
6145 C     C     . VAL VAL VAL B B 368 368 . 0.0360 0.0348 0.0254 0.0101  -
0.0012 -0.0011 1 .
6146 O     O     . VAL VAL VAL B B 368 368 . 0.0433 0.0315 0.0260 0.0106  -
0.0036 -0.0021 1 .
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6147 N     N     . SER SER SER B B 369 369 . 0.0417 0.0283 0.0253 0.0070  -
0.0003 -0.0001 1 .
6148 CA    CA    . SER SER SER B B 369 369 . 0.0287 0.0254 0.0253 0.0006
0.0000  0.0000  1 .
6149 CB    CB    . SER SER SER B B 369 369 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6150 OG    OG    . SER SER SER B B 369 369 . 0.0297 0.0253 0.0287 0.0000  -
0.0038 0.0000  1 .
6151 C     C     . SER SER SER B B 369 369 . 0.0284 0.0476 0.0282 -0.0030
0.0030  -0.0036 1 .
6152 O     O     . SER SER SER B B 369 369 . 0.0311 0.0254 0.0265 0.0009  -
0.0026 -0.0004 1 .
6153 N     N     . HIS HIS HIS B B 370 370 . 0.0348 0.0256 0.0269 0.0004
0.0038  0.0003  1 .
6154 CA    CA    . HIS HIS HIS B B 370 370 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6155 CB    CB    . HIS HIS HIS B B 370 370 . 0.0264 0.0368 0.0255 0.0036
0.0004  0.0015  1 .
6156 CG    CG    . HIS HIS HIS B B 370 370 . 0.0253 0.0373 0.0309 -0.0001
0.0000  0.0082  1 .
6157 ND1   ND1   . HIS HIS HIS B B 370 370 . 0.0308 0.0470 0.0397 0.0086  -
0.0027 -0.0146 1 .
6158 CE1   CE1   . HIS HIS HIS B B 370 370 . 0.0295 0.0325 0.0266 -0.0053
0.0001  0.0004  1 .
6159 NE2   NE2   . HIS HIS HIS B B 370 370 . 0.0372 0.0460 0.0466 0.0072  -
0.0003 0.0184  1 .
6160 CD2   CD2   . HIS HIS HIS B B 370 370 . 0.0504 0.0578 0.0572 0.0286
0.0111  0.0124  1 .
6161 C     C     . HIS HIS HIS B B 370 370 . 0.0541 0.0255 0.0275 0.0024
0.0079  0.0006  1 .
6162 O     O     . HIS HIS HIS B B 370 370 . 0.0259 0.0258 0.0255 0.0005
0.0003  0.0003  1 .
6163 N     N     . ARG ARG ARG B B 371 371 . 0.0577 0.0281 0.0258 0.0096
0.0042  0.0012  1 .
6164 CA    CA    . ARG ARG ARG B B 371 371 . 0.0403 0.0398 0.0324 0.0125  -
0.0019 -0.0069 1 .
6165 CB    CB    . ARG ARG ARG B B 371 371 . 0.0344 0.0317 0.0270 0.0076  -
0.0040 -0.0033 1 .
6166 CG    CG    . ARG ARG ARG B B 371 371 . 0.0308 0.0341 0.0301 -0.0069
0.0051  -0.0065 1 .
6167 CD    CD    . ARG ARG ARG B B 371 371 . 0.0368 0.0301 0.0478 -0.0074 -
0.0160 0.0103  1 .
6168 NE    NE    . ARG ARG ARG B B 371 371 . 0.0264 0.0284 0.0283 -0.0018 -
0.0018 0.0030  1 .
6169 CZ    CZ    . ARG ARG ARG B B 371 371 . 0.0263 0.0275 0.0262 0.0015  -
0.0009 -0.0014 1 .
6170 NH1   NH1   . ARG ARG ARG B B 371 371 . 0.0437 0.0397 0.0271 -0.0012 -
0.0006 0.0051  1 .
6171 NH2   NH2   . ARG ARG ARG B B 371 371 . 0.0633 0.0265 0.0411 0.0069  -
0.0245 -0.0044 1 .
6172 C     C     . ARG ARG ARG B B 371 371 . 0.0418 0.0401 0.0316 0.0005
0.0086  -0.0048 1 .
6173 O     O     . ARG ARG ARG B B 371 371 . 0.0420 0.0332 0.0363 0.0114
0.0135  0.0092  1 .
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6174 N     N     . SER SER SER B B 372 372 . 0.0432 0.0331 0.0257 0.0013  -
0.0003 -0.0017 1 .
6175 CA    CA    . SER SER SER B B 372 372 . 0.0394 0.0303 0.0258 -0.0037 -
0.0028 0.0008  1 .
6176 CB    CB    . SER SER SER B B 372 372 . 0.0405 0.0435 0.0262 -0.0166
0.0036  -0.0040 1 .
6177 OG    OG    . SER SER SER B B 372 372 . 0.0265 0.0255 0.0266 0.0004
0.0012  0.0004  1 .
6178 C     C     . SER SER SER B B 372 372 . 0.0331 0.0398 0.0311 0.0052
0.0037  -0.0042 1 .
6179 O     O     . SER SER SER B B 372 372 . 0.0578 0.0280 0.0257 0.0076
0.0001  0.0006  1 .
6180 N     N     . GLY GLY GLY B B 373 373 . 0.0372 0.0253 0.0304 -0.0006
0.0077  -0.0004 1 .
6181 CA    CA    . GLY GLY GLY B B 373 373 . 0.0282 0.0440 0.0257 -0.0074
0.0010  -0.0027 1 .
6182 C     C     . GLY GLY GLY B B 373 373 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6183 O     O     . GLY GLY GLY B B 373 373 . 0.0272 0.0335 0.0274 0.0039  -
0.0020 -0.0041 1 .
6184 N     N     . GLU GLU GLU B B 374 374 . 0.0329 0.0254 0.0261 0.0007
0.0024  0.0002  1 .
6185 CA    CA    . GLU GLU GLU B B 374 374 . 0.0366 0.0280 0.0291 -0.0054
0.0065  -0.0032 1 .
6186 CB    CB    . GLU GLU GLU B B 374 374 . 0.0344 0.0264 0.0285 0.0032
0.0053  0.0019  1 .
6187 CG    CG    . GLU GLU GLU B B 374 374 . 0.0258 0.0276 0.0264 0.0011  -
0.0007 -0.0016 1 .
6188 CD    CD    . GLU GLU GLU B B 374 374 . 0.0446 0.0260 0.0306 -0.0018
0.0085  -0.0016 1 .
6189 OE1   OE1   . GLU GLU GLU B B 374 374 . 0.0473 0.0369 0.0254 0.0160
0.0016  0.0011  1 .
6190 OE2   OE2   . GLU GLU GLU B B 374 374 . 0.0345 0.0305 0.0299 0.0058  -
0.0042 -0.0006 1 .
6191 C     C     . GLU GLU GLU B B 374 374 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6192 O     O     . GLU GLU GLU B B 374 374 . 0.0459 0.0340 0.0320 0.0134
0.0117  0.0076  1 .
6193 N     N     . THR THR THR B B 375 375 . 0.0311 0.0260 0.0254 0.0020  -
0.0006 -0.0002 1 .
6194 CA    CA    . THR THR THR B B 375 375 . 0.0254 0.0255 0.0253 -0.0001
0.0000  0.0000  1 .
6195 CB    CB    . THR THR THR B B 375 375 . 0.0429 0.0283 0.0332 0.0068
0.0002  -0.0016 1 .
6196 OG1   OG1   . THR THR THR B B 375 375 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6197 CG2   CG2   . THR THR THR B B 375 375 . 0.0276 0.0265 0.0319 0.0017  -
0.0039 -0.0028 1 .
6198 C     C     . THR THR THR B B 375 375 . 0.0329 0.0343 0.0257 0.0078
0.0016  0.0018  1 .
6199 O     O     . THR THR THR B B 375 375 . 0.0578 0.0328 0.0304 0.0155  -
0.0101 -0.0051 1 .
6200 N     N     . GLU GLU GLU B B 376 376 . 0.0519 0.0254 0.0262 -0.0017
0.0050  -0.0003 1 .
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6201 CA    CA    . GLU GLU GLU B B 376 376 . 0.0472 0.0313 0.0311 -0.0017 -
0.0031 0.0058  1 .
6202 CB    CB    . GLU GLU GLU B B 376 376 . 0.0400 0.0428 0.0404 0.0160
0.0149  0.0162  1 .
6203 CG    CG    . GLU GLU GLU B B 376 376 . 0.0377 0.0395 0.0285 -0.0133 -
0.0063 0.0068  1 .
6204 CD    CD    . GLU GLU GLU B B 376 376 . 0.0733 0.0393 0.0472 0.0088
0.0323  0.0067  1 .
6205 OE1   OE1   . GLU GLU GLU B B 376 376 . 0.0586 0.0450 0.0697 -0.0149
0.0321  -0.0011 1 .
6206 OE2   OE2   . GLU GLU GLU B B 376 376 . 0.0437 0.0292 0.0335 -0.0032
0.0059  0.0035  1 .
6207 C     C     . GLU GLU GLU B B 376 376 . 0.0319 0.0253 0.0310 -0.0001 -
0.0061 0.0001  1 .
6208 O     O     . GLU GLU GLU B B 376 376 . 0.0438 0.0432 0.0730 -0.0077 -
0.0183 0.0285  1 .
6209 N     N     . ASP ASP ASP B B 377 377 . 0.0294 0.0260 0.0309 0.0014  -
0.0047 -0.0014 1 .
6210 CA    CA    . ASP ASP ASP B B 377 377 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6211 CB    CB    . ASP ASP ASP B B 377 377 . 0.0313 0.0436 0.0293 -0.0072
0.0031  -0.0085 1 .
6212 CG    CG    . ASP ASP ASP B B 377 377 . 0.0521 0.0787 0.0353 0.0283
0.0104  -0.0007 1 .
6213 OD1   OD1   . ASP ASP ASP B B 377 377 . 0.0889 0.0516 0.0533 0.0086  -
0.0087 0.0013  1 .
6214 OD2   OD2   . ASP ASP ASP B B 377 377 . 0.0335 0.0414 0.0541 -0.0074
0.0088  0.0054  1 .
6215 C     C     . ASP ASP ASP B B 377 377 . 0.0311 0.0314 0.0269 -0.0059
0.0030  -0.0031 1 .
6216 O     O     . ASP ASP ASP B B 377 377 . 0.0325 0.0509 0.0471 0.0100
0.0024  -0.0122 1 .
6217 N     N     . THR THR THR B B 378 378 . 0.0404 0.0260 0.0388 0.0033
0.0142  0.0031  1 .
6218 CA    CA    . THR THR THR B B 378 378 . 0.0496 0.0420 0.0406 -0.0130 -
0.0006 -0.0118 1 .
6219 CB    CB    . THR THR THR B B 378 378 . 0.0338 0.0451 0.0422 0.0129
0.0119  0.0182  1 .
6220 OG1   OG1   . THR THR THR B B 378 378 . 0.0563 0.0445 0.0311 0.0084
0.0128  0.0065  1 .
6221 CG2   CG2   . THR THR THR B B 378 378 . 0.0282 0.0480 0.0274 -0.0081
0.0025  -0.0069 1 .
6222 C     C     . THR THR THR B B 378 378 . 0.0258 0.0253 0.0253 0.0001
0.0000  0.0000  1 .
6223 O     O     . THR THR THR B B 378 378 . 0.0332 0.0302 0.0254 0.0062
0.0010  0.0008  1 .
6224 N     N     . PHE PHE PHE B B 379 379 . 0.0478 0.0429 0.0358 0.0199  -
0.0153 -0.0135 1 .
6225 CA    CA    . PHE PHE PHE B B 379 379 . 0.0523 0.0329 0.0369 0.0143  -
0.0177 -0.0094 1 .
6226 CB    CB    . PHE PHE PHE B B 379 379 . 0.0494 0.0382 0.0311 0.0176  -
0.0118 -0.0086 1 .
6227 CG    CG    . PHE PHE PHE B B 379 379 . 0.0503 0.0258 0.0262 0.0036  -
0.0047 -0.0006 1 .
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6228 CD1   CD1   . PHE PHE PHE B B 379 379 . 0.0545 0.0439 0.0498 0.0231
0.0018  0.0038  1 .
6229 CE1   CE1   . PHE PHE PHE B B 379 379 . 0.0424 0.0367 0.0508 0.0125  -
0.0052 -0.0111 1 .
6230 CZ    CZ    . PHE PHE PHE B B 379 379 . 0.0762 0.0303 0.0549 -0.0045
0.0150  -0.0120 1 .
6231 CE2   CE2   . PHE PHE PHE B B 379 379 . 0.0829 0.0312 0.0872 -0.0152
0.0001  -0.0106 1 .
6232 CD2   CD2   . PHE PHE PHE B B 379 379 . 0.0737 0.0757 0.0657 0.0384  -
0.0106 0.0190  1 .
6233 C     C     . PHE PHE PHE B B 379 379 . 0.0284 0.0258 0.0335 0.0012  -
0.0050 -0.0020 1 .
6234 O     O     . PHE PHE PHE B B 379 379 . 0.0368 0.0468 0.0317 0.0015
0.0059  0.0092  1 .
6235 N     N     . ILE ILE ILE B B 380 380 . 0.0271 0.0302 0.0289 0.0030
0.0025  0.0042  1 .
6236 CA    CA    . ILE ILE ILE B B 380 380 . 0.0446 0.0375 0.0260 0.0153  -
0.0037 -0.0029 1 .
6237 CB    CB    . ILE ILE ILE B B 380 380 . 0.0315 0.0314 0.0254 0.0061  -
0.0009 -0.0009 1 .
6238 CG1   CG1   . ILE ILE ILE B B 380 380 . 0.0274 0.0432 0.0270 0.0061  -
0.0019 -0.0056 1 .
6239 CD1   CD1   . ILE ILE ILE B B 380 380 . 0.0354 0.0254 0.0283 -0.0011
0.0055  -0.0006 1 .
6240 CG2   CG2   . ILE ILE ILE B B 380 380 . 0.0752 0.0541 0.0515 0.0187  -
0.0171 0.0145  1 .
6241 C     C     . ILE ILE ILE B B 380 380 . 0.0628 0.0283 0.0558 0.0105
0.0004  0.0008  1 .
6242 O     O     . ILE ILE ILE B B 380 380 . 0.0507 0.0471 0.0275 0.0234
0.0008  0.0013  1 .
6243 N     N     . ALA ALA ALA B B 381 381 . 0.0362 0.0293 0.0286 0.0065
0.0023  0.0009  1 .
6244 CA    CA    . ALA ALA ALA B B 381 381 . 0.0466 0.0337 0.0288 0.0111
0.0024  -0.0016 1 .
6245 CB    CB    . ALA ALA ALA B B 381 381 . 0.0295 0.0289 0.0253 0.0038  -
0.0004 -0.0004 1 .
6246 C     C     . ALA ALA ALA B B 381 381 . 0.0259 0.0253 0.0255 -0.0001
0.0003  0.0000  1 .
6247 O     O     . ALA ALA ALA B B 381 381 . 0.0991 0.0302 0.0721 0.0148
0.0163  0.0123  1 .
6248 N     N     . ASP ASP ASP B B 382 382 . 0.0706 0.0309 0.0343 0.0088  -
0.0052 0.0047  1 .
6249 CA    CA    . ASP ASP ASP B B 382 382 . 0.0457 0.0300 0.0292 0.0095
0.0044  0.0029  1 .
6250 CB    CB    . ASP ASP ASP B B 382 382 . 0.0564 0.0529 0.0578 0.0040
0.0113  0.0292  1 .
6251 CG    CG    . ASP ASP ASP B B 382 382 . 0.0470 0.0412 0.0854 -0.0129
0.0031  0.0202  1 .
6252 OD1   OD1   . ASP ASP ASP B B 382 382 . 0.1140 0.0806 0.0498 0.0343  -
0.0405 0.0001  1 .
6253 OD2   OD2   . ASP ASP ASP B B 382 382 . 0.0829 0.0486 0.0863 0.0151  -
0.0022 0.0037  1 .
6254 C     C     . ASP ASP ASP B B 382 382 . 0.0672 0.0309 0.0281 -0.0007 -
0.0062 0.0033  1 .
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6255 O     O     . ASP ASP ASP B B 382 382 . 0.0277 0.0274 0.0271 -0.0022 -
0.0020 0.0019  1 .
6256 N     N     . LEU LEU LEU B B 383 383 . 0.0282 0.0499 0.0361 -0.0061 -
0.0034 0.0161  1 .
6257 CA    CA    . LEU LEU LEU B B 383 383 . 0.0387 0.0400 0.0303 -0.0113 -
0.0064 0.0086  1 .
6258 CB    CB    . LEU LEU LEU B B 383 383 . 0.0326 0.0253 0.0255 -0.0002
0.0013  0.0000  1 .
6259 CG    CG    . LEU LEU LEU B B 383 383 . 0.0264 0.0337 0.0538 0.0030
0.0056  0.0155  1 .
6260 CD1   CD1   . LEU LEU LEU B B 383 383 . 0.0432 0.0543 0.0421 0.0227
0.0173  0.0221  1 .
6261 CD2   CD2   . LEU LEU LEU B B 383 383 . 0.0354 0.0255 0.0292 -0.0015
0.0062  -0.0009 1 .
6262 C     C     . LEU LEU LEU B B 383 383 . 0.0398 0.0393 0.0322 -0.0132
0.0010  0.0025  1 .
6263 O     O     . LEU LEU LEU B B 383 383 . 0.0531 0.0386 0.0415 -0.0105 -
0.0060 0.0140  1 .
6264 N     N     . VAL VAL VAL B B 384 384 . 0.0860 0.0378 0.0368 0.0069
0.0071  0.0019  1 .
6265 CA    CA    . VAL VAL VAL B B 384 384 . 0.0606 0.0293 0.0496 -0.0040
0.0144  0.0064  1 .
6266 CB    CB    . VAL VAL VAL B B 384 384 . 0.0416 0.0459 0.0428 0.0066  -
0.0115 0.0082  1 .
6267 CG1   CG1   . VAL VAL VAL B B 384 384 . 0.0624 0.0353 0.0267 0.0192  -
0.0073 -0.0038 1 .
6268 CG2   CG2   . VAL VAL VAL B B 384 384 . 0.0374 0.0316 0.0288 0.0087
0.0065  0.0047  1 .
6269 C     C     . VAL VAL VAL B B 384 384 . 0.0793 0.0482 0.0490 0.0034  -
0.0032 0.0109  1 .
6270 O     O     . VAL VAL VAL B B 384 384 . 0.0883 0.0533 0.0465 0.0156
0.0223  0.0234  1 .
6271 N     N     . VAL VAL VAL B B 385 385 . 0.0898 0.0456 0.0591 0.0033
0.0097  0.0034  1 .
6272 CA    CA    . VAL VAL VAL B B 385 385 . 0.0450 0.0296 0.0378 0.0053
0.0000  0.0040  1 .
6273 CB    CB    . VAL VAL VAL B B 385 385 . 0.0375 0.0258 0.0265 0.0025
0.0038  0.0007  1 .
6274 CG1   CG1   . VAL VAL VAL B B 385 385 . 0.0722 0.0286 0.0554 -0.0097 -
0.0258 0.0007  1 .
6275 CG2   CG2   . VAL VAL VAL B B 385 385 . 0.0505 0.0375 0.0396 0.0012  -
0.0121 0.0095  1 .
6276 C     C     . VAL VAL VAL B B 385 385 . 0.0808 0.0555 0.0576 -0.0186 -
0.0052 0.0026  1 .
6277 O     O     . VAL VAL VAL B B 385 385 . 0.1014 0.0585 0.0508 -0.0151 -
0.0313 -0.0132 1 .
6278 N     N     . GLY GLY GLY B B 386 386 . 0.0761 0.0592 0.0795 0.0004
0.0097  0.0233  1 .
6279 CA    CA    . GLY GLY GLY B B 386 386 . 0.0675 0.0532 0.0848 0.0047
0.0148  0.0216  1 .
6280 C     C     . GLY GLY GLY B B 386 386 . 0.0845 0.0707 0.0631 0.0161
0.0010  0.0021  1 .
6281 O     O     . GLY GLY GLY B B 386 386 . 0.1079 0.0633 0.0742 -0.0059
0.0016  -0.0034 1 .
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6282 N     N     . LEU LEU LEU B B 387 387 . 0.0970 0.0512 0.0570 0.0118  -
0.0045 0.0037  1 .
6283 CA    CA    . LEU LEU LEU B B 387 387 . 0.0912 0.0404 0.0613 0.0135  -
0.0036 0.0147  1 .
6284 CB    CB    . LEU LEU LEU B B 387 387 . 0.0596 0.0548 0.0742 0.0314  -
0.0085 -0.0022 1 .
6285 CG    CG    . LEU LEU LEU B B 387 387 . 0.0775 0.1048 0.0452 -0.0226 -
0.0192 -0.0214 1 .
6286 CD1   CD1   . LEU LEU LEU B B 387 387 . 0.0982 0.0406 0.0737 0.0092  -
0.0091 -0.0031 1 .
6287 CD2   CD2   . LEU LEU LEU B B 387 387 . 0.0662 0.0982 0.0630 0.0484
0.0157  -0.0036 1 .
6288 C     C     . LEU LEU LEU B B 387 387 . 0.0986 0.0552 0.0619 0.0180  -
0.0099 0.0123  1 .
6289 O     O     . LEU LEU LEU B B 387 387 . 0.1325 0.0855 0.0682 0.0286  -
0.0114 -0.0003 1 .
6290 N     N     . CYS CYS CYS B B 388 388 . 0.1019 0.0742 0.0593 0.0137  -
0.0099 0.0123  1 .
6291 CA    CA    . CYS CYS CYS B B 388 388 . 0.1335 0.0978 0.0893 0.0010  -
0.0019 0.0101  1 .
6292 CB    CB    . CYS CYS CYS B B 388 388 . 0.1328 0.0806 0.0800 0.0059  -
0.0114 -0.0037 1 .
6293 SG    SG    . CYS CYS CYS B B 388 388 . 0.3006 0.2336 0.1545 -0.0161 -
0.0393 0.0105  1 .
6294 C     C     . CYS CYS CYS B B 388 388 . 0.1303 0.0939 0.0968 -0.0032 -
0.0017 0.0031  1 .
6295 O     O     . CYS CYS CYS B B 388 388 . 0.1808 0.1310 0.0974 0.0020  -
0.0018 0.0119  1 .
6296 N     N     . THR THR THR B B 389 389 . 0.0889 0.0595 0.0595 -0.0055 -
0.0018 0.0057  1 .
6297 CA    CA    . THR THR THR B B 389 389 . 0.0582 0.0491 0.0581 -0.0006 -
0.0019 0.0208  1 .
6298 CB    CB    . THR THR THR B B 389 389 . 0.0485 0.0664 0.0312 -0.0087 -
0.0090 -0.0023 1 .
6299 OG1   OG1   . THR THR THR B B 389 389 . 0.0433 0.0519 0.0378 0.0128
0.0018  0.0159  1 .
6300 CG2   CG2   . THR THR THR B B 389 389 . 0.0359 0.0559 0.0420 0.0033
0.0047  0.0222  1 .
6301 C     C     . THR THR THR B B 389 389 . 0.0721 0.0692 0.0380 0.0001
0.0014  0.0033  1 .
6302 O     O     . THR THR THR B B 389 389 . 0.0891 0.0613 0.0636 -0.0246
0.0028  0.0178  1 .
6303 N     N     . GLY GLY GLY B B 390 390 . 0.0366 0.0262 0.0277 -0.0032 -
0.0052 0.0015  1 .
6304 CA    CA    . GLY GLY GLY B B 390 390 . 0.0538 0.0262 0.0438 -0.0040 -
0.0110 -0.0005 1 .
6305 C     C     . GLY GLY GLY B B 390 390 . 0.0318 0.0369 0.0265 0.0087
0.0028  0.0038  1 .
6306 O     O     . GLY GLY GLY B B 390 390 . 0.0455 0.0295 0.0257 -0.0081 -
0.0014 0.0011  1 .
6307 N     N     . GLN GLN GLN B B 391 391 . 0.0388 0.0286 0.0295 -0.0066 -
0.0074 0.0036  1 .
6308 CA    CA    . GLN GLN GLN B B 391 391 . 0.0353 0.0528 0.0298 -0.0045
0.0028  0.0084  1 .
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6309 CB    CB    . GLN GLN GLN B B 391 391 . 0.0552 0.0476 0.0413 -0.0138 -
0.0068 0.0182  1 .
6310 CG    CG    . GLN GLN GLN B B 391 391 . 0.0363 0.0691 0.0480 -0.0210
0.0048  -0.0009 1 .
6311 CD    CD    . GLN GLN GLN B B 391 391 . 0.0507 0.0414 0.0435 -0.0193 -
0.0151 0.0152  1 .
6312 OE1   OE1   . GLN GLN GLN B B 391 391 . 0.0570 0.0569 0.0450 0.0079  -
0.0094 0.0199  1 .
6313 NE2   NE2   . GLN GLN GLN B B 391 391 . 0.0688 0.0882 0.0668 -0.0116
0.0140  0.0090  1 .
6314 C     C     . GLN GLN GLN B B 391 391 . 0.0349 0.0324 0.0335 -0.0056 -
0.0054 -0.0011 1 .
6315 O     O     . GLN GLN GLN B B 391 391 . 0.0529 0.0490 0.0332 -0.0094 -
0.0029 0.0097  1 .
6316 N     N     . ILE ILE ILE B B 392 392 . 0.0588 0.0261 0.0273 0.0012  -
0.0039 0.0009  1 .
6317 CA    CA    . ILE ILE ILE B B 392 392 . 0.0459 0.0253 0.0254 -0.0005 -
0.0018 0.0000  1 .
6318 CB    CB    . ILE ILE ILE B B 392 392 . 0.0478 0.0394 0.0268 0.0178
0.0059  0.0046  1 .
6319 CG1   CG1   . ILE ILE ILE B B 392 392 . 0.0336 0.0352 0.0258 0.0090  -
0.0021 -0.0023 1 .
6320 CD1   CD1   . ILE ILE ILE B B 392 392 . 0.0273 0.0253 0.0373 -0.0003 -
0.0049 0.0008  1 .
6321 CG2   CG2   . ILE ILE ILE B B 392 392 . 0.0830 0.0523 0.0496 0.0389  -
0.0031 -0.0063 1 .
6322 C     C     . ILE ILE ILE B B 392 392 . 0.0311 0.0297 0.0299 0.0050
0.0051  0.0045  1 .
6323 O     O     . ILE ILE ILE B B 392 392 . 0.0366 0.0329 0.0322 0.0091
0.0086  0.0068  1 .
6324 N     N     . LYS LYS LYS B B 393 393 . 0.0484 0.0294 0.0259 0.0097  -
0.0039 -0.0016 1 .
6325 CA    CA    . LYS LYS LYS B B 393 393 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6326 CB    CB    . LYS LYS LYS B B 393 393 . 0.0276 0.0510 0.0305 0.0077
0.0035  0.0116  1 .
6327 CG    CG    . LYS LYS LYS B B 393 393 . 0.0527 0.0259 0.0254 -0.0039 -
0.0016 0.0002  1 .
6328 CD    CD    . LYS LYS LYS B B 393 393 . 0.0492 0.0475 0.0398 -0.0028
0.0077  -0.0171 1 .
6329 CE    CE    . LYS LYS LYS B B 393 393 . 0.0446 0.0490 0.0430 -0.0114
0.0141  -0.0195 1 .
6330 NZ    NZ    . LYS LYS LYS B B 393 393 . 0.0418 0.0404 0.0502 -0.0020 -
0.0117 0.0171  1 .
6331 C     C     . LYS LYS LYS B B 393 393 . 0.0465 0.0317 0.0369 0.0116
0.0157  0.0086  1 .
6332 O     O     . LYS LYS LYS B B 393 393 . 0.0257 0.0266 0.0256 0.0007
0.0003  0.0006  1 .
6333 N     N     . THR THR THR B B 394 394 . 0.0362 0.0424 0.0258 0.0136
0.0024  0.0031  1 .
6334 CA    CA    . THR THR THR B B 394 394 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6335 CB    CB    . THR THR THR B B 394 394 . 0.0355 0.0274 0.0254 0.0046  -
0.0012 -0.0005 1 .
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6336 OG1   OG1   . THR THR THR B B 394 394 . 0.0346 0.0260 0.0277 0.0025
0.0047  0.0012  1 .
6337 CG2   CG2   . THR THR THR B B 394 394 . 0.0488 0.0280 0.0330 0.0071  -
0.0003 -0.0020 1 .
6338 C     C     . THR THR THR B B 394 394 . 0.0254 0.0264 0.0259 -0.0003
0.0002  -0.0008 1 .
6339 O     O     . THR THR THR B B 394 394 . 0.0270 0.0259 0.0254 0.0010
0.0004  0.0002  1 .
6340 N     N     . GLY GLY GLY B B 395 395 . 0.0255 0.0253 0.0255 0.0000  -
0.0002 0.0000  1 .
6341 CA    CA    . GLY GLY GLY B B 395 395 . 0.0253 0.0439 0.0354 -0.0007 -
0.0005 0.0136  1 .
6342 C     C     . GLY GLY GLY B B 395 395 . 0.0372 0.0337 0.0256 -0.0099 -
0.0018 0.0015  1 .
6343 O     O     . GLY GLY GLY B B 395 395 . 0.0452 0.0320 0.0317 0.0115
0.0113  0.0066  1 .
6344 N     N     . ALA ALA ALA B B 396 396 . 0.0262 0.0266 0.0277 0.0010
0.0014  0.0017  1 .
6345 CA    CA    . ALA ALA ALA B B 396 396 . 0.0304 0.0328 0.0355 0.0021  -
0.0065 0.0006  1 .
6346 CB    CB    . ALA ALA ALA B B 396 396 . 0.0290 0.0283 0.0537 -0.0030 -
0.0075 0.0037  1 .
6347 C     C     . ALA ALA ALA B B 396 396 . 0.0346 0.0321 0.0261 0.0079
0.0027  0.0023  1 .
6348 O     O     . ALA ALA ALA B B 396 396 . 0.0253 0.0262 0.0253 -0.0001
0.0000  0.0000  1 .
6349 N     N     . PRO PRO PRO B B 397 397 . 0.0372 0.0258 0.0297 0.0025
0.0072  0.0015  1 .
6350 CA    CA    . PRO PRO PRO B B 397 397 . 0.0260 0.0255 0.0256 0.0003
0.0005  0.0002  1 .
6351 CB    CB    . PRO PRO PRO B B 397 397 . 0.0846 0.0262 0.0430 -0.0075
0.0246  -0.0030 1 .
6352 CG    CG    . PRO PRO PRO B B 397 397 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6353 CD    CD    . PRO PRO PRO B B 397 397 . 0.0273 0.0338 0.0379 -0.0017
0.0020  -0.0103 1 .
6354 C     C     . PRO PRO PRO B B 397 397 . 0.0611 0.0257 0.0253 0.0036  -
0.0008 0.0000  1 .
6355 O     O     . PRO PRO PRO B B 397 397 . 0.0420 0.0457 0.0274 0.0184
0.0059  0.0066  1 .
6356 N     N     . CYS CYS CYS B B 398 398 . 0.0277 0.0262 0.0256 0.0015
0.0008  0.0005  1 .
6357 CA    CA    . CYS CYS CYS B B 398 398 . 0.0339 0.0272 0.0280 -0.0040
0.0047  -0.0022 1 .
6358 CB    CB    . CYS CYS CYS B B 398 398 . 0.0253 0.0253 0.0445 0.0000  -
0.0002 -0.0009 1 .
6359 SG    SG    . CYS CYS CYS B B 398 398 . 0.0341 0.0313 0.0325 -0.0021
0.0079  -0.0015 1 .
6360 C     C     . CYS CYS CYS B B 398 398 . 0.0525 0.0368 0.0592 0.0050
0.0034  0.0061  1 .
6361 O     O     . CYS CYS CYS B B 398 398 . 0.0330 0.0280 0.0346 0.0046
0.0084  0.0050  1 .
6362 N     N     . ARG ARG ARG B B 399 399 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
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6363 CA    CA    . ARG ARG ARG B B 399 399 . 0.0346 0.0257 0.0259 0.0019
0.0024  0.0005  1 .
6364 CB    CB    . ARG ARG ARG B B 399 399 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6365 CG    CG    . ARG ARG ARG B B 399 399 . 0.0459 0.0351 0.0253 0.0142
0.0011  0.0008  1 .
6366 CD    CD    . ARG ARG ARG B B 399 399 . 0.0481 0.0447 0.0360 -0.0158
0.0080  0.0025  1 .
6367 NE    NE    . ARG ARG ARG B B 399 399 . 0.0330 0.0405 0.0400 0.0089  -
0.0090 -0.0149 1 .
6368 CZ    CZ    . ARG ARG ARG B B 399 399 . 0.0369 0.0337 0.0629 -0.0098
0.0208  -0.0177 1 .
6369 NH1   NH1   . ARG ARG ARG B B 399 399 . 0.0303 0.0300 0.0931 -0.0009 -
0.0011 -0.0172 1 .
6370 NH2   NH2   . ARG ARG ARG B B 399 399 . 0.0495 0.0427 0.0255 0.0205
0.0025  0.0021  1 .
6371 C     C     . ARG ARG ARG B B 399 399 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6372 O     O     . ARG ARG ARG B B 399 399 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6373 N     N     . SER SER SER B B 400 400 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6374 CA    CA    . SER SER SER B B 400 400 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6375 CB    CB    . SER SER SER B B 400 400 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6376 OG    OG    . SER SER SER B B 400 400 . 0.0410 0.0254 0.0284 -0.0010 -
0.0069 0.0004  1 .
6377 C     C     . SER SER SER B B 400 400 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6378 O     O     . SER SER SER B B 400 400 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6379 N     N     . GLU GLU GLU B B 401 401 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6380 CA    CA    . GLU GLU GLU B B 401 401 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6381 CB    CB    . GLU GLU GLU B B 401 401 . 0.0253 0.0253 0.0387 0.0000
0.0006  -0.0002 1 .
6382 CG    CG    . GLU GLU GLU B B 401 401 . 0.0369 0.0385 0.0419 0.0014
0.0121  -0.0055 1 .
6383 CD    CD    . GLU GLU GLU B B 401 401 . 0.0315 0.0414 0.0310 0.0047  -
0.0019 -0.0095 1 .
6384 OE1   OE1   . GLU GLU GLU B B 401 401 . 0.0255 0.0254 0.0253 0.0001  -
0.0001 0.0000  1 .
6385 OE2   OE2   . GLU GLU GLU B B 401 401 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6386 C     C     . GLU GLU GLU B B 401 401 . 0.0278 0.0303 0.0268 -0.0035 -
0.0019 0.0027  1 .
6387 O     O     . GLU GLU GLU B B 401 401 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6388 N     N     . ARG ARG ARG B B 402 402 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6389 CA    CA    . ARG ARG ARG B B 402 402 . 0.0253 0.0279 0.0297 -0.0002
0.0003  -0.0034 1 .
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6390 CB    CB    . ARG ARG ARG B B 402 402 . 0.0405 0.0317 0.0301 -0.0053 -
0.0040 -0.0026 1 .
6391 CG    CG    . ARG ARG ARG B B 402 402 . 0.0488 0.0254 0.0260 -0.0016 -
0.0041 0.0002  1 .
6392 CD    CD    . ARG ARG ARG B B 402 402 . 0.0256 0.0274 0.0273 0.0008  -
0.0007 -0.0020 1 .
6393 NE    NE    . ARG ARG ARG B B 402 402 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6394 CZ    CZ    . ARG ARG ARG B B 402 402 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6395 NH1   NH1   . ARG ARG ARG B B 402 402 . 0.0333 0.0484 0.0358 -0.0136
0.0091  -0.0155 1 .
6396 NH2   NH2   . ARG ARG ARG B B 402 402 . 0.0350 0.0253 0.0280 0.0000  -
0.0051 0.0000  1 .
6397 C     C     . ARG ARG ARG B B 402 402 . 0.0253 0.0253 0.0259 0.0000
0.0000  0.0001  1 .
6398 O     O     . ARG ARG ARG B B 402 402 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6399 N     N     . LEU LEU LEU B B 403 403 . 0.0384 0.0309 0.0273 0.0085
0.0051  0.0033  1 .
6400 CA    CA    . LEU LEU LEU B B 403 403 . 0.0257 0.0257 0.0255 -0.0004
0.0003  -0.0003 1 .
6401 CB    CB    . LEU LEU LEU B B 403 403 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6402 CG    CG    . LEU LEU LEU B B 403 403 . 0.0304 0.0323 0.0295 -0.0060 -
0.0046 0.0054  1 .
6403 CD1   CD1   . LEU LEU LEU B B 403 403 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6404 CD2   CD2   . LEU LEU LEU B B 403 403 . 0.0323 0.0254 0.0348 -0.0007 -
0.0081 0.0009  1 .
6405 C     C     . LEU LEU LEU B B 403 403 . 0.0253 0.0284 0.0262 0.0000
0.0000  -0.0017 1 .
6406 O     O     . LEU LEU LEU B B 403 403 . 0.0254 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6407 N     N     . ALA ALA ALA B B 404 404 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6408 CA    CA    . ALA ALA ALA B B 404 404 . 0.0256 0.0315 0.0256 -0.0013
0.0002  -0.0013 1 .
6409 CB    CB    . ALA ALA ALA B B 404 404 . 0.0253 0.0517 0.0354 0.0012  -
0.0007 -0.0163 1 .
6410 C     C     . ALA ALA ALA B B 404 404 . 0.0268 0.0354 0.0520 0.0037  -
0.0046 -0.0142 1 .
6411 O     O     . ALA ALA ALA B B 404 404 . 0.0280 0.0309 0.0253 -0.0038
0.0000  0.0000  1 .
6412 N     N     . LYS LYS LYS B B 405 405 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6413 CA    CA    . LYS LYS LYS B B 405 405 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6414 CB    CB    . LYS LYS LYS B B 405 405 . 0.0294 0.0290 0.0294 0.0039
0.0040  0.0039  1 .
6415 CG    CG    . LYS LYS LYS B B 405 405 . 0.0262 0.0262 0.0350 0.0009  -
0.0029 -0.0029 1 .
6416 CD    CD    . LYS LYS LYS B B 405 405 . 0.0341 0.0262 0.0258 -0.0028 -
0.0022 0.0007  1 .
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6417 CE    CE    . LYS LYS LYS B B 405 405 . 0.0278 0.0281 0.0266 -0.0017 -
0.0003 0.0017  1 .
6418 NZ    NZ    . LYS LYS LYS B B 405 405 . 0.0254 0.0265 0.0275 0.0003  -
0.0004 -0.0016 1 .
6419 C     C     . LYS LYS LYS B B 405 405 . 0.0315 0.0499 0.0280 -0.0084 -
0.0040 0.0055  1 .
6420 O     O     . LYS LYS LYS B B 405 405 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6421 N     N     . TYR TYR TYR B B 406 406 . 0.0387 0.0306 0.0276 0.0084
0.0055  0.0035  1 .
6422 CA    CA    . TYR TYR TYR B B 406 406 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6423 CB    CB    . TYR TYR TYR B B 406 406 . 0.0298 0.0279 0.0394 0.0034
0.0079  0.0060  1 .
6424 CG    CG    . TYR TYR TYR B B 406 406 . 0.0271 0.0314 0.0323 -0.0033 -
0.0035 0.0065  1 .
6425 CD1   CD1   . TYR TYR TYR B B 406 406 . 0.0256 0.0296 0.0254 0.0011
0.0002  0.0007  1 .
6426 CE1   CE1   . TYR TYR TYR B B 406 406 . 0.0253 0.0261 0.0262 -0.0001
0.0001  -0.0008 1 .
6427 CZ    CZ    . TYR TYR TYR B B 406 406 . 0.0260 0.0358 0.0267 -0.0026
0.0009  -0.0038 1 .
6428 OH    OH    . TYR TYR TYR B B 406 406 . 0.0325 0.0269 0.0260 0.0034
0.0023  0.0011  1 .
6429 CE2   CE2   . TYR TYR TYR B B 406 406 . 0.0632 0.0692 0.0498 0.0085
0.0302  0.0027  1 .
6430 CD2   CD2   . TYR TYR TYR B B 406 406 . 0.0436 0.0255 0.0324 0.0019  -
0.0114 -0.0012 1 .
6431 C     C     . TYR TYR TYR B B 406 406 . 0.0308 0.0260 0.0260 0.0020  -
0.0020 -0.0007 1 .
6432 O     O     . TYR TYR TYR B B 406 406 . 0.0276 0.0280 0.0280 -0.0025
0.0025  -0.0027 1 .
6433 N     N     . ASN ASN ASN B B 407 407 . 0.0278 0.0267 0.0366 -0.0018
0.0052  -0.0040 1 .
6434 CA    CA    . ASN ASN ASN B B 407 407 . 0.0259 0.0264 0.0263 -0.0008 -
0.0007 0.0010  1 .
6435 CB    CB    . ASN ASN ASN B B 407 407 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6436 CG    CG    . ASN ASN ASN B B 407 407 . 0.0255 0.0272 0.0298 0.0006
0.0009  0.0029  1 .
6437 OD1   OD1   . ASN ASN ASN B B 407 407 . 0.0307 0.0259 0.0254 0.0018
0.0009  0.0003  1 .
6438 ND2   ND2   . ASN ASN ASN B B 407 407 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6439 C     C     . ASN ASN ASN B B 407 407 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6440 O     O     . ASN ASN ASN B B 407 407 . 0.0258 0.0256 0.0257 0.0004  -
0.0004 -0.0003 1 .
6441 N     N     . GLN GLN GLN B B 408 408 . 0.0275 0.0261 0.0255 0.0013
0.0007  0.0004  1 .
6442 CA    CA    . GLN GLN GLN B B 408 408 . 0.0278 0.0255 0.0255 0.0006
0.0000  0.0000  1 .
6443 CB    CB    . GLN GLN GLN B B 408 408 . 0.0298 0.0266 0.0261 0.0024  -
0.0018 -0.0010 1 .
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6444 CG    CG    . GLN GLN GLN B B 408 408 . 0.0278 0.0267 0.0293 0.0018
0.0031  0.0023  1 .
6445 CD    CD    . GLN GLN GLN B B 408 408 . 0.0254 0.0326 0.0278 0.0010  -
0.0006 -0.0042 1 .
6446 OE1   OE1   . GLN GLN GLN B B 408 408 . 0.0583 0.0662 0.0442 0.0278  -
0.0007 0.0176  1 .
6447 NE2   NE2   . GLN GLN GLN B B 408 408 . 0.0615 0.1021 0.0454 0.0143
0.0088  0.0392  1 .
6448 C     C     . GLN GLN GLN B B 408 408 . 0.0262 0.0270 0.0259 -0.0012 -
0.0007 0.0010  1 .
6449 O     O     . GLN GLN GLN B B 408 408 . 0.0311 0.0337 0.0307 0.0058  -
0.0021 -0.0055 1 .
6450 N     N     . LEU LEU LEU B B 409 409 . 0.0345 0.0473 0.0329 0.0142  -
0.0083 -0.0129 1 .
6451 CA    CA    . LEU LEU LEU B B 409 409 . 0.0272 0.0267 0.0254 0.0016
0.0005  0.0004  1 .
6452 CB    CB    . LEU LEU LEU B B 409 409 . 0.0263 0.0256 0.0317 0.0004  -
0.0006 0.0006  1 .
6453 CG    CG    . LEU LEU LEU B B 409 409 . 0.0255 0.0289 0.0287 0.0008  -
0.0008 -0.0035 1 .
6454 CD1   CD1   . LEU LEU LEU B B 409 409 . 0.0477 0.0308 0.0347 0.0110
0.0145  0.0071  1 .
6455 CD2   CD2   . LEU LEU LEU B B 409 409 . 0.0698 0.0566 0.0599 -0.0169 -
0.0294 -0.0081 1 .
6456 C     C     . LEU LEU LEU B B 409 409 . 0.0254 0.0255 0.0253 0.0001
0.0000  0.0000  1 .
6457 O     O     . LEU LEU LEU B B 409 409 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6458 N     N     . MET MET MET B B 410 410 . 0.0413 0.0303 0.0267 0.0089
0.0048  0.0026  1 .
6459 CA    CA    . MET MET MET B B 410 410 . 0.0608 0.0256 0.0331 -0.0034 -
0.0068 0.0007  1 .
6460 CB    CB    . MET MET MET B B 410 410 . 0.0302 0.0258 0.0279 0.0012  -
0.0007 0.0004  1 .
6461 CG    CG    . MET MET MET B B 410 410 . 0.0463 0.0906 0.0543 0.0243  -
0.0008 -0.0337 1 .
6462 SD    SD    . MET MET MET B B 410 410 . 0.0820 0.0656 0.0323 0.0126  -
0.0144 0.0079  1 .
6463 CE    CE    . MET MET MET B B 410 410 . 0.1476 0.0827 0.0520 -0.0153
0.0086  -0.0345 1 .
6464 C     C     . MET MET MET B B 410 410 . 0.0375 0.0300 0.0318 0.0073
0.0082  0.0044  1 .
6465 O     O     . MET MET MET B B 410 410 . 0.0459 0.0255 0.0312 0.0022  -
0.0110 -0.0012 1 .
6466 N     N     . ARG ARG ARG B B 411 411 . 0.0701 0.0264 0.0377 -0.0035
0.0011  -0.0013 1 .
6467 CA    CA    . ARG ARG ARG B B 411 411 . 0.0282 0.0345 0.0305 0.0052
0.0039  0.0069  1 .
6468 CB    CB    . ARG ARG ARG B B 411 411 . 0.0474 0.0306 0.0269 -0.0108 -
0.0059 0.0029  1 .
6469 CG    CG    . ARG ARG ARG B B 411 411 . 0.0399 0.0492 0.0306 0.0179  -
0.0025 0.0000  1 .
6470 CD    CD    . ARG ARG ARG B B 411 411 . 0.0258 0.0343 0.0256 -0.0022 -
0.0004 0.0016  1 .
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6471 NE    NE    . ARG ARG ARG B B 411 411 . 0.0275 0.0492 0.0269 -0.0006 -
0.0005 -0.0056 1 .
6472 CZ    CZ    . ARG ARG ARG B B 411 411 . 0.0602 0.0414 0.0292 0.0028  -
0.0110 0.0017  1 .
6473 NH1   NH1   . ARG ARG ARG B B 411 411 . 0.0424 0.0266 0.0258 -0.0048 -
0.0029 0.0008  1 .
6474 NH2   NH2   . ARG ARG ARG B B 411 411 . 0.0362 0.0523 0.0271 -0.0171 -
0.0044 0.0069  1 .
6475 C     C     . ARG ARG ARG B B 411 411 . 0.0464 0.0290 0.0433 -0.0084 -
0.0029 0.0034  1 .
6476 O     O     . ARG ARG ARG B B 411 411 . 0.0503 0.0332 0.0673 0.0038  -
0.0009 0.0173  1 .
6477 N     N     . ILE ILE ILE B B 412 412 . 0.0391 0.0336 0.0406 -0.0018 -
0.0110 0.0087  1 .
6478 CA    CA    . ILE ILE ILE B B 412 412 . 0.0503 0.0343 0.0531 -0.0065 -
0.0177 -0.0058 1 .
6479 CB    CB    . ILE ILE ILE B B 412 412 . 0.0543 0.0281 0.0317 0.0030  -
0.0132 -0.0005 1 .
6480 CG1   CG1   . ILE ILE ILE B B 412 412 . 0.0361 0.0292 0.0371 -0.0039 -
0.0059 0.0067  1 .
6481 CD1   CD1   . ILE ILE ILE B B 412 412 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6482 CG2   CG2   . ILE ILE ILE B B 412 412 . 0.0550 0.0894 0.0768 -0.0202 -
0.0362 0.0053  1 .
6483 C     C     . ILE ILE ILE B B 412 412 . 0.0512 0.0407 0.0576 -0.0041 -
0.0063 -0.0101 1 .
6484 O     O     . ILE ILE ILE B B 412 412 . 0.0456 0.0643 0.0812 -0.0001 -
0.0327 -0.0107 1 .
6485 N     N     . GLU GLU GLU B B 413 413 . 0.0549 0.0289 0.0375 0.0100
0.0078  0.0041  1 .
6486 CA    CA    . GLU GLU GLU B B 413 413 . 0.0733 0.0390 0.0366 -0.0008
0.0090  0.0112  1 .
6487 CB    CB    . GLU GLU GLU B B 413 413 . 0.0626 0.0266 0.0499 0.0053
0.0197  0.0000  1 .
6488 CG    CG    . GLU GLU GLU B B 413 413 . 0.1060 0.0355 0.0559 -0.0078
0.0088  -0.0175 1 .
6489 CD    CD    . GLU GLU GLU B B 413 413 . 0.1264 0.0568 0.0817 -0.0290
0.0029  -0.0161 1 .
6490 OE1   OE1   . GLU GLU GLU B B 413 413 . 0.1336 0.0737 0.1269 0.0014
0.0102  -0.0128 1 .
6491 OE2   OE2   . GLU GLU GLU B B 413 413 . 0.1731 0.0817 0.0763 0.0413
0.0088  -0.0396 1 .
6492 C     C     . GLU GLU GLU B B 413 413 . 0.1023 0.0510 0.0490 -0.0156 -
0.0102 0.0069  1 .
6493 O     O     . GLU GLU GLU B B 413 413 . 0.0987 0.0577 0.0483 -0.0166 -
0.0335 0.0223  1 .
6494 N     N     . GLU GLU GLU B B 414 414 . 0.0872 0.0728 0.0622 -0.0127 -
0.0076 0.0248  1 .
6495 CA    CA    . GLU GLU GLU B B 414 414 . 0.1104 0.0617 0.0517 -0.0054 -
0.0052 0.0067  1 .
6496 CB    CB    . GLU GLU GLU B B 414 414 . 0.1118 0.0756 0.0390 0.0097  -
0.0209 0.0182  1 .
6497 CG    CG    . GLU GLU GLU B B 414 414 . 0.1796 0.0695 0.0941 -0.0151 -
0.0091 -0.0083 1 .
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6498 CD    CD    . GLU GLU GLU B B 414 414 . 0.1469 0.1364 0.1073 0.0146  -
0.0061 -0.0374 1 .
6499 OE1   OE1   . GLU GLU GLU B B 414 414 . 0.1956 0.1539 0.1624 -0.0240 -
0.0124 -0.0707 1 .
6500 OE2   OE2   . GLU GLU GLU B B 414 414 . 0.1623 0.1049 0.1469 0.0224  -
0.0216 -0.0088 1 .
6501 C     C     . GLU GLU GLU B B 414 414 . 0.1168 0.0837 0.0776 -0.0028 -
0.0086 0.0066  1 .
6502 O     O     . GLU GLU GLU B B 414 414 . 0.1636 0.0629 0.1204 -0.0032 -
0.0230 -0.0101 1 .
6503 N     N     . GLU GLU GLU B B 415 415 . 0.1659 0.1010 0.1168 0.0029
0.0007  0.0129  1 .
6504 CA    CA    . GLU GLU GLU B B 415 415 . 0.1571 0.1055 0.1411 -0.0055 -
0.0023 0.0159  1 .
6505 CB    CB    . GLU GLU GLU B B 415 415 . 0.1651 0.1192 0.1642 -0.0030
0.0035  0.0020  1 .
6506 CG    CG    . GLU GLU GLU B B 415 415 . 0.2010 0.1982 0.2428 -0.0226 -
0.0182 0.0105  1 .
6507 CD    CD    . GLU GLU GLU B B 415 415 . 0.3131 0.2930 0.2721 0.0133  -
0.0413 0.0461  1 .
6508 OE1   OE1   . GLU GLU GLU B B 415 415 . 0.3692 0.3455 0.2889 -0.0112 -
0.0892 0.0489  1 .
6509 OE2   OE2   . GLU GLU GLU B B 415 415 . 0.3376 0.3275 0.3308 0.0144  -
0.0802 0.0415  1 .
6510 C     C     . GLU GLU GLU B B 415 415 . 0.1904 0.1395 0.1552 -0.0127 -
0.0047 -0.0045 1 .
6511 O     O     . GLU GLU GLU B B 415 415 . 0.1915 0.1608 0.1631 -0.0105 -
0.0009 -0.0126 1 .
6512 N     N     . LEU LEU LEU B B 416 416 . 0.2131 0.1690 0.1635 -0.0220 -
0.0079 -0.0177 1 .
6513 CA    CA    . LEU LEU LEU B B 416 416 . 0.2359 0.2130 0.1901 -0.0137 -
0.0181 -0.0038 1 .
6514 CB    CB    . LEU LEU LEU B B 416 416 . 0.2170 0.2036 0.1695 -0.0188 -
0.0268 -0.0141 1 .
6515 CG    CG    . LEU LEU LEU B B 416 416 . 0.1958 0.2155 0.1667 -0.0244 -
0.0259 0.0228  1 .
6516 CD1   CD1   . LEU LEU LEU B B 416 416 . 0.2011 0.1940 0.1508 -0.0183 -
0.0496 0.0948  1 .
6517 CD2   CD2   . LEU LEU LEU B B 416 416 . 0.1758 0.2462 0.2044 -0.0451 -
0.0238 0.0038  1 .
6518 C     C     . LEU LEU LEU B B 416 416 . 0.2644 0.2369 0.2216 -0.0080 -
0.0160 -0.0156 1 .
6519 O     O     . LEU LEU LEU B B 416 416 . 0.2842 0.2604 0.2373 -0.0136 -
0.0220 -0.0142 1 .
6520 N     N     . GLY GLY GLY B B 417 417 . 0.3051 0.2638 0.2502 -0.0008 -
0.0136 -0.0071 1 .
6521 CA    CA    . GLY GLY GLY B B 417 417 . 0.3414 0.2922 0.2958 0.0058  -
0.0053 -0.0003 1 .
6522 C     C     . GLY GLY GLY B B 417 417 . 0.3604 0.3239 0.3164 0.0083  -
0.0032 0.0014  1 .
6523 O     O     . GLY GLY GLY B B 417 417 . 0.3668 0.3096 0.2942 0.0230  -
0.0007 0.0142  1 .
6524 N     N     . ASP ASP ASP B B 418 418 . 0.3883 0.3630 0.3578 0.0053  -
0.0081 0.0032  1 .
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6525 CA    CA    . ASP ASP ASP B B 418 418 . 0.4114 0.3896 0.3935 -0.0006 -
0.0030 -0.0073 1 .
6526 CB    CB    . ASP ASP ASP B B 418 418 . 0.4088 0.4014 0.4135 -0.0030 -
0.0039 -0.0057 1 .
6527 CG    CG    . ASP ASP ASP B B 418 418 . 0.4244 0.4283 0.4674 0.0004
0.0076  -0.0271 1 .
6528 OD1   OD1   . ASP ASP ASP B B 418 418 . 0.3902 0.4381 0.4993 -0.0193
0.0596  -0.0021 1 .
6529 OD2   OD2   . ASP ASP ASP B B 418 418 . 0.4205 0.4843 0.5340 0.0007
0.0423  -0.0362 1 .
6530 C     C     . ASP ASP ASP B B 418 418 . 0.4086 0.3910 0.3930 -0.0016 -
0.0027 -0.0012 1 .
6531 O     O     . ASP ASP ASP B B 418 418 . 0.4241 0.4015 0.4134 -0.0046
0.0063  -0.0025 1 .
6532 N     N     . GLU GLU GLU B B 419 419 . 0.3993 0.3785 0.3798 -0.0059 -
0.0054 -0.0027 1 .
6533 CA    CA    . GLU GLU GLU B B 419 419 . 0.3774 0.3646 0.3613 -0.0091 -
0.0053 0.0004  1 .
6534 CB    CB    . GLU GLU GLU B B 419 419 . 0.3949 0.3803 0.3753 -0.0059 -
0.0042 0.0000  1 .
6535 CG    CG    . GLU GLU GLU B B 419 419 . 0.4345 0.4447 0.4074 -0.0208 -
0.0021 -0.0070 1 .
6536 CD    CD    . GLU GLU GLU B B 419 419 . 0.4977 0.5003 0.5046 -0.0048
0.0079  -0.0036 1 .
6537 OE1   OE1   . GLU GLU GLU B B 419 419 . 0.5180 0.5653 0.5041 -0.0116
0.0330  -0.0117 1 .
6538 OE2   OE2   . GLU GLU GLU B B 419 419 . 0.5430 0.5001 0.5234 -0.0368 -
0.0073 0.0263  1 .
6539 C     C     . GLU GLU GLU B B 419 419 . 0.3461 0.3408 0.3375 -0.0019 -
0.0028 0.0019  1 .
6540 O     O     . GLU GLU GLU B B 419 419 . 0.3364 0.3381 0.3296 -0.0079 -
0.0030 0.0113  1 .
6541 N     N     . ALA ALA ALA B B 420 420 . 0.3098 0.2963 0.2939 -0.0024
0.0041  -0.0010 1 .
6542 CA    CA    . ALA ALA ALA B B 420 420 . 0.2935 0.2570 0.2719 0.0043
0.0089  -0.0055 1 .
6543 CB    CB    . ALA ALA ALA B B 420 420 . 0.2964 0.2470 0.2776 0.0033
0.0046  0.0051  1 .
6544 C     C     . ALA ALA ALA B B 420 420 . 0.2803 0.2390 0.2651 0.0002
0.0085  0.0000  1 .
6545 O     O     . ALA ALA ALA B B 420 420 . 0.3032 0.2532 0.2689 -0.0010
0.0087  -0.0092 1 .
6546 N     N     . ARG ARG ARG B B 421 421 . 0.2508 0.2186 0.2438 -0.0008
0.0161  -0.0060 1 .
6547 CA    CA    . ARG ARG ARG B B 421 421 . 0.2360 0.2154 0.2301 -0.0074
0.0062  -0.0127 1 .
6548 CB    CB    . ARG ARG ARG B B 421 421 . 0.2426 0.2213 0.2480 0.0015
0.0037  0.0008  1 .
6549 CG    CG    . ARG ARG ARG B B 421 421 . 0.2926 0.2913 0.3007 -0.0052
0.0257  -0.0084 1 .
6550 CD    CD    . ARG ARG ARG B B 421 421 . 0.3972 0.3490 0.3701 0.0389
0.0295  -0.0087 1 .
6551 NE    NE    . ARG ARG ARG B B 421 421 . 0.4077 0.4150 0.4270 0.0042
0.0170  -0.0188 1 .
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6552 CZ    CZ    . ARG ARG ARG B B 421 421 . 0.4536 0.4226 0.4500 0.0242
0.0153  -0.0174 1 .
6553 NH1   NH1   . ARG ARG ARG B B 421 421 . 0.4636 0.4512 0.4764 0.0293
0.0285  -0.0247 1 .
6554 NH2   NH2   . ARG ARG ARG B B 421 421 . 0.4297 0.4067 0.4527 0.0277
0.0292  -0.0271 1 .
6555 C     C     . ARG ARG ARG B B 421 421 . 0.1907 0.1718 0.2064 -0.0018
0.0023  -0.0089 1 .
6556 O     O     . ARG ARG ARG B B 421 421 . 0.2127 0.1969 0.2279 -0.0116 -
0.0046 -0.0281 1 .
6557 N     N     . PHE PHE PHE B B 422 422 . 0.1686 0.1277 0.1606 -0.0133 -
0.0114 -0.0019 1 .
6558 CA    CA    . PHE PHE PHE B B 422 422 . 0.1264 0.0810 0.1056 0.0051  -
0.0121 -0.0125 1 .
6559 CB    CB    . PHE PHE PHE B B 422 422 . 0.1067 0.1008 0.1010 0.0059  -
0.0246 -0.0066 1 .
6560 CG    CG    . PHE PHE PHE B B 422 422 . 0.1201 0.0650 0.0700 0.0002  -
0.0027 -0.0175 1 .
6561 CD1   CD1   . PHE PHE PHE B B 422 422 . 0.1033 0.0363 0.0269 0.0253
0.0000  0.0021  1 .
6562 CE1   CE1   . PHE PHE PHE B B 422 422 . 0.0495 0.0660 0.0270 0.0314
0.0063  0.0082  1 .
6563 CZ    CZ    . PHE PHE PHE B B 422 422 . 0.0320 0.0631 0.0348 0.0085  -
0.0046 -0.0189 1 .
6564 CE2   CE2   . PHE PHE PHE B B 422 422 . 0.1286 0.0712 0.0680 0.0096  -
0.0247 -0.0289 1 .
6565 CD2   CD2   . PHE PHE PHE B B 422 422 . 0.0968 0.1516 0.0694 0.0022  -
0.0201 -0.0158 1 .
6566 C     C     . PHE PHE PHE B B 422 422 . 0.1113 0.0650 0.0762 0.0002  -
0.0013 -0.0038 1 .
6567 O     O     . PHE PHE PHE B B 422 422 . 0.1404 0.0660 0.0981 0.0010
0.0000  -0.0032 1 .
6568 N     N     . ALA ALA ALA B B 423 423 . 0.1108 0.0416 0.0659 -0.0213
0.0057  0.0026  1 .
6569 CA    CA    . ALA ALA ALA B B 423 423 . 0.0989 0.0576 0.0485 -0.0092 -
0.0002 0.0080  1 .
6570 CB    CB    . ALA ALA ALA B B 423 423 . 0.0877 0.0484 0.0629 -0.0183
0.0011  0.0255  1 .
6571 C     C     . ALA ALA ALA B B 423 423 . 0.1190 0.0289 0.0789 -0.0070
0.0045  0.0124  1 .
6572 O     O     . ALA ALA ALA B B 423 423 . 0.1548 0.0561 0.0604 -0.0023
0.0091  0.0013  1 .
6573 N     N     . GLY GLY GLY B B 424 424 . 0.1060 0.0530 0.0872 -0.0244
0.0079  0.0328  1 .
6574 CA    CA    . GLY GLY GLY B B 424 424 . 0.1523 0.0651 0.0896 0.0103
0.0167  0.0218  1 .
6575 C     C     . GLY GLY GLY B B 424 424 . 0.1889 0.1087 0.1046 -0.0005
0.0284  0.0156  1 .
6576 O     O     . GLY GLY GLY B B 424 424 . 0.2152 0.0863 0.1010 -0.0031
0.0324  -0.0034 1 .
6577 N     N     . HIS HIS HIS B B 425 425 . 0.1761 0.0984 0.0941 0.0047
0.0238  -0.0098 1 .
6578 CA    CA    . HIS HIS HIS B B 425 425 . 0.1851 0.1399 0.1079 0.0111
0.0260  -0.0119 1 .
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6579 CB    CB    . HIS HIS HIS B B 425 425 . 0.1790 0.1409 0.1048 0.0218
0.0274  -0.0327 1 .
6580 CG    CG    . HIS HIS HIS B B 425 425 . 0.1819 0.1869 0.0499 0.0109
0.0346  -0.0120 1 .
6581 ND1   ND1   . HIS HIS HIS B B 425 425 . 0.2064 0.2417 0.1057 0.0231
0.0372  -0.0254 1 .
6582 CE1   CE1   . HIS HIS HIS B B 425 425 . 0.1512 0.1732 0.1157 -0.0086
0.0295  0.0219  1 .
6583 NE2   NE2   . HIS HIS HIS B B 425 425 . 0.2198 0.1489 0.1636 0.0308
0.0118  -0.0366 1 .
6584 CD2   CD2   . HIS HIS HIS B B 425 425 . 0.2162 0.1494 0.0700 0.0191
0.0483  -0.0051 1 .
6585 C     C     . HIS HIS HIS B B 425 425 . 0.1772 0.1384 0.1223 0.0027
0.0176  -0.0197 1 .
6586 O     O     . HIS HIS HIS B B 425 425 . 0.2309 0.1331 0.1335 -0.0088
0.0094  -0.0245 1 .
6587 N     N     . ASN ASN ASN B B 426 426 . 0.1387 0.1028 0.1202 -0.0133
0.0062  -0.0218 1 .
6588 CA    CA    . ASN ASN ASN B B 426 426 . 0.1389 0.1219 0.1284 -0.0037
0.0048  0.0041  1 .
6589 CB    CB    . ASN ASN ASN B B 426 426 . 0.1672 0.1276 0.1519 0.0000  -
0.0018 -0.0131 1 .
6590 CG    CG    . ASN ASN ASN B B 426 426 . 0.2179 0.2089 0.1752 0.0010
0.0005  -0.0004 1 .
6591 OD1   OD1   . ASN ASN ASN B B 426 426 . 0.3190 0.3483 0.2205 0.0104
0.0176  0.0109  1 .
6592 ND2   ND2   . ASN ASN ASN B B 426 426 . 0.2527 0.2265 0.2246 0.0499
0.0184  -0.0828 1 .
6593 C     C     . ASN ASN ASN B B 426 426 . 0.1110 0.0913 0.0944 -0.0077 -
0.0014 0.0105  1 .
6594 O     O     . ASN ASN ASN B B 426 426 . 0.1282 0.1204 0.1012 0.0038
0.0008  0.0071  1 .
6595 N     N     . PHE PHE PHE B B 427 427 . 0.0706 0.0529 0.0493 -0.0071
0.0022  0.0247  1 .
6596 CA    CA    . PHE PHE PHE B B 427 427 . 0.0595 0.0525 0.0570 0.0047  -
0.0172 0.0023  1 .
6597 CB    CB    . PHE PHE PHE B B 427 427 . 0.0453 0.0636 0.0729 -0.0020 -
0.0123 -0.0083 1 .
6598 CG    CG    . PHE PHE PHE B B 427 427 . 0.0738 0.0732 0.0718 0.0124  -
0.0341 0.0126  1 .
6599 CD1   CD1   . PHE PHE PHE B B 427 427 . 0.0552 0.0740 0.0811 0.0215  -
0.0007 0.0425  1 .
6600 CE1   CE1   . PHE PHE PHE B B 427 427 . 0.0961 0.0816 0.1026 0.0213
0.0231  0.0533  1 .
6601 CZ    CZ    . PHE PHE PHE B B 427 427 . 0.1005 0.0664 0.0688 0.0186
0.0157  0.0414  1 .
6602 CE2   CE2   . PHE PHE PHE B B 427 427 . 0.0369 0.0364 0.0468 0.0096
0.0005  0.0086  1 .
6603 CD2   CD2   . PHE PHE PHE B B 427 427 . 0.0264 0.0293 0.0272 0.0020  -
0.0014 -0.0027 1 .
6604 C     C     . PHE PHE PHE B B 427 427 . 0.0469 0.0416 0.0405 0.0066
0.0047  0.0022  1 .
6605 O     O     . PHE PHE PHE B B 427 427 . 0.0608 0.0444 0.0432 0.0065  -
0.0096 -0.0141 1 .
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6606 N     N     . ARG ARG ARG B B 428 428 . 0.0801 0.0737 0.0701 0.0104  -
0.0154 0.0104  1 .
6607 CA    CA    . ARG ARG ARG B B 428 428 . 0.1243 0.0754 0.0877 -0.0059 -
0.0143 0.0121  1 .
6608 CB    CB    . ARG ARG ARG B B 428 428 . 0.0863 0.0838 0.0909 0.0099
0.0050  -0.0002 1 .
6609 CG    CG    . ARG ARG ARG B B 428 428 . 0.1341 0.1236 0.0847 -0.0218
0.0221  0.0201  1 .
6610 CD    CD    . ARG ARG ARG B B 428 428 . 0.1002 0.0832 0.0636 -0.0163
0.0361  -0.0038 1 .
6611 NE    NE    . ARG ARG ARG B B 428 428 . 0.1026 0.0696 0.0316 -0.0105
0.0141  -0.0146 1 .
6612 CZ    CZ    . ARG ARG ARG B B 428 428 . 0.0858 0.0748 0.0481 -0.0302 -
0.0075 -0.0237 1 .
6613 NH1   NH1   . ARG ARG ARG B B 428 428 . 0.1168 0.0867 0.0714 -0.0477 -
0.0062 -0.0376 1 .
6614 NH2   NH2   . ARG ARG ARG B B 428 428 . 0.1513 0.1324 0.0816 -0.0213
0.0118  0.0161  1 .
6615 C     C     . ARG ARG ARG B B 428 428 . 0.1353 0.0928 0.1219 -0.0055 -
0.0188 -0.0082 1 .
6616 O     O     . ARG ARG ARG B B 428 428 . 0.1969 0.1367 0.1686 -0.0052 -
0.0204 -0.0028 1 .
6617 N     N     . ASN ASN ASN B B 429 429 . 0.1887 0.1138 0.1450 -0.0071 -
0.0212 0.0157  1 .
6618 CA    CA    . ASN ASN ASN B B 429 429 . 0.1907 0.1331 0.1527 -0.0203 -
0.0142 0.0130  1 .
6619 CB    CB    . ASN ASN ASN B B 429 429 . 0.2165 0.1492 0.1621 -0.0245 -
0.0231 0.0327  1 .
6620 CG    CG    . ASN ASN ASN B B 429 429 . 0.2539 0.1683 0.2028 -0.0320 -
0.0314 0.0216  1 .
6621 OD1   OD1   . ASN ASN ASN B B 429 429 . 0.3595 0.2344 0.2162 -0.1034 -
0.0609 0.0337  1 .
6622 ND2   ND2   . ASN ASN ASN B B 429 429 . 0.2966 0.1303 0.2648 -0.0453 -
0.0609 0.0636  1 .
6623 C     C     . ASN ASN ASN B B 429 429 . 0.2056 0.1562 0.1663 -0.0165 -
0.0185 0.0057  1 .
6624 O     O     . ASN ASN ASN B B 429 429 . 0.2328 0.1364 0.1569 0.0020  -
0.0374 -0.0020 1 .
6625 N     N     . PRO PRO PRO B B 430 430 . 0.2106 0.1845 0.1520 -0.0159 -
0.0069 -0.0014 1 .
6626 CA    CA    . PRO PRO PRO B B 430 430 . 0.2300 0.2101 0.1767 -0.0146 -
0.0103 0.0059  1 .
6627 CB    CB    . PRO PRO PRO B B 430 430 . 0.2317 0.2083 0.1671 -0.0169
0.0078  0.0005  1 .
6628 CG    CG    . PRO PRO PRO B B 430 430 . 0.2406 0.2234 0.1327 -0.0258 -
0.0246 0.0184  1 .
6629 CD    CD    . PRO PRO PRO B B 430 430 . 0.1926 0.1798 0.1434 -0.0214 -
0.0133 0.0004  1 .
6630 C     C     . PRO PRO PRO B B 430 430 . 0.2585 0.2403 0.2250 -0.0198 -
0.0038 0.0021  1 .
6631 O     O     . PRO PRO PRO B B 430 430 . 0.2535 0.2539 0.2241 -0.0337 -
0.0057 0.0104  1 .
6632 N     N     . SER SER SER B B 431 431 . 0.2850 0.2777 0.2691 -0.0101 -
0.0082 -0.0040 1 .
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6633 CA    CA    . SER SER SER B B 431 431 . 0.3241 0.3254 0.3205 -0.0052 -
0.0053 -0.0098 1 .
6634 CB    CB    . SER SER SER B B 431 431 . 0.3304 0.3265 0.3330 -0.0015 -
0.0005 -0.0042 1 .
6635 OG    OG    . SER SER SER B B 431 431 . 0.3597 0.3425 0.3264 -0.0179 -
0.0060 -0.0380 1 .
6636 C     C     . SER SER SER B B 431 431 . 0.3408 0.3333 0.3344 -0.0088 -
0.0090 -0.0101 1 .
6637 O     O     . SER SER SER B B 431 431 . 0.3540 0.3636 0.3532 -0.0121 -
0.0121 -0.0126 1 .
6638 N     N     . VAL VAL VAL B B 432 432 . 0.3518 0.3435 0.3359 -0.0070 -
0.0013 -0.0074 1 .
6639 CA    CA    . VAL VAL VAL B B 432 432 . 0.3637 0.3466 0.3409 -0.0061 -
0.0013 -0.0079 1 .
6640 CB    CB    . VAL VAL VAL B B 432 432 . 0.3608 0.3502 0.3429 -0.0027 -
0.0010 -0.0060 1 .
6641 CG1   CG1   . VAL VAL VAL B B 432 432 . 0.3716 0.3359 0.3322 0.0075
0.0097  -0.0164 1 .
6642 CG2   CG2   . VAL VAL VAL B B 432 432 . 0.3641 0.3492 0.3453 -0.0179 -
0.0096 0.0027  1 .
6643 C     C     . VAL VAL VAL B B 432 432 . 0.3659 0.3584 0.3494 -0.0062 -
0.0019 -0.0047 1 .
6644 O     O     . VAL VAL VAL B B 432 432 . 0.3725 0.3439 0.3302 -0.0100
0.0047  -0.0293 1 .
6645 MG+2  MG+2  . MG2 MG2 MG2 B B 440 440 . 0.0420 0.0362 0.0280 0.0133
0.0066  0.0054  1 .
6646 MG+2  MG+2  . MG2 MG2 MG2 B B 441 441 . 0.0647 0.0352 0.0288 0.0179
0.0096  0.0030  1 .
6647 O3P   O3P   . PEP PEP PEP B B 442 442 . 0.0501 0.0302 0.0337 0.0109
0.0144  0.0064  1 .
6648 P     P     . PEP PEP PEP B B 442 442 . 0.0317 0.0281 0.0281 0.0042
0.0042  0.0028  1 .
6649 O1P   O1P   . PEP PEP PEP B B 442 442 . 0.0318 0.0358 0.0629 -0.0083
0.0157  -0.0198 1 .
6650 O2P   O2P   . PEP PEP PEP B B 442 442 . 0.0253 0.0327 0.0349 -0.0001 -
0.0002 0.0084  1 .
6651 O2    O2    . PEP PEP PEP B B 442 442 . 0.0593 0.0413 0.0285 0.0233
0.0103  0.0071  1 .
6652 C2    C2    . PEP PEP PEP B B 442 442 . 0.0386 0.0407 0.0568 0.0134
0.0173  0.0134  1 .
6653 C3    C3    . PEP PEP PEP B B 442 442 . 0.2093 0.1409 0.0456 -0.0362
0.0194  -0.0019 1 .
6654 C1    C1    . PEP PEP PEP B B 442 442 . 0.0719 0.0650 0.0681 -0.0052
0.0095  0.0045  1 .
6655 O1    O1    . PEP PEP PEP B B 442 442 . 0.0801 0.0398 0.0415 0.0161
0.0068  -0.0101 1 .
6656 "O2'" "O2'" . PEP PEP PEP B B 442 442 . 0.0962 0.0670 0.0606 0.0394  -
0.0029 0.0247  1 .
6657 O     O     . HOH HOH HOH B B 446 446 . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6658 O     O     . HOH HOH HOH B B 447 447 . 0.0467 0.0672 0.0312 0.0080
0.0084  -0.0068 1 .
6659 O     O     . HOH HOH HOH B B 448 448 . 0.0878 0.0447 0.0720 0.0025
0.0111  0.0198  1 .
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6660 N     N     . GLY GLY GLY B B 555 555 . 0.1313 0.0800 0.0576 0.0008  -
0.0128 -0.0411 1 .
6661 CA    CA    . GLY GLY GLY B B 555 555 . 0.1061 0.0438 0.0475 -0.0057
0.0061  -0.0175 1 .
6662 C     C     . GLY GLY GLY B B 555 555 . 0.0821 0.0519 0.0490 -0.0083
0.0034  -0.0076 1 .
6663 O     O     . GLY GLY GLY B B 555 555 . 0.0609 0.0374 0.0381 -0.0204
0.0204  -0.0124 1 .
6664 N     N     . SER SER SER B B 556 556 . 0.0910 0.0472 0.0511 -0.0025
0.0178  -0.0220 1 .
6665 CA    CA    . SER SER SER B B 556 556 . 0.0950 0.0425 0.0628 -0.0073
0.0144  -0.0143 1 .
6666 CB    CB    . SER SER SER B B 556 556 . 0.1098 0.0291 0.0826 0.0117
0.0265  -0.0066 1 .
6667 OG    OG    . SER SER SER B B 556 556 . 0.1677 0.1120 0.1333 0.0011
0.0475  -0.0041 1 .
6668 C     C     . SER SER SER B B 556 556 . 0.1010 0.0454 0.0643 -0.0040
0.0080  -0.0055 1 .
6669 O     O     . SER SER SER B B 556 556 . 0.1158 0.0457 0.0595 -0.0228
0.0027  0.0000  1 .
6670 N     N     . HIS HIS HIS B B 557 557 . 0.0957 0.0595 0.0660 -0.0051
0.0095  0.0101  1 .
6671 CA    CA    . HIS HIS HIS B B 557 557 . 0.0848 0.0657 0.0553 -0.0012
0.0149  -0.0016 1 .
6672 CB    CB    . HIS HIS HIS B B 557 557 . 0.0732 0.0587 0.0427 -0.0044
0.0259  -0.0025 1 .
6673 CG    CG    . HIS HIS HIS B B 557 557 . 0.0787 0.0618 0.0683 0.0061  -
0.0071 0.0174  1 .
6674 ND1   ND1   . HIS HIS HIS B B 557 557 . 0.0721 0.0941 0.0381 0.0258
0.0071  -0.0212 1 .
6675 CE1   CE1   . HIS HIS HIS B B 557 557 . 0.0591 0.0405 0.0330 0.0226
0.0161  0.0108  1 .
6676 NE2   NE2   . HIS HIS HIS B B 557 557 . 0.0505 0.0511 0.0873 0.0105  -
0.0126 -0.0061 1 .
6677 CD2   CD2   . HIS HIS HIS B B 557 557 . 0.0880 0.0998 0.0413 0.0178  -
0.0134 0.0133  1 .
6678 C     C     . HIS HIS HIS B B 557 557 . 0.1009 0.0956 0.0720 0.0019
0.0131  0.0067  1 .
6679 O     O     . HIS HIS HIS B B 557 557 . 0.1288 0.0931 0.0865 0.0006
0.0070  -0.0020 1 .
6680 N     N     . ALA ALA ALA B B 558 558 . 0.1025 0.1030 0.0785 -0.0018
0.0034  0.0068  1 .
6681 CA    CA    . ALA ALA ALA B B 558 558 . 0.1137 0.1198 0.1070 0.0004
0.0086  -0.0061 1 .
6682 CB    CB    . ALA ALA ALA B B 558 558 . 0.1141 0.1126 0.0994 0.0053
0.0081  -0.0258 1 .
6683 C     C     . ALA ALA ALA B B 558 558 . 0.1316 0.1285 0.1260 -0.0023
0.0031  -0.0106 1 .
6684 O     O     . ALA ALA ALA B B 558 558 . 0.1273 0.1325 0.1351 -0.0139
0.0172  -0.0128 1 .
6685 N     N     . GLY GLY GLY B B 559 559 . 0.1494 0.1376 0.1236 -0.0001
0.0002  -0.0096 1 .
6686 CA    CA    . GLY GLY GLY B B 559 559 . 0.1684 0.1528 0.1419 0.0030  -
0.0026 -0.0135 1 .
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6687 C     C     . GLY GLY GLY B B 559 559 . 0.1569 0.1432 0.1291 -0.0030
0.0019  -0.0096 1 .
6688 O     O     . GLY GLY GLY B B 559 559 . 0.1648 0.1467 0.1037 0.0140
0.0085  -0.0002 1 .
6689 O     O     . HOH HOH HOH S . 1   1   . 0.0258 0.0345 0.0254 -0.0021
0.0002  -0.0008 1 .
6690 O     O     . HOH HOH HOH S . 2   2   . 0.0262 0.0253 0.0273 -0.0002
0.0013  -0.0003 1 .
6691 O     O     . HOH HOH HOH S . 3   3   . 0.0277 0.0413 0.0302 0.0023
0.0033  0.0050  1 .
6692 O     O     . HOH HOH HOH S . 4   4   . 0.0402 0.0296 0.0352 0.0080  -
0.0121 -0.0065 1 .
6693 O     O     . HOH HOH HOH S . 5   5   . 0.0293 0.0287 0.0256 -0.0036
0.0010  -0.0009 1 .
6694 O     O     . HOH HOH HOH S . 6   6   . 0.0271 0.0306 0.0255 -0.0030 -
0.0006 0.0011  1 .
6695 O     O     . HOH HOH HOH S . 7   7   . 0.0406 0.0302 0.0365 0.0074
0.0076  0.0007  1 .
6696 O     O     . HOH HOH HOH S . 8   8   . 0.0350 0.0379 0.0318 0.0110  -
0.0078 -0.0090 1 .
6697 O     O     . HOH HOH HOH S . 9   9   . 0.0380 0.0302 0.0384 0.0079  -
0.0129 -0.0080 1 .
6698 O     O     . HOH HOH HOH S . 10  10  . 0.0281 0.0369 0.0255 0.0024  -
0.0002 0.0009  1 .
6699 O     O     . HOH HOH HOH S . 11  11  . 0.0790 0.0519 0.0582 -0.0121 -
0.0108 -0.0246 1 .
6700 O     O     . HOH HOH HOH S . 12  12  . 0.0561 0.0295 0.0638 -0.0004 -
0.0042 -0.0125 1 .
6701 O     O     . HOH HOH HOH S . 13  13  . 0.0406 0.0603 0.0508 0.0187
0.0013  -0.0157 1 .
6702 O     O     . HOH HOH HOH S . 14  14  . 0.0388 0.0296 0.0537 -0.0061 -
0.0108 -0.0004 1 .
6703 O     O     . HOH HOH HOH S . 15  15  . 0.0543 0.0275 0.0425 -0.0080
0.0223  -0.0061 1 .
6704 O     O     . HOH HOH HOH S . 16  16  . 0.0889 0.0481 0.0460 -0.0005
0.0120  0.0204  1 .
6705 O     O     . HOH HOH HOH S . 17  17  . 0.0483 0.0296 0.0404 0.0099  -
0.0186 -0.0080 1 .
6706 O     O     . HOH HOH HOH S . 18  18  . 0.0316 0.0372 0.0253 0.0086  -
0.0006 -0.0008 1 .
6707 O     O     . HOH HOH HOH S . 19  19  . 0.0422 0.0436 0.0704 -0.0163
0.0235  -0.0170 1 .
6708 O     O     . HOH HOH HOH S . 20  20  . 0.0375 0.0283 0.0324 -0.0060 -
0.0092 0.0046  1 .
6709 O     O     . HOH HOH HOH S . 21  21  . 0.0426 0.0592 0.0372 -0.0178
0.0118  -0.0198 1 .
6710 O     O     . HOH HOH HOH S . 22  22  . 0.0477 0.0259 0.0257 0.0022  -
0.0029 -0.0003 1 .
6711 O     O     . HOH HOH HOH S . 23  23  . 0.1113 0.1226 0.0606 0.0054
0.0054  -0.0081 1 .
6712 O     O     . HOH HOH HOH S . 24  24  . 0.0788 0.0390 0.1043 0.0253
0.0062  0.0144  1 .
6713 O     O     . HOH HOH HOH S . 25  25  . 0.1063 0.1177 0.0700 0.0232
0.0309  -0.0326 1 .
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6714 O     O     . HOH HOH HOH S . 26  26  . 0.0591 0.0511 0.0439 0.0084  -
0.0095 0.0170  1 .
6715 O     O     . HOH HOH HOH S . 27  27  . 0.1186 0.0320 0.0514 0.0211
0.0115  -0.0043 1 .
6716 O     O     . HOH HOH HOH S . 28  28  . 0.0337 0.0352 0.0343 -0.0085 -
0.0081 0.0094  1 .
6717 O     O     . HOH HOH HOH S . 29  29  . 0.0269 0.0330 0.0499 0.0035  -
0.0063 -0.0137 1 .
6718 O     O     . HOH HOH HOH S . 30  30  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6719 O     O     . HOH HOH HOH S . 31  31  . 0.0535 0.0664 0.0314 0.0338
0.0101  0.0110  1 .
6720 O     O     . HOH HOH HOH S . 32  32  . 0.0268 0.0310 0.0447 0.0029  -
0.0054 -0.0105 1 .
6721 O     O     . HOH HOH HOH S . 33  33  . 0.0253 0.0253 0.0253 0.0000
0.0000  0.0000  1 .
6722 O     O     . HOH HOH HOH S . 34  34  . 0.0279 0.0279 0.0427 0.0026  -
0.0067 -0.0067 1 .
6723 O     O     . HOH HOH HOH S . 35  35  . 0.0842 0.0405 0.0253 0.0299
0.0007  0.0003  1 .
6724 O     O     . HOH HOH HOH S . 36  36  . 0.0662 0.0288 0.0311 0.0119  -
0.0153 -0.0045 1 .
6725 O     O     . HOH HOH HOH S . 37  37  . 0.0662 0.0616 0.0513 0.0373
0.0053  0.0123  1 .
6726 O     O     . HOH HOH HOH S . 38  38  . 0.0903 0.0688 0.0607 -0.0139 -
0.0322 -0.0212 1 .
6727 O     O     . HOH HOH HOH S . 39  39  . 0.0991 0.0421 0.0458 -0.0157
0.0100  -0.0182 1 .
6728 O     O     . HOH HOH HOH S . 40  40  . 0.0571 0.0556 0.0939 -0.0058
0.0465  -0.0126 1 .
6729 O     O     . HOH HOH HOH S . 41  41  . 0.0950 0.0505 0.0378 0.0227
0.0195  0.0175  1 .
6730 O     O     . HOH HOH HOH S . 42  42  . 0.1174 0.1253 0.1497 -0.0316
0.0843  -0.0299 1 .
6731 O     O     . HOH HOH HOH S . 43  43  . 0.1344 0.1701 0.0449 0.0054  -
0.0033 0.0151  1 .
6732 O     O     . HOH HOH HOH S . 44  44  . 0.0717 0.0376 0.0494 -0.0009 -
0.0166 0.0153  1 .
6733 O     O     . HOH HOH HOH S . 45  45  . 0.1686 0.1067 0.1305 -0.0253 -
0.0248 -0.0396 1 .
6734 O     O     . HOH HOH HOH S . 46  46  . 0.0983 0.1025 0.0998 -0.0495 -
0.0177 -0.0433 1 .
6735 O     O     . HOH HOH HOH S . 47  47  . 0.0281 0.0294 0.0274 0.0034
0.0024  0.0029  1 .
6736 O     O     . HOH HOH HOH S . 48  48  . 0.1126 0.0942 0.0709 0.0065  -
0.0003 -0.0107 1 .
6737 O     O     . HOH HOH HOH S . 50  50  . 0.0914 0.0618 0.0460 0.0374
0.0093  -0.0103 1 .
6738 O     O     . HOH HOH HOH S . 51  51  . 0.1154 0.0741 0.0819 -0.0252
0.0446  -0.0225 1 .
6739 O     O     . HOH HOH HOH S . 52  52  . 0.0986 0.1453 0.2197 -0.0651 -
0.0220 0.0666  1 .
6740 O     O     . HOH HOH HOH S . 53  53  . 0.0600 0.0583 0.0572 0.0318  -
0.0097 0.0016  1 .
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6741 O     O     . HOH HOH HOH S . 54  54  . 0.1312 0.0757 0.1631 0.0054
0.0911  -0.0016 1 .
6742 O     O     . HOH HOH HOH S . 55  55  . 0.0793 0.0347 0.0786 -0.0076 -
0.0032 0.0168  1 .
6743 O     O     . HOH HOH HOH S . 56  56  . 0.0813 0.0496 0.0535 0.0220
0.0257  -0.0058 1 .
6744 O     O     . HOH HOH HOH S . 57  57  . 0.0717 0.0962 0.0828 -0.0045 -
0.0143 0.0071  1 .
6745 O     O     . HOH HOH HOH S . 58  58  . 0.1382 0.1098 0.0490 -0.0363 -
0.0109 -0.0370 1 .
6746 O     O     . HOH HOH HOH S . 59  59  . 0.0703 0.0588 0.0298 -0.0012
0.0018  -0.0121 1 .
6747 O     O     . HOH HOH HOH S . 60  60  . 0.0735 0.0705 0.0727 -0.0084
0.0153  0.0403  1 .
6748 O     O     . HOH HOH HOH S . 61  61  . 0.0446 0.0414 0.1112 0.0022
0.0092  -0.0246 1 .
6749 O     O     . HOH HOH HOH S . 62  62  . 0.0707 0.0497 0.0567 0.0224
0.0031  0.0219  1 .
6750 O     O     . HOH HOH HOH S . 63  63  . 0.0572 0.0347 0.0340 0.0173  -
0.0166 -0.0090 1 .
6751 O     O     . HOH HOH HOH S . 64  64  . 0.1422 0.1429 0.0845 -0.0346
0.0747  0.0128  1 .
6752 O     O     . HOH HOH HOH S . 65  65  . 0.0936 0.1052 0.1335 0.0733  -
0.0398 -0.0325 1 .
6753 O     O     . HOH HOH HOH S . 66  66  . 0.0834 0.1271 0.0821 -0.0284 -
0.0035 0.0170  1 .
6754 O     O     . HOH HOH HOH S . 67  67  . 0.0577 0.0490 0.0757 -0.0042 -
0.0396 -0.0016 1 .
6755 O     O     . HOH HOH HOH S . 68  68  . 0.0912 0.0405 0.0575 0.0316
0.0460  0.0221  1 .
6756 O     O     . HOH HOH HOH S . 69  69  . 0.0518 0.0497 0.0638 0.0174  -
0.0192 -0.0183 1 .
6757 O     O     . HOH HOH HOH S . 70  70  . 0.0729 0.0553 0.0616 -0.0192 -
0.0230 -0.0029 1 .
6758 O     O     . HOH HOH HOH S . 71  71  . 0.1143 0.0939 0.0314 -0.0123
0.0138  0.0108  1 .
6759 O     O     . HOH HOH HOH S . 72  72  . 0.1110 0.0693 0.0319 0.0611
0.0199  0.0132  1 .
6760 O     O     . HOH HOH HOH S . 73  73  . 0.1415 0.2389 0.2737 -0.1371
0.0320  -0.0203 1 .
6761 O     O     . HOH HOH HOH S . 74  74  . 0.0867 0.0496 0.0666 -0.0247 -
0.0086 -0.0205 1 .
6762 O     O     . HOH HOH HOH S . 75  75  . 0.0539 0.0338 0.0361 0.0071  -
0.0125 0.0027  1 .
6763 O     O     . HOH HOH HOH S . 76  76  . 0.1203 0.0727 0.0323 -0.0225 -
0.0110 0.0181  1 .
6764 O     O     . HOH HOH HOH S . 77  77  . 0.1719 0.0800 0.1132 -0.0053
0.0028  -0.0027 1 .
6765 O     O     . HOH HOH HOH S . 78  78  . 0.0534 0.0323 0.0266 0.0140  -
0.0060 -0.0030 1 .
6766 O     O     . HOH HOH HOH S . 79  79  . 0.1093 0.0584 0.0946 0.0297
0.0125  -0.0239 1 .
6767 O     O     . HOH HOH HOH S . 80  80  . 0.1493 0.1145 0.1813 -0.0014
0.0794  0.0958  1 .
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6768 O     O     . HOH HOH HOH S . 81  81  . 0.0947 0.0474 0.0520 0.0198
0.0401  0.0039  1 .
6769 O     O     . HOH HOH HOH S . 82  82  . 0.0863 0.1685 0.2027 0.0626  -
0.0480 0.0322  1 .
6770 O     O     . HOH HOH HOH S . 83  83  . 0.1008 0.1126 0.1320 -0.0796 -
0.0360 0.0553  1 .
6771 O     O     . HOH HOH HOH S . 84  84  . 0.1344 0.0645 0.0757 0.0325  -
0.0009 0.0382  1 .
6772 O     O     . HOH HOH HOH S . 85  85  . 0.3952 0.3860 0.2292 -0.0941
0.0239  -0.1773 1 .
6773 O     O     . HOH HOH HOH S . 87  87  . 0.1715 0.1462 0.0740 0.0787
0.0280  0.0272  1 .
6774 O     O     . HOH HOH HOH S . 88  88  . 0.1353 0.1398 0.0888 -0.0693 -
0.0061 -0.0629 1 .
6775 O     O     . HOH HOH HOH S . 89  89  . 0.0574 0.0651 0.0752 -0.0180 -
0.0284 -0.0112 1 .
6776 O     O     . HOH HOH HOH S . 90  90  . 0.1121 0.0421 0.0360 0.0295
0.0111  -0.0041 1 .
6777 O     O     . HOH HOH HOH S . 91  91  . 0.2367 0.0698 0.1390 0.0268
0.0151  -0.0263 1 .
6778 O     O     . HOH HOH HOH S . 92  92  . 0.2117 0.0822 0.0854 0.0521
0.0232  -0.0427 1 .
6779 O     O     . HOH HOH HOH S . 93  93  . 0.2118 0.1836 0.1853 -0.0136 -
0.0062 -0.0138 1 .
6780 O     O     . HOH HOH HOH S . 94  94  . 0.1229 0.1339 0.1457 -0.0283 -
0.0302 -0.0282 1 .
6781 O     O     . HOH HOH HOH S . 95  95  . 0.1173 0.0602 0.0724 -0.0101 -
0.0267 0.0279  1 .
6782 O     O     . HOH HOH HOH S . 96  96  . 0.1483 0.1077 0.1248 -0.0308
0.0731  -0.0146 1 .
6783 O     O     . HOH HOH HOH S . 97  97  . 0.0985 0.1282 0.1542 0.0425  -
0.0338 0.0129  1 .
6784 O     O     . HOH HOH HOH S . 98  98  . 0.1585 0.1805 0.1109 0.0275
0.0689  0.0538  1 .
6785 O     O     . HOH HOH HOH S . 99  99  . 0.0585 0.0528 0.0504 0.0194  -
0.0186 -0.0263 1 .
6786 O     O     . HOH HOH HOH S . 100 100 . 0.1477 0.1447 0.0811 0.1122  -
0.0376 -0.0615 1 .
6787 O     O     . HOH HOH HOH S . 101 101 . 0.0961 0.0649 0.0643 0.0112
0.0169  -0.0030 1 .
6788 O     O     . HOH HOH HOH S . 102 102 . 0.2144 0.1511 0.0849 0.0072  -
0.0429 -0.0251 1 .
6789 O     O     . HOH HOH HOH S . 103 103 . 0.1074 0.0443 0.0723 -0.0013 -
0.0047 0.0118  1 .
6790 O     O     . HOH HOH HOH S . 104 104 . 0.0460 0.0545 0.0411 -0.0010
0.0143  -0.0137 1 .
6791 O     O     . HOH HOH HOH S . 105 105 . 0.0819 0.0614 0.0420 -0.0291
0.0088  0.0134  1 .
6792 O     O     . HOH HOH HOH S . 106 106 . 0.1426 0.1351 0.0882 0.1049
0.0089  0.0191  1 .
6793 O     O     . HOH HOH HOH S . 107 107 . 0.1203 0.1243 0.2341 0.0080
0.0004  -0.0585 1 .
6794 O     O     . HOH HOH HOH S . 108 108 . 0.2209 0.1122 0.1600 -0.0159 -
0.0747 -0.0125 1 .
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6795 O     O     . HOH HOH HOH S . 109 109 . 0.1383 0.0380 0.1228 0.0258  -
0.0388 0.0150  1 .
6796 O     O     . HOH HOH HOH S . 110 110 . 0.0796 0.0616 0.0590 0.0384
0.0144  0.0267  1 .
6797 O     O     . HOH HOH HOH S . 111 111 . 0.0699 0.0577 0.0401 0.0290
0.0027  -0.0024 1 .
6798 O     O     . HOH HOH HOH S . 112 112 . 0.1280 0.0502 0.1120 -0.0144
0.0172  -0.0147 1 .
6799 O     O     . HOH HOH HOH S . 113 113 . 0.1930 0.1086 0.2848 -0.0156
0.0354  0.0104  1 .
6800 O     O     . HOH HOH HOH S . 114 114 . 0.0808 0.0332 0.0500 0.0056
0.0256  -0.0071 1 .
6801 O     O     . HOH HOH HOH S . 115 115 . 0.1598 0.0978 0.0967 0.0048
0.0264  -0.0329 1 .
6802 O     O     . HOH HOH HOH S . 116 116 . 0.1340 0.1103 0.1771 0.0100
0.0784  0.0264  1 .
6803 O     O     . HOH HOH HOH S . 117 117 . 0.1125 0.0913 0.1046 0.0087  -
0.0488 -0.0026 1 .
6804 O     O     . HOH HOH HOH S . 118 118 . 0.1621 0.1454 0.2023 -0.0174 -
0.0183 0.1175  1 .
6805 O     O     . HOH HOH HOH S . 119 119 . 0.1559 0.1023 0.1108 0.0381  -
0.0005 0.0448  1 .
6806 O     O     . HOH HOH HOH S . 120 120 . 0.0869 0.0743 0.1103 -0.0148
0.0262  0.0004  1 .
6807 O     O     . HOH HOH HOH S . 121 121 . 0.1411 0.1216 0.2876 -0.0153
0.0979  -0.0275 1 .
6808 O     O     . HOH HOH HOH S . 122 122 . 0.1142 0.0680 0.0748 0.0170  -
0.0247 0.0306  1 .
6809 O     O     . HOH HOH HOH S . 123 123 . 0.1603 0.1466 0.1613 -0.0254
0.0711  -0.0394 1 .
6810 O     O     . HOH HOH HOH S . 124 124 . 0.1071 0.1250 0.1069 0.0080  -
0.0713 -0.0237 1 .
6811 O     O     . HOH HOH HOH S . 125 125 . 0.1375 0.1201 0.1270 -0.0152
0.0976  -0.0078 1 .
6812 O     O     . HOH HOH HOH S . 126 126 . 0.1347 0.0725 0.0573 0.0246  -
0.0512 0.0067  1 .
6813 O     O     . HOH HOH HOH S . 127 127 . 0.1672 0.0938 0.1662 0.0045  -
0.0453 -0.0198 1 .
6814 O     O     . HOH HOH HOH S . 128 128 . 0.0881 0.0713 0.1419 -0.0430 -
0.0089 -0.0375 1 .
6815 O     O     . HOH HOH HOH S . 129 129 . 0.1355 0.1826 0.1607 0.0948  -
0.0562 0.0225  1 .
6816 O     O     . HOH HOH HOH S . 130 130 . 0.2153 0.0866 0.1928 0.1069  -
0.0091 0.0087  1 .
6817 O     O     . HOH HOH HOH S . 131 131 . 0.0684 0.1424 0.2017 0.0098
0.0127  0.0694  1 .
6818 O     O     . HOH HOH HOH S . 132 132 . 0.1057 0.1461 0.1449 0.0096  -
0.0125 -0.0215 1 .
6819 O     O     . HOH HOH HOH S . 133 133 . 0.2227 0.1399 0.1186 0.0743
0.0487  0.0671  1 .
6820 O     O     . HOH HOH HOH S . 134 134 . 0.1600 0.0924 0.0643 -0.0107
0.0007  -0.0052 1 .
6821 O     O     . HOH HOH HOH S . 135 135 . 0.1958 0.0882 0.0899 0.0620  -
0.0807 -0.0620 1 .
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6822 O     O     . HOH HOH HOH S . 136 136 . 0.1771 0.1591 0.1106 0.0073  -
0.0700 0.0517  1 .
6823 O     O     . HOH HOH HOH S . 137 137 . 0.0956 0.1286 0.1042 0.0148  -
0.0378 -0.0128 1 .
6824 O     O     . HOH HOH HOH S . 138 138 . 0.1450 0.0864 0.0486 -0.0509
0.0356  -0.0248 1 .
6825 O     O     . HOH HOH HOH S . 139 139 . 0.1741 0.1462 0.0804 0.0382
0.0490  0.0357  1 .
6826 O     O     . HOH HOH HOH S . 140 140 . 0.0861 0.0580 0.0555 0.0227
0.0288  -0.0091 1 .
6827 O     O     . HOH HOH HOH S . 141 141 . 0.1342 0.1713 0.1299 -0.0312 -
0.0169 0.0752  1 .
6828 O     O     . HOH HOH HOH S . 142 142 . 0.0560 0.0588 0.0449 0.0017  -
0.0218 -0.0129 1 .
6829 O     O     . HOH HOH HOH S . 143 143 . 0.2910 0.2585 0.1811 -0.0562 -
0.0096 0.1092  1 .
6830 O     O     . HOH HOH HOH S . 144 144 . 0.1198 0.0984 0.1004 -0.0059 -
0.0462 -0.0205 1 .
6831 O     O     . HOH HOH HOH S . 145 145 . 0.1778 0.1810 0.1421 0.0219
0.0196  -0.0055 1 .
6832 O     O     . HOH HOH HOH S . 146 146 . 0.1313 0.1528 0.1123 0.0091  -
0.0386 0.0239  1 .
6833 O     O     . HOH HOH HOH S . 147 147 . 0.1599 0.1276 0.1518 0.0547  -
0.0002 -0.0213 1 .
6834 O     O     . HOH HOH HOH S . 148 148 . 0.3085 0.3283 0.1443 -0.0850 -
0.0993 0.0793  1 .
6835 O     O     . HOH HOH HOH S . 149 149 . 0.4722 0.1129 0.2300 0.0902  -
0.0165 -0.0659 1 .
6836 O     O     . HOH HOH HOH S . 150 150 . 0.2151 0.0761 0.1948 -0.0480
0.0101  -0.0834 1 .
6837 O     O     . HOH HOH HOH S . 151 151 . 0.1519 0.1258 0.1863 -0.0576
0.0119  -0.0454 1 .
6838 O     O     . HOH HOH HOH S . 152 152 . 0.0804 0.1011 0.1441 -0.0431
0.0265  -0.0459 1 .
6839 O     O     . HOH HOH HOH S . 153 153 . 0.0820 0.1322 0.1351 -0.0428
0.0457  -0.0221 1 .
6840 O     O     . HOH HOH HOH S . 154 154 . 1.0134 0.2705 1.3151 -0.4238
0.2724  0.1607  1 .
6841 O     O     . HOH HOH HOH S . 155 155 . 0.0881 0.2421 0.2722 0.0507  -
0.0569 0.0560  1 .
6842 O     O     . HOH HOH HOH S . 156 156 . 0.3280 0.1735 0.3046 0.1384
0.0191  0.0106  1 .
6843 O     O     . HOH HOH HOH S . 157 157 . 0.2685 0.3061 0.1193 0.0038
0.0479  -0.0171 1 .
6844 O     O     . HOH HOH HOH S . 158 158 . 0.2310 0.0898 0.1786 0.0125
0.0278  -0.0418 1 .
6845 O     O     . HOH HOH HOH S . 159 159 . 0.2127 0.1736 0.1835 0.0181  -
0.0922 0.0383  1 .
6846 O     O     . HOH HOH HOH S . 160 160 . 0.2461 0.0810 0.1591 0.0262
0.0693  0.0175  1 .
6847 O     O     . HOH HOH HOH S . 161 161 . 0.1470 0.1091 0.0844 0.0220  -
0.0046 0.0162  1 .
6848 O     O     . HOH HOH HOH S . 162 162 . 0.1056 0.0710 0.0860 0.0272  -
0.0104 0.0149  1 .
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6849 O     O     . HOH HOH HOH S . 163 163 . 0.2167 0.1206 0.2156 0.0293  -
0.0107 0.0598  1 .
6850 O     O     . HOH HOH HOH S . 164 164 . 0.2491 0.1259 0.2081 0.0436  -
0.1089 0.0396  1 .
6851 O     O     . HOH HOH HOH S . 165 165 . 0.1809 0.1384 0.2495 -0.0368 -
0.0638 0.0045  1 .
6852 O     O     . HOH HOH HOH S . 166 166 . 0.2156 0.1404 0.1917 0.0762
0.0418  -0.0155 1 .
6853 O     O     . HOH HOH HOH S . 167 167 . 0.1073 0.2095 0.2222 -0.0038
0.0382  0.0614  1 .
6854 O     O     . HOH HOH HOH S . 168 168 . 0.2217 0.0910 0.1400 0.0126
0.0691  0.0467  1 .
6855 O     O     . HOH HOH HOH S . 169 169 . 0.1415 0.1255 0.1176 0.0233  -
0.0102 0.0376  1 .
6856 O     O     . HOH HOH HOH S . 170 170 . 0.2791 0.2938 0.1243 -0.1151
0.1029  -0.0298 1 .
6857 O     O     . HOH HOH HOH S . 171 171 . 0.2804 0.1394 0.1516 0.0035
0.0476  0.0712  1 .
6858 O     O     . HOH HOH HOH S . 172 172 . 0.1946 0.0933 0.1752 0.0965  -
0.0383 -0.0211 1 .
6859 O     O     . HOH HOH HOH S . 173 173 . 0.1772 0.1593 0.2785 0.0491  -
0.0017 0.0454  1 .
6860 O     O     . HOH HOH HOH S . 174 174 . 0.2729 0.1433 0.1415 -0.0038
0.0884  0.0985  1 .
6861 O     O     . HOH HOH HOH S . 175 175 . 0.1526 0.1530 0.1143 0.0709
0.0416  -0.0498 1 .
6862 O     O     . HOH HOH HOH S . 176 176 . 0.0806 0.0773 0.1115 -0.0247 -
0.0222 -0.0038 1 .
6863 O     O     . HOH HOH HOH S . 177 177 . 0.1045 0.1168 0.1177 -0.0175 -
0.0196 -0.0832 1 .
6864 O     O     . HOH HOH HOH S . 178 178 . 0.1175 0.1554 0.1577 0.0707  -
0.0521 0.0483  1 .
6865 O     O     . HOH HOH HOH S . 179 179 . 0.2466 0.1590 0.1551 0.0597
0.0185  -0.0028 1 .
6866 O     O     . HOH HOH HOH S . 180 180 . 0.4101 0.2940 0.0619 -0.0452 -
0.0685 0.0065  1 .
6867 O     O     . HOH HOH HOH S . 181 181 . 0.2153 0.1211 0.0594 0.0226  -
0.0468 -0.0113 1 .
6868 O     O     . HOH HOH HOH S . 182 182 . 0.1824 0.1625 0.1466 0.0581
0.0082  0.0161  1 .
6869 O     O     . HOH HOH HOH S . 183 183 . 0.1811 0.1156 0.1419 0.0054  -
0.0056 0.0279  1 .
6870 O     O     . HOH HOH HOH S . 184 184 . 0.1634 0.1364 0.1552 0.0359  -
0.0440 -0.0665 1 .
6871 O     O     . HOH HOH HOH S . 185 185 . 0.0957 0.2400 0.1051 0.0004  -
0.0403 -0.0289 1 .
6872 O     O     . HOH HOH HOH S . 186 186 . 0.4775 0.0867 0.3540 -0.0293 -
0.1257 -0.0324 1 .
6873 O     O     . HOH HOH HOH S . 187 187 . 0.2399 0.2947 0.2748 0.0809
0.0194  -0.0769 1 .
6874 O     O     . HOH HOH HOH S . 188 188 . 0.2283 0.3901 0.2827 -0.0443
0.0893  -0.0289 1 .
6875 O     O     . HOH HOH HOH S . 189 189 . 0.1403 0.1188 0.0599 -0.0536 -
0.0036 -0.0460 1 .
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6876 O     O     . HOH HOH HOH S . 190 190 . 0.2801 0.3205 0.3679 0.0098  -
0.0782 0.1317  1 .
6877 O     O     . HOH HOH HOH S . 191 191 . 0.1963 0.2777 0.2078 -0.0691
0.0192  -0.0600 1 .
6878 O     O     . HOH HOH HOH S . 192 192 . 0.1349 0.2836 0.2467 -0.0650
0.0553  0.0796  1 .
6879 O     O     . HOH HOH HOH S . 193 193 . 0.3191 0.4322 0.3617 -0.0384 -
0.0178 -0.0508 1 .
6880 O     O     . HOH HOH HOH S . 194 194 . 0.2426 0.2621 0.1955 0.0110  -
0.0541 0.0635  1 .
6881 O     O     . HOH HOH HOH S . 195 195 . 0.4349 0.2875 0.2145 -0.0046
0.1158  -0.1168 1 .
6882 O     O     . HOH HOH HOH S . 196 196 . 0.1871 0.1574 0.0751 -0.0321 -
0.0023 -0.0342 1 .
6883 O     O     . HOH HOH HOH S . 197 197 . 0.1612 0.1440 0.1393 0.0579
0.0602  0.0860  1 .
6884 O     O     . HOH HOH HOH S . 198 198 . 0.0490 0.2715 0.2832 0.0464  -
0.0697 -0.0456 1 .
6885 O     O     . HOH HOH HOH S . 199 199 . 0.1592 0.1468 0.0574 -0.0285 -
0.0131 0.0073  1 .
6886 O     O     . HOH HOH HOH S . 200 200 . 0.3254 0.2453 0.2520 0.2248
0.1246  -0.0015 1 .
6887 O     O     . HOH HOH HOH S . 201 201 . 0.4183 0.1369 0.2061 0.1095  -
0.0398 0.0498  1 .
6888 O     O     . HOH HOH HOH S . 202 202 . 0.1529 0.1584 0.0913 0.0137
0.0013  -0.0082 1 .
6889 O     O     . HOH HOH HOH S . 204 204 . 0.3764 0.2642 0.1226 0.0416  -
0.0783 -0.0667 1 .
6890 O     O     . HOH HOH HOH S . 205 205 . 0.2715 0.1778 0.4008 -0.0406 -
0.0040 -0.1027 1 .
6891 O     O     . HOH HOH HOH S . 206 206 . 0.3350 0.2760 0.2295 0.0532  -
0.0264 0.1819  1 .
6892 O     O     . HOH HOH HOH S . 207 207 . 0.3186 0.2384 0.2107 -0.0228 -
0.0553 0.1421  1 .
6893 O     O     . HOH HOH HOH S . 208 208 . 0.2200 0.1694 0.2142 0.0956
0.0873  -0.0623 1 .
6894 O     O     . HOH HOH HOH S . 209 209 . 0.2496 0.1680 0.1939 0.0586  -
0.0746 -0.0036 1 .
6895 O     O     . HOH HOH HOH S . 210 210 . 0.0906 0.2775 0.2793 -0.1238 -
0.0368 0.0058  1 .
6896 O     O     . HOH HOH HOH S . 211 211 . 0.1830 0.1418 0.1738 -0.1183
0.0067  0.0475  1 .
6897 O     O     . HOH HOH HOH S . 212 212 . 0.1014 0.1360 0.2324 0.0648  -
0.0553 0.0400  1 .
6898 O     O     . HOH HOH HOH S . 213 213 . 0.2708 0.1448 0.1732 -0.0899 -
0.0337 0.0425  1 .
6899 O     O     . HOH HOH HOH S . 214 214 . 0.2423 0.1644 0.1750 -0.0088
0.0079  0.0089  1 .
6900 O     O     . HOH HOH HOH S . 215 215 . 0.1271 0.1133 0.1105 0.0214
0.0494  0.0191  1 .
6901 O     O     . HOH HOH HOH S . 216 216 . 0.1654 0.1728 0.2443 0.0249  -
0.0464 0.0362  1 .
6902 O     O     . HOH HOH HOH S . 217 217 . 0.1884 0.0809 0.2491 0.0073
0.0274  -0.0181 1 .
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6903 O     O     . HOH HOH HOH S . 218 218 . 0.1144 0.1410 0.2666 0.0217  -
0.0502 -0.0274 1 .
6904 O     O     . HOH HOH HOH S . 219 219 . 0.2139 0.2452 0.1894 0.1396  -
0.0262 0.0530  1 .
6905 O     O     . HOH HOH HOH S . 220 220 . 0.3049 0.2260 0.2581 -0.0114
0.0035  -0.0467 1 .
6906 O     O     . HOH HOH HOH S . 221 221 . 0.1223 0.2646 0.4284 -0.1503 -
0.0366 0.0068  1 .
6907 O     O     . HOH HOH HOH S . 222 222 . 0.0534 0.9382 0.6502 0.0750
0.1175  0.0063  1 .
6908 O     O     . HOH HOH HOH S . 223 223 . 0.0853 0.1009 0.1260 0.0057  -
0.0047 0.0254  1 .
6909 O     O     . HOH HOH HOH S . 224 224 . 0.0865 0.1481 0.0268 -0.0197
0.0051  -0.0130 1 .
6910 O     O     . HOH HOH HOH S . 225 225 . 0.2286 0.0495 0.0790 0.0089  -
0.0267 -0.0108 1 .
6911 O     O     . HOH HOH HOH S . 226 226 . 0.1424 0.1113 0.2716 -0.0444
0.0277  -0.0487 1 .
6912 O     O     . HOH HOH HOH S . 228 228 . 0.1482 0.1392 0.2099 0.1145  -
0.0610 -0.0320 1 .
6913 O     O     . HOH HOH HOH S . 229 229 . 0.3401 0.6748 0.9376 -0.2669 -
0.2512 -0.3356 1 .
6914 O     O     . HOH HOH HOH S . 230 230 . 0.1580 0.2143 0.1532 0.0437
0.0276  0.1134  1 .
6915 O     O     . HOH HOH HOH S . 231 231 . 0.1991 0.1773 0.1939 0.0463  -
0.0461 0.0110  1 .
6916 O     O     . HOH HOH HOH S . 232 232 . 0.1430 0.2773 0.4344 -0.0426 -
0.0660 0.2762  1 .
6917 O     O     . HOH HOH HOH S . 233 233 . 0.0768 0.0898 0.1286 0.0226  -
0.0690 -0.0062 1 .
6918 O     O     . HOH HOH HOH S . 234 234 . 0.6154 0.5289 0.4147 0.2526
0.3379  -0.1336 1 .
6919 O     O     . HOH HOH HOH S . 235 235 . 0.0942 0.2761 0.3990 0.0077
0.0356  -0.0128 1 .
6920 O     O     . HOH HOH HOH S . 236 236 . 0.2109 0.2250 0.1282 -0.0057 -
0.0534 0.0305  1 .
6921 O     O     . HOH HOH HOH S . 237 237 . 0.2038 0.1347 0.2063 0.0793  -
0.0306 -0.0436 1 .
6922 O     O     . HOH HOH HOH S . 238 238 . 0.2985 0.4769 0.6180 0.0138
0.1295  0.2678  1 .
6923 O     O     . HOH HOH HOH S . 239 239 . 0.3449 0.2887 0.1773 0.0255  -
0.1046 -0.1014 1 .
6924 O     O     . HOH HOH HOH S . 240 240 . 0.3034 0.0679 0.5343 0.0196  -
0.2264 0.0042  1 .
6925 O     O     . HOH HOH HOH S . 241 241 . 0.3009 0.1569 0.1835 0.0875  -
0.0630 -0.0530 1 .
6926 O     O     . HOH HOH HOH S . 242 242 . 0.2587 0.1942 0.2648 -0.0791 -
0.1045 0.0009  1 .
6927 O     O     . HOH HOH HOH S . 243 243 . 0.1808 0.3149 0.2800 -0.0625 -
0.0430 -0.0629 1 .
6928 O     O     . HOH HOH HOH S . 244 244 . 0.2880 0.3165 0.1377 0.0994  -
0.0243 0.0320  1 .
6929 O     O     . HOH HOH HOH S . 245 245 . 0.2358 0.2698 0.1534 0.0040  -
0.1344 0.0623  1 .
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6930 O     O     . HOH HOH HOH S . 246 246 . 0.4979 0.8053 0.7515 -0.0044
0.0856  0.2423  1 .
6931 O     O     . HOH HOH HOH S . 247 247 . 0.4028 0.3014 0.2102 -0.0134 -
0.1804 0.0876  1 .
6932 O     O     . HOH HOH HOH S . 248 248 . 0.4055 0.2045 0.4964 -0.0997 -
0.1762 0.1691  1 .
6933 O     O     . HOH HOH HOH S . 249 249 . 0.3207 0.1479 0.2129 0.0913  -
0.0927 -0.0849 1 .
6934 O     O     . HOH HOH HOH S . 250 250 . 0.1453 0.1611 0.2056 -0.0404
0.0269  0.0166  1 .
6935 O     O     . HOH HOH HOH S . 251 251 . 0.2978 0.6801 0.2979 0.3959
0.0024  -0.0245 1 .
6936 O     O     . HOH HOH HOH S . 252 252 . 0.3771 0.0905 0.4574 -0.0259
0.0744  0.0454  1 .
6937 O     O     . HOH HOH HOH S . 253 253 . 0.0454 0.1257 0.1669 -0.0216 -
0.0220 0.0000  1 .
6938 O     O     . HOH HOH HOH S . 254 254 . 0.3283 0.3115 0.0993 0.0395
0.0275  -0.0509 1 .
6939 O     O     . HOH HOH HOH S . 255 255 . 0.7393 0.7632 1.2103 0.5219
0.8653  0.4121  1 .
6940 O     O     . HOH HOH HOH S . 256 256 . 0.1388 0.1152 0.2107 0.0212  -
0.0817 0.0570  1 .
6941 O     O     . HOH HOH HOH S . 257 257 . 0.2152 0.5382 0.3061 0.0052  -
0.1787 -0.1188 1 .
6942 O     O     . HOH HOH HOH S . 258 258 . 0.3424 0.4361 0.2206 -0.0578 -
0.0859 0.2764  1 .
6943 O     O     . HOH HOH HOH S . 259 259 . 0.2107 0.1834 0.2443 0.0113
0.1650  0.0994  1 .
6944 O     O     . HOH HOH HOH S . 260 260 . 0.1950 0.1618 0.3004 -0.0705 -
0.1257 -0.0384 1 .
6945 O     O     . HOH HOH HOH S . 261 261 . 0.1941 0.3170 0.2150 0.0208
0.1531  -0.0827 1 .
6946 O     O     . HOH HOH HOH S . 262 262 . 0.3412 0.1751 0.2012 0.0554
0.1429  0.0798  1 .
6947 O     O     . HOH HOH HOH S . 263 263 . 0.2573 0.1589 0.3265 0.0636  -
0.1181 0.1305  1 .
6948 O     O     . HOH HOH HOH S . 264 264 . 0.1924 0.1039 0.1366 0.0583
0.0347  -0.0656 1 .
6949 O     O     . HOH HOH HOH S . 265 265 . 0.1718 0.1758 0.1433 -0.0207
0.0306  0.0157  1 .
6950 O     O     . HOH HOH HOH S . 266 266 . 0.5858 0.5628 0.2887 -0.1076 -
0.0302 -0.0950 1 .
6951 O     O     . HOH HOH HOH S . 268 268 . 0.5275 0.1904 0.0924 0.0995  -
0.0490 -0.0649 1 .
6952 O     O     . HOH HOH HOH S . 270 270 . 0.5661 0.3437 0.1007 -0.0134
0.0299  -0.0285 1 .
6953 O     O     . HOH HOH HOH S . 271 271 . 0.2232 0.1979 0.1453 -0.0305
0.0469  -0.0462 1 .
6954 O     O     . HOH HOH HOH S . 272 272 . 0.1829 0.4705 0.3571 -0.2474 -
0.0247 0.1752  1 .
6955 O     O     . HOH HOH HOH S . 273 273 . 0.1536 0.2059 0.2418 -0.0358 -
0.0012 0.1210  1 .
6956 O     O     . HOH HOH HOH S . 274 274 . 0.3086 0.1600 0.3502 -0.1877
0.0382  0.0322  1 .
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6957 O     O     . HOH HOH HOH S . 276 276 . 0.4352 0.4508 0.6481 0.0085
0.0685  -0.1934 1 .
6958 O     O     . HOH HOH HOH S . 277 277 . 0.1983 0.3653 0.2366 -0.1005
0.0418  -0.2610 1 .
6959 O     O     . HOH HOH HOH S . 278 278 . 0.3477 0.1299 0.2522 -0.0891 -
0.0107 0.0360  1 .
6960 O     O     . HOH HOH HOH S . 279 279 . 0.3003 0.2413 0.3162 -0.0507 -
0.0700 -0.0063 1 .
6961 O     O     . HOH HOH HOH S . 280 280 . 0.2963 0.1346 0.2848 -0.1364
0.0242  -0.1143 1 .
6962 O     O     . HOH HOH HOH S . 281 281 . 0.4685 0.1686 0.3033 0.0772  -
0.1724 0.1028  1 .
6963 O     O     . HOH HOH HOH S . 282 282 . 0.1335 0.4065 0.2621 0.0820  -
0.0358 0.0818  1 .
6964 O     O     . HOH HOH HOH S . 283 283 . 0.1503 0.1374 0.1784 0.0052  -
0.0473 -0.0515 1 .
6965 O     O     . HOH HOH HOH S . 284 284 . 0.2832 0.7120 0.6287 -0.1704
0.0858  0.5177  1 .
6966 O     O     . HOH HOH HOH S . 285 285 . 0.1557 0.1677 0.2516 -0.0732 -
0.0939 0.0236  1 .
6967 O     O     . HOH HOH HOH S . 286 286 . 0.2130 0.1265 0.4300 0.0790
0.0031  -0.0409 1 .
6968 O     O     . HOH HOH HOH S . 287 287 . 0.2655 0.2991 0.1557 -0.0670
0.0554  0.0124  1 .
6969 O     O     . HOH HOH HOH S . 288 288 . 0.2484 0.1039 0.2550 0.0463  -
0.0081 0.1051  1 .
6970 O     O     . HOH HOH HOH S . 289 289 . 0.4812 0.1830 0.1802 -0.0950 -
0.0306 0.0804  1 .
6971 O     O     . HOH HOH HOH S . 290 290 . 0.2238 0.0840 0.1522 -0.0111 -
0.0373 -0.0199 1 .
6972 O     O     . HOH HOH HOH S . 291 291 . 0.1591 0.4111 0.1767 0.0062
0.1164  -0.1334 1 .
6973 O     O     . HOH HOH HOH S . 292 292 . 0.4386 0.3726 0.2486 0.0779
0.2474  0.1159  1 .
6974 O     O     . HOH HOH HOH S . 293 293 . 0.3688 0.0817 0.4368 0.0056
0.2388  -0.0311 1 .
6975 O     O     . HOH HOH HOH S . 294 294 . 0.4440 0.1444 0.2282 -0.1426 -
0.1029 0.0507  1 .
6976 O     O     . HOH HOH HOH S . 295 295 . 0.4883 0.2007 0.1180 -0.0712 -
0.0333 0.0425  1 .
6977 O     O     . HOH HOH HOH S . 296 296 . 0.2843 0.2192 0.2608 0.1478
0.1635  0.0427  1 .
6978 O     O     . HOH HOH HOH S . 297 297 . 0.1246 0.2077 0.2844 0.0495
0.0011  0.0522  1 .
6979 O     O     . HOH HOH HOH S . 298 298 . 0.2936 0.1790 0.1180 0.0210  -
0.0508 0.0107  1 .
6980 O     O     . HOH HOH HOH S . 299 299 . 0.4140 0.0722 0.3453 0.0319  -
0.0946 0.1069  1 .
6981 O     O     . HOH HOH HOH S . 300 300 . 0.2743 0.3420 0.2236 0.1528  -
0.0092 -0.1250 1 .
6982 O     O     . HOH HOH HOH S . 301 301 . 0.5486 0.4372 0.4189 0.0437  -
0.0590 -0.1385 1 .
6983 O     O     . HOH HOH HOH S . 302 302 . 0.1964 0.1016 0.2273 0.0467  -
0.0046 0.0077  1 .
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6984 O     O     . HOH HOH HOH S . 303 303 . 0.2088 0.0692 0.1966 0.0328
0.0435  -0.0229 1 .
6985 O     O     . HOH HOH HOH S . 304 304 . 0.3310 0.3410 0.2587 0.1112
0.1323  0.0938  1 .
6986 O     O     . HOH HOH HOH S . 305 305 . 0.5171 0.5063 0.4035 0.3522  -
0.3188 -0.2204 1 .
6987 O     O     . HOH HOH HOH S . 306 306 . 0.3742 0.2026 0.2360 -0.0811
0.0465  0.0513  1 .
6988 O     O     . HOH HOH HOH S . 307 307 . 0.1379 0.2645 0.3702 -0.0381
0.1144  0.0518  1 .
6989 O     O     . HOH HOH HOH S . 308 308 . 0.0883 0.2905 0.2036 0.0270  -
0.0258 0.0197  1 .
6990 O     O     . HOH HOH HOH S . 309 309 . 0.0334 0.0651 0.0417 0.0179
0.0051  0.0106  1 .
6991 O     O     . HOH HOH HOH S . 310 310 . 0.0455 0.0584 0.0627 0.0243
0.0229  0.0342  1 .
6992 O     O     . HOH HOH HOH S . 311 311 . 0.1038 0.0966 0.0866 0.0195
0.0272  -0.0119 1 .
6993 O     O     . HOH HOH HOH S . 312 312 . 0.1165 0.0461 0.1007 0.0435
0.0465  0.0222  1 .
6994 O     O     . HOH HOH HOH S . 313 313 . 0.1209 0.1388 0.0856 0.0146  -
0.0230 0.0376  1 .
6995 O     O     . HOH HOH HOH S . 314 314 . 0.1276 0.0539 0.0796 0.0025
0.0220  -0.0293 1 .
6996 O     O     . HOH HOH HOH S . 315 315 . 0.1015 0.0740 0.0840 0.0147  -
0.0177 -0.0103 1 .
6997 O     O     . HOH HOH HOH S . 317 317 . 0.1880 0.1418 0.2719 -0.0262 -
0.0069 -0.0149 1 .
6998 O     O     . HOH HOH HOH S . 318 318 . 0.1712 0.1696 0.1654 0.0041
0.1014  0.0134  1 .
6999 O     O     . HOH HOH HOH S . 319 319 . 0.1465 0.1239 0.2041 0.0730
0.0132  -0.0747 1 .
7000 O     O     . HOH HOH HOH S . 320 320 . 0.3432 0.3012 0.1901 0.0786
0.0639  0.0030  1 .
7001 O     O     . HOH HOH HOH S . 321 321 . 0.2065 0.1560 0.1540 0.0153
0.0131  -0.0239 1 .
7002 O     O     . HOH HOH HOH S . 322 322 . 0.1699 0.1050 0.1834 0.0671
0.0068  0.0350  1 .
7003 O     O     . HOH HOH HOH S . 323 323 . 0.1734 0.1419 0.1044 0.0038
0.0659  0.0171  1 .
7004 O     O     . HOH HOH HOH S . 324 324 . 0.0982 0.2040 0.0903 0.0818
0.0193  -0.0213 1 .
7005 O     O     . HOH HOH HOH S . 325 325 . 0.3553 0.1345 0.2688 -0.0047
0.0732  0.0783  1 .
7006 O     O     . HOH HOH HOH S . 326 326 . 0.3182 0.1146 0.2771 0.0727
0.0402  -0.0392 1 .
7007 O     O     . HOH HOH HOH S . 327 327 . 0.1927 0.1636 0.2663 0.0712
0.0286  0.1102  1 .
7008 O     O     . HOH HOH HOH S . 328 328 . 0.1547 0.2889 0.0783 0.0660
0.0679  -0.0283 1 .
7009 O     O     . HOH HOH HOH S . 329 329 . 0.2034 0.1958 0.2609 0.0475  -
0.0641 0.1008  1 .
7010 O     O     . HOH HOH HOH S . 330 330 . 0.1722 0.0938 0.1468 0.0089  -
0.0836 -0.0427 1 .
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7011 O     O     . HOH HOH HOH S . 331 331 . 0.1893 0.3347 0.2476 0.0861
0.1380  -0.0949 1 .
7012 O     O     . HOH HOH HOH S . 332 332 . 0.1727 0.2423 0.2277 0.0538  -
0.0363 0.0636  1 .
7013 O     O     . HOH HOH HOH S . 333 333 . 0.5093 0.0946 0.4279 0.0648
0.0264  0.0998  1 .
7014 O     O     . HOH HOH HOH S . 334 334 . 0.1989 0.1185 0.2671 -0.0749
0.0391  -0.0202 1 .
7015 O     O     . HOH HOH HOH S . 335 335 . 0.1686 0.1236 0.1336 0.0436
0.0165  0.0055  1 .
7016 O     O     . HOH HOH HOH S . 336 336 . 0.2316 0.3396 0.2242 -0.0699 -
0.0941 0.1940  1 .
7017 O     O     . HOH HOH HOH S . 337 337 . 0.2545 0.1607 0.2683 0.0639  -
0.0744 0.0018  1 .
7018 O     O     . HOH HOH HOH S . 338 338 . 0.3676 0.3818 0.2539 0.2697
0.0486  -0.0027 1 .
7019 O     O     . HOH HOH HOH S . 339 339 . 0.4074 0.2522 0.3465 -0.2052 -
0.0515 0.1444  1 .
7020 O     O     . HOH HOH HOH S . 340 340 . 0.5323 0.9898 0.6440 -0.2180 -
0.2346 0.3478  1 .
7021 O     O     . HOH HOH HOH S . 341 341 . 0.0587 0.6476 0.4655 -0.1370 -
0.0287 -0.0415 1 .
7022 O     O     . HOH HOH HOH S . 342 342 . 0.3121 0.3526 0.3590 -0.1093
0.1064  -0.1458 1 .
7023 O     O     . HOH HOH HOH S . 343 343 . 0.2369 0.1317 0.2144 -0.0436
0.0976  -0.1022 1 .
7024 O     O     . HOH HOH HOH S . 344 344 . 0.5630 0.3366 0.5159 0.0480  -
0.1733 -0.1680 1 .
7025 O     O     . HOH HOH HOH S . 345 345 . 0.5771 0.1733 0.2888 -0.0649
0.1211  -0.1696 1 .
7026 O     O     . HOH HOH HOH S . 346 346 . 0.4388 0.2505 0.2883 -0.0300 -
0.0391 -0.0773 1 .
7027 O     O     . HOH HOH HOH S . 347 347 . 0.4237 0.1566 0.6474 -0.2276
0.0543  -0.0590 1 .
7028 O     O     . HOH HOH HOH S . 348 348 . 0.1713 0.0926 0.2378 0.0366  -
0.0026 -0.1117 1 .
7029 O     O     . HOH HOH HOH S . 349 349 . 0.5193 0.4900 0.3001 0.0884  -
0.0363 0.3430  1 .
7030 O     O     . HOH HOH HOH S . 350 350 . 0.3585 0.1323 0.2367 -0.0249 -
0.0490 0.0442  1 .
7031 O     O     . HOH HOH HOH S . 351 351 . 0.3429 0.3141 0.0983 0.0191
0.0247  0.0292  1 .
7032 O     O     . HOH HOH HOH S . 352 352 . 0.2457 0.1988 0.3402 -0.0852
0.1100  -0.0026 1 .
7033 O     O     . HOH HOH HOH S . 353 353 . 0.2132 0.2081 0.3440 -0.0710 -
0.0620 -0.1921 1 .
7034 O     O     . HOH HOH HOH S . 354 354 . 0.1460 0.1877 0.2822 0.1024  -
0.0480 -0.0657 1 .
7035 O     O     . HOH HOH HOH S . 355 355 . 0.3283 0.2286 0.2236 0.0005  -
0.0173 0.0800  1 .
7036 O     O     . HOH HOH HOH S . 356 356 . 0.5087 0.1902 0.1511 0.1032
0.0290  -0.0434 1 .
7037 O     O     . HOH HOH HOH S . 357 357 . 0.2772 0.1556 0.5725 0.1806  -
0.0807 -0.0776 1 .
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7038 O     O     . HOH HOH HOH S . 358 358 . 0.1734 0.2542 0.4930 0.0231
0.1703  -0.0295 1 .
7039 O     O     . HOH HOH HOH S . 359 359 . 0.4568 0.2082 0.1605 0.0758
0.1577  -0.0654 1 .
7040 O     O     . HOH HOH HOH S . 360 360 . 0.2275 0.4275 0.6110 -0.0891 -
0.0331 -0.1593 1 .
7041 O     O     . HOH HOH HOH S . 361 361 . 0.1625 0.1870 0.1602 -0.1018
0.0513  -0.0636 1 .
7042 O     O     . HOH HOH HOH S . 362 362 . 0.1387 0.1531 0.1653 0.0246  -
0.0337 0.0552  1 .
7043 O     O     . HOH HOH HOH S . 363 363 . 0.2426 0.0957 0.3466 0.0909
0.0627  0.1253  1 .
7044 O     O     . HOH HOH HOH S . 364 364 . 0.1734 0.1286 0.0672 0.0027
0.0051  0.0406  1 .
7045 O     O     . HOH HOH HOH S . 365 365 . 1.2431 2.3808 1.0725 0.5192
0.2240  -0.5513 1 .
7046 O     O     . HOH HOH HOH S . 366 366 . 0.1586 0.2121 0.2183 -0.0649
0.0527  0.0035  1 .
7047 O     O     . HOH HOH HOH S . 367 367 . 0.3975 0.8400 0.5898 0.0255  -
0.0133 -0.2026 1 .
7048 O     O     . HOH HOH HOH S . 368 368 . 0.6490 0.5894 0.4331 0.5497
0.1675  -0.0222 1 .
7049 O     O     . HOH HOH HOH S . 369 369 . 0.3120 0.1985 0.2418 -0.0987 -
0.0926 0.0508  1 .
7050 O     O     . HOH HOH HOH S . 370 370 . 0.1168 0.2136 0.2033 -0.0154 -
0.0054 0.0087  1 .
7051 O     O     . HOH HOH HOH S . 371 371 . 0.3690 0.2342 0.4495 -0.0770 -
0.0651 -0.0964 1 .
7052 O     O     . HOH HOH HOH S . 372 372 . 0.2842 0.2831 0.2130 0.1203
0.1095  -0.1180 1 .
7053 O     O     . HOH HOH HOH S . 373 373 . 0.5026 0.5705 0.1576 -0.2828
0.0656  -0.0770 1 .
7054 O     O     . HOH HOH HOH S . 374 374 . 0.7450 0.1543 0.5416 0.1034
0.1707  -0.2085 1 .
7055 O     O     . HOH HOH HOH S . 375 375 . 1.0420 0.3942 0.5850 -0.5432 -
0.2410 -0.0700 1 .
7056 O     O     . HOH HOH HOH S . 376 376 . 0.4406 0.1007 0.4114 0.0042
0.0014  0.0490  1 .
7057 O     O     . HOH HOH HOH S . 377 377 . 0.3477 0.7315 0.6287 -0.1509 -
0.0668 -0.2982 1 .
7058 O     O     . HOH HOH HOH S . 378 378 . 0.1544 0.5649 0.3187 0.2577
0.0390  -0.0057 1 .
7059 O     O     . HOH HOH HOH S . 379 379 . 0.5320 0.1641 0.4109 -0.0467 -
0.0119 -0.0549 1 .
7060 O     O     . HOH HOH HOH S . 380 380 . 0.5642 0.4392 0.5197 0.0057
0.0466  0.2363  1 .
7061 O     O     . HOH HOH HOH S . 381 381 . 0.4797 0.4748 0.5377 -0.0348 -
0.0943 0.1400  1 .
7062 O     O     . HOH HOH HOH S . 382 382 . 0.3836 0.3592 0.1324 0.1025  -
0.0217 0.1108  1 .
7063 O     O     . HOH HOH HOH S . 383 383 . 0.4437 0.3078 0.4749 0.2487  -
0.0065 -0.1888 1 .
7064 O     O     . HOH HOH HOH S . 384 384 . 0.2557 0.2081 0.2341 0.0013
0.0445  0.1512  1 .
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7065 O     O     . HOH HOH HOH S . 385 385 . 0.4595 0.2901 0.2564 0.0482  -
0.2089 0.1463  1 .
7066 O     O     . HOH HOH HOH S . 386 386 . 0.1955 0.1406 0.3175 0.0800
0.0044  0.0284  1 .
7067 O     O     . HOH HOH HOH S . 387 387 . 0.1066 0.2005 0.3129 -0.0267 -
0.0113 -0.1453 1 .
7068 O     O     . HOH HOH HOH S . 388 388 . 0.3940 0.2424 0.1968 -0.1471 -
0.0526 0.0179  1 .
7069 O     O     . HOH HOH HOH S . 389 389 . 0.2613 0.2103 0.0573 0.0044  -
0.0492 -0.0355 1 .
7070 O     O     . HOH HOH HOH S . 390 390 . 0.2773 0.1496 0.1535 -0.0632
0.1025  -0.1041 1 .
7071 O     O     . HOH HOH HOH S . 391 391 . 0.3145 0.1682 0.3351 0.0719  -
0.0547 -0.0233 1 .
7072 O     O     . HOH HOH HOH S . 392 392 . 0.2642 0.1434 0.2063 0.0084  -
0.0037 0.0660  1 .
7073 O     O     . HOH HOH HOH S . 394 394 . 0.3420 0.0786 0.1767 -0.0619 -
0.0335 0.0014  1 .
7074 O     O     . HOH HOH HOH S . 395 395 . 0.3311 0.6142 0.2392 -0.2529
0.1454  0.1140  1 .
7075 O     O     . HOH HOH HOH S . 396 396 . 0.5924 0.3000 0.6218 0.0209
0.0437  0.0854  1 .
7076 O     O     . HOH HOH HOH S . 397 397 . 0.2424 0.2431 0.1466 -0.1358
0.0410  0.0496  1 .
7077 O     O     . HOH HOH HOH S . 414 414 . 0.4354 0.4881 0.0811 0.1823
0.1012  0.0230  1 .
7078 O     O     . HOH HOH HOH S . 415 415 . 0.3260 0.0667 0.2747 -0.0092
0.0259  -0.0267 1 .
7079 O     O     . HOH HOH HOH S . 416 416 . 0.1732 0.2601 0.1360 0.0096  -
0.0387 0.0007  1 .
7080 O     O     . HOH HOH HOH S . 417 417 . 0.5717 0.2163 0.2937 0.1049
0.0087  -0.1224 1 .
7081 O     O     . HOH HOH HOH S . 418 418 . 0.3536 0.3045 0.4156 -0.0313
0.0641  -0.0948 1 .
7082 O     O     . HOH HOH HOH S . 419 419 . 0.4330 0.1404 0.2980 -0.0871 -
0.1186 -0.1222 1 .
7083 O     O     . HOH HOH HOH S . 420 420 . 0.2901 0.1720 0.1487 0.0463  -
0.1116 -0.0261 1 .
7084 O     O     . HOH HOH HOH S . 421 421 . 0.2905 0.4008 0.3978 -0.0261
0.1675  0.0377  1 .
7085 O     O     . HOH HOH HOH S . 422 422 . 0.2677 0.1937 0.3782 0.1564  -
0.1415 0.0127  1 .
7086 O     O     . HOH HOH HOH S . 423 423 . 0.7537 0.3480 0.4729 -0.2152
0.3287  0.1813  1 .
7087 O     O     . HOH HOH HOH S . 424 424 . 0.1396 0.1990 0.1737 -0.0258 -
0.0782 0.0077  1 .
7088 O     O     . HOH HOH HOH S . 425 425 . 0.3518 0.1167 0.3443 -0.0002
0.0275  0.0558  1 .
7089 O     O     . HOH HOH HOH S . 426 426 . 0.4417 1.2351 1.1121 -0.1102
0.3564  -0.5773 1 .
7090 O     O     . HOH HOH HOH S . 427 427 . 0.4088 0.2030 0.1072 0.1052  -
0.0181 0.0832  1 .
7091 O     O     . HOH HOH HOH S . 428 428 . 0.2821 0.2217 0.1914 -0.0316 -
0.0152 -0.0793 1 .
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7092 O     O     . HOH HOH HOH S . 429 429 . 0.1764 0.4654 0.2078 -0.0508
0.0504  -0.1534 1 .
7093 O     O     . HOH HOH HOH S . 430 430 . 0.3150 0.2139 0.0828 -0.0578 -
0.0291 0.0472  1 .
7094 O     O     . HOH HOH HOH S . 431 431 . 1.2558 1.0959 0.8461 0.7156
0.3575  -0.4092 1 .
7095 O     O     . HOH HOH HOH S . 432 432 . 0.2107 0.2561 0.4246 0.0004  -
0.0211 0.1943  1 .
7096 O     O     . HOH HOH HOH S . 433 433 . 0.2856 0.2790 0.4794 0.0234  -
0.0636 0.1877  1 .
7097 O     O     . HOH HOH HOH S . 434 434 . 0.5166 0.0865 0.6862 -0.1734
0.0879  -0.0251 1 .
7098 O     O     . HOH HOH HOH S . 435 435 . 0.4664 0.3476 0.2887 -0.1309
0.1143  0.0270  1 .
7099 O     O     . HOH HOH HOH S . 436 436 . 0.2575 0.0278 0.4490 -0.0123
0.1148  -0.0199 1 .
7100 O     O     . HOH HOH HOH S . 437 437 . 0.1256 0.2028 0.2216 0.0100
0.0429  -0.0237 1 .
7101 O     O     . HOH HOH HOH S . 438 438 . 0.1798 0.1090 0.3823 -0.0173
0.0337  0.0966  1 .
7102 O     O     . HOH HOH HOH S . 439 439 . 0.2343 0.2358 0.4204 0.0923  -
0.1558 0.0172  1 .
7103 O     O     . HOH HOH HOH S . 440 440 . 0.9241 0.7190 1.3143 0.0818
0.3664  -0.0697 1 .
7104 O     O     . HOH HOH HOH S . 441 441 . 0.9373 0.5847 0.9535 0.1933  -
0.3923 -0.1857 1 .
7105 O     O     . HOH HOH HOH S . 442 442 . 0.2042 0.2512 0.3702 0.1667  -
0.1451 -0.0085 1 .
7106 O     O     . HOH HOH HOH S . 443 443 . 0.2563 0.2318 0.2889 0.0276  -
0.1468 -0.0168 1 .
7107 O     O     . HOH HOH HOH S . 444 444 . 0.1984 0.3403 0.1891 0.0047  -
0.1130 -0.0049 1 .
7108 O     O     . HOH HOH HOH S . 445 445 . 0.2513 0.1726 0.2594 0.0900  -
0.0633 -0.0424 1 .
7109 O     O     . HOH HOH HOH S . 446 446 . 0.8294 0.5115 0.4974 0.0599
0.0592  -0.0218 1 .
7110 O     O     . HOH HOH HOH S . 447 447 . 0.4226 0.1872 0.2513 -0.1281 -
0.1031 0.1352  1 .
7111 O     O     . HOH HOH HOH S . 448 448 . 0.5569 0.1788 0.1905 -0.0091 -
0.0546 0.0299  1 .
7112 O     O     . HOH HOH HOH S . 449 449 . 0.3478 0.4097 0.2714 0.1752
0.0205  -0.0138 1 .
7113 O     O     . HOH HOH HOH S . 450 450 . 0.9213 1.0609 0.5921 0.1942
0.1390  -0.1709 1 .
7114 O     O     . HOH HOH HOH S . 451 451 . 0.4495 0.1933 0.3006 -0.1896 -
0.0036 0.0918  1 .
7115 O     O     . HOH HOH HOH S . 452 452 . 0.3939 0.3529 0.4296 0.0824
0.0348  -0.2195 1 .
7116 O     O     . HOH HOH HOH S . 453 453 . 0.9205 0.2218 0.3196 -0.3075 -
0.1138 -0.1203 1 .
7117 O     O     . HOH HOH HOH S . 454 454 . 0.5999 0.2564 0.3244 -0.2505 -
0.1560 0.0399  1 .
7118 O     O     . HOH HOH HOH S . 455 455 . 0.1766 0.1853 0.2752 -0.0738 -
0.0935 -0.0449 1 .
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7119 O     O     . HOH HOH HOH S . 456 456 . 0.2316 0.1593 0.2594 0.0919
0.1465  0.0840  1 .
7120 O     O     . HOH HOH HOH S . 457 457 . 0.5352 0.1960 0.1046 -0.0476
0.0641  -0.0525 1 .
7121 O     O     . HOH HOH HOH S . 458 458 . 0.4287 0.1141 0.9238 0.0695  -
0.0708 -0.0625 1 .
7122 O     O     . HOH HOH HOH S . 459 459 . 0.2356 0.2375 0.2928 0.0668
0.0655  -0.0264 1 .
7123 O     O     . HOH HOH HOH S . 460 460 . 1.4404 0.5269 0.7918 0.4705
0.3012  0.5044  1 .
7124 O     O     . HOH HOH HOH S . 461 461 . 1.2316 1.3412 0.7870 -0.5573 -
0.2848 0.2086  1 .
7125 O     O     . HOH HOH HOH S . 462 462 . 0.0442 0.5656 0.3680 0.0671
0.0317  -0.0735 1 .
7126 O     O     . HOH HOH HOH S . 463 463 . 0.3281 0.2025 0.2741 0.0567
0.0031  0.1144  1 .
7127 O     O     . HOH HOH HOH S . 464 464 . 0.0780 0.2157 0.4251 -0.0804 -
0.0431 0.1150  1 .
7128 O     O     . HOH HOH HOH S . 465 465 . 0.5393 0.3356 0.3638 -0.2683
0.0849  -0.1158 1 .
7129 O     O     . HOH HOH HOH S . 466 466 . 0.7271 0.5149 1.6944 -0.5264 -
0.3526 0.0521  1 .
7130 O     O     . HOH HOH HOH S . 467 467 . 0.7520 0.1532 0.2264 -0.2655
0.3634  -0.1572 1 .
7131 O     O     . HOH HOH HOH S . 468 468 . 0.4147 0.2901 0.1385 0.0199  -
0.0582 -0.0053 1 .
7132 O     O     . HOH HOH HOH S . 469 469 . 0.3916 0.4803 0.0737 0.0930
0.0276  -0.0184 1 .
7133 O     O     . HOH HOH HOH S . 470 470 . 0.4436 0.2153 0.2862 -0.0124 -
0.0685 -0.1029 1 .
7134 O     O     . HOH HOH HOH S . 471 471 . 0.7874 0.3826 0.5511 -0.1834 -
0.2780 0.0580  1 .
7135 O     O     . HOH HOH HOH S . 472 472 . 0.2583 0.5382 0.5038 0.0057  -
0.1376 -0.1987 1 .
7136 O     O     . HOH HOH HOH S . 473 473 . 0.2305 0.3553 0.3756 0.1286
0.1543  0.0557  1 .
7137 O     O     . HOH HOH HOH S . 474 474 . 0.3190 0.3504 0.2588 -0.0640
0.0835  -0.1439 1 .
7138 O     O     . HOH HOH HOH S . 475 475 . 0.7743 0.3519 0.1834 0.1216  -
0.0914 0.1347  1 .
7139 O     O     . HOH HOH HOH S . 476 476 . 0.4122 0.1122 0.3547 -0.0602 -
0.1211 -0.1300 1 .
7140 O     O     . HOH HOH HOH S . 477 477 . 1.0428 0.2417 0.1567 0.3548
0.1568  0.0017  1 .
7141 O     O     . HOH HOH HOH S . 478 478 . 0.1853 0.1528 0.1902 -0.0386
0.0172  -0.0365 1 .
7142 O     O     . HOH HOH HOH S . 479 479 . 0.4115 0.1986 0.2632 -0.1598 -
0.0384 0.1291  1 .
7143 O     O     . HOH HOH HOH S . 480 480 . 0.2224 0.1556 0.1142 0.0251  -
0.1030 -0.0199 1 .
7144 O     O     . HOH HOH HOH S . 481 481 . 0.5993 0.2306 0.6378 0.1188
0.2566  -0.2468 1 .
7145 O     O     . HOH HOH HOH S . 482 482 . 1.4727 0.9180 0.4952 -0.5192 -
0.4006 0.0588  1 .
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7146 O     O     . HOH HOH HOH S . 483 483 . 0.5078 0.3837 0.1865 0.2059  -
0.0025 -0.0907 1 .
7147 O     O     . HOH HOH HOH S . 484 484 . 0.2749 0.2112 0.0651 0.0655
0.0689  -0.0177 1 .
7148 O     O     . HOH HOH HOH S . 485 485 . 0.3521 0.3542 0.1802 0.0850
0.0645  0.1812  1 .
7149 O     O     . HOH HOH HOH S . 486 486 . 0.3792 0.1799 0.2675 0.1276
0.0907  -0.0091 1 .
7150 O     O     . HOH HOH HOH S . 487 487 . 0.5293 0.3283 0.1649 -0.1443 -
0.0832 0.0526  1 .
7151 O     O     . HOH HOH HOH S . 488 488 . 0.7407 0.4484 0.4542 -0.2602 -
0.1377 -0.1449 1 .
7152 O     O     . HOH HOH HOH S . 489 489 . 0.4235 0.6788 0.2930 -0.3492
0.1975  0.0695  1 .
7153 O     O     . HOH HOH HOH S . 490 490 . 0.3931 0.3110 0.4178 0.2329  -
0.1811 -0.0856 1 .
7154 O     O     . HOH HOH HOH S . 491 491 . 0.3041 0.1879 0.1700 0.0135  -
0.0194 0.0658  1 .
7155 O     O     . HOH HOH HOH S . 492 492 . 0.4263 0.3484 0.3471 -0.0169
0.2016  -0.0268 1 .
7156 O     O     . HOH HOH HOH S . 493 493 . 0.2413 0.2520 0.1561 0.0929
0.0227  0.0509  1 .
7157 O     O     . HOH HOH HOH S . 494 494 . 0.4844 0.3961 0.3294 0.1367  -
0.2349 -0.1189 1 .
7158 O     O     . HOH HOH HOH S . 495 495 . 0.2648 0.2085 0.2852 -0.0051
0.0914  0.0490  1 .
7159 O     O     . HOH HOH HOH S . 496 496 . 0.0672 0.5030 0.5614 0.0578
0.0703  0.1443  1 .
7160 O     O     . HOH HOH HOH S . 497 497 . 0.1720 0.2000 0.1926 0.0782
0.0495  -0.0407 1 .
7161 O     O     . HOH HOH HOH S . 498 498 . 0.1166 0.2084 0.2757 0.0948  -
0.1015 -0.0388 1 .
7162 O     O     . HOH HOH HOH S . 499 499 . 0.3542 0.1071 0.3634 0.0392
0.1886  -0.0767 1 .
7163 O     O     . HOH HOH HOH S . 500 500 . 0.2677 0.1336 0.2329 0.0748
0.0007  0.0722  1 .
7164 O     O     . HOH HOH HOH S . 501 501 . 0.2064 0.2454 0.2023 0.0456
0.0232  0.1219  1 .
7165 O     O     . HOH HOH HOH S . 502 502 . 0.4113 0.6804 0.1742 0.0550  -
0.0129 0.0484  1 .
7166 O     O     . HOH HOH HOH S . 503 503 . 0.1993 0.2361 0.1897 -0.0550 -
0.0343 0.0830  1 .
7167 O     O     . HOH HOH HOH S . 504 504 . 0.3332 0.1501 0.3559 0.0904  -
0.0818 -0.0315 1 .
7168 O     O     . HOH HOH HOH S . 505 505 . 0.5324 0.2965 0.1627 0.1154  -
0.0390 0.1241  1 .
7169 O     O     . HOH HOH HOH S . 506 506 . 0.4762 0.2258 0.7778 0.0029
0.3213  -0.1225 1 .
7170 O     O     . HOH HOH HOH S . 507 507 . 0.2764 0.3360 0.3398 0.1198  -
0.1202 -0.1733 1 .
7171 O     O     . HOH HOH HOH S . 508 508 . 0.4464 0.1478 0.1176 0.0430  -
0.0061 -0.0569 1 .
7172 O     O     . HOH HOH HOH S . 509 509 . 0.2303 0.1564 0.2085 -0.0254
0.0830  -0.0928 1 .
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7173 O     O     . HOH HOH HOH S . 510 510 . 0.4154 0.2340 0.1866 0.0438  -
0.1078 0.0534  1 .
7174 O     O     . HOH HOH HOH S . 511 511 . 0.4375 0.3397 0.2872 0.0032
0.0451  -0.0983 1 .
7175 O     O     . HOH HOH HOH S . 512 512 . 0.1169 1.0711 0.4435 -0.1754 -
0.0146 -0.0041 1 .
7176 O     O     . HOH HOH HOH S . 513 513 . 0.4430 0.1268 0.7143 -0.0170
0.1921  0.0312  1 .
7177 O     O     . HOH HOH HOH S . 514 514 . 0.2577 0.2702 0.3421 -0.0550 -
0.1171 -0.0393 1 .
7178 O     O     . HOH HOH HOH S . 515 515 . 0.2562 0.1010 0.1492 0.1037
0.0256  -0.0478 1 .
7179 O     O     . HOH HOH HOH S . 516 516 . 0.3803 0.2390 0.1406 0.0831  -
0.0140 0.0526  1 .
7180 O     O     . HOH HOH HOH S . 517 517 . 0.3417 0.3312 0.2447 0.0040  -
0.1430 -0.0022 1 .
7181 O     O     . HOH HOH HOH S . 518 518 . 0.2679 0.8811 0.0827 -0.3860 -
0.0048 -0.1099 1 .
7182 O     O     . HOH HOH HOH S . 519 519 . 0.2539 0.2023 0.3177 0.1386  -
0.2255 -0.0602 1 .
7183 O     O     . HOH HOH HOH S . 520 520 . 0.3587 0.2602 0.3586 0.0110  -
0.2444 -0.1982 1 .
7184 O     O     . HOH HOH HOH S . 521 521 . 0.4694 0.3196 0.2473 -0.1835
0.2462  -0.2384 1 .
7185 O     O     . HOH HOH HOH S . 522 522 . 0.4204 0.3488 0.3209 0.1165  -
0.1528 0.1247  1 .
7186 O     O     . HOH HOH HOH S . 523 523 . 0.2244 0.2764 0.0929 0.0133
0.0007  0.1301  1 .
7187 O     O     . HOH HOH HOH S . 524 524 . 0.5352 0.2022 0.2998 0.1917
0.0317  -0.0226 1 .
7188 O     O     . HOH HOH HOH S . 525 525 . 0.3292 0.3437 0.2063 0.0735  -
0.1668 -0.0310 1 .
7189 O     O     . HOH HOH HOH S . 526 526 . 0.1751 0.3183 0.3212 -0.0385 -
0.1530 -0.0379 1 .
7190 O     O     . HOH HOH HOH S . 527 527 . 0.4543 0.5705 0.4346 0.0956
0.2391  0.2866  1 .
7191 O     O     . HOH HOH HOH S . 528 528 . 0.2702 0.6179 0.4292 0.3654
0.0099  0.1533  1 .
7192 O     O     . HOH HOH HOH S . 529 529 . 0.2886 0.2282 0.2504 -0.0374 -
0.0697 -0.0698 1 .
7193 O     O     . HOH HOH HOH S . 530 530 . 0.5440 0.2136 0.5663 0.2466  -
0.5136 -0.1962 1 .
7194 O     O     . HOH HOH HOH S . 531 531 . 0.7282 0.5449 0.4791 0.0361
0.0877  -0.0381 1 .
7195 O     O     . HOH HOH HOH S . 532 532 . 0.5067 0.3006 0.4599 0.0722
0.0651  -0.1716 1 .
7196 O     O     . HOH HOH HOH S . 533 533 . 0.3907 0.3442 0.1470 0.0243
0.0559  -0.0338 1 .
7197 O     O     . HOH HOH HOH S . 534 534 . 0.2920 0.2275 0.1618 -0.0571
0.0480  -0.0907 1 .
7198 O     O     . HOH HOH HOH S . 537 537 . 0.5169 0.2639 0.3814 0.0061  -
0.1002 0.1864  1 .
7199 O     O     . HOH HOH HOH S . 538 538 . 0.1579 0.2411 0.1937 -0.0188 -
0.0533 -0.0896 1 .
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7200 O     O     . HOH HOH HOH S . 539 539 . 0.3411 0.3118 0.2095 0.1178
0.1238  0.0941  1 .
7201 O     O     . HOH HOH HOH S . 540 540 . 0.8354 0.5219 0.8009 -0.0634 -
0.1762 0.0657  1 .
7202 O     O     . HOH HOH HOH S . 541 541 . 0.2463 0.2781 0.3629 -0.0032
0.2724  -0.0248 1 .
7203 O     O     . HOH HOH HOH S . 542 542 . 0.2836 0.3709 0.2669 0.0248
0.0000  0.1344  1 .
7204 O     O     . HOH HOH HOH S . 543 543 . 0.4063 0.3520 0.6453 -0.0740
0.1496  -0.3610 1 .
7205 O     O     . HOH HOH HOH S . 544 544 . 0.4750 0.3979 0.2447 0.0705
0.0252  -0.1483 1 .
7206 O     O     . HOH HOH HOH S . 545 545 . 0.1653 0.3527 0.2087 -0.0207 -
0.0975 0.0491  1 .
7207 O     O     . HOH HOH HOH S . 546 546 . 0.3115 0.4741 0.2930 -0.0746
0.2068  -0.0586 1 .
7208 O     O     . HOH HOH HOH S . 547 547 . 0.6304 0.1803 0.5141 0.1256  -
0.0168 0.1823  1 .
7209 O     O     . HOH HOH HOH S . 548 548 . 0.4921 0.0893 0.2375 -0.0059 -
0.1706 0.0274  1 .
7210 O     O     . HOH HOH HOH S . 549 549 . 0.7179 0.4425 0.2968 0.0907
0.2007  -0.1884 1 .
7211 O     O     . HOH HOH HOH S . 550 550 . 0.5105 0.2989 0.2257 0.2116
0.1406  0.0084  1 .
7212 O     O     . HOH HOH HOH S . 552 552 . 0.2625 0.2694 0.1576 0.0121
0.0691  0.0523  1 .
7213 O     O     . HOH HOH HOH S . 553 553 . 0.5178 0.1557 0.5034 0.1399
0.0067  -0.0755 1 .
7214 O     O     . HOH HOH HOH S . 554 554 . 0.4426 0.1328 0.7134 0.0596
0.0588  0.0478  1 .
7215 O     O     . HOH HOH HOH S . 555 555 . 0.0499 0.3591 0.3698 -0.0516
0.0308  0.0884  1 .
7216 O     O     . HOH HOH HOH S . 556 556 . 0.2955 0.1010 0.1600 0.0374
0.0503  -0.0282 1 .
7217 O     O     . HOH HOH HOH S . 557 557 . 0.2974 0.1520 0.2666 -0.1017
0.0729  -0.0729 1 .
7218 O     O     . HOH HOH HOH S . 558 558 . 0.2137 0.4606 0.4719 -0.2153 -
0.0284 -0.0783 1 .
7219 O     O     . HOH HOH HOH S . 559 559 . 0.5206 0.2069 0.4367 0.0610  -
0.0083 0.0756  1 .
7220 O     O     . HOH HOH HOH S . 561 561 . 0.3270 0.1319 0.3223 -0.0005 -
0.1503 -0.1536 1 .
7221 O     O     . HOH HOH HOH S . 562 562 . 0.4662 0.5403 0.7311 0.3651  -
0.0579 -0.0605 1 .
7222 O     O     . HOH HOH HOH S . 563 563 . 0.2126 0.4078 0.2132 0.2142  -
0.0597 -0.0932 1 .
7223 O     O     . HOH HOH HOH S . 564 564 . 0.2926 0.3186 0.2292 -0.0433 -
0.1557 0.0142  1 .
7224 O     O     . HOH HOH HOH S . 565 565 . 0.3191 0.1927 0.3891 -0.0721
0.1556  -0.1418 1 .
7225 O     O     . HOH HOH HOH S . 566 566 . 0.4872 0.0725 0.1330 0.0808  -
0.1089 0.0166  1 .
7226 O     O     . HOH HOH HOH S . 567 567 . 0.2552 0.2365 0.3422 -0.0854 -
0.1000 -0.1842 1 .
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7227 O     O     . HOH HOH HOH S . 568 568 . 0.2305 0.1772 0.3158 0.0077  -
0.0178 -0.0670 1 .
7228 O     O     . HOH HOH HOH S . 569 569 . 1.1453 0.9340 0.3639 0.1180  -
0.3322 -0.4988 1 .
7229 O     O     . HOH HOH HOH S . 570 570 . 0.3800 0.1083 0.4168 -0.1401
0.0041  -0.1056 1 .
7230 O     O     . HOH HOH HOH S . 572 572 . 0.3668 0.0664 0.5101 0.1185
0.0458  0.0146  1 .
7231 O     O     . HOH HOH HOH S . 573 573 . 0.7296 0.4708 0.7402 0.0322  -
0.1909 -0.0879 1 .
7232 O     O     . HOH HOH HOH S . 574 574 . 0.4590 0.7216 0.3731 -0.0732 -
0.0860 -0.0453 1 .
7233 O     O     . HOH HOH HOH S . 575 575 . 1.0110 0.4505 0.3805 -0.1398
0.0183  0.1734  1 .
7234 O     O     . HOH HOH HOH S . 576 576 . 0.4533 0.2711 0.5917 -0.1392 -
0.0349 -0.0302 1 .
7235 O     O     . HOH HOH HOH S . 577 577 . 0.3978 0.2162 0.2663 -0.1081
0.0113  -0.1557 1 .
7236 O     O     . HOH HOH HOH S . 578 578 . 0.4430 0.2570 0.1467 -0.0964
0.0618  -0.0731 1 .
7237 O     O     . HOH HOH HOH S . 580 580 . 0.4652 0.2705 0.7078 0.2688  -
0.2582 0.0494  1 .
7238 O     O     . HOH HOH HOH S . 581 581 . 0.5282 0.2881 0.3484 0.0289  -
0.0800 0.0228  1 .
7239 O     O     . HOH HOH HOH S . 583 583 . 0.2744 0.2368 0.6598 -0.1962
0.2573  -0.0577 1 .
7240 O     O     . HOH HOH HOH S . 584 584 . 0.5168 0.4589 0.1226 0.1973
0.1963  0.1524  1 .
7241 O     O     . HOH HOH HOH S . 585 585 . 0.2510 0.4364 0.2921 -0.0561
0.1203  -0.1185 1 .
7242 O     O     . HOH HOH HOH S . 586 586 . 0.5498 0.3536 0.4919 -0.1025 -
0.0408 0.2189  1 .
7243 O     O     . HOH HOH HOH S . 589 589 . 0.4806 0.3855 0.1786 0.1900  -
0.1553 -0.0353 1 .
7244 O     O     . HOH HOH HOH S . 591 591 . 0.3558 0.0973 0.2861 0.0328
0.0137  0.0323  1 .
7245 O     O     . HOH HOH HOH S . 592 592 . 0.6391 0.4766 0.3685 0.3283
0.1208  -0.0206 1 .
7246 O     O     . HOH HOH HOH S . 593 593 . 0.3798 0.2596 0.1315 0.0759  -
0.0667 0.1059  1 .
7247 O     O     . HOH HOH HOH S . 594 594 . 0.7009 0.3738 0.4645 -0.0323
0.2106  -0.2839 1 .
7248 O     O     . HOH HOH HOH S . 596 596 . 0.3230 0.1317 0.5808 0.1719
0.1681  0.0734  1 .
7249 O     O     . HOH HOH HOH S . 597 597 . 0.3899 0.0359 0.6370 0.0520  -
0.2023 -0.0688 1 .
7250 O     O     . HOH HOH HOH S . 598 598 . 0.5037 0.4927 0.3599 -0.0375
0.0544  0.1021  1 .
7251 O     O     . HOH HOH HOH S . 599 599 . 0.2887 0.2706 0.2376 -0.1269 -
0.1175 0.0823  1 .
7252 O     O     . HOH HOH HOH S . 601 601 . 0.3536 0.3011 0.3046 -0.0121 -
0.0881 0.0907  1 .
7253 O     O     . HOH HOH HOH S . 602 602 . 0.2093 0.3564 0.2465 -0.0754
0.1376  0.0444  1 .
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7254 O     O     . HOH HOH HOH S . 603 603 . 0.3548 0.1643 0.6062 -0.0756 -
0.1588 0.0790  1 .
7255 O     O     . HOH HOH HOH S . 604 604 . 0.5580 0.1770 0.3457 0.1062
0.1640  0.1305  1 .
7256 O     O     . HOH HOH HOH S . 605 605 . 0.6646 0.3213 0.9668 0.3971  -
0.1281 -0.2920 1 .
7257 O     O     . HOH HOH HOH S . 606 606 . 0.1986 0.2911 0.3323 0.0715  -
0.0883 0.1089  1 .
7258 O     O     . HOH HOH HOH S . 607 607 . 0.4670 0.0658 0.3008 0.0754
0.0807  0.0642  1 .
7259 O     O     . HOH HOH HOH S . 608 608 . 0.3150 0.5952 0.4318 -0.2350
0.0518  -0.4302 1 .
7260 O     O     . HOH HOH HOH S . 609 609 . 0.1760 0.2238 0.2056 -0.0135
0.0717  0.0227  1 .
7261 O     O     . HOH HOH HOH S . 612 612 . 0.4742 0.4642 0.3479 0.1390  -
0.3484 0.0107  1 .
7262 O     O     . HOH HOH HOH S . 613 613 . 0.3298 0.4159 0.6680 0.2267
0.1430  0.0663  1 .
7263 O     O     . HOH HOH HOH S . 614 614 . 0.5864 0.2894 0.7072 0.1136
0.1080  -0.1047 1 .
7264 O     O     . HOH HOH HOH S . 615 615 . 0.6686 0.8497 0.6147 -0.2584
0.3138  -0.4359 1 .
7265 O     O     . HOH HOH HOH S . 616 616 . 0.3092 0.2064 0.6139 -0.0784 -
0.1832 -0.2231 1 .
7266 O     O     . HOH HOH HOH S . 617 617 . 0.4392 0.2245 0.4369 -0.0948
0.1902  -0.1291 1 .
7267 O     O     . HOH HOH HOH S . 618 618 . 0.6926 0.1350 0.3307 0.0671  -
0.2738 0.0191  1 .
7268 O     O     . HOH HOH HOH S . 620 620 . 0.9974 0.8164 0.2713 -0.1267
0.1425  0.3047  1 .
7269 O     O     . HOH HOH HOH S . 621 621 . 0.4903 0.2002 0.3364 -0.1037
0.2087  -0.1121 1 .
7270 O     O     . HOH HOH HOH S . 623 623 . 0.1997 0.2911 0.1174 -0.1442
0.0353  0.0209  1 .
7271 O     O     . HOH HOH HOH S . 626 626 . 0.4173 0.6067 0.5057 -0.0824 -
0.0169 0.2753  1 .
7272 O     O     . HOH HOH HOH S . 630 630 . 0.4411 0.2889 0.1995 -0.1854
0.0918  -0.0653 1 .
7273 O     O     . HOH HOH HOH S . 632 632 . 0.7251 0.9997 0.3012 -0.0186
0.0157  0.0857  1 .
7274 O     O     . HOH HOH HOH S . 633 633 . 0.3053 0.4627 0.2391 -0.0193 -
0.0336 0.0786  1 .
7275 O     O     . HOH HOH HOH S . 634 634 . 0.3259 0.4306 0.5874 -0.2582
0.2576  -0.0137 1 .
7276 O     O     . HOH HOH HOH S . 635 635 . 0.0713 0.4508 0.5102 -0.1399
0.0366  -0.0993 1 .
7277 O     O     . HOH HOH HOH S . 636 636 . 0.4635 0.4074 0.1276 -0.0123
0.0437  0.0477  1 .
#
_atom_sites.entry_id                    UNNAMED
_atom_sites.fract_transf_matrix[1][1]   0.009045
_atom_sites.fract_transf_matrix[1][2]   0.000000
_atom_sites.fract_transf_matrix[1][3]   0.000000
_atom_sites.fract_transf_matrix[2][1]   0.000000
```

```
_atom_sites.fract_transf_matrix[2][2]   0.008346
_atom_sites.fract_transf_matrix[2][3]   0.000000
_atom_sites.fract_transf_matrix[3][1]   0.000000
_atom_sites.fract_transf_matrix[3][2]   0.000000
_atom_sites.fract_transf_matrix[3][3]   0.014676
_atom_sites.fract_transf_vector[1]      0.000000
_atom_sites.fract_transf_vector[2]      0.000000
_atom_sites.fract_transf_vector[3]      0.000000
#
_cell.length_a      110.557
_cell.length_b      119.819
_cell.length_c      68.140
_cell.angle_alpha   90.000
_cell.angle_beta    90.000
_cell.angle_gamma   90.000
_cell.entry_id      UNNAMED
#
_computing.entry_id                  UNNAMED
_computing.structure_refinement      'REFMAC 5.5.0109'
_computing.structure_solution        ?
_computing.pdbx_data_reduction_ds    HKL
_computing.pdbx_data_reduction_ii    HKL
_computing.cell_refinement           HKL
#
_data_extraction.software           pdb_extract
_data_extraction.extraction_date    'Fri Oct 21 12:38:13 2011'
_data_extraction.version            3.10
_data_extraction.release_date       'June 10, 2010'
_data_extraction.location           http://sw-tools.rcsb.org/apps/PDB_EXTRACT/
#
loop_
_database_2.database_id
_database_2.database_code
PDB  UNNAMED
RCSB UNNAMED
#
_database_PDB_remark.id     3
_database_PDB_remark.text
;
REMARK   3
REMARK   3 REFINEMENT.
REMARK   3   PROGRAM     : REFMAC 5.5.0109
REMARK   3   AUTHORS     : MURSHUDOV,VAGIN,DODSON
REMARK   3
REMARK   3    REFINEMENT TARGET : MAXIMUM LIKELIHOOD
REMARK   3
REMARK   3  DATA USED IN REFINEMENT.
REMARK   3   RESOLUTION RANGE HIGH (ANGSTROMS) :   1.40
REMARK   3   RESOLUTION RANGE LOW  (ANGSTROMS) :  81.25
REMARK   3   DATA CUTOFF            (SIGMA(F)) : NONE
REMARK   3   COMPLETENESS FOR RANGE        (%) :  77.74
REMARK   3   NUMBER OF REFLECTIONS             :  131411
REMARK   3
REMARK   3  FIT TO DATA USED IN REFINEMENT.
```

```
REMARK   3   CROSS-VALIDATION METHOD          : THROUGHOUT
REMARK   3   FREE R VALUE TEST SET SELECTION  : RANDOM
REMARK   3   R VALUE     (WORKING + TEST SET) : 0.21821
REMARK   3   R VALUE            (WORKING SET) :  0.21630
REMARK   3   FREE R VALUE                     :  0.25467
REMARK   3   FREE R VALUE TEST SET SIZE   (%) :  5.0
REMARK   3   FREE R VALUE TEST SET COUNT      :  6887
REMARK   3
REMARK   3  FIT IN THE HIGHEST RESOLUTION BIN.
REMARK   3   TOTAL NUMBER OF BINS USED           :      20
REMARK   3   BIN RESOLUTION RANGE HIGH           :    1.400
REMARK   3   BIN RESOLUTION RANGE LOW            :    1.437
REMARK   3   REFLECTION IN BIN     (WORKING SET) :     4829
REMARK   3   BIN COMPLETENESS (WORKING+TEST) (%) :    38.83
REMARK   3   BIN R VALUE           (WORKING SET) :    0.275
REMARK   3   BIN FREE R VALUE SET COUNT          :      238
REMARK   3   BIN FREE R VALUE                    :    0.342
REMARK   3
REMARK   3  NUMBER OF NON-HYDROGEN ATOMS USED IN REFINEMENT.
REMARK   3   ALL ATOMS               :     7277
REMARK   3
REMARK   3  B VALUES.
REMARK   3   FROM WILSON PLOT           (A**2) : NULL
REMARK   3   MEAN B VALUE      (OVERALL, A**2) :   9.170
REMARK   3   OVERALL ANISOTROPIC B VALUE.
REMARK   3    B11 (A**2) :     1.17
REMARK   3    B22 (A**2) :    -0.68
REMARK   3    B33 (A**2) :    -0.50
REMARK   3    B12 (A**2) :     0.00
REMARK   3    B13 (A**2) :     0.00
REMARK   3    B23 (A**2) :     0.00
REMARK   3
REMARK   3  ESTIMATED OVERALL COORDINATE ERROR.
REMARK   3   ESU BASED ON R VALUE                            (A):   0.111
REMARK   3   ESU BASED ON FREE R VALUE                       (A):   0.093
REMARK   3   ESU BASED ON MAXIMUM LIKELIHOOD                 (A):   0.057
REMARK   3   ESU FOR B VALUES BASED ON MAXIMUM LIKELIHOOD (A**2):   3.136
REMARK   3
REMARK   3 CORRELATION COEFFICIENTS.
REMARK   3   CORRELATION COEFFICIENT FO-FC      :   0.889
REMARK   3   CORRELATION COEFFICIENT FO-FC FREE :   0.862
REMARK   3
REMARK   3  RMS DEVIATIONS FROM IDEAL VALUES        COUNT    RMS    WEIGHT
REMARK   3   BOND LENGTHS REFINED ATOMS        (A):  6785 ; 0.023 ; 0.022
REMARK   3   BOND ANGLES REFINED ATOMS   (DEGREES):  9178 ; 1.987 ; 1.971
REMARK   3   TORSION ANGLES, PERIOD 1    (DEGREES):   867 ; 6.114 ; 5.000
REMARK   3   TORSION ANGLES, PERIOD 2    (DEGREES):   309 ;39.979 ;24.984
REMARK   3   TORSION ANGLES, PERIOD 3    (DEGREES):  1164 ;14.912 ;15.000
REMARK   3   TORSION ANGLES, PERIOD 4    (DEGREES):    40 ;20.098 ;15.000
REMARK   3   CHIRAL-CENTER RESTRAINTS       (A**3):  1027 ; 0.138 ; 0.200
REMARK   3   GENERAL PLANES REFINED ATOMS      (A):  5134 ; 0.012 ; 0.021
REMARK   3
REMARK   3  ISOTROPIC THERMAL FACTOR RESTRAINTS.     COUNT   RMS    WEIGHT
REMARK   3   MAIN-CHAIN BOND REFINED ATOMS  (A**2):  4301 ; 1.813 ; 1.500
```

```
REMARK   3   MAIN-CHAIN ANGLE REFINED ATOMS (A**2):  6872 ; 2.509 ; 2.000
REMARK   3   SIDE-CHAIN BOND REFINED ATOMS  (A**2):  2484 ; 4.111 ; 3.000
REMARK   3   SIDE-CHAIN ANGLE REFINED ATOMS (A**2):  2306 ; 5.716 ; 4.500
REMARK   3
REMARK   3 ANISOTROPIC THERMAL FACTOR RESTRAINTS.    COUNT   RMS   WEIGHT
REMARK   3   RIGID-BOND RESTRAINTS          (A**2):  6785 ; 2.244 ; 3.000
REMARK   3
REMARK   3  NCS RESTRAINTS STATISTICS
REMARK   3   NUMBER OF NCS GROUPS : NULL
REMARK   3
REMARK   3  TWIN DETAILS
REMARK   3   NUMBER OF TWIN DOMAINS  : NULL
REMARK   3
REMARK   3
REMARK   3  TLS DETAILS
REMARK   3   NUMBER OF TLS GROUPS  : NULL
REMARK   3
REMARK   3
REMARK   3  BULK SOLVENT MODELLING.
REMARK   3   METHOD USED :  MASK
REMARK   3   PARAMETERS FOR MASK CALCULATION
REMARK   3   VDW PROBE RADIUS   :   1.40
REMARK   3   ION PROBE RADIUS   :   0.80
REMARK   3   SHRINKAGE RADIUS   :   0.80
REMARK   3
REMARK   3  OTHER REFINEMENT REMARKS:
REMARK   3  HYDROGENS HAVE BEEN ADDED IN THE RIDING POSITIONS
REMARK   3  U VALUES      : REFINED INDIVIDUALLY
REMARK   3
;
#
_entity_poly.entity_id                  1
_entity_poly.pdbx_seq_one_letter_code
;SIQKIWAREILDSRGNPTVEVDLYTAKGLFRAAVPSGASTGIYEALELRDGDKQRYLGKG
VLKAVDHINSTIAPALISSGLSVVEQEKLDNLMLELDGTENKSKFGANAILGVSLAVCKA
GAAERELPLYRHIAQLAGNSDLILPVPAFNVINGGSHAGNKLAMQEFMILPVGAESFRDA
MRLGAEVYHTLKGVIKDKYGKDATNVGDEGGFAPNILENSEALELVKEAIDKAGYTEKIV
IGMDVAASEFYRDGKYDLDFKSPTDPSRYITGDQLGALYQDFVRDYPVVSIEDPFDQDDW
AAWSKFTANVGIQIVGDDLTVTNPKRIERAVEEKACNCLLLKVNQIGSVTEAIQACKLAQ
ENGWGVMVSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEELGDEA
RFAGHNFRNPSVL
;
_entity_poly.pdbx_strand_id             A,B
_entity_poly.type                       'polypeptide(L)'
_entity_poly.pdbx_target_identifier     ?
#
_entry.id   UNNAMED
#
_exptl.crystals_number   1
_exptl.entry_id          UNNAMED
_exptl.method            'X-RAY DIFFRACTION'
#
_exptl_crystal.id                    1
_exptl_crystal.pdbx_mosaicity        0.503
```

```
_exptl_crystal.pdbx_mosaicity_esd    ?
_exptl_crystal.density_Matthews      ?
_exptl_crystal.density_diffrn        ?
_exptl_crystal.density_meas          ?
_exptl_crystal.density_meas_temp     ?
_exptl_crystal.density_percent_sol   ?
_exptl_crystal.size_max              ?
_exptl_crystal.size_mid              ?
_exptl_crystal.size_min              ?
_exptl_crystal.size_rad              ?
#
_refine.entry_id                                 UNNAMED
_refine.pdbx_refine_id                           'X-RAY DIFFRACTION'
_refine.ls_d_res_high                            1.4000
_refine.ls_d_res_low                             81.2500
_refine.pdbx_ls_sigma_F                          0.000
_refine.pdbx_data_cutoff_high_absF               ?
_refine.pdbx_data_cutoff_low_absF                ?
_refine.ls_percent_reflns_obs                    77.7400
_refine.ls_number_reflns_obs                     138298
_refine.ls_number_reflns_all                     ?
_refine.pdbx_ls_cross_valid_method               THROUGHOUT
_refine.ls_matrix_type                           ?
_refine.pdbx_R_Free_selection_details            RANDOM
_refine.details
' HYDROGENS HAVE BEEN ADDED IN THE RIDING POSITIONS U VALUES      : REFINED
INDIVIDUALLY '
_refine.ls_R_factor_all                          ?
_refine.ls_R_factor_obs                          0.2182
_refine.ls_R_factor_R_work                       0.2163
_refine.ls_wR_factor_R_work                      0.1951
_refine.ls_R_factor_R_free                       0.2547
_refine.ls_wR_factor_R_free                      0.2254
_refine.ls_percent_reflns_R_free                 5.0000
_refine.ls_number_reflns_R_free                  6887
_refine.ls_number_reflns_R_work                  131411
_refine.ls_R_factor_R_free_error                 ?
_refine.B_iso_mean                               9.1705
_refine.solvent_model_param_bsol                 ?
_refine.solvent_model_param_ksol                 ?
_refine.pdbx_isotropic_thermal_model             ?
_refine.aniso_B[1][1]                            1.1700
_refine.aniso_B[2][2]                            -0.6800
_refine.aniso_B[3][3]                            -0.5000
_refine.aniso_B[1][2]                            0.0000
_refine.aniso_B[1][3]                            0.0000
_refine.aniso_B[2][3]                            0.0000
_refine.correlation_coeff_Fo_to_Fc                0.8890
_refine.correlation_coeff_Fo_to_Fc_free           0.8620
_refine.overall_SU_R_Cruickshank_DPI             0.1113
_refine.pdbx_overall_SU_R_free_Cruickshank_DPI   ?
_refine.pdbx_overall_SU_R_Blow_DPI               ?
_refine.pdbx_overall_SU_R_free_Blow_DPI          ?
_refine.overall_SU_R_free                        0.0928
```

```
_refine.pdbx_overall_ESU_R                       0.1110
_refine.pdbx_overall_ESU_R_Free                  0.0930
_refine.overall_SU_ML                            0.0570
_refine.overall_SU_B                             3.1360
_refine.solvent_model_details                    MASK
_refine.pdbx_solvent_vdw_probe_radii             1.4000
_refine.pdbx_solvent_ion_probe_radii             0.8000
_refine.pdbx_solvent_shrinkage_radii             0.8000
_refine.ls_number_parameters                     ?
_refine.ls_number_restraints                     ?
_refine.pdbx_starting_model                      ?
_refine.pdbx_method_to_determine_struct          ?
_refine.pdbx_stereochemistry_target_values       'MAXIMUM LIKELIHOOD'
_refine.pdbx_stereochem_target_val_spec_case     ?
_refine.overall_FOM_work_R_set                   0.8861
_refine.B_iso_max                                123.610
_refine.B_iso_min                                2.000
_refine.pdbx_overall_phase_error                 ?
_refine.occupancy_max                            1.000
_refine.occupancy_min                            0.500
#
loop_
_refine_ls_restr.pdbx_refine_id
_refine_ls_restr.type
_refine_ls_restr.number
_refine_ls_restr.dev_ideal
_refine_ls_restr.dev_ideal_target
_refine_ls_restr.weight
_refine_ls_restr.pdbx_restraint_function
'X-RAY DIFFRACTION' r_bond_refined_d       6785 0.023  0.022  ? ?
'X-RAY DIFFRACTION' r_angle_refined_deg    9178 1.987  1.971  ? ?
'X-RAY DIFFRACTION' r_dihedral_angle_1_deg 867  6.114  5.000  ? ?
'X-RAY DIFFRACTION' r_dihedral_angle_2_deg 309  39.979 24.984 ? ?
'X-RAY DIFFRACTION' r_dihedral_angle_3_deg 1164 14.912 15.000 ? ?
'X-RAY DIFFRACTION' r_dihedral_angle_4_deg 40   20.098 15.000 ? ?
'X-RAY DIFFRACTION' r_chiral_restr         1027 0.138  0.200  ? ?
'X-RAY DIFFRACTION' r_gen_planes_refined   5134 0.012  0.021  ? ?
'X-RAY DIFFRACTION' r_mcbond_it            4301 1.813  1.500  ? ?
'X-RAY DIFFRACTION' r_mcangle_it           6872 2.509  2.000  ? ?
'X-RAY DIFFRACTION' r_scbond_it            2484 4.111  3.000  ? ?
'X-RAY DIFFRACTION' r_scangle_it           2306 5.716  4.500  ? ?
'X-RAY DIFFRACTION' r_rigid_bond_restr     6785 2.244  3.000  ? ?
#
_refine_ls_shell.d_res_high                      1.4000
_refine_ls_shell.d_res_low                       1.4370
_refine_ls_shell.pdbx_total_number_of_bins_used  20
_refine_ls_shell.percent_reflns_obs              38.8300
_refine_ls_shell.number_reflns_R_work            4829
_refine_ls_shell.R_factor_all                    ?
_refine_ls_shell.R_factor_R_work                 0.2750
_refine_ls_shell.R_factor_R_free                 0.3420
_refine_ls_shell.percent_reflns_R_free           ?
_refine_ls_shell.number_reflns_R_free            238
_refine_ls_shell.R_factor_R_free_error           ?
```

```
_refine_ls_shell.number_reflns_all                5067
_refine_ls_shell.number_reflns_obs                ?
_refine_ls_shell.pdbx_refine_id                   'X-RAY DIFFRACTION'
#
_reflns.entry_id                     UNNAMED
_reflns.d_resolution_high            1.400
_reflns.d_resolution_low             50.000
_reflns.pdbx_number_measured_all     778718
_reflns.number_obs                   150755
_reflns.pdbx_Rmerge_I_obs            0.097
_reflns.pdbx_netI_over_av_sigmaI     22.970
_reflns.pdbx_netI_over_sigmaI        7.700
_reflns.pdbx_chi_squared             1.697
_reflns.pdbx_redundancy              5.200
_reflns.percent_possible_obs         84.600
_reflns.pdbx_Rmeas_mean              0.097
_reflns.pdbx_average_I_obs           1451.700
_reflns.pdbx_average_sigmaI_obs      63.200
#
loop_
_reflns_shell.d_res_high
_reflns_shell.d_res_low
_reflns_shell.number_measured_obs
_reflns_shell.number_measured_all
_reflns_shell.number_unique_obs
_reflns_shell.pdbx_rejects
_reflns_shell.Rmerge_I_obs
_reflns_shell.meanI_over_sigI_obs
_reflns_shell.pdbx_Rsym_value
_reflns_shell.pdbx_chi_squared
_reflns_shell.pdbx_redundancy
_reflns_shell.percent_possible_obs
_reflns_shell.pdbx_Rmeas_mean
_reflns_shell.pdbx_netI_over_sigmaI_obs
_reflns_shell.pdbx_number_centric
_reflns_shell.pdbx_number_anomalous
_reflns_shell.pdbx_Rmerge_I_anomalous
_reflns_shell.pdbx_meanI_over_sigI_anomalous
_reflns_shell.pdbx_PCV_mean
_reflns_shell.number_possible
_reflns_shell.number_unique_all
_reflns_shell.Rmerge_F_all
_reflns_shell.Rmerge_F_obs
_reflns_shell.Rmerge_I_all
_reflns_shell.meanI_over_sigI_all
_reflns_shell.percent_possible_all
_reflns_shell.pdbx_Rrim_I_all
_reflns_shell.pdbx_Rpim_I_all
1.400 1.450  ? ? ? ? 0.791 ? ? 0.724 3.500 ? ? ? ? ? ? ? ? ? 9000  ? ? ? ?
51.000 ? ?
1.450 1.510  ? ? ? ? 0.688 ? ? 0.748 4.300 ? ? ? ? ? ? ? ? ? 11077 ? ? ? ?
62.800 ? ?
1.510 1.580  ? ? ? ? 0.593 ? ? 0.802 4.800 ? ? ? ? ? ? ? ? ? 12536 ? ? ? ?
71.000 ? ?
```

```
1.580 1.660  ? ? ? ? 0.508 ? ? 0.859 5.100 ? ? ? ? ? ? ? ? ? 14089 ? ? ? ?
79.600 ? ?
1.660 1.760  ? ? ? ? 0.382 ? ? 1.004 5.100 ? ? ? ? ? ? ? ? ? 15822 ? ? ? ?
89.500 ? ?
1.760 1.900  ? ? ? ? 0.284 ? ? 1.172 5.200 ? ? ? ? ? ? ? ? ? 17168 ? ? ? ?
96.600 ? ?
1.900 2.090  ? ? ? ? 0.192 ? ? 1.483 5.400 ? ? ? ? ? ? ? ? ? 17528 ? ? ? ?
98.600 ? ?
2.090 2.390  ? ? ? ? 0.130 ? ? 2.012 5.500 ? ? ? ? ? ? ? ? ? 17746 ? ? ? ?
99.400 ? ?
2.390 3.020  ? ? ? ? 0.091 ? ? 2.667 5.600 ? ? ? ? ? ? ? ? ? 17760 ? ? ? ?
98.900 ? ?
3.020 50.000 ? ? ? ? 0.057 ? ? 3.321 5.900 ? ? ? ? ? ? ? ? ? 18029 ? ? ? ?
97.300 ? ?
#
loop_
_software.pdbx_ordinal
_software.name
_software.version
_software.date
_software.type
_software.contact_author
_software.contact_author_email
_software.classification
_software.location
_software.language
1 HKL         ?    ?              package 'Zbyszek Otwinowski' hkl@hkl-
xray.com
'data reduction'  http://www.hkl-xray.com/                     ?
2 REFMAC5     ?    ?              program 'Garib N. Murshudov'
garib@ysbl.york.ac.uk
refinement        http://www.ccp4.ac.uk/dist/html/refmac5.html Fortran_77
3 pdb_extract 3.10 'June 10, 2010' package PDB
deposit@deposit.rcsb.org
'data extraction' http://sw-tools.pdb.org/apps/PDB_EXTRACT/    C++
#
_struct_biol.id        1
_struct_biol.details   ?
#
_symmetry.space_group_name_H-M   'P 21 21 2'
_symmetry.entry_id               UNNAMED
_symmetry.Int_Tables_number      18
#
```

CIF File(s) (REQUIRED if paper describes X-ray crystal structures)

Click here to download CIF File(s) (REQUIRED if paper describes X-ray crystal structures): TSPLAP-coord-31428.doc

```
data_UNNAMED
#
loop_
_atom_site.group_PDB
_atom_site.id
_atom_site.auth_atom_id
_atom_site.label_atom_id
_atom_site.label_alt_id
_atom_site.auth_comp_id
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ATOM 1    N    N    . SER SER SER A A 1   1   . 14.287 17.016 22.389  1.00 31.82  1 .
.
ATOM 2    CA   CA   . SER SER SER A A 1   1   . 13.482 18.009 21.641  1.00 29.09  1 .
.
ATOM 3    CB   CB   . SER SER SER A A 1   1   . 12.874 19.142 22.539  1.00 31.73  1 .
.
ATOM 4    OG   OG   . SER SER SER A A 1   1   . 13.812 20.021 23.259  1.00 27.53  1 .
.
ATOM 5    C    C    . SER SER SER A A 1   1   . 14.275 18.474 20.385  1.00 26.89  1 .
.
ATOM 6    O    O    . SER SER SER A A 1   1   . 13.752 19.266 19.616  1.00 28.10  1 .
.
ATOM 7    N    N    . ILE ILE ILE A A 2   2   . 15.488 17.965 20.091  1.00 23.80  1 .
.
ATOM 8    CA   CA   . ILE ILE ILE A A 2   2   . 16.188 18.487 18.892  1.00 20.21  1 .
.
ATOM 9    CB   CB   . ILE ILE ILE A A 2   2   . 17.729 18.301 19.035  1.00 18.43  1 .
.
ATOM 10   CG1  CG1  . ILE ILE ILE A A 2   2   . 18.202 18.996 20.301  1.00 18.81  1 .
.
ATOM 11   CD   CD   . ILE ILE ILE A A 2   2   . 19.583 18.553 20.610  1.00 18.60  1 .
.
ATOM 12   CG2  CG2  . ILE ILE ILE A A 2   2   . 18.503 18.725 17.689  1.00 17.96  1 .
.
ATOM 13   C    C    . ILE ILE ILE A A 2   2   . 15.724 17.847 17.627  1.00 19.62  1 .
.
ATOM 14   O    O    . ILE ILE ILE A A 2   2   . 15.743 16.574 17.519  1.00 21.86  1 .
.
ATOM 15   N    N    . GLU GLU GLU A A 3   3   . 15.380 18.666 16.631  1.00 18.65  1 .
.
ATOM 16   CA   CA   . GLU GLU GLU A A 3   3   . 14.760 18.141 15.398  1.00 18.96  1 .
.
ATOM 17   CB   CB   . GLU GLU GLU A A 3   3   . 13.658 19.100 14.899  1.00 20.53  1 .
.
ATOM 18   CG   CG   . GLU GLU GLU A A 3   3   . 12.398 19.150 15.765  1.00 25.35  1 .
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ATOM 19   CD   CD   . GLU GLU GLU A A 3   3   . 11.332 20.153 15.153  1.00 38.15  1 .
.
ATOM 20   OE1  OE1  . GLU GLU GLU A A 3   3   . 11.678 21.004 14.267  1.00 40.65  1 .
.
ATOM 21   OE2  OE2  . GLU GLU GLU A A 3   3   . 10.146 20.103 15.563  1.00 42.35  1 .
.
ATOM 22   C    C    . GLU GLU GLU A A 3   3   . 15.784 17.983 14.288  1.00 18.73  1 .
.
ATOM 23   O    O    . GLU GLU GLU A A 3   3   . 15.683 17.071 13.490  1.00 20.01  1 .
.
ATOM 24   N    N    . LYS LYS LYS A A 4   4   . 16.760 18.901 14.217  1.00 16.27  1 .
.
ATOM 25   CA   CA   . LYS LYS LYS A A 4   4   . 17.734 18.906 13.107  1.00 15.33  1 .
.
ATOM 26   CB   CB   . LYS LYS LYS A A 4   4   . 17.101 19.469 11.832  1.00 16.13  1 .
.
ATOM 27   CG   CG   . LYS LYS LYS A A 4   4   . 18.087 19.508 10.729  1.00 19.16  1 .
.
ATOM 28   CD   CD   . LYS LYS LYS A A 4   4   . 17.450 20.150 9.473   1.00 24.57  1 .
.
ATOM 29   CE   CE   . LYS LYS LYS A A 4   4   . 18.483 20.110 8.290   1.00 24.45  1 .
.
ATOM 30   NZ   NZ   . LYS LYS LYS A A 4   4   . 17.781 20.625 7.059   1.00 34.71  1 .
.
ATOM 31   C    C    . LYS LYS LYS A A 4   4   . 18.890 19.814 13.549  1.00 14.74  1 .
.
ATOM 32   O    O    . LYS LYS LYS A A 4   4   . 18.642 20.798 14.298  1.00 15.00  1 .
.
ATOM 33   N    N    . ILE ILE ILE A A 5   5   . 20.102 19.416 13.187  1.00 12.32  1 .
.
ATOM 34   CA   CA   . ILE ILE ILE A A 5   5   . 21.294 20.252 13.407  1.00 13.31  1 .
.
ATOM 35   CB   CB   . ILE ILE ILE A A 5   5   . 22.208 19.650 14.475  1.00 11.91  1 .
.
ATOM 36   CG1  CG1  . ILE ILE ILE A A 5   5   . 21.558 19.881 15.848  1.00 11.87  1 .
.
ATOM 37   CD   CD   . ILE ILE ILE A A 5   5   . 22.266 19.051 16.970  1.00 16.19  1 .
.
ATOM 38   CG2  CG2  . ILE ILE ILE A A 5   5   . 23.646 20.226 14.392  1.00 14.15  1 .
.
ATOM 39   C    C    . ILE ILE ILE A A 5   5   . 22.016 20.339 12.087  1.00 14.49  1 .
.
ATOM 40   O    O    . ILE ILE ILE A A 5   5   . 22.273 19.300 11.373  1.00 16.48  1 .
.
ATOM 41   N    N    . TRP TRP TRP A A 6   6   . 22.367 21.581 11.705  1.00 13.62  1 .
.
ATOM 42   CA   CA   . TRP TRP TRP A A 6   6   . 23.161 21.751 10.502  1.00 13.06  1 .
.
ATOM 43   CB   CB   . TRP TRP TRP A A 6   6   . 22.272 22.167 9.289   1.00 11.41  1 .
.
ATOM 44   CG   CG   . TRP TRP TRP A A 6   6   . 23.092 22.196 8.014   1.00 14.43  1 .
.
ATOM 45   CD1  CD1  . TRP TRP TRP A A 6   6   . 23.518 23.312 7.320   1.00 13.23  1 .
.
ATOM 46   NE1  NE1  . TRP TRP TRP A A 6   6   . 24.254 22.947 6.241   1.00 16.64  1 .
.
ATOM 47   CE2  CE2  . TRP TRP TRP A A 6   6   . 24.333 21.579 6.167   1.00 16.97  1 .
.
ATOM 48   CD2  CD2  . TRP TRP TRP A A 6   6   . 23.647 21.057 7.293   1.00 15.22  1 .
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ATOM 49   CE3  CE3  . TRP TRP TRP A A 6   6   . 23.579 19.645 7.460   1.00 16.36  1 .
.
ATOM 50   CZ3  CZ3  . TRP TRP TRP A A 6   6   . 24.231 18.822 6.496   1.00 16.47  1 .
.
ATOM 51   CH2  CH2  . TRP TRP TRP A A 6   6   . 24.907 19.398 5.413   1.00 19.19  1 .
.
ATOM 52   CZ2  CZ2  . TRP TRP TRP A A 6   6   . 24.976 20.764 5.235   1.00 19.41  1 .
.
ATOM 53   C    C    . TRP TRP TRP A A 6   6   . 24.215 22.819 10.704  1.00 12.88  1 .
.
ATOM 54   O    O    . TRP TRP TRP A A 6   6   . 23.895 23.963 11.083  1.00 14.19  1 .
.
ATOM 55   N    N    . ALA ALA ALA A A 7   7   . 25.457 22.417 10.484  1.00 10.50  1 .
.
ATOM 56   CA   CA   . ALA ALA ALA A A 7   7   . 26.599 23.296 10.603  1.00 11.98  1 .
.
ATOM 57   CB   CB   . ALA ALA ALA A A 7   7   . 27.739 22.598 11.352  1.00 12.95  1 .
.
ATOM 58   C    C    . ALA ALA ALA A A 7   7   . 27.123 23.743 9.247   1.00 11.45  1 .
.
ATOM 59   O    O    . ALA ALA ALA A A 7   7   . 27.007 22.994 8.240   1.00 11.45  1 .
.
ATOM 60   N    N    . ARG ARG ARG A A 8   8   . 27.837 24.882 9.248   1.00 10.88  1 .
.
ATOM 61   CA   CA   . ARG ARG ARG A A 8   8   . 28.491 25.378 8.013   1.00 11.02  1 .
.
ATOM 62   CB   CB   . ARG ARG ARG A A 8   8   . 27.520 26.280 7.235   1.00 10.43  1 .
.
ATOM 63   CG   CG   . ARG ARG ARG A A 8   8   . 27.236 27.636 7.940   1.00 11.70  1 .
.
ATOM 64   CD   CD   . ARG ARG ARG A A 8   8   . 26.280 28.566 7.135   1.00 12.33  1 .
.
ATOM 65   NE   NE   . ARG ARG ARG A A 8   8   . 24.963 27.902 6.981   1.00 12.27  1 .
.
ATOM 66   CZ   CZ   . ARG ARG ARG A A 8   8   . 24.045 27.808 7.935   1.00 12.45  1 .
.
ATOM 67   NH1  NH1  . ARG ARG ARG A A 8   8   . 24.167 28.494 9.107   1.00 12.36  1 .
.
ATOM 68   NH2  NH2  . ARG ARG ARG A A 8   8   . 22.938 27.085 7.705   1.00 14.58  1 .
.
ATOM 69   C    C    . ARG ARG ARG A A 8   8   . 29.750 26.153 8.357   1.00 11.67  1 .
.
ATOM 70   O    O    . ARG ARG ARG A A 8   8   . 29.944 26.524 9.522   1.00 12.43  1 .
.
ATOM 71   N    N    . GLU GLU GLU A A 9   9   . 30.581 26.471 7.357   1.00 10.59  1 .
.
ATOM 72   CA   CA   . GLU GLU GLU A A 9   9   . 31.753 27.309 7.535   1.00 12.62  1 .
.
ATOM 73   CB   CB   . GLU GLU GLU A A 9   9   . 32.759 26.748 6.537   1.00 15.14  1 .
.
ATOM 74   CG   CG   . GLU GLU GLU A A 9   9   . 34.097 27.192 6.546   1.00 20.31  1 .
.
ATOM 75   CD   CD   . GLU GLU GLU A A 9   9   . 34.919 26.468 5.457   1.00 18.44  1 .
.
ATOM 76   OE1  OE1  . GLU GLU GLU A A 9   9   . 35.975 25.865 5.797   1.00 15.33  1 .
.
ATOM 77   OE2  OE2  . GLU GLU GLU A A 9   9   . 34.509 26.557 4.244   1.00 19.38  1 .
.
ATOM 78   C    C    . GLU GLU GLU A A 9   9   . 31.268 28.748 7.183   1.00 12.29  1 .
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ATOM 79   O    O    . GLU GLU GLU A A 9   9   . 30.596 28.950 6.137   1.00 17.13  1 .
.
ATOM 80   N    N    . ILE ILE ILE A A 10  10  . 31.564 29.680 8.085   1.00 10.79  1 .
.
ATOM 81   CA   CA   . ILE ILE ILE A A 10  10  . 31.410 31.112 7.814   1.00 10.88  1 .
.
ATOM 82   CB   CB   . ILE ILE ILE A A 10  10  . 30.365 31.756 8.757   1.00 10.05  1 .
.
ATOM 83   CG1  CG1  . ILE ILE ILE A A 10  10  . 30.777 31.613 10.245  1.00 11.75  1 .
.
ATOM 84   CD   CD   . ILE ILE ILE A A 10  10  . 29.967 32.567 11.133  1.00 14.23  1 .
.
ATOM 85   CG2  CG2  . ILE ILE ILE A A 10  10  . 28.919 31.209 8.472   1.00 13.45  1 .
.
ATOM 86   C    C    . ILE ILE ILE A A 10  10  . 32.779 31.739 7.958   1.00 11.54  1 .
.
ATOM 87   O    O    . ILE ILE ILE A A 10  10  . 33.737 31.049 8.300   1.00 12.60  1 .
.
ATOM 88   N    N    . LEU LEU LEU A A 11  11  . 32.897 33.045 7.675   1.00 9.67   1 .
.
ATOM 89   CA   CA   . LEU LEU LEU A A 11  11  . 34.155 33.711 7.960   1.00 8.55   1 .
.
ATOM 90   CB   CB   . LEU LEU LEU A A 11  11  . 34.602 34.647 6.797   1.00 9.61   1 .
.
ATOM 91   CG   CG   . LEU LEU LEU A A 11  11  . 34.814 33.844 5.467   1.00 10.79  1 .
.
ATOM 92   CD1  CD1  . LEU LEU LEU A A 11  11  . 35.417 34.879 4.465   1.00 13.38  1 .
.
ATOM 93   CD2  CD2  . LEU LEU LEU A A 11  11  . 35.848 32.683 5.696   1.00 16.13  1 .
.
ATOM 94   C    C    . LEU LEU LEU A A 11  11  . 34.056 34.533 9.230   1.00 8.49   1 .
.
ATOM 95   O    O    . LEU LEU LEU A A 11  11  . 33.075 35.252 9.438   1.00 8.90   1 .
.
ATOM 96   N    N    . ASP ASP ASP A A 12  12  . 35.140 34.485 9.979   1.00 9.54   1 .
.
ATOM 97   CA   CA   . ASP ASP ASP A A 12  12  . 35.322 35.335 11.190  1.00 8.87   1 .
.
ATOM 98   CB   CB   . ASP ASP ASP A A 12  12  . 36.204 34.598 12.280  1.00 8.93   1 .
.
ATOM 99   CG   CG   . ASP ASP ASP A A 12  12  . 37.719 34.613 11.987  1.00 12.39  1 .
.
ATOM 100  OD1  OD1  . ASP ASP ASP A A 12  12  . 38.176 35.325 11.074  1.00 11.93  1 .
.
ATOM 101  OD2  OD2  . ASP ASP ASP A A 12  12  . 38.482 33.964 12.778  1.00 14.43  1 .
.
ATOM 102  C    C    . ASP ASP ASP A A 12  12  . 35.816 36.728 10.879  1.00 10.34  1 .
.
ATOM 103  O    O    . ASP ASP ASP A A 12  12  . 35.977 37.099 9.699   1.00 8.92   1 .
.
ATOM 104  N    N    . SER SER SER A A 13  13  . 36.107 37.514 11.950  1.00 8.76   1 .
.
ATOM 105  CA   CA   . SER SER SER A A 13  13  . 36.356 38.935 11.739  1.00 9.20   1 .
.
ATOM 106  CB   CB   . SER SER SER A A 13  13  . 36.252 39.672 13.061  1.00 9.68   1 .
.
ATOM 107  OG   OG   . SER SER SER A A 13  13  . 37.167 39.133 14.013  1.00 11.48  1 .
.
ATOM 108  C    C    . SER SER SER A A 13  13  . 37.726 39.203 11.092  1.00 8.68   1 .
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ATOM 109  O    O    . SER SER SER A A 13  13  . 37.977 40.323 10.701  1.00 11.08  1 .
.
ATOM 110  N    N    . ARG ARG ARG A A 14  14  . 38.594 38.199 11.013  1.00 10.63  1 .
.
ATOM 111  CA   CA   . ARG ARG ARG A A 14  14  . 39.864 38.345 10.315  1.00 13.27  1 .
.
ATOM 112  CB   CB   . ARG ARG ARG A A 14  14  . 40.972 37.610 11.151  1.00 16.80  1 .
.
ATOM 113  CG   CG   . ARG ARG ARG A A 14  14  . 41.651 38.455 12.107  1.00 22.27  1 .
.
ATOM 114  CD   CD   . ARG ARG ARG A A 14  14  . 42.900 37.600 12.682  1.00 21.17  1 .
.
ATOM 115  NE   NE   . ARG ARG ARG A A 14  14  . 42.485 36.598 13.585  1.00 24.02  1 .
.
ATOM 116  CZ   CZ   . ARG ARG ARG A A 14  14  . 42.699 36.644 14.883  1.00 17.24  1 .
.
ATOM 117  NH1  NH1  . ARG ARG ARG A A 14  14  . 43.337 37.704 15.460  1.00 20.43  1 .
.
ATOM 118  NH2  NH2  . ARG ARG ARG A A 14  14  . 42.312 35.592 15.566  1.00 22.81  1 .
.
ATOM 119  C    C    . ARG ARG ARG A A 14  14  . 39.804 37.718 8.939   1.00 14.31  1 .
.
ATOM 120  O    O    . ARG ARG ARG A A 14  14  . 40.863 37.690 8.260   1.00 16.26  1 .
.
ATOM 121  N    N    . GLY GLY GLY A A 15  15  . 38.656 37.197 8.517   1.00 10.43  1 .
.
ATOM 122  CA   CA   . GLY GLY GLY A A 15  15  . 38.561 36.551 7.185   1.00 10.07  1 .
.
ATOM 123  C    C    . GLY GLY GLY A A 15  15  . 38.979 35.091 7.217   1.00 12.52  1 .
.
ATOM 124  O    O    . GLY GLY GLY A A 15  15  . 39.235 34.542 6.149   1.00 14.37  1 .
.
ATOM 125  N    N    . ASN ASN ASN A A 16  16  . 39.036 34.452 8.403   1.00 12.09  1 .
.
ATOM 126  CA   CA   . ASN ASN ASN A A 16  16  . 39.327 32.988 8.449   1.00 11.10  1 .
.
ATOM 127  CB   CB   . ASN ASN ASN A A 16  16  . 40.334 32.682 9.576   1.00 11.95  1 .
.
ATOM 128  CG   CG   . ASN ASN ASN A A 16  16  . 41.679 33.318 9.299   1.00 15.64  1 .
.
ATOM 129  OD1  OD1  . ASN ASN ASN A A 16  16  . 42.185 33.196 8.170   1.00 19.01  1 .
.
ATOM 130  ND2  ND2  . ASN ASN ASN A A 16  16  . 42.254 33.997 10.280  1.00 17.14  1 .
.
ATOM 131  C    C    . ASN ASN ASN A A 16  16  . 38.081 32.177 8.676   1.00 10.71  1 .
.
ATOM 132  O    O    . ASN ASN ASN A A 16  16  . 37.170 32.607 9.365   1.00 11.01  1 .
.
ATOM 133  N    N    . PRO PRO PRO A A 17  17  . 38.024 30.950 8.149   1.00 10.79  1 .
.
ATOM 134  CA   CA   . PRO PRO PRO A A 17  17  . 36.816 30.128 8.392   1.00 9.11   1 .
.
ATOM 135  CB   CB   . PRO PRO PRO A A 17  17  . 37.134 28.789 7.680   1.00 10.64  1 .
.
ATOM 136  CG   CG   . PRO PRO PRO A A 17  17  . 38.057 29.249 6.573   1.00 12.19  1 .
.
ATOM 137  CD   CD   . PRO PRO PRO A A 17  17  . 38.980 30.270 7.248   1.00 12.65  1 .
.
ATOM 138  C    C    . PRO PRO PRO A A 17  17  . 36.583 29.848 9.885   1.00 8.64   1 .
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ATOM 139  O    O    . PRO PRO PRO A A 17  17  . 37.551 29.663 10.680  1.00 11.08  1 .
.
ATOM 140  N    N    . THR THR THR A A 18  18  . 35.316 29.739 10.224  1.00 9.24   1 .
.
ATOM 141  CA   CA   . THR THR THR A A 18  18  . 34.959 29.214 11.532  1.00 9.87   1 .
.
ATOM 142  CB   CB   . THR THR THR A A 18  18  . 35.038 30.294 12.608  1.00 10.43  1 .
.
ATOM 143  OG1  OG1  . THR THR THR A A 18  18  . 34.971 29.604 13.875  1.00 11.43  1 .
.
ATOM 144  CG2  CG2  . THR THR THR A A 18  18  . 33.860 31.291 12.530  1.00 10.81  1 .
.
ATOM 145  C    C    . THR THR THR A A 18  18  . 33.615 28.497 11.445  1.00 10.02  1 .
.
ATOM 146  O    O    . THR THR THR A A 18  18  . 32.940 28.502 10.404  1.00 11.41  1 .
.
ATOM 147  N    N    . VAL VAL VAL A A 19  19  . 33.268 27.770 12.475  1.00 10.01  1 .
.
ATOM 148  CA   CA   . VAL VAL VAL A A 19  19  . 32.046 26.983 12.509  1.00 10.48  1 .
.
ATOM 149  CB   CB   . VAL VAL VAL A A 19  19  . 32.251 25.820 13.563  1.00 11.78  1 .
.
ATOM 150  CG1  CG1  . VAL VAL VAL A A 19  19  . 30.991 25.078 13.896  1.00 11.78  1 .
.
ATOM 151  CG2  CG2  . VAL VAL VAL A A 19  19  . 33.411 24.933 13.132  1.00 11.75  1 .
.
ATOM 152  C    C    . VAL VAL VAL A A 19  19  . 30.847 27.800 12.966  1.00 11.90  1 .
.
ATOM 153  O    O    . VAL VAL VAL A A 19  19  . 30.918 28.575 13.948  1.00 11.14  1 .
.
ATOM 154  N    N    . GLU GLU GLU A A 20  20  . 29.757 27.629 12.232  1.00 9.80   1 .
.
ATOM 155  CA   CA   . GLU GLU GLU A A 20  20  . 28.463 28.124 12.666  1.00 11.52  1 .
.
ATOM 156  CB   CB   . GLU GLU GLU A A 20  20  . 27.967 29.190 11.641  1.00 11.00  1 .
.
ATOM 157  CG   CG   . GLU GLU GLU A A 20  20  . 26.537 29.636 11.945  1.00 13.83  1 .
.
ATOM 158  CD   CD   . GLU GLU GLU A A 20  20  . 26.149 30.773 11.056  1.00 15.20  1 .
.
ATOM 159  OE1  OE1  . GLU GLU GLU A A 20  20  . 26.471 31.912 11.488  1.00 17.71  1 .
.
ATOM 160  OE2  OE2  . GLU GLU GLU A A 20  20  . 25.714 30.576 9.880   1.00 18.26  1 .
.
ATOM 161  C    C    . GLU GLU GLU A A 20  20  . 27.506 26.951 12.702  1.00 10.53  1 .
.
ATOM 162  O    O    . GLU GLU GLU A A 20  20  . 27.563 26.084 11.779  1.00 11.30  1 .
.
ATOM 163  N    N    . VAL VAL VAL A A 21  21  . 26.631 26.924 13.699  1.00 9.37   1 .
.
ATOM 164  CA   CA   . VAL VAL VAL A A 21  21  . 25.648 25.817 13.822  1.00 11.07  1 .
.
ATOM 165  CB   CB   . VAL VAL VAL A A 21  21  . 25.930 25.046 15.137  1.00 10.32  1 .
.
ATOM 166  CG1  CG1  . VAL VAL VAL A A 21  21  . 24.817 23.988 15.439  1.00 14.17  1 .
.
ATOM 167  CG2  CG2  . VAL VAL VAL A A 21  21  . 27.329 24.399 15.122  1.00 13.15  1 .
.
ATOM 168  C    C    . VAL VAL VAL A A 21  21  . 24.226 26.361 13.866  1.00 10.84  1 .
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ATOM 169  O    O    . VAL VAL VAL A A 21  21  . 23.915 27.292 14.625  1.00 10.58  1 .
.
ATOM 170  N    N    . ASP ASP ASP A A 22  22  . 23.342 25.753 13.059  1.00 10.73  1 .
.
ATOM 171  CA   CA   . ASP ASP ASP A A 22  22  . 21.871 25.953 13.135  1.00 11.55  1 .
.
ATOM 172  CB   CB   . ASP ASP ASP A A 22  22  . 21.282 25.979 11.749  1.00 12.82  1 .
.
ATOM 173  CG   CG   . ASP ASP ASP A A 22  22  . 21.613 27.230 10.990  1.00 15.93  1 .
.
ATOM 174  OD1  OD1  . ASP ASP ASP A A 22  22  . 21.084 27.340 9.852   1.00 17.02  1 .
.
ATOM 175  OD2  OD2  . ASP ASP ASP A A 22  22  . 22.402 28.105 11.483  1.00 17.65  1 .
.
ATOM 176  C    C    . ASP ASP ASP A A 22  22  . 21.252 24.759 13.887  1.00 11.59  1 .
.
ATOM 177  O    O    . ASP ASP ASP A A 22  22  . 21.527 23.602 13.540  1.00 13.88  1 .
.
ATOM 178  N    N    . LEU LEU LEU A A 23  23  . 20.446 25.010 14.902  1.00 12.84  1 .
.
ATOM 179  CA   CA   . LEU LEU LEU A A 23  23  . 19.828 23.907 15.630  1.00 13.06  1 .
.
ATOM 180  CB   CB   . LEU LEU LEU A A 23  23  . 20.381 23.880 17.039  1.00 12.17  1 .
.
ATOM 181  CG   CG   . LEU LEU LEU A A 23  23  . 19.858 22.651 17.841  1.00 14.74  1 .
.
ATOM 182  CD1  CD1  . LEU LEU LEU A A 23  23  . 20.933 22.196 18.937  1.00 13.84  1 .
.
ATOM 183  CD2  CD2  . LEU LEU LEU A A 23  23  . 18.489 22.998 18.450  1.00 14.38  1 .
.
ATOM 184  C    C    . LEU LEU LEU A A 23  23  . 18.319 24.225 15.626  1.00 13.04  1 .
.
ATOM 185  O    O    . LEU LEU LEU A A 23  23  . 17.883 25.361 15.978  1.00 12.91  1 .
.
ATOM 186  N    N    . TYR TYR TYR A A 24  24  . 17.520 23.242 15.160  1.00 12.45  1 .
.
ATOM 187  CA   CA   . TYR TYR TYR A A 24  24  . 16.067 23.400 15.151  1.00 15.33  1 .
.
ATOM 188  CB   CB   . TYR TYR TYR A A 24  24  . 15.519 22.898 13.803  1.00 17.11  1 .
.
ATOM 189  CG   CG   . TYR TYR TYR A A 24  24  . 15.973 23.701 12.591  1.00 18.19  1 .
.
ATOM 190  CD1  CD1  . TYR TYR TYR A A 24  24  . 17.191 23.418 11.976  1.00 16.73  1 .
.
ATOM 191  CE1  CE1  . TYR TYR TYR A A 24  24  . 17.668 24.122 10.826  1.00 16.57  1 .
.
ATOM 192  CZ   CZ   . TYR TYR TYR A A 24  24  . 16.817 25.110 10.325  1.00 25.30  1 .
.
ATOM 193  OH   OH   . TYR TYR TYR A A 24  24  . 17.188 25.830 9.205   1.00 30.22  1 .
.
ATOM 194  CE2  CE2  . TYR TYR TYR A A 24  24  . 15.564 25.391 10.945  1.00 25.04  1 .
.
ATOM 195  CD2  CD2  . TYR TYR TYR A A 24  24  . 15.157 24.692 12.063  1.00 22.61  1 .
.
ATOM 196  C    C    . TYR TYR TYR A A 24  24  . 15.361 22.658 16.260  1.00 17.43  1 .
.
ATOM 197  O    O    . TYR TYR TYR A A 24  24  . 15.645 21.476 16.500  1.00 15.93  1 .
.
ATOM 198  N    N    . THR THR THR A A 25  25  . 14.364 23.329 16.853  1.00 17.60  1 .
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ATOM 199  CA   CA   . THR THR THR A A 25  25  . 13.419 22.659 17.746  1.00 18.07  1 .
.
ATOM 200  CB   CB   . THR THR THR A A 25  25  . 13.567 23.076 19.162  1.00 19.00  1 .
.
ATOM 201  OG1  OG1  . THR THR THR A A 25  25  . 13.113 24.421 19.284  1.00 19.16  1 .
.
ATOM 202  CG2  CG2  . THR THR THR A A 25  25  . 15.051 22.859 19.732  1.00 16.81  1 .
.
ATOM 203  C    C    . THR THR THR A A 25  25  . 12.023 23.075 17.263  1.00 19.35  1 .
.
ATOM 204  O    O    . THR THR THR A A 25  25  . 11.904 23.800 16.256  1.00 20.18  1 .
.
ATOM 205  N    N    . ALA ALA ALA A A 26  26  . 10.983 22.602 17.958  1.00 21.41  1 .
.
ATOM 206  CA   CA   . ALA ALA ALA A A 26  26  . 9.657  23.051 17.631  1.00 23.31  1 .
.
ATOM 207  CB   CB   . ALA ALA ALA A A 26  26  . 8.607  22.357 18.544  1.00 23.89  1 .
.
ATOM 208  C    C    . ALA ALA ALA A A 26  26  . 9.526  24.585 17.760  1.00 23.75  1 .
.
ATOM 209  O    O    . ALA ALA ALA A A 26  26  . 8.607  25.146 17.188  1.00 25.65  1 .
.
ATOM 210  N    N    . LYS LYS LYS A A 27  27  . 10.400 25.229 18.537  1.00 22.38  1 .
.
ATOM 211  CA   CA   . LYS LYS LYS A A 27  27  . 10.374 26.685 18.707  1.00 22.71  1 .
.
ATOM 212  CB   CB   . LYS LYS LYS A A 27  27  . 10.982 27.110 20.040  1.00 23.97  1 .
.
ATOM 213  CG   CG   . LYS LYS LYS A A 27  27  . 10.266 26.508 21.254  1.00 27.98  1 .
.
ATOM 214  CD   CD   . LYS LYS LYS A A 27  27  . 9.410  27.503 21.888  1.00 30.80  1 .
.
ATOM 215  CE   CE   . LYS LYS LYS A A 27  27  . 9.034  27.033 23.207  1.00 32.63  1 .
.
ATOM 216  NZ   NZ   . LYS LYS LYS A A 27  27  . 7.609  26.716 23.087  1.00 38.92  1 .
.
ATOM 217  C    C    . LYS LYS LYS A A 27  27  . 11.064 27.463 17.606  1.00 22.32  1 .
.
ATOM 218  O    O    . LYS LYS LYS A A 27  27  . 10.978 28.728 17.537  1.00 25.85  1 .
.
ATOM 219  N    N    . GLY GLY GLY A A 28  28  . 11.695 26.768 16.696  1.00 21.43  1 .
.
ATOM 220  CA   CA   . GLY GLY GLY A A 28  28  . 12.358 27.487 15.650  1.00 20.82  1 .
.
ATOM 221  C    C    . GLY GLY GLY A A 28  28  . 13.840 27.193 15.440  1.00 19.75  1 .
.
ATOM 222  O    O    . GLY GLY GLY A A 28  28  . 14.324 26.140 15.823  1.00 17.53  1 .
.
ATOM 223  N    N    . LEU LEU LEU A A 29  29  . 14.542 28.168 14.867  1.00 18.19  1 .
.
ATOM 224  CA   CA   . LEU LEU LEU A A 29  29  . 15.957 28.045 14.516  1.00 17.63  1 .
.
ATOM 225  CB   CB   . LEU LEU LEU A A 29  29  . 16.156 28.605 13.099  1.00 19.37  1 .
.
ATOM 226  CG   CG   . LEU LEU LEU A A 29  29  . 17.557 28.969 12.658  1.00 22.26  1 .
.
ATOM 227  CD1  CD1  . LEU LEU LEU A A 29  29  . 18.378 27.727 12.600  1.00 23.97  1 .
.
ATOM 228  CD2  CD2  . LEU LEU LEU A A 29  29  . 17.417 29.549 11.238  1.00 26.00  1 .
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ATOM 229  C    C    . LEU LEU LEU A A 29  29  . 16.789 28.816 15.481  1.00 17.28  1 .
.
ATOM 230  O    O    . LEU LEU LEU A A 29  29  . 16.468 29.996 15.801  1.00 18.16  1 .
.
ATOM 231  N    N    . PHE PHE PHE A A 30  30  . 17.856 28.184 15.948  1.00 14.17  1 .
.
ATOM 232  CA   CA   . PHE PHE PHE A A 30  30  . 18.823 28.831 16.901  1.00 13.95  1 .
.
ATOM 233  CB   CB   . PHE PHE PHE A A 30  30  . 18.709 28.107 18.248  1.00 14.70  1 .
.
ATOM 234  CG   CG   . PHE PHE PHE A A 30  30  . 17.304 28.179 18.746  1.00 14.81  1 .
.
ATOM 235  CD1  CD1  . PHE PHE PHE A A 30  30  . 16.879 29.350 19.399  1.00 14.93  1 .
.
ATOM 236  CE1  CE1  . PHE PHE PHE A A 30  30  . 15.545 29.527 19.793  1.00 16.06  1 .
.
ATOM 237  CZ   CZ   . PHE PHE PHE A A 30  30  . 14.580 28.515 19.493  1.00 15.32  1 .
.
ATOM 238  CE2  CE2  . PHE PHE PHE A A 30  30  . 15.026 27.289 18.897  1.00 15.59  1 .
.
ATOM 239  CD2  CD2  . PHE PHE PHE A A 30  30  . 16.384 27.152 18.461  1.00 15.05  1 .
.
ATOM 240  C    C    . PHE PHE PHE A A 30  30  . 20.183 28.694 16.293  1.00 13.93  1 .
.
ATOM 241  O    O    . PHE PHE PHE A A 30  30  . 20.613 27.571 15.915  1.00 16.86  1 .
.
ATOM 242  N    N    . ARG ARG ARG A A 31  31  . 20.884 29.811 16.201  1.00 10.22  1 .
.
ATOM 243  CA   CA   . ARG ARG ARG A A 31  31  . 22.143 29.812 15.442  1.00 9.69   1 .
.
ATOM 244  CB   CB   . ARG ARG ARG A A 31  31  . 21.924 30.667 14.180  1.00 10.29  1 .
.
ATOM 245  CG   CG   . ARG ARG ARG A A 31  31  . 23.148 30.881 13.378  1.00 11.91  1 .
.
ATOM 246  CD   CD   . ARG ARG ARG A A 31  31  . 22.727 31.707 12.043  1.00 13.15  1 .
.
ATOM 247  NE   NE   . ARG ARG ARG A A 31  31  . 21.980 30.823 11.142  1.00 14.80  1 .
.
ATOM 248  CZ   CZ   . ARG ARG ARG A A 31  31  . 21.105 31.190 10.217  1.00 19.03  1 .
.
ATOM 249  NH1  NH1  . ARG ARG ARG A A 31  31  . 20.893 32.469 10.053  1.00 20.16  1 .
.
ATOM 250  NH2  NH2  . ARG ARG ARG A A 31  31  . 20.500 30.225 9.430   1.00 18.36  1 .
.
ATOM 251  C    C    . ARG ARG ARG A A 31  31  . 23.234 30.416 16.311  1.00 10.03  1 .
.
ATOM 252  O    O    . ARG ARG ARG A A 31  31  . 23.024 31.409 17.020  1.00 12.45  1 .
.
ATOM 253  N    N    . ALA ALA ALA A A 32  32  . 24.383 29.779 16.277  1.00 9.93   1 .
.
ATOM 254  CA   CA   . ALA ALA ALA A A 32  32  . 25.562 30.222 17.046  1.00 9.59   1 .
.
ATOM 255  CB   CB   . ALA ALA ALA A A 32  32  . 25.726 29.422 18.373  1.00 11.20  1 .
.
ATOM 256  C    C    . ALA ALA ALA A A 32  32  . 26.812 30.038 16.225  1.00 11.58  1 .
.
ATOM 257  O    O    . ALA ALA ALA A A 32  32  . 26.884 29.154 15.334  1.00 13.14  1 .
.
ATOM 258  N    N    . ALA ALA ALA A A 33  33  . 27.854 30.818 16.537  1.00 10.48  1 .
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ATOM 259  CA   CA   . ALA ALA ALA A A 33  33  . 29.132 30.625 15.801  1.00 9.62   1 .
.
ATOM 260  CB   CB   . ALA ALA ALA A A 33  33  . 29.312 31.706 14.696  1.00 11.42  1 .
.
ATOM 261  C    C    . ALA ALA ALA A A 33  33  . 30.280 30.660 16.810  1.00 11.45  1 .
.
ATOM 262  O    O    . ALA ALA ALA A A 33  33  . 30.109 31.188 17.961  1.00 12.29  1 .
.
ATOM 263  N    N    . VAL VAL VAL A A 34  34  . 31.417 30.090 16.390  1.00 10.32  1 .
.
ATOM 264  CA   CA   . VAL VAL VAL A A 34  34  . 32.530 29.910 17.333  1.00 8.57   1 .
.
ATOM 265  CB   CB   . VAL VAL VAL A A 34  34  . 33.076 28.464 17.068  1.00 10.69  1 .
.
ATOM 266  CG1  CG1  . VAL VAL VAL A A 34  34  . 34.332 28.188 17.964  1.00 13.35  1 .
.
ATOM 267  CG2  CG2  . VAL VAL VAL A A 34  34  . 31.871 27.410 17.331  1.00 11.96  1 .
.
ATOM 268  C    C    . VAL VAL VAL A A 34  34  . 33.685 30.893 17.021  1.00 10.51  1 .
.
ATOM 269  O    O    . VAL VAL VAL A A 34  34  . 34.045 31.119 15.860  1.00 10.80  1 .
.
ATOM 270  N    N    . PRO PRO PRO A A 35  35  . 34.266 31.504 18.064  1.00 9.63   1 .
.
ATOM 271  CA   CA   . PRO PRO PRO A A 35  35  . 35.371 32.415 17.842  1.00 12.21  1 .
.
ATOM 272  CB   CB   . PRO PRO PRO A A 35  35  . 35.311 33.345 19.106  1.00 10.19  1 .
.
ATOM 273  CG   CG   . PRO PRO PRO A A 35  35  . 34.980 32.316 20.157  1.00 10.57  1 .
.
ATOM 274  CD   CD   . PRO PRO PRO A A 35  35  . 33.846 31.443 19.483  1.00 11.58  1 .
.
ATOM 275  C    C    . PRO PRO PRO A A 35  35  . 36.707 31.670 17.779  1.00 12.34  1 .
.
ATOM 276  O    O    . PRO PRO PRO A A 35  35  . 36.776 30.442 17.983  1.00 14.49  1 .
.
ATOM 277  N    N    . SER SER SER A A 36  36  . 37.786 32.414 17.499  1.00 11.72  1 .
.
ATOM 278  CA   CA   . SER SER SER A A 36  36  . 39.072 31.788 17.342  1.00 12.45  1 .
.
ATOM 279  CB   CB   . SER SER SER A A 36  36  . 39.210 31.435 15.845  1.00 14.01  1 .
.
ATOM 280  OG   OG   . SER SER SER A A 36  36  . 40.521 30.895 15.561  1.00 19.97  1 .
.
ATOM 281  C    C    . SER SER SER A A 36  36  . 40.199 32.754 17.726  1.00 12.42  1 .
.
ATOM 282  O    O    . SER SER SER A A 36  36  . 40.240 33.919 17.271  1.00 11.72  1 .
.
ATOM 283  N    N    . GLY GLY GLY A A 37  37  . 41.142 32.249 18.542  1.00 12.72  1 .
.
ATOM 284  CA   CA   . GLY GLY GLY A A 37  37  . 42.209 33.114 18.963  1.00 13.27  1 .
.
ATOM 285  C    C    . GLY GLY GLY A A 37  37  . 43.413 33.091 18.031  1.00 12.99  1 .
.
ATOM 286  O    O    . GLY GLY GLY A A 37  37  . 43.564 32.202 17.153  1.00 15.05  1 .
.
ATOM 287  N    N    . ALA ALA ALA A A 38  38  . 44.283 34.078 18.215  1.00 14.34  1 .
.
ATOM 288  CA   CA   . ALA ALA ALA A A 38  38  . 45.659 34.091 17.540  1.00 15.66  1 .
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ATOM 289  CB   CB   . ALA ALA ALA A A 38  38  . 45.884 35.381 16.800  1.00 18.06  1 .
.
ATOM 290  C    C    . ALA ALA ALA A A 38  38  . 46.687 33.897 18.630  1.00 17.09  1 .
.
ATOM 291  O    O    . ALA ALA ALA A A 38  38  . 47.564 33.003 18.497  1.00 20.22  1 .
.
ATOM 292  N    N    . SER SER SER A A 39  39  . 46.573 34.625 19.752  1.00 16.37  1 .
.
ATOM 293  CA   CA   . SER SER SER A A 39  39  . 47.519 34.342 20.867  1.00 16.74  1 .
.
ATOM 294  CB   CB   . SER SER SER A A 39  39  . 47.838 35.607 21.662  1.00 17.88  1 .
.
ATOM 295  OG   OG   . SER SER SER A A 39  39  . 46.648 36.255 22.173  1.00 17.74  1 .
.
ATOM 296  C    C    . SER SER SER A A 39  39  . 46.962 33.270 21.771  1.00 17.07  1 .
.
ATOM 297  O    O    . SER SER SER A A 39  39  . 46.486 33.561 22.883  1.00 17.28  1 .
.
ATOM 298  N    N    . THR THR THR A A 40  40  . 47.007 32.033 21.275  1.00 16.46  1 .
.
ATOM 299  CA   CA   . THR THR THR A A 40  40  . 46.368 30.940 21.926  1.00 17.14  1 .
.
ATOM 300  CB   CB   . THR THR THR A A 40  40  . 45.822 29.958 20.886  1.00 16.56  1 .
.
ATOM 301  OG1  OG1  . THR THR THR A A 40  40  . 46.853 29.690 19.902  1.00 19.91  1 .
.
ATOM 302  CG2  CG2  . THR THR THR A A 40  40  . 44.615 30.601 20.141  1.00 17.59  1 .
.
ATOM 303  C    C    . THR THR THR A A 40  40  . 47.336 30.240 22.830  1.00 17.70  1 .
.
ATOM 304  O    O    . THR THR THR A A 40  40  . 48.449 29.858 22.411  1.00 20.61  1 .
.
ATOM 305  N    N    . GLY GLY GLY A A 41  41  . 46.891 29.946 24.037  1.00 17.27  1 .
.
ATOM 306  CA   CA   . GLY GLY GLY A A 41  41  . 47.706 29.188 25.004  1.00 16.34  1 .
.
ATOM 307  C    C    . GLY GLY GLY A A 41  41  . 47.928 27.788 24.589  1.00 16.96  1 .
.
ATOM 308  O    O    . GLY GLY GLY A A 41  41  . 47.039 27.148 23.980  1.00 17.39  1 .
.
ATOM 309  N    N    . ILE ILE ILE A A 42  42  . 49.127 27.276 24.898  1.00 17.28  1 .
.
ATOM 310  CA   CA   . ILE ILE ILE A A 42  42  . 49.369 25.853 24.653  1.00 17.77  1 .
.
ATOM 311  CB   CB   . ILE ILE ILE A A 42  42  . 50.831 25.433 24.913  1.00 18.80  1 .
.
ATOM 312  CG1  CG1  . ILE ILE ILE A A 42  42  . 51.119 25.447 26.387  1.00 16.62  1 .
.
ATOM 313  CD   CD   . ILE ILE ILE A A 42  42  . 52.686 25.177 26.704  1.00 23.61  1 .
.
ATOM 314  CG2  CG2  . ILE ILE ILE A A 42  42  . 51.784 26.266 24.052  1.00 21.89  1 .
.
ATOM 315  C    C    . ILE ILE ILE A A 42  42  . 48.423 24.831 25.288  1.00 18.61  1 .
.
ATOM 316  O    O    . ILE ILE ILE A A 42  42  . 48.289 23.701 24.796  1.00 20.52  1 .
.
ATOM 317  N    N    . TYR TYR TYR A A 43  43  . 47.690 25.208 26.333  1.00 18.33  1 .
.
ATOM 318  CA   CA   . TYR TYR TYR A A 43  43  . 46.818 24.223 27.030  1.00 19.02  1 .
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ATOM 319  CB   CB   . TYR TYR TYR A A 43  43  . 46.928 24.415 28.534  1.00 18.81  1 .
.
ATOM 320  CG   CG   . TYR TYR TYR A A 43  43  . 48.353 24.111 29.010  1.00 20.18  1 .
.
ATOM 321  CD1  CD1  . TYR TYR TYR A A 43  43  . 49.212 25.132 29.415  1.00 21.07  1 .
.
ATOM 322  CE1  CE1  . TYR TYR TYR A A 43  43  . 50.556 24.849 29.813  1.00 24.50  1 .
.
ATOM 323  CZ   CZ   . TYR TYR TYR A A 43  43  . 50.991 23.523 29.822  1.00 22.85  1 .
.
ATOM 324  OH   OH   . TYR TYR TYR A A 43  43  . 52.294 23.182 30.207  1.00 29.15  1 .
.
ATOM 325  CE2  CE2  . TYR TYR TYR A A 43  43  . 50.146 22.525 29.395  1.00 26.84  1 .
.
ATOM 326  CD2  CD2  . TYR TYR TYR A A 43  43  . 48.818 22.829 29.000  1.00 23.32  1 .
.
ATOM 327  C    C    . TYR TYR TYR A A 43  43  . 45.348 24.355 26.597  1.00 18.36  1 .
.
ATOM 328  O    O    . TYR TYR TYR A A 43  43  . 44.490 23.695 27.152  1.00 17.25  1 .
.
ATOM 329  N    N    . GLU GLU GLU A A 44  44  . 45.072 25.239 25.622  1.00 16.28  1 .
.
ATOM 330  CA   CA   . GLU GLU GLU A A 44  44  . 43.673 25.351 25.120  1.00 16.27  1 .
.
ATOM 331  CB   CB   . GLU GLU GLU A A 44  44  . 43.564 26.492 24.091  1.00 14.21  1 .
.
ATOM 332  CG   CG   . GLU GLU GLU A A 44  44  . 43.976 27.876 24.716  1.00 13.74  1 .
.
ATOM 333  CD   CD   . GLU GLU GLU A A 44  44  . 43.445 29.064 23.943  1.00 15.12  1 .
.
ATOM 334  OE1  OE1  . GLU GLU GLU A A 44  44  . 42.574 28.862 23.033  1.00 21.22  1 .
.
ATOM 335  OE2  OE2  . GLU GLU GLU A A 44  44  . 43.893 30.211 24.209  1.00 15.99  1 .
.
ATOM 336  C    C    . GLU GLU GLU A A 44  44  . 43.199 24.042 24.493  1.00 15.46  1 .
.
ATOM 337  O    O    . GLU GLU GLU A A 44  44  . 44.003 23.273 23.916  1.00 16.85  1 .
.
ATOM 338  N    N    . ALA ALA ALA A A 45  45  . 41.900 23.780 24.616  1.00 15.64  1 .
.
ATOM 339  CA   CA   . ALA ALA ALA A A 45  45  . 41.258 22.665 23.892  1.00 15.51  1 .
.
ATOM 340  CB   CB   . ALA ALA ALA A A 45  45  . 39.772 22.625 24.185  1.00 14.94  1 .
.
ATOM 341  C    C    . ALA ALA ALA A A 45  45  . 41.533 22.799 22.388  1.00 15.35  1 .
.
ATOM 342  O    O    . ALA ALA ALA A A 45  45  . 41.757 23.914 21.856  1.00 16.21  1 .
.
ATOM 343  N    N    . LEU LEU LEU A A 46  46  . 41.602 21.661 21.686  1.00 15.00  1 .
.
ATOM 344  CA   CA   . LEU LEU LEU A A 46  46  . 42.085 21.696 20.271  1.00 15.89  1 .
.
ATOM 345  CB   CB   . LEU LEU LEU A A 46  46  . 42.273 20.250 19.821  1.00 17.64  1 .
.
ATOM 346  CG   CG   . LEU LEU LEU A A 46  46  . 42.665 20.294 18.319  1.00 19.53  1 .
.
ATOM 347  CD1  CD1  . LEU LEU LEU A A 46  46  . 44.135 20.623 18.194  1.00 22.96  1 .
.
ATOM 348  CD2  CD2  . LEU LEU LEU A A 46  46  . 42.168 19.174 17.441  1.00 26.06  1 .
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ATOM 349  C    C    . LEU LEU LEU A A 46  46  . 41.088 22.406 19.300  1.00 15.44  1 .
.
ATOM 350  O    O    . LEU LEU LEU A A 46  46  . 39.929 22.010 19.237  1.00 16.62  1 .
.
ATOM 351  N    N    . GLU GLU GLU A A 47  47  . 41.551 23.385 18.548  1.00 13.06  1 .
.
ATOM 352  CA   CA   . GLU GLU GLU A A 47  47  . 40.776 23.934 17.472  1.00 13.90  1 .
.
ATOM 353  CB   CB   . GLU GLU GLU A A 47  47  . 41.189 25.398 17.301  1.00 14.04  1 .
.
ATOM 354  CG   CG   . GLU GLU GLU A A 47  47  . 40.546 26.061 16.103  1.00 16.86  1 .
.
ATOM 355  CD   CD   . GLU GLU GLU A A 47  47  . 41.012 27.495 16.007  1.00 18.34  1 .
.
ATOM 356  OE1  OE1  . GLU GLU GLU A A 47  47  . 40.408 28.320 16.759  1.00 21.73  1 .
.
ATOM 357  OE2  OE2  . GLU GLU GLU A A 47  47  . 42.004 27.777 15.259  1.00 21.27  1 .
.
ATOM 358  C    C    . GLU GLU GLU A A 47  47  . 41.103 23.150 16.234  1.00 13.48  1 .
.
ATOM 359  O    O    . GLU GLU GLU A A 47  47  . 42.280 23.157 15.778  1.00 17.16  1 .
.
ATOM 360  N    N    . LEU LEU LEU A A 48  48  . 40.112 22.419 15.696  1.00 13.27  1 .
.
ATOM 361  CA   CA   . LEU LEU LEU A A 48  48  . 40.385 21.504 14.548  1.00 14.07  1 .
.
ATOM 362  CB   CB   . LEU LEU LEU A A 48  48  . 39.393 20.333 14.514  1.00 14.92  1 .
.
ATOM 363  CG   CG   . LEU LEU LEU A A 48  48  . 39.532 19.295 13.342  1.00 14.93  1 .
.
ATOM 364  CD1  CD1  . LEU LEU LEU A A 48  48  . 40.952 18.657 13.372  1.00 20.79  1 .
.
ATOM 365  CD2  CD2  . LEU LEU LEU A A 48  48  . 38.458 18.244 13.324  1.00 17.40  1 .
.
ATOM 366  C    C    . LEU LEU LEU A A 48  48  . 40.282 22.281 13.238  1.00 13.07  1 .
.
ATOM 367  O    O    . LEU LEU LEU A A 48  48  . 39.200 22.784 12.889  1.00 13.17  1 .
.
ATOM 368  N    N    . ARG ARG ARG A A 49  49  . 41.395 22.370 12.524  1.00 14.30  1 .
.
ATOM 369  CA   CA   . ARG ARG ARG A A 49  49  . 41.447 22.981 11.191  1.00 15.70  1 .
.
ATOM 370  CB   CB   . ARG ARG ARG A A 49  49  . 42.555 24.036 11.170  1.00 17.47  1 .
.
ATOM 371  CG   CG   . ARG ARG ARG A A 49  49  . 42.357 25.183 12.153  1.00 21.72  1 .
.
ATOM 372  CD   CD   . ARG ARG ARG A A 49  49  . 41.739 26.296 11.503  1.00 20.05  1 .
.
ATOM 373  NE   NE   . ARG ARG ARG A A 49  49  . 41.566 27.419 12.411  1.00 19.08  1 .
.
ATOM 374  CZ   CZ   . ARG ARG ARG A A 49  49  . 40.657 28.381 12.188  1.00 17.36  1 .
.
ATOM 375  NH1  NH1  . ARG ARG ARG A A 49  49  . 40.007 28.457 11.036  1.00 13.75  1 .
.
ATOM 376  NH2  NH2  . ARG ARG ARG A A 49  49  . 40.436 29.325 13.086  1.00 20.50  1 .
.
ATOM 377  C    C    . ARG ARG ARG A A 49  49  . 41.812 21.890 10.207  1.00 17.64  1 .
.
ATOM 378  O    O    . ARG ARG ARG A A 49  49  . 42.395 20.843 10.605  1.00 18.53  1 .
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ATOM 379  N    N    . ASP ASP ASP A A 50  50  . 41.471 22.100 8.931   1.00 15.52  1 .
.
ATOM 380  CA   CA   . ASP ASP ASP A A 50  50  . 41.599 21.030 7.906   1.00 16.49  1 .
.
ATOM 381  CB   CB   . ASP ASP ASP A A 50  50  . 40.759 21.413 6.673   1.00 15.11  1 .
.
ATOM 382  CG   CG   . ASP ASP ASP A A 50  50  . 39.296 21.541 6.997   1.00 16.92  1 .
.
ATOM 383  OD1  OD1  . ASP ASP ASP A A 50  50  . 38.852 21.012 8.086   1.00 17.97  1 .
.
ATOM 384  OD2  OD2  . ASP ASP ASP A A 50  50  . 38.529 22.147 6.181   1.00 17.23  1 .
.
ATOM 385  C    C    . ASP ASP ASP A A 50  50  . 43.041 20.798 7.462   1.00 17.83  1 .
.
ATOM 386  O    O    . ASP ASP ASP A A 50  50  . 43.377 19.647 7.131   1.00 20.40  1 .
.
ATOM 387  N    N    . GLY GLY GLY A A 51  51  . 43.880 21.855 7.429   1.00 18.59  1 .
.
ATOM 388  CA   CA   . GLY GLY GLY A A 51  51  . 45.278 21.733 6.990   1.00 22.44  1 .
.
ATOM 389  C    C    . GLY GLY GLY A A 51  51  . 45.357 21.471 5.495   1.00 24.27  1 .
.
ATOM 390  O    O    . GLY GLY GLY A A 51  51  . 46.403 20.974 5.019   1.00 27.32  1 .
.
ATOM 391  N    N    . ASP ASP ASP A A 52  52  . 44.311 21.784 4.734   1.00 24.34  1 .
.
ATOM 392  CA   CA   . ASP ASP ASP A A 52  52  . 44.433 21.725 3.272   1.00 25.95  1 .
.
ATOM 393  CB   CB   . ASP ASP ASP A A 52  52  . 43.118 21.372 2.612   1.00 25.70  1 .
.
ATOM 394  CG   CG   . ASP ASP ASP A A 52  52  . 43.144 21.488 1.057   1.00 29.62  1 .
.
ATOM 395  OD1  OD1  . ASP ASP ASP A A 52  52  . 42.040 21.307 0.475   1.00 32.25  1 .
.
ATOM 396  OD2  OD2  . ASP ASP ASP A A 52  52  . 44.209 21.767 0.422   1.00 31.86  1 .
.
ATOM 397  C    C    . ASP ASP ASP A A 52  52  . 45.064 23.012 2.784   1.00 28.14  1 .
.
ATOM 398  O    O    . ASP ASP ASP A A 52  52  . 44.369 24.044 2.687   1.00 26.31  1 .
.
ATOM 399  N    N    . LYS LYS LYS A A 53  53  . 46.376 22.944 2.508   1.00 28.93  1 .
.
ATOM 400  CA   CA   . LYS LYS LYS A A 53  53  . 47.224 24.131 2.445   1.00 32.23  1 .
.
ATOM 401  CB   CB   . LYS LYS LYS A A 53  53  . 48.763 23.856 2.500   1.00 32.76  1 .
.
ATOM 402  CG   CG   . LYS LYS LYS A A 53  53  . 49.366 23.743 3.939   1.00 35.46  1 .
.
ATOM 403  C    C    . LYS LYS LYS A A 53  53  . 46.823 24.993 1.256   1.00 31.48  1 .
.
ATOM 404  O    O    . LYS LYS LYS A A 53  53  . 47.107 26.190 1.274   1.00 34.28  1 .
.
ATOM 405  N    N    . GLN GLN GLN A A 54  54  . 46.137 24.413 0.270   1.00 30.75  1 .
.
ATOM 406  CA   CA   . GLN GLN GLN A A 54  54  . 45.647 25.177 -0.866  1.00 31.60  1 .
.
ATOM 407  CB   CB   . GLN GLN GLN A A 54  54  . 45.172 24.261 -1.999  1.00 33.64  1 .
.
ATOM 408  C    C    . GLN GLN GLN A A 54  54  . 44.448 26.033 -0.519  1.00 32.18  1 .
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ATOM 409  O    O    . GLN GLN GLN A A 54  54  . 44.317 27.156 -1.108  1.00 32.87  1 .
.
ATOM 410  N    N    . ARG ARG ARG A A 55  55  . 43.596 25.510 0.419   1.00 27.64  1 .
.
ATOM 411  CA   CA   . ARG ARG ARG A A 55  55  . 42.282 26.032 0.699   1.00 24.85  1 .
.
ATOM 412  CB   CB   . ARG ARG ARG A A 55  55  . 41.278 24.888 0.805   1.00 25.33  1 .
.
ATOM 413  CG   CG   . ARG ARG ARG A A 55  55  . 39.886 25.347 1.040   1.00 22.73  1 .
.
ATOM 414  CD   CD   . ARG ARG ARG A A 55  55  . 38.839 24.224 0.859   1.00 22.41  1 .
.
ATOM 415  NE   NE   . ARG ARG ARG A A 55  55  . 37.523 24.872 0.935   1.00 18.32  1 .
.
ATOM 416  CZ   CZ   . ARG ARG ARG A A 55  55  . 36.914 25.225 2.075   1.00 15.21  1 .
.
ATOM 417  NH1  NH1  . ARG ARG ARG A A 55  55  . 37.500 24.955 3.251   1.00 14.56  1 .
.
ATOM 418  NH2  NH2  . ARG ARG ARG A A 55  55  . 35.792 25.913 2.022   1.00 16.10  1 .
.
ATOM 419  C    C    . ARG ARG ARG A A 55  55  . 42.294 26.873 1.995   1.00 21.83  1 .
.
ATOM 420  O    O    . ARG ARG ARG A A 55  55  . 42.590 26.371 3.087   1.00 20.80  1 .
.
ATOM 421  N    N    . TYR TYR TYR A A 56  56  . 42.010 28.171 1.874   1.00 19.33  1 .
.
ATOM 422  CA   CA   . TYR TYR TYR A A 56  56  . 42.096 29.009 3.059   1.00 18.91  1 .
.
ATOM 423  CB   CB   . TYR TYR TYR A A 56  56  . 40.872 28.757 3.954   1.00 17.62  1 .
.
ATOM 424  CG   CG   . TYR TYR TYR A A 56  56  . 39.584 29.379 3.454   1.00 15.32  1 .
.
ATOM 425  CD1  CD1  . TYR TYR TYR A A 56  56  . 38.525 28.619 3.051   1.00 15.45  1 .
.
ATOM 426  CE1  CE1  . TYR TYR TYR A A 56  56  . 37.313 29.157 2.671   1.00 15.38  1 .
.
ATOM 427  CZ   CZ   . TYR TYR TYR A A 56  56  . 37.172 30.571 2.686   1.00 11.52  1 .
.
ATOM 428  OH   OH   . TYR TYR TYR A A 56  56  . 35.954 31.118 2.332   1.00 16.70  1 .
.
ATOM 429  CE2  CE2  . TYR TYR TYR A A 56  56  . 38.228 31.325 3.116   1.00 13.28  1 .
.
ATOM 430  CD2  CD2  . TYR TYR TYR A A 56  56  . 39.397 30.776 3.502   1.00 14.59  1 .
.
ATOM 431  C    C    . TYR TYR TYR A A 56  56  . 43.401 28.899 3.822   1.00 20.85  1 .
.
ATOM 432  O    O    . TYR TYR TYR A A 56  56  . 43.443 29.098 5.068   1.00 18.43  1 .
.
ATOM 433  N    N    . LEU LEU LEU A A 57  57  . 44.512 28.658 3.070   1.00 23.77  1 .
.
ATOM 434  CA   CA   . LEU LEU LEU A A 57  57  . 45.853 28.618 3.689   1.00 25.64  1 .
.
ATOM 435  CB   CB   . LEU LEU LEU A A 57  57  . 46.299 30.024 4.189   1.00 26.98  1 .
.
ATOM 436  CG   CG   . LEU LEU LEU A A 57  57  . 46.339 31.134 3.087   1.00 31.17  1 .
.
ATOM 437  CD1  CD1  . LEU LEU LEU A A 57  57  . 47.082 32.428 3.441   1.00 33.93  1 .
.
ATOM 438  C    C    . LEU LEU LEU A A 57  57  . 45.853 27.586 4.799   1.00 24.36  1 .
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ATOM 439  O    O    . LEU LEU LEU A A 57  57  . 46.482 27.787 5.860   1.00 27.74  1 .
.
ATOM 440  N    N    . GLY GLY GLY A A 58  58  . 45.071 26.505 4.612   1.00 22.14  1 .
.
ATOM 441  CA   CA   . GLY GLY GLY A A 58  58  . 45.020 25.371 5.578   1.00 20.26  1 .
.
ATOM 442  C    C    . GLY GLY GLY A A 58  58  . 44.058 25.619 6.778   1.00 19.09  1 .
.
ATOM 443  O    O    . GLY GLY GLY A A 58  58  . 43.997 24.819 7.719   1.00 19.94  1 .
.
ATOM 444  N    N    . LYS LYS LYS A A 59  59  . 43.274 26.695 6.718   1.00 17.23  1 .
.
ATOM 445  CA   CA   . LYS LYS LYS A A 59  59  . 42.452 27.030 7.855   1.00 15.20  1 .
.
ATOM 446  CB   CB   . LYS LYS LYS A A 59  59  . 42.682 28.511 8.200   1.00 16.73  1 .
.
ATOM 447  CG   CG   . LYS LYS LYS A A 59  59  . 44.137 28.753 8.656   1.00 20.36  1 .
.
ATOM 448  CD   CD   . LYS LYS LYS A A 59  59  . 44.245 30.109 9.253   1.00 28.75  1 .
.
ATOM 449  CE   CE   . LYS LYS LYS A A 59  59  . 45.624 30.317 9.886   1.00 33.96  1 .
.
ATOM 450  NZ   NZ   . LYS LYS LYS A A 59  59  . 45.968 31.812 9.812   1.00 39.54  1 .
.
ATOM 451  C    C    . LYS LYS LYS A A 59  59  . 40.978 26.714 7.681   1.00 14.41  1 .
.
ATOM 452  O    O    . LYS LYS LYS A A 59  59  . 40.162 27.118 8.507   1.00 13.45  1 .
.
ATOM 453  N    N    . GLY GLY GLY A A 60  60  . 40.600 25.912 6.673   1.00 13.48  1 .
.
ATOM 454  CA   CA   . GLY GLY GLY A A 60  60  . 39.217 25.452 6.574   1.00 12.36  1 .
.
ATOM 455  C    C    . GLY GLY GLY A A 60  60  . 38.744 24.676 7.828   1.00 12.06  1 .
.
ATOM 456  O    O    . GLY GLY GLY A A 60  60  . 39.582 24.167 8.651   1.00 13.58  1 .
.
ATOM 457  N    N    . VAL VAL VAL A A 61  61  . 37.443 24.682 8.043   1.00 11.39  1 .
.
ATOM 458  CA   CA   . VAL VAL VAL A A 61  61  . 36.890 23.916 9.199   1.00 11.33  1 .
.
ATOM 459  CB   CB   . VAL VAL VAL A A 61  61  . 36.316 24.836 10.320  1.00 11.40  1 .
.
ATOM 460  CG1  CG1  . VAL VAL VAL A A 61  61  . 37.529 25.550 10.981  1.00 11.69  1 .
.
ATOM 461  CG2  CG2  . VAL VAL VAL A A 61  61  . 35.206 25.809 9.762   1.00 9.92   1 .
.
ATOM 462  C    C    . VAL VAL VAL A A 61  61  . 35.850 22.914 8.674   1.00 11.19  1 .
.
ATOM 463  O    O    . VAL VAL VAL A A 61  61  . 34.909 22.553 9.375   1.00 12.19  1 .
.
ATOM 464  N    N    . LEU LEU LEU A A 62  62  . 36.048 22.410 7.443   1.00 13.13  1 .
.
ATOM 465  CA   CA   . LEU LEU LEU A A 62  62  . 35.124 21.392 6.937   1.00 12.73  1 .
.
ATOM 466  CB   CB   . LEU LEU LEU A A 62  62  . 35.519 21.030 5.476   1.00 14.41  1 .
.
ATOM 467  CG   CG   . LEU LEU LEU A A 62  62  . 35.534 22.245 4.525   1.00 17.33  1 .
.
ATOM 468  CD1  CD1  . LEU LEU LEU A A 62  62  . 36.033 21.753 3.151   1.00 23.40  1 .
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ATOM 469  CD2  CD2  . LEU LEU LEU A A 62  62  . 34.130 22.874 4.484   1.00 19.47  1 .
.
ATOM 470  C    C    . LEU LEU LEU A A 62  62  . 35.140 20.092 7.755   1.00 13.79  1 .
.
ATOM 471  O    O    . LEU LEU LEU A A 62  62  . 34.072 19.439 7.850   1.00 14.41  1 .
.
ATOM 472  N    N    . LYS LYS LYS A A 63  63  . 36.309 19.715 8.311   1.00 13.53  1 .
.
ATOM 473  CA   CA   . LYS LYS LYS A A 63  63  . 36.312 18.483 9.147   1.00 14.13  1 .
.
ATOM 474  CB   CB   . LYS LYS LYS A A 63  63  . 37.756 18.098 9.560   1.00 14.66  1 .
.
ATOM 475  CG   CG   . LYS LYS LYS A A 63  63  . 38.562 17.537 8.403   1.00 15.63  1 .
.
ATOM 476  CD   CD   . LYS LYS LYS A A 63  63  . 40.052 17.387 8.822   1.00 18.08  1 .
.
ATOM 477  CE   CE   . LYS LYS LYS A A 63  63  . 40.854 17.032 7.555   1.00 20.25  1 .
.
ATOM 478  NZ   NZ   . LYS LYS LYS A A 63  63  . 42.274 16.777 7.953   1.00 22.64  1 .
.
ATOM 479  C    C    . LYS LYS LYS A A 63  63  . 35.404 18.644 10.379  1.00 12.91  1 .
.
ATOM 480  O    O    . LYS LYS LYS A A 63  63  . 34.564 17.775 10.710  1.00 14.66  1 .
.
ATOM 481  N    N    . ALA ALA ALA A A 64  64  . 35.546 19.786 11.082  1.00 12.65  1 .
.
ATOM 482  CA   CA   . ALA ALA ALA A A 64  64  . 34.687 20.004 12.229  1.00 10.29  1 .
.
ATOM 483  CB   CB   . ALA ALA ALA A A 64  64  . 35.113 21.345 12.939  1.00 11.13  1 .
.
ATOM 484  C    C    . ALA ALA ALA A A 64  64  . 33.220 20.052 11.811  1.00 11.01  1 .
.
ATOM 485  O    O    . ALA ALA ALA A A 64  64  . 32.287 19.579 12.526  1.00 11.58  1 .
.
ATOM 486  N    N    . VAL VAL VAL A A 65  65  . 32.951 20.823 10.735  1.00 10.91  1 .
.
ATOM 487  CA   CA   . VAL VAL VAL A A 65  65  . 31.553 20.871 10.262  1.00 11.49  1 .
.
ATOM 488  CB   CB   . VAL VAL VAL A A 65  65  . 31.482 21.726 8.988   1.00 12.10  1 .
.
ATOM 489  CG1  CG1  . VAL VAL VAL A A 65  65  . 30.141 21.574 8.223   1.00 14.16  1 .
.
ATOM 490  CG2  CG2  . VAL VAL VAL A A 65  65  . 31.729 23.214 9.380   1.00 13.15  1 .
.
ATOM 491  C    C    . VAL VAL VAL A A 65  65  . 30.973 19.459 9.993   1.00 12.10  1 .
.
ATOM 492  O    O    . VAL VAL VAL A A 65  65  . 29.810 19.192 10.337  1.00 11.44  1 .
.
ATOM 493  N    N    . ASP ASP ASP A A 66  66  . 31.763 18.632 9.298   1.00 12.20  1 .
.
ATOM 494  CA   CA   . ASP ASP ASP A A 66  66  . 31.310 17.237 8.960   1.00 12.61  1 .
.
ATOM 495  CB   CB   . ASP ASP ASP A A 66  66  . 32.304 16.520 8.050   1.00 16.09  1 .
.
ATOM 496  CG   CG   . ASP ASP ASP A A 66  66  . 32.278 17.032 6.589   1.00 23.04  1 .
.
ATOM 497  OD1  OD1  . ASP ASP ASP A A 66  66  . 31.337 17.791 6.191   1.00 30.46  1 .
.
ATOM 498  OD2  OD2  . ASP ASP ASP A A 66  66  . 33.214 16.663 5.800   1.00 30.16  1 .
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ATOM 499  C    C    . ASP ASP ASP A A 66  66  . 31.140 16.410 10.259  1.00 12.54  1 .
.
ATOM 500  O    O    . ASP ASP ASP A A 66  66  . 30.174 15.695 10.397  1.00 13.16  1 .
.
ATOM 501  N    N    . HIS HIS HIS A A 67  67  . 32.025 16.619 11.265  1.00 11.89  1 .
.
ATOM 502  CA   CA   . HIS HIS HIS A A 67  67  . 31.793 15.928 12.551  1.00 12.60  1 .
.
ATOM 503  CB   CB   . HIS HIS HIS A A 67  67  . 32.893 16.215 13.565  1.00 11.55  1 .
.
ATOM 504  CG   CG   . HIS HIS HIS A A 67  67  . 34.196 15.557 13.217  1.00 15.84  1 .
.
ATOM 505  ND1  ND1  . HIS HIS HIS A A 67  67  . 34.317 14.172 13.006  1.00 21.82  1 .
.
ATOM 506  CE1  CE1  . HIS HIS HIS A A 67  67  . 35.597 13.893 12.792  1.00 24.74  1 .
.
ATOM 507  NE2  NE2  . HIS HIS HIS A A 67  67  . 36.300 15.021 12.865  1.00 21.75  1 .
.
ATOM 508  CD2  CD2  . HIS HIS HIS A A 67  67  . 35.454 16.058 13.196  1.00 17.51  1 .
.
ATOM 509  C    C    . HIS HIS HIS A A 67  67  . 30.456 16.292 13.142  1.00 11.75  1 .
.
ATOM 510  O    O    . HIS HIS HIS A A 67  67  . 29.726 15.426 13.697  1.00 12.29  1 .
.
ATOM 511  N    N    . ILE ILE ILE A A 68  68  . 30.128 17.599 13.106  1.00 11.46  1 .
.
ATOM 512  CA   CA   . ILE ILE ILE A A 68  68  . 28.834 17.992 13.649  1.00 9.86   1 .
.
ATOM 513  CB   CB   . ILE ILE ILE A A 68  68  . 28.658 19.539 13.643  1.00 9.77   1 .
.
ATOM 514  CG1  CG1  . ILE ILE ILE A A 68  68  . 29.670 20.176 14.626  1.00 10.09  1 .
.
ATOM 515  CD   CD   . ILE ILE ILE A A 68  68  . 29.885 21.721 14.280  1.00 12.79  1 .
.
ATOM 516  CG2  CG2  . ILE ILE ILE A A 68  68  . 27.266 19.875 13.976  1.00 12.82  1 .
.
ATOM 517  C    C    . ILE ILE ILE A A 68  68  . 27.672 17.397 12.818  1.00 11.24  1 .
.
ATOM 518  O    O    . ILE ILE ILE A A 68  68  . 26.762 16.825 13.358  1.00 11.75  1 .
.
ATOM 519  N    N    . ASN ASN ASN A A 69  69  . 27.708 17.540 11.480  1.00 11.52  1 .
.
ATOM 520  CA   CA   . ASN ASN ASN A A 69  69  . 26.562 17.172 10.688  1.00 11.86  1 .
.
ATOM 521  CB   CB   . ASN ASN ASN A A 69  69  . 26.741 17.695 9.272   1.00 11.15  1 .
.
ATOM 522  CG   CG   . ASN ASN ASN A A 69  69  . 26.574 19.214 9.264   1.00 11.55  1 .
.
ATOM 523  OD1  OD1  . ASN ASN ASN A A 69  69  . 25.893 19.769 10.156  1.00 13.53  1 .
.
ATOM 524  ND2  ND2  . ASN ASN ASN A A 69  69  . 27.089 19.849 8.240   1.00 13.37  1 .
.
ATOM 525  C    C    . ASN ASN ASN A A 69  69  . 26.294 15.651 10.657  1.00 14.73  1 .
.
ATOM 526  O    O    . ASN ASN ASN A A 69  69  . 25.107 15.256 10.645  1.00 16.31  1 .
.
ATOM 527  N    N    . SER SER SER A A 70  70  . 27.396 14.891 10.650  1.00 15.08  1 .
.
ATOM 528  CA   CA   . SER SER SER A A 70  70  . 27.277 13.416 10.367  1.00 15.39  1 .
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ATOM 529  CB   CB   . SER SER SER A A 70  70  . 28.404 12.974 9.489   1.00 18.40  1 .
.
ATOM 530  OG   OG   . SER SER SER A A 70  70  . 28.259 13.633 8.259   1.00 24.98  1 .
.
ATOM 531  C    C    . SER SER SER A A 70  70  . 27.357 12.612 11.604  1.00 14.34  1 .
.
ATOM 532  O    O    . SER SER SER A A 70  70  . 26.862 11.460 11.580  1.00 14.78  1 .
.
ATOM 533  N    N    . THR THR THR A A 71  71  . 27.918 13.169 12.700  1.00 13.15  1 .
.
ATOM 534  CA   CA   . THR THR THR A A 71  71  . 28.129 12.315 13.885  1.00 13.32  1 .
.
ATOM 535  CB   CB   . THR THR THR A A 71  71  . 29.664 12.017 14.105  1.00 12.26  1 .
.
ATOM 536  OG1  OG1  . THR THR THR A A 71  71  . 30.208 11.404 12.915  1.00 14.40  1 .
.
ATOM 537  CG2  CG2  . THR THR THR A A 71  71  . 29.860 11.087 15.366  1.00 12.45  1 .
.
ATOM 538  C    C    . THR THR THR A A 71  71  . 27.520 12.905 15.128  1.00 12.69  1 .
.
ATOM 539  O    O    . THR THR THR A A 71  71  . 26.756 12.282 15.888  1.00 13.89  1 .
.
ATOM 540  N    N    . ILE ILE ILE A A 72  72  . 27.906 14.134 15.417  1.00 12.87  1 .
.
ATOM 541  CA   CA   . ILE ILE ILE A A 72  72  . 27.275 14.747 16.591  1.00 11.93  1 .
.
ATOM 542  CB   CB   . ILE ILE ILE A A 72  72  . 27.991 16.081 16.958  1.00 11.87  1 .
.
ATOM 543  CG1  CG1  . ILE ILE ILE A A 72  72  . 29.476 15.817 17.318  1.00 13.72  1 .
.
ATOM 544  CD   CD   . ILE ILE ILE A A 72  72  . 30.240 17.212 17.460  1.00 20.20  1 .
.
ATOM 545  CG2  CG2  . ILE ILE ILE A A 72  72  . 27.157 16.777 18.126  1.00 14.10  1 .
.
ATOM 546  C    C    . ILE ILE ILE A A 72  72  . 25.761 14.954 16.497  1.00 13.84  1 .
.
ATOM 547  O    O    . ILE ILE ILE A A 72  72  . 25.029 14.615 17.423  1.00 14.03  1 .
.
ATOM 548  N    N    . ALA ALA ALA A A 73  73  . 25.276 15.463 15.364  1.00 12.54  1 .
.
ATOM 549  CA   CA   . ALA ALA ALA A A 73  73  . 23.804 15.705 15.183  1.00 13.47  1 .
.
ATOM 550  CB   CB   . ALA ALA ALA A A 73  73  . 23.512 16.272 13.787  1.00 13.62  1 .
.
ATOM 551  C    C    . ALA ALA ALA A A 73  73  . 22.926 14.470 15.492  1.00 14.55  1 .
.
ATOM 552  O    O    . ALA ALA ALA A A 73  73  . 22.050 14.562 16.384  1.00 13.83  1 .
.
ATOM 553  N    N    . PRO PRO PRO A A 74  74  . 23.202 13.321 14.783  1.00 15.28  1 .
.
ATOM 554  CA   CA   . PRO PRO PRO A A 74  74  . 22.327 12.180 15.089  1.00 14.90  1 .
.
ATOM 555  CB   CB   . PRO PRO PRO A A 74  74  . 22.821 11.043 14.131  1.00 14.42  1 .
.
ATOM 556  CG   CG   . PRO PRO PRO A A 74  74  . 24.285 11.497 13.657  1.00 15.73  1 .
.
ATOM 557  CD   CD   . PRO PRO PRO A A 74  74  . 24.171 13.075 13.687  1.00 12.83  1 .
.
ATOM 558  C    C    . PRO PRO PRO A A 74  74  . 22.448 11.727 16.557  1.00 14.51  1 .
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ATOM 559  O    O    . PRO PRO PRO A A 74  74  . 21.427 11.272 17.132  1.00 16.01  1 .
.
ATOM 560  N    N    . ALA ALA ALA A A 75  75  . 23.653 11.836 17.129  1.00 14.52  1 .
.
ATOM 561  CA   CA   . ALA ALA ALA A A 75  75  . 23.818 11.388 18.489  1.00 15.64  1 .
.
ATOM 562  CB   CB   . ALA ALA ALA A A 75  75  . 25.331 11.538 18.909  1.00 15.72  1 .
.
ATOM 563  C    C    . ALA ALA ALA A A 75  75  . 22.881 12.212 19.439  1.00 16.35  1 .
.
ATOM 564  O    O    . ALA ALA ALA A A 75  75  . 22.244 11.684 20.352  1.00 17.99  1 .
.
ATOM 565  N    N    . LEU LEU LEU A A 76  76  . 22.830 13.533 19.257  1.00 16.24  1 .
.
ATOM 566  CA   CA   . LEU LEU LEU A A 76  76  . 22.000 14.344 20.139  1.00 15.78  1 .
.
ATOM 567  CB   CB   . LEU LEU LEU A A 76  76  . 22.408 15.877 20.025  1.00 15.83  1 .
.
ATOM 568  CG   CG   . LEU LEU LEU A A 76  76  . 23.883 16.144 20.368  1.00 15.94  1 .
.
ATOM 569  CD1  CD1  . LEU LEU LEU A A 76  76  . 24.076 17.692 20.500  1.00 17.51  1 .
.
ATOM 570  CD2  CD2  . LEU LEU LEU A A 76  76  . 24.367 15.409 21.589  1.00 16.55  1 .
.
ATOM 571  C    C    . LEU LEU LEU A A 76  76  . 20.501 14.204 19.848  1.00 17.62  1 .
.
ATOM 572  O    O    . LEU LEU LEU A A 76  76  . 19.643 14.280 20.803  1.00 18.30  1 .
.
ATOM 573  N    N    . ILE ILE ILE A A 77  77  . 20.187 14.047 18.565  1.00 16.11  1 .
.
ATOM 574  CA   CA   . ILE ILE ILE A A 77  77  . 18.791 13.718 18.138  1.00 17.36  1 .
.
ATOM 575  CB   CB   . ILE ILE ILE A A 77  77  . 18.647 13.786 16.631  1.00 15.35  1 .
.
ATOM 576  CG1  CG1  . ILE ILE ILE A A 77  77  . 18.724 15.277 16.223  1.00 18.54  1 .
.
ATOM 577  CD   CD   . ILE ILE ILE A A 77  77  . 19.028 15.475 14.785  1.00 19.20  1 .
.
ATOM 578  CG2  CG2  . ILE ILE ILE A A 77  77  . 17.285 13.197 16.159  1.00 18.26  1 .
.
ATOM 579  C    C    . ILE ILE ILE A A 77  77  . 18.356 12.380 18.782  1.00 19.64  1 .
.
ATOM 580  O    O    . ILE ILE ILE A A 77  77  . 17.278 12.335 19.319  1.00 21.02  1 .
.
ATOM 581  N    N    . SER SER SER A A 78  78  . 19.230 11.375 18.733  1.00 20.48  1 .
.
ATOM 582  CA   CA   . SER SER SER A A 78  78  . 18.945 10.024 19.322  1.00 21.05  1 .
.
ATOM 583  CB   CB   . SER SER SER A A 78  78  . 20.101 9.079  18.999  1.00 20.90  1 .
.
ATOM 584  OG   OG   . SER SER SER A A 78  78  . 20.000 8.770  17.613  1.00 25.41  1 .
.
ATOM 585  C    C    . SER SER SER A A 78  78  . 18.814 10.074 20.837  1.00 22.55  1 .
.
ATOM 586  O    O    . SER SER SER A A 78  78  . 18.159 9.204  21.423  1.00 25.97  1 .
.
ATOM 587  N    N    . SER SER SER A A 79  79  . 19.418 11.059 21.495  1.00 20.35  1 .
.
ATOM 588  CA   CA   . SER SER SER A A 79  79  . 19.371 11.078 22.958  1.00 21.93  1 .
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ATOM 589  CB   CB   . SER SER SER A A 79  79  . 20.353 12.150 23.495  1.00 20.71  1 .
.
ATOM 590  OG   OG   . SER SER SER A A 79  79  . 19.757 13.432 23.357  1.00 18.96  1 .
.
ATOM 591  C    C    . SER SER SER A A 79  79  . 17.928 11.344 23.445  1.00 22.49  1 .
.
ATOM 592  O    O    . SER SER SER A A 79  79  . 17.515 10.962 24.560  1.00 26.21  1 .
.
ATOM 593  N    N    . GLY GLY GLY A A 80  80  . 17.143 12.014 22.600  1.00 22.69  1 .
.
ATOM 594  CA   CA   . GLY GLY GLY A A 80  80  . 15.807 12.521 22.959  1.00 23.89  1 .
.
ATOM 595  C    C    . GLY GLY GLY A A 80  80  . 15.800 13.507 24.098  1.00 24.08  1 .
.
ATOM 596  O    O    . GLY GLY GLY A A 80  80  . 14.711 13.845 24.584  1.00 27.16  1 .
.
ATOM 597  N    N    . LEU LEU LEU A A 81  81  . 16.992 14.013 24.514  1.00 23.43  1 .
.
ATOM 598  CA   CA   . LEU LEU LEU A A 81  81  . 17.093 14.992 25.588  1.00 20.58  1 .
.
ATOM 599  CB   CB   . LEU LEU LEU A A 81  81  . 18.541 15.242 26.067  1.00 20.93  1 .
.
ATOM 600  CG   CG   . LEU LEU LEU A A 81  81  . 19.293 14.089 26.801  1.00 19.45  1 .
.
ATOM 601  CD1  CD1  . LEU LEU LEU A A 81  81  . 20.842 14.111 26.719  1.00 22.02  1 .
.
ATOM 602  CD2  CD2  . LEU LEU LEU A A 81  81  . 18.769 13.968 28.309  1.00 26.46  1 .
.
ATOM 603  C    C    . LEU LEU LEU A A 81  81  . 16.492 16.317 25.232  1.00 21.71  1 .
.
ATOM 604  O    O    . LEU LEU LEU A A 81  81  . 16.635 16.761 24.098  1.00 22.56  1 .
.
ATOM 605  N    N    . SER SER SER A A 82  82  . 15.863 16.994 26.202  1.00 20.39  1 .
.
ATOM 606  CA   CA   . SER SER SER A A 82  82  . 15.361 18.366 25.951  1.00 20.98  1 .
.
ATOM 607  CB   CB   . SER SER SER A A 82  82  . 14.548 18.885 27.104  1.00 22.77  1 .
.
ATOM 608  OG   OG   . SER SER SER A A 82  82  . 14.160 20.233 26.845  1.00 24.13  1 .
.
ATOM 609  C    C    . SER SER SER A A 82  82  . 16.591 19.284 25.785  1.00 19.00  1 .
.
ATOM 610  O    O    . SER SER SER A A 82  82  . 17.574 19.114 26.459  1.00 17.48  1 .
.
ATOM 611  N    N    . VAL VAL VAL A A 83  83  . 16.475 20.287 24.942  1.00 18.38  1 .
.
ATOM 612  CA   CA   . VAL VAL VAL A A 83  83  . 17.542 21.303 24.874  1.00 17.97  1 .
.
ATOM 613  CB   CB   . VAL VAL VAL A A 83  83  . 17.304 22.334 23.687  1.00 16.50  1 .
.
ATOM 614  CG1  CG1  . VAL VAL VAL A A 83  83  . 17.601 21.664 22.305  1.00 17.95  1 .
.
ATOM 615  CG2  CG2  . VAL VAL VAL A A 83  83  . 15.873 23.012 23.811  1.00 19.31  1 .
.
ATOM 616  C    C    . VAL VAL VAL A A 83  83  . 17.728 22.121 26.175  1.00 18.25  1 .
.
ATOM 617  O    O    . VAL VAL VAL A A 83  83  . 18.748 22.840 26.322  1.00 18.09  1 .
.
ATOM 618  N    N    . VAL VAL VAL A A 84  84  . 16.806 22.037 27.138  1.00 19.11  1 .
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ATOM 619  CA   CA   . VAL VAL VAL A A 84  84  . 17.123 22.660 28.462  1.00 19.62  1 .
.
ATOM 620  CB   CB   . VAL VAL VAL A A 84  84  . 15.860 22.813 29.348  1.00 19.82  1 .
.
ATOM 621  CG1  CG1  . VAL VAL VAL A A 84  84  . 14.766 23.551 28.574  1.00 21.17  1 .
.
ATOM 622  CG2  CG2  . VAL VAL VAL A A 84  84  . 15.408 21.392 29.850  1.00 23.08  1 .
.
ATOM 623  C    C    . VAL VAL VAL A A 84  84  . 18.202 21.901 29.225  1.00 19.28  1 .
.
ATOM 624  O    O    . VAL VAL VAL A A 84  84  . 18.754 22.435 30.208  1.00 18.93  1 .
.
ATOM 625  N    N    . GLU GLU GLU A A 85  85  . 18.448 20.630 28.838  1.00 19.73  1 .
.
ATOM 626  CA   CA   . GLU GLU GLU A A 85  85  . 19.420 19.772 29.567  1.00 19.66  1 .
.
ATOM 627  CB   CB   . GLU GLU GLU A A 85  85  . 19.034 18.275 29.413  1.00 20.88  1 .
.
ATOM 628  CG   CG   . GLU GLU GLU A A 85  85  . 17.632 17.970 29.952  1.00 24.60  1 .
.
ATOM 629  CD   CD   . GLU GLU GLU A A 85  85  . 17.539 18.017 31.490  1.00 34.58  1 .
.
ATOM 630  OE1  OE1  . GLU GLU GLU A A 85  85  . 18.570 18.044 32.269  1.00 35.26  1 .
.
ATOM 631  OE2  OE2  . GLU GLU GLU A A 85  85  . 16.385 18.038 31.945  1.00 39.29  1 .
.
ATOM 632  C    C    . GLU GLU GLU A A 85  85  . 20.838 20.024 29.108  1.00 18.43  1 .
.
ATOM 633  O    O    . GLU GLU GLU A A 85  85  . 21.508 19.144 28.494  1.00 18.57  1 .
.
ATOM 634  N    N    . GLN GLN GLN A A 86  86  . 21.306 21.253 29.402  1.00 17.32  1 .
.
ATOM 635  CA   CA   . GLN GLN GLN A A 86  86  . 22.613 21.710 28.855  1.00 15.62  1 .
.
ATOM 636  CB   CB   . GLN GLN GLN A A 86  86  . 22.944 23.101 29.374  1.00 14.46  1 .
.
ATOM 637  CG   CG   . GLN GLN GLN A A 86  86  . 24.226 23.655 28.759  1.00 12.90  1 .
.
ATOM 638  CD   CD   . GLN GLN GLN A A 86  86  . 24.030 24.061 27.316  1.00 13.25  1 .
.
ATOM 639  OE1  OE1  . GLN GLN GLN A A 86  86  . 23.016 24.609 26.987  1.00 16.11  1 .
.
ATOM 640  NE2  NE2  . GLN GLN GLN A A 86  86  . 24.987 23.812 26.479  1.00 14.67  1 .
.
ATOM 641  C    C    . GLN GLN GLN A A 86  86  . 23.696 20.722 29.308  1.00 16.46  1 .
.
ATOM 642  O    O    . GLN GLN GLN A A 86  86  . 24.543 20.304 28.516  1.00 15.33  1 .
.
ATOM 643  N    N    . GLU GLU GLU A A 87  87  . 23.713 20.388 30.598  1.00 17.94  1 .
.
ATOM 644  CA   CA   . GLU GLU GLU A A 87  87  . 24.796 19.540 31.106  1.00 19.13  1 .
.
ATOM 645  CB   CB   . GLU GLU GLU A A 87  87  . 24.755 19.505 32.628  1.00 21.19  1 .
.
ATOM 646  CG   CG   . GLU GLU GLU A A 87  87  . 25.908 18.689 33.285  1.00 21.16  1 .
.
ATOM 647  CD   CD   . GLU GLU GLU A A 87  87  . 26.034 19.057 34.781  1.00 33.67  1 .
.
ATOM 648  OE1  OE1  . GLU GLU GLU A A 87  87  . 26.831 18.382 35.475  1.00 41.14  1 .
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ATOM 649  OE2  OE2  . GLU GLU GLU A A 87  87  . 25.319 19.965 35.286  1.00 35.10  1 .
.
ATOM 650  C    C    . GLU GLU GLU A A 87  87  . 24.804 18.132 30.546  1.00 19.12  1 .
.
ATOM 651  O    O    . GLU GLU GLU A A 87  87  . 25.884 17.627 30.219  1.00 19.80  1 .
.
ATOM 652  N    N    . LYS LYS LYS A A 88  88  . 23.606 17.528 30.397  1.00 19.24  1 .
.
ATOM 653  CA   CA   . LYS LYS LYS A A 88  88  . 23.547 16.199 29.850  1.00 20.48  1 .
.
ATOM 654  CB   CB   . LYS LYS LYS A A 88  88  . 22.186 15.571 30.097  1.00 21.98  1 .
.
ATOM 655  CG   CG   . LYS LYS LYS A A 88  88  . 21.851 15.314 31.604  1.00 25.18  1 .
.
ATOM 656  CD   CD   . LYS LYS LYS A A 88  88  . 20.496 14.453 31.515  1.00 31.45  1 .
.
ATOM 657  CE   CE   . LYS LYS LYS A A 88  88  . 19.681 14.398 32.803  1.00 36.50  1 .
.
ATOM 658  NZ   NZ   . LYS LYS LYS A A 88  88  . 20.675 14.414 33.822  1.00 36.64  1 .
.
ATOM 659  C    C    . LYS LYS LYS A A 88  88  . 23.922 16.181 28.389  1.00 18.47  1 .
.
ATOM 660  O    O    . LYS LYS LYS A A 88  88  . 24.646 15.270 27.945  1.00 17.77  1 .
.
ATOM 661  N    N    . LEU LEU LEU A A 89  89  . 23.502 17.208 27.633  1.00 17.29  1 .
.
ATOM 662  CA   CA   . LEU LEU LEU A A 89  89  . 23.885 17.255 26.225  1.00 16.73  1 .
.
ATOM 663  CB   CB   . LEU LEU LEU A A 89  89  . 23.043 18.319 25.450  1.00 15.40  1 .
.
ATOM 664  CG   CG   . LEU LEU LEU A A 89  89  . 21.565 17.841 25.253  1.00 14.68  1 .
.
ATOM 665  CD1  CD1  . LEU LEU LEU A A 89  89  . 20.610 19.046 24.950  1.00 15.70  1 .
.
ATOM 666  CD2  CD2  . LEU LEU LEU A A 89  89  . 21.438 16.799 24.167  1.00 15.20  1 .
.
ATOM 667  C    C    . LEU LEU LEU A A 89  89  . 25.391 17.498 26.073  1.00 16.57  1 .
.
ATOM 668  O    O    . LEU LEU LEU A A 89  89  . 26.076 16.844 25.240  1.00 18.12  1 .
.
ATOM 669  N    N    . ASP ASP ASP A A 90  90  . 25.926 18.434 26.863  1.00 15.59  1 .
.
ATOM 670  CA   CA   . ASP ASP ASP A A 90  90  . 27.375 18.680 26.784  1.00 15.71  1 .
.
ATOM 671  CB   CB   . ASP ASP ASP A A 90  90  . 27.815 19.873 27.655  1.00 15.37  1 .
.
ATOM 672  CG   CG   . ASP ASP ASP A A 90  90  . 27.463 21.256 26.986  1.00 17.97  1 .
.
ATOM 673  OD1  OD1  . ASP ASP ASP A A 90  90  . 27.316 21.342 25.717  1.00 17.90  1 .
.
ATOM 674  OD2  OD2  . ASP ASP ASP A A 90  90  . 27.291 22.226 27.762  1.00 17.92  1 .
.
ATOM 675  C    C    . ASP ASP ASP A A 90  90  . 28.154 17.406 27.144  1.00 14.41  1 .
.
ATOM 676  O    O    . ASP ASP ASP A A 90  90  . 29.138 17.027 26.452  1.00 15.10  1 .
.
ATOM 677  N    N    . ASN ASN ASN A A 91  91  . 27.708 16.748 28.206  1.00 16.93  1 .
.
ATOM 678  CA   CA   . ASN ASN ASN A A 91  91  . 28.407 15.475 28.630  1.00 19.12  1 .
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ATOM 679  CB   CB   . ASN ASN ASN A A 91  91  . 27.786 14.946 29.905  1.00 20.50  1 .
.
ATOM 680  CG   CG   . ASN ASN ASN A A 91  91  . 28.234 15.721 31.159  1.00 24.90  1 .
.
ATOM 681  OD1  OD1  . ASN ASN ASN A A 91  91  . 29.270 16.418 31.152  1.00 32.23  1 .
.
ATOM 682  ND2  ND2  . ASN ASN ASN A A 91  91  . 27.449 15.598 32.257  1.00 29.65  1 .
.
ATOM 683  C    C    . ASN ASN ASN A A 91  91  . 28.414 14.385 27.556  1.00 19.96  1 .
.
ATOM 684  O    O    . ASN ASN ASN A A 91  91  . 29.424 13.723 27.338  1.00 20.03  1 .
.
ATOM 685  N    N    . LEU LEU LEU A A 92  92  . 27.291 14.281 26.823  1.00 18.28  1 .
.
ATOM 686  CA   CA   . LEU LEU LEU A A 92  92  . 27.158 13.367 25.733  1.00 19.57  1 .
.
ATOM 687  CB   CB   . LEU LEU LEU A A 92  92  . 25.742 13.448 25.237  1.00 19.65  1 .
.
ATOM 688  CG   CG   . LEU LEU LEU A A 92  92  . 25.243 12.320 24.412  1.00 25.42  1 .
.
ATOM 689  CD1  CD1  . LEU LEU LEU A A 92  92  . 23.711 12.567 24.238  1.00 26.40  1 .
.
ATOM 690  CD2  CD2  . LEU LEU LEU A A 92  92  . 25.989 12.280 23.054  1.00 31.09  1 .
.
ATOM 691  C    C    . LEU LEU LEU A A 92  92  . 28.211 13.663 24.691  1.00 19.01  1 .
.
ATOM 692  O    O    . LEU LEU LEU A A 92  92  . 28.930 12.759 24.236  1.00 18.98  1 .
.
ATOM 693  N    N    . MET MET MET A A 93  93  . 28.347 14.934 24.324  1.00 18.02  1 .
.
ATOM 694  CA   CA   . MET MET MET A A 93  93  . 29.376 15.292 23.332  1.00 16.75  1 .
.
ATOM 695  CB   CB   . MET MET MET A A 93  93  . 29.258 16.792 22.932  1.00 14.64  1 .
.
ATOM 696  CG   CG   . MET MET MET A A 93  93  . 27.923 16.984 22.095  1.00 16.93  1 .
.
ATOM 697  SD   SD   . MET MET MET A A 93  93  . 27.939 18.615 21.344  1.00 16.95  1 .
.
ATOM 698  CE   CE   . MET MET MET A A 93  93  . 27.548 19.630 22.754  1.00 15.97  1 .
.
ATOM 699  C    C    . MET MET MET A A 93  93  . 30.815 14.981 23.819  1.00 15.30  1 .
.
ATOM 700  O    O    . MET MET MET A A 93  93  . 31.648 14.464 23.057  1.00 16.63  1 .
.
ATOM 701  N    N    . LEU LEU LEU A A 94  94  . 31.067 15.291 25.086  1.00 16.87  1 .
.
ATOM 702  CA   CA   . LEU LEU LEU A A 94  94  . 32.435 15.147 25.635  1.00 17.83  1 .
.
ATOM 703  CB   CB   . LEU LEU LEU A A 94  94  . 32.470 15.657 27.043  1.00 18.89  1 .
.
ATOM 704  CG   CG   . LEU LEU LEU A A 94  94  . 32.261 17.140 27.310  1.00 23.76  1 .
.
ATOM 705  CD1  CD1  . LEU LEU LEU A A 94  94  . 32.663 17.470 28.787  1.00 26.63  1 .
.
ATOM 706  CD2  CD2  . LEU LEU LEU A A 94  94  . 32.910 17.945 26.344  1.00 27.04  1 .
.
ATOM 707  C    C    . LEU LEU LEU A A 94  94  . 32.772 13.648 25.632  1.00 18.51  1 .
.
ATOM 708  O    O    . LEU LEU LEU A A 94  94  . 33.876 13.270 25.254  1.00 18.24  1 .
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ATOM 709  N    N    . GLU GLU GLU A A 95  95  . 31.787 12.827 26.027  1.00 18.03  1 .
.
ATOM 710  CA   CA   . GLU GLU GLU A A 95  95  . 31.991 11.356 26.027  1.00 20.35  1 .
.
ATOM 711  CB   CB   . GLU GLU GLU A A 95  95  . 30.816 10.664 26.750  1.00 20.20  1 .
.
ATOM 712  CG   CG   . GLU GLU GLU A A 95  95  . 30.807 11.086 28.203  1.00 24.73  1 .
.
ATOM 713  C    C    . GLU GLU GLU A A 95  95  . 32.144 10.798 24.617  1.00 20.47  1 .
.
ATOM 714  O    O    . GLU GLU GLU A A 95  95  . 32.999 9.941  24.394  1.00 20.88  1 .
.
ATOM 715  N    N    . LEU LEU LEU A A 96  96  . 31.392 11.345 23.648  1.00 18.22  1 .
.
ATOM 716  CA   CA   . LEU LEU LEU A A 96  96  . 31.435 10.788 22.263  1.00 18.24  1 .
.
ATOM 717  CB   CB   . LEU LEU LEU A A 96  96  . 30.296 11.422 21.433  1.00 18.50  1 .
.
ATOM 718  CG   CG   . LEU LEU LEU A A 96  96  . 29.638 10.574 20.322  1.00 27.46  1 .
.
ATOM 719  CD1  CD1  . LEU LEU LEU A A 96  96  . 28.969 11.354 19.184  1.00 23.83  1 .
.
ATOM 720  CD2  CD2  . LEU LEU LEU A A 96  96  . 30.186 9.174  19.842  1.00 26.12  1 .
.
ATOM 721  C    C    . LEU LEU LEU A A 96  96  . 32.778 11.184 21.662  1.00 18.56  1 .
.
ATOM 722  O    O    . LEU LEU LEU A A 96  96  . 33.364 10.438 20.838  1.00 19.64  1 .
.
ATOM 723  N    N    . ASP ASP ASP A A 97  97  . 33.305 12.355 22.074  1.00 17.59  1 .
.
ATOM 724  CA   CA   . ASP ASP ASP A A 97  97  . 34.606 12.759 21.583  1.00 17.04  1 .
.
ATOM 725  CB   CB   . ASP ASP ASP A A 97  97  . 34.866 14.292 21.829  1.00 14.71  1 .
.
ATOM 726  CG   CG   . ASP ASP ASP A A 97  97  . 36.345 14.662 21.579  1.00 19.09  1 .
.
ATOM 727  OD1  OD1  . ASP ASP ASP A A 97  97  . 36.679 15.125 20.526  1.00 16.94  1 .
.
ATOM 728  OD2  OD2  . ASP ASP ASP A A 97  97  . 37.216 14.383 22.420  1.00 22.72  1 .
.
ATOM 729  C    C    . ASP ASP ASP A A 97  97  . 35.686 11.864 22.255  1.00 17.35  1 .
.
ATOM 730  O    O    . ASP ASP ASP A A 97  97  . 36.540 11.256 21.583  1.00 19.82  1 .
.
ATOM 731  N    N    . GLY GLY GLY A A 98  98  . 35.553 11.714 23.540  1.00 18.87  1 .
.
ATOM 732  CA   CA   . GLY GLY GLY A A 98  98  . 36.373 10.721 24.268  1.00 20.89  1 .
.
ATOM 733  C    C    . GLY GLY GLY A A 98  98  . 37.834 11.079 24.532  1.00 22.57  1 .
.
ATOM 734  O    O    . GLY GLY GLY A A 98  98  . 38.603 10.238 25.090  1.00 25.53  1 .
.
ATOM 735  N    N    . THR THR THR A A 99  99  . 38.265 12.311 24.213  1.00 21.03  1 .
.
ATOM 736  CA   CA   . THR THR THR A A 99  99  . 39.680 12.705 24.459  1.00 20.80  1 .
.
ATOM 737  CB   CB   . THR THR THR A A 99  99  . 40.381 13.212 23.134  1.00 20.67  1 .
.
ATOM 738  OG1  OG1  . THR THR THR A A 99  99  . 39.740 14.412 22.700  1.00 22.31  1 .
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ATOM 739  CG2  CG2  . THR THR THR A A 99  99  . 40.222 12.208 21.961  1.00 21.29  1 .
.
ATOM 740  C    C    . THR THR THR A A 99  99  . 39.684 13.849 25.469  1.00 22.52  1 .
.
ATOM 741  O    O    . THR THR THR A A 99  99  . 38.689 14.580 25.548  1.00 22.51  1 .
.
ATOM 742  N    N    . GLU GLU GLU A A 100 100 . 40.839 14.090 26.129  1.00 21.98  1 .
.
ATOM 743  CA   CA   . GLU GLU GLU A A 100 100 . 40.960 15.136 27.151  1.00 22.43  1 .
.
ATOM 744  CB   CB   . GLU GLU GLU A A 100 100 . 42.308 15.045 27.922  1.00 24.65  1 .
.
ATOM 745  C    C    . GLU GLU GLU A A 100 100 . 40.830 16.505 26.522  1.00 23.05  1 .
.
ATOM 746  O    O    . GLU GLU GLU A A 100 100 . 40.209 17.377 27.120  1.00 26.59  1 .
.
ATOM 747  N    N    . ASN ASN ASN A A 101 101 . 41.364 16.669 25.317  1.00 20.49  1 .
.
ATOM 748  CA   CA   . ASN ASN ASN A A 101 101 . 41.476 17.997 24.699  1.00 18.57  1 .
.
ATOM 749  CB   CB   . ASN ASN ASN A A 101 101 . 42.925 18.286 24.269  1.00 19.40  1 .
.
ATOM 750  CG   CG   . ASN ASN ASN A A 101 101 . 43.456 17.333 23.184  1.00 22.47  1 .
.
ATOM 751  OD1  OD1  . ASN ASN ASN A A 101 101 . 44.460 17.676 22.485  1.00 33.16  1 .
.
ATOM 752  ND2  ND2  . ASN ASN ASN A A 101 101 . 42.842 16.170 23.020  1.00 22.04  1 .
.
ATOM 753  C    C    . ASN ASN ASN A A 101 101 . 40.510 18.237 23.517  1.00 17.42  1 .
.
ATOM 754  O    O    . ASN ASN ASN A A 101 101 . 40.733 19.191 22.761  1.00 16.84  1 .
.
ATOM 755  N    N    . LYS LYS LYS A A 102 102 . 39.525 17.352 23.395  1.00 15.72  1 .
.
ATOM 756  CA   CA   . LYS LYS LYS A A 102 102 . 38.440 17.415 22.309  1.00 14.33  1 .
.
ATOM 757  CB   CB   . LYS LYS LYS A A 102 102 . 37.586 18.692 22.418  1.00 13.25  1 .
.
ATOM 758  CG   CG   . LYS LYS LYS A A 102 102 . 36.770 18.679 23.711  1.00 15.39  1 .
.
ATOM 759  CD   CD   . LYS LYS LYS A A 102 102 . 36.141 20.076 23.937  1.00 16.30  1 .
.
ATOM 760  CE   CE   . LYS LYS LYS A A 102 102 . 35.117 20.065 25.100  1.00 16.01  1 .
.
ATOM 761  NZ   NZ   . LYS LYS LYS A A 102 102 . 35.954 19.893 26.396  1.00 17.10  1 .
.
ATOM 762  C    C    . LYS LYS LYS A A 102 102 . 39.168 17.347 20.969  1.00 16.31  1 .
.
ATOM 763  O    O    . LYS LYS LYS A A 102 102 . 38.828 18.054 20.036  1.00 16.96  1 .
.
ATOM 764  N    N    . SER SER SER A A 103 103 . 40.169 16.497 20.854  1.00 16.78  1 .
.
ATOM 765  CA   CA   . SER SER SER A A 103 103 . 40.911 16.422 19.627  1.00 17.74  1 .
.
ATOM 766  CB   CB   . SER SER SER A A 103 103 . 42.393 16.083 19.890  1.00 18.32  1 .
.
ATOM 767  OG   OG   . SER SER SER A A 103 103 . 42.477 14.839 20.524  1.00 21.42  1 .
.
ATOM 768  C    C    . SER SER SER A A 103 103 . 40.310 15.483 18.533  1.00 18.42  1 .
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ATOM 769  O    O    . SER SER SER A A 103 103 . 40.806 15.464 17.418  1.00 21.69  1 .
.
ATOM 770  N    N    . LYS LYS LYS A A 104 104 . 39.276 14.751 18.853  1.00 17.65  1 .
.
ATOM 771  CA   CA   . LYS LYS LYS A A 104 104 . 38.612 13.942 17.826  1.00 17.80  1 .
.
ATOM 772  CB   CB   . LYS LYS LYS A A 104 104 . 37.833 12.802 18.501  1.00 18.90  1 .
.
ATOM 773  CG   CG   . LYS LYS LYS A A 104 104 . 37.050 11.877 17.448  1.00 21.73  1 .
.
ATOM 774  CD   CD   . LYS LYS LYS A A 104 104 . 36.663 10.511 17.987  1.00 26.26  1 .
.
ATOM 775  CE   CE   . LYS LYS LYS A A 104 104 . 35.410 10.400 18.632  1.00 31.45  1 .
.
ATOM 776  NZ   NZ   . LYS LYS LYS A A 104 104 . 35.780 9.178  19.435  1.00 26.49  1 .
.
ATOM 777  C    C    . LYS LYS LYS A A 104 104 . 37.680 14.829 16.967  1.00 17.79  1 .
.
ATOM 778  O    O    . LYS LYS LYS A A 104 104 . 37.799 14.849 15.710  1.00 19.79  1 .
.
ATOM 779  N    N    . PHE PHE PHE A A 105 105 . 36.770 15.553 17.638  1.00 15.99  1 .
.
ATOM 780  CA   CA   . PHE PHE PHE A A 105 105 . 35.807 16.381 16.884  1.00 14.98  1 .
.
ATOM 781  CB   CB   . PHE PHE PHE A A 105 105 . 34.447 16.452 17.589  1.00 15.03  1 .
.
ATOM 782  CG   CG   . PHE PHE PHE A A 105 105 . 33.747 15.139 17.647  1.00 17.76  1 .
.
ATOM 783  CD1  CD1  . PHE PHE PHE A A 105 105 . 32.881 14.886 18.706  1.00 18.99  1 .
.
ATOM 784  CE1  CE1  . PHE PHE PHE A A 105 105 . 32.139 13.608 18.789  1.00 19.49  1 .
.
ATOM 785  CZ   CZ   . PHE PHE PHE A A 105 105 . 32.304 12.686 17.789  1.00 19.31  1 .
.
ATOM 786  CE2  CE2  . PHE PHE PHE A A 105 105 . 33.181 12.929 16.742  1.00 21.91  1 .
.
ATOM 787  CD2  CD2  . PHE PHE PHE A A 105 105 . 33.899 14.189 16.642  1.00 19.01  1 .
.
ATOM 788  C    C    . PHE PHE PHE A A 105 105 . 36.340 17.780 16.710  1.00 15.92  1 .
.
ATOM 789  O    O    . PHE PHE PHE A A 105 105 . 35.934 18.475 15.763  1.00 15.05  1 .
.
ATOM 790  N    N    . GLY GLY GLY A A 106 106 . 37.246 18.205 17.582  1.00 14.17  1 .
.
ATOM 791  CA   CA   . GLY GLY GLY A A 106 106 . 37.558 19.698 17.700  1.00 13.86  1 .
.
ATOM 792  C    C    . GLY GLY GLY A A 106 106 . 36.697 20.345 18.749  1.00 13.04  1 .
.
ATOM 793  O    O    . GLY GLY GLY A A 106 106 . 35.471 20.163 18.795  1.00 13.53  1 .
.
ATOM 794  N    N    . ALA ALA ALA A A 107 107 . 37.331 21.145 19.600  1.00 12.85  1 .
.
ATOM 795  CA   CA   . ALA ALA ALA A A 107 107 . 36.540 22.010 20.523  1.00 13.39  1 .
.
ATOM 796  CB   CB   . ALA ALA ALA A A 107 107 . 37.452 22.843 21.407  1.00 14.11  1 .
.
ATOM 797  C    C    . ALA ALA ALA A A 107 107 . 35.658 22.934 19.758  1.00 12.85  1 .
.
ATOM 798  O    O    . ALA ALA ALA A A 107 107 . 34.599 23.316 20.286  1.00 14.02  1 .
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ATOM 799  N    N    . ASN ASN ASN A A 108 108 . 36.074 23.305 18.553  1.00 13.53  1 .
.
ATOM 800  CA   CA   . ASN ASN ASN A A 108 108 . 35.187 24.172 17.749  1.00 12.61  1 .
.
ATOM 801  CB   CB   . ASN ASN ASN A A 108 108 . 35.944 24.858 16.578  1.00 12.23  1 .
.
ATOM 802  CG   CG   . ASN ASN ASN A A 108 108 . 36.789 23.898 15.742  1.00 13.44  1 .
.
ATOM 803  OD1  OD1  . ASN ASN ASN A A 108 108 . 37.176 22.805 16.198  1.00 14.09  1 .
.
ATOM 804  ND2  ND2  . ASN ASN ASN A A 108 108 . 37.117 24.307 14.543  1.00 12.44  1 .
.
ATOM 805  C    C    . ASN ASN ASN A A 108 108 . 33.913 23.478 17.272  1.00 14.45  1 .
.
ATOM 806  O    O    . ASN ASN ASN A A 108 108 . 32.854 24.166 17.165  1.00 17.27  1 .
.
ATOM 807  N    N    . ALA ALA ALA A A 109 109 . 33.953 22.153 17.065  1.00 12.82  1 .
.
ATOM 808  CA   CA   . ALA ALA ALA A A 109 109 . 32.738 21.442 16.652  1.00 13.09  1 .
.
ATOM 809  CB   CB   . ALA ALA ALA A A 109 109 . 33.052 20.014 16.174  1.00 12.27  1 .
.
ATOM 810  C    C    . ALA ALA ALA A A 109 109 . 31.836 21.334 17.867  1.00 13.84  1 .
.
ATOM 811  O    O    . ALA ALA ALA A A 109 109 . 30.634 21.661 17.809  1.00 14.59  1 .
.
ATOM 812  N    N    . ILE ILE ILE A A 110 110 . 32.414 20.930 19.011  1.00 13.30  1 .
.
ATOM 813  CA   CA   . ILE ILE ILE A A 110 110 . 31.542 20.706 20.156  1.00 12.81  1 .
.
ATOM 814  CB   CB   . ILE ILE ILE A A 110 110 . 32.396 19.986 21.295  1.00 11.56  1 .
.
ATOM 815  CG1  CG1  . ILE ILE ILE A A 110 110 . 32.716 18.544 20.773  1.00 13.46  1 .
.
ATOM 816  CD   CD   . ILE ILE ILE A A 110 110 . 33.754 17.844 21.616  1.00 14.88  1 .
.
ATOM 817  CG2  CG2  . ILE ILE ILE A A 110 110 . 31.589 20.040 22.714  1.00 13.52  1 .
.
ATOM 818  C    C    . ILE ILE ILE A A 110 110 . 30.930 22.037 20.689  1.00 10.97  1 .
.
ATOM 819  O    O    . ILE ILE ILE A A 110 110 . 29.753 22.095 21.041  1.00 11.69  1 .
.
ATOM 820  N    N    . LEU LEU LEU A A 111 111 . 31.751 23.082 20.750  1.00 11.26  1 .
.
ATOM 821  CA   CA   . LEU LEU LEU A A 111 111 . 31.269 24.351 21.285  1.00 9.32   1 .
.
ATOM 822  CB   CB   . LEU LEU LEU A A 111 111 . 32.432 25.357 21.439  1.00 9.17   1 .
.
ATOM 823  CG   CG   . LEU LEU LEU A A 111 111 . 31.907 26.739 21.914  1.00 12.08  1 .
.
ATOM 824  CD1  CD1  . LEU LEU LEU A A 111 111 . 31.326 26.615 23.358  1.00 13.09  1 .
.
ATOM 825  CD2  CD2  . LEU LEU LEU A A 111 111 . 33.111 27.733 21.838  1.00 12.57  1 .
.
ATOM 826  C    C    . LEU LEU LEU A A 111 111 . 30.162 24.912 20.403  1.00 9.74   1 .
.
ATOM 827  O    O    . LEU LEU LEU A A 111 111 . 29.212 25.492 20.914  1.00 11.53  1 .
.
ATOM 828  N    N    . GLY GLY GLY A A 112 112 . 30.320 24.834 19.067  1.00 9.87   1 .
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ATOM 829  CA   CA   . GLY GLY GLY A A 112 112 . 29.283 25.383 18.217  1.00 11.78  1 .
.
ATOM 830  C    C    . GLY GLY GLY A A 112 112 . 27.908 24.803 18.548  1.00 12.14  1 .
.
ATOM 831  O    O    . GLY GLY GLY A A 112 112 . 26.905 25.523 18.619  1.00 13.32  1 .
.
ATOM 832  N    N    . VAL VAL VAL A A 113 113 . 27.870 23.478 18.741  1.00 12.02  1 .
.
ATOM 833  CA   CA   . VAL VAL VAL A A 113 113 . 26.627 22.865 19.112  1.00 12.14  1 .
.
ATOM 834  CB   CB   . VAL VAL VAL A A 113 113 . 26.758 21.315 19.007  1.00 12.50  1 .
.
ATOM 835  CG1  CG1  . VAL VAL VAL A A 113 113 . 25.412 20.664 19.426  1.00 15.96  1 .
.
ATOM 836  CG2  CG2  . VAL VAL VAL A A 113 113 . 27.154 20.914 17.602  1.00 12.24  1 .
.
ATOM 837  C    C    . VAL VAL VAL A A 113 113 . 26.185 23.250 20.533  1.00 12.65  1 .
.
ATOM 838  O    O    . VAL VAL VAL A A 113 113 . 25.001 23.514 20.775  1.00 12.70  1 .
.
ATOM 839  N    N    . SER SER SER A A 114 114 . 27.123 23.276 21.484  1.00 11.65  1 .
.
ATOM 840  CA   CA   . SER SER SER A A 114 114 . 26.785 23.619 22.831  1.00 12.13  1 .
.
ATOM 841  CB   CB   . SER SER SER A A 114 114 . 28.100 23.611 23.653  1.00 12.02  1 .
.
ATOM 842  OG   OG   . SER SER SER A A 114 114 . 27.809 23.786 24.986  1.00 14.51  1 .
.
ATOM 843  C    C    . SER SER SER A A 114 114 . 26.138 25.016 22.952  1.00 12.34  1 .
.
ATOM 844  O    O    . SER SER SER A A 114 114 . 25.184 25.250 23.719  1.00 11.84  1 .
.
ATOM 845  N    N    . LEU LEU LEU A A 115 115 . 26.668 25.961 22.189  1.00 9.43   1 .
.
ATOM 846  CA   CA   . LEU LEU LEU A A 115 115 . 26.095 27.320 22.192  1.00 9.41   1 .
.
ATOM 847  CB   CB   . LEU LEU LEU A A 115 115 . 26.970 28.231 21.333  1.00 10.05  1 .
.
ATOM 848  CG   CG   . LEU LEU LEU A A 115 115 . 28.395 28.524 21.841  1.00 10.67  1 .
.
ATOM 849  CD1  CD1  . LEU LEU LEU A A 115 115 . 29.262 29.324 20.788  1.00 12.38  1 .
.
ATOM 850  CD2  CD2  . LEU LEU LEU A A 115 115 . 28.381 29.303 23.164  1.00 12.84  1 .
.
ATOM 851  C    C    . LEU LEU LEU A A 115 115 . 24.676 27.337 21.576  1.00 12.01  1 .
.
ATOM 852  O    O    . LEU LEU LEU A A 115 115 . 23.786 27.949 22.152  1.00 11.18  1 .
.
ATOM 853  N    N    . ALA ALA ALA A A 116 116 . 24.489 26.569 20.493  1.00 10.84  1 .
.
ATOM 854  CA   CA   . ALA ALA ALA A A 116 116 . 23.163 26.548 19.816  1.00 11.60  1 .
.
ATOM 855  CB   CB   . ALA ALA ALA A A 116 116 . 23.249 25.832 18.488  1.00 12.72  1 .
.
ATOM 856  C    C    . ALA ALA ALA A A 116 116 . 22.135 25.880 20.720  1.00 11.26  1 .
.
ATOM 857  O    O    . ALA ALA ALA A A 116 116 . 20.994 26.292 20.797  1.00 12.78  1 .
.
ATOM 858  N    N    . VAL VAL VAL A A 117 117 . 22.546 24.792 21.387  1.00 12.63  1 .
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ATOM 859  CA   CA   . VAL VAL VAL A A 117 117 . 21.721 24.129 22.385  1.00 13.69  1 .
.
ATOM 860  CB   CB   . VAL VAL VAL A A 117 117 . 22.514 22.925 23.004  1.00 13.33  1 .
.
ATOM 861  CG1  CG1  . VAL VAL VAL A A 117 117 . 21.840 22.485 24.330  1.00 15.57  1 .
.
ATOM 862  CG2  CG2  . VAL VAL VAL A A 117 117 . 22.535 21.766 22.026  1.00 15.74  1 .
.
ATOM 863  C    C    . VAL VAL VAL A A 117 117 . 21.283 25.093 23.509  1.00 13.55  1 .
.
ATOM 864  O    O    . VAL VAL VAL A A 117 117 . 20.130 25.118 23.915  1.00 13.93  1 .
.
ATOM 865  N    N    . CYS CYS CYS A A 118 118 . 22.184 25.932 23.975  1.00 13.15  1 .
.
ATOM 866  CA   CA   . CYS CYS CYS A A 118 118 . 21.874 26.844 25.084  1.00 12.06  1 .
.
ATOM 867  CB   CB   . CYS CYS CYS A A 118 118 . 23.204 27.460 25.531  1.00 12.12  1 .
.
ATOM 868  SG   SG   . CYS CYS CYS A A 118 118 . 22.977 28.407 27.088  1.00 15.90  1 .
.
ATOM 869  C    C    . CYS CYS CYS A A 118 118 . 20.852 27.878 24.601  1.00 11.89  1 .
.
ATOM 870  O    O    . CYS CYS CYS A A 118 118 . 19.923 28.183 25.317  1.00 12.85  1 .
.
ATOM 871  N    N    . LYS LYS LYS A A 119 119 . 21.033 28.422 23.396  1.00 12.04  1 .
.
ATOM 872  CA   CA   . LYS LYS LYS A A 119 119 . 20.019 29.365 22.886  1.00 12.79  1 .
.
ATOM 873  CB   CB   . LYS LYS LYS A A 119 119 . 20.443 29.927 21.559  1.00 12.33  1 .
.
ATOM 874  CG   CG   . LYS LYS LYS A A 119 119 . 21.743 30.648 21.716  1.00 12.89  1 .
.
ATOM 875  CD   CD   . LYS LYS LYS A A 119 119 . 22.084 31.372 20.398  1.00 14.68  1 .
.
ATOM 876  CE   CE   . LYS LYS LYS A A 119 119 . 23.606 32.036 20.445  1.00 19.09  1 .
.
ATOM 877  NZ   NZ   . LYS LYS LYS A A 119 119 . 24.070 32.925 19.192  1.00 18.66  1 .
.
ATOM 878  C    C    . LYS LYS LYS A A 119 119 . 18.679 28.674 22.716  1.00 12.60  1 .
.
ATOM 879  O    O    . LYS LYS LYS A A 119 119 . 17.631 29.296 23.044  1.00 13.96  1 .
.
ATOM 880  N    N    . ALA ALA ALA A A 120 120 . 18.685 27.427 22.218  1.00 13.00  1 .
.
ATOM 881  CA   CA   . ALA ALA ALA A A 120 120 . 17.394 26.694 22.080  1.00 14.07  1 .
.
ATOM 882  CB   CB   . ALA ALA ALA A A 120 120 . 17.644 25.340 21.316  1.00 12.40  1 .
.
ATOM 883  C    C    . ALA ALA ALA A A 120 120 . 16.753 26.450 23.455  1.00 16.00  1 .
.
ATOM 884  O    O    . ALA ALA ALA A A 120 120 . 15.538 26.564 23.623  1.00 16.87  1 .
.
ATOM 885  N    N    . GLY GLY GLY A A 121 121 . 17.588 26.124 24.451  1.00 15.35  1 .
.
ATOM 886  CA   CA   . GLY GLY GLY A A 121 121 . 17.100 25.858 25.753  1.00 15.71  1 .
.
ATOM 887  C    C    . GLY GLY GLY A A 121 121 . 16.450 27.076 26.371  1.00 15.90  1 .
.
ATOM 888  O    O    . GLY GLY GLY A A 121 121 . 15.448 26.937 27.102  1.00 15.73  1 .
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ATOM 889  N    N    . ALA ALA ALA A A 122 122 . 17.042 28.254 26.178  1.00 15.74  1 .
.
ATOM 890  CA   CA   . ALA ALA ALA A A 122 122 . 16.420 29.470 26.601  1.00 15.28  1 .
.
ATOM 891  CB   CB   . ALA ALA ALA A A 122 122 . 17.270 30.696 26.233  1.00 14.76  1 .
.
ATOM 892  C    C    . ALA ALA ALA A A 122 122 . 15.005 29.607 26.038  1.00 16.42  1 .
.
ATOM 893  O    O    . ALA ALA ALA A A 122 122 . 14.087 29.886 26.797  1.00 19.01  1 .
.
ATOM 894  N    N    . ALA ALA ALA A A 123 123 . 14.860 29.429 24.727  1.00 15.46  1 .
.
ATOM 895  CA   CA   . ALA ALA ALA A A 123 123 . 13.545 29.514 24.083  1.00 16.34  1 .
.
ATOM 896  CB   CB   . ALA ALA ALA A A 123 123 . 13.656 29.325 22.604  1.00 17.62  1 .
.
ATOM 897  C    C    . ALA ALA ALA A A 123 123 . 12.575 28.473 24.693  1.00 16.71  1 .
.
ATOM 898  O    O    . ALA ALA ALA A A 123 123 . 11.368 28.800 24.897  1.00 19.50  1 .
.
ATOM 899  N    N    . GLU GLU GLU A A 124 124 . 13.061 27.248 24.933  1.00 16.03  1 .
.
ATOM 900  CA   CA   . GLU GLU GLU A A 124 124 . 12.234 26.202 25.521  1.00 16.97  1 .
.
ATOM 901  CB   CB   . GLU GLU GLU A A 124 124 . 13.015 24.880 25.629  1.00 20.33  1 .
.
ATOM 902  CG   CG   . GLU GLU GLU A A 124 124 . 12.113 23.627 25.781  1.00 26.22  1 .
.
ATOM 903  CD   CD   . GLU GLU GLU A A 124 124 . 11.419 23.212 24.395  1.00 36.61  1 .
.
ATOM 904  OE1  OE1  . GLU GLU GLU A A 124 124 . 10.352 22.565 24.491  1.00 44.89  1 .
.
ATOM 905  OE2  OE2  . GLU GLU GLU A A 124 124 . 11.898 23.508 23.197  1.00 34.42  1 .
.
ATOM 906  C    C    . GLU GLU GLU A A 124 124 . 11.694 26.654 26.880  1.00 18.39  1 .
.
ATOM 907  O    O    . GLU GLU GLU A A 124 124 . 10.513 26.390 27.217  1.00 22.03  1 .
.
ATOM 908  N    N    . ARG ARG ARG A A 125 125 . 12.509 27.330 27.680  1.00 19.88  1 .
.
ATOM 909  CA   CA   . ARG ARG ARG A A 125 125 . 12.071 27.864 28.956  1.00 21.88  1 .
.
ATOM 910  CB   CB   . ARG ARG ARG A A 125 125 . 13.310 28.133 29.821  1.00 22.10  1 .
.
ATOM 911  CG   CG   . ARG ARG ARG A A 125 125 . 14.169 26.923 30.114  1.00 23.58  1 .
.
ATOM 912  CD   CD   . ARG ARG ARG A A 125 125 . 13.637 26.252 31.380  1.00 32.16  1 .
.
ATOM 913  NE   NE   . ARG ARG ARG A A 125 125 . 14.594 25.313 31.952  1.00 38.86  1 .
.
ATOM 914  CZ   CZ   . ARG ARG ARG A A 125 125 . 14.270 24.162 32.579  1.00 41.34  1 .
.
ATOM 915  NH1  NH1  . ARG ARG ARG A A 125 125 . 15.217 23.394 33.086  1.00 39.37  1 .
.
ATOM 916  NH2  NH2  . ARG ARG ARG A A 125 125 . 13.000 23.748 32.676  1.00 44.86  1 .
.
ATOM 917  C    C    . ARG ARG ARG A A 125 125 . 11.290 29.188 28.877  1.00 22.07  1 .
.
ATOM 918  O    O    . ARG ARG ARG A A 125 125 . 10.926 29.688 29.925  1.00 23.07  1 .
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ATOM 919  N    N    . GLU GLU GLU A A 126 126 . 11.101 29.748 27.674  1.00 20.67  1 .
.
ATOM 920  CA   CA   . GLU GLU GLU A A 126 126 . 10.436 31.019 27.435  1.00 21.41  1 .
.
ATOM 921  CB   CB   . GLU GLU GLU A A 126 126 . 8.882  30.900 27.706  1.00 23.61  1 .
.
ATOM 922  C    C    . GLU GLU GLU A A 126 126 . 11.183 32.103 28.276  1.00 22.28  1 .
.
ATOM 923  O    O    . GLU GLU GLU A A 126 126 . 10.569 32.972 28.919  1.00 23.39  1 .
.
ATOM 924  N    N    . LEU LEU LEU A A 127 127 . 12.527 32.075 28.203  1.00 20.96  1 .
.
ATOM 925  CA   CA   . LEU LEU LEU A A 127 127 . 13.403 32.987 28.917  1.00 19.66  1 .
.
ATOM 926  CB   CB   . LEU LEU LEU A A 127 127 . 14.281 32.218 29.921  1.00 20.07  1 .
.
ATOM 927  CG   CG   . LEU LEU LEU A A 127 127 . 13.593 31.651 31.161  1.00 22.27  1 .
.
ATOM 928  CD1  CD1  . LEU LEU LEU A A 127 127 . 14.620 30.914 31.994  1.00 23.63  1 .
.
ATOM 929  CD2  CD2  . LEU LEU LEU A A 127 127 . 13.025 32.864 31.960  1.00 20.76  1 .
.
ATOM 930  C    C    . LEU LEU LEU A A 127 127 . 14.365 33.650 27.891  1.00 17.79  1 .
.
ATOM 931  O    O    . LEU LEU LEU A A 127 127 . 14.779 32.967 26.919  1.00 18.09  1 .
.
ATOM 932  N    N    . PRO PRO PRO A A 128 128 . 14.729 34.930 28.127  1.00 17.56  1 .
.
ATOM 933  CA   CA   . PRO PRO PRO A A 128 128 . 15.834 35.518 27.411  1.00 16.45  1 .
.
ATOM 934  CB   CB   . PRO PRO PRO A A 128 128 . 16.055 36.875 28.079  1.00 17.52  1 .
.
ATOM 935  CG   CG   . PRO PRO PRO A A 128 128 . 15.196 36.961 29.154  1.00 19.83  1 .
.
ATOM 936  CD   CD   . PRO PRO PRO A A 128 128 . 14.260 35.806 29.209  1.00 19.27  1 .
.
ATOM 937  C    C    . PRO PRO PRO A A 128 128 . 17.099 34.692 27.737  1.00 15.42  1 .
.
ATOM 938  O    O    . PRO PRO PRO A A 128 128 . 17.217 34.126 28.868  1.00 16.52  1 .
.
ATOM 939  N    N    . LEU LEU LEU A A 129 129 . 18.065 34.700 26.813  1.00 13.94  1 .
.
ATOM 940  CA   CA   . LEU LEU LEU A A 129 129 . 19.227 33.860 27.021  1.00 13.33  1 .
.
ATOM 941  CB   CB   . LEU LEU LEU A A 129 129 . 20.194 34.005 25.862  1.00 14.55  1 .
.
ATOM 942  CG   CG   . LEU LEU LEU A A 129 129 . 21.531 33.228 25.872  1.00 12.50  1 .
.
ATOM 943  CD1  CD1  . LEU LEU LEU A A 129 129 . 21.357 31.700 26.008  1.00 12.63  1 .
.
ATOM 944  CD2  CD2  . LEU LEU LEU A A 129 129 . 22.256 33.600 24.563  1.00 12.90  1 .
.
ATOM 945  C    C    . LEU LEU LEU A A 129 129 . 19.972 34.163 28.352  1.00 13.77  1 .
.
ATOM 946  O    O    . LEU LEU LEU A A 129 129 . 20.380 33.224 29.033  1.00 14.04  1 .
.
ATOM 947  N    N    . TYR TYR TYR A A 130 130 . 20.161 35.441 28.720  1.00 13.05  1 .
.
ATOM 948  CA   CA   . TYR TYR TYR A A 130 130 . 20.910 35.745 29.961  1.00 12.67  1 .
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ATOM 949  CB   CB   . TYR TYR TYR A A 130 130 . 21.135 37.259 30.104  1.00 12.41  1 .
.
ATOM 950  CG   CG   . TYR TYR TYR A A 130 130 . 19.864 38.096 30.152  1.00 13.66  1 .
.
ATOM 951  CD1  CD1  . TYR TYR TYR A A 130 130 . 19.197 38.348 31.383  1.00 16.03  1 .
.
ATOM 952  CE1  CE1  . TYR TYR TYR A A 130 130 . 18.042 39.182 31.411  1.00 16.83  1 .
.
ATOM 953  CZ   CZ   . TYR TYR TYR A A 130 130 . 17.501 39.658 30.234  1.00 18.31  1 .
.
ATOM 954  OH   OH   . TYR TYR TYR A A 130 130 . 16.334 40.404 30.319  1.00 20.10  1 .
.
ATOM 955  CE2  CE2  . TYR TYR TYR A A 130 130 . 18.150 39.413 29.016  1.00 15.62  1 .
.
ATOM 956  CD2  CD2  . TYR TYR TYR A A 130 130 . 19.290 38.603 28.988  1.00 13.43  1 .
.
ATOM 957  C    C    . TYR TYR TYR A A 130 130 . 20.213 35.148 31.171  1.00 13.78  1 .
.
ATOM 958  O    O    . TYR TYR TYR A A 130 130 . 20.901 34.771 32.118  1.00 14.88  1 .
.
ATOM 959  N    N    . ARG ARG ARG A A 131 131 . 18.882 35.090 31.162  1.00 13.28  1 .
.
ATOM 960  CA   CA   . ARG ARG ARG A A 131 131 . 18.161 34.502 32.327  1.00 15.55  1 .
.
ATOM 961  CB   CB   . ARG ARG ARG A A 131 131 . 16.693 34.942 32.340  1.00 19.02  1 .
.
ATOM 962  CG   CG   . ARG ARG ARG A A 131 131 . 16.535 36.239 33.017  1.00 24.30  1 .
.
ATOM 963  CD   CD   . ARG ARG ARG A A 131 131 . 15.095 36.439 33.552  1.00 32.26  1 .
.
ATOM 964  NE   NE   . ARG ARG ARG A A 131 131 . 14.577 37.632 32.858  1.00 40.80  1 .
.
ATOM 965  CZ   CZ   . ARG ARG ARG A A 131 131 . 14.433 38.857 33.394  1.00 47.20  1 .
.
ATOM 966  NH1  NH1  . ARG ARG ARG A A 131 131 . 13.971 39.884 32.612  1.00 49.47  1 .
.
ATOM 967  NH2  NH2  . ARG ARG ARG A A 131 131 . 14.718 39.060 34.708  1.00 49.53  1 .
.
ATOM 968  C    C    . ARG ARG ARG A A 131 131 . 18.276 32.990 32.337  1.00 16.12  1 .
.
ATOM 969  O    O    . ARG ARG ARG A A 131 131 . 18.429 32.374 33.372  1.00 16.67  1 .
.
ATOM 970  N    N    . HIS HIS HIS A A 132 132 . 18.255 32.383 31.156  1.00 13.66  1 .
.
ATOM 971  CA   CA   . HIS HIS HIS A A 132 132 . 18.462 30.912 31.125  1.00 13.32  1 .
.
ATOM 972  CB   CB   . HIS HIS HIS A A 132 132 . 18.241 30.441 29.673  1.00 14.74  1 .
.
ATOM 973  CG   CG   . HIS HIS HIS A A 132 132 . 18.510 28.967 29.465  1.00 14.42  1 .
.
ATOM 974  ND1  ND1  . HIS HIS HIS A A 132 132 . 17.906 27.971 30.231  1.00 16.42  1 .
.
ATOM 975  CE1  CE1  . HIS HIS HIS A A 132 132 . 18.329 26.789 29.793  1.00 19.67  1 .
.
ATOM 976  NE2  NE2  . HIS HIS HIS A A 132 132 . 19.197 26.985 28.803  1.00 16.74  1 .
.
ATOM 977  CD2  CD2  . HIS HIS HIS A A 132 132 . 19.327 28.341 28.593  1.00 14.55  1 .
.
ATOM 978  C    C    . HIS HIS HIS A A 132 132 . 19.897 30.552 31.639  1.00 12.96  1 .
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ATOM 979  O    O    . HIS HIS HIS A A 132 132 . 20.082 29.604 32.388  1.00 15.17  1 .
.
ATOM 980  N    N    . ILE ILE ILE A A 133 133 . 20.925 31.321 31.218  1.00 13.81  1 .
.
ATOM 981  CA   CA   . ILE ILE ILE A A 133 133 . 22.272 31.081 31.701  1.00 13.71  1 .
.
ATOM 982  CB   CB   . ILE ILE ILE A A 133 133 . 23.236 32.049 30.976  1.00 13.80  1 .
.
ATOM 983  CG1  CG1  . ILE ILE ILE A A 133 133 . 23.335 31.529 29.499  1.00 13.50  1 .
.
ATOM 984  CD   CD   . ILE ILE ILE A A 133 133 . 24.170 32.569 28.599  1.00 15.35  1 .
.
ATOM 985  CG2  CG2  . ILE ILE ILE A A 133 133 . 24.630 32.090 31.692  1.00 15.54  1 .
.
ATOM 986  C    C    . ILE ILE ILE A A 133 133 . 22.336 31.293 33.240  1.00 14.53  1 .
.
ATOM 987  O    O    . ILE ILE ILE A A 133 133 . 22.988 30.513 33.895  1.00 17.28  1 .
.
ATOM 988  N    N    . ALA ALA ALA A A 134 134 . 21.733 32.362 33.760  1.00 16.81  1 .
.
ATOM 989  CA   CA   . ALA ALA ALA A A 134 134 . 21.633 32.578 35.228  1.00 17.30  1 .
.
ATOM 990  CB   CB   . ALA ALA ALA A A 134 134 . 20.813 33.808 35.532  1.00 17.72  1 .
.
ATOM 991  C    C    . ALA ALA ALA A A 134 134 . 21.064 31.316 35.897  1.00 18.35  1 .
.
ATOM 992  O    O    . ALA ALA ALA A A 134 134 . 21.615 30.800 36.888  1.00 19.30  1 .
.
ATOM 993  N    N    . GLN GLN GLN A A 135 135 . 20.017 30.762 35.327  1.00 19.36  1 .
.
ATOM 994  CA   CA   . GLN GLN GLN A A 135 135 . 19.427 29.550 35.943  1.00 19.38  1 .
.
ATOM 995  CB   CB   . GLN GLN GLN A A 135 135 . 18.082 29.212 35.314  1.00 18.68  1 .
.
ATOM 996  CG   CG   . GLN GLN GLN A A 135 135 . 17.114 30.269 35.726  1.00 22.15  1 .
.
ATOM 997  CD   CD   . GLN GLN GLN A A 135 135 . 15.657 30.006 35.282  1.00 23.64  1 .
.
ATOM 998  OE1  OE1  . GLN GLN GLN A A 135 135 . 15.336 28.979 34.622  1.00 29.04  1 .
.
ATOM 999  NE2  NE2  . GLN GLN GLN A A 135 135 . 14.767 30.937 35.663  1.00 26.12  1 .
.
ATOM 1000 C    C    . GLN GLN GLN A A 135 135 . 20.371 28.351 35.903  1.00 20.06  1 .
.
ATOM 1001 O    O    . GLN GLN GLN A A 135 135 . 20.488 27.620 36.896  1.00 22.19  1 .
.
ATOM 1002 N    N    . LEU LEU LEU A A 136 136 . 21.052 28.148 34.763  1.00 18.55  1 .
.
ATOM 1003 CA   CA   . LEU LEU LEU A A 136 136 . 22.017 27.078 34.636  1.00 20.00  1 .
.
ATOM 1004 CB   CB   . LEU LEU LEU A A 136 136 . 22.695 27.060 33.254  1.00 18.55  1 .
.
ATOM 1005 CG   CG   . LEU LEU LEU A A 136 136 . 21.782 26.650 32.102  1.00 15.40  1 .
.
ATOM 1006 CD1  CD1  . LEU LEU LEU A A 136 136 . 22.521 26.817 30.767  1.00 16.65  1 .
.
ATOM 1007 CD2  CD2  . LEU LEU LEU A A 136 136 . 21.321 25.162 32.258  1.00 19.35  1 .
.
ATOM 1008 C    C    . LEU LEU LEU A A 136 136 . 23.121 27.222 35.686  1.00 20.86  1 .
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ATOM 1009 O    O    . LEU LEU LEU A A 136 136 . 23.682 26.210 36.131  1.00 22.95  1 .
.
ATOM 1010 N    N    . ALA ALA ALA A A 137 137 . 23.490 28.456 36.005  1.00 21.22  1 .
.
ATOM 1011 CA   CA   . ALA ALA ALA A A 137 137 . 24.620 28.718 36.875  1.00 21.53  1 .
.
ATOM 1012 CB   CB   . ALA ALA ALA A A 137 137 . 25.236 30.065 36.485  1.00 21.15  1 .
.
ATOM 1013 C    C    . ALA ALA ALA A A 137 137 . 24.121 28.811 38.315  1.00 24.25  1 .
.
ATOM 1014 O    O    . ALA ALA ALA A A 137 137 . 24.956 28.889 39.258  1.00 25.62  1 .
.
ATOM 1015 N    N    . GLY GLY GLY A A 138 138 . 22.799 28.903 38.491  1.00 24.82  1 .
.
ATOM 1016 CA   CA   . GLY GLY GLY A A 138 138 . 22.215 29.039 39.858  1.00 27.33  1 .
.
ATOM 1017 C    C    . GLY GLY GLY A A 138 138 . 22.250 30.444 40.438  1.00 27.78  1 .
.
ATOM 1018 O    O    . GLY GLY GLY A A 138 138 . 22.229 30.601 41.655  1.00 29.09  1 .
.
ATOM 1019 N    N    . ASN ASN ASN A A 139 139 . 22.182 31.470 39.591  1.00 25.91  1 .
.
ATOM 1020 CA   CA   . ASN ASN ASN A A 139 139 . 22.105 32.853 39.994  1.00 25.57  1 .
.
ATOM 1021 CB   CB   . ASN ASN ASN A A 139 139 . 23.050 33.737 39.093  1.00 25.12  1 .
.
ATOM 1022 CG   CG   . ASN ASN ASN A A 139 139 . 24.494 33.307 39.177  1.00 26.71  1 .
.
ATOM 1023 OD1  OD1  . ASN ASN ASN A A 139 139 . 25.247 33.418 38.205  1.00 23.69  1 .
.
ATOM 1024 ND2  ND2  . ASN ASN ASN A A 139 139 . 24.897 32.789 40.347  1.00 25.24  1 .
.
ATOM 1025 C    C    . ASN ASN ASN A A 139 139 . 20.714 33.378 39.855  1.00 28.24  1 .
.
ATOM 1026 O    O    . ASN ASN ASN A A 139 139 . 19.995 32.980 38.926  1.00 24.84  1 .
.
ATOM 1027 N    N    . SER SER SER A A 140 140 . 20.343 34.283 40.780  1.00 31.37  1 .
.
ATOM 1028 CA   CA   . SER SER SER A A 140 140 . 19.113 35.063 40.719  1.00 33.46  1 .
.
ATOM 1029 CB   CB   . SER SER SER A A 140 140 . 18.362 34.958 42.050  1.00 35.67  1 .
.
ATOM 1030 OG   OG   . SER SER SER A A 140 140 . 18.317 33.602 42.480  1.00 39.82  1 .
.
ATOM 1031 C    C    . SER SER SER A A 140 140 . 19.217 36.537 40.420  1.00 34.59  1 .
.
ATOM 1032 O    O    . SER SER SER A A 140 140 . 18.288 37.104 39.849  1.00 36.48  1 .
.
ATOM 1033 N    N    . ASP ASP ASP A A 141 141 . 20.320 37.207 40.724  1.00 33.83  1 .
.
ATOM 1034 CA   CA   . ASP ASP ASP A A 141 141 . 20.216 38.663 40.813  1.00 32.98  1 .
.
ATOM 1035 CB   CB   . ASP ASP ASP A A 141 141 . 20.408 39.164 42.299  1.00 33.42  1 .
.
ATOM 1036 CG   CG   . ASP ASP ASP A A 141 141 . 19.270 38.771 43.219  1.00 35.26  1 .
.
ATOM 1037 C    C    . ASP ASP ASP A A 141 141 . 21.239 39.336 39.883  1.00 31.53  1 .
.
ATOM 1038 O    O    . ASP ASP ASP A A 141 141 . 22.322 39.679 40.351  1.00 33.47  1 .
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ATOM 1039 N    N    . LEU LEU LEU A A 142 142 . 20.846 39.545 38.608  1.00 26.17  1 .
.
ATOM 1040 CA   CA   . LEU LEU LEU A A 142 142 . 21.704 39.821 37.425  1.00 22.75  1 .
.
ATOM 1041 CB   CB   . LEU LEU LEU A A 142 142 . 20.824 39.809 36.150  1.00 20.35  1 .
.
ATOM 1042 CG   CG   . LEU LEU LEU A A 142 142 . 19.868 38.604 35.936  1.00 21.90  1 .
.
ATOM 1043 CD1  CD1  . LEU LEU LEU A A 142 142 . 18.718 38.959 35.025  1.00 24.91  1 .
.
ATOM 1044 CD2  CD2  . LEU LEU LEU A A 142 142 . 20.515 37.447 35.268  1.00 23.46  1 .
.
ATOM 1045 C    C    . LEU LEU LEU A A 142 142 . 22.511 41.152 37.497  1.00 22.22  1 .
.
ATOM 1046 O    O    . LEU LEU LEU A A 142 142 . 22.033 42.135 38.101  1.00 22.49  1 .
.
ATOM 1047 N    N    . ILE ILE ILE A A 143 143 . 23.683 41.197 36.854  1.00 18.87  1 .
.
ATOM 1048 CA   CA   . ILE ILE ILE A A 143 143 . 24.501 42.404 36.955  1.00 17.95  1 .
.
ATOM 1049 CB   CB   . ILE ILE ILE A A 143 143 . 25.845 42.009 37.769  1.00 19.38  1 .
.
ATOM 1050 CG1  CG1  . ILE ILE ILE A A 143 143 . 25.530 41.619 39.218  1.00 22.42  1 .
.
ATOM 1051 CD   CD   . ILE ILE ILE A A 143 143 . 25.203 42.822 40.149  1.00 28.77  1 .
.
ATOM 1052 CG2  CG2  . ILE ILE ILE A A 143 143 . 26.920 43.098 37.612  1.00 21.27  1 .
.
ATOM 1053 C    C    . ILE ILE ILE A A 143 143 . 24.994 42.824 35.570  1.00 15.49  1 .
.
ATOM 1054 O    O    . ILE ILE ILE A A 143 143 . 25.399 41.944 34.808  1.00 15.37  1 .
.
ATOM 1055 N    N    . LEU LEU LEU A A 144 144 . 24.834 44.089 35.171  1.00 12.30  1 .
.
ATOM 1056 CA   CA   . LEU LEU LEU A A 144 144 . 25.523 44.531 33.945  1.00 11.16  1 .
.
ATOM 1057 CB   CB   . LEU LEU LEU A A 144 144 . 24.904 45.859 33.441  1.00 11.34  1 .
.
ATOM 1058 CG   CG   . LEU LEU LEU A A 144 144 . 23.703 45.718 32.498  1.00 13.60  1 .
.
ATOM 1059 CD1  CD1  . LEU LEU LEU A A 144 144 . 24.060 45.060 31.101  1.00 15.72  1 .
.
ATOM 1060 CD2  CD2  . LEU LEU LEU A A 144 144 . 22.541 44.921 33.125  1.00 17.14  1 .
.
ATOM 1061 C    C    . LEU LEU LEU A A 144 144 . 26.998 44.753 34.276  1.00 12.24  1 .
.
ATOM 1062 O    O    . LEU LEU LEU A A 144 144 . 27.346 45.406 35.278  1.00 12.99  1 .
.
ATOM 1063 N    N    . PRO PRO PRO A A 145 145 . 27.899 44.268 33.426  1.00 11.93  1 .
.
ATOM 1064 CA   CA   . PRO PRO PRO A A 145 145 . 29.336 44.358 33.741  1.00 11.84  1 .
.
ATOM 1065 CB   CB   . PRO PRO PRO A A 145 145 . 29.968 43.300 32.823  1.00 11.20  1 .
.
ATOM 1066 CG   CG   . PRO PRO PRO A A 145 145 . 29.017 43.309 31.577  1.00 10.30  1 .
.
ATOM 1067 CD   CD   . PRO PRO PRO A A 145 145 . 27.604 43.580 32.125  1.00 11.14  1 .
.
ATOM 1068 C    C    . PRO PRO PRO A A 145 145 . 29.993 45.685 33.335  1.00 11.57  1 .
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ATOM 1069 O    O    . PRO PRO PRO A A 145 145 . 29.479 46.416 32.490  1.00 11.31  1 .
.
ATOM 1070 N    N    . VAL VAL VAL A A 146 146 . 31.108 45.984 33.972  1.00 11.18  1 .
.
ATOM 1071 CA   CA   . VAL VAL VAL A A 146 146 . 31.962 47.051 33.426  1.00 12.32  1 .
.
ATOM 1072 CB   CB   . VAL VAL VAL A A 146 146 . 33.043 47.523 34.442  1.00 13.11  1 .
.
ATOM 1073 CG1  CG1  . VAL VAL VAL A A 146 146 . 33.960 48.625 33.794  1.00 14.90  1 .
.
ATOM 1074 CG2  CG2  . VAL VAL VAL A A 146 146 . 32.324 48.083 35.719  1.00 14.10  1 .
.
ATOM 1075 C    C    . VAL VAL VAL A A 146 146 . 32.629 46.528 32.194  1.00 12.08  1 .
.
ATOM 1076 O    O    . VAL VAL VAL A A 146 146 . 33.208 45.444 32.249  1.00 13.34  1 .
.
ATOM 1077 N    N    . PRO PRO PRO A A 147 147 . 32.515 47.267 31.076  1.00 12.36  1 .
.
ATOM 1078 CA   CA   . PRO PRO PRO A A 147 147 . 33.248 46.812 29.886  1.00 12.64  1 .
.
ATOM 1079 CB   CB   . PRO PRO PRO A A 147 147 . 32.493 47.565 28.757  1.00 12.77  1 .
.
ATOM 1080 CG   CG   . PRO PRO PRO A A 147 147 . 32.094 48.938 29.422  1.00 11.21  1 .
.
ATOM 1081 CD   CD   . PRO PRO PRO A A 147 147 . 31.720 48.492 30.844  1.00 12.35  1 .
.
ATOM 1082 C    C    . PRO PRO PRO A A 147 147 . 34.716 47.250 29.958  1.00 13.90  1 .
.
ATOM 1083 O    O    . PRO PRO PRO A A 147 147 . 34.990 48.378 30.406  1.00 13.33  1 .
.
ATOM 1084 N    N    . ALA ALA ALA A A 148 148 . 35.611 46.418 29.434  1.00 12.08  1 .
.
ATOM 1085 CA   CA   . ALA ALA ALA A A 148 148 . 37.018 46.740 29.336  1.00 12.12  1 .
.
ATOM 1086 CB   CB   . ALA ALA ALA A A 148 148 . 37.830 45.735 30.015  1.00 14.21  1 .
.
ATOM 1087 C    C    . ALA ALA ALA A A 148 148 . 37.355 46.836 27.860  1.00 13.16  1 .
.
ATOM 1088 O    O    . ALA ALA ALA A A 148 148 . 37.420 45.798 27.135  1.00 15.33  1 .
.
ATOM 1089 N    N    . PHE PHE PHE A A 149 149 . 37.544 48.077 27.435  1.00 13.48  1 .
.
ATOM 1090 CA   CA   . PHE PHE PHE A A 149 149 . 37.692 48.344 25.959  1.00 13.35  1 .
.
ATOM 1091 CB   CB   . PHE PHE PHE A A 149 149 . 37.114 49.694 25.556  1.00 12.99  1 .
.
ATOM 1092 CG   CG   . PHE PHE PHE A A 149 149 . 35.649 49.872 25.823  1.00 13.83  1 .
.
ATOM 1093 CD1  CD1  . PHE PHE PHE A A 149 149 . 34.631 49.288 25.010  1.00 13.20  1 .
.
ATOM 1094 CE1  CE1  . PHE PHE PHE A A 149 149 . 33.317 49.501 25.268  1.00 14.32  1 .
.
ATOM 1095 CZ   CZ   . PHE PHE PHE A A 149 149 . 32.934 50.318 26.345  1.00 13.38  1 .
.
ATOM 1096 CE2  CE2  . PHE PHE PHE A A 149 149 . 33.953 50.915 27.146  1.00 11.89  1 .
.
ATOM 1097 CD2  CD2  . PHE PHE PHE A A 149 149 . 35.252 50.669 26.875  1.00 15.64  1 .
.
ATOM 1098 C    C    . PHE PHE PHE A A 149 149 . 39.160 48.395 25.570  1.00 14.96  1 .
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ATOM 1099 O    O    . PHE PHE PHE A A 149 149 . 39.889 49.283 26.057  1.00 15.39  1 .
.
ATOM 1100 N    N    . ASN ASN ASN A A 150 150 . 39.595 47.553 24.614  1.00 15.21  1 .
.
ATOM 1101 CA   CA   . ASN ASN ASN A A 150 150 . 41.008 47.489 24.187  1.00 16.22  1 .
.
ATOM 1102 CB   CB   . ASN ASN ASN A A 150 150 . 41.221 46.050 23.613  1.00 17.50  1 .
.
ATOM 1103 CG   CG   . ASN ASN ASN A A 150 150 . 42.607 45.782 23.030  1.00 21.42  1 .
.
ATOM 1104 OD1  OD1  . ASN ASN ASN A A 150 150 . 42.816 44.716 22.386  1.00 24.81  1 .
.
ATOM 1105 ND2  ND2  . ASN ASN ASN A A 150 150 . 43.589 46.691 23.278  1.00 18.54  1 .
.
ATOM 1106 C    C    . ASN ASN ASN A A 150 150 . 41.257 48.552 23.140  1.00 18.34  1 .
.
ATOM 1107 O    O    . ASN ASN ASN A A 150 150 . 41.095 48.272 21.936  1.00 19.60  1 .
.
ATOM 1108 N    N    . VAL VAL VAL A A 151 151 . 41.746 49.735 23.561  1.00 16.78  1 .
.
ATOM 1109 CA   CA   . VAL VAL VAL A A 151 151 . 41.785 50.882 22.682  1.00 18.11  1 .
.
ATOM 1110 CB   CB   . VAL VAL VAL A A 151 151 . 41.256 52.124 23.393  1.00 19.63  1 .
.
ATOM 1111 CG1  CG1  . VAL VAL VAL A A 151 151 . 39.776 51.915 23.805  1.00 21.15  1 .
.
ATOM 1112 CG2  CG2  . VAL VAL VAL A A 151 151 . 42.191 52.532 24.587  1.00 19.06  1 .
.
ATOM 1113 C    C    . VAL VAL VAL A A 151 151 . 43.125 51.119 22.007  1.00 17.75  1 .
.
ATOM 1114 O    O    . VAL VAL VAL A A 151 151 . 43.132 51.964 21.078  1.00 18.41  1 .
.
ATOM 1115 N    N    . ILE ILE ILE A A 152 152 . 44.204 50.445 22.447  1.00 16.52  1 .
.
ATOM 1116 CA   CA   . ILE ILE ILE A A 152 152 . 45.442 50.414 21.737  1.00 20.02  1 .
.
ATOM 1117 CB   CB   . ILE ILE ILE A A 152 152 . 46.620 51.256 22.401  1.00 19.56  1 .
.
ATOM 1118 CG1  CG1  . ILE ILE ILE A A 152 152 . 46.180 52.729 22.394  1.00 21.74  1 .
.
ATOM 1119 CD   CD   . ILE ILE ILE A A 152 152 . 47.145 53.713 22.957  1.00 21.46  1 .
.
ATOM 1120 CG2  CG2  . ILE ILE ILE A A 152 152 . 47.952 50.987 21.608  1.00 21.48  1 .
.
ATOM 1121 C    C    . ILE ILE ILE A A 152 152 . 45.807 48.951 21.652  1.00 20.40  1 .
.
ATOM 1122 O    O    . ILE ILE ILE A A 152 152 . 45.872 48.247 22.673  1.00 21.19  1 .
.
ATOM 1123 N    N    . ASN ASN ASN A A 153 153 . 45.992 48.473 20.394  1.00 20.42  1 .
.
ATOM 1124 CA   CA   . ASN ASN ASN A A 153 153 . 46.286 47.089 20.174  1.00 20.35  1 .
.
ATOM 1125 CB   CB   . ASN ASN ASN A A 153 153 . 45.531 46.585 18.924  1.00 19.34  1 .
.
ATOM 1126 CG   CG   . ASN ASN ASN A A 153 153 . 44.004 46.443 19.147  1.00 23.02  1 .
.
ATOM 1127 OD1  OD1  . ASN ASN ASN A A 153 153 . 43.261 46.076 18.204  1.00 20.12  1 .
.
ATOM 1128 ND2  ND2  . ASN ASN ASN A A 153 153 . 43.525 46.758 20.374  1.00 25.45  1 .
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ATOM 1129 C    C    . ASN ASN ASN A A 153 153 . 47.744 46.948 19.890  1.00 20.99  1 .
.
ATOM 1130 O    O    . ASN ASN ASN A A 153 153 . 48.312 47.778 19.125  1.00 21.93  1 .
.
ATOM 1131 N    N    . GLY GLY GLY A A 154 154 . 48.357 45.955 20.487  1.00 23.12  1 .
.
ATOM 1132 CA   CA   . GLY GLY GLY A A 154 154 . 49.757 45.609 20.193  1.00 22.65  1 .
.
ATOM 1133 C    C    . GLY GLY GLY A A 154 154 . 49.933 44.094 20.064  1.00 21.06  1 .
.
ATOM 1134 O    O    . GLY GLY GLY A A 154 154 . 48.983 43.380 19.722  1.00 20.81  1 .
.
ATOM 1135 N    N    . GLY GLY GLY A A 155 155 . 51.116 43.582 20.384  1.00 19.67  1 .
.
ATOM 1136 CA   CA   . GLY GLY GLY A A 155 155 . 51.394 42.166 20.335  1.00 21.63  1 .
.
ATOM 1137 C    C    . GLY GLY GLY A A 155 155 . 51.028 41.506 19.012  1.00 23.48  1 .
.
ATOM 1138 O    O    . GLY GLY GLY A A 155 155 . 51.220 42.083 17.908  1.00 22.67  1 .
.
ATOM 1139 N    N    . SER SER SER A A 156 156 . 50.422 40.319 19.116  1.00 23.09  1 .
.
ATOM 1140 CA   CA   . SER SER SER A A 156 156 . 50.100 39.548 17.936  1.00 25.03  1 .
.
ATOM 1141 CB   CB   . SER SER SER A A 156 156 . 49.913 38.078 18.364  1.00 25.22  1 .
.
ATOM 1142 OG   OG   . SER SER SER A A 156 156 . 51.183 37.508 18.765  1.00 27.17  1 .
.
ATOM 1143 C    C    . SER SER SER A A 156 156 . 48.835 40.047 17.229  1.00 23.13  1 .
.
ATOM 1144 O    O    . SER SER SER A A 156 156 . 48.406 39.422 16.239  1.00 24.90  1 .
.
ATOM 1145 N    N    . HIS HIS HIS A A 157 157 . 48.251 41.158 17.718  1.00 21.27  1 .
.
ATOM 1146 CA   CA   . HIS HIS HIS A A 157 157 . 47.037 41.689 17.101  1.00 20.21  1 .
.
ATOM 1147 CB   CB   . HIS HIS HIS A A 157 157 . 46.036 42.125 18.189  1.00 21.05  1 .
.
ATOM 1148 CG   CG   . HIS HIS HIS A A 157 157 . 45.529 40.990 19.022  1.00 19.58  1 .
.
ATOM 1149 ND1  ND1  . HIS HIS HIS A A 157 157 . 44.778 41.182 20.173  1.00 20.97  1 .
.
ATOM 1150 CE1  CE1  . HIS HIS HIS A A 157 157 . 44.496 40.000 20.707  1.00 23.20  1 .
.
ATOM 1151 NE2  NE2  . HIS HIS HIS A A 157 157 . 45.048 39.052 19.950  1.00 20.86  1 .
.
ATOM 1152 CD2  CD2  . HIS HIS HIS A A 157 157 . 45.707 39.650 18.894  1.00 22.16  1 .
.
ATOM 1153 C    C    . HIS HIS HIS A A 157 157 . 47.245 42.906 16.276  1.00 20.42  1 .
.
ATOM 1154 O    O    . HIS HIS HIS A A 157 157 . 46.245 43.438 15.737  1.00 18.43  1 .
.
ATOM 1155 N    N    . ALA ALA ALA A A 158 158 . 48.509 43.380 16.122  1.00 20.71  1 .
.
ATOM 1156 CA   CA   . ALA ALA ALA A A 158 158 . 48.685 44.618 15.348  1.00 21.20  1 .
.
ATOM 1157 CB   CB   . ALA ALA ALA A A 158 158 . 48.418 45.878 16.208  1.00 21.98  1 .
.
ATOM 1158 C    C    . ALA ALA ALA A A 158 158 . 50.081 44.653 14.689  1.00 21.28  1 .
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ATOM 1159 O    O    . ALA ALA ALA A A 158 158 . 51.000 43.969 15.162  1.00 23.06  1 .
.
ATOM 1160 N    N    . GLY GLY GLY A A 159 159 . 50.140 45.388 13.596  1.00 22.84  1 .
.
ATOM 1161 CA   CA   . GLY GLY GLY A A 159 159 . 51.372 45.667 12.858  1.00 25.69  1 .
.
ATOM 1162 C    C    . GLY GLY GLY A A 159 159 . 51.997 46.912 13.508  1.00 26.51  1 .
.
ATOM 1163 O    O    . GLY GLY GLY A A 159 159 . 51.732 48.054 13.115  1.00 30.37  1 .
.
ATOM 1164 N    N    . ASN ASN ASN A A 160 160 . 52.768 46.695 14.552  1.00 27.41  1 .
.
ATOM 1165 CA   CA   . ASN ASN ASN A A 160 160 . 53.532 47.786 15.193  1.00 25.66  1 .
.
ATOM 1166 CB   CB   . ASN ASN ASN A A 160 160 . 52.636 48.795 15.970  1.00 24.31  1 .
.
ATOM 1167 CG   CG   . ASN ASN ASN A A 160 160 . 51.687 48.126 17.020  1.00 25.70  1 .
.
ATOM 1168 OD1  OD1  . ASN ASN ASN A A 160 160 . 51.781 46.915 17.330  1.00 21.24  1 .
.
ATOM 1169 ND2  ND2  . ASN ASN ASN A A 160 160 . 50.791 48.976 17.624  1.00 24.16  1 .
.
ATOM 1170 C    C    . ASN ASN ASN A A 160 160 . 54.571 47.067 16.025  1.00 23.79  1 .
.
ATOM 1171 O    O    . ASN ASN ASN A A 160 160 . 54.570 45.843 16.010  1.00 24.11  1 .
.
ATOM 1172 N    N    . LYS LYS LYS A A 161 161 . 55.508 47.769 16.682  1.00 23.28  1 .
.
ATOM 1173 CA   CA   . LYS LYS LYS A A 161 161 . 56.495 47.062 17.513  1.00 23.98  1 .
.
ATOM 1174 CB   CB   . LYS LYS LYS A A 161 161 . 57.764 47.901 17.671  1.00 24.15  1 .
.
ATOM 1175 CG   CG   . LYS LYS LYS A A 161 161 . 58.362 48.384 16.265  1.00 30.08  1 .
.
ATOM 1176 CD   CD   . LYS LYS LYS A A 161 161 . 59.847 48.828 16.446  1.00 35.48  1 .
.
ATOM 1177 CE   CE   . LYS LYS LYS A A 161 161 . 60.430 49.328 15.155  1.00 38.10  1 .
.
ATOM 1178 NZ   NZ   . LYS LYS LYS A A 161 161 . 61.689 50.121 15.472  1.00 40.34  1 .
.
ATOM 1179 C    C    . LYS LYS LYS A A 161 161 . 55.967 46.782 18.904  1.00 23.96  1 .
.
ATOM 1180 O    O    . LYS LYS LYS A A 161 161 . 56.466 45.892 19.560  1.00 25.33  1 .
.
ATOM 1181 N    N    . LEU LEU LEU A A 162 162 . 54.963 47.572 19.329  1.00 25.16  1 .
.
ATOM 1182 CA   CA   . LEU LEU LEU A A 162 162 . 54.359 47.495 20.688  1.00 23.88  1 .
.
ATOM 1183 CB   CB   . LEU LEU LEU A A 162 162 . 53.070 48.290 20.646  1.00 23.39  1 .
.
ATOM 1184 CG   CG   . LEU LEU LEU A A 162 162 . 52.315 48.495 21.996  1.00 23.40  1 .
.
ATOM 1185 CD1  CD1  . LEU LEU LEU A A 162 162 . 53.125 49.409 22.919  1.00 27.59  1 .
.
ATOM 1186 CD2  CD2  . LEU LEU LEU A A 162 162 . 51.013 49.210 21.651  1.00 24.56  1 .
.
ATOM 1187 C    C    . LEU LEU LEU A A 162 162 . 54.139 45.999 21.069  1.00 23.26  1 .
.
ATOM 1188 O    O    . LEU LEU LEU A A 162 162 . 53.370 45.300 20.363  1.00 24.18  1 .
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ATOM 1189 N    N    . ALA ALA ALA A A 163 163 . 54.864 45.477 22.063  1.00 20.71  1 .
.
ATOM 1190 CA   CA   . ALA ALA ALA A A 163 163 . 54.835 44.100 22.378  1.00 20.72  1 .
.
ATOM 1191 CB   CB   . ALA ALA ALA A A 163 163 . 56.061 43.787 23.243  1.00 19.76  1 .
.
ATOM 1192 C    C    . ALA ALA ALA A A 163 163 . 53.629 43.685 23.194  1.00 22.35  1 .
.
ATOM 1193 O    O    . ALA ALA ALA A A 163 163 . 53.154 42.555 23.089  1.00 22.39  1 .
.
ATOM 1194 N    N    . MET MET MET A A 164 164 . 53.202 44.538 24.129  1.00 23.35  1 .
.
ATOM 1195 CA   CA   . MET MET MET A A 164 164 . 52.075 44.107 25.004  1.00 22.90  1 .
.
ATOM 1196 CB   CB   . MET MET MET A A 164 164 . 52.072 44.966 26.281  1.00 23.59  1 .
.
ATOM 1197 CG   CG   . MET MET MET A A 164 164 . 53.258 44.524 27.132  1.00 25.56  1 .
.
ATOM 1198 SD   SD   . MET MET MET A A 164 164 . 53.384 45.515 28.666  1.00 25.98  1 .
.
ATOM 1199 CE   CE   . MET MET MET A A 164 164 . 54.929 44.817 29.342  1.00 28.32  1 .
.
ATOM 1200 C    C    . MET MET MET A A 164 164 . 50.835 44.156 24.188  1.00 21.38  1 .
.
ATOM 1201 O    O    . MET MET MET A A 164 164 . 50.696 45.026 23.308  1.00 22.70  1 .
.
ATOM 1202 N    N    . GLN GLN GLN A A 165 165 . 49.920 43.188 24.445  1.00 20.13  1 .
.
ATOM 1203 CA   CA   . GLN GLN GLN A A 165 165 . 48.796 42.994 23.507  1.00 19.81  1 .
.
ATOM 1204 CB   CB   . GLN GLN GLN A A 165 165 . 48.265 41.571 23.662  1.00 19.51  1 .
.
ATOM 1205 CG   CG   . GLN GLN GLN A A 165 165 . 47.272 41.076 22.557  1.00 18.63  1 .
.
ATOM 1206 CD   CD   . GLN GLN GLN A A 165 165 . 46.861 39.683 22.955  1.00 19.15  1 .
.
ATOM 1207 OE1  OE1  . GLN GLN GLN A A 165 165 . 45.892 39.461 23.790  1.00 23.79  1 .
.
ATOM 1208 NE2  NE2  . GLN GLN GLN A A 165 165 . 47.636 38.735 22.524  1.00 17.83  1 .
.
ATOM 1209 C    C    . GLN GLN GLN A A 165 165 . 47.712 44.043 23.575  1.00 18.10  1 .
.
ATOM 1210 O    O    . GLN GLN GLN A A 165 165 . 47.189 44.486 22.521  1.00 19.13  1 .
.
ATOM 1211 N    N    . GLU GLU GLU A A 166 166 . 47.263 44.384 24.795  1.00 17.17  1 .
.
ATOM 1212 CA   CA   . GLU GLU GLU A A 166 166 . 46.035 45.135 24.898  1.00 19.41  1 .
.
ATOM 1213 CB   CB   . GLU GLU GLU A A 166 166 . 44.846 44.234 25.301  1.00 19.33  1 .
.
ATOM 1214 CG   CG   . GLU GLU GLU A A 166 166 . 44.757 43.016 24.416  1.00 20.77  1 .
.
ATOM 1215 CD   CD   . GLU GLU GLU A A 166 166 . 43.650 42.058 24.828  1.00 23.28  1 .
.
ATOM 1216 OE1  OE1  . GLU GLU GLU A A 166 166 . 42.892 42.363 25.798  1.00 23.26  1 .
.
ATOM 1217 OE2  OE2  . GLU GLU GLU A A 166 166 . 43.502 41.033 24.133  1.00 23.71  1 .
.
ATOM 1218 C    C    . GLU GLU GLU A A 166 166 . 46.185 46.172 26.007  1.00 18.37  1 .
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ATOM 1219 O  O  . GLU GLU GLU A A 166 166 . 46.672 45.839 27.099  1.00 18.15  1 .
.
ATOM 1220 N  N  . PHE PHE PHE A A 167 167 . 45.740 47.377 25.679  1.00 18.44  1 .
.
ATOM 1221 CA CA . PHE PHE PHE A A 167 167 . 45.612 48.450 26.657  1.00 17.85  1 .
.
ATOM 1222 CB CB . PHE PHE PHE A A 167 167 . 46.523 49.644 26.308  1.00 19.64  1 .
.
ATOM 1223 CG CG . PHE PHE PHE A A 167 167 . 47.969 49.261 26.279  1.00 20.82  1 .
.
ATOM 1224 CD1 CD1 . PHE PHE PHE A A 167 167 . 48.516 48.608 25.132  1.00 20.70  1 .
.
ATOM 1225 CE1 CE1 . PHE PHE PHE A A 167 167 . 49.845 48.196 25.120  1.00 23.65  1 .
.
ATOM 1226 CZ CZ . PHE PHE PHE A A 167 167 . 50.671 48.435 26.222  1.00 23.95  1 .
.
ATOM 1227 CE2 CE2 . PHE PHE PHE A A 167 167 . 50.171 49.105 27.357  1.00 25.76  1 .
.
ATOM 1228 CD2 CD2 . PHE PHE PHE A A 167 167 . 48.795 49.472 27.404  1.00 22.23  1 .
.
ATOM 1229 C  C  . PHE PHE PHE A A 167 167 . 44.180 48.865 26.700  1.00 17.76  1 .
.
ATOM 1230 O  O  . PHE PHE PHE A A 167 167 . 43.633 49.396 25.704  1.00 17.84  1 .
.
ATOM 1231 N  N  . MET MET MET A A 168 168 . 43.536 48.626 27.877  1.00 16.72  1 .
.
ATOM 1232 CA CA . MET MET MET A A 168 168 . 42.080 48.730 27.965  1.00 15.94  1 .
.
ATOM 1233 CB CB . MET MET MET A A 168 168 . 41.529 47.404 28.553  1.00 16.12  1 .
.
ATOM 1234 CG CG . MET MET MET A A 168 168 . 41.723 46.213 27.552  1.00 19.60  1 .
.
ATOM 1235 SD SD . MET MET MET A A 168 168 . 41.133 44.712 28.298  1.00 21.67  1 .
.
ATOM 1236 CE CE . MET MET MET A A 168 168 . 42.756 44.089 28.972  1.00 21.83  1 .
.
ATOM 1237 C  C  . MET MET MET A A 168 168 . 41.656 49.886 28.891  1.00 15.11  1 .
.
ATOM 1238 O  O  . MET MET MET A A 168 168 . 42.378 50.215 29.855  1.00 17.72  1 .
.
ATOM 1239 N  N  . ILE ILE ILE A A 169 169 . 40.498 50.435 28.636  1.00 14.14  1 .
.
ATOM 1240 CA CA . ILE ILE ILE A A 169 169 . 39.889 51.458 29.537  1.00 14.03  1 .
.
ATOM 1241 CB CB . ILE ILE ILE A A 169 169 . 39.658 52.786 28.847  1.00 13.45  1 .
.
ATOM 1242 CG1 CG1 . ILE ILE ILE A A 169 169 . 38.656 52.646 27.636  1.00 14.03  1 .
.
ATOM 1243 CD CD . ILE ILE ILE A A 169 169 . 38.250 54.008 26.983  1.00 15.90  1 .
.
ATOM 1244 CG2 CG2 . ILE ILE ILE A A 169 169 . 41.039 53.459 28.533  1.00 15.93  1 .
.
ATOM 1245 C  C  . ILE ILE ILE A A 169 169 . 38.640 50.822 30.132  1.00 14.87  1 .
.
ATOM 1246 O  O  . ILE ILE ILE A A 169 169 . 37.862 50.149 29.423  1.00 13.29  1 .
.
ATOM 1247 N  N  . LEU LEU LEU A A 170 170 . 38.425 50.997 31.445  1.00 13.83  1 .
.
ATOM 1248 CA CA . LEU LEU LEU A A 170 170 . 37.237 50.442 32.160  1.00 13.38  1 .
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ATOM 1249 CB   CB   . LEU LEU LEU A A 170 170 . 37.701 49.547 33.337  1.00 14.34  1 .
.
ATOM 1250 CG   CG   . LEU LEU LEU A A 170 170 . 38.261 48.180 32.930  1.00 16.36  1 .
.
ATOM 1251 CD1  CD1  . LEU LEU LEU A A 170 170 . 39.628 48.202 32.190  1.00 19.96  1 .
.
ATOM 1252 CD2  CD2  . LEU LEU LEU A A 170 170 . 38.382 47.392 34.213  1.00 22.89  1 .
.
ATOM 1253 C    C    . LEU LEU LEU A A 170 170 . 36.483 51.633 32.774  1.00 14.47  1 .
.
ATOM 1254 O    O    . LEU LEU LEU A A 170 170 . 36.999 52.214 33.764  1.00 13.74  1 .
.
ATOM 1255 N    N    . PRO PRO PRO A A 171 171 . 35.305 51.983 32.260  1.00 14.71  1 .
.
ATOM 1256 CA   CA   . PRO PRO PRO A A 171 171 . 34.561 53.076 32.874  1.00 14.84  1 .
.
ATOM 1257 CB   CB   . PRO PRO PRO A A 171 171 . 33.560 53.538 31.788  1.00 14.75  1 .
.
ATOM 1258 CG   CG   . PRO PRO PRO A A 171 171 . 33.958 52.777 30.498  1.00 18.10  1 .
.
ATOM 1259 CD   CD   . PRO PRO PRO A A 171 171 . 34.737 51.567 30.920  1.00 12.75  1 .
.
ATOM 1260 C    C    . PRO PRO PRO A A 171 171 . 33.806 52.635 34.176  1.00 14.74  1 .
.
ATOM 1261 O    O    . PRO PRO PRO A A 171 171 . 32.576 52.651 34.231  1.00 14.44  1 .
.
ATOM 1262 N    N    . VAL VAL VAL A A 172 172 . 34.614 52.356 35.193  1.00 14.55  1 .
.
ATOM 1263 CA   CA   . VAL VAL VAL A A 172 172 . 34.097 51.997 36.558  1.00 16.03  1 .
.
ATOM 1264 CB   CB   . VAL VAL VAL A A 172 172 . 35.232 51.634 37.513  1.00 16.04  1 .
.
ATOM 1265 CG1  CG1  . VAL VAL VAL A A 172 172 . 35.931 50.323 37.107  1.00 16.26  1 .
.
ATOM 1266 CG2  CG2  . VAL VAL VAL A A 172 172 . 36.244 52.824 37.615  1.00 18.71  1 .
.
ATOM 1267 C    C    . VAL VAL VAL A A 172 172 . 33.201 53.068 37.169  1.00 15.25  1 .
.
ATOM 1268 O    O    . VAL VAL VAL A A 172 172 . 32.282 52.721 37.946  1.00 16.07  1 .
.
ATOM 1269 N    N    . GLY GLY GLY A A 173 173 . 33.444 54.333 36.814  1.00 15.70  1 .
.
ATOM 1270 CA   CA   . GLY GLY GLY A A 173 173 . 32.654 55.477 37.334  1.00 17.64  1 .
.
ATOM 1271 C    C    . GLY GLY GLY A A 173 173 . 31.409 55.833 36.541  1.00 17.25  1 .
.
ATOM 1272 O    O    . GLY GLY GLY A A 173 173 . 30.741 56.837 36.816  1.00 18.60  1 .
.
ATOM 1273 N    N    . ALA ALA ALA A A 174 174 . 31.077 55.063 35.497  1.00 15.44  1 .
.
ATOM 1274 CA   CA   . ALA ALA ALA A A 174 174 . 29.834 55.305 34.800  1.00 16.70  1 .
.
ATOM 1275 CB   CB   . ALA ALA ALA A A 174 174 . 29.781 54.428 33.485  1.00 15.19  1 .
.
ATOM 1276 C    C    . ALA ALA ALA A A 174 174 . 28.560 55.077 35.617  1.00 16.67  1 .
.
ATOM 1277 O    O    . ALA ALA ALA A A 174 174 . 28.554 54.315 36.564  1.00 18.53  1 .
.
ATOM 1278 N    N    . GLU GLU GLU A A 175 175 . 27.456 55.666 35.168  1.00 19.40  1 .
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ATOM 1279 CA   CA   . GLU GLU GLU A A 175 175 . 26.142 55.548 35.865  1.00 21.61  1 .
.
ATOM 1280 CB   CB   . GLU GLU GLU A A 175 175 . 25.300 56.817 35.522  1.00 22.56  1 .
.
ATOM 1281 CG   CG   . GLU GLU GLU A A 175 175 . 25.928 58.089 36.283  1.00 30.28  1 .
.
ATOM 1282 CD   CD   . GLU GLU GLU A A 175 175 . 24.991 59.304 36.349  1.00 38.59  1 .
.
ATOM 1283 C    C    . GLU GLU GLU A A 175 175 . 25.365 54.248 35.562  1.00 20.91  1 .
.
ATOM 1284 O    O    . GLU GLU GLU A A 175 175 . 24.435 53.798 36.319  1.00 21.34  1 .
.
ATOM 1285 N    N    . SER SER SER A A 176 176 . 25.729 53.656 34.422  1.00 18.29  1 .
.
ATOM 1286 CA   CA   . SER SER SER A A 176 176 . 24.969 52.580 33.813  1.00 16.52  1 .
.
ATOM 1287 CB   CB   . SER SER SER A A 176 176 . 23.676 53.079 33.201  1.00 17.09  1 .
.
ATOM 1288 OG   OG   . SER SER SER A A 176 176 . 23.901 53.966 32.077  1.00 15.39  1 .
.
ATOM 1289 C    C    . SER SER SER A A 176 176 . 25.855 51.950 32.720  1.00 15.46  1 .
.
ATOM 1290 O    O    . SER SER SER A A 176 176 . 26.919 52.486 32.359  1.00 14.68  1 .
.
ATOM 1291 N    N    . PHE PHE PHE A A 177 177 . 25.375 50.843 32.185  1.00 14.30  1 .
.
ATOM 1292 CA   CA   . PHE PHE PHE A A 177 177 . 26.116 50.228 31.078  1.00 12.23  1 .
.
ATOM 1293 CB   CB   . PHE PHE PHE A A 177 177 . 25.539 48.846 30.718  1.00 12.45  1 .
.
ATOM 1294 CG   CG   . PHE PHE PHE A A 177 177 . 26.485 48.159 29.730  1.00 10.21  1 .
.
ATOM 1295 CD1  CD1  . PHE PHE PHE A A 177 177 . 27.662 47.543 30.239  1.00 9.74   1 .
.
ATOM 1296 CE1  CE1  . PHE PHE PHE A A 177 177 . 28.688 46.987 29.364  1.00 11.43  1 .
.
ATOM 1297 CZ   CZ   . PHE PHE PHE A A 177 177 . 28.484 47.141 27.949  1.00 13.85  1 .
.
ATOM 1298 CE2  CE2  . PHE PHE PHE A A 177 177 . 27.312 47.824 27.451  1.00 14.53  1 .
.
ATOM 1299 CD2  CD2  . PHE PHE PHE A A 177 177 . 26.302 48.323 28.337  1.00 11.05  1 .
.
ATOM 1300 C    C    . PHE PHE PHE A A 177 177 . 26.069 51.150 29.856  1.00 12.93  1 .
.
ATOM 1301 O    O    . PHE PHE PHE A A 177 177 . 27.085 51.365 29.192  1.00 13.46  1 .
.
ATOM 1302 N    N    . ARG ARG ARG A A 178 178 . 24.884 51.673 29.571  1.00 14.48  1 .
.
ATOM 1303 CA   CA   . ARG ARG ARG A A 178 178 . 24.761 52.575 28.393  1.00 14.49  1 .
.
ATOM 1304 CB   CB   . ARG ARG ARG A A 178 178 . 23.309 53.006 28.186  1.00 15.93  1 .
.
ATOM 1305 CG   CG   . ARG ARG ARG A A 178 178 . 22.560 51.980 27.365  1.00 25.42  1 .
.
ATOM 1306 CD   CD   . ARG ARG ARG A A 178 178 . 21.941 50.792 28.108  1.00 30.32  1 .
.
ATOM 1307 NE   NE   . ARG ARG ARG A A 178 178 . 20.530 50.971 28.025  1.00 37.35  1 .
.
ATOM 1308 CZ   CZ   . ARG ARG ARG A A 178 178 . 19.714 51.608 28.903  1.00 41.20  1 .
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ATOM 1309 NH1  NH1  . ARG ARG ARG A A 178 178 . 20.108 52.138 30.060  1.00 46.66  1 .
.
ATOM 1310 NH2  NH2  . ARG ARG ARG A A 178 178 . 18.442 51.718 28.574  1.00 35.99  1 .
.
ATOM 1311 C    C    . ARG ARG ARG A A 178 178 . 25.681 53.803 28.596  1.00 13.89  1 .
.
ATOM 1312 O    O    . ARG ARG ARG A A 178 178 . 26.358 54.272 27.635  1.00 13.91  1 .
.
ATOM 1313 N    N    . ASP ASP ASP A A 179 179 . 25.762 54.366 29.826  1.00 14.38  1 .
.
ATOM 1314 CA   CA   . ASP ASP ASP A A 179 179 . 26.695 55.454 30.035  1.00 15.62  1 .
.
ATOM 1315 CB   CB   . ASP ASP ASP A A 179 179 . 26.506 55.982 31.492  1.00 16.71  1 .
.
ATOM 1316 CG   CG   . ASP ASP ASP A A 179 179 . 27.169 57.339 31.727  1.00 19.17  1 .
.
ATOM 1317 OD1  OD1  . ASP ASP ASP A A 179 179 . 27.808 57.457 32.821  1.00 23.11  1 .
.
ATOM 1318 OD2  OD2  . ASP ASP ASP A A 179 179 . 27.021 58.263 30.855  1.00 21.53  1 .
.
ATOM 1319 C    C    . ASP ASP ASP A A 179 179 . 28.155 54.996 29.929  1.00 15.08  1 .
.
ATOM 1320 O    O    . ASP ASP ASP A A 179 179 . 29.014 55.759 29.427  1.00 13.74  1 .
.
ATOM 1321 N    N    . ALA ALA ALA A A 180 180 . 28.484 53.786 30.382  1.00 13.18  1 .
.
ATOM 1322 CA   CA   . ALA ALA ALA A A 180 180 . 29.834 53.234 30.120  1.00 12.60  1 .
.
ATOM 1323 CB   CB   . ALA ALA ALA A A 180 180 . 30.020 51.833 30.682  1.00 13.56  1 .
.
ATOM 1324 C    C    . ALA ALA ALA A A 180 180 . 30.179 53.207 28.612  1.00 12.78  1 .
.
ATOM 1325 O    O    . ALA ALA ALA A A 180 180 . 31.336 53.403 28.310  1.00 13.62  1 .
.
ATOM 1326 N    N    . MET MET MET A A 181 181 . 29.214 52.839 27.763  1.00 12.23  1 .
.
ATOM 1327 CA   CA   . MET MET MET A A 181 181 . 29.468 52.892 26.315  1.00 12.37  1 .
.
ATOM 1328 CB   CB   . MET MET MET A A 181 181 . 28.249 52.355 25.501  1.00 11.86  1 .
.
ATOM 1329 CG   CG   . MET MET MET A A 181 181 . 28.059 50.863 25.829  1.00 12.96  1 .
.
ATOM 1330 SD   SD   . MET MET MET A A 181 181 . 29.483 49.799 25.481  1.00 14.96  1 .
.
ATOM 1331 CE   CE   . MET MET MET A A 181 181 . 29.901 50.332 23.818  1.00 14.53  1 .
.
ATOM 1332 C    C    . MET MET MET A A 181 181 . 29.808 54.293 25.838  1.00 12.89  1 .
.
ATOM 1333 O    O    . MET MET MET A A 181 181 . 30.733 54.483 25.013  1.00 13.68  1 .
.
ATOM 1334 N    N    . ARG ARG ARG A A 182 182 . 29.077 55.277 26.354  1.00 12.27  1 .
.
ATOM 1335 CA   CA   . ARG ARG ARG A A 182 182 . 29.375 56.664 25.945  1.00 13.40  1 .
.
ATOM 1336 CB   CB   . ARG ARG ARG A A 182 182 . 28.277 57.601 26.561  1.00 14.61  1 .
.
ATOM 1337 CG   CG   . ARG ARG ARG A A 182 182 . 28.608 59.100 26.355  1.00 15.39  1 .
.
ATOM 1338 CD   CD   . ARG ARG ARG A A 182 182 . 27.600 60.027 27.135  1.00 20.83  1 .
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ATOM 1339 NE   NE   . ARG ARG ARG A A 182 182 . 28.193 61.401 27.013  1.00 28.32  1 .
.
ATOM 1340 CZ   CZ   . ARG ARG ARG A A 182 182 . 27.633 62.532 27.450  1.00 29.16  1 .
.
ATOM 1341 NH1  NH1  . ARG ARG ARG A A 182 182 . 28.246 63.720 27.289  1.00 28.27  1 .
.
ATOM 1342 NH2  NH2  . ARG ARG ARG A A 182 182 . 26.443 62.491 28.042  1.00 27.11  1 .
.
ATOM 1343 C    C    . ARG ARG ARG A A 182 182 . 30.766 57.040 26.434  1.00 13.74  1 .
.
ATOM 1344 O    O    . ARG ARG ARG A A 182 182 . 31.517 57.674 25.672  1.00 15.07  1 .
.
ATOM 1345 N    N    . LEU LEU LEU A A 183 183 . 31.083 56.792 27.714  1.00 14.78  1 .
.
ATOM 1346 CA   CA   . LEU LEU LEU A A 183 183 . 32.449 57.075 28.191  1.00 15.75  1 .
.
ATOM 1347 CB   CB   . LEU LEU LEU A A 183 183 . 32.612 56.770 29.662  1.00 16.13  1 .
.
ATOM 1348 CG   CG   . LEU LEU LEU A A 183 183 . 32.271 57.923 30.643  1.00 16.45  1 .
.
ATOM 1349 CD1  CD1  . LEU LEU LEU A A 183 183 . 30.873 58.430 30.478  1.00 18.67  1 .
.
ATOM 1350 CD2  CD2  . LEU LEU LEU A A 183 183 . 32.442 57.321 32.037  1.00 17.48  1 .
.
ATOM 1351 C    C    . LEU LEU LEU A A 183 183 . 33.523 56.386 27.343  1.00 16.27  1 .
.
ATOM 1352 O    O    . LEU LEU LEU A A 183 183 . 34.499 57.030 26.931  1.00 16.32  1 .
.
ATOM 1353 N    N    . GLY GLY GLY A A 184 184 . 33.364 55.097 27.051  1.00 14.66  1 .
.
ATOM 1354 CA   CA   . GLY GLY GLY A A 184 184 . 34.387 54.422 26.304  1.00 14.72  1 .
.
ATOM 1355 C    C    . GLY GLY GLY A A 184 184 . 34.502 54.951 24.885  1.00 13.95  1 .
.
ATOM 1356 O    O    . GLY GLY GLY A A 184 184 . 35.659 55.091 24.391  1.00 14.37  1 .
.
ATOM 1357 N    N    . ALA ALA ALA A A 185 185 . 33.363 55.204 24.225  1.00 13.39  1 .
.
ATOM 1358 CA   CA   . ALA ALA ALA A A 185 185 . 33.399 55.721 22.840  1.00 15.00  1 .
.
ATOM 1359 CB   CB   . ALA ALA ALA A A 185 185 . 32.020 55.735 22.216  1.00 14.00  1 .
.
ATOM 1360 C    C    . ALA ALA ALA A A 185 185 . 34.055 57.155 22.792  1.00 15.15  1 .
.
ATOM 1361 O    O    . ALA ALA ALA A A 185 185 . 34.926 57.434 21.917  1.00 16.91  1 .
.
ATOM 1362 N    N    . GLU GLU GLU A A 186 186 . 33.722 57.996 23.771  1.00 14.68  1 .
.
ATOM 1363 CA   CA   . GLU GLU GLU A A 186 186 . 34.283 59.326 23.767  1.00 16.84  1 .
.
ATOM 1364 CB   CB   . GLU GLU GLU A A 186 186 . 33.567 60.182 24.815  1.00 17.71  1 .
.
ATOM 1365 CG   CG   . GLU GLU GLU A A 186 186 . 32.119 60.604 24.317  1.00 18.64  1 .
.
ATOM 1366 CD   CD   . GLU GLU GLU A A 186 186 . 31.423 61.481 25.339  1.00 19.10  1 .
.
ATOM 1367 OE1  OE1  . GLU GLU GLU A A 186 186 . 32.069 61.876 26.375  1.00 22.51  1 .
.
ATOM 1368 OE2  OE2  . GLU GLU GLU A A 186 186 . 30.223 61.748 25.139  1.00 18.48  1 .
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ATOM 1369 C    C    . GLU GLU GLU A A 186 186 . 35.775 59.301 23.973  1.00 16.96  1 .
.
ATOM 1370 O    O    . GLU GLU GLU A A 186 186 . 36.509 60.046 23.288  1.00 17.02  1 .
.
ATOM 1371 N    N    . VAL VAL VAL A A 187 187 . 36.257 58.459 24.922  1.00 17.14  1 .
.
ATOM 1372 CA   CA   . VAL VAL VAL A A 187 187 . 37.680 58.334 25.124  1.00 14.20  1 .
.
ATOM 1373 CB   CB   . VAL VAL VAL A A 187 187 . 38.010 57.464 26.343  1.00 14.62  1 .
.
ATOM 1374 CG1  CG1  . VAL VAL VAL A A 187 187 . 39.545 57.251 26.447  1.00 13.83  1 .
.
ATOM 1375 CG2  CG2  . VAL VAL VAL A A 187 187 . 37.530 58.232 27.603  1.00 13.55  1 .
.
ATOM 1376 C    C    . VAL VAL VAL A A 187 187 . 38.348 57.777 23.861  1.00 16.21  1 .
.
ATOM 1377 O    O    . VAL VAL VAL A A 187 187 . 39.410 58.254 23.466  1.00 16.29  1 .
.
ATOM 1378 N    N    . TYR TYR TYR A A 188 188 . 37.717 56.790 23.230  1.00 14.31  1 .
.
ATOM 1379 CA   CA   . TYR TYR TYR A A 188 188 . 38.316 56.203 22.024  1.00 14.13  1 .
.
ATOM 1380 CB   CB   . TYR TYR TYR A A 188 188 . 37.414 55.050 21.567  1.00 12.90  1 .
.
ATOM 1381 CG   CG   . TYR TYR TYR A A 188 188 . 37.891 54.359 20.294  1.00 14.48  1 .
.
ATOM 1382 CD1  CD1  . TYR TYR TYR A A 188 188 . 38.889 53.395 20.368  1.00 14.60  1 .
.
ATOM 1383 CE1  CE1  . TYR TYR TYR A A 188 188 . 39.370 52.754 19.223  1.00 14.57  1 .
.
ATOM 1384 CZ   CZ   . TYR TYR TYR A A 188 188 . 38.720 53.016 18.026  1.00 12.27  1 .
.
ATOM 1385 OH   OH   . TYR TYR TYR A A 188 188 . 39.143 52.399 16.880  1.00 14.97  1 .
.
ATOM 1386 CE2  CE2  . TYR TYR TYR A A 188 188 . 37.700 53.947 17.923  1.00 16.30  1 .
.
ATOM 1387 CD2  CD2  . TYR TYR TYR A A 188 188 . 37.284 54.628 19.070  1.00 15.13  1 .
.
ATOM 1388 C    C    . TYR TYR TYR A A 188 188 . 38.440 57.284 20.930  1.00 14.33  1 .
.
ATOM 1389 O    O    . TYR TYR TYR A A 188 188 . 39.503 57.330 20.246  1.00 16.21  1 .
.
ATOM 1390 N    N    . HIS HIS HIS A A 189 189 . 37.388 58.064 20.671  1.00 15.85  1 .
.
ATOM 1391 CA   CA   . HIS HIS HIS A A 189 189 . 37.458 59.082 19.604  1.00 16.64  1 .
.
ATOM 1392 CB   CB   . HIS HIS HIS A A 189 189 . 36.117 59.711 19.378  1.00 17.24  1 .
.
ATOM 1393 CG   CG   . HIS HIS HIS A A 189 189 . 35.081 58.743 18.909  1.00 18.65  1 .
.
ATOM 1394 ND1  ND1  . HIS HIS HIS A A 189 189 . 35.321 57.828 17.895  1.00 24.74  1 .
.
ATOM 1395 CE1  CE1  . HIS HIS HIS A A 189 189 . 34.222 57.111 17.701  1.00 19.31  1 .
.
ATOM 1396 NE2  NE2  . HIS HIS HIS A A 189 189 . 33.293 57.541 18.547  1.00 24.59  1 .
.
ATOM 1397 CD2  CD2  . HIS HIS HIS A A 189 189 . 33.806 58.567 19.302  1.00 19.70  1 .
.
ATOM 1398 C    C    . HIS HIS HIS A A 189 189 . 38.440 60.196 19.988  1.00 15.69  1 .
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ATOM 1399 O    O    . HIS HIS HIS A A 189 189 . 39.189 60.694 19.120  1.00 18.68  1 .
.
ATOM 1400 N    N    . THR THR THR A A 190 190 . 38.559 60.486 21.302  1.00 16.39  1 .
.
ATOM 1401 CA   CA   . THR THR THR A A 190 190 . 39.519 61.506 21.756  1.00 17.88  1 .
.
ATOM 1402 CB   CB   . THR THR THR A A 190 190 . 39.263 61.828 23.270  1.00 17.39  1 .
.
ATOM 1403 OG1  OG1  . THR THR THR A A 190 190 . 37.962 62.330 23.391  1.00 20.46  1 .
.
ATOM 1404 CG2  CG2  . THR THR THR A A 190 190 . 40.299 62.921 23.743  1.00 20.75  1 .
.
ATOM 1405 C    C    . THR THR THR A A 190 190 . 40.941 60.981 21.536  1.00 17.25  1 .
.
ATOM 1406 O    O    . THR THR THR A A 190 190 . 41.842 61.670 21.022  1.00 19.10  1 .
.
ATOM 1407 N    N    . LEU LEU LEU A A 191 191 . 41.151 59.706 21.855  1.00 18.43  1 .
.
ATOM 1408 CA   CA   . LEU LEU LEU A A 191 191 . 42.408 59.002 21.673  1.00 17.41  1 .
.
ATOM 1409 CB   CB   . LEU LEU LEU A A 191 191 . 42.311 57.556 22.152  1.00 17.69  1 .
.
ATOM 1410 CG   CG   . LEU LEU LEU A A 191 191 . 43.571 56.695 22.003  1.00 16.50  1 .
.
ATOM 1411 CD1  CD1  . LEU LEU LEU A A 191 191 . 44.906 57.311 22.679  1.00 17.35  1 .
.
ATOM 1412 CD2  CD2  . LEU LEU LEU A A 191 191 . 43.324 55.209 22.516  1.00 19.25  1 .
.
ATOM 1413 C    C    . LEU LEU LEU A A 191 191 . 42.842 59.030 20.211  1.00 17.16  1 .
.
ATOM 1414 O    O    . LEU LEU LEU A A 191 191 . 44.029 59.185 19.899  1.00 17.81  1 .
.
ATOM 1415 N    N    . LYS LYS LYS A A 192 192 . 41.897 58.869 19.311  1.00 17.11  1 .
.
ATOM 1416 CA   CA   . LYS LYS LYS A A 192 192 . 42.263 58.938 17.848  1.00 17.99  1 .
.
ATOM 1417 CB   CB   . LYS LYS LYS A A 192 192 . 41.028 58.753 16.931  1.00 18.26  1 .
.
ATOM 1418 CG   CG   . LYS LYS LYS A A 192 192 . 41.484 58.398 15.497  1.00 20.27  1 .
.
ATOM 1419 CD   CD   . LYS LYS LYS A A 192 192 . 40.238 58.095 14.635  1.00 23.42  1 .
.
ATOM 1420 CE   CE   . LYS LYS LYS A A 192 192 . 40.613 57.519 13.267  1.00 26.78  1 .
.
ATOM 1421 NZ   NZ   . LYS LYS LYS A A 192 192 . 39.362 57.504 12.349  1.00 23.95  1 .
.
ATOM 1422 C    C    . LYS LYS LYS A A 192 192 . 42.954 60.278 17.547  1.00 19.06  1 .
.
ATOM 1423 O    O    . LYS LYS LYS A A 192 192 . 43.906 60.333 16.752  1.00 19.35  1 .
.
ATOM 1424 N    N    . GLY GLY GLY A A 193 193 . 42.395 61.354 18.124  1.00 18.82  1 .
.
ATOM 1425 CA   CA   . GLY GLY GLY A A 193 193 . 42.889 62.719 17.824  1.00 20.04  1 .
.
ATOM 1426 C    C    . GLY GLY GLY A A 193 193 . 44.208 62.948 18.547  1.00 19.55  1 .
.
ATOM 1427 O    O    . GLY GLY GLY A A 193 193 . 45.139 63.544 17.976  1.00 21.22  1 .
.
ATOM 1428 N    N    . VAL VAL VAL A A 194 194 . 44.343 62.382 19.746  1.00 18.91  1 .
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ATOM 1429 CA   CA   . VAL VAL VAL A A 194 194 . 45.636 62.415 20.467  1.00 19.36  1 .
.
ATOM 1430 CB   CB   . VAL VAL VAL A A 194 194 . 45.579 61.762 21.897  1.00 20.35  1 .
.
ATOM 1431 CG1  CG1  . VAL VAL VAL A A 194 194 . 46.995 61.621 22.444  1.00 20.28  1 .
.
ATOM 1432 CG2  CG2  . VAL VAL VAL A A 194 194 . 44.636 62.547 22.788  1.00 20.32  1 .
.
ATOM 1433 C    C    . VAL VAL VAL A A 194 194 . 46.714 61.743 19.615  1.00 21.47  1 .
.
ATOM 1434 O    O    . VAL VAL VAL A A 194 194 . 47.865 62.295 19.431  1.00 23.49  1 .
.
ATOM 1435 N    N    . ILE ILE ILE A A 195 195 . 46.370 60.577 19.040  1.00 19.10  1 .
.
ATOM 1436 CA   CA   . ILE ILE ILE A A 195 195 . 47.379 59.799 18.304  1.00 20.59  1 .
.
ATOM 1437 CB   CB   . ILE ILE ILE A A 195 195 . 46.904 58.345 18.046  1.00 20.30  1 .
.
ATOM 1438 CG1  CG1  . ILE ILE ILE A A 195 195 . 47.066 57.573 19.320  1.00 16.31  1 .
.
ATOM 1439 CD   CD   . ILE ILE ILE A A 195 195 . 46.365 56.217 19.308  1.00 20.76  1 .
.
ATOM 1440 CG2  CG2  . ILE ILE ILE A A 195 195 . 47.825 57.581 17.008  1.00 21.42  1 .
.
ATOM 1441 C    C    . ILE ILE ILE A A 195 195 . 47.697 60.506 16.992  1.00 20.84  1 .
.
ATOM 1442 O    O    . ILE ILE ILE A A 195 195 . 48.912 60.558 16.590  1.00 21.57  1 .
.
ATOM 1443 N    N    . LYS LYS LYS A A 196 196 . 46.668 61.017 16.323  1.00 21.08  1 .
.
ATOM 1444 CA   CA   . LYS LYS LYS A A 196 196 . 46.827 61.716 15.022  1.00 21.96  1 .
.
ATOM 1445 CB   CB   . LYS LYS LYS A A 196 196 . 45.475 62.115 14.481  1.00 21.55  1 .
.
ATOM 1446 CG   CG   . LYS LYS LYS A A 196 196 . 45.541 63.049 13.223  1.00 26.00  1 .
.
ATOM 1447 CD   CD   . LYS LYS LYS A A 196 196 . 44.168 63.190 12.495  1.00 36.82  1 .
.
ATOM 1448 CE   CE   . LYS LYS LYS A A 196 196 . 44.145 64.453 11.563  1.00 41.74  1 .
.
ATOM 1449 NZ   NZ   . LYS LYS LYS A A 196 196 . 42.749 64.946 11.149  1.00 45.66  1 .
.
ATOM 1450 C    C    . LYS LYS LYS A A 196 196 . 47.743 62.977 15.212  1.00 25.07  1 .
.
ATOM 1451 O    O    . LYS LYS LYS A A 196 196 . 48.734 63.185 14.445  1.00 24.30  1 .
.
ATOM 1452 N    N    . ASP ASP ASP A A 197 197 . 47.433 63.758 16.232  1.00 24.41  1 .
.
ATOM 1453 CA   CA   . ASP ASP ASP A A 197 197 . 48.224 64.987 16.551  1.00 27.43  1 .
.
ATOM 1454 CB   CB   . ASP ASP ASP A A 197 197 . 47.638 65.693 17.783  1.00 28.25  1 .
.
ATOM 1455 CG   CG   . ASP ASP ASP A A 197 197 . 46.315 66.488 17.495  1.00 32.47  1 .
.
ATOM 1456 OD1  OD1  . ASP ASP ASP A A 197 197 . 45.700 66.963 18.500  1.00 36.78  1 .
.
ATOM 1457 OD2  OD2  . ASP ASP ASP A A 197 197 . 45.879 66.651 16.304  1.00 38.67  1 .
.
ATOM 1458 C    C    . ASP ASP ASP A A 197 197 . 49.676 64.657 16.826  1.00 28.23  1 .
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ATOM 1459 O    O    . ASP ASP ASP A A 197 197 . 50.604 65.382 16.407  1.00 29.49  1 .
.
ATOM 1460 N    N    . LYS LYS LYS A A 198 198 . 49.939 63.569 17.503  1.00 27.97  1 .
.
ATOM 1461 CA   CA   . LYS LYS LYS A A 198 198 . 51.277 63.239 17.844  1.00 28.83  1 .
.
ATOM 1462 CB   CB   . LYS LYS LYS A A 198 198 . 51.271 62.428 19.118  1.00 29.09  1 .
.
ATOM 1463 CG   CG   . LYS LYS LYS A A 198 198 . 52.596 62.280 19.712  1.00 31.35  1 .
.
ATOM 1464 CD   CD   . LYS LYS LYS A A 198 198 . 52.474 62.006 21.156  1.00 34.50  1 .
.
ATOM 1465 CE   CE   . LYS LYS LYS A A 198 198 . 53.879 62.086 21.771  1.00 35.68  1 .
.
ATOM 1466 NZ   NZ   . LYS LYS LYS A A 198 198 . 53.969 61.240 23.006  1.00 35.89  1 .
.
ATOM 1467 C    C    . LYS LYS LYS A A 198 198 . 52.061 62.486 16.777  1.00 30.10  1 .
.
ATOM 1468 O    O    . LYS LYS LYS A A 198 198 . 53.301 62.705 16.594  1.00 30.93  1 .
.
ATOM 1469 N    N    . TYR TYR TYR A A 199 199 . 51.405 61.547 16.107  1.00 27.75  1 .
.
ATOM 1470 CA   CA   . TYR TYR TYR A A 199 199 . 52.136 60.572 15.323  1.00 28.66  1 .
.
ATOM 1471 CB   CB   . TYR TYR TYR A A 199 199 . 51.901 59.118 15.811  1.00 26.74  1 .
.
ATOM 1472 CG   CG   . TYR TYR TYR A A 199 199 . 52.485 58.830 17.126  1.00 29.18  1 .
.
ATOM 1473 CD1  CD1  . TYR TYR TYR A A 199 199 . 51.696 58.749 18.267  1.00 25.93  1 .
.
ATOM 1474 CE1  CE1  . TYR TYR TYR A A 199 199 . 52.271 58.465 19.509  1.00 29.39  1 .
.
ATOM 1475 CZ   CZ   . TYR TYR TYR A A 199 199 . 53.636 58.353 19.613  1.00 30.06  1 .
.
ATOM 1476 OH   OH   . TYR TYR TYR A A 199 199 . 54.228 58.128 20.831  1.00 33.43  1 .
.
ATOM 1477 CE2  CE2  . TYR TYR TYR A A 199 199 . 54.448 58.455 18.507  1.00 32.88  1 .
.
ATOM 1478 CD2  CD2  . TYR TYR TYR A A 199 199 . 53.883 58.686 17.269  1.00 31.23  1 .
.
ATOM 1479 C    C    . TYR TYR TYR A A 199 199 . 51.687 60.670 13.859  1.00 29.55  1 .
.
ATOM 1480 O    O    . TYR TYR TYR A A 199 199 . 52.289 60.000 13.014  1.00 32.92  1 .
.
ATOM 1481 N    N    . GLY GLY GLY A A 200 200 . 50.683 61.486 13.548  1.00 29.70  1 .
.
ATOM 1482 CA   CA   . GLY GLY GLY A A 200 200 . 50.209 61.664 12.152  1.00 28.13  1 .
.
ATOM 1483 C    C    . GLY GLY GLY A A 200 200 . 48.922 60.818 11.868  1.00 27.70  1 .
.
ATOM 1484 O    O    . GLY GLY GLY A A 200 200 . 48.658 59.840 12.603  1.00 25.85  1 .
.
ATOM 1485 N    N    . LYS LYS LYS A A 201 201 . 48.166 61.152 10.802  1.00 27.71  1 .
.
ATOM 1486 CA   CA   . LYS LYS LYS A A 201 201 . 46.957 60.368 10.489  1.00 28.23  1 .
.
ATOM 1487 CB   CB   . LYS LYS LYS A A 201 201 . 46.112 60.996 9.353   1.00 31.11  1 .
.
ATOM 1488 CG   CG   . LYS LYS LYS A A 201 201 . 44.541 60.667 9.436   1.00 35.28  1 .
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ATOM 1489 CD   CD   . LYS LYS LYS A A 201 201 . 43.810 61.071 8.103   1.00 41.97  1 .
.
ATOM 1490 CE   CE   . LYS LYS LYS A A 201 201 . 42.383 61.605 8.265   1.00 45.26  1 .
.
ATOM 1491 NZ   NZ   . LYS LYS LYS A A 201 201 . 41.516 60.727 9.108   1.00 49.73  1 .
.
ATOM 1492 C    C    . LYS LYS LYS A A 201 201 . 47.260 58.904 10.202  1.00 26.59  1 .
.
ATOM 1493 O    O    . LYS LYS LYS A A 201 201 . 46.506 57.991 10.618  1.00 25.05  1 .
.
ATOM 1494 N    N    . ASP ASP ASP A A 202 202 . 48.403 58.637 9.602   1.00 23.61  1 .
.
ATOM 1495 CA   CA   . ASP ASP ASP A A 202 202 . 48.735 57.257 9.244   1.00 24.52  1 .
.
ATOM 1496 CB   CB   . ASP ASP ASP A A 202 202 . 49.889 57.204 8.215   1.00 25.30  1 .
.
ATOM 1497 CG   CG   . ASP ASP ASP A A 202 202 . 51.173 57.713 8.781   1.00 32.55  1 .
.
ATOM 1498 OD1  OD1  . ASP ASP ASP A A 202 202 . 52.239 57.370 8.257   1.00 42.06  1 .
.
ATOM 1499 OD2  OD2  . ASP ASP ASP A A 202 202 . 51.147 58.501 9.739   1.00 38.89  1 .
.
ATOM 1500 C    C    . ASP ASP ASP A A 202 202 . 48.950 56.324 10.428  1.00 22.54  1 .
.
ATOM 1501 O    O    . ASP ASP ASP A A 202 202 . 49.090 55.140 10.213  1.00 23.69  1 .
.
ATOM 1502 N    N    . ALA ALA ALA A A 203 203 . 48.908 56.841 11.682  1.00 20.16  1 .
.
ATOM 1503 CA   CA   . ALA ALA ALA A A 203 203 . 49.052 55.993 12.869  1.00 17.91  1 .
.
ATOM 1504 CB   CB   . ALA ALA ALA A A 203 203 . 49.820 56.735 14.035  1.00 18.09  1 .
.
ATOM 1505 C    C    . ALA ALA ALA A A 203 203 . 47.695 55.605 13.428  1.00 19.31  1 .
.
ATOM 1506 O    O    . ALA ALA ALA A A 203 203 . 47.644 55.006 14.502  1.00 20.27  1 .
.
ATOM 1507 N    N    . THR THR THR A A 204 204 . 46.603 55.937 12.734  1.00 17.69  1 .
.
ATOM 1508 CA   CA   . THR THR THR A A 204 204 . 45.270 55.677 13.365  1.00 17.89  1 .
.
ATOM 1509 CB   CB   . THR THR THR A A 204 204 . 44.404 56.926 13.455  1.00 19.02  1 .
.
ATOM 1510 OG1  OG1  . THR THR THR A A 204 204 . 44.198 57.475 12.146  1.00 22.89  1 .
.
ATOM 1511 CG2  CG2  . THR THR THR A A 204 204 . 45.109 57.999 14.403  1.00 21.85  1 .
.
ATOM 1512 C    C    . THR THR THR A A 204 204 . 44.442 54.531 12.712  1.00 17.09  1 .
.
ATOM 1513 O    O    . THR THR THR A A 204 204 . 43.271 54.374 12.981  1.00 16.86  1 .
.
ATOM 1514 N    N    . ASN ASN ASN A A 205 205 . 45.097 53.699 11.943  1.00 15.61  1 .
.
ATOM 1515 CA   CA   . ASN ASN ASN A A 205 205 . 44.459 52.423 11.549  1.00 15.89  1 .
.
ATOM 1516 CB   CB   . ASN ASN ASN A A 205 205 . 45.219 51.802 10.397  1.00 17.67  1 .
.
ATOM 1517 CG   CG   . ASN ASN ASN A A 205 205 . 44.572 52.101 9.078   1.00 22.62  1 .
.
ATOM 1518 OD1  OD1  . ASN ASN ASN A A 205 205 . 43.694 52.949 8.968   1.00 26.15  1 .
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ATOM 1519 ND2  ND2  . ASN ASN ASN A A 205 205 . 45.023 51.370 8.021   1.00 24.86  1 .
.
ATOM 1520 C    C    . ASN ASN ASN A A 205 205 . 44.361 51.469 12.737  1.00 17.53  1 .
.
ATOM 1521 O    O    . ASN ASN ASN A A 205 205 . 44.984 51.736 13.732  1.00 17.13  1 .
.
ATOM 1522 N    N    . VAL VAL VAL A A 206 206 . 43.555 50.380 12.660  1.00 15.37  1 .
.
ATOM 1523 CA   CA   . VAL VAL VAL A A 206 206 . 43.265 49.581 13.851  1.00 15.03  1 .
.
ATOM 1524 CB   CB   . VAL VAL VAL A A 206 206 . 41.754 49.632 14.195  1.00 12.66  1 .
.
ATOM 1525 CG1  CG1  . VAL VAL VAL A A 206 206 . 41.252 51.142 14.321  1.00 13.54  1 .
.
ATOM 1526 CG2  CG2  . VAL VAL VAL A A 206 206 . 40.916 48.878 13.049  1.00 14.32  1 .
.
ATOM 1527 C    C    . VAL VAL VAL A A 206 206 . 43.763 48.182 13.704  1.00 15.60  1 .
.
ATOM 1528 O    O    . VAL VAL VAL A A 206 206 . 43.923 47.644 12.567  1.00 17.58  1 .
.
ATOM 1529 N    N    . GLY GLY GLY A A 207 207 . 44.104 47.609 14.851  1.00 15.61  1 .
.
ATOM 1530 CA   CA   . GLY GLY GLY A A 207 207 . 44.447 46.194 14.960  1.00 14.21  1 .
.
ATOM 1531 C    C    . GLY GLY GLY A A 207 207 . 43.187 45.263 14.968  1.00 15.01  1 .
.
ATOM 1532 O    O    . GLY GLY GLY A A 207 207 . 42.053 45.701 14.684  1.00 14.82  1 .
.
ATOM 1533 N    N    . ASP ASP ASP A A 208 208 . 43.422 44.014 15.266  1.00 14.83  1 .
.
ATOM 1534 CA   CA   . ASP ASP ASP A A 208 208 . 42.421 42.963 15.125  1.00 14.49  1 .
.
ATOM 1535 CB   CB   . ASP ASP ASP A A 208 208 . 42.988 41.589 15.472  1.00 14.72  1 .
.
ATOM 1536 CG   CG   . ASP ASP ASP A A 208 208 . 43.856 41.006 14.321  1.00 17.43  1 .
.
ATOM 1537 OD1  OD1  . ASP ASP ASP A A 208 208 . 43.759 41.508 13.166  1.00 18.56  1 .
.
ATOM 1538 OD2  OD2  . ASP ASP ASP A A 208 208 . 44.640 40.065 14.604  1.00 21.63  1 .
.
ATOM 1539 C    C    . ASP ASP ASP A A 208 208 . 41.229 43.189 16.029  1.00 14.52  1 .
.
ATOM 1540 O    O    . ASP ASP ASP A A 208 208 . 40.123 42.765 15.668  1.00 13.97  1 .
.
ATOM 1541 N    N    . GLU GLU GLU A A 209 209 . 41.450 43.836 17.191  1.00 14.09  1 .
.
ATOM 1542 CA   CA   . GLU GLU GLU A A 209 209 . 40.345 44.079 18.086  1.00 13.17  1 .
.
ATOM 1543 CB   CB   . GLU GLU GLU A A 209 209 . 40.755 43.683 19.507  1.00 15.06  1 .
.
ATOM 1544 CG   CG   . GLU GLU GLU A A 209 209 . 41.089 42.163 19.626  1.00 16.06  1 .
.
ATOM 1545 CD   CD   . GLU GLU GLU A A 209 209 . 41.133 41.672 21.010  1.00 23.87  1 .
.
ATOM 1546 OE1  OE1  . GLU GLU GLU A A 209 209 . 41.094 42.487 21.967  1.00 24.42  1 .
.
ATOM 1547 OE2  OE2  . GLU GLU GLU A A 209 209 . 41.167 40.415 21.198  1.00 26.47  1 .
.
ATOM 1548 C    C    . GLU GLU GLU A A 209 209 . 39.774 45.512 18.058  1.00 13.19  1 .
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ATOM 1549 O    O    . GLU GLU GLU A A 209 209 . 38.992 45.886 18.948  1.00 13.12  1 .
.
ATOM 1550 N    N    . GLY GLY GLY A A 210 210 . 40.149 46.311 17.046  1.00 11.84  1 .
.
ATOM 1551 CA   CA   . GLY GLY GLY A A 210 210 . 39.574 47.651 16.838  1.00 12.96  1 .
.
ATOM 1552 C    C    . GLY GLY GLY A A 210 210 . 40.372 48.774 17.522  1.00 12.17  1 .
.
ATOM 1553 O    O    . GLY GLY GLY A A 210 210 . 39.976 49.929 17.423  1.00 15.02  1 .
.
ATOM 1554 N    N    . GLY GLY GLY A A 211 211 . 41.383 48.421 18.294  1.00 14.00  1 .
.
ATOM 1555 CA   CA   . GLY GLY GLY A A 211 211 . 42.174 49.454 19.002  1.00 13.30  1 .
.
ATOM 1556 C    C    . GLY GLY GLY A A 211 211 . 43.178 50.051 18.050  1.00 15.68  1 .
.
ATOM 1557 O    O    . GLY GLY GLY A A 211 211 . 43.632 49.373 17.052  1.00 16.29  1 .
.
ATOM 1558 N    N    . PHE PHE PHE A A 212 212 . 43.541 51.323 18.284  1.00 17.09  1 .
.
ATOM 1559 CA   CA   . PHE PHE PHE A A 212 212 . 44.465 51.930 17.332  1.00 17.41  1 .
.
ATOM 1560 CB   CB   . PHE PHE PHE A A 212 212 . 44.635 53.376 17.682  1.00 16.62  1 .
.
ATOM 1561 CG   CG   . PHE PHE PHE A A 212 212 . 43.361 54.104 17.619  1.00 20.06  1 .
.
ATOM 1562 CD1  CD1  . PHE PHE PHE A A 212 212 . 42.725 54.506 18.795  1.00 17.47  1 .
.
ATOM 1563 CE1  CE1  . PHE PHE PHE A A 212 212 . 41.530 55.198 18.729  1.00 19.90  1 .
.
ATOM 1564 CZ   CZ   . PHE PHE PHE A A 212 212 . 40.893 55.427 17.460  1.00 20.18  1 .
.
ATOM 1565 CE2  CE2  . PHE PHE PHE A A 212 212 . 41.517 55.004 16.260  1.00 20.40  1 .
.
ATOM 1566 CD2  CD2  . PHE PHE PHE A A 212 212 . 42.718 54.299 16.357  1.00 15.69  1 .
.
ATOM 1567 C    C    . PHE PHE PHE A A 212 212 . 45.796 51.242 17.430  1.00 18.09  1 .
.
ATOM 1568 O    O    . PHE PHE PHE A A 212 212 . 46.207 50.671 18.458  1.00 20.23  1 .
.
ATOM 1569 N    N    . ALA ALA ALA A A 213 213 . 46.500 51.261 16.288  1.00 20.58  1 .
.
ATOM 1570 CA   CA   . ALA ALA ALA A A 213 213 . 47.756 50.538 16.203  1.00 21.54  1 .
.
ATOM 1571 CB   CB   . ALA ALA ALA A A 213 213 . 47.569 49.429 15.175  1.00 23.43  1 .
.
ATOM 1572 C    C    . ALA ALA ALA A A 213 213 . 48.917 51.472 15.782  1.00 24.08  1 .
.
ATOM 1573 O    O    . ALA ALA ALA A A 213 213 . 49.636 51.155 14.857  1.00 23.67  1 .
.
ATOM 1574 N    N    . PRO PRO PRO A A 214 214 . 49.140 52.556 16.531  1.00 22.38  1 .
.
ATOM 1575 CA   CA   . PRO PRO PRO A A 214 214 . 50.290 53.475 16.240  1.00 24.78  1 .
.
ATOM 1576 CB   CB   . PRO PRO PRO A A 214 214 . 50.220 54.501 17.381  1.00 24.80  1 .
.
ATOM 1577 CG   CG   . PRO PRO PRO A A 214 214 . 49.627 53.604 18.568  1.00 23.01  1 .
.
ATOM 1578 CD   CD   . PRO PRO PRO A A 214 214 . 48.567 52.779 17.899  1.00 23.90  1 .
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ATOM 1579 C    C    . PRO PRO PRO A A 214 214 . 51.618 52.711 16.275  1.00 26.05  1 .
.
ATOM 1580 O    O    . PRO PRO PRO A A 214 214 . 51.734 51.656 16.962  1.00 27.69  1 .
.
ATOM 1581 N    N    . ASN ASN ASN A A 215 215 . 52.609 53.183 15.497  1.00 26.60  1 .
.
ATOM 1582 CA   CA   . ASN ASN ASN A A 215 215 . 53.830 52.382 15.347  1.00 27.72  1 .
.
ATOM 1583 CB   CB   . ASN ASN ASN A A 215 215 . 54.530 52.581 13.958  1.00 29.07  1 .
.
ATOM 1584 C    C    . ASN ASN ASN A A 215 215 . 54.737 52.825 16.412  1.00 28.37  1 .
.
ATOM 1585 O    O    . ASN ASN ASN A A 215 215 . 55.781 53.418 16.118  1.00 30.85  1 .
.
ATOM 1586 N    N    . ILE ILE ILE A A 216 216 . 54.304 52.617 17.641  1.00 26.91  1 .
.
ATOM 1587 CA   CA   . ILE ILE ILE A A 216 216 . 55.144 52.867 18.855  1.00 25.99  1 .
.
ATOM 1588 CB   CB   . ILE ILE ILE A A 216 216 . 54.327 53.538 19.964  1.00 25.22  1 .
.
ATOM 1589 CG1  CG1  . ILE ILE ILE A A 216 216 . 53.101 52.702 20.336  1.00 26.11  1 .
.
ATOM 1590 CD   CD   . ILE ILE ILE A A 216 216 . 52.319 53.263 21.603  1.00 27.64  1 .
.
ATOM 1591 CG2  CG2  . ILE ILE ILE A A 216 216 . 53.904 54.972 19.550  1.00 27.23  1 .
.
ATOM 1592 C    C    . ILE ILE ILE A A 216 216 . 55.739 51.589 19.385  1.00 25.49  1 .
.
ATOM 1593 O    O    . ILE ILE ILE A A 216 216 . 55.270 50.493 19.045  1.00 26.81  1 .
.
ATOM 1594 N    N    . LEU LEU LEU A A 217 217 . 56.743 51.692 20.252  1.00 24.44  1 .
.
ATOM 1595 CA   CA   . LEU LEU LEU A A 217 217 . 57.396 50.540 20.781  1.00 25.32  1 .
.
ATOM 1596 CB   CB   . LEU LEU LEU A A 217 217 . 58.957 50.644 20.490  1.00 26.43  1 .
.
ATOM 1597 CG   CG   . LEU LEU LEU A A 217 217 . 59.857 49.677 21.283  1.00 29.01  1 .
.
ATOM 1598 CD1  CD1  . LEU LEU LEU A A 217 217 . 59.626 48.167 20.970  1.00 30.64  1 .
.
ATOM 1599 CD2  CD2  . LEU LEU LEU A A 217 217 . 61.379 50.068 21.094  1.00 29.44  1 .
.
ATOM 1600 C    C    . LEU LEU LEU A A 217 217 . 57.239 50.515 22.307  1.00 26.92  1 .
.
ATOM 1601 O    O    . LEU LEU LEU A A 217 217 . 57.084 49.421 22.935  1.00 28.91  1 .
.
ATOM 1602 N    N    . GLU GLU GLU A A 218 218 . 57.296 51.691 22.946  1.00 26.20  1 .
.
ATOM 1603 CA   CA   . GLU GLU GLU A A 218 218 . 57.364 51.718 24.438  1.00 26.41  1 .
.
ATOM 1604 CB   CB   . GLU GLU GLU A A 218 218 . 57.806 53.119 24.884  1.00 26.06  1 .
.
ATOM 1605 CG   CG   . GLU GLU GLU A A 218 218 . 59.183 53.513 24.280  1.00 28.69  1 .
.
ATOM 1606 C    C    . GLU GLU GLU A A 218 218 . 55.953 51.410 25.007  1.00 24.65  1 .
.
ATOM 1607 O    O    . GLU GLU GLU A A 218 218 . 55.003 52.096 24.662  1.00 25.29  1 .
.
ATOM 1608 N    N    . ASN ASN ASN A A 219 219 . 55.832 50.468 25.910  1.00 24.10  1 .
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ATOM 1609 CA   CA   . ASN ASN ASN A A 219 219 . 54.458 50.178 26.481  1.00 25.85  1 .
.
ATOM 1610 CB   CB   . ASN ASN ASN A A 219 219 . 54.484 48.822 27.186  1.00 25.52  1 .
.
ATOM 1611 CG   CG   . ASN ASN ASN A A 219 219 . 54.804 47.679 26.218  1.00 29.72  1 .
.
ATOM 1612 OD1  OD1  . ASN ASN ASN A A 219 219 . 55.931 47.073 26.242  1.00 33.82  1 .
.
ATOM 1613 ND2  ND2  . ASN ASN ASN A A 219 219 . 53.868 47.422 25.300  1.00 20.39  1 .
.
ATOM 1614 C    C    . ASN ASN ASN A A 219 219 . 53.989 51.342 27.402  1.00 25.91  1 .
.
ATOM 1615 O    O    . ASN ASN ASN A A 219 219 . 52.806 51.659 27.444  1.00 23.93  1 .
.
ATOM 1616 N    N    . SER SER SER A A 220 220 . 54.939 52.066 28.032  1.00 26.12  1 .
.
ATOM 1617 CA   CA   . SER SER SER A A 220 220 . 54.598 53.251 28.821  1.00 27.37  1 .
.
ATOM 1618 CB   CB   . SER SER SER A A 220 220 . 55.814 53.733 29.609  1.00 28.27  1 .
.
ATOM 1619 OG   OG   . SER SER SER A A 220 220 . 56.830 54.063 28.668  1.00 32.50  1 .
.
ATOM 1620 C    C    . SER SER SER A A 220 220 . 54.022 54.340 27.946  1.00 27.08  1 .
.
ATOM 1621 O    O    . SER SER SER A A 220 220 . 53.177 55.114 28.395  1.00 29.25  1 .
.
ATOM 1622 N    N    . GLU GLU GLU A A 221 221 . 54.428 54.415 26.671  1.00 26.89  1 .
.
ATOM 1623 CA   CA   . GLU GLU GLU A A 221 221 . 53.855 55.404 25.802  1.00 26.41  1 .
.
ATOM 1624 CB   CB   . GLU GLU GLU A A 221 221 . 54.700 55.574 24.505  1.00 28.06  1 .
.
ATOM 1625 CG   CG   . GLU GLU GLU A A 221 221 . 54.049 56.469 23.433  1.00 29.85  1 .
.
ATOM 1626 CD   CD   . GLU GLU GLU A A 221 221 . 53.859 58.005 23.786  1.00 32.96  1 .
.
ATOM 1627 OE1  OE1  . GLU GLU GLU A A 221 221 . 54.159 58.482 24.902  1.00 35.02  1 .
.
ATOM 1628 OE2  OE2  . GLU GLU GLU A A 221 221 . 53.372 58.767 22.922  1.00 32.22  1 .
.
ATOM 1629 C    C    . GLU GLU GLU A A 221 221 . 52.393 55.062 25.463  1.00 24.89  1 .
.
ATOM 1630 O    O    . GLU GLU GLU A A 221 221 . 51.549 55.990 25.349  1.00 25.81  1 .
.
ATOM 1631 N    N    . ALA ALA ALA A A 222 222 . 52.101 53.758 25.271  1.00 23.81  1 .
.
ATOM 1632 CA   CA   . ALA ALA ALA A A 222 222 . 50.679 53.378 25.116  1.00 22.29  1 .
.
ATOM 1633 CB   CB   . ALA ALA ALA A A 222 222 . 50.490 51.894 24.813  1.00 23.90  1 .
.
ATOM 1634 C    C    . ALA ALA ALA A A 222 222 . 49.886 53.789 26.353  1.00 22.32  1 .
.
ATOM 1635 O    O    . ALA ALA ALA A A 222 222 . 48.806 54.371 26.203  1.00 22.63  1 .
.
ATOM 1636 N    N    . LEU LEU LEU A A 223 223 . 50.406 53.512 27.550  1.00 22.19  1 .
.
ATOM 1637 CA   CA   . LEU LEU LEU A A 223 223 . 49.725 53.928 28.806  1.00 23.80  1 .
.
ATOM 1638 CB   CB   . LEU LEU LEU A A 223 223 . 50.478 53.358 29.992  1.00 24.20  1 .
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ATOM 1639 CG   CG   . LEU LEU LEU A A 223 223 . 50.332 51.877 30.131  1.00 25.62  1 .
.
ATOM 1640 CD1  CD1  . LEU LEU LEU A A 223 223 . 51.288 51.302 31.194  1.00 26.03  1 .
.
ATOM 1641 CD2  CD2  . LEU LEU LEU A A 223 223 . 48.839 51.594 30.496  1.00 24.42  1 .
.
ATOM 1642 C    C    . LEU LEU LEU A A 223 223 . 49.597 55.426 28.920  1.00 24.13  1 .
.
ATOM 1643 O    O    . LEU LEU LEU A A 223 223 . 48.540 55.937 29.238  1.00 23.95  1 .
.
ATOM 1644 N    N    . GLU GLU GLU A A 224 224 . 50.665 56.165 28.569  1.00 24.63  1 .
.
ATOM 1645 CA   CA   . GLU GLU GLU A A 224 224 . 50.568 57.606 28.466  1.00 24.74  1 .
.
ATOM 1646 CB   CB   . GLU GLU GLU A A 224 224 . 51.950 58.220 28.056  1.00 27.37  1 .
.
ATOM 1647 CG   CG   . GLU GLU GLU A A 224 224 . 52.017 59.646 28.404  1.00 34.96  1 .
.
ATOM 1648 CD   CD   . GLU GLU GLU A A 224 224 . 52.323 59.828 29.884  1.00 42.00  1 .
.
ATOM 1649 OE1  OE1  . GLU GLU GLU A A 224 224 . 51.570 60.574 30.544  1.00 47.77  1 .
.
ATOM 1650 OE2  OE2  . GLU GLU GLU A A 224 224 . 53.295 59.190 30.393  1.00 46.59  1 .
.
ATOM 1651 C    C    . GLU GLU GLU A A 224 224 . 49.472 58.158 27.531  1.00 23.91  1 .
.
ATOM 1652 O    O    . GLU GLU GLU A A 224 224 . 48.740 59.120 27.889  1.00 23.98  1 .
.
ATOM 1653 N    N    . LEU LEU LEU A A 225 225 . 49.341 57.574 26.327  1.00 22.60  1 .
.
ATOM 1654 CA   CA   . LEU LEU LEU A A 225 225 . 48.367 58.042 25.340  1.00 21.33  1 .
.
ATOM 1655 CB   CB   . LEU LEU LEU A A 225 225 . 48.517 57.257 24.018  1.00 19.24  1 .
.
ATOM 1656 CG   CG   . LEU LEU LEU A A 225 225 . 49.798 57.675 23.209  1.00 21.62  1 .
.
ATOM 1657 CD1  CD1  . LEU LEU LEU A A 225 225 . 50.128 56.692 22.154  1.00 23.01  1 .
.
ATOM 1658 CD2  CD2  . LEU LEU LEU A A 225 225 . 49.643 59.091 22.561  1.00 25.52  1 .
.
ATOM 1659 C    C    . LEU LEU LEU A A 225 225 . 46.965 57.813 25.893  1.00 19.32  1 .
.
ATOM 1660 O    O    . LEU LEU LEU A A 225 225 . 46.080 58.690 25.790  1.00 21.68  1 .
.
ATOM 1661 N    N    . VAL VAL VAL A A 226 226 . 46.797 56.657 26.509  1.00 22.03  1 .
.
ATOM 1662 CA   CA   . VAL VAL VAL A A 226 226 . 45.476 56.259 27.083  1.00 20.70  1 .
.
ATOM 1663 CB   CB   . VAL VAL VAL A A 226 226 . 45.431 54.746 27.497  1.00 21.98  1 .
.
ATOM 1664 CG1  CG1  . VAL VAL VAL A A 226 226 . 44.145 54.407 28.225  1.00 20.05  1 .
.
ATOM 1665 CG2  CG2  . VAL VAL VAL A A 226 226 . 45.445 53.849 26.239  1.00 20.93  1 .
.
ATOM 1666 C    C    . VAL VAL VAL A A 226 226 . 45.136 57.217 28.234  1.00 21.14  1 .
.
ATOM 1667 O    O    . VAL VAL VAL A A 226 226 . 44.052 57.769 28.241  1.00 19.54  1 .
.
ATOM 1668 N    N    . LYS LYS LYS A A 227 227 . 46.084 57.475 29.147  1.00 22.30  1 .
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ATOM 1669 CA   CA   . LYS LYS LYS A A 227 227 . 45.837 58.439 30.274  1.00 22.06  1 .
.
ATOM 1670 CB   CB   . LYS LYS LYS A A 227 227 . 47.049 58.430 31.240  1.00 23.13  1 .
.
ATOM 1671 CG   CG   . LYS LYS LYS A A 227 227 . 46.829 59.201 32.565  1.00 27.21  1 .
.
ATOM 1672 CD   CD   . LYS LYS LYS A A 227 227 . 45.303 59.045 32.999  1.00 36.75  1 .
.
ATOM 1673 CE   CE   . LYS LYS LYS A A 227 227 . 44.915 59.739 34.334  1.00 42.09  1 .
.
ATOM 1674 NZ   NZ   . LYS LYS LYS A A 227 227 . 46.109 59.998 35.201  1.00 45.50  1 .
.
ATOM 1675 C    C    . LYS LYS LYS A A 227 227 . 45.518 59.812 29.754  1.00 21.05  1 .
.
ATOM 1676 O    O    . LYS LYS LYS A A 227 227 . 44.567 60.431 30.185  1.00 20.14  1 .
.
ATOM 1677 N    N    . GLU GLU GLU A A 228 228 . 46.294 60.277 28.741  1.00 22.42  1 .
.
ATOM 1678 CA   CA   . GLU GLU GLU A A 228 228 . 45.990 61.570 28.028  1.00 21.26  1 .
.
ATOM 1679 CB   CB   . GLU GLU GLU A A 228 228 . 47.085 61.960 26.950  1.00 23.18  1 .
.
ATOM 1680 C    C    . GLU GLU GLU A A 228 228 . 44.587 61.673 27.459  1.00 21.79  1 .
.
ATOM 1681 O    O    . GLU GLU GLU A A 228 228 . 43.888 62.682 27.652  1.00 22.25  1 .
.
ATOM 1682 N    N    . ALA ALA ALA A A 229 229 . 44.138 60.613 26.734  1.00 21.43  1 .
.
ATOM 1683 CA   CA   . ALA ALA ALA A A 229 229 . 42.813 60.668 26.134  1.00 20.78  1 .
.
ATOM 1684 CB   CB   . ALA ALA ALA A A 229 229 . 42.631 59.474 25.215  1.00 20.58  1 .
.
ATOM 1685 C    C    . ALA ALA ALA A A 229 229 . 41.696 60.655 27.237  1.00 18.60  1 .
.
ATOM 1686 O    O    . ALA ALA ALA A A 229 229 . 40.705 61.335 27.094  1.00 19.64  1 .
.
ATOM 1687 N    N    . ILE ILE ILE A A 230 230 . 41.894 59.879 28.302  1.00 18.74  1 .
.
ATOM 1688 CA   CA   . ILE ILE ILE A A 230 230 . 40.922 59.845 29.438  1.00 18.47  1 .
.
ATOM 1689 CB   CB   . ILE ILE ILE A A 230 230 . 41.348 58.907 30.559  1.00 16.41  1 .
.
ATOM 1690 CG1  CG1  . ILE ILE ILE A A 230 230 . 41.261 57.443 30.104  1.00 16.25  1 .
.
ATOM 1691 CD   CD   . ILE ILE ILE A A 230 230 . 41.850 56.421 31.045  1.00 20.09  1 .
.
ATOM 1692 CG2  CG2  . ILE ILE ILE A A 230 230 . 40.491 59.195 31.849  1.00 20.54  1 .
.
ATOM 1693 C    C    . ILE ILE ILE A A 230 230 . 40.750 61.273 30.034  1.00 18.91  1 .
.
ATOM 1694 O    O    . ILE ILE ILE A A 230 230 . 39.614 61.796 30.164  1.00 18.81  1 .
.
ATOM 1695 N    N    . ASP ASP ASP A A 231 231 . 41.908 61.919 30.290  1.00 21.36  1 .
.
ATOM 1696 CA   CA   . ASP ASP ASP A A 231 231 . 41.939 63.287 30.851  1.00 23.36  1 .
.
ATOM 1697 CB   CB   . ASP ASP ASP A A 231 231 . 43.353 63.631 31.250  1.00 24.75  1 .
.
ATOM 1698 CG   CG   . ASP ASP ASP A A 231 231 . 43.945 62.671 32.321  1.00 31.87  1 .
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ATOM 1699 OD1  OD1  . ASP ASP ASP A A 231 231 . 45.197 62.819 32.505  1.00 41.53  1 .
.
ATOM 1700 OD2  OD2  . ASP ASP ASP A A 231 231 . 43.251 61.779 32.988  1.00 33.77  1 .
.
ATOM 1701 C    C    . ASP ASP ASP A A 231 231 . 41.390 64.301 29.898  1.00 23.14  1 .
.
ATOM 1702 O    O    . ASP ASP ASP A A 231 231 . 40.454 65.070 30.263  1.00 23.52  1 .
.
ATOM 1703 N    N    . LYS LYS LYS A A 232 232 . 41.831 64.254 28.630  1.00 22.70  1 .
.
ATOM 1704 CA   CA   . LYS LYS LYS A A 232 232 . 41.280 65.149 27.636  1.00 25.14  1 .
.
ATOM 1705 CB   CB   . LYS LYS LYS A A 232 232 . 42.059 65.060 26.280  1.00 25.26  1 .
.
ATOM 1706 CG   CG   . LYS LYS LYS A A 232 232 . 41.698 66.115 25.193  1.00 33.03  1 .
.
ATOM 1707 CD   CD   . LYS LYS LYS A A 232 232 . 42.553 65.869 23.880  1.00 37.78  1 .
.
ATOM 1708 CE   CE   . LYS LYS LYS A A 232 232 . 42.402 66.967 22.828  1.00 42.04  1 .
.
ATOM 1709 NZ   NZ   . LYS LYS LYS A A 232 232 . 43.153 66.487 21.632  1.00 44.42  1 .
.
ATOM 1710 C    C    . LYS LYS LYS A A 232 232 . 39.779 65.024 27.441  1.00 23.67  1 .
.
ATOM 1711 O    O    . LYS LYS LYS A A 232 232 . 39.070 66.040 27.152  1.00 25.72  1 .
.
ATOM 1712 N    N    . ALA ALA ALA A A 233 233 . 39.272 63.799 27.591  1.00 21.87  1 .
.
ATOM 1713 CA   CA   . ALA ALA ALA A A 233 233 . 37.850 63.579 27.421  1.00 20.89  1 .
.
ATOM 1714 CB   CB   . ALA ALA ALA A A 233 233 . 37.596 62.083 27.082  1.00 22.18  1 .
.
ATOM 1715 C    C    . ALA ALA ALA A A 233 233 . 37.074 63.998 28.652  1.00 22.45  1 .
.
ATOM 1716 O    O    . ALA ALA ALA A A 233 233 . 35.841 64.143 28.609  1.00 24.96  1 .
.
ATOM 1717 N    N    . GLY GLY GLY A A 234 234 . 37.791 64.307 29.736  1.00 22.95  1 .
.
ATOM 1718 CA   CA   . GLY GLY GLY A A 234 234 . 37.059 64.774 30.930  1.00 22.98  1 .
.
ATOM 1719 C    C    . GLY GLY GLY A A 234 234 . 36.730 63.707 31.946  1.00 22.13  1 .
.
ATOM 1720 O    O    . GLY GLY GLY A A 234 234 . 35.928 63.992 32.858  1.00 22.58  1 .
.
ATOM 1721 N    N    . TYR TYR TYR A A 235 235 . 37.370 62.539 31.890  1.00 20.74  1 .
.
ATOM 1722 CA   CA   . TYR TYR TYR A A 235 235 . 36.891 61.390 32.658  1.00 17.16  1 .
.
ATOM 1723 CB   CB   . TYR TYR TYR A A 235 235 . 36.305 60.313 31.686  1.00 16.94  1 .
.
ATOM 1724 CG   CG   . TYR TYR TYR A A 235 235 . 35.065 60.773 30.974  1.00 17.92  1 .
.
ATOM 1725 CD1  CD1  . TYR TYR TYR A A 235 235 . 34.991 60.695 29.559  1.00 17.41  1 .
.
ATOM 1726 CE1  CE1  . TYR TYR TYR A A 235 235 . 33.857 61.064 28.886  1.00 17.11  1 .
.
ATOM 1727 CZ   CZ   . TYR TYR TYR A A 235 235 . 32.710 61.506 29.613  1.00 17.69  1 .
.
ATOM 1728 OH   OH   . TYR TYR TYR A A 235 235 . 31.538 61.860 28.992  1.00 21.48  1 .
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ATOM 1729 CE2  CE2  . TYR TYR TYR A A 235 235 . 32.730 61.543 31.004  1.00 19.82  1 .
.
ATOM 1730 CD2  CD2  . TYR TYR TYR A A 235 235 . 33.894 61.149 31.678  1.00 17.98  1 .
.
ATOM 1731 C    C    . TYR TYR TYR A A 235 235 . 37.938 60.814 33.612  1.00 17.90  1 .
.
ATOM 1732 O    O    . TYR TYR TYR A A 235 235 . 37.885 59.614 34.029  1.00 18.00  1 .
.
ATOM 1733 N    N    . THR THR THR A A 236 236 . 38.932 61.634 33.996  1.00 19.36  1 .
.
ATOM 1734 CA   CA   . THR THR THR A A 236 236 . 39.964 61.126 34.923  1.00 20.28  1 .
.
ATOM 1735 CB   CB   . THR THR THR A A 236 236 . 40.924 62.246 35.361  1.00 22.51  1 .
.
ATOM 1736 OG1  OG1  . THR THR THR A A 236 236 . 41.482 62.793 34.165  1.00 28.19  1 .
.
ATOM 1737 CG2  CG2  . THR THR THR A A 236 236 . 42.058 61.711 36.180  1.00 24.22  1 .
.
ATOM 1738 C    C    . THR THR THR A A 236 236 . 39.381 60.429 36.141  1.00 21.01  1 .
.
ATOM 1739 O    O    . THR THR THR A A 236 236 . 39.922 59.410 36.617  1.00 22.62  1 .
.
ATOM 1740 N    N    . GLU GLU GLU A A 237 237 . 38.292 60.937 36.680  1.00 23.11  1 .
.
ATOM 1741 CA   CA   . GLU GLU GLU A A 237 237 . 37.767 60.330 37.936  1.00 24.91  1 .
.
ATOM 1742 CB   CB   . GLU GLU GLU A A 237 237 . 37.117 61.416 38.836  1.00 27.20  1 .
.
ATOM 1743 C    C    . GLU GLU GLU A A 237 237 . 36.855 59.085 37.700  1.00 24.58  1 .
.
ATOM 1744 O    O    . GLU GLU GLU A A 237 237 . 36.357 58.458 38.654  1.00 26.55  1 .
.
ATOM 1745 N    N    . LYS LYS LYS A A 238 238 . 36.688 58.683 36.438  1.00 20.47  1 .
.
ATOM 1746 CA   CA   . LYS LYS LYS A A 238 238 . 35.629 57.732 36.187  1.00 19.04  1 .
.
ATOM 1747 CB   CB   . LYS LYS LYS A A 238 238 . 34.444 58.386 35.454  1.00 20.38  1 .
.
ATOM 1748 CG   CG   . LYS LYS LYS A A 238 238 . 33.634 59.367 36.332  1.00 24.28  1 .
.
ATOM 1749 CD   CD   . LYS LYS LYS A A 238 238 . 32.405 59.927 35.580  1.00 27.44  1 .
.
ATOM 1750 CE   CE   . LYS LYS LYS A A 238 238 . 31.597 60.950 36.410  1.00 32.36  1 .
.
ATOM 1751 C    C    . LYS LYS LYS A A 238 238 . 36.141 56.522 35.402  1.00 17.06  1 .
.
ATOM 1752 O    O    . LYS LYS LYS A A 238 238 . 35.378 55.566 35.188  1.00 16.69  1 .
.
ATOM 1753 N    N    . ILE ILE ILE A A 239 239 . 37.365 56.601 34.872  1.00 16.05  1 .
.
ATOM 1754 CA   CA   . ILE ILE ILE A A 239 239 . 37.821 55.569 33.963  1.00 16.78  1 .
.
ATOM 1755 CB   CB   . ILE ILE ILE A A 239 239 . 37.854 56.076 32.498  1.00 16.07  1 .
.
ATOM 1756 CG1  CG1  . ILE ILE ILE A A 239 239 . 36.437 56.535 32.080  1.00 17.87  1 .
.
ATOM 1757 CD   CD   . ILE ILE ILE A A 239 239 . 36.343 57.013 30.653  1.00 16.44  1 .
.
ATOM 1758 CG2  CG2  . ILE ILE ILE A A 239 239 . 38.422 54.882 31.534  1.00 19.78  1 .
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ATOM 1759 C    C    . ILE ILE ILE A A 239 239 . 39.198 55.160 34.404  1.00 17.05  1 .
.
ATOM 1760 O    O    . ILE ILE ILE A A 239 239 . 40.095 55.999 34.629  1.00 20.57  1 .
.
ATOM 1761 N    N    . VAL VAL VAL A A 240 240 . 39.406 53.870 34.538  1.00 15.66  1 .
.
ATOM 1762 CA   CA   . VAL VAL VAL A A 240 240 . 40.714 53.348 34.917  1.00 16.23  1 .
.
ATOM 1763 CB   CB   . VAL VAL VAL A A 240 240 . 40.656 52.561 36.225  1.00 17.23  1 .
.
ATOM 1764 CG1  CG1  . VAL VAL VAL A A 240 240 . 40.306 53.534 37.389  1.00 20.47  1 .
.
ATOM 1765 CG2  CG2  . VAL VAL VAL A A 240 240 . 39.569 51.443 36.236  1.00 18.39  1 .
.
ATOM 1766 C    C    . VAL VAL VAL A A 240 240 . 41.270 52.442 33.767  1.00 16.69  1 .
.
ATOM 1767 O    O    . VAL VAL VAL A A 240 240 . 40.589 52.277 32.774  1.00 16.10  1 .
.
ATOM 1768 N    N    . ILE ILE ILE A A 241 241 . 42.399 51.775 33.986  1.00 16.90  1 .
.
ATOM 1769 CA   CA   . ILE ILE ILE A A 241 241 . 43.106 51.082 32.905  1.00 17.10  1 .
.
ATOM 1770 CB   CB   . ILE ILE ILE A A 241 241 . 44.484 51.799 32.548  1.00 17.06  1 .
.
ATOM 1771 CG1  CG1  . ILE ILE ILE A A 241 241 . 44.213 53.229 32.011  1.00 18.21  1 .
.
ATOM 1772 CD   CD   . ILE ILE ILE A A 241 241 . 45.510 54.086 31.736  1.00 16.72  1 .
.
ATOM 1773 CG2  CG2  . ILE ILE ILE A A 241 241 . 45.358 50.880 31.673  1.00 20.26  1 .
.
ATOM 1774 C    C    . ILE ILE ILE A A 241 241 . 43.335 49.646 33.204  1.00 16.83  1 .
.
ATOM 1775 O    O    . ILE ILE ILE A A 241 241 . 43.679 49.287 34.321  1.00 17.18  1 .
.
ATOM 1776 N    N    . GLY GLY GLY A A 242 242 . 43.218 48.774 32.192  1.00 15.50  1 .
.
ATOM 1777 CA   CA   . GLY GLY GLY A A 242 242 . 43.594 47.374 32.388  1.00 17.19  1 .
.
ATOM 1778 C    C    . GLY GLY GLY A A 242 242 . 44.532 47.019 31.250  1.00 17.40  1 .
.
ATOM 1779 O    O    . GLY GLY GLY A A 242 242 . 44.565 47.739 30.247  1.00 18.67  1 .
.
ATOM 1780 N    N    . MET MET MET A A 243 243 . 45.315 45.963 31.437  1.00 17.61  1 .
.
ATOM 1781 CA   CA   . MET MET MET A A 243 243 . 46.273 45.514 30.394  1.00 18.96  1 .
.
ATOM 1782 CB   CB   . MET MET MET A A 243 243 . 47.717 45.809 30.850  1.00 21.38  1 .
.
ATOM 1783 CG   CG   . MET MET MET A A 243 243 . 47.991 47.305 30.981  1.00 22.97  1 .
.
ATOM 1784 SD   SD   . MET MET MET A A 243 243 . 49.594 47.612 31.824  1.00 27.00  1 .
.
ATOM 1785 CE   CE   . MET MET MET A A 243 243 . 50.738 47.068 30.517  1.00 27.58  1 .
.
ATOM 1786 C    C    . MET MET MET A A 243 243 . 46.138 43.991 30.252  1.00 19.03  1 .
.
ATOM 1787 O    O    . MET MET MET A A 243 243 . 45.851 43.287 31.247  1.00 18.82  1 .
.
ATOM 1788 N    N    . ASP ASP ASP A A 244 244 . 46.368 43.492 29.027  1.00 17.91  1 .
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ATOM 1789 CA   CA   . ASP ASP ASP A A 244 244 . 46.646 42.099 28.788  1.00 17.14  1 .
.
ATOM 1790 CB   CB   . ASP ASP ASP A A 244 244 . 45.562 41.430 27.887  1.00 17.07  1 .
.
ATOM 1791 CG   CG   . ASP ASP ASP A A 244 244 . 45.902 39.968 27.553  1.00 17.70  1 .
.
ATOM 1792 OD1  OD1  . ASP ASP ASP A A 244 244 . 46.888 39.426 28.093  1.00 18.47  1 .
.
ATOM 1793 OD2  OD2  . ASP ASP ASP A A 244 244 . 45.131 39.332 26.760  1.00 20.71  1 .
.
ATOM 1794 C    C    . ASP ASP ASP A A 244 244 . 48.018 42.091 28.122  1.00 18.08  1 .
.
ATOM 1795 O    O    . ASP ASP ASP A A 244 244 . 48.213 42.564 26.985  1.00 18.63  1 .
.
ATOM 1796 N    N    . VAL VAL VAL A A 245 245 . 48.970 41.631 28.882  1.00 18.17  1 .
.
ATOM 1797 CA   CA   . VAL VAL VAL A A 245 245 . 50.346 41.622 28.409  1.00 20.84  1 .
.
ATOM 1798 CB   CB   . VAL VAL VAL A A 245 245 . 51.294 41.386 29.585  1.00 20.26  1 .
.
ATOM 1799 CG1  CG1  . VAL VAL VAL A A 245 245 . 52.758 41.166 29.099  1.00 22.82  1 .
.
ATOM 1800 CG2  CG2  . VAL VAL VAL A A 245 245 . 51.239 42.626 30.592  1.00 23.49  1 .
.
ATOM 1801 C    C    . VAL VAL VAL A A 245 245 . 50.508 40.503 27.355  1.00 21.04  1 .
.
ATOM 1802 O    O    . VAL VAL VAL A A 245 245 . 51.239 40.689 26.349  1.00 20.31  1 .
.
ATOM 1803 N    N    . ALA ALA ALA A A 246 246 . 49.828 39.371 27.610  1.00 19.93  1 .
.
ATOM 1804 CA   CA   . ALA ALA ALA A A 246 246 . 49.984 38.136 26.842  1.00 18.86  1 .
.
ATOM 1805 CB   CB   . ALA ALA ALA A A 246 246 . 49.294 38.242 25.421  1.00 19.33  1 .
.
ATOM 1806 C    C    . ALA ALA ALA A A 246 246 . 51.462 37.748 26.767  1.00 21.11  1 .
.
ATOM 1807 O    O    . ALA ALA ALA A A 246 246 . 52.016 37.461 25.666  1.00 21.65  1 .
.
ATOM 1808 N    N    . ALA ALA ALA A A 247 247 . 52.065 37.606 27.960  1.00 19.21  1 .
.
ATOM 1809 CA   CA   . ALA ALA ALA A A 247 247 . 53.529 37.477 28.003  1.00 21.73  1 .
.
ATOM 1810 CB   CB   . ALA ALA ALA A A 247 247 . 54.020 37.625 29.412  1.00 20.65  1 .
.
ATOM 1811 C    C    . ALA ALA ALA A A 247 247 . 53.994 36.160 27.383  1.00 23.33  1 .
.
ATOM 1812 O    O    . ALA ALA ALA A A 247 247 . 55.169 36.098 26.970  1.00 26.22  1 .
.
ATOM 1813 N    N    . SER SER SER A A 248 248 . 53.121 35.131 27.266  1.00 23.89  1 .
.
ATOM 1814 CA   CA   . SER SER SER A A 248 248 . 53.534 33.869 26.597  1.00 23.85  1 .
.
ATOM 1815 CB   CB   . SER SER SER A A 248 248 . 52.405 32.783 26.642  1.00 23.36  1 .
.
ATOM 1816 OG   OG   . SER SER SER A A 248 248 . 51.961 32.532 27.979  1.00 23.41  1 .
.
ATOM 1817 C    C    . SER SER SER A A 248 248 . 53.940 34.122 25.141  1.00 23.27  1 .
.
ATOM 1818 O    O    . SER SER SER A A 248 248 . 54.721 33.374 24.589  1.00 24.90  1 .
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ATOM 1819 N    N    . GLU GLU GLU A A 249 249 . 53.456 35.189 24.539  1.00 23.26  1 .
.
ATOM 1820 CA   CA   . GLU GLU GLU A A 249 249 . 53.727 35.466 23.138  1.00 23.65  1 .
.
ATOM 1821 CB   CB   . GLU GLU GLU A A 249 249 . 52.809 36.538 22.614  1.00 22.74  1 .
.
ATOM 1822 CG   CG   . GLU GLU GLU A A 249 249 . 51.355 36.020 22.600  1.00 23.50  1 .
.
ATOM 1823 CD   CD   . GLU GLU GLU A A 249 249 . 51.061 34.943 21.543  1.00 28.47  1 .
.
ATOM 1824 OE1  OE1  . GLU GLU GLU A A 249 249 . 50.724 33.778 21.954  1.00 27.22  1 .
.
ATOM 1825 OE2  OE2  . GLU GLU GLU A A 249 249 . 51.104 35.279 20.310  1.00 28.69  1 .
.
ATOM 1826 C    C    . GLU GLU GLU A A 249 249 . 55.168 35.918 22.927  1.00 25.99  1 .
.
ATOM 1827 O    O    . GLU GLU GLU A A 249 249 . 55.643 35.950 21.770  1.00 26.61  1 .
.
ATOM 1828 N    N    . PHE PHE PHE A A 250 250 . 55.821 36.346 24.006  1.00 25.16  1 .
.
ATOM 1829 CA   CA   . PHE PHE PHE A A 250 250 . 57.172 36.956 23.835  1.00 25.48  1 .
.
ATOM 1830 CB   CB   . PHE PHE PHE A A 250 250 . 57.160 38.501 23.811  1.00 25.47  1 .
.
ATOM 1831 CG   CG   . PHE PHE PHE A A 250 250 . 56.532 39.182 25.043  1.00 24.76  1 .
.
ATOM 1832 CD1  CD1  . PHE PHE PHE A A 250 250 . 55.326 39.900 24.904  1.00 23.78  1 .
.
ATOM 1833 CE1  CE1  . PHE PHE PHE A A 250 250 . 54.747 40.584 26.027  1.00 24.91  1 .
.
ATOM 1834 CZ   CZ   . PHE PHE PHE A A 250 250 . 55.406 40.548 27.280  1.00 26.35  1 .
.
ATOM 1835 CE2  CE2  . PHE PHE PHE A A 250 250 . 56.627 39.842 27.416  1.00 28.84  1 .
.
ATOM 1836 CD2  CD2  . PHE PHE PHE A A 250 250 . 57.174 39.153 26.302  1.00 26.13  1 .
.
ATOM 1837 C    C    . PHE PHE PHE A A 250 250 . 58.105 36.377 24.874  1.00 26.70  1 .
.
ATOM 1838 O    O    . PHE PHE PHE A A 250 250 . 59.151 36.941 25.216  1.00 27.85  1 .
.
ATOM 1839 N    N    . TYR TYR TYR A A 251 251 . 57.693 35.226 25.382  1.00 27.94  1 .
.
ATOM 1840 CA   CA   . TYR TYR TYR A A 251 251 . 58.543 34.442 26.241  1.00 27.60  1 .
.
ATOM 1841 CB   CB   . TYR TYR TYR A A 251 251 . 57.691 33.443 26.965  1.00 27.75  1 .
.
ATOM 1842 CG   CG   . TYR TYR TYR A A 251 251 . 58.390 32.621 28.018  1.00 28.98  1 .
.
ATOM 1843 CD1  CD1  . TYR TYR TYR A A 251 251 . 59.062 33.229 29.080  1.00 30.99  1 .
.
ATOM 1844 CE1  CE1  . TYR TYR TYR A A 251 251 . 59.681 32.445 30.097  1.00 30.97  1 .
.
ATOM 1845 CZ   CZ   . TYR TYR TYR A A 251 251 . 59.621 31.045 30.037  1.00 35.37  1 .
.
ATOM 1846 OH   OH   . TYR TYR TYR A A 251 251 . 60.219 30.294 31.015  1.00 40.22  1 .
.
ATOM 1847 CE2  CE2  . TYR TYR TYR A A 251 251 . 58.970 30.403 29.013  1.00 33.41  1 .
.
ATOM 1848 CD2  CD2  . TYR TYR TYR A A 251 251 . 58.344 31.215 27.970  1.00 31.37  1 .
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ATOM 1849 C    C    . TYR TYR TYR A A 251 251 . 59.628 33.738 25.358  1.00 29.96  1 .
.
ATOM 1850 O    O    . TYR TYR TYR A A 251 251 . 59.298 32.997 24.404  1.00 27.94  1 .
.
ATOM 1851 N    N    . ARG ARG ARG A A 252 252 . 60.906 33.992 25.636  1.00 31.97  1 .
.
ATOM 1852 CA   CA   . ARG ARG ARG A A 252 252 . 62.003 33.481 24.729  1.00 34.23  1 .
.
ATOM 1853 CB   CB   . ARG ARG ARG A A 252 252 . 62.526 34.597 23.832  1.00 34.53  1 .
.
ATOM 1854 CG   CG   . ARG ARG ARG A A 252 252 . 61.563 35.201 22.819  1.00 36.36  1 .
.
ATOM 1855 CD   CD   . ARG ARG ARG A A 252 252 . 61.237 34.207 21.754  1.00 40.18  1 .
.
ATOM 1856 NE   NE   . ARG ARG ARG A A 252 252 . 60.273 34.770 20.805  1.00 43.85  1 .
.
ATOM 1857 CZ   CZ   . ARG ARG ARG A A 252 252 . 58.944 34.667 20.949  1.00 42.73  1 .
.
ATOM 1858 NH1  NH1  . ARG ARG ARG A A 252 252 . 58.427 34.015 21.986  1.00 40.00  1 .
.
ATOM 1859 NH2  NH2  . ARG ARG ARG A A 252 252 . 58.143 35.204 20.043  1.00 39.87  1 .
.
ATOM 1860 C    C    . ARG ARG ARG A A 252 252 . 63.148 33.038 25.626  1.00 36.26  1 .
.
ATOM 1861 O    O    . ARG ARG ARG A A 252 252 . 63.707 33.877 26.331  1.00 36.41  1 .
.
ATOM 1862 N    N    . ASP ASP ASP A A 253 253 . 63.449 31.734 25.657  1.00 37.89  1 .
.
ATOM 1863 CA   CA   . ASP ASP ASP A A 253 253 . 64.596 31.192 26.416  1.00 39.28  1 .
.
ATOM 1864 CB   CB   . ASP ASP ASP A A 253 253 . 65.944 31.623 25.797  1.00 39.61  1 .
.
ATOM 1865 C    C    . ASP ASP ASP A A 253 253 . 64.573 31.582 27.885  1.00 39.49  1 .
.
ATOM 1866 O    O    . ASP ASP ASP A A 253 253 . 65.625 32.018 28.436  1.00 39.76  1 .
.
ATOM 1867 N    N    . GLY GLY GLY A A 254 254 . 63.416 31.433 28.543  1.00 38.24  1 .
.
ATOM 1868 CA   CA   . GLY GLY GLY A A 254 254 . 63.336 31.753 29.995  1.00 35.63  1 .
.
ATOM 1869 C    C    . GLY GLY GLY A A 254 254 . 63.283 33.238 30.300  1.00 34.08  1 .
.
ATOM 1870 O    O    . GLY GLY GLY A A 254 254 . 63.167 33.624 31.465  1.00 34.52  1 .
.
ATOM 1871 N    N    . LYS LYS LYS A A 255 255 . 63.340 34.082 29.266  1.00 32.68  1 .
.
ATOM 1872 CA   CA   . LYS LYS LYS A A 255 255 . 63.286 35.560 29.399  1.00 32.13  1 .
.
ATOM 1873 CB   CB   . LYS LYS LYS A A 255 255 . 64.634 36.172 28.926  1.00 32.46  1 .
.
ATOM 1874 CG   CG   . LYS LYS LYS A A 255 255 . 65.786 35.672 29.742  1.00 35.10  1 .
.
ATOM 1875 C    C    . LYS LYS LYS A A 255 255 . 62.145 36.120 28.545  1.00 30.89  1 .
.
ATOM 1876 O    O    . LYS LYS LYS A A 255 255 . 61.369 35.344 27.929  1.00 30.80  1 .
.
ATOM 1877 N    N    . TYR TYR TYR A A 256 256 . 62.075 37.443 28.470  1.00 29.66  1 .
.
ATOM 1878 CA   CA   . TYR TYR TYR A A 256 256 . 60.965 38.103 27.785  1.00 29.95  1 .
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ATOM 1879 CB   CB   . TYR TYR TYR A A 256 256 . 60.033 38.729 28.846  1.00 28.93  1 .
.
ATOM 1880 CG   CG   . TYR TYR TYR A A 256 256 . 59.355 37.684 29.710  1.00 27.61  1 .
.
ATOM 1881 CD1  CD1  . TYR TYR TYR A A 256 256 . 58.180 36.992 29.247  1.00 25.85  1 .
.
ATOM 1882 CE1  CE1  . TYR TYR TYR A A 256 256 . 57.563 36.025 30.034  1.00 26.68  1 .
.
ATOM 1883 CZ   CZ   . TYR TYR TYR A A 256 256 . 58.066 35.771 31.269  1.00 27.13  1 .
.
ATOM 1884 OH   OH   . TYR TYR TYR A A 256 256 . 57.436 34.804 32.052  1.00 27.69  1 .
.
ATOM 1885 CE2  CE2  . TYR TYR TYR A A 256 256 . 59.248 36.451 31.739  1.00 26.68  1 .
.
ATOM 1886 CD2  CD2  . TYR TYR TYR A A 256 256 . 59.833 37.381 30.979  1.00 24.77  1 .
.
ATOM 1887 C    C    . TYR TYR TYR A A 256 256 . 61.442 39.165 26.820  1.00 30.26  1 .
.
ATOM 1888 O    O    . TYR TYR TYR A A 256 256 . 62.233 40.025 27.178  1.00 30.16  1 .
.
ATOM 1889 N    N    . ASP ASP ASP A A 257 257 . 60.877 39.144 25.622  1.00 30.44  1 .
.
ATOM 1890 CA   CA   . ASP ASP ASP A A 257 257 . 61.250 40.063 24.590  1.00 29.91  1 .
.
ATOM 1891 CB   CB   . ASP ASP ASP A A 257 257 . 61.641 39.234 23.330  1.00 30.10  1 .
.
ATOM 1892 CG   CG   . ASP ASP ASP A A 257 257 . 62.096 40.088 22.158  1.00 30.40  1 .
.
ATOM 1893 OD1  OD1  . ASP ASP ASP A A 257 257 . 62.342 41.320 22.327  1.00 31.87  1 .
.
ATOM 1894 OD2  OD2  . ASP ASP ASP A A 257 257 . 62.300 39.492 21.054  1.00 29.61  1 .
.
ATOM 1895 C    C    . ASP ASP ASP A A 257 257 . 60.211 41.151 24.305  1.00 29.97  1 .
.
ATOM 1896 O    O    . ASP ASP ASP A A 257 257 . 59.213 40.913 23.556  1.00 30.30  1 .
.
ATOM 1897 N    N    . LEU LEU LEU A A 258 258 . 60.457 42.361 24.839  1.00 29.51  1 .
.
ATOM 1898 CA   CA   . LEU LEU LEU A A 258 258 . 59.588 43.522 24.549  1.00 29.16  1 .
.
ATOM 1899 CB   CB   . LEU LEU LEU A A 258 258 . 59.607 44.574 25.669  1.00 28.88  1 .
.
ATOM 1900 CG   CG   . LEU LEU LEU A A 258 258 . 59.268 43.946 27.023  1.00 29.41  1 .
.
ATOM 1901 CD1  CD1  . LEU LEU LEU A A 258 258 . 59.292 45.048 28.090  1.00 28.83  1 .
.
ATOM 1902 CD2  CD2  . LEU LEU LEU A A 258 258 . 57.904 43.259 27.084  1.00 29.97  1 .
.
ATOM 1903 C    C    . LEU LEU LEU A A 258 258 . 59.746 44.148 23.157  1.00 28.25  1 .
.
ATOM 1904 O    O    . LEU LEU LEU A A 258 258 . 59.121 45.196 22.866  1.00 28.44  1 .
.
ATOM 1905 N    N    . ASP ASP ASP A A 259 259 . 60.567 43.533 22.274  1.00 28.80  1 .
.
ATOM 1906 CA   CA   . ASP ASP ASP A A 259 259 . 60.594 43.955 20.846  1.00 29.63  1 .
.
ATOM 1907 CB   CB   . ASP ASP ASP A A 259 259 . 61.912 44.771 20.560  1.00 29.79  1 .
.
ATOM 1908 CG   CG   . ASP ASP ASP A A 259 259 . 61.841 45.667 19.326  1.00 33.68  1 .
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ATOM 1909 OD1  OD1  . ASP ASP ASP A A 259 259 . 60.808 45.745 18.579  1.00 35.20  1 .
.
ATOM 1910 OD2  OD2  . ASP ASP ASP A A 259 259 . 62.896 46.340 19.097  1.00 37.58  1 .
.
ATOM 1911 C    C    . ASP ASP ASP A A 259 259 . 60.450 42.711 19.942  1.00 30.14  1 .
.
ATOM 1912 O    O    . ASP ASP ASP A A 259 259 . 61.152 42.547 18.920  1.00 29.77  1 .
.
ATOM 1913 N    N    . PHE PHE PHE A A 260 260 . 59.493 41.842 20.275  1.00 29.76  1 .
.
ATOM 1914 CA   CA   . PHE PHE PHE A A 260 260 . 59.486 40.491 19.695  1.00 29.53  1 .
.
ATOM 1915 CB   CB   . PHE PHE PHE A A 260 260 . 58.628 39.462 20.510  1.00 28.38  1 .
.
ATOM 1916 CG   CG   . PHE PHE PHE A A 260 260 . 57.140 39.610 20.327  1.00 25.73  1 .
.
ATOM 1917 CD1  CD1  . PHE PHE PHE A A 260 260 . 56.403 40.520 21.117  1.00 25.10  1 .
.
ATOM 1918 CE1  CE1  . PHE PHE PHE A A 260 260 . 54.943 40.647 20.941  1.00 26.88  1 .
.
ATOM 1919 CZ   CZ   . PHE PHE PHE A A 260 260 . 54.263 39.793 20.002  1.00 29.00  1 .
.
ATOM 1920 CE2  CE2  . PHE PHE PHE A A 260 260 . 55.006 38.858 19.251  1.00 26.77  1 .
.
ATOM 1921 CD2  CD2  . PHE PHE PHE A A 260 260 . 56.461 38.771 19.438  1.00 25.28  1 .
.
ATOM 1922 C    C    . PHE PHE PHE A A 260 260 . 59.109 40.508 18.190  1.00 30.47  1 .
.
ATOM 1923 O    O    . PHE PHE PHE A A 260 260 . 59.294 39.464 17.479  1.00 30.40  1 .
.
ATOM 1924 N    N    . LYS LYS LYS A A 261 261 . 58.572 41.636 17.719  1.00 29.78  1 .
.
ATOM 1925 CA   CA   . LYS LYS LYS A A 261 261 . 58.199 41.721 16.314  1.00 32.76  1 .
.
ATOM 1926 CB   CB   . LYS LYS LYS A A 261 261 . 56.873 42.490 16.133  1.00 32.75  1 .
.
ATOM 1927 CG   CG   . LYS LYS LYS A A 261 261 . 55.691 41.672 16.703  1.00 32.45  1 .
.
ATOM 1928 CD   CD   . LYS LYS LYS A A 261 261 . 54.358 42.484 16.701  1.00 27.57  1 .
.
ATOM 1929 CE   CE   . LYS LYS LYS A A 261 261 . 54.274 43.335 17.981  1.00 26.24  1 .
.
ATOM 1930 NZ   NZ   . LYS LYS LYS A A 261 261 . 53.052 44.198 17.827  1.00 22.35  1 .
.
ATOM 1931 C    C    . LYS LYS LYS A A 261 261 . 59.365 42.307 15.501  1.00 34.61  1 .
.
ATOM 1932 O    O    . LYS LYS LYS A A 261 261 . 59.237 42.529 14.284  1.00 35.88  1 .
.
ATOM 1933 N    N    . SER SER SER A A 262 262 . 60.501 42.514 16.165  1.00 35.97  1 .
.
ATOM 1934 CA   CA   . SER SER SER A A 262 262 . 61.710 43.000 15.456  1.00 37.92  1 .
.
ATOM 1935 CB   CB   . SER SER SER A A 262 262 . 62.401 44.162 16.211  1.00 38.49  1 .
.
ATOM 1936 OG   OG   . SER SER SER A A 262 262 . 61.628 45.356 16.087  1.00 36.97  1 .
.
ATOM 1937 C    C    . SER SER SER A A 262 262 . 62.641 41.816 15.227  1.00 39.19  1 .
.
ATOM 1938 O    O    . SER SER SER A A 262 262 . 62.625 40.836 15.979  1.00 37.92  1 .
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ATOM 1939 N    N    . PRO PRO PRO A A 263 263 . 63.445 41.861 14.140  1.00 40.67  1 .
.
ATOM 1940 CA   CA   . PRO PRO PRO A A 263 263 . 64.328 40.680 13.951  1.00 41.33  1 .
.
ATOM 1941 CB   CB   . PRO PRO PRO A A 263 263 . 65.245 41.058 12.778  1.00 41.82  1 .
.
ATOM 1942 CG   CG   . PRO PRO PRO A A 263 263 . 64.757 42.405 12.238  1.00 42.25  1 .
.
ATOM 1943 CD   CD   . PRO PRO PRO A A 263 263 . 63.610 42.925 13.125  1.00 40.99  1 .
.
ATOM 1944 C    C    . PRO PRO PRO A A 263 263 . 65.132 40.386 15.221  1.00 41.54  1 .
.
ATOM 1945 O    O    . PRO PRO PRO A A 263 263 . 65.555 41.310 15.948  1.00 41.16  1 .
.
ATOM 1946 N    N    . THR THR THR A A 264 264 . 65.298 39.095 15.482  1.00 42.72  1 .
.
ATOM 1947 CA   CA   . THR THR THR A A 264 264 . 65.735 38.566 16.780  1.00 44.46  1 .
.
ATOM 1948 CB   CB   . THR THR THR A A 264 264 . 65.881 37.015 16.751  1.00 44.58  1 .
.
ATOM 1949 OG1  OG1  . THR THR THR A A 264 264 . 64.628 36.418 16.363  1.00 45.79  1 .
.
ATOM 1950 CG2  CG2  . THR THR THR A A 264 264 . 66.335 36.449 18.114  1.00 43.19  1 .
.
ATOM 1951 C    C    . THR THR THR A A 264 264 . 67.021 39.196 17.263  1.00 45.47  1 .
.
ATOM 1952 O    O    . THR THR THR A A 264 264 . 67.920 39.519 16.465  1.00 46.35  1 .
.
ATOM 1953 N    N    . ASP ASP ASP A A 265 265 . 67.087 39.387 18.570  1.00 44.99  1 .
.
ATOM 1954 CA   CA   . ASP ASP ASP A A 265 265 . 68.249 39.963 19.209  1.00 46.03  1 .
.
ATOM 1955 CB   CB   . ASP ASP ASP A A 265 265 . 68.372 41.472 18.955  1.00 45.93  1 .
.
ATOM 1956 CG   CG   . ASP ASP ASP A A 265 265 . 69.653 42.048 19.539  1.00 47.58  1 .
.
ATOM 1957 OD1  OD1  . ASP ASP ASP A A 265 265 . 70.459 41.275 20.129  1.00 46.86  1 .
.
ATOM 1958 OD2  OD2  . ASP ASP ASP A A 265 265 . 69.853 43.268 19.427  1.00 49.37  1 .
.
ATOM 1959 C    C    . ASP ASP ASP A A 265 265 . 68.212 39.655 20.708  1.00 45.46  1 .
.
ATOM 1960 O    O    . ASP ASP ASP A A 265 265 . 67.722 40.466 21.501  1.00 45.29  1 .
.
ATOM 1961 N    N    . PRO PRO PRO A A 266 266 . 68.758 38.483 21.099  1.00 45.45  1 .
.
ATOM 1962 CA   CA   . PRO PRO PRO A A 266 266 . 68.693 38.055 22.497  1.00 44.89  1 .
.
ATOM 1963 CB   CB   . PRO PRO PRO A A 266 266 . 69.449 36.737 22.508  1.00 45.14  1 .
.
ATOM 1964 CG   CG   . PRO PRO PRO A A 266 266 . 69.237 36.208 21.109  1.00 45.56  1 .
.
ATOM 1965 CD   CD   . PRO PRO PRO A A 266 266 . 69.342 37.438 20.239  1.00 45.36  1 .
.
ATOM 1966 C    C    . PRO PRO PRO A A 266 266 . 69.274 39.016 23.511  1.00 44.58  1 .
.
ATOM 1967 O    O    . PRO PRO PRO A A 266 266 . 68.958 38.889 24.695  1.00 43.64  1 .
.
ATOM 1968 N    N    . SER SER SER A A 267 267 . 70.074 39.993 23.065  1.00 44.65  1 .
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ATOM 1969 CA   CA   . SER SER SER A A 267 267 . 70.657 40.958 24.005  1.00 43.91  1 .
.
ATOM 1970 CB   CB   . SER SER SER A A 267 267 . 71.753 41.822 23.346  1.00 44.56  1 .
.
ATOM 1971 OG   OG   . SER SER SER A A 267 267 . 71.285 42.419 22.161  1.00 44.72  1 .
.
ATOM 1972 C    C    . SER SER SER A A 267 267 . 69.599 41.851 24.654  1.00 43.48  1 .
.
ATOM 1973 O    O    . SER SER SER A A 267 267 . 69.843 42.393 25.754  1.00 42.60  1 .
.
ATOM 1974 N    N    . ARG ARG ARG A A 268 268 . 68.448 42.023 23.977  1.00 41.29  1 .
.
ATOM 1975 CA   CA   . ARG ARG ARG A A 268 268 . 67.389 42.884 24.496  1.00 39.43  1 .
.
ATOM 1976 CB   CB   . ARG ARG ARG A A 268 268 . 66.576 43.493 23.348  1.00 38.87  1 .
.
ATOM 1977 CG   CG   . ARG ARG ARG A A 268 268 . 65.707 42.483 22.651  1.00 37.81  1 .
.
ATOM 1978 CD   CD   . ARG ARG ARG A A 268 268 . 65.133 43.035 21.348  1.00 39.97  1 .
.
ATOM 1979 NE   NE   . ARG ARG ARG A A 268 268 . 64.399 41.944 20.701  1.00 40.88  1 .
.
ATOM 1980 CZ   CZ   . ARG ARG ARG A A 268 268 . 64.299 41.723 19.384  1.00 39.94  1 .
.
ATOM 1981 NH1  NH1  . ARG ARG ARG A A 268 268 . 64.888 42.542 18.500  1.00 41.11  1 .
.
ATOM 1982 NH2  NH2  . ARG ARG ARG A A 268 268 . 63.609 40.656 18.958  1.00 36.17  1 .
.
ATOM 1983 C    C    . ARG ARG ARG A A 268 268 . 66.430 42.189 25.474  1.00 38.22  1 .
.
ATOM 1984 O    O    . ARG ARG ARG A A 268 268 . 65.562 42.856 26.048  1.00 38.39  1 .
.
ATOM 1985 N    N    . TYR TYR TYR A A 269 269 . 66.582 40.881 25.666  1.00 36.44  1 .
.
ATOM 1986 CA   CA   . TYR TYR TYR A A 269 269 . 65.660 40.118 26.558  1.00 36.15  1 .
.
ATOM 1987 CB   CB   . TYR TYR TYR A A 269 269 . 65.865 38.591 26.491  1.00 35.10  1 .
.
ATOM 1988 CG   CG   . TYR TYR TYR A A 269 269 . 65.658 37.952 25.134  1.00 35.05  1 .
.
ATOM 1989 CD1  CD1  . TYR TYR TYR A A 269 269 . 65.160 38.687 24.070  1.00 29.80  1 .
.
ATOM 1990 CE1  CE1  . TYR TYR TYR A A 269 269 . 64.956 38.096 22.806  1.00 34.82  1 .
.
ATOM 1991 CZ   CZ   . TYR TYR TYR A A 269 269 . 65.278 36.736 22.615  1.00 34.04  1 .
.
ATOM 1992 OH   OH   . TYR TYR TYR A A 269 269 . 65.075 36.124 21.374  1.00 37.16  1 .
.
ATOM 1993 CE2  CE2  . TYR TYR TYR A A 269 269 . 65.792 35.981 23.677  1.00 34.01  1 .
.
ATOM 1994 CD2  CD2  . TYR TYR TYR A A 269 269 . 65.978 36.592 24.922  1.00 33.74  1 .
.
ATOM 1995 C    C    . TYR TYR TYR A A 269 269 . 65.779 40.601 28.015  1.00 35.97  1 .
.
ATOM 1996 O    O    . TYR TYR TYR A A 269 269 . 66.861 40.838 28.511  1.00 32.32  1 .
.
ATOM 1997 N    N    . ILE ILE ILE A A 270 270 . 64.645 40.731 28.702  1.00 34.54  1 .
.
ATOM 1998 CA   CA   . ILE ILE ILE A A 270 270 . 64.678 41.038 30.122  1.00 34.49  1 .
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ATOM 1999 CB   CB   . ILE ILE ILE A A 270 270 . 63.844 42.347 30.457  1.00 34.75  1 .
.
ATOM 2000 CG1  CG1  . ILE ILE ILE A A 270 270 . 62.312 42.125 30.188  1.00 32.22  1 .
.
ATOM 2001 CD   CD   . ILE ILE ILE A A 270 270 . 61.459 43.294 30.717  1.00 29.80  1 .
.
ATOM 2002 CG2  CG2  . ILE ILE ILE A A 270 270 . 64.427 43.648 29.745  1.00 34.82  1 .
.
ATOM 2003 C    C    . ILE ILE ILE A A 270 270 . 64.205 39.831 30.971  1.00 35.25  1 .
.
ATOM 2004 O    O    . ILE ILE ILE A A 270 270 . 63.441 38.928 30.509  1.00 36.36  1 .
.
ATOM 2005 N    N    . THR THR THR A A 271 271 . 64.566 39.819 32.243  1.00 33.56  1 .
.
ATOM 2006 CA   CA   . THR THR THR A A 271 271 . 64.138 38.721 33.057  1.00 33.22  1 .
.
ATOM 2007 CB   CB   . THR THR THR A A 271 271 . 65.034 38.589 34.250  1.00 33.13  1 .
.
ATOM 2008 OG1  OG1  . THR THR THR A A 271 271 . 64.841 39.759 35.071  1.00 34.04  1 .
.
ATOM 2009 CG2  CG2  . THR THR THR A A 271 271 . 66.510 38.509 33.745  1.00 35.08  1 .
.
ATOM 2010 C    C    . THR THR THR A A 271 271 . 62.675 38.957 33.573  1.00 32.70  1 .
.
ATOM 2011 O    O    . THR THR THR A A 271 271 . 62.111 40.079 33.443  1.00 31.84  1 .
.
ATOM 2012 N    N    . GLY GLY GLY A A 272 272 . 62.125 37.930 34.215  1.00 32.87  1 .
.
ATOM 2013 CA   CA   . GLY GLY GLY A A 272 272 . 60.790 38.061 34.836  1.00 32.78  1 .
.
ATOM 2014 C    C    . GLY GLY GLY A A 272 272 . 60.798 39.086 35.974  1.00 33.11  1 .
.
ATOM 2015 O    O    . GLY GLY GLY A A 272 272 . 59.797 39.797 36.216  1.00 32.26  1 .
.
ATOM 2016 N    N    . ASP ASP ASP A A 273 273 . 61.912 39.196 36.682  1.00 33.38  1 .
.
ATOM 2017 CA   CA   . ASP ASP ASP A A 273 273 . 62.014 40.229 37.742  1.00 33.92  1 .
.
ATOM 2018 CB   CB   . ASP ASP ASP A A 273 273 . 63.249 39.988 38.616  1.00 35.83  1 .
.
ATOM 2019 CG   CG   . ASP ASP ASP A A 273 273 . 63.029 38.848 39.612  1.00 40.07  1 .
.
ATOM 2020 OD1  OD1  . ASP ASP ASP A A 273 273 . 61.871 38.478 39.873  1.00 44.22  1 .
.
ATOM 2021 OD2  OD2  . ASP ASP ASP A A 273 273 . 64.020 38.309 40.139  1.00 45.77  1 .
.
ATOM 2022 C    C    . ASP ASP ASP A A 273 273 . 62.045 41.601 37.185  1.00 33.59  1 .
.
ATOM 2023 O    O    . ASP ASP ASP A A 273 273 . 61.370 42.492 37.713  1.00 36.62  1 .
.
ATOM 2024 N    N    . GLN GLN GLN A A 274 274 . 62.789 41.800 36.105  1.00 32.04  1 .
.
ATOM 2025 CA   CA   . GLN GLN GLN A A 274 274 . 62.773 43.065 35.412  1.00 32.15  1 .
.
ATOM 2026 CB   CB   . GLN GLN GLN A A 274 274 . 63.778 43.039 34.258  1.00 33.56  1 .
.
ATOM 2027 CG   CG   . GLN GLN GLN A A 274 274 . 65.203 43.261 34.768  1.00 35.74  1 .
.
ATOM 2028 CD   CD   . GLN GLN GLN A A 274 274 . 66.192 43.089 33.653  1.00 39.11  1 .
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ATOM 2029 OE1  OE1  . GLN GLN GLN A A 274 274 . 66.151 42.087 32.877  1.00 37.54  1 .
.
ATOM 2030 NE2  NE2  . GLN GLN GLN A A 274 274 . 67.116 44.039 33.563  1.00 42.61  1 .
.
ATOM 2031 C    C    . GLN GLN GLN A A 274 274 . 61.366 43.433 34.884  1.00 30.27  1 .
.
ATOM 2032 O    O    . GLN GLN GLN A A 274 274 . 60.893 44.581 35.005  1.00 28.71  1 .
.
ATOM 2033 N    N    . LEU LEU LEU A A 275 275 . 60.722 42.442 34.291  1.00 29.07  1 .
.
ATOM 2034 CA   CA   . LEU LEU LEU A A 275 275 . 59.346 42.600 33.841  1.00 27.58  1 .
.
ATOM 2035 CB   CB   . LEU LEU LEU A A 275 275 . 58.875 41.331 33.131  1.00 28.53  1 .
.
ATOM 2036 CG   CG   . LEU LEU LEU A A 275 275 . 57.579 41.450 32.292  1.00 27.44  1 .
.
ATOM 2037 CD1  CD1  . LEU LEU LEU A A 275 275 . 57.532 42.663 31.322  1.00 27.53  1 .
.
ATOM 2038 CD2  CD2  . LEU LEU LEU A A 275 275 . 57.428 40.157 31.486  1.00 27.63  1 .
.
ATOM 2039 C    C    . LEU LEU LEU A A 275 275 . 58.389 42.989 34.986  1.00 26.89  1 .
.
ATOM 2040 O    O    . LEU LEU LEU A A 275 275 . 57.641 43.927 34.806  1.00 26.98  1 .
.
ATOM 2041 N    N    . GLY GLY GLY A A 276 276 . 58.443 42.306 36.126  1.00 26.37  1 .
.
ATOM 2042 CA   CA   . GLY GLY GLY A A 276 276 . 57.578 42.646 37.250  1.00 26.57  1 .
.
ATOM 2043 C    C    . GLY GLY GLY A A 276 276 . 57.855 44.062 37.723  1.00 27.64  1 .
.
ATOM 2044 O    O    . GLY GLY GLY A A 276 276 . 56.939 44.727 38.181  1.00 27.80  1 .
.
ATOM 2045 N    N    . ALA ALA ALA A A 277 277 . 59.133 44.538 37.675  1.00 27.82  1 .
.
ATOM 2046 CA   CA   . ALA ALA ALA A A 277 277 . 59.439 45.870 38.176  1.00 27.36  1 .
.
ATOM 2047 CB   CB   . ALA ALA ALA A A 277 277 . 61.052 46.066 38.277  1.00 27.65  1 .
.
ATOM 2048 C    C    . ALA ALA ALA A A 277 277 . 58.881 46.877 37.275  1.00 27.37  1 .
.
ATOM 2049 O    O    . ALA ALA ALA A A 277 277 . 58.461 47.941 37.722  1.00 29.24  1 .
.
ATOM 2050 N    N    . LEU LEU LEU A A 278 278 . 58.862 46.562 35.970  1.00 27.87  1 .
.
ATOM 2051 CA   CA   . LEU LEU LEU A A 278 278 . 58.254 47.427 35.017  1.00 27.46  1 .
.
ATOM 2052 CB   CB   . LEU LEU LEU A A 278 278 . 58.444 46.869 33.595  1.00 27.87  1 .
.
ATOM 2053 CG   CG   . LEU LEU LEU A A 278 278 . 57.932 47.784 32.479  1.00 31.00  1 .
.
ATOM 2054 CD1  CD1  . LEU LEU LEU A A 278 278 . 58.605 49.220 32.343  1.00 33.80  1 .
.
ATOM 2055 CD2  CD2  . LEU LEU LEU A A 278 278 . 58.053 47.051 31.165  1.00 32.91  1 .
.
ATOM 2056 C    C    . LEU LEU LEU A A 278 278 . 56.745 47.524 35.375  1.00 25.92  1 .
.
ATOM 2057 O    O    . LEU LEU LEU A A 278 278 . 56.216 48.597 35.360  1.00 24.61  1 .
.
ATOM 2058 N    N    . TYR TYR TYR A A 279 279 . 56.070 46.407 35.673  1.00 26.39  1 .
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ATOM 2059 CA   CA   . TYR TYR TYR A A 279 279 . 54.620 46.469 36.045  1.00 25.10  1 .
.
ATOM 2060 CB   CB   . TYR TYR TYR A A 279 279 . 54.032 45.069 36.309  1.00 25.30  1 .
.
ATOM 2061 CG   CG   . TYR TYR TYR A A 279 279 . 54.085 44.131 35.142  1.00 22.71  1 .
.
ATOM 2062 CD1  CD1  . TYR TYR TYR A A 279 279 . 53.928 44.605 33.841  1.00 23.11  1 .
.
ATOM 2063 CE1  CE1  . TYR TYR TYR A A 279 279 . 53.999 43.745 32.734  1.00 22.76  1 .
.
ATOM 2064 CZ   CZ   . TYR TYR TYR A A 279 279 . 54.239 42.388 32.916  1.00 20.07  1 .
.
ATOM 2065 OH   OH   . TYR TYR TYR A A 279 279 . 54.317 41.521 31.828  1.00 23.89  1 .
.
ATOM 2066 CE2  CE2  . TYR TYR TYR A A 279 279 . 54.437 41.885 34.176  1.00 23.03  1 .
.
ATOM 2067 CD2  CD2  . TYR TYR TYR A A 279 279 . 54.367 42.787 35.321  1.00 22.48  1 .
.
ATOM 2068 C    C    . TYR TYR TYR A A 279 279 . 54.381 47.336 37.292  1.00 25.62  1 .
.
ATOM 2069 O    O    . TYR TYR TYR A A 279 279 . 53.455 48.125 37.348  1.00 24.13  1 .
.
ATOM 2070 N    N    . GLN GLN GLN A A 280 280 . 55.251 47.206 38.277  1.00 26.62  1 .
.
ATOM 2071 CA   CA   . GLN GLN GLN A A 280 280 . 55.163 48.080 39.505  1.00 27.70  1 .
.
ATOM 2072 CB   CB   . GLN GLN GLN A A 280 280 . 56.276 47.742 40.487  1.00 29.25  1 .
.
ATOM 2073 CG   CG   . GLN GLN GLN A A 280 280 . 56.156 46.294 41.064  1.00 29.74  1 .
.
ATOM 2074 CD   CD   . GLN GLN GLN A A 280 280 . 55.001 46.117 42.058  1.00 35.99  1 .
.
ATOM 2075 OE1  OE1  . GLN GLN GLN A A 280 280 . 54.201 47.052 42.300  1.00 38.58  1 .
.
ATOM 2076 NE2  NE2  . GLN GLN GLN A A 280 280 . 54.889 44.907 42.620  1.00 35.47  1 .
.
ATOM 2077 C    C    . GLN GLN GLN A A 280 280 . 55.231 49.557 39.134  1.00 28.94  1 .
.
ATOM 2078 O    O    . GLN GLN GLN A A 280 280 . 54.474 50.346 39.666  1.00 28.57  1 .
.
ATOM 2079 N    N    . ASP ASP ASP A A 281 281 . 56.148 49.941 38.225  1.00 28.33  1 .
.
ATOM 2080 CA   CA   . ASP ASP ASP A A 281 281 . 56.158 51.317 37.694  1.00 29.78  1 .
.
ATOM 2081 CB   CB   . ASP ASP ASP A A 281 281 . 57.315 51.575 36.681  1.00 31.22  1 .
.
ATOM 2082 CG   CG   . ASP ASP ASP A A 281 281 . 58.740 51.491 37.281  1.00 36.80  1 .
.
ATOM 2083 OD1  OD1  . ASP ASP ASP A A 281 281 . 58.982 51.376 38.539  1.00 38.14  1 .
.
ATOM 2084 OD2  OD2  . ASP ASP ASP A A 281 281 . 59.669 51.573 36.411  1.00 41.68  1 .
.
ATOM 2085 C    C    . ASP ASP ASP A A 281 281 . 54.825 51.739 37.007  1.00 27.64  1 .
.
ATOM 2086 O    O    . ASP ASP ASP A A 281 281 . 54.354 52.848 37.125  1.00 26.88  1 .
.
ATOM 2087 N    N    . PHE PHE PHE A A 282 282 . 54.268 50.847 36.199  1.00 26.69  1 .
.
ATOM 2088 CA   CA   . PHE PHE PHE A A 282 282 . 53.057 51.154 35.525  1.00 26.29  1 .
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ATOM 2089 CB   CB   . PHE PHE PHE A A 282 282 . 52.649 49.954 34.672  1.00 26.44  1 .
.
ATOM 2090 CG   CG   . PHE PHE PHE A A 282 282 . 53.522 49.740 33.466  1.00 29.61  1 .
.
ATOM 2091 CD1  CD1  . PHE PHE PHE A A 282 282 . 53.477 48.527 32.814  1.00 29.99  1 .
.
ATOM 2092 CE1  CE1  . PHE PHE PHE A A 282 282 . 54.300 48.322 31.662  1.00 35.31  1 .
.
ATOM 2093 CZ   CZ   . PHE PHE PHE A A 282 282 . 55.177 49.379 31.222  1.00 35.52  1 .
.
ATOM 2094 CE2  CE2  . PHE PHE PHE A A 282 282 . 55.209 50.578 31.868  1.00 31.47  1 .
.
ATOM 2095 CD2  CD2  . PHE PHE PHE A A 282 282 . 54.389 50.767 33.004  1.00 31.26  1 .
.
ATOM 2096 C    C    . PHE PHE PHE A A 282 282 . 51.965 51.362 36.593  1.00 23.94  1 .
.
ATOM 2097 O    O    . PHE PHE PHE A A 282 282 . 51.142 52.255 36.447  1.00 24.15  1 .
.
ATOM 2098 N    N    . VAL VAL VAL A A 283 283 . 51.951 50.521 37.618  1.00 23.72  1 .
.
ATOM 2099 CA   CA   . VAL VAL VAL A A 283 283 . 50.870 50.579 38.616  1.00 23.21  1 .
.
ATOM 2100 CB   CB   . VAL VAL VAL A A 283 283 . 50.859 49.307 39.482  1.00 22.39  1 .
.
ATOM 2101 CG1  CG1  . VAL VAL VAL A A 283 283 . 49.923 49.459 40.717  1.00 25.10  1 .
.
ATOM 2102 CG2  CG2  . VAL VAL VAL A A 283 283 . 50.324 48.137 38.685  1.00 25.48  1 .
.
ATOM 2103 C    C    . VAL VAL VAL A A 283 283 . 50.992 51.890 39.450  1.00 25.09  1 .
.
ATOM 2104 O    O    . VAL VAL VAL A A 283 283 . 50.012 52.507 39.858  1.00 25.07  1 .
.
ATOM 2105 N    N    . ARG ARG ARG A A 284 284 . 52.234 52.287 39.691  1.00 26.29  1 .
.
ATOM 2106 CA   CA   . ARG ARG ARG A A 284 284 . 52.528 53.539 40.400  1.00 27.03  1 .
.
ATOM 2107 CB   CB   . ARG ARG ARG A A 284 284 . 53.991 53.501 40.847  1.00 27.96  1 .
.
ATOM 2108 CG   CG   . ARG ARG ARG A A 284 284 . 54.473 54.777 41.559  1.00 31.22  1 .
.
ATOM 2109 CD   CD   . ARG ARG ARG A A 284 284 . 56.040 54.783 41.513  1.00 34.42  1 .
.
ATOM 2110 NE   NE   . ARG ARG ARG A A 284 284 . 56.551 55.072 40.158  1.00 37.36  1 .
.
ATOM 2111 CZ   CZ   . ARG ARG ARG A A 284 284 . 57.723 54.638 39.683  1.00 40.54  1 .
.
ATOM 2112 NH1  NH1  . ARG ARG ARG A A 284 284 . 58.508 53.892 40.457  1.00 42.43  1 .
.
ATOM 2113 NH2  NH2  . ARG ARG ARG A A 284 284 . 58.118 54.954 38.438  1.00 40.18  1 .
.
ATOM 2114 C    C    . ARG ARG ARG A A 284 284 . 52.201 54.791 39.562  1.00 26.19  1 .
.
ATOM 2115 O    O    . ARG ARG ARG A A 284 284 . 51.610 55.738 40.063  1.00 28.02  1 .
.
ATOM 2116 N    N    . ASP ASP ASP A A 285 285 . 52.539 54.785 38.264  1.00 25.46  1 .
.
ATOM 2117 CA   CA   . ASP ASP ASP A A 285 285 . 52.428 55.973 37.423  1.00 26.98  1 .
.
ATOM 2118 CB   CB   . ASP ASP ASP A A 285 285 . 53.570 56.053 36.377  1.00 28.93  1 .
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ATOM 2119 CG   CG   . ASP ASP ASP A A 285 285 . 54.962 56.067 37.034  1.00 32.39  1 .
.
ATOM 2120 OD1  OD1  . ASP ASP ASP A A 285 285 . 55.065 56.461 38.231  1.00 35.83  1 .
.
ATOM 2121 OD2  OD2  . ASP ASP ASP A A 285 285 . 55.929 55.654 36.362  1.00 35.93  1 .
.
ATOM 2122 C    C    . ASP ASP ASP A A 285 285 . 51.138 56.153 36.681  1.00 26.36  1 .
.
ATOM 2123 O    O    . ASP ASP ASP A A 285 285 . 50.806 57.298 36.254  1.00 27.24  1 .
.
ATOM 2124 N    N    . TYR TYR TYR A A 286 286 . 50.391 55.053 36.500  1.00 25.23  1 .
.
ATOM 2125 CA   CA   . TYR TYR TYR A A 286 286 . 49.132 55.120 35.788  1.00 23.91  1 .
.
ATOM 2126 CB   CB   . TYR TYR TYR A A 286 286 . 49.298 54.356 34.459  1.00 24.77  1 .
.
ATOM 2127 CG   CG   . TYR TYR TYR A A 286 286 . 50.386 55.005 33.642  1.00 27.48  1 .
.
ATOM 2128 CD1  CD1  . TYR TYR TYR A A 286 286 . 50.154 56.184 32.954  1.00 27.22  1 .
.
ATOM 2129 CE1  CE1  . TYR TYR TYR A A 286 286 . 51.214 56.811 32.234  1.00 29.81  1 .
.
ATOM 2130 CZ   CZ   . TYR TYR TYR A A 286 286 . 52.442 56.196 32.237  1.00 32.20  1 .
.
ATOM 2131 OH   OH   . TYR TYR TYR A A 286 286 . 53.564 56.654 31.588  1.00 40.15  1 .
.
ATOM 2132 CE2  CE2  . TYR TYR TYR A A 286 286 . 52.665 55.023 32.902  1.00 32.59  1 .
.
ATOM 2133 CD2  CD2  . TYR TYR TYR A A 286 286 . 51.655 54.431 33.605  1.00 29.32  1 .
.
ATOM 2134 C    C    . TYR TYR TYR A A 286 286 . 48.014 54.424 36.541  1.00 23.28  1 .
.
ATOM 2135 O    O    . TYR TYR TYR A A 286 286 . 48.298 53.589 37.379  1.00 22.84  1 .
.
ATOM 2136 N    N    . PRO PRO PRO A A 287 287 . 46.740 54.737 36.202  1.00 22.82  1 .
.
ATOM 2137 CA   CA   . PRO PRO PRO A A 287 287 . 45.664 54.117 36.982  1.00 21.83  1 .
.
ATOM 2138 CB   CB   . PRO PRO PRO A A 287 287 . 44.491 55.098 36.770  1.00 22.06  1 .
.
ATOM 2139 CG   CG   . PRO PRO PRO A A 287 287 . 44.747 55.719 35.408  1.00 23.71  1 .
.
ATOM 2140 CD   CD   . PRO PRO PRO A A 287 287 . 46.252 55.738 35.254  1.00 23.98  1 .
.
ATOM 2141 C    C    . PRO PRO PRO A A 287 287 . 45.343 52.671 36.519  1.00 22.44  1 .
.
ATOM 2142 O    O    . PRO PRO PRO A A 287 287 . 44.163 52.360 36.219  1.00 21.92  1 .
.
ATOM 2143 N    N    . VAL VAL VAL A A 288 288 . 46.372 51.799 36.524  1.00 21.39  1 .
.
ATOM 2144 CA   CA   . VAL VAL VAL A A 288 288 . 46.256 50.408 36.166  1.00 21.13  1 .
.
ATOM 2145 CB   CB   . VAL VAL VAL A A 288 288 . 47.615 49.839 35.709  1.00 20.33  1 .
.
ATOM 2146 CG1  CG1  . VAL VAL VAL A A 288 288 . 47.530 48.298 35.493  1.00 21.06  1 .
.
ATOM 2147 CG2  CG2  . VAL VAL VAL A A 288 288 . 48.122 50.664 34.468  1.00 20.46  1 .
.
ATOM 2148 C    C    . VAL VAL VAL A A 288 288 . 45.668 49.612 37.336  1.00 20.04  1 .
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ATOM 2149 O    O    . VAL VAL VAL A A 288 288 . 46.204 49.520 38.484  1.00 21.51  1 .
.
ATOM 2150 N    N    . VAL VAL VAL A A 289 289 . 44.530 49.018 37.081  1.00 18.77  1 .
.
ATOM 2151 CA   CA   . VAL VAL VAL A A 289 289 . 43.882 48.265 38.158  1.00 17.37  1 .
.
ATOM 2152 CB   CB   . VAL VAL VAL A A 289 289 . 42.451 48.797 38.384  1.00 17.39  1 .
.
ATOM 2153 CG1  CG1  . VAL VAL VAL A A 289 289 . 42.503 50.271 38.706  1.00 17.98  1 .
.
ATOM 2154 CG2  CG2  . VAL VAL VAL A A 289 289 . 41.471 48.453 37.127  1.00 19.28  1 .
.
ATOM 2155 C    C    . VAL VAL VAL A A 289 289 . 43.831 46.772 37.858  1.00 18.05  1 .
.
ATOM 2156 O    O    . VAL VAL VAL A A 289 289 . 43.317 45.982 38.676  1.00 19.45  1 .
.
ATOM 2157 N    N    . SER SER SER A A 290 290 . 44.283 46.349 36.644  1.00 16.98  1 .
.
ATOM 2158 CA   CA   . SER SER SER A A 290 290 . 44.148 44.919 36.256  1.00 15.52  1 .
.
ATOM 2159 CB   CB   . SER SER SER A A 290 290 . 42.760 44.634 35.622  1.00 15.59  1 .
.
ATOM 2160 OG   OG   . SER SER SER A A 290 290 . 42.647 43.237 35.280  1.00 16.62  1 .
.
ATOM 2161 C    C    . SER SER SER A A 290 290 . 45.243 44.623 35.229  1.00 14.46  1 .
.
ATOM 2162 O    O    . SER SER SER A A 290 290 . 45.394 45.425 34.288  1.00 18.00  1 .
.
ATOM 2163 N    N    . ILE ILE ILE A A 291 291 . 45.941 43.516 35.437  1.00 15.54  1 .
.
ATOM 2164 CA   CA   . ILE ILE ILE A A 291 291 . 46.983 43.032 34.481  1.00 16.84  1 .
.
ATOM 2165 CB   CB   . ILE ILE ILE A A 291 291 . 48.476 43.246 35.017  1.00 16.87  1 .
.
ATOM 2166 CG1  CG1  . ILE ILE ILE A A 291 291 . 48.699 44.752 35.209  1.00 18.94  1 .
.
ATOM 2167 CD   CD   . ILE ILE ILE A A 291 291 . 50.115 45.059 35.867  1.00 22.24  1 .
.
ATOM 2168 CG2  CG2  . ILE ILE ILE A A 291 291 . 49.496 42.770 33.924  1.00 18.88  1 .
.
ATOM 2169 C    C    . ILE ILE ILE A A 291 291 . 46.748 41.579 34.238  1.00 15.64  1 .
.
ATOM 2170 O    O    . ILE ILE ILE A A 291 291 . 46.724 40.739 35.173  1.00 16.39  1 .
.
ATOM 2171 N    N    . GLU GLU GLU A A 292 292 . 46.590 41.238 32.946  1.00 15.85  1 .
.
ATOM 2172 CA   CA   . GLU GLU GLU A A 292 292 . 46.326 39.883 32.581  1.00 15.97  1 .
.
ATOM 2173 CB   CB   . GLU GLU GLU A A 292 292 . 45.151 39.893 31.535  1.00 14.18  1 .
.
ATOM 2174 CG   CG   . GLU GLU GLU A A 292 292 . 44.878 38.499 30.934  1.00 13.49  1 .
.
ATOM 2175 CD   CD   . GLU GLU GLU A A 292 292 . 43.925 38.657 29.753  1.00 17.81  1 .
.
ATOM 2176 OE1  OE1  . GLU GLU GLU A A 292 292 . 43.121 39.635 29.675  1.00 20.94  1 .
.
ATOM 2177 OE2  OE2  . GLU GLU GLU A A 292 292 . 44.001 37.801 28.861  1.00 15.78  1 .
.
ATOM 2178 C    C    . GLU GLU GLU A A 292 292 . 47.579 39.261 31.916  1.00 17.11  1 .
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ATOM 2179 O    O    . GLU GLU GLU A A 292 292 . 48.268 39.939 31.175  1.00 18.53  1 .
.
ATOM 2180 N    N    . ASP ASP ASP A A 293 293 . 47.792 37.978 32.182  1.00 18.09  1 .
.
ATOM 2181 CA   CA   . ASP ASP ASP A A 293 293 . 48.966 37.177 31.663  1.00 18.98  1 .
.
ATOM 2182 CB   CB   . ASP ASP ASP A A 293 293 . 48.729 36.683 30.214  1.00 18.95  1 .
.
ATOM 2183 CG   CG   . ASP ASP ASP A A 293 293 . 47.873 35.381 30.172  1.00 19.46  1 .
.
ATOM 2184 OD1  OD1  . ASP ASP ASP A A 293 293 . 47.656 34.682 31.212  1.00 20.53  1 .
.
ATOM 2185 OD2  OD2  . ASP ASP ASP A A 293 293 . 47.439 35.043 29.055  1.00 19.72  1 .
.
ATOM 2186 C    C    . ASP ASP ASP A A 293 293 . 50.304 37.933 31.743  1.00 20.26  1 .
.
ATOM 2187 O    O    . ASP ASP ASP A A 293 293 . 51.027 38.126 30.715  1.00 19.99  1 .
.
ATOM 2188 N    N    . PRO PRO PRO A A 294 294 . 50.608 38.449 32.953  1.00 19.72  1 .
.
ATOM 2189 CA   CA   . PRO PRO PRO A A 294 294 . 51.849 39.252 33.067  1.00 20.85  1 .
.
ATOM 2190 CB   CB   . PRO PRO PRO A A 294 294 . 51.804 39.758 34.531  1.00 20.54  1 .
.
ATOM 2191 CG   CG   . PRO PRO PRO A A 294 294 . 50.866 38.745 35.260  1.00 21.30  1 .
.
ATOM 2192 CD   CD   . PRO PRO PRO A A 294 294 . 49.786 38.470 34.185  1.00 19.42  1 .
.
ATOM 2193 C    C    . PRO PRO PRO A A 294 294 . 53.077 38.367 32.821  1.00 22.10  1 .
.
ATOM 2194 O    O    . PRO PRO PRO A A 294 294 . 54.167 38.899 32.521  1.00 20.81  1 .
.
ATOM 2195 N    N    . PHE PHE PHE A A 295 295 . 52.932 37.035 32.961  1.00 22.24  1 .
.
ATOM 2196 CA   CA   . PHE PHE PHE A A 295 295 . 54.080 36.138 32.712  1.00 24.08  1 .
.
ATOM 2197 CB   CB   . PHE PHE PHE A A 295 295 . 54.721 35.697 34.019  1.00 24.86  1 .
.
ATOM 2198 CG   CG   . PHE PHE PHE A A 295 295 . 55.092 36.874 34.910  1.00 23.26  1 .
.
ATOM 2199 CD1  CD1  . PHE PHE PHE A A 295 295 . 56.228 37.639 34.622  1.00 26.75  1 .
.
ATOM 2200 CE1  CE1  . PHE PHE PHE A A 295 295 . 56.587 38.726 35.430  1.00 26.13  1 .
.
ATOM 2201 CZ   CZ   . PHE PHE PHE A A 295 295 . 55.768 39.124 36.496  1.00 28.26  1 .
.
ATOM 2202 CE2  CE2  . PHE PHE PHE A A 295 295 . 54.619 38.383 36.796  1.00 26.68  1 .
.
ATOM 2203 CD2  CD2  . PHE PHE PHE A A 295 295 . 54.268 37.272 35.984  1.00 24.94  1 .
.
ATOM 2204 C    C    . PHE PHE PHE A A 295 295 . 53.620 34.948 31.926  1.00 24.45  1 .
.
ATOM 2205 O    O    . PHE PHE PHE A A 295 295 . 52.410 34.793 31.680  1.00 23.43  1 .
.
ATOM 2206 N    N    . ASP ASP ASP A A 296 296 . 54.586 34.138 31.498  1.00 23.14  1 .
.
ATOM 2207 CA   CA   . ASP ASP ASP A A 296 296 . 54.309 33.002 30.621  1.00 23.36  1 .
.
ATOM 2208 CB   CB   . ASP ASP ASP A A 296 296 . 55.650 32.285 30.186  1.00 23.35  1 .
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ATOM 2209 CG   CG   . ASP ASP ASP A A 296 296 . 55.369 31.061 29.335  1.00 24.32  1 .
.
ATOM 2210 OD1  OD1  . ASP ASP ASP A A 296 296 . 55.034 31.281 28.163  1.00 29.53  1 .
.
ATOM 2211 OD2  OD2  . ASP ASP ASP A A 296 296 . 55.444 29.901 29.836  1.00 27.47  1 .
.
ATOM 2212 C    C    . ASP ASP ASP A A 296 296 . 53.374 31.995 31.296  1.00 22.21  1 .
.
ATOM 2213 O    O    . ASP ASP ASP A A 296 296 . 53.305 31.904 32.518  1.00 22.26  1 .
.
ATOM 2214 N    N    . GLN GLN GLN A A 297 297 . 52.670 31.190 30.486  1.00 22.69  1 .
.
ATOM 2215 CA   CA   . GLN GLN GLN A A 297 297 . 51.651 30.240 30.984  1.00 22.91  1 .
.
ATOM 2216 CB   CB   . GLN GLN GLN A A 297 297 . 50.934 29.632 29.750  1.00 21.82  1 .
.
ATOM 2217 CG   CG   . GLN GLN GLN A A 297 297 . 51.975 28.911 28.832  1.00 22.37  1 .
.
ATOM 2218 CD   CD   . GLN GLN GLN A A 297 297 . 51.597 28.980 27.349  1.00 24.02  1 .
.
ATOM 2219 OE1  OE1  . GLN GLN GLN A A 297 297 . 50.418 28.918 26.994  1.00 24.45  1 .
.
ATOM 2220 NE2  NE2  . GLN GLN GLN A A 297 297 . 52.588 29.165 26.485  1.00 23.96  1 .
.
ATOM 2221 C    C    . GLN GLN GLN A A 297 297 . 52.210 29.120 31.848  1.00 25.44  1 .
.
ATOM 2222 O    O    . GLN GLN GLN A A 297 297 . 51.469 28.428 32.561  1.00 25.95  1 .
.
ATOM 2223 N    N    . ASP ASP ASP A A 298 298 . 53.549 28.918 31.802  1.00 25.42  1 .
.
ATOM 2224 CA   CA   . ASP ASP ASP A A 298 298 . 54.223 27.868 32.629  1.00 27.36  1 .
.
ATOM 2225 CB   CB   . ASP ASP ASP A A 298 298 . 55.165 26.974 31.742  1.00 28.80  1 .
.
ATOM 2226 CG   CG   . ASP ASP ASP A A 298 298 . 54.429 25.926 30.809  1.00 32.33  1 .
.
ATOM 2227 OD1  OD1  . ASP ASP ASP A A 298 298 . 53.494 25.208 31.230  1.00 26.51  1 .
.
ATOM 2228 OD2  OD2  . ASP ASP ASP A A 298 298 . 54.885 25.785 29.584  1.00 37.07  1 .
.
ATOM 2229 C    C    . ASP ASP ASP A A 298 298 . 55.073 28.534 33.743  1.00 27.36  1 .
.
ATOM 2230 O    O    . ASP ASP ASP A A 298 298 . 55.711 27.815 34.551  1.00 28.87  1 .
.
ATOM 2231 N    N    . ASP ASP ASP A A 299 299 . 55.157 29.865 33.752  1.00 27.55  1 .
.
ATOM 2232 CA   CA   . ASP ASP ASP A A 299 299 . 56.079 30.604 34.716  1.00 25.47  1 .
.
ATOM 2233 CB   CB   . ASP ASP ASP A A 299 299 . 56.556 31.916 34.051  1.00 26.05  1 .
.
ATOM 2234 CG   CG   . ASP ASP ASP A A 299 299 . 57.803 32.557 34.753  1.00 27.35  1 .
.
ATOM 2235 OD1  OD1  . ASP ASP ASP A A 299 299 . 58.287 32.045 35.781  1.00 29.34  1 .
.
ATOM 2236 OD2  OD2  . ASP ASP ASP A A 299 299 . 58.270 33.587 34.220  1.00 29.56  1 .
.
ATOM 2237 C    C    . ASP ASP ASP A A 299 299 . 55.409 30.828 36.094  1.00 25.65  1 .
.
ATOM 2238 O    O    . ASP ASP ASP A A 299 299 . 55.286 31.978 36.557  1.00 26.57  1 .
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ATOM 2239 N    N    . TRP TRP TRP A A 300 300 . 55.034 29.749 36.775  1.00 26.09  1 .
.
ATOM 2240 CA   CA   . TRP TRP TRP A A 300 300 . 54.142 29.812 37.930  1.00 26.67  1 .
.
ATOM 2241 CB   CB   . TRP TRP TRP A A 300 300 . 53.817 28.429 38.426  1.00 27.33  1 .
.
ATOM 2242 CG   CG   . TRP TRP TRP A A 300 300 . 52.889 27.648 37.516  1.00 27.95  1 .
.
ATOM 2243 CD1  CD1  . TRP TRP TRP A A 300 300 . 53.235 26.809 36.503  1.00 29.42  1 .
.
ATOM 2244 NE1  NE1  . TRP TRP TRP A A 300 300 . 52.078 26.273 35.906  1.00 30.00  1 .
.
ATOM 2245 CE2  CE2  . TRP TRP TRP A A 300 300 . 50.968 26.768 36.551  1.00 27.00  1 .
.
ATOM 2246 CD2  CD2  . TRP TRP TRP A A 300 300 . 51.432 27.665 37.556  1.00 27.03  1 .
.
ATOM 2247 CE3  CE3  . TRP TRP TRP A A 300 300 . 50.495 28.307 38.386  1.00 25.72  1 .
.
ATOM 2248 CZ3  CZ3  . TRP TRP TRP A A 300 300 . 49.110 28.095 38.146  1.00 25.41  1 .
.
ATOM 2249 CH2  CH2  . TRP TRP TRP A A 300 300 . 48.684 27.196 37.146  1.00 25.34  1 .
.
ATOM 2250 CZ2  CZ2  . TRP TRP TRP A A 300 300 . 49.599 26.525 36.327  1.00 25.80  1 .
.
ATOM 2251 C    C    . TRP TRP TRP A A 300 300 . 54.738 30.636 39.071  1.00 28.99  1 .
.
ATOM 2252 O    O    . TRP TRP TRP A A 300 300 . 54.014 31.432 39.733  1.00 29.10  1 .
.
ATOM 2253 N    N    . ALA ALA ALA A A 301 301 . 56.058 30.466 39.300  1.00 29.14  1 .
.
ATOM 2254 CA   CA   . ALA ALA ALA A A 301 301 . 56.675 31.131 40.459  1.00 29.48  1 .
.
ATOM 2255 CB   CB   . ALA ALA ALA A A 301 301 . 58.158 30.773 40.557  1.00 30.51  1 .
.
ATOM 2256 C    C    . ALA ALA ALA A A 301 301 . 56.541 32.638 40.319  1.00 29.38  1 .
.
ATOM 2257 O    O    . ALA ALA ALA A A 301 301 . 56.313 33.320 41.332  1.00 30.83  1 .
.
ATOM 2258 N    N    . ALA ALA ALA A A 302 302 . 56.785 33.156 39.091  1.00 28.57  1 .
.
ATOM 2259 CA   CA   . ALA ALA ALA A A 302 302 . 56.666 34.593 38.790  1.00 26.71  1 .
.
ATOM 2260 CB   CB   . ALA ALA ALA A A 302 302 . 57.078 34.941 37.368  1.00 27.47  1 .
.
ATOM 2261 C    C    . ALA ALA ALA A A 302 302 . 55.256 35.101 39.059  1.00 27.00  1 .
.
ATOM 2262 O    O    . ALA ALA ALA A A 302 302 . 55.107 36.202 39.602  1.00 25.20  1 .
.
ATOM 2263 N    N    . TRP TRP TRP A A 303 303 . 54.234 34.335 38.629  1.00 26.85  1 .
.
ATOM 2264 CA   CA   . TRP TRP TRP A A 303 303 . 52.877 34.746 38.904  1.00 26.24  1 .
.
ATOM 2265 CB   CB   . TRP TRP TRP A A 303 303 . 51.909 33.739 38.327  1.00 26.75  1 .
.
ATOM 2266 CG   CG   . TRP TRP TRP A A 303 303 . 51.664 33.788 36.856  1.00 24.45  1 .
.
ATOM 2267 CD1  CD1  . TRP TRP TRP A A 303 303 . 52.402 33.221 35.884  1.00 25.19  1 .
.
ATOM 2268 NE1  NE1  . TRP TRP TRP A A 303 303 . 51.826 33.395 34.657  1.00 23.96  1 .
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ATOM 2269 CE2  CE2  . TRP TRP TRP A A 303 303 . 50.639 34.068 34.838  1.00 23.74  1 .
.
ATOM 2270 CD2  CD2  . TRP TRP TRP A A 303 303 . 50.534 34.360 36.229  1.00 20.77  1 .
.
ATOM 2271 CE3  CE3  . TRP TRP TRP A A 303 303 . 49.411 35.056 36.702  1.00 21.85  1 .
.
ATOM 2272 CZ3  CZ3  . TRP TRP TRP A A 303 303 . 48.416 35.462 35.776  1.00 19.43  1 .
.
ATOM 2273 CH2  CH2  . TRP TRP TRP A A 303 303 . 48.542 35.187 34.393  1.00 19.82  1 .
.
ATOM 2274 CZ2  CZ2  . TRP TRP TRP A A 303 303 . 49.653 34.488 33.895  1.00 20.77  1 .
.
ATOM 2275 C    C    . TRP TRP TRP A A 303 303 . 52.599 34.821 40.416  1.00 27.73  1 .
.
ATOM 2276 O    O    . TRP TRP TRP A A 303 303 . 52.100 35.841 40.907  1.00 27.33  1 .
.
ATOM 2277 N    N    . SER SER SER A A 304 304 . 52.893 33.749 41.137  1.00 27.29  1 .
.
ATOM 2278 CA   CA   . SER SER SER A A 304 304 . 52.597 33.731 42.587  1.00 29.22  1 .
.
ATOM 2279 CB   CB   . SER SER SER A A 304 304 . 52.999 32.403 43.203  1.00 29.91  1 .
.
ATOM 2280 OG   OG   . SER SER SER A A 304 304 . 52.270 31.321 42.668  1.00 31.30  1 .
.
ATOM 2281 C    C    . SER SER SER A A 304 304 . 53.369 34.859 43.317  1.00 30.09  1 .
.
ATOM 2282 O    O    . SER SER SER A A 304 304 . 52.839 35.463 44.266  1.00 29.06  1 .
.
ATOM 2283 N    N    . LYS LYS LYS A A 305 305 . 54.601 35.168 42.870  1.00 30.46  1 .
.
ATOM 2284 CA   CA   . LYS LYS LYS A A 305 305 . 55.380 36.229 43.507  1.00 31.71  1 .
.
ATOM 2285 CB   CB   . LYS LYS LYS A A 305 305 . 56.872 36.111 43.076  1.00 31.94  1 .
.
ATOM 2286 CG   CG   . LYS LYS LYS A A 305 305 . 57.858 37.033 43.798  1.00 38.67  1 .
.
ATOM 2287 CD   CD   . LYS LYS LYS A A 305 305 . 59.281 36.722 43.261  1.00 41.20  1 .
.
ATOM 2288 CE   CE   . LYS LYS LYS A A 305 305 . 60.294 37.581 43.891  1.00 46.26  1 .
.
ATOM 2289 NZ   NZ   . LYS LYS LYS A A 305 305 . 60.135 38.959 43.372  1.00 50.98  1 .
.
ATOM 2290 C    C    . LYS LYS LYS A A 305 305 . 54.798 37.614 43.196  1.00 30.67  1 .
.
ATOM 2291 O    O    . LYS LYS LYS A A 305 305 . 54.586 38.424 44.127  1.00 30.80  1 .
.
ATOM 2292 N    N    . PHE PHE PHE A A 306 306 . 54.468 37.878 41.908  1.00 28.95  1 .
.
ATOM 2293 CA   CA   . PHE PHE PHE A A 306 306 . 53.878 39.161 41.531  1.00 27.75  1 .
.
ATOM 2294 CB   CB   . PHE PHE PHE A A 306 306 . 53.695 39.296 39.992  1.00 25.93  1 .
.
ATOM 2295 CG   CG   . PHE PHE PHE A A 306 306 . 53.318 40.681 39.530  1.00 28.87  1 .
.
ATOM 2296 CD1  CD1  . PHE PHE PHE A A 306 306 . 54.173 41.762 39.712  1.00 29.75  1 .
.
ATOM 2297 CE1  CE1  . PHE PHE PHE A A 306 306 . 53.843 43.012 39.312  1.00 27.93  1 .
.
ATOM 2298 CZ   CZ   . PHE PHE PHE A A 306 306 . 52.639 43.246 38.685  1.00 30.29  1 .
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ATOM 2299 CE2  CE2  . PHE PHE PHE A A 306 306 . 51.745 42.164 38.478  1.00 31.50  1 .
.
ATOM 2300 CD2  CD2  . PHE PHE PHE A A 306 306 . 52.091 40.887 38.899  1.00 28.72  1 .
.
ATOM 2301 C    C    . PHE PHE PHE A A 306 306 . 52.556 39.390 42.270  1.00 27.41  1 .
.
ATOM 2302 O    O    . PHE PHE PHE A A 306 306 . 52.353 40.467 42.827  1.00 27.49  1 .
.
ATOM 2303 N    N    . THR THR THR A A 307 307 . 51.658 38.401 42.248  1.00 28.26  1 .
.
ATOM 2304 CA   CA   . THR THR THR A A 307 307 . 50.325 38.504 42.889  1.00 28.81  1 .
.
ATOM 2305 CB   CB   . THR THR THR A A 307 307 . 49.544 37.197 42.632  1.00 29.89  1 .
.
ATOM 2306 OG1  OG1  . THR THR THR A A 307 307 . 49.345 37.122 41.217  1.00 28.22  1 .
.
ATOM 2307 CG2  CG2  . THR THR THR A A 307 307 . 48.181 37.144 43.336  1.00 27.09  1 .
.
ATOM 2308 C    C    . THR THR THR A A 307 307 . 50.423 38.858 44.396  1.00 29.24  1 .
.
ATOM 2309 O    O    . THR THR THR A A 307 307 . 49.627 39.626 44.943  1.00 28.21  1 .
.
ATOM 2310 N    N    . ALA ALA ALA A A 308 308 . 51.415 38.274 45.046  1.00 29.60  1 .
.
ATOM 2311 CA   CA   . ALA ALA ALA A A 308 308 . 51.637 38.516 46.495  1.00 30.05  1 .
.
ATOM 2312 CB   CB   . ALA ALA ALA A A 308 308 . 52.655 37.503 46.984  1.00 29.54  1 .
.
ATOM 2313 C    C    . ALA ALA ALA A A 308 308 . 52.110 39.928 46.782  1.00 30.84  1 .
.
ATOM 2314 O    O    . ALA ALA ALA A A 308 308 . 52.023 40.431 47.903  1.00 31.13  1 .
.
ATOM 2315 N    N    . ASN ASN ASN A A 309 309 . 52.617 40.590 45.774  1.00 31.45  1 .
.
ATOM 2316 CA   CA   . ASN ASN ASN A A 309 309 . 53.272 41.877 45.959  1.00 31.49  1 .
.
ATOM 2317 CB   CB   . ASN ASN ASN A A 309 309 . 54.695 41.765 45.396  1.00 32.20  1 .
.
ATOM 2318 CG   CG   . ASN ASN ASN A A 309 309 . 55.612 41.015 46.342  1.00 36.07  1 .
.
ATOM 2319 OD1  OD1  . ASN ASN ASN A A 309 309 . 55.975 39.844 46.121  1.00 39.23  1 .
.
ATOM 2320 ND2  ND2  . ASN ASN ASN A A 309 309 . 55.950 41.674 47.448  1.00 36.26  1 .
.
ATOM 2321 C    C    . ASN ASN ASN A A 309 309 . 52.503 43.026 45.324  1.00 32.05  1 .
.
ATOM 2322 O    O    . ASN ASN ASN A A 309 309 . 53.046 44.130 45.149  1.00 32.27  1 .
.
ATOM 2323 N    N    . VAL VAL VAL A A 310 310 . 51.252 42.769 44.889  1.00 30.16  1 .
.
ATOM 2324 CA   CA   . VAL VAL VAL A A 310 310 . 50.413 43.867 44.385  1.00 29.00  1 .
.
ATOM 2325 CB   CB   . VAL VAL VAL A A 310 310 . 50.271 43.808 42.848  1.00 29.05  1 .
.
ATOM 2326 CG1  CG1  . VAL VAL VAL A A 310 310 . 51.652 43.849 42.185  1.00 31.30  1 .
.
ATOM 2327 CG2  CG2  . VAL VAL VAL A A 310 310 . 49.446 42.558 42.459  1.00 27.68  1 .
.
ATOM 2328 C    C    . VAL VAL VAL A A 310 310 . 48.984 43.840 44.971  1.00 26.84  1 .
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ATOM 2329 O    O    . VAL VAL VAL A A 310 310 . 48.567 42.830 45.511  1.00 28.00  1 .
.
ATOM 2330 N    N    . GLY GLY GLY A A 311 311 . 48.277 44.969 44.890  1.00 25.48  1 .
.
ATOM 2331 CA   CA   . GLY GLY GLY A A 311 311 . 46.916 45.057 45.443  1.00 25.42  1 .
.
ATOM 2332 C    C    . GLY GLY GLY A A 311 311 . 45.912 45.166 44.307  1.00 24.93  1 .
.
ATOM 2333 O    O    . GLY GLY GLY A A 311 311 . 44.740 45.520 44.531  1.00 25.62  1 .
.
ATOM 2334 N    N    . ILE ILE ILE A A 312 312 . 46.361 44.842 43.095  1.00 22.99  1 .
.
ATOM 2335 CA   CA   . ILE ILE ILE A A 312 312 . 45.447 44.925 41.910  1.00 20.56  1 .
.
ATOM 2336 CB   CB   . ILE ILE ILE A A 312 312 . 46.095 45.682 40.750  1.00 19.24  1 .
.
ATOM 2337 CG1  CG1  . ILE ILE ILE A A 312 312 . 47.293 44.898 40.167  1.00 20.70  1 .
.
ATOM 2338 CD   CD   . ILE ILE ILE A A 312 312 . 47.670 45.461 38.726  1.00 21.88  1 .
.
ATOM 2339 CG2  CG2  . ILE ILE ILE A A 312 312 . 46.413 47.131 41.181  1.00 20.38  1 .
.
ATOM 2340 C    C    . ILE ILE ILE A A 312 312 . 44.960 43.581 41.423  1.00 19.16  1 .
.
ATOM 2341 O    O    . ILE ILE ILE A A 312 312 . 45.314 42.511 41.962  1.00 18.61  1 .
.
ATOM 2342 N    N    . GLN GLN GLN A A 313 313 . 44.048 43.634 40.430  1.00 18.18  1 .
.
ATOM 2343 CA   CA   . GLN GLN GLN A A 313 313 . 43.530 42.370 39.859  1.00 16.95  1 .
.
ATOM 2344 CB   CB   . GLN GLN GLN A A 313 313 . 42.253 42.665 39.037  1.00 15.83  1 .
.
ATOM 2345 CG   CG   . GLN GLN GLN A A 313 313 . 41.789 41.451 38.223  1.00 16.29  1 .
.
ATOM 2346 CD   CD   . GLN GLN GLN A A 313 313 . 40.331 41.640 37.797  1.00 17.60  1 .
.
ATOM 2347 OE1  OE1  . GLN GLN GLN A A 313 313 . 39.424 41.273 38.561  1.00 16.69  1 .
.
ATOM 2348 NE2  NE2  . GLN GLN GLN A A 313 313 . 40.103 42.237 36.617  1.00 15.61  1 .
.
ATOM 2349 C    C    . GLN GLN GLN A A 313 313 . 44.616 41.810 38.929  1.00 16.90  1 .
.
ATOM 2350 O    O    . GLN GLN GLN A A 313 313 . 45.193 42.579 38.148  1.00 18.50  1 .
.
ATOM 2351 N    N    . ILE ILE ILE A A 314 314 . 44.847 40.514 39.023  1.00 17.55  1 .
.
ATOM 2352 CA   CA   . ILE ILE ILE A A 314 314 . 45.860 39.787 38.197  1.00 16.37  1 .
.
ATOM 2353 CB   CB   . ILE ILE ILE A A 314 314 . 46.988 39.185 39.043  1.00 19.38  1 .
.
ATOM 2354 CG1  CG1  . ILE ILE ILE A A 314 314 . 47.766 40.352 39.743  1.00 20.00  1 .
.
ATOM 2355 CD   CD   . ILE ILE ILE A A 314 314 . 48.393 41.507 38.734  1.00 18.47  1 .
.
ATOM 2356 CG2  CG2  . ILE ILE ILE A A 314 314 . 47.887 38.244 38.178  1.00 18.66  1 .
.
ATOM 2357 C    C    . ILE ILE ILE A A 314 314 . 45.042 38.678 37.551  1.00 15.96  1 .
.
ATOM 2358 O    O    . ILE ILE ILE A A 314 314 . 44.459 37.834 38.207  1.00 15.57  1 .
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ATOM 2359 N    N    . VAL VAL VAL A A 315 315 . 44.983 38.707 36.226  1.00 16.26  1 .
.
ATOM 2360 CA   CA   . VAL VAL VAL A A 315 315 . 44.050 37.834 35.497  1.00 16.23  1 .
.
ATOM 2361 CB   CB   . VAL VAL VAL A A 315 315 . 43.245 38.656 34.461  1.00 13.96  1 .
.
ATOM 2362 CG1  CG1  . VAL VAL VAL A A 315 315 . 42.183 37.720 33.760  1.00 17.55  1 .
.
ATOM 2363 CG2  CG2  . VAL VAL VAL A A 315 315 . 42.702 39.917 34.997  1.00 14.51  1 .
.
ATOM 2364 C    C    . VAL VAL VAL A A 315 315 . 44.751 36.679 34.778  1.00 14.78  1 .
.
ATOM 2365 O    O    . VAL VAL VAL A A 315 315 . 45.704 36.939 33.996  1.00 16.70  1 .
.
ATOM 2366 N    N    . GLY GLY GLY A A 316 316 . 44.353 35.436 35.080  1.00 15.56  1 .
.
ATOM 2367 CA   CA   . GLY GLY GLY A A 316 316 . 44.798 34.228 34.345  1.00 14.56  1 .
.
ATOM 2368 C    C    . GLY GLY GLY A A 316 316 . 44.072 34.106 33.019  1.00 16.21  1 .
.
ATOM 2369 O    O    . GLY GLY GLY A A 316 316 . 42.839 34.130 33.004  1.00 16.43  1 .
.
ATOM 2370 N    N    . ASP ASP ASP A A 317 317 . 44.839 33.938 31.917  1.00 15.46  1 .
.
ATOM 2371 CA   CA   . ASP ASP ASP A A 317 317 . 44.198 33.683 30.613  1.00 14.49  1 .
.
ATOM 2372 CB   CB   . ASP ASP ASP A A 317 317 . 44.257 34.934 29.715  1.00 14.21  1 .
.
ATOM 2373 CG   CG   . ASP ASP ASP A A 317 317 . 43.863 34.624 28.261  1.00 14.73  1 .
.
ATOM 2374 OD1  OD1  . ASP ASP ASP A A 317 317 . 43.101 33.625 28.070  1.00 17.51  1 .
.
ATOM 2375 OD2  OD2  . ASP ASP ASP A A 317 317 . 44.254 35.448 27.400  1.00 16.05  1 .
.
ATOM 2376 C    C    . ASP ASP ASP A A 317 317 . 44.879 32.427 30.042  1.00 15.86  1 .
.
ATOM 2377 O    O    . ASP ASP ASP A A 317 317 . 44.320 31.320 30.146  1.00 15.69  1 .
.
ATOM 2378 N    N    . ASP ASP ASP A A 318 318 . 46.080 32.573 29.500  1.00 16.74  1 .
.
ATOM 2379 CA   CA   . ASP ASP ASP A A 318 318 . 46.764 31.387 28.966  1.00 17.08  1 .
.
ATOM 2380 CB   CB   . ASP ASP ASP A A 318 318 . 47.935 31.839 28.080  1.00 17.85  1 .
.
ATOM 2381 CG   CG   . ASP ASP ASP A A 318 318 . 47.470 32.427 26.745  1.00 20.03  1 .
.
ATOM 2382 OD1  OD1  . ASP ASP ASP A A 318 318 . 46.336 32.075 26.299  1.00 18.91  1 .
.
ATOM 2383 OD2  OD2  . ASP ASP ASP A A 318 318 . 48.198 33.227 26.100  1.00 23.00  1 .
.
ATOM 2384 C    C    . ASP ASP ASP A A 318 318 . 47.231 30.547 30.160  1.00 18.14  1 .
.
ATOM 2385 O    O    . ASP ASP ASP A A 318 318 . 47.390 29.348 30.060  1.00 17.78  1 .
.
ATOM 2386 N    N    . LEU LEU LEU A A 319 319 . 47.376 31.174 31.343  1.00 17.60  1 .
.
ATOM 2387 CA   CA   . LEU LEU LEU A A 319 319 . 47.693 30.373 32.523  1.00 18.83  1 .
.
ATOM 2388 CB   CB   . LEU LEU LEU A A 319 319 . 47.843 31.304 33.732  1.00 18.97  1 .
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ATOM 2389 CG   CG   . LEU LEU LEU A A 319 319 . 48.133 30.571 35.043  1.00 20.90  1 .
.
ATOM 2390 CD1  CD1  . LEU LEU LEU A A 319 319 . 49.669 30.132 34.992  1.00 21.10  1 .
.
ATOM 2391 CD2  CD2  . LEU LEU LEU A A 319 319 . 47.846 31.576 36.209  1.00 22.36  1 .
.
ATOM 2392 C    C    . LEU LEU LEU A A 319 319 . 46.621 29.307 32.853  1.00 18.26  1 .
.
ATOM 2393 O    O    . LEU LEU LEU A A 319 319 . 46.945 28.154 33.175  1.00 18.70  1 .
.
ATOM 2394 N    N    . THR THR THR A A 320 320 . 45.345 29.709 32.768  1.00 17.30  1 .
.
ATOM 2395 CA   CA   . THR THR THR A A 320 320 . 44.243 28.952 33.309  1.00 16.86  1 .
.
ATOM 2396 CB   CB   . THR THR THR A A 320 320 . 43.302 29.909 34.146  1.00 16.45  1 .
.
ATOM 2397 OG1  OG1  . THR THR THR A A 320 320 . 43.184 31.155 33.451  1.00 18.79  1 .
.
ATOM 2398 CG2  CG2  . THR THR THR A A 320 320 . 43.929 30.235 35.605  1.00 19.43  1 .
.
ATOM 2399 C    C    . THR THR THR A A 320 320 . 43.378 28.275 32.220  1.00 16.41  1 .
.
ATOM 2400 O    O    . THR THR THR A A 320 320 . 42.706 27.272 32.491  1.00 15.74  1 .
.
ATOM 2401 N    N    . VAL VAL VAL A A 321 321 . 43.464 28.822 30.990  1.00 15.20  1 .
.
ATOM 2402 CA   CA   . VAL VAL VAL A A 321 321 . 42.665 28.321 29.844  1.00 14.54  1 .
.
ATOM 2403 CB   CB   . VAL VAL VAL A A 321 321 . 43.469 27.293 28.944  1.00 16.55  1 .
.
ATOM 2404 CG1  CG1  . VAL VAL VAL A A 321 321 . 44.651 28.010 28.260  1.00 17.75  1 .
.
ATOM 2405 CG2  CG2  . VAL VAL VAL A A 321 321 . 43.968 26.000 29.740  1.00 15.83  1 .
.
ATOM 2406 C    C    . VAL VAL VAL A A 321 321 . 41.256 27.799 30.150  1.00 13.11  1 .
.
ATOM 2407 O    O    . VAL VAL VAL A A 321 321 . 40.839 26.753 29.612  1.00 14.03  1 .
.
ATOM 2408 N    N    . THR THR THR A A 322 322 . 40.513 28.535 30.997  1.00 13.37  1 .
.
ATOM 2409 CA   CA   . THR THR THR A A 322 322 . 39.134 28.239 31.331  1.00 13.56  1 .
.
ATOM 2410 CB   CB   . THR THR THR A A 322 322 . 38.212 28.702 30.178  1.00 12.49  1 .
.
ATOM 2411 OG1  OG1  . THR THR THR A A 322 322 . 38.584 30.033 29.786  1.00 13.62  1 .
.
ATOM 2412 CG2  CG2  . THR THR THR A A 322 322 . 36.720 28.756 30.594  1.00 14.57  1 .
.
ATOM 2413 C    C    . THR THR THR A A 322 322 . 38.994 26.757 31.698  1.00 15.33  1 .
.
ATOM 2414 O    O    . THR THR THR A A 322 322 . 37.995 26.138 31.439  1.00 14.84  1 .
.
ATOM 2415 N    N    . ASN ASN ASN A A 323 323 . 40.001 26.232 32.406  1.00 16.22  1 .
.
ATOM 2416 CA   CA   . ASN ASN ASN A A 323 323 . 40.114 24.763 32.594  1.00 18.16  1 .
.
ATOM 2417 CB   CB   . ASN ASN ASN A A 323 323 . 41.403 24.244 31.972  1.00 18.60  1 .
.
ATOM 2418 CG   CG   . ASN ASN ASN A A 323 323 . 41.462 22.737 31.991  1.00 22.00  1 .
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ATOM 2419 OD1  OD1  . ASN ASN ASN A A 323 323 . 41.246 22.115 33.026  1.00 28.88  1 .
.
ATOM 2420 ND2  ND2  . ASN ASN ASN A A 323 323 . 41.767 22.126 30.843  1.00 20.26  1 .
.
ATOM 2421 C    C    . ASN ASN ASN A A 323 323 . 40.171 24.465 34.097  1.00 19.94  1 .
.
ATOM 2422 O    O    . ASN ASN ASN A A 323 323 . 41.100 24.915 34.718  1.00 19.72  1 .
.
ATOM 2423 N    N    . PRO PRO PRO A A 324 324 . 39.151 23.762 34.626  1.00 21.75  1 .
.
ATOM 2424 CA   CA   . PRO PRO PRO A A 324 324 . 39.086 23.555 36.082  1.00 22.69  1 .
.
ATOM 2425 CB   CB   . PRO PRO PRO A A 324 324 . 37.854 22.625 36.217  1.00 21.60  1 .
.
ATOM 2426 CG   CG   . PRO PRO PRO A A 324 324 . 36.870 23.095 35.054  1.00 24.01  1 .
.
ATOM 2427 CD   CD   . PRO PRO PRO A A 324 324 . 37.874 23.386 33.922  1.00 21.06  1 .
.
ATOM 2428 C    C    . PRO PRO PRO A A 324 324 . 40.406 22.960 36.679  1.00 23.94  1 .
.
ATOM 2429 O    O    . PRO PRO PRO A A 324 324 . 40.854 23.368 37.782  1.00 23.68  1 .
.
ATOM 2430 N    N    . LYS LYS LYS A A 325 325 . 41.065 22.045 35.955  1.00 25.50  1 .
.
ATOM 2431 CA   CA   . LYS LYS LYS A A 325 325 . 42.346 21.505 36.457  1.00 25.60  1 .
.
ATOM 2432 CB   CB   . LYS LYS LYS A A 325 325 . 42.828 20.344 35.564  1.00 29.21  1 .
.
ATOM 2433 CG   CG   . LYS LYS LYS A A 325 325 . 41.878 19.136 35.594  1.00 32.21  1 .
.
ATOM 2434 CD   CD   . LYS LYS LYS A A 325 325 . 42.380 18.010 34.655  1.00 38.91  1 .
.
ATOM 2435 CE   CE   . LYS LYS LYS A A 325 325 . 41.438 16.758 34.590  1.00 43.39  1 .
.
ATOM 2436 C    C    . LYS LYS LYS A A 325 325 . 43.448 22.556 36.637  1.00 26.27  1 .
.
ATOM 2437 O    O    . LYS LYS LYS A A 325 325 . 44.169 22.575 37.703  1.00 27.35  1 .
.
ATOM 2438 N    N    . ARG ARG ARG A A 326 326 . 43.591 23.460 35.673  1.00 22.43  1 .
.
ATOM 2439 CA   CA   . ARG ARG ARG A A 326 326 . 44.592 24.509 35.791  1.00 23.75  1 .
.
ATOM 2440 CB   CB   . ARG ARG ARG A A 326 326 . 44.889 25.179 34.440  1.00 23.03  1 .
.
ATOM 2441 CG   CG   . ARG ARG ARG A A 326 326 . 45.342 24.198 33.314  1.00 28.44  1 .
.
ATOM 2442 CD   CD   . ARG ARG ARG A A 326 326 . 46.820 24.140 33.140  1.00 30.33  1 .
.
ATOM 2443 NE   NE   . ARG ARG ARG A A 326 326 . 47.466 25.434 32.947  1.00 25.74  1 .
.
ATOM 2444 CZ   CZ   . ARG ARG ARG A A 326 326 . 48.772 25.550 32.899  1.00 20.74  1 .
.
ATOM 2445 NH1  NH1  . ARG ARG ARG A A 326 326 . 49.505 24.426 32.954  1.00 27.24  1 .
.
ATOM 2446 NH2  NH2  . ARG ARG ARG A A 326 326 . 49.321 26.731 32.723  1.00 26.40  1 .
.
ATOM 2447 C    C    . ARG ARG ARG A A 326 326 . 44.144 25.574 36.804  1.00 22.18  1 .
.
ATOM 2448 O    O    . ARG ARG ARG A A 326 326 . 44.986 26.219 37.450  1.00 22.15  1 .
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ATOM 2449 N    N    . ILE ILE ILE A A 327 327 . 42.813 25.786 36.929  1.00 21.39  1 .
.
ATOM 2450 CA   CA   . ILE ILE ILE A A 327 327 . 42.301 26.771 37.861  1.00 20.55  1 .
.
ATOM 2451 CB   CB   . ILE ILE ILE A A 327 327 . 40.753 27.018 37.662  1.00 20.40  1 .
.
ATOM 2452 CG1  CG1  . ILE ILE ILE A A 327 327 . 40.541 27.755 36.346  1.00 19.08  1 .
.
ATOM 2453 CD   CD   . ILE ILE ILE A A 327 327 . 39.131 27.659 35.817  1.00 18.42  1 .
.
ATOM 2454 CG2  CG2  . ILE ILE ILE A A 327 327 . 40.270 27.934 38.746  1.00 20.11  1 .
.
ATOM 2455 C    C    . ILE ILE ILE A A 327 327 . 42.575 26.255 39.284  1.00 22.77  1 .
.
ATOM 2456 O    O    . ILE ILE ILE A A 327 327 . 42.944 27.048 40.168  1.00 24.42  1 .
.
ATOM 2457 N    N    . GLU GLU GLU A A 328 328 . 42.336 24.969 39.490  1.00 23.63  1 .
.
ATOM 2458 CA   CA   . GLU GLU GLU A A 328 328 . 42.586 24.396 40.855  1.00 25.45  1 .
.
ATOM 2459 CB   CB   . GLU GLU GLU A A 328 328 . 42.205 22.907 40.956  1.00 27.46  1 .
.
ATOM 2460 C    C    . GLU GLU GLU A A 328 328 . 44.056 24.667 41.244  1.00 26.06  1 .
.
ATOM 2461 O    O    . GLU GLU GLU A A 328 328 . 44.293 25.114 42.348  1.00 27.85  1 .
.
ATOM 2462 N    N    . ARG ARG ARG A A 329 329 . 45.030 24.499 40.336  1.00 25.62  1 .
.
ATOM 2463 CA   CA   . ARG ARG ARG A A 329 329 . 46.440 24.729 40.649  1.00 26.80  1 .
.
ATOM 2464 CB   CB   . ARG ARG ARG A A 329 329 . 47.292 24.229 39.501  1.00 26.28  1 .
.
ATOM 2465 CG   CG   . ARG ARG ARG A A 329 329 . 48.778 24.474 39.694  1.00 27.94  1 .
.
ATOM 2466 CD   CD   . ARG ARG ARG A A 329 329 . 49.530 23.685 38.670  1.00 31.19  1 .
.
ATOM 2467 NE   NE   . ARG ARG ARG A A 329 329 . 50.965 23.905 38.801  1.00 35.42  1 .
.
ATOM 2468 CZ   CZ   . ARG ARG ARG A A 329 329 . 51.839 23.505 37.894  1.00 37.17  1 .
.
ATOM 2469 NH1  NH1  . ARG ARG ARG A A 329 329 . 51.408 22.866 36.810  1.00 39.51  1 .
.
ATOM 2470 NH2  NH2  . ARG ARG ARG A A 329 329 . 53.124 23.754 38.062  1.00 38.44  1 .
.
ATOM 2471 C    C    . ARG ARG ARG A A 329 329 . 46.737 26.225 40.897  1.00 27.46  1 .
.
ATOM 2472 O    O    . ARG ARG ARG A A 329 329 . 47.456 26.592 41.866  1.00 28.78  1 .
.
ATOM 2473 N    N    . ALA ALA ALA A A 330 330 . 46.123 27.106 40.092  1.00 24.84  1 .
.
ATOM 2474 CA   CA   . ALA ALA ALA A A 330 330 . 46.321 28.533 40.278  1.00 24.91  1 .
.
ATOM 2475 CB   CB   . ALA ALA ALA A A 330 330 . 45.656 29.341 39.096  1.00 25.83  1 .
.
ATOM 2476 C    C    . ALA ALA ALA A A 330 330 . 45.744 29.000 41.649  1.00 25.44  1 .
.
ATOM 2477 O    O    . ALA ALA ALA A A 330 330 . 46.292 29.920 42.245  1.00 25.08  1 .
.
ATOM 2478 N    N    . VAL VAL VAL A A 331 331 . 44.651 28.389 42.091  1.00 24.36  1 .
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ATOM 2479 CA   CA   . VAL VAL VAL A A 331 331 . 44.005 28.774 43.353  1.00 26.58  1 .
.
ATOM 2480 CB   CB   . VAL VAL VAL A A 331 331 . 42.606 28.128 43.525  1.00 25.57  1 .
.
ATOM 2481 CG1  CG1  . VAL VAL VAL A A 331 331 . 42.050 28.159 45.017  1.00 27.00  1 .
.
ATOM 2482 CG2  CG2  . VAL VAL VAL A A 331 331 . 41.583 28.847 42.613  1.00 24.79  1 .
.
ATOM 2483 C    C    . VAL VAL VAL A A 331 331 . 44.973 28.367 44.470  1.00 29.36  1 .
.
ATOM 2484 O    O    . VAL VAL VAL A A 331 331 . 45.263 29.195 45.347  1.00 30.05  1 .
.
ATOM 2485 N    N    . GLU GLU GLU A A 332 332 . 45.509 27.144 44.353  1.00 31.36  1 .
.
ATOM 2486 CA   CA   . GLU GLU GLU A A 332 332 . 46.416 26.515 45.358  1.00 33.41  1 .
.
ATOM 2487 CB   CB   . GLU GLU GLU A A 332 332 . 46.709 25.036 45.056  1.00 34.83  1 .
.
ATOM 2488 CG   CG   . GLU GLU GLU A A 332 332 . 45.516 24.050 45.243  1.00 44.01  1 .
.
ATOM 2489 CD   CD   . GLU GLU GLU A A 332 332 . 44.747 24.232 46.600  1.00 55.14  1 .
.
ATOM 2490 OE1  OE1  . GLU GLU GLU A A 332 332 . 45.412 24.179 47.678  1.00 60.15  1 .
.
ATOM 2491 OE2  OE2  . GLU GLU GLU A A 332 332 . 43.489 24.425 46.599  1.00 58.58  1 .
.
ATOM 2492 C    C    . GLU GLU GLU A A 332 332 . 47.701 27.292 45.480  1.00 33.47  1 .
.
ATOM 2493 O    O    . GLU GLU GLU A A 332 332 . 48.164 27.545 46.592  1.00 33.36  1 .
.
ATOM 2494 N    N    . GLU GLU GLU A A 333 333 . 48.262 27.738 44.357  1.00 31.39  1 .
.
ATOM 2495 CA   CA   . GLU GLU GLU A A 333 333 . 49.497 28.490 44.360  1.00 31.02  1 .
.
ATOM 2496 CB   CB   . GLU GLU GLU A A 333 333 . 50.285 28.138 43.125  1.00 31.10  1 .
.
ATOM 2497 CG   CG   . GLU GLU GLU A A 333 333 . 50.447 26.610 43.039  1.00 34.76  1 .
.
ATOM 2498 CD   CD   . GLU GLU GLU A A 333 333 . 51.497 26.163 42.040  1.00 41.26  1 .
.
ATOM 2499 OE1  OE1  . GLU GLU GLU A A 333 333 . 51.546 24.943 41.746  1.00 44.66  1 .
.
ATOM 2500 OE2  OE2  . GLU GLU GLU A A 333 333 . 52.265 27.024 41.528  1.00 44.70  1 .
.
ATOM 2501 C    C    . GLU GLU GLU A A 333 333 . 49.316 29.976 44.473  1.00 29.33  1 .
.
ATOM 2502 O    O    . GLU GLU GLU A A 333 333 . 50.316 30.710 44.416  1.00 30.37  1 .
.
ATOM 2503 N    N    . LYS LYS LYS A A 334 334 . 48.034 30.422 44.585  1.00 28.87  1 .
.
ATOM 2504 CA   CA   . LYS LYS LYS A A 334 334 . 47.672 31.821 44.573  1.00 26.52  1 .
.
ATOM 2505 CB   CB   . LYS LYS LYS A A 334 334 . 48.046 32.472 45.939  1.00 28.23  1 .
.
ATOM 2506 CG   CG   . LYS LYS LYS A A 334 334 . 47.332 31.807 47.118  1.00 28.69  1 .
.
ATOM 2507 CD   CD   . LYS LYS LYS A A 334 334 . 47.743 32.551 48.431  1.00 33.74  1 .
.
ATOM 2508 CE   CE   . LYS LYS LYS A A 334 334 . 46.654 32.450 49.523  1.00 37.92  1 .
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ATOM 2509 C    C    . LYS LYS LYS A A 334 334 . 48.342 32.528 43.406  1.00 27.18  1 .
.
ATOM 2510 O    O    . LYS LYS LYS A A 334 334 . 48.968 33.588 43.585  1.00 27.07  1 .
.
ATOM 2511 N    N    . ALA ALA ALA A A 335 335 . 48.193 31.951 42.202  1.00 24.92  1 .
.
ATOM 2512 CA   CA   . ALA ALA ALA A A 335 335 . 48.890 32.506 41.044  1.00 24.94  1 .
.
ATOM 2513 CB   CB   . ALA ALA ALA A A 335 335 . 48.945 31.537 39.941  1.00 25.00  1 .
.
ATOM 2514 C    C    . ALA ALA ALA A A 335 335 . 48.300 33.800 40.562  1.00 24.54  1 .
.
ATOM 2515 O    O    . ALA ALA ALA A A 335 335 . 49.016 34.634 39.975  1.00 24.90  1 .
.
ATOM 2516 N    N    . CYS CYS CYS A A 336 336 . 47.001 33.994 40.790  1.00 22.77  1 .
.
ATOM 2517 CA   CA   . CYS CYS CYS A A 336 336 . 46.325 35.172 40.229  1.00 22.13  1 .
.
ATOM 2518 CB   CB   . CYS CYS CYS A A 336 336 . 45.979 34.966 38.697  1.00 20.70  1 .
.
ATOM 2519 SG   SG   . CYS CYS CYS A A 336 336 . 45.044 33.359 38.342  1.00 24.23  1 .
.
ATOM 2520 C    C    . CYS CYS CYS A A 336 336 . 45.040 35.221 41.007  1.00 20.95  1 .
.
ATOM 2521 O    O    . CYS CYS CYS A A 336 336 . 44.805 34.346 41.891  1.00 23.51  1 .
.
ATOM 2522 N    N    . ASN ASN ASN A A 337 337 . 44.204 36.220 40.723  1.00 19.41  1 .
.
ATOM 2523 CA   CA   . ASN ASN ASN A A 337 337 . 42.980 36.366 41.509  1.00 17.88  1 .
.
ATOM 2524 CB   CB   . ASN ASN ASN A A 337 337 . 43.158 37.494 42.559  1.00 19.29  1 .
.
ATOM 2525 CG   CG   . ASN ASN ASN A A 337 337 . 43.653 38.832 41.964  1.00 20.47  1 .
.
ATOM 2526 OD1  OD1  . ASN ASN ASN A A 337 337 . 44.555 39.526 42.528  1.00 26.37  1 .
.
ATOM 2527 ND2  ND2  . ASN ASN ASN A A 337 337 . 43.079 39.230 40.888  1.00 15.20  1 .
.
ATOM 2528 C    C    . ASN ASN ASN A A 337 337 . 41.755 36.633 40.631  1.00 18.10  1 .
.
ATOM 2529 O    O    . ASN ASN ASN A A 337 337 . 40.719 37.111 41.121  1.00 17.40  1 .
.
ATOM 2530 N    N    . CYS CYS CYS A A 338 338 . 41.881 36.364 39.326  1.00 17.05  1 .
.
ATOM 2531 CA   CA   . CYS CYS CYS A A 338 338 . 40.726 36.532 38.456  1.00 16.19  1 .
.
ATOM 2532 CB   CB   . CYS CYS CYS A A 338 338 . 40.727 37.984 37.939  1.00 15.78  1 .
.
ATOM 2533 SG   SG   . CYS CYS CYS A A 338 338 . 39.348 38.410 36.785  1.00 17.59  1 .
.
ATOM 2534 C    C    . CYS CYS CYS A A 338 338 . 40.918 35.571 37.289  1.00 15.43  1 .
.
ATOM 2535 O    O    . CYS CYS CYS A A 338 338 . 42.038 35.371 36.858  1.00 15.12  1 .
.
ATOM 2536 N    N    . LEU LEU LEU A A 339 339 . 39.834 35.014 36.783  1.00 14.44  1 .
.
ATOM 2537 CA   CA   . LEU LEU LEU A A 339 339 . 39.839 34.098 35.643  1.00 13.49  1 .
.
ATOM 2538 CB   CB   . LEU LEU LEU A A 339 339 . 38.860 32.932 35.980  1.00 13.96  1 .
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ATOM 2539 CG   CG   . LEU LEU LEU A A 339 339 . 38.515 31.957 34.844  1.00 14.97  1 .
.
ATOM 2540 CD1  CD1  . LEU LEU LEU A A 339 339 . 39.815 31.306 34.368  1.00 18.29  1 .
.
ATOM 2541 CD2  CD2  . LEU LEU LEU A A 339 339 . 37.524 30.899 35.293  1.00 16.91  1 .
.
ATOM 2542 C    C    . LEU LEU LEU A A 339 339 . 39.299 34.835 34.421  1.00 13.80  1 .
.
ATOM 2543 O    O    . LEU LEU LEU A A 339 339 . 38.251 35.453 34.487  1.00 13.31  1 .
.
ATOM 2544 N    N    . LEU LEU LEU A A 340 340 . 40.031 34.719 33.313  1.00 13.72  1 .
.
ATOM 2545 CA   CA   . LEU LEU LEU A A 340 340 . 39.518 35.149 32.004  1.00 13.33  1 .
.
ATOM 2546 CB   CB   . LEU LEU LEU A A 340 340 . 40.671 35.498 31.016  1.00 13.96  1 .
.
ATOM 2547 CG   CG   . LEU LEU LEU A A 340 340 . 40.063 36.380 29.913  1.00 14.67  1 .
.
ATOM 2548 CD1  CD1  . LEU LEU LEU A A 340 340 . 39.867 37.842 30.340  1.00 13.91  1 .
.
ATOM 2549 CD2  CD2  . LEU LEU LEU A A 340 340 . 41.023 36.328 28.752  1.00 13.81  1 .
.
ATOM 2550 C    C    . LEU LEU LEU A A 340 340 . 38.680 33.977 31.505  1.00 13.33  1 .
.
ATOM 2551 O    O    . LEU LEU LEU A A 340 340 . 39.198 32.883 31.322  1.00 14.31  1 .
.
ATOM 2552 N    N    . LEU LEU LEU A A 341 341 . 37.383 34.212 31.256  1.00 12.84  1 .
.
ATOM 2553 CA   CA   . LEU LEU LEU A A 341 341 . 36.515 33.110 30.851  1.00 13.07  1 .
.
ATOM 2554 CB   CB   . LEU LEU LEU A A 341 341 . 35.151 33.297 31.552  1.00 13.57  1 .
.
ATOM 2555 CG   CG   . LEU LEU LEU A A 341 341 . 34.287 32.031 31.633  1.00 15.64  1 .
.
ATOM 2556 CD1  CD1  . LEU LEU LEU A A 341 341 . 34.813 31.128 32.738  1.00 20.29  1 .
.
ATOM 2557 CD2  CD2  . LEU LEU LEU A A 341 341 . 32.826 32.368 31.962  1.00 19.16  1 .
.
ATOM 2558 C    C    . LEU LEU LEU A A 341 341 . 36.305 33.118 29.295  1.00 12.78  1 .
.
ATOM 2559 O    O    . LEU LEU LEU A A 341 341 . 35.643 34.011 28.789  1.00 13.99  1 .
.
ATOM 2560 N    N    . LYS LYS LYS A A 342 342 . 36.833 32.102 28.625  1.00 12.60  1 .
.
ATOM 2561 CA   CA   . LYS LYS LYS A A 342 342 . 36.717 31.939 27.162  1.00 13.64  1 .
.
ATOM 2562 CB   CB   . LYS LYS LYS A A 342 342 . 38.124 32.003 26.503  1.00 13.36  1 .
.
ATOM 2563 CG   CG   . LYS LYS LYS A A 342 342 . 38.606 33.382 26.414  1.00 15.37  1 .
.
ATOM 2564 CD   CD   . LYS LYS LYS A A 342 342 . 40.094 33.335 26.015  1.00 14.30  1 .
.
ATOM 2565 CE   CE   . LYS LYS LYS A A 342 342 . 40.483 34.710 25.662  1.00 19.87  1 .
.
ATOM 2566 NZ   NZ   . LYS LYS LYS A A 342 342 . 41.985 34.698 25.676  1.00 18.82  1 .
.
ATOM 2567 C    C    . LYS LYS LYS A A 342 342 . 36.102 30.612 26.879  1.00 12.51  1 .
.
ATOM 2568 O    O    . LYS LYS LYS A A 342 342 . 36.773 29.575 27.086  1.00 14.42  1 .
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ATOM 2569 N    N    . VAL VAL VAL A A 343 343 . 34.836 30.611 26.503  1.00 13.43  1 .
.
ATOM 2570 CA   CA   . VAL VAL VAL A A 343 343 . 34.113 29.312 26.222  1.00 12.84  1 .
.
ATOM 2571 CB   CB   . VAL VAL VAL A A 343 343 . 32.702 29.549 25.646  1.00 16.23  1 .
.
ATOM 2572 CG1  CG1  . VAL VAL VAL A A 343 343 . 31.756 30.077 26.749  1.00 17.39  1 .
.
ATOM 2573 CG2  CG2  . VAL VAL VAL A A 343 343 . 32.810 30.514 24.429  1.00 16.03  1 .
.
ATOM 2574 C    C    . VAL VAL VAL A A 343 343 . 34.928 28.437 25.265  1.00 13.17  1 .
.
ATOM 2575 O    O    . VAL VAL VAL A A 343 343 . 34.942 27.231 25.460  1.00 14.71  1 .
.
ATOM 2576 N    N    . ASN ASN ASN A A 344 344 . 35.646 29.032 24.299  1.00 11.26  1 .
.
ATOM 2577 CA   CA   . ASN ASN ASN A A 344 344 . 36.340 28.169 23.321  1.00 11.34  1 .
.
ATOM 2578 CB   CB   . ASN ASN ASN A A 344 344 . 36.401 28.775 21.903  1.00 12.41  1 .
.
ATOM 2579 CG   CG   . ASN ASN ASN A A 344 344 . 37.743 29.501 21.631  1.00 13.43  1 .
.
ATOM 2580 OD1  OD1  . ASN ASN ASN A A 344 344 . 38.084 30.445 22.374  1.00 15.24  1 .
.
ATOM 2581 ND2  ND2  . ASN ASN ASN A A 344 344 . 38.452 29.123 20.552  1.00 15.36  1 .
.
ATOM 2582 C    C    . ASN ASN ASN A A 344 344 . 37.729 27.637 23.827  1.00 12.56  1 .
.
ATOM 2583 O    O    . ASN ASN ASN A A 344 344 . 38.326 26.816 23.180  1.00 14.62  1 .
.
ATOM 2584 N    N    . GLN GLN GLN A A 345 345 . 38.201 28.114 24.962  1.00 11.90  1 .
.
ATOM 2585 CA   CA   . GLN GLN GLN A A 345 345 . 39.421 27.519 25.544  1.00 12.64  1 .
.
ATOM 2586 CB   CB   . GLN GLN GLN A A 345 345 . 40.079 28.381 26.680  1.00 11.70  1 .
.
ATOM 2587 CG   CG   . GLN GLN GLN A A 345 345 . 40.734 29.628 26.101  1.00 13.05  1 .
.
ATOM 2588 CD   CD   . GLN GLN GLN A A 345 345 . 41.444 30.419 27.149  1.00 12.67  1 .
.
ATOM 2589 OE1  OE1  . GLN GLN GLN A A 345 345 . 40.932 30.569 28.273  1.00 15.52  1 .
.
ATOM 2590 NE2  NE2  . GLN GLN GLN A A 345 345 . 42.638 30.960 26.801  1.00 14.27  1 .
.
ATOM 2591 C    C    . GLN GLN GLN A A 345 345 . 39.141 26.154 26.094  1.00 13.50  1 .
.
ATOM 2592 O    O    . GLN GLN GLN A A 345 345 . 40.073 25.359 26.220  1.00 15.60  1 .
.
ATOM 2593 N    N    . ILE ILE ILE A A 346 346 . 37.894 25.904 26.497  1.00 12.94  1 .
.
ATOM 2594 CA   CA   . ILE ILE ILE A A 346 346 . 37.559 24.643 27.144  1.00 14.54  1 .
.
ATOM 2595 CB   CB   . ILE ILE ILE A A 346 346 . 37.056 24.879 28.603  1.00 14.69  1 .
.
ATOM 2596 CG1  CG1  . ILE ILE ILE A A 346 346 . 36.976 23.530 29.427  1.00 15.87  1 .
.
ATOM 2597 CD   CD   . ILE ILE ILE A A 346 346 . 38.383 22.838 29.537  1.00 17.78  1 .
.
ATOM 2598 CG2  CG2  . ILE ILE ILE A A 346 346 . 35.685 25.494 28.637  1.00 15.45  1 .
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ATOM 2599 C    C    . ILE ILE ILE A A 346 346 . 36.575 23.815 26.283  1.00 15.24  1 .
.
ATOM 2600 O    O    . ILE ILE ILE A A 346 346 . 36.704 22.591 26.227  1.00 16.04  1 .
.
ATOM 2601 N    N    . GLY GLY GLY A A 347 347 . 35.693 24.485 25.524  1.00 14.80  1 .
.
ATOM 2602 CA   CA   . GLY GLY GLY A A 347 347 . 34.958 23.865 24.429  1.00 12.68  1 .
.
ATOM 2603 C    C    . GLY GLY GLY A A 347 347 . 33.509 23.524 24.706  1.00 13.23  1 .
.
ATOM 2604 O    O    . GLY GLY GLY A A 347 347 . 32.858 22.875 23.882  1.00 15.08  1 .
.
ATOM 2605 N    N    . SER SER SER A A 348 348 . 32.974 23.914 25.838  1.00 12.99  1 .
.
ATOM 2606 CA   CA   . SER SER SER A A 348 348 . 31.535 23.752 26.079  1.00 13.60  1 .
.
ATOM 2607 CB   CB   . SER SER SER A A 348 348 . 31.194 22.317 26.535  1.00 15.78  1 .
.
ATOM 2608 OG   OG   . SER SER SER A A 348 348 . 31.588 22.081 27.931  1.00 18.38  1 .
.
ATOM 2609 C    C    . SER SER SER A A 348 348 . 30.992 24.782 27.051  1.00 12.95  1 .
.
ATOM 2610 O    O    . SER SER SER A A 348 348 . 31.729 25.306 27.907  1.00 15.67  1 .
.
ATOM 2611 N    N    . VAL VAL VAL A A 349 349 . 29.716 25.065 26.936  1.00 12.58  1 .
.
ATOM 2612 CA   CA   . VAL VAL VAL A A 349 349 . 29.046 26.040 27.811  1.00 12.87  1 .
.
ATOM 2613 CB   CB   . VAL VAL VAL A A 349 349 . 27.617 26.289 27.358  1.00 16.14  1 .
.
ATOM 2614 CG1  CG1  . VAL VAL VAL A A 349 349 . 26.884 27.125 28.401  1.00 15.54  1 .
.
ATOM 2615 CG2  CG2  . VAL VAL VAL A A 349 349 . 27.585 27.061 26.067  1.00 13.50  1 .
.
ATOM 2616 C    C    . VAL VAL VAL A A 349 349 . 29.050 25.501 29.269  1.00 15.35  1 .
.
ATOM 2617 O    O    . VAL VAL VAL A A 349 349 . 29.425 26.218 30.219  1.00 13.74  1 .
.
ATOM 2618 N    N    . THR THR THR A A 350 350 . 28.747 24.224 29.440  1.00 14.20  1 .
.
ATOM 2619 CA   CA   . THR THR THR A A 350 350 . 28.712 23.634 30.788  1.00 15.16  1 .
.
ATOM 2620 CB   CB   . THR THR THR A A 350 350 . 28.366 22.129 30.725  1.00 15.64  1 .
.
ATOM 2621 OG1  OG1  . THR THR THR A A 350 350 . 27.014 22.004 30.305  1.00 17.29  1 .
.
ATOM 2622 CG2  CG2  . THR THR THR A A 350 350 . 28.434 21.547 32.133  1.00 18.89  1 .
.
ATOM 2623 C    C    . THR THR THR A A 350 350 . 30.081 23.726 31.454  1.00 15.58  1 .
.
ATOM 2624 O    O    . THR THR THR A A 350 350 . 30.182 24.167 32.626  1.00 16.20  1 .
.
ATOM 2625 N    N    . GLU GLU GLU A A 351 351 . 31.137 23.357 30.736  1.00 15.48  1 .
.
ATOM 2626 CA   CA   . GLU GLU GLU A A 351 351 . 32.484 23.443 31.360  1.00 15.57  1 .
.
ATOM 2627 CB   CB   . GLU GLU GLU A A 351 351 . 33.550 22.812 30.463  1.00 16.98  1 .
.
ATOM 2628 CG   CG   . GLU GLU GLU A A 351 351 . 33.415 21.280 30.418  1.00 17.99  1 .
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ATOM 2629 CD   CD   . GLU GLU GLU A A 351 351 . 34.294 20.726 29.368  1.00 21.55  1 .
.
ATOM 2630 OE1  OE1  . GLU GLU GLU A A 351 351 . 33.986 20.988 28.169  1.00 20.17  1 .
.
ATOM 2631 OE2  OE2  . GLU GLU GLU A A 351 351 . 35.297 20.046 29.734  1.00 21.76  1 .
.
ATOM 2632 C    C    . GLU GLU GLU A A 351 351 . 32.883 24.893 31.689  1.00 15.97  1 .
.
ATOM 2633 O    O    . GLU GLU GLU A A 351 351 . 33.568 25.159 32.701  1.00 16.24  1 .
.
ATOM 2634 N    N    . ALA ALA ALA A A 352 352 . 32.511 25.840 30.805  1.00 14.09  1 .
.
ATOM 2635 CA   CA   . ALA ALA ALA A A 352 352 . 32.803 27.215 31.057  1.00 13.61  1 .
.
ATOM 2636 CB   CB   . ALA ALA ALA A A 352 352 . 32.437 28.116 29.815  1.00 14.47  1 .
.
ATOM 2637 C    C    . ALA ALA ALA A A 352 352 . 32.044 27.716 32.314  1.00 14.39  1 .
.
ATOM 2638 O    O    . ALA ALA ALA A A 352 352 . 32.594 28.507 33.091  1.00 15.78  1 .
.
ATOM 2639 N    N    . ILE ILE ILE A A 353 353 . 30.809 27.295 32.469  1.00 14.54  1 .
.
ATOM 2640 CA   CA   . ILE ILE ILE A A 353 353 . 30.037 27.691 33.628  1.00 14.84  1 .
.
ATOM 2641 CB   CB   . ILE ILE ILE A A 353 353 . 28.553 27.298 33.489  1.00 14.92  1 .
.
ATOM 2642 CG1  CG1  . ILE ILE ILE A A 353 353 . 27.919 28.231 32.439  1.00 14.65  1 .
.
ATOM 2643 CD   CD   . ILE ILE ILE A A 353 353 . 26.447 27.767 31.976  1.00 19.28  1 .
.
ATOM 2644 CG2  CG2  . ILE ILE ILE A A 353 353 . 27.811 27.562 34.893  1.00 16.63  1 .
.
ATOM 2645 C    C    . ILE ILE ILE A A 353 353 . 30.661 27.083 34.884  1.00 15.09  1 .
.
ATOM 2646 O    O    . ILE ILE ILE A A 353 353 . 30.823 27.804 35.953  1.00 16.51  1 .
.
ATOM 2647 N    N    . GLN GLN GLN A A 354 354 . 31.067 25.834 34.771  1.00 16.57  1 .
.
ATOM 2648 CA   CA   . GLN GLN GLN A A 354 354 . 31.829 25.174 35.885  1.00 17.26  1 .
.
ATOM 2649 CB   CB   . GLN GLN GLN A A 354 354 . 32.130 23.726 35.558  1.00 17.92  1 .
.
ATOM 2650 CG   CG   . GLN GLN GLN A A 354 354 . 30.872 22.912 35.712  1.00 23.96  1 .
.
ATOM 2651 CD   CD   . GLN GLN GLN A A 354 354 . 30.993 21.541 35.073  1.00 29.44  1 .
.
ATOM 2652 OE1  OE1  . GLN GLN GLN A A 354 354 . 31.962 21.259 34.332  1.00 35.39  1 .
.
ATOM 2653 NE2  NE2  . GLN GLN GLN A A 354 354 . 29.978 20.693 35.306  1.00 30.87  1 .
.
ATOM 2654 C    C    . GLN GLN GLN A A 354 354 . 33.100 25.910 36.277  1.00 17.24  1 .
.
ATOM 2655 O    O    . GLN GLN GLN A A 354 354 . 33.364 26.097 37.478  1.00 18.12  1 .
.
ATOM 2656 N    N    . ALA ALA ALA A A 355 355 . 33.881 26.340 35.267  1.00 15.25  1 .
.
ATOM 2657 CA   CA   . ALA ALA ALA A A 355 355 . 35.122 27.077 35.468  1.00 15.88  1 .
.
ATOM 2658 CB   CB   . ALA ALA ALA A A 355 355 . 35.856 27.348 34.132  1.00 16.51  1 .
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ATOM 2659 C    C    . ALA ALA ALA A A 355 355 . 34.808 28.415 36.204  1.00 16.40  1 .
.
ATOM 2660 O    O    . ALA ALA ALA A A 355 355 . 35.500 28.759 37.184  1.00 16.79  1 .
.
ATOM 2661 N    N    . CYS CYS CYS A A 356 356 . 33.781 29.151 35.749  1.00 15.44  1 .
.
ATOM 2662 CA   CA   . CYS CYS CYS A A 356 356 . 33.350 30.404 36.386  1.00 14.87  1 .
.
ATOM 2663 CB   CB   . CYS CYS CYS A A 356 356 . 32.137 30.961 35.625  1.00 14.64  1 .
.
ATOM 2664 SG   SG   . CYS CYS CYS A A 356 356 . 31.630 32.532 36.282  1.00 17.64  1 .
.
ATOM 2665 C    C    . CYS CYS CYS A A 356 356 . 32.987 30.169 37.869  1.00 17.37  1 .
.
ATOM 2666 O    O    . CYS CYS CYS A A 356 356 . 33.523 30.866 38.784  1.00 17.15  1 .
.
ATOM 2667 N    N    . LYS LYS LYS A A 357 357 . 32.195 29.148 38.129  1.00 16.66  1 .
.
ATOM 2668 CA   CA   . LYS LYS LYS A A 357 357 . 31.693 28.957 39.535  1.00 19.11  1 .
.
ATOM 2669 CB   CB   . LYS LYS LYS A A 357 357 . 30.608 27.939 39.555  1.00 20.31  1 .
.
ATOM 2670 CG   CG   . LYS LYS LYS A A 357 357 . 29.314 28.471 38.829  1.00 24.64  1 .
.
ATOM 2671 CD   CD   . LYS LYS LYS A A 357 357 . 28.186 27.455 38.820  1.00 30.17  1 .
.
ATOM 2672 CE   CE   . LYS LYS LYS A A 357 357 . 27.755 27.202 40.245  1.00 35.14  1 .
.
ATOM 2673 NZ   NZ   . LYS LYS LYS A A 357 357 . 26.591 26.298 40.346  1.00 37.34  1 .
.
ATOM 2674 C    C    . LYS LYS LYS A A 357 357 . 32.865 28.526 40.445  1.00 19.18  1 .
.
ATOM 2675 O    O    . LYS LYS LYS A A 357 357 . 32.968 28.997 41.606  1.00 19.38  1 .
.
ATOM 2676 N    N    . LEU LEU LEU A A 358 358 . 33.774 27.707 39.908  1.00 19.06  1 .
.
ATOM 2677 CA   CA   . LEU LEU LEU A A 358 358 . 35.006 27.342 40.635  1.00 19.63  1 .
.
ATOM 2678 CB   CB   . LEU LEU LEU A A 358 358 . 35.849 26.307 39.845  1.00 20.67  1 .
.
ATOM 2679 CG   CG   . LEU LEU LEU A A 358 358 . 37.224 25.910 40.421  1.00 21.89  1 .
.
ATOM 2680 CD1  CD1  . LEU LEU LEU A A 358 358 . 36.972 25.268 41.803  1.00 25.25  1 .
.
ATOM 2681 CD2  CD2  . LEU LEU LEU A A 358 358 . 37.973 24.973 39.492  1.00 25.24  1 .
.
ATOM 2682 C    C    . LEU LEU LEU A A 358 358 . 35.838 28.572 40.980  1.00 19.98  1 .
.
ATOM 2683 O    O    . LEU LEU LEU A A 358 358 . 36.232 28.756 42.166  1.00 21.46  1 .
.
ATOM 2684 N    N    . ALA ALA ALA A A 359 359 . 36.056 29.487 40.025  1.00 17.87  1 .
.
ATOM 2685 CA   CA   . ALA ALA ALA A A 359 359 . 36.744 30.734 40.375  1.00 17.34  1 .
.
ATOM 2686 CB   CB   . ALA ALA ALA A A 359 359 . 36.953 31.586 39.098  1.00 15.38  1 .
.
ATOM 2687 C    C    . ALA ALA ALA A A 359 359 . 35.962 31.544 41.463  1.00 18.37  1 .
.
ATOM 2688 O    O    . ALA ALA ALA A A 359 359 . 36.565 32.017 42.446  1.00 17.70  1 .
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ATOM 2689 N    N    . GLN GLN GLN A A 360 360 . 34.656 31.732 41.268  1.00 17.44  1 .
.
ATOM 2690 CA   CA   . GLN GLN GLN A A 360 360 . 33.852 32.602 42.161  1.00 18.25  1 .
.
ATOM 2691 CB   CB   . GLN GLN GLN A A 360 360 . 32.437 32.751 41.646  1.00 19.21  1 .
.
ATOM 2692 CG   CG   . GLN GLN GLN A A 360 360 . 32.476 33.704 40.372  1.00 20.60  1 .
.
ATOM 2693 CD   CD   . GLN GLN GLN A A 360 360 . 31.100 33.804 39.663  1.00 23.18  1 .
.
ATOM 2694 OE1  OE1  . GLN GLN GLN A A 360 360 . 30.751 34.845 39.016  1.00 24.62  1 .
.
ATOM 2695 NE2  NE2  . GLN GLN GLN A A 360 360 . 30.383 32.694 39.665  1.00 17.32  1 .
.
ATOM 2696 C    C    . GLN GLN GLN A A 360 360 . 33.849 32.026 43.570  1.00 19.69  1 .
.
ATOM 2697 O    O    . GLN GLN GLN A A 360 360 . 33.967 32.776 44.500  1.00 20.10  1 .
.
ATOM 2698 N    N    . GLU GLU GLU A A 361 361 . 33.813 30.709 43.675  1.00 19.09  1 .
.
ATOM 2699 CA   CA   . GLU GLU GLU A A 361 361 . 33.766 30.057 44.998  1.00 23.97  1 .
.
ATOM 2700 CB   CB   . GLU GLU GLU A A 361 361 . 33.402 28.580 44.857  1.00 23.47  1 .
.
ATOM 2701 CG   CG   . GLU GLU GLU A A 361 361 . 31.916 28.478 44.552  1.00 33.37  1 .
.
ATOM 2702 CD   CD   . GLU GLU GLU A A 361 361 . 31.453 27.160 43.915  1.00 41.99  1 .
.
ATOM 2703 OE1  OE1  . GLU GLU GLU A A 361 361 . 30.278 27.156 43.420  1.00 44.88  1 .
.
ATOM 2704 OE2  OE2  . GLU GLU GLU A A 361 361 . 32.216 26.144 43.930  1.00 45.24  1 .
.
ATOM 2705 C    C    . GLU GLU GLU A A 361 361 . 35.086 30.215 45.743  1.00 23.14  1 .
.
ATOM 2706 O    O    . GLU GLU GLU A A 361 361 . 35.153 30.161 46.989  1.00 26.98  1 .
.
ATOM 2707 N    N    . ASN ASN ASN A A 362 362 . 36.149 30.447 45.020  1.00 23.03  1 .
.
ATOM 2708 CA   CA   . ASN ASN ASN A A 362 362 . 37.450 30.662 45.615  1.00 23.29  1 .
.
ATOM 2709 CB   CB   . ASN ASN ASN A A 362 362 . 38.477 29.862 44.838  1.00 22.53  1 .
.
ATOM 2710 CG   CG   . ASN ASN ASN A A 362 362 . 38.358 28.408 45.160  1.00 26.29  1 .
.
ATOM 2711 OD1  OD1  . ASN ASN ASN A A 362 362 . 38.779 28.000 46.275  1.00 29.63  1 .
.
ATOM 2712 ND2  ND2  . ASN ASN ASN A A 362 362 . 37.667 27.611 44.275  1.00 26.18  1 .
.
ATOM 2713 C    C    . ASN ASN ASN A A 362 362 . 37.815 32.121 45.780  1.00 22.75  1 .
.
ATOM 2714 O    O    . ASN ASN ASN A A 362 362 . 38.953 32.428 45.999  1.00 23.87  1 .
.
ATOM 2715 N    N    . GLY GLY GLY A A 363 363 . 36.819 33.006 45.660  1.00 21.43  1 .
.
ATOM 2716 CA   CA   . GLY GLY GLY A A 363 363 . 36.973 34.406 45.795  1.00 21.43  1 .
.
ATOM 2717 C    C    . GLY GLY GLY A A 363 363 . 37.663 35.172 44.661  1.00 21.40  1 .
.
ATOM 2718 O    O    . GLY GLY GLY A A 363 363 . 38.060 36.342 44.817  1.00 23.50  1 .
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ATOM 2719 N    N    . TRP TRP TRP A A 364 364 . 37.830 34.546 43.499  1.00 19.82  1 .
.
ATOM 2720 CA   CA   . TRP TRP TRP A A 364 364 . 38.379 35.260 42.348  1.00 18.81  1 .
.
ATOM 2721 CB   CB   . TRP TRP TRP A A 364 364 . 38.899 34.258 41.340  1.00 18.06  1 .
.
ATOM 2722 CG   CG   . TRP TRP TRP A A 364 364 . 40.148 33.519 41.675  1.00 20.72  1 .
.
ATOM 2723 CD1  CD1  . TRP TRP TRP A A 364 364 . 40.818 33.405 42.897  1.00 22.06  1 .
.
ATOM 2724 NE1  NE1  . TRP TRP TRP A A 364 364 . 41.924 32.567 42.733  1.00 22.02  1 .
.
ATOM 2725 CE2  CE2  . TRP TRP TRP A A 364 364 . 42.018 32.224 41.393  1.00 21.30  1 .
.
ATOM 2726 CD2  CD2  . TRP TRP TRP A A 364 364 . 40.898 32.795 40.725  1.00 21.67  1 .
.
ATOM 2727 CE3  CE3  . TRP TRP TRP A A 364 364 . 40.722 32.570 39.339  1.00 20.80  1 .
.
ATOM 2728 CZ3  CZ3  . TRP TRP TRP A A 364 364 . 41.595 31.836 38.693  1.00 19.40  1 .
.
ATOM 2729 CH2  CH2  . TRP TRP TRP A A 364 364 . 42.719 31.259 39.364  1.00 23.01  1 .
.
ATOM 2730 CZ2  CZ2  . TRP TRP TRP A A 364 364 . 42.946 31.450 40.719  1.00 23.85  1 .
.
ATOM 2731 C    C    . TRP TRP TRP A A 364 364 . 37.331 36.032 41.587  1.00 17.90  1 .
.
ATOM 2732 O    O    . TRP TRP TRP A A 364 364 . 36.153 35.736 41.693  1.00 18.55  1 .
.
ATOM 2733 N    N    . GLY GLY GLY A A 365 365 . 37.774 37.077 40.897  1.00 16.87  1 .
.
ATOM 2734 CA   CA   . GLY GLY GLY A A 365 365 . 36.947 37.739 39.861  1.00 15.80  1 .
.
ATOM 2735 C    C    . GLY GLY GLY A A 365 365 . 36.882 36.871 38.647  1.00 14.17  1 .
.
ATOM 2736 O    O    . GLY GLY GLY A A 365 365 . 37.648 35.894 38.509  1.00 14.58  1 .
.
ATOM 2737 N    N    . VAL VAL VAL A A 366 366 . 35.956 37.191 37.749  1.00 13.29  1 .
.
ATOM 2738 CA   CA   . VAL VAL VAL A A 366 366 . 35.915 36.457 36.475  1.00 14.00  1 .
.
ATOM 2739 CB   CB   . VAL VAL VAL A A 366 366 . 34.736 35.414 36.429  1.00 12.65  1 .
.
ATOM 2740 CG1  CG1  . VAL VAL VAL A A 366 366 . 34.633 34.725 34.997  1.00 15.37  1 .
.
ATOM 2741 CG2  CG2  . VAL VAL VAL A A 366 366 . 34.946 34.258 37.489  1.00 13.23  1 .
.
ATOM 2742 C    C    . VAL VAL VAL A A 366 366 . 35.628 37.532 35.448  1.00 13.91  1 .
.
ATOM 2743 O    O    . VAL VAL VAL A A 366 366 . 34.731 38.364 35.646  1.00 14.18  1 .
.
ATOM 2744 N    N    . MET MET MET A A 367 367 . 36.463 37.587 34.389  1.00 13.03  1 .
.
ATOM 2745 CA   CA   . MET MET MET A A 367 367 . 36.206 38.545 33.309  1.00 12.41  1 .
.
ATOM 2746 CB   CB   . MET MET MET A A 367 367 . 37.416 39.438 33.086  1.00 13.76  1 .
.
ATOM 2747 CG   CG   . MET MET MET A A 367 367 . 37.226 40.325 31.868  1.00 12.34  1 .
.
ATOM 2748 SD   SD   . MET MET MET A A 367 367 . 38.637 41.382 31.494  1.00 17.32  1 .
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ATOM 2749 CE   CE   . MET MET MET A A 367 367 . 38.501 42.789 32.640  1.00 22.79  1 .
.
ATOM 2750 C    C    . MET MET MET A A 367 367 . 35.868 37.663 32.063  1.00 11.74  1 .
.
ATOM 2751 O    O    . MET MET MET A A 367 367 . 36.709 36.912 31.564  1.00 11.70  1 .
.
ATOM 2752 N    N    . VAL VAL VAL A A 368 368 . 34.641 37.835 31.555  1.00 11.24  1 .
.
ATOM 2753 CA   CA   . VAL VAL VAL A A 368 368 . 34.229 37.088 30.335  1.00 10.55  1 .
.
ATOM 2754 CB   CB   . VAL VAL VAL A A 368 368 . 32.705 37.173 30.134  1.00 8.61   1 .
.
ATOM 2755 CG1  CG1  . VAL VAL VAL A A 368 368 . 32.254 36.659 28.737  1.00 10.47  1 .
.
ATOM 2756 CG2  CG2  . VAL VAL VAL A A 368 368 . 32.007 36.423 31.290  1.00 13.30  1 .
.
ATOM 2757 C    C    . VAL VAL VAL A A 368 368 . 34.994 37.766 29.183  1.00 9.86   1 .
.
ATOM 2758 O    O    . VAL VAL VAL A A 368 368 . 35.226 39.001 29.153  1.00 10.60  1 .
.
ATOM 2759 N    N    . SER SER SER A A 369 369 . 35.395 36.931 28.221  1.00 10.47  1 .
.
ATOM 2760 CA   CA   . SER SER SER A A 369 369 . 36.181 37.489 27.105  1.00 11.72  1 .
.
ATOM 2761 CB   CB   . SER SER SER A A 369 369 . 37.670 37.116 27.320  1.00 11.27  1 .
.
ATOM 2762 OG   OG   . SER SER SER A A 369 369 . 38.512 37.685 26.323  1.00 12.15  1 .
.
ATOM 2763 C    C    . SER SER SER A A 369 369 . 35.773 36.957 25.724  1.00 11.02  1 .
.
ATOM 2764 O    O    . SER SER SER A A 369 369 . 35.412 35.777 25.529  1.00 13.79  1 .
.
ATOM 2765 N    N    . HIS HIS HIS A A 370 370 . 35.877 37.871 24.754  1.00 11.56  1 .
.
ATOM 2766 CA   CA   . HIS HIS HIS A A 370 370 . 35.948 37.438 23.342  1.00 10.92  1 .
.
ATOM 2767 CB   CB   . HIS HIS HIS A A 370 370 . 35.828 38.693 22.477  1.00 11.97  1 .
.
ATOM 2768 CG   CG   . HIS HIS HIS A A 370 370 . 36.987 39.656 22.622  1.00 11.17  1 .
.
ATOM 2769 ND1  ND1  . HIS HIS HIS A A 370 370 . 37.142 40.734 21.773  1.00 13.99  1 .
.
ATOM 2770 CE1  CE1  . HIS HIS HIS A A 370 370 . 38.190 41.453 22.159  1.00 14.22  1 .
.
ATOM 2771 NE2  NE2  . HIS HIS HIS A A 370 370 . 38.713 40.895 23.244  1.00 15.78  1 .
.
ATOM 2772 CD2  CD2  . HIS HIS HIS A A 370 370 . 37.971 39.773 23.569  1.00 12.80  1 .
.
ATOM 2773 C    C    . HIS HIS HIS A A 370 370 . 37.290 36.731 22.973  1.00 11.50  1 .
.
ATOM 2774 O    O    . HIS HIS HIS A A 370 370 . 38.190 36.548 23.803  1.00 11.88  1 .
.
ATOM 2775 N    N    . ARG ARG ARG A A 371 371 . 37.404 36.325 21.704  1.00 9.93   1 .
.
ATOM 2776 CA   CA   . ARG ARG ARG A A 371 371 . 38.733 36.039 21.101  1.00 9.31   1 .
.
ATOM 2777 CB   CB   . ARG ARG ARG A A 371 371 . 38.732 34.708 20.306  1.00 7.70   1 .
.
ATOM 2778 CG   CG   . ARG ARG ARG A A 371 371 . 38.339 33.482 21.209  1.00 9.59   1 .
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ATOM 2779 CD   CD   . ARG ARG ARG A A 371 371 . 39.133 33.434 22.491  1.00 13.57  1 .
.
ATOM 2780 NE   NE   . ARG ARG ARG A A 371 371 . 40.598 33.364 22.363  1.00 13.50  1 .
.
ATOM 2781 CZ   CZ   . ARG ARG ARG A A 371 371 . 41.357 32.295 22.588  1.00 14.05  1 .
.
ATOM 2782 NH1  NH1  . ARG ARG ARG A A 371 371 . 40.779 31.085 22.831  1.00 12.75  1 .
.
ATOM 2783 NH2  NH2  . ARG ARG ARG A A 371 371 . 42.722 32.451 22.576  1.00 13.52  1 .
.
ATOM 2784 C    C    . ARG ARG ARG A A 371 371 . 39.047 37.112 20.061  1.00 9.80   1 .
.
ATOM 2785 O    O    . ARG ARG ARG A A 371 371 . 38.179 37.869 19.652  1.00 10.02  1 .
.
ATOM 2786 N    N    . SER SER SER A A 372 372 . 40.317 37.185 19.677  1.00 10.14  1 .
.
ATOM 2787 CA   CA   . SER SER SER A A 372 372 . 40.654 38.162 18.644  1.00 11.02  1 .
.
ATOM 2788 CB   CB   . SER SER SER A A 372 372 . 42.193 38.308 18.526  1.00 11.99  1 .
.
ATOM 2789 OG   OG   . SER SER SER A A 372 372 . 42.764 37.068 18.147  1.00 13.67  1 .
.
ATOM 2790 C    C    . SER SER SER A A 372 372 . 40.044 37.884 17.287  1.00 12.43  1 .
.
ATOM 2791 O    O    . SER SER SER A A 372 372 . 39.869 38.811 16.506  1.00 11.79  1 .
.
ATOM 2792 N    N    . GLY GLY GLY A A 373 373 . 39.691 36.623 17.012  1.00 11.04  1 .
.
ATOM 2793 CA   CA   . GLY GLY GLY A A 373 373 . 38.903 36.309 15.755  1.00 10.82  1 .
.
ATOM 2794 C    C    . GLY GLY GLY A A 373 373 . 37.476 36.101 16.242  1.00 11.28  1 .
.
ATOM 2795 O    O    . GLY GLY GLY A A 373 373 . 37.182 35.129 16.959  1.00 13.82  1 .
.
ATOM 2796 N    N    . GLU GLU GLU A A 374 374 . 36.625 37.078 16.034  1.00 11.34  1 .
.
ATOM 2797 CA   CA   . GLU GLU GLU A A 374 374 . 35.276 37.015 16.543  1.00 10.88  1 .
.
ATOM 2798 CB   CB   . GLU GLU GLU A A 374 374 . 34.920 38.267 17.425  1.00 11.17  1 .
.
ATOM 2799 CG   CG   . GLU GLU GLU A A 374 374 . 35.107 37.983 18.919  1.00 11.60  1 .
.
ATOM 2800 CD   CD   . GLU GLU GLU A A 374 374 . 34.183 36.881 19.467  1.00 11.35  1 .
.
ATOM 2801 OE1  OE1  . GLU GLU GLU A A 374 374 . 33.083 36.600 18.908  1.00 13.47  1 .
.
ATOM 2802 OE2  OE2  . GLU GLU GLU A A 374 374 . 34.571 36.308 20.505  1.00 14.17  1 .
.
ATOM 2803 C    C    . GLU GLU GLU A A 374 374 . 34.284 36.904 15.386  1.00 9.96   1 .
.
ATOM 2804 O    O    . GLU GLU GLU A A 374 374 . 34.640 36.856 14.205  1.00 10.37  1 .
.
ATOM 2805 N    N    . THR THR THR A A 375 375 . 33.044 36.753 15.739  1.00 9.30   1 .
.
ATOM 2806 CA   CA   . THR THR THR A A 375 375 . 31.986 36.774 14.726  1.00 9.62   1 .
.
ATOM 2807 CB   CB   . THR THR THR A A 375 375 . 31.337 35.368 14.520  1.00 9.67   1 .
.
ATOM 2808 OG1  OG1  . THR THR THR A A 375 375 . 30.568 34.989 15.732  1.00 12.57  1 .
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ATOM 2809 CG2  CG2  . THR THR THR A A 375 375 . 32.459 34.310 14.243  1.00 14.46  1 .
.
ATOM 2810 C    C    . THR THR THR A A 375 375 . 30.886 37.746 15.170  1.00 10.65  1 .
.
ATOM 2811 O    O    . THR THR THR A A 375 375 . 30.954 38.378 16.262  1.00 10.52  1 .
.
ATOM 2812 N    N    . GLU GLU GLU A A 376 376 . 29.813 37.771 14.368  1.00 12.99  1 .
.
ATOM 2813 CA   CA   . GLU GLU GLU A A 376 376 . 28.609 38.557 14.712  1.00 13.73  1 .
.
ATOM 2814 CB   CB   . GLU GLU GLU A A 376 376 . 27.757 38.795 13.400  1.00 14.72  1 .
.
ATOM 2815 CG   CG   . GLU GLU GLU A A 376 376 . 27.332 37.461 12.624  1.00 15.34  1 .
.
ATOM 2816 CD   CD   . GLU GLU GLU A A 376 376 . 28.313 37.019 11.557  1.00 16.38  1 .
.
ATOM 2817 OE1  OE1  . GLU GLU GLU A A 376 376 . 29.544 37.044 11.783  1.00 19.18  1 .
.
ATOM 2818 OE2  OE2  . GLU GLU GLU A A 376 376 . 27.890 36.529 10.497  1.00 12.82  1 .
.
ATOM 2819 C    C    . GLU GLU GLU A A 376 376 . 27.788 37.908 15.843  1.00 12.87  1 .
.
ATOM 2820 O    O    . GLU GLU GLU A A 376 376 . 26.774 38.515 16.288  1.00 13.76  1 .
.
ATOM 2821 N    N    . ASP ASP ASP A A 377 377 . 28.229 36.742 16.372  1.00 10.11  1 .
.
ATOM 2822 CA   CA   . ASP ASP ASP A A 377 377 . 27.499 36.095 17.502  1.00 11.39  1 .
.
ATOM 2823 CB   CB   . ASP ASP ASP A A 377 377 . 28.182 34.761 17.719  1.00 12.78  1 .
.
ATOM 2824 CG   CG   . ASP ASP ASP A A 377 377 . 27.574 33.970 18.818  1.00 17.11  1 .
.
ATOM 2825 OD1  OD1  . ASP ASP ASP A A 377 377 . 27.958 34.192 19.984  1.00 22.74  1 .
.
ATOM 2826 OD2  OD2  . ASP ASP ASP A A 377 377 . 26.901 32.980 18.518  1.00 18.57  1 .
.
ATOM 2827 C    C    . ASP ASP ASP A A 377 377 . 27.568 36.983 18.788  1.00 13.79  1 .
.
ATOM 2828 O    O    . ASP ASP ASP A A 377 377 . 28.631 37.607 19.049  1.00 14.70  1 .
.
ATOM 2829 N    N    . THR THR THR A A 378 378 . 26.525 37.046 19.583  1.00 11.71  1 .
.
ATOM 2830 CA   CA   . THR THR THR A A 378 378 . 26.583 37.906 20.748  1.00 11.06  1 .
.
ATOM 2831 CB   CB   . THR THR THR A A 378 378 . 25.501 39.005 20.718  1.00 11.41  1 .
.
ATOM 2832 OG1  OG1  . THR THR THR A A 378 378 . 24.218 38.399 20.691  1.00 13.20  1 .
.
ATOM 2833 CG2  CG2  . THR THR THR A A 378 378 . 25.669 39.893 19.453  1.00 13.25  1 .
.
ATOM 2834 C    C    . THR THR THR A A 378 378 . 26.417 37.105 22.026  1.00 10.18  1 .
.
ATOM 2835 O    O    . THR THR THR A A 378 378 . 26.146 37.708 23.114  1.00 11.91  1 .
.
ATOM 2836 N    N    . PHE PHE PHE A A 379 379 . 26.582 35.770 21.925  1.00 9.88   1 .
.
ATOM 2837 CA   CA   . PHE PHE PHE A A 379 379 . 26.381 34.915 23.131  1.00 10.94  1 .
.
ATOM 2838 CB   CB   . PHE PHE PHE A A 379 379 . 26.924 33.519 22.824  1.00 11.27  1 .
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ATOM 2839 CG   CG   . PHE PHE PHE A A 379 379 . 26.626 32.517 23.886  1.00 12.00  1 .
.
ATOM 2840 CD1  CD1  . PHE PHE PHE A A 379 379 . 27.543 32.309 24.889  1.00 13.51  1 .
.
ATOM 2841 CE1  CE1  . PHE PHE PHE A A 379 379 . 27.298 31.340 25.916  1.00 15.24  1 .
.
ATOM 2842 CZ   CZ   . PHE PHE PHE A A 379 379 . 26.117 30.591 25.863  1.00 14.07  1 .
.
ATOM 2843 CE2  CE2  . PHE PHE PHE A A 379 379 . 25.175 30.789 24.850  1.00 13.81  1 .
.
ATOM 2844 CD2  CD2  . PHE PHE PHE A A 379 379 . 25.446 31.726 23.828  1.00 14.68  1 .
.
ATOM 2845 C    C    . PHE PHE PHE A A 379 379 . 27.095 35.465 24.389  1.00 11.23  1 .
.
ATOM 2846 O    O    . PHE PHE PHE A A 379 379 . 26.517 35.406 25.499  1.00 10.47  1 .
.
ATOM 2847 N    N    . ILE ILE ILE A A 380 380 . 28.326 35.965 24.229  1.00 10.06  1 .
.
ATOM 2848 CA   CA   . ILE ILE ILE A A 380 380 . 29.054 36.241 25.501  1.00 10.48  1 .
.
ATOM 2849 CB   CB   . ILE ILE ILE A A 380 380 . 30.590 36.430 25.334  1.00 11.26  1 .
.
ATOM 2850 CG1  CG1  . ILE ILE ILE A A 380 380 . 30.863 37.609 24.356  1.00 10.81  1 .
.
ATOM 2851 CD   CD   . ILE ILE ILE A A 380 380 . 32.420 37.814 24.217  1.00 12.36  1 .
.
ATOM 2852 CG2  CG2  . ILE ILE ILE A A 380 380 . 31.210 35.083 24.911  1.00 10.77  1 .
.
ATOM 2853 C    C    . ILE ILE ILE A A 380 380 . 28.465 37.456 26.225  1.00 10.41  1 .
.
ATOM 2854 O    O    . ILE ILE ILE A A 380 380 . 28.744 37.618 27.435  1.00 10.27  1 .
.
ATOM 2855 N    N    . ALA ALA ALA A A 381 381 . 27.676 38.307 25.524  1.00 10.43  1 .
.
ATOM 2856 CA   CA   . ALA ALA ALA A A 381 381 . 26.912 39.419 26.230  1.00 9.70   1 .
.
ATOM 2857 CB   CB   . ALA ALA ALA A A 381 381 . 26.199 40.401 25.221  1.00 10.11  1 .
.
ATOM 2858 C    C    . ALA ALA ALA A A 381 381 . 25.904 38.840 27.214  1.00 10.23  1 .
.
ATOM 2859 O    O    . ALA ALA ALA A A 381 381 . 25.882 39.211 28.402  1.00 11.57  1 .
.
ATOM 2860 N    N    . ASP ASP ASP A A 382 382 . 25.124 37.838 26.744  1.00 8.71   1 .
.
ATOM 2861 CA   CA   . ASP ASP ASP A A 382 382 . 24.129 37.223 27.648  1.00 11.14  1 .
.
ATOM 2862 CB   CB   . ASP ASP ASP A A 382 382 . 23.163 36.308 26.858  1.00 11.82  1 .
.
ATOM 2863 CG   CG   . ASP ASP ASP A A 382 382 . 22.217 37.138 26.013  1.00 13.61  1 .
.
ATOM 2864 OD1  OD1  . ASP ASP ASP A A 382 382 . 22.662 37.745 25.012  1.00 17.93  1 .
.
ATOM 2865 OD2  OD2  . ASP ASP ASP A A 382 382 . 21.063 37.279 26.447  1.00 17.67  1 .
.
ATOM 2866 C    C    . ASP ASP ASP A A 382 382 . 24.891 36.403 28.711  1.00 9.67   1 .
.
ATOM 2867 O    O    . ASP ASP ASP A A 382 382 . 24.444 36.397 29.865  1.00 11.66  1 .
.
ATOM 2868 N    N    . LEU LEU LEU A A 383 383 . 26.039 35.758 28.371  1.00 8.73   1 .
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ATOM 2869 CA   CA   . LEU LEU LEU A A 383 383 . 26.765 34.930 29.316  1.00 9.84   1 .
.
ATOM 2870 CB   CB   . LEU LEU LEU A A 383 383 . 27.953 34.307 28.603  1.00 9.59   1 .
.
ATOM 2871 CG   CG   . LEU LEU LEU A A 383 383 . 28.868 33.379 29.388  1.00 9.80   1 .
.
ATOM 2872 CD1  CD1  . LEU LEU LEU A A 383 383 . 28.016 32.165 29.860  1.00 11.17  1 .
.
ATOM 2873 CD2  CD2  . LEU LEU LEU A A 383 383 . 30.092 32.928 28.608  1.00 12.09  1 .
.
ATOM 2874 C    C    . LEU LEU LEU A A 383 383 . 27.280 35.769 30.498  1.00 10.78  1 .
.
ATOM 2875 O    O    . LEU LEU LEU A A 383 383 . 27.154 35.377 31.672  1.00 12.84  1 .
.
ATOM 2876 N    N    . VAL VAL VAL A A 384 384 . 27.839 36.945 30.230  1.00 10.43  1 .
.
ATOM 2877 CA   CA   . VAL VAL VAL A A 384 384 . 28.416 37.701 31.346  1.00 11.23  1 .
.
ATOM 2878 CB   CB   . VAL VAL VAL A A 384 384 . 29.335 38.907 30.873  1.00 12.05  1 .
.
ATOM 2879 CG1  CG1  . VAL VAL VAL A A 384 384 . 28.525 39.968 30.124  1.00 10.70  1 .
.
ATOM 2880 CG2  CG2  . VAL VAL VAL A A 384 384 . 30.132 39.460 32.077  1.00 12.03  1 .
.
ATOM 2881 C    C    . VAL VAL VAL A A 384 384 . 27.333 38.213 32.303  1.00 12.01  1 .
.
ATOM 2882 O    O    . VAL VAL VAL A A 384 384 . 27.586 38.331 33.518  1.00 12.77  1 .
.
ATOM 2883 N    N    . VAL VAL VAL A A 385 385 . 26.168 38.544 31.776  1.00 12.04  1 .
.
ATOM 2884 CA   CA   . VAL VAL VAL A A 385 385 . 25.093 39.053 32.617  1.00 12.91  1 .
.
ATOM 2885 CB   CB   . VAL VAL VAL A A 385 385 . 23.992 39.692 31.777  1.00 11.34  1 .
.
ATOM 2886 CG1  CG1  . VAL VAL VAL A A 385 385 . 22.749 40.025 32.648  1.00 12.57  1 .
.
ATOM 2887 CG2  CG2  . VAL VAL VAL A A 385 385 . 24.524 40.964 31.079  1.00 12.70  1 .
.
ATOM 2888 C    C    . VAL VAL VAL A A 385 385 . 24.551 37.824 33.407  1.00 13.32  1 .
.
ATOM 2889 O    O    . VAL VAL VAL A A 385 385 . 24.273 37.932 34.603  1.00 14.47  1 .
.
ATOM 2890 N    N    . GLY GLY GLY A A 386 386 . 24.327 36.691 32.758  1.00 12.61  1 .
.
ATOM 2891 CA   CA   . GLY GLY GLY A A 386 386 . 23.755 35.532 33.514  1.00 13.32  1 .
.
ATOM 2892 C    C    . GLY GLY GLY A A 386 386 . 24.728 35.018 34.541  1.00 13.82  1 .
.
ATOM 2893 O    O    . GLY GLY GLY A A 386 386 . 24.263 34.543 35.610  1.00 14.76  1 .
.
ATOM 2894 N    N    . LEU LEU LEU A A 387 387 . 26.034 35.068 34.277  1.00 12.74  1 .
.
ATOM 2895 CA   CA   . LEU LEU LEU A A 387 387 . 27.050 34.618 35.296  1.00 12.59  1 .
.
ATOM 2896 CB   CB   . LEU LEU LEU A A 387 387 . 28.319 34.143 34.602  1.00 12.05  1 .
.
ATOM 2897 CG   CG   . LEU LEU LEU A A 387 387 . 28.181 32.938 33.699  1.00 13.92  1 .
.
ATOM 2898 CD1  CD1  . LEU LEU LEU A A 387 387 . 29.535 32.624 33.098  1.00 17.74  1 .
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ATOM 2899 CD2  CD2  . LEU LEU LEU A A 387 387 . 27.678 31.744 34.480  1.00 19.20  1 .
.
ATOM 2900 C    C    . LEU LEU LEU A A 387 387 . 27.407 35.676 36.314  1.00 13.59  1 .
.
ATOM 2901 O    O    . LEU LEU LEU A A 387 387 . 28.094 35.384 37.325  1.00 14.70  1 .
.
ATOM 2902 N    N    . CYS CYS CYS A A 388 388 . 26.832 36.862 36.128  1.00 14.22  1 .
.
ATOM 2903 CA   CA   . CYS CYS CYS A A 388 388 . 26.927 37.962 37.098  1.00 15.68  1 .
.
ATOM 2904 CB   CB   . CYS CYS CYS A A 388 388 . 26.182 37.602 38.412  1.00 16.64  1 .
.
ATOM 2905 SG   SG   . CYS CYS CYS A A 388 388 . 24.407 37.511 38.248  1.00 24.75  1 .
.
ATOM 2906 C    C    . CYS CYS CYS A A 388 388 . 28.392 38.288 37.426  1.00 14.21  1 .
.
ATOM 2907 O    O    . CYS CYS CYS A A 388 388 . 28.722 38.587 38.549  1.00 17.84  1 .
.
ATOM 2908 N    N    . THR THR THR A A 389 389 . 29.283 38.254 36.451  1.00 13.02  1 .
.
ATOM 2909 CA   CA   . THR THR THR A A 389 389 . 30.712 38.332 36.780  1.00 13.38  1 .
.
ATOM 2910 CB   CB   . THR THR THR A A 389 389 . 31.630 37.688 35.748  1.00 14.67  1 .
.
ATOM 2911 OG1  OG1  . THR THR THR A A 389 389 . 31.892 38.633 34.691  1.00 15.12  1 .
.
ATOM 2912 CG2  CG2  . THR THR THR A A 389 389 . 31.019 36.392 35.204  1.00 16.63  1 .
.
ATOM 2913 C    C    . THR THR THR A A 389 389 . 31.165 39.799 36.990  1.00 14.46  1 .
.
ATOM 2914 O    O    . THR THR THR A A 389 389 . 32.166 40.028 37.697  1.00 16.98  1 .
.
ATOM 2915 N    N    . GLY GLY GLY A A 390 390 . 30.452 40.787 36.437  1.00 13.16  1 .
.
ATOM 2916 CA   CA   . GLY GLY GLY A A 390 390 . 30.790 42.180 36.654  1.00 12.08  1 .
.
ATOM 2917 C    C    . GLY GLY GLY A A 390 390 . 31.829 42.776 35.695  1.00 12.12  1 .
.
ATOM 2918 O    O    . GLY GLY GLY A A 390 390 . 32.068 43.986 35.730  1.00 11.96  1 .
.
ATOM 2919 N    N    . GLN GLN GLN A A 391 391 . 32.414 41.955 34.810  1.00 12.30  1 .
.
ATOM 2920 CA   CA   . GLN GLN GLN A A 391 391 . 33.400 42.527 33.889  1.00 11.50  1 .
.
ATOM 2921 CB   CB   . GLN GLN GLN A A 391 391 . 34.755 42.655 34.553  1.00 16.05  1 .
.
ATOM 2922 CG   CG   . GLN GLN GLN A A 391 391 . 35.018 41.636 35.614  1.00 16.43  1 .
.
ATOM 2923 CD   CD   . GLN GLN GLN A A 391 391 . 36.442 41.743 36.175  1.00 16.81  1 .
.
ATOM 2924 OE1  OE1  . GLN GLN GLN A A 391 391 . 37.302 42.487 35.627  1.00 18.83  1 .
.
ATOM 2925 NE2  NE2  . GLN GLN GLN A A 391 391 . 36.700 40.964 37.234  1.00 16.09  1 .
.
ATOM 2926 C    C    . GLN GLN GLN A A 391 391 . 33.483 41.717 32.587  1.00 11.84  1 .
.
ATOM 2927 O    O    . GLN GLN GLN A A 391 391 . 33.460 40.506 32.602  1.00 11.59  1 .
.
ATOM 2928 N    N    . ILE ILE ILE A A 392 392 . 33.586 42.443 31.492  1.00 11.35  1 .
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ATOM 2929 CA   CA   . ILE ILE ILE A A 392 392 . 33.750 41.728 30.208  1.00 11.57  1 .
.
ATOM 2930 CB   CB   . ILE ILE ILE A A 392 392 . 32.370 41.652 29.439  1.00 11.22  1 .
.
ATOM 2931 CG1  CG1  . ILE ILE ILE A A 392 392 . 32.596 40.912 28.112  1.00 9.90   1 .
.
ATOM 2932 CD   CD   . ILE ILE ILE A A 392 392 . 31.198 40.477 27.485  1.00 12.51  1 .
.
ATOM 2933 CG2  CG2  . ILE ILE ILE A A 392 392 . 31.692 43.006 29.237  1.00 12.22  1 .
.
ATOM 2934 C    C    . ILE ILE ILE A A 392 392 . 34.742 42.504 29.335  1.00 10.99  1 .
.
ATOM 2935 O    O    . ILE ILE ILE A A 392 392 . 34.695 43.727 29.340  1.00 12.11  1 .
.
ATOM 2936 N    N    . LYS LYS LYS A A 393 393 . 35.598 41.788 28.609  1.00 10.65  1 .
.
ATOM 2937 CA   CA   . LYS LYS LYS A A 393 393 . 36.373 42.430 27.582  1.00 10.55  1 .
.
ATOM 2938 CB   CB   . LYS LYS LYS A A 393 393 . 37.863 42.337 27.808  1.00 12.41  1 .
.
ATOM 2939 CG   CG   . LYS LYS LYS A A 393 393 . 38.508 41.058 27.642  1.00 14.14  1 .
.
ATOM 2940 CD   CD   . LYS LYS LYS A A 393 393 . 40.036 41.144 27.730  1.00 13.97  1 .
.
ATOM 2941 CE   CE   . LYS LYS LYS A A 393 393 . 40.577 39.994 26.945  1.00 15.56  1 .
.
ATOM 2942 NZ   NZ   . LYS LYS LYS A A 393 393 . 42.166 40.108 27.027  1.00 17.85  1 .
.
ATOM 2943 C    C    . LYS LYS LYS A A 393 393 . 35.914 41.878 26.250  1.00 10.23  1 .
.
ATOM 2944 O    O    . LYS LYS LYS A A 393 393 . 35.974 40.653 26.048  1.00 11.11  1 .
.
ATOM 2945 N    N    . THR THR THR A A 394 394 . 35.486 42.776 25.362  1.00 10.81  1 .
.
ATOM 2946 CA   CA   . THR THR THR A A 394 394 . 35.068 42.257 24.025  1.00 11.91  1 .
.
ATOM 2947 CB   CB   . THR THR THR A A 394 394 . 33.566 41.724 24.076  1.00 10.37  1 .
.
ATOM 2948 OG1  OG1  . THR THR THR A A 394 394 . 33.246 41.132 22.810  1.00 10.98  1 .
.
ATOM 2949 CG2  CG2  . THR THR THR A A 394 394 . 32.588 42.815 24.411  1.00 13.45  1 .
.
ATOM 2950 C    C    . THR THR THR A A 394 394 . 35.390 43.228 22.940  1.00 11.16  1 .
.
ATOM 2951 O    O    . THR THR THR A A 394 394 . 34.662 43.301 21.917  1.00 11.56  1 .
.
ATOM 2952 N    N    . GLY GLY GLY A A 395 395 . 36.498 43.977 23.125  1.00 10.49  1 .
.
ATOM 2953 CA   CA   . GLY GLY GLY A A 395 395 . 37.027 44.799 22.021  1.00 11.29  1 .
.
ATOM 2954 C    C    . GLY GLY GLY A A 395 395 . 37.034 46.296 22.273  1.00 11.39  1 .
.
ATOM 2955 O    O    . GLY GLY GLY A A 395 395 . 36.386 46.787 23.263  1.00 11.92  1 .
.
ATOM 2956 N    N    . ALA ALA ALA A A 396 396 . 37.713 47.046 21.403  1.00 12.37  1 .
.
ATOM 2957 CA   CA   . ALA ALA ALA A A 396 396 . 37.489 48.508 21.363  1.00 11.46  1 .
.
ATOM 2958 CB   CB   . ALA ALA ALA A A 396 396 . 38.378 49.122 20.258  1.00 10.93  1 .
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ATOM 2959 C    C    . ALA ALA ALA A A 396 396 . 36.031 48.744 20.982  1.00 10.72  1 .
.
ATOM 2960 O    O    . ALA ALA ALA A A 396 396 . 35.337 47.814 20.479  1.00 12.80  1 .
.
ATOM 2961 N    N    . PRO PRO PRO A A 397 397 . 35.536 49.978 21.093  1.00 11.25  1 .
.
ATOM 2962 CA   CA   . PRO PRO PRO A A 397 397 . 34.196 50.268 20.576  1.00 12.60  1 .
.
ATOM 2963 CB   CB   . PRO PRO PRO A A 397 397 . 33.754 51.523 21.424  1.00 13.35  1 .
.
ATOM 2964 CG   CG   . PRO PRO PRO A A 397 397 . 35.096 52.256 21.597  1.00 13.83  1 .
.
ATOM 2965 CD   CD   . PRO PRO PRO A A 397 397 . 36.085 51.130 21.893  1.00 12.83  1 .
.
ATOM 2966 C    C    . PRO PRO PRO A A 397 397 . 34.297 50.526 19.054  1.00 13.04  1 .
.
ATOM 2967 O    O    . PRO PRO PRO A A 397 397 . 33.926 51.591 18.544  1.00 15.43  1 .
.
ATOM 2968 N    N    . CYS CYS CYS A A 398 398 . 34.870 49.541 18.348  1.00 11.63  1 .
.
ATOM 2969 CA   CA   . CYS CYS CYS A A 398 398 . 35.144 49.728 16.903  1.00 10.83  1 .
.
ATOM 2970 CB   CB   . CYS CYS CYS A A 398 398 . 36.527 50.438 16.726  1.00 10.81  1 .
.
ATOM 2971 SG   SG   . CYS CYS CYS A A 398 398 . 37.048 50.556 15.017  1.00 15.93  1 .
.
ATOM 2972 C    C    . CYS CYS CYS A A 398 398 . 35.229 48.303 16.324  1.00 10.01  1 .
.
ATOM 2973 O    O    . CYS CYS CYS A A 398 398 . 35.821 47.412 17.012  1.00 9.21   1 .
.
ATOM 2974 N    N    . ARG ARG ARG A A 399 399 . 34.634 48.087 15.132  1.00 10.37  1 .
.
ATOM 2975 CA   CA   . ARG ARG ARG A A 399 399 . 34.510 46.758 14.451  1.00 9.90   1 .
.
ATOM 2976 CB   CB   . ARG ARG ARG A A 399 399 . 35.767 45.872 14.541  1.00 11.12  1 .
.
ATOM 2977 CG   CG   . ARG ARG ARG A A 399 399 . 37.052 46.563 14.038  1.00 11.00  1 .
.
ATOM 2978 CD   CD   . ARG ARG ARG A A 399 399 . 38.285 45.703 14.229  1.00 9.54   1 .
.
ATOM 2979 NE   NE   . ARG ARG ARG A A 399 399 . 38.180 44.372 13.603  1.00 9.27   1 .
.
ATOM 2980 CZ   CZ   . ARG ARG ARG A A 399 399 . 39.129 43.858 12.775  1.00 12.72  1 .
.
ATOM 2981 NH1  NH1  . ARG ARG ARG A A 399 399 . 40.293 44.521 12.531  1.00 13.54  1 .
.
ATOM 2982 NH2  NH2  . ARG ARG ARG A A 399 399 . 38.974 42.611 12.274  1.00 13.55  1 .
.
ATOM 2983 C    C    . ARG ARG ARG A A 399 399 . 33.311 46.072 15.028  1.00 9.26   1 .
.
ATOM 2984 O    O    . ARG ARG ARG A A 399 399 . 33.226 45.853 16.259  1.00 9.49   1 .
.
ATOM 2985 N    N    . SER SER SER A A 400 400 . 32.309 45.776 14.197  1.00 9.66   1 .
.
ATOM 2986 CA   CA   . SER SER SER A A 400 400 . 31.010 45.293 14.797  1.00 7.70   1 .
.
ATOM 2987 CB   CB   . SER SER SER A A 400 400 . 29.889 45.425 13.750  1.00 8.25   1 .
.
ATOM 2988 OG   OG   . SER SER SER A A 400 400 . 29.679 46.832 13.467  1.00 9.52   1 .
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ATOM 2989 C    C    . SER SER SER A A 400 400 . 31.041 43.893 15.337  1.00 8.33   1 .
.
ATOM 2990 O    O    . SER SER SER A A 400 400 . 30.078 43.522 16.011  1.00 9.71   1 .
.
ATOM 2991 N    N    . GLU GLU GLU A A 401 401 . 32.091 43.075 15.096  1.00 8.84   1 .
.
ATOM 2992 CA   CA   . GLU GLU GLU A A 401 401 . 32.192 41.858 15.924  1.00 8.65   1 .
.
ATOM 2993 CB   CB   . GLU GLU GLU A A 401 401 . 33.295 40.854 15.451  1.00 9.04   1 .
.
ATOM 2994 CG   CG   . GLU GLU GLU A A 401 401 . 34.746 41.334 15.693  1.00 8.77   1 .
.
ATOM 2995 CD   CD   . GLU GLU GLU A A 401 401 . 35.283 42.349 14.649  1.00 8.69   1 .
.
ATOM 2996 OE1  OE1  . GLU GLU GLU A A 401 401 . 34.571 42.831 13.727  1.00 11.06  1 .
.
ATOM 2997 OE2  OE2  . GLU GLU GLU A A 401 401 . 36.519 42.657 14.814  1.00 12.10  1 .
.
ATOM 2998 C    C    . GLU GLU GLU A A 401 401 . 32.399 42.193 17.406  1.00 9.61   1 .
.
ATOM 2999 O    O    . GLU GLU GLU A A 401 401 . 32.192 41.305 18.265  1.00 10.42  1 .
.
ATOM 3000 N    N    . ARG ARG ARG A A 402 402 . 32.825 43.448 17.687  1.00 7.43   1 .
.
ATOM 3001 CA   CA   . ARG ARG ARG A A 402 402 . 32.945 43.926 19.098  1.00 8.45   1 .
.
ATOM 3002 CB   CB   . ARG ARG ARG A A 402 402 . 34.123 44.907 19.190  1.00 8.45   1 .
.
ATOM 3003 CG   CG   . ARG ARG ARG A A 402 402 . 35.401 44.400 18.524  1.00 7.97   1 .
.
ATOM 3004 CD   CD   . ARG ARG ARG A A 402 402 . 35.867 43.031 18.965  1.00 7.16   1 .
.
ATOM 3005 NE   NE   . ARG ARG ARG A A 402 402 . 36.823 42.548 17.920  1.00 9.68   1 .
.
ATOM 3006 CZ   CZ   . ARG ARG ARG A A 402 402 . 37.393 41.349 17.907  1.00 8.64   1 .
.
ATOM 3007 NH1  NH1  . ARG ARG ARG A A 402 402 . 37.373 40.508 18.999  1.00 11.11  1 .
.
ATOM 3008 NH2  NH2  . ARG ARG ARG A A 402 402 . 37.986 40.938 16.752  1.00 12.16  1 .
.
ATOM 3009 C    C    . ARG ARG ARG A A 402 402 . 31.671 44.641 19.463  1.00 9.24   1 .
.
ATOM 3010 O    O    . ARG ARG ARG A A 402 402 . 31.008 44.317 20.468  1.00 9.71   1 .
.
ATOM 3011 N    N    . LEU LEU LEU A A 403 403 . 31.248 45.584 18.629  1.00 9.40   1 .
.
ATOM 3012 CA   CA   . LEU LEU LEU A A 403 403 . 30.035 46.345 19.013  1.00 10.17  1 .
.
ATOM 3013 CB   CB   . LEU LEU LEU A A 403 403 . 29.639 47.542 18.025  1.00 9.23   1 .
.
ATOM 3014 CG   CG   . LEU LEU LEU A A 403 403 . 30.512 48.807 18.071  1.00 9.98   1 .
.
ATOM 3015 CD1  CD1  . LEU LEU LEU A A 403 403 . 30.747 49.191 19.548  1.00 10.99  1 .
.
ATOM 3016 CD2  CD2  . LEU LEU LEU A A 403 403 . 31.860 48.659 17.240  1.00 11.81  1 .
.
ATOM 3017 C    C    . LEU LEU LEU A A 403 403 . 28.801 45.448 19.117  1.00 10.04  1 .
.
ATOM 3018 O    O    . LEU LEU LEU A A 403 403 . 27.846 45.788 19.814  1.00 11.00  1 .
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ATOM 3019 N    N    . ALA ALA ALA A A 404 404 . 28.732 44.355 18.353  1.00 9.79   1 .
.
ATOM 3020 CA   CA   . ALA ALA ALA A A 404 404 . 27.521 43.531 18.442  1.00 8.58   1 .
.
ATOM 3021 CB   CB   . ALA ALA ALA A A 404 404 . 27.632 42.341 17.466  1.00 9.77   1 .
.
ATOM 3022 C    C    . ALA ALA ALA A A 404 404 . 27.302 43.100 19.918  1.00 9.85   1 .
.
ATOM 3023 O    O    . ALA ALA ALA A A 404 404 . 26.166 43.096 20.389  1.00 9.82   1 .
.
ATOM 3024 N    N    . LYS LYS LYS A A 405 405 . 28.400 42.812 20.620  1.00 9.23   1 .
.
ATOM 3025 CA   CA   . LYS LYS LYS A A 405 405 . 28.263 42.383 22.047  1.00 9.26   1 .
.
ATOM 3026 CB   CB   . LYS LYS LYS A A 405 405 . 29.603 41.840 22.590  1.00 9.27   1 .
.
ATOM 3027 CG   CG   . LYS LYS LYS A A 405 405 . 29.913 40.370 22.201  1.00 10.45  1 .
.
ATOM 3028 CD   CD   . LYS LYS LYS A A 405 405 . 30.221 40.272 20.706  1.00 9.56   1 .
.
ATOM 3029 CE   CE   . LYS LYS LYS A A 405 405 . 31.029 38.956 20.446  1.00 10.94  1 .
.
ATOM 3030 NZ   NZ   . LYS LYS LYS A A 405 405 . 31.223 38.690 19.002  1.00 9.99   1 .
.
ATOM 3031 C    C    . LYS LYS LYS A A 405 405 . 27.871 43.613 22.881  1.00 9.78   1 .
.
ATOM 3032 O    O    . LYS LYS LYS A A 405 405 . 27.004 43.521 23.739  1.00 9.57   1 .
.
ATOM 3033 N    N    . TYR TYR TYR A A 406 406 . 28.572 44.738 22.712  1.00 11.21  1 .
.
ATOM 3034 CA   CA   . TYR TYR TYR A A 406 406 . 28.289 45.932 23.527  1.00 10.78  1 .
.
ATOM 3035 CB   CB   . TYR TYR TYR A A 406 406 . 29.271 47.056 23.216  1.00 10.27  1 .
.
ATOM 3036 CG   CG   . TYR TYR TYR A A 406 406 . 30.656 46.732 23.681  1.00 9.19   1 .
.
ATOM 3037 CD1  CD1  . TYR TYR TYR A A 406 406 . 30.905 46.306 24.978  1.00 9.64   1 .
.
ATOM 3038 CE1  CE1  . TYR TYR TYR A A 406 406 . 32.196 46.010 25.401  1.00 8.73   1 .
.
ATOM 3039 CZ   CZ   . TYR TYR TYR A A 406 406 . 33.303 46.110 24.507  1.00 9.60   1 .
.
ATOM 3040 OH   OH   . TYR TYR TYR A A 406 406 . 34.559 45.770 24.916  1.00 13.33  1 .
.
ATOM 3041 CE2  CE2  . TYR TYR TYR A A 406 406 . 33.069 46.496 23.178  1.00 9.30   1 .
.
ATOM 3042 CD2  CD2  . TYR TYR TYR A A 406 406 . 31.763 46.796 22.760  1.00 12.23  1 .
.
ATOM 3043 C    C    . TYR TYR TYR A A 406 406 . 26.861 46.407 23.282  1.00 11.58  1 .
.
ATOM 3044 O    O    . TYR TYR TYR A A 406 406 . 26.190 46.808 24.208  1.00 9.82   1 .
.
ATOM 3045 N    N    . ASN ASN ASN A A 407 407 . 26.424 46.374 22.028  1.00 8.82   1 .
.
ATOM 3046 CA   CA   . ASN ASN ASN A A 407 407 . 25.052 46.754 21.734  1.00 10.09  1 .
.
ATOM 3047 CB   CB   . ASN ASN ASN A A 407 407 . 24.791 46.773 20.206  1.00 9.98   1 .
.
ATOM 3048 CG   CG   . ASN ASN ASN A A 407 407 . 25.473 47.951 19.519  1.00 10.83  1 .
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ATOM 3049 OD1  OD1  . ASN ASN ASN A A 407 407 . 25.802 49.002 20.147  1.00 11.26  1 .
.
ATOM 3050 ND2  ND2  . ASN ASN ASN A A 407 407 . 25.716 47.778 18.206  1.00 10.45  1 .
.
ATOM 3051 C    C    . ASN ASN ASN A A 407 407 . 24.062 45.798 22.419  1.00 9.30   1 .
.
ATOM 3052 O    O    . ASN ASN ASN A A 407 407 . 23.027 46.252 22.903  1.00 10.54  1 .
.
ATOM 3053 N    N    . GLN GLN GLN A A 408 408 . 24.367 44.487 22.422  1.00 9.21   1 .
.
ATOM 3054 CA   CA   . GLN GLN GLN A A 408 408 . 23.451 43.509 23.056  1.00 8.96   1 .
.
ATOM 3055 CB   CB   . GLN GLN GLN A A 408 408 . 23.957 42.095 22.807  1.00 9.19   1 .
.
ATOM 3056 CG   CG   . GLN GLN GLN A A 408 408 . 23.159 40.958 23.440  1.00 11.90  1 .
.
ATOM 3057 CD   CD   . GLN GLN GLN A A 408 408 . 21.697 40.811 22.990  1.00 14.81  1 .
.
ATOM 3058 OE1  OE1  . GLN GLN GLN A A 408 408 . 21.149 41.623 22.203  1.00 14.59  1 .
.
ATOM 3059 NE2  NE2  . GLN GLN GLN A A 408 408 . 21.008 39.797 23.546  1.00 17.66  1 .
.
ATOM 3060 C    C    . GLN GLN GLN A A 408 408 . 23.419 43.789 24.578  1.00 10.31  1 .
.
ATOM 3061 O    O    . GLN GLN GLN A A 408 408 . 22.349 43.663 25.188  1.00 10.62  1 .
.
ATOM 3062 N    N    . LEU LEU LEU A A 409 409 . 24.588 44.138 25.156  1.00 10.25  1 .
.
ATOM 3063 CA   CA   . LEU LEU LEU A A 409 409 . 24.590 44.520 26.592  1.00 10.42  1 .
.
ATOM 3064 CB   CB   . LEU LEU LEU A A 409 409 . 26.004 44.754 27.119  1.00 9.38   1 .
.
ATOM 3065 CG   CG   . LEU LEU LEU A A 409 409 . 26.782 43.443 27.294  1.00 9.76   1 .
.
ATOM 3066 CD1  CD1  . LEU LEU LEU A A 409 409 . 28.286 43.691 27.437  1.00 11.84  1 .
.
ATOM 3067 CD2  CD2  . LEU LEU LEU A A 409 409 . 26.210 42.581 28.528  1.00 10.12  1 .
.
ATOM 3068 C    C    . LEU LEU LEU A A 409 409 . 23.698 45.757 26.823  1.00 11.04  1 .
.
ATOM 3069 O    O    . LEU LEU LEU A A 409 409 . 22.951 45.798 27.837  1.00 11.65  1 .
.
ATOM 3070 N    N    . MET MET MET A A 410 410 . 23.742 46.765 25.946  1.00 11.67  1 .
.
ATOM 3071 CA   CA   . MET MET MET A A 410 410 . 22.765 47.876 26.123  1.00 11.88  1 .
.
ATOM 3072 CB   CB   . MET MET MET A A 410 410 . 23.006 48.971 25.085  1.00 11.24  1 .
.
ATOM 3073 CG   CG   . MET MET MET A A 410 410 . 24.356 49.651 25.381  1.00 14.28  1 .
.
ATOM 3074 SD   SD   . MET MET MET A A 410 410 . 24.547 51.232 24.461  1.00 18.28  1 .
.
ATOM 3075 CE   CE   . MET MET MET A A 410 410 . 24.723 50.522 22.876  1.00 14.54  1 .
.
ATOM 3076 C    C    . MET MET MET A A 410 410 . 21.314 47.414 26.050  1.00 11.45  1 .
.
ATOM 3077 O    O    . MET MET MET A A 410 410 . 20.456 47.924 26.797  1.00 12.24  1 .
.
ATOM 3078 N    N    . ARG ARG ARG A A 411 411 . 21.025 46.465 25.147  1.00 10.37  1 .
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ATOM 3079 CA   CA   . ARG ARG ARG A A 411 411 . 19.669 45.952 25.013  1.00 10.13  1 .
.
ATOM 3080 CB   CB   . ARG ARG ARG A A 411 411 . 19.452 45.006 23.769  1.00 11.23  1 .
.
ATOM 3081 CG   CG   . ARG ARG ARG A A 411 411 . 19.776 45.699 22.414  1.00 12.84  1 .
.
ATOM 3082 CD   CD   . ARG ARG ARG A A 411 411 . 19.359 44.798 21.256  1.00 10.79  1 .
.
ATOM 3083 NE   NE   . ARG ARG ARG A A 411 411 . 20.061 45.274 20.077  1.00 16.98  1 .
.
ATOM 3084 CZ   CZ   . ARG ARG ARG A A 411 411 . 21.174 44.758 19.574  1.00 15.85  1 .
.
ATOM 3085 NH1  NH1  . ARG ARG ARG A A 411 411 . 21.756 43.649 20.109  1.00 16.45  1 .
.
ATOM 3086 NH2  NH2  . ARG ARG ARG A A 411 411 . 21.705 45.367 18.489  1.00 15.66  1 .
.
ATOM 3087 C    C    . ARG ARG ARG A A 411 411 . 19.252 45.166 26.245  1.00 12.21  1 .
.
ATOM 3088 O    O    . ARG ARG ARG A A 411 411 . 18.096 45.268 26.652  1.00 12.75  1 .
.
ATOM 3089 N    N    . ILE ILE ILE A A 412 412 . 20.200 44.437 26.839  1.00 11.74  1 .
.
ATOM 3090 CA   CA   . ILE ILE ILE A A 412 412 . 19.858 43.664 28.051  1.00 10.82  1 .
.
ATOM 3091 CB   CB   . ILE ILE ILE A A 412 412 . 21.038 42.697 28.431  1.00 11.96  1 .
.
ATOM 3092 CG1  CG1  . ILE ILE ILE A A 412 412 . 21.080 41.576 27.390  1.00 12.53  1 .
.
ATOM 3093 CD   CD   . ILE ILE ILE A A 412 412 . 22.416 40.764 27.461  1.00 11.23  1 .
.
ATOM 3094 CG2  CG2  . ILE ILE ILE A A 412 412 . 20.845 42.050 29.835  1.00 11.54  1 .
.
ATOM 3095 C    C    . ILE ILE ILE A A 412 412 . 19.570 44.679 29.160  1.00 11.93  1 .
.
ATOM 3096 O    O    . ILE ILE ILE A A 412 412 . 18.633 44.482 29.983  1.00 13.16  1 .
.
ATOM 3097 N    N    . GLU GLU GLU A A 413 413 . 20.435 45.669 29.287  1.00 12.07  1 .
.
ATOM 3098 CA   CA   . GLU GLU GLU A A 413 413 . 20.218 46.697 30.385  1.00 14.85  1 .
.
ATOM 3099 CB   CB   . GLU GLU GLU A A 413 413 . 21.307 47.762 30.350  1.00 14.13  1 .
.
ATOM 3100 CG   CG   . GLU GLU GLU A A 413 413 . 21.023 48.903 31.380  1.00 16.02  1 .
.
ATOM 3101 CD   CD   . GLU GLU GLU A A 413 413 . 22.213 49.811 31.506  1.00 14.61  1 .
.
ATOM 3102 OE1  OE1  . GLU GLU GLU A A 413 413 . 22.498 50.531 30.521  1.00 18.99  1 .
.
ATOM 3103 OE2  OE2  . GLU GLU GLU A A 413 413 . 22.939 49.664 32.510  1.00 17.06  1 .
.
ATOM 3104 C    C    . GLU GLU GLU A A 413 413 . 18.833 47.309 30.205  1.00 15.18  1 .
.
ATOM 3105 O    O    . GLU GLU GLU A A 413 413 . 18.047 47.472 31.169  1.00 14.89  1 .
.
ATOM 3106 N    N    . GLU GLU GLU A A 414 414 . 18.513 47.678 28.963  1.00 14.14  1 .
.
ATOM 3107 CA   CA   . GLU GLU GLU A A 414 414 . 17.133 48.202 28.671  1.00 16.80  1 .
.
ATOM 3108 CB   CB   . GLU GLU GLU A A 414 414 . 17.024 48.534 27.160  1.00 17.44  1 .
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ATOM 3109 CG   CG   . GLU GLU GLU A A 414 414 . 15.738 49.139 26.740  1.00 21.04  1 .
.
ATOM 3110 CD   CD   . GLU GLU GLU A A 414 414 . 15.723 49.292 25.200  1.00 22.81  1 .
.
ATOM 3111 OE1  OE1  . GLU GLU GLU A A 414 414 . 16.613 49.966 24.639  1.00 25.24  1 .
.
ATOM 3112 OE2  OE2  . GLU GLU GLU A A 414 414 . 14.838 48.693 24.545  1.00 28.50  1 .
.
ATOM 3113 C    C    . GLU GLU GLU A A 414 414 . 16.046 47.199 29.134  1.00 16.63  1 .
.
ATOM 3114 O    O    . GLU GLU GLU A A 414 414 . 15.056 47.604 29.733  1.00 18.75  1 .
.
ATOM 3115 N    N    . GLU GLU GLU A A 415 415 . 16.194 45.913 28.778  1.00 14.75  1 .
.
ATOM 3116 CA   CA   . GLU GLU GLU A A 415 415 . 15.201 44.897 29.080  1.00 16.97  1 .
.
ATOM 3117 CB   CB   . GLU GLU GLU A A 415 415 . 15.550 43.569 28.455  1.00 18.50  1 .
.
ATOM 3118 CG   CG   . GLU GLU GLU A A 415 415 . 14.138 42.762 28.157  1.00 24.48  1 .
.
ATOM 3119 CD   CD   . GLU GLU GLU A A 415 415 . 14.422 41.409 27.728  1.00 35.11  1 .
.
ATOM 3120 OE2  OE2  . GLU GLU GLU A A 415 415 . 15.079 40.793 28.535  1.00 37.39  1 .
.
ATOM 3121 C    C    . GLU GLU GLU A A 415 415 . 15.003 44.792 30.604  1.00 18.01  1 .
.
ATOM 3122 O    O    . GLU GLU GLU A A 415 415 . 13.859 44.571 31.051  1.00 19.27  1 .
.
ATOM 3123 N    N    . LEU LEU LEU A A 416 416 . 16.082 44.922 31.376  1.00 16.90  1 .
.
ATOM 3124 CA   CA   . LEU LEU LEU A A 416 416 . 16.006 44.713 32.837  1.00 19.49  1 .
.
ATOM 3125 CB   CB   . LEU LEU LEU A A 416 416 . 17.368 44.419 33.373  1.00 17.68  1 .
.
ATOM 3126 CG   CG   . LEU LEU LEU A A 416 416 . 17.780 42.985 33.049  1.00 20.34  1 .
.
ATOM 3127 CD1  CD1  . LEU LEU LEU A A 416 416 . 19.262 42.895 33.277  1.00 24.56  1 .
.
ATOM 3128 CD2  CD2  . LEU LEU LEU A A 416 416 . 17.067 41.978 33.969  1.00 26.13  1 .
.
ATOM 3129 C    C    . LEU LEU LEU A A 416 416 . 15.435 45.916 33.579  1.00 22.00  1 .
.
ATOM 3130 O    O    . LEU LEU LEU A A 416 416 . 14.871 45.762 34.693  1.00 22.73  1 .
.
ATOM 3131 N    N    . GLY GLY GLY A A 417 417 . 15.526 47.084 32.967  1.00 24.92  1 .
.
ATOM 3132 CA   CA   . GLY GLY GLY A A 417 417 . 14.807 48.276 33.430  1.00 30.36  1 .
.
ATOM 3133 C    C    . GLY GLY GLY A A 417 417 . 15.296 48.594 34.809  1.00 34.13  1 .
.
ATOM 3134 O    O    . GLY GLY GLY A A 417 417 . 16.496 48.378 35.076  1.00 34.89  1 .
.
ATOM 3135 N    N    . ASP ASP ASP A A 418 418 . 14.357 49.021 35.712  1.00 37.53  1 .
.
ATOM 3136 CA   CA   . ASP ASP ASP A A 418 418 . 14.751 49.420 37.095  1.00 37.12  1 .
.
ATOM 3137 CB   CB   . ASP ASP ASP A A 418 418 . 13.630 50.154 37.927  1.00 38.38  1 .
.
ATOM 3138 C    C    . ASP ASP ASP A A 418 418 . 15.397 48.299 37.899  1.00 36.49  1 .
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ATOM 3139 O    O    . ASP ASP ASP A A 418 418 . 15.881 48.551 38.966  1.00 38.96  1 .
.
ATOM 3140 N    N    . GLU GLU GLU A A 419 419 . 15.311 47.060 37.438  1.00 34.31  1 .
.
ATOM 3141 CA   CA   . GLU GLU GLU A A 419 419 . 16.057 45.952 37.999  1.00 32.89  1 .
.
ATOM 3142 CB   CB   . GLU GLU GLU A A 419 419 . 15.388 44.586 37.732  1.00 32.10  1 .
.
ATOM 3143 C    C    . GLU GLU GLU A A 419 419 . 17.538 45.891 37.476  1.00 32.50  1 .
.
ATOM 3144 O    O    . GLU GLU GLU A A 419 419 . 18.326 44.989 37.916  1.00 32.34  1 .
.
ATOM 3145 N    N    . ALA ALA ALA A A 420 420 . 17.905 46.765 36.502  1.00 33.24  1 .
.
ATOM 3146 CA   CA   . ALA ALA ALA A A 420 420 . 19.329 46.729 36.025  1.00 31.59  1 .
.
ATOM 3147 CB   CB   . ALA ALA ALA A A 420 420 . 19.483 47.541 34.627  1.00 31.25  1 .
.
ATOM 3148 C    C    . ALA ALA ALA A A 420 420 . 20.253 47.246 37.176  1.00 32.03  1 .
.
ATOM 3149 O    O    . ALA ALA ALA A A 420 420 . 19.882 48.229 37.812  1.00 34.84  1 .
.
ATOM 3150 N    N    . ARG ARG ARG A A 421 421 . 21.358 46.551 37.505  1.00 30.77  1 .
.
ATOM 3151 CA   CA   . ARG ARG ARG A A 421 421 . 22.417 47.105 38.410  1.00 25.74  1 .
.
ATOM 3152 CB   CB   . ARG ARG ARG A A 421 421 . 22.547 46.402 39.737  1.00 26.62  1 .
.
ATOM 3153 CG   CG   . ARG ARG ARG A A 421 421 . 21.348 46.698 40.743  1.00 30.01  1 .
.
ATOM 3154 C    C    . ARG ARG ARG A A 421 421 . 23.750 46.995 37.698  1.00 23.17  1 .
.
ATOM 3155 O    O    . ARG ARG ARG A A 421 421 . 24.159 45.888 37.218  1.00 23.79  1 .
.
ATOM 3156 N    N    . PHE PHE PHE A A 422 422 . 24.441 48.117 37.655  1.00 18.75  1 .
.
ATOM 3157 CA   CA   . PHE PHE PHE A A 422 422 . 25.723 48.141 36.967  1.00 16.03  1 .
.
ATOM 3158 CB   CB   . PHE PHE PHE A A 422 422 . 25.830 49.504 36.294  1.00 15.89  1 .
.
ATOM 3159 CG   CG   . PHE PHE PHE A A 422 422 . 27.161 49.792 35.655  1.00 13.89  1 .
.
ATOM 3160 CD1  CD1  . PHE PHE PHE A A 422 422 . 27.557 49.115 34.510  1.00 14.36  1 .
.
ATOM 3161 CE1  CE1  . PHE PHE PHE A A 422 422 . 28.734 49.433 33.892  1.00 14.44  1 .
.
ATOM 3162 CZ   CZ   . PHE PHE PHE A A 422 422 . 29.602 50.378 34.373  1.00 15.35  1 .
.
ATOM 3163 CE2  CE2  . PHE PHE PHE A A 422 422 . 29.222 51.132 35.514  1.00 17.27  1 .
.
ATOM 3164 CD2  CD2  . PHE PHE PHE A A 422 422 . 27.977 50.827 36.141  1.00 16.43  1 .
.
ATOM 3165 C    C    . PHE PHE PHE A A 422 422 . 26.844 47.920 37.958  1.00 16.10  1 .
.
ATOM 3166 O    O    . PHE PHE PHE A A 422 422 . 26.796 48.484 39.089  1.00 16.18  1 .
.
ATOM 3167 N    N    . ALA ALA ALA A A 423 423 . 27.833 47.075 37.607  1.00 14.55  1 .
.
ATOM 3168 CA   CA   . ALA ALA ALA A A 423 423 . 28.883 46.654 38.557  1.00 14.87  1 .
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ATOM 3169 CB   CB   . ALA ALA ALA A A 423 423 . 29.767 45.535 37.957  1.00 15.67  1 .
.
ATOM 3170 C    C    . ALA ALA ALA A A 423 423 . 29.757 47.807 39.066  1.00 14.66  1 .
.
ATOM 3171 O    O    . ALA ALA ALA A A 423 423 . 30.226 47.776 40.219  1.00 15.23  1 .
.
ATOM 3172 N    N    . GLY GLY GLY A A 424 424 . 29.937 48.843 38.259  1.00 13.33  1 .
.
ATOM 3173 CA   CA   . GLY GLY GLY A A 424 424 . 30.770 50.005 38.651  1.00 13.86  1 .
.
ATOM 3174 C    C    . GLY GLY GLY A A 424 424 . 32.088 49.695 39.337  1.00 13.36  1 .
.
ATOM 3175 O    O    . GLY GLY GLY A A 424 424 . 32.921 48.879 38.876  1.00 13.56  1 .
.
ATOM 3176 N    N    . HIS HIS HIS A A 425 425 . 32.326 50.339 40.504  1.00 14.12  1 .
.
ATOM 3177 CA   CA   . HIS HIS HIS A A 425 425 . 33.566 50.027 41.221  1.00 13.61  1 .
.
ATOM 3178 CB   CB   . HIS HIS HIS A A 425 425 . 33.755 51.099 42.327  1.00 13.04  1 .
.
ATOM 3179 CG   CG   . HIS HIS HIS A A 425 425 . 34.028 52.453 41.751  1.00 12.66  1 .
.
ATOM 3180 ND1  ND1  . HIS HIS HIS A A 425 425 . 35.252 52.790 41.229  1.00 18.16  1 .
.
ATOM 3181 CE1  CE1  . HIS HIS HIS A A 425 425 . 35.193 54.035 40.757  1.00 16.09  1 .
.
ATOM 3182 NE2  NE2  . HIS HIS HIS A A 425 425 . 33.947 54.466 40.847  1.00 19.16  1 .
.
ATOM 3183 CD2  CD2  . HIS HIS HIS A A 425 425 . 33.197 53.505 41.494  1.00 16.71  1 .
.
ATOM 3184 C    C    . HIS HIS HIS A A 425 425 . 33.627 48.664 41.878  1.00 14.34  1 .
.
ATOM 3185 O    O    . HIS HIS HIS A A 425 425 . 34.709 48.291 42.403  1.00 15.14  1 .
.
ATOM 3186 N    N    . ASN ASN ASN A A 426 426 . 32.522 47.915 41.810  1.00 12.78  1 .
.
ATOM 3187 CA   CA   . ASN ASN ASN A A 426 426 . 32.473 46.546 42.260  1.00 14.08  1 .
.
ATOM 3188 CB   CB   . ASN ASN ASN A A 426 426 . 31.186 46.299 43.037  1.00 11.85  1 .
.
ATOM 3189 CG   CG   . ASN ASN ASN A A 426 426 . 31.233 47.069 44.346  1.00 15.90  1 .
.
ATOM 3190 OD1  OD1  . ASN ASN ASN A A 426 426 . 32.048 46.714 45.258  1.00 19.92  1 .
.
ATOM 3191 ND2  ND2  . ASN ASN ASN A A 426 426 . 30.605 48.217 44.371  1.00 11.39  1 .
.
ATOM 3192 C    C    . ASN ASN ASN A A 426 426 . 32.611 45.535 41.118  1.00 15.66  1 .
.
ATOM 3193 O    O    . ASN ASN ASN A A 426 426 . 32.178 44.405 41.253  1.00 18.43  1 .
.
ATOM 3194 N    N    . PHE PHE PHE A A 427 427 . 33.349 45.948 40.100  1.00 13.51  1 .
.
ATOM 3195 CA   CA   . PHE PHE PHE A A 427 427 . 33.560 45.039 38.966  1.00 15.32  1 .
.
ATOM 3196 CB   CB   . PHE PHE PHE A A 427 427 . 34.267 45.751 37.832  1.00 16.04  1 .
.
ATOM 3197 CG   CG   . PHE PHE PHE A A 427 427 . 35.710 46.042 38.113  1.00 16.15  1 .
.
ATOM 3198 CD1  CD1  . PHE PHE PHE A A 427 427 . 36.107 47.195 38.834  1.00 15.65  1 .
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ATOM 3199 CE1  CE1  . PHE PHE PHE A A 427 427 . 37.518 47.421 39.071  1.00 19.85  1 .
.
ATOM 3200 CZ   CZ   . PHE PHE PHE A A 427 427 . 38.467 46.513 38.570  1.00 19.23  1 .
.
ATOM 3201 CE2  CE2  . PHE PHE PHE A A 427 427 . 38.046 45.362 37.883  1.00 21.99  1 .
.
ATOM 3202 CD2  CD2  . PHE PHE PHE A A 427 427 . 36.691 45.148 37.656  1.00 20.45  1 .
.
ATOM 3203 C    C    . PHE PHE PHE A A 427 427 . 34.254 43.721 39.372  1.00 17.77  1 .
.
ATOM 3204 O    O    . PHE PHE PHE A A 427 427 . 33.946 42.708 38.765  1.00 20.18  1 .
.
ATOM 3205 N    N    . ARG ARG ARG A A 428 428 . 35.161 43.720 40.392  1.00 17.30  1 .
.
ATOM 3206 CA   CA   . ARG ARG ARG A A 428 428 . 35.864 42.518 40.801  1.00 20.43  1 .
.
ATOM 3207 CB   CB   . ARG ARG ARG A A 428 428 . 37.139 42.851 41.599  1.00 20.10  1 .
.
ATOM 3208 CG   CG   . ARG ARG ARG A A 428 428 . 38.224 43.657 40.799  1.00 24.75  1 .
.
ATOM 3209 CD   CD   . ARG ARG ARG A A 428 428 . 39.501 44.015 41.594  1.00 27.32  1 .
.
ATOM 3210 NE   NE   . ARG ARG ARG A A 428 428 . 40.156 42.869 42.207  1.00 27.40  1 .
.
ATOM 3211 CZ   CZ   . ARG ARG ARG A A 428 428 . 41.253 42.936 43.002  1.00 30.73  1 .
.
ATOM 3212 NH1  NH1  . ARG ARG ARG A A 428 428 . 41.839 44.088 43.300  1.00 29.50  1 .
.
ATOM 3213 NH2  NH2  . ARG ARG ARG A A 428 428 . 41.771 41.833 43.511  1.00 30.87  1 .
.
ATOM 3214 C    C    . ARG ARG ARG A A 428 428 . 34.828 41.672 41.567  1.00 21.72  1 .
.
ATOM 3215 O    O    . ARG ARG ARG A A 428 428 . 34.833 40.456 41.444  1.00 23.25  1 .
.
ATOM 3216 N    N    . ASN ASN ASN A A 429 429 . 33.920 42.279 42.342  1.00 22.41  1 .
.
ATOM 3217 CA   CA   . ASN ASN ASN A A 429 429 . 33.002 41.428 43.130  1.00 23.58  1 .
.
ATOM 3218 CB   CB   . ASN ASN ASN A A 429 429 . 33.598 41.087 44.517  1.00 26.85  1 .
.
ATOM 3219 CG   CG   . ASN ASN ASN A A 429 429 . 32.781 39.947 45.254  1.00 31.44  1 .
.
ATOM 3220 OD1  OD1  . ASN ASN ASN A A 429 429 . 31.801 39.331 44.696  1.00 32.20  1 .
.
ATOM 3221 ND2  ND2  . ASN ASN ASN A A 429 429 . 33.166 39.685 46.538  1.00 35.81  1 .
.
ATOM 3222 C    C    . ASN ASN ASN A A 429 429 . 31.647 42.048 43.293  1.00 21.92  1 .
.
ATOM 3223 O    O    . ASN ASN ASN A A 429 429 . 31.346 42.710 44.322  1.00 21.31  1 .
.
ATOM 3224 N    N    . PRO PRO PRO A A 430 430 . 30.781 41.863 42.281  1.00 19.02  1 .
.
ATOM 3225 CA   CA   . PRO PRO PRO A A 430 430 . 29.551 42.573 42.180  1.00 19.59  1 .
.
ATOM 3226 CB   CB   . PRO PRO PRO A A 430 430 . 29.163 42.410 40.658  1.00 21.07  1 .
.
ATOM 3227 CG   CG   . PRO PRO PRO A A 430 430 . 29.889 41.205 40.269  1.00 20.74  1 .
.
ATOM 3228 CD   CD   . PRO PRO PRO A A 430 430 . 31.181 41.207 41.031  1.00 20.16  1 .
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ATOM 3229 C    C    . PRO PRO PRO A A 430 430 . 28.443 41.996 43.063  1.00 20.53  1 .
.
ATOM 3230 O    O    . PRO PRO PRO A A 430 430 . 27.358 42.587 43.109  1.00 20.83  1 .
.
ATOM 3231 N    N    . SER SER SER A A 431 431 . 28.727 40.850 43.663  1.00 23.58  1 .
.
ATOM 3232 CA   CA   . SER SER SER A A 431 431 . 27.795 40.223 44.602  1.00 27.02  1 .
.
ATOM 3233 CB   CB   . SER SER SER A A 431 431 . 28.417 38.910 45.161  1.00 29.18  1 .
.
ATOM 3234 OG   OG   . SER SER SER A A 431 431 . 29.323 39.202 46.235  1.00 32.60  1 .
.
ATOM 3235 C    C    . SER SER SER A A 431 431 . 27.300 41.184 45.731  1.00 28.74  1 .
.
ATOM 3236 O    O    . SER SER SER A A 431 431 . 26.151 41.029 46.220  1.00 28.65  1 .
.
ATOM 3237 N    N    . VAL VAL VAL A A 432 432 . 28.083 42.206 46.097  1.00 26.41  1 .
.
ATOM 3238 CA   CA   . VAL VAL VAL A A 432 432 . 27.703 43.123 47.209  1.00 25.98  1 .
.
ATOM 3239 CB   CB   . VAL VAL VAL A A 432 432 . 28.965 43.920 47.706  1.00 26.60  1 .
.
ATOM 3240 CG1  CG1  . VAL VAL VAL A A 432 432 . 30.116 42.956 47.963  1.00 23.34  1 .
.
ATOM 3241 CG2  CG2  . VAL VAL VAL A A 432 432 . 29.381 45.033 46.650  1.00 23.69  1 .
.
ATOM 3242 C    C    . VAL VAL VAL A A 432 432 . 26.607 44.081 46.861  1.00 26.92  1 .
.
ATOM 3243 O    O    . VAL VAL VAL A A 432 432 . 26.104 44.841 47.738  1.00 28.94  1 .
.
ATOM 3244 N    N    . LEU LEU LEU A A 433 433 . 26.230 44.134 45.580  1.00 24.22  1 .
.
ATOM 3245 CA   CA   . LEU LEU LEU A A 433 433 . 25.298 45.161 45.140  1.00 24.75  1 .
.
ATOM 3246 CB   CB   . LEU LEU LEU A A 433 433 . 25.563 45.474 43.663  1.00 24.17  1 .
.
ATOM 3247 CG   CG   . LEU LEU LEU A A 433 433 . 26.907 46.178 43.447  1.00 22.89  1 .
.
ATOM 3248 CD1  CD1  . LEU LEU LEU A A 433 433 . 27.193 46.397 41.928  1.00 22.04  1 .
.
ATOM 3249 CD2  CD2  . LEU LEU LEU A A 433 433 . 26.922 47.496 44.265  1.00 27.60  1 .
.
ATOM 3250 C    C    . LEU LEU LEU A A 433 433 . 23.800 44.765 45.335  1.00 24.91  1 .
.
ATOM 3251 O    O    . LEU LEU LEU A A 433 433 . 23.415 43.708 44.870  1.00 25.38  1 .
.
ATOM 3252 MG+2 MG+2 . MG2 MG2 MG2 A . 600 600 . 44.668 37.314 27.011  1.00 16.63  1 .
.
ATOM 3253 MG+2 MG+2 . MG2 MG2 MG2 A . 601 601 . 45.561 35.178 23.686  1.00 17.08  1 .
.
ATOM 3254 O3P  O3P  . XSP XSP XSP A . 602 602 . 44.173 36.070 20.167  1.00 18.02  1 .
.
ATOM 3255 P    P    . XSP XSP XSP A . 602 602 . 43.317 35.907 21.431  1.00 16.68  1 .
.
ATOM 3256 O1P  O1P  . XSP XSP XSP A . 602 602 . 43.980 34.944 22.365  1.00 16.24  1 .
.
ATOM 3257 O2P  O2P  . XSP XSP XSP A . 602 602 . 41.863 35.549 21.127  1.00 14.30  1 .
.
ATOM 3258 O3   O3   . XSP XSP XSP A . 602 602 . 43.376 37.345 22.146  1.00 16.93  1 .
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ATOM 3259 C2   C2   . XSP XSP XSP A . 602 602 . 42.687 37.421 23.492  1.00 20.31  1 .
.
ATOM 3260 C1   C1   . XSP XSP XSP A . 602 602 . 43.536 37.310 24.748  1.00 18.96  1 .
.
ATOM 3261 O2   O2   . XSP XSP XSP A . 602 602 . 43.058 37.584 25.882  1.00 15.18  1 .
.
ATOM 3262 O1   O1   . XSP XSP XSP A . 602 602 . 44.714 36.825 24.631  1.00 16.50  1 .
.
ATOM 3263 C3   C3   . XSP XSP XSP A . 602 602 . 41.464 38.333 23.492  1.00 26.58  1 .
.
ATOM 3264 O4   O4   . XSP XSP XSP A . 602 602 . 41.575 39.722 23.656  1.00 31.86  1 .
.
ATOM 3265 O3   O3   . TRS TRS TRS A . 603 603 . 53.220 32.067 20.373  1.00 36.84  1 .
.
ATOM 3266 C3   C3   . TRS TRS TRS A . 603 603 . 53.047 30.657 20.399  1.00 34.62  1 .
.
ATOM 3267 C    C    . TRS TRS TRS A . 603 603 . 51.973 30.373 21.457  1.00 34.61  1 .
.
ATOM 3268 N    N    . TRS TRS TRS A . 603 603 . 50.765 31.274 21.176  1.00 34.34  1 .
.
ATOM 3269 C2   C2   . TRS TRS TRS A . 603 603 . 51.618 28.864 21.460  1.00 35.05  1 .
.
ATOM 3270 O2   O2   . TRS TRS TRS A . 603 603 . 51.243 28.381 20.178  1.00 36.38  1 .
.
ATOM 3271 C1   C1   . TRS TRS TRS A . 603 603 . 52.519 30.632 22.886  1.00 33.76  1 .
.
ATOM 3272 O1   O1   . TRS TRS TRS A . 603 603 . 51.504 30.295 23.838  1.00 28.59  1 .
.
ATOM 3273 N    N    . SER SER SER B B 1   1   . -1.335 44.040 11.627  1.00 30.02  1 .
.
ATOM 3274 CA   CA   . SER SER SER B B 1   1   . -0.831 45.414 11.827  1.00 29.51  1 .
.
ATOM 3275 CB   CB   . SER SER SER B B 1   1   . -1.949 46.407 12.151  1.00 30.43  1 .
.
ATOM 3276 OG   OG   . SER SER SER B B 1   1   . -2.468 46.259 13.454  1.00 36.80  1 .
.
ATOM 3277 C    C    . SER SER SER B B 1   1   . 0.342  45.461 12.843  1.00 27.58  1 .
.
ATOM 3278 O    O    . SER SER SER B B 1   1   . 0.740  44.423 13.459  1.00 28.67  1 .
.
ATOM 3279 N    N    . ILE ILE ILE B B 2   2   . 0.890  46.648 13.015  1.00 24.52  1 .
.
ATOM 3280 CA   CA   . ILE ILE ILE B B 2   2   . 2.042  46.829 13.881  1.00 22.64  1 .
.
ATOM 3281 CB   CB   . ILE ILE ILE B B 2   2   . 2.828  48.056 13.496  1.00 21.04  1 .
.
ATOM 3282 CG1  CG1  . ILE ILE ILE B B 2   2   . 3.336  47.926 12.055  1.00 21.22  1 .
.
ATOM 3283 CD   CD   . ILE ILE ILE B B 2   2   . 3.807  49.286 11.503  1.00 22.19  1 .
.
ATOM 3284 CG2  CG2  . ILE ILE ILE B B 2   2   . 4.001  48.283 14.496  1.00 18.50  1 .
.
ATOM 3285 C    C    . ILE ILE ILE B B 2   2   . 1.572  46.982 15.317  1.00 23.52  1 .
.
ATOM 3286 O    O    . ILE ILE ILE B B 2   2   . 0.715  47.838 15.585  1.00 24.79  1 .
.
ATOM 3287 N    N    . GLU GLU GLU B B 3   3   . 2.158  46.197 16.232  1.00 21.77  1 .
.
ATOM 3288 CA   CA   . GLU GLU GLU B B 3   3   . 1.805  46.252 17.661  1.00 22.02  1 .
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ATOM 3289 CB   CB   . GLU GLU GLU B B 3   3   . 1.930  44.864 18.326  1.00 22.30  1 .
.
ATOM 3290 CG   CG   . GLU GLU GLU B B 3   3   . 1.051  43.813 17.636  1.00 27.58  1 .
.
ATOM 3291 CD   CD   . GLU GLU GLU B B 3   3   . 1.087  42.490 18.365  1.00 34.37  1 .
.
ATOM 3292 OE1  OE1  . GLU GLU GLU B B 3   3   . 0.092  41.685 18.239  1.00 39.90  1 .
.
ATOM 3293 OE2  OE2  . GLU GLU GLU B B 3   3   . 2.100  42.257 19.093  1.00 37.39  1 .
.
ATOM 3294 C    C    . GLU GLU GLU B B 3   3   . 2.613  47.231 18.431  1.00 21.05  1 .
.
ATOM 3295 O    O    . GLU GLU GLU B B 3   3   . 2.060  47.931 19.246  1.00 21.92  1 .
.
ATOM 3296 N    N    . LYS LYS LYS B B 4   4   . 3.912  47.368 18.118  1.00 19.89  1 .
.
ATOM 3297 CA   CA   . LYS LYS LYS B B 4   4   . 4.755  48.249 18.897  1.00 18.29  1 .
.
ATOM 3298 CB   CB   . LYS LYS LYS B B 4   4   . 5.167  47.536 20.185  1.00 18.90  1 .
.
ATOM 3299 CG   CG   . LYS LYS LYS B B 4   4   . 6.201  48.342 21.037  1.00 22.98  1 .
.
ATOM 3300 CD   CD   . LYS LYS LYS B B 4   4   . 6.647  47.553 22.286  1.00 32.22  1 .
.
ATOM 3301 CE   CE   . LYS LYS LYS B B 4   4   . 7.398  48.461 23.310  1.00 38.11  1 .
.
ATOM 3302 NZ   NZ   . LYS LYS LYS B B 4   4   . 6.556  49.025 24.428  1.00 45.81  1 .
.
ATOM 3303 C    C    . LYS LYS LYS B B 4   4   . 5.997  48.558 18.067  1.00 17.81  1 .
.
ATOM 3304 O    O    . LYS LYS LYS B B 4   4   . 6.474  47.685 17.352  1.00 17.39  1 .
.
ATOM 3305 N    N    . ILE ILE ILE B B 5   5   . 6.502  49.780 18.186  1.00 17.97  1 .
.
ATOM 3306 CA   CA   . ILE ILE ILE B B 5   5   . 7.790  50.201 17.578  1.00 17.81  1 .
.
ATOM 3307 CB   CB   . ILE ILE ILE B B 5   5   . 7.617  51.179 16.371  1.00 16.98  1 .
.
ATOM 3308 CG1  CG1  . ILE ILE ILE B B 5   5   . 6.951  50.430 15.219  1.00 17.36  1 .
.
ATOM 3309 CD   CD   . ILE ILE ILE B B 5   5   . 6.407  51.267 13.987  1.00 19.82  1 .
.
ATOM 3310 CG2  CG2  . ILE ILE ILE B B 5   5   . 8.969  51.806 15.909  1.00 17.39  1 .
.
ATOM 3311 C    C    . ILE ILE ILE B B 5   5   . 8.591  50.835 18.647  1.00 18.65  1 .
.
ATOM 3312 O    O    . ILE ILE ILE B B 5   5   . 8.079  51.728 19.353  1.00 20.85  1 .
.
ATOM 3313 N    N    . TRP TRP TRP B B 6   6   . 9.840  50.401 18.822  1.00 16.94  1 .
.
ATOM 3314 CA   CA   . TRP TRP TRP B B 6   6   . 10.691 51.026 19.811  1.00 16.88  1 .
.
ATOM 3315 CB   CB   . TRP TRP TRP B B 6   6   . 10.840 50.181 21.083  1.00 16.75  1 .
.
ATOM 3316 CG   CG   . TRP TRP TRP B B 6   6   . 11.678 50.918 22.116  1.00 19.80  1 .
.
ATOM 3317 CD1  CD1  . TRP TRP TRP B B 6   6   . 12.983 50.600 22.499  1.00 20.30  1 .
.
ATOM 3318 NE1  NE1  . TRP TRP TRP B B 6   6   . 13.445 51.516 23.426  1.00 21.67  1 .
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ATOM 3319 CE2  CE2  . TRP TRP TRP B B 6   6   . 12.480 52.476 23.640  1.00 22.32  1 .
.
ATOM 3320 CD2  CD2  . TRP TRP TRP B B 6   6   . 11.345 52.131 22.826  1.00 20.35  1 .
.
ATOM 3321 CE3  CE3  . TRP TRP TRP B B 6   6   . 10.190 52.958 22.865  1.00 23.09  1 .
.
ATOM 3322 CZ3  CZ3  . TRP TRP TRP B B 6   6   . 10.196 54.105 23.699  1.00 26.32  1 .
.
ATOM 3323 CH2  CH2  . TRP TRP TRP B B 6   6   . 11.340 54.447 24.495  1.00 23.59  1 .
.
ATOM 3324 CZ2  CZ2  . TRP TRP TRP B B 6   6   . 12.484 53.638 24.518  1.00 23.27  1 .
.
ATOM 3325 C    C    . TRP TRP TRP B B 6   6   . 12.072 51.242 19.175  1.00 16.42  1 .
.
ATOM 3326 O    O    . TRP TRP TRP B B 6   6   . 12.668 50.260 18.708  1.00 16.78  1 .
.
ATOM 3327 N    N    . ALA ALA ALA B B 7   7   . 12.538 52.488 19.123  1.00 14.51  1 .
.
ATOM 3328 CA   CA   . ALA ALA ALA B B 7   7   . 13.908 52.800 18.668  1.00 14.07  1 .
.
ATOM 3329 CB   CB   . ALA ALA ALA B B 7   7   . 13.898 54.044 17.683  1.00 14.53  1 .
.
ATOM 3330 C    C    . ALA ALA ALA B B 7   7   . 14.883 53.073 19.787  1.00 14.02  1 .
.
ATOM 3331 O    O    . ALA ALA ALA B B 7   7   . 14.500 53.605 20.860  1.00 14.10  1 .
.
ATOM 3332 N    N    . ARG ARG ARG B B 8   8   . 16.156 52.823 19.497  1.00 13.16  1 .
.
ATOM 3333 CA   CA   . ARG ARG ARG B B 8   8   . 17.229 53.117 20.467  1.00 12.83  1 .
.
ATOM 3334 CB   CB   . ARG ARG ARG B B 8   8   . 17.535 51.856 21.317  1.00 13.02  1 .
.
ATOM 3335 CG   CG   . ARG ARG ARG B B 8   8   . 18.183 50.720 20.444  1.00 14.13  1 .
.
ATOM 3336 CD   CD   . ARG ARG ARG B B 8   8   . 18.588 49.519 21.371  1.00 15.49  1 .
.
ATOM 3337 NE   NE   . ARG ARG ARG B B 8   8   . 17.367 48.943 21.993  1.00 15.53  1 .
.
ATOM 3338 CZ   CZ   . ARG ARG ARG B B 8   8   . 16.512 48.117 21.378  1.00 17.54  1 .
.
ATOM 3339 NH1  NH1  . ARG ARG ARG B B 8   8   . 16.735 47.657 20.143  1.00 17.35  1 .
.
ATOM 3340 NH2  NH2  . ARG ARG ARG B B 8   8   . 15.364 47.765 21.988  1.00 21.34  1 .
.
ATOM 3341 C    C    . ARG ARG ARG B B 8   8   . 18.493 53.557 19.701  1.00 14.02  1 .
.
ATOM 3342 O    O    . ARG ARG ARG B B 8   8   . 18.611 53.368 18.498  1.00 14.24  1 .
.
ATOM 3343 N    N    . GLU GLU GLU B B 9   9   . 19.468 54.032 20.432  1.00 13.59  1 .
.
ATOM 3344 CA   CA   . GLU GLU GLU B B 9   9   . 20.790 54.419 19.894  1.00 14.56  1 .
.
ATOM 3345 CB   CB   . GLU GLU GLU B B 9   9   . 21.258 55.589 20.754  1.00 16.28  1 .
.
ATOM 3346 CG   CG   . GLU GLU GLU B B 9   9   . 22.210 56.483 20.237  1.00 20.47  1 .
.
ATOM 3347 CD   CD   . GLU GLU GLU B B 9   9   . 22.541 57.659 21.224  1.00 20.28  1 .
.
ATOM 3348 OE1  OE1  . GLU GLU GLU B B 9   9   . 22.660 58.826 20.737  1.00 20.69  1 .
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ATOM 3349 OE2  OE2  . GLU GLU GLU B B 9   9   . 22.715 57.403 22.472  1.00 22.51  1 .
.
ATOM 3350 C    C    . GLU GLU GLU B B 9   9   . 21.723 53.187 20.191  1.00 14.69  1 .
.
ATOM 3351 O    O    . GLU GLU GLU B B 9   9   . 21.745 52.682 21.322  1.00 18.57  1 .
.
ATOM 3352 N    N    . ILE ILE ILE B B 10  10  . 22.387 52.692 19.199  1.00 12.61  1 .
.
ATOM 3353 CA   CA   . ILE ILE ILE B B 10  10  . 23.435 51.645 19.367  1.00 11.36  1 .
.
ATOM 3354 CB   CB   . ILE ILE ILE B B 10  10  . 23.074 50.340 18.566  1.00 12.57  1 .
.
ATOM 3355 CG1  CG1  . ILE ILE ILE B B 10  10  . 22.882 50.664 17.027  1.00 12.25  1 .
.
ATOM 3356 CD   CD   . ILE ILE ILE B B 10  10  . 22.810 49.384 16.131  1.00 15.62  1 .
.
ATOM 3357 CG2  CG2  . ILE ILE ILE B B 10  10  . 21.856 49.609 19.239  1.00 15.24  1 .
.
ATOM 3358 C    C    . ILE ILE ILE B B 10  10  . 24.690 52.265 18.733  1.00 13.13  1 .
.
ATOM 3359 O    O    . ILE ILE ILE B B 10  10  . 24.612 53.375 18.187  1.00 13.64  1 .
.
ATOM 3360 N    N    . LEU LEU LEU B B 11  11  . 25.806 51.598 18.834  1.00 10.60  1 .
.
ATOM 3361 CA   CA   . LEU LEU LEU B B 11  11  . 27.059 52.056 18.171  1.00 10.29  1 .
.
ATOM 3362 CB   CB   . LEU LEU LEU B B 11  11  . 28.243 51.865 19.121  1.00 12.23  1 .
.
ATOM 3363 CG   CG   . LEU LEU LEU B B 11  11  . 28.119 52.724 20.391  1.00 13.39  1 .
.
ATOM 3364 CD1  CD1  . LEU LEU LEU B B 11  11  . 29.511 52.704 21.071  1.00 15.23  1 .
.
ATOM 3365 CD2  CD2  . LEU LEU LEU B B 11  11  . 27.681 54.168 20.065  1.00 15.80  1 .
.
ATOM 3366 C    C    . LEU LEU LEU B B 11  11  . 27.274 51.345 16.867  1.00 9.99   1 .
.
ATOM 3367 O    O    . LEU LEU LEU B B 11  11  . 27.135 50.109 16.768  1.00 10.22  1 .
.
ATOM 3368 N    N    . ASP ASP ASP B B 12  12  . 27.623 52.108 15.854  1.00 10.33  1 .
.
ATOM 3369 CA   CA   . ASP ASP ASP B B 12  12  . 28.091 51.507 14.579  1.00 9.74   1 .
.
ATOM 3370 CB   CB   . ASP ASP ASP B B 12  12  . 27.775 52.512 13.428  1.00 11.46  1 .
.
ATOM 3371 CG   CG   . ASP ASP ASP B B 12  12  . 28.819 53.734 13.301  1.00 12.13  1 .
.
ATOM 3372 OD1  OD1  . ASP ASP ASP B B 12  12  . 29.862 53.756 13.946  1.00 11.61  1 .
.
ATOM 3373 OD2  OD2  . ASP ASP ASP B B 12  12  . 28.570 54.631 12.412  1.00 14.93  1 .
.
ATOM 3374 C    C    . ASP ASP ASP B B 12  12  . 29.505 51.073 14.579  1.00 9.89   1 .
.
ATOM 3375 O    O    . ASP ASP ASP B B 12  12  . 30.235 51.170 15.609  1.00 9.66   1 .
.
ATOM 3376 N    N    . SER SER SER B B 13  13  . 29.995 50.602 13.409  1.00 8.49   1 .
.
ATOM 3377 CA   CA   . SER SER SER B B 13  13  . 31.292 49.998 13.359  1.00 9.33   1 .
.
ATOM 3378 CB   CB   . SER SER SER B B 13  13  . 31.427 49.236 12.015  1.00 10.24  1 .
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ATOM 3379 OG   OG   . SER SER SER B B 13  13  . 31.398 50.177 10.993  1.00 11.61  1 .
.
ATOM 3380 C    C    . SER SER SER B B 13  13  . 32.531 50.896 13.628  1.00 9.80   1 .
.
ATOM 3381 O    O    . SER SER SER B B 13  13  . 33.647 50.392 13.791  1.00 10.91  1 .
.
ATOM 3382 N    N    . ARG ARG ARG B B 14  14  . 32.321 52.210 13.627  1.00 10.62  1 .
.
ATOM 3383 CA   CA   . ARG ARG ARG B B 14  14  . 33.381 53.191 13.925  1.00 13.48  1 .
.
ATOM 3384 CB   CB   . ARG ARG ARG B B 14  14  . 33.242 54.419 12.944  1.00 12.80  1 .
.
ATOM 3385 CG   CG   . ARG ARG ARG B B 14  14  . 33.882 54.170 11.640  1.00 19.76  1 .
.
ATOM 3386 CD   CD   . ARG ARG ARG B B 14  14  . 34.051 55.503 10.915  1.00 23.00  1 .
.
ATOM 3387 NE   NE   . ARG ARG ARG B B 14  14  . 32.814 55.881 10.277  1.00 20.61  1 .
.
ATOM 3388 CZ   CZ   . ARG ARG ARG B B 14  14  . 32.665 55.949 8.947   1.00 16.73  1 .
.
ATOM 3389 NH1  NH1  . ARG ARG ARG B B 14  14  . 33.683 55.709 8.067   1.00 18.25  1 .
.
ATOM 3390 NH2  NH2  . ARG ARG ARG B B 14  14  . 31.470 56.323 8.485   1.00 16.68  1 .
.
ATOM 3391 C    C    . ARG ARG ARG B B 14  14  . 33.182 53.765 15.323  1.00 13.91  1 .
.
ATOM 3392 O    O    . ARG ARG ARG B B 14  14  . 33.945 54.672 15.692  1.00 15.57  1 .
.
ATOM 3393 N    N    . GLY GLY GLY B B 15  15  . 32.204 53.275 16.075  1.00 10.82  1 .
.
ATOM 3394 CA   CA   . GLY GLY GLY B B 15  15  . 31.980 53.762 17.488  1.00 12.56  1 .
.
ATOM 3395 C    C    . GLY GLY GLY B B 15  15  . 31.108 54.977 17.502  1.00 13.80  1 .
.
ATOM 3396 O    O    . GLY GLY GLY B B 15  15  . 31.052 55.664 18.523  1.00 14.17  1 .
.
ATOM 3397 N    N    . ASN ASN ASN B B 16  16  . 30.385 55.266 16.435  1.00 12.17  1 .
.
ATOM 3398 CA   CA   . ASN ASN ASN B B 16  16  . 29.450 56.399 16.499  1.00 13.80  1 .
.
ATOM 3399 CB   CB   . ASN ASN ASN B B 16  16  . 29.524 57.207 15.213  1.00 13.79  1 .
.
ATOM 3400 CG   CG   . ASN ASN ASN B B 16  16  . 30.835 57.930 15.066  1.00 17.13  1 .
.
ATOM 3401 OD1  OD1  . ASN ASN ASN B B 16  16  . 31.343 58.559 16.004  1.00 18.87  1 .
.
ATOM 3402 ND2  ND2  . ASN ASN ASN B B 16  16  . 31.426 57.824 13.845  1.00 18.68  1 .
.
ATOM 3403 C    C    . ASN ASN ASN B B 16  16  . 27.990 55.933 16.658  1.00 12.62  1 .
.
ATOM 3404 O    O    . ASN ASN ASN B B 16  16  . 27.555 54.882 16.167  1.00 12.63  1 .
.
ATOM 3405 N    N    . PRO PRO PRO B B 17  17  . 27.164 56.712 17.339  1.00 12.47  1 .
.
ATOM 3406 CA   CA   . PRO PRO PRO B B 17  17  . 25.782 56.326 17.526  1.00 10.79  1 .
.
ATOM 3407 CB   CB   . PRO PRO PRO B B 17  17  . 25.163 57.540 18.279  1.00 12.66  1 .
.
ATOM 3408 CG   CG   . PRO PRO PRO B B 17  17  . 26.304 58.093 18.990  1.00 13.01  1 .
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ATOM 3409 CD   CD   . PRO PRO PRO B B 17  17  . 27.523 57.932 18.091  1.00 12.06  1 .
.
ATOM 3410 C    C    . PRO PRO PRO B B 17  17  . 25.016 56.171 16.212  1.00 11.44  1 .
.
ATOM 3411 O    O    . PRO PRO PRO B B 17  17  . 25.299 56.904 15.193  1.00 11.61  1 .
.
ATOM 3412 N    N    . THR THR THR B B 18  18  . 24.119 55.187 16.166  1.00 12.27  1 .
.
ATOM 3413 CA   CA   . THR THR THR B B 18  18  . 23.222 55.143 15.044  1.00 12.44  1 .
.
ATOM 3414 CB   CB   . THR THR THR B B 18  18  . 23.766 54.377 13.837  1.00 10.80  1 .
.
ATOM 3415 OG1  OG1  . THR THR THR B B 18  18  . 22.896 54.625 12.701  1.00 13.41  1 .
.
ATOM 3416 CG2  CG2  . THR THR THR B B 18  18  . 23.806 52.842 14.192  1.00 11.08  1 .
.
ATOM 3417 C    C    . THR THR THR B B 18  18  . 21.863 54.602 15.533  1.00 11.85  1 .
.
ATOM 3418 O    O    . THR THR THR B B 18  18  . 21.745 54.225 16.703  1.00 13.85  1 .
.
ATOM 3419 N    N    . VAL VAL VAL B B 19  19  . 20.847 54.662 14.690  1.00 12.11  1 .
.
ATOM 3420 CA   CA   . VAL VAL VAL B B 19  19  . 19.472 54.258 15.008  1.00 12.26  1 .
.
ATOM 3421 CB   CB   . VAL VAL VAL B B 19  19  . 18.501 54.908 14.030  1.00 11.07  1 .
.
ATOM 3422 CG1  CG1  . VAL VAL VAL B B 19  19  . 17.060 54.476 14.277  1.00 15.35  1 .
.
ATOM 3423 CG2  CG2  . VAL VAL VAL B B 19  19  . 18.643 56.486 14.191  1.00 15.20  1 .
.
ATOM 3424 C    C    . VAL VAL VAL B B 19  19  . 19.269 52.746 14.805  1.00 12.29  1 .
.
ATOM 3425 O    O    . VAL VAL VAL B B 19  19  . 19.714 52.183 13.784  1.00 12.13  1 .
.
ATOM 3426 N    N    . GLU GLU GLU B B 20  20  . 18.679 52.108 15.810  1.00 10.82  1 .
.
ATOM 3427 CA   CA   . GLU GLU GLU B B 20  20  . 18.162 50.741 15.692  1.00 10.62  1 .
.
ATOM 3428 CB   CB   . GLU GLU GLU B B 20  20  . 18.915 49.847 16.635  1.00 12.24  1 .
.
ATOM 3429 CG   CG   . GLU GLU GLU B B 20  20  . 18.293 48.410 16.680  1.00 12.18  1 .
.
ATOM 3430 CD   CD   . GLU GLU GLU B B 20  20  . 19.229 47.533 17.534  1.00 16.32  1 .
.
ATOM 3431 OE1  OE1  . GLU GLU GLU B B 20  20  . 20.162 46.962 16.894  1.00 20.56  1 .
.
ATOM 3432 OE2  OE2  . GLU GLU GLU B B 20  20  . 19.053 47.426 18.784  1.00 17.22  1 .
.
ATOM 3433 C    C    . GLU GLU GLU B B 20  20  . 16.655 50.780 16.050  1.00 12.54  1 .
.
ATOM 3434 O    O    . GLU GLU GLU B B 20  20  . 16.246 51.504 16.937  1.00 14.41  1 .
.
ATOM 3435 N    N    . VAL VAL VAL B B 21  21  . 15.859 50.020 15.297  1.00 11.56  1 .
.
ATOM 3436 CA   CA   . VAL VAL VAL B B 21  21  . 14.425 49.895 15.537  1.00 12.75  1 .
.
ATOM 3437 CB   CB   . VAL VAL VAL B B 21  21  . 13.654 50.415 14.282  1.00 12.92  1 .
.
ATOM 3438 CG1  CG1  . VAL VAL VAL B B 21  21  . 12.156 50.196 14.456  1.00 16.74  1 .
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ATOM 3439 CG2  CG2  . VAL VAL VAL B B 21  21  . 14.075 51.952 14.100  1.00 15.12  1 .
.
ATOM 3440 C    C    . VAL VAL VAL B B 21  21  . 14.011 48.486 15.802  1.00 13.85  1 .
.
ATOM 3441 O    O    . VAL VAL VAL B B 21  21  . 14.307 47.616 15.007  1.00 12.81  1 .
.
ATOM 3442 N    N    . ASP ASP ASP B B 22  22  . 13.232 48.300 16.859  1.00 14.26  1 .
.
ATOM 3443 CA   CA   . ASP ASP ASP B B 22  22  . 12.542 47.031 17.114  1.00 15.46  1 .
.
ATOM 3444 CB   CB   . ASP ASP ASP B B 22  22  . 12.527 46.749 18.598  1.00 14.95  1 .
.
ATOM 3445 CG   CG   . ASP ASP ASP B B 22  22  . 13.873 46.269 19.116  1.00 16.47  1 .
.
ATOM 3446 OD1  OD1  . ASP ASP ASP B B 22  22  . 13.928 45.908 20.287  1.00 17.48  1 .
.
ATOM 3447 OD2  OD2  . ASP ASP ASP B B 22  22  . 14.890 46.197 18.352  1.00 19.69  1 .
.
ATOM 3448 C    C    . ASP ASP ASP B B 22  22  . 11.098 47.238 16.700  1.00 15.42  1 .
.
ATOM 3449 O    O    . ASP ASP ASP B B 22  22  . 10.457 48.236 17.098  1.00 16.01  1 .
.
ATOM 3450 N    N    . LEU LEU LEU B B 23  23  . 10.607 46.337 15.904  1.00 13.34  1 .
.
ATOM 3451 CA   CA   . LEU LEU LEU B B 23  23  . 9.206  46.378 15.518  1.00 15.80  1 .
.
ATOM 3452 CB   CB   . LEU LEU LEU B B 23  23  . 9.112  46.716 14.015  1.00 13.82  1 .
.
ATOM 3453 CG   CG   . LEU LEU LEU B B 23  23  . 7.702  46.947 13.431  1.00 17.83  1 .
.
ATOM 3454 CD1  CD1  . LEU LEU LEU B B 23  23  . 6.820  45.720 13.106  1.00 18.50  1 .
.
ATOM 3455 CD2  CD2  . LEU LEU LEU B B 23  23  . 7.814  47.923 12.198  1.00 18.54  1 .
.
ATOM 3456 C    C    . LEU LEU LEU B B 23  23  . 8.515  45.045 15.852  1.00 16.05  1 .
.
ATOM 3457 O    O    . LEU LEU LEU B B 23  23  . 8.987  43.982 15.466  1.00 15.63  1 .
.
ATOM 3458 N    N    . TYR TYR TYR B B 24  24  . 7.368  45.146 16.555  1.00 15.15  1 .
.
ATOM 3459 CA   CA   . TYR TYR TYR B B 24  24  . 6.663  43.921 16.980  1.00 16.41  1 .
.
ATOM 3460 CB   CB   . TYR TYR TYR B B 24  24  . 6.256  44.022 18.426  1.00 18.74  1 .
.
ATOM 3461 CG   CG   . TYR TYR TYR B B 24  24  . 7.426  44.035 19.377  1.00 17.96  1 .
.
ATOM 3462 CD1  CD1  . TYR TYR TYR B B 24  24  . 8.105  45.214 19.661  1.00 20.73  1 .
.
ATOM 3463 CE1  CE1  . TYR TYR TYR B B 24  24  . 9.171  45.245 20.559  1.00 23.62  1 .
.
ATOM 3464 CZ   CZ   . TYR TYR TYR B B 24  24  . 9.562  44.039 21.169  1.00 23.01  1 .
.
ATOM 3465 OH   OH   . TYR TYR TYR B B 24  24  . 10.588 44.053 22.056  1.00 28.35  1 .
.
ATOM 3466 CE2  CE2  . TYR TYR TYR B B 24  24  . 8.913  42.821 20.909  1.00 23.36  1 .
.
ATOM 3467 CD2  CD2  . TYR TYR TYR B B 24  24  . 7.833  42.819 20.017  1.00 21.16  1 .
.
ATOM 3468 C    C    . TYR TYR TYR B B 24  24  . 5.379  43.702 16.170  1.00 18.37  1 .
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ATOM 3469 O    O    . TYR TYR TYR B B 24  24  . 4.612  44.655 15.977  1.00 19.27  1 .
.
ATOM 3470 N    N    . THR THR THR B B 25  25  . 5.164  42.484 15.702  1.00 18.82  1 .
.
ATOM 3471 CA   CA   . THR THR THR B B 25  25  . 3.812  42.087 15.204  1.00 20.63  1 .
.
ATOM 3472 CB   CB   . THR THR THR B B 25  25  . 3.800  41.830 13.680  1.00 19.36  1 .
.
ATOM 3473 OG1  OG1  . THR THR THR B B 25  25  . 4.576  40.643 13.442  1.00 21.48  1 .
.
ATOM 3474 CG2  CG2  . THR THR THR B B 25  25  . 4.414  42.987 12.885  1.00 21.18  1 .
.
ATOM 3475 C    C    . THR THR THR B B 25  25  . 3.437  40.776 15.905  1.00 20.81  1 .
.
ATOM 3476 O    O    . THR THR THR B B 25  25  . 4.182  40.264 16.781  1.00 21.55  1 .
.
ATOM 3477 N    N    . ALA ALA ALA B B 26  26  . 2.293  40.200 15.531  1.00 22.43  1 .
.
ATOM 3478 CA   CA   . ALA ALA ALA B B 26  26  . 1.891  38.942 16.073  1.00 24.77  1 .
.
ATOM 3479 CB   CB   . ALA ALA ALA B B 26  26  . 0.476  38.612 15.624  1.00 26.57  1 .
.
ATOM 3480 C    C    . ALA ALA ALA B B 26  26  . 2.887  37.831 15.684  1.00 25.67  1 .
.
ATOM 3481 O    O    . ALA ALA ALA B B 26  26  . 2.932  36.764 16.332  1.00 27.59  1 .
.
ATOM 3482 N    N    . LYS LYS LYS B B 27  27  . 3.709  38.056 14.667  1.00 24.14  1 .
.
ATOM 3483 CA   CA   . LYS LYS LYS B B 27  27  . 4.750  37.064 14.341  1.00 23.61  1 .
.
ATOM 3484 CB   CB   . LYS LYS LYS B B 27  27  . 5.119  37.076 12.836  1.00 24.77  1 .
.
ATOM 3485 CG   CG   . LYS LYS LYS B B 27  27  . 3.959  36.938 11.846  1.00 26.84  1 .
.
ATOM 3486 CD   CD   . LYS LYS LYS B B 27  27  . 3.560  35.598 11.713  1.00 30.57  1 .
.
ATOM 3487 CE   CE   . LYS LYS LYS B B 27  27  . 2.972  35.317 10.337  1.00 34.64  1 .
.
ATOM 3488 NZ   NZ   . LYS LYS LYS B B 27  27  . 2.364  33.962 10.570  1.00 40.27  1 .
.
ATOM 3489 C    C    . LYS LYS LYS B B 27  27  . 6.040  37.225 15.150  1.00 22.37  1 .
.
ATOM 3490 O    O    . LYS LYS LYS B B 27  27  . 6.930  36.369 15.024  1.00 24.35  1 .
.
ATOM 3491 N    N    . GLY GLY GLY B B 28  28  . 6.144  38.271 15.974  1.00 20.88  1 .
.
ATOM 3492 CA   CA   . GLY GLY GLY B B 28  28  . 7.321  38.454 16.836  1.00 20.49  1 .
.
ATOM 3493 C    C    . GLY GLY GLY B B 28  28  . 8.076  39.747 16.603  1.00 19.77  1 .
.
ATOM 3494 O    O    . GLY GLY GLY B B 28  28  . 7.473  40.759 16.253  1.00 18.67  1 .
.
ATOM 3495 N    N    . LEU LEU LEU B B 29  29  . 9.378  39.736 16.889  1.00 18.00  1 .
.
ATOM 3496 CA   CA   . LEU LEU LEU B B 29  29  . 10.200 40.969 16.914  1.00 18.96  1 .
.
ATOM 3497 CB   CB   . LEU LEU LEU B B 29  29  . 11.129 40.918 18.169  1.00 17.85  1 .
.
ATOM 3498 CG   CG   . LEU LEU LEU B B 29  29  . 12.365 41.784 18.214  1.00 21.45  1 .
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ATOM 3499 CD1  CD1  . LEU LEU LEU B B 29  29  . 11.985 43.187 18.240  1.00 20.83  1 .
.
ATOM 3500 CD2  CD2  . LEU LEU LEU B B 29  29  . 13.113 41.460 19.511  1.00 25.67  1 .
.
ATOM 3501 C    C    . LEU LEU LEU B B 29  29  . 11.074 41.029 15.704  1.00 17.01  1 .
.
ATOM 3502 O    O    . LEU LEU LEU B B 29  29  . 11.742 40.004 15.320  1.00 18.82  1 .
.
ATOM 3503 N    N    . PHE PHE PHE B B 30  30  . 11.134 42.205 15.072  1.00 14.95  1 .
.
ATOM 3504 CA   CA   . PHE PHE PHE B B 30  30  . 11.933 42.415 13.870  1.00 15.24  1 .
.
ATOM 3505 CB   CB   . PHE PHE PHE B B 30  30  . 10.973 42.635 12.651  1.00 15.56  1 .
.
ATOM 3506 CG   CG   . PHE PHE PHE B B 30  30  . 10.091 41.432 12.463  1.00 16.83  1 .
.
ATOM 3507 CD1  CD1  . PHE PHE PHE B B 30  30  . 10.554 40.332 11.756  1.00 17.52  1 .
.
ATOM 3508 CE1  CE1  . PHE PHE PHE B B 30  30  . 9.744  39.153 11.677  1.00 17.95  1 .
.
ATOM 3509 CZ   CZ   . PHE PHE PHE B B 30  30  . 8.505  39.085 12.323  1.00 18.83  1 .
.
ATOM 3510 CE2  CE2  . PHE PHE PHE B B 30  30  . 8.063  40.144 13.060  1.00 17.71  1 .
.
ATOM 3511 CD2  CD2  . PHE PHE PHE B B 30  30  . 8.824  41.346 13.106  1.00 16.08  1 .
.
ATOM 3512 C    C    . PHE PHE PHE B B 30  30  . 12.786 43.616 14.130  1.00 15.31  1 .
.
ATOM 3513 O    O    . PHE PHE PHE B B 30  30  . 12.269 44.655 14.517  1.00 18.64  1 .
.
ATOM 3514 N    N    . ARG ARG ARG B B 31  31  . 14.085 43.488 13.897  1.00 12.52  1 .
.
ATOM 3515 CA   CA   . ARG ARG ARG B B 31  31  . 14.992 44.516 14.330  1.00 11.92  1 .
.
ATOM 3516 CB   CB   . ARG ARG ARG B B 31  31  . 15.844 43.938 15.496  1.00 13.37  1 .
.
ATOM 3517 CG   CG   . ARG ARG ARG B B 31  31  . 16.920 44.890 15.956  1.00 14.06  1 .
.
ATOM 3518 CD   CD   . ARG ARG ARG B B 31  31  . 17.738 44.253 17.118  1.00 16.19  1 .
.
ATOM 3519 NE   NE   . ARG ARG ARG B B 31  31  . 16.851 44.244 18.264  1.00 18.19  1 .
.
ATOM 3520 CZ   CZ   . ARG ARG ARG B B 31  31  . 16.820 43.412 19.300  1.00 22.96  1 .
.
ATOM 3521 NH1  NH1  . ARG ARG ARG B B 31  31  . 17.633 42.386 19.340  1.00 22.11  1 .
.
ATOM 3522 NH2  NH2  . ARG ARG ARG B B 31  31  . 15.928 43.619 20.303  1.00 23.85  1 .
.
ATOM 3523 C    C    . ARG ARG ARG B B 31  31  . 15.894 44.915 13.146  1.00 12.69  1 .
.
ATOM 3524 O    O    . ARG ARG ARG B B 31  31  . 16.379 44.066 12.408  1.00 14.25  1 .
.
ATOM 3525 N    N    . ALA ALA ALA B B 32  32  . 16.150 46.207 13.004  1.00 10.91  1 .
.
ATOM 3526 CA   CA   . ALA ALA ALA B B 32  32  . 17.029 46.717 11.960  1.00 12.38  1 .
.
ATOM 3527 CB   CB   . ALA ALA ALA B B 32  32  . 16.200 47.098 10.714  1.00 14.58  1 .
.
ATOM 3528 C    C    . ALA ALA ALA B B 32  32  . 17.814 47.905 12.401  1.00 12.09  1 .
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ATOM 3529 O    O    . ALA ALA ALA B B 32  32  . 17.424 48.618 13.331  1.00 14.49  1 .
.
ATOM 3530 N    N    . ALA ALA ALA B B 33  33  . 18.941 48.157 11.756  1.00 11.17  1 .
.
ATOM 3531 CA   CA   . ALA ALA ALA B B 33  33  . 19.759 49.295 12.172  1.00 11.53  1 .
.
ATOM 3532 CB   CB   . ALA ALA ALA B B 33  33  . 21.031 48.844 13.009  1.00 13.57  1 .
.
ATOM 3533 C    C    . ALA ALA ALA B B 33  33  . 20.219 50.024 10.893  1.00 13.82  1 .
.
ATOM 3534 O    O    . ALA ALA ALA B B 33  33  . 20.225 49.473 9.761   1.00 14.22  1 .
.
ATOM 3535 N    N    . VAL VAL VAL B B 34  34  . 20.638 51.243 11.090  1.00 12.90  1 .
.
ATOM 3536 CA   CA   . VAL VAL VAL B B 34  34  . 20.928 52.201 9.993   1.00 14.00  1 .
.
ATOM 3537 CB   CB   . VAL VAL VAL B B 34  34  . 20.157 53.527 10.241  1.00 13.82  1 .
.
ATOM 3538 CG1  CG1  . VAL VAL VAL B B 34  34  . 20.441 54.511 9.083   1.00 17.24  1 .
.
ATOM 3539 CG2  CG2  . VAL VAL VAL B B 34  34  . 18.658 53.206 10.316  1.00 14.68  1 .
.
ATOM 3540 C    C    . VAL VAL VAL B B 34  34  . 22.407 52.490 9.857   1.00 11.91  1 .
.
ATOM 3541 O    O    . VAL VAL VAL B B 34  34  . 23.071 52.773 10.859  1.00 13.30  1 .
.
ATOM 3542 N    N    . PRO PRO PRO B B 35  35  . 22.963 52.418 8.617   1.00 10.82  1 .
.
ATOM 3543 CA   CA   . PRO PRO PRO B B 35  35  . 24.420 52.666 8.477   1.00 10.90  1 .
.
ATOM 3544 CB   CB   . PRO PRO PRO B B 35  35  . 24.778 51.947 7.155   1.00 10.31  1 .
.
ATOM 3545 CG   CG   . PRO PRO PRO B B 35  35  . 23.498 52.136 6.362   1.00 10.19  1 .
.
ATOM 3546 CD   CD   . PRO PRO PRO B B 35  35  . 22.359 51.923 7.382   1.00 14.27  1 .
.
ATOM 3547 C    C    . PRO PRO PRO B B 35  35  . 24.641 54.168 8.259   1.00 12.15  1 .
.
ATOM 3548 O    O    . PRO PRO PRO B B 35  35  . 23.654 54.975 8.284   1.00 14.95  1 .
.
ATOM 3549 N    N    . SER SER SER B B 36  36  . 25.910 54.524 8.190   1.00 12.51  1 .
.
ATOM 3550 CA   CA   . SER SER SER B B 36  36  . 26.266 55.964 8.042   1.00 13.81  1 .
.
ATOM 3551 CB   CB   . SER SER SER B B 36  36  . 26.566 56.483 9.485   1.00 16.12  1 .
.
ATOM 3552 OG   OG   . SER SER SER B B 36  36  . 26.871 57.877 9.415   1.00 19.58  1 .
.
ATOM 3553 C    C    . SER SER SER B B 36  36  . 27.512 56.144 7.199   1.00 13.61  1 .
.
ATOM 3554 O    O    . SER SER SER B B 36  36  . 28.560 55.516 7.479   1.00 13.30  1 .
.
ATOM 3555 N    N    . GLY GLY GLY B B 37  37  . 27.454 57.112 6.253   1.00 11.58  1 .
.
ATOM 3556 CA   CA   . GLY GLY GLY B B 37  37  . 28.659 57.338 5.477   1.00 13.60  1 .
.
ATOM 3557 C    C    . GLY GLY GLY B B 37  37  . 29.638 58.338 6.049   1.00 13.51  1 .
.
ATOM 3558 O    O    . GLY GLY GLY B B 37  37  . 29.273 59.167 6.940   1.00 17.00  1 .
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ATOM 3559 N    N    . ALA ALA ALA B B 38  38  . 30.821 58.360 5.471   1.00 13.36  1 .
.
ATOM 3560 CA   CA   . ALA ALA ALA B B 38  38  . 31.871 59.399 5.759   1.00 14.90  1 .
.
ATOM 3561 CB   CB   . ALA ALA ALA B B 38  38  . 33.208 58.762 6.128   1.00 16.21  1 .
.
ATOM 3562 C    C    . ALA ALA ALA B B 38  38  . 32.037 60.246 4.485   1.00 16.12  1 .
.
ATOM 3563 O    O    . ALA ALA ALA B B 38  38  . 31.920 61.517 4.585   1.00 17.44  1 .
.
ATOM 3564 N    N    . SER SER SER B B 39  39  . 32.282 59.585 3.304   1.00 13.80  1 .
.
ATOM 3565 CA   CA   . SER SER SER B B 39  39  . 32.374 60.394 2.057   1.00 13.82  1 .
.
ATOM 3566 CB   CB   . SER SER SER B B 39  39  . 33.334 59.703 1.024   1.00 13.42  1 .
.
ATOM 3567 OG   OG   . SER SER SER B B 39  39  . 32.875 58.347 0.844   1.00 14.00  1 .
.
ATOM 3568 C    C    . SER SER SER B B 39  39  . 30.924 60.523 1.527   1.00 13.17  1 .
.
ATOM 3569 O    O    . SER SER SER B B 39  39  . 30.452 59.828 0.556   1.00 13.17  1 .
.
ATOM 3570 N    N    . THR THR THR B B 40  40  . 30.146 61.406 2.147   1.00 15.92  1 .
.
ATOM 3571 CA   CA   . THR THR THR B B 40  40  . 28.723 61.534 1.755   1.00 14.52  1 .
.
ATOM 3572 CB   CB   . THR THR THR B B 40  40  . 27.861 61.917 2.993   1.00 16.91  1 .
.
ATOM 3573 OG1  OG1  . THR THR THR B B 40  40  . 28.562 62.991 3.634   1.00 18.54  1 .
.
ATOM 3574 CG2  CG2  . THR THR THR B B 40  40  . 27.827 60.748 3.999   1.00 17.12  1 .
.
ATOM 3575 C    C    . THR THR THR B B 40  40  . 28.540 62.606 0.678   1.00 16.51  1 .
.
ATOM 3576 O    O    . THR THR THR B B 40  40  . 29.094 63.746 0.762   1.00 16.57  1 .
.
ATOM 3577 N    N    . GLY GLY GLY B B 41  41  . 27.739 62.251 -0.324  1.00 14.20  1 .
.
ATOM 3578 CA   CA   . GLY GLY GLY B B 41  41  . 27.477 63.199 -1.413  1.00 14.34  1 .
.
ATOM 3579 C    C    . GLY GLY GLY B B 41  41  . 26.588 64.332 -0.921  1.00 13.43  1 .
.
ATOM 3580 O    O    . GLY GLY GLY B B 41  41  . 25.746 64.170 0.024   1.00 14.95  1 .
.
ATOM 3581 N    N    . ILE ILE ILE B B 42  42  . 26.720 65.503 -1.523  1.00 12.41  1 .
.
ATOM 3582 CA   CA   . ILE ILE ILE B B 42  42  . 25.906 66.619 -1.067  1.00 14.41  1 .
.
ATOM 3583 CB   CB   . ILE ILE ILE B B 42  42  . 26.355 67.966 -1.715  1.00 13.74  1 .
.
ATOM 3584 CG1  CG1  . ILE ILE ILE B B 42  42  . 26.009 68.005 -3.220  1.00 15.30  1 .
.
ATOM 3585 CD   CD   . ILE ILE ILE B B 42  42  . 26.652 69.213 -3.943  1.00 20.22  1 .
.
ATOM 3586 CG2  CG2  . ILE ILE ILE B B 42  42  . 27.844 68.183 -1.419  1.00 17.94  1 .
.
ATOM 3587 C    C    . ILE ILE ILE B B 42  42  . 24.398 66.461 -1.299  1.00 14.56  1 .
.
ATOM 3588 O    O    . ILE ILE ILE B B 42  42  . 23.598 67.214 -0.674  1.00 17.45  1 .
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ATOM 3589 N    N    . TYR TYR TYR B B 43  43  . 23.989 65.542 -2.194  1.00 12.02  1 .
.
ATOM 3590 CA   CA   . TYR TYR TYR B B 43  43  . 22.583 65.352 -2.550  1.00 12.87  1 .
.
ATOM 3591 CB   CB   . TYR TYR TYR B B 43  43  . 22.413 65.147 -4.088  1.00 13.54  1 .
.
ATOM 3592 CG   CG   . TYR TYR TYR B B 43  43  . 22.879 66.347 -4.835  1.00 14.16  1 .
.
ATOM 3593 CD1  CD1  . TYR TYR TYR B B 43  43  . 24.012 66.278 -5.611  1.00 11.89  1 .
.
ATOM 3594 CE1  CE1  . TYR TYR TYR B B 43  43  . 24.459 67.383 -6.364  1.00 13.44  1 .
.
ATOM 3595 CZ   CZ   . TYR TYR TYR B B 43  43  . 23.780 68.580 -6.245  1.00 15.94  1 .
.
ATOM 3596 OH   OH   . TYR TYR TYR B B 43  43  . 24.279 69.704 -6.938  1.00 14.01  1 .
.
ATOM 3597 CE2  CE2  . TYR TYR TYR B B 43  43  . 22.649 68.687 -5.430  1.00 15.04  1 .
.
ATOM 3598 CD2  CD2  . TYR TYR TYR B B 43  43  . 22.178 67.564 -4.732  1.00 16.92  1 .
.
ATOM 3599 C    C    . TYR TYR TYR B B 43  43  . 21.943 64.228 -1.730  1.00 13.07  1 .
.
ATOM 3600 O    O    . TYR TYR TYR B B 43  43  . 20.787 63.931 -1.923  1.00 13.72  1 .
.
ATOM 3601 N    N    . GLU GLU GLU B B 44  44  . 22.720 63.622 -0.804  1.00 13.25  1 .
.
ATOM 3602 CA   CA   . GLU GLU GLU B B 44  44  . 22.109 62.546 0.064   1.00 13.77  1 .
.
ATOM 3603 CB   CB   . GLU GLU GLU B B 44  44  . 23.220 61.941 0.959   1.00 14.33  1 .
.
ATOM 3604 CG   CG   . GLU GLU GLU B B 44  44  . 24.255 61.164 0.093   1.00 15.06  1 .
.
ATOM 3605 CD   CD   . GLU GLU GLU B B 44  44  . 25.119 60.186 0.906   1.00 14.28  1 .
.
ATOM 3606 OE1  OE1  . GLU GLU GLU B B 44  44  . 24.737 59.733 2.064   1.00 16.73  1 .
.
ATOM 3607 OE2  OE2  . GLU GLU GLU B B 44  44  . 26.158 59.802 0.314   1.00 17.82  1 .
.
ATOM 3608 C    C    . GLU GLU GLU B B 44  44  . 20.981 63.102 0.920   1.00 15.98  1 .
.
ATOM 3609 O    O    . GLU GLU GLU B B 44  44  . 21.061 64.300 1.395   1.00 14.71  1 .
.
ATOM 3610 N    N    . ALA ALA ALA B B 45  45  . 19.977 62.263 1.186   1.00 13.90  1 .
.
ATOM 3611 CA   CA   . ALA ALA ALA B B 45  45  . 18.916 62.589 2.224   1.00 14.92  1 .
.
ATOM 3612 CB   CB   . ALA ALA ALA B B 45  45  . 17.865 61.451 2.322   1.00 16.46  1 .
.
ATOM 3613 C    C    . ALA ALA ALA B B 45  45  . 19.586 62.844 3.591   1.00 13.86  1 .
.
ATOM 3614 O    O    . ALA ALA ALA B B 45  45  . 20.686 62.339 3.868   1.00 16.01  1 .
.
ATOM 3615 N    N    . LEU LEU LEU B B 46  46  . 18.981 63.711 4.422   1.00 14.14  1 .
.
ATOM 3616 CA   CA   . LEU LEU LEU B B 46  46  . 19.704 64.207 5.609   1.00 15.18  1 .
.
ATOM 3617 CB   CB   . LEU LEU LEU B B 46  46  . 18.970 65.491 6.126   1.00 17.44  1 .
.
ATOM 3618 CG   CG   . LEU LEU LEU B B 46  46  . 19.581 66.161 7.362   1.00 23.63  1 .
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ATOM 3619 CD1  CD1  . LEU LEU LEU B B 46  46  . 20.067 67.584 7.029   1.00 31.35  1 .
.
ATOM 3620 CD2  CD2  . LEU LEU LEU B B 46  46  . 18.595 66.290 8.498   1.00 30.41  1 .
.
ATOM 3621 C    C    . LEU LEU LEU B B 46  46  . 19.815 63.184 6.692   1.00 15.86  1 .
.
ATOM 3622 O    O    . LEU LEU LEU B B 46  46  . 18.787 62.641 7.107   1.00 18.94  1 .
.
ATOM 3623 N    N    . GLU GLU GLU B B 47  47  . 21.040 62.994 7.188   1.00 15.35  1 .
.
ATOM 3624 CA   CA   . GLU GLU GLU B B 47  47  . 21.273 62.144 8.330   1.00 15.72  1 .
.
ATOM 3625 CB   CB   . GLU GLU GLU B B 47  47  . 22.661 61.528 8.240   1.00 16.99  1 .
.
ATOM 3626 CG   CG   . GLU GLU GLU B B 47  47  . 23.129 60.885 9.536   1.00 19.34  1 .
.
ATOM 3627 CD   CD   . GLU GLU GLU B B 47  47  . 24.515 60.309 9.377   1.00 23.82  1 .
.
ATOM 3628 OE1  OE1  . GLU GLU GLU B B 47  47  . 24.644 59.217 8.744   1.00 22.86  1 .
.
ATOM 3629 OE2  OE2  . GLU GLU GLU B B 47  47  . 25.517 60.976 9.788   1.00 22.17  1 .
.
ATOM 3630 C    C    . GLU GLU GLU B B 47  47  . 21.180 63.105 9.523   1.00 16.25  1 .
.
ATOM 3631 O    O    . GLU GLU GLU B B 47  47  . 22.074 63.957 9.661   1.00 17.80  1 .
.
ATOM 3632 N    N    . LEU LEU LEU B B 48  48  . 20.189 62.899 10.389  1.00 14.09  1 .
.
ATOM 3633 CA   CA   . LEU LEU LEU B B 48  48  . 19.988 63.828 11.540  1.00 16.93  1 .
.
ATOM 3634 CB   CB   . LEU LEU LEU B B 48  48  . 18.523 63.812 11.918  1.00 15.81  1 .
.
ATOM 3635 CG   CG   . LEU LEU LEU B B 48  48  . 18.234 64.782 13.087  1.00 17.86  1 .
.
ATOM 3636 CD1  CD1  . LEU LEU LEU B B 48  48  . 18.477 66.282 12.615  1.00 21.25  1 .
.
ATOM 3637 CD2  CD2  . LEU LEU LEU B B 48  48  . 16.822 64.499 13.518  1.00 17.48  1 .
.
ATOM 3638 C    C    . LEU LEU LEU B B 48  48  . 20.855 63.432 12.762  1.00 18.19  1 .
.
ATOM 3639 O    O    . LEU LEU LEU B B 48  48  . 20.682 62.325 13.301  1.00 16.52  1 .
.
ATOM 3640 N    N    . ARG ARG ARG B B 49  49  . 21.725 64.331 13.228  1.00 17.99  1 .
.
ATOM 3641 CA   CA   . ARG ARG ARG B B 49  49  . 22.602 64.066 14.353  1.00 16.44  1 .
.
ATOM 3642 CB   CB   . ARG ARG ARG B B 49  49  . 24.043 64.300 13.915  1.00 18.78  1 .
.
ATOM 3643 CG   CG   . ARG ARG ARG B B 49  49  . 24.530 63.330 12.861  1.00 20.48  1 .
.
ATOM 3644 CD   CD   . ARG ARG ARG B B 49  49  . 25.026 62.135 13.552  1.00 19.07  1 .
.
ATOM 3645 NE   NE   . ARG ARG ARG B B 49  49  . 25.655 61.150 12.605  1.00 20.63  1 .
.
ATOM 3646 CZ   CZ   . ARG ARG ARG B B 49  49  . 25.878 59.886 12.978  1.00 19.60  1 .
.
ATOM 3647 NH1  NH1  . ARG ARG ARG B B 49  49  . 26.254 58.967 12.077  1.00 20.10  1 .
.
ATOM 3648 NH2  NH2  . ARG ARG ARG B B 49  49  . 25.668 59.551 14.275  1.00 17.04  1 .
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ATOM 3649 C   C   . ARG ARG ARG B B 49  49  . 22.210 65.173 15.366  1.00 18.36  1 .
.
ATOM 3650 O   O   . ARG ARG ARG B B 49  49  . 21.679 66.246 14.982  1.00 20.42  1 .
.
ATOM 3651 N   N   . ASP ASP ASP B B 50  50  . 22.435 64.935 16.645  1.00 18.07  1 .
.
ATOM 3652 CA  CA  . ASP ASP ASP B B 50  50  . 21.904 65.836 17.666  1.00 19.09  1 .
.
ATOM 3653 CB  CB  . ASP ASP ASP B B 50  50  . 22.067 65.157 18.985  1.00 19.95  1 .
.
ATOM 3654 CG  CG  . ASP ASP ASP B B 50  50  . 21.169 63.945 19.126  1.00 18.51  1 .
.
ATOM 3655 OD1 OD1 . ASP ASP ASP B B 50  50  . 20.223 63.855 18.309  1.00 20.22  1 .
.
ATOM 3656 OD2 OD2 . ASP ASP ASP B B 50  50  . 21.432 63.097 20.033  1.00 18.38  1 .
.
ATOM 3657 C   C   . ASP ASP ASP B B 50  50  . 22.676 67.119 17.756  1.00 21.37  1 .
.
ATOM 3658 O   O   . ASP ASP ASP B B 50  50  . 22.099 68.122 18.166  1.00 22.65  1 .
.
ATOM 3659 N   N   . GLY GLY GLY B B 51  51  . 23.984 67.065 17.520  1.00 22.49  1 .
.
ATOM 3660 CA  CA  . GLY GLY GLY B B 51  51  . 24.857 68.243 17.510  1.00 25.19  1 .
.
ATOM 3661 C   C   . GLY GLY GLY B B 51  51  . 25.125 68.753 18.920  1.00 26.38  1 .
.
ATOM 3662 O   O   . GLY GLY GLY B B 51  51  . 25.452 69.942 19.112  1.00 28.54  1 .
.
ATOM 3663 N   N   . ASP ASP ASP B B 52  52  . 25.003 67.889 19.920  1.00 25.04  1 .
.
ATOM 3664 CA  CA  . ASP ASP ASP B B 52  52  . 25.434 68.265 21.268  1.00 25.95  1 .
.
ATOM 3665 CB  CB  . ASP ASP ASP B B 52  52  . 24.619 67.475 22.256  1.00 25.36  1 .
.
ATOM 3666 CG  CG  . ASP ASP ASP B B 52  52  . 25.029 67.733 23.684  1.00 28.36  1 .
.
ATOM 3667 OD1 OD1 . ASP ASP ASP B B 52  52  . 26.048 68.482 23.895  1.00 33.14  1 .
.
ATOM 3668 OD2 OD2 . ASP ASP ASP B B 52  52  . 24.355 67.163 24.594  1.00 29.06  1 .
.
ATOM 3669 C   C   . ASP ASP ASP B B 52  52  . 26.915 67.977 21.388  1.00 27.51  1 .
.
ATOM 3670 O   O   . ASP ASP ASP B B 52  52  . 27.274 66.796 21.537  1.00 27.81  1 .
.
ATOM 3671 N   N   . LYS LYS LYS B B 53  53  . 27.798 68.998 21.318  1.00 27.32  1 .
.
ATOM 3672 CA  CA  . LYS LYS LYS B B 53  53  . 29.244 68.747 21.083  1.00 29.26  1 .
.
ATOM 3673 CB  CB  . LYS LYS LYS B B 53  53  . 30.045 70.052 20.757  1.00 29.28  1 .
.
ATOM 3674 CG  CG  . LYS LYS LYS B B 53  53  . 29.820 70.640 19.353  1.00 33.30  1 .
.
ATOM 3675 C   C   . LYS LYS LYS B B 53  53  . 29.853 68.086 22.292  1.00 29.32  1 .
.
ATOM 3676 O   O   . LYS LYS LYS B B 53  53  . 30.981 67.606 22.218  1.00 30.36  1 .
.
ATOM 3677 N   N   . GLN GLN GLN B B 54  54  . 29.132 68.103 23.409  1.00 27.70  1 .
.
ATOM 3678 CA  CA  . GLN GLN GLN B B 54  54  . 29.591 67.469 24.590  1.00 28.95  1 .
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ATOM 3679 CB   CB   . GLN GLN GLN B B 54  54  . 29.033 68.209 25.841  1.00 31.02  1 .
.
ATOM 3680 CG   CG   . GLN GLN GLN B B 54  54  . 29.561 69.726 26.023  1.00 35.13  1 .
.
ATOM 3681 CD   CD   . GLN GLN GLN B B 54  54  . 31.111 69.870 25.912  1.00 38.94  1 .
.
ATOM 3682 C    C    . GLN GLN GLN B B 54  54  . 29.281 65.967 24.659  1.00 28.27  1 .
.
ATOM 3683 O    O    . GLN GLN GLN B B 54  54  . 29.908 65.247 25.478  1.00 30.22  1 .
.
ATOM 3684 N    N    . ARG ARG ARG B B 55  55  . 28.372 65.461 23.806  1.00 24.74  1 .
.
ATOM 3685 CA   CA   . ARG ARG ARG B B 55  55  . 27.928 64.061 23.970  1.00 21.16  1 .
.
ATOM 3686 CB   CB   . ARG ARG ARG B B 55  55  . 26.460 64.066 24.246  1.00 20.48  1 .
.
ATOM 3687 CG   CG   . ARG ARG ARG B B 55  55  . 25.807 62.557 24.304  1.00 17.06  1 .
.
ATOM 3688 CD   CD   . ARG ARG ARG B B 55  55  . 24.361 62.551 24.834  1.00 17.52  1 .
.
ATOM 3689 NE   NE   . ARG ARG ARG B B 55  55  . 24.009 61.153 25.034  1.00 19.00  1 .
.
ATOM 3690 CZ   CZ   . ARG ARG ARG B B 55  55  . 23.638 60.304 24.067  1.00 18.33  1 .
.
ATOM 3691 NH1  NH1  . ARG ARG ARG B B 55  55  . 23.469 60.747 22.807  1.00 16.76  1 .
.
ATOM 3692 NH2  NH2  . ARG ARG ARG B B 55  55  . 23.386 59.014 24.387  1.00 20.02  1 .
.
ATOM 3693 C    C    . ARG ARG ARG B B 55  55  . 28.192 63.327 22.650  1.00 21.21  1 .
.
ATOM 3694 O    O    . ARG ARG ARG B B 55  55  . 27.647 63.721 21.612  1.00 20.69  1 .
.
ATOM 3695 N    N    . TYR TYR TYR B B 56  56  . 29.102 62.336 22.681  1.00 18.64  1 .
.
ATOM 3696 CA   CA   . TYR TYR TYR B B 56  56  . 29.469 61.608 21.411  1.00 18.89  1 .
.
ATOM 3697 CB   CB   . TYR TYR TYR B B 56  56  . 28.250 60.806 20.895  1.00 16.73  1 .
.
ATOM 3698 CG   CG   . TYR TYR TYR B B 56  56  . 28.069 59.455 21.618  1.00 16.78  1 .
.
ATOM 3699 CD1  CD1  . TYR TYR TYR B B 56  56  . 26.966 59.232 22.384  1.00 16.19  1 .
.
ATOM 3700 CE1  CE1  . TYR TYR TYR B B 56  56  . 26.719 57.967 22.999  1.00 16.76  1 .
.
ATOM 3701 CZ   CZ   . TYR TYR TYR B B 56  56  . 27.678 56.947 22.841  1.00 16.43  1 .
.
ATOM 3702 OH   OH   . TYR TYR TYR B B 56  56  . 27.496 55.740 23.433  1.00 17.29  1 .
.
ATOM 3703 CE2  CE2  . TYR TYR TYR B B 56  56  . 28.834 57.164 22.094  1.00 17.11  1 .
.
ATOM 3704 CD2  CD2  . TYR TYR TYR B B 56  56  . 29.011 58.433 21.479  1.00 16.58  1 .
.
ATOM 3705 C    C    . TYR TYR TYR B B 56  56  . 29.966 62.595 20.383  1.00 19.80  1 .
.
ATOM 3706 O    O    . TYR TYR TYR B B 56  56  . 29.718 62.433 19.174  1.00 20.19  1 .
.
ATOM 3707 N    N    . LEU LEU LEU B B 57  57  . 30.674 63.648 20.847  1.00 22.87  1 .
.
ATOM 3708 CA   CA   . LEU LEU LEU B B 57  57  . 31.247 64.623 19.905  1.00 23.96  1 .
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ATOM 3709 CB   CB   . LEU LEU LEU B B 57  57  . 32.514 64.009 19.226  1.00 24.79  1 .
.
ATOM 3710 CG   CG   . LEU LEU LEU B B 57  57  . 33.751 63.710 20.121  1.00 26.78  1 .
.
ATOM 3711 CD1  CD1  . LEU LEU LEU B B 57  57  . 33.690 62.434 21.042  1.00 30.86  1 .
.
ATOM 3712 CD2  CD2  . LEU LEU LEU B B 57  57  . 35.090 63.635 19.365  1.00 28.87  1 .
.
ATOM 3713 C    C    . LEU LEU LEU B B 57  57  . 30.217 65.203 18.906  1.00 23.21  1 .
.
ATOM 3714 O    O    . LEU LEU LEU B B 57  57  . 30.530 65.439 17.719  1.00 25.21  1 .
.
ATOM 3715 N    N    . GLY GLY GLY B B 58  58  . 28.969 65.411 19.361  1.00 20.80  1 .
.
ATOM 3716 CA   CA   . GLY GLY GLY B B 58  58  . 27.928 65.945 18.508  1.00 20.19  1 .
.
ATOM 3717 C    C    . GLY GLY GLY B B 58  58  . 27.155 64.932 17.654  1.00 17.62  1 .
.
ATOM 3718 O    O    . GLY GLY GLY B B 58  58  . 26.209 65.275 16.885  1.00 18.36  1 .
.
ATOM 3719 N    N    . LYS LYS LYS B B 59  59  . 27.565 63.670 17.748  1.00 18.23  1 .
.
ATOM 3720 CA   CA   . LYS LYS LYS B B 59  59  . 27.026 62.665 16.823  1.00 17.06  1 .
.
ATOM 3721 CB   CB   . LYS LYS LYS B B 59  59  . 28.167 61.809 16.243  1.00 18.24  1 .
.
ATOM 3722 CG   CG   . LYS LYS LYS B B 59  59  . 29.163 62.690 15.509  1.00 22.16  1 .
.
ATOM 3723 CD   CD   . LYS LYS LYS B B 59  59  . 30.242 61.895 14.934  1.00 29.38  1 .
.
ATOM 3724 CE   CE   . LYS LYS LYS B B 59  59  . 31.038 62.781 13.938  1.00 33.57  1 .
.
ATOM 3725 NZ   NZ   . LYS LYS LYS B B 59  59  . 32.259 62.075 13.413  1.00 35.68  1 .
.
ATOM 3726 C    C    . LYS LYS LYS B B 59  59  . 25.911 61.766 17.431  1.00 17.08  1 .
.
ATOM 3727 O    O    . LYS LYS LYS B B 59  59  . 25.510 60.766 16.809  1.00 14.34  1 .
.
ATOM 3728 N    N    . GLY GLY GLY B B 60  60  . 25.356 62.134 18.596  1.00 15.17  1 .
.
ATOM 3729 CA   CA   . GLY GLY GLY B B 60  60  . 24.189 61.403 19.097  1.00 15.60  1 .
.
ATOM 3730 C    C    . GLY GLY GLY B B 60  60  . 23.007 61.348 18.124  1.00 16.16  1 .
.
ATOM 3731 O    O    . GLY GLY GLY B B 60  60  . 22.877 62.236 17.206  1.00 16.04  1 .
.
ATOM 3732 N    N    . VAL VAL VAL B B 61  61  . 22.160 60.306 18.233  1.00 13.61  1 .
.
ATOM 3733 CA   CA   . VAL VAL VAL B B 61  61  . 20.954 60.290 17.403  1.00 12.45  1 .
.
ATOM 3734 CB   CB   . VAL VAL VAL B B 61  61  . 20.958 59.172 16.328  1.00 12.42  1 .
.
ATOM 3735 CG1  CG1  . VAL VAL VAL B B 61  61  . 22.146 59.416 15.431  1.00 12.89  1 .
.
ATOM 3736 CG2  CG2  . VAL VAL VAL B B 61  61  . 21.115 57.797 17.047  1.00 14.51  1 .
.
ATOM 3737 C    C    . VAL VAL VAL B B 61  61  . 19.730 60.246 18.287  1.00 14.12  1 .
.
ATOM 3738 O    O    . VAL VAL VAL B B 61  61  . 18.750 59.693 17.932  1.00 15.42  1 .
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ATOM 3739 N    N    . LEU LEU LEU B B 62  62  . 19.800 60.872 19.467  1.00 14.71  1 .
.
ATOM 3740 CA   CA   . LEU LEU LEU B B 62  62  . 18.595 60.948 20.310  1.00 16.46  1 .
.
ATOM 3741 CB   CB   . LEU LEU LEU B B 62  62  . 18.879 61.724 21.602  1.00 16.17  1 .
.
ATOM 3742 CG   CG   . LEU LEU LEU B B 62  62  . 19.985 61.119 22.501  1.00 18.81  1 .
.
ATOM 3743 CD1  CD1  . LEU LEU LEU B B 62  62  . 20.238 62.099 23.677  1.00 21.19  1 .
.
ATOM 3744 CD2  CD2  . LEU LEU LEU B B 62  62  . 19.634 59.720 22.911  1.00 22.76  1 .
.
ATOM 3745 C    C    . LEU LEU LEU B B 62  62  . 17.417 61.651 19.616  1.00 16.18  1 .
.
ATOM 3746 O    O    . LEU LEU LEU B B 62  62  . 16.273 61.281 19.858  1.00 17.43  1 .
.
ATOM 3747 N    N    . LYS LYS LYS B B 63  63  . 17.686 62.661 18.779  1.00 16.20  1 .
.
ATOM 3748 CA   CA   . LYS LYS LYS B B 63  63  . 16.572 63.316 18.120  1.00 17.16  1 .
.
ATOM 3749 CB   CB   . LYS LYS LYS B B 63  63  . 16.994 64.668 17.424  1.00 17.04  1 .
.
ATOM 3750 CG   CG   . LYS LYS LYS B B 63  63  . 17.538 65.723 18.427  1.00 20.66  1 .
.
ATOM 3751 CD   CD   . LYS LYS LYS B B 63  63  . 18.090 66.879 17.662  1.00 25.10  1 .
.
ATOM 3752 CE   CE   . LYS LYS LYS B B 63  63  . 18.749 67.891 18.623  1.00 24.83  1 .
.
ATOM 3753 NZ   NZ   . LYS LYS LYS B B 63  63  . 19.021 69.091 17.797  1.00 28.10  1 .
.
ATOM 3754 C    C    . LYS LYS LYS B B 63  63  . 15.854 62.448 17.138  1.00 15.72  1 .
.
ATOM 3755 O    O    . LYS LYS LYS B B 63  63  . 14.602 62.385 17.125  1.00 17.27  1 .
.
ATOM 3756 N    N    . ALA ALA ALA B B 64  64  . 16.669 61.694 16.336  1.00 16.32  1 .
.
ATOM 3757 CA   CA   . ALA ALA ALA B B 64  64  . 16.070 60.737 15.422  1.00 15.90  1 .
.
ATOM 3758 CB   CB   . ALA ALA ALA B B 64  64  . 17.184 60.046 14.536  1.00 16.21  1 .
.
ATOM 3759 C    C    . ALA ALA ALA B B 64  64  . 15.271 59.667 16.148  1.00 16.57  1 .
.
ATOM 3760 O    O    . ALA ALA ALA B B 64  64  . 14.151 59.313 15.725  1.00 16.03  1 .
.
ATOM 3761 N    N    . VAL VAL VAL B B 65  65  . 15.856 59.142 17.232  1.00 15.84  1 .
.
ATOM 3762 CA   CA   . VAL VAL VAL B B 65  65  . 15.185 58.114 18.017  1.00 15.42  1 .
.
ATOM 3763 CB   CB   . VAL VAL VAL B B 65  65  . 16.147 57.640 19.123  1.00 15.61  1 .
.
ATOM 3764 CG1  CG1  . VAL VAL VAL B B 65  65  . 15.384 56.802 20.205  1.00 16.52  1 .
.
ATOM 3765 CG2  CG2  . VAL VAL VAL B B 65  65  . 17.238 56.804 18.466  1.00 15.09  1 .
.
ATOM 3766 C    C    . VAL VAL VAL B B 65  65  . 13.888 58.656 18.592  1.00 17.39  1 .
.
ATOM 3767 O    O    . VAL VAL VAL B B 65  65  . 12.835 57.996 18.573  1.00 17.16  1 .
.
ATOM 3768 N    N    . ASP ASP ASP B B 66  66  . 13.922 59.904 19.038  1.00 18.96  1 .
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ATOM 3769 CA   CA   . ASP ASP ASP B B 66  66  . 12.671 60.495 19.565  1.00 20.05  1 .
.
ATOM 3770 CB   CB   . ASP ASP ASP B B 66  66  . 12.987 61.800 20.347  1.00 20.81  1 .
.
ATOM 3771 CG   CG   . ASP ASP ASP B B 66  66  . 11.714 62.516 20.797  1.00 27.13  1 .
.
ATOM 3772 OD1  OD1  . ASP ASP ASP B B 66  66  . 11.397 63.656 20.230  1.00 36.14  1 .
.
ATOM 3773 OD2  OD2  . ASP ASP ASP B B 66  66  . 11.048 61.937 21.679  1.00 28.16  1 .
.
ATOM 3774 C    C    . ASP ASP ASP B B 66  66  . 11.622 60.720 18.446  1.00 19.60  1 .
.
ATOM 3775 O    O    . ASP ASP ASP B B 66  66  . 10.406 60.519 18.677  1.00 19.11  1 .
.
ATOM 3776 N    N    . HIS HIS HIS B B 67  67  . 12.045 61.116 17.229  1.00 18.48  1 .
.
ATOM 3777 CA   CA   . HIS HIS HIS B B 67  67  . 11.037 61.228 16.200  1.00 18.39  1 .
.
ATOM 3778 CB   CB   . HIS HIS HIS B B 67  67  . 11.603 61.814 14.914  1.00 18.51  1 .
.
ATOM 3779 CG   CG   . HIS HIS HIS B B 67  67  . 12.045 63.246 15.023  1.00 19.62  1 .
.
ATOM 3780 ND1  ND1  . HIS HIS HIS B B 67  67  . 11.194 64.262 15.442  1.00 24.34  1 .
.
ATOM 3781 CE1  CE1  . HIS HIS HIS B B 67  67  . 11.857 65.416 15.396  1.00 24.83  1 .
.
ATOM 3782 NE2  NE2  . HIS HIS HIS B B 67  67  . 13.072 65.196 14.896  1.00 20.63  1 .
.
ATOM 3783 CD2  CD2  . HIS HIS HIS B B 67  67  . 13.208 63.849 14.655  1.00 18.08  1 .
.
ATOM 3784 C    C    . HIS HIS HIS B B 67  67  . 10.345 59.877 15.960  1.00 17.57  1 .
.
ATOM 3785 O    O    . HIS HIS HIS B B 67  67  . 9.138  59.800 15.653  1.00 19.76  1 .
.
ATOM 3786 N    N    . ILE ILE ILE B B 68  68  . 11.131 58.777 16.048  1.00 15.60  1 .
.
ATOM 3787 CA   CA   . ILE ILE ILE B B 68  68  . 10.504 57.472 15.846  1.00 15.94  1 .
.
ATOM 3788 CB   CB   . ILE ILE ILE B B 68  68  . 11.520 56.334 15.768  1.00 14.63  1 .
.
ATOM 3789 CG1  CG1  . ILE ILE ILE B B 68  68  . 12.344 56.532 14.503  1.00 14.40  1 .
.
ATOM 3790 CD   CD   . ILE ILE ILE B B 68  68  . 13.618 55.608 14.453  1.00 15.57  1 .
.
ATOM 3791 CG2  CG2  . ILE ILE ILE B B 68  68  . 10.802 54.989 15.789  1.00 14.23  1 .
.
ATOM 3792 C    C    . ILE ILE ILE B B 68  68  . 9.513  57.180 16.991  1.00 16.18  1 .
.
ATOM 3793 O    O    . ILE ILE ILE B B 68  68  . 8.338  56.802 16.752  1.00 17.93  1 .
.
ATOM 3794 N    N    . ASN ASN ASN B B 69  69  . 9.994  57.327 18.217  1.00 16.22  1 .
.
ATOM 3795 CA   CA   . ASN ASN ASN B B 69  69  . 9.223  56.787 19.342  1.00 18.15  1 .
.
ATOM 3796 CB   CB   . ASN ASN ASN B B 69  69  . 10.105 56.732 20.569  1.00 17.12  1 .
.
ATOM 3797 CG   CG   . ASN ASN ASN B B 69  69  . 11.117 55.586 20.453  1.00 16.90  1 .
.
ATOM 3798 OD1  OD1  . ASN ASN ASN B B 69  69  . 10.850 54.608 19.716  1.00 15.92  1 .
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ATOM 3799 ND2  ND2  . ASN ASN ASN B B 69  69  . 12.248 55.710 21.124  1.00 18.39  1 .
.
ATOM 3800 C    C    . ASN ASN ASN B B 69  69  . 8.035  57.670 19.654  1.00 19.70  1 .
.
ATOM 3801 O    O    . ASN ASN ASN B B 69  69  . 6.984  57.165 20.017  1.00 22.00  1 .
.
ATOM 3802 N    N    . SER SER SER B B 70  70  . 8.201  58.986 19.490  1.00 21.44  1 .
.
ATOM 3803 CA   CA   . SER SER SER B B 70  70  . 7.106  59.941 19.835  1.00 22.82  1 .
.
ATOM 3804 CB   CB   . SER SER SER B B 70  70  . 7.758  61.236 20.345  1.00 22.58  1 .
.
ATOM 3805 OG   OG   . SER SER SER B B 70  70  . 8.437  60.972 21.533  1.00 27.69  1 .
.
ATOM 3806 C    C    . SER SER SER B B 70  70  . 6.149  60.260 18.673  1.00 23.19  1 .
.
ATOM 3807 O    O    . SER SER SER B B 70  70  . 5.006  60.684 18.895  1.00 24.89  1 .
.
ATOM 3808 N    N    . THR THR THR B B 71  71  . 6.595  60.119 17.425  1.00 22.10  1 .
.
ATOM 3809 CA   CA   . THR THR THR B B 71  71  . 5.807  60.586 16.305  1.00 21.12  1 .
.
ATOM 3810 CB   CB   . THR THR THR B B 71  71  . 6.474  61.812 15.622  1.00 21.92  1 .
.
ATOM 3811 OG1  OG1  . THR THR THR B B 71  71  . 6.711  62.841 16.601  1.00 24.61  1 .
.
ATOM 3812 CG2  CG2  . THR THR THR B B 71  71  . 5.640  62.291 14.374  1.00 24.44  1 .
.
ATOM 3813 C    C    . THR THR THR B B 71  71  . 5.542  59.531 15.264  1.00 20.65  1 .
.
ATOM 3814 O    O    . THR THR THR B B 71  71  . 4.379  59.223 14.921  1.00 21.12  1 .
.
ATOM 3815 N    N    . ILE ILE ILE B B 72  72  . 6.601  58.934 14.708  1.00 17.57  1 .
.
ATOM 3816 CA   CA   . ILE ILE ILE B B 72  72  . 6.366  57.970 13.640  1.00 17.02  1 .
.
ATOM 3817 CB   CB   . ILE ILE ILE B B 72  72  . 7.690  57.563 12.985  1.00 17.66  1 .
.
ATOM 3818 CG1  CG1  . ILE ILE ILE B B 72  72  . 8.335  58.776 12.315  1.00 18.73  1 .
.
ATOM 3819 CD   CD   . ILE ILE ILE B B 72  72  . 9.848  58.561 11.844  1.00 19.68  1 .
.
ATOM 3820 CG2  CG2  . ILE ILE ILE B B 72  72  . 7.440  56.352 12.024  1.00 17.89  1 .
.
ATOM 3821 C    C    . ILE ILE ILE B B 72  72  . 5.644  56.696 14.154  1.00 18.47  1 .
.
ATOM 3822 O    O    . ILE ILE ILE B B 72  72  . 4.622  56.219 13.541  1.00 18.54  1 .
.
ATOM 3823 N    N    . ALA ALA ALA B B 73  73  . 6.139  56.138 15.260  1.00 17.48  1 .
.
ATOM 3824 CA   CA   . ALA ALA ALA B B 73  73  . 5.523  54.882 15.742  1.00 18.43  1 .
.
ATOM 3825 CB   CB   . ALA ALA ALA B B 73  73  . 6.277  54.389 16.968  1.00 18.79  1 .
.
ATOM 3826 C    C    . ALA ALA ALA B B 73  73  . 4.002  54.968 16.002  1.00 18.71  1 .
.
ATOM 3827 O    O    . ALA ALA ALA B B 73  73  . 3.206  54.083 15.496  1.00 19.10  1 .
.
ATOM 3828 N    N    . PRO PRO PRO B B 74  74  . 3.552  56.023 16.752  1.00 19.01  1 .
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ATOM 3829 CA   CA   . PRO PRO PRO B B 74  74  . 2.086  56.000 16.991  1.00 19.62  1 .
.
ATOM 3830 CB   CB   . PRO PRO PRO B B 74  74  . 1.836  57.143 18.026  1.00 19.62  1 .
.
ATOM 3831 CG   CG   . PRO PRO PRO B B 74  74  . 3.061  58.023 17.995  1.00 19.46  1 .
.
ATOM 3832 CD   CD   . PRO PRO PRO B B 74  74  . 4.235  57.042 17.556  1.00 18.95  1 .
.
ATOM 3833 C    C    . PRO PRO PRO B B 74  74  . 1.261  56.197 15.689  1.00 18.64  1 .
.
ATOM 3834 O    O    . PRO PRO PRO B B 74  74  . 0.218  55.631 15.522  1.00 20.52  1 .
.
ATOM 3835 N    N    . ALA ALA ALA B B 75  75  . 1.797  56.957 14.750  1.00 20.11  1 .
.
ATOM 3836 CA   CA   . ALA ALA ALA B B 75  75  . 1.096  57.205 13.513  1.00 19.21  1 .
.
ATOM 3837 CB   CB   . ALA ALA ALA B B 75  75  . 1.810  58.281 12.748  1.00 19.56  1 .
.
ATOM 3838 C    C    . ALA ALA ALA B B 75  75  . 0.984  55.927 12.700  1.00 19.94  1 .
.
ATOM 3839 O    O    . ALA ALA ALA B B 75  75  . -0.097 55.549 12.204  1.00 19.74  1 .
.
ATOM 3840 N    N    . LEU LEU LEU B B 76  76  . 2.086  55.169 12.594  1.00 19.92  1 .
.
ATOM 3841 CA   CA   . LEU LEU LEU B B 76  76  . 2.000  53.923 11.807  1.00 18.60  1 .
.
ATOM 3842 CB   CB   . LEU LEU LEU B B 76  76  . 3.391  53.320 11.547  1.00 17.36  1 .
.
ATOM 3843 CG   CG   . LEU LEU LEU B B 76  76  . 4.346  54.243 10.775  1.00 18.32  1 .
.
ATOM 3844 CD1  CD1  . LEU LEU LEU B B 76  76  . 5.600  53.564 10.354  1.00 18.28  1 .
.
ATOM 3845 CD2  CD2  . LEU LEU LEU B B 76  76  . 3.628  54.844 9.574   1.00 21.90  1 .
.
ATOM 3846 C    C    . LEU LEU LEU B B 76  76  . 1.109  52.867 12.499  1.00 18.21  1 .
.
ATOM 3847 O    O    . LEU LEU LEU B B 76  76  . 0.408  52.123 11.847  1.00 18.05  1 .
.
ATOM 3848 N    N    . ILE ILE ILE B B 77  77  . 1.192  52.762 13.817  1.00 19.07  1 .
.
ATOM 3849 CA   CA   . ILE ILE ILE B B 77  77  . 0.312  51.848 14.535  1.00 18.90  1 .
.
ATOM 3850 CB   CB   . ILE ILE ILE B B 77  77  . 0.735  51.817 16.002  1.00 18.78  1 .
.
ATOM 3851 CG1  CG1  . ILE ILE ILE B B 77  77  . 2.038  50.979 16.092  1.00 18.74  1 .
.
ATOM 3852 CD   CD   . ILE ILE ILE B B 77  77  . 2.758  51.104 17.381  1.00 23.99  1 .
.
ATOM 3853 CG2  CG2  . ILE ILE ILE B B 77  77  . -0.283 51.052 16.884  1.00 17.77  1 .
.
ATOM 3854 C    C    . ILE ILE ILE B B 77  77  . -1.183 52.233 14.342  1.00 20.34  1 .
.
ATOM 3855 O    O    . ILE ILE ILE B B 77  77  . -2.028 51.364 14.085  1.00 20.53  1 .
.
ATOM 3856 N    N    . SER SER SER B B 78  78  . -1.461 53.541 14.398  1.00 22.09  1 .
.
ATOM 3857 CA   CA   . SER SER SER B B 78  78  . -2.844 54.108 14.203  1.00 23.51  1 .
.
ATOM 3858 CB   CB   . SER SER SER B B 78  78  . -2.774 55.639 14.294  1.00 22.62  1 .
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ATOM 3859 OG   OG   . SER SER SER B B 78  78  . -2.998 55.709 15.646  1.00 30.82  1 .
.
ATOM 3860 C    C    . SER SER SER B B 78  78  . -3.417 53.776 12.870  1.00 23.75  1 .
.
ATOM 3861 O    O    . SER SER SER B B 78  78  . -4.589 53.590 12.719  1.00 24.01  1 .
.
ATOM 3862 N    N    . SER SER SER B B 79  79  . -2.544 53.719 11.879  1.00 20.78  1 .
.
ATOM 3863 CA   CA   . SER SER SER B B 79  79  . -2.965 53.378 10.551  1.00 19.83  1 .
.
ATOM 3864 CB   CB   . SER SER SER B B 79  79  . -1.759 53.513 9.611   1.00 20.83  1 .
.
ATOM 3865 OG   OG   . SER SER SER B B 79  79  . -1.022 52.299 9.553   1.00 19.91  1 .
.
ATOM 3866 C    C    . SER SER SER B B 79  79  . -3.641 51.996 10.418  1.00 20.53  1 .
.
ATOM 3867 O    O    . SER SER SER B B 79  79  . -4.403 51.759 9.485   1.00 20.37  1 .
.
ATOM 3868 N    N    . GLY GLY GLY B B 80  80  . -3.283 51.041 11.283  1.00 20.61  1 .
.
ATOM 3869 CA   CA   . GLY GLY GLY B B 80  80  . -3.713 49.662 11.048  1.00 21.07  1 .
.
ATOM 3870 C    C    . GLY GLY GLY B B 80  80  . -3.143 48.974 9.794   1.00 20.47  1 .
.
ATOM 3871 O    O    . GLY GLY GLY B B 80  80  . -3.577 47.830 9.458   1.00 23.31  1 .
.
ATOM 3872 N    N    . LEU LEU LEU B B 81  81  . -2.195 49.601 9.067   1.00 20.01  1 .
.
ATOM 3873 CA   CA   . LEU LEU LEU B B 81  81  . -1.678 48.960 7.847   1.00 20.16  1 .
.
ATOM 3874 CB   CB   . LEU LEU LEU B B 81  81  . -0.720 49.930 7.060   1.00 20.53  1 .
.
ATOM 3875 CG   CG   . LEU LEU LEU B B 81  81  . -1.509 51.003 6.240   1.00 21.01  1 .
.
ATOM 3876 CD1  CD1  . LEU LEU LEU B B 81  81  . -0.540 52.148 5.901   1.00 20.90  1 .
.
ATOM 3877 CD2  CD2  . LEU LEU LEU B B 81  81  . -2.110 50.434 5.009   1.00 23.62  1 .
.
ATOM 3878 C    C    . LEU LEU LEU B B 81  81  . -0.902 47.673 8.195   1.00 20.35  1 .
.
ATOM 3879 O    O    . LEU LEU LEU B B 81  81  . -0.193 47.689 9.201   1.00 21.78  1 .
.
ATOM 3880 N    N    . SER SER SER B B 82  82  . -1.117 46.598 7.426   1.00 20.47  1 .
.
ATOM 3881 CA   CA   . SER SER SER B B 82  82  . -0.323 45.376 7.482   1.00 20.60  1 .
.
ATOM 3882 CB   CB   . SER SER SER B B 82  82  . -0.839 44.320 6.517   1.00 21.58  1 .
.
ATOM 3883 OG   OG   . SER SER SER B B 82  82  . 0.151  43.261 6.430   1.00 23.33  1 .
.
ATOM 3884 C    C    . SER SER SER B B 82  82  . 1.125  45.732 7.087   1.00 19.52  1 .
.
ATOM 3885 O    O    . SER SER SER B B 82  82  . 1.362  46.577 6.226   1.00 18.95  1 .
.
ATOM 3886 N    N    . VAL VAL VAL B B 83  83  . 2.085  45.090 7.739   1.00 18.31  1 .
.
ATOM 3887 CA   CA   . VAL VAL VAL B B 83  83  . 3.516  45.328 7.460   1.00 17.25  1 .
.
ATOM 3888 CB   CB   . VAL VAL VAL B B 83  83  . 4.421  44.604 8.500   1.00 17.02  1 .
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ATOM 3889 CG1  CG1  . VAL VAL VAL B B 83  83  . 4.420  45.385 9.808   1.00 17.00  1 .
.
ATOM 3890 CG2  CG2  . VAL VAL VAL B B 83  83  . 4.100  43.072 8.602   1.00 18.33  1 .
.
ATOM 3891 C    C    . VAL VAL VAL B B 83  83  . 3.835  44.805 6.084   1.00 17.69  1 .
.
ATOM 3892 O    O    . VAL VAL VAL B B 83  83  . 4.892  45.132 5.550   1.00 17.65  1 .
.
ATOM 3893 N    N    . VAL VAL VAL B B 84  84  . 2.936  44.049 5.443   1.00 17.53  1 .
.
ATOM 3894 CA   CA   . VAL VAL VAL B B 84  84  . 3.229  43.751 4.009   1.00 17.26  1 .
.
ATOM 3895 CB   CB   . VAL VAL VAL B B 84  84  . 2.352  42.592 3.381   1.00 18.35  1 .
.
ATOM 3896 CG1  CG1  . VAL VAL VAL B B 84  84  . 2.454  41.337 4.271   1.00 20.16  1 .
.
ATOM 3897 CG2  CG2  . VAL VAL VAL B B 84  84  . 0.887  43.041 3.256   1.00 21.49  1 .
.
ATOM 3898 C    C    . VAL VAL VAL B B 84  84  . 3.100  45.005 3.099   1.00 18.02  1 .
.
ATOM 3899 O    O    . VAL VAL VAL B B 84  84  . 3.537  44.950 1.960   1.00 19.53  1 .
.
ATOM 3900 N    N    . GLU GLU GLU B B 85  85  . 2.450  46.069 3.609   1.00 18.55  1 .
.
ATOM 3901 CA   CA   . GLU GLU GLU B B 85  85  . 2.138  47.245 2.765   1.00 17.47  1 .
.
ATOM 3902 CB   CB   . GLU GLU GLU B B 85  85  . 0.867  47.968 3.275   1.00 19.32  1 .
.
ATOM 3903 CG   CG   . GLU GLU GLU B B 85  85  . -0.403 47.100 3.179   1.00 23.43  1 .
.
ATOM 3904 CD   CD   . GLU GLU GLU B B 85  85  . -0.772 46.766 1.760   1.00 31.26  1 .
.
ATOM 3905 OE1  OE1  . GLU GLU GLU B B 85  85  . -0.338 47.467 0.790   1.00 32.25  1 .
.
ATOM 3906 OE2  OE2  . GLU GLU GLU B B 85  85  . -1.477 45.745 1.579   1.00 34.09  1 .
.
ATOM 3907 C    C    . GLU GLU GLU B B 85  85  . 3.332  48.220 2.791   1.00 17.86  1 .
.
ATOM 3908 O    O    . GLU GLU GLU B B 85  85  . 3.248  49.321 3.360   1.00 16.86  1 .
.
ATOM 3909 N    N    . GLN GLN GLN B B 86  86  . 4.456  47.789 2.251   1.00 17.01  1 .
.
ATOM 3910 CA   CA   . GLN GLN GLN B B 86  86  . 5.695  48.576 2.385   1.00 17.81  1 .
.
ATOM 3911 CB   CB   . GLN GLN GLN B B 86  86  . 6.822  47.889 1.601   1.00 16.97  1 .
.
ATOM 3912 CG   CG   . GLN GLN GLN B B 86  86  . 8.183  48.510 1.799   1.00 16.74  1 .
.
ATOM 3913 CD   CD   . GLN GLN GLN B B 86  86  . 8.773  48.188 3.149   1.00 15.74  1 .
.
ATOM 3914 OE1  OE1  . GLN GLN GLN B B 86  86  . 8.702  47.014 3.632   1.00 17.13  1 .
.
ATOM 3915 NE2  NE2  . GLN GLN GLN B B 86  86  . 9.375  49.205 3.787   1.00 15.42  1 .
.
ATOM 3916 C    C    . GLN GLN GLN B B 86  86  . 5.496  49.977 1.854   1.00 17.95  1 .
.
ATOM 3917 O    O    . GLN GLN GLN B B 86  86  . 5.887  50.928 2.497   1.00 17.34  1 .
.
ATOM 3918 N    N    . GLU GLU GLU B B 87  87  . 4.981  50.057 0.650   1.00 17.71  1 .
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ATOM 3919 CA   CA   . GLU GLU GLU B B 87  87  . 4.800  51.355 -0.028  1.00 19.09  1 .
.
ATOM 3920 CB   CB   . GLU GLU GLU B B 87  87  . 4.262  51.143 -1.428  1.00 20.34  1 .
.
ATOM 3921 CG   CG   . GLU GLU GLU B B 87  87  . 4.178  52.484 -2.165  1.00 23.90  1 .
.
ATOM 3922 CD   CD   . GLU GLU GLU B B 87  87  . 4.094  52.341 -3.645  1.00 35.62  1 .
.
ATOM 3923 OE1  OE1  . GLU GLU GLU B B 87  87  . 4.160  51.201 -4.148  1.00 40.49  1 .
.
ATOM 3924 OE2  OE2  . GLU GLU GLU B B 87  87  . 3.958  53.402 -4.304  1.00 42.18  1 .
.
ATOM 3925 C    C    . GLU GLU GLU B B 87  87  . 3.859  52.291 0.742   1.00 18.41  1 .
.
ATOM 3926 O    O    . GLU GLU GLU B B 87  87  . 4.180  53.501 0.959   1.00 18.43  1 .
.
ATOM 3927 N    N    . LYS LYS LYS B B 88  88  . 2.721  51.772 1.204   1.00 17.43  1 .
.
ATOM 3928 CA   CA   . LYS LYS LYS B B 88  88  . 1.831  52.696 1.991   1.00 16.78  1 .
.
ATOM 3929 CB   CB   . LYS LYS LYS B B 88  88  . 0.436  52.056 2.206   1.00 17.32  1 .
.
ATOM 3930 CG   CG   . LYS LYS LYS B B 88  88  . -0.354 51.873 0.917   1.00 19.03  1 .
.
ATOM 3931 CD   CD   . LYS LYS LYS B B 88  88  . -1.661 51.083 1.220   1.00 21.15  1 .
.
ATOM 3932 CE   CE   . LYS LYS LYS B B 88  88  . -2.429 50.878 -0.098  1.00 30.51  1 .
.
ATOM 3933 NZ   NZ   . LYS LYS LYS B B 88  88  . -3.845 50.478 0.118   1.00 35.46  1 .
.
ATOM 3934 C    C    . LYS LYS LYS B B 88  88  . 2.408  53.163 3.316   1.00 16.51  1 .
.
ATOM 3935 O    O    . LYS LYS LYS B B 88  88  . 2.252  54.329 3.735   1.00 17.96  1 .
.
ATOM 3936 N    N    . LEU LEU LEU B B 89  89  . 3.099  52.256 4.006   1.00 16.88  1 .
.
ATOM 3937 CA   CA   . LEU LEU LEU B B 89  89  . 3.752  52.608 5.250   1.00 16.12  1 .
.
ATOM 3938 CB   CB   . LEU LEU LEU B B 89  89  . 4.267  51.360 6.034   1.00 16.79  1 .
.
ATOM 3939 CG   CG   . LEU LEU LEU B B 89  89  . 3.124  50.588 6.759   1.00 17.05  1 .
.
ATOM 3940 CD1  CD1  . LEU LEU LEU B B 89  89  . 3.570  49.081 7.123   1.00 15.81  1 .
.
ATOM 3941 CD2  CD2  . LEU LEU LEU B B 89  89  . 2.704  51.345 8.003   1.00 16.96  1 .
.
ATOM 3942 C    C    . LEU LEU LEU B B 89  89  . 4.900  53.608 4.980   1.00 16.50  1 .
.
ATOM 3943 O    O    . LEU LEU LEU B B 89  89  . 5.038  54.587 5.718   1.00 16.69  1 .
.
ATOM 3944 N    N    . ASP ASP ASP B B 90  90  . 5.735  53.350 3.981   1.00 15.73  1 .
.
ATOM 3945 CA   CA   . ASP ASP ASP B B 90  90  . 6.788  54.322 3.674   1.00 15.96  1 .
.
ATOM 3946 CB   CB   . ASP ASP ASP B B 90  90  . 7.699  53.828 2.538   1.00 15.39  1 .
.
ATOM 3947 CG   CG   . ASP ASP ASP B B 90  90  . 8.683  52.738 2.998   1.00 17.40  1 .
.
ATOM 3948 OD1  OD1  . ASP ASP ASP B B 90  90  . 9.024  52.757 4.235   1.00 17.47  1 .
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ATOM 3949 OD2  OD2  . ASP ASP ASP B B 90  90  . 9.137  51.907 2.123   1.00 16.91  1 .
.
ATOM 3950 C    C    . ASP ASP ASP B B 90  90  . 6.189  55.691 3.272   1.00 16.91  1 .
.
ATOM 3951 O    O    . ASP ASP ASP B B 90  90  . 6.693  56.728 3.773   1.00 16.71  1 .
.
ATOM 3952 N    N    . ASN ASN ASN B B 91  91  . 5.145  55.690 2.432   1.00 17.65  1 .
.
ATOM 3953 CA   CA   . ASN ASN ASN B B 91  91  . 4.507  56.973 2.036   1.00 19.88  1 .
.
ATOM 3954 CB   CB   . ASN ASN ASN B B 91  91  . 3.370  56.737 1.022   1.00 21.75  1 .
.
ATOM 3955 CG   CG   . ASN ASN ASN B B 91  91  . 3.893  56.388 -0.356  1.00 27.55  1 .
.
ATOM 3956 OD1  OD1  . ASN ASN ASN B B 91  91  . 3.133  55.910 -1.214  1.00 38.90  1 .
.
ATOM 3957 ND2  ND2  . ASN ASN ASN B B 91  91  . 5.179  56.623 -0.592  1.00 27.26  1 .
.
ATOM 3958 C    C    . ASN ASN ASN B B 91  91  . 3.987  57.744 3.230   1.00 19.72  1 .
.
ATOM 3959 O    O    . ASN ASN ASN B B 91  91  . 4.115  58.957 3.283   1.00 17.30  1 .
.
ATOM 3960 N    N    . LEU LEU LEU B B 92  92  . 3.377  57.026 4.197   1.00 20.29  1 .
.
ATOM 3961 CA   CA   . LEU LEU LEU B B 92  92  . 2.969  57.695 5.419   1.00 19.16  1 .
.
ATOM 3962 CB   CB   . LEU LEU LEU B B 92  92  . 2.222  56.722 6.325   1.00 21.32  1 .
.
ATOM 3963 CG   CG   . LEU LEU LEU B B 92  92  . 1.150  57.094 7.288   1.00 25.65  1 .
.
ATOM 3964 CD1  CD1  . LEU LEU LEU B B 92  92  . 0.159  58.153 6.734   1.00 24.03  1 .
.
ATOM 3965 CD2  CD2  . LEU LEU LEU B B 92  92  . 0.389  55.763 7.666   1.00 22.63  1 .
.
ATOM 3966 C    C    . LEU LEU LEU B B 92  92  . 4.108  58.413 6.136   1.00 19.59  1 .
.
ATOM 3967 O    O    . LEU LEU LEU B B 92  92  . 3.945  59.589 6.525   1.00 18.94  1 .
.
ATOM 3968 N    N    . MET MET MET B B 93  93  . 5.266  57.727 6.338   1.00 16.94  1 .
.
ATOM 3969 CA   CA   . MET MET MET B B 93  93  . 6.392  58.400 6.923   1.00 17.18  1 .
.
ATOM 3970 CB   CB   . MET MET MET B B 93  93  . 7.579  57.410 7.079   1.00 15.86  1 .
.
ATOM 3971 CG   CG   . MET MET MET B B 93  93  . 7.170  56.386 8.095   1.00 17.53  1 .
.
ATOM 3972 SD   SD   . MET MET MET B B 93  93  . 8.678  55.422 8.599   1.00 18.53  1 .
.
ATOM 3973 CE   CE   . MET MET MET B B 93  93  . 8.825  54.287 7.179   1.00 16.62  1 .
.
ATOM 3974 C    C    . MET MET MET B B 93  93  . 6.834  59.605 6.108   1.00 16.86  1 .
.
ATOM 3975 O    O    . MET MET MET B B 93  93  . 7.198  60.647 6.701   1.00 16.46  1 .
.
ATOM 3976 N    N    . LEU LEU LEU B B 94  94  . 6.861  59.445 4.775   1.00 17.94  1 .
.
ATOM 3977 CA   CA   . LEU LEU LEU B B 94  94  . 7.387  60.525 3.926   1.00 19.08  1 .
.
ATOM 3978 CB   CB   . LEU LEU LEU B B 94  94  . 7.453  60.110 2.449   1.00 18.55  1 .
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ATOM 3979 CG   CG   . LEU LEU LEU B B 94  94  . 8.328  58.937 2.031   1.00 24.24  1 .
.
ATOM 3980 CD1  CD1  . LEU LEU LEU B B 94  94  . 8.627  59.085 0.623   1.00 26.26  1 .
.
ATOM 3981 CD2  CD2  . LEU LEU LEU B B 94  94  . 9.542  58.737 2.898   1.00 27.03  1 .
.
ATOM 3982 C    C    . LEU LEU LEU B B 94  94  . 6.471  61.778 4.029   1.00 20.08  1 .
.
ATOM 3983 O    O    . LEU LEU LEU B B 94  94  . 6.986  62.907 4.066   1.00 19.20  1 .
.
ATOM 3984 N    N    . GLU GLU GLU B B 95  95  . 5.166  61.541 4.048   1.00 19.37  1 .
.
ATOM 3985 CA   CA   . GLU GLU GLU B B 95  95  . 4.204  62.627 4.247   1.00 20.62  1 .
.
ATOM 3986 CB   CB   . GLU GLU GLU B B 95  95  . 2.803  62.119 3.937   1.00 21.47  1 .
.
ATOM 3987 CG   CG   . GLU GLU GLU B B 95  95  . 2.667  62.036 2.409   1.00 26.16  1 .
.
ATOM 3988 CD   CD   . GLU GLU GLU B B 95  95  . 2.886  63.487 1.769   1.00 37.09  1 .
.
ATOM 3989 OE1  OE1  . GLU GLU GLU B B 95  95  . 2.344  64.544 2.290   1.00 41.36  1 .
.
ATOM 3990 OE2  OE2  . GLU GLU GLU B B 95  95  . 3.656  63.565 0.774   1.00 42.74  1 .
.
ATOM 3991 C    C    . GLU GLU GLU B B 95  95  . 4.232  63.312 5.589   1.00 20.85  1 .
.
ATOM 3992 O    O    . GLU GLU GLU B B 95  95  . 4.026  64.560 5.661   1.00 20.27  1 .
.
ATOM 3993 N    N    . LEU LEU LEU B B 96  96  . 4.490  62.537 6.654   1.00 20.44  1 .
.
ATOM 3994 CA   CA   . LEU LEU LEU B B 96  96  . 4.616  63.133 7.994   1.00 19.07  1 .
.
ATOM 3995 CB   CB   . LEU LEU LEU B B 96  96  . 4.592  62.073 9.104   1.00 20.54  1 .
.
ATOM 3996 CG   CG   . LEU LEU LEU B B 96  96  . 3.262  61.355 9.304   1.00 21.89  1 .
.
ATOM 3997 CD1  CD1  . LEU LEU LEU B B 96  96  . 3.446  60.054 10.111  1.00 24.21  1 .
.
ATOM 3998 CD2  CD2  . LEU LEU LEU B B 96  96  . 2.250  62.290 9.995   1.00 21.16  1 .
.
ATOM 3999 C    C    . LEU LEU LEU B B 96  96  . 5.857  63.956 8.140   1.00 20.81  1 .
.
ATOM 4000 O    O    . LEU LEU LEU B B 96  96  . 5.858  64.950 8.873   1.00 21.06  1 .
.
ATOM 4001 N    N    . ASP ASP ASP B B 97  97  . 6.951  63.532 7.476   1.00 17.88  1 .
.
ATOM 4002 CA   CA   . ASP ASP ASP B B 97  97  . 8.128  64.340 7.488   1.00 20.07  1 .
.
ATOM 4003 CB   CB   . ASP ASP ASP B B 97  97  . 9.352  63.530 6.944   1.00 17.90  1 .
.
ATOM 4004 CG   CG   . ASP ASP ASP B B 97  97  . 10.543 64.381 6.725   1.00 19.51  1 .
.
ATOM 4005 OD1  OD1  . ASP ASP ASP B B 97  97  . 11.459 64.465 7.619   1.00 20.90  1 .
.
ATOM 4006 OD2  OD2  . ASP ASP ASP B B 97  97  . 10.597 64.960 5.635   1.00 22.11  1 .
.
ATOM 4007 C    C    . ASP ASP ASP B B 97  97  . 7.904  65.637 6.687   1.00 19.83  1 .
.
ATOM 4008 O    O    . ASP ASP ASP B B 97  97  . 8.296  66.754 7.129   1.00 19.88  1 .
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ATOM 4009 N    N    . GLY GLY GLY B B 98  98  . 7.354  65.439 5.498   1.00 19.21  1 .
.
ATOM 4010 CA   CA   . GLY GLY GLY B B 98  98  . 6.894  66.533 4.596   1.00 20.94  1 .
.
ATOM 4011 C    C    . GLY GLY GLY B B 98  98  . 7.982  67.271 3.833   1.00 23.94  1 .
.
ATOM 4012 O    O    . GLY GLY GLY B B 98  98  . 7.625  68.255 3.074   1.00 25.24  1 .
.
ATOM 4013 N    N    . THR THR THR B B 99  99  . 9.271  66.945 4.066   1.00 21.58  1 .
.
ATOM 4014 CA   CA   . THR THR THR B B 99  99  . 10.412 67.657 3.406   1.00 22.51  1 .
.
ATOM 4015 CB   CB   . THR THR THR B B 99  99  . 11.553 68.028 4.382   1.00 22.35  1 .
.
ATOM 4016 OG1  OG1  . THR THR THR B B 99  99  . 12.201 66.801 4.747   1.00 21.01  1 .
.
ATOM 4017 CG2  CG2  . THR THR THR B B 99  99  . 11.016 68.650 5.635   1.00 22.32  1 .
.
ATOM 4018 C    C    . THR THR THR B B 99  99  . 11.009 66.831 2.267   1.00 23.54  1 .
.
ATOM 4019 O    O    . THR THR THR B B 99  99  . 10.872 65.595 2.228   1.00 25.57  1 .
.
ATOM 4020 N    N    . GLU GLU GLU B B 100 100 . 11.666 67.477 1.326   1.00 24.32  1 .
.
ATOM 4021 CA   CA   . GLU GLU GLU B B 100 100 . 12.148 66.741 0.138   1.00 25.94  1 .
.
ATOM 4022 CB   CB   . GLU GLU GLU B B 100 100 . 12.689 67.709 -0.938  1.00 29.15  1 .
.
ATOM 4023 CG   CG   . GLU GLU GLU B B 100 100 . 13.832 68.628 -0.441  1.00 32.21  1 .
.
ATOM 4024 CD   CD   . GLU GLU GLU B B 100 100 . 15.161 68.547 -1.289  1.00 42.14  1 .
.
ATOM 4025 C    C    . GLU GLU GLU B B 100 100 . 13.265 65.789 0.559   1.00 24.87  1 .
.
ATOM 4026 O    O    . GLU GLU GLU B B 100 100 . 13.392 64.680 0.006   1.00 26.93  1 .
.
ATOM 4027 N    N    . ASN ASN ASN B B 101 101 . 14.080 66.247 1.516   1.00 21.81  1 .
.
ATOM 4028 CA   CA   . ASN ASN ASN B B 101 101 . 15.336 65.560 1.872   1.00 20.52  1 .
.
ATOM 4029 CB   CB   . ASN ASN ASN B B 101 101 . 16.522 66.564 1.844   1.00 23.77  1 .
.
ATOM 4030 CG   CG   . ASN ASN ASN B B 101 101 . 16.482 67.623 2.957   1.00 26.81  1 .
.
ATOM 4031 OD1  OD1  . ASN ASN ASN B B 101 101 . 17.557 68.221 3.346   1.00 34.33  1 .
.
ATOM 4032 ND2  ND2  . ASN ASN ASN B B 101 101 . 15.300 67.920 3.438   1.00 27.07  1 .
.
ATOM 4033 C    C    . ASN ASN ASN B B 101 101 . 15.259 64.857 3.227   1.00 19.34  1 .
.
ATOM 4034 O    O    . ASN ASN ASN B B 101 101 . 16.289 64.504 3.784   1.00 18.45  1 .
.
ATOM 4035 N    N    . LYS LYS LYS B B 102 102 . 14.040 64.700 3.757   1.00 18.28  1 .
.
ATOM 4036 CA   CA   . LYS LYS LYS B B 102 102 . 13.804 64.004 5.052   1.00 16.25  1 .
.
ATOM 4037 CB   CB   . LYS LYS LYS B B 102 102 . 14.206 62.540 4.975   1.00 17.49  1 .
.
ATOM 4038 CG   CG   . LYS LYS LYS B B 102 102 . 13.359 61.741 3.983   1.00 16.32  1 .
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ATOM 4039 CD   CD   . LYS LYS LYS B B 102 102 . 13.847 60.256 3.914   1.00 19.25  1 .
.
ATOM 4040 CE   CE   . LYS LYS LYS B B 102 102 . 12.927 59.470 2.981   1.00 16.65  1 .
.
ATOM 4041 NZ   NZ   . LYS LYS LYS B B 102 102 . 12.866 60.025 1.542   1.00 16.76  1 .
.
ATOM 4042 C    C    . LYS LYS LYS B B 102 102 . 14.521 64.715 6.205   1.00 19.16  1 .
.
ATOM 4043 O    O    . LYS LYS LYS B B 102 102 . 15.050 64.083 7.146   1.00 19.63  1 .
.
ATOM 4044 N    N    . SER SER SER B B 103 103 . 14.521 66.060 6.165   1.00 19.17  1 .
.
ATOM 4045 CA   CA   . SER SER SER B B 103 103 . 15.323 66.783 7.161   1.00 22.23  1 .
.
ATOM 4046 CB   CB   . SER SER SER B B 103 103 . 15.847 68.074 6.547   1.00 23.20  1 .
.
ATOM 4047 OG   OG   . SER SER SER B B 103 103 . 14.795 68.790 5.872   1.00 25.88  1 .
.
ATOM 4048 C    C    . SER SER SER B B 103 103 . 14.504 67.090 8.424   1.00 23.24  1 .
.
ATOM 4049 O    O    . SER SER SER B B 103 103 . 15.051 67.578 9.388   1.00 25.95  1 .
.
ATOM 4050 N    N    . LYS LYS LYS B B 104 104 . 13.241 66.744 8.470   1.00 21.29  1 .
.
ATOM 4051 CA   CA   . LYS LYS LYS B B 104 104 . 12.590 66.920 9.754   1.00 21.74  1 .
.
ATOM 4052 CB   CB   . LYS LYS LYS B B 104 104 . 11.125 67.151 9.569   1.00 21.23  1 .
.
ATOM 4053 CG   CG   . LYS LYS LYS B B 104 104 . 10.535 67.609 10.870  1.00 22.84  1 .
.
ATOM 4054 CD   CD   . LYS LYS LYS B B 104 104 . 9.147  68.022 10.577  1.00 27.03  1 .
.
ATOM 4055 CE   CE   . LYS LYS LYS B B 104 104 . 8.292  66.823 10.572  1.00 28.93  1 .
.
ATOM 4056 NZ   NZ   . LYS LYS LYS B B 104 104 . 6.911  67.357 10.441  1.00 32.59  1 .
.
ATOM 4057 C    C    . LYS LYS LYS B B 104 104 . 12.800 65.759 10.719  1.00 20.15  1 .
.
ATOM 4058 O    O    . LYS LYS LYS B B 104 104 . 13.220 65.942 11.892  1.00 21.39  1 .
.
ATOM 4059 N    N    . PHE PHE PHE B B 105 105 . 12.522 64.544 10.247  1.00 19.33  1 .
.
ATOM 4060 CA   CA   . PHE PHE PHE B B 105 105 . 12.796 63.378 11.115  1.00 17.96  1 .
.
ATOM 4061 CB   CB   . PHE PHE PHE B B 105 105 . 11.858 62.183 10.759  1.00 18.56  1 .
.
ATOM 4062 CG   CG   . PHE PHE PHE B B 105 105 . 10.393 62.475 10.996  1.00 20.08  1 .
.
ATOM 4063 CD1  CD1  . PHE PHE PHE B B 105 105 . 9.431  61.874 10.148  1.00 20.62  1 .
.
ATOM 4064 CE1  CE1  . PHE PHE PHE B B 105 105 . 8.010  62.115 10.312  1.00 19.50  1 .
.
ATOM 4065 CZ   CZ   . PHE PHE PHE B B 105 105 . 7.586  63.023 11.382  1.00 23.09  1 .
.
ATOM 4066 CE2  CE2  . PHE PHE PHE B B 105 105 . 8.572  63.677 12.206  1.00 24.11  1 .
.
ATOM 4067 CD2  CD2  . PHE PHE PHE B B 105 105 . 9.976  63.419 11.986  1.00 19.69  1 .
.
ATOM 4068 C    C    . PHE PHE PHE B B 105 105 . 14.198 62.849 10.967  1.00 18.20  1 .
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ATOM 4069 O    O    . PHE PHE PHE B B 105 105 . 14.716 62.230 11.903  1.00 17.37  1 .
.
ATOM 4070 N    N    . GLY GLY GLY B B 106 106 . 14.786 63.070 9.805   1.00 17.02  1 .
.
ATOM 4071 CA   CA   . GLY GLY GLY B B 106 106 . 16.066 62.449 9.486   1.00 16.02  1 .
.
ATOM 4072 C    C    . GLY GLY GLY B B 106 106 . 15.795 61.230 8.635   1.00 15.05  1 .
.
ATOM 4073 O    O    . GLY GLY GLY B B 106 106 . 14.879 60.427 8.922   1.00 17.12  1 .
.
ATOM 4074 N    N    . ALA ALA ALA B B 107 107 . 16.604 61.076 7.609   1.00 14.24  1 .
.
ATOM 4075 CA   CA   . ALA ALA ALA B B 107 107 . 16.527 59.865 6.764   1.00 14.85  1 .
.
ATOM 4076 CB   CB   . ALA ALA ALA B B 107 107 . 17.479 59.976 5.576   1.00 14.67  1 .
.
ATOM 4077 C    C    . ALA ALA ALA B B 107 107 . 16.843 58.639 7.641   1.00 15.25  1 .
.
ATOM 4078 O    O    . ALA ALA ALA B B 107 107 . 16.370 57.522 7.340   1.00 15.30  1 .
.
ATOM 4079 N    N    . ASN ASN ASN B B 108 108 . 17.662 58.856 8.672   1.00 14.14  1 .
.
ATOM 4080 CA   CA   . ASN ASN ASN B B 108 108 . 18.052 57.746 9.608   1.00 14.08  1 .
.
ATOM 4081 CB   CB   . ASN ASN ASN B B 108 108 . 19.318 58.038 10.433  1.00 14.93  1 .
.
ATOM 4082 CG   CG   . ASN ASN ASN B B 108 108 . 19.324 59.399 11.110  1.00 15.60  1 .
.
ATOM 4083 OD1  OD1  . ASN ASN ASN B B 108 108 . 18.635 60.342 10.660  1.00 18.18  1 .
.
ATOM 4084 ND2  ND2  . ASN ASN ASN B B 108 108 . 20.200 59.529 12.132  1.00 14.82  1 .
.
ATOM 4085 C    C    . ASN ASN ASN B B 108 108 . 16.868 57.270 10.433  1.00 15.98  1 .
.
ATOM 4086 O    O    . ASN ASN ASN B B 108 108 . 16.738 56.062 10.678  1.00 18.30  1 .
.
ATOM 4087 N    N    . ALA ALA ALA B B 109 109 . 15.962 58.191 10.780  1.00 13.48  1 .
.
ATOM 4088 CA   CA   . ALA ALA ALA B B 109 109 . 14.755 57.783 11.508  1.00 13.83  1 .
.
ATOM 4089 CB   CB   . ALA ALA ALA B B 109 109 . 13.971 59.002 12.072  1.00 13.83  1 .
.
ATOM 4090 C    C    . ALA ALA ALA B B 109 109 . 13.854 56.997 10.557  1.00 14.65  1 .
.
ATOM 4091 O    O    . ALA ALA ALA B B 109 109 . 13.360 55.900 10.882  1.00 17.17  1 .
.
ATOM 4092 N    N    . ILE ILE ILE B B 110 110 . 13.553 57.581 9.396   1.00 14.23  1 .
.
ATOM 4093 CA   CA   . ILE ILE ILE B B 110 110 . 12.593 56.943 8.532   1.00 13.82  1 .
.
ATOM 4094 CB   CB   . ILE ILE ILE B B 110 110 . 12.253 57.869 7.332   1.00 14.20  1 .
.
ATOM 4095 CG1  CG1  . ILE ILE ILE B B 110 110 . 11.581 59.148 7.860   1.00 14.16  1 .
.
ATOM 4096 CD   CD   . ILE ILE ILE B B 110 110 . 11.480 60.250 6.776   1.00 18.84  1 .
.
ATOM 4097 CG2  CG2  . ILE ILE ILE B B 110 110 . 11.461 57.144 6.274   1.00 15.06  1 .
.
ATOM 4098 C    C    . ILE ILE ILE B B 110 110 . 13.124 55.572 8.060   1.00 12.39  1 .
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ATOM 4099 O    O    . ILE ILE ILE B B 110 110 . 12.372 54.621 8.003   1.00 13.56  1 .
.
ATOM 4100 N    N    . LEU LEU LEU B B 111 111 . 14.403 55.517 7.694   1.00 11.22  1 .
.
ATOM 4101 CA   CA   . LEU LEU LEU B B 111 111 . 14.911 54.258 7.130   1.00 11.00  1 .
.
ATOM 4102 CB   CB   . LEU LEU LEU B B 111 111 . 16.336 54.409 6.618   1.00 10.96  1 .
.
ATOM 4103 CG   CG   . LEU LEU LEU B B 111 111 . 16.936 53.112 6.038   1.00 13.50  1 .
.
ATOM 4104 CD1  CD1  . LEU LEU LEU B B 111 111 . 16.060 52.576 4.807   1.00 12.71  1 .
.
ATOM 4105 CD2  CD2  . LEU LEU LEU B B 111 111 . 18.401 53.398 5.615   1.00 12.10  1 .
.
ATOM 4106 C    C    . LEU LEU LEU B B 111 111 . 14.881 53.115 8.191   1.00 12.07  1 .
.
ATOM 4107 O    O    . LEU LEU LEU B B 111 111 . 14.562 51.954 7.832   1.00 14.13  1 .
.
ATOM 4108 N    N    . GLY GLY GLY B B 112 112 . 15.234 53.464 9.419   1.00 12.11  1 .
.
ATOM 4109 CA   CA   . GLY GLY GLY B B 112 112 . 15.245 52.456 10.502  1.00 12.83  1 .
.
ATOM 4110 C    C    . GLY GLY GLY B B 112 112 . 13.870 51.716 10.565  1.00 13.87  1 .
.
ATOM 4111 O    O    . GLY GLY GLY B B 112 112 . 13.772 50.447 10.660  1.00 12.83  1 .
.
ATOM 4112 N    N    . VAL VAL VAL B B 113 113 . 12.796 52.492 10.506  1.00 14.42  1 .
.
ATOM 4113 CA   CA   . VAL VAL VAL B B 113 113 . 11.491 51.914 10.544  1.00 13.08  1 .
.
ATOM 4114 CB   CB   . VAL VAL VAL B B 113 113 . 10.416 53.021 10.793  1.00 13.82  1 .
.
ATOM 4115 CG1  CG1  . VAL VAL VAL B B 113 113 . 8.999  52.378 10.756  1.00 13.23  1 .
.
ATOM 4116 CG2  CG2  . VAL VAL VAL B B 113 113 . 10.633 53.632 12.134  1.00 15.54  1 .
.
ATOM 4117 C    C    . VAL VAL VAL B B 113 113 . 11.194 51.172 9.240   1.00 13.49  1 .
.
ATOM 4118 O    O    . VAL VAL VAL B B 113 113 . 10.612 50.088 9.253   1.00 13.09  1 .
.
ATOM 4119 N    N    . SER SER SER B B 114 114 . 11.533 51.779 8.108   1.00 12.32  1 .
.
ATOM 4120 CA   CA   . SER SER SER B B 114 114 . 11.266 51.166 6.794   1.00 13.00  1 .
.
ATOM 4121 CB   CB   . SER SER SER B B 114 114 . 11.823 52.096 5.684   1.00 12.58  1 .
.
ATOM 4122 OG   OG   . SER SER SER B B 114 114 . 11.436 51.584 4.428   1.00 14.95  1 .
.
ATOM 4123 C    C    . SER SER SER B B 114 114 . 11.877 49.728 6.728   1.00 12.80  1 .
.
ATOM 4124 O    O    . SER SER SER B B 114 114 . 11.241 48.806 6.207   1.00 13.94  1 .
.
ATOM 4125 N    N    . LEU LEU LEU B B 115 115 . 13.135 49.593 7.203   1.00 12.33  1 .
.
ATOM 4126 CA   CA   . LEU LEU LEU B B 115 115 . 13.823 48.287 7.124   1.00 12.10  1 .
.
ATOM 4127 CB   CB   . LEU LEU LEU B B 115 115 . 15.285 48.460 7.609   1.00 12.04  1 .
.
ATOM 4128 CG   CG   . LEU LEU LEU B B 115 115 . 16.206 49.378 6.761   1.00 11.19  1 .
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ATOM 4129 CD1  CD1  . LEU LEU LEU B B 115 115 . 17.552 49.613 7.495   1.00 14.89  1 .
.
ATOM 4130 CD2  CD2  . LEU LEU LEU B B 115 115 . 16.360 48.761 5.334   1.00 16.31  1 .
.
ATOM 4131 C    C    . LEU LEU LEU B B 115 115 . 13.107 47.289 8.047   1.00 12.67  1 .
.
ATOM 4132 O    O    . LEU LEU LEU B B 115 115 . 12.935 46.132 7.651   1.00 13.18  1 .
.
ATOM 4133 N    N    . ALA ALA ALA B B 116 116 . 12.759 47.729 9.249   1.00 12.25  1 .
.
ATOM 4134 CA   CA   . ALA ALA ALA B B 116 116 . 12.080 46.827 10.233  1.00 12.67  1 .
.
ATOM 4135 CB   CB   . ALA ALA ALA B B 116 116 . 12.015 47.525 11.623  1.00 13.96  1 .
.
ATOM 4136 C    C    . ALA ALA ALA B B 116 116 . 10.687 46.368 9.704   1.00 13.01  1 .
.
ATOM 4137 O    O    . ALA ALA ALA B B 116 116 . 10.326 45.201 9.765   1.00 14.72  1 .
.
ATOM 4138 N    N    . VAL VAL VAL B B 117 117 . 9.959  47.300 9.089   1.00 13.83  1 .
.
ATOM 4139 CA   CA   . VAL VAL VAL B B 117 117 . 8.698  46.956 8.399   1.00 12.74  1 .
.
ATOM 4140 CB   CB   . VAL VAL VAL B B 117 117 . 8.083  48.237 7.765   1.00 13.97  1 .
.
ATOM 4141 CG1  CG1  . VAL VAL VAL B B 117 117 . 7.010  47.855 6.759   1.00 14.23  1 .
.
ATOM 4142 CG2  CG2  . VAL VAL VAL B B 117 117 . 7.486  49.138 8.863   1.00 15.71  1 .
.
ATOM 4143 C    C    . VAL VAL VAL B B 117 117 . 8.898  45.863 7.334   1.00 14.74  1 .
.
ATOM 4144 O    O    . VAL VAL VAL B B 117 117 . 8.111  44.895 7.253   1.00 13.39  1 .
.
ATOM 4145 N    N    . CYS CYS CYS B B 118 118 . 9.943  46.016 6.520   1.00 13.87  1 .
.
ATOM 4146 CA   CA   . CYS CYS CYS B B 118 118 . 10.214 45.072 5.469   1.00 13.33  1 .
.
ATOM 4147 CB   CB   . CYS CYS CYS B B 118 118 . 11.410 45.580 4.618   1.00 14.44  1 .
.
ATOM 4148 SG   SG   . CYS CYS CYS B B 118 118 . 11.596 44.700 3.059   1.00 16.23  1 .
.
ATOM 4149 C    C    . CYS CYS CYS B B 118 118 . 10.468 43.663 6.035   1.00 13.71  1 .
.
ATOM 4150 O    O    . CYS CYS CYS B B 118 118 . 9.977  42.678 5.511   1.00 13.90  1 .
.
ATOM 4151 N    N    . LYS LYS LYS B B 119 119 . 11.271 43.587 7.087   1.00 13.42  1 .
.
ATOM 4152 CA   CA   . LYS LYS LYS B B 119 119 . 11.550 42.253 7.742   1.00 13.84  1 .
.
ATOM 4153 CB   CB   . LYS LYS LYS B B 119 119 . 12.617 42.457 8.864   1.00 13.80  1 .
.
ATOM 4154 CG   CG   . LYS LYS LYS B B 119 119 . 14.009 42.893 8.314   1.00 14.22  1 .
.
ATOM 4155 CD   CD   . LYS LYS LYS B B 119 119 . 14.990 42.954 9.474   1.00 14.28  1 .
.
ATOM 4156 CE   CE   . LYS LYS LYS B B 119 119 . 16.335 43.579 9.001   1.00 18.78  1 .
.
ATOM 4157 NZ   NZ   . LYS LYS LYS B B 119 119 . 17.600 43.515 9.957   1.00 18.43  1 .
.
ATOM 4158 C    C    . LYS LYS LYS B B 119 119 . 10.270 41.615 8.285   1.00 14.17  1 .
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ATOM 4159 O    O    . LYS LYS LYS B B 119 119 . 10.030 40.438 8.111   1.00 15.34  1 .
.
ATOM 4160 N    N    . ALA ALA ALA B B 120 120 . 9.435  42.441 8.961   1.00 14.39  1 .
.
ATOM 4161 CA   CA   . ALA ALA ALA B B 120 120 . 8.209  41.939 9.506   1.00 14.72  1 .
.
ATOM 4162 CB   CB   . ALA ALA ALA B B 120 120 . 7.538  43.039 10.385  1.00 15.81  1 .
.
ATOM 4163 C    C    . ALA ALA ALA B B 120 120 . 7.282  41.540 8.355   1.00 15.80  1 .
.
ATOM 4164 O    O    . ALA ALA ALA B B 120 120 . 6.488  40.622 8.490   1.00 16.43  1 .
.
ATOM 4165 N    N    . GLY GLY GLY B B 121 121 . 7.312  42.314 7.263   1.00 13.95  1 .
.
ATOM 4166 CA   CA   . GLY GLY GLY B B 121 121 . 6.449  41.932 6.119   1.00 15.14  1 .
.
ATOM 4167 C    C    . GLY GLY GLY B B 121 121 . 6.821  40.566 5.535   1.00 16.44  1 .
.
ATOM 4168 O    O    . GLY GLY GLY B B 121 121 . 5.937  39.798 5.119   1.00 16.68  1 .
.
ATOM 4169 N    N    . ALA ALA ALA B B 122 122 . 8.122  40.235 5.520   1.00 14.02  1 .
.
ATOM 4170 CA   CA   . ALA ALA ALA B B 122 122 . 8.533  38.955 4.978   1.00 14.43  1 .
.
ATOM 4171 CB   CB   . ALA ALA ALA B B 122 122 . 10.127 38.851 4.870   1.00 14.54  1 .
.
ATOM 4172 C    C    . ALA ALA ALA B B 122 122 . 7.926  37.860 5.846   1.00 15.13  1 .
.
ATOM 4173 O    O    . ALA ALA ALA B B 122 122 . 7.443  36.865 5.289   1.00 17.10  1 .
.
ATOM 4174 N    N    . ALA ALA ALA B B 123 123 . 7.973  38.073 7.172   1.00 16.08  1 .
.
ATOM 4175 CA   CA   . ALA ALA ALA B B 123 123 . 7.486  37.065 8.134   1.00 16.87  1 .
.
ATOM 4176 CB   CB   . ALA ALA ALA B B 123 123 . 7.852  37.391 9.554   1.00 17.03  1 .
.
ATOM 4177 C    C    . ALA ALA ALA B B 123 123 . 5.950  36.934 7.961   1.00 18.73  1 .
.
ATOM 4178 O    O    . ALA ALA ALA B B 123 123 . 5.390  35.814 8.039   1.00 20.28  1 .
.
ATOM 4179 N    N    . GLU GLU GLU B B 124 124 . 5.286  38.056 7.687   1.00 19.26  1 .
.
ATOM 4180 CA   CA   . GLU GLU GLU B B 124 124 . 3.814  38.029 7.491   1.00 20.78  1 .
.
ATOM 4181 CB   CB   . GLU GLU GLU B B 124 124 . 3.291  39.442 7.239   1.00 21.49  1 .
.
ATOM 4182 CG   CG   . GLU GLU GLU B B 124 124 . 1.791  39.514 7.403   1.00 27.94  1 .
.
ATOM 4183 CD   CD   . GLU GLU GLU B B 124 124 . 1.387  39.266 8.896   1.00 39.94  1 .
.
ATOM 4184 OE1  OE1  . GLU GLU GLU B B 124 124 . 2.056  39.821 9.880   1.00 42.98  1 .
.
ATOM 4185 OE2  OE2  . GLU GLU GLU B B 124 124 . 0.422  38.494 9.072   1.00 43.86  1 .
.
ATOM 4186 C    C    . GLU GLU GLU B B 124 124 . 3.477  37.187 6.269   1.00 20.92  1 .
.
ATOM 4187 O    O    . GLU GLU GLU B B 124 124 . 2.486  36.435 6.247   1.00 23.26  1 .
.
ATOM 4188 N    N    . ARG ARG ARG B B 125 125 . 4.332  37.255 5.264   1.00 20.43  1 .
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ATOM 4189 CA   CA   . ARG ARG ARG B B 125 125 . 4.160  36.541 4.013   1.00 20.52  1 .
.
ATOM 4190 CB   CB   . ARG ARG ARG B B 125 125 . 4.918  37.207 2.882   1.00 20.07  1 .
.
ATOM 4191 CG   CG   . ARG ARG ARG B B 125 125 . 4.317  38.548 2.414   1.00 22.30  1 .
.
ATOM 4192 CD   CD   . ARG ARG ARG B B 125 125 . 3.087  38.373 1.510   1.00 27.11  1 .
.
ATOM 4193 NE   NE   . ARG ARG ARG B B 125 125 . 2.859  39.608 0.781   1.00 38.89  1 .
.
ATOM 4194 CZ   CZ   . ARG ARG ARG B B 125 125 . 1.627  40.096 0.547   1.00 42.47  1 .
.
ATOM 4195 NH1  NH1  . ARG ARG ARG B B 125 125 . 0.548  39.453 1.016   1.00 44.56  1 .
.
ATOM 4196 NH2  NH2  . ARG ARG ARG B B 125 125 . 1.451  41.227 -0.132  1.00 42.26  1 .
.
ATOM 4197 C    C    . ARG ARG ARG B B 125 125 . 4.666  35.102 4.081   1.00 20.35  1 .
.
ATOM 4198 O    O    . ARG ARG ARG B B 125 125 . 4.565  34.412 3.084   1.00 22.20  1 .
.
ATOM 4199 N    N    . GLU GLU GLU B B 126 126 . 5.252  34.723 5.218   1.00 19.79  1 .
.
ATOM 4200 CA   CA   . GLU GLU GLU B B 126 126 . 5.937  33.427 5.391   1.00 20.88  1 .
.
ATOM 4201 CB   CB   . GLU GLU GLU B B 126 126 . 4.876  32.259 5.437   1.00 22.22  1 .
.
ATOM 4202 CG   CG   . GLU GLU GLU B B 126 126 . 3.962  32.521 6.565   1.00 28.45  1 .
.
ATOM 4203 CD   CD   . GLU GLU GLU B B 126 126 . 2.651  31.697 6.512   1.00 39.20  1 .
.
ATOM 4204 OE1  OE1  . GLU GLU GLU B B 126 126 . 2.646  30.554 6.026   1.00 41.00  1 .
.
ATOM 4205 OE2  OE2  . GLU GLU GLU B B 126 126 . 1.608  32.229 6.978   1.00 47.76  1 .
.
ATOM 4206 C    C    . GLU GLU GLU B B 126 126 . 6.979  33.218 4.341   1.00 21.34  1 .
.
ATOM 4207 O    O    . GLU GLU GLU B B 126 126 . 7.032  32.114 3.682   1.00 22.41  1 .
.
ATOM 4208 N    N    . LEU LEU LEU B B 127 127 . 7.797  34.278 4.126   1.00 18.96  1 .
.
ATOM 4209 CA   CA   . LEU LEU LEU B B 127 127 . 8.866  34.208 3.149   1.00 17.16  1 .
.
ATOM 4210 CB   CB   . LEU LEU LEU B B 127 127 . 8.596  35.169 1.966   1.00 19.12  1 .
.
ATOM 4211 CG   CG   . LEU LEU LEU B B 127 127 . 7.435  34.841 1.037   1.00 21.15  1 .
.
ATOM 4212 CD1  CD1  . LEU LEU LEU B B 127 127 . 7.232  36.034 0.076   1.00 21.28  1 .
.
ATOM 4213 CD2  CD2  . LEU LEU LEU B B 127 127 . 7.764  33.631 0.230   1.00 23.47  1 .
.
ATOM 4214 C    C    . LEU LEU LEU B B 127 127 . 10.151 34.611 3.758   1.00 16.43  1 .
.
ATOM 4215 O    O    . LEU LEU LEU B B 127 127 . 10.170 35.470 4.659   1.00 17.45  1 .
.
ATOM 4216 N    N    . PRO PRO PRO B B 128 128 . 11.267 34.060 3.256   1.00 17.47  1 .
.
ATOM 4217 CA   CA   . PRO PRO PRO B B 128 128 . 12.570 34.668 3.682   1.00 17.58  1 .
.
ATOM 4218 CB   CB   . PRO PRO PRO B B 128 128 . 13.643 33.854 2.935   1.00 17.84  1 .
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ATOM 4219 CG   CG   . PRO PRO PRO B B 128 128 . 12.931 33.085 1.920   1.00 20.06  1 .
.
ATOM 4220 CD   CD   . PRO PRO PRO B B 128 128 . 11.418 32.966 2.254   1.00 18.29  1 .
.
ATOM 4221 C    C    . PRO PRO PRO B B 128 128 . 12.632 36.087 3.122   1.00 15.49  1 .
.
ATOM 4222 O    O    . PRO PRO PRO B B 128 128 . 11.998 36.377 2.124   1.00 16.41  1 .
.
ATOM 4223 N    N    . LEU LEU LEU B B 129 129 . 13.360 36.952 3.812   1.00 16.45  1 .
.
ATOM 4224 CA   CA   . LEU LEU LEU B B 129 129 . 13.435 38.393 3.432   1.00 12.34  1 .
.
ATOM 4225 CB   CB   . LEU LEU LEU B B 129 129 . 14.467 39.020 4.322   1.00 12.93  1 .
.
ATOM 4226 CG   CG   . LEU LEU LEU B B 129 129 . 14.615 40.539 4.043   1.00 13.90  1 .
.
ATOM 4227 CD1  CD1  . LEU LEU LEU B B 129 129 . 13.300 41.372 4.158   1.00 15.67  1 .
.
ATOM 4228 CD2  CD2  . LEU LEU LEU B B 129 129 . 15.712 41.173 4.938   1.00 13.10  1 .
.
ATOM 4229 C    C    . LEU LEU LEU B B 129 129 . 13.806 38.583 1.927   1.00 14.37  1 .
.
ATOM 4230 O    O    . LEU LEU LEU B B 129 129 . 13.099 39.338 1.242   1.00 14.71  1 .
.
ATOM 4231 N    N    . TYR TYR TYR B B 130 130 . 14.778 37.805 1.372   1.00 13.38  1 .
.
ATOM 4232 CA   CA   . TYR TYR TYR B B 130 130 . 15.189 38.013 -0.014  1.00 13.04  1 .
.
ATOM 4233 CB   CB   . TYR TYR TYR B B 130 130 . 16.423 37.190 -0.396  1.00 13.09  1 .
.
ATOM 4234 CG   CG   . TYR TYR TYR B B 130 130 . 16.284 35.695 -0.242  1.00 14.81  1 .
.
ATOM 4235 CD1  CD1  . TYR TYR TYR B B 130 130 . 15.882 34.914 -1.312  1.00 15.72  1 .
.
ATOM 4236 CE1  CE1  . TYR TYR TYR B B 130 130 . 15.777 33.539 -1.177  1.00 19.18  1 .
.
ATOM 4237 CZ   CZ   . TYR TYR TYR B B 130 130 . 16.138 32.909 0.014   1.00 19.76  1 .
.
ATOM 4238 OH   OH   . TYR TYR TYR B B 130 130 . 16.060 31.501 0.057   1.00 21.57  1 .
.
ATOM 4239 CE2  CE2  . TYR TYR TYR B B 130 130 . 16.605 33.622 1.064   1.00 17.53  1 .
.
ATOM 4240 CD2  CD2  . TYR TYR TYR B B 130 130 . 16.707 35.047 0.934   1.00 14.16  1 .
.
ATOM 4241 C    C    . TYR TYR TYR B B 130 130 . 14.027 37.737 -1.000  1.00 13.46  1 .
.
ATOM 4242 O    O    . TYR TYR TYR B B 130 130 . 13.924 38.410 -2.026  1.00 13.43  1 .
.
ATOM 4243 N    N    . ARG ARG ARG B B 131 131 . 13.176 36.767 -0.687  1.00 15.20  1 .
.
ATOM 4244 CA   CA   . ARG ARG ARG B B 131 131 . 12.017 36.464 -1.550  1.00 15.12  1 .
.
ATOM 4245 CB   CB   . ARG ARG ARG B B 131 131 . 11.400 35.048 -1.287  1.00 16.52  1 .
.
ATOM 4246 CG   CG   . ARG ARG ARG B B 131 131 . 12.299 33.944 -1.836  1.00 20.46  1 .
.
ATOM 4247 CD   CD   . ARG ARG ARG B B 131 131 . 11.536 32.533 -1.845  1.00 27.90  1 .
.
ATOM 4248 C    C    . ARG ARG ARG B B 131 131 . 10.940 37.568 -1.414  1.00 16.13  1 .
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ATOM 4249 O    O    . ARG ARG ARG B B 131 131 . 10.281 37.917 -2.387  1.00 17.18  1 .
.
ATOM 4250 N    N    . HIS HIS HIS B B 132 132 . 10.736 38.087 -0.231  1.00 14.44  1 .
.
ATOM 4251 CA   CA   . HIS HIS HIS B B 132 132 . 9.743  39.159 -0.027  1.00 15.92  1 .
.
ATOM 4252 CB   CB   . HIS HIS HIS B B 132 132 . 9.633  39.526 1.460   1.00 16.19  1 .
.
ATOM 4253 CG   CG   . HIS HIS HIS B B 132 132 . 8.692  40.666 1.750   1.00 14.81  1 .
.
ATOM 4254 ND1  ND1  . HIS HIS HIS B B 132 132 . 7.390  40.709 1.287   1.00 16.66  1 .
.
ATOM 4255 CE1  CE1  . HIS HIS HIS B B 132 132 . 6.798  41.810 1.731   1.00 19.19  1 .
.
ATOM 4256 NE2  NE2  . HIS HIS HIS B B 132 132 . 7.650  42.468 2.498   1.00 17.16  1 .
.
ATOM 4257 CD2  CD2  . HIS HIS HIS B B 132 132 . 8.850  41.778 2.521   1.00 17.56  1 .
.
ATOM 4258 C    C    . HIS HIS HIS B B 132 132 . 10.214 40.389 -0.818  1.00 15.65  1 .
.
ATOM 4259 O    O    . HIS HIS HIS B B 132 132 . 9.402  41.072 -1.466  1.00 16.19  1 .
.
ATOM 4260 N    N    . ILE ILE ILE B B 133 133 . 11.515 40.684 -0.744  1.00 14.44  1 .
.
ATOM 4261 CA   CA   . ILE ILE ILE B B 133 133 . 12.078 41.835 -1.498  1.00 14.69  1 .
.
ATOM 4262 CB   CB   . ILE ILE ILE B B 133 133 . 13.574 42.040 -1.158  1.00 14.39  1 .
.
ATOM 4263 CG1  CG1  . ILE ILE ILE B B 133 133 . 13.604 42.550 0.263   1.00 13.98  1 .
.
ATOM 4264 CD   CD   . ILE ILE ILE B B 133 133 . 15.046 42.776 0.889   1.00 15.99  1 .
.
ATOM 4265 CG2  CG2  . ILE ILE ILE B B 133 133 . 14.225 43.041 -2.122  1.00 15.99  1 .
.
ATOM 4266 C    C    . ILE ILE ILE B B 133 133 . 11.863 41.621 -3.012  1.00 14.86  1 .
.
ATOM 4267 O    O    . ILE ILE ILE B B 133 133 . 11.433 42.538 -3.726  1.00 15.99  1 .
.
ATOM 4268 N    N    . ALA ALA ALA B B 134 134 . 12.152 40.409 -3.483  1.00 14.22  1 .
.
ATOM 4269 CA   CA   . ALA ALA ALA B B 134 134 . 11.927 40.090 -4.901  1.00 14.85  1 .
.
ATOM 4270 CB   CB   . ALA ALA ALA B B 134 134 . 12.322 38.589 -5.205  1.00 16.45  1 .
.
ATOM 4271 C    C    . ALA ALA ALA B B 134 134 . 10.462 40.343 -5.270  1.00 15.89  1 .
.
ATOM 4272 O    O    . ALA ALA ALA B B 134 134 . 10.201 40.992 -6.330  1.00 16.88  1 .
.
ATOM 4273 N    N    . GLN GLN GLN B B 135 135 . 9.515  39.912 -4.423  1.00 17.13  1 .
.
ATOM 4274 CA   CA   . GLN GLN GLN B B 135 135 . 8.066  40.149 -4.715  1.00 18.08  1 .
.
ATOM 4275 CB   CB   . GLN GLN GLN B B 135 135 . 7.173  39.422 -3.730  1.00 19.93  1 .
.
ATOM 4276 CG   CG   . GLN GLN GLN B B 135 135 . 7.289  37.934 -3.935  1.00 22.29  1 .
.
ATOM 4277 CD   CD   . GLN GLN GLN B B 135 135 . 6.265  37.125 -3.193  1.00 23.88  1 .
.
ATOM 4278 OE1  OE1  . GLN GLN GLN B B 135 135 . 5.496  37.635 -2.356  1.00 25.68  1 .
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ATOM 4279 NE2  NE2  . GLN GLN GLN B B 135 135 . 6.261  35.815 -3.481  1.00 25.90  1 .
.
ATOM 4280 C    C    . GLN GLN GLN B B 135 135 . 7.743  41.671 -4.724  1.00 18.96  1 .
.
ATOM 4281 O    O    . GLN GLN GLN B B 135 135 . 7.018  42.134 -5.605  1.00 20.51  1 .
.
ATOM 4282 N    N    . LEU LEU LEU B B 136 136 . 8.331  42.451 -3.816  1.00 17.06  1 .
.
ATOM 4283 CA   CA   . LEU LEU LEU B B 136 136 . 8.116  43.919 -3.723  1.00 18.35  1 .
.
ATOM 4284 CB   CB   . LEU LEU LEU B B 136 136 . 8.882  44.583 -2.524  1.00 17.75  1 .
.
ATOM 4285 CG   CG   . LEU LEU LEU B B 136 136 . 8.235  44.291 -1.190  1.00 18.26  1 .
.
ATOM 4286 CD1  CD1  . LEU LEU LEU B B 136 136 . 9.142  44.900 -0.006  1.00 16.15  1 .
.
ATOM 4287 CD2  CD2  . LEU LEU LEU B B 136 136 . 6.821  44.788 -1.094  1.00 22.07  1 .
.
ATOM 4288 C    C    . LEU LEU LEU B B 136 136 . 8.571  44.569 -5.023  1.00 19.84  1 .
.
ATOM 4289 O    O    . LEU LEU LEU B B 136 136 . 7.921  45.537 -5.447  1.00 20.65  1 .
.
ATOM 4290 N    N    . ALA ALA ALA B B 137 137 . 9.643  44.017 -5.629  1.00 19.05  1 .
.
ATOM 4291 CA   CA   . ALA ALA ALA B B 137 137 . 10.323 44.563 -6.789  1.00 20.26  1 .
.
ATOM 4292 CB   CB   . ALA ALA ALA B B 137 137 . 11.856 44.255 -6.752  1.00 18.88  1 .
.
ATOM 4293 C    C    . ALA ALA ALA B B 137 137 . 9.733  44.005 -8.077  1.00 22.12  1 .
.
ATOM 4294 O    O    . ALA ALA ALA B B 137 137 . 10.095 44.466 -9.165  1.00 23.88  1 .
.
ATOM 4295 N    N    . GLY GLY GLY B B 138 138 . 8.877  42.997 -7.960  1.00 22.66  1 .
.
ATOM 4296 CA   CA   . GLY GLY GLY B B 138 138 . 8.340  42.331 -9.197  1.00 24.62  1 .
.
ATOM 4297 C    C    . GLY GLY GLY B B 138 138 . 9.298  41.329 -9.855  1.00 25.50  1 .
.
ATOM 4298 O    O    . GLY GLY GLY B B 138 138 . 9.179  41.043 -11.076 1.00 26.53  1 .
.
ATOM 4299 N    N    . ASN ASN ASN B B 139 139 . 10.230 40.755 -9.088  1.00 24.28  1 .
.
ATOM 4300 CA   CA   . ASN ASN ASN B B 139 139 . 11.218 39.795 -9.648  1.00 25.60  1 .
.
ATOM 4301 CB   CB   . ASN ASN ASN B B 139 139 . 12.667 40.030 -9.137  1.00 24.71  1 .
.
ATOM 4302 CG   CG   . ASN ASN ASN B B 139 139 . 13.175 41.385 -9.504  1.00 24.52  1 .
.
ATOM 4303 OD1  OD1  . ASN ASN ASN B B 139 139 . 12.784 41.935 -10.566 1.00 29.65  1 .
.
ATOM 4304 ND2  ND2  . ASN ASN ASN B B 139 139 . 14.041 41.957 -8.677  1.00 21.91  1 .
.
ATOM 4305 C    C    . ASN ASN ASN B B 139 139 . 10.847 38.390 -9.296  1.00 27.49  1 .
.
ATOM 4306 O    O    . ASN ASN ASN B B 139 139 . 10.340 38.099 -8.220  1.00 26.71  1 .
.
ATOM 4307 N    N    . SER SER SER B B 140 140 . 11.057 37.480 -10.199 1.00 31.35  1 .
.
ATOM 4308 CA   CA   . SER SER SER B B 140 140 . 10.761 36.107 -9.786  1.00 35.08  1 .
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ATOM 4309 CB   CB   . SER SER SER B B 140 140 . 9.575  35.516 -10.553 1.00 35.43  1 .
.
ATOM 4310 OG   OG   . SER SER SER B B 140 140 . 9.800  35.776 -11.917 1.00 39.81  1 .
.
ATOM 4311 C    C    . SER SER SER B B 140 140 . 11.991 35.273 -9.964  1.00 36.51  1 .
.
ATOM 4312 O    O    . SER SER SER B B 140 140 . 11.945 34.054 -9.837  1.00 40.05  1 .
.
ATOM 4313 N    N    . ASP ASP ASP B B 141 141 . 13.104 35.907 -10.302 1.00 36.38  1 .
.
ATOM 4314 CA   CA   . ASP ASP ASP B B 141 141 . 14.356 35.186 -10.342 1.00 34.51  1 .
.
ATOM 4315 CB   CB   . ASP ASP ASP B B 141 141 . 15.119 35.454 -11.651 1.00 36.03  1 .
.
ATOM 4316 CG   CG   . ASP ASP ASP B B 141 141 . 14.445 34.799 -12.892 1.00 37.04  1 .
.
ATOM 4317 C    C    . ASP ASP ASP B B 141 141 . 15.129 35.697 -9.091  1.00 32.73  1 .
.
ATOM 4318 O    O    . ASP ASP ASP B B 141 141 . 14.701 36.719 -8.432  1.00 34.04  1 .
.
ATOM 4319 N    N    . LEU LEU LEU B B 142 142 . 16.194 34.976 -8.729  1.00 28.68  1 .
.
ATOM 4320 CA   CA   . LEU LEU LEU B B 142 142 . 17.068 35.363 -7.616  1.00 24.78  1 .
.
ATOM 4321 CB   CB   . LEU LEU LEU B B 142 142 . 16.707 34.554 -6.386  1.00 22.42  1 .
.
ATOM 4322 CG   CG   . LEU LEU LEU B B 142 142 . 15.279 34.650 -5.784  1.00 22.68  1 .
.
ATOM 4323 CD1  CD1  . LEU LEU LEU B B 142 142 . 15.098 33.542 -4.745  1.00 27.99  1 .
.
ATOM 4324 CD2  CD2  . LEU LEU LEU B B 142 142 . 15.041 35.977 -5.073  1.00 25.46  1 .
.
ATOM 4325 C    C    . LEU LEU LEU B B 142 142 . 18.451 35.015 -8.128  1.00 23.61  1 .
.
ATOM 4326 O    O    . LEU LEU LEU B B 142 142 . 18.613 34.034 -8.873  1.00 26.60  1 .
.
ATOM 4327 N    N    . ILE ILE ILE B B 143 143 . 19.426 35.862 -7.863  1.00 20.97  1 .
.
ATOM 4328 CA   CA   . ILE ILE ILE B B 143 143 . 20.744 35.626 -8.337  1.00 19.84  1 .
.
ATOM 4329 CB   CB   . ILE ILE ILE B B 143 143 . 21.082 36.611 -9.514  1.00 22.04  1 .
.
ATOM 4330 CG1  CG1  . ILE ILE ILE B B 143 143 . 19.988 36.538 -10.585 1.00 26.61  1 .
.
ATOM 4331 CD   CD   . ILE ILE ILE B B 143 143 . 20.241 35.465 -11.645 1.00 31.96  1 .
.
ATOM 4332 CG2  CG2  . ILE ILE ILE B B 143 143 . 22.416 36.221 -10.130 1.00 28.41  1 .
.
ATOM 4333 C    C    . ILE ILE ILE B B 143 143 . 21.692 35.982 -7.211  1.00 17.32  1 .
.
ATOM 4334 O    O    . ILE ILE ILE B B 143 143 . 21.472 36.981 -6.520  1.00 17.21  1 .
.
ATOM 4335 N    N    . LEU LEU LEU B B 144 144 . 22.703 35.149 -6.981  1.00 14.57  1 .
.
ATOM 4336 CA   CA   . LEU LEU LEU B B 144 144 . 23.778 35.542 -6.027  1.00 13.19  1 .
.
ATOM 4337 CB   CB   . LEU LEU LEU B B 144 144 . 24.558 34.290 -5.501  1.00 14.79  1 .
.
ATOM 4338 CG   CG   . LEU LEU LEU B B 144 144 . 23.935 33.537 -4.304  1.00 15.42  1 .
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ATOM 4339 CD1  CD1  . LEU LEU LEU B B 144 144 . 23.861 34.451 -3.020  1.00 14.86  1 .
.
ATOM 4340 CD2  CD2  . LEU LEU LEU B B 144 144 . 22.573 33.053 -4.650  1.00 17.25  1 .
.
ATOM 4341 C    C    . LEU LEU LEU B B 144 144 . 24.761 36.501 -6.722  1.00 12.94  1 .
.
ATOM 4342 O    O    . LEU LEU LEU B B 144 144 . 25.178 36.256 -7.863  1.00 14.67  1 .
.
ATOM 4343 N    N    . PRO PRO PRO B B 145 145 . 25.092 37.607 -6.100  1.00 12.99  1 .
.
ATOM 4344 CA   CA   . PRO PRO PRO B B 145 145 . 25.948 38.605 -6.720  1.00 11.93  1 .
.
ATOM 4345 CB   CB   . PRO PRO PRO B B 145 145 . 25.775 39.850 -5.804  1.00 12.37  1 .
.
ATOM 4346 CG   CG   . PRO PRO PRO B B 145 145 . 25.566 39.177 -4.388  1.00 13.17  1 .
.
ATOM 4347 CD   CD   . PRO PRO PRO B B 145 145 . 24.749 37.942 -4.669  1.00 11.47  1 .
.
ATOM 4348 C    C    . PRO PRO PRO B B 145 145 . 27.430 38.270 -6.696  1.00 11.63  1 .
.
ATOM 4349 O    O    . PRO PRO PRO B B 145 145 . 27.909 37.497 -5.797  1.00 12.51  1 .
.
ATOM 4350 N    N    . VAL VAL VAL B B 146 146 . 28.210 38.846 -7.610  1.00 12.22  1 .
.
ATOM 4351 CA   CA   . VAL VAL VAL B B 146 146 . 29.656 38.878 -7.387  1.00 11.83  1 .
.
ATOM 4352 CB   CB   . VAL VAL VAL B B 146 146 . 30.437 39.298 -8.694  1.00 12.98  1 .
.
ATOM 4353 CG1  CG1  . VAL VAL VAL B B 146 146 . 31.976 39.330 -8.411  1.00 15.96  1 .
.
ATOM 4354 CG2  CG2  . VAL VAL VAL B B 146 146 . 30.117 38.254 -9.730  1.00 13.98  1 .
.
ATOM 4355 C    C    . VAL VAL VAL B B 146 146 . 29.966 39.900 -6.268  1.00 12.13  1 .
.
ATOM 4356 O    O    . VAL VAL VAL B B 146 146 . 29.543 41.040 -6.326  1.00 14.28  1 .
.
ATOM 4357 N    N    . PRO PRO PRO B B 147 147 . 30.742 39.504 -5.255  1.00 11.64  1 .
.
ATOM 4358 CA   CA   . PRO PRO PRO B B 147 147 . 31.145 40.465 -4.218  1.00 11.12  1 .
.
ATOM 4359 CB   CB   . PRO PRO PRO B B 147 147 . 31.551 39.531 -3.062  1.00 10.98  1 .
.
ATOM 4360 CG   CG   . PRO PRO PRO B B 147 147 . 32.167 38.319 -3.759  1.00 11.03  1 .
.
ATOM 4361 CD   CD   . PRO PRO PRO B B 147 147 . 31.228 38.152 -4.980  1.00 11.18  1 .
.
ATOM 4362 C    C    . PRO PRO PRO B B 147 147 . 32.342 41.315 -4.691  1.00 11.72  1 .
.
ATOM 4363 O    O    . PRO PRO PRO B B 147 147 . 33.250 40.797 -5.376  1.00 13.65  1 .
.
ATOM 4364 N    N    . ALA ALA ALA B B 148 148 . 32.381 42.589 -4.353  1.00 12.38  1 .
.
ATOM 4365 CA   CA   . ALA ALA ALA B B 148 148 . 33.499 43.465 -4.696  1.00 9.97   1 .
.
ATOM 4366 CB   CB   . ALA ALA ALA B B 148 148 . 32.895 44.685 -5.397  1.00 11.68  1 .
.
ATOM 4367 C    C    . ALA ALA ALA B B 148 148 . 34.104 43.842 -3.329  1.00 11.40  1 .
.
ATOM 4368 O    O    . ALA ALA ALA B B 148 148 . 33.546 44.671 -2.565  1.00 13.06  1 .
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ATOM 4369 N    N    . PHE PHE PHE B B 149 149 . 35.284 43.354 -3.079  1.00 11.71  1 .
.
ATOM 4370 CA   CA   . PHE PHE PHE B B 149 149 . 35.952 43.539 -1.746  1.00 11.90  1 .
.
ATOM 4371 CB   CB   . PHE PHE PHE B B 149 149 . 36.740 42.303 -1.380  1.00 11.61  1 .
.
ATOM 4372 CG   CG   . PHE PHE PHE B B 149 149 . 35.936 41.035 -1.338  1.00 9.87   1 .
.
ATOM 4373 CD1  CD1  . PHE PHE PHE B B 149 149 . 35.147 40.725 -0.190  1.00 11.06  1 .
.
ATOM 4374 CE1  CE1  . PHE PHE PHE B B 149 149 . 34.395 39.554 -0.113  1.00 11.85  1 .
.
ATOM 4375 CZ   CZ   . PHE PHE PHE B B 149 149 . 34.514 38.530 -1.165  1.00 11.32  1 .
.
ATOM 4376 CE2  CE2  . PHE PHE PHE B B 149 149 . 35.306 38.846 -2.303  1.00 11.40  1 .
.
ATOM 4377 CD2  CD2  . PHE PHE PHE B B 149 149 . 36.045 40.026 -2.369  1.00 12.58  1 .
.
ATOM 4378 C    C    . PHE PHE PHE B B 149 149 . 36.936 44.653 -1.733  1.00 12.00  1 .
.
ATOM 4379 O    O    . PHE PHE PHE B B 149 149 . 37.944 44.622 -2.482  1.00 12.00  1 .
.
ATOM 4380 N    N    . ASN ASN ASN B B 150 150 . 36.714 45.642 -0.861  1.00 11.76  1 .
.
ATOM 4381 CA   CA   . ASN ASN ASN B B 150 150 . 37.618 46.746 -0.729  1.00 13.70  1 .
.
ATOM 4382 CB   CB   . ASN ASN ASN B B 150 150 . 36.911 47.933 0.061   1.00 17.26  1 .
.
ATOM 4383 CG   CG   . ASN ASN ASN B B 150 150 . 37.769 49.179 0.163   1.00 21.48  1 .
.
ATOM 4384 OD1  OD1  . ASN ASN ASN B B 150 150 . 38.789 49.323 -0.543  1.00 25.14  1 .
.
ATOM 4385 ND2  ND2  . ASN ASN ASN B B 150 150 . 37.294 50.173 0.975   1.00 24.60  1 .
.
ATOM 4386 C    C    . ASN ASN ASN B B 150 150 . 38.902 46.385 -0.071  1.00 15.82  1 .
.
ATOM 4387 O    O    . ASN ASN ASN B B 150 150 . 38.910 46.375 1.135   1.00 22.39  1 .
.
ATOM 4388 N    N    . VAL VAL VAL B B 151 151 . 40.004 46.275 -0.789  1.00 14.17  1 .
.
ATOM 4389 CA   CA   . VAL VAL VAL B B 151 151 . 41.282 45.838 -0.144  1.00 15.29  1 .
.
ATOM 4390 CB   CB   . VAL VAL VAL B B 151 151 . 41.842 44.544 -0.909  1.00 17.09  1 .
.
ATOM 4391 CG1  CG1  . VAL VAL VAL B B 151 151 . 40.797 43.405 -0.746  1.00 19.93  1 .
.
ATOM 4392 CG2  CG2  . VAL VAL VAL B B 151 151 . 42.109 44.813 -2.389  1.00 17.59  1 .
.
ATOM 4393 C    C    . VAL VAL VAL B B 151 151 . 42.426 46.826 0.112   1.00 16.56  1 .
.
ATOM 4394 O    O    . VAL VAL VAL B B 151 151 . 43.334 46.533 0.958   1.00 16.57  1 .
.
ATOM 4395 N    N    . ILE ILE ILE B B 152 152 . 42.463 47.929 -0.640  1.00 15.92  1 .
.
ATOM 4396 CA   CA   . ILE ILE ILE B B 152 152 . 43.406 49.040 -0.413  1.00 17.85  1 .
.
ATOM 4397 CB   CB   . ILE ILE ILE B B 152 152 . 44.481 49.119 -1.477  1.00 17.60  1 .
.
ATOM 4398 CG1  CG1  . ILE ILE ILE B B 152 152 . 45.333 47.833 -1.448  1.00 20.47  1 .
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ATOM 4399 CD   CD   . ILE ILE ILE B B 152 152 . 46.542 47.839 -2.206  1.00 22.68  1 .
.
ATOM 4400 CG2  CG2  . ILE ILE ILE B B 152 152 . 45.253 50.471 -1.357  1.00 17.20  1 .
.
ATOM 4401 C    C    . ILE ILE ILE B B 152 152 . 42.624 50.331 -0.392  1.00 20.07  1 .
.
ATOM 4402 O    O    . ILE ILE ILE B B 152 152 . 41.692 50.510 -1.194  1.00 19.28  1 .
.
ATOM 4403 N    N    . ASN ASN ASN B B 153 153 . 42.894 51.187 0.598   1.00 20.13  1 .
.
ATOM 4404 CA   CA   . ASN ASN ASN B B 153 153 . 42.179 52.486 0.640   1.00 22.94  1 .
.
ATOM 4405 CB   CB   . ASN ASN ASN B B 153 153 . 41.087 52.531 1.636   1.00 25.06  1 .
.
ATOM 4406 CG   CG   . ASN ASN ASN B B 153 153 . 41.145 51.444 2.519   1.00 32.31  1 .
.
ATOM 4407 OD1  OD1  . ASN ASN ASN B B 153 153 . 40.337 50.498 2.459   1.00 45.17  1 .
.
ATOM 4408 ND2  ND2  . ASN ASN ASN B B 153 153 . 42.202 51.451 3.324   1.00 35.22  1 .
.
ATOM 4409 C    C    . ASN ASN ASN B B 153 153 . 42.974 53.720 0.713   1.00 22.76  1 .
.
ATOM 4410 O    O    . ASN ASN ASN B B 153 153 . 44.131 53.703 1.114   1.00 22.20  1 .
.
ATOM 4411 N    N    . GLY GLY GLY B B 154 154 . 42.334 54.788 0.251   1.00 19.71  1 .
.
ATOM 4412 CA   CA   . GLY GLY GLY B B 154 154 . 42.947 56.072 0.197   1.00 20.23  1 .
.
ATOM 4413 C    C    . GLY GLY GLY B B 154 154 . 41.777 57.034 0.481   1.00 20.05  1 .
.
ATOM 4414 O    O    . GLY GLY GLY B B 154 154 . 40.811 56.674 1.122   1.00 19.89  1 .
.
ATOM 4415 N    N    . GLY GLY GLY B B 155 155 . 41.886 58.232 -0.014  1.00 21.40  1 .
.
ATOM 4416 CA   CA   . GLY GLY GLY B B 155 155 . 40.703 59.078 0.100   1.00 22.14  1 .
.
ATOM 4417 C    C    . GLY GLY GLY B B 155 155 . 40.783 59.996 1.264   1.00 22.20  1 .
.
ATOM 4418 O    O    . GLY GLY GLY B B 155 155 . 41.841 60.079 1.958   1.00 21.21  1 .
.
ATOM 4419 N    N    . SER SER SER B B 156 156 . 39.639 60.668 1.501   1.00 21.47  1 .
.
ATOM 4420 CA   CA   . SER SER SER B B 156 156 . 39.548 61.848 2.393   1.00 24.42  1 .
.
ATOM 4421 CB   CB   . SER SER SER B B 156 156 . 38.206 62.542 2.089   1.00 24.11  1 .
.
ATOM 4422 OG   OG   . SER SER SER B B 156 156 . 37.163 61.618 2.445   1.00 26.25  1 .
.
ATOM 4423 C    C    . SER SER SER B B 156 156 . 39.674 61.480 3.886   1.00 25.53  1 .
.
ATOM 4424 O    O    . SER SER SER B B 156 156 . 40.071 62.354 4.753   1.00 27.56  1 .
.
ATOM 4425 N    N    . HIS HIS HIS B B 157 157 . 39.419 60.203 4.219   1.00 23.69  1 .
.
ATOM 4426 CA   CA   . HIS HIS HIS B B 157 157 . 39.488 59.779 5.621   1.00 25.51  1 .
.
ATOM 4427 CB   CB   . HIS HIS HIS B B 157 157 . 38.091 59.234 6.021   1.00 24.63  1 .
.
ATOM 4428 CG   CG   . HIS HIS HIS B B 157 157 . 37.029 60.300 5.925   1.00 27.52  1 .
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ATOM 4429 ND1  ND1  . HIS HIS HIS B B 157 157 . 36.332 60.548 4.751   1.00 28.94  1 .
.
ATOM 4430 CE1  CE1  . HIS HIS HIS B B 157 157 . 35.487 61.557 4.945   1.00 30.92  1 .
.
ATOM 4431 NE2  NE2  . HIS HIS HIS B B 157 157 . 35.602 61.962 6.202   1.00 31.25  1 .
.
ATOM 4432 CD2  CD2  . HIS HIS HIS B B 157 157 . 36.591 61.214 6.828   1.00 29.56  1 .
.
ATOM 4433 C    C    . HIS HIS HIS B B 157 157 . 40.623 58.795 5.927   1.00 26.74  1 .
.
ATOM 4434 O    O    . HIS HIS HIS B B 157 157 . 40.596 58.130 6.993   1.00 30.33  1 .
.
ATOM 4435 N    N    . ALA ALA ALA B B 158 158 . 41.622 58.676 5.043   1.00 26.55  1 .
.
ATOM 4436 CA   CA   . ALA ALA ALA B B 158 158 . 42.794 57.803 5.219   1.00 21.33  1 .
.
ATOM 4437 CB   CB   . ALA ALA ALA B B 158 158 . 42.940 56.912 3.988   1.00 24.96  1 .
.
ATOM 4438 C    C    . ALA ALA ALA B B 158 158 . 44.051 58.734 5.286   1.00 24.08  1 .
.
ATOM 4439 O    O    . ALA ALA ALA B B 158 158 . 44.117 59.841 4.657   1.00 25.01  1 .
.
ATOM 4440 N    N    . GLY GLY GLY B B 159 159 . 45.055 58.263 6.004   1.00 22.23  1 .
.
ATOM 4441 CA   CA   . GLY GLY GLY B B 159 159 . 46.248 59.065 6.353   1.00 23.33  1 .
.
ATOM 4442 C    C    . GLY GLY GLY B B 159 159 . 47.418 59.012 5.384   1.00 24.32  1 .
.
ATOM 4443 O    O    . GLY GLY GLY B B 159 159 . 48.484 59.695 5.657   1.00 25.92  1 .
.
ATOM 4444 N    N    . ASN ASN ASN B B 160 160 . 47.240 58.214 4.280   1.00 21.84  1 .
.
ATOM 4445 CA   CA   . ASN ASN ASN B B 160 160 . 48.212 58.196 3.183   1.00 21.84  1 .
.
ATOM 4446 CB   CB   . ASN ASN ASN B B 160 160 . 48.259 56.777 2.521   1.00 18.56  1 .
.
ATOM 4447 CG   CG   . ASN ASN ASN B B 160 160 . 46.886 56.281 2.035   1.00 21.50  1 .
.
ATOM 4448 OD1  OD1  . ASN ASN ASN B B 160 160 . 46.757 55.120 1.629   1.00 23.37  1 .
.
ATOM 4449 ND2  ND2  . ASN ASN ASN B B 160 160 . 45.887 57.120 2.102   1.00 18.92  1 .
.
ATOM 4450 C    C    . ASN ASN ASN B B 160 160 . 47.964 59.312 2.218   1.00 20.10  1 .
.
ATOM 4451 O    O    . ASN ASN ASN B B 160 160 . 47.020 60.088 2.422   1.00 22.94  1 .
.
ATOM 4452 N    N    . LYS LYS LYS B B 161 161 . 48.865 59.515 1.239   1.00 20.99  1 .
.
ATOM 4453 CA   CA   . LYS LYS LYS B B 161 161 . 48.703 60.566 0.316   1.00 21.81  1 .
.
ATOM 4454 CB   CB   . LYS LYS LYS B B 161 161 . 50.064 61.074 -0.195  1.00 22.55  1 .
.
ATOM 4455 CG   CG   . LYS LYS LYS B B 161 161 . 50.922 61.739 0.910   1.00 25.79  1 .
.
ATOM 4456 CD   CD   . LYS LYS LYS B B 161 161 . 50.045 62.656 1.810   1.00 35.97  1 .
.
ATOM 4457 CE   CE   . LYS LYS LYS B B 161 161 . 50.755 63.413 2.996   1.00 36.76  1 .
.
ATOM 4458 NZ   NZ   . LYS LYS LYS B B 161 161 . 51.524 64.582 2.492   1.00 38.15  1 .
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ATOM 4459 C    C    . LYS LYS LYS B B 161 161 . 47.726 60.109 -0.825  1.00 21.91  1 .
.
ATOM 4460 O    O    . LYS LYS LYS B B 161 161 . 47.159 60.957 -1.516  1.00 24.68  1 .
.
ATOM 4461 N    N    . LEU LEU LEU B B 162 162 . 47.557 58.779 -0.970  1.00 22.44  1 .
.
ATOM 4462 CA   CA   . LEU LEU LEU B B 162 162 . 46.698 58.125 -2.004  1.00 19.92  1 .
.
ATOM 4463 CB   CB   . LEU LEU LEU B B 162 162 . 46.454 56.665 -1.578  1.00 21.29  1 .
.
ATOM 4464 CG   CG   . LEU LEU LEU B B 162 162 . 45.837 55.670 -2.637  1.00 17.79  1 .
.
ATOM 4465 CD1  CD1  . LEU LEU LEU B B 162 162 . 46.724 55.558 -3.884  1.00 23.92  1 .
.
ATOM 4466 CD2  CD2  . LEU LEU LEU B B 162 162 . 45.600 54.306 -2.072  1.00 21.25  1 .
.
ATOM 4467 C    C    . LEU LEU LEU B B 162 162 . 45.287 58.798 -2.080  1.00 19.95  1 .
.
ATOM 4468 O    O    . LEU LEU LEU B B 162 162 . 44.500 58.713 -1.099  1.00 19.87  1 .
.
ATOM 4469 N    N    . ALA ALA ALA B B 163 163 . 45.017 59.442 -3.237  1.00 19.81  1 .
.
ATOM 4470 CA   CA   . ALA ALA ALA B B 163 163 . 43.778 60.306 -3.392  1.00 18.45  1 .
.
ATOM 4471 CB   CB   . ALA ALA ALA B B 163 163 . 43.958 61.289 -4.538  1.00 20.35  1 .
.
ATOM 4472 C    C    . ALA ALA ALA B B 163 163 . 42.519 59.422 -3.606  1.00 17.70  1 .
.
ATOM 4473 O    O    . ALA ALA ALA B B 163 163 . 41.413 59.663 -3.060  1.00 20.15  1 .
.
ATOM 4474 N    N    . MET MET MET B B 164 164 . 42.670 58.316 -4.333  1.00 17.48  1 .
.
ATOM 4475 CA   CA   . MET MET MET B B 164 164 . 41.454 57.516 -4.682  1.00 16.33  1 .
.
ATOM 4476 CB   CB   . MET MET MET B B 164 164 . 41.668 56.773 -6.002  1.00 16.99  1 .
.
ATOM 4477 CG   CG   . MET MET MET B B 164 164 . 42.050 57.805 -7.088  1.00 16.00  1 .
.
ATOM 4478 SD   SD   . MET MET MET B B 164 164 . 42.305 56.951 -8.624  1.00 17.88  1 .
.
ATOM 4479 CE   CE   . MET MET MET B B 164 164 . 42.767 58.328 -9.659  1.00 18.41  1 .
.
ATOM 4480 C    C    . MET MET MET B B 164 164 . 40.981 56.634 -3.532  1.00 17.66  1 .
.
ATOM 4481 O    O    . MET MET MET B B 164 164 . 41.793 56.113 -2.755  1.00 18.12  1 .
.
ATOM 4482 N    N    . GLN GLN GLN B B 165 165 . 39.678 56.529 -3.357  1.00 15.27  1 .
.
ATOM 4483 CA   CA   . GLN GLN GLN B B 165 165 . 39.128 55.944 -2.127  1.00 16.63  1 .
.
ATOM 4484 CB   CB   . GLN GLN GLN B B 165 165 . 37.665 56.362 -1.944  1.00 17.70  1 .
.
ATOM 4485 CG   CG   . GLN GLN GLN B B 165 165 . 37.105 56.035 -0.516  1.00 15.86  1 .
.
ATOM 4486 CD   CD   . GLN GLN GLN B B 165 165 . 35.635 56.547 -0.409  1.00 17.12  1 .
.
ATOM 4487 OE1  OE1  . GLN GLN GLN B B 165 165 . 35.434 57.695 -0.117  1.00 18.83  1 .
.
ATOM 4488 NE2  NE2  . GLN GLN GLN B B 165 165 . 34.663 55.718 -0.715  1.00 19.17  1 .
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ATOM 4489 C    C    . GLN GLN GLN B B 165 165 . 39.292 54.435 -1.978  1.00 16.46  1 .
.
ATOM 4490 O    O    . GLN GLN GLN B B 165 165 . 39.686 53.953 -0.897  1.00 18.28  1 .
.
ATOM 4491 N    N    . GLU GLU GLU B B 166 166 . 38.911 53.655 -2.991  1.00 15.25  1 .
.
ATOM 4492 CA   CA   . GLU GLU GLU B B 166 166 . 38.843 52.215 -2.753  1.00 15.03  1 .
.
ATOM 4493 CB   CB   . GLU GLU GLU B B 166 166 . 37.382 51.745 -2.619  1.00 16.76  1 .
.
ATOM 4494 CG   CG   . GLU GLU GLU B B 166 166 . 36.575 52.486 -1.585  1.00 20.88  1 .
.
ATOM 4495 CD   CD   . GLU GLU GLU B B 166 166 . 35.053 52.201 -1.601  1.00 21.41  1 .
.
ATOM 4496 OE1  OE1  . GLU GLU GLU B B 166 166 . 34.558 51.266 -2.280  1.00 19.61  1 .
.
ATOM 4497 OE2  OE2  . GLU GLU GLU B B 166 166 . 34.320 52.938 -0.845  1.00 27.79  1 .
.
ATOM 4498 C    C    . GLU GLU GLU B B 166 166 . 39.346 51.477 -3.991  1.00 13.94  1 .
.
ATOM 4499 O    O    . GLU GLU GLU B B 166 166 . 39.012 51.831 -5.127  1.00 13.54  1 .
.
ATOM 4500 N    N    . PHE PHE PHE B B 167 167 . 40.131 50.445 -3.729  1.00 12.20  1 .
.
ATOM 4501 CA   CA   . PHE PHE PHE B B 167 167 . 40.570 49.463 -4.772  1.00 11.90  1 .
.
ATOM 4502 CB   CB   . PHE PHE PHE B B 167 167 . 42.101 49.468 -4.841  1.00 13.00  1 .
.
ATOM 4503 CG   CG   . PHE PHE PHE B B 167 167 . 42.642 50.796 -5.266  1.00 14.52  1 .
.
ATOM 4504 CD1  CD1  . PHE PHE PHE B B 167 167 . 42.806 51.869 -4.322  1.00 15.71  1 .
.
ATOM 4505 CE1  CE1  . PHE PHE PHE B B 167 167 . 43.272 53.153 -4.758  1.00 15.50  1 .
.
ATOM 4506 CZ   CZ   . PHE PHE PHE B B 167 167 . 43.585 53.357 -6.112  1.00 16.66  1 .
.
ATOM 4507 CE2  CE2  . PHE PHE PHE B B 167 167 . 43.386 52.288 -7.041  1.00 15.39  1 .
.
ATOM 4508 CD2  CD2  . PHE PHE PHE B B 167 167 . 42.945 50.988 -6.567  1.00 16.13  1 .
.
ATOM 4509 C    C    . PHE PHE PHE B B 167 167 . 40.015 48.121 -4.387  1.00 12.27  1 .
.
ATOM 4510 O    O    . PHE PHE PHE B B 167 167 . 40.351 47.641 -3.282  1.00 15.20  1 .
.
ATOM 4511 N    N    . MET MET MET B B 168 168 . 39.142 47.511 -5.224  1.00 12.31  1 .
.
ATOM 4512 CA   CA   . MET MET MET B B 168 168 . 38.351 46.332 -4.887  1.00 12.29  1 .
.
ATOM 4513 CB   CB   . MET MET MET B B 168 168 . 36.846 46.630 -5.178  1.00 14.28  1 .
.
ATOM 4514 CG   CG   . MET MET MET B B 168 168 . 36.308 47.715 -4.113  1.00 13.69  1 .
.
ATOM 4515 SD   SD   . MET MET MET B B 168 168 . 34.579 48.089 -4.544  1.00 21.08  1 .
.
ATOM 4516 CE   CE   . MET MET MET B B 168 168 . 34.845 49.557 -5.601  1.00 18.74  1 .
.
ATOM 4517 C    C    . MET MET MET B B 168 168 . 38.728 45.177 -5.773  1.00 12.84  1 .
.
ATOM 4518 O    O    . MET MET MET B B 168 168 . 39.136 45.373 -6.920  1.00 12.80  1 .
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ATOM 4519 N    N    . ILE ILE ILE B B 169 169 . 38.549 43.957 -5.265  1.00 12.02  1 .
.
ATOM 4520 CA   CA   . ILE ILE ILE B B 169 169 . 38.721 42.788 -6.140  1.00 14.31  1 .
.
ATOM 4521 CB   CB   . ILE ILE ILE B B 169 169 . 39.760 41.798 -5.577  1.00 12.83  1 .
.
ATOM 4522 CG1  CG1  . ILE ILE ILE B B 169 169 . 39.441 41.411 -4.116  1.00 12.34  1 .
.
ATOM 4523 CD   CD   . ILE ILE ILE B B 169 169 . 40.333 40.395 -3.595  1.00 14.85  1 .
.
ATOM 4524 CG2  CG2  . ILE ILE ILE B B 169 169 . 41.149 42.400 -5.625  1.00 14.23  1 .
.
ATOM 4525 C    C    . ILE ILE ILE B B 169 169 . 37.374 42.116 -6.287  1.00 13.73  1 .
.
ATOM 4526 O    O    . ILE ILE ILE B B 169 169 . 36.573 42.020 -5.322  1.00 13.12  1 .
.
ATOM 4527 N    N    . LEU LEU LEU B B 170 170 . 37.098 41.599 -7.495  1.00 13.93  1 .
.
ATOM 4528 CA   CA   . LEU LEU LEU B B 170 170 . 35.816 40.951 -7.813  1.00 11.51  1 .
.
ATOM 4529 CB   CB   . LEU LEU LEU B B 170 170 . 35.143 41.780 -8.949  1.00 13.27  1 .
.
ATOM 4530 CG   CG   . LEU LEU LEU B B 170 170 . 34.420 43.091 -8.544  1.00 12.08  1 .
.
ATOM 4531 CD1  CD1  . LEU LEU LEU B B 170 170 . 35.454 44.173 -8.154  1.00 15.10  1 .
.
ATOM 4532 CD2  CD2  . LEU LEU LEU B B 170 170 . 33.451 43.556 -9.680  1.00 15.97  1 .
.
ATOM 4533 C    C    . LEU LEU LEU B B 170 170 . 36.069 39.560 -8.363  1.00 13.75  1 .
.
ATOM 4534 O    O    . LEU LEU LEU B B 170 170 . 36.647 39.422 -9.476  1.00 14.30  1 .
.
ATOM 4535 N    N    . PRO PRO PRO B B 171 171 . 35.697 38.520 -7.609  1.00 12.81  1 .
.
ATOM 4536 CA   CA   . PRO PRO PRO B B 171 171 . 35.977 37.133 -8.110  1.00 12.46  1 .
.
ATOM 4537 CB   CB   . PRO PRO PRO B B 171 171 . 36.048 36.251 -6.839  1.00 13.36  1 .
.
ATOM 4538 CG   CG   . PRO PRO PRO B B 171 171 . 36.099 37.213 -5.641  1.00 17.04  1 .
.
ATOM 4539 CD   CD   . PRO PRO PRO B B 171 171 . 35.333 38.537 -6.166  1.00 12.34  1 .
.
ATOM 4540 C    C    . PRO PRO PRO B B 171 171 . 34.924 36.662 -9.121  1.00 14.44  1 .
.
ATOM 4541 O    O    . PRO PRO PRO B B 171 171 . 34.088 35.796 -8.876  1.00 14.01  1 .
.
ATOM 4542 N    N    . VAL VAL VAL B B 172 172 . 34.990 37.269 -10.321 1.00 14.71  1 .
.
ATOM 4543 CA   CA   . VAL VAL VAL B B 172 172 . 33.973 36.977 -11.324 1.00 15.65  1 .
.
ATOM 4544 CB   CB   . VAL VAL VAL B B 172 172 . 34.152 37.944 -12.540 1.00 16.23  1 .
.
ATOM 4545 CG1  CG1  . VAL VAL VAL B B 172 172 . 33.717 39.413 -12.151 1.00 15.91  1 .
.
ATOM 4546 CG2  CG2  . VAL VAL VAL B B 172 172 . 35.609 37.902 -13.061 1.00 17.20  1 .
.
ATOM 4547 C    C    . VAL VAL VAL B B 172 172 . 34.139 35.541 -11.840 1.00 14.89  1 .
.
ATOM 4548 O    O    . VAL VAL VAL B B 172 172 . 33.163 35.009 -12.335 1.00 15.30  1 .
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ATOM 4549 N    N    . GLY GLY GLY B B 173 173 . 35.325 34.947 -11.687 1.00 15.41  1 .
.
ATOM 4550 CA   CA   . GLY GLY GLY B B 173 173 . 35.579 33.559 -12.231 1.00 16.19  1 .
.
ATOM 4551 C    C    . GLY GLY GLY B B 173 173 . 35.285 32.494 -11.199 1.00 17.47  1 .
.
ATOM 4552 O    O    . GLY GLY GLY B B 173 173 . 35.547 31.273 -11.445 1.00 18.66  1 .
.
ATOM 4553 N    N    . ALA ALA ALA B B 174 174 . 34.753 32.897 -10.029 1.00 15.63  1 .
.
ATOM 4554 CA   CA   . ALA ALA ALA B B 174 174 . 34.425 31.866 -9.010  1.00 15.71  1 .
.
ATOM 4555 CB   CB   . ALA ALA ALA B B 174 174 . 34.002 32.615 -7.694  1.00 14.61  1 .
.
ATOM 4556 C    C    . ALA ALA ALA B B 174 174 . 33.313 30.894 -9.424  1.00 16.10  1 .
.
ATOM 4557 O    O    . ALA ALA ALA B B 174 174 . 32.451 31.209 -10.214 1.00 17.12  1 .
.
ATOM 4558 N    N    . GLU GLU GLU B B 175 175 . 33.282 29.703 -8.808  1.00 16.80  1 .
.
ATOM 4559 CA   CA   . GLU GLU GLU B B 175 175 . 32.227 28.756 -9.115  1.00 18.62  1 .
.
ATOM 4560 CB   CB   . GLU GLU GLU B B 175 175 . 32.696 27.305 -8.726  1.00 18.85  1 .
.
ATOM 4561 CG   CG   . GLU GLU GLU B B 175 175 . 34.043 27.001 -9.383  1.00 24.72  1 .
.
ATOM 4562 CD   CD   . GLU GLU GLU B B 175 175 . 33.888 26.624 -10.845 1.00 33.14  1 .
.
ATOM 4563 C    C    . GLU GLU GLU B B 175 175 . 30.883 29.014 -8.496  1.00 17.67  1 .
.
ATOM 4564 O    O    . GLU GLU GLU B B 175 175 . 29.860 28.475 -8.968  1.00 20.36  1 .
.
ATOM 4565 N    N    . SER SER SER B B 176 176 . 30.866 29.821 -7.412  1.00 14.57  1 .
.
ATOM 4566 CA   CA   . SER SER SER B B 176 176 . 29.633 29.953 -6.621  1.00 13.84  1 .
.
ATOM 4567 CB   CB   . SER SER SER B B 176 176 . 29.412 28.721 -5.697  1.00 13.24  1 .
.
ATOM 4568 OG   OG   . SER SER SER B B 176 176 . 30.491 28.560 -4.832  1.00 14.10  1 .
.
ATOM 4569 C    C    . SER SER SER B B 176 176 . 29.924 31.213 -5.760  1.00 12.99  1 .
.
ATOM 4570 O    O    . SER SER SER B B 176 176 . 31.078 31.681 -5.730  1.00 12.65  1 .
.
ATOM 4571 N    N    . PHE PHE PHE B B 177 177 . 28.915 31.652 -4.992  1.00 13.22  1 .
.
ATOM 4572 CA   CA   . PHE PHE PHE B B 177 177 . 29.147 32.723 -4.021  1.00 12.08  1 .
.
ATOM 4573 CB   CB   . PHE PHE PHE B B 177 177 . 27.831 33.238 -3.399  1.00 10.59  1 .
.
ATOM 4574 CG   CG   . PHE PHE PHE B B 177 177 . 28.080 34.481 -2.642  1.00 9.80   1 .
.
ATOM 4575 CD1  CD1  . PHE PHE PHE B B 177 177 . 28.239 35.683 -3.307  1.00 12.20  1 .
.
ATOM 4576 CE1  CE1  . PHE PHE PHE B B 177 177 . 28.628 36.832 -2.621  1.00 12.79  1 .
.
ATOM 4577 CZ   CZ   . PHE PHE PHE B B 177 177 . 28.989 36.764 -1.308  1.00 14.11  1 .
.
ATOM 4578 CE2  CE2  . PHE PHE PHE B B 177 177 . 28.907 35.532 -0.605  1.00 10.31  1 .
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ATOM 4579 CD2  CD2  . PHE PHE PHE B B 177 177 . 28.402 34.414 -1.243  1.00 10.81  1 .
.
ATOM 4580 C    C    . PHE PHE PHE B B 177 177 . 30.087 32.244 -2.920  1.00 12.74  1 .
.
ATOM 4581 O    O    . PHE PHE PHE B B 177 177 . 31.059 32.932 -2.579  1.00 11.25  1 .
.
ATOM 4582 N    N    . ARG ARG ARG B B 178 178 . 29.851 31.034 -2.399  1.00 13.12  1 .
.
ATOM 4583 CA   CA   . ARG ARG ARG B B 178 178 . 30.827 30.502 -1.399  1.00 13.66  1 .
.
ATOM 4584 CB   CB   . ARG ARG ARG B B 178 178 . 30.273 29.195 -0.851  1.00 13.18  1 .
.
ATOM 4585 CG   CG   . ARG ARG ARG B B 178 178 . 28.974 29.571 -0.047  1.00 19.68  1 .
.
ATOM 4586 CD   CD   . ARG ARG ARG B B 178 178 . 27.956 28.519 0.349   1.00 26.17  1 .
.
ATOM 4587 NE   NE   . ARG ARG ARG B B 178 178 . 27.358 27.907 -0.806  1.00 27.41  1 .
.
ATOM 4588 CZ   CZ   . ARG ARG ARG B B 178 178 . 26.619 26.789 -0.784  1.00 28.25  1 .
.
ATOM 4589 NH1  NH1  . ARG ARG ARG B B 178 178 . 26.096 26.338 -1.935  1.00 31.16  1 .
.
ATOM 4590 NH2  NH2  . ARG ARG ARG B B 178 178 . 26.394 26.162 0.364   1.00 25.44  1 .
.
ATOM 4591 C    C    . ARG ARG ARG B B 178 178 . 32.240 30.374 -1.885  1.00 10.77  1 .
.
ATOM 4592 O    O    . ARG ARG ARG B B 178 178 . 33.192 30.732 -1.175  1.00 11.62  1 .
.
ATOM 4593 N    N    . ASP ASP ASP B B 179 179 . 32.423 30.032 -3.185  1.00 10.98  1 .
.
ATOM 4594 CA   CA   . ASP ASP ASP B B 179 179 . 33.733 30.005 -3.712  1.00 10.98  1 .
.
ATOM 4595 CB   CB   . ASP ASP ASP B B 179 179 . 33.689 29.308 -5.103  1.00 12.21  1 .
.
ATOM 4596 CG   CG   . ASP ASP ASP B B 179 179 . 35.081 28.977 -5.632  1.00 14.14  1 .
.
ATOM 4597 OD1  OD1  . ASP ASP ASP B B 179 179 . 35.377 29.237 -6.832  1.00 20.97  1 .
.
ATOM 4598 OD2  OD2  . ASP ASP ASP B B 179 179 . 35.931 28.412 -4.879  1.00 21.25  1 .
.
ATOM 4599 C    C    . ASP ASP ASP B B 179 179 . 34.326 31.434 -3.912  1.00 11.91  1 .
.
ATOM 4600 O    O    . ASP ASP ASP B B 179 179 . 35.526 31.666 -3.755  1.00 12.42  1 .
.
ATOM 4601 N    N    . ALA ALA ALA B B 180 180 . 33.455 32.384 -4.285  1.00 12.26  1 .
.
ATOM 4602 CA   CA   . ALA ALA ALA B B 180 180 . 33.902 33.787 -4.330  1.00 11.42  1 .
.
ATOM 4603 CB   CB   . ALA ALA ALA B B 180 180 . 32.747 34.735 -4.849  1.00 10.81  1 .
.
ATOM 4604 C    C    . ALA ALA ALA B B 180 180 . 34.454 34.301 -3.023  1.00 11.75  1 .
.
ATOM 4605 O    O    . ALA ALA ALA B B 180 180 . 35.459 35.026 -2.988  1.00 12.17  1 .
.
ATOM 4606 N    N    . MET MET MET B B 181 181 . 33.795 33.860 -1.933  1.00 11.49  1 .
.
ATOM 4607 CA   CA   . MET MET MET B B 181 181 . 34.328 34.221 -0.604  1.00 11.69  1 .
.
ATOM 4608 CB   CB   . MET MET MET B B 181 181 . 33.380 33.800 0.494   1.00 11.92  1 .
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ATOM 4609 CG   CG   . MET MET MET B B 181 181 . 32.049 34.501 0.469   1.00 11.69  1 .
.
ATOM 4610 SD   SD   . MET MET MET B B 181 181 . 32.219 36.336 0.512   1.00 14.12  1 .
.
ATOM 4611 CE   CE   . MET MET MET B B 181 181 . 33.314 36.541 1.987   1.00 13.38  1 .
.
ATOM 4612 C    C    . MET MET MET B B 181 181 . 35.710 33.657 -0.337  1.00 12.06  1 .
.
ATOM 4613 O    O    . MET MET MET B B 181 181 . 36.561 34.324 0.226   1.00 13.19  1 .
.
ATOM 4614 N    N    . ARG ARG ARG B B 182 182 . 35.933 32.396 -0.750  1.00 11.42  1 .
.
ATOM 4615 CA   CA   . ARG ARG ARG B B 182 182 . 37.244 31.804 -0.578  1.00 12.00  1 .
.
ATOM 4616 CB   CB   . ARG ARG ARG B B 182 182 . 37.185 30.315 -0.997  1.00 13.07  1 .
.
ATOM 4617 CG   CG   . ARG ARG ARG B B 182 182 . 38.578 29.625 -0.951  1.00 13.64  1 .
.
ATOM 4618 CD   CD   . ARG ARG ARG B B 182 182 . 38.561 28.143 -1.653  1.00 19.50  1 .
.
ATOM 4619 NE   NE   . ARG ARG ARG B B 182 182 . 40.006 27.763 -1.945  1.00 28.47  1 .
.
ATOM 4620 CZ   CZ   . ARG ARG ARG B B 182 182 . 40.428 26.551 -2.380  1.00 30.92  1 .
.
ATOM 4621 NH1  NH1  . ARG ARG ARG B B 182 182 . 41.775 26.253 -2.569  1.00 30.28  1 .
.
ATOM 4622 NH2  NH2  . ARG ARG ARG B B 182 182 . 39.501 25.601 -2.668  1.00 32.70  1 .
.
ATOM 4623 C    C    . ARG ARG ARG B B 182 182 . 38.309 32.565 -1.420  1.00 11.38  1 .
.
ATOM 4624 O    O    . ARG ARG ARG B B 182 182 . 39.411 32.848 -0.918  1.00 12.14  1 .
.
ATOM 4625 N    N    . LEU LEU LEU B B 183 183 . 37.978 32.858 -2.701  1.00 10.82  1 .
.
ATOM 4626 CA   CA   . LEU LEU LEU B B 183 183 . 38.941 33.582 -3.559  1.00 11.75  1 .
.
ATOM 4627 CB   CB   . LEU LEU LEU B B 183 183 . 38.353 33.729 -4.936  1.00 12.68  1 .
.
ATOM 4628 CG   CG   . LEU LEU LEU B B 183 183 . 38.851 32.645 -5.918  1.00 15.29  1 .
.
ATOM 4629 CD1  CD1  . LEU LEU LEU B B 183 183 . 38.476 31.266 -5.359  1.00 16.72  1 .
.
ATOM 4630 CD2  CD2  . LEU LEU LEU B B 183 183 . 38.081 32.881 -7.228  1.00 18.50  1 .
.
ATOM 4631 C    C    . LEU LEU LEU B B 183 183 . 39.256 34.952 -2.929  1.00 12.09  1 .
.
ATOM 4632 O    O    . LEU LEU LEU B B 183 183 . 40.412 35.348 -2.844  1.00 12.98  1 .
.
ATOM 4633 N    N    . GLY GLY GLY B B 184 184 . 38.204 35.657 -2.421  1.00 12.69  1 .
.
ATOM 4634 CA   CA   . GLY GLY GLY B B 184 184 . 38.389 37.002 -1.892  1.00 14.03  1 .
.
ATOM 4635 C    C    . GLY GLY GLY B B 184 184 . 39.278 36.933 -0.631  1.00 12.70  1 .
.
ATOM 4636 O    O    . GLY GLY GLY B B 184 184 . 40.208 37.730 -0.464  1.00 12.97  1 .
.
ATOM 4637 N    N    . ALA ALA ALA B B 185 185 . 38.988 35.987 0.268   1.00 11.11  1 .
.
ATOM 4638 CA   CA   . ALA ALA ALA B B 185 185 . 39.751 35.854 1.484   1.00 12.89  1 .
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ATOM 4639 CB   CB   . ALA ALA ALA B B 185 185 . 39.041 34.871 2.461   1.00 12.01  1 .
.
ATOM 4640 C    C    . ALA ALA ALA B B 185 185 . 41.209 35.454 1.204   1.00 11.48  1 .
.
ATOM 4641 O    O    . ALA ALA ALA B B 185 185 . 42.118 36.054 1.747   1.00 12.25  1 .
.
ATOM 4642 N    N    . GLU GLU GLU B B 186 186 . 41.428 34.474 0.307   1.00 12.22  1 .
.
ATOM 4643 CA   CA   . GLU GLU GLU B B 186 186 . 42.792 34.093 0.007   1.00 12.81  1 .
.
ATOM 4644 CB   CB   . GLU GLU GLU B B 186 186 . 42.785 32.870 -0.971  1.00 12.02  1 .
.
ATOM 4645 CG   CG   . GLU GLU GLU B B 186 186 . 42.380 31.620 -0.246  1.00 13.30  1 .
.
ATOM 4646 CD   CD   . GLU GLU GLU B B 186 186 . 42.330 30.405 -1.128  1.00 17.04  1 .
.
ATOM 4647 OE1  OE1  . GLU GLU GLU B B 186 186 . 42.816 30.500 -2.283  1.00 20.76  1 .
.
ATOM 4648 OE2  OE2  . GLU GLU GLU B B 186 186 . 41.820 29.357 -0.683  1.00 18.05  1 .
.
ATOM 4649 C    C    . GLU GLU GLU B B 186 186 . 43.621 35.236 -0.593  1.00 12.75  1 .
.
ATOM 4650 O    O    . GLU GLU GLU B B 186 186 . 44.801 35.411 -0.243  1.00 13.63  1 .
.
ATOM 4651 N    N    . VAL VAL VAL B B 187 187 . 43.033 35.993 -1.538  1.00 13.48  1 .
.
ATOM 4652 CA   CA   . VAL VAL VAL B B 187 187 . 43.760 37.116 -2.109  1.00 12.86  1 .
.
ATOM 4653 CB   CB   . VAL VAL VAL B B 187 187 . 43.011 37.738 -3.313  1.00 12.01  1 .
.
ATOM 4654 CG1  CG1  . VAL VAL VAL B B 187 187 . 43.697 39.049 -3.775  1.00 13.50  1 .
.
ATOM 4655 CG2  CG2  . VAL VAL VAL B B 187 187 . 42.919 36.681 -4.504  1.00 14.76  1 .
.
ATOM 4656 C    C    . VAL VAL VAL B B 187 187 . 43.996 38.208 -1.021  1.00 11.98  1 .
.
ATOM 4657 O    O    . VAL VAL VAL B B 187 187 . 45.047 38.761 -0.973  1.00 12.16  1 .
.
ATOM 4658 N    N    . TYR TYR TYR B B 188 188 . 43.012 38.460 -0.134  1.00 12.22  1 .
.
ATOM 4659 CA   CA   . TYR TYR TYR B B 188 188 . 43.190 39.481 0.901   1.00 11.36  1 .
.
ATOM 4660 CB   CB   . TYR TYR TYR B B 188 188 . 41.889 39.521 1.736   1.00 11.34  1 .
.
ATOM 4661 CG   CG   . TYR TYR TYR B B 188 188 . 41.923 40.474 2.937   1.00 11.08  1 .
.
ATOM 4662 CD1  CD1  . TYR TYR TYR B B 188 188 . 41.732 41.842 2.793   1.00 9.72   1 .
.
ATOM 4663 CE1  CE1  . TYR TYR TYR B B 188 188 . 41.808 42.689 3.893   1.00 11.73  1 .
.
ATOM 4664 CZ   CZ   . TYR TYR TYR B B 188 188 . 42.084 42.132 5.147   1.00 12.06  1 .
.
ATOM 4665 OH   OH   . TYR TYR TYR B B 188 188 . 42.184 42.986 6.211   1.00 12.84  1 .
.
ATOM 4666 CE2  CE2  . TYR TYR TYR B B 188 188 . 42.270 40.800 5.304   1.00 14.40  1 .
.
ATOM 4667 CD2  CD2  . TYR TYR TYR B B 188 188 . 42.196 39.983 4.169   1.00 13.48  1 .
.
ATOM 4668 C    C    . TYR TYR TYR B B 188 188 . 44.397 39.070 1.809   1.00 11.95  1 .
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ATOM 4669 O    O    . TYR TYR TYR B B 188 188 . 45.266 39.880 2.121   1.00 11.28  1 .
.
ATOM 4670 N    N    . HIS HIS HIS B B 189 189 . 44.401 37.816 2.266   1.00 12.17  1 .
.
ATOM 4671 CA   CA   . HIS HIS HIS B B 189 189 . 45.534 37.340 3.127   1.00 14.93  1 .
.
ATOM 4672 CB   CB   . HIS HIS HIS B B 189 189 . 45.239 35.921 3.586   1.00 14.76  1 .
.
ATOM 4673 CG   CG   . HIS HIS HIS B B 189 189 . 44.039 35.830 4.489   1.00 17.81  1 .
.
ATOM 4674 ND1  ND1  . HIS HIS HIS B B 189 189 . 43.017 34.907 4.349   1.00 23.75  1 .
.
ATOM 4675 CE1  CE1  . HIS HIS HIS B B 189 189 . 42.108 35.131 5.297   1.00 23.86  1 .
.
ATOM 4676 NE2  NE2  . HIS HIS HIS B B 189 189 . 42.482 36.205 5.985   1.00 25.52  1 .
.
ATOM 4677 CD2  CD2  . HIS HIS HIS B B 189 189 . 43.678 36.644 5.494   1.00 22.31  1 .
.
ATOM 4678 C    C    . HIS HIS HIS B B 189 189 . 46.860 37.413 2.352   1.00 13.96  1 .
.
ATOM 4679 O    O    . HIS HIS HIS B B 189 189 . 47.910 37.783 2.892   1.00 15.56  1 .
.
ATOM 4680 N    N    . THR THR THR B B 190 190 . 46.825 37.085 1.062   1.00 12.87  1 .
.
ATOM 4681 CA   CA   . THR THR THR B B 190 190 . 48.052 37.191 0.230   1.00 13.41  1 .
.
ATOM 4682 CB   CB   . THR THR THR B B 190 190 . 47.777 36.655 -1.167  1.00 12.05  1 .
.
ATOM 4683 OG1  OG1  . THR THR THR B B 190 190 . 47.410 35.295 -1.040  1.00 15.83  1 .
.
ATOM 4684 CG2  CG2  . THR THR THR B B 190 190 . 49.067 36.757 -2.020  1.00 14.95  1 .
.
ATOM 4685 C    C    . THR THR THR B B 190 190 . 48.515 38.615 0.116   1.00 12.62  1 .
.
ATOM 4686 O    O    . THR THR THR B B 190 190 . 49.720 38.924 0.302   1.00 13.94  1 .
.
ATOM 4687 N    N    . LEU LEU LEU B B 191 191 . 47.563 39.536 -0.028  1.00 12.71  1 .
.
ATOM 4688 CA   CA   . LEU LEU LEU B B 191 191 . 47.922 40.960 -0.130  1.00 11.91  1 .
.
ATOM 4689 CB   CB   . LEU LEU LEU B B 191 191 . 46.623 41.747 -0.448  1.00 11.78  1 .
.
ATOM 4690 CG   CG   . LEU LEU LEU B B 191 191 . 46.843 43.273 -0.462  1.00 13.32  1 .
.
ATOM 4691 CD1  CD1  . LEU LEU LEU B B 191 191 . 45.399 43.981 -0.620  1.00 14.93  1 .
.
ATOM 4692 CD2  CD2  . LEU LEU LEU B B 191 191 . 47.802 43.804 -1.601  1.00 16.79  1 .
.
ATOM 4693 C    C    . LEU LEU LEU B B 191 191 . 48.545 41.485 1.154   1.00 12.69  1 .
.
ATOM 4694 O    O    . LEU LEU LEU B B 191 191 . 49.427 42.312 1.096   1.00 14.06  1 .
.
ATOM 4695 N    N    . LYS LYS LYS B B 192 192 . 48.041 41.033 2.322   1.00 12.48  1 .
.
ATOM 4696 CA   CA   . LYS LYS LYS B B 192 192 . 48.651 41.432 3.577   1.00 12.07  1 .
.
ATOM 4697 CB   CB   . LYS LYS LYS B B 192 192 . 47.974 40.738 4.791   1.00 14.26  1 .
.
ATOM 4698 CG   CG   . LYS LYS LYS B B 192 192 . 48.275 41.443 6.085   1.00 13.24  1 .
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ATOM 4699 CD   CD   . LYS LYS LYS B B 192 192 . 47.552 40.760 7.187   1.00 17.78  1 .
.
ATOM 4700 CE   CE   . LYS LYS LYS B B 192 192 . 47.945 41.394 8.543   1.00 20.45  1 .
.
ATOM 4701 NZ   NZ   . LYS LYS LYS B B 192 192 . 47.146 40.680 9.657   1.00 22.18  1 .
.
ATOM 4702 C    C    . LYS LYS LYS B B 192 192 . 50.135 41.092 3.580   1.00 14.83  1 .
.
ATOM 4703 O    O    . LYS LYS LYS B B 192 192 . 50.928 41.927 4.008   1.00 15.49  1 .
.
ATOM 4704 N    N    . GLY GLY GLY B B 193 193 . 50.460 39.894 3.098   1.00 15.80  1 .
.
ATOM 4705 CA   CA   . GLY GLY GLY B B 193 193 . 51.868 39.472 3.069   1.00 16.57  1 .
.
ATOM 4706 C    C    . GLY GLY GLY B B 193 193 . 52.668 40.320 2.054   1.00 17.74  1 .
.
ATOM 4707 O    O    . GLY GLY GLY B B 193 193 . 53.836 40.693 2.282   1.00 18.70  1 .
.
ATOM 4708 N    N    . VAL VAL VAL B B 194 194 . 52.060 40.652 0.917   1.00 17.12  1 .
.
ATOM 4709 CA   CA   . VAL VAL VAL B B 194 194 . 52.771 41.457 -0.127  1.00 18.19  1 .
.
ATOM 4710 CB   CB   . VAL VAL VAL B B 194 194 . 51.867 41.630 -1.390  1.00 18.35  1 .
.
ATOM 4711 CG1  CG1  . VAL VAL VAL B B 194 194 . 52.469 42.697 -2.346  1.00 21.63  1 .
.
ATOM 4712 CG2  CG2  . VAL VAL VAL B B 194 194 . 51.640 40.287 -2.144  1.00 18.60  1 .
.
ATOM 4713 C    C    . VAL VAL VAL B B 194 194 . 53.059 42.850 0.407   1.00 18.07  1 .
.
ATOM 4714 O    O    . VAL VAL VAL B B 194 194 . 54.166 43.438 0.243   1.00 19.78  1 .
.
ATOM 4715 N    N    . ILE ILE ILE B B 195 195 . 52.081 43.383 1.156   1.00 17.77  1 .
.
ATOM 4716 CA   CA   . ILE ILE ILE B B 195 195 . 52.281 44.698 1.770   1.00 17.57  1 .
.
ATOM 4717 CB   CB   . ILE ILE ILE B B 195 195 . 50.921 45.291 2.325   1.00 16.89  1 .
.
ATOM 4718 CG1  CG1  . ILE ILE ILE B B 195 195 . 50.044 45.752 1.141   1.00 18.70  1 .
.
ATOM 4719 CD   CD   . ILE ILE ILE B B 195 195 . 48.553 46.083 1.499   1.00 18.24  1 .
.
ATOM 4720 CG2  CG2  . ILE ILE ILE B B 195 195 . 51.222 46.567 3.230   1.00 17.39  1 .
.
ATOM 4721 C    C    . ILE ILE ILE B B 195 195 . 53.330 44.579 2.891   1.00 19.44  1 .
.
ATOM 4722 O    O    . ILE ILE ILE B B 195 195 . 54.218 45.457 3.003   1.00 19.12  1 .
.
ATOM 4723 N    N    . LYS LYS LYS B B 196 196 . 53.245 43.532 3.714   1.00 18.19  1 .
.
ATOM 4724 CA   CA   . LYS LYS LYS B B 196 196 . 54.200 43.420 4.793   1.00 20.43  1 .
.
ATOM 4725 CB   CB   . LYS LYS LYS B B 196 196 . 53.950 42.207 5.643   1.00 20.14  1 .
.
ATOM 4726 CG   CG   . LYS LYS LYS B B 196 196 . 54.995 41.965 6.755   1.00 27.01  1 .
.
ATOM 4727 CD   CD   . LYS LYS LYS B B 196 196 . 54.748 40.602 7.339   1.00 31.40  1 .
.
ATOM 4728 C    C    . LYS LYS LYS B B 196 196 . 55.643 43.339 4.183   1.00 20.96  1 .
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ATOM 4729 O    O    . LYS LYS LYS B B 196 196 . 56.565 44.004 4.686   1.00 23.02  1 .
.
ATOM 4730 N    N    . ASP ASP ASP B B 197 197 . 55.795 42.605 3.094   1.00 19.80  1 .
.
ATOM 4731 CA   CA   . ASP ASP ASP B B 197 197 . 57.149 42.372 2.528   1.00 22.54  1 .
.
ATOM 4732 CB   CB   . ASP ASP ASP B B 197 197 . 57.072 41.350 1.448   1.00 23.01  1 .
.
ATOM 4733 CG   CG   . ASP ASP ASP B B 197 197 . 56.935 39.941 1.977   1.00 26.36  1 .
.
ATOM 4734 OD1  OD1  . ASP ASP ASP B B 197 197 . 56.658 39.045 1.112   1.00 32.37  1 .
.
ATOM 4735 OD2  OD2  . ASP ASP ASP B B 197 197 . 57.123 39.708 3.217   1.00 33.23  1 .
.
ATOM 4736 C    C    . ASP ASP ASP B B 197 197 . 57.708 43.675 1.955   1.00 24.09  1 .
.
ATOM 4737 O    O    . ASP ASP ASP B B 197 197 . 58.917 43.962 2.054   1.00 27.83  1 .
.
ATOM 4738 N    N    . LYS LYS LYS B B 198 198 . 56.847 44.476 1.363   1.00 22.22  1 .
.
ATOM 4739 CA   CA   . LYS LYS LYS B B 198 198 . 57.285 45.679 0.731   1.00 22.94  1 .
.
ATOM 4740 CB   CB   . LYS LYS LYS B B 198 198 . 56.480 45.911 -0.557  1.00 23.85  1 .
.
ATOM 4741 CG   CG   . LYS LYS LYS B B 198 198 . 56.881 47.207 -1.195  1.00 27.19  1 .
.
ATOM 4742 CD   CD   . LYS LYS LYS B B 198 198 . 56.416 47.351 -2.619  1.00 32.06  1 .
.
ATOM 4743 CE   CE   . LYS LYS LYS B B 198 198 . 56.841 48.710 -3.179  1.00 34.49  1 .
.
ATOM 4744 NZ   NZ   . LYS LYS LYS B B 198 198 . 56.557 48.637 -4.638  1.00 42.38  1 .
.
ATOM 4745 C    C    . LYS LYS LYS B B 198 198 . 57.359 46.896 1.631   1.00 22.81  1 .
.
ATOM 4746 O    O    . LYS LYS LYS B B 198 198 . 58.354 47.711 1.554   1.00 23.61  1 .
.
ATOM 4747 N    N    . TYR TYR TYR B B 199 199 . 56.355 47.044 2.517   1.00 20.39  1 .
.
ATOM 4748 CA   CA   . TYR TYR TYR B B 199 199 . 56.175 48.265 3.298   1.00 19.17  1 .
.
ATOM 4749 CB   CB   . TYR TYR TYR B B 199 199 . 54.757 48.865 3.089   1.00 18.49  1 .
.
ATOM 4750 CG   CG   . TYR TYR TYR B B 199 199 . 54.582 49.364 1.673   1.00 21.15  1 .
.
ATOM 4751 CD1  CD1  . TYR TYR TYR B B 199 199 . 53.867 48.625 0.729   1.00 21.76  1 .
.
ATOM 4752 CE1  CE1  . TYR TYR TYR B B 199 199 . 53.760 49.088 -0.586  1.00 23.13  1 .
.
ATOM 4753 CZ   CZ   . TYR TYR TYR B B 199 199 . 54.393 50.264 -0.950  1.00 27.51  1 .
.
ATOM 4754 OH   OH   . TYR TYR TYR B B 199 199 . 54.322 50.721 -2.261  1.00 32.61  1 .
.
ATOM 4755 CE2  CE2  . TYR TYR TYR B B 199 199 . 55.108 51.001 -0.045  1.00 26.27  1 .
.
ATOM 4756 CD2  CD2  . TYR TYR TYR B B 199 199 . 55.191 50.550 1.263   1.00 23.67  1 .
.
ATOM 4757 C    C    . TYR TYR TYR B B 199 199 . 56.417 48.092 4.770   1.00 19.29  1 .
.
ATOM 4758 O    O    . TYR TYR TYR B B 199 199 . 56.483 49.089 5.498   1.00 21.79  1 .
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ATOM 4759 N    N    . GLY GLY GLY B B 200 200 . 56.510 46.861 5.234   1.00 20.02  1 .
.
ATOM 4760 CA   CA   . GLY GLY GLY B B 200 200 . 56.767 46.580 6.662   1.00 20.98  1 .
.
ATOM 4761 C    C    . GLY GLY GLY B B 200 200 . 55.466 46.171 7.336   1.00 23.62  1 .
.
ATOM 4762 O    O    . GLY GLY GLY B B 200 200 . 54.361 46.453 6.845   1.00 21.87  1 .
.
ATOM 4763 N    N    . LYS LYS LYS B B 201 201 . 55.620 45.448 8.436   1.00 27.02  1 .
.
ATOM 4764 CA   CA   . LYS LYS LYS B B 201 201 . 54.450 45.049 9.296   1.00 28.89  1 .
.
ATOM 4765 CB   CB   . LYS LYS LYS B B 201 201 . 55.001 44.482 10.572  1.00 29.76  1 .
.
ATOM 4766 C    C    . LYS LYS LYS B B 201 201 . 53.595 46.244 9.665   1.00 29.29  1 .
.
ATOM 4767 O    O    . LYS LYS LYS B B 201 201 . 52.328 46.164 9.720   1.00 30.00  1 .
.
ATOM 4768 N    N    . ASP ASP ASP B B 202 202 . 54.266 47.345 10.004  1.00 28.73  1 .
.
ATOM 4769 CA   CA   . ASP ASP ASP B B 202 202 . 53.576 48.543 10.391  1.00 30.53  1 .
.
ATOM 4770 CB   CB   . ASP ASP ASP B B 202 202 . 54.578 49.706 10.821  1.00 34.01  1 .
.
ATOM 4771 CG   CG   . ASP ASP ASP B B 202 202 . 55.300 49.413 12.197  1.00 41.60  1 .
.
ATOM 4772 OD1  OD1  . ASP ASP ASP B B 202 202 . 55.789 48.240 12.366  1.00 47.10  1 .
.
ATOM 4773 OD2  OD2  . ASP ASP ASP B B 202 202 . 55.399 50.318 13.137  1.00 53.23  1 .
.
ATOM 4774 C    C    . ASP ASP ASP B B 202 202 . 52.540 49.019 9.395   1.00 27.41  1 .
.
ATOM 4775 O    O    . ASP ASP ASP B B 202 202 . 51.728 49.840 9.790   1.00 28.74  1 .
.
ATOM 4776 N    N    . ALA ALA ALA B B 203 203 . 52.524 48.517 8.130   1.00 23.83  1 .
.
ATOM 4777 CA   CA   . ALA ALA ALA B B 203 203 . 51.632 49.015 7.044   1.00 21.03  1 .
.
ATOM 4778 CB   CB   . ALA ALA ALA B B 203 203 . 52.330 49.005 5.697   1.00 21.71  1 .
.
ATOM 4779 C    C    . ALA ALA ALA B B 203 203 . 50.393 48.078 6.909   1.00 19.45  1 .
.
ATOM 4780 O    O    . ALA ALA ALA B B 203 203 . 49.602 48.206 5.956   1.00 19.27  1 .
.
ATOM 4781 N    N    . THR THR THR B B 204 204 . 50.257 47.125 7.824   1.00 17.52  1 .
.
ATOM 4782 CA   CA   . THR THR THR B B 204 204 . 49.223 46.113 7.619   1.00 17.76  1 .
.
ATOM 4783 CB   CB   . THR THR THR B B 204 204 . 49.789 44.673 7.701   1.00 18.71  1 .
.
ATOM 4784 OG1  OG1  . THR THR THR B B 204 204 . 50.330 44.440 9.034   1.00 22.63  1 .
.
ATOM 4785 CG2  CG2  . THR THR THR B B 204 204 . 50.904 44.508 6.627   1.00 22.23  1 .
.
ATOM 4786 C    C    . THR THR THR B B 204 204 . 48.054 46.166 8.594   1.00 15.25  1 .
.
ATOM 4787 O    O    . THR THR THR B B 204 204 . 47.271 45.209 8.663   1.00 16.54  1 .
.
ATOM 4788 N    N    . ASN ASN ASN B B 205 205 . 47.872 47.266 9.264   1.00 16.28  1 .
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ATOM 4789 CA   CA   . ASN ASN ASN B B 205 205 . 46.635 47.447 10.077  1.00 16.16  1 .
.
ATOM 4790 CB   CB   . ASN ASN ASN B B 205 205 . 46.896 48.480 11.170  1.00 17.74  1 .
.
ATOM 4791 CG   CG   . ASN ASN ASN B B 205 205 . 48.026 48.011 12.051  1.00 20.60  1 .
.
ATOM 4792 OD1  OD1  . ASN ASN ASN B B 205 205 . 47.916 46.914 12.636  1.00 22.72  1 .
.
ATOM 4793 ND2  ND2  . ASN ASN ASN B B 205 205 . 49.186 48.749 12.054  1.00 24.29  1 .
.
ATOM 4794 C    C    . ASN ASN ASN B B 205 205 . 45.515 47.838 9.121   1.00 16.10  1 .
.
ATOM 4795 O    O    . ASN ASN ASN B B 205 205 . 45.782 48.058 7.940   1.00 16.57  1 .
.
ATOM 4796 N    N    . VAL VAL VAL B B 206 206 . 44.267 47.921 9.595   1.00 15.28  1 .
.
ATOM 4797 CA   CA   . VAL VAL VAL B B 206 206 . 43.173 48.077 8.664   1.00 14.72  1 .
.
ATOM 4798 CB   CB   . VAL VAL VAL B B 206 206 . 42.191 46.859 8.655   1.00 14.82  1 .
.
ATOM 4799 CG1  CG1  . VAL VAL VAL B B 206 206 . 42.988 45.563 8.268   1.00 14.45  1 .
.
ATOM 4800 CG2  CG2  . VAL VAL VAL B B 206 206 . 41.547 46.731 10.055  1.00 15.57  1 .
.
ATOM 4801 C    C    . VAL VAL VAL B B 206 206 . 42.375 49.367 8.897   1.00 15.85  1 .
.
ATOM 4802 O    O    . VAL VAL VAL B B 206 206 . 42.399 49.957 10.012  1.00 16.66  1 .
.
ATOM 4803 N    N    . GLY GLY GLY B B 207 207 . 41.752 49.815 7.818   1.00 13.87  1 .
.
ATOM 4804 CA   CA   . GLY GLY GLY B B 207 207 . 40.864 50.993 7.812   1.00 17.18  1 .
.
ATOM 4805 C    C    . GLY GLY GLY B B 207 207 . 39.400 50.639 8.146   1.00 14.49  1 .
.
ATOM 4806 O    O    . GLY GLY GLY B B 207 207 . 39.072 49.529 8.569   1.00 14.67  1 .
.
ATOM 4807 N    N    . ASP ASP ASP B B 208 208 . 38.532 51.610 7.916   1.00 14.94  1 .
.
ATOM 4808 CA   CA   . ASP ASP ASP B B 208 208 . 37.127 51.523 8.376   1.00 13.69  1 .
.
ATOM 4809 CB   CB   . ASP ASP ASP B B 208 208 . 36.357 52.804 7.982   1.00 16.29  1 .
.
ATOM 4810 CG   CG   . ASP ASP ASP B B 208 208 . 36.744 54.024 8.844   1.00 18.38  1 .
.
ATOM 4811 OD1  OD1  . ASP ASP ASP B B 208 208 . 37.305 53.862 9.941   1.00 18.69  1 .
.
ATOM 4812 OD2  OD2  . ASP ASP ASP B B 208 208 . 36.404 55.162 8.359   1.00 20.81  1 .
.
ATOM 4813 C    C    . ASP ASP ASP B B 208 208 . 36.437 50.357 7.693   1.00 13.09  1 .
.
ATOM 4814 O    O    . ASP ASP ASP B B 208 208 . 35.511 49.780 8.301   1.00 13.40  1 .
.
ATOM 4815 N    N    . GLU GLU GLU B B 209 209 . 36.861 50.002 6.477   1.00 12.71  1 .
.
ATOM 4816 CA   CA   . GLU GLU GLU B B 209 209 . 36.153 48.937 5.780   1.00 13.72  1 .
.
ATOM 4817 CB   CB   . GLU GLU GLU B B 209 209 . 35.815 49.348 4.341   1.00 14.58  1 .
.
ATOM 4818 CG   CG   . GLU GLU GLU B B 209 209 . 34.825 50.531 4.297   1.00 18.58  1 .
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ATOM 4819 CD   CD   . GLU GLU GLU B B 209 209 . 34.339 50.853 2.931   1.00 25.73  1 .
.
ATOM 4820 OE1  OE1  . GLU GLU GLU B B 209 209 . 34.650 50.132 1.928   1.00 25.28  1 .
.
ATOM 4821 OE2  OE2  . GLU GLU GLU B B 209 209 . 33.562 51.860 2.869   1.00 35.73  1 .
.
ATOM 4822 C    C    . GLU GLU GLU B B 209 209 . 36.940 47.642 5.732   1.00 12.00  1 .
.
ATOM 4823 O    O    . GLU GLU GLU B B 209 209 . 36.542 46.729 4.977   1.00 13.30  1 .
.
ATOM 4824 N    N    . GLY GLY GLY B B 210 210 . 38.052 47.528 6.470   1.00 10.93  1 .
.
ATOM 4825 CA   CA   . GLY GLY GLY B B 210 210 . 38.738 46.290 6.606   1.00 11.86  1 .
.
ATOM 4826 C    C    . GLY GLY GLY B B 210 210 . 39.911 46.163 5.666   1.00 12.44  1 .
.
ATOM 4827 O    O    . GLY GLY GLY B B 210 210 . 40.604 45.193 5.759   1.00 14.19  1 .
.
ATOM 4828 N    N    . GLY GLY GLY B B 211 211 . 40.064 47.103 4.718   1.00 14.40  1 .
.
ATOM 4829 CA   CA   . GLY GLY GLY B B 211 211 . 41.225 47.094 3.777   1.00 13.71  1 .
.
ATOM 4830 C    C    . GLY GLY GLY B B 211 211 . 42.540 47.701 4.364   1.00 14.92  1 .
.
ATOM 4831 O    O    . GLY GLY GLY B B 211 211 . 42.554 48.252 5.488   1.00 14.74  1 .
.
ATOM 4832 N    N    . PHE PHE PHE B B 212 212 . 43.658 47.626 3.619   1.00 15.59  1 .
.
ATOM 4833 CA   CA   . PHE PHE PHE B B 212 212 . 44.918 48.213 4.060   1.00 16.93  1 .
.
ATOM 4834 CB   CB   . PHE PHE PHE B B 212 212 . 46.033 47.244 3.511   1.00 15.72  1 .
.
ATOM 4835 CG   CG   . PHE PHE PHE B B 212 212 . 45.807 45.816 3.939   1.00 14.60  1 .
.
ATOM 4836 CD1  CD1  . PHE PHE PHE B B 212 212 . 45.416 44.775 3.051   1.00 13.25  1 .
.
ATOM 4837 CE1  CE1  . PHE PHE PHE B B 212 212 . 45.188 43.452 3.533   1.00 15.41  1 .
.
ATOM 4838 CZ   CZ   . PHE PHE PHE B B 212 212 . 45.313 43.158 4.988   1.00 14.22  1 .
.
ATOM 4839 CE2  CE2  . PHE PHE PHE B B 212 212 . 45.722 44.187 5.806   1.00 16.73  1 .
.
ATOM 4840 CD2  CD2  . PHE PHE PHE B B 212 212 . 45.961 45.464 5.344   1.00 15.93  1 .
.
ATOM 4841 C    C    . PHE PHE PHE B B 212 212 . 45.158 49.628 3.517   1.00 19.17  1 .
.
ATOM 4842 O    O    . PHE PHE PHE B B 212 212 . 44.718 49.964 2.407   1.00 17.60  1 .
.
ATOM 4843 N    N    . ALA ALA ALA B B 213 213 . 45.912 50.458 4.261   1.00 18.56  1 .
.
ATOM 4844 CA   CA   . ALA ALA ALA B B 213 213 . 46.326 51.783 3.712   1.00 21.04  1 .
.
ATOM 4845 CB   CB   . ALA ALA ALA B B 213 213 . 45.641 52.915 4.493   1.00 20.33  1 .
.
ATOM 4846 C    C    . ALA ALA ALA B B 213 213 . 47.812 52.025 3.755   1.00 23.48  1 .
.
ATOM 4847 O    O    . ALA ALA ALA B B 213 213 . 48.291 52.870 4.575   1.00 23.64  1 .
.
ATOM 4848 N    N    . PRO PRO PRO B B 214 214 . 48.565 51.312 2.941   1.00 22.45  1 .
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ATOM 4849 CA   CA   . PRO PRO PRO B B 214 214 . 49.958 51.625 2.958   1.00 23.84  1 .
.
ATOM 4850 CB   CB   . PRO PRO PRO B B 214 214 . 50.531 50.664 1.916   1.00 25.26  1 .
.
ATOM 4851 CG   CG   . PRO PRO PRO B B 214 214 . 49.370 50.125 1.193   1.00 25.33  1 .
.
ATOM 4852 CD   CD   . PRO PRO PRO B B 214 214 . 48.157 50.563 1.715   1.00 21.80  1 .
.
ATOM 4853 C    C    . PRO PRO PRO B B 214 214 . 50.234 53.078 2.612   1.00 25.01  1 .
.
ATOM 4854 O    O    . PRO PRO PRO B B 214 214 . 49.374 53.777 1.997   1.00 23.04  1 .
.
ATOM 4855 N    N    . ASN ASN ASN B B 215 215 . 51.413 53.565 2.998   1.00 24.89  1 .
.
ATOM 4856 CA   CA   . ASN ASN ASN B B 215 215 . 51.739 54.975 2.679   1.00 24.98  1 .
.
ATOM 4857 CB   CB   . ASN ASN ASN B B 215 215 . 52.689 55.613 3.741   1.00 26.98  1 .
.
ATOM 4858 CG   CG   . ASN ASN ASN B B 215 215 . 51.974 55.899 5.016   1.00 30.76  1 .
.
ATOM 4859 OD1  OD1  . ASN ASN ASN B B 215 215 . 50.807 56.301 5.009   1.00 31.08  1 .
.
ATOM 4860 ND2  ND2  . ASN ASN ASN B B 215 215 . 52.687 55.754 6.142   1.00 36.04  1 .
.
ATOM 4861 C    C    . ASN ASN ASN B B 215 215 . 52.258 55.170 1.312   1.00 25.53  1 .
.
ATOM 4862 O    O    . ASN ASN ASN B B 215 215 . 53.489 55.286 1.123   1.00 26.73  1 .
.
ATOM 4863 N    N    . ILE ILE ILE B B 216 216 . 51.331 55.241 0.347   1.00 22.09  1 .
.
ATOM 4864 CA   CA   . ILE ILE ILE B B 216 216 . 51.691 55.445 -1.059  1.00 21.76  1 .
.
ATOM 4865 CB   CB   . ILE ILE ILE B B 216 216 . 51.341 54.160 -1.835  1.00 21.12  1 .
.
ATOM 4866 CG1  CG1  . ILE ILE ILE B B 216 216 . 49.852 53.806 -1.587  1.00 20.56  1 .
.
ATOM 4867 CD   CD   . ILE ILE ILE B B 216 216 . 49.317 52.579 -2.446  1.00 24.01  1 .
.
ATOM 4868 CG2  CG2  . ILE ILE ILE B B 216 216 . 52.273 53.078 -1.391  1.00 21.29  1 .
.
ATOM 4869 C    C    . ILE ILE ILE B B 216 216 . 50.951 56.674 -1.608  1.00 19.83  1 .
.
ATOM 4870 O    O    . ILE ILE ILE B B 216 216 . 49.933 57.092 -1.054  1.00 23.21  1 .
.
ATOM 4871 N    N    . LEU LEU LEU B B 217 217 . 51.450 57.284 -2.663  1.00 22.92  1 .
.
ATOM 4872 CA   CA   . LEU LEU LEU B B 217 217 . 50.728 58.442 -3.192  1.00 24.54  1 .
.
ATOM 4873 CB   CB   . LEU LEU LEU B B 217 217 . 51.677 59.628 -3.334  1.00 25.16  1 .
.
ATOM 4874 CG   CG   . LEU LEU LEU B B 217 217 . 51.292 60.735 -4.333  1.00 27.38  1 .
.
ATOM 4875 CD1  CD1  . LEU LEU LEU B B 217 217 . 50.072 61.585 -3.879  1.00 28.50  1 .
.
ATOM 4876 CD2  CD2  . LEU LEU LEU B B 217 217 . 52.504 61.633 -4.679  1.00 32.03  1 .
.
ATOM 4877 C    C    . LEU LEU LEU B B 217 217 . 50.093 58.025 -4.539  1.00 23.50  1 .
.
ATOM 4878 O    O    . LEU LEU LEU B B 217 217 . 48.939 58.417 -4.875  1.00 24.56  1 .
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ATOM 4879 N    N    . GLU GLU GLU B B 218 218 . 50.812 57.191 -5.286  1.00 22.81  1 .
.
ATOM 4880 CA   CA   . GLU GLU GLU B B 218 218 . 50.461 56.878 -6.685  1.00 20.19  1 .
.
ATOM 4881 CB   CB   . GLU GLU GLU B B 218 218 . 51.689 56.338 -7.482  1.00 22.26  1 .
.
ATOM 4882 CG   CG   . GLU GLU GLU B B 218 218 . 52.821 57.381 -7.523  1.00 27.94  1 .
.
ATOM 4883 CD   CD   . GLU GLU GLU B B 218 218 . 52.564 58.461 -8.570  1.00 38.71  1 .
.
ATOM 4884 OE1  OE1  . GLU GLU GLU B B 218 218 . 53.242 59.529 -8.508  1.00 45.75  1 .
.
ATOM 4885 OE2  OE2  . GLU GLU GLU B B 218 218 . 51.665 58.275 -9.456  1.00 42.62  1 .
.
ATOM 4886 C    C    . GLU GLU GLU B B 218 218 . 49.330 55.868 -6.718  1.00 20.87  1 .
.
ATOM 4887 O    O    . GLU GLU GLU B B 218 218 . 49.427 54.761 -6.141  1.00 20.05  1 .
.
ATOM 4888 N    N    . ASN ASN ASN B B 219 219 . 48.246 56.229 -7.409  1.00 19.11  1 .
.
ATOM 4889 CA   CA   . ASN ASN ASN B B 219 219 . 47.156 55.287 -7.516  1.00 19.27  1 .
.
ATOM 4890 CB   CB   . ASN ASN ASN B B 219 219 . 45.913 55.988 -8.085  1.00 19.40  1 .
.
ATOM 4891 CG   CG   . ASN ASN ASN B B 219 219 . 45.465 57.107 -7.183  1.00 19.53  1 .
.
ATOM 4892 OD1  OD1  . ASN ASN ASN B B 219 219 . 45.771 58.280 -7.482  1.00 24.60  1 .
.
ATOM 4893 ND2  ND2  . ASN ASN ASN B B 219 219 . 44.884 56.790 -6.040  1.00 14.24  1 .
.
ATOM 4894 C    C    . ASN ASN ASN B B 219 219 . 47.551 54.031 -8.274  1.00 17.83  1 .
.
ATOM 4895 O    O    . ASN ASN ASN B B 219 219 . 47.003 52.928 -8.000  1.00 18.44  1 .
.
ATOM 4896 N    N    . SER SER SER B B 220 220 . 48.468 54.186 -9.219  1.00 19.01  1 .
.
ATOM 4897 CA   CA   . SER SER SER B B 220 220 . 48.969 53.032 -9.965  1.00 19.65  1 .
.
ATOM 4898 CB   CB   . SER SER SER B B 220 220 . 49.885 53.451 -11.120 1.00 20.79  1 .
.
ATOM 4899 OG   OG   . SER SER SER B B 220 220 . 51.029 54.098 -10.625 1.00 24.62  1 .
.
ATOM 4900 C    C    . SER SER SER B B 220 220 . 49.695 52.042 -9.045  1.00 18.30  1 .
.
ATOM 4901 O    O    . SER SER SER B B 220 220 . 49.641 50.838 -9.279  1.00 18.80  1 .
.
ATOM 4902 N    N    . GLU GLU GLU B B 221 221 . 50.332 52.508 -7.985  1.00 17.71  1 .
.
ATOM 4903 CA   CA   . GLU GLU GLU B B 221 221 . 50.951 51.582 -7.011  1.00 18.16  1 .
.
ATOM 4904 CB   CB   . GLU GLU GLU B B 221 221 . 51.897 52.405 -6.076  1.00 19.14  1 .
.
ATOM 4905 CG   CG   . GLU GLU GLU B B 221 221 . 52.501 51.551 -4.967  1.00 24.72  1 .
.
ATOM 4906 CD   CD   . GLU GLU GLU B B 221 221 . 53.364 50.364 -5.430  1.00 32.42  1 .
.
ATOM 4907 OE1  OE1  . GLU GLU GLU B B 221 221 . 53.783 49.599 -4.526  1.00 38.60  1 .
.
ATOM 4908 OE2  OE2  . GLU GLU GLU B B 221 221 . 53.634 50.154 -6.647  1.00 35.58  1 .
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ATOM 4909 C   C   . GLU GLU GLU B B 221 221 . 49.898 50.731 -6.246  1.00 17.51  1 .
.
ATOM 4910 O   O   . GLU GLU GLU B B 221 221 . 50.122 49.522 -5.973  1.00 16.37  1 .
.
ATOM 4911 N   N   . ALA ALA ALA B B 222 222 . 48.741 51.331 -5.891  1.00 16.21  1 .
.
ATOM 4912 CA  CA  . ALA ALA ALA B B 222 222 . 47.648 50.529 -5.369  1.00 16.22  1 .
.
ATOM 4913 CB  CB  . ALA ALA ALA B B 222 222 . 46.441 51.389 -4.949  1.00 16.56  1 .
.
ATOM 4914 C   C   . ALA ALA ALA B B 222 222 . 47.237 49.405 -6.305  1.00 15.10  1 .
.
ATOM 4915 O   O   . ALA ALA ALA B B 222 222 . 46.995 48.256 -5.893  1.00 15.12  1 .
.
ATOM 4916 N   N   . LEU LEU LEU B B 223 223 . 47.063 49.754 -7.564  1.00 14.12  1 .
.
ATOM 4917 CA  CA  . LEU LEU LEU B B 223 223 . 46.682 48.773 -8.567  1.00 14.30  1 .
.
ATOM 4918 CB  CB  . LEU LEU LEU B B 223 223 . 46.410 49.436 -9.922  1.00 14.81  1 .
.
ATOM 4919 CG  CG  . LEU LEU LEU B B 223 223 . 45.106 50.290 -9.848  1.00 13.45  1 .
.
ATOM 4920 CD1 CD1 . LEU LEU LEU B B 223 223 . 45.000 51.227 -11.104 1.00 16.08  1 .
.
ATOM 4921 CD2 CD2 . LEU LEU LEU B B 223 223 . 43.893 49.347 -9.799  1.00 16.61  1 .
.
ATOM 4922 C   C   . LEU LEU LEU B B 223 223 . 47.764 47.665 -8.710  1.00 15.21  1 .
.
ATOM 4923 O   O   . LEU LEU LEU B B 223 223 . 47.441 46.466 -8.811  1.00 16.20  1 .
.
ATOM 4924 N   N   . GLU GLU GLU B B 224 224 . 49.019 48.100 -8.712  1.00 15.25  1 .
.
ATOM 4925 CA  CA  . GLU GLU GLU B B 224 224 . 50.100 47.138 -8.816  1.00 17.14  1 .
.
ATOM 4926 CB  CB  . GLU GLU GLU B B 224 224 . 51.424 47.857 -8.811  1.00 19.63  1 .
.
ATOM 4927 CG  CG  . GLU GLU GLU B B 224 224 . 52.484 46.931 -9.361  1.00 27.83  1 .
.
ATOM 4928 CD  CD  . GLU GLU GLU B B 224 224 . 52.374 46.942 -10.922 1.00 37.96  1 .
.
ATOM 4929 OE1 OE1 . GLU GLU GLU B B 224 224 . 52.120 45.923 -11.525 1.00 43.22  1 .
.
ATOM 4930 OE2 OE2 . GLU GLU GLU B B 224 224 . 52.491 48.025 -11.550 1.00 46.13  1 .
.
ATOM 4931 C   C   . GLU GLU GLU B B 224 224 . 50.081 46.134 -7.630  1.00 18.03  1 .
.
ATOM 4932 O   O   . GLU GLU GLU B B 224 224 . 50.322 44.928 -7.818  1.00 17.59  1 .
.
ATOM 4933 N   N   . LEU LEU LEU B B 225 225 . 49.896 46.643 -6.406  1.00 17.01  1 .
.
ATOM 4934 CA  CA  . LEU LEU LEU B B 225 225 . 49.823 45.724 -5.251  1.00 15.01  1 .
.
ATOM 4935 CB  CB  . LEU LEU LEU B B 225 225 . 49.575 46.581 -3.963  1.00 16.63  1 .
.
ATOM 4936 CG  CG  . LEU LEU LEU B B 225 225 . 50.775 47.429 -3.540  1.00 17.26  1 .
.
ATOM 4937 CD1 CD1 . LEU LEU LEU B B 225 225 . 50.383 48.401 -2.451  1.00 18.20  1 .
.
ATOM 4938 CD2 CD2 . LEU LEU LEU B B 225 225 . 51.912 46.457 -3.001  1.00 19.58  1 .
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ATOM 4939 C    C    . LEU LEU LEU B B 225 225 . 48.704 44.746 -5.350  1.00 13.92  1 .
.
ATOM 4940 O    O    . LEU LEU LEU B B 225 225 . 48.834 43.569 -5.005  1.00 15.81  1 .
.
ATOM 4941 N    N    . VAL VAL VAL B B 226 226 . 47.514 45.238 -5.724  1.00 13.73  1 .
.
ATOM 4942 CA   CA   . VAL VAL VAL B B 226 226 . 46.376 44.334 -5.902  1.00 12.16  1 .
.
ATOM 4943 CB   CB   . VAL VAL VAL B B 226 226 . 45.097 45.141 -6.160  1.00 14.50  1 .
.
ATOM 4944 CG1  CG1  . VAL VAL VAL B B 226 226 . 43.955 44.229 -6.488  1.00 14.51  1 .
.
ATOM 4945 CG2  CG2  . VAL VAL VAL B B 226 226 . 44.761 46.015 -4.914  1.00 15.96  1 .
.
ATOM 4946 C    C    . VAL VAL VAL B B 226 226 . 46.621 43.284 -6.991  1.00 12.79  1 .
.
ATOM 4947 O    O    . VAL VAL VAL B B 226 226 . 46.304 42.123 -6.791  1.00 14.23  1 .
.
ATOM 4948 N    N    . LYS LYS LYS B B 227 227 . 47.092 43.714 -8.156  1.00 14.54  1 .
.
ATOM 4949 CA   CA   . LYS LYS LYS B B 227 227 . 47.415 42.804 -9.215  1.00 16.72  1 .
.
ATOM 4950 CB   CB   . LYS LYS LYS B B 227 227 . 47.858 43.581 -10.465 1.00 17.44  1 .
.
ATOM 4951 CG   CG   . LYS LYS LYS B B 227 227 . 48.128 42.607 -11.666 1.00 21.64  1 .
.
ATOM 4952 C    C    . LYS LYS LYS B B 227 227 . 48.485 41.766 -8.753  1.00 16.14  1 .
.
ATOM 4953 O    O    . LYS LYS LYS B B 227 227 . 48.308 40.602 -9.057  1.00 17.54  1 .
.
ATOM 4954 N    N    . GLU GLU GLU B B 228 228 . 49.506 42.172 -8.001  1.00 18.68  1 .
.
ATOM 4955 CA   CA   . GLU GLU GLU B B 228 228 . 50.553 41.234 -7.458  1.00 17.18  1 .
.
ATOM 4956 CB   CB   . GLU GLU GLU B B 228 228 . 51.700 41.953 -6.723  1.00 18.11  1 .
.
ATOM 4957 CG   CG   . GLU GLU GLU B B 228 228 . 52.791 41.032 -6.139  1.00 20.04  1 .
.
ATOM 4958 CD   CD   . GLU GLU GLU B B 228 228 . 54.133 41.798 -5.801  1.00 29.59  1 .
.
ATOM 4959 C    C    . GLU GLU GLU B B 228 228 . 49.867 40.190 -6.548  1.00 18.01  1 .
.
ATOM 4960 O    O    . GLU GLU GLU B B 228 228 . 50.127 38.958 -6.645  1.00 18.83  1 .
.
ATOM 4961 N    N    . ALA ALA ALA B B 229 229 . 48.948 40.672 -5.692  1.00 14.84  1 .
.
ATOM 4962 CA   CA   . ALA ALA ALA B B 229 229 . 48.298 39.735 -4.804  1.00 14.97  1 .
.
ATOM 4963 CB   CB   . ALA ALA ALA B B 229 229 . 47.464 40.472 -3.761  1.00 14.07  1 .
.
ATOM 4964 C    C    . ALA ALA ALA B B 229 229 . 47.423 38.698 -5.547  1.00 15.12  1 .
.
ATOM 4965 O    O    . ALA ALA ALA B B 229 229 . 47.388 37.519 -5.194  1.00 15.29  1 .
.
ATOM 4966 N    N    . ILE ILE ILE B B 230 230 . 46.653 39.159 -6.536  1.00 13.66  1 .
.
ATOM 4967 CA   CA   . ILE ILE ILE B B 230 230 . 45.800 38.271 -7.287  1.00 14.79  1 .
.
ATOM 4968 CB   CB   . ILE ILE ILE B B 230 230 . 45.072 39.047 -8.368  1.00 13.80  1 .
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ATOM 4969 CG1  CG1  . ILE ILE ILE B B 230 230 . 43.935 39.916 -7.735  1.00 13.66  1 .
.
ATOM 4970 CD   CD   . ILE ILE ILE B B 230 230 . 43.331 41.041 -8.642  1.00 15.03  1 .
.
ATOM 4971 CG2  CG2  . ILE ILE ILE B B 230 230 . 44.450 38.031 -9.403  1.00 16.24  1 .
.
ATOM 4972 C    C    . ILE ILE ILE B B 230 230 . 46.701 37.191 -7.934  1.00 18.09  1 .
.
ATOM 4973 O    O    . ILE ILE ILE B B 230 230 . 46.432 35.956 -7.890  1.00 17.51  1 .
.
ATOM 4974 N    N    . ASP ASP ASP B B 231 231 . 47.803 37.678 -8.483  1.00 17.61  1 .
.
ATOM 4975 CA   CA   . ASP ASP ASP B B 231 231 . 48.726 36.760 -9.216  1.00 21.03  1 .
.
ATOM 4976 CB   CB   . ASP ASP ASP B B 231 231 . 49.734 37.559 -10.043 1.00 22.29  1 .
.
ATOM 4977 CG   CG   . ASP ASP ASP B B 231 231 . 49.026 38.457 -11.215 1.00 29.62  1 .
.
ATOM 4978 OD1  OD1  . ASP ASP ASP B B 231 231 . 49.804 39.242 -11.898 1.00 38.55  1 .
.
ATOM 4979 OD2  OD2  . ASP ASP ASP B B 231 231 . 47.722 38.401 -11.489 1.00 32.13  1 .
.
ATOM 4980 C    C    . ASP ASP ASP B B 231 231 . 49.382 35.735 -8.276  1.00 21.24  1 .
.
ATOM 4981 O    O    . ASP ASP ASP B B 231 231 . 49.409 34.506 -8.579  1.00 22.21  1 .
.
ATOM 4982 N    N    . LYS LYS LYS B B 232 232 . 49.910 36.232 -7.155  1.00 21.78  1 .
.
ATOM 4983 CA   CA   . LYS LYS LYS B B 232 232 . 50.564 35.409 -6.135  1.00 22.62  1 .
.
ATOM 4984 CB   CB   . LYS LYS LYS B B 232 232 . 51.266 36.303 -5.097  1.00 23.83  1 .
.
ATOM 4985 CG   CG   . LYS LYS LYS B B 232 232 . 52.069 35.639 -4.117  1.00 27.86  1 .
.
ATOM 4986 CD   CD   . LYS LYS LYS B B 232 232 . 52.861 36.694 -3.295  1.00 35.89  1 .
.
ATOM 4987 CE   CE   . LYS LYS LYS B B 232 232 . 53.564 36.039 -2.067  1.00 38.45  1 .
.
ATOM 4988 NZ   NZ   . LYS LYS LYS B B 232 232 . 54.222 37.065 -1.152  1.00 43.30  1 .
.
ATOM 4989 C    C    . LYS LYS LYS B B 232 232 . 49.597 34.359 -5.536  1.00 22.72  1 .
.
ATOM 4990 O    O    . LYS LYS LYS B B 232 232 . 50.014 33.210 -5.234  1.00 23.98  1 .
.
ATOM 4991 N    N    . ALA ALA ALA B B 233 233 . 48.316 34.699 -5.426  1.00 19.73  1 .
.
ATOM 4992 CA   CA   . ALA ALA ALA B B 233 233 . 47.278 33.762 -4.922  1.00 18.70  1 .
.
ATOM 4993 CB   CB   . ALA ALA ALA B B 233 233 . 45.974 34.565 -4.465  1.00 18.47  1 .
.
ATOM 4994 C    C    . ALA ALA ALA B B 233 233 . 46.878 32.709 -5.934  1.00 18.85  1 .
.
ATOM 4995 O    O    . ALA ALA ALA B B 233 233 . 46.194 31.733 -5.577  1.00 22.15  1 .
.
ATOM 4996 N    N    . GLY GLY GLY B B 234 234 . 47.306 32.888 -7.183  1.00 19.27  1 .
.
ATOM 4997 CA   CA   . GLY GLY GLY B B 234 234 . 46.937 31.976 -8.276  1.00 20.76  1 .
.
ATOM 4998 C    C    . GLY GLY GLY B B 234 234 . 45.663 32.242 -9.031  1.00 20.67  1 .
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ATOM 4999 O    O    . GLY GLY GLY B B 234 234 . 45.162 31.374 -9.697  1.00 21.55  1 .
.
ATOM 5000 N    N    . TYR TYR TYR B B 235 235 . 45.127 33.461 -8.956  1.00 18.99  1 .
.
ATOM 5001 CA   CA   . TYR TYR TYR B B 235 235 . 43.777 33.681 -9.423  1.00 17.76  1 .
.
ATOM 5002 CB   CB   . TYR TYR TYR B B 235 235 . 42.882 34.085 -8.220  1.00 16.72  1 .
.
ATOM 5003 CG   CG   . TYR TYR TYR B B 235 235 . 42.615 32.944 -7.257  1.00 19.65  1 .
.
ATOM 5004 CD1  CD1  . TYR TYR TYR B B 235 235 . 42.839 33.100 -5.885  1.00 18.96  1 .
.
ATOM 5005 CE1  CE1  . TYR TYR TYR B B 235 235 . 42.625 32.101 -5.015  1.00 21.73  1 .
.
ATOM 5006 CZ   CZ   . TYR TYR TYR B B 235 235 . 42.169 30.881 -5.500  1.00 20.49  1 .
.
ATOM 5007 OH   OH   . TYR TYR TYR B B 235 235 . 41.897 29.851 -4.631  1.00 22.93  1 .
.
ATOM 5008 CE2  CE2  . TYR TYR TYR B B 235 235 . 41.905 30.684 -6.842  1.00 21.92  1 .
.
ATOM 5009 CD2  CD2  . TYR TYR TYR B B 235 235 . 42.141 31.705 -7.730  1.00 18.16  1 .
.
ATOM 5010 C    C    . TYR TYR TYR B B 235 235 . 43.722 34.745 -10.531 1.00 17.59  1 .
.
ATOM 5011 O    O    . TYR TYR TYR B B 235 235 . 42.627 35.322 -10.803 1.00 15.60  1 .
.
ATOM 5012 N    N    . THR THR THR B B 236 236 . 44.851 34.958 -11.221 1.00 18.06  1 .
.
ATOM 5013 CA   CA   . THR THR THR B B 236 236 . 44.837 35.907 -12.352 1.00 19.47  1 .
.
ATOM 5014 CB   CB   . THR THR THR B B 236 236 . 46.159 35.878 -13.107 1.00 21.02  1 .
.
ATOM 5015 OG1  OG1  . THR THR THR B B 236 236 . 47.222 36.143 -12.190 1.00 24.52  1 .
.
ATOM 5016 CG2  CG2  . THR THR THR B B 236 236 . 46.130 36.949 -14.191 1.00 21.81  1 .
.
ATOM 5017 C    C    . THR THR THR B B 236 236 . 43.680 35.696 -13.354 1.00 18.63  1 .
.
ATOM 5018 O    O    . THR THR THR B B 236 236 . 43.071 36.674 -13.793 1.00 20.11  1 .
.
ATOM 5019 N    N    . GLU GLU GLU B B 237 237 . 43.321 34.451 -13.696 1.00 19.15  1 .
.
ATOM 5020 CA   CA   . GLU GLU GLU B B 237 237 . 42.181 34.191 -14.566 1.00 21.68  1 .
.
ATOM 5021 CB   CB   . GLU GLU GLU B B 237 237 . 42.297 32.774 -15.200 1.00 25.02  1 .
.
ATOM 5022 CG   CG   . GLU GLU GLU B B 237 237 . 43.565 32.663 -16.092 1.00 33.27  1 .
.
ATOM 5023 CD   CD   . GLU GLU GLU B B 237 237 . 43.907 31.214 -16.416 1.00 45.99  1 .
.
ATOM 5024 OE1  OE1  . GLU GLU GLU B B 237 237 . 43.280 30.318 -15.791 1.00 50.66  1 .
.
ATOM 5025 OE2  OE2  . GLU GLU GLU B B 237 237 . 44.797 30.960 -17.291 1.00 53.72  1 .
.
ATOM 5026 C    C    . GLU GLU GLU B B 237 237 . 40.782 34.404 -14.006 1.00 21.08  1 .
.
ATOM 5027 O    O    . GLU GLU GLU B B 237 237 . 39.795 34.340 -14.772 1.00 22.31  1 .
.
ATOM 5028 N    N    . LYS LYS LYS B B 238 238 . 40.646 34.710 -12.708 1.00 19.01  1 .
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ATOM 5029 CA   CA   . LYS LYS LYS B B 238 238 . 39.314 34.629 -12.088 1.00 18.42  1 .
.
ATOM 5030 CB   CB   . LYS LYS LYS B B 238 238 . 39.278 33.419 -11.154 1.00 19.85  1 .
.
ATOM 5031 CG   CG   . LYS LYS LYS B B 238 238 . 39.287 32.024 -11.920 1.00 21.04  1 .
.
ATOM 5032 CD   CD   . LYS LYS LYS B B 238 238 . 39.382 30.887 -10.898 1.00 29.90  1 .
.
ATOM 5033 CE   CE   . LYS LYS LYS B B 238 238 . 39.353 29.571 -11.696 1.00 34.12  1 .
.
ATOM 5034 NZ   NZ   . LYS LYS LYS B B 238 238 . 38.458 28.609 -10.954 1.00 44.05  1 .
.
ATOM 5035 C    C    . LYS LYS LYS B B 238 238 . 38.943 35.873 -11.307 1.00 16.11  1 .
.
ATOM 5036 O    O    . LYS LYS LYS B B 238 238 . 37.802 35.941 -10.849 1.00 16.44  1 .
.
ATOM 5037 N    N    . ILE ILE ILE B B 239 239 . 39.883 36.828 -11.169 1.00 15.05  1 .
.
ATOM 5038 CA   CA   . ILE ILE ILE B B 239 239 . 39.585 38.032 -10.341 1.00 14.82  1 .
.
ATOM 5039 CB   CB   . ILE ILE ILE B B 239 239 . 40.389 37.978 -9.058  1.00 15.24  1 .
.
ATOM 5040 CG1  CG1  . ILE ILE ILE B B 239 239 . 39.920 36.659 -8.298  1.00 17.07  1 .
.
ATOM 5041 CD   CD   . ILE ILE ILE B B 239 239 . 40.577 36.493 -7.002  1.00 16.66  1 .
.
ATOM 5042 CG2  CG2  . ILE ILE ILE B B 239 239 . 40.124 39.251 -8.159  1.00 13.14  1 .
.
ATOM 5043 C    C    . ILE ILE ILE B B 239 239 . 39.915 39.260 -11.102 1.00 14.78  1 .
.
ATOM 5044 O    O    . ILE ILE ILE B B 239 239 . 41.017 39.357 -11.683 1.00 15.88  1 .
.
ATOM 5045 N    N    . VAL VAL VAL B B 240 240 . 38.984 40.211 -11.103 1.00 12.10  1 .
.
ATOM 5046 CA   CA   . VAL VAL VAL B B 240 240 . 39.233 41.470 -11.766 1.00 12.81  1 .
.
ATOM 5047 CB   CB   . VAL VAL VAL B B 240 240 . 38.257 41.728 -12.857 1.00 12.06  1 .
.
ATOM 5048 CG1  CG1  . VAL VAL VAL B B 240 240 . 38.548 40.727 -14.058 1.00 14.97  1 .
.
ATOM 5049 CG2  CG2  . VAL VAL VAL B B 240 240 . 36.781 41.719 -12.360 1.00 12.42  1 .
.
ATOM 5050 C    C    . VAL VAL VAL B B 240 240 . 39.149 42.615 -10.686 1.00 13.11  1 .
.
ATOM 5051 O    O    . VAL VAL VAL B B 240 240 . 38.843 42.338 -9.502  1.00 13.25  1 .
.
ATOM 5052 N    N    . ILE ILE ILE B B 241 241 . 39.399 43.854 -11.099 1.00 12.32  1 .
.
ATOM 5053 CA   CA   . ILE ILE ILE B B 241 241 . 39.515 44.982 -10.140 1.00 12.58  1 .
.
ATOM 5054 CB   CB   . ILE ILE ILE B B 241 241 . 40.901 45.645 -10.247 1.00 11.48  1 .
.
ATOM 5055 CG1  CG1  . ILE ILE ILE B B 241 241 . 41.945 44.607 -9.873  1.00 15.23  1 .
.
ATOM 5056 CD   CD   . ILE ILE ILE B B 241 241 . 43.395 45.063 -10.210 1.00 16.95  1 .
.
ATOM 5057 CG2  CG2  . ILE ILE ILE B B 241 241 . 41.052 46.976 -9.445  1.00 12.21  1 .
.
ATOM 5058 C    C    . ILE ILE ILE B B 241 241 . 38.413 45.992 -10.387 1.00 12.23  1 .
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ATOM 5059 O    O    . ILE ILE ILE B B 241 241 . 38.034 46.283 -11.497 1.00 12.50  1 .
.
ATOM 5060 N    N    . GLY GLY GLY B B 242 242 . 37.899 46.574 -9.309  1.00 11.10  1 .
.
ATOM 5061 CA   CA   . GLY GLY GLY B B 242 242 . 36.975 47.711 -9.426  1.00 12.31  1 .
.
ATOM 5062 C    C    . GLY GLY GLY B B 242 242 . 37.567 48.834 -8.605  1.00 11.08  1 .
.
ATOM 5063 O    O    . GLY GLY GLY B B 242 242 . 38.375 48.627 -7.703  1.00 13.22  1 .
.
ATOM 5064 N    N    . MET MET MET B B 243 243 . 37.182 50.078 -8.908  1.00 10.76  1 .
.
ATOM 5065 CA   CA   . MET MET MET B B 243 243 . 37.711 51.201 -8.149  1.00 12.60  1 .
.
ATOM 5066 CB   CB   . MET MET MET B B 243 243 . 38.647 52.054 -9.035  1.00 12.74  1 .
.
ATOM 5067 CG   CG   . MET MET MET B B 243 243 . 39.928 51.287 -9.395  1.00 16.99  1 .
.
ATOM 5068 SD   SD   . MET MET MET B B 243 243 . 40.822 52.300 -10.666 1.00 17.62  1 .
.
ATOM 5069 CE   CE   . MET MET MET B B 243 243 . 41.223 53.702 -9.612  1.00 21.51  1 .
.
ATOM 5070 C    C    . MET MET MET B B 243 243 . 36.542 52.082 -7.696  1.00 12.87  1 .
.
ATOM 5071 O    O    . MET MET MET B B 243 243 . 35.526 52.234 -8.450  1.00 11.87  1 .
.
ATOM 5072 N    N    . ASP ASP ASP B B 244 244 . 36.660 52.711 -6.487  1.00 11.00  1 .
.
ATOM 5073 CA   CA   . ASP ASP ASP B B 244 244 . 35.754 53.825 -6.177  1.00 11.57  1 .
.
ATOM 5074 CB   CB   . ASP ASP ASP B B 244 244 . 34.969 53.587 -4.924  1.00 11.82  1 .
.
ATOM 5075 CG   CG   . ASP ASP ASP B B 244 244 . 34.068 54.777 -4.547  1.00 12.06  1 .
.
ATOM 5076 OD1  OD1  . ASP ASP ASP B B 244 244 . 34.044 55.780 -5.298  1.00 13.13  1 .
.
ATOM 5077 OD2  OD2  . ASP ASP ASP B B 244 244 . 33.245 54.656 -3.593  1.00 13.94  1 .
.
ATOM 5078 C    C    . ASP ASP ASP B B 244 244 . 36.680 55.024 -5.971  1.00 12.74  1 .
.
ATOM 5079 O    O    . ASP ASP ASP B B 244 244 . 37.459 55.110 -5.009  1.00 14.12  1 .
.
ATOM 5080 N    N    . VAL VAL VAL B B 245 245 . 36.659 55.943 -6.929  1.00 11.01  1 .
.
ATOM 5081 CA   CA   . VAL VAL VAL B B 245 245 . 37.577 57.038 -6.894  1.00 11.26  1 .
.
ATOM 5082 CB   CB   . VAL VAL VAL B B 245 245 . 37.592 57.711 -8.284  1.00 11.41  1 .
.
ATOM 5083 CG1  CG1  . VAL VAL VAL B B 245 245 . 38.436 59.053 -8.270  1.00 12.20  1 .
.
ATOM 5084 CG2  CG2  . VAL VAL VAL B B 245 245 . 38.232 56.706 -9.286  1.00 12.15  1 .
.
ATOM 5085 C    C    . VAL VAL VAL B B 245 245 . 37.060 58.051 -5.815  1.00 11.85  1 .
.
ATOM 5086 O    O    . VAL VAL VAL B B 245 245 . 37.912 58.738 -5.182  1.00 13.52  1 .
.
ATOM 5087 N    N    . ALA ALA ALA B B 246 246 . 35.726 58.161 -5.740  1.00 11.27  1 .
.
ATOM 5088 CA   CA   . ALA ALA ALA B B 246 246 . 35.062 59.213 -4.891  1.00 10.87  1 .
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ATOM 5089 CB   CB   . ALA ALA ALA B B 246 246 . 35.214 58.887 -3.348  1.00 14.03  1 .
.
ATOM 5090 C    C    . ALA ALA ALA B B 246 246 . 35.655 60.590 -5.240  1.00 12.84  1 .
.
ATOM 5091 O    O    . ALA ALA ALA B B 246 246 . 36.063 61.391 -4.360  1.00 13.96  1 .
.
ATOM 5092 N    N    . ALA ALA ALA B B 247 247 . 35.573 60.965 -6.520  1.00 12.56  1 .
.
ATOM 5093 CA   CA   . ALA ALA ALA B B 247 247 . 36.302 62.156 -7.045  1.00 12.65  1 .
.
ATOM 5094 CB   CB   . ALA ALA ALA B B 247 247 . 36.202 62.228 -8.585  1.00 11.71  1 .
.
ATOM 5095 C    C    . ALA ALA ALA B B 247 247 . 35.708 63.462 -6.422  1.00 13.60  1 .
.
ATOM 5096 O    O    . ALA ALA ALA B B 247 247 . 36.392 64.469 -6.476  1.00 14.44  1 .
.
ATOM 5097 N    N    . SER SER SER B B 248 248 . 34.463 63.413 -5.895  1.00 12.87  1 .
.
ATOM 5098 CA   CA   . SER SER SER B B 248 248 . 33.877 64.655 -5.283  1.00 15.34  1 .
.
ATOM 5099 CB   CB   . SER SER SER B B 248 248 . 32.439 64.432 -4.828  1.00 15.37  1 .
.
ATOM 5100 OG   OG   . SER SER SER B B 248 248 . 31.583 64.069 -5.924  1.00 14.38  1 .
.
ATOM 5101 C    C    . SER SER SER B B 248 248 . 34.681 65.086 -4.089  1.00 16.95  1 .
.
ATOM 5102 O    O    . SER SER SER B B 248 248 . 34.626 66.286 -3.719  1.00 18.05  1 .
.
ATOM 5103 N    N    . GLU GLU GLU B B 249 249 . 35.395 64.154 -3.465  1.00 15.88  1 .
.
ATOM 5104 CA   CA   . GLU GLU GLU B B 249 249 . 36.276 64.473 -2.303  1.00 16.13  1 .
.
ATOM 5105 CB   CB   . GLU GLU GLU B B 249 249 . 36.651 63.165 -1.540  1.00 14.48  1 .
.
ATOM 5106 CG   CG   . GLU GLU GLU B B 249 249 . 35.409 62.389 -0.970  1.00 16.46  1 .
.
ATOM 5107 CD   CD   . GLU GLU GLU B B 249 249 . 34.691 63.107 0.115   1.00 23.16  1 .
.
ATOM 5108 OE1  OE1  . GLU GLU GLU B B 249 249 . 35.426 63.686 0.927   1.00 29.70  1 .
.
ATOM 5109 OE2  OE2  . GLU GLU GLU B B 249 249 . 33.409 63.072 0.221   1.00 25.10  1 .
.
ATOM 5110 C    C    . GLU GLU GLU B B 249 249 . 37.549 65.271 -2.689  1.00 16.71  1 .
.
ATOM 5111 O    O    . GLU GLU GLU B B 249 249 . 38.195 65.931 -1.808  1.00 20.83  1 .
.
ATOM 5112 N    N    . PHE PHE PHE B B 250 250 . 37.944 65.265 -3.943  1.00 17.12  1 .
.
ATOM 5113 CA   CA   . PHE PHE PHE B B 250 250 . 39.185 65.954 -4.341  1.00 16.49  1 .
.
ATOM 5114 CB   CB   . PHE PHE PHE B B 250 250 . 40.409 65.042 -4.576  1.00 18.21  1 .
.
ATOM 5115 CG   CG   . PHE PHE PHE B B 250 250 . 40.212 63.930 -5.577  1.00 15.08  1 .
.
ATOM 5116 CD1  CD1  . PHE PHE PHE B B 250 250 . 40.013 62.594 -5.127  1.00 19.37  1 .
.
ATOM 5117 CE1  CE1  . PHE PHE PHE B B 250 250 . 39.874 61.585 -6.021  1.00 18.68  1 .
.
ATOM 5118 CZ   CZ   . PHE PHE PHE B B 250 250 . 39.964 61.854 -7.422  1.00 17.89  1 .
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ATOM 5119 CE2  CE2  . PHE PHE PHE B B 250 250 . 40.171 63.174 -7.904  1.00 17.79  1 .
.
ATOM 5120 CD2  CD2  . PHE PHE PHE B B 250 250 . 40.318 64.204 -6.948  1.00 17.18  1 .
.
ATOM 5121 C    C    . PHE PHE PHE B B 250 250 . 38.967 66.976 -5.474  1.00 16.04  1 .
.
ATOM 5122 O    O    . PHE PHE PHE B B 250 250 . 39.917 67.416 -6.102  1.00 17.77  1 .
.
ATOM 5123 N    N    . TYR TYR TYR B B 251 251 . 37.704 67.277 -5.739  1.00 16.94  1 .
.
ATOM 5124 CA   CA   . TYR TYR TYR B B 251 251 . 37.405 68.316 -6.746  1.00 17.37  1 .
.
ATOM 5125 CB   CB   . TYR TYR TYR B B 251 251 . 35.919 68.283 -6.991  1.00 17.72  1 .
.
ATOM 5126 CG   CG   . TYR TYR TYR B B 251 251 . 35.421 69.363 -7.935  1.00 18.50  1 .
.
ATOM 5127 CD1  CD1  . TYR TYR TYR B B 251 251 . 35.509 69.218 -9.329  1.00 19.09  1 .
.
ATOM 5128 CE1  CE1  . TYR TYR TYR B B 251 251 . 35.027 70.189 -10.163 1.00 22.21  1 .
.
ATOM 5129 CZ   CZ   . TYR TYR TYR B B 251 251 . 34.438 71.333 -9.598  1.00 26.75  1 .
.
ATOM 5130 OH   OH   . TYR TYR TYR B B 251 251 . 33.936 72.400 -10.369 1.00 30.08  1 .
.
ATOM 5131 CE2  CE2  . TYR TYR TYR B B 251 251 . 34.374 71.511 -8.245  1.00 28.00  1 .
.
ATOM 5132 CD2  CD2  . TYR TYR TYR B B 251 251 . 34.840 70.524 -7.415  1.00 24.71  1 .
.
ATOM 5133 C    C    . TYR TYR TYR B B 251 251 . 37.768 69.684 -6.103  1.00 17.73  1 .
.
ATOM 5134 O    O    . TYR TYR TYR B B 251 251 . 37.290 69.943 -4.977  1.00 20.49  1 .
.
ATOM 5135 N    N    . ARG ARG ARG B B 252 252 . 38.486 70.527 -6.834  1.00 16.83  1 .
.
ATOM 5136 CA   CA   . ARG ARG ARG B B 252 252 . 38.981 71.863 -6.324  1.00 18.63  1 .
.
ATOM 5137 CB   CB   . ARG ARG ARG B B 252 252 . 40.492 71.728 -5.897  1.00 19.42  1 .
.
ATOM 5138 CG   CG   . ARG ARG ARG B B 252 252 . 40.707 70.763 -4.752  1.00 23.22  1 .
.
ATOM 5139 CD   CD   . ARG ARG ARG B B 252 252 . 39.941 71.107 -3.498  1.00 26.22  1 .
.
ATOM 5140 NE   NE   . ARG ARG ARG B B 252 252 . 40.367 70.233 -2.387  1.00 30.30  1 .
.
ATOM 5141 CZ   CZ   . ARG ARG ARG B B 252 252 . 39.580 69.312 -1.835  1.00 26.96  1 .
.
ATOM 5142 NH1  NH1  . ARG ARG ARG B B 252 252 . 38.319 69.066 -2.309  1.00 29.35  1 .
.
ATOM 5143 NH2  NH2  . ARG ARG ARG B B 252 252 . 40.064 68.553 -0.878  1.00 28.82  1 .
.
ATOM 5144 C    C    . ARG ARG ARG B B 252 252 . 38.897 72.844 -7.426  1.00 18.63  1 .
.
ATOM 5145 O    O    . ARG ARG ARG B B 252 252 . 39.643 72.662 -8.447  1.00 17.96  1 .
.
ATOM 5146 N    N    . ASP ASP ASP B B 253 253 . 38.045 73.906 -7.294  1.00 20.60  1 .
.
ATOM 5147 CA   CA   . ASP ASP ASP B B 253 253 . 38.086 74.982 -8.284  1.00 21.82  1 .
.
ATOM 5148 CB   CB   . ASP ASP ASP B B 253 253 . 39.468 75.775 -8.221  1.00 23.96  1 .
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ATOM 5149 CG   CG   . ASP ASP ASP B B 253 253 . 39.745 76.437 -6.850  1.00 30.59  1 .
.
ATOM 5150 OD1  OD1  . ASP ASP ASP B B 253 253 . 40.981 76.741 -6.599  1.00 38.69  1 .
.
ATOM 5151 OD2  OD2  . ASP ASP ASP B B 253 253 . 38.791 76.660 -6.044  1.00 32.72  1 .
.
ATOM 5152 C    C    . ASP ASP ASP B B 253 253 . 37.930 74.528 -9.716  1.00 20.80  1 .
.
ATOM 5153 O    O    . ASP ASP ASP B B 253 253 . 38.616 75.053 -10.590 1.00 20.17  1 .
.
ATOM 5154 N    N    . GLY GLY GLY B B 254 254 . 37.087 73.512 -9.941  1.00 17.70  1 .
.
ATOM 5155 CA   CA   . GLY GLY GLY B B 254 254 . 36.808 73.077 -11.321 1.00 18.58  1 .
.
ATOM 5156 C    C    . GLY GLY GLY B B 254 254 . 37.814 72.053 -11.867 1.00 18.21  1 .
.
ATOM 5157 O    O    . GLY GLY GLY B B 254 254 . 37.709 71.653 -13.008 1.00 19.94  1 .
.
ATOM 5158 N    N    . LYS LYS LYS B B 255 255 . 38.810 71.687 -11.031 1.00 17.59  1 .
.
ATOM 5159 CA   CA   . LYS LYS LYS B B 255 255 . 39.865 70.743 -11.400 1.00 18.48  1 .
.
ATOM 5160 CB   CB   . LYS LYS LYS B B 255 255 . 41.244 71.451 -11.575 1.00 19.67  1 .
.
ATOM 5161 CG   CG   . LYS LYS LYS B B 255 255 . 41.300 72.405 -12.756 1.00 21.53  1 .
.
ATOM 5162 CD   CD   . LYS LYS LYS B B 255 255 . 42.653 73.080 -12.782 1.00 27.54  1 .
.
ATOM 5163 CE   CE   . LYS LYS LYS B B 255 255 . 42.901 73.858 -14.074 1.00 33.94  1 .
.
ATOM 5164 NZ   NZ   . LYS LYS LYS B B 255 255 . 44.408 74.211 -14.201 1.00 39.95  1 .
.
ATOM 5165 C    C    . LYS LYS LYS B B 255 255 . 39.897 69.655 -10.325 1.00 18.39  1 .
.
ATOM 5166 O    O    . LYS LYS LYS B B 255 255 . 39.042 69.591 -9.421  1.00 18.81  1 .
.
ATOM 5167 N    N    . TYR TYR TYR B B 256 256 . 40.936 68.823 -10.370 1.00 18.11  1 .
.
ATOM 5168 CA   CA   . TYR TYR TYR B B 256 256 . 41.036 67.701 -9.463  1.00 17.73  1 .
.
ATOM 5169 CB   CB   . TYR TYR TYR B B 256 256 . 40.679 66.379 -10.205 1.00 16.92  1 .
.
ATOM 5170 CG   CG   . TYR TYR TYR B B 256 256 . 39.197 66.352 -10.631 1.00 13.82  1 .
.
ATOM 5171 CD1  CD1  . TYR TYR TYR B B 256 256 . 38.224 65.892 -9.753  1.00 14.32  1 .
.
ATOM 5172 CE1  CE1  . TYR TYR TYR B B 256 256 . 36.878 65.885 -10.073 1.00 12.71  1 .
.
ATOM 5173 CZ   CZ   . TYR TYR TYR B B 256 256 . 36.482 66.344 -11.357 1.00 13.15  1 .
.
ATOM 5174 OH   OH   . TYR TYR TYR B B 256 256 . 35.157 66.314 -11.663 1.00 11.57  1 .
.
ATOM 5175 CE2  CE2  . TYR TYR TYR B B 256 256 . 37.428 66.821 -12.263 1.00 13.48  1 .
.
ATOM 5176 CD2  CD2  . TYR TYR TYR B B 256 256 . 38.787 66.808 -11.893 1.00 14.78  1 .
.
ATOM 5177 C    C    . TYR TYR TYR B B 256 256 . 42.456 67.641 -8.901  1.00 18.36  1 .
.
ATOM 5178 O    O    . TYR TYR TYR B B 256 256 . 43.479 67.753 -9.626  1.00 19.26  1 .
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ATOM 5179 N    N    . ASP ASP ASP B B 257 257 . 42.475 67.329 -7.649  1.00 17.95  1 .
.
ATOM 5180 CA   CA   . ASP ASP ASP B B 257 257 . 43.732 67.295 -6.889  1.00 21.37  1 .
.
ATOM 5181 CB   CB   . ASP ASP ASP B B 257 257 . 43.694 68.368 -5.810  1.00 20.48  1 .
.
ATOM 5182 CG   CG   . ASP ASP ASP B B 257 257 . 45.021 68.491 -5.037  1.00 23.78  1 .
.
ATOM 5183 OD1  OD1  . ASP ASP ASP B B 257 257 . 46.056 67.919 -5.493  1.00 23.19  1 .
.
ATOM 5184 OD2  OD2  . ASP ASP ASP B B 257 257 . 44.987 69.179 -3.963  1.00 26.14  1 .
.
ATOM 5185 C    C    . ASP ASP ASP B B 257 257 . 44.083 65.896 -6.335  1.00 21.50  1 .
.
ATOM 5186 O    O    . ASP ASP ASP B B 257 257 . 43.560 65.467 -5.295  1.00 20.64  1 .
.
ATOM 5187 N    N    . LEU LEU LEU B B 258 258 . 44.975 65.226 -7.056  1.00 22.25  1 .
.
ATOM 5188 CA   CA   . LEU LEU LEU B B 258 258 . 45.387 63.854 -6.678  1.00 22.08  1 .
.
ATOM 5189 CB   CB   . LEU LEU LEU B B 258 258 . 45.873 63.077 -7.903  1.00 21.98  1 .
.
ATOM 5190 CG   CG   . LEU LEU LEU B B 258 258 . 44.782 62.779 -8.924  1.00 20.97  1 .
.
ATOM 5191 CD1  CD1  . LEU LEU LEU B B 258 258 . 45.463 62.069 -10.108 1.00 23.50  1 .
.
ATOM 5192 CD2  CD2  . LEU LEU LEU B B 258 258 . 43.615 61.981 -8.251  1.00 20.64  1 .
.
ATOM 5193 C    C    . LEU LEU LEU B B 258 258 . 46.480 63.861 -5.617  1.00 23.14  1 .
.
ATOM 5194 O    O    . LEU LEU LEU B B 258 258 . 46.899 62.783 -5.186  1.00 22.17  1 .
.
ATOM 5195 N    N    . ASP ASP ASP B B 259 259 . 46.865 65.055 -5.111  1.00 22.01  1 .
.
ATOM 5196 CA   CA   . ASP ASP ASP B B 259 259 . 47.694 65.083 -3.867  1.00 25.41  1 .
.
ATOM 5197 CB   CB   . ASP ASP ASP B B 259 259 . 49.100 65.493 -4.267  1.00 24.78  1 .
.
ATOM 5198 CG   CG   . ASP ASP ASP B B 259 259 . 50.136 65.297 -3.146  1.00 27.90  1 .
.
ATOM 5199 OD1  OD1  . ASP ASP ASP B B 259 259 . 49.814 64.683 -2.059  1.00 26.48  1 .
.
ATOM 5200 OD2  OD2  . ASP ASP ASP B B 259 259 . 51.281 65.790 -3.430  1.00 31.13  1 .
.
ATOM 5201 C    C    . ASP ASP ASP B B 259 259 . 47.008 66.042 -2.880  1.00 25.99  1 .
.
ATOM 5202 O    O    . ASP ASP ASP B B 259 259 . 47.642 66.916 -2.228  1.00 25.16  1 .
.
ATOM 5203 N    N    . PHE PHE PHE B B 260 260 . 45.672 65.876 -2.773  1.00 25.66  1 .
.
ATOM 5204 CA   CA   . PHE PHE PHE B B 260 260 . 44.872 66.840 -1.992  1.00 25.31  1 .
.
ATOM 5205 CB   CB   . PHE PHE PHE B B 260 260 . 43.346 66.726 -2.256  1.00 25.35  1 .
.
ATOM 5206 CG   CG   . PHE PHE PHE B B 260 260 . 42.687 65.546 -1.628  1.00 19.95  1 .
.
ATOM 5207 CD1  CD1  . PHE PHE PHE B B 260 260 . 42.787 64.303 -2.258  1.00 18.55  1 .
.
ATOM 5208 CE1  CE1  . PHE PHE PHE B B 260 260 . 42.104 63.175 -1.773  1.00 18.10  1 .
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ATOM 5209 CZ   CZ   . PHE PHE PHE B B 260 260 . 41.363 63.264 -0.697  1.00 18.16  1 .
.
ATOM 5210 CE2  CE2  . PHE PHE PHE B B 260 260 . 41.254 64.527 -0.028  1.00 16.86  1 .
.
ATOM 5211 CD2  CD2  . PHE PHE PHE B B 260 260 . 41.910 65.667 -0.565  1.00 18.27  1 .
.
ATOM 5212 C    C    . PHE PHE PHE B B 260 260 . 45.170 66.826 -0.529  1.00 25.76  1 .
.
ATOM 5213 O    O    . PHE PHE PHE B B 260 260 . 44.696 67.749 0.218   1.00 25.99  1 .
.
ATOM 5214 N    N    . LYS LYS LYS B B 261 261 . 45.938 65.811 -0.087  1.00 24.30  1 .
.
ATOM 5215 CA   CA   . LYS LYS LYS B B 261 261 . 46.244 65.717 1.381   1.00 23.84  1 .
.
ATOM 5216 CB   CB   . LYS LYS LYS B B 261 261 . 46.078 64.272 1.916   1.00 25.64  1 .
.
ATOM 5217 CG   CG   . LYS LYS LYS B B 261 261 . 44.618 63.927 1.935   1.00 25.09  1 .
.
ATOM 5218 CD   CD   . LYS LYS LYS B B 261 261 . 44.356 62.505 2.361   1.00 23.87  1 .
.
ATOM 5219 CE   CE   . LYS LYS LYS B B 261 261 . 44.644 61.510 1.136   1.00 21.86  1 .
.
ATOM 5220 NZ   NZ   . LYS LYS LYS B B 261 261 . 44.342 60.060 1.461   1.00 19.62  1 .
.
ATOM 5221 C    C    . LYS LYS LYS B B 261 261 . 47.594 66.291 1.704   1.00 26.55  1 .
.
ATOM 5222 O    O    . LYS LYS LYS B B 261 261 . 47.989 66.279 2.843   1.00 27.28  1 .
.
ATOM 5223 N    N    . SER SER SER B B 262 262 . 48.305 66.797 0.687   1.00 27.12  1 .
.
ATOM 5224 CA   CA   . SER SER SER B B 262 262 . 49.479 67.616 0.908   1.00 28.68  1 .
.
ATOM 5225 CB   CB   . SER SER SER B B 262 262 . 50.565 67.343 -0.167  1.00 29.48  1 .
.
ATOM 5226 OG   OG   . SER SER SER B B 262 262 . 51.054 65.987 -0.096  1.00 31.57  1 .
.
ATOM 5227 C    C    . SER SER SER B B 262 262 . 49.009 69.109 0.882   1.00 30.07  1 .
.
ATOM 5228 O    O    . SER SER SER B B 262 262 . 47.953 69.459 0.337   1.00 28.60  1 .
.
ATOM 5229 N    N    . PRO PRO PRO B B 263 263 . 49.776 70.016 1.502   1.00 30.95  1 .
.
ATOM 5230 CA   CA   . PRO PRO PRO B B 263 263 . 49.307 71.426 1.493   1.00 33.04  1 .
.
ATOM 5231 CB   CB   . PRO PRO PRO B B 263 263 . 50.511 72.183 2.115   1.00 33.55  1 .
.
ATOM 5232 CG   CG   . PRO PRO PRO B B 263 263 . 51.253 71.123 2.941   1.00 32.53  1 .
.
ATOM 5233 CD   CD   . PRO PRO PRO B B 263 263 . 51.127 69.860 2.079   1.00 32.49  1 .
.
ATOM 5234 C    C    . PRO PRO PRO B B 263 263 . 48.999 72.004 0.073   1.00 33.45  1 .
.
ATOM 5235 O    O    . PRO PRO PRO B B 263 263 . 49.750 71.715 -0.920  1.00 32.95  1 .
.
ATOM 5236 N    N    . THR THR THR B B 264 264 . 47.934 72.814 -0.011  1.00 33.85  1 .
.
ATOM 5237 CA   CA   . THR THR THR B B 264 264 . 47.347 73.244 -1.276  1.00 34.34  1 .
.
ATOM 5238 CB   CB   . THR THR THR B B 264 264 . 46.330 74.303 -0.985  1.00 35.22  1 .
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ATOM 5239 OG1  OG1  . THR THR THR B B 264 264 . 45.368 73.793 -0.038  1.00 36.63  1 .
.
ATOM 5240 CG2  CG2  . THR THR THR B B 264 264 . 45.636 74.747 -2.266  1.00 37.76  1 .
.
ATOM 5241 C    C    . THR THR THR B B 264 264 . 48.376 73.837 -2.226  1.00 35.41  1 .
.
ATOM 5242 O    O    . THR THR THR B B 264 264 . 49.187 74.748 -1.842  1.00 36.06  1 .
.
ATOM 5243 N    N    . ASP ASP ASP B B 265 265 . 48.364 73.357 -3.451  1.00 34.18  1 .
.
ATOM 5244 CA   CA   . ASP ASP ASP B B 265 265 . 49.196 73.938 -4.510  1.00 34.16  1 .
.
ATOM 5245 CB   CB   . ASP ASP ASP B B 265 265 . 50.629 73.426 -4.396  1.00 34.27  1 .
.
ATOM 5246 CG   CG   . ASP ASP ASP B B 265 265 . 51.469 73.735 -5.611  1.00 35.76  1 .
.
ATOM 5247 OD1  OD1  . ASP ASP ASP B B 265 265 . 52.510 73.062 -5.737  1.00 40.74  1 .
.
ATOM 5248 OD2  OD2  . ASP ASP ASP B B 265 265 . 51.121 74.590 -6.445  1.00 35.64  1 .
.
ATOM 5249 C    C    . ASP ASP ASP B B 265 265 . 48.498 73.649 -5.879  1.00 33.99  1 .
.
ATOM 5250 O    O    . ASP ASP ASP B B 265 265 . 48.646 72.570 -6.506  1.00 33.98  1 .
.
ATOM 5251 N    N    . PRO PRO PRO B B 266 266 . 47.718 74.629 -6.329  1.00 33.28  1 .
.
ATOM 5252 CA   CA   . PRO PRO PRO B B 266 266 . 46.882 74.551 -7.509  1.00 33.15  1 .
.
ATOM 5253 CB   CB   . PRO PRO PRO B B 266 266 . 46.334 76.007 -7.630  1.00 33.21  1 .
.
ATOM 5254 CG   CG   . PRO PRO PRO B B 266 266 . 46.289 76.450 -6.213  1.00 32.13  1 .
.
ATOM 5255 CD   CD   . PRO PRO PRO B B 266 266 . 47.567 75.941 -5.644  1.00 33.90  1 .
.
ATOM 5256 C    C    . PRO PRO PRO B B 266 266 . 47.692 74.224 -8.743  1.00 32.81  1 .
.
ATOM 5257 O    O    . PRO PRO PRO B B 266 266 . 47.106 73.893 -9.782  1.00 31.47  1 .
.
ATOM 5258 N    N    . SER SER SER B B 267 267 . 49.031 74.369 -8.651  1.00 30.88  1 .
.
ATOM 5259 CA   CA   . SER SER SER B B 267 267 . 49.851 74.135 -9.819  1.00 31.89  1 .
.
ATOM 5260 CB   CB   . SER SER SER B B 267 267 . 51.288 74.666 -9.609  1.00 32.53  1 .
.
ATOM 5261 OG   OG   . SER SER SER B B 267 267 . 51.965 73.848 -8.653  1.00 35.99  1 .
.
ATOM 5262 C    C    . SER SER SER B B 267 267 . 49.864 72.647 -10.177 1.00 30.24  1 .
.
ATOM 5263 O    O    . SER SER SER B B 267 267 . 50.131 72.292 -11.335 1.00 31.62  1 .
.
ATOM 5264 N    N    . ARG ARG ARG B B 268 268 . 49.586 71.798 -9.197  1.00 27.48  1 .
.
ATOM 5265 CA   CA   . ARG ARG ARG B B 268 268 . 49.487 70.344 -9.468  1.00 26.98  1 .
.
ATOM 5266 CB   CB   . ARG ARG ARG B B 268 268 . 49.930 69.515 -8.250  1.00 26.38  1 .
.
ATOM 5267 CG   CG   . ARG ARG ARG B B 268 268 . 48.952 69.658 -7.133  1.00 25.19  1 .
.
ATOM 5268 CD   CD   . ARG ARG ARG B B 268 268 . 49.444 69.024 -5.838  1.00 26.35  1 .
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ATOM 5269 NE   NE   . ARG ARG ARG B B 268 268 . 48.419 69.155 -4.801  1.00 25.29  1 .
.
ATOM 5270 CZ   CZ   . ARG ARG ARG B B 268 268 . 48.613 69.541 -3.550  1.00 25.36  1 .
.
ATOM 5271 NH1  NH1  . ARG ARG ARG B B 268 268 . 49.836 69.815 -3.089  1.00 27.19  1 .
.
ATOM 5272 NH2  NH2  . ARG ARG ARG B B 268 268 . 47.567 69.659 -2.722  1.00 27.29  1 .
.
ATOM 5273 C    C    . ARG ARG ARG B B 268 268 . 48.071 69.865 -9.860  1.00 26.34  1 .
.
ATOM 5274 O    O    . ARG ARG ARG B B 268 268 . 47.890 68.644 -10.141 1.00 26.63  1 .
.
ATOM 5275 N    N    . TYR TYR TYR B B 269 269 . 47.071 70.757 -9.858  1.00 26.24  1 .
.
ATOM 5276 CA   CA   . TYR TYR TYR B B 269 269 . 45.709 70.281 -10.189 1.00 24.71  1 .
.
ATOM 5277 CB   CB   . TYR TYR TYR B B 269 269 . 44.670 71.418 -9.973  1.00 24.99  1 .
.
ATOM 5278 CG   CG   . TYR TYR TYR B B 269 269 . 44.448 71.888 -8.539  1.00 25.21  1 .
.
ATOM 5279 CD1  CD1  . TYR TYR TYR B B 269 269 . 43.690 73.061 -8.304  1.00 22.91  1 .
.
ATOM 5280 CE1  CE1  . TYR TYR TYR B B 269 269 . 43.427 73.489 -7.057  1.00 24.77  1 .
.
ATOM 5281 CZ   CZ   . TYR TYR TYR B B 269 269 . 43.987 72.834 -5.998  1.00 28.39  1 .
.
ATOM 5282 OH   OH   . TYR TYR TYR B B 269 269 . 43.697 73.303 -4.745  1.00 30.60  1 .
.
ATOM 5283 CE2  CE2  . TYR TYR TYR B B 269 269 . 44.736 71.637 -6.187  1.00 27.85  1 .
.
ATOM 5284 CD2  CD2  . TYR TYR TYR B B 269 269 . 44.985 71.226 -7.437  1.00 27.36  1 .
.
ATOM 5285 C    C    . TYR TYR TYR B B 269 269 . 45.651 69.850 -11.602 1.00 25.30  1 .
.
ATOM 5286 O    O    . TYR TYR TYR B B 269 269 . 46.298 70.495 -12.469 1.00 25.58  1 .
.
ATOM 5287 N    N    . ILE ILE ILE B B 270 270 . 44.835 68.792 -11.881 1.00 22.81  1 .
.
ATOM 5288 CA   CA   . ILE ILE ILE B B 270 270 . 44.687 68.313 -13.247 1.00 22.58  1 .
.
ATOM 5289 CB   CB   . ILE ILE ILE B B 270 270 . 45.127 66.852 -13.359 1.00 20.16  1 .
.
ATOM 5290 CG1  CG1  . ILE ILE ILE B B 270 270 . 44.303 65.958 -12.411 1.00 19.35  1 .
.
ATOM 5291 CD   CD   . ILE ILE ILE B B 270 270 . 44.563 64.427 -12.735 1.00 19.23  1 .
.
ATOM 5292 CG2  CG2  . ILE ILE ILE B B 270 270 . 46.635 66.699 -13.023 1.00 23.75  1 .
.
ATOM 5293 C    C    . ILE ILE ILE B B 270 270 . 43.251 68.527 -13.704 1.00 20.07  1 .
.
ATOM 5294 O    O    . ILE ILE ILE B B 270 270 . 42.308 68.600 -12.871 1.00 22.31  1 .
.
ATOM 5295 N    N    . THR THR THR B B 271 271 . 43.070 68.665 -15.006 1.00 22.37  1 .
.
ATOM 5296 CA   CA   . THR THR THR B B 271 271 . 41.731 68.784 -15.534 1.00 20.21  1 .
.
ATOM 5297 CB   CB   . THR THR THR B B 271 271 . 41.716 69.279 -16.968 1.00 21.32  1 .
.
ATOM 5298 OG1  OG1  . THR THR THR B B 271 271 . 42.194 68.267 -17.868 1.00 21.93  1 .
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ATOM 5299 CG2  CG2  . THR THR THR B B 271 271 . 42.473 70.634 -17.133 1.00 22.80  1 .
.
ATOM 5300 C    C    . THR THR THR B B 271 271 . 40.985 67.436 -15.456 1.00 20.89  1 .
.
ATOM 5301 O    O    . THR THR THR B B 271 271 . 41.597 66.339 -15.287 1.00 20.42  1 .
.
ATOM 5302 N    N    . GLY GLY GLY B B 272 272 . 39.671 67.496 -15.640 1.00 19.66  1 .
.
ATOM 5303 CA   CA   . GLY GLY GLY B B 272 272 . 38.917 66.254 -15.766 1.00 18.77  1 .
.
ATOM 5304 C    C    . GLY GLY GLY B B 272 272 . 39.418 65.421 -16.951 1.00 19.24  1 .
.
ATOM 5305 O    O    . GLY GLY GLY B B 272 272 . 39.338 64.195 -16.896 1.00 17.46  1 .
.
ATOM 5306 N    N    . ASP ASP ASP B B 273 273 . 39.887 66.079 -18.023 1.00 17.71  1 .
.
ATOM 5307 CA   CA   . ASP ASP ASP B B 273 273 . 40.398 65.388 -19.190 1.00 21.69  1 .
.
ATOM 5308 CB   CB   . ASP ASP ASP B B 273 273 . 40.689 66.446 -20.255 1.00 23.81  1 .
.
ATOM 5309 CG   CG   . ASP ASP ASP B B 273 273 . 41.160 65.835 -21.593 1.00 33.66  1 .
.
ATOM 5310 OD1  OD1  . ASP ASP ASP B B 273 273 . 40.328 65.192 -22.270 1.00 41.63  1 .
.
ATOM 5311 OD2  OD2  . ASP ASP ASP B B 273 273 . 42.326 66.084 -22.041 1.00 46.75  1 .
.
ATOM 5312 C    C    . ASP ASP ASP B B 273 273 . 41.659 64.604 -18.869 1.00 21.07  1 .
.
ATOM 5313 O    O    . ASP ASP ASP B B 273 273 . 41.849 63.426 -19.304 1.00 20.16  1 .
.
ATOM 5314 N    N    . GLN GLN GLN B B 274 274 . 42.506 65.234 -18.075 1.00 20.55  1 .
.
ATOM 5315 CA   CA   . GLN GLN GLN B B 274 274 . 43.770 64.618 -17.607 1.00 20.63  1 .
.
ATOM 5316 CB   CB   . GLN GLN GLN B B 274 274 . 44.644 65.623 -16.858 1.00 21.57  1 .
.
ATOM 5317 CG   CG   . GLN GLN GLN B B 274 274 . 45.214 66.620 -17.807 1.00 24.27  1 .
.
ATOM 5318 CD   CD   . GLN GLN GLN B B 274 274 . 45.951 67.708 -17.148 1.00 26.58  1 .
.
ATOM 5319 OE1  OE1  . GLN GLN GLN B B 274 274 . 45.421 68.448 -16.321 1.00 24.46  1 .
.
ATOM 5320 NE2  NE2  . GLN GLN GLN B B 274 274 . 47.220 67.861 -17.549 1.00 31.30  1 .
.
ATOM 5321 C    C    . GLN GLN GLN B B 274 274 . 43.441 63.390 -16.696 1.00 19.30  1 .
.
ATOM 5322 O    O    . GLN GLN GLN B B 274 274 . 44.032 62.322 -16.885 1.00 18.93  1 .
.
ATOM 5323 N    N    . LEU LEU LEU B B 275 275 . 42.454 63.552 -15.809 1.00 16.63  1 .
.
ATOM 5324 CA   CA   . LEU LEU LEU B B 275 275 . 42.049 62.499 -14.905 1.00 16.25  1 .
.
ATOM 5325 CB   CB   . LEU LEU LEU B B 275 275 . 41.031 63.024 -13.950 1.00 15.49  1 .
.
ATOM 5326 CG   CG   . LEU LEU LEU B B 275 275 . 40.546 62.135 -12.856 1.00 14.57  1 .
.
ATOM 5327 CD1  CD1  . LEU LEU LEU B B 275 275 . 41.663 61.461 -12.024 1.00 16.80  1 .
.
ATOM 5328 CD2  CD2  . LEU LEU LEU B B 275 275 . 39.497 62.933 -11.976 1.00 12.93  1 .
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ATOM 5329 C    C    . LEU LEU LEU B B 275 275 . 41.466 61.358 -15.754 1.00 16.19  1 .
.
ATOM 5330 O    O    . LEU LEU LEU B B 275 275 . 41.793 60.207 -15.507 1.00 15.09  1 .
.
ATOM 5331 N    N    . GLY GLY GLY B B 276 276 . 40.578 61.653 -16.723 1.00 15.49  1 .
.
ATOM 5332 CA   CA   . GLY GLY GLY B B 276 276 . 40.052 60.590 -17.631 1.00 15.00  1 .
.
ATOM 5333 C    C    . GLY GLY GLY B B 276 276 . 41.145 59.839 -18.376 1.00 16.48  1 .
.
ATOM 5334 O    O    . GLY GLY GLY B B 276 276 . 41.066 58.600 -18.539 1.00 15.47  1 .
.
ATOM 5335 N    N    . ALA ALA ALA B B 277 277 . 42.194 60.557 -18.791 1.00 16.50  1 .
.
ATOM 5336 CA   CA   . ALA ALA ALA B B 277 277 . 43.311 59.899 -19.524 1.00 16.97  1 .
.
ATOM 5337 CB   CB   . ALA ALA ALA B B 277 277 . 44.322 60.963 -20.062 1.00 19.05  1 .
.
ATOM 5338 C    C    . ALA ALA ALA B B 277 277 . 44.053 58.942 -18.600 1.00 17.43  1 .
.
ATOM 5339 O    O    . ALA ALA ALA B B 277 277 . 44.510 57.879 -19.045 1.00 16.55  1 .
.
ATOM 5340 N    N    . LEU LEU LEU B B 278 278 . 44.180 59.324 -17.333 1.00 16.18  1 .
.
ATOM 5341 CA   CA   . LEU LEU LEU B B 278 278 . 44.795 58.463 -16.317 1.00 16.65  1 .
.
ATOM 5342 CB   CB   . LEU LEU LEU B B 278 278 . 44.895 59.172 -15.010 1.00 16.86  1 .
.
ATOM 5343 CG   CG   . LEU LEU LEU B B 278 278 . 45.427 58.375 -13.857 1.00 21.34  1 .
.
ATOM 5344 CD1  CD1  . LEU LEU LEU B B 278 278 . 46.943 57.992 -14.130 1.00 23.63  1 .
.
ATOM 5345 CD2  CD2  . LEU LEU LEU B B 278 278 . 45.377 59.321 -12.635 1.00 26.96  1 .
.
ATOM 5346 C    C    . LEU LEU LEU B B 278 278 . 43.963 57.151 -16.141 1.00 15.23  1 .
.
ATOM 5347 O    O    . LEU LEU LEU B B 278 278 . 44.510 56.052 -16.120 1.00 16.04  1 .
.
ATOM 5348 N    N    . TYR TYR TYR B B 279 279 . 42.652 57.292 -16.038 1.00 13.31  1 .
.
ATOM 5349 CA   CA   . TYR TYR TYR B B 279 279 . 41.773 56.105 -15.991 1.00 12.18  1 .
.
ATOM 5350 CB   CB   . TYR TYR TYR B B 279 279 . 40.264 56.430 -15.886 1.00 11.50  1 .
.
ATOM 5351 CG   CG   . TYR TYR TYR B B 279 279 . 39.880 57.294 -14.687 1.00 10.92  1 .
.
ATOM 5352 CD1  CD1  . TYR TYR TYR B B 279 279 . 40.508 57.105 -13.443 1.00 12.60  1 .
.
ATOM 5353 CE1  CE1  . TYR TYR TYR B B 279 279 . 40.136 57.895 -12.340 1.00 12.48  1 .
.
ATOM 5354 CZ   CZ   . TYR TYR TYR B B 279 279 . 39.181 58.917 -12.512 1.00 11.96  1 .
.
ATOM 5355 OH   OH   . TYR TYR TYR B B 279 279 . 38.787 59.696 -11.434 1.00 13.03  1 .
.
ATOM 5356 CE2  CE2  . TYR TYR TYR B B 279 279 . 38.509 59.112 -13.770 1.00 10.82  1 .
.
ATOM 5357 CD2  CD2  . TYR TYR TYR B B 279 279 . 38.882 58.278 -14.837 1.00 11.10  1 .
.
ATOM 5358 C    C    . TYR TYR TYR B B 279 279 . 41.952 55.221 -17.217 1.00 12.69  1 .
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ATOM 5359 O    O    . TYR TYR TYR B B 279 279 . 41.949 53.986 -17.079 1.00 13.24  1 .
.
ATOM 5360 N    N    . GLN GLN GLN B B 280 280 . 42.022 55.852 -18.409 1.00 12.96  1 .
.
ATOM 5361 CA   CA   . GLN GLN GLN B B 280 280 . 42.309 55.031 -19.594 1.00 15.72  1 .
.
ATOM 5362 CB   CB   . GLN GLN GLN B B 280 280 . 42.291 55.885 -20.870 1.00 14.83  1 .
.
ATOM 5363 CG   CG   . GLN GLN GLN B B 280 280 . 40.771 56.241 -21.089 1.00 20.52  1 .
.
ATOM 5364 CD   CD   . GLN GLN GLN B B 280 280 . 40.520 56.952 -22.313 1.00 33.50  1 .
.
ATOM 5365 OE1  OE1  . GLN GLN GLN B B 280 280 . 39.615 56.571 -23.118 1.00 38.74  1 .
.
ATOM 5366 NE2  NE2  . GLN GLN GLN B B 280 280 . 41.268 58.034 -22.505 1.00 38.41  1 .
.
ATOM 5367 C    C    . GLN GLN GLN B B 280 280 . 43.588 54.248 -19.468 1.00 15.93  1 .
.
ATOM 5368 O    O    . GLN GLN GLN B B 280 280 . 43.617 53.073 -19.872 1.00 17.48  1 .
.
ATOM 5369 N    N    . ASP ASP ASP B B 281 281 . 44.598 54.824 -18.856 1.00 15.58  1 .
.
ATOM 5370 CA   CA   . ASP ASP ASP B B 281 281 . 45.859 54.068 -18.625 1.00 17.33  1 .
.
ATOM 5371 CB   CB   . ASP ASP ASP B B 281 281 . 46.987 54.974 -18.134 1.00 19.05  1 .
.
ATOM 5372 CG   CG   . ASP ASP ASP B B 281 281 . 47.469 56.003 -19.215 1.00 25.11  1 .
.
ATOM 5373 OD1  OD1  . ASP ASP ASP B B 281 281 . 47.256 55.855 -20.443 1.00 27.66  1 .
.
ATOM 5374 OD2  OD2  . ASP ASP ASP B B 281 281 . 48.075 57.004 -18.776 1.00 31.04  1 .
.
ATOM 5375 C    C    . ASP ASP ASP B B 281 281 . 45.670 52.911 -17.663 1.00 17.68  1 .
.
ATOM 5376 O    O    . ASP ASP ASP B B 281 281 . 46.133 51.767 -17.919 1.00 17.49  1 .
.
ATOM 5377 N    N    . PHE PHE PHE B B 282 282 . 44.882 53.151 -16.619 1.00 15.35  1 .
.
ATOM 5378 CA   CA   . PHE PHE PHE B B 282 282 . 44.614 52.075 -15.664 1.00 15.21  1 .
.
ATOM 5379 CB   CB   . PHE PHE PHE B B 282 282 . 43.716 52.579 -14.524 1.00 16.49  1 .
.
ATOM 5380 CG   CG   . PHE PHE PHE B B 282 282 . 44.390 53.588 -13.608 1.00 18.41  1 .
.
ATOM 5381 CD1  CD1  . PHE PHE PHE B B 282 282 . 43.600 54.264 -12.671 1.00 17.17  1 .
.
ATOM 5382 CE1  CE1  . PHE PHE PHE B B 282 282 . 44.231 55.190 -11.772 1.00 22.32  1 .
.
ATOM 5383 CZ   CZ   . PHE PHE PHE B B 282 282 . 45.621 55.426 -11.846 1.00 22.40  1 .
.
ATOM 5384 CE2  CE2  . PHE PHE PHE B B 282 282 . 46.415 54.771 -12.820 1.00 23.79  1 .
.
ATOM 5385 CD2  CD2  . PHE PHE PHE B B 282 282 . 45.798 53.869 -13.673 1.00 19.09  1 .
.
ATOM 5386 C    C    . PHE PHE PHE B B 282 282 . 43.905 50.913 -16.321 1.00 15.06  1 .
.
ATOM 5387 O    O    . PHE PHE PHE B B 282 282 . 44.207 49.744 -16.011 1.00 16.32  1 .
.
ATOM 5388 N    N    . VAL VAL VAL B B 283 283 . 42.946 51.203 -17.215 1.00 13.06  1 .
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ATOM 5389 CA   CA   . VAL VAL VAL B B 283 283 . 42.123 50.168 -17.805 1.00 14.50  1 .
.
ATOM 5390 CB   CB   . VAL VAL VAL B B 283 283 . 40.894 50.750 -18.459 1.00 13.98  1 .
.
ATOM 5391 CG1  CG1  . VAL VAL VAL B B 283 283 . 40.092 49.675 -19.371 1.00 16.25  1 .
.
ATOM 5392 CG2  CG2  . VAL VAL VAL B B 283 283 . 39.937 51.288 -17.368 1.00 12.08  1 .
.
ATOM 5393 C    C    . VAL VAL VAL B B 283 283 . 42.987 49.368 -18.798 1.00 14.75  1 .
.
ATOM 5394 O    O    . VAL VAL VAL B B 283 283 . 42.764 48.172 -18.960 1.00 15.74  1 .
.
ATOM 5395 N    N    . ARG ARG ARG B B 284 284 . 43.922 50.050 -19.449 1.00 15.54  1 .
.
ATOM 5396 CA   CA   . ARG ARG ARG B B 284 284 . 44.798 49.364 -20.385 1.00 16.63  1 .
.
ATOM 5397 CB   CB   . ARG ARG ARG B B 284 284 . 45.572 50.419 -21.231 1.00 17.37  1 .
.
ATOM 5398 CG   CG   . ARG ARG ARG B B 284 284 . 46.628 49.833 -22.115 1.00 17.15  1 .
.
ATOM 5399 CD   CD   . ARG ARG ARG B B 284 284 . 46.079 48.909 -23.305 1.00 23.77  1 .
.
ATOM 5400 NE   NE   . ARG ARG ARG B B 284 284 . 45.077 49.524 -24.215 1.00 26.76  1 .
.
ATOM 5401 CZ   CZ   . ARG ARG ARG B B 284 284 . 45.384 50.282 -25.288 1.00 28.77  1 .
.
ATOM 5402 NH1  NH1  . ARG ARG ARG B B 284 284 . 46.681 50.489 -25.612 1.00 30.26  1 .
.
ATOM 5403 NH2  NH2  . ARG ARG ARG B B 284 284 . 44.403 50.800 -26.061 1.00 30.21  1 .
.
ATOM 5404 C    C    . ARG ARG ARG B B 284 284 . 45.808 48.459 -19.645 1.00 16.53  1 .
.
ATOM 5405 O    O    . ARG ARG ARG B B 284 284 . 46.107 47.340 -20.074 1.00 18.25  1 .
.
ATOM 5406 N    N    . ASP ASP ASP B B 285 285 . 46.288 48.916 -18.504 1.00 17.08  1 .
.
ATOM 5407 CA   CA   . ASP ASP ASP B B 285 285 . 47.407 48.283 -17.802 1.00 16.73  1 .
.
ATOM 5408 CB   CB   . ASP ASP ASP B B 285 285 . 48.257 49.355 -17.184 1.00 16.45  1 .
.
ATOM 5409 CG   CG   . ASP ASP ASP B B 285 285 . 49.036 50.167 -18.185 1.00 20.94  1 .
.
ATOM 5410 OD1  OD1  . ASP ASP ASP B B 285 285 . 49.109 49.780 -19.387 1.00 24.04  1 .
.
ATOM 5411 OD2  OD2  . ASP ASP ASP B B 285 285 . 49.615 51.210 -17.758 1.00 25.37  1 .
.
ATOM 5412 C    C    . ASP ASP ASP B B 285 285 . 47.017 47.249 -16.719 1.00 17.46  1 .
.
ATOM 5413 O    O    . ASP ASP ASP B B 285 285 . 47.896 46.471 -16.259 1.00 17.73  1 .
.
ATOM 5414 N    N    . TYR TYR TYR B B 286 286 . 45.778 47.289 -16.266 1.00 17.04  1 .
.
ATOM 5415 CA   CA   . TYR TYR TYR B B 286 286 . 45.308 46.483 -15.138 1.00 15.43  1 .
.
ATOM 5416 CB   CB   . TYR TYR TYR B B 286 286 . 45.210 47.348 -13.848 1.00 15.78  1 .
.
ATOM 5417 CG   CG   . TYR TYR TYR B B 286 286 . 46.554 47.853 -13.415 1.00 18.48  1 .
.
ATOM 5418 CD1  CD1  . TYR TYR TYR B B 286 286 . 47.451 46.989 -12.781 1.00 20.31  1 .
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ATOM 5419 CE1  CE1  . TYR TYR TYR B B 286 286 . 48.728 47.423 -12.434 1.00 22.26  1 .
.
ATOM 5420 CZ   CZ   . TYR TYR TYR B B 286 286 . 49.106 48.745 -12.746 1.00 25.51  1 .
.
ATOM 5421 OH   OH   . TYR TYR TYR B B 286 286 . 50.342 49.185 -12.418 1.00 34.04  1 .
.
ATOM 5422 CE2  CE2  . TYR TYR TYR B B 286 286 . 48.237 49.637 -13.400 1.00 23.84  1 .
.
ATOM 5423 CD2  CD2  . TYR TYR TYR B B 286 286 . 46.957 49.167 -13.730 1.00 18.95  1 .
.
ATOM 5424 C    C    . TYR TYR TYR B B 286 286 . 43.907 46.029 -15.467 1.00 15.95  1 .
.
ATOM 5425 O    O    . TYR TYR TYR B B 286 286 . 43.206 46.627 -16.314 1.00 15.83  1 .
.
ATOM 5426 N    N    . PRO PRO PRO B B 287 287 . 43.460 44.929 -14.839 1.00 14.94  1 .
.
ATOM 5427 CA   CA   . PRO PRO PRO B B 287 287 . 42.156 44.413 -15.162 1.00 14.27  1 .
.
ATOM 5428 CB   CB   . PRO PRO PRO B B 287 287 . 42.224 42.904 -14.641 1.00 15.59  1 .
.
ATOM 5429 CG   CG   . PRO PRO PRO B B 287 287 . 43.198 43.020 -13.483 1.00 16.54  1 .
.
ATOM 5430 CD   CD   . PRO PRO PRO B B 287 287 . 44.212 44.055 -13.907 1.00 16.91  1 .
.
ATOM 5431 C    C    . PRO PRO PRO B B 287 287 . 41.033 45.182 -14.444 1.00 13.79  1 .
.
ATOM 5432 O    O    . PRO PRO PRO B B 287 287 . 40.197 44.597 -13.773 1.00 13.97  1 .
.
ATOM 5433 N    N    . VAL VAL VAL B B 288 288 . 40.972 46.496 -14.689 1.00 13.63  1 .
.
ATOM 5434 CA   CA   . VAL VAL VAL B B 288 288 . 39.961 47.334 -14.054 1.00 12.23  1 .
.
ATOM 5435 CB   CB   . VAL VAL VAL B B 288 288 . 40.460 48.805 -13.996 1.00 11.49  1 .
.
ATOM 5436 CG1  CG1  . VAL VAL VAL B B 288 288 . 39.326 49.746 -13.585 1.00 13.53  1 .
.
ATOM 5437 CG2  CG2  . VAL VAL VAL B B 288 288 . 41.682 48.910 -13.042 1.00 12.36  1 .
.
ATOM 5438 C    C    . VAL VAL VAL B B 288 288 . 38.728 47.226 -14.916 1.00 12.35  1 .
.
ATOM 5439 O    O    . VAL VAL VAL B B 288 288 . 38.785 47.579 -16.096 1.00 15.17  1 .
.
ATOM 5440 N    N    . VAL VAL VAL B B 289 289 . 37.616 46.801 -14.365 1.00 11.25  1 .
.
ATOM 5441 CA   CA   . VAL VAL VAL B B 289 289 . 36.362 46.577 -15.112 1.00 9.99   1 .
.
ATOM 5442 CB   CB   . VAL VAL VAL B B 289 289 . 35.859 45.126 -14.961 1.00 11.92  1 .
.
ATOM 5443 CG1  CG1  . VAL VAL VAL B B 289 289 . 36.962 44.133 -15.456 1.00 14.87  1 .
.
ATOM 5444 CG2  CG2  . VAL VAL VAL B B 289 289 . 35.451 44.789 -13.437 1.00 11.88  1 .
.
ATOM 5445 C    C    . VAL VAL VAL B B 289 289 . 35.271 47.559 -14.704 1.00 11.39  1 .
.
ATOM 5446 O    O    . VAL VAL VAL B B 289 289 . 34.201 47.564 -15.294 1.00 11.54  1 .
.
ATOM 5447 N    N    . SER SER SER B B 290 290 . 35.551 48.359 -13.637 1.00 12.13  1 .
.
ATOM 5448 CA   CA   . SER SER SER B B 290 290 . 34.469 49.211 -13.109 1.00 10.19  1 .
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ATOM 5449 CB   CB   . SER SER SER B B 290 290 . 33.606 48.343 -12.081 1.00 10.73  1 .
.
ATOM 5450 OG   OG   . SER SER SER B B 290 290 . 32.575 49.174 -11.520 1.00 12.48  1 .
.
ATOM 5451 C    C    . SER SER SER B B 290 290 . 35.127 50.339 -12.379 1.00 9.47   1 .
.
ATOM 5452 O    O    . SER SER SER B B 290 290 . 36.087 50.082 -11.589 1.00 10.73  1 .
.
ATOM 5453 N    N    . ILE ILE ILE B B 291 291 . 34.640 51.557 -12.627 1.00 8.41   1 .
.
ATOM 5454 CA   CA   . ILE ILE ILE B B 291 291 . 35.147 52.749 -11.874 1.00 9.44   1 .
.
ATOM 5455 CB   CB   . ILE ILE ILE B B 291 291 . 36.093 53.701 -12.735 1.00 9.65   1 .
.
ATOM 5456 CG1  CG1  . ILE ILE ILE B B 291 291 . 37.331 52.916 -13.235 1.00 9.98   1 .
.
ATOM 5457 CD   CD   . ILE ILE ILE B B 291 291 . 38.204 53.719 -14.204 1.00 12.05  1 .
.
ATOM 5458 CG2  CG2  . ILE ILE ILE B B 291 291 . 36.484 54.938 -11.931 1.00 9.56   1 .
.
ATOM 5459 C    C    . ILE ILE ILE B B 291 291 . 33.894 53.496 -11.409 1.00 9.63   1 .
.
ATOM 5460 O    O    . ILE ILE ILE B B 291 291 . 33.037 53.876 -12.194 1.00 10.78  1 .
.
ATOM 5461 N    N    . GLU GLU GLU B B 292 292 . 33.847 53.749 -10.100 1.00 9.11   1 .
.
ATOM 5462 CA   CA   . GLU GLU GLU B B 292 292 . 32.728 54.464 -9.478  1.00 8.26   1 .
.
ATOM 5463 CB   CB   . GLU GLU GLU B B 292 292 . 32.365 53.694 -8.162  1.00 8.05   1 .
.
ATOM 5464 CG   CG   . GLU GLU GLU B B 292 292 . 31.318 54.431 -7.291  1.00 8.79   1 .
.
ATOM 5465 CD   CD   . GLU GLU GLU B B 292 292 . 31.234 53.764 -5.943  1.00 13.70  1 .
.
ATOM 5466 OE1  OE1  . GLU GLU GLU B B 292 292 . 31.573 52.530 -5.808  1.00 13.50  1 .
.
ATOM 5467 OE2  OE2  . GLU GLU GLU B B 292 292 . 30.837 54.469 -4.985  1.00 12.83  1 .
.
ATOM 5468 C    C    . GLU GLU GLU B B 292 292 . 33.208 55.903 -9.124  1.00 8.72   1 .
.
ATOM 5469 O    O    . GLU GLU GLU B B 292 292 . 34.348 56.144 -8.705  1.00 10.78  1 .
.
ATOM 5470 N    N    . ASP ASP ASP B B 293 293 . 32.277 56.830 -9.299  1.00 9.73   1 .
.
ATOM 5471 CA   CA   . ASP ASP ASP B B 293 293 . 32.525 58.278 -9.051  1.00 10.24  1 .
.
ATOM 5472 CB   CB   . ASP ASP ASP B B 293 293 . 32.415 58.588 -7.541  1.00 12.41  1 .
.
ATOM 5473 CG   CG   . ASP ASP ASP B B 293 293 . 30.963 58.801 -7.112  1.00 12.73  1 .
.
ATOM 5474 OD1  OD1  . ASP ASP ASP B B 293 293 . 30.009 58.891 -7.928  1.00 12.39  1 .
.
ATOM 5475 OD2  OD2  . ASP ASP ASP B B 293 293 . 30.723 58.780 -5.890  1.00 13.39  1 .
.
ATOM 5476 C    C    . ASP ASP ASP B B 293 293 . 33.841 58.743 -9.615  1.00 11.33  1 .
.
ATOM 5477 O    O    . ASP ASP ASP B B 293 293 . 34.662 59.337 -8.951  1.00 10.85  1 .
.
ATOM 5478 N    N    . PRO PRO PRO B B 294 294 . 34.023 58.567 -10.920 1.00 10.29  1 .
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ATOM 5479 CA   CA   . PRO PRO PRO B B 294 294 . 35.313 59.006 -11.508 1.00 10.95  1 .
.
ATOM 5480 CB   CB   . PRO PRO PRO B B 294 294 . 35.250 58.412 -12.982 1.00 11.12  1 .
.
ATOM 5481 CG   CG   . PRO PRO PRO B B 294 294 . 33.740 58.260 -13.160 1.00 10.70  1 .
.
ATOM 5482 CD   CD   . PRO PRO PRO B B 294 294 . 33.234 57.731 -11.852 1.00 11.11  1 .
.
ATOM 5483 C    C    . PRO PRO PRO B B 294 294 . 35.410 60.563 -11.561 1.00 10.34  1 .
.
ATOM 5484 O    O    . PRO PRO PRO B B 294 294 . 36.547 61.073 -11.702 1.00 11.22  1 .
.
ATOM 5485 N    N    . PHE PHE PHE B B 295 295 . 34.270 61.250 -11.522 1.00 10.88  1 .
.
ATOM 5486 CA   CA   . PHE PHE PHE B B 295 295 . 34.300 62.727 -11.509 1.00 10.32  1 .
.
ATOM 5487 CB   CB   . PHE PHE PHE B B 295 295 . 33.857 63.262 -12.899 1.00 10.19  1 .
.
ATOM 5488 CG   CG   . PHE PHE PHE B B 295 295 . 34.746 62.726 -13.982 1.00 9.59   1 .
.
ATOM 5489 CD1  CD1  . PHE PHE PHE B B 295 295 . 36.077 63.168 -14.113 1.00 10.93  1 .
.
ATOM 5490 CE1  CE1  . PHE PHE PHE B B 295 295 . 36.921 62.579 -15.131 1.00 11.68  1 .
.
ATOM 5491 CZ   CZ   . PHE PHE PHE B B 295 295 . 36.337 61.463 -15.904 1.00 13.00  1 .
.
ATOM 5492 CE2  CE2  . PHE PHE PHE B B 295 295 . 35.152 61.053 -15.698 1.00 11.66  1 .
.
ATOM 5493 CD2  CD2  . PHE PHE PHE B B 295 295 . 34.305 61.611 -14.763 1.00 10.45  1 .
.
ATOM 5494 C    C    . PHE PHE PHE B B 295 295 . 33.377 63.241 -10.400 1.00 9.99   1 .
.
ATOM 5495 O    O    . PHE PHE PHE B B 295 295 . 32.589 62.489 -9.792  1.00 11.20  1 .
.
ATOM 5496 N    N    . ASP ASP ASP B B 296 296 . 33.483 64.554 -10.172 1.00 10.74  1 .
.
ATOM 5497 CA   CA   . ASP ASP ASP B B 296 296 . 32.621 65.178 -9.190  1.00 11.72  1 .
.
ATOM 5498 CB   CB   . ASP ASP ASP B B 296 296 . 33.015 66.669 -9.089  1.00 11.26  1 .
.
ATOM 5499 CG   CG   . ASP ASP ASP B B 296 296 . 32.201 67.415 -7.987  1.00 14.04  1 .
.
ATOM 5500 OD1  OD1  . ASP ASP ASP B B 296 296 . 32.536 67.200 -6.814  1.00 14.50  1 .
.
ATOM 5501 OD2  OD2  . ASP ASP ASP B B 296 296 . 31.167 68.095 -8.285  1.00 14.03  1 .
.
ATOM 5502 C    C    . ASP ASP ASP B B 296 296 . 31.105 65.007 -9.410  1.00 11.62  1 .
.
ATOM 5503 O    O    . ASP ASP ASP B B 296 296 . 30.639 64.895 -10.587 1.00 11.22  1 .
.
ATOM 5504 N    N    . GLN GLN GLN B B 297 297 . 30.299 65.009 -8.327  1.00 10.40  1 .
.
ATOM 5505 CA   CA   . GLN GLN GLN B B 297 297 . 28.871 64.774 -8.413  1.00 10.57  1 .
.
ATOM 5506 CB   CB   . GLN GLN GLN B B 297 297 . 28.319 64.780 -6.970  1.00 11.67  1 .
.
ATOM 5507 CG   CG   . GLN GLN GLN B B 297 297 . 28.502 66.166 -6.257  1.00 11.82  1 .
.
ATOM 5508 CD   CD   . GLN GLN GLN B B 297 297 . 28.773 65.999 -4.756  1.00 15.09  1 .
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ATOM 5509 OE1  OE1  . GLN GLN GLN B B 297 297 . 28.193 65.144 -4.135  1.00 15.03  1 .
.
ATOM 5510 NE2  NE2  . GLN GLN GLN B B 297 297 . 29.615 66.850 -4.181  1.00 16.23  1 .
.
ATOM 5511 C    C    . GLN GLN GLN B B 297 297 . 28.113 65.829 -9.303  1.00 11.41  1 .
.
ATOM 5512 O    O    . GLN GLN GLN B B 297 297 . 26.951 65.612 -9.658  1.00 12.20  1 .
.
ATOM 5513 N    N    . ASP ASP ASP B B 298 298 . 28.777 66.979 -9.622  1.00 11.82  1 .
.
ATOM 5514 CA   CA   . ASP ASP ASP B B 298 298 . 28.157 67.996 -10.463 1.00 12.23  1 .
.
ATOM 5515 CB   CB   . ASP ASP ASP B B 298 298 . 28.202 69.389 -9.727  1.00 13.20  1 .
.
ATOM 5516 CG   CG   . ASP ASP ASP B B 298 298 . 27.233 69.484 -8.528  1.00 13.56  1 .
.
ATOM 5517 OD1  OD1  . ASP ASP ASP B B 298 298 . 26.025 69.174 -8.669  1.00 16.28  1 .
.
ATOM 5518 OD2  OD2  . ASP ASP ASP B B 298 298 . 27.687 69.966 -7.451  1.00 18.95  1 .
.
ATOM 5519 C    C    . ASP ASP ASP B B 298 298 . 28.846 68.114 -11.819 1.00 10.32  1 .
.
ATOM 5520 O    O    . ASP ASP ASP B B 298 298 . 28.412 68.954 -12.664 1.00 11.13  1 .
.
ATOM 5521 N    N    . ASP ASP ASP B B 299 299 . 29.918 67.347 -12.068 1.00 13.00  1 .
.
ATOM 5522 CA   CA   . ASP ASP ASP B B 299 299 . 30.710 67.520 -13.293 1.00 10.77  1 .
.
ATOM 5523 CB   CB   . ASP ASP ASP B B 299 299 . 32.156 67.201 -13.000 1.00 11.30  1 .
.
ATOM 5524 CG   CG   . ASP ASP ASP B B 299 299 . 33.124 67.522 -14.153 1.00 10.56  1 .
.
ATOM 5525 OD1  OD1  . ASP ASP ASP B B 299 299 . 32.768 67.994 -15.235 1.00 13.41  1 .
.
ATOM 5526 OD2  OD2  . ASP ASP ASP B B 299 299 . 34.312 67.287 -13.919 1.00 13.86  1 .
.
ATOM 5527 C    C    . ASP ASP ASP B B 299 299 . 30.121 66.633 -14.421 1.00 12.31  1 .
.
ATOM 5528 O    O    . ASP ASP ASP B B 299 299 . 30.791 65.734 -14.949 1.00 10.82  1 .
.
ATOM 5529 N    N    . TRP TRP TRP B B 300 300 . 28.865 66.919 -14.765 1.00 11.35  1 .
.
ATOM 5530 CA   CA   . TRP TRP TRP B B 300 300 . 28.102 66.087 -15.683 1.00 10.87  1 .
.
ATOM 5531 CB   CB   . TRP TRP TRP B B 300 300 . 26.737 66.714 -15.935 1.00 11.04  1 .
.
ATOM 5532 CG   CG   . TRP TRP TRP B B 300 300 . 25.858 66.597 -14.738 1.00 10.57  1 .
.
ATOM 5533 CD1  CD1  . TRP TRP TRP B B 300 300 . 25.677 67.571 -13.717 1.00 11.30  1 .
.
ATOM 5534 NE1  NE1  . TRP TRP TRP B B 300 300 . 24.800 67.093 -12.791 1.00 14.08  1 .
.
ATOM 5535 CE2  CE2  . TRP TRP TRP B B 300 300 . 24.410 65.810 -13.165 1.00 11.10  1 .
.
ATOM 5536 CD2  CD2  . TRP TRP TRP B B 300 300 . 25.080 65.488 -14.384 1.00 12.45  1 .
.
ATOM 5537 CE3  CE3  . TRP TRP TRP B B 300 300 . 24.831 64.244 -14.999 1.00 13.00  1 .
.
ATOM 5538 CZ3  CZ3  . TRP TRP TRP B B 300 300 . 23.961 63.296 -14.318 1.00 12.11  1 .
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ATOM 5539 CH2  CH2  . TRP TRP TRP B B 300 300 . 23.304 63.642 -13.138 1.00 15.32  1 .
.
ATOM 5540 CZ2  CZ2  . TRP TRP TRP B B 300 300 . 23.497 64.922 -12.541 1.00 14.66  1 .
.
ATOM 5541 C    C    . TRP TRP TRP B B 300 300 . 28.843 65.881 -17.020 1.00 12.76  1 .
.
ATOM 5542 O    O    . TRP TRP TRP B B 300 300 . 28.778 64.769 -17.621 1.00 11.41  1 .
.
ATOM 5543 N    N    . ALA ALA ALA B B 301 301 . 29.464 66.941 -17.523 1.00 11.68  1 .
.
ATOM 5544 CA   CA   . ALA ALA ALA B B 301 301 . 30.147 66.846 -18.834 1.00 12.56  1 .
.
ATOM 5545 CB   CB   . ALA ALA ALA B B 301 301 . 30.771 68.241 -19.262 1.00 12.89  1 .
.
ATOM 5546 C    C    . ALA ALA ALA B B 301 301 . 31.209 65.774 -18.842 1.00 12.97  1 .
.
ATOM 5547 O    O    . ALA ALA ALA B B 301 301 . 31.354 65.015 -19.859 1.00 12.84  1 .
.
ATOM 5548 N    N    . ALA ALA ALA B B 302 302 . 31.983 65.684 -17.738 1.00 10.54  1 .
.
ATOM 5549 CA   CA   . ALA ALA ALA B B 302 302 . 33.051 64.686 -17.699 1.00 11.08  1 .
.
ATOM 5550 CB   CB   . ALA ALA ALA B B 302 302 . 34.002 64.930 -16.477 1.00 11.49  1 .
.
ATOM 5551 C    C    . ALA ALA ALA B B 302 302 . 32.503 63.256 -17.649 1.00 11.12  1 .
.
ATOM 5552 O    O    . ALA ALA ALA B B 302 302 . 33.041 62.363 -18.302 1.00 12.09  1 .
.
ATOM 5553 N    N    . TRP TRP TRP B B 303 303 . 31.460 63.044 -16.867 1.00 11.36  1 .
.
ATOM 5554 CA   CA   . TRP TRP TRP B B 303 303 . 30.805 61.740 -16.757 1.00 10.89  1 .
.
ATOM 5555 CB   CB   . TRP TRP TRP B B 303 303 . 29.572 61.815 -15.853 1.00 12.15  1 .
.
ATOM 5556 CG   CG   . TRP TRP TRP B B 303 303 . 29.943 61.822 -14.376 1.00 10.36  1 .
.
ATOM 5557 CD1  CD1  . TRP TRP TRP B B 303 303 . 30.163 62.948 -13.535 1.00 9.20   1 .
.
ATOM 5558 NE1  NE1  . TRP TRP TRP B B 303 303 . 30.408 62.515 -12.251 1.00 10.94  1 .
.
ATOM 5559 CE2  CE2  . TRP TRP TRP B B 303 303 . 30.198 61.153 -12.200 1.00 10.40  1 .
.
ATOM 5560 CD2  CD2  . TRP TRP TRP B B 303 303 . 29.983 60.681 -13.527 1.00 8.08   1 .
.
ATOM 5561 CE3  CE3  . TRP TRP TRP B B 303 303 . 29.709 59.308 -13.737 1.00 9.41   1 .
.
ATOM 5562 CZ3  CZ3  . TRP TRP TRP B B 303 303 . 29.721 58.415 -12.612 1.00 9.94   1 .
.
ATOM 5563 CH2  CH2  . TRP TRP TRP B B 303 303 . 29.994 58.916 -11.291 1.00 11.51  1 .
.
ATOM 5564 CZ2  CZ2  . TRP TRP TRP B B 303 303 . 30.259 60.290 -11.079 1.00 9.03   1 .
.
ATOM 5565 C    C    . TRP TRP TRP B B 303 303 . 30.313 61.276 -18.125 1.00 11.34  1 .
.
ATOM 5566 O    O    . TRP TRP TRP B B 303 303 . 30.652 60.171 -18.550 1.00 11.43  1 .
.
ATOM 5567 N    N    . SER SER SER B B 304 304 . 29.581 62.160 -18.841 1.00 10.29  1 .
.
ATOM 5568 CA   CA   . SER SER SER B B 304 304 . 28.977 61.725 -20.138 1.00 11.50  1 .
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ATOM 5569 CB   CB   . SER SER SER B B 304 304 . 28.013 62.839 -20.603 1.00 12.89  1 .
.
ATOM 5570 OG   OG   . SER SER SER B B 304 304 . 26.864 62.930 -19.705 1.00 14.55  1 .
.
ATOM 5571 C    C    . SER SER SER B B 304 304 . 30.093 61.483 -21.133 1.00 12.55  1 .
.
ATOM 5572 O    O    . SER SER SER B B 304 304 . 30.038 60.498 -21.925 1.00 11.84  1 .
.
ATOM 5573 N    N    . LYS LYS LYS B B 305 305 . 31.120 62.322 -21.146 1.00 11.97  1 .
.
ATOM 5574 CA   CA   . LYS LYS LYS B B 305 305 . 32.189 62.173 -22.162 1.00 14.07  1 .
.
ATOM 5575 CB   CB   . LYS LYS LYS B B 305 305 . 33.134 63.358 -22.121 1.00 15.21  1 .
.
ATOM 5576 CG   CG   . LYS LYS LYS B B 305 305 . 34.250 63.290 -23.259 1.00 19.04  1 .
.
ATOM 5577 CD   CD   . LYS LYS LYS B B 305 305 . 34.888 64.686 -23.454 1.00 27.88  1 .
.
ATOM 5578 CE   CE   . LYS LYS LYS B B 305 305 . 35.870 64.713 -24.639 1.00 34.53  1 .
.
ATOM 5579 NZ   NZ   . LYS LYS LYS B B 305 305 . 37.019 63.896 -24.217 1.00 42.79  1 .
.
ATOM 5580 C    C    . LYS LYS LYS B B 305 305 . 32.952 60.878 -21.890 1.00 13.61  1 .
.
ATOM 5581 O    O    . LYS LYS LYS B B 305 305 . 33.239 60.062 -22.802 1.00 14.20  1 .
.
ATOM 5582 N    N    . PHE PHE PHE B B 306 306 . 33.270 60.666 -20.624 1.00 10.87  1 .
.
ATOM 5583 CA   CA   . PHE PHE PHE B B 306 306 . 34.035 59.453 -20.285 1.00 11.74  1 .
.
ATOM 5584 CB   CB   . PHE PHE PHE B B 306 306 . 34.445 59.521 -18.800 1.00 13.40  1 .
.
ATOM 5585 CG   CG   . PHE PHE PHE B B 306 306 . 35.415 58.429 -18.400 1.00 12.11  1 .
.
ATOM 5586 CD1  CD1  . PHE PHE PHE B B 306 306 . 36.707 58.417 -18.905 1.00 15.91  1 .
.
ATOM 5587 CE1  CE1  . PHE PHE PHE B B 306 306 . 37.674 57.432 -18.519 1.00 13.69  1 .
.
ATOM 5588 CZ   CZ   . PHE PHE PHE B B 306 306 . 37.274 56.451 -17.661 1.00 14.25  1 .
.
ATOM 5589 CE2  CE2  . PHE PHE PHE B B 306 306 . 36.006 56.478 -17.144 1.00 14.85  1 .
.
ATOM 5590 CD2  CD2  . PHE PHE PHE B B 306 306 . 35.054 57.478 -17.489 1.00 12.54  1 .
.
ATOM 5591 C    C    . PHE PHE PHE B B 306 306 . 33.241 58.192 -20.583 1.00 12.52  1 .
.
ATOM 5592 O    O    . PHE PHE PHE B B 306 306 . 33.808 57.271 -21.193 1.00 12.87  1 .
.
ATOM 5593 N    N    . THR THR THR B B 307 307 . 31.948 58.158 -20.222 1.00 11.60  1 .
.
ATOM 5594 CA   CA   . THR THR THR B B 307 307 . 31.158 56.945 -20.344 1.00 13.23  1 .
.
ATOM 5595 CB   CB   . THR THR THR B B 307 307 . 29.786 57.187 -19.706 1.00 13.00  1 .
.
ATOM 5596 OG1  OG1  . THR THR THR B B 307 307 . 30.007 57.251 -18.290 1.00 12.38  1 .
.
ATOM 5597 CG2  CG2  . THR THR THR B B 307 307 . 28.795 56.093 -19.964 1.00 14.70  1 .
.
ATOM 5598 C    C    . THR THR THR B B 307 307 . 31.054 56.649 -21.850 1.00 12.66  1 .
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ATOM 5599 O    O    . THR THR THR B B 307 307 . 31.100 55.466 -22.251 1.00 12.68  1 .
.
ATOM 5600 N    N    . ALA ALA ALA B B 308 308 . 30.931 57.711 -22.664 1.00 13.07  1 .
.
ATOM 5601 CA   CA   . ALA ALA ALA B B 308 308 . 30.894 57.502 -24.133 1.00 14.55  1 .
.
ATOM 5602 CB   CB   . ALA ALA ALA B B 308 308 . 30.472 58.752 -24.843 1.00 14.97  1 .
.
ATOM 5603 C    C    . ALA ALA ALA B B 308 308 . 32.186 57.009 -24.759 1.00 13.79  1 .
.
ATOM 5604 O    O    . ALA ALA ALA B B 308 308 . 32.121 56.559 -25.938 1.00 17.48  1 .
.
ATOM 5605 N    N    . ASN ASN ASN B B 309 309 . 33.311 57.089 -24.063 1.00 12.53  1 .
.
ATOM 5606 CA   CA   . ASN ASN ASN B B 309 309 . 34.588 56.775 -24.637 1.00 13.72  1 .
.
ATOM 5607 CB   CB   . ASN ASN ASN B B 309 309 . 35.476 57.983 -24.404 1.00 16.86  1 .
.
ATOM 5608 CG   CG   . ASN ASN ASN B B 309 309 . 35.173 59.145 -25.368 1.00 24.70  1 .
.
ATOM 5609 OD1  OD1  . ASN ASN ASN B B 309 309 . 34.718 58.953 -26.488 1.00 32.88  1 .
.
ATOM 5610 ND2  ND2  . ASN ASN ASN B B 309 309 . 35.505 60.345 -24.942 1.00 32.53  1 .
.
ATOM 5611 C    C    . ASN ASN ASN B B 309 309 . 35.259 55.521 -24.044 1.00 13.06  1 .
.
ATOM 5612 O    O    . ASN ASN ASN B B 309 309 . 36.438 55.261 -24.317 1.00 16.04  1 .
.
ATOM 5613 N    N    . VAL VAL VAL B B 310 310 . 34.553 54.785 -23.186 1.00 12.29  1 .
.
ATOM 5614 CA   CA   . VAL VAL VAL B B 310 310 . 35.059 53.508 -22.613 1.00 12.86  1 .
.
ATOM 5615 CB   CB   . VAL VAL VAL B B 310 310 . 35.469 53.748 -21.106 1.00 13.80  1 .
.
ATOM 5616 CG1  CG1  . VAL VAL VAL B B 310 310 . 36.421 54.899 -21.017 1.00 17.43  1 .
.
ATOM 5617 CG2  CG2  . VAL VAL VAL B B 310 310 . 34.242 54.054 -20.258 1.00 13.10  1 .
.
ATOM 5618 C    C    . VAL VAL VAL B B 310 310 . 34.032 52.431 -22.653 1.00 11.70  1 .
.
ATOM 5619 O    O    . VAL VAL VAL B B 310 310 . 32.839 52.658 -22.913 1.00 12.18  1 .
.
ATOM 5620 N    N    . GLY GLY GLY B B 311 311 . 34.495 51.172 -22.413 1.00 12.79  1 .
.
ATOM 5621 CA   CA   . GLY GLY GLY B B 311 311 . 33.530 50.076 -22.351 1.00 11.16  1 .
.
ATOM 5622 C    C    . GLY GLY GLY B B 311 311 . 33.328 49.518 -20.957 1.00 12.74  1 .
.
ATOM 5623 O    O    . GLY GLY GLY B B 311 311 . 32.545 48.595 -20.751 1.00 13.03  1 .
.
ATOM 5624 N    N    . ILE ILE ILE B B 312 312 . 34.032 50.093 -20.005 1.00 11.30  1 .
.
ATOM 5625 CA   CA   . ILE ILE ILE B B 312 312 . 33.895 49.530 -18.629 1.00 10.60  1 .
.
ATOM 5626 CB   CB   . ILE ILE ILE B B 312 312 . 35.134 49.903 -17.738 1.00 8.62   1 .
.
ATOM 5627 CG1  CG1  . ILE ILE ILE B B 312 312 . 35.281 51.453 -17.697 1.00 11.15  1 .
.
ATOM 5628 CD   CD   . ILE ILE ILE B B 312 312 . 36.163 51.929 -16.461 1.00 15.41  1 .
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ATOM 5629 CG2  CG2  . ILE ILE ILE B B 312 312 . 36.452 49.372 -18.285 1.00 12.18  1 .
.
ATOM 5630 C    C    . ILE ILE ILE B B 312 312 . 32.619 49.998 -17.970 1.00 10.18  1 .
.
ATOM 5631 O    O    . ILE ILE ILE B B 312 312 . 31.945 50.939 -18.432 1.00 12.11  1 .
.
ATOM 5632 N    N    . GLN GLN GLN B B 313 313 . 32.326 49.359 -16.822 1.00 9.61   1 .
.
ATOM 5633 CA   CA   . GLN GLN GLN B B 313 313 . 31.224 49.816 -15.979 1.00 9.10   1 .
.
ATOM 5634 CB   CB   . GLN GLN GLN B B 313 313 . 30.942 48.728 -14.930 1.00 9.86   1 .
.
ATOM 5635 CG   CG   . GLN GLN GLN B B 313 313 . 29.898 49.225 -13.915 1.00 10.98  1 .
.
ATOM 5636 CD   CD   . GLN GLN GLN B B 313 313 . 29.331 48.093 -13.124 1.00 11.84  1 .
.
ATOM 5637 OE1  OE1  . GLN GLN GLN B B 313 313 . 28.312 47.476 -13.517 1.00 15.11  1 .
.
ATOM 5638 NE2  NE2  . GLN GLN GLN B B 313 313 . 30.012 47.775 -12.023 1.00 12.39  1 .
.
ATOM 5639 C    C    . GLN GLN GLN B B 313 313 . 31.629 51.149 -15.285 1.00 8.62   1 .
.
ATOM 5640 O    O    . GLN GLN GLN B B 313 313 . 32.737 51.275 -14.799 1.00 10.31  1 .
.
ATOM 5641 N    N    . ILE ILE ILE B B 314 314 . 30.674 52.106 -15.305 1.00 8.90   1 .
.
ATOM 5642 CA   CA   . ILE ILE ILE B B 314 314 . 30.893 53.439 -14.718 1.00 9.23   1 .
.
ATOM 5643 CB   CB   . ILE ILE ILE B B 314 314 . 30.800 54.540 -15.798 1.00 9.77   1 .
.
ATOM 5644 CG1  CG1  . ILE ILE ILE B B 314 314 . 31.942 54.379 -16.807 1.00 10.43  1 .
.
ATOM 5645 CD   CD   . ILE ILE ILE B B 314 314 . 33.342 54.435 -16.259 1.00 13.47  1 .
.
ATOM 5646 CG2  CG2  . ILE ILE ILE B B 314 314 . 30.805 55.976 -15.128 1.00 12.94  1 .
.
ATOM 5647 C    C    . ILE ILE ILE B B 314 314 . 29.767 53.639 -13.748 1.00 9.56   1 .
.
ATOM 5648 O    O    . ILE ILE ILE B B 314 314 . 28.572 53.670 -14.133 1.00 8.86   1 .
.
ATOM 5649 N    N    . VAL VAL VAL B B 315 315 . 30.152 53.743 -12.445 1.00 9.90   1 .
.
ATOM 5650 CA   CA   . VAL VAL VAL B B 315 315 . 29.136 53.675 -11.382 1.00 9.65   1 .
.
ATOM 5651 CB   CB   . VAL VAL VAL B B 315 315 . 29.621 52.705 -10.239 1.00 9.59   1 .
.
ATOM 5652 CG1  CG1  . VAL VAL VAL B B 315 315 . 28.474 52.532 -9.220  1.00 10.69  1 .
.
ATOM 5653 CG2  CG2  . VAL VAL VAL B B 315 315 . 30.032 51.335 -10.874 1.00 10.46  1 .
.
ATOM 5654 C    C    . VAL VAL VAL B B 315 315 . 28.841 55.024 -10.774 1.00 8.62   1 .
.
ATOM 5655 O    O    . VAL VAL VAL B B 315 315 . 29.780 55.672 -10.298 1.00 10.08  1 .
.
ATOM 5656 N    N    . GLY GLY GLY B B 316 316 . 27.557 55.427 -10.752 1.00 9.60   1 .
.
ATOM 5657 CA   CA   . GLY GLY GLY B B 316 316 . 27.130 56.636 -10.044 1.00 10.12  1 .
.
ATOM 5658 C    C    . GLY GLY GLY B B 316 316 . 26.938 56.288 -8.554  1.00 10.65  1 .
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ATOM 5659 O    O    . GLY GLY GLY B B 316 316 . 26.204 55.368 -8.237  1.00 12.11  1 .
.
ATOM 5660 N    N    . ASP ASP ASP B B 317 317 . 27.545 57.104 -7.674  1.00 10.58  1 .
.
ATOM 5661 CA   CA   . ASP ASP ASP B B 317 317 . 27.293 56.926 -6.225  1.00 11.41  1 .
.
ATOM 5662 CB   CB   . ASP ASP ASP B B 317 317 . 28.574 56.433 -5.576  1.00 12.83  1 .
.
ATOM 5663 CG   CG   . ASP ASP ASP B B 317 317 . 28.467 56.411 -4.049  1.00 9.21   1 .
.
ATOM 5664 OD1  OD1  . ASP ASP ASP B B 317 317 . 27.313 56.518 -3.604  1.00 13.45  1 .
.
ATOM 5665 OD2  OD2  . ASP ASP ASP B B 317 317 . 29.545 56.374 -3.408  1.00 10.85  1 .
.
ATOM 5666 C    C    . ASP ASP ASP B B 317 317 . 26.886 58.325 -5.771  1.00 11.18  1 .
.
ATOM 5667 O    O    . ASP ASP ASP B B 317 317 . 25.708 58.559 -5.663  1.00 12.34  1 .
.
ATOM 5668 N    N    . ASP ASP ASP B B 318 318 . 27.848 59.216 -5.535  1.00 12.72  1 .
.
ATOM 5669 CA   CA   . ASP ASP ASP B B 318 318 . 27.511 60.626 -5.141  1.00 12.79  1 .
.
ATOM 5670 CB   CB   . ASP ASP ASP B B 318 318 . 28.762 61.366 -4.682  1.00 11.91  1 .
.
ATOM 5671 CG   CG   . ASP ASP ASP B B 318 318 . 29.284 60.797 -3.308  1.00 11.69  1 .
.
ATOM 5672 OD1  OD1  . ASP ASP ASP B B 318 318 . 28.459 60.139 -2.599  1.00 15.47  1 .
.
ATOM 5673 OD2  OD2  . ASP ASP ASP B B 318 318 . 30.478 60.955 -3.063  1.00 17.50  1 .
.
ATOM 5674 C    C    . ASP ASP ASP B B 318 318 . 26.856 61.390 -6.328  1.00 12.45  1 .
.
ATOM 5675 O    O    . ASP ASP ASP B B 318 318 . 26.037 62.235 -6.137  1.00 12.54  1 .
.
ATOM 5676 N    N    . LEU LEU LEU B B 319 319 . 27.081 60.892 -7.561  1.00 11.70  1 .
.
ATOM 5677 CA   CA   . LEU LEU LEU B B 319 319 . 26.365 61.529 -8.703  1.00 10.52  1 .
.
ATOM 5678 CB   CB   . LEU LEU LEU B B 319 319 . 26.819 60.792 -9.991  1.00 11.48  1 .
.
ATOM 5679 CG   CG   . LEU LEU LEU B B 319 319 . 26.100 61.337 -11.254 1.00 11.22  1 .
.
ATOM 5680 CD1  CD1  . LEU LEU LEU B B 319 319 . 26.617 62.732 -11.635 1.00 11.69  1 .
.
ATOM 5681 CD2  CD2  . LEU LEU LEU B B 319 319 . 26.365 60.355 -12.458 1.00 13.69  1 .
.
ATOM 5682 C    C    . LEU LEU LEU B B 319 319 . 24.834 61.298 -8.562  1.00 11.64  1 .
.
ATOM 5683 O    O    . LEU LEU LEU B B 319 319 . 24.011 62.216 -8.812  1.00 13.14  1 .
.
ATOM 5684 N    N    . THR THR THR B B 320 320 . 24.416 60.074 -8.217  1.00 11.74  1 .
.
ATOM 5685 CA   CA   . THR THR THR B B 320 320 . 23.017 59.672 -8.347  1.00 11.54  1 .
.
ATOM 5686 CB   CB   . THR THR THR B B 320 320 . 22.939 58.241 -9.004  1.00 12.38  1 .
.
ATOM 5687 OG1  OG1  . THR THR THR B B 320 320 . 24.034 57.477 -8.508  1.00 12.82  1 .
.
ATOM 5688 CG2  CG2  . THR THR THR B B 320 320 . 23.210 58.423 -10.515 1.00 13.19  1 .
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ATOM 5689 C    C    . THR THR THR B B 320 320 . 22.284 59.599 -7.013  1.00 12.08  1 .
.
ATOM 5690 O    O    . THR THR THR B B 320 320 . 21.029 59.672 -6.998  1.00 11.53  1 .
.
ATOM 5691 N    N    . VAL VAL VAL B B 321 321 . 23.055 59.396 -5.928  1.00 12.71  1 .
.
ATOM 5692 CA   CA   . VAL VAL VAL B B 321 321 . 22.536 59.242 -4.526  1.00 12.20  1 .
.
ATOM 5693 CB   CB   . VAL VAL VAL B B 321 321 . 22.466 60.666 -3.771  1.00 11.27  1 .
.
ATOM 5694 CG1  CG1  . VAL VAL VAL B B 321 321 . 23.920 61.210 -3.564  1.00 10.93  1 .
.
ATOM 5695 CG2  CG2  . VAL VAL VAL B B 321 321 . 21.603 61.685 -4.559  1.00 13.82  1 .
.
ATOM 5696 C    C    . VAL VAL VAL B B 321 321 . 21.216 58.463 -4.384  1.00 12.53  1 .
.
ATOM 5697 O    O    . VAL VAL VAL B B 321 321 . 20.312 58.841 -3.601  1.00 13.29  1 .
.
ATOM 5698 N    N    . THR THR THR B B 322 322 . 21.115 57.347 -5.117  1.00 11.99  1 .
.
ATOM 5699 CA   CA   . THR THR THR B B 322 322 . 19.997 56.441 -5.039  1.00 12.94  1 .
.
ATOM 5700 CB   CB   . THR THR THR B B 322 322 . 20.082 55.564 -3.686  1.00 12.67  1 .
.
ATOM 5701 OG1  OG1  . THR THR THR B B 322 322 . 21.423 55.046 -3.587  1.00 13.24  1 .
.
ATOM 5702 CG2  CG2  . THR THR THR B B 322 322 . 19.112 54.360 -3.732  1.00 13.86  1 .
.
ATOM 5703 C    C    . THR THR THR B B 322 322 . 18.683 57.207 -5.172  1.00 14.99  1 .
.
ATOM 5704 O    O    . THR THR THR B B 322 322 . 17.655 56.852 -4.561  1.00 14.31  1 .
.
ATOM 5705 N    N    . ASN ASN ASN B B 323 323 . 18.722 58.217 -6.044  1.00 14.00  1 .
.
ATOM 5706 CA   CA   . ASN ASN ASN B B 323 323 . 17.635 59.182 -6.081  1.00 14.21  1 .
.
ATOM 5707 CB   CB   . ASN ASN ASN B B 323 323 . 18.148 60.550 -5.589  1.00 13.57  1 .
.
ATOM 5708 CG   CG   . ASN ASN ASN B B 323 323 . 16.999 61.551 -5.462  1.00 16.52  1 .
.
ATOM 5709 OD1  OD1  . ASN ASN ASN B B 323 323 . 16.130 61.579 -6.341  1.00 22.03  1 .
.
ATOM 5710 ND2  ND2  . ASN ASN ASN B B 323 323 . 17.002 62.390 -4.438  1.00 17.03  1 .
.
ATOM 5711 C    C    . ASN ASN ASN B B 323 323 . 17.012 59.262 -7.439  1.00 16.58  1 .
.
ATOM 5712 O    O    . ASN ASN ASN B B 323 323 . 17.706 59.626 -8.379  1.00 16.20  1 .
.
ATOM 5713 N    N    . PRO PRO PRO B B 324 324 . 15.752 58.763 -7.580  1.00 17.56  1 .
.
ATOM 5714 CA   CA   . PRO PRO PRO B B 324 324 . 15.121 58.679 -8.926  1.00 17.71  1 .
.
ATOM 5715 CB   CB   . PRO PRO PRO B B 324 324 . 13.646 58.425 -8.557  1.00 18.14  1 .
.
ATOM 5716 CG   CG   . PRO PRO PRO B B 324 324 . 13.821 57.391 -7.368  1.00 18.78  1 .
.
ATOM 5717 CD   CD   . PRO PRO PRO B B 324 324 . 14.893 58.159 -6.527  1.00 18.60  1 .
.
ATOM 5718 C    C    . PRO PRO PRO B B 324 324 . 15.281 59.989 -9.748  1.00 18.04  1 .
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ATOM 5719 O    O    . PRO PRO PRO B B 324 324 . 15.450 59.946 -10.983 1.00 18.99  1 .
.
ATOM 5720 N    N    . LYS LYS LYS B B 325 325 . 15.203 61.144 -9.082  1.00 19.93  1 .
.
ATOM 5721 CA   CA   . LYS LYS LYS B B 325 325 . 15.333 62.438 -9.815  1.00 19.10  1 .
.
ATOM 5722 CB   CB   . LYS LYS LYS B B 325 325 . 14.961 63.606 -8.894  1.00 21.28  1 .
.
ATOM 5723 CG   CG   . LYS LYS LYS B B 325 325 . 13.455 63.611 -8.622  1.00 24.79  1 .
.
ATOM 5724 C    C    . LYS LYS LYS B B 325 325 . 16.728 62.651 -10.497 1.00 18.44  1 .
.
ATOM 5725 O    O    . LYS LYS LYS B B 325 325 . 16.893 63.081 -11.694 1.00 18.81  1 .
.
ATOM 5726 N    N    . ARG ARG ARG B B 326 326 . 17.757 62.294 -9.752  1.00 17.23  1 .
.
ATOM 5727 CA   CA   . ARG ARG ARG B B 326 326 . 19.125 62.391 -10.266 1.00 14.58  1 .
.
ATOM 5728 CB   CB   . ARG ARG ARG B B 326 326 . 20.184 62.290 -9.160  1.00 15.57  1 .
.
ATOM 5729 CG   CG   . ARG ARG ARG B B 326 326 . 19.964 63.266 -7.957  1.00 21.84  1 .
.
ATOM 5730 CD   CD   . ARG ARG ARG B B 326 326 . 20.782 64.482 -7.969  1.00 24.29  1 .
.
ATOM 5731 NE   NE   . ARG ARG ARG B B 326 326 . 22.202 64.277 -8.262  1.00 19.46  1 .
.
ATOM 5732 CZ   CZ   . ARG ARG ARG B B 326 326 . 22.930 65.274 -8.781  1.00 17.98  1 .
.
ATOM 5733 NH1  NH1  . ARG ARG ARG B B 326 326 . 24.197 65.081 -9.082  1.00 13.89  1 .
.
ATOM 5734 NH2  NH2  . ARG ARG ARG B B 326 326 . 22.328 66.497 -8.981  1.00 19.59  1 .
.
ATOM 5735 C    C    . ARG ARG ARG B B 326 326 . 19.354 61.270 -11.256 1.00 13.04  1 .
.
ATOM 5736 O    O    . ARG ARG ARG B B 326 326 . 20.047 61.487 -12.242 1.00 13.58  1 .
.
ATOM 5737 N    N    . ILE ILE ILE B B 327 327 . 18.803 60.066 -11.008 1.00 14.16  1 .
.
ATOM 5738 CA   CA   . ILE ILE ILE B B 327 327 . 19.027 58.945 -11.870 1.00 12.64  1 .
.
ATOM 5739 CB   CB   . ILE ILE ILE B B 327 327 . 18.426 57.650 -11.295 1.00 13.30  1 .
.
ATOM 5740 CG1  CG1  . ILE ILE ILE B B 327 327 . 19.248 57.220 -10.058 1.00 14.42  1 .
.
ATOM 5741 CD   CD   . ILE ILE ILE B B 327 327 . 18.420 56.191 -9.123  1.00 14.09  1 .
.
ATOM 5742 CG2  CG2  . ILE ILE ILE B B 327 327 . 18.350 56.552 -12.373 1.00 14.31  1 .
.
ATOM 5743 C    C    . ILE ILE ILE B B 327 327 . 18.365 59.301 -13.243 1.00 14.33  1 .
.
ATOM 5744 O    O    . ILE ILE ILE B B 327 327 . 18.982 59.040 -14.297 1.00 13.77  1 .
.
ATOM 5745 N    N    . GLU GLU GLU B B 328 328 . 17.161 59.901 -13.226 1.00 15.01  1 .
.
ATOM 5746 CA   CA   . GLU GLU GLU B B 328 328 . 16.532 60.340 -14.529 1.00 17.47  1 .
.
ATOM 5747 CB   CB   . GLU GLU GLU B B 328 328 . 15.185 61.054 -14.294 1.00 20.37  1 .
.
ATOM 5748 CG   CG   . GLU GLU GLU B B 328 328 . 14.099 60.039 -13.969 1.00 28.78  1 .
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ATOM 5749 CD   CD   . GLU GLU GLU B B 328 328 . 13.394 59.286 -15.197 1.00 41.03  1 .
.
ATOM 5750 OE1  OE1  . GLU GLU GLU B B 328 328 . 14.023 58.901 -16.262 1.00 41.95  1 .
.
ATOM 5751 OE2  OE2  . GLU GLU GLU B B 328 328 . 12.154 59.035 -15.033 1.00 47.47  1 .
.
ATOM 5752 C    C    . GLU GLU GLU B B 328 328 . 17.465 61.236 -15.350 1.00 16.93  1 .
.
ATOM 5753 O    O    . GLU GLU GLU B B 328 328 . 17.581 61.033 -16.557 1.00 18.50  1 .
.
ATOM 5754 N    N    . ARG ARG ARG B B 329 329 . 18.104 62.216 -14.720 1.00 15.70  1 .
.
ATOM 5755 CA   CA   . ARG ARG ARG B B 329 329 . 19.069 63.053 -15.391 1.00 14.19  1 .
.
ATOM 5756 CB   CB   . ARG ARG ARG B B 329 329 . 19.534 64.157 -14.484 1.00 15.17  1 .
.
ATOM 5757 CG   CG   . ARG ARG ARG B B 329 329 . 20.578 65.138 -15.173 1.00 14.74  1 .
.
ATOM 5758 CD   CD   . ARG ARG ARG B B 329 329 . 20.724 66.434 -14.377 1.00 17.00  1 .
.
ATOM 5759 NE   NE   . ARG ARG ARG B B 329 329 . 21.701 67.333 -15.026 1.00 18.55  1 .
.
ATOM 5760 CZ   CZ   . ARG ARG ARG B B 329 329 . 22.185 68.456 -14.452 1.00 19.56  1 .
.
ATOM 5761 NH1  NH1  . ARG ARG ARG B B 329 329 . 21.803 68.808 -13.197 1.00 19.45  1 .
.
ATOM 5762 NH2  NH2  . ARG ARG ARG B B 329 329 . 23.079 69.199 -15.104 1.00 19.92  1 .
.
ATOM 5763 C    C    . ARG ARG ARG B B 329 329 . 20.232 62.251 -15.965 1.00 14.95  1 .
.
ATOM 5764 O    O    . ARG ARG ARG B B 329 329 . 20.705 62.527 -17.118 1.00 15.31  1 .
.
ATOM 5765 N    N    . ALA ALA ALA B B 330 330 . 20.809 61.340 -15.127 1.00 13.40  1 .
.
ATOM 5766 CA   CA   . ALA ALA ALA B B 330 330 . 21.962 60.593 -15.526 1.00 12.29  1 .
.
ATOM 5767 CB   CB   . ALA ALA ALA B B 330 330 . 22.545 59.830 -14.274 1.00 12.73  1 .
.
ATOM 5768 C    C    . ALA ALA ALA B B 330 330 . 21.596 59.671 -16.675 1.00 13.10  1 .
.
ATOM 5769 O    O    . ALA ALA ALA B B 330 330 . 22.401 59.445 -17.546 1.00 14.51  1 .
.
ATOM 5770 N    N    . VAL VAL VAL B B 331 331 . 20.358 59.184 -16.711 1.00 13.36  1 .
.
ATOM 5771 CA   CA   . VAL VAL VAL B B 331 331 . 19.953 58.304 -17.828 1.00 15.38  1 .
.
ATOM 5772 CB   CB   . VAL VAL VAL B B 331 331 . 18.540 57.644 -17.580 1.00 15.66  1 .
.
ATOM 5773 CG1  CG1  . VAL VAL VAL B B 331 331 . 17.983 57.074 -18.907 1.00 16.44  1 .
.
ATOM 5774 CG2  CG2  . VAL VAL VAL B B 331 331 . 18.620 56.495 -16.492 1.00 15.79  1 .
.
ATOM 5775 C    C    . VAL VAL VAL B B 331 331 . 19.890 59.139 -19.082 1.00 16.17  1 .
.
ATOM 5776 O    O    . VAL VAL VAL B B 331 331 . 20.431 58.732 -20.137 1.00 17.75  1 .
.
ATOM 5777 N    N    . GLU GLU GLU B B 332 332 . 19.186 60.280 -19.010 1.00 17.15  1 .
.
ATOM 5778 CA   CA   . GLU GLU GLU B B 332 332 . 19.028 61.209 -20.166 1.00 18.92  1 .
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ATOM 5779 CB   CB   . GLU GLU GLU B B 332 332 . 18.126 62.408 -19.794 1.00 18.69  1 .
.
ATOM 5780 CG   CG   . GLU GLU GLU B B 332 332 . 17.842 63.410 -20.999 1.00 26.37  1 .
.
ATOM 5781 C    C    . GLU GLU GLU B B 332 332 . 20.378 61.692 -20.729 1.00 16.21  1 .
.
ATOM 5782 O    O    . GLU GLU GLU B B 332 332 . 20.593 61.722 -21.977 1.00 19.73  1 .
.
ATOM 5783 N    N    . GLU GLU GLU B B 333 333 . 21.339 61.997 -19.855 1.00 15.38  1 .
.
ATOM 5784 CA   CA   . GLU GLU GLU B B 333 333 . 22.666 62.469 -20.286 1.00 13.93  1 .
.
ATOM 5785 CB   CB   . GLU GLU GLU B B 333 333 . 23.210 63.488 -19.269 1.00 14.57  1 .
.
ATOM 5786 CG   CG   . GLU GLU GLU B B 333 333 . 22.142 64.656 -19.085 1.00 17.58  1 .
.
ATOM 5787 CD   CD   . GLU GLU GLU B B 333 333 . 22.731 65.910 -18.383 1.00 19.56  1 .
.
ATOM 5788 OE1  OE1  . GLU GLU GLU B B 333 333 . 21.894 66.690 -17.855 1.00 19.86  1 .
.
ATOM 5789 OE2  OE2  . GLU GLU GLU B B 333 333 . 23.995 66.111 -18.369 1.00 20.14  1 .
.
ATOM 5790 C    C    . GLU GLU GLU B B 333 333 . 23.660 61.361 -20.538 1.00 12.66  1 .
.
ATOM 5791 O    O    . GLU GLU GLU B B 333 333 . 24.785 61.610 -20.915 1.00 14.66  1 .
.
ATOM 5792 N    N    . LYS LYS LYS B B 334 334 . 23.237 60.112 -20.289 1.00 13.24  1 .
.
ATOM 5793 CA   CA   . LYS LYS LYS B B 334 334 . 24.178 58.985 -20.442 1.00 13.81  1 .
.
ATOM 5794 CB   CB   . LYS LYS LYS B B 334 334 . 24.515 58.606 -21.890 1.00 14.36  1 .
.
ATOM 5795 CG   CG   . LYS LYS LYS B B 334 334 . 23.285 58.228 -22.705 1.00 17.89  1 .
.
ATOM 5796 CD   CD   . LYS LYS LYS B B 334 334 . 23.718 57.681 -24.145 1.00 22.61  1 .
.
ATOM 5797 CE   CE   . LYS LYS LYS B B 334 334 . 22.634 57.908 -25.187 1.00 36.51  1 .
.
ATOM 5798 NZ   NZ   . LYS LYS LYS B B 334 334 . 21.448 57.048 -24.902 1.00 39.86  1 .
.
ATOM 5799 C    C    . LYS LYS LYS B B 334 334 . 25.438 59.179 -19.632 1.00 11.74  1 .
.
ATOM 5800 O    O    . LYS LYS LYS B B 334 334 . 26.552 58.970 -20.080 1.00 12.42  1 .
.
ATOM 5801 N    N    . ALA ALA ALA B B 335 335 . 25.219 59.636 -18.403 1.00 11.07  1 .
.
ATOM 5802 CA   CA   . ALA ALA ALA B B 335 335 . 26.354 60.006 -17.532 1.00 11.40  1 .
.
ATOM 5803 CB   CB   . ALA ALA ALA B B 335 335 . 25.816 60.845 -16.359 1.00 13.73  1 .
.
ATOM 5804 C    C    . ALA ALA ALA B B 335 335 . 27.094 58.796 -16.998 1.00 11.12  1 .
.
ATOM 5805 O    O    . ALA ALA ALA B B 335 335 . 28.289 58.881 -16.691 1.00 11.58  1 .
.
ATOM 5806 N    N    . CYS CYS CYS B B 336 336 . 26.394 57.694 -16.838 1.00 12.08  1 .
.
ATOM 5807 CA   CA   . CYS CYS CYS B B 336 336 . 27.029 56.487 -16.260 1.00 11.58  1 .
.
ATOM 5808 CB   CB   . CYS CYS CYS B B 336 336 . 27.122 56.558 -14.696 1.00 11.68  1 .
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ATOM 5809 SG   SG   . CYS CYS CYS B B 336 336 . 25.490 56.830 -13.880 1.00 14.48  1 .
.
ATOM 5810 C    C    . CYS CYS CYS B B 336 336 . 26.198 55.297 -16.719 1.00 12.70  1 .
.
ATOM 5811 O    O    . CYS CYS CYS B B 336 336 . 25.216 55.475 -17.441 1.00 15.13  1 .
.
ATOM 5812 N    N    . ASN ASN ASN B B 337 337 . 26.564 54.088 -16.299 1.00 11.18  1 .
.
ATOM 5813 CA   CA   . ASN ASN ASN B B 337 337 . 25.797 52.921 -16.722 1.00 11.95  1 .
.
ATOM 5814 CB   CB   . ASN ASN ASN B B 337 337 . 26.491 52.261 -17.953 1.00 11.01  1 .
.
ATOM 5815 CG   CG   . ASN ASN ASN B B 337 337 . 27.917 51.903 -17.702 1.00 12.95  1 .
.
ATOM 5816 OD1  OD1  . ASN ASN ASN B B 337 337 . 28.791 51.962 -18.626 1.00 16.52  1 .
.
ATOM 5817 ND2  ND2  . ASN ASN ASN B B 337 337 . 28.192 51.491 -16.494 1.00 8.10   1 .
.
ATOM 5818 C    C    . ASN ASN ASN B B 337 337 . 25.537 51.942 -15.580 1.00 10.61  1 .
.
ATOM 5819 O    O    . ASN ASN ASN B B 337 337 . 25.143 50.766 -15.834 1.00 10.72  1 .
.
ATOM 5820 N    N    . CYS CYS CYS B B 338 338 . 25.832 52.363 -14.339 1.00 10.47  1 .
.
ATOM 5821 CA   CA   . CYS CYS CYS B B 338 338 . 25.505 51.478 -13.213 1.00 10.87  1 .
.
ATOM 5822 CB   CB   . CYS CYS CYS B B 338 338 . 26.770 50.661 -12.905 1.00 10.41  1 .
.
ATOM 5823 SG   SG   . CYS CYS CYS B B 338 338 . 26.508 49.469 -11.529 1.00 15.16  1 .
.
ATOM 5824 C    C    . CYS CYS CYS B B 338 338 . 25.155 52.401 -12.053 1.00 11.33  1 .
.
ATOM 5825 O    O    . CYS CYS CYS B B 338 338 . 25.812 53.440 -11.911 1.00 10.92  1 .
.
ATOM 5826 N    N    . LEU LEU LEU B B 339 339 . 24.183 51.980 -11.256 1.00 9.90   1 .
.
ATOM 5827 CA   CA   . LEU LEU LEU B B 339 339 . 23.807 52.731 -10.038 1.00 10.74  1 .
.
ATOM 5828 CB   CB   . LEU LEU LEU B B 339 339 . 22.291 52.675 -9.909  1.00 10.46  1 .
.
ATOM 5829 CG   CG   . LEU LEU LEU B B 339 339 . 21.728 53.195 -8.588  1.00 10.04  1 .
.
ATOM 5830 CD1  CD1  . LEU LEU LEU B B 339 339 . 21.939 54.743 -8.502  1.00 11.55  1 .
.
ATOM 5831 CD2  CD2  . LEU LEU LEU B B 339 339 . 20.203 52.907 -8.626  1.00 14.70  1 .
.
ATOM 5832 C    C    . LEU LEU LEU B B 339 339 . 24.389 52.040 -8.795  1.00 10.58  1 .
.
ATOM 5833 O    O    . LEU LEU LEU B B 339 339 . 24.147 50.844 -8.636  1.00 13.05  1 .
.
ATOM 5834 N    N    . LEU LEU LEU B B 340 340 . 25.016 52.805 -7.899  1.00 9.29   1 .
.
ATOM 5835 CA   CA   . LEU LEU LEU B B 340 340 . 25.375 52.225 -6.594  1.00 9.53   1 .
.
ATOM 5836 CB   CB   . LEU LEU LEU B B 340 340 . 26.560 52.952 -5.990  1.00 11.23  1 .
.
ATOM 5837 CG   CG   . LEU LEU LEU B B 340 340 . 27.136 52.214 -4.802  1.00 9.11   1 .
.
ATOM 5838 CD1  CD1  . LEU LEU LEU B B 340 340 . 28.077 51.095 -5.346  1.00 11.41  1 .
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ATOM 5839 CD2  CD2  . LEU LEU LEU B B 340 340 . 28.016 53.126 -3.924  1.00 11.98  1 .
.
ATOM 5840 C    C    . LEU LEU LEU B B 340 340 . 24.116 52.452 -5.736  1.00 11.65  1 .
.
ATOM 5841 O    O    . LEU LEU LEU B B 340 340 . 23.640 53.599 -5.551  1.00 12.25  1 .
.
ATOM 5842 N    N    . LEU LEU LEU B B 341 341 . 23.608 51.374 -5.141  1.00 10.38  1 .
.
ATOM 5843 CA   CA   . LEU LEU LEU B B 341 341 . 22.292 51.449 -4.413  1.00 11.69  1 .
.
ATOM 5844 CB   CB   . LEU LEU LEU B B 341 341 . 21.451 50.265 -4.722  1.00 12.33  1 .
.
ATOM 5845 CG   CG   . LEU LEU LEU B B 341 341 . 19.971 50.459 -4.498  1.00 15.27  1 .
.
ATOM 5846 CD1  CD1  . LEU LEU LEU B B 341 341 . 19.354 51.211 -5.632  1.00 19.01  1 .
.
ATOM 5847 CD2  CD2  . LEU LEU LEU B B 341 341 . 19.292 49.110 -4.428  1.00 17.31  1 .
.
ATOM 5848 C    C    . LEU LEU LEU B B 341 341 . 22.584 51.473 -2.891  1.00 12.46  1 .
.
ATOM 5849 O    O    . LEU LEU LEU B B 341 341 . 23.028 50.454 -2.280  1.00 12.50  1 .
.
ATOM 5850 N    N    . LYS LYS LYS B B 342 342 . 22.338 52.645 -2.305  1.00 12.41  1 .
.
ATOM 5851 CA   CA   . LYS LYS LYS B B 342 342 . 22.476 52.851 -0.847  1.00 12.77  1 .
.
ATOM 5852 CB   CB   . LYS LYS LYS B B 342 342 . 23.483 53.900 -0.500  1.00 14.43  1 .
.
ATOM 5853 CG   CG   . LYS LYS LYS B B 342 342 . 24.936 53.458 -0.765  1.00 13.83  1 .
.
ATOM 5854 CD   CD   . LYS LYS LYS B B 342 342 . 25.825 54.667 -0.724  1.00 14.19  1 .
.
ATOM 5855 CE   CE   . LYS LYS LYS B B 342 342 . 27.287 54.236 -0.660  1.00 14.22  1 .
.
ATOM 5856 NZ   NZ   . LYS LYS LYS B B 342 342 . 28.098 55.344 -1.039  1.00 18.36  1 .
.
ATOM 5857 C    C    . LYS LYS LYS B B 342 342 . 21.151 53.257 -0.282  1.00 13.33  1 .
.
ATOM 5858 O    O    . LYS LYS LYS B B 342 342 . 20.696 54.409 -0.485  1.00 12.63  1 .
.
ATOM 5859 N    N    . VAL VAL VAL B B 343 343 . 20.542 52.360 0.473   1.00 12.28  1 .
.
ATOM 5860 CA   CA   . VAL VAL VAL B B 343 343 . 19.197 52.638 1.029   1.00 12.52  1 .
.
ATOM 5861 CB   CB   . VAL VAL VAL B B 343 343 . 18.596 51.526 1.884   1.00 14.01  1 .
.
ATOM 5862 CG1  CG1  . VAL VAL VAL B B 343 343 . 18.202 50.319 0.916   1.00 15.80  1 .
.
ATOM 5863 CG2  CG2  . VAL VAL VAL B B 343 343 . 19.705 51.041 2.915   1.00 15.23  1 .
.
ATOM 5864 C    C    . VAL VAL VAL B B 343 343 . 19.225 53.959 1.861   1.00 12.84  1 .
.
ATOM 5865 O    O    . VAL VAL VAL B B 343 343 . 18.258 54.718 1.829   1.00 14.32  1 .
.
ATOM 5866 N    N    . ASN ASN ASN B B 344 344 . 20.312 54.286 2.522   1.00 12.04  1 .
.
ATOM 5867 CA   CA   . ASN ASN ASN B B 344 344 . 20.257 55.469 3.374   1.00 12.85  1 .
.
ATOM 5868 CB   CB   . ASN ASN ASN B B 344 344 . 21.108 55.288 4.630   1.00 12.72  1 .
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ATOM 5869 CG   CG   . ASN ASN ASN B B 344 344 . 22.542 55.806 4.471   1.00 12.70  1 .
.
ATOM 5870 OD1  OD1  . ASN ASN ASN B B 344 344 . 23.277 55.399 3.569   1.00 14.74  1 .
.
ATOM 5871 ND2  ND2  . ASN ASN ASN B B 344 344 . 22.959 56.647 5.380   1.00 15.97  1 .
.
ATOM 5872 C    C    . ASN ASN ASN B B 344 344 . 20.650 56.753 2.624   1.00 12.47  1 .
.
ATOM 5873 O    O    . ASN ASN ASN B B 344 344 . 20.621 57.821 3.193   1.00 15.61  1 .
.
ATOM 5874 N    N    . GLN GLN GLN B B 345 345 . 21.026 56.673 1.357   1.00 11.30  1 .
.
ATOM 5875 CA   CA   . GLN GLN GLN B B 345 345 . 21.129 57.937 0.599   1.00 11.51  1 .
.
ATOM 5876 CB   CB   . GLN GLN GLN B B 345 345 . 21.916 57.689 -0.742  1.00 9.53   1 .
.
ATOM 5877 CG   CG   . GLN GLN GLN B B 345 345 . 23.386 57.617 -0.539  1.00 11.62  1 .
.
ATOM 5878 CD   CD   . GLN GLN GLN B B 345 345 . 24.164 57.454 -1.856  1.00 10.26  1 .
.
ATOM 5879 OE1  OE1  . GLN GLN GLN B B 345 345 . 25.327 57.958 -1.975  1.00 16.90  1 .
.
ATOM 5880 NE2  NE2  . GLN GLN GLN B B 345 345 . 23.628 56.719 -2.769  1.00 9.89   1 .
.
ATOM 5881 C    C    . GLN GLN GLN B B 345 345 . 19.731 58.474 0.244   1.00 13.11  1 .
.
ATOM 5882 O    O    . GLN GLN GLN B B 345 345 . 19.633 59.690 -0.088  1.00 15.29  1 .
.
ATOM 5883 N    N    . ILE ILE ILE B B 346 346 . 18.683 57.623 0.235   1.00 11.36  1 .
.
ATOM 5884 CA   CA   . ILE ILE ILE B B 346 346 . 17.355 58.052 -0.152  1.00 13.41  1 .
.
ATOM 5885 CB   CB   . ILE ILE ILE B B 346 346 . 16.860 57.323 -1.443  1.00 12.62  1 .
.
ATOM 5886 CG1  CG1  . ILE ILE ILE B B 346 346 . 15.569 57.958 -2.066  1.00 13.29  1 .
.
ATOM 5887 CD   CD   . ILE ILE ILE B B 346 346 . 15.719 59.503 -2.323  1.00 15.23  1 .
.
ATOM 5888 CG2  CG2  . ILE ILE ILE B B 346 346 . 16.546 55.833 -1.252  1.00 15.74  1 .
.
ATOM 5889 C    C    . ILE ILE ILE B B 346 346 . 16.385 57.953 1.053   1.00 14.12  1 .
.
ATOM 5890 O    O    . ILE ILE ILE B B 346 346 . 15.450 58.755 1.192   1.00 16.34  1 .
.
ATOM 5891 N    N    . GLY GLY GLY B B 347 347 . 16.541 56.921 1.896   1.00 14.59  1 .
.
ATOM 5892 CA   CA   . GLY GLY GLY B B 347 347 . 15.874 56.949 3.232   1.00 12.84  1 .
.
ATOM 5893 C    C    . GLY GLY GLY B B 347 347 . 14.687 56.043 3.376   1.00 12.72  1 .
.
ATOM 5894 O    O    . GLY GLY GLY B B 347 347 . 14.094 56.058 4.471   1.00 14.90  1 .
.
ATOM 5895 N    N    . SER SER SER B B 348 348 . 14.306 55.295 2.333   1.00 12.76  1 .
.
ATOM 5896 CA   CA   . SER SER SER B B 348 348 . 13.245 54.302 2.502   1.00 14.78  1 .
.
ATOM 5897 CB   CB   . SER SER SER B B 348 348 . 11.843 54.889 2.276   1.00 16.50  1 .
.
ATOM 5898 OG   OG   . SER SER SER B B 348 348 . 11.573 55.063 0.884   1.00 17.87  1 .
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ATOM 5899 C    C    . SER SER SER B B 348 348 . 13.471 53.092 1.614   1.00 15.22  1 .
.
ATOM 5900 O    O    . SER SER SER B B 348 348 . 14.115 53.204 0.557   1.00 13.87  1 .
.
ATOM 5901 N    N    . VAL VAL VAL B B 349 349 . 12.943 51.949 2.032   1.00 13.83  1 .
.
ATOM 5902 CA   CA   . VAL VAL VAL B B 349 349 . 13.046 50.737 1.150   1.00 13.25  1 .
.
ATOM 5903 CB   CB   . VAL VAL VAL B B 349 349 . 12.474 49.506 1.915   1.00 12.62  1 .
.
ATOM 5904 CG1  CG1  . VAL VAL VAL B B 349 349 . 12.295 48.307 0.985   1.00 14.81  1 .
.
ATOM 5905 CG2  CG2  . VAL VAL VAL B B 349 349 . 13.458 49.210 3.066   1.00 13.74  1 .
.
ATOM 5906 C    C    . VAL VAL VAL B B 349 349 . 12.301 50.924 -0.163  1.00 13.06  1 .
.
ATOM 5907 O    O    . VAL VAL VAL B B 349 349 . 12.829 50.612 -1.253  1.00 13.69  1 .
.
ATOM 5908 N    N    . THR THR THR B B 350 350 . 11.098 51.470 -0.077  1.00 15.03  1 .
.
ATOM 5909 CA   CA   . THR THR THR B B 350 350 . 10.304 51.668 -1.278  1.00 15.15  1 .
.
ATOM 5910 CB   CB   . THR THR THR B B 350 350 . 8.937  52.335 -0.941  1.00 15.47  1 .
.
ATOM 5911 OG1  OG1  . THR THR THR B B 350 350 . 8.183  51.438 -0.141  1.00 16.81  1 .
.
ATOM 5912 CG2  CG2  . THR THR THR B B 350 350 . 8.124  52.616 -2.249  1.00 19.24  1 .
.
ATOM 5913 C    C    . THR THR THR B B 350 350 . 11.065 52.533 -2.279  1.00 13.94  1 .
.
ATOM 5914 O    O    . THR THR THR B B 350 350 . 11.139 52.189 -3.510  1.00 14.69  1 .
.
ATOM 5915 N    N    . GLU GLU GLU B B 351 351 . 11.650 53.637 -1.798  1.00 12.82  1 .
.
ATOM 5916 CA   CA   . GLU GLU GLU B B 351 351 . 12.324 54.517 -2.776  1.00 14.27  1 .
.
ATOM 5917 CB   CB   . GLU GLU GLU B B 351 351 . 12.698 55.807 -2.077  1.00 14.46  1 .
.
ATOM 5918 CG   CG   . GLU GLU GLU B B 351 351 . 11.401 56.702 -1.858  1.00 17.51  1 .
.
ATOM 5919 CD   CD   . GLU GLU GLU B B 351 351 . 11.779 57.909 -0.984  1.00 18.97  1 .
.
ATOM 5920 OE1  OE1  . GLU GLU GLU B B 351 351 . 12.120 57.717 0.219   1.00 19.61  1 .
.
ATOM 5921 OE2  OE2  . GLU GLU GLU B B 351 351 . 11.822 59.063 -1.533  1.00 22.56  1 .
.
ATOM 5922 C    C    . GLU GLU GLU B B 351 351 . 13.589 53.871 -3.353  1.00 12.72  1 .
.
ATOM 5923 O    O    . GLU GLU GLU B B 351 351 . 13.953 54.120 -4.498  1.00 14.06  1 .
.
ATOM 5924 N    N    . ALA ALA ALA B B 352 352 . 14.305 53.087 -2.554  1.00 13.00  1 .
.
ATOM 5925 CA   CA   . ALA ALA ALA B B 352 352 . 15.534 52.467 -3.031  1.00 13.06  1 .
.
ATOM 5926 CB   CB   . ALA ALA ALA B B 352 352 . 16.200 51.776 -1.821  1.00 13.58  1 .
.
ATOM 5927 C    C    . ALA ALA ALA B B 352 352 . 15.148 51.421 -4.084  1.00 13.13  1 .
.
ATOM 5928 O    O    . ALA ALA ALA B B 352 352 . 15.851 51.240 -5.066  1.00 13.12  1 .
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ATOM 5929 N    N    . ILE ILE ILE B B 353 353 . 14.056 50.667 -3.851  1.00 14.33  1 .
.
ATOM 5930 CA   CA   . ILE ILE ILE B B 353 353 . 13.567 49.668 -4.870  1.00 13.39  1 .
.
ATOM 5931 CB   CB   . ILE ILE ILE B B 353 353 . 12.391 48.795 -4.328  1.00 14.12  1 .
.
ATOM 5932 CG1  CG1  . ILE ILE ILE B B 353 353 . 12.982 47.923 -3.200  1.00 15.52  1 .
.
ATOM 5933 CD   CD   . ILE ILE ILE B B 353 353 . 11.948 46.935 -2.578  1.00 18.08  1 .
.
ATOM 5934 CG2  CG2  . ILE ILE ILE B B 353 353 . 11.746 47.936 -5.419  1.00 15.08  1 .
.
ATOM 5935 C    C    . ILE ILE ILE B B 353 353 . 13.183 50.429 -6.126  1.00 11.96  1 .
.
ATOM 5936 O    O    . ILE ILE ILE B B 353 353 . 13.559 49.981 -7.244  1.00 13.49  1 .
.
ATOM 5937 N    N    . GLN GLN GLN B B 354 354 . 12.498 51.589 -5.987  1.00 13.33  1 .
.
ATOM 5938 CA   CA   . GLN GLN GLN B B 354 354 . 12.112 52.364 -7.207  1.00 15.01  1 .
.
ATOM 5939 CB   CB   . GLN GLN GLN B B 354 354 . 11.311 53.586 -6.835  1.00 15.54  1 .
.
ATOM 5940 CG   CG   . GLN GLN GLN B B 354 354 . 9.996  53.137 -6.302  1.00 24.45  1 .
.
ATOM 5941 CD   CD   . GLN GLN GLN B B 354 354 . 9.163  54.310 -5.744  1.00 30.69  1 .
.
ATOM 5942 OE1  OE1  . GLN GLN GLN B B 354 354 . 9.701  55.370 -5.285  1.00 33.88  1 .
.
ATOM 5943 NE2  NE2  . GLN GLN GLN B B 354 354 . 7.830  54.134 -5.798  1.00 35.61  1 .
.
ATOM 5944 C    C    . GLN GLN GLN B B 354 354 . 13.375 52.838 -7.960  1.00 15.32  1 .
.
ATOM 5945 O    O    . GLN GLN GLN B B 354 354 . 13.394 52.787 -9.212  1.00 15.67  1 .
.
ATOM 5946 N    N    . ALA ALA ALA B B 355 355 . 14.407 53.298 -7.227  1.00 14.71  1 .
.
ATOM 5947 CA   CA   . ALA ALA ALA B B 355 355 . 15.665 53.710 -7.820  1.00 13.74  1 .
.
ATOM 5948 CB   CB   . ALA ALA ALA B B 355 355 . 16.650 54.251 -6.725  1.00 13.41  1 .
.
ATOM 5949 C    C    . ALA ALA ALA B B 355 355 . 16.316 52.532 -8.603  1.00 14.29  1 .
.
ATOM 5950 O    O    . ALA ALA ALA B B 355 355 . 16.804 52.705 -9.756  1.00 13.20  1 .
.
ATOM 5951 N    N    . CYS CYS CYS B B 356 356 . 16.358 51.323 -8.019  1.00 13.33  1 .
.
ATOM 5952 CA   CA   . CYS CYS CYS B B 356 356 . 16.967 50.158 -8.664  1.00 14.15  1 .
.
ATOM 5953 CB   CB   . CYS CYS CYS B B 356 356 . 16.789 48.973 -7.691  1.00 15.07  1 .
.
ATOM 5954 SG   SG   . CYS CYS CYS B B 356 356 . 17.578 47.461 -8.363  1.00 16.29  1 .
.
ATOM 5955 C    C    . CYS CYS CYS B B 356 356 . 16.182 49.841 -9.948  1.00 14.08  1 .
.
ATOM 5956 O    O    . CYS CYS CYS B B 356 356 . 16.803 49.633 -11.044 1.00 16.84  1 .
.
ATOM 5957 N    N    . LYS LYS LYS B B 357 357 . 14.858 49.831 -9.822  1.00 14.55  1 .
.
ATOM 5958 CA   CA   . LYS LYS LYS B B 357 357 . 14.016 49.464 -11.007 1.00 16.86  1 .
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ATOM 5959 CB   CB   . LYS LYS LYS B B 357 357 . 12.580 49.255 -10.657 1.00 17.75  1 .
.
ATOM 5960 CG   CG   . LYS LYS LYS B B 357 357 . 12.313 48.065 -9.721  1.00 19.48  1 .
.
ATOM 5961 CD   CD   . LYS LYS LYS B B 357 357 . 10.826 47.982 -9.210  1.00 26.83  1 .
.
ATOM 5962 CE   CE   . LYS LYS LYS B B 357 357 . 10.336 49.265 -8.341  1.00 35.19  1 .
.
ATOM 5963 NZ   NZ   . LYS LYS LYS B B 357 357 . 8.974  49.529 -7.526  1.00 40.07  1 .
.
ATOM 5964 C    C    . LYS LYS LYS B B 357 357 . 14.185 50.487 -12.096 1.00 17.01  1 .
.
ATOM 5965 O    O    . LYS LYS LYS B B 357 357 . 14.230 50.120 -13.280 1.00 17.89  1 .
.
ATOM 5966 N    N    . LEU LEU LEU B B 358 358 . 14.312 51.761 -11.736 1.00 14.48  1 .
.
ATOM 5967 CA   CA   . LEU LEU LEU B B 358 358 . 14.537 52.792 -12.773 1.00 15.86  1 .
.
ATOM 5968 CB   CB   . LEU LEU LEU B B 358 358 . 14.430 54.175 -12.134 1.00 16.50  1 .
.
ATOM 5969 CG   CG   . LEU LEU LEU B B 358 358 . 14.716 55.358 -13.033 1.00 18.69  1 .
.
ATOM 5970 CD1  CD1  . LEU LEU LEU B B 358 358 . 13.593 55.336 -14.115 1.00 20.91  1 .
.
ATOM 5971 CD2  CD2  . LEU LEU LEU B B 358 358 . 14.770 56.627 -12.197 1.00 17.76  1 .
.
ATOM 5972 C    C    . LEU LEU LEU B B 358 358 . 15.848 52.606 -13.527 1.00 14.91  1 .
.
ATOM 5973 O    O    . LEU LEU LEU B B 358 358 . 15.901 52.690 -14.786 1.00 15.30  1 .
.
ATOM 5974 N    N    . ALA ALA ALA B B 359 359 . 16.918 52.265 -12.790 1.00 14.22  1 .
.
ATOM 5975 CA   CA   . ALA ALA ALA B B 359 359 . 18.213 51.986 -13.413 1.00 13.99  1 .
.
ATOM 5976 CB   CB   . ALA ALA ALA B B 359 359 . 19.234 51.733 -12.324 1.00 15.00  1 .
.
ATOM 5977 C    C    . ALA ALA ALA B B 359 359 . 18.063 50.746 -14.306 1.00 15.60  1 .
.
ATOM 5978 O    O    . ALA ALA ALA B B 359 359 . 18.492 50.771 -15.472 1.00 14.50  1 .
.
ATOM 5979 N    N    . GLN GLN GLN B B 360 360 . 17.497 49.653 -13.777 1.00 16.32  1 .
.
ATOM 5980 CA   CA   . GLN GLN GLN B B 360 360 . 17.506 48.375 -14.534 1.00 15.62  1 .
.
ATOM 5981 CB   CB   . GLN GLN GLN B B 360 360 . 16.912 47.246 -13.663 1.00 16.31  1 .
.
ATOM 5982 CG   CG   . GLN GLN GLN B B 360 360 . 17.958 46.863 -12.577 1.00 17.58  1 .
.
ATOM 5983 CD   CD   . GLN GLN GLN B B 360 360 . 17.436 45.844 -11.545 1.00 18.24  1 .
.
ATOM 5984 OE1  OE1  . GLN GLN GLN B B 360 360 . 18.239 45.009 -10.949 1.00 24.34  1 .
.
ATOM 5985 NE2  NE2  . GLN GLN GLN B B 360 360 . 16.161 45.904 -11.294 1.00 17.75  1 .
.
ATOM 5986 C    C    . GLN GLN GLN B B 360 360 . 16.634 48.544 -15.793 1.00 16.93  1 .
.
ATOM 5987 O    O    . GLN GLN GLN B B 360 360 . 17.009 48.034 -16.889 1.00 17.75  1 .
.
ATOM 5988 N    N    . GLU GLU GLU B B 361 361 . 15.479 49.226 -15.640 1.00 16.10  1 .
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ATOM 5989 CA   CA   . GLU GLU GLU B B 361 361 . 14.616 49.549 -16.838 1.00 18.44  1 .
.
ATOM 5990 CB   CB   . GLU GLU GLU B B 361 361 . 13.333 50.284 -16.475 1.00 19.67  1 .
.
ATOM 5991 CG   CG   . GLU GLU GLU B B 361 361 . 12.462 49.325 -15.681 1.00 27.48  1 .
.
ATOM 5992 CD   CD   . GLU GLU GLU B B 361 361 . 11.254 50.037 -15.051 1.00 39.54  1 .
.
ATOM 5993 OE1  OE1  . GLU GLU GLU B B 361 361 . 11.059 51.281 -15.311 1.00 42.39  1 .
.
ATOM 5994 OE2  OE2  . GLU GLU GLU B B 361 361 . 10.518 49.317 -14.298 1.00 46.50  1 .
.
ATOM 5995 C    C    . GLU GLU GLU B B 361 361 . 15.301 50.312 -17.936 1.00 17.07  1 .
.
ATOM 5996 O    O    . GLU GLU GLU B B 361 361 . 14.893 50.151 -19.092 1.00 18.55  1 .
.
ATOM 5997 N    N    . ASN ASN ASN B B 362 362 . 16.360 51.037 -17.622 1.00 15.67  1 .
.
ATOM 5998 CA   CA   . ASN ASN ASN B B 362 362 . 17.082 51.845 -18.583 1.00 16.46  1 .
.
ATOM 5999 CB   CB   . ASN ASN ASN B B 362 362 . 17.271 53.250 -18.019 1.00 17.62  1 .
.
ATOM 6000 CG   CG   . ASN ASN ASN B B 362 362 . 16.018 54.046 -18.149 1.00 17.33  1 .
.
ATOM 6001 OD1  OD1  . ASN ASN ASN B B 362 362 . 15.658 54.455 -19.286 1.00 22.19  1 .
.
ATOM 6002 ND2  ND2  . ASN ASN ASN B B 362 362 . 15.294 54.258 -17.044 1.00 20.06  1 .
.
ATOM 6003 C    C    . ASN ASN ASN B B 362 362 . 18.393 51.175 -18.962 1.00 16.88  1 .
.
ATOM 6004 O    O    . ASN ASN ASN B B 362 362 . 19.295 51.801 -19.521 1.00 19.48  1 .
.
ATOM 6005 N    N    . GLY GLY GLY B B 363 363 . 18.529 49.898 -18.662 1.00 16.74  1 .
.
ATOM 6006 CA   CA   . GLY GLY GLY B B 363 363 . 19.701 49.205 -19.122 1.00 16.33  1 .
.
ATOM 6007 C    C    . GLY GLY GLY B B 363 363 . 20.960 49.329 -18.293 1.00 16.04  1 .
.
ATOM 6008 O    O    . GLY GLY GLY B B 363 363 . 22.037 48.910 -18.709 1.00 18.13  1 .
.
ATOM 6009 N    N    . TRP TRP TRP B B 364 364 . 20.823 49.880 -17.089 1.00 13.30  1 .
.
ATOM 6010 CA   CA   . TRP TRP TRP B B 364 364 . 22.029 50.000 -16.223 1.00 12.13  1 .
.
ATOM 6011 CB   CB   . TRP TRP TRP B B 364 364 . 21.796 51.144 -15.255 1.00 11.76  1 .
.
ATOM 6012 CG   CG   . TRP TRP TRP B B 364 364 . 21.834 52.554 -15.799 1.00 12.93  1 .
.
ATOM 6013 CD1  CD1  . TRP TRP TRP B B 364 364 . 21.716 53.025 -17.108 1.00 15.79  1 .
.
ATOM 6014 NE1  NE1  . TRP TRP TRP B B 364 364 . 21.793 54.442 -17.112 1.00 13.75  1 .
.
ATOM 6015 CE2  CE2  . TRP TRP TRP B B 364 364 . 21.959 54.855 -15.806 1.00 14.68  1 .
.
ATOM 6016 CD2  CD2  . TRP TRP TRP B B 364 364 . 22.022 53.682 -14.980 1.00 12.00  1 .
.
ATOM 6017 CE3  CE3  . TRP TRP TRP B B 364 364 . 22.121 53.827 -13.582 1.00 10.94  1 .
.
ATOM 6018 CZ3  CZ3  . TRP TRP TRP B B 364 364 . 22.251 55.107 -13.042 1.00 11.73  1 .
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ATOM 6019 CH2  CH2  . TRP TRP TRP B B 364 364 . 22.220 56.253 -13.868 1.00 12.23  1 .
.
ATOM 6020 CZ2  CZ2  . TRP TRP TRP B B 364 364 . 22.108 56.150 -15.274 1.00 14.17  1 .
.
ATOM 6021 C    C    . TRP TRP TRP B B 364 364 . 22.223 48.780 -15.358 1.00 11.88  1 .
.
ATOM 6022 O    O    . TRP TRP TRP B B 364 364 . 21.203 48.120 -15.012 1.00 14.45  1 .
.
ATOM 6023 N    N    . GLY GLY GLY B B 365 365 . 23.460 48.589 -14.881 1.00 12.79  1 .
.
ATOM 6024 CA   CA   . GLY GLY GLY B B 365 365 . 23.726 47.587 -13.818 1.00 10.97  1 .
.
ATOM 6025 C    C    . GLY GLY GLY B B 365 365 . 23.366 48.328 -12.502 1.00 11.62  1 .
.
ATOM 6026 O    O    . GLY GLY GLY B B 365 365 . 23.107 49.542 -12.454 1.00 11.78  1 .
.
ATOM 6027 N    N    . VAL VAL VAL B B 366 366 . 23.347 47.561 -11.412 1.00 11.20  1 .
.
ATOM 6028 CA   CA   . VAL VAL VAL B B 366 366 . 23.160 48.128 -10.084 1.00 11.11  1 .
.
ATOM 6029 CB   CB   . VAL VAL VAL B B 366 366 . 21.639 47.945 -9.604  1.00 10.06  1 .
.
ATOM 6030 CG1  CG1  . VAL VAL VAL B B 366 366 . 21.512 48.428 -8.145  1.00 13.56  1 .
.
ATOM 6031 CG2  CG2  . VAL VAL VAL B B 366 366 . 20.632 48.629 -10.524 1.00 12.62  1 .
.
ATOM 6032 C    C    . VAL VAL VAL B B 366 366 . 24.066 47.311 -9.134  1.00 11.37  1 .
.
ATOM 6033 O    O    . VAL VAL VAL B B 366 366 . 24.087 46.053 -9.179  1.00 13.22  1 .
.
ATOM 6034 N    N    . MET MET MET B B 367 367 . 24.823 48.029 -8.333  1.00 10.21  1 .
.
ATOM 6035 CA   CA   . MET MET MET B B 367 367 . 25.693 47.452 -7.342  1.00 10.99  1 .
.
ATOM 6036 CB   CB   . MET MET MET B B 367 367 . 27.165 47.828 -7.589  1.00 10.52  1 .
.
ATOM 6037 CG   CG   . MET MET MET B B 367 367 . 28.003 47.337 -6.424  1.00 11.07  1 .
.
ATOM 6038 SD   SD   . MET MET MET B B 367 367 . 29.756 47.792 -6.558  1.00 15.35  1 .
.
ATOM 6039 CE   CE   . MET MET MET B B 367 367 . 30.415 46.750 -7.883  1.00 20.57  1 .
.
ATOM 6040 C    C    . MET MET MET B B 367 367 . 25.208 47.884 -5.966  1.00 11.96  1 .
.
ATOM 6041 O    O    . MET MET MET B B 367 367 . 25.234 49.093 -5.648  1.00 12.49  1 .
.
ATOM 6042 N    N    . VAL VAL VAL B B 368 368 . 24.692 46.920 -5.182  1.00 11.68  1 .
.
ATOM 6043 CA   CA   . VAL VAL VAL B B 368 368 . 24.228 47.256 -3.847  1.00 10.78  1 .
.
ATOM 6044 CB   CB   . VAL VAL VAL B B 368 368 . 23.343 46.118 -3.279  1.00 9.93   1 .
.
ATOM 6045 CG1  CG1  . VAL VAL VAL B B 368 368 . 23.089 46.344 -1.738  1.00 11.88  1 .
.
ATOM 6046 CG2  CG2  . VAL VAL VAL B B 368 368 . 22.042 46.028 -4.015  1.00 11.25  1 .
.
ATOM 6047 C    C    . VAL VAL VAL B B 368 368 . 25.436 47.549 -2.963  1.00 11.06  1 .
.
ATOM 6048 O    O    . VAL VAL VAL B B 368 368 . 26.492 46.973 -3.177  1.00 10.96  1 .
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ATOM 6049 N    N    . SER SER SER B B 369 369 . 25.311 48.524 -2.032  1.00 8.63   1 .
.
ATOM 6050 CA   CA   . SER SER SER B B 369 369 . 26.515 48.944 -1.302  1.00 9.60   1 .
.
ATOM 6051 CB   CB   . SER SER SER B B 369 369 . 27.007 50.314 -1.827  1.00 9.93   1 .
.
ATOM 6052 OG   OG   . SER SER SER B B 369 369 . 28.164 50.757 -1.160  1.00 12.72  1 .
.
ATOM 6053 C    C    . SER SER SER B B 369 369 . 26.188 49.185 0.181   1.00 9.42   1 .
.
ATOM 6054 O    O    . SER SER SER B B 369 369 . 25.082 49.644 0.560   1.00 11.13  1 .
.
ATOM 6055 N    N    . HIS HIS HIS B B 370 370 . 27.196 48.795 0.984   1.00 9.31   1 .
.
ATOM 6056 CA   CA   . HIS HIS HIS B B 370 370 . 27.289 49.247 2.390   1.00 9.69   1 .
.
ATOM 6057 CB   CB   . HIS HIS HIS B B 370 370 . 28.419 48.477 3.081   1.00 7.77   1 .
.
ATOM 6058 CG   CG   . HIS HIS HIS B B 370 370 . 29.772 48.741 2.542   1.00 8.87   1 .
.
ATOM 6059 ND1  ND1  . HIS HIS HIS B B 370 370 . 30.908 48.321 3.186   1.00 11.84  1 .
.
ATOM 6060 CE1  CE1  . HIS HIS HIS B B 370 370 . 31.980 48.680 2.498   1.00 13.89  1 .
.
ATOM 6061 NE2  NE2  . HIS HIS HIS B B 370 370 . 31.582 49.263 1.376   1.00 13.28  1 .
.
ATOM 6062 CD2  CD2  . HIS HIS HIS B B 370 370 . 30.199 49.297 1.357   1.00 10.64  1 .
.
ATOM 6063 C    C    . HIS HIS HIS B B 370 370 . 27.581 50.735 2.500   1.00 10.54  1 .
.
ATOM 6064 O    O    . HIS HIS HIS B B 370 370 . 27.785 51.431 1.470   1.00 11.17  1 .
.
ATOM 6065 N    N    . ARG ARG ARG B B 371 371 . 27.630 51.238 3.755   1.00 9.03   1 .
.
ATOM 6066 CA   CA   . ARG ARG ARG B B 371 371 . 28.322 52.503 4.027   1.00 10.17  1 .
.
ATOM 6067 CB   CB   . ARG ARG ARG B B 371 371 . 27.455 53.440 4.838   1.00 8.74   1 .
.
ATOM 6068 CG   CG   . ARG ARG ARG B B 371 371 . 26.059 53.763 4.266   1.00 7.95   1 .
.
ATOM 6069 CD   CD   . ARG ARG ARG B B 371 371 . 26.188 54.378 2.838   1.00 9.46   1 .
.
ATOM 6070 NE   NE   . ARG ARG ARG B B 371 371 . 27.096 55.517 2.639   1.00 12.61  1 .
.
ATOM 6071 CZ   CZ   . ARG ARG ARG B B 371 371 . 26.652 56.748 2.289   1.00 11.41  1 .
.
ATOM 6072 NH1  NH1  . ARG ARG ARG B B 371 371 . 25.321 57.014 2.377   1.00 13.73  1 .
.
ATOM 6073 NH2  NH2  . ARG ARG ARG B B 371 371 . 27.581 57.655 1.901   1.00 13.42  1 .
.
ATOM 6074 C    C    . ARG ARG ARG B B 371 371 . 29.619 52.253 4.789   1.00 10.87  1 .
.
ATOM 6075 O    O    . ARG ARG ARG B B 371 371 . 29.784 51.149 5.327   1.00 11.42  1 .
.
ATOM 6076 N    N    . SER SER SER B B 372 372 . 30.527 53.222 4.862   1.00 11.26  1 .
.
ATOM 6077 CA   CA   . SER SER SER B B 372 372 . 31.817 53.013 5.588   1.00 11.15  1 .
.
ATOM 6078 CB   CB   . SER SER SER B B 372 372 . 32.829 54.147 5.265   1.00 11.97  1 .
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ATOM 6079 OG   OG   . SER SER SER B B 372 372 . 32.225 55.373 5.645   1.00 13.85  1 .
.
ATOM 6080 C    C    . SER SER SER B B 372 372 . 31.576 52.839 7.128   1.00 11.78  1 .
.
ATOM 6081 O    O    . SER SER SER B B 372 372 . 32.377 52.189 7.815   1.00 14.45  1 .
.
ATOM 6082 N    N    . GLY GLY GLY B B 373 373 . 30.443 53.396 7.600   1.00 11.51  1 .
.
ATOM 6083 CA   CA   . GLY GLY GLY B B 373 373 . 29.938 53.170 8.989   1.00 12.22  1 .
.
ATOM 6084 C    C    . GLY GLY GLY B B 373 373 . 28.796 52.152 8.923   1.00 12.32  1 .
.
ATOM 6085 O    O    . GLY GLY GLY B B 373 373 . 27.735 52.413 8.439   1.00 13.24  1 .
.
ATOM 6086 N    N    . GLU GLU GLU B B 374 374 . 29.098 50.908 9.320   1.00 11.83  1 .
.
ATOM 6087 CA   CA   . GLU GLU GLU B B 374 374 . 28.113 49.814 9.204   1.00 10.07  1 .
.
ATOM 6088 CB   CB   . GLU GLU GLU B B 374 374 . 28.646 48.607 8.292   1.00 8.57   1 .
.
ATOM 6089 CG   CG   . GLU GLU GLU B B 374 374 . 28.200 48.787 6.813   1.00 12.38  1 .
.
ATOM 6090 CD   CD   . GLU GLU GLU B B 374 374 . 26.681 48.734 6.603   1.00 10.97  1 .
.
ATOM 6091 OE1  OE1  . GLU GLU GLU B B 374 374 . 25.921 48.175 7.441   1.00 13.23  1 .
.
ATOM 6092 OE2  OE2  . GLU GLU GLU B B 374 374 . 26.202 49.274 5.572   1.00 12.70  1 .
.
ATOM 6093 C    C    . GLU GLU GLU B B 374 374 . 27.676 49.282 10.562  1.00 11.45  1 .
.
ATOM 6094 O    O    . GLU GLU GLU B B 374 374 . 28.155 49.727 11.616  1.00 12.70  1 .
.
ATOM 6095 N    N    . THR THR THR B B 375 375 . 26.716 48.365 10.550  1.00 10.83  1 .
.
ATOM 6096 CA   CA   . THR THR THR B B 375 375 . 26.390 47.675 11.783  1.00 11.27  1 .
.
ATOM 6097 CB   CB   . THR THR THR B B 375 375 . 24.957 48.117 12.253  1.00 10.67  1 .
.
ATOM 6098 OG1  OG1  . THR THR THR B B 375 375 . 23.958 47.589 11.365  1.00 12.84  1 .
.
ATOM 6099 CG2  CG2  . THR THR THR B B 375 375 . 24.847 49.657 12.228  1.00 15.54  1 .
.
ATOM 6100 C    C    . THR THR THR B B 375 375 . 26.296 46.186 11.494  1.00 10.11  1 .
.
ATOM 6101 O    O    . THR THR THR B B 375 375 . 26.629 45.769 10.342  1.00 11.74  1 .
.
ATOM 6102 N    N    . GLU GLU GLU B B 376 376 . 25.894 45.398 12.546  1.00 11.59  1 .
.
ATOM 6103 CA   CA   . GLU GLU GLU B B 376 376 . 25.721 43.940 12.414  1.00 13.45  1 .
.
ATOM 6104 CB   CB   . GLU GLU GLU B B 376 376 . 25.691 43.329 13.849  1.00 13.43  1 .
.
ATOM 6105 CG   CG   . GLU GLU GLU B B 376 376 . 24.628 43.947 14.868  1.00 18.02  1 .
.
ATOM 6106 CD   CD   . GLU GLU GLU B B 376 376 . 25.119 45.123 15.710  1.00 17.73  1 .
.
ATOM 6107 OE1  OE1  . GLU GLU GLU B B 376 376 . 25.778 46.009 15.178  1.00 18.73  1 .
.
ATOM 6108 OE2  OE2  . GLU GLU GLU B B 376 376 . 24.772 45.221 16.909  1.00 15.31  1 .
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ATOM 6109 C   C   . GLU GLU GLU B B 376 376 . 24.491 43.585 11.555 1.00 12.62 1 .
.
ATOM 6110 O   O   . GLU GLU GLU B B 376 376 . 24.217 42.415 11.323 1.00 14.59 1 .
.
ATOM 6111 N   N   . ASP ASP ASP B B 377 377 . 23.718 44.597 11.117 1.00 11.54 1 .
.
ATOM 6112 CA  CA  . ASP ASP ASP B B 377 377 . 22.515 44.362 10.283 1.00 11.73 1 .
.
ATOM 6113 CB  CB  . ASP ASP ASP B B 377 377 . 21.866 45.747 10.055 1.00 13.96 1 .
.
ATOM 6114 CG  CG  . ASP ASP ASP B B 377 377 . 20.581 45.688 9.295  1.00 19.97 1 .
.
ATOM 6115 OD1 OD1 . ASP ASP ASP B B 377 377 . 20.641 45.576 8.030  1.00 26.59 1 .
.
ATOM 6116 OD2 OD2 . ASP ASP ASP B B 377 377 . 19.511 45.790 9.943  1.00 19.17 1 .
.
ATOM 6117 C   C   . ASP ASP ASP B B 377 377 . 22.944 43.717 8.944  1.00 13.18 1 .
.
ATOM 6118 O   O   . ASP ASP ASP B B 377 377 . 23.961 44.077 8.390  1.00 13.11 1 .
.
ATOM 6119 N   N   . THR THR THR B B 378 378 . 22.195 42.770 8.420  1.00 9.52  1 .
.
ATOM 6120 CA  CA  . THR THR THR B B 378 378 . 22.545 42.151 7.134  1.00 10.02 1 .
.
ATOM 6121 CB  CB  . THR THR THR B B 378 378 . 22.735 40.639 7.309  1.00 10.83 1 .
.
ATOM 6122 OG1 OG1 . THR THR THR B B 378 378 . 21.498 40.038 7.761  1.00 14.73 1 .
.
ATOM 6123 CG2 CG2 . THR THR THR B B 378 378 . 23.834 40.320 8.358  1.00 10.93 1 .
.
ATOM 6124 C   C   . THR THR THR B B 378 378 . 21.467 42.331 6.109  1.00 9.38  1 .
.
ATOM 6125 O   O   . THR THR THR B B 378 378 . 21.499 41.625 5.043  1.00 11.26 1 .
.
ATOM 6126 N   N   . PHE PHE PHE B B 379 379 . 20.595 43.366 6.273  1.00 10.63 1 .
.
ATOM 6127 CA  CA  . PHE PHE PHE B B 379 379 . 19.512 43.571 5.259  1.00 10.91 1 .
.
ATOM 6128 CB  CB  . PHE PHE PHE B B 379 379 . 18.847 44.911 5.572  1.00 11.53 1 .
.
ATOM 6129 CG  CG  . PHE PHE PHE B B 379 379 . 17.638 45.197 4.739  1.00 10.90 1 .
.
ATOM 6130 CD1 CD1 . PHE PHE PHE B B 379 379 . 17.767 45.917 3.553  1.00 13.26 1 .
.
ATOM 6131 CE1 CE1 . PHE PHE PHE B B 379 379 . 16.630 46.205 2.750  1.00 14.73 1 .
.
ATOM 6132 CZ  CZ  . PHE PHE PHE B B 379 379 . 15.382 45.729 3.149  1.00 16.62 1 .
.
ATOM 6133 CE2 CE2 . PHE PHE PHE B B 379 379 . 15.219 45.062 4.366  1.00 18.30 1 .
.
ATOM 6134 CD2 CD2 . PHE PHE PHE B B 379 379 . 16.367 44.748 5.155  1.00 14.83 1 .
.
ATOM 6135 C   C   . PHE PHE PHE B B 379 379 . 20.021 43.599 3.832  1.00 8.74  1 .
.
ATOM 6136 O   O   . PHE PHE PHE B B 379 379 . 19.350 43.053 2.920  1.00 10.10 1 .
.
ATOM 6137 N   N   . ILE ILE ILE B B 380 380 . 21.139 44.288 3.598  1.00 9.73  1 .
.
ATOM 6138 CA  CA  . ILE ILE ILE B B 380 380 . 21.561 44.499 2.175  1.00 10.74 1 .
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ATOM 6139 CB   CB   . ILE ILE ILE B B 380 380 . 22.717 45.560 1.953   1.00 10.63  1 .
.
ATOM 6140 CG1  CG1  . ILE ILE ILE B B 380 380 . 24.036 45.193 2.703   1.00 10.16  1 .
.
ATOM 6141 CD   CD   . ILE ILE ILE B B 380 380 . 25.172 46.167 2.333   1.00 10.28  1 .
.
ATOM 6142 CG2  CG2  . ILE ILE ILE B B 380 380 . 22.154 46.929 2.386   1.00 11.34  1 .
.
ATOM 6143 C    C    . ILE ILE ILE B B 380 380 . 21.962 43.178 1.476   1.00 10.85  1 .
.
ATOM 6144 O    O    . ILE ILE ILE B B 380 380 . 21.919 43.086 0.242   1.00 11.08  1 .
.
ATOM 6145 N    N    . ALA ALA ALA B B 381 381 . 22.283 42.146 2.257   1.00 10.25  1 .
.
ATOM 6146 CA   CA   . ALA ALA ALA B B 381 381 . 22.534 40.801 1.640   1.00 10.32  1 .
.
ATOM 6147 CB   CB   . ALA ALA ALA B B 381 381 . 23.073 39.862 2.720   1.00 9.18   1 .
.
ATOM 6148 C    C    . ALA ALA ALA B B 381 381 . 21.234 40.257 1.022   1.00 12.24  1 .
.
ATOM 6149 O    O    . ALA ALA ALA B B 381 381 . 21.232 39.789 -0.134  1.00 12.44  1 .
.
ATOM 6150 N    N    . ASP ASP ASP B B 382 382 . 20.144 40.270 1.786   1.00 12.61  1 .
.
ATOM 6151 CA   CA   . ASP ASP ASP B B 382 382 . 18.856 39.856 1.228   1.00 12.73  1 .
.
ATOM 6152 CB   CB   . ASP ASP ASP B B 382 382 . 17.756 39.786 2.294   1.00 11.86  1 .
.
ATOM 6153 CG   CG   . ASP ASP ASP B B 382 382 . 18.012 38.623 3.224   1.00 15.72  1 .
.
ATOM 6154 OD1  OD1  . ASP ASP ASP B B 382 382 . 18.943 38.736 4.076   1.00 18.10  1 .
.
ATOM 6155 OD2  OD2  . ASP ASP ASP B B 382 382 . 17.333 37.562 3.099   1.00 16.42  1 .
.
ATOM 6156 C    C    . ASP ASP ASP B B 382 382 . 18.427 40.811 0.068   1.00 11.38  1 .
.
ATOM 6157 O    O    . ASP ASP ASP B B 382 382 . 17.819 40.363 -0.931  1.00 10.84  1 .
.
ATOM 6158 N    N    . LEU LEU LEU B B 383 383 . 18.721 42.092 0.234   1.00 10.50  1 .
.
ATOM 6159 CA   CA   . LEU LEU LEU B B 383 383 . 18.321 43.108 -0.755  1.00 11.78  1 .
.
ATOM 6160 CB   CB   . LEU LEU LEU B B 383 383 . 18.768 44.506 -0.262  1.00 10.98  1 .
.
ATOM 6161 CG   CG   . LEU LEU LEU B B 383 383 . 18.383 45.679 -1.200  1.00 10.91  1 .
.
ATOM 6162 CD1  CD1  . LEU LEU LEU B B 383 383 . 16.783 45.785 -1.246  1.00 13.23  1 .
.
ATOM 6163 CD2  CD2  . LEU LEU LEU B B 383 383 . 19.058 46.972 -0.624  1.00 10.34  1 .
.
ATOM 6164 C    C    . LEU LEU LEU B B 383 383 . 18.949 42.808 -2.137  1.00 11.94  1 .
.
ATOM 6165 O    O    . LEU LEU LEU B B 383 383 . 18.242 42.814 -3.153  1.00 12.61  1 .
.
ATOM 6166 N    N    . VAL VAL VAL B B 384 384 . 20.255 42.543 -2.173  1.00 10.69  1 .
.
ATOM 6167 CA   CA   . VAL VAL VAL B B 384 384 . 20.952 42.341 -3.460  1.00 11.30  1 .
.
ATOM 6168 CB   CB   . VAL VAL VAL B B 384 384 . 22.469 42.379 -3.327  1.00 9.96   1 .
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ATOM 6169 CG1  CG1  . VAL VAL VAL B B 384 384 . 23.014 41.159 -2.515  1.00 11.50  1 .
.
ATOM 6170 CG2  CG2  . VAL VAL VAL B B 384 384 . 23.100 42.470 -4.730  1.00 10.89  1 .
.
ATOM 6171 C    C    . VAL VAL VAL B B 384 384 . 20.422 41.078 -4.156  1.00 11.91  1 .
.
ATOM 6172 O    O    . VAL VAL VAL B B 384 384 . 20.299 41.050 -5.377  1.00 12.53  1 .
.
ATOM 6173 N    N    . VAL VAL VAL B B 385 385 . 20.082 40.046 -3.380  1.00 10.94  1 .
.
ATOM 6174 CA   CA   . VAL VAL VAL B B 385 385 . 19.577 38.820 -3.986  1.00 11.63  1 .
.
ATOM 6175 CB   CB   . VAL VAL VAL B B 385 385 . 19.579 37.630 -2.949  1.00 10.46  1 .
.
ATOM 6176 CG1  CG1  . VAL VAL VAL B B 385 385 . 18.938 36.411 -3.599  1.00 12.89  1 .
.
ATOM 6177 CG2  CG2  . VAL VAL VAL B B 385 385 . 21.076 37.354 -2.652  1.00 12.86  1 .
.
ATOM 6178 C    C    . VAL VAL VAL B B 385 385 . 18.144 39.059 -4.510  1.00 12.19  1 .
.
ATOM 6179 O    O    . VAL VAL VAL B B 385 385 . 17.827 38.655 -5.664  1.00 14.76  1 .
.
ATOM 6180 N    N    . GLY GLY GLY B B 386 386 . 17.295 39.668 -3.677  1.00 12.33  1 .
.
ATOM 6181 CA   CA   . GLY GLY GLY B B 386 386 . 15.892 39.944 -4.116  1.00 13.77  1 .
.
ATOM 6182 C    C    . GLY GLY GLY B B 386 386 . 15.807 40.884 -5.328  1.00 14.35  1 .
.
ATOM 6183 O    O    . GLY GLY GLY B B 386 386 . 14.890 40.745 -6.159  1.00 15.99  1 .
.
ATOM 6184 N    N    . LEU LEU LEU B B 387 387 . 16.716 41.854 -5.415  1.00 14.43  1 .
.
ATOM 6185 CA   CA   . LEU LEU LEU B B 387 387 . 16.718 42.822 -6.542  1.00 13.32  1 .
.
ATOM 6186 CB   CB   . LEU LEU LEU B B 387 387 . 17.338 44.138 -6.075  1.00 13.34  1 .
.
ATOM 6187 CG   CG   . LEU LEU LEU B B 387 387 . 16.405 44.825 -5.026  1.00 14.41  1 .
.
ATOM 6188 CD1  CD1  . LEU LEU LEU B B 387 387 . 17.030 46.177 -4.722  1.00 17.23  1 .
.
ATOM 6189 CD2  CD2  . LEU LEU LEU B B 387 387 . 14.946 44.969 -5.465  1.00 17.20  1 .
.
ATOM 6190 C    C    . LEU LEU LEU B B 387 387 . 17.484 42.242 -7.767  1.00 14.53  1 .
.
ATOM 6191 O    O    . LEU LEU LEU B B 387 387 . 17.579 42.891 -8.874  1.00 16.18  1 .
.
ATOM 6192 N    N    . CYS CYS CYS B B 388 388 . 18.065 41.042 -7.584  1.00 15.62  1 .
.
ATOM 6193 CA   CA   . CYS CYS CYS B B 388 388 . 18.768 40.299 -8.629  1.00 17.33  1 .
.
ATOM 6194 CB   CB   . CYS CYS CYS B B 388 388 . 17.813 39.801 -9.707  1.00 19.21  1 .
.
ATOM 6195 SG   SG   . CYS CYS CYS B B 388 388 . 16.623 38.732 -9.060  1.00 29.12  1 .
.
ATOM 6196 C    C    . CYS CYS CYS B B 388 388 . 19.806 41.208 -9.324  1.00 17.34  1 .
.
ATOM 6197 O    O    . CYS CYS CYS B B 388 388 . 19.916 41.149 -10.570 1.00 18.95  1 .
.
ATOM 6198 N    N    . THR THR THR B B 389 389 . 20.563 42.009 -8.573  1.00 15.36  1 .
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ATOM 6199 CA   CA   . THR THR THR B B 389 389 . 21.445 42.979 -9.299  1.00 13.68  1 .
.
ATOM 6200 CB   CB   . THR THR THR B B 389 389 . 21.733 44.264 -8.491  1.00 10.90  1 .
.
ATOM 6201 OG1  OG1  . THR THR THR B B 389 389 . 22.887 43.990 -7.638  1.00 13.97  1 .
.
ATOM 6202 CG2  CG2  . THR THR THR B B 389 389 . 20.567 44.614 -7.580  1.00 13.91  1 .
.
ATOM 6203 C    C    . THR THR THR B B 389 389 . 22.760 42.373 -9.772  1.00 13.62  1 .
.
ATOM 6204 O    O    . THR THR THR B B 389 389 . 23.428 42.901 -10.663 1.00 15.08  1 .
.
ATOM 6205 N    N    . GLY GLY GLY B B 390 390 . 23.164 41.225 -9.191  1.00 12.56  1 .
.
ATOM 6206 CA   CA   . GLY GLY GLY B B 390 390 . 24.466 40.614 -9.584  1.00 12.69  1 .
.
ATOM 6207 C    C    . GLY GLY GLY B B 390 390 . 25.753 41.135 -8.992  1.00 11.77  1 .
.
ATOM 6208 O    O    . GLY GLY GLY B B 390 390 . 26.835 40.612 -9.260  1.00 12.22  1 .
.
ATOM 6209 N    N    . GLN GLN GLN B B 391 391 . 25.656 42.260 -8.187  1.00 10.60  1 .
.
ATOM 6210 CA   CA   . GLN GLN GLN B B 391 391 . 26.919 42.822 -7.648  1.00 10.06  1 .
.
ATOM 6211 CB   CB   . GLN GLN GLN B B 391 391 . 27.640 43.837 -8.546  1.00 14.59  1 .
.
ATOM 6212 CG   CG   . GLN GLN GLN B B 391 391 . 26.894 44.218 -9.722  1.00 16.65  1 .
.
ATOM 6213 CD   CD   . GLN GLN GLN B B 391 391 . 27.633 45.245 -10.651 1.00 16.34  1 .
.
ATOM 6214 OE1  OE1  . GLN GLN GLN B B 391 391 . 28.750 45.666 -10.416 1.00 16.94  1 .
.
ATOM 6215 NE2  NE2  . GLN GLN GLN B B 391 391 . 26.942 45.678 -11.658 1.00 17.60  1 .
.
ATOM 6216 C    C    . GLN GLN GLN B B 391 391 . 26.607 43.489 -6.316  1.00 10.08  1 .
.
ATOM 6217 O    O    . GLN GLN GLN B B 391 391 . 25.613 44.239 -6.173  1.00 11.97  1 .
.
ATOM 6218 N    N    . ILE ILE ILE B B 392 392 . 27.526 43.264 -5.385  1.00 10.32  1 .
.
ATOM 6219 CA   CA   . ILE ILE ILE B B 392 392 . 27.448 43.986 -4.090  1.00 10.74  1 .
.
ATOM 6220 CB   CB   . ILE ILE ILE B B 392 392 . 26.768 43.089 -3.022  1.00 12.08  1 .
.
ATOM 6221 CG1  CG1  . ILE ILE ILE B B 392 392 . 26.668 43.900 -1.704  1.00 10.30  1 .
.
ATOM 6222 CD   CD   . ILE ILE ILE B B 392 392 . 25.657 43.233 -0.694  1.00 12.73  1 .
.
ATOM 6223 CG2  CG2  . ILE ILE ILE B B 392 392 . 27.610 41.751 -2.797  1.00 13.26  1 .
.
ATOM 6224 C    C    . ILE ILE ILE B B 392 392 . 28.845 44.356 -3.621  1.00 11.24  1 .
.
ATOM 6225 O    O    . ILE ILE ILE B B 392 392 . 29.794 43.581 -3.805  1.00 10.89  1 .
.
ATOM 6226 N    N    . LYS LYS LYS B B 393 393 . 29.042 45.574 -3.045  1.00 9.87   1 .
.
ATOM 6227 CA   CA   . LYS LYS LYS B B 393 393 . 30.286 45.918 -2.363  1.00 10.46  1 .
.
ATOM 6228 CB   CB   . LYS LYS LYS B B 393 393 . 31.048 47.137 -2.934  1.00 11.04  1 .
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ATOM 6229 CG   CG   . LYS LYS LYS B B 393 393 . 30.453 48.429 -2.767  1.00 13.39  1 .
.
ATOM 6230 CD   CD   . LYS LYS LYS B B 393 393 . 31.424 49.567 -3.290  1.00 12.34  1 .
.
ATOM 6231 CE   CE   . LYS LYS LYS B B 393 393 . 31.138 50.840 -2.565  1.00 15.66  1 .
.
ATOM 6232 NZ   NZ   . LYS LYS LYS B B 393 393 . 32.075 51.906 -3.054  1.00 14.33  1 .
.
ATOM 6233 C    C    . LYS LYS LYS B B 393 393 . 29.895 46.114 -0.898  1.00 10.61  1 .
.
ATOM 6234 O    O    . LYS LYS LYS B B 393 393 . 29.003 46.925 -0.577  1.00 11.17  1 .
.
ATOM 6235 N    N    . THR THR THR B B 394 394 . 30.529 45.316 -0.029  1.00 10.22  1 .
.
ATOM 6236 CA   CA   . THR THR THR B B 394 394 . 30.201 45.451 1.396   1.00 10.03  1 .
.
ATOM 6237 CB   CB   . THR THR THR B B 394 394 . 28.935 44.719 1.801   1.00 10.73  1 .
.
ATOM 6238 OG1  OG1  . THR THR THR B B 394 394 . 28.574 45.003 3.183   1.00 12.09  1 .
.
ATOM 6239 CG2  CG2  . THR THR THR B B 394 394 . 28.990 43.172 1.512   1.00 11.25  1 .
.
ATOM 6240 C    C    . THR THR THR B B 394 394 . 31.433 45.185 2.281   1.00 10.57  1 .
.
ATOM 6241 O    O    . THR THR THR B B 394 394 . 31.265 44.751 3.452   1.00 10.95  1 .
.
ATOM 6242 N    N    . GLY GLY GLY B B 395 395 . 32.624 45.531 1.794   1.00 10.07  1 .
.
ATOM 6243 CA   CA   . GLY GLY GLY B B 395 395 . 33.763 45.565 2.669   1.00 11.19  1 .
.
ATOM 6244 C    C    . GLY GLY GLY B B 395 395 . 34.851 44.631 2.172   1.00 9.24   1 .
.
ATOM 6245 O    O    . GLY GLY GLY B B 395 395 . 34.612 43.716 1.352   1.00 9.37   1 .
.
ATOM 6246 N    N    . ALA ALA ALA B B 396 396 . 36.026 44.779 2.739   1.00 10.05  1 .
.
ATOM 6247 CA   CA   . ALA ALA ALA B B 396 396 . 37.024 43.706 2.681   1.00 9.55   1 .
.
ATOM 6248 CB   CB   . ALA ALA ALA B B 396 396 . 38.252 44.173 3.430   1.00 11.06  1 .
.
ATOM 6249 C    C    . ALA ALA ALA B B 396 396 . 36.422 42.452 3.420   1.00 11.07  1 .
.
ATOM 6250 O    O    . ALA ALA ALA B B 396 396 . 35.427 42.553 4.161   1.00 11.01  1 .
.
ATOM 6251 N    N    . PRO PRO PRO B B 397 397 . 37.042 41.267 3.247   1.00 10.64  1 .
.
ATOM 6252 CA   CA   . PRO PRO PRO B B 397 397 . 36.570 40.107 4.022   1.00 9.92   1 .
.
ATOM 6253 CB   CB   . PRO PRO PRO B B 397 397 . 37.028 38.942 3.166   1.00 11.13  1 .
.
ATOM 6254 CG   CG   . PRO PRO PRO B B 397 397 . 38.377 39.459 2.532   1.00 12.34  1 .
.
ATOM 6255 CD   CD   . PRO PRO PRO B B 397 397 . 38.069 40.910 2.202   1.00 10.85  1 .
.
ATOM 6256 C    C    . PRO PRO PRO B B 397 397 . 37.211 40.176 5.452   1.00 11.26  1 .
.
ATOM 6257 O    O    . PRO PRO PRO B B 397 397 . 37.925 39.275 5.864   1.00 13.13  1 .
.
ATOM 6258 N    N    . CYS CYS CYS B B 398 398 . 37.021 41.321 6.126   1.00 10.76  1 .
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ATOM 6259 CA   CA   . CYS CYS CYS B B 398 398 . 37.666 41.569 7.418   1.00 9.99   1 .
.
ATOM 6260 CB   CB   . CYS CYS CYS B B 398 398 . 39.080 42.123 7.207   1.00 10.89  1 .
.
ATOM 6261 SG   SG   . CYS CYS CYS B B 398 398 . 39.846 42.697 8.693   1.00 15.10  1 .
.
ATOM 6262 C    C    . CYS CYS CYS B B 398 398 . 36.776 42.588 8.076   1.00 10.63  1 .
.
ATOM 6263 O    O    . CYS CYS CYS B B 398 398 . 36.328 43.553 7.410   1.00 11.12  1 .
.
ATOM 6264 N    N    . ARG ARG ARG B B 399 399 . 36.501 42.390 9.366   1.00 9.71   1 .
.
ATOM 6265 CA   CA   . ARG ARG ARG B B 399 399 . 35.600 43.174 10.240  1.00 10.31  1 .
.
ATOM 6266 CB   CB   . ARG ARG ARG B B 399 399 . 35.627 44.706 9.962   1.00 8.16   1 .
.
ATOM 6267 CG   CG   . ARG ARG ARG B B 399 399 . 37.092 45.331 10.227  1.00 10.82  1 .
.
ATOM 6268 CD   CD   . ARG ARG ARG B B 399 399 . 37.164 46.821 9.771   1.00 10.58  1 .
.
ATOM 6269 NE   NE   . ARG ARG ARG B B 399 399 . 36.190 47.620 10.572  1.00 9.66   1 .
.
ATOM 6270 CZ   CZ   . ARG ARG ARG B B 399 399 . 36.482 48.784 11.143  1.00 10.58  1 .
.
ATOM 6271 NH1  NH1  . ARG ARG ARG B B 399 399 . 37.774 49.235 11.166  1.00 14.93  1 .
.
ATOM 6272 NH2  NH2  . ARG ARG ARG B B 399 399 . 35.541 49.436 11.805  1.00 11.85  1 .
.
ATOM 6273 C    C    . ARG ARG ARG B B 399 399 . 34.181 42.679 10.096  1.00 8.61   1 .
.
ATOM 6274 O    O    . ARG ARG ARG B B 399 399 . 33.661 42.581 8.961   1.00 9.80   1 .
.
ATOM 6275 N    N    . SER SER SER B B 400 400 . 33.535 42.271 11.180  1.00 7.84   1 .
.
ATOM 6276 CA   CA   . SER SER SER B B 400 400 . 32.258 41.498 10.948  1.00 7.56   1 .
.
ATOM 6277 CB   CB   . SER SER SER B B 400 400 . 31.921 40.639 12.175  1.00 9.27   1 .
.
ATOM 6278 OG   OG   . SER SER SER B B 400 400 . 32.944 39.651 12.353  1.00 10.36  1 .
.
ATOM 6279 C    C    . SER SER SER B B 400 400 . 31.043 42.353 10.566  1.00 7.65   1 .
.
ATOM 6280 O    O    . SER SER SER B B 400 400 . 30.014 41.833 10.172  1.00 9.12   1 .
.
ATOM 6281 N    N    . GLU GLU GLU B B 401 401 . 31.138 43.718 10.608  1.00 8.37   1 .
.
ATOM 6282 CA   CA   . GLU GLU GLU B B 401 401 . 30.044 44.457 9.938   1.00 8.37   1 .
.
ATOM 6283 CB   CB   . GLU GLU GLU B B 401 401 . 30.059 45.955 10.281  1.00 8.42   1 .
.
ATOM 6284 CG   CG   . GLU GLU GLU B B 401 401 . 31.255 46.754 9.722   1.00 6.47   1 .
.
ATOM 6285 CD   CD   . GLU GLU GLU B B 401 401 . 32.589 46.609 10.415  1.00 7.84   1 .
.
ATOM 6286 OE1  OE1  . GLU GLU GLU B B 401 401 . 32.797 45.856 11.394  1.00 8.59   1 .
.
ATOM 6287 OE2  OE2  . GLU GLU GLU B B 401 401 . 33.521 47.350 9.898   1.00 11.35  1 .
.
ATOM 6288 C    C    . GLU GLU GLU B B 401 401 . 30.093 44.230 8.425   1.00 9.50   1 .
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ATOM 6289 O    O    . GLU GLU GLU B B 401 401 . 29.085 44.559 7.748   1.00 10.41  1 .
.
ATOM 6290 N    N    . ARG ARG ARG B B 402 402 . 31.269 43.770 7.933   1.00 7.67   1 .
.
ATOM 6291 CA   CA   . ARG ARG ARG B B 402 402 . 31.372 43.363 6.490   1.00 6.71   1 .
.
ATOM 6292 CB   CB   . ARG ARG ARG B B 402 402 . 32.775 43.662 5.973   1.00 6.90   1 .
.
ATOM 6293 CG   CG   . ARG ARG ARG B B 402 402 . 33.359 45.014 6.408   1.00 7.34   1 .
.
ATOM 6294 CD   CD   . ARG ARG ARG B B 402 402 . 32.526 46.230 6.000   1.00 9.76   1 .
.
ATOM 6295 NE   NE   . ARG ARG ARG B B 402 402 . 32.929 47.345 6.866   1.00 10.11  1 .
.
ATOM 6296 CZ   CZ   . ARG ARG ARG B B 402 402 . 32.294 48.530 6.878   1.00 9.63   1 .
.
ATOM 6297 NH1  NH1  . ARG ARG ARG B B 402 402 . 31.459 48.866 5.876   1.00 9.97   1 .
.
ATOM 6298 NH2  NH2  . ARG ARG ARG B B 402 402 . 32.596 49.415 7.854   1.00 10.50  1 .
.
ATOM 6299 C    C    . ARG ARG ARG B B 402 402 . 31.032 41.857 6.369   1.00 8.31   1 .
.
ATOM 6300 O    O    . ARG ARG ARG B B 402 402 . 30.155 41.491 5.566   1.00 9.40   1 .
.
ATOM 6301 N    N    . LEU LEU LEU B B 403 403 . 31.726 41.004 7.166   1.00 9.02   1 .
.
ATOM 6302 CA   CA   . LEU LEU LEU B B 403 403 . 31.487 39.569 7.001   1.00 9.15   1 .
.
ATOM 6303 CB   CB   . LEU LEU LEU B B 403 403 . 32.402 38.756 7.916   1.00 10.92  1 .
.
ATOM 6304 CG   CG   . LEU LEU LEU B B 403 403 . 33.891 38.582 7.475   1.00 9.15   1 .
.
ATOM 6305 CD1  CD1  . LEU LEU LEU B B 403 403 . 34.054 38.210 5.959   1.00 12.60  1 .
.
ATOM 6306 CD2  CD2  . LEU LEU LEU B B 403 403 . 34.817 39.691 8.011   1.00 11.92  1 .
.
ATOM 6307 C    C    . LEU LEU LEU B B 403 403 . 30.024 39.208 7.325   1.00 9.58   1 .
.
ATOM 6308 O    O    . LEU LEU LEU B B 403 403 . 29.556 38.204 6.783   1.00 10.12  1 .
.
ATOM 6309 N    N    . ALA ALA ALA B B 404 404 . 29.311 39.954 8.213   1.00 8.36   1 .
.
ATOM 6310 CA   CA   . ALA ALA ALA B B 404 404 . 27.882 39.610 8.476   1.00 9.06   1 .
.
ATOM 6311 CB   CB   . ALA ALA ALA B B 404 404 . 27.195 40.574 9.484   1.00 10.81  1 .
.
ATOM 6312 C    C    . ALA ALA ALA B B 404 404 . 27.105 39.523 7.178   1.00 9.10   1 .
.
ATOM 6313 O    O    . ALA ALA ALA B B 404 404 . 26.298 38.590 7.014   1.00 11.21  1 .
.
ATOM 6314 N    N    . LYS LYS LYS B B 405 405 . 27.397 40.450 6.258   1.00 9.20   1 .
.
ATOM 6315 CA   CA   . LYS LYS LYS B B 405 405 . 26.638 40.451 5.017   1.00 7.70   1 .
.
ATOM 6316 CB   CB   . LYS LYS LYS B B 405 405 . 26.928 41.736 4.226   1.00 7.65   1 .
.
ATOM 6317 CG   CG   . LYS LYS LYS B B 405 405 . 26.108 42.961 4.657   1.00 9.99   1 .
.
ATOM 6318 CD   CD   . LYS LYS LYS B B 405 405 . 26.555 43.473 6.059   1.00 8.16   1 .
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ATOM 6319 CE   CE   . LYS LYS LYS B B 405 405 . 26.030 44.976 6.181   1.00 10.10  1 .
.
ATOM 6320 NZ   NZ   . LYS LYS LYS B B 405 405 . 26.435 45.369 7.620   1.00 9.39   1 .
.
ATOM 6321 C    C    . LYS LYS LYS B B 405 405 . 27.142 39.288 4.137   1.00 9.00   1 .
.
ATOM 6322 O    O    . LYS LYS LYS B B 405 405 . 26.285 38.621 3.532   1.00 9.00   1 .
.
ATOM 6323 N    N    . TYR TYR TYR B B 406 406 . 28.449 39.089 4.048   1.00 8.62   1 .
.
ATOM 6324 CA   CA   . TYR TYR TYR B B 406 406 . 29.000 38.038 3.167   1.00 9.27   1 .
.
ATOM 6325 CB   CB   . TYR TYR TYR B B 406 406 . 30.536 38.109 3.121   1.00 8.91   1 .
.
ATOM 6326 CG   CG   . TYR TYR TYR B B 406 406 . 30.994 39.379 2.357   1.00 8.66   1 .
.
ATOM 6327 CD1  CD1  . TYR TYR TYR B B 406 406 . 30.482 39.658 1.067   1.00 9.67   1 .
.
ATOM 6328 CE1  CE1  . TYR TYR TYR B B 406 406 . 30.955 40.772 0.381   1.00 10.06  1 .
.
ATOM 6329 CZ   CZ   . TYR TYR TYR B B 406 406 . 31.851 41.635 0.964   1.00 9.10   1 .
.
ATOM 6330 OH   OH   . TYR TYR TYR B B 406 406 . 32.273 42.738 0.281   1.00 12.06  1 .
.
ATOM 6331 CE2  CE2  . TYR TYR TYR B B 406 406 . 32.381 41.372 2.230   1.00 9.71   1 .
.
ATOM 6332 CD2  CD2  . TYR TYR TYR B B 406 406 . 31.908 40.280 2.916   1.00 10.92  1 .
.
ATOM 6333 C    C    . TYR TYR TYR B B 406 406 . 28.522 36.656 3.682   1.00 9.36   1 .
.
ATOM 6334 O    O    . TYR TYR TYR B B 406 406 . 28.183 35.741 2.894   1.00 9.82   1 .
.
ATOM 6335 N    N    . ASN ASN ASN B B 407 407 . 28.533 36.484 5.014   1.00 8.72   1 .
.
ATOM 6336 CA   CA   . ASN ASN ASN B B 407 407 . 28.056 35.208 5.583   1.00 7.82   1 .
.
ATOM 6337 CB   CB   . ASN ASN ASN B B 407 407 . 28.293 35.225 7.126   1.00 7.31   1 .
.
ATOM 6338 CG   CG   . ASN ASN ASN B B 407 407 . 29.798 35.100 7.452   1.00 7.30   1 .
.
ATOM 6339 OD1  OD1  . ASN ASN ASN B B 407 407 . 30.630 34.562 6.666   1.00 10.18  1 .
.
ATOM 6340 ND2  ND2  . ASN ASN ASN B B 407 407 . 30.166 35.547 8.640   1.00 8.24   1 .
.
ATOM 6341 C    C    . ASN ASN ASN B B 407 407 . 26.609 35.000 5.313   1.00 9.24   1 .
.
ATOM 6342 O    O    . ASN ASN ASN B B 407 407 . 26.155 33.899 5.009   1.00 10.02  1 .
.
ATOM 6343 N    N    . GLN GLN GLN B B 408 408 . 25.832 36.073 5.369   1.00 9.23   1 .
.
ATOM 6344 CA   CA   . GLN GLN GLN B B 408 408 . 24.415 35.922 5.077   1.00 9.43   1 .
.
ATOM 6345 CB   CB   . GLN GLN GLN B B 408 408 . 23.699 37.234 5.417   1.00 9.18   1 .
.
ATOM 6346 CG   CG   . GLN GLN GLN B B 408 408 . 22.204 37.208 5.065   1.00 10.22  1 .
.
ATOM 6347 CD   CD   . GLN GLN GLN B B 408 408 . 21.312 36.283 5.889   1.00 15.54  1 .
.
ATOM 6348 OE1  OE1  . GLN GLN GLN B B 408 408 . 21.765 35.520 6.748   1.00 15.40  1 .
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ATOM 6349 NE2  NE2  . GLN GLN GLN B B 408 408 . 19.994 36.364 5.623   1.00 17.03  1 .
.
ATOM 6350 C    C    . GLN GLN GLN B B 408 408 . 24.205 35.538 3.600   1.00 10.23  1 .
.
ATOM 6351 O    O    . GLN GLN GLN B B 408 408 . 23.318 34.728 3.302   1.00 10.09  1 .
.
ATOM 6352 N    N    . LEU LEU LEU B B 409 409 . 24.978 36.148 2.697   1.00 8.87   1 .
.
ATOM 6353 CA   CA   . LEU LEU LEU B B 409 409 . 24.935 35.718 1.269   1.00 8.97   1 .
.
ATOM 6354 CB   CB   . LEU LEU LEU B B 409 409 . 25.871 36.592 0.397   1.00 7.67   1 .
.
ATOM 6355 CG   CG   . LEU LEU LEU B B 409 409 . 25.206 38.004 0.197   1.00 10.89  1 .
.
ATOM 6356 CD1  CD1  . LEU LEU LEU B B 409 409 . 26.333 38.952 -0.379  1.00 11.92  1 .
.
ATOM 6357 CD2  CD2  . LEU LEU LEU B B 409 409 . 24.009 37.891 -0.776  1.00 9.70   1 .
.
ATOM 6358 C    C    . LEU LEU LEU B B 409 409 . 25.298 34.219 1.124   1.00 9.81   1 .
.
ATOM 6359 O    O    . LEU LEU LEU B B 409 409 . 24.610 33.504 0.364   1.00 10.60  1 .
.
ATOM 6360 N    N    . MET MET MET B B 410 410 . 26.303 33.738 1.861   1.00 10.75  1 .
.
ATOM 6361 CA   CA   . MET MET MET B B 410 410 . 26.548 32.275 1.832   1.00 11.22  1 .
.
ATOM 6362 CB   CB   . MET MET MET B B 410 410 . 27.807 31.938 2.690   1.00 10.18  1 .
.
ATOM 6363 CG   CG   . MET MET MET B B 410 410 . 29.017 32.416 1.924   1.00 13.65  1 .
.
ATOM 6364 SD   SD   . MET MET MET B B 410 410 . 30.584 31.707 2.547   1.00 16.66  1 .
.
ATOM 6365 CE   CE   . MET MET MET B B 410 410 . 30.592 32.488 4.139   1.00 11.69  1 .
.
ATOM 6366 C    C    . MET MET MET B B 410 410 . 25.353 31.476 2.300   1.00 12.49  1 .
.
ATOM 6367 O    O    . MET MET MET B B 410 410 . 25.068 30.387 1.720   1.00 13.49  1 .
.
ATOM 6368 N    N    . ARG ARG ARG B B 411 411 . 24.714 31.928 3.414   1.00 10.40  1 .
.
ATOM 6369 CA   CA   . ARG ARG ARG B B 411 411 . 23.466 31.285 3.898   1.00 11.30  1 .
.
ATOM 6370 CB   CB   . ARG ARG ARG B B 411 411 . 22.969 31.899 5.153   1.00 12.16  1 .
.
ATOM 6371 CG   CG   . ARG ARG ARG B B 411 411 . 23.979 31.767 6.315   1.00 11.05  1 .
.
ATOM 6372 CD   CD   . ARG ARG ARG B B 411 411 . 23.260 32.159 7.674   1.00 13.08  1 .
.
ATOM 6373 NE   NE   . ARG ARG ARG B B 411 411 . 24.359 32.530 8.635   1.00 13.36  1 .
.
ATOM 6374 CZ   CZ   . ARG ARG ARG B B 411 411 . 24.791 33.769 8.850   1.00 15.01  1 .
.
ATOM 6375 NH1  NH1  . ARG ARG ARG B B 411 411 . 24.231 34.872 8.223   1.00 15.06  1 .
.
ATOM 6376 NH2  NH2  . ARG ARG ARG B B 411 411 . 25.828 33.934 9.685   1.00 14.97  1 .
.
ATOM 6377 C    C    . ARG ARG ARG B B 411 411 . 22.329 31.270 2.832   1.00 12.03  1 .
.
ATOM 6378 O    O    . ARG ARG ARG B B 411 411 . 21.595 30.277 2.700   1.00 12.84  1 .
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ATOM 6379 N    N    . ILE ILE ILE B B 412 412 . 22.180 32.372 2.110   1.00 9.36   1 .
.
ATOM 6380 CA   CA   . ILE ILE ILE B B 412 412 . 21.087 32.423 1.139   1.00 10.60  1 .
.
ATOM 6381 CB   CB   . ILE ILE ILE B B 412 412 . 20.982 33.892 0.609   1.00 9.82   1 .
.
ATOM 6382 CG1  CG1  . ILE ILE ILE B B 412 412 . 20.344 34.734 1.742   1.00 9.96   1 .
.
ATOM 6383 CD   CD   . ILE ILE ILE B B 412 412 . 20.443 36.272 1.389   1.00 11.79  1 .
.
ATOM 6384 CG2  CG2  . ILE ILE ILE B B 412 412 . 20.130 33.984 -0.702  1.00 12.16  1 .
.
ATOM 6385 C    C    . ILE ILE ILE B B 412 412 . 21.422 31.434 -0.001  1.00 12.98  1 .
.
ATOM 6386 O    O    . ILE ILE ILE B B 412 412 . 20.505 30.775 -0.503  1.00 13.71  1 .
.
ATOM 6387 N    N    . GLU GLU GLU B B 413 413 . 22.681 31.387 -0.414  1.00 11.98  1 .
.
ATOM 6388 CA   CA   . GLU GLU GLU B B 413 413 . 23.108 30.509 -1.523  1.00 12.66  1 .
.
ATOM 6389 CB   CB   . GLU GLU GLU B B 413 413 . 24.586 30.652 -1.813  1.00 13.02  1 .
.
ATOM 6390 CG   CG   . GLU GLU GLU B B 413 413 . 25.005 29.641 -2.947  1.00 15.20  1 .
.
ATOM 6391 CD   CD   . GLU GLU GLU B B 413 413 . 26.406 29.962 -3.415  1.00 18.48  1 .
.
ATOM 6392 OE1  OE1  . GLU GLU GLU B B 413 413 . 27.362 29.719 -2.621  1.00 17.92  1 .
.
ATOM 6393 OE2  OE2  . GLU GLU GLU B B 413 413 . 26.542 30.434 -4.592  1.00 20.47  1 .
.
ATOM 6394 C    C    . GLU GLU GLU B B 413 413 . 22.799 29.053 -1.082  1.00 13.82  1 .
.
ATOM 6395 O    O    . GLU GLU GLU B B 413 413 . 22.191 28.249 -1.841  1.00 15.10  1 .
.
ATOM 6396 N    N    . GLU GLU GLU B B 414 414 . 23.182 28.720 0.187   1.00 13.15  1 .
.
ATOM 6397 CA   CA   . GLU GLU GLU B B 414 414 . 22.803 27.410 0.742   1.00 14.11  1 .
.
ATOM 6398 CB   CB   . GLU GLU GLU B B 414 414 . 23.421 27.285 2.154   1.00 15.11  1 .
.
ATOM 6399 CG   CG   . GLU GLU GLU B B 414 414 . 23.171 25.949 2.850   1.00 17.43  1 .
.
ATOM 6400 CD   CD   . GLU GLU GLU B B 414 414 . 23.515 26.061 4.325   1.00 18.18  1 .
.
ATOM 6401 OE1  OE1  . GLU GLU GLU B B 414 414 . 24.636 26.387 4.671   1.00 24.38  1 .
.
ATOM 6402 OE2  OE2  . GLU GLU GLU B B 414 414 . 22.666 25.850 5.136   1.00 22.77  1 .
.
ATOM 6403 C    C    . GLU GLU GLU B B 414 414 . 21.264 27.149 0.733   1.00 14.72  1 .
.
ATOM 6404 O    O    . GLU GLU GLU B B 414 414 . 20.817 26.061 0.301   1.00 17.71  1 .
.
ATOM 6405 N    N    . GLU GLU GLU B B 415 415 . 20.445 28.133 1.133   1.00 15.82  1 .
.
ATOM 6406 CA   CA   . GLU GLU GLU B B 415 415 . 18.995 28.019 1.239   1.00 16.19  1 .
.
ATOM 6407 CB   CB   . GLU GLU GLU B B 415 415 . 18.374 29.376 1.781   1.00 17.92  1 .
.
ATOM 6408 CG   CG   . GLU GLU GLU B B 415 415 . 16.872 29.430 2.252   1.00 24.28  1 .
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ATOM 6409 CD   CD   . GLU GLU GLU B B 415 415 . 16.632 28.286 3.174   1.00 21.77  1 .
.
ATOM 6410 C    C    . GLU GLU GLU B B 415 415 . 18.433 27.753 -0.178  1.00 18.98  1 .
.
ATOM 6411 O    O    . GLU GLU GLU B B 415 415 . 17.507 26.940 -0.340  1.00 20.05  1 .
.
ATOM 6412 N    N    . LEU LEU LEU B B 416 416 . 19.014 28.372 -1.205  1.00 17.68  1 .
.
ATOM 6413 CA   CA   . LEU LEU LEU B B 416 416 . 18.455 28.218 -2.558  1.00 19.77  1 .
.
ATOM 6414 CB   CB   . LEU LEU LEU B B 416 416 . 18.963 29.330 -3.413  1.00 18.81  1 .
.
ATOM 6415 CG   CG   . LEU LEU LEU B B 416 416 . 18.211 30.631 -3.210  1.00 20.28  1 .
.
ATOM 6416 CD1  CD1  . LEU LEU LEU B B 416 416 . 19.058 31.747 -3.870  1.00 20.29  1 .
.
ATOM 6417 CD2  CD2  . LEU LEU LEU B B 416 416 . 16.737 30.496 -3.797  1.00 25.78  1 .
.
ATOM 6418 C    C    . LEU LEU LEU B B 416 416 . 18.796 26.853 -3.177  1.00 22.13  1 .
.
ATOM 6419 O    O    . LEU LEU LEU B B 416 416 . 18.129 26.438 -4.128  1.00 23.03  1 .
.
ATOM 6420 N    N    . GLY GLY GLY B B 417 417 . 19.809 26.143 -2.652  1.00 23.54  1 .
.
ATOM 6421 CA   CA   . GLY GLY GLY B B 417 417 . 20.059 24.696 -3.031  1.00 27.40  1 .
.
ATOM 6422 C    C    . GLY GLY GLY B B 417 417 . 20.368 24.630 -4.506  1.00 29.22  1 .
.
ATOM 6423 O    O    . GLY GLY GLY B B 417 417 . 21.143 25.503 -5.014  1.00 27.52  1 .
.
ATOM 6424 N    N    . ASP ASP ASP B B 418 418 . 19.735 23.632 -5.206  1.00 32.00  1 .
.
ATOM 6425 CA   CA   . ASP ASP ASP B B 418 418 . 19.922 23.451 -6.652  1.00 34.00  1 .
.
ATOM 6426 CB   CB   . ASP ASP ASP B B 418 418 . 19.210 22.133 -7.097  1.00 34.51  1 .
.
ATOM 6427 C    C    . ASP ASP ASP B B 418 418 . 19.496 24.652 -7.543  1.00 34.41  1 .
.
ATOM 6428 O    O    . ASP ASP ASP B B 418 418 . 19.899 24.742 -8.708  1.00 36.90  1 .
.
ATOM 6429 N    N    . GLU GLU GLU B B 419 419 . 18.668 25.547 -6.999  1.00 32.69  1 .
.
ATOM 6430 CA   CA   . GLU GLU GLU B B 419 419 . 18.154 26.736 -7.648  1.00 31.14  1 .
.
ATOM 6431 CB   CB   . GLU GLU GLU B B 419 419 . 16.824 27.139 -6.991  1.00 31.46  1 .
.
ATOM 6432 CG   CG   . GLU GLU GLU B B 419 419 . 15.594 26.321 -7.496  1.00 34.81  1 .
.
ATOM 6433 C    C    . GLU GLU GLU B B 419 419 . 19.139 27.944 -7.559  1.00 29.42  1 .
.
ATOM 6434 O    O    . GLU GLU GLU B B 419 419 . 18.879 28.970 -8.174  1.00 30.04  1 .
.
ATOM 6435 N    N    . ALA ALA ALA B B 420 420 . 20.209 27.846 -6.762  1.00 28.13  1 .
.
ATOM 6436 CA   CA   . ALA ALA ALA B B 420 420 . 21.203 28.951 -6.652  1.00 26.85  1 .
.
ATOM 6437 CB   CB   . ALA ALA ALA B B 420 420 . 22.248 28.673 -5.519  1.00 27.11  1 .
.
ATOM 6438 C    C    . ALA ALA ALA B B 420 420 . 21.924 29.221 -7.970  1.00 25.99  1 .
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ATOM 6439 O    O    . ALA ALA ALA B B 420 420 . 22.443 28.298 -8.617  1.00 28.84  1 .
.
ATOM 6440 N    N    . ARG ARG ARG B B 421 421 . 21.967 30.474 -8.384  1.00 24.13  1 .
.
ATOM 6441 CA   CA   . ARG ARG ARG B B 421 421 . 22.732 30.860 -9.576  1.00 24.08  1 .
.
ATOM 6442 CB   CB   . ARG ARG ARG B B 421 421 . 21.760 31.258 -10.698 1.00 24.40  1 .
.
ATOM 6443 CG   CG   . ARG ARG ARG B B 421 421 . 20.985 29.988 -11.235 1.00 27.62  1 .
.
ATOM 6444 C    C    . ARG ARG ARG B B 421 421 . 23.659 32.006 -9.190  1.00 22.20  1 .
.
ATOM 6445 O    O    . ARG ARG ARG B B 421 421 . 23.253 32.882 -8.443  1.00 26.41  1 .
.
ATOM 6446 N    N    . PHE PHE PHE B B 422 422 . 24.877 31.980 -9.646  1.00 18.12  1 .
.
ATOM 6447 CA   CA   . PHE PHE PHE B B 422 422 . 25.897 32.991 -9.291  1.00 16.99  1 .
.
ATOM 6448 CB   CB   . PHE PHE PHE B B 422 422 . 27.183 32.288 -8.822  1.00 17.85  1 .
.
ATOM 6449 CG   CG   . PHE PHE PHE B B 422 422 . 28.366 33.203 -8.545  1.00 14.73  1 .
.
ATOM 6450 CD1  CD1  . PHE PHE PHE B B 422 422 . 28.346 34.222 -7.501  1.00 13.38  1 .
.
ATOM 6451 CE1  CE1  . PHE PHE PHE B B 422 422 . 29.480 34.999 -7.274  1.00 12.44  1 .
.
ATOM 6452 CZ   CZ   . PHE PHE PHE B B 422 422 . 30.655 34.833 -8.085  1.00 14.78  1 .
.
ATOM 6453 CE2  CE2  . PHE PHE PHE B B 422 422 . 30.686 33.814 -9.111  1.00 13.46  1 .
.
ATOM 6454 CD2  CD2  . PHE PHE PHE B B 422 422 . 29.555 33.056 -9.303  1.00 13.63  1 .
.
ATOM 6455 C    C    . PHE PHE PHE B B 422 422 . 26.161 33.822 -10.510 1.00 16.60  1 .
.
ATOM 6456 O    O    . PHE PHE PHE B B 422 422 . 26.455 33.296 -11.579 1.00 17.27  1 .
.
ATOM 6457 N    N    . ALA ALA ALA B B 423 423 . 26.197 35.135 -10.330 1.00 15.30  1 .
.
ATOM 6458 CA   CA   . ALA ALA ALA B B 423 423 . 26.260 36.022 -11.503 1.00 16.59  1 .
.
ATOM 6459 CB   CB   . ALA ALA ALA B B 423 423 . 26.042 37.448 -11.005 1.00 17.74  1 .
.
ATOM 6460 C    C    . ALA ALA ALA B B 423 423 . 27.562 35.907 -12.239 1.00 16.23  1 .
.
ATOM 6461 O    O    . ALA ALA ALA B B 423 423 . 27.564 36.074 -13.487 1.00 18.63  1 .
.
ATOM 6462 N    N    . GLY GLY GLY B B 424 424 . 28.661 35.613 -11.544 1.00 15.69  1 .
.
ATOM 6463 CA   CA   . GLY GLY GLY B B 424 424 . 29.987 35.438 -12.147 1.00 15.64  1 .
.
ATOM 6464 C    C    . GLY GLY GLY B B 424 424 . 30.324 36.437 -13.238 1.00 17.56  1 .
.
ATOM 6465 O    O    . GLY GLY GLY B B 424 424 . 30.344 37.665 -13.020 1.00 17.69  1 .
.
ATOM 6466 N    N    . HIS HIS HIS B B 425 425 . 30.648 35.917 -14.430 1.00 18.72  1 .
.
ATOM 6467 CA   CA   . HIS HIS HIS B B 425 425 . 31.125 36.811 -15.497 1.00 19.44  1 .
.
ATOM 6468 CB   CB   . HIS HIS HIS B B 425 425 . 31.704 35.916 -16.618 1.00 19.98  1 .
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ATOM 6469 CG   CG   . HIS HIS HIS B B 425 425 . 33.032 35.346 -16.258 1.00 22.60  1 .
.
ATOM 6470 ND1  ND1  . HIS HIS HIS B B 425 425 . 34.122 36.150 -15.998 1.00 26.06  1 .
.
ATOM 6471 CE1  CE1  . HIS HIS HIS B B 425 425 . 35.169 35.400 -15.712 1.00 25.44  1 .
.
ATOM 6472 NE2  NE2  . HIS HIS HIS B B 425 425 . 34.788 34.136 -15.742 1.00 27.17  1 .
.
ATOM 6473 CD2  CD2  . HIS HIS HIS B B 425 425 . 33.445 34.072 -16.059 1.00 24.69  1 .
.
ATOM 6474 C    C    . HIS HIS HIS B B 425 425 . 30.011 37.705 -16.007 1.00 19.98  1 .
.
ATOM 6475 O    O    . HIS HIS HIS B B 425 425 . 30.327 38.717 -16.667 1.00 21.62  1 .
.
ATOM 6476 N    N    . ASN ASN ASN B B 426 426 . 28.758 37.374 -15.675 1.00 19.59  1 .
.
ATOM 6477 CA   CA   . ASN ASN ASN B B 426 426 . 27.554 38.208 -16.060 1.00 21.25  1 .
.
ATOM 6478 CB   CB   . ASN ASN ASN B B 426 426 . 26.394 37.259 -16.415 1.00 22.56  1 .
.
ATOM 6479 CG   CG   . ASN ASN ASN B B 426 426 . 26.737 36.369 -17.606 1.00 28.58  1 .
.
ATOM 6480 OD1  OD1  . ASN ASN ASN B B 426 426 . 26.982 36.872 -18.706 1.00 36.13  1 .
.
ATOM 6481 ND2  ND2  . ASN ASN ASN B B 426 426 . 26.856 35.051 -17.375 1.00 35.17  1 .
.
ATOM 6482 C    C    . ASN ASN ASN B B 426 426 . 27.109 39.261 -15.023 1.00 17.88  1 .
.
ATOM 6483 O    O    . ASN ASN ASN B B 426 426 . 25.949 39.702 -14.979 1.00 19.22  1 .
.
ATOM 6484 N    N    . PHE PHE PHE B B 427 427 . 28.026 39.594 -14.112 1.00 16.48  1 .
.
ATOM 6485 CA   CA   . PHE PHE PHE B B 427 427 . 27.712 40.538 -13.028 1.00 15.72  1 .
.
ATOM 6486 CB   CB   . PHE PHE PHE B B 427 427 . 28.909 40.723 -12.109 1.00 16.70  1 .
.
ATOM 6487 CG   CG   . PHE PHE PHE B B 427 427 . 29.997 41.615 -12.674 1.00 17.18  1 .
.
ATOM 6488 CD1  CD1  . PHE PHE PHE B B 427 427 . 30.951 41.106 -13.548 1.00 19.15  1 .
.
ATOM 6489 CE1  CE1  . PHE PHE PHE B B 427 427 . 31.973 41.941 -14.052 1.00 21.75  1 .
.
ATOM 6490 CZ   CZ   . PHE PHE PHE B B 427 427 . 32.023 43.297 -13.641 1.00 18.81  1 .
.
ATOM 6491 CE2  CE2  . PHE PHE PHE B B 427 427 . 31.084 43.800 -12.744 1.00 19.80  1 .
.
ATOM 6492 CD2  CD2  . PHE PHE PHE B B 427 427 . 30.072 42.959 -12.257 1.00 16.99  1 .
.
ATOM 6493 C    C    . PHE PHE PHE B B 427 427 . 27.150 41.878 -13.537 1.00 16.54  1 .
.
ATOM 6494 O    O    . PHE PHE PHE B B 427 427 . 26.297 42.440 -12.860 1.00 17.15  1 .
.
ATOM 6495 N    N    . ARG ARG ARG B B 428 428 . 27.581 42.332 -14.729 1.00 16.75  1 .
.
ATOM 6496 CA   CA   . ARG ARG ARG B B 428 428 . 27.058 43.602 -15.264 1.00 18.71  1 .
.
ATOM 6497 CB   CB   . ARG ARG ARG B B 428 428 . 27.998 44.132 -16.351 1.00 17.61  1 .
.
ATOM 6498 CG   CG   . ARG ARG ARG B B 428 428 . 29.356 44.585 -15.723 1.00 16.27  1 .
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ATOM 6499 CD   CD   . ARG ARG ARG B B 428 428 . 30.366 45.079 -16.810 1.00 18.22  1 .
.
ATOM 6500 NE   NE   . ARG ARG ARG B B 428 428 . 29.810 46.267 -17.471 1.00 17.27  1 .
.
ATOM 6501 CZ   CZ   . ARG ARG ARG B B 428 428 . 30.397 46.983 -18.480 1.00 13.89  1 .
.
ATOM 6502 NH1  NH1  . ARG ARG ARG B B 428 428 . 31.582 46.663 -18.932 1.00 16.37  1 .
.
ATOM 6503 NH2  NH2  . ARG ARG ARG B B 428 428 . 29.760 48.079 -18.974 1.00 18.12  1 .
.
ATOM 6504 C    C    . ARG ARG ARG B B 428 428 . 25.624 43.534 -15.816 1.00 21.27  1 .
.
ATOM 6505 O    O    . ARG ARG ARG B B 428 428 . 24.850 44.507 -15.724 1.00 24.47  1 .
.
ATOM 6506 N    N    . ASN ASN ASN B B 429 429 . 25.227 42.320 -16.225 1.00 19.91  1 .
.
ATOM 6507 CA   CA   . ASN ASN ASN B B 429 429 . 23.970 42.132 -16.895 1.00 20.87  1 .
.
ATOM 6508 CB   CB   . ASN ASN ASN B B 429 429 . 24.261 42.392 -18.389 1.00 24.03  1 .
.
ATOM 6509 CG   CG   . ASN ASN ASN B B 429 429 . 25.000 41.276 -19.015 1.00 28.35  1 .
.
ATOM 6510 OD1  OD1  . ASN ASN ASN B B 429 429 . 24.600 40.797 -20.113 1.00 35.37  1 .
.
ATOM 6511 ND2  ND2  . ASN ASN ASN B B 429 429 . 26.052 40.767 -18.326 1.00 30.71  1 .
.
ATOM 6512 C    C    . ASN ASN ASN B B 429 429 . 23.434 40.734 -16.570 1.00 21.71  1 .
.
ATOM 6513 O    O    . ASN ASN ASN B B 429 429 . 23.387 39.826 -17.408 1.00 22.45  1 .
.
ATOM 6514 N    N    . PRO PRO PRO B B 430 430 . 23.006 40.563 -15.322 1.00 22.38  1 .
.
ATOM 6515 CA   CA   . PRO PRO PRO B B 430 430 . 22.804 39.219 -14.835 1.00 23.89  1 .
.
ATOM 6516 CB   CB   . PRO PRO PRO B B 430 430 . 22.733 39.413 -13.305 1.00 24.54  1 .
.
ATOM 6517 CG   CG   . PRO PRO PRO B B 430 430 . 22.378 40.811 -13.130 1.00 21.47  1 .
.
ATOM 6518 CD   CD   . PRO PRO PRO B B 430 430 . 23.083 41.546 -14.226 1.00 21.02  1 .
.
ATOM 6519 C    C    . PRO PRO PRO B B 430 430 . 21.495 38.685 -15.371 1.00 29.48  1 .
.
ATOM 6520 O    O    . PRO PRO PRO B B 430 430 . 21.314 37.484 -15.320 1.00 31.94  1 .
.
ATOM 6521 N    N    . SER SER SER B B 431 431 . 20.609 39.548 -15.876 1.00 32.98  1 .
.
ATOM 6522 CA   CA   . SER SER SER B B 431 431 . 19.272 39.112 -16.369 1.00 37.02  1 .
.
ATOM 6523 CB   CB   . SER SER SER B B 431 431 . 18.422 40.295 -16.783 1.00 36.58  1 .
.
ATOM 6524 OG   OG   . SER SER SER B B 431 431 . 18.777 40.749 -18.053 1.00 39.64  1 .
.
ATOM 6525 C    C    . SER SER SER B B 431 431 . 19.361 38.111 -17.518 1.00 40.13  1 .
.
ATOM 6526 O    O    . SER SER SER B B 431 431 . 18.372 37.396 -17.806 1.00 41.99  1 .
.
ATOM 6527 N    N    . VAL VAL VAL B B 432 432 . 20.522 38.028 -18.160 1.00 41.55  1 .
.
ATOM 6528 CA   CA   . VAL VAL VAL B B 432 432 . 20.752 36.959 -19.159 1.00 44.35  1 .
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ATOM 6529 CB   CB   . VAL VAL VAL B B 432 432 . 21.921 37.312 -20.105 1.00 43.87  1 .
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ATOM 6530 CG1  CG1  . VAL VAL VAL B B 432 432 . 21.673 38.700 -20.673 1.00 42.11  1 .
.
ATOM 6531 CG2  CG2  . VAL VAL VAL B B 432 432 . 23.276 37.227 -19.373 1.00 44.66  1 .
.
ATOM 6532 C    C    . VAL VAL VAL B B 432 432 . 20.823 35.544 -18.540 1.00 46.73  1 .
.
ATOM 6533 O    O    . VAL VAL VAL B B 432 432 . 20.742 34.538 -19.240 1.00 47.76  1 .
.
ATOM 6534 N    N    . LEU LEU LEU B B 433 433 . 20.923 35.486 -17.210 1.00 48.49  1 .
.
ATOM 6535 CA   CA   . LEU LEU LEU B B 433 433 . 20.543 34.306 -16.429 1.00 50.22  1 .
.
ATOM 6536 CB   CB   . LEU LEU LEU B B 433 433 . 21.579 34.096 -15.290 1.00 51.06  1 .
.
ATOM 6537 CG   CG   . LEU LEU LEU B B 433 433 . 23.092 34.158 -15.630 1.00 50.80  1 .
.
ATOM 6538 CD1  CD1  . LEU LEU LEU B B 433 433 . 23.947 34.788 -14.530 1.00 50.27  1 .
.
ATOM 6539 CD2  CD2  . LEU LEU LEU B B 433 433 . 23.639 32.772 -16.035 1.00 53.35  1 .
.
ATOM 6540 C    C    . LEU LEU LEU B B 433 433 . 19.124 34.653 -15.883 1.00 51.17  1 .
.
ATOM 6541 O    O    . LEU LEU LEU B B 433 433 . 18.265 33.805 -15.598 1.00 51.73  1 .
.
ATOM 6542 MG+2 MG+2 . MG2 MG2 MG2 B . 600 600 . 31.363 55.566 -3.405  1.00 12.57  1 .
.
ATOM 6543 MG+2 MG+2 . MG2 MG2 MG2 B . 601 601 . 31.076 57.988 -0.166  1.00 12.97  1 .
.
ATOM 6544 O3P  O3P  . YAP YAP YAP B . 602 602 . 30.234 57.075 1.426   1.00 15.13  1 .
.
ATOM 6545 P    P    . YAP YAP YAP B . 602 602 . 30.873 56.159 2.450   1.00 13.11  1 .
.
ATOM 6546 O1P  O1P  . YAP YAP YAP B . 602 602 . 31.855 56.785 3.413   1.00 13.42  1 .
.
ATOM 6547 O2P  O2P  . YAP YAP YAP B . 602 602 . 29.793 55.304 3.050   1.00 13.03  1 .
.
ATOM 6548 O3   O3   . YAP YAP YAP B . 602 602 . 31.869 55.144 1.647   1.00 14.43  1 .
.
ATOM 6549 C2   C2   . YAP YAP YAP B . 602 602 . 31.189 54.333 0.552   1.00 16.97  1 .
.
ATOM 6550 C3   C3   . YAP YAP YAP B . 602 602 . 31.738 52.873 0.682   1.00 21.78  1 .
.
ATOM 6551 C1   C1   . YAP YAP YAP B . 602 602 . 31.261 54.928 -0.881  1.00 17.47  1 .
.
ATOM 6552 O1   O1   . YAP YAP YAP B . 602 602 . 30.871 54.293 -1.867  1.00 15.03  1 .
.
ATOM 6553 O2   O2   . YAP YAP YAP B . 602 602 . 31.654 56.128 -1.060  1.00 14.42  1 .
.
ATOM 6554 O    O    . HOH HOH HOH S . 1   1   . 25.718 63.923 -4.005  1.00 12.76  1 .
.
ATOM 6555 O    O    . HOH HOH HOH S . 2   2   . 27.737 47.872 15.075  1.00 10.20  1 .
.
ATOM 6556 O    O    . HOH HOH HOH S . 3   3   . 32.152 37.346 11.125  1.00 10.88  1 .
.
ATOM 6557 O    O    . HOH HOH HOH S . 4   4   . 25.592 37.144 9.186   1.00 10.98  1 .
.
ATOM 6558 O    O    . HOH HOH HOH S . 5   5   . 24.133 43.236 18.555  1.00 12.37  1 .
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ATOM 6559 O    O    . HOH HOH HOH S . 6   6   . 33.720 51.315 9.970   1.00 10.88  1 .
.
ATOM 6560 O    O    . HOH HOH HOH S . 7   7   . 29.733 35.718 21.655  1.00 13.23  1 .
.
ATOM 6561 O    O    . HOH HOH HOH S . 8   8   . 28.040 40.819 34.734  1.00 14.35  1 .
.
ATOM 6562 O    O    . HOH HOH HOH S . 9   9   . 33.567 50.055 -9.215  1.00 14.17  1 .
.
ATOM 6563 O    O    . HOH HOH HOH S . 10  10  . 30.610 53.281 -22.527 1.00 12.90  1 .
.
ATOM 6564 O    O    . HOH HOH HOH S . 11  11  . 25.121 58.691 6.050   1.00 15.65  1 .
.
ATOM 6565 O    O    . HOH HOH HOH S . 12  12  . 39.670 40.328 14.220  1.00 12.28  1 .
.
ATOM 6566 O    O    . HOH HOH HOH S . 13  13  . 23.722 56.297 -5.999  1.00 12.83  1 .
.
ATOM 6567 O    O    . HOH HOH HOH S . 14  14  . 33.892 46.492 -0.565  1.00 12.27  1 .
.
ATOM 6568 O    O    . HOH HOH HOH S . 15  15  . 41.463 31.325 31.405  1.00 16.08  1 .
.
ATOM 6569 O    O    . HOH HOH HOH S . 16  16  . 33.712 33.258 26.653  1.00 14.78  1 .
.
ATOM 6570 O    O    . HOH HOH HOH S . 17  17  . 38.446 44.708 24.936  1.00 13.26  1 .
.
ATOM 6571 O    O    . HOH HOH HOH S . 18  18  . 38.016 21.328 10.731  1.00 12.36  1 .
.
ATOM 6572 O    O    . HOH HOH HOH S . 19  19  . 36.035 31.779 23.706  1.00 14.00  1 .
.
ATOM 6573 O    O    . HOH HOH HOH S . 20  20  . 32.342 61.311 -5.165  1.00 14.08  1 .
.
ATOM 6574 O    O    . HOH HOH HOH S . 21  21  . 30.822 51.592 -20.797 1.00 16.93  1 .
.
ATOM 6575 O    O    . HOH HOH HOH S . 22  22  . 22.241 39.618 -6.965  1.00 17.35  1 .
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ATOM 6576 O    O    . HOH HOH HOH S . 23  23  . 30.493 69.358 -16.159 1.00 13.68  1 .
.
ATOM 6577 O    O    . HOH HOH HOH S . 24  24  . 27.702 59.145 -22.506 1.00 16.28  1 .
.
ATOM 6578 O    O    . HOH HOH HOH S . 25  25  . 36.547 27.306 14.496  1.00 16.41  1 .
.
ATOM 6579 O    O    . HOH HOH HOH S . 26  26  . 34.559 68.327 -17.360 1.00 16.04  1 .
.
ATOM 6580 O    O    . HOH HOH HOH S . 27  27  . 22.544 45.770 5.835   1.00 13.44  1 .
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ATOM 6581 O    O    . HOH HOH HOH S . 28  28  . 21.831 49.746 0.313   1.00 15.06  1 .
.
ATOM 6582 O    O    . HOH HOH HOH S . 29  29  . 41.980 24.186 4.744   1.00 15.69  1 .
.
ATOM 6583 O    O    . HOH HOH HOH S . 30  30  . 34.012 29.641 1.260   1.00 18.14  1 .
.
ATOM 6584 O    O    . HOH HOH HOH S . 31  31  . 41.855 42.318 11.393  1.00 15.78  1 .
.
ATOM 6585 O    O    . HOH HOH HOH S . 32  32  . 22.795 52.842 2.660   1.00 14.79  1 .
.
ATOM 6586 O    O    . HOH HOH HOH S . 33  33  . 22.705 57.455 8.983   1.00 18.32  1 .
.
ATOM 6587 O    O    . HOH HOH HOH S . 34  34  . 40.989 29.435 19.102  1.00 16.02  1 .
.
ATOM 6588 O    O    . HOH HOH HOH S . 35  35  . 21.046 8.170  15.607  1.00 17.35  1 .
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ATOM 6589 O    O    . HOH HOH HOH S . 36  36  . 38.622 60.189 -2.792  1.00 17.77  1 .
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ATOM 6590 O    O    . HOH HOH HOH S . 37  37  . 37.844 28.031 17.069  1.00 19.10  1 .
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ATOM 6591 O    O    . HOH HOH HOH S . 38  38  . 29.508 49.451 46.640  1.00 17.82  1 .
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ATOM 6592 O    O    . HOH HOH HOH S . 39  39  . 0.867  43.290 10.084  1.00 23.21  1 .
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ATOM 6593 O    O    . HOH HOH HOH S . 40  40  . 20.349 24.662 27.590  1.00 17.94  1 .
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ATOM 6594 O    O    . HOH HOH HOH S . 41  41  . 46.727 36.906 27.384  1.00 15.61  1 .
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ATOM 6595 O    O    . HOH HOH HOH S . 42  42  . 27.634 47.636 -16.099 1.00 21.58  1 .
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ATOM 6596 O    O    . HOH HOH HOH S . 43  43  . 34.518 39.473 38.787  1.00 17.23  1 .
.
ATOM 6597 O    O    . HOH HOH HOH S . 44  44  . 25.368 64.607 20.256  1.00 17.74  1 .
.
ATOM 6598 O    O    . HOH HOH HOH S . 45  45  . 31.432 50.415 -7.414  1.00 14.62  1 .
.
ATOM 6599 O    O    . HOH HOH HOH S . 46  46  . 38.550 31.357 12.582  1.00 17.50  1 .
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ATOM 6600 O    O    . HOH HOH HOH S . 47  47  . 39.898 25.902 21.049  1.00 16.49  1 .
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ATOM 6601 O    O    . HOH HOH HOH S . 48  48  . 43.364 42.133 8.682   1.00 20.76  1 .
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ATOM 6602 O    O    . HOH HOH HOH S . 49  49  . 23.122 36.648 22.481  1.00 21.29  1 .
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ATOM 6603 O    O    . HOH HOH HOH S . 50  50  . 23.569 48.681 5.058   1.00 16.94  1 .
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ATOM 6604 O    O    . HOH HOH HOH S . 51  51  . 30.043 69.355 -6.281  1.00 17.15  1 .
.
ATOM 6605 O    O    . HOH HOH HOH S . 52  52  . 27.740 22.976 5.602   1.00 16.67  1 .
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ATOM 6606 O    O    . HOH HOH HOH S . 53  53  . 18.933 61.647 -2.200  1.00 19.24  1 .
.
ATOM 6607 O    O    . HOH HOH HOH S . 54  54  . 39.553 22.928 3.918   1.00 16.12  1 .
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ATOM 6608 O    O    . HOH HOH HOH S . 55  55  . 30.685 61.824 -7.730  1.00 15.17  1 .
.
ATOM 6609 O    O    . HOH HOH HOH S . 56  56  . 26.615 56.446 12.840  1.00 19.95  1 .
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ATOM 6610 O    O    . HOH HOH HOH S . 57  57  . 34.464 33.937 23.690  1.00 16.76  1 .
.
ATOM 6611 O    O    . HOH HOH HOH S . 58  58  . 37.183 52.053 12.157  1.00 17.00  1 .
.
ATOM 6612 O    O    . HOH HOH HOH S . 59  59  . 30.256 56.442 11.614  1.00 19.45  1 .
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ATOM 6613 O    O    . HOH HOH HOH S . 60  60  . 41.043 34.092 13.024  1.00 20.93  1 .
.
ATOM 6614 O    O    . HOH HOH HOH S . 61  61  . 28.719 18.389 6.254   1.00 24.14  1 .
.
ATOM 6615 O    O    . HOH HOH HOH S . 62  62  . 15.556 54.488 23.257  1.00 21.40  1 .
.
ATOM 6616 O    O    . HOH HOH HOH S . 63  63  . 32.680 34.779 21.688  1.00 17.29  1 .
.
ATOM 6617 O    O    . HOH HOH HOH S . 64  64  . 24.119 68.318 -10.267 1.00 18.00  1 .
.
ATOM 6618 O    O    . HOH HOH HOH S . 65  65  . 26.313 65.610 -19.546 1.00 19.54  1 .
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ATOM 6619 O    O    . HOH HOH HOH S . 66  66  . 36.144 45.838 42.240  1.00 20.64  1 .
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ATOM 6620 O    O    . HOH HOH HOH S . 67  67  . 21.348 59.905 4.831   1.00 18.70  1 .
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ATOM 6621 O    O    . HOH HOH HOH S . 68  68  . 23.925 60.509 4.395   1.00 17.85  1 .
.
ATOM 6622 O    O    . HOH HOH HOH S . 69  69  . 38.579 53.516 14.218  1.00 16.97  1 .
.
ATOM 6623 O    O    . HOH HOH HOH S . 70  70  . 41.756 23.783 28.198  1.00 19.77  1 .
.
ATOM 6624 O    O    . HOH HOH HOH S . 71  71  . 19.074 40.006 6.332   1.00 20.97  1 .
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ATOM 6625 O    O    . HOH HOH HOH S . 72  72  . 43.199 39.328 -13.338 1.00 20.38  1 .
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ATOM 6626 O    O    . HOH HOH HOH S . 73  73  . 19.333 62.657 15.885  1.00 18.56  1 .
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ATOM 6627 O    O    . HOH HOH HOH S . 74  74  . 43.281 43.122 32.754  1.00 21.05  1 .
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ATOM 6628 O    O    . HOH HOH HOH S . 75  75  . 48.013 52.994 11.694  1.00 24.23  1 .
.
ATOM 6629 O    O    . HOH HOH HOH S . 76  76  . 23.504 50.198 2.767   1.00 16.51  1 .
.
ATOM 6630 O    O    . HOH HOH HOH S . 77  77  . 29.991 24.806 4.840   1.00 21.70  1 .
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ATOM 6631 O    O    . HOH HOH HOH S . 78  78  . 24.297 55.561 -19.955 1.00 21.17  1 .
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ATOM 6632 O    O    . HOH HOH HOH S . 79  79  . 37.400 59.674 -0.282  1.00 19.80  1 .
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ATOM 6633 O    O    . HOH HOH HOH S . 80  80  . 24.167 68.764 -17.833 1.00 23.07  1 .
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ATOM 6634 O    O    . HOH HOH HOH S . 81  81  . 21.238 18.596 32.127  1.00 21.71  1 .
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ATOM 6635 O    O    . HOH HOH HOH S . 82  82  . 24.349 40.148 12.565  1.00 21.18  1 .
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ATOM 6636 O    O    . HOH HOH HOH S . 83  83  . 24.034 44.732 -12.324 1.00 20.95  1 .
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ATOM 6637 O    O    . HOH HOH HOH S . 84  84  . 21.243 48.401 7.447   1.00 23.37  1 .
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ATOM 6638 O    O    . HOH HOH HOH S . 85  85  . 20.825 58.191 7.016   1.00 19.72  1 .
.
ATOM 6639 O    O    . HOH HOH HOH S . 86  86  . 41.851 41.087 31.504  1.00 20.68  1 .
.
ATOM 6640 O    O    . HOH HOH HOH S . 87  87  . 31.952 34.247 17.818  1.00 17.46  1 .
.
ATOM 6641 O    O    . HOH HOH HOH S . 88  88  . 42.135 27.582 20.667  1.00 17.10  1 .
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ATOM 6642 O    O    . HOH HOH HOH S . 89  89  . 32.206 32.472 -12.741 1.00 19.63  1 .
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ATOM 6643 O    O    . HOH HOH HOH S . 90  90  . 29.944 53.759 38.883  1.00 22.05  1 .
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ATOM 6644 O    O    . HOH HOH HOH S . 91  91  . 31.776 64.238 1.851   1.00 27.67  1 .
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ATOM 6645 O    O    . HOH HOH HOH S . 92  92  . 40.443 42.700 24.655  1.00 22.19  1 .
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ATOM 6646 O    O    . HOH HOH HOH S . 93  93  . 6.980  44.953 3.594   1.00 19.33  1 .
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ATOM 6647 O    O    . HOH HOH HOH S . 94  94  . 4.864  51.534 19.989  1.00 22.46  1 .
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ATOM 6648 O    O    . HOH HOH HOH S . 95  95  . 30.008 56.021 -27.534 1.00 26.76  1 .
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ATOM 6649 O    O    . HOH HOH HOH S . 96  96  . 30.238 65.829 -22.282 1.00 21.11  1 .
.
ATOM 6650 O    O    . HOH HOH HOH S . 97  97  . 47.951 27.681 27.848  1.00 18.89  1 .
.
ATOM 6651 O    O    . HOH HOH HOH S . 98  98  . 35.260 15.202 9.563   1.00 20.17  1 .
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ATOM 6652 O    O    . HOH HOH HOH S . 99  99  . 24.768 40.038 15.383  1.00 20.27  1 .
.
ATOM 6653 O    O    . HOH HOH HOH S . 100 100 . 30.015 50.162 42.569  1.00 24.17  1 .
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ATOM 6654 O    O    . HOH HOH HOH S . 101 101 . 19.489 32.321 16.934  1.00 22.89  1 .
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ATOM 6655 O    O    . HOH HOH HOH S . 102 102 . 45.452 43.589 9.998   1.00 22.01  1 .
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ATOM 6656 O    O    . HOH HOH HOH S . 103 103 . 21.848 21.396 32.770  1.00 22.83  1 .
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ATOM 6657 O    O    . HOH HOH HOH S . 104 104 . 3.897  47.749 -1.142  1.00 26.51  1 .
.
ATOM 6658 O    O    . HOH HOH HOH S . 105 105 . -0.015 49.013 11.486  1.00 23.18  1 .
.
ATOM 6659 O    O    . HOH HOH HOH S . 106 106 . 38.333 70.053 -15.202 1.00 20.80  1 .
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ATOM 6660 O    O    . HOH HOH HOH S . 107 107 . 30.632 65.685 -1.515  1.00 22.48  1 .
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ATOM 6661 O    O    . HOH HOH HOH S . 108 108 . 1.713  49.154 0.046   1.00 21.98  1 .
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ATOM 6662 O    O    . HOH HOH HOH S . 109 109 . 36.833 76.756 -12.008 1.00 18.24  1 .
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ATOM 6663 O    O    . HOH HOH HOH S . 110 110 . 21.944 57.135 11.916  1.00 16.60  1 .
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ATOM 6664 O    O    . HOH HOH HOH S . 111 111 . 26.768 47.963 -18.416 1.00 32.73  1 .
.
ATOM 6665 O    O    . HOH HOH HOH S . 112 112 . 40.361 46.418 -18.159 1.00 24.36  1 .
.
ATOM 6666 O    O    . HOH HOH HOH S . 113 113 . 34.211 57.104 -28.410 1.00 24.86  1 .
.
ATOM 6667 O    O    . HOH HOH HOH S . 114 114 . 23.298 63.552 21.781  1.00 19.57  1 .
.
ATOM 6668 O    O    . HOH HOH HOH S . 115 115 . 14.526 36.107 6.239   1.00 24.36  1 .
.
ATOM 6669 O    O    . HOH HOH HOH S . 116 116 . 39.654 53.945 6.455   1.00 22.06  1 .
.
ATOM 6670 O    O    . HOH HOH HOH S . 117 117 . 19.782 54.229 -20.940 1.00 29.10  1 .
.
ATOM 6671 O    O    . HOH HOH HOH S . 118 118 . 41.980 52.152 -21.973 1.00 20.75  1 .
.
ATOM 6672 O    O    . HOH HOH HOH S . 119 119 . 50.083 34.724 27.530  1.00 21.47  1 .
.
ATOM 6673 O    O    . HOH HOH HOH S . 120 120 . -0.131 64.087 2.604   1.00 25.80  1 .
.
ATOM 6674 O    O    . HOH HOH HOH S . 121 121 . 50.264 33.384 30.398  1.00 20.87  1 .
.
ATOM 6675 O    O    . HOH HOH HOH S . 122 122 . 46.925 60.060 -5.377  1.00 22.82  1 .
.
ATOM 6676 O    O    . HOH HOH HOH S . 123 123 . 31.710 64.230 23.374  1.00 31.03  1 .
.
ATOM 6677 O    O    . HOH HOH HOH S . 124 124 . 38.854 53.935 -24.039 1.00 35.60  1 .
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ATOM 6678 O    O    . HOH HOH HOH S . 125 125 . 40.663 54.126 12.409  1.00 23.21  1 .
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ATOM 6679 O    O    . HOH HOH HOH S . 126 126 . 19.762 25.379 8.381   1.00 24.46  1 .
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ATOM 6680 O    O    . HOH HOH HOH S . 127 127 . 30.493 32.910 20.085  1.00 20.79  1 .
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ATOM 6681 O    O    . HOH HOH HOH S . 128 128 . 30.660 59.531 18.524  1.00 24.73  1 .
.
ATOM 6682 O    O    . HOH HOH HOH S . 129 129 . 22.831 16.866 10.389  1.00 21.67  1 .
.
ATOM 6683 O    O    . HOH HOH HOH S . 130 130 . 9.791  63.211 3.465   1.00 23.18  1 .
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ATOM 6684 O    O    . HOH HOH HOH S . 131 131 . 43.887 21.351 13.701  1.00 27.71  1 .
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ATOM 6685 O    O    . HOH HOH HOH S . 132 132 . 22.457 70.667 -10.760 1.00 27.50  1 .
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ATOM 6686 O    O    . HOH HOH HOH S . 133 133 . 47.250 49.556 6.303   1.00 22.03  1 .
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ATOM 6687 O    O    . HOH HOH HOH S . 134 134 . 4.960  40.134 10.815  1.00 21.72  1 .
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ATOM 6688 O    O    . HOH HOH HOH S . 135 135 . 13.542 25.374 21.858  1.00 19.10  1 .
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ATOM 6689 O    O    . HOH HOH HOH S . 136 136 . 20.004 41.840 10.098  1.00 27.20  1 .
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ATOM 6690 O    O    . HOH HOH HOH S . 137 137 . 16.878 31.773 22.514  1.00 26.06  1 .
.
ATOM 6691 O    O    . HOH HOH HOH S . 138 138 . 26.008 23.977 3.933   1.00 26.70  1 .
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ATOM 6692 O    O    . HOH HOH HOH S . 139 139 . 23.632 48.862 8.998   1.00 18.31  1 .
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ATOM 6693 O    O    . HOH HOH HOH S . 140 140 . 47.185 51.631 39.985  1.00 25.84  1 .
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ATOM 6694 O    O    . HOH HOH HOH S . 141 141 . 53.556 56.138 -4.291  1.00 27.41  1 .
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ATOM 6695 O    O    . HOH HOH HOH S . 142 142 . 39.288 49.955 4.455   1.00 25.77  1 .
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ATOM 6696 O    O    . HOH HOH HOH S . 143 143 . 25.418 55.318 25.198  1.00 19.86  1 .
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ATOM 6697 O    O    . HOH HOH HOH S . 144 144 . 31.456 63.055 -1.681  1.00 23.24  1 .
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ATOM 6698 O    O    . HOH HOH HOH S . 145 145 . 33.740 49.411 -0.589  1.00 19.09  1 .
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ATOM 6699 O    O    . HOH HOH HOH S . 146 146 . 27.727 50.133 41.008  1.00 23.28  1 .
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ATOM 6700 O    O    . HOH HOH HOH S . 147 147 . 32.708 28.310 3.322   1.00 27.89  1 .
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ATOM 6701 O    O    . HOH HOH HOH S . 148 148 . 16.981 35.784 4.905   1.00 29.66  1 .
.
ATOM 6702 O    O    . HOH HOH HOH S . 149 149 . 18.580 54.806 23.172  1.00 23.95  1 .
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ATOM 6703 O    O    . HOH HOH HOH S . 150 150 . 25.854 33.775 13.433  1.00 32.01  1 .
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ATOM 6704 O    O    . HOH HOH HOH S . 151 151 . 15.983 16.072 11.100  1.00 23.92  1 .
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ATOM 6705 O    O    . HOH HOH HOH S . 152 152 . 29.650 58.356 10.092  1.00 27.21  1 .
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ATOM 6706 O    O    . HOH HOH HOH S . 153 153 . 26.718 72.233 -6.181  1.00 31.70  1 .
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ATOM 6707 O    O    . HOH HOH HOH S . 154 154 . 5.606  39.724 -0.674  1.00 24.82  1 .
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ATOM 6708 O    O    . HOH HOH HOH S . 155 155 . 45.418 31.107 -3.041  1.00 27.41  1 .
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ATOM 6709 O    O    . HOH HOH HOH S . 156 156 . 37.227 50.546 -21.872 1.00 23.03  1 .
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ATOM 6710 O    O    . HOH HOH HOH S . 157 157 . 15.043 40.884 12.973  1.00 22.87  1 .
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ATOM 6711 O    O    . HOH HOH HOH S . 158 158 . 32.977 11.474 13.428  1.00 24.19  1 .
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ATOM 6712 O    O    . HOH HOH HOH S . 159 159 . 46.508 56.099 6.969   1.00 24.54  1 .
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ATOM 6713 O    O    . HOH HOH HOH S . 160 160 . 30.146 52.892 -24.706 1.00 28.85  1 .
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ATOM 6714 O    O    . HOH HOH HOH S . 161 161 . -4.369 52.887 7.006   1.00 25.44  1 .
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ATOM 6715 O    O    . HOH HOH HOH S . 162 162 . 48.779 27.379 20.382  1.00 33.64  1 .
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ATOM 6716 O    O    . HOH HOH HOH S . 163 163 . 32.441 37.313 39.624  1.00 26.05  1 .
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ATOM 6717 O    O    . HOH HOH HOH S . 164 164 . 2.173  60.999 15.223  1.00 24.64  1 .
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ATOM 6718 O    O    . HOH HOH HOH S . 165 165 . 7.916  48.938 -1.707  1.00 28.09  1 .
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ATOM 6719 O    O    . HOH HOH HOH S . 166 166 . 57.074 46.803 23.580  1.00 29.24  1 .
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ATOM 6720 O    O    . HOH HOH HOH S . 167 167 . 13.148 64.672 18.072  1.00 29.00  1 .
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ATOM 6721 O    O    . HOH HOH HOH S . 168 168 . 28.012 32.255 38.357  1.00 27.36  1 .
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ATOM 6722 O    O    . HOH HOH HOH S . 169 169 . 23.659 50.218 39.415  1.00 30.87  1 .
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ATOM 6723 O    O    . HOH HOH HOH S . 170 170 . 51.521 58.359 1.870   1.00 27.12  1 .
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ATOM 6724 O    O    . HOH HOH HOH S . 171 171 . 39.764 20.929 2.114   1.00 25.21  1 .
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ATOM 6725 O    O    . HOH HOH HOH S . 172 172 . 23.135 9.120  21.750  1.00 30.28  1 .
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ATOM 6726 O    O    . HOH HOH HOH S . 173 173 . 34.583 27.403 -0.351  1.00 24.87  1 .
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ATOM 6727 O    O    . HOH HOH HOH S . 174 174 . 51.942 40.036 23.537  1.00 23.20  1 .
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ATOM 6728 O    O    . HOH HOH HOH S . 175 175 . -1.022 54.664 18.029  1.00 30.54  1 .
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ATOM 6729 O    O    . HOH HOH HOH S . 176 176 . 51.809 37.079 0.526   1.00 25.45  1 .
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ATOM 6730 O    O    . HOH HOH HOH S . 177 177 . 47.642 63.653 -0.974  1.00 28.80  1 .
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ATOM 6731 O    O    . HOH HOH HOH S . 178 178 . 47.794 58.566 -9.490  1.00 33.22  1 .
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ATOM 6732 O    O    . HOH HOH HOH S . 179 179 . 34.230 58.953 13.380  1.00 30.69  1 .
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ATOM 6733 O    O    . HOH HOH HOH S . 180 180 . 11.713 38.438 8.455   1.00 25.27  1 .
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ATOM 6734 O    O    . HOH HOH HOH S . 181 181 . 53.227 52.251 4.475   1.00 25.39  1 .
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ATOM 6735 O    O    . HOH HOH HOH S . 182 182 . 14.890 32.975 24.197  1.00 27.41  1 .
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ATOM 6736 O    O    . HOH HOH HOH S . 183 183 . 50.190 39.142 21.678  1.00 22.30  1 .
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ATOM 6737 O    O    . HOH HOH HOH S . 184 184 . 32.763 68.438 -4.675  1.00 38.71  1 .
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ATOM 6738 O    O    . HOH HOH HOH S . 185 185 . 22.425 65.365 23.720  1.00 27.41  1 .
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ATOM 6739 O    O    . HOH HOH HOH S . 186 186 . 50.724 34.861 45.435  1.00 32.92  1 .
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ATOM 6740 O    O    . HOH HOH HOH S . 187 187 . 14.446 68.266 12.899  1.00 40.38  1 .
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ATOM 6741 O    O    . HOH HOH HOH S . 188 188 . 24.488 57.526 26.771  1.00 28.32  1 .
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ATOM 6742 O    O    . HOH HOH HOH S . 189 189 . 50.026 32.515 24.124  1.00 27.16  1 .
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ATOM 6743 O    O    . HOH HOH HOH S . 190 190 . 21.500 55.807 -19.772 1.00 20.01  1 .
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ATOM 6744 O    O    . HOH HOH HOH S . 191 191 . 30.790 58.091 39.373  1.00 36.21  1 .
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ATOM 6745 O    O    . HOH HOH HOH S . 192 192 . 24.978 58.443 29.295  1.00 27.17  1 .
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ATOM 6746 O    O    . HOH HOH HOH S . 193 193 . 45.003 43.938 20.799  1.00 24.30  1 .
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ATOM 6747 O    O    . HOH HOH HOH S . 194 194 . 19.787 67.559 -7.996  1.00 31.50  1 .
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ATOM 6748 O    O    . HOH HOH HOH S . 195 195 . 11.255 62.441 1.177   1.00 25.63  1 .
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ATOM 6749 O    O    . HOH HOH HOH S . 196 196 . 45.930 41.762 44.473  1.00 30.87  1 .
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ATOM 6750 O    O    . HOH HOH HOH S . 197 197 . 41.625 64.450 20.616  1.00 35.40  1 .
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ATOM 6751 O    O    . HOH HOH HOH S . 198 198 . 23.302 54.974 23.611  1.00 28.80  1 .
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ATOM 6756 O    O    . HOH HOH HOH S . 203 203 . 41.874 57.861 35.566  1.00 25.92  1 .
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ATOM 6759 O    O    . HOH HOH HOH S . 206 206 . 27.697 52.798 -21.328 1.00 22.05  1 .
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ATOM 6760 O    O    . HOH HOH HOH S . 207 207 . 19.696 42.719 47.330  1.00 37.86  1 .
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ATOM 6761 O    O    . HOH HOH HOH S . 208 208 . 49.296 50.398 -23.993 1.00 27.76  1 .
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ATOM 6762 O    O    . HOH HOH HOH S . 209 209 . 25.545 29.145 -6.845  1.00 35.15  1 .
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ATOM 6763 O    O    . HOH HOH HOH S . 210 210 . 48.769 64.600 20.907  1.00 26.08  1 .
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ATOM 6766 O    O    . HOH HOH HOH S . 213 213 . 24.061 68.762 1.435   1.00 33.07  1 .
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ATOM 6767 O    O    . HOH HOH HOH S . 214 214 . 42.070 31.666 5.689   1.00 32.97  1 .
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ATOM 6768 O    O    . HOH HOH HOH S . 215 215 . 14.866 67.364 15.144  1.00 35.34  1 .
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ATOM 6769 O    O    . HOH HOH HOH S . 216 216 . 39.957 14.359 14.092  1.00 33.44  1 .
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ATOM 6770 O    O    . HOH HOH HOH S . 217 217 . 45.200 38.391 45.372  1.00 28.24  1 .
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ATOM 6771 O    O    . HOH HOH HOH S . 218 218 . 33.402 60.599 15.764  1.00 37.22  1 .
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ATOM 6772 O    O    . HOH HOH HOH S . 219 219 . 15.140 64.529 -13.183 1.00 33.41  1 .
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ATOM 6773 O    O    . HOH HOH HOH S . 220 220 . 29.307 41.141 -16.944 1.00 30.01  1 .
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ATOM 6774 O    O    . HOH HOH HOH S . 221 221 . 55.304 28.012 27.858  1.00 37.72  1 .
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ATOM 6775 O    O    . HOH HOH HOH S . 222 222 . 35.116 26.906 -2.713  1.00 27.18  1 .
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ATOM 6777 O    O    . HOH HOH HOH S . 224 224 . 43.799 29.478 16.455  1.00 26.07  1 .
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ATOM 6779 O    O    . HOH HOH HOH S . 226 226 . 13.110 30.588 14.020  1.00 33.40  1 .
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ATOM 6780 O    O    . HOH HOH HOH S . 227 227 . 25.332 23.728 32.206  1.00 29.91  1 .
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ATOM 6781 O    O    . HOH HOH HOH S . 228 228 . 26.008 12.084 6.636   1.00 27.83  1 .
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ATOM 6782 O    O    . HOH HOH HOH S . 229 229 . -3.288 46.613 5.526   1.00 27.28  1 .
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ATOM 6783 O    O    . HOH HOH HOH S . 230 230 . 12.294 59.010 -4.193  1.00 32.02  1 .
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ATOM 6784 O    O    . HOH HOH HOH S . 231 231 . 58.411 44.256 18.288  1.00 27.65  1 .
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ATOM 6785 O    O    . HOH HOH HOH S . 232 232 . 19.024 37.852 24.965  1.00 30.78  1 .
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ATOM 6786 O    O    . HOH HOH HOH S . 233 233 . 44.219 31.950 -12.516 1.00 35.69  1 .
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ATOM 6787 O    O    . HOH HOH HOH S . 234 234 . 36.773 17.101 26.883  1.00 26.12  1 .
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ATOM 6788 O    O    . HOH HOH HOH S . 235 235 . 22.275 23.690 -0.266  1.00 37.59  1 .
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ATOM 6789 O    O    . HOH HOH HOH S . 236 236 . 56.889 42.476 42.365  1.00 43.72  1 .
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ATOM 6790 O    O    . HOH HOH HOH S . 237 237 . 45.219 23.601 21.413  1.00 28.41  1 .
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ATOM 6791 O    O    . HOH HOH HOH S . 238 238 . 11.978 46.319 22.103  1.00 27.62  1 .
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ATOM 6792 O    O    . HOH HOH HOH S . 239 239 . 20.337 68.577 15.217  1.00 31.39  1 .
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ATOM 6793 O    O    . HOH HOH HOH S . 240 240 . 49.401 56.960 -10.441 1.00 29.86  1 .
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ATOM 6794 O    O    . HOH HOH HOH S . 241 241 . 4.887  64.056 18.090  1.00 36.31  1 .
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ATOM 6795 O    O    . HOH HOH HOH S . 242 242 . 42.499 53.960 6.668   1.00 31.00  1 .
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ATOM 6796 O    O    . HOH HOH HOH S . 243 243 . 24.376 60.498 27.957  1.00 26.48  1 .
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ATOM 6797 O    O    . HOH HOH HOH S . 244 244 . 46.811 62.270 -17.357 1.00 32.27  1 .
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ATOM 6798 O    O    . HOH HOH HOH S . 245 245 . 0.288  41.882 14.220  1.00 30.40  1 .
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ATOM 6799 O    O    . HOH HOH HOH S . 246 246 . 44.236 24.330 18.946  1.00 28.38  1 .
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ATOM 6800 O    O    . HOH HOH HOH S . 247 247 . 24.770 12.880 29.253  1.00 31.18  1 .
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ATOM 6801 O    O    . HOH HOH HOH S . 248 248 . 42.349 49.625 -23.124 1.00 29.48  1 .
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ATOM 6802 O    O    . HOH HOH HOH S . 249 249 . 35.893 15.367 25.133  1.00 24.57  1 .
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ATOM 6803 O    O    . HOH HOH HOH S . 250 250 . 19.417 67.285 -11.344 1.00 35.84  1 .
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ATOM 6804 O    O    . HOH HOH HOH S . 251 251 . 19.962 39.980 20.047  1.00 31.79  1 .
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ATOM 6805 O    O    . HOH HOH HOH S . 252 252 . 49.283 51.903 -21.284 1.00 36.76  1 .
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ATOM 6806 O    O    . HOH HOH HOH S . 253 253 . 25.781 29.814 -11.339 1.00 34.71  1 .
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ATOM 6807 O    O    . HOH HOH HOH S . 254 254 . 39.815 40.240 40.989  1.00 30.91  1 .
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ATOM 6808 O    O    . HOH HOH HOH S . 255 255 . 17.462 35.820 24.251  1.00 25.35  1 .
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ATOM 6809 O    O    . HOH HOH HOH S . 256 256 . 57.779 54.364 21.510  1.00 34.71  1 .
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ATOM 6810 O    O    . HOH HOH HOH S . 257 257 . 36.690 74.058 -4.755  1.00 34.76  1 .
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ATOM 6811 O    O    . HOH HOH HOH S . 258 258 . 37.396 28.729 -8.429  1.00 33.11  1 .
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ATOM 6813 O    O    . HOH HOH HOH S . 260 260 . 15.570 59.791 22.186  1.00 30.78  1 .
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ATOM 6814 O    O    . HOH HOH HOH S . 261 261 . 2.607  50.146 21.185  1.00 37.56  1 .
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ATOM 6815 O    O    . HOH HOH HOH S . 262 262 . 18.534 48.005 41.151  1.00 60.42  1 .
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ATOM 6816 O    O    . HOH HOH HOH S . 263 263 . 48.070 43.879 -15.427 1.00 42.51  1 .
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ATOM 6817 O    O    . HOH HOH HOH S . 264 264 . 19.209 66.499 -18.398 1.00 23.62  1 .
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ATOM 6818 O    O    . HOH HOH HOH S . 265 265 . 44.595 64.484 -21.626 1.00 39.99  1 .
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ATOM 6819 O    O    . HOH HOH HOH S . 266 266 . 14.820 15.683 28.542  1.00 31.27  1 .
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ATOM 6820 O    O    . HOH HOH HOH S . 267 267 . 62.950 43.262 26.029  1.00 38.72  1 .
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ATOM 6821 O    O    . HOH HOH HOH S . 268 268 . 46.166 71.141 -15.928 1.00 34.84  1 .
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ATOM 6822 O    O    . HOH HOH HOH S . 269 269 . 55.468 30.616 25.611  1.00 28.54  1 .
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ATOM 6823 O    O    . HOH HOH HOH S . 270 270 . 19.229 22.340 32.811  1.00 33.31  1 .
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ATOM 6824 O    O    . HOH HOH HOH S . 271 271 . 50.040 53.443 -19.827 1.00 39.54  1 .
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ATOM 6825 O    O    . HOH HOH HOH S . 272 272 . 23.246 26.151 -3.402  1.00 33.26  1 .
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ATOM 6827 O    O    . HOH HOH HOH S . 274 274 . 55.956 53.055 -2.869  1.00 63.31  1 .
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ATOM 6828 O    O    . HOH HOH HOH S . 275 275 . 48.472 33.539 -11.461 1.00 36.35  1 .
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ATOM 6830 O    O    . HOH HOH HOH S . 277 277 . 35.604 67.918 -1.652  1.00 35.66  1 .
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ATOM 6833 O    O    . HOH HOH HOH S . 280 280 . 11.350 20.451 19.722  1.00 29.03  1 .
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ATOM 6834 O    O    . HOH HOH HOH S . 281 281 . 15.026 14.260 19.268  1.00 39.53  1 .
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ATOM 6835 O    O    . HOH HOH HOH S . 282 282 . 22.878 15.375 8.049   1.00 44.91  1 .
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ATOM 6836 O    O    . HOH HOH HOH S . 283 283 . 28.561 20.516 4.585   1.00 24.26  1 .
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ATOM 6837 O    O    . HOH HOH HOH S . 284 284 . 32.916 18.797 3.067   1.00 65.53  1 .
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ATOM 6838 O    O    . HOH HOH HOH S . 285 285 . 32.154 19.885 5.716   1.00 35.43  1 .
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ATOM 6839 O    O    . HOH HOH HOH S . 286 286 . 31.362 24.774 3.074   1.00 47.18  1 .
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ATOM 6840 O    O    . HOH HOH HOH S . 287 287 . 28.978 28.372 3.824   1.00 32.97  1 .
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ATOM 6841 O    O    . HOH HOH HOH S . 288 288 . 10.138 17.978 18.103  1.00 58.08  1 .
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ATOM 6842 O    O    . HOH HOH HOH S . 289 289 . 11.699 24.434 13.518  1.00 48.34  1 .
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ATOM 6843 O    O    . HOH HOH HOH S . 290 290 . 11.770 15.087 11.376  1.00 38.70  1 .
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ATOM 6844 O    O    . HOH HOH HOH S . 291 291 . 18.451 23.534 7.418   1.00 43.84  1 .
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ATOM 6845 O    O    . HOH HOH HOH S . 292 292 . 20.715 20.338 5.103   1.00 51.58  1 .
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ATOM 6846 O    O    . HOH HOH HOH S . 293 293 . 21.895 22.456 3.525   1.00 53.36  1 .
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ATOM 6847 O    O    . HOH HOH HOH S . 294 294 . 27.134 19.588 2.426   1.00 45.54  1 .
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ATOM 6848 O    O    . HOH HOH HOH S . 295 295 . 43.264 39.340 8.806   1.00 34.02  1 .
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ATOM 6849 O    O    . HOH HOH HOH S . 296 296 . 44.954 35.474 9.825   1.00 33.56  1 .
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ATOM 6850 O    O    . HOH HOH HOH S . 297 297 . 44.925 33.538 7.791   1.00 35.77  1 .
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ATOM 6851 O    O    . HOH HOH HOH S . 298 298 . 44.812 39.678 11.261  1.00 33.43  1 .
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ATOM 6852 O    O    . HOH HOH HOH S . 299 299 . 44.355 30.920 12.828  1.00 52.47  1 .
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ATOM 6857 O    O    . HOH HOH HOH S . 304 304 . 21.713 35.221 18.636  1.00 38.90  1 .
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ATOM 6858 O    O    . HOH HOH HOH S . 305 305 . 23.571 35.463 12.380  1.00 28.77  1 .
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ATOM 6859 O    O    . HOH HOH HOH S . 306 306 . 37.801 26.318 19.287  1.00 19.74  1 .
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ATOM 6860 O    O    . HOH HOH HOH S . 307 307 . 44.480 26.745 19.715  1.00 28.67  1 .
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ATOM 6861 O    O    . HOH HOH HOH S . 308 308 . 48.016 31.228 16.561  1.00 40.78  1 .
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ATOM 6862 O    O    . HOH HOH HOH S . 309 309 . 46.482 36.571 13.712  1.00 56.30  1 .
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ATOM 6863 O    O    . HOH HOH HOH S . 310 310 . 47.061 40.281 13.667  1.00 43.91  1 .
.
ATOM 6864 O    O    . HOH HOH HOH S . 311 311 . 44.716 33.942 25.078  1.00 16.77  1 .
.
ATOM 6865 O    O    . HOH HOH HOH S . 312 312 . 46.737 26.309 21.615  1.00 33.79  1 .
.
ATOM 6866 O    O    . HOH HOH HOH S . 313 313 . 47.226 35.451 24.958  1.00 16.97  1 .
.
ATOM 6867 O    O    . HOH HOH HOH S . 314 314 . 49.456 22.720 22.719  1.00 40.82  1 .
.
ATOM 6868 O    O    . HOH HOH HOH S . 315 315 . 51.536 21.477 25.863  1.00 44.25  1 .
.
ATOM 6869 O    O    . HOH HOH HOH S . 316 316 . 45.484 21.013 24.453  1.00 49.62  1 .
.
ATOM 6870 O    O    . HOH HOH HOH S . 317 317 . 41.206 21.255 27.114  1.00 23.13  1 .
.
ATOM 6871 O    O    . HOH HOH HOH S . 318 318 . 45.105 21.348 28.624  1.00 40.43  1 .
.
ATOM 6872 O    O    . HOH HOH HOH S . 319 319 . 38.907 19.916 26.812  1.00 32.06  1 .
.
ATOM 6873 O    O    . HOH HOH HOH S . 320 320 . 36.878 18.026 29.199  1.00 54.57  1 .
.
ATOM 6874 O    O    . HOH HOH HOH S . 321 321 . 44.921 24.296 15.505  1.00 63.50  1 .
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ATOM 6875 O    O    . HOH HOH HOH S . 322 322 . 45.723 18.764 9.104   1.00 50.86  1 .
.
ATOM 6876 O    O    . HOH HOH HOH S . 323 323 . 40.291 18.970 3.985   1.00 33.18  1 .
.
ATOM 6877 O    O    . HOH HOH HOH S . 324 324 . 43.210 18.232 4.268   1.00 41.55  1 .
.
ATOM 6878 O    O    . HOH HOH HOH S . 325 325 . 36.648 25.091 -1.756  1.00 29.26  1 .
.
ATOM 6879 O    O    . HOH HOH HOH S . 326 326 . 47.972 20.435 2.153   1.00 37.67  1 .
.
ATOM 6880 O    O    . HOH HOH HOH S . 327 327 . 35.448 15.525 6.736   1.00 34.25  1 .
.
ATOM 6881 O    O    . HOH HOH HOH S . 328 328 . 37.797 14.183 9.668   1.00 31.42  1 .
.
ATOM 6882 O    O    . HOH HOH HOH S . 329 329 . 41.836 13.768 8.838   1.00 51.78  1 .
.
ATOM 6883 O    O    . HOH HOH HOH S . 330 330 . 33.326 13.047 9.620   1.00 29.65  1 .
.
ATOM 6884 O    O    . HOH HOH HOH S . 331 331 . 25.764 10.615 9.247   1.00 35.08  1 .
.
ATOM 6885 O    O    . HOH HOH HOH S . 332 332 . 26.203 10.957 5.202   1.00 24.08  1 .
.
ATOM 6886 O    O    . HOH HOH HOH S . 333 333 . 21.939 8.568  24.168  1.00 43.41  1 .
.
ATOM 6887 O    O    . HOH HOH HOH S . 334 334 . 26.184 8.625  22.970  1.00 33.83  1 .
.
ATOM 6888 O    O    . HOH HOH HOH S . 335 335 . 21.214 10.308 26.727  1.00 49.44  1 .
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ATOM 6889 O    O    . HOH HOH HOH S . 336 336 . 14.760 9.308  20.588  1.00 42.32  1 .
.
ATOM 6890 O    O    . HOH HOH HOH S . 337 337 . 16.711 27.354 32.776  1.00 26.79  1 .
.
ATOM 6891 O    O    . HOH HOH HOH S . 338 338 . 18.078 25.360 34.184  1.00 44.12  1 .
.
ATOM 6892 O    O    . HOH HOH HOH S . 339 339 . 25.375 13.395 31.973  1.00 37.02  1 .
.
ATOM 6893 O    O    . HOH HOH HOH S . 340 340 . 30.109 18.181 33.008  1.00 43.94  1 .
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ATOM 6894 O    O    . HOH HOH HOH S . 341 341 . 26.684 11.265 28.475  1.00 46.03  1 .
.
ATOM 6895 O    O    . HOH HOH HOH S . 342 342 . 21.679 11.530 29.882  1.00 53.72  1 .
.
ATOM 6896 O    O    . HOH HOH HOH S . 343 343 . 28.185 9.950  24.117  1.00 35.97  1 .
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ATOM 6897 O    O    . HOH HOH HOH S . 344 344 . 30.211 8.068  23.971  1.00 31.75  1 .
.
ATOM 6898 O    O    . HOH HOH HOH S . 345 345 . 29.533 11.503 30.408  1.00 44.13  1 .
.
ATOM 6899 O    O    . HOH HOH HOH S . 346 346 . 34.073 8.309  26.256  1.00 31.67  1 .
.
ATOM 6900 O    O    . HOH HOH HOH S . 347 347 . 37.229 7.842  26.083  1.00 45.87  1 .
.
ATOM 6901 O    O    . HOH HOH HOH S . 348 348 . 29.945 5.975  22.151  1.00 29.43  1 .
.
ATOM 6902 O    O    . HOH HOH HOH S . 349 349 . 27.904 9.009  26.843  1.00 44.43  1 .
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ATOM 6903 O    O    . HOH HOH HOH S . 350 350 . 42.962 12.481 19.195  1.00 46.63  1 .
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ATOM 6904 O    O    . HOH HOH HOH S . 351 351 . 36.068 12.881 27.806  1.00 45.35  1 .
.
ATOM 6905 O    O    . HOH HOH HOH S . 352 352 . 43.126 15.895 16.053  1.00 40.02  1 .
.
ATOM 6906 O    O    . HOH HOH HOH S . 353 353 . 35.843 25.820 21.125  1.00 34.30  1 .
.
ATOM 6907 O    O    . HOH HOH HOH S . 354 354 . 8.765  32.935 31.231  1.00 48.35  1 .
.
ATOM 6908 O    O    . HOH HOH HOH S . 355 355 . 29.155 30.917 41.642  1.00 47.07  1 .
.
ATOM 6909 O    O    . HOH HOH HOH S . 356 356 . 22.599 35.406 42.720  1.00 50.21  1 .
.
ATOM 6910 O    O    . HOH HOH HOH S . 357 357 . 21.614 37.202 38.422  1.00 41.47  1 .
.
ATOM 6911 O    O    . HOH HOH HOH S . 358 358 . 22.398 49.688 34.946  1.00 37.21  1 .
.
ATOM 6912 O    O    . HOH HOH HOH S . 359 359 . 52.903 37.844 16.479  1.00 36.24  1 .
.
ATOM 6913 O    O    . HOH HOH HOH S . 360 360 . 37.535 51.300 40.983  1.00 41.85  1 .
.
ATOM 6914 O    O    . HOH HOH HOH S . 361 361 . 27.437 52.512 39.533  1.00 35.74  1 .
.
ATOM 6915 O    O    . HOH HOH HOH S . 362 362 . 19.922 51.656 33.305  1.00 38.34  1 .
.
ATOM 6916 O    O    . HOH HOH HOH S . 363 363 . 22.592 51.896 36.573  1.00 35.72  1 .
.
ATOM 6917 O    O    . HOH HOH HOH S . 364 364 . 22.570 56.093 32.125  1.00 45.66  1 .
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ATOM 6918 O    O    . HOH HOH HOH S . 365 365 . 29.079 59.093 35.848  1.00 48.54  1 .
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ATOM 6919 O    O    . HOH HOH HOH S . 366 366 . 20.754 52.448 23.900  1.00 37.56  1 .
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ATOM 6920 O    O    . HOH HOH HOH S . 367 367 . 19.146 55.493 26.020  1.00 48.98  1 .
.
ATOM 6921 O    O    . HOH HOH HOH S . 368 368 . 38.820 64.811 19.726  1.00 50.95  1 .
.
ATOM 6922 O    O    . HOH HOH HOH S . 369 369 . 37.121 64.857 23.095  1.00 44.32  1 .
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ATOM 6923 O    O    . HOH HOH HOH S . 370 370 . 37.497 57.566 16.457  1.00 35.14  1 .
.
ATOM 6924 O    O    . HOH HOH HOH S . 371 371 . 46.487 66.317 21.243  1.00 49.65  1 .
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ATOM 6925 O    O    . HOH HOH HOH S . 372 372 . 56.439 62.502 17.852  1.00 53.39  1 .
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ATOM 6926 O    O    . HOH HOH HOH S . 373 373 . 48.244 62.401 5.042   1.00 47.27  1 .
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ATOM 6927 O    O    . HOH HOH HOH S . 374 374 . 43.748 56.152 7.682   1.00 27.22  1 .
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ATOM 6928 O    O    . HOH HOH HOH S . 375 375 . 51.834 59.682 5.162   1.00 52.38  1 .
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ATOM 6929 O    O    . HOH HOH HOH S . 376 376 . 48.992 49.943 9.265   1.00 37.88  1 .
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ATOM 6930 O    O    . HOH HOH HOH S . 377 377 . 57.962 49.513 27.686  1.00 38.94  1 .
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ATOM 6931 O    O    . HOH HOH HOH S . 378 378 . 60.156 48.602 25.413  1.00 42.19  1 .
.
ATOM 6932 O    O    . HOH HOH HOH S . 379 379 . 63.152 46.372 23.685  1.00 47.80  1 .
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ATOM 6933 O    O    . HOH HOH HOH S . 380 380 . 34.128 63.622 26.506  1.00 36.33  1 .
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ATOM 6934 O    O    . HOH HOH HOH S . 381 381 . 39.615 67.543 31.473  1.00 58.86  1 .
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ATOM 6935 O    O    . HOH HOH HOH S . 382 382 . 36.798 63.073 35.841  1.00 49.37  1 .
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ATOM 6936 O    O    . HOH HOH HOH S . 383 383 . 30.400 62.341 33.321  1.00 65.22  1 .
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ATOM 6937 O    O    . HOH HOH HOH S . 384 384 . 55.841 32.414 22.277  1.00 51.75  1 .
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ATOM 6938 O    O    . HOH HOH HOH S . 385 385 . 54.676 34.766 19.326  1.00 39.74  1 .
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ATOM 6939 O    O    . HOH HOH HOH S . 386 386 . 62.323 36.995 19.924  1.00 49.74  1 .
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ATOM 6940 O    O    . HOH HOH HOH S . 387 387 . 65.821 33.566 21.473  1.00 44.66  1 .
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ATOM 6941 O    O    . HOH HOH HOH S . 388 388 . 62.267 29.406 24.009  1.00 49.95  1 .
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ATOM 6942 O    O    . HOH HOH HOH S . 389 389 . 64.244 47.078 21.413  1.00 49.41  1 .
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ATOM 6943 O    O    . HOH HOH HOH S . 390 390 . 63.803 36.790 37.001  1.00 44.45  1 .
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ATOM 6944 O    O    . HOH HOH HOH S . 391 391 . 57.817 38.628 39.635  1.00 42.85  1 .
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ATOM 6945 O    O    . HOH HOH HOH S . 392 392 . 59.659 47.107 41.482  1.00 48.35  1 .
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ATOM 6946 O    O    . HOH HOH HOH S . 393 393 . 59.502 49.191 39.809  1.00 42.13  1 .
.
ATOM 6947 O    O    . HOH HOH HOH S . 394 394 . 61.577 49.001 36.181  1.00 59.32  1 .
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ATOM 6948 O    O    . HOH HOH HOH S . 395 395 . 53.383 50.137 42.073  1.00 35.28  1 .
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ATOM 6949 O    O    . HOH HOH HOH S . 396 396 . 49.560 47.646 44.025  1.00 34.02  1 .
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ATOM 6950 O    O    . HOH HOH HOH S . 397 397 . 49.934 47.398 47.164  1.00 41.29  1 .
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ATOM 6951 O    O    . HOH HOH HOH S . 398 398 . 45.157 53.117 40.476  1.00 39.05  1 .
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ATOM 6952 O    O    . HOH HOH HOH S . 399 399 . 42.202 46.563 41.343  1.00 36.09  1 .
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ATOM 6953 O    O    . HOH HOH HOH S . 400 400 . 41.698 49.938 42.477  1.00 36.64  1 .
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ATOM 6954 O    O    . HOH HOH HOH S . 401 401 . 40.862 52.950 41.108  1.00 55.31  1 .
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ATOM 6955 O    O    . HOH HOH HOH S . 402 402 . 37.217 49.571 42.872  1.00 45.31  1 .
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ATOM 6956 O    O    . HOH HOH HOH S . 403 403 . 57.264 27.568 26.224  1.00 72.82  1 .
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ATOM 6957 O    O    . HOH HOH HOH S . 404 404 . 52.272 25.087 33.180  1.00 36.42  1 .
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ATOM 6958 O    O    . HOH HOH HOH S . 405 405 . 54.142 25.394 40.318  1.00 41.35  1 .
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ATOM 6959 O    O    . HOH HOH HOH S . 406 406 . 53.668 28.886 42.166  1.00 40.25  1 .
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ATOM 6960 O    O    . HOH HOH HOH S . 407 407 . 50.442 23.073 42.988  1.00 47.33  1 .
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ATOM 6961 O    O    . HOH HOH HOH S . 408 408 . 48.821 36.306 46.982  1.00 32.09  1 .
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ATOM 6962 O    O    . HOH HOH HOH S . 409 409 . 46.092 35.845 46.195  1.00 31.99  1 .
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ATOM 6963 O    O    . HOH HOH HOH S . 410 410 . 58.153 38.773 47.204  1.00 50.99  1 .
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ATOM 6964 O    O    . HOH HOH HOH S . 411 411 . 46.800 44.750 48.951  1.00 39.25  1 .
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ATOM 6965 O    O    . HOH HOH HOH S . 412 412 . 50.398 44.299 48.366  1.00 48.99  1 .
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ATOM 6966 O    O    . HOH HOH HOH S . 413 413 . 41.774 47.147 46.124  1.00 45.17  1 .
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ATOM 6967 O    O    . HOH HOH HOH S . 414 414 . 62.827 46.228 27.133  1.00 42.24  1 .
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ATOM 6968 O    O    . HOH HOH HOH S . 415 415 . 39.608 64.973 33.364  1.00 41.87  1 .
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ATOM 6969 O    O    . HOH HOH HOH S . 416 416 . 38.796 46.319 48.459  1.00 44.83  1 .
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ATOM 6970 O    O    . HOH HOH HOH S . 417 417 . 39.919 39.045 43.369  1.00 41.97  1 .
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ATOM 6971 O    O    . HOH HOH HOH S . 418 418 . 38.782 19.889 33.070  1.00 42.68  1 .
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ATOM 6972 O    O    . HOH HOH HOH S . 419 419 . 36.211 20.787 32.164  1.00 34.49  1 .
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ATOM 6973 O    O    . HOH HOH HOH S . 420 420 . 41.349 31.319 46.822  1.00 40.35  1 .
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ATOM 6974 O    O    . HOH HOH HOH S . 421 421 . 41.518 35.775 45.844  1.00 49.46  1 .
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ATOM 6975 O    O    . HOH HOH HOH S . 422 422 . 32.405 24.171 39.459  1.00 41.04  1 .
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ATOM 6976 O    O    . HOH HOH HOH S . 423 423 . 34.960 22.581 38.208  1.00 64.26  1 .
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ATOM 6977 O    O    . HOH HOH HOH S . 424 424 . 27.161 35.303 41.446  1.00 47.96  1 .
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ATOM 6978 O    O    . HOH HOH HOH S . 425 425 . 33.761 37.012 41.747  1.00 37.91  1 .
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ATOM 6979 O    O    . HOH HOH HOH S . 426 426 . 35.549 24.906 45.512  1.00 58.57  1 .
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ATOM 6980 O    O    . HOH HOH HOH S . 427 427 . 23.094 41.182 17.124  1.00 17.67  1 .
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ATOM 6981 O    O    . HOH HOH HOH S . 428 428 . 20.795 42.491 16.328  1.00 28.94  1 .
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ATOM 6982 O    O    . HOH HOH HOH S . 429 429 . 23.818 37.890 11.134  1.00 17.22  1 .
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ATOM 6983 O    O    . HOH HOH HOH S . 430 430 . 20.313 36.323 22.293  1.00 44.68  1 .
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ATOM 6984 O    O    . HOH HOH HOH S . 431 431 . 36.442 55.310 14.533  1.00 33.51  1 .
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ATOM 6985 O    O    . HOH HOH HOH S . 432 432 . 22.349 39.844 19.057  1.00 33.80  1 .
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ATOM 6986 O    O    . HOH HOH HOH S . 433 433 . 15.875 52.657 25.122  1.00 33.64  1 .
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ATOM 6987 O    O    . HOH HOH HOH S . 434 434 . 14.298 50.193 30.323  1.00 33.98  1 .
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ATOM 6988 O    O    . HOH HOH HOH S . 435 435 . 11.553 46.946 30.097  1.00 43.67  1 .
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ATOM 6989 O    O    . HOH HOH HOH S . 436 436 . 12.536 39.261 36.127  1.00 57.35  1 .
.
ATOM 6990 O    O    . HOH HOH HOH S . 437 437 . 20.659 43.903 36.715  1.00 42.06  1 .
.
ATOM 6991 O    O    . HOH HOH HOH S . 438 438 . 27.221 50.522 45.925  1.00 27.96  1 .
.
ATOM 6992 O    O    . HOH HOH HOH S . 439 439 . 35.646 44.696 44.662  1.00 36.14  1 .
.
ATOM 6993 O    O    . HOH HOH HOH S . 440 440 . 37.589 42.472 45.272  1.00 46.48  1 .
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ATOM 6994 O    O    . HOH HOH HOH S . 441 441 . 32.589 42.228 50.663  1.00 42.69  1 .
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ATOM 6995 O    O    . HOH HOH HOH S . 442 442 . 25.680 49.056 47.443  1.00 46.18  1 .
.
ATOM 6996 O    O    . HOH HOH HOH S . 443 443 . 23.373 48.175 47.095  1.00 32.24  1 .
.
ATOM 6997 O    O    . HOH HOH HOH S . 444 444 . 22.783 41.832 47.208  1.00 34.19  1 .
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ATOM 6998 O    O    . HOH HOH HOH S . 445 445 . 45.762 28.131 17.657  1.00 35.81  1 .
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ATOM 6999 O    O    . HOH HOH HOH S . 446 446 . -1.709 48.653 14.490  1.00 38.99  1 .
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ATOM 7000 O    O    . HOH HOH HOH S . 447 447 . 3.485  53.879 19.463  1.00 27.42  1 .
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ATOM 7001 O    O    . HOH HOH HOH S . 448 448 . 7.487  53.751 20.603  1.00 55.88  1 .
.
ATOM 7002 O    O    . HOH HOH HOH S . 449 449 . 14.455 56.581 24.360  1.00 34.80  1 .
.
ATOM 7003 O    O    . HOH HOH HOH S . 450 450 . 12.876 58.194 22.784  1.00 40.02  1 .
.
ATOM 7004 O    O    . HOH HOH HOH S . 451 451 . 9.454  50.176 25.547  1.00 64.46  1 .
.
ATOM 7005 O    O    . HOH HOH HOH S . 452 452 . 21.584 55.172 26.303  1.00 53.44  1 .
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ATOM 7006 O    O    . HOH HOH HOH S . 453 453 . 0.806  34.996 8.001   1.00 42.25  1 .
.
ATOM 7007 O    O    . HOH HOH HOH S . 454 454 . 10.516 37.176 17.751  1.00 36.75  1 .
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ATOM 7008 O    O    . HOH HOH HOH S . 455 455 . 10.829 37.195 14.753  1.00 45.90  1 .
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ATOM 7009 O    O    . HOH HOH HOH S . 456 456 . 15.926 40.157 16.706  1.00 46.95  1 .
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ATOM 7010 O    O    . HOH HOH HOH S . 457 457 . 20.160 44.069 13.130  1.00 38.65  1 .
.
ATOM 7011 O    O    . HOH HOH HOH S . 458 458 . 27.581 61.070 7.690   1.00 28.94  1 .
.
ATOM 7012 O    O    . HOH HOH HOH S . 459 459 . 27.390 63.400 6.101   1.00 31.06  1 .
.
ATOM 7013 O    O    . HOH HOH HOH S . 460 460 . 24.943 63.106 4.696   1.00 32.76  1 .
.
ATOM 7014 O    O    . HOH HOH HOH S . 461 461 . 31.855 58.942 -1.874  1.00 12.05  1 .
.
ATOM 7015 O    O    . HOH HOH HOH S . 462 462 . 29.245 57.953 -1.122  1.00 14.17  1 .
.
ATOM 7016 O    O    . HOH HOH HOH S . 463 463 . 27.943 65.730 2.992   1.00 41.77  1 .
.
ATOM 7017 O    O    . HOH HOH HOH S . 464 464 . 22.835 65.087 3.346   1.00 34.83  1 .
.
ATOM 7018 O    O    . HOH HOH HOH S . 465 465 . 16.990 63.079 -0.715  1.00 23.31  1 .
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ATOM 7019 O    O    . HOH HOH HOH S . 466 466 . 23.111 64.601 5.990   1.00 42.07  1 .
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ATOM 7020 O    O    . HOH HOH HOH S . 467 467 . 18.718 56.800 6.036   1.00 35.68  1 .
.
ATOM 7021 O    O    . HOH HOH HOH S . 468 468 . 25.532 64.076 9.740   1.00 36.17  1 .
.
ATOM 7022 O    O    . HOH HOH HOH S . 469 469 . 26.738 71.733 21.548  1.00 35.38  1 .
.
ATOM 7023 O    O    . HOH HOH HOH S . 470 470 . 27.325 66.213 28.205  1.00 46.89  1 .
.
ATOM 7024 O    O    . HOH HOH HOH S . 471 471 . 32.273 66.224 15.870  1.00 51.47  1 .
.
ATOM 7025 O    O    . HOH HOH HOH S . 472 472 . 27.531 66.195 13.512  1.00 51.34  1 .
.
ATOM 7026 O    O    . HOH HOH HOH S . 473 473 . 13.756 67.181 17.625  1.00 40.42  1 .
.
ATOM 7027 O    O    . HOH HOH HOH S . 474 474 . 10.098 57.884 24.789  1.00 58.56  1 .
.
ATOM 7028 O    O    . HOH HOH HOH S . 475 475 . 6.701  66.183 14.674  1.00 35.66  1 .
.
ATOM 7029 O    O    . HOH HOH HOH S . 476 476 . 8.760  64.313 16.581  1.00 36.30  1 .
.
ATOM 7030 O    O    . HOH HOH HOH S . 477 477 . 3.752  60.477 21.433  1.00 46.21  1 .
.
ATOM 7031 O    O    . HOH HOH HOH S . 478 478 . 0.745  53.962 19.958  1.00 34.09  1 .
.
ATOM 7032 O    O    . HOH HOH HOH S . 479 479 . -0.002 59.903 16.381  0.50 25.40  1 .
.
ATOM 7033 O    O    . HOH HOH HOH S . 480 480 . -5.397 50.068 6.549   1.00 39.78  1 .
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ATOM 7034 O    O    . HOH HOH HOH S . 481 481 . -4.343 48.223 2.535   1.00 39.70  1 .
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ATOM 7035 O    O    . HOH HOH HOH S . 482 482 . -2.991 44.594 3.519   1.00 38.57  1 .
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ATOM 7036 O    O    . HOH HOH HOH S . 483 483 . 4.486  42.135 -1.715  1.00 39.38  1 .
.
ATOM 7037 O    O    . HOH HOH HOH S . 484 484 . 3.257  45.356 -0.599  1.00 40.65  1 .
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ATOM 7038 O    O    . HOH HOH HOH S . 485 485 . 0.827  50.185 -2.515  1.00 38.45  1 .
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ATOM 7039 O    O    . HOH HOH HOH S . 486 486 . 5.619  48.225 -3.318  1.00 53.80  1 .
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ATOM 7040 O    O    . HOH HOH HOH S . 487 487 . 0.263  55.535 -0.352  1.00 43.06  1 .
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ATOM 7041 O    O    . HOH HOH HOH S . 488 488 . 7.247  64.489 0.910   1.00 49.56  1 .
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ATOM 7042 O    O    . HOH HOH HOH S . 489 489 . 5.083  60.434 -0.236  1.00 38.95  1 .
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ATOM 7043 O    O    . HOH HOH HOH S . 490 490 . 4.937  68.441 2.549   1.00 42.00  1 .
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ATOM 7044 O    O    . HOH HOH HOH S . 491 491 . 7.704  69.479 7.172   1.00 33.23  1 .
.
ATOM 7045 O    O    . HOH HOH HOH S . 492 492 . 11.544 70.314 1.438   1.00 40.24  1 .
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ATOM 7046 O    O    . HOH HOH HOH S . 493 493 . 14.686 62.116 0.341   1.00 30.59  1 .
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ATOM 7047 O    O    . HOH HOH HOH S . 494 494 . 12.681 61.391 -1.769  1.00 43.69  1 .
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ATOM 7048 O    O    . HOH HOH HOH S . 495 495 . 15.094 64.352 -3.779  1.00 38.86  1 .
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ATOM 7049 O    O    . HOH HOH HOH S . 496 496 . 20.039 66.875 1.563   1.00 41.66  1 .
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ATOM 7050 O    O    . HOH HOH HOH S . 497 497 . 17.918 70.473 5.023   1.00 42.12  1 .
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ATOM 7051 O    O    . HOH HOH HOH S . 498 498 . 10.829 35.940 7.367   1.00 26.82  1 .
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ATOM 7052 O    O    . HOH HOH HOH S . 499 499 . 14.089 39.028 7.952   1.00 32.77  1 .
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ATOM 7053 O    O    . HOH HOH HOH S . 500 500 . 10.149 35.647 13.585  1.00 63.56  1 .
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ATOM 7054 O    O    . HOH HOH HOH S . 501 501 . 13.243 34.588 7.866   1.00 47.97  1 .
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ATOM 7055 O    O    . HOH HOH HOH S . 502 502 . 10.344 31.937 5.654   1.00 48.17  1 .
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ATOM 7056 O    O    . HOH HOH HOH S . 503 503 . 10.144 30.391 0.523   1.00 45.98  1 .
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ATOM 7057 O    O    . HOH HOH HOH S . 504 504 . 14.894 44.544 -9.287  1.00 26.89  1 .
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ATOM 7058 O    O    . HOH HOH HOH S . 505 505 . 5.585  40.622 -7.250  1.00 40.64  1 .
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ATOM 7059 O    O    . HOH HOH HOH S . 506 506 . 7.362  38.387 -8.082  1.00 39.10  1 .
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ATOM 7060 O    O    . HOH HOH HOH S . 507 507 . 9.618  47.255 -10.957 1.00 43.61  1 .
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ATOM 7061 O    O    . HOH HOH HOH S . 508 508 . 19.699 31.910 -7.545  1.00 33.02  1 .
.
ATOM 7062 O    O    . HOH HOH HOH S . 509 509 . 43.260 51.219 5.697   1.00 31.83  1 .
.
ATOM 7063 O    O    . HOH HOH HOH S . 510 510 . 53.528 58.851 -0.088  1.00 43.99  1 .
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ATOM 7064 O    O    . HOH HOH HOH S . 511 511 . 46.627 66.296 -9.236  1.00 31.33  1 .
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ATOM 7065 O    O    . HOH HOH HOH S . 512 512 . 49.436 61.088 -8.015  1.00 51.46  1 .
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ATOM 7066 O    O    . HOH HOH HOH S . 513 513 . 34.476 38.717 -16.508 1.00 43.91  1 .
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ATOM 7067 O    O    . HOH HOH HOH S . 514 514 . 30.118 33.053 -14.864 1.00 30.79  1 .
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ATOM 7068 O    O    . HOH HOH HOH S . 515 515 . 37.257 32.639 -15.016 1.00 47.41  1 .
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ATOM 7069 O    O    . HOH HOH HOH S . 516 516 . 37.021 25.521 -8.060  1.00 44.45  1 .
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ATOM 7070 O    O    . HOH HOH HOH S . 517 517 . 26.897 28.516 -8.769  1.00 38.74  1 .
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ATOM 7071 O    O    . HOH HOH HOH S . 518 518 . 25.792 26.765 -4.894  1.00 37.87  1 .
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ATOM 7072 O    O    . HOH HOH HOH S . 519 519 . 29.652 26.095 -3.244  1.00 48.15  1 .
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ATOM 7073 O    O    . HOH HOH HOH S . 520 520 . 60.815 42.034 2.733   1.00 54.28  1 .
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ATOM 7074 O    O    . HOH HOH HOH S . 521 521 . 60.367 40.150 0.861   1.00 52.06  1 .
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ATOM 7075 O    O    . HOH HOH HOH S . 522 522 . 58.136 44.337 8.966   1.00 43.81  1 .
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ATOM 7076 O    O    . HOH HOH HOH S . 523 523 . 50.978 52.778 7.537   1.00 49.86  1 .
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ATOM 7077 O    O    . HOH HOH HOH S . 524 524 . 60.144 46.653 5.254   1.00 44.20  1 .
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ATOM 7078 O    O    . HOH HOH HOH S . 525 525 . 35.876 56.040 5.673   1.00 38.93  1 .
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ATOM 7079 O    O    . HOH HOH HOH S . 526 526 . 38.552 51.876 4.900   1.00 34.59  1 .
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ATOM 7080 O    O    . HOH HOH HOH S . 527 527 . 50.142 56.477 -13.000 1.00 35.01  1 .
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ATOM 7081 O    O    . HOH HOH HOH S . 528 528 . 48.936 53.024 -15.366 1.00 44.65  1 .
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ATOM 7082 O    O    . HOH HOH HOH S . 529 529 . 53.305 52.540 -9.990  1.00 47.87  1 .
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ATOM 7083 O    O    . HOH HOH HOH S . 530 530 . 54.332 53.860 -4.982  1.00 37.47  1 .
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ATOM 7084 O    O    . HOH HOH HOH S . 531 531 . 55.030 54.152 -7.356  1.00 49.22  1 .
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ATOM 7085 O    O    . HOH HOH HOH S . 532 532 . 54.718 47.299 -6.597  1.00 46.29  1 .
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ATOM 7086 O    O    . HOH HOH HOH S . 533 533 . 51.589 43.860 -10.369 1.00 39.47  1 .
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ATOM 7087 O    O    . HOH HOH HOH S . 534 534 . 50.491 35.266 -12.853 1.00 64.10  1 .
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ATOM 7088 O    O    . HOH HOH HOH S . 535 535 . 45.245 28.434 -6.783  1.00 44.09  1 .
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ATOM 7089 O    O    . HOH HOH HOH S . 536 536 . 45.768 40.719 -12.898 1.00 53.76  1 .
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ATOM 7090 O    O    . HOH HOH HOH S . 537 537 . 32.195 57.326 -4.154  1.00 11.96  1 .
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ATOM 7091 O    O    . HOH HOH HOH S . 538 538 . 30.733 69.877 -3.229  1.00 34.26  1 .
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ATOM 7092 O    O    . HOH HOH HOH S . 539 539 . 37.851 66.339 0.873   1.00 43.74  1 .
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ATOM 7093 O    O    . HOH HOH HOH S . 540 540 . 34.206 63.785 3.443   1.00 40.77  1 .
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ATOM 7094 O    O    . HOH HOH HOH S . 541 541 . 34.730 70.052 -3.547  1.00 42.75  1 .
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ATOM 7095 O    O    . HOH HOH HOH S . 542 542 . 42.371 75.609 -4.351  1.00 33.50  1 .
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ATOM 7096 O    O    . HOH HOH HOH S . 543 543 . 38.941 74.539 -3.259  1.00 64.40  1 .
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ATOM 7097 O    O    . HOH HOH HOH S . 544 544 . 35.865 76.571 -5.538  1.00 61.23  1 .
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ATOM 7098 O    O    . HOH HOH HOH S . 545 545 . 43.590 70.869 -2.358  1.00 36.37  1 .
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ATOM 7099 O    O    . HOH HOH HOH S . 546 546 . 47.241 73.217 2.792   1.00 50.02  1 .
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ATOM 7100 O    O    . HOH HOH HOH S . 547 547 . 49.035 70.426 -12.935 1.00 51.24  1 .
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ATOM 7101 O    O    . HOH HOH HOH S . 548 548 . 48.088 64.062 -15.988 1.00 48.98  1 .
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ATOM 7102 O    O    . HOH HOH HOH S . 549 549 . 34.271 67.187 -19.911 1.00 25.34  1 .
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ATOM 7103 O    O    . HOH HOH HOH S . 550 550 . 45.432 57.694 -21.785 1.00 33.86  1 .
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ATOM 7104 O    O    . HOH HOH HOH S . 551 551 . 45.491 54.211 -23.068 1.00 40.58  1 .
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ATOM 7105 O    O    . HOH HOH HOH S . 552 552 . 48.173 59.760 -18.004 1.00 59.13  1 .
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ATOM 7106 O    O    . HOH HOH HOH S . 553 553 . 38.557 59.760 -21.786 1.00 40.37  1 .
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ATOM 7107 O    O    . HOH HOH HOH S . 554 554 . 42.625 45.903 -18.620 1.00 32.97  1 .
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ATOM 7108 O    O    . HOH HOH HOH S . 555 555 . 27.532 56.630 -23.576 1.00 17.10  1 .
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ATOM 7109 O    O    . HOH HOH HOH S . 556 556 . 26.708 60.676 -24.493 1.00 32.51  1 .
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ATOM 7110 O    O    . HOH HOH HOH S . 557 557 . 25.881 54.805 -22.170 1.00 25.45  1 .
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ATOM 7111 O    O    . HOH HOH HOH S . 558 558 . 27.152 56.751 -26.245 1.00 39.79  1 .
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ATOM 7112 O    O    . HOH HOH HOH S . 559 559 . 35.992 47.429 -21.766 1.00 34.13  1 .
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ATOM 7113 O    O    . HOH HOH HOH S . 560 560 . 34.559 46.078 -20.082 1.00 31.04  1 .
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ATOM 7114 O    O    . HOH HOH HOH S . 561 561 . 33.598 44.196 -18.081 1.00 40.20  1 .
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ATOM 7115 O    O    . HOH HOH HOH S . 562 562 . 15.612 60.188 -18.187 1.00 35.10  1 .
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ATOM 7116 O    O    . HOH HOH HOH S . 563 563 . 19.377 58.086 -22.883 1.00 34.24  1 .
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ATOM 7117 O    O    . HOH HOH HOH S . 564 564 . 25.322 63.679 -22.964 1.00 40.12  1 .
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ATOM 7118 O    O    . HOH HOH HOH S . 565 565 . 23.485 65.887 -22.390 1.00 40.21  1 .
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ATOM 7119 O    O    . HOH HOH HOH S . 566 566 . 10.510 61.787 -1.021  1.00 39.19  1 .
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ATOM 7120 O    O    . HOH HOH HOH S . 567 567 . 13.216 61.437 -5.409  1.00 33.84  1 .
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ATOM 7121 O    O    . HOH HOH HOH S . 568 568 . 7.826  47.067 -7.807  1.00 44.82  1 .
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ATOM 7122 O    O    . HOH HOH HOH S . 569 569 . 11.020 52.852 -10.737 1.00 39.15  1 .
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ATOM 7123 O    O    . HOH HOH HOH S . 570 570 . 12.475 54.923 -17.463 1.00 40.39  1 .
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ATOM 7124 O    O    . HOH HOH HOH S . 571 571 . 17.327 54.387 -21.703 1.00 31.52  1 .
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ATOM 7125 O    O    . HOH HOH HOH S . 572 572 . 22.563 51.721 -21.720 1.00 46.61  1 .
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ATOM 7126 O    O    . HOH HOH HOH S . 573 573 . 20.954 44.778 -12.210 1.00 28.88  1 .
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ATOM 7127 O    O    . HOH HOH HOH S . 574 574 . 20.868 45.240 -14.310 1.00 41.23  1 .
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ATOM 7128 O    O    . HOH HOH HOH S . 575 575 . 20.728 42.302 -16.731 1.00 29.05  1 .
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ATOM 7129 O    O    . HOH HOH HOH S . 576 576 . 16.451 33.418 -17.457 1.00 43.54  1 .
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ATOM 7130 O    O    . HOH HOH HOH S . 577 577 . 23.983 35.999 18.469  1.00 31.69  1 .
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ATOM 7131 O    O    . HOH HOH HOH S . 578 578 . 38.889 58.071 2.657   1.00 35.93  1 .
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ATOM 7132 O    O    . HOH HOH HOH S . 579 579 . 17.898 41.101 25.054  1.00 37.42  1 .
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ATOM 7133 O    O    . HOH HOH HOH S . 580 580 . 36.442 64.655 -19.519 1.00 37.90  1 .
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ATOM 7134 O    O    . HOH HOH HOH S . 581 581 . 25.242 33.924 15.267  1.00 38.21  1 .
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ATOM 7135 O    O    . HOH HOH HOH S . 582 582 . 45.006 33.860 44.572  1.00 31.89  1 .
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ATOM 7136 O    O    . HOH HOH HOH S . 583 583 . 37.780 20.634 0.077   1.00 38.53  1 .
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ATOM 7137 O    O    . HOH HOH HOH S . 584 584 . 26.743 30.736 40.712  1.00 35.24  1 .
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ATOM 7138 O    O    . HOH HOH HOH S . 585 585 . 21.308 34.686 11.390  1.00 27.05  1 .
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ATOM 7139 O    O    . HOH HOH HOH S . 586 586 . 51.525 50.902 13.139  1.00 36.44  1 .
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ATOM 7140 O    O    . HOH HOH HOH S . 587 587 . 38.774 47.173 42.896  1.00 32.69  1 .
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ATOM 7141 O    O    . HOH HOH HOH S . 588 588 . 20.113 66.326 22.057  1.00 39.61  1 .
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ATOM 7142 O    O    . HOH HOH HOH S . 589 589 . 10.577 35.080 -5.647  1.00 45.79  1 .
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ATOM 7143 O    O    . HOH HOH HOH S . 590 590 . 17.894 65.692 -5.991  1.00 39.90  1 .
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ATOM 7144 O    O    . HOH HOH HOH S . 591 591 . 51.457 46.821 -15.088 1.00 50.59  1 .
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ATOM 7145 O    O    . HOH HOH HOH S . 592 592 . 17.159 51.179 -22.624 1.00 45.53  1 .
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ATOM 7146 O    O    . HOH HOH HOH S . 593 593 . 39.268 14.801 12.144  1.00 32.21  1 .
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ATOM 7147 O    O    . HOH HOH HOH S . 594 594 . 18.567 32.544 4.497   1.00 37.01  1 .
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ATOM 7148 O    O    . HOH HOH HOH S . 595 595 . 28.878 59.666 33.728  1.00 39.10  1 .
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ATOM 7149 O    O    . HOH HOH HOH S . 596 596 . 21.610 38.028 9.419   1.00 40.13  1 .
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ATOM 7150 O    O    . HOH HOH HOH S . 597 597 . 24.260 67.156 6.776   1.00 53.55  1 .
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ATOM 7151 O    O    . HOH HOH HOH S . 598 598 . 20.340 59.593 27.228  1.00 44.07  1 .
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ATOM 7152 O    O    . HOH HOH HOH S . 599 599 . 19.167 33.519 22.225  1.00 28.53  1 .
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ATOM 7153 O    O    . HOH HOH HOH S . 600 600 . 19.170 41.437 17.759  1.00 36.53  1 .
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ATOM 7154 O    O    . HOH HOH HOH S . 601 601 . 18.871 51.755 25.270  1.00 35.77  1 .
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ATOM 7155 O    O    . HOH HOH HOH S . 602 602 . 6.582  33.723 9.190   1.00 34.82  1 .
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ATOM 7156 O    O    . HOH HOH HOH S . 603 603 . 16.756 42.581 -12.909 1.00 54.99  1 .
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ATOM 7157 O    O    . HOH HOH HOH S . 604 604 . 17.705 32.543 8.930   1.00 42.45  1 .
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ATOM 7158 O    O    . HOH HOH HOH S . 605 605 . 12.699 37.587 10.957  1.00 39.82  1 .
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ATOM 7159 O    O    . HOH HOH HOH S . 606 606 . 35.401 53.977 1.954   1.00 31.71  1 .
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ATOM 7160 O    O    . HOH HOH HOH S . 607 607 . 21.458 64.336 26.192  1.00 41.24  1 .
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ATOM 7161 O    O    . HOH HOH HOH S . 608 608 . 42.925 76.688 -8.983  1.00 32.96  1 .
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ATOM 7162 O    O    . HOH HOH HOH S . 609 609 . 45.814 16.065 20.371  1.00 46.84  1 .
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ATOM 7163 O    O    . HOH HOH HOH S . 610 610 . 37.883 52.754 1.839   1.00 40.90  1 .
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ATOM 7164 O    O    . HOH HOH HOH S . 611 611 . 26.278 50.740 43.423  1.00 34.78  1 .
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ATOM 7165 O    O    . HOH HOH HOH S . 612 612 . 38.962 55.138 3.462   1.00 47.00  1 .
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ATOM 7166 O    O    . HOH HOH HOH S . 613 613 . 36.417 58.360 2.554   1.00 32.99  1 .
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ATOM 7167 O    O    . HOH HOH HOH S . 614 614 . 34.751 56.051 3.097   1.00 28.92  1 .
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ATOM 7168 O    O    . HOH HOH HOH S . 615 615 . 40.441 55.793 5.289   1.00 33.78  1 .
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ATOM 7169 O    O    . HOH HOH HOH S . 616 616 . 14.370 45.155 25.666  1.00 49.76  1 .
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ATOM 7170 O    O    . HOH HOH HOH S . 617 617 . 40.670 27.492 -5.944  1.00 35.69  1 .
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ATOM 7171 O    O    . HOH HOH HOH S . 618 618 . 48.897 29.779 -6.370  1.00 80.39  1 .
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ATOM 7172 O    O    . HOH HOH HOH S . 619 619 . 40.400 21.320 -1.976  1.00 59.96  1 .
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ATOM 7173 O    O    . HOH HOH HOH S . 620 620 . 33.814 22.944 -0.119  1.00 44.43  1 .
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ATOM 7174 O    O    . HOH HOH HOH S . 621 621 . 15.347 31.938 -8.883  1.00 49.85  1 .
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ATOM 7175 O    O    . HOH HOH HOH S . 622 622 . 4.455  33.975 -2.041  1.00 34.54  1 .
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ATOM 7176 O    O    . HOH HOH HOH S . 623 623 . 2.569  35.015 -4.092  1.00 51.40  1 .
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ATOM 7177 O    O    . HOH HOH HOH S . 624 624 . 14.043 56.483 -19.894 1.00 47.35  1 .
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ATOM 7178 O    O    . HOH HOH HOH S . 625 625 . 43.839 16.600 12.813  1.00 57.74  1 .
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ATOM 7179 O    O    . HOH HOH HOH S . 626 626 . 20.032 28.450 5.392   1.00 54.67  1 .
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ATOM 7180 O    O    . HOH HOH HOH S . 627 627 . 16.495 33.100 19.956  1.00 47.30  1 .
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ATOM 7181 O    O    . HOH HOH HOH S . 628 628 . 39.766 58.369 9.529   1.00 40.79  1 .
.
ATOM 7182 O    O    . HOH HOH HOH S . 629 629 . 45.278 29.284 0.438   1.00 49.36  1 .
.
ATOM 7183 O    O    . HOH HOH HOH S . 630 630 . 42.808 12.047 25.910  1.00 34.91  1 .
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ATOM 7184 O    O    . HOH HOH HOH S . 631 631 . 43.136 19.490 27.388  1.00 53.56  1 .
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ATOM 7185 O    O    . HOH HOH HOH S . 632 632 . 42.405 19.126 30.832  1.00 56.91  1 .
.
ATOM 7186 O    O    . HOH HOH HOH S . 633 633 . 10.134 30.893 23.649  1.00 34.63  1 .
.
ATOM 7187 O    O    . HOH HOH HOH S . 634 634 . 10.683 28.907 32.256  1.00 36.70  1 .
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ATOM 7188 O    O    . HOH HOH HOH S . 635 635 . 25.612 60.815 32.592  1.00 53.78  1 .
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ATOM 7189 O    O    . HOH HOH HOH S . 636 636 . 27.845 60.752 30.653  1.00 45.34  1 .
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ATOM 7190 O    O    . HOH HOH HOH S . 637 637 . 47.532 63.481 30.865  1.00 45.36  1 .
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ATOM 7191 O    O    . HOH HOH HOH S . 638 638 . 32.916 65.382 30.190  1.00 47.40  1 .
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ATOM 7192 O    O    . HOH HOH HOH S . 639 639 . 32.149 65.837 27.215  1.00 43.62  1 .
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ATOM 7193 O    O    . HOH HOH HOH S . 640 640 . 69.982 31.996 34.070  1.00 40.15  1 .
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ATOM 7194 O    O    . HOH HOH HOH S . 641 641 . 49.394 52.769 42.533  1.00 50.95  1 .
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ATOM 7195 O    O    . HOH HOH HOH S . 642 642 . 56.870 51.224 42.409  1.00 49.47  1 .
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ATOM 7196 O    O    . HOH HOH HOH S . 643 643 . 29.846 23.689 39.132  1.00 46.89  1 .
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ATOM 7197 O    O    . HOH HOH HOH S . 644 644 . 26.378 71.450 16.920  1.00 56.90  1 .
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ATOM 7198 O    O    . HOH HOH HOH S . 645 645 . 25.198 67.349 27.144  1.00 45.56  1 .
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ATOM 7199 O    O    . HOH HOH HOH S . 646 646 . 8.399  32.043 -3.445  1.00 47.26  1 .
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ATOM 7200 O    O    . HOH HOH HOH S . 647 647 . 52.114 41.300 -10.660 1.00 48.74  1 .
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ATOM 7201 O    O    . HOH HOH HOH S . 648 648 . 39.693 58.697 -25.463 1.00 43.74  1 .
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ATOM 7202 O    O    . HOH HOH HOH S . 649 649 . 12.708 62.496 -13.596 1.00 54.52  1 .
.
ATOM 7203 O    O    . HOH HOH HOH S . 650 650 . 12.142 44.299 -11.006 1.00 46.88  1 .
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ATOM 7204 O    O    . HOH HOH HOH S . 651 651 . 18.447 45.889 -17.729 1.00 37.94  1 .
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ATOM 7205 O    O    . HOH HOH HOH S . 652 652 . 50.848 33.637 18.353  1.00 39.53  1 .
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ATOM 7206 O    O    . HOH HOH HOH S . 653 653 . 53.204 32.542 17.629  1.00 60.65  1 .
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ATOM 7207 O    O    . HOH HOH HOH S . 654 654 . 40.766 54.530 10.321  1.00 38.40  1 .
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ATOM 7208 O    O    . HOH HOH HOH S . 655 655 . 45.624 27.791 -3.596  1.00 42.88  1 .
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ATOM 7209 O    O    . HOH HOH HOH S . 656 656 . 35.855 40.726 47.237  1.00 42.10  1 .
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ATOM 7210 O    O    . HOH HOH HOH S . 657 657 . 7.111  56.536 -2.658  1.00 50.73  1 .
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ATOM 7211 O    O    . HOH HOH HOH S . 658 658 . 49.931 62.015 25.412  1.00 56.18  1 .
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ATOM 7212 O    O    . HOH HOH HOH S . 659 659 . 17.271 34.043 37.011  1.00 35.31  1 .
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ATOM 7213 O    O    . HOH HOH HOH S . 660 660 . 48.903 51.444 7.579   1.00 55.15  1 .
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ATOM 7214 O    O    . HOH HOH HOH S . 661 661 . 29.343 15.403 6.838   1.00 46.73  1 .
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ATOM 7215 O    O    . HOH HOH HOH S . 662 662 . 46.416 43.519 11.895  1.00 41.31  1 .
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ATOM 7216 O    O    . HOH HOH HOH S . 663 663 . 28.269 40.378 -19.307 1.00 33.27  1 .
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ATOM 7217 O    O    . HOH HOH HOH S . 664 664 . 48.131 63.733 9.720   1.00 52.14  1 .
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ATOM 7218 O    O    . HOH HOH HOH S . 665 665 . 38.693 56.728 8.473   1.00 53.20  1 .
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ATOM 7219 O    O    . HOH HOH HOH S . 666 666 . 29.534 62.872 -24.757 1.00 45.84  1 .
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ATOM 7220 O    O    . HOH HOH HOH S . 667 667 . 53.249 55.451 14.149  1.00 42.48  1 .
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ATOM 7221 O    O    . HOH HOH HOH S . 668 668 . 30.046 66.810 1.217   1.00 40.11  1 .
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ATOM 7222 O    O    . HOH HOH HOH S . 669 669 . 20.072 67.349 -21.274 1.00 41.89  1 .
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ATOM 7223 O    O    . HOH HOH HOH S . 670 670 . 30.433 60.518 11.357  1.00 45.59  1 .
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ATOM 7224 O    O    . HOH HOH HOH S . 671 671 . 50.060 42.674 -14.044 1.00 39.10  1 .
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ATOM 7304 O    O    . HOH HOH HOH S . 751 751 . 17.255 38.018 7.444   1.00 42.94  1 .
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ATOM 7305 O    O    . HOH HOH HOH S . 752 752 . 7.811  26.555 25.650  1.00 60.23  1 .
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ATOM 7306 O    O    . HOH HOH HOH S . 753 753 . 1.785  61.707 19.032  1.00 50.61  1 .
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ATOM 7307 O    O    . HOH HOH HOH S . 754 754 . 44.526 34.642 48.914  1.00 64.15  1 .
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0.0128  1 .
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0.0227  1 .
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0.0247 1 .
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0.0079 1 .
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0.0189 1 .
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27   CG   CG   . LYS LYS LYS A A 4   4   . 0.2728 0.2536 0.2013 -0.0478 -0.0163
0.0421  1 .
28   CD   CD   . LYS LYS LYS A A 4   4   . 0.3327 0.3818 0.2190 -0.0419 -0.0679
0.0366  1 .
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29   CE   CE   . LYS LYS LYS A A 4   4   . 0.3123 0.3226 0.2939 0.0116  -0.0607
0.0402  1 .
30   NZ   NZ   . LYS LYS LYS A A 4   4   . 0.4990 0.4754 0.3443 -0.0144 -0.1190
0.0422  1 .
31   C    C    . LYS LYS LYS A A 4   4   . 0.1824 0.1660 0.2114 -0.0279 -0.0018
0.0010  1 .
32   O    O    . LYS LYS LYS A A 4   4   . 0.1941 0.1686 0.2073 -0.0374 -0.0301 -
0.0117 1 .
33   N    N    . ILE ILE ILE A A 5   5   . 0.1440 0.1197 0.2041 -0.0204 -0.0253
0.0120  1 .
34   CA   CA   . ILE ILE ILE A A 5   5   . 0.1761 0.1240 0.2054 -0.0239 -0.0243
0.0069  1 .
35   CB   CB   . ILE ILE ILE A A 5   5   . 0.1726 0.1226 0.1570 -0.0150 -0.0029
0.0036  1 .
36   CG1  CG1  . ILE ILE ILE A A 5   5   . 0.1764 0.1327 0.1417 -0.0169 -0.0114 -
0.0175 1 .
37   CD   CD   . ILE ILE ILE A A 5   5   . 0.2319 0.1390 0.2442 0.0481  -0.0297
0.0318  1 .
38   CG2  CG2  . ILE ILE ILE A A 5   5   . 0.2045 0.0975 0.2355 -0.0420 -0.0346 -
0.0159 1 .
39   C    C    . ILE ILE ILE A A 5   5   . 0.2161 0.1399 0.1945 -0.0099 -0.0099 -
0.0023 1 .
40   O    O    . ILE ILE ILE A A 5   5   . 0.2605 0.1270 0.2384 -0.0157 0.0067
0.0208  1 .
41   N    N    . TRP TRP TRP A A 6   6   . 0.2056 0.1350 0.1767 -0.0051 -0.0197
0.0240  1 .
42   CA   CA   . TRP TRP TRP A A 6   6   . 0.1688 0.1473 0.1799 -0.0099 -0.0363
0.0048  1 .
43   CB   CB   . TRP TRP TRP A A 6   6   . 0.1426 0.1355 0.1551 0.0098  -0.0582
0.0243  1 .
44   CG   CG   . TRP TRP TRP A A 6   6   . 0.2078 0.1628 0.1777 0.0128  -0.0544
0.0415  1 .
45   CD1  CD1  . TRP TRP TRP A A 6   6   . 0.1837 0.1622 0.1567 -0.0034 -0.0156
0.0397  1 .
46   NE1  NE1  . TRP TRP TRP A A 6   6   . 0.2334 0.2135 0.1853 0.0112  -0.0640
0.0080  1 .
47   CE2  CE2  . TRP TRP TRP A A 6   6   . 0.2391 0.1972 0.2084 0.0016  -0.0312
0.0147  1 .
48   CD2  CD2  . TRP TRP TRP A A 6   6   . 0.2107 0.1992 0.1684 0.0056  -0.0138
0.0051  1 .
49   CE3  CE3  . TRP TRP TRP A A 6   6   . 0.2116 0.2209 0.1891 0.0083  -0.0762 -
0.0304 1 .
50   CZ3  CZ3  . TRP TRP TRP A A 6   6   . 0.1928 0.2643 0.1687 -0.0278 -0.0412 -
0.0220 1 .
51   CH2  CH2  . TRP TRP TRP A A 6   6   . 0.2418 0.2511 0.2360 -0.0243 -0.0606 -
0.0014 1 .
52   CZ2  CZ2  . TRP TRP TRP A A 6   6   . 0.2482 0.2622 0.2268 -0.0144 -0.0853 -
0.0197 1 .
53   C    C    . TRP TRP TRP A A 6   6   . 0.1581 0.1576 0.1735 0.0018  -0.0108
0.0026  1 .
54   O    O    . TRP TRP TRP A A 6   6   . 0.1767 0.1408 0.2214 0.0206  -0.0396 -
0.0108 1 .
55   N    N    . ALA ALA ALA A A 7   7   . 0.1537 0.1240 0.1209 0.0091  -0.0224
0.0110  1 .
56   CA   CA   . ALA ALA ALA A A 7   7   . 0.1623 0.1477 0.1450 -0.0127 -0.0159 -
0.0022 1 .
57   CB   CB   . ALA ALA ALA A A 7   7   . 0.1936 0.1341 0.1644 0.0273  -0.0470
0.0015  1 .
58   C    C    . ALA ALA ALA A A 7   7   . 0.1863 0.1306 0.1179 -0.0134 -0.0344
0.0191  1 .
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59   O    O    . ALA ALA ALA A A 7   7   . 0.1786 0.1058 0.1506 0.0107  -0.0364
0.0074  1 .
60   N    N    . ARG ARG ARG A A 8   8   . 0.1620 0.1230 0.1281 -0.0081 -0.0182
0.0005  1 .
61   CA   CA   . ARG ARG ARG A A 8   8   . 0.1739 0.1129 0.1319 -0.0010 -0.0210 -
0.0022 1 .
62   CB   CB   . ARG ARG ARG A A 8   8   . 0.1361 0.1033 0.1567 0.0081  -0.0454 -
0.0279 1 .
63   CG   CG   . ARG ARG ARG A A 8   8   . 0.1871 0.0714 0.1858 0.0549  -0.0490 -
0.0061 1 .
64   CD   CD   . ARG ARG ARG A A 8   8   . 0.1577 0.1521 0.1585 0.0387  -0.0372
0.0432  1 .
65   NE   NE   . ARG ARG ARG A A 8   8   . 0.1595 0.1162 0.1902 0.0094  -0.0206
0.0213  1 .
66   CZ   CZ   . ARG ARG ARG A A 8   8   . 0.1449 0.1761 0.1520 0.0083  -0.0255 -
0.0034 1 .
67   NH1  NH1  . ARG ARG ARG A A 8   8   . 0.1784 0.1359 0.1553 0.0202  -0.0303 -
0.0182 1 .
68   NH2  NH2  . ARG ARG ARG A A 8   8   . 0.1730 0.1729 0.2080 -0.0148 -0.0419
0.0515  1 .
69   C    C    . ARG ARG ARG A A 8   8   . 0.1773 0.1196 0.1464 -0.0050 -0.0099 -
0.0014 1 .
70   O    O    . ARG ARG ARG A A 8   8   . 0.2121 0.1263 0.1336 -0.0192 -0.0283
0.0129  1 .
71   N    N    . GLU GLU GLU A A 9   9   . 0.1529 0.1200 0.1294 -0.0110 -0.0217
0.0012  1 .
72   CA   CA   . GLU GLU GLU A A 9   9   . 0.1928 0.1328 0.1537 0.0075  -0.0118
0.0021  1 .
73   CB   CB   . GLU GLU GLU A A 9   9   . 0.1919 0.2305 0.1527 -0.0201 0.0052  -
0.0246 1 .
74   CG   CG   . GLU GLU GLU A A 9   9   . 0.2476 0.3604 0.1636 0.0070  0.0036  -
0.0122 1 .
75   CD   CD   . GLU GLU GLU A A 9   9   . 0.2107 0.2917 0.1980 0.0654  -0.0006 -
0.0216 1 .
76   OE1  OE1  . GLU GLU GLU A A 9   9   . 0.2377 0.1514 0.1931 0.0203  0.0081
0.0115  1 .
77   OE2  OE2  . GLU GLU GLU A A 9   9   . 0.2450 0.2748 0.2165 0.0383  -0.0088 -
0.0073 1 .
78   C    C    . GLU GLU GLU A A 9   9   . 0.1991 0.1291 0.1386 0.0008  -0.0482
0.0130  1 .
79   O    O    . GLU GLU GLU A A 9   9   . 0.3024 0.1486 0.1997 0.0041  -0.0793
0.0385  1 .
80   N    N    . ILE ILE ILE A A 10  10  . 0.2006 0.0857 0.1233 0.0062  -0.0244
0.0147  1 .
81   CA   CA   . ILE ILE ILE A A 10  10  . 0.1532 0.1155 0.1446 0.0018  -0.0040
0.0184  1 .
82   CB   CB   . ILE ILE ILE A A 10  10  . 0.1390 0.1348 0.1081 -0.0036 -0.0082 -
0.0172 1 .
83   CG1  CG1  . ILE ILE ILE A A 10  10  . 0.1393 0.1698 0.1371 0.0134  0.0130
0.0136  1 .
84   CD   CD   . ILE ILE ILE A A 10  10  . 0.2478 0.1555 0.1374 0.0076  0.0634  -
0.0097 1 .
85   CG2  CG2  . ILE ILE ILE A A 10  10  . 0.1213 0.1806 0.2092 -0.0081 0.0072
0.0092  1 .
86   C    C    . ILE ILE ILE A A 10  10  . 0.1717 0.1321 0.1345 0.0022  -0.0092
0.0021  1 .
87   O    O    . ILE ILE ILE A A 10  10  . 0.1753 0.1279 0.1752 -0.0038 -0.0158
0.0280  1 .
88   N    N    . LEU LEU LEU A A 11  11  . 0.1521 0.1001 0.1149 -0.0085 0.0079
0.0254  1 .
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89   CA   CA   . LEU LEU LEU A A 11  11  . 0.1426 0.1163 0.0658 -0.0049 0.0029
0.0077  1 .
90   CB   CB   . LEU LEU LEU A A 11  11  . 0.1793 0.0986 0.0871 -0.0172 0.0237
0.0162  1 .
91   CG   CG   . LEU LEU LEU A A 11  11  . 0.1616 0.1307 0.1176 0.0256  0.0337
0.0100  1 .
92   CD1  CD1  . LEU LEU LEU A A 11  11  . 0.2072 0.1535 0.1474 -0.0009 0.0312
0.0505  1 .
93   CD2  CD2  . LEU LEU LEU A A 11  11  . 0.2543 0.1731 0.1852 0.0632  -0.0032 -
0.0058 1 .
94   C    C    . LEU LEU LEU A A 11  11  . 0.1322 0.0930 0.0971 0.0050  0.0021  -
0.0042 1 .
95   O    O    . LEU LEU LEU A A 11  11  . 0.1148 0.1190 0.1042 0.0175  -0.0142 -
0.0114 1 .
96   N    N    . ASP ASP ASP A A 12  12  . 0.1481 0.0993 0.1149 -0.0136 0.0004  -
0.0106 1 .
97   CA   CA   . ASP ASP ASP A A 12  12  . 0.1346 0.1083 0.0941 0.0064  -0.0147 -
0.0221 1 .
98   CB   CB   . ASP ASP ASP A A 12  12  . 0.0965 0.1247 0.1178 -0.0008 -0.0189 -
0.0286 1 .
99   CG   CG   . ASP ASP ASP A A 12  12  . 0.1488 0.1874 0.1344 0.0130  0.0012  -
0.0051 1 .
100  OD1  OD1  . ASP ASP ASP A A 12  12  . 0.1643 0.1391 0.1495 0.0087  -0.0025 -
0.0237 1 .
101  OD2  OD2  . ASP ASP ASP A A 12  12  . 0.1975 0.1557 0.1949 0.0143  -0.0227
0.0157  1 .
102  C    C    . ASP ASP ASP A A 12  12  . 0.1516 0.1310 0.1102 0.0046  -0.0086 -
0.0123 1 .
103  O    O    . ASP ASP ASP A A 12  12  . 0.1237 0.0963 0.1187 0.0083  -0.0085 -
0.0183 1 .
104  N    N    . SER SER SER A A 13  13  . 0.1487 0.0897 0.0941 -0.0009 0.0028  -
0.0186 1 .
105  CA   CA   . SER SER SER A A 13  13  . 0.1276 0.1178 0.1038 0.0028  0.0087  -
0.0241 1 .
106  CB   CB   . SER SER SER A A 13  13  . 0.1352 0.1216 0.1107 0.0210  0.0012  -
0.0350 1 .
107  OG   OG   . SER SER SER A A 13  13  . 0.1486 0.1439 0.1434 0.0122  0.0101  -
0.0286 1 .
108  C    C    . SER SER SER A A 13  13  . 0.1288 0.1103 0.0907 0.0026  0.0089  -
0.0110 1 .
109  O    O    . SER SER SER A A 13  13  . 0.1572 0.1393 0.1242 -0.0071 0.0358  -
0.0099 1 .
110  N    N    . ARG ARG ARG A A 14  14  . 0.1360 0.1371 0.1307 -0.0008 0.0108  -
0.0398 1 .
111  CA   CA   . ARG ARG ARG A A 14  14  . 0.1776 0.1503 0.1759 0.0021  0.0198  -
0.0126 1 .
112  CB   CB   . ARG ARG ARG A A 14  14  . 0.1470 0.2588 0.2326 -0.0138 -0.0172 -
0.0445 1 .
113  CG   CG   . ARG ARG ARG A A 14  14  . 0.2504 0.2810 0.3148 0.0080  -0.0126 -
0.0268 1 .
114  CD   CD   . ARG ARG ARG A A 14  14  . 0.2444 0.2537 0.3060 0.0403  0.0165
0.0761  1 .
115  NE   NE   . ARG ARG ARG A A 14  14  . 0.2618 0.3363 0.3143 0.0744  -0.0332
0.0337  1 .
116  CZ   CZ   . ARG ARG ARG A A 14  14  . 0.1839 0.2393 0.2317 0.0474  0.0160  -
0.0079 1 .
117  NH1  NH1  . ARG ARG ARG A A 14  14  . 0.2045 0.2467 0.3249 0.0167  0.0328  -
0.0124 1 .
118  NH2  NH2  . ARG ARG ARG A A 14  14  . 0.1771 0.3682 0.3211 -0.0350 -0.0009
0.0082  1 .
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119  C    C    . ARG ARG ARG A A 14  14  . 0.1739 0.1901 0.1794 -0.0017 0.0144
0.0068  1 .
120  O    O    . ARG ARG ARG A A 14  14  . 0.1895 0.2231 0.2051 -0.0058 0.0488
0.0042  1 .
121  N    N    . GLY GLY GLY A A 15  15  . 0.1629 0.1261 0.1071 0.0175  -0.0008
0.0117  1 .
122  CA   CA   . GLY GLY GLY A A 15  15  . 0.1533 0.1005 0.1286 0.0342  0.0026  -
0.0047 1 .
123  C    C    . GLY GLY GLY A A 15  15  . 0.1743 0.1589 0.1424 0.0327  -0.0013 -
0.0015 1 .
124  O    O    . GLY GLY GLY A A 15  15  . 0.2177 0.1841 0.1442 0.0414  0.0183
0.0184  1 .
125  N    N    . ASN ASN ASN A A 16  16  . 0.1726 0.1465 0.1400 0.0178  0.0109
0.0291  1 .
126  CA   CA   . ASN ASN ASN A A 16  16  . 0.1486 0.1528 0.1203 0.0100  0.0070
0.0025  1 .
127  CB   CB   . ASN ASN ASN A A 16  16  . 0.1641 0.1631 0.1267 -0.0024 -0.0135
0.0048  1 .
128  CG   CG   . ASN ASN ASN A A 16  16  . 0.1815 0.2343 0.1782 0.0231  -0.0113
0.0069  1 .
129  OD1  OD1  . ASN ASN ASN A A 16  16  . 0.1923 0.3051 0.2248 0.0355  0.0172
0.0141  1 .
130  ND2  ND2  . ASN ASN ASN A A 16  16  . 0.2005 0.2433 0.2072 0.0114  -0.0225 -
0.0742 1 .
131  C    C    . ASN ASN ASN A A 16  16  . 0.1530 0.1291 0.1247 0.0036  0.0052  -
0.0074 1 .
132  O    O    . ASN ASN ASN A A 16  16  . 0.1528 0.1456 0.1198 0.0271  -0.0103 -
0.0134 1 .
133  N    N    . PRO PRO PRO A A 17  17  . 0.1560 0.1413 0.1126 0.0137  0.0176  -
0.0041 1 .
134  CA   CA   . PRO PRO PRO A A 17  17  . 0.1464 0.1069 0.0927 0.0090  0.0233  -
0.0155 1 .
135  CB   CB   . PRO PRO PRO A A 17  17  . 0.1703 0.1067 0.1270 0.0154  0.0272  -
0.0350 1 .
136  CG   CG   . PRO PRO PRO A A 17  17  . 0.1742 0.1524 0.1364 -0.0282 0.0260  -
0.0179 1 .
137  CD   CD   . PRO PRO PRO A A 17  17  . 0.1949 0.1242 0.1615 0.0222  0.0393  -
0.0294 1 .
138  C    C    . PRO PRO PRO A A 17  17  . 0.1365 0.0973 0.0942 0.0050  -0.0014 -
0.0279 1 .
139  O    O    . PRO PRO PRO A A 17  17  . 0.1409 0.1441 0.1359 0.0060  -0.0035 -
0.0260 1 .
140  N    N    . THR THR THR A A 18  18  . 0.1451 0.0977 0.1080 0.0107  0.0144  -
0.0341 1 .
141  CA   CA   . THR THR THR A A 18  18  . 0.1617 0.1042 0.1089 0.0013  0.0009  -
0.0128 1 .
142  CB   CB   . THR THR THR A A 18  18  . 0.1546 0.1336 0.1081 0.0275  -0.0005 -
0.0183 1 .
143  OG1  OG1  . THR THR THR A A 18  18  . 0.1670 0.1307 0.1363 -0.0077 0.0033
0.0127  1 .
144  CG2  CG2  . THR THR THR A A 18  18  . 0.1419 0.1382 0.1304 -0.0095 0.0218  -
0.0077 1 .
145  C    C    . THR THR THR A A 18  18  . 0.1542 0.0913 0.1350 0.0134  -0.0016 -
0.0102 1 .
146  O    O    . THR THR THR A A 18  18  . 0.2009 0.1118 0.1206 -0.0106 -0.0095
0.0259  1 .
147  N    N    . VAL VAL VAL A A 19  19  . 0.1364 0.1213 0.1226 0.0007  0.0083  -
0.0008 1 .
148  CA   CA   . VAL VAL VAL A A 19  19  . 0.1537 0.1071 0.1370 0.0075  -0.0071 -
0.0100 1 .
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149  CB   CB   . VAL VAL VAL A A 19  19  . 0.1465 0.1251 0.1759 0.0082  -0.0074
0.0054  1 .
150  CG1  CG1  . VAL VAL VAL A A 19  19  . 0.1611 0.0917 0.1946 -0.0326 0.0113
0.0093  1 .
151  CG2  CG2  . VAL VAL VAL A A 19  19  . 0.1536 0.0903 0.2023 0.0232  0.0257
0.0052  1 .
152  C    C    . VAL VAL VAL A A 19  19  . 0.1521 0.1605 0.1395 -0.0007 -0.0074
0.0057  1 .
153  O    O    . VAL VAL VAL A A 19  19  . 0.1702 0.1272 0.1256 0.0260  -0.0103
0.0102  1 .
154  N    N    . GLU GLU GLU A A 20  20  . 0.1235 0.1323 0.1166 -0.0043 -0.0189
0.0083  1 .
155  CA   CA   . GLU GLU GLU A A 20  20  . 0.1597 0.1387 0.1392 -0.0077 0.0007
0.0056  1 .
156  CB   CB   . GLU GLU GLU A A 20  20  . 0.1464 0.1321 0.1395 0.0109  -0.0284
0.0009  1 .
157  CG   CG   . GLU GLU GLU A A 20  20  . 0.1775 0.1478 0.2000 0.0452  -0.0245
0.0582  1 .
158  CD   CD   . GLU GLU GLU A A 20  20  . 0.2079 0.1627 0.2068 0.0345  -0.0112
0.0001  1 .
159  OE1  OE1  . GLU GLU GLU A A 20  20  . 0.2392 0.1369 0.2968 -0.0059 -0.0217
0.0017  1 .
160  OE2  OE2  . GLU GLU GLU A A 20  20  . 0.2114 0.1783 0.3039 0.0038  -0.0210
0.0120  1 .
161  C    C    . GLU GLU GLU A A 20  20  . 0.1469 0.1381 0.1151 -0.0022 -0.0006 -
0.0014 1 .
162  O    O    . GLU GLU GLU A A 20  20  . 0.1701 0.1157 0.1433 -0.0111 -0.0142 -
0.0124 1 .
163  N    N    . VAL VAL VAL A A 21  21  . 0.1174 0.1214 0.1171 -0.0153 0.0031
0.0160  1 .
164  CA   CA   . VAL VAL VAL A A 21  21  . 0.1452 0.1518 0.1237 -0.0036 -0.0083
0.0192  1 .
165  CB   CB   . VAL VAL VAL A A 21  21  . 0.1465 0.1220 0.1232 0.0027  -0.0232
0.0339  1 .
166  CG1  CG1  . VAL VAL VAL A A 21  21  . 0.1643 0.1816 0.1924 -0.0308 -0.0010
0.0186  1 .
167  CG2  CG2  . VAL VAL VAL A A 21  21  . 0.1505 0.1807 0.1681 0.0395  -0.0193
0.0329  1 .
168  C    C    . VAL VAL VAL A A 21  21  . 0.1547 0.1378 0.1194 -0.0015 -0.0068
0.0072  1 .
169  O    O    . VAL VAL VAL A A 21  21  . 0.1312 0.1290 0.1416 0.0182  -0.0199 -
0.0011 1 .
170  N    N    . ASP ASP ASP A A 22  22  . 0.1443 0.1046 0.1586 -0.0240 -0.0247 -
0.0008 1 .
171  CA   CA   . ASP ASP ASP A A 22  22  . 0.1666 0.1289 0.1432 -0.0137 0.0007  -
0.0006 1 .
172  CB   CB   . ASP ASP ASP A A 22  22  . 0.1934 0.1167 0.1766 -0.0191 -0.0151 -
0.0060 1 .
173  CG   CG   . ASP ASP ASP A A 22  22  . 0.2174 0.1962 0.1917 0.0016  -0.0215
0.0144  1 .
174  OD1  OD1  . ASP ASP ASP A A 22  22  . 0.2166 0.1998 0.2304 -0.0080 -0.0483
0.0113  1 .
175  OD2  OD2  . ASP ASP ASP A A 22  22  . 0.2696 0.1955 0.2055 -0.0219 -0.0350
0.0285  1 .
176  C    C    . ASP ASP ASP A A 22  22  . 0.1679 0.1297 0.1425 -0.0065 0.0002
0.0034  1 .
177  O    O    . ASP ASP ASP A A 22  22  . 0.1982 0.1535 0.1754 -0.0150 0.0155
0.0206  1 .
178  N    N    . LEU LEU LEU A A 23  23  . 0.1754 0.1400 0.1722 -0.0239 0.0000
0.0332  1 .
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179  CA   CA   . LEU LEU LEU A A 23  23  . 0.1511 0.1675 0.1774 -0.0196 -0.0085
0.0269  1 .
180  CB   CB   . LEU LEU LEU A A 23  23  . 0.1578 0.1567 0.1478 -0.0152 -0.0016
0.0420  1 .
181  CG   CG   . LEU LEU LEU A A 23  23  . 0.1521 0.2011 0.2066 -0.0133 -0.0081
0.0642  1 .
182  CD1  CD1  . LEU LEU LEU A A 23  23  . 0.1741 0.1775 0.1740 -0.0352 -0.0560
0.0226  1 .
183  CD2  CD2  . LEU LEU LEU A A 23  23  . 0.1869 0.1813 0.1782 -0.0146 0.0336
0.0117  1 .
184  C    C    . LEU LEU LEU A A 23  23  . 0.1486 0.1541 0.1925 -0.0180 -0.0032 -
0.0115 1 .
185  O    O    . LEU LEU LEU A A 23  23  . 0.1467 0.1552 0.1886 -0.0168 -0.0086 -
0.0089 1 .
186  N    N    . TYR TYR TYR A A 24  24  . 0.1522 0.1434 0.1771 -0.0416 -0.0203 -
0.0152 1 .
187  CA   CA   . TYR TYR TYR A A 24  24  . 0.1868 0.1852 0.2101 -0.0135 -0.0085 -
0.0157 1 .
188  CB   CB   . TYR TYR TYR A A 24  24  . 0.1887 0.2274 0.2338 -0.0239 -0.0274
0.0145  1 .
189  CG   CG   . TYR TYR TYR A A 24  24  . 0.2467 0.1988 0.2456 -0.0295 -0.0203
0.0103  1 .
190  CD1  CD1  . TYR TYR TYR A A 24  24  . 0.2669 0.1807 0.1880 -0.0569 -0.0091 -
0.0216 1 .
191  CE1  CE1  . TYR TYR TYR A A 24  24  . 0.2806 0.1123 0.2367 -0.0855 -0.0183
0.0148  1 .
192  CZ   CZ   . TYR TYR TYR A A 24  24  . 0.3049 0.3427 0.3136 -0.0235 -0.0434
0.0774  1 .
193  OH   OH   . TYR TYR TYR A A 24  24  . 0.3694 0.4606 0.3182 -0.1038 -0.1374
0.1237  1 .
194  CE2  CE2  . TYR TYR TYR A A 24  24  . 0.2756 0.3437 0.3318 -0.0088 -0.0381
0.1043  1 .
195  CD2  CD2  . TYR TYR TYR A A 24  24  . 0.2607 0.2993 0.2989 -0.0138 -0.0679
0.0360  1 .
196  C    C    . TYR TYR TYR A A 24  24  . 0.2010 0.2162 0.2452 -0.0187 -0.0224 -
0.0074 1 .
197  O    O    . TYR TYR TYR A A 24  24  . 0.1942 0.1864 0.2244 -0.0397 -0.0350
0.0134  1 .
198  N    N    . THR THR THR A A 25  25  . 0.2086 0.2294 0.2306 -0.0293 -0.0040 -
0.0071 1 .
199  CA   CA   . THR THR THR A A 25  25  . 0.1926 0.2434 0.2506 -0.0242 -0.0102 -
0.0019 1 .
200  CB   CB   . THR THR THR A A 25  25  . 0.2048 0.2494 0.2677 -0.0180 -0.0142 -
0.0012 1 .
201  OG1  OG1  . THR THR THR A A 25  25  . 0.1659 0.2578 0.3040 0.0052  -0.0491
0.0177  1 .
202  CG2  CG2  . THR THR THR A A 25  25  . 0.1715 0.2138 0.2533 -0.0278 -0.0103 -
0.0200 1 .
203  C    C    . THR THR THR A A 25  25  . 0.2218 0.2553 0.2578 -0.0247 -0.0069 -
0.0036 1 .
204  O    O    . THR THR THR A A 25  25  . 0.2093 0.2727 0.2844 -0.0304 -0.0139 -
0.0017 1 .
205  N    N    . ALA ALA ALA A A 26  26  . 0.2299 0.2861 0.2972 -0.0184 0.0064
0.0009  1 .
206  CA   CA   . ALA ALA ALA A A 26  26  . 0.2586 0.2950 0.3320 -0.0093 -0.0026
0.0045  1 .
207  CB   CB   . ALA ALA ALA A A 26  26  . 0.2504 0.3123 0.3450 -0.0263 0.0197
0.0166  1 .
208  C    C    . ALA ALA ALA A A 26  26  . 0.2658 0.2927 0.3437 -0.0072 -0.0026
0.0326  1 .
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209  O    O    . ALA ALA ALA A A 26  26  . 0.2553 0.3345 0.3846 -0.0098 -0.0285
0.0323  1 .
210  N    N    . LYS LYS LYS A A 27  27  . 0.2497 0.2862 0.3144 0.0068  -0.0056
0.0087  1 .
211  CA   CA   . LYS LYS LYS A A 27  27  . 0.2640 0.2850 0.3135 0.0094  0.0002
0.0097  1 .
212  CB   CB   . LYS LYS LYS A A 27  27  . 0.2805 0.3153 0.3149 0.0146  0.0051
0.0111  1 .
213  CG   CG   . LYS LYS LYS A A 27  27  . 0.3784 0.3561 0.3283 0.0202  0.0344
0.0291  1 .
214  CD   CD   . LYS LYS LYS A A 27  27  . 0.3326 0.4813 0.3561 0.0003  0.0504
0.0085  1 .
215  CE   CE   . LYS LYS LYS A A 27  27  . 0.3718 0.5384 0.3293 -0.0376 0.0239  -
0.0260 1 .
216  NZ   NZ   . LYS LYS LYS A A 27  27  . 0.3731 0.6983 0.4074 -0.0502 0.0492  -
0.0185 1 .
217  C    C    . LYS LYS LYS A A 27  27  . 0.2487 0.2780 0.3213 0.0045  -0.0071 -
0.0012 1 .
218  O    O    . LYS LYS LYS A A 27  27  . 0.3026 0.2916 0.3879 -0.0065 -0.0025
0.0040  1 .
219  N    N    . GLY GLY GLY A A 28  28  . 0.2279 0.2687 0.3176 0.0088  -0.0036
0.0011  1 .
220  CA   CA   . GLY GLY GLY A A 28  28  . 0.2325 0.2643 0.2943 0.0175  -0.0081
0.0191  1 .
221  C    C    . GLY GLY GLY A A 28  28  . 0.2128 0.2438 0.2937 -0.0005 -0.0251
0.0187  1 .
222  O    O    . GLY GLY GLY A A 28  28  . 0.2146 0.1946 0.2568 -0.0263 -0.0281
0.0075  1 .
223  N    N    . LEU LEU LEU A A 29  29  . 0.2069 0.2255 0.2584 0.0027  -0.0179
0.0239  1 .
224  CA   CA   . LEU LEU LEU A A 29  29  . 0.2095 0.2229 0.2373 -0.0012 -0.0072
0.0032  1 .
225  CB   CB   . LEU LEU LEU A A 29  29  . 0.2448 0.2492 0.2420 0.0040  -0.0031
0.0199  1 .
226  CG   CG   . LEU LEU LEU A A 29  29  . 0.2961 0.2864 0.2632 0.0454  0.0265
0.0591  1 .
227  CD1  CD1  . LEU LEU LEU A A 29  29  . 0.2390 0.3262 0.3452 0.0753  0.0582
0.0438  1 .
228  CD2  CD2  . LEU LEU LEU A A 29  29  . 0.3173 0.4089 0.2617 0.0703  0.0134
0.0668  1 .
229  C    C    . LEU LEU LEU A A 29  29  . 0.1999 0.2196 0.2368 0.0098  -0.0094
0.0000  1 .
230  O    O    . LEU LEU LEU A A 29  29  . 0.2183 0.2141 0.2576 0.0156  -0.0478 -
0.0180 1 .
231  N    N    . PHE PHE PHE A A 30  30  . 0.1582 0.1853 0.1948 0.0099  -0.0184 -
0.0105 1 .
232  CA   CA   . PHE PHE PHE A A 30  30  . 0.1515 0.1923 0.1863 -0.0035 -0.0032
0.0105  1 .
233  CB   CB   . PHE PHE PHE A A 30  30  . 0.1360 0.2353 0.1870 -0.0051 0.0033
0.0120  1 .
234  CG   CG   . PHE PHE PHE A A 30  30  . 0.1626 0.2001 0.1998 0.0025  0.0245
0.0132  1 .
235  CD1  CD1  . PHE PHE PHE A A 30  30  . 0.1779 0.1918 0.1974 0.0281  0.0176  -
0.0054 1 .
236  CE1  CE1  . PHE PHE PHE A A 30  30  . 0.1525 0.2107 0.2468 -0.0082 0.0136  -
0.0008 1 .
237  CZ   CZ   . PHE PHE PHE A A 30  30  . 0.1911 0.1736 0.2172 -0.0089 0.0093  -
0.0474 1 .
238  CE2  CE2  . PHE PHE PHE A A 30  30  . 0.1581 0.2013 0.2330 0.0025  0.0213  -
0.0478 1 .
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239  CD2  CD2  . PHE PHE PHE A A 30  30  . 0.1503 0.2051 0.2161 -0.0112 0.0187  -
0.0201 1 .
240  C    C    . PHE PHE PHE A A 30  30  . 0.1608 0.1795 0.1888 -0.0071 -0.0007
0.0026  1 .
241  O    O    . PHE PHE PHE A A 30  30  . 0.2043 0.1726 0.2635 -0.0128 0.0320
0.0076  1 .
242  N    N    . ARG ARG ARG A A 31  31  . 0.1466 0.1202 0.1213 -0.0202 -0.0132
0.0111  1 .
243  CA   CA   . ARG ARG ARG A A 31  31  . 0.1233 0.1353 0.1096 -0.0100 -0.0239
0.0236  1 .
244  CB   CB   . ARG ARG ARG A A 31  31  . 0.1445 0.1067 0.1396 -0.0019 -0.0147
0.0150  1 .
245  CG   CG   . ARG ARG ARG A A 31  31  . 0.1773 0.1442 0.1308 -0.0019 0.0072
0.0249  1 .
246  CD   CD   . ARG ARG ARG A A 31  31  . 0.1955 0.1639 0.1401 0.0070  -0.0399
0.0144  1 .
247  NE   NE   . ARG ARG ARG A A 31  31  . 0.2197 0.1856 0.1569 0.0000  -0.0100
0.0018  1 .
248  CZ   CZ   . ARG ARG ARG A A 31  31  . 0.2318 0.2308 0.2605 0.0108  -0.0194
0.0100  1 .
249  NH1  NH1  . ARG ARG ARG A A 31  31  . 0.2603 0.2343 0.2713 0.1063  0.0765
0.0498  1 .
250  NH2  NH2  . ARG ARG ARG A A 31  31  . 0.2258 0.2750 0.1968 0.0112  -0.0336
0.0396  1 .
251  C    C    . ARG ARG ARG A A 31  31  . 0.1445 0.1256 0.1107 -0.0060 -0.0139 -
0.0063 1 .
252  O    O    . ARG ARG ARG A A 31  31  . 0.1645 0.1401 0.1683 0.0239  -0.0056 -
0.0329 1 .
253  N    N    . ALA ALA ALA A A 32  32  . 0.1394 0.1192 0.1186 0.0049  -0.0267
0.0242  1 .
254  CA   CA   . ALA ALA ALA A A 32  32  . 0.1332 0.1343 0.0966 -0.0105 -0.0241
0.0249  1 .
255  CB   CB   . ALA ALA ALA A A 32  32  . 0.1490 0.1743 0.1019 0.0000  -0.0462
0.0386  1 .
256  C    C    . ALA ALA ALA A A 32  32  . 0.1454 0.1524 0.1419 0.0016  -0.0207
0.0007  1 .
257  O    O    . ALA ALA ALA A A 32  32  . 0.1645 0.1577 0.1770 0.0088  -0.0102 -
0.0189 1 .
258  N    N    . ALA ALA ALA A A 33  33  . 0.1271 0.1393 0.1316 0.0028  -0.0099 -
0.0082 1 .
259  CA   CA   . ALA ALA ALA A A 33  33  . 0.1121 0.1371 0.1161 -0.0114 -0.0037
0.0047  1 .
260  CB   CB   . ALA ALA ALA A A 33  33  . 0.1632 0.1303 0.1403 -0.0027 -0.0283
0.0239  1 .
261  C    C    . ALA ALA ALA A A 33  33  . 0.1375 0.1632 0.1342 0.0086  -0.0114 -
0.0005 1 .
262  O    O    . ALA ALA ALA A A 33  33  . 0.1634 0.1634 0.1402 0.0090  -0.0181 -
0.0174 1 .
263  N    N    . VAL VAL VAL A A 34  34  . 0.1107 0.1354 0.1458 0.0140  -0.0271 -
0.0058 1 .
264  CA   CA   . VAL VAL VAL A A 34  34  . 0.1205 0.0947 0.1103 -0.0033 -0.0165 -
0.0066 1 .
265  CB   CB   . VAL VAL VAL A A 34  34  . 0.1561 0.0862 0.1637 0.0094  -0.0353
0.0154  1 .
266  CG1  CG1  . VAL VAL VAL A A 34  34  . 0.1331 0.2001 0.1737 -0.0158 -0.0390 -
0.0114 1 .
267  CG2  CG2  . VAL VAL VAL A A 34  34  . 0.1764 0.1106 0.1672 -0.0123 -0.0051
0.0097  1 .
268  C    C    . VAL VAL VAL A A 34  34  . 0.1482 0.1312 0.1200 -0.0087 -0.0096 -
0.0037 1 .
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269  O    O    . VAL VAL VAL A A 34  34  . 0.1669 0.1156 0.1278 -0.0283 0.0221  -
0.0197 1 .
270  N    N    . PRO PRO PRO A A 35  35  . 0.1358 0.1179 0.1121 -0.0135 -0.0061 -
0.0043 1 .
271  CA   CA   . PRO PRO PRO A A 35  35  . 0.1543 0.1448 0.1646 -0.0108 -0.0022 -
0.0128 1 .
272  CB   CB   . PRO PRO PRO A A 35  35  . 0.1583 0.1222 0.1065 -0.0176 0.0003  -
0.0091 1 .
273  CG   CG   . PRO PRO PRO A A 35  35  . 0.1430 0.1289 0.1295 -0.0398 -0.0063 -
0.0089 1 .
274  CD   CD   . PRO PRO PRO A A 35  35  . 0.1516 0.1727 0.1157 -0.0182 -0.0064
0.0012  1 .
275  C    C    . PRO PRO PRO A A 35  35  . 0.1532 0.1515 0.1641 -0.0057 -0.0136 -
0.0027 1 .
276  O    O    . PRO PRO PRO A A 35  35  . 0.1662 0.1683 0.2157 -0.0114 -0.0224 -
0.0033 1 .
277  N    N    . SER SER SER A A 36  36  . 0.1410 0.1611 0.1430 -0.0109 0.0052  -
0.0191 1 .
278  CA   CA   . SER SER SER A A 36  36  . 0.1374 0.1682 0.1672 -0.0013 -0.0015 -
0.0323 1 .
279  CB   CB   . SER SER SER A A 36  36  . 0.1361 0.2289 0.1671 0.0178  0.0186  -
0.0239 1 .
280  OG   OG   . SER SER SER A A 36  36  . 0.1869 0.2983 0.2734 0.0110  0.0137  -
0.0703 1 .
281  C    C    . SER SER SER A A 36  36  . 0.1509 0.1688 0.1520 0.0025  -0.0013 -
0.0261 1 .
282  O    O    . SER SER SER A A 36  36  . 0.1423 0.1501 0.1528 -0.0049 -0.0280 -
0.0084 1 .
283  N    N    . GLY GLY GLY A A 37  37  . 0.1590 0.1679 0.1561 -0.0018 0.0064  -
0.0218 1 .
284  CA   CA   . GLY GLY GLY A A 37  37  . 0.1454 0.1829 0.1756 -0.0227 0.0015  -
0.0332 1 .
285  C    C    . GLY GLY GLY A A 37  37  . 0.1675 0.1783 0.1475 -0.0115 0.0171  -
0.0187 1 .
286  O    O    . GLY GLY GLY A A 37  37  . 0.1723 0.2029 0.1967 -0.0109 0.0187  -
0.0397 1 .
287  N    N    . ALA ALA ALA A A 38  38  . 0.1464 0.1919 0.2064 -0.0196 0.0349  -
0.0036 1 .
288  CA   CA   . ALA ALA ALA A A 38  38  . 0.1681 0.2270 0.1997 -0.0061 0.0334  -
0.0019 1 .
289  CB   CB   . ALA ALA ALA A A 38  38  . 0.1789 0.2447 0.2623 -0.0224 0.0214
0.0100  1 .
290  C    C    . ALA ALA ALA A A 38  38  . 0.1884 0.2406 0.2202 -0.0004 0.0175  -
0.0241 1 .
291  O    O    . ALA ALA ALA A A 38  38  . 0.2129 0.3218 0.2335 0.0329  0.0015  -
0.0419 1 .
292  N    N    . SER SER SER A A 39  39  . 0.1596 0.2502 0.2119 -0.0114 0.0065  -
0.0280 1 .
293  CA   CA   . SER SER SER A A 39  39  . 0.2016 0.2390 0.1954 -0.0070 0.0025  -
0.0277 1 .
294  CB   CB   . SER SER SER A A 39  39  . 0.1962 0.2522 0.2309 -0.0037 -0.0194 -
0.0509 1 .
295  OG   OG   . SER SER SER A A 39  39  . 0.1901 0.2618 0.2219 -0.0160 0.0364  -
0.0662 1 .
296  C    C    . SER SER SER A A 39  39  . 0.1912 0.2375 0.2195 -0.0105 -0.0087 -
0.0306 1 .
297  O    O    . SER SER SER A A 39  39  . 0.1927 0.2432 0.2207 -0.0108 0.0059  -
0.0591 1 .
298  N    N    . THR THR THR A A 40  40  . 0.1822 0.2274 0.2157 0.0159  0.0004  -
0.0189 1 .
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299  CA   CA   . THR THR THR A A 40  40  . 0.2017 0.2316 0.2180 0.0107  0.0092  -
0.0128 1 .
300  CB   CB   . THR THR THR A A 40  40  . 0.1909 0.2412 0.1969 0.0196  0.0100  -
0.0259 1 .
301  OG1  OG1  . THR THR THR A A 40  40  . 0.2195 0.2787 0.2582 -0.0195 0.0263  -
0.0243 1 .
302  CG2  CG2  . THR THR THR A A 40  40  . 0.2014 0.2460 0.2207 0.0330  -0.0064 -
0.0047 1 .
303  C    C    . THR THR THR A A 40  40  . 0.1926 0.2589 0.2208 0.0090  0.0034  -
0.0150 1 .
304  O    O    . THR THR THR A A 40  40  . 0.2023 0.3047 0.2757 0.0214  0.0098  -
0.0125 1 .
305  N    N    . GLY GLY GLY A A 41  41  . 0.2039 0.2610 0.1911 0.0190  -0.0224 -
0.0104 1 .
306  CA   CA   . GLY GLY GLY A A 41  41  . 0.1879 0.2363 0.1965 0.0445  -0.0097 -
0.0064 1 .
307  C    C    . GLY GLY GLY A A 41  41  . 0.1908 0.2263 0.2272 0.0215  -0.0315 -
0.0028 1 .
308  O    O    . GLY GLY GLY A A 41  41  . 0.1865 0.2569 0.2172 0.0426  -0.0218 -
0.0241 1 .
309  N    N    . ILE ILE ILE A A 42  42  . 0.1843 0.2505 0.2217 0.0329  -0.0285 -
0.0241 1 .
310  CA   CA   . ILE ILE ILE A A 42  42  . 0.1737 0.2472 0.2539 0.0326  -0.0237 -
0.0067 1 .
311  CB   CB   . ILE ILE ILE A A 42  42  . 0.1814 0.2656 0.2671 0.0328  -0.0310
0.0031  1 .
312  CG1  CG1  . ILE ILE ILE A A 42  42  . 0.1268 0.2525 0.2522 0.0318  -0.0374
0.0005  1 .
313  CD   CD   . ILE ILE ILE A A 42  42  . 0.1223 0.4216 0.3532 0.0321  -0.0490
0.0432  1 .
314  CG2  CG2  . ILE ILE ILE A A 42  42  . 0.2278 0.2905 0.3132 0.0104  0.0009  -
0.0155 1 .
315  C    C    . ILE ILE ILE A A 42  42  . 0.1907 0.2681 0.2482 0.0333  -0.0317 -
0.0159 1 .
316  O    O    . ILE ILE ILE A A 42  42  . 0.2022 0.2902 0.2872 0.0386  -0.0025 -
0.0614 1 .
317  N    N    . TYR TYR TYR A A 43  43  . 0.1947 0.2775 0.2242 0.0409  -0.0456 -
0.0251 1 .
318  CA   CA   . TYR TYR TYR A A 43  43  . 0.2084 0.2791 0.2349 0.0359  -0.0509 -
0.0070 1 .
319  CB   CB   . TYR TYR TYR A A 43  43  . 0.1864 0.2980 0.2301 0.0515  -0.0436
0.0112  1 .
320  CG   CG   . TYR TYR TYR A A 43  43  . 0.2145 0.3072 0.2450 0.0345  -0.0611 -
0.0005 1 .
321  CD1  CD1  . TYR TYR TYR A A 43  43  . 0.2044 0.3158 0.2803 0.0050  -0.0748
0.0121  1 .
322  CE1  CE1  . TYR TYR TYR A A 43  43  . 0.2681 0.3630 0.2995 0.0811  -0.0903 -
0.0218 1 .
323  CZ   CZ   . TYR TYR TYR A A 43  43  . 0.1918 0.3512 0.3251 0.1077  -0.1358 -
0.0112 1 .
324  OH   OH   . TYR TYR TYR A A 43  43  . 0.2496 0.4536 0.4041 0.1231  -0.1653 -
0.0344 1 .
325  CE2  CE2  . TYR TYR TYR A A 43  43  . 0.2752 0.3331 0.4114 0.0768  -0.0848
0.0107  1 .
326  CD2  CD2  . TYR TYR TYR A A 43  43  . 0.2663 0.2870 0.3325 0.0320  -0.1126
0.0065  1 .
327  C    C    . TYR TYR TYR A A 43  43  . 0.2109 0.2490 0.2375 0.0246  -0.0372 -
0.0023 1 .
328  O    O    . TYR TYR TYR A A 43  43  . 0.2074 0.2427 0.2052 0.0221  -0.0495
0.0099  1 .
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329  N    N    . GLU GLU GLU A A 44  44  . 0.1991 0.2302 0.1891 0.0242  -0.0369 -
0.0097 1 .
330  CA   CA   . GLU GLU GLU A A 44  44  . 0.1957 0.1980 0.2243 0.0075  -0.0370 -
0.0050 1 .
331  CB   CB   . GLU GLU GLU A A 44  44  . 0.2094 0.1713 0.1592 -0.0051 -0.0246 -
0.0105 1 .
332  CG   CG   . GLU GLU GLU A A 44  44  . 0.1829 0.1581 0.1810 0.0150  -0.0175 -
0.0034 1 .
333  CD   CD   . GLU GLU GLU A A 44  44  . 0.1955 0.1816 0.1972 0.0223  -0.0023 -
0.0264 1 .
334  OE1  OE1  . GLU GLU GLU A A 44  44  . 0.2217 0.3183 0.2663 0.0311  -0.0350
0.0022  1 .
335  OE2  OE2  . GLU GLU GLU A A 44  44  . 0.1634 0.2183 0.2256 -0.0082 -0.0324 -
0.0108 1 .
336  C    C    . GLU GLU GLU A A 44  44  . 0.2019 0.1956 0.1896 0.0230  -0.0204 -
0.0147 1 .
337  O    O    . GLU GLU GLU A A 44  44  . 0.2078 0.2257 0.2065 0.0504  -0.0140 -
0.0041 1 .
338  N    N    . ALA ALA ALA A A 45  45  . 0.2051 0.1923 0.1967 0.0107  -0.0348 -
0.0150 1 .
339  CA   CA   . ALA ALA ALA A A 45  45  . 0.2014 0.1910 0.1968 0.0155  -0.0263 -
0.0140 1 .
340  CB   CB   . ALA ALA ALA A A 45  45  . 0.1785 0.2129 0.1759 0.0019  -0.0260 -
0.0009 1 .
341  C    C    . ALA ALA ALA A A 45  45  . 0.2067 0.1858 0.1904 0.0078  -0.0272
0.0027  1 .
342  O    O    . ALA ALA ALA A A 45  45  . 0.2001 0.2076 0.2081 0.0182  -0.0318 -
0.0003 1 .
343  N    N    . LEU LEU LEU A A 46  46  . 0.1964 0.1921 0.1813 0.0291  -0.0228 -
0.0042 1 .
344  CA   CA   . LEU LEU LEU A A 46  46  . 0.2167 0.1935 0.1936 0.0317  -0.0235
0.0036  1 .
345  CB   CB   . LEU LEU LEU A A 46  46  . 0.2745 0.1959 0.1996 0.0383  -0.0027 -
0.0109 1 .
346  CG   CG   . LEU LEU LEU A A 46  46  . 0.2947 0.2000 0.2471 0.0426  0.0167
0.0043  1 .
347  CD1  CD1  . LEU LEU LEU A A 46  46  . 0.2845 0.3688 0.2191 0.0201  0.0103  -
0.0384 1 .
348  CD2  CD2  . LEU LEU LEU A A 46  46  . 0.4127 0.3577 0.2195 -0.0362 -0.0199 -
0.0138 1 .
349  C    C    . LEU LEU LEU A A 46  46  . 0.1998 0.1898 0.1970 0.0192  -0.0132
0.0060  1 .
350  O    O    . LEU LEU LEU A A 46  46  . 0.1828 0.2088 0.2399 0.0416  -0.0105
0.0049  1 .
351  N    N    . GLU GLU GLU A A 47  47  . 0.1632 0.1633 0.1696 0.0355  -0.0195
0.0156  1 .
352  CA   CA   . GLU GLU GLU A A 47  47  . 0.1922 0.1792 0.1567 0.0166  -0.0181 -
0.0028 1 .
353  CB   CB   . GLU GLU GLU A A 47  47  . 0.1890 0.1846 0.1599 0.0342  -0.0177
0.0026  1 .
354  CG   CG   . GLU GLU GLU A A 47  47  . 0.2276 0.1915 0.2214 0.0355  -0.0312
0.0063  1 .
355  CD   CD   . GLU GLU GLU A A 47  47  . 0.2177 0.2293 0.2498 -0.0012 -0.0280 -
0.0059 1 .
356  OE1  OE1  . GLU GLU GLU A A 47  47  . 0.2384 0.2914 0.2957 0.0136  -0.0456 -
0.0312 1 .
357  OE2  OE2  . GLU GLU GLU A A 47  47  . 0.2519 0.2795 0.2765 0.0444  -0.0027 -
0.0274 1 .
358  C    C    . GLU GLU GLU A A 47  47  . 0.1571 0.2004 0.1543 0.0161  0.0040  -
0.0186 1 .
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359  O    O    . GLU GLU GLU A A 47  47  . 0.1913 0.2628 0.1978 -0.0096 0.0030  -
0.0387 1 .
360  N    N    . LEU LEU LEU A A 48  48  . 0.1839 0.1802 0.1401 0.0217  0.0100  -
0.0193 1 .
361  CA   CA   . LEU LEU LEU A A 48  48  . 0.2116 0.1779 0.1450 0.0210  0.0003  -
0.0157 1 .
362  CB   CB   . LEU LEU LEU A A 48  48  . 0.2136 0.1841 0.1692 0.0077  0.0105  -
0.0081 1 .
363  CG   CG   . LEU LEU LEU A A 48  48  . 0.2300 0.1385 0.1986 0.0348  -0.0089 -
0.0021 1 .
364  CD1  CD1  . LEU LEU LEU A A 48  48  . 0.2688 0.2403 0.2806 0.0483  0.0038  -
0.0095 1 .
365  CD2  CD2  . LEU LEU LEU A A 48  48  . 0.2303 0.2000 0.2308 0.0048  -0.0042 -
0.0076 1 .
366  C    C    . LEU LEU LEU A A 48  48  . 0.1901 0.1577 0.1486 0.0103  0.0046  -
0.0061 1 .
367  O    O    . LEU LEU LEU A A 48  48  . 0.1900 0.1533 0.1570 0.0294  -0.0043 -
0.0034 1 .
368  N    N    . ARG ARG ARG A A 49  49  . 0.1950 0.1862 0.1618 0.0306  -0.0017 -
0.0250 1 .
369  CA   CA   . ARG ARG ARG A A 49  49  . 0.2523 0.1799 0.1642 0.0227  0.0115  -
0.0226 1 .
370  CB   CB   . ARG ARG ARG A A 49  49  . 0.2545 0.2190 0.1901 0.0076  0.0308  -
0.0484 1 .
371  CG   CG   . ARG ARG ARG A A 49  49  . 0.3594 0.2184 0.2474 0.0233  0.0147  -
0.0442 1 .
372  CD   CD   . ARG ARG ARG A A 49  49  . 0.2610 0.2739 0.2266 0.1539  -0.0185 -
0.0446 1 .
373  NE   NE   . ARG ARG ARG A A 49  49  . 0.2786 0.2350 0.2113 0.0684  -0.0402 -
0.0333 1 .
374  CZ   CZ   . ARG ARG ARG A A 49  49  . 0.2627 0.2206 0.1761 0.0740  -0.0649 -
0.0465 1 .
375  NH1  NH1  . ARG ARG ARG A A 49  49  . 0.1700 0.1879 0.1643 0.0271  -0.0420
0.0003  1 .
376  NH2  NH2  . ARG ARG ARG A A 49  49  . 0.2895 0.2413 0.2479 0.0290  -0.0392 -
0.0668 1 .
377  C    C    . ARG ARG ARG A A 49  49  . 0.2630 0.2089 0.1982 0.0376  0.0118  -
0.0217 1 .
378  O    O    . ARG ARG ARG A A 49  49  . 0.2781 0.2414 0.1846 0.0697  0.0007  -
0.0122 1 .
379  N    N    . ASP ASP ASP A A 50  50  . 0.2318 0.1917 0.1659 0.0365  -0.0068 -
0.0457 1 .
380  CA   CA   . ASP ASP ASP A A 50  50  . 0.2274 0.1934 0.2058 0.0400  0.0065  -
0.0449 1 .
381  CB   CB   . ASP ASP ASP A A 50  50  . 0.2234 0.1656 0.1850 0.0426  0.0151  -
0.0500 1 .
382  CG   CG   . ASP ASP ASP A A 50  50  . 0.2371 0.1942 0.2112 0.0063  -0.0095 -
0.0139 1 .
383  OD1  OD1  . ASP ASP ASP A A 50  50  . 0.3070 0.1622 0.2135 0.0421  0.0003
0.0389  1 .
384  OD2  OD2  . ASP ASP ASP A A 50  50  . 0.2184 0.2099 0.2263 0.0005  -0.0229 -
0.0257 1 .
385  C    C    . ASP ASP ASP A A 50  50  . 0.2437 0.2049 0.2287 0.0492  0.0225  -
0.0358 1 .
386  O    O    . ASP ASP ASP A A 50  50  . 0.3035 0.2138 0.2575 0.0631  0.0204
0.0060  1 .
387  N    N    . GLY GLY GLY A A 51  51  . 0.2315 0.2195 0.2550 0.0582  0.0578  -
0.0098 1 .
388  CA   CA   . GLY GLY GLY A A 51  51  . 0.2750 0.2798 0.2977 0.0653  0.0472  -
0.0024 1 .
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389  C    C    . GLY GLY GLY A A 51  51  . 0.3045 0.2988 0.3187 0.0600  0.0518
0.0114  1 .
390  O    O    . GLY GLY GLY A A 51  51  . 0.3394 0.3390 0.3596 0.0985  0.0701
0.0172  1 .
391  N    N    . ASP ASP ASP A A 52  52  . 0.3267 0.2758 0.3222 0.0515  0.0447
0.0081  1 .
392  CA   CA   . ASP ASP ASP A A 52  52  . 0.3596 0.2883 0.3380 0.0565  0.0471
0.0051  1 .
393  CB   CB   . ASP ASP ASP A A 52  52  . 0.3544 0.2990 0.3230 0.0884  0.0406
0.0017  1 .
394  CG   CG   . ASP ASP ASP A A 52  52  . 0.4108 0.3442 0.3702 0.0618  0.0301
0.0071  1 .
395  OD1  OD1  . ASP ASP ASP A A 52  52  . 0.4973 0.3400 0.3879 0.0986  -0.0163
0.0095  1 .
396  OD2  OD2  . ASP ASP ASP A A 52  52  . 0.4463 0.3906 0.3734 0.1196  0.0874
0.0079  1 .
397  C    C    . ASP ASP ASP A A 52  52  . 0.3751 0.3198 0.3742 0.0611  0.0461
0.0128  1 .
398  O    O    . ASP ASP ASP A A 52  52  . 0.3612 0.2661 0.3722 0.0845  0.0699  -
0.0015 1 .
399  N    N    . LYS LYS LYS A A 53  53  . 0.3639 0.3325 0.4028 0.0605  0.0536
0.0147  1 .
400  CA   CA   . LYS LYS LYS A A 53  53  . 0.3903 0.3919 0.4424 0.0520  0.0522  -
0.0052 1 .
401  CB   CB   . LYS LYS LYS A A 53  53  . 0.3930 0.4018 0.4500 0.0410  0.0325
0.0144  1 .
402  CG   CG   . LYS LYS LYS A A 53  53  . 0.4694 0.4204 0.4575 0.0212  0.0108  -
0.0395 1 .
403  C    C    . LYS LYS LYS A A 53  53  . 0.3671 0.3924 0.4367 0.0558  0.0650
0.0020  1 .
404  O    O    . LYS LYS LYS A A 53  53  . 0.4019 0.4028 0.4977 0.0630  0.0801
0.0046  1 .
405  N    N    . GLN GLN GLN A A 54  54  . 0.3669 0.3904 0.4107 0.0690  0.0697  -
0.0151 1 .
406  CA   CA   . GLN GLN GLN A A 54  54  . 0.3882 0.3955 0.4166 0.0633  0.0603
0.0035  1 .
407  CB   CB   . GLN GLN GLN A A 54  54  . 0.4256 0.4197 0.4329 0.0684  0.0341  -
0.0105 1 .
408  C    C    . GLN GLN GLN A A 54  54  . 0.4110 0.3905 0.4210 0.0556  0.0563
0.0218  1 .
409  O    O    . GLN GLN GLN A A 54  54  . 0.3845 0.4124 0.4519 0.0658  0.0477
0.0397  1 .
410  N    N    . ARG ARG ARG A A 55  55  . 0.3658 0.3375 0.3467 0.0561  0.0608
0.0224  1 .
411  CA   CA   . ARG ARG ARG A A 55  55  . 0.3590 0.3097 0.2754 0.0348  0.0279
0.0222  1 .
412  CB   CB   . ARG ARG ARG A A 55  55  . 0.3486 0.3411 0.2724 0.0329  0.0067
0.0085  1 .
413  CG   CG   . ARG ARG ARG A A 55  55  . 0.3057 0.2948 0.2631 0.0652  0.0285
0.0144  1 .
414  CD   CD   . ARG ARG ARG A A 55  55  . 0.2987 0.3013 0.2513 0.0968  -0.0168 -
0.0027 1 .
415  NE   NE   . ARG ARG ARG A A 55  55  . 0.2651 0.2564 0.1745 0.0652  0.0463  -
0.0024 1 .
416  CZ   CZ   . ARG ARG ARG A A 55  55  . 0.2178 0.1811 0.1788 0.0317  0.0087  -
0.0016 1 .
417  NH1  NH1  . ARG ARG ARG A A 55  55  . 0.2685 0.1371 0.1474 0.0451  0.0077  -
0.0014 1 .
418  NH2  NH2  . ARG ARG ARG A A 55  55  . 0.2277 0.1947 0.1890 0.0321  0.0033  -
0.0046 1 .
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419  C    C    . ARG ARG ARG A A 55  55  . 0.3211 0.2551 0.2532 0.0394  0.0321
0.0185  1 .
420  O    O    . ARG ARG ARG A A 55  55  . 0.3313 0.2259 0.2328 0.0267  0.0301
0.0414  1 .
421  N    N    . TYR TYR TYR A A 56  56  . 0.3046 0.2112 0.2183 0.0258  0.0625
0.0213  1 .
422  CA   CA   . TYR TYR TYR A A 56  56  . 0.2686 0.2183 0.2313 0.0109  0.0507
0.0209  1 .
423  CB   CB   . TYR TYR TYR A A 56  56  . 0.2390 0.2002 0.2301 0.0375  0.0650
0.0293  1 .
424  CG   CG   . TYR TYR TYR A A 56  56  . 0.2523 0.1649 0.1647 0.0093  0.0322
0.0090  1 .
425  CD1  CD1  . TYR TYR TYR A A 56  56  . 0.2215 0.1926 0.1726 0.0360  0.0233
0.0171  1 .
426  CE1  CE1  . TYR TYR TYR A A 56  56  . 0.2364 0.1812 0.1668 0.0364  -0.0085 -
0.0091 1 .
427  CZ   CZ   . TYR TYR TYR A A 56  56  . 0.1942 0.1476 0.0958 -0.0001 0.0064
0.0252  1 .
428  OH   OH   . TYR TYR TYR A A 56  56  . 0.2675 0.2175 0.1492 0.0203  0.0101
0.0412  1 .
429  CE2  CE2  . TYR TYR TYR A A 56  56  . 0.2055 0.1540 0.1449 -0.0107 0.0042
0.0000  1 .
430  CD2  CD2  . TYR TYR TYR A A 56  56  . 0.2505 0.1514 0.1522 0.0119  0.0285
0.0380  1 .
431  C    C    . TYR TYR TYR A A 56  56  . 0.2781 0.2616 0.2525 0.0234  0.0582
0.0239  1 .
432  O    O    . TYR TYR TYR A A 56  56  . 0.2612 0.2076 0.2314 -0.0044 0.0571
0.0291  1 .
433  N    N    . LEU LEU LEU A A 57  57  . 0.2981 0.2857 0.3190 0.0205  0.0503
0.0223  1 .
434  CA   CA   . LEU LEU LEU A A 57  57  . 0.3011 0.3319 0.3412 0.0094  0.0486
0.0034  1 .
435  CB   CB   . LEU LEU LEU A A 57  57  . 0.3214 0.3497 0.3541 0.0054  0.0482
0.0135  1 .
436  CG   CG   . LEU LEU LEU A A 57  57  . 0.4031 0.3743 0.4068 -0.0163 0.0583
0.0383  1 .
437  CD1  CD1  . LEU LEU LEU A A 57  57  . 0.4524 0.3641 0.4726 0.0259  0.0347  -
0.0415 1 .
438  C    C    . LEU LEU LEU A A 57  57  . 0.2799 0.3223 0.3234 0.0133  0.0419  -
0.0058 1 .
439  O    O    . LEU LEU LEU A A 57  57  . 0.2852 0.3710 0.3975 -0.0207 0.0430  -
0.0169 1 .
440  N    N    . GLY GLY GLY A A 58  58  . 0.2429 0.3032 0.2951 0.0229  0.0519  -
0.0180 1 .
441  CA   CA   . GLY GLY GLY A A 58  58  . 0.2282 0.2688 0.2727 0.0307  0.0548  -
0.0105 1 .
442  C    C    . GLY GLY GLY A A 58  58  . 0.2395 0.2401 0.2456 0.0184  0.0439  -
0.0012 1 .
443  O    O    . GLY GLY GLY A A 58  58  . 0.2657 0.2440 0.2478 0.0705  0.0122  -
0.0053 1 .
444  N    N    . LYS LYS LYS A A 59  59  . 0.2241 0.2019 0.2285 0.0106  0.0270
0.0039  1 .
445  CA   CA   . LYS LYS LYS A A 59  59  . 0.2061 0.1465 0.2247 0.0119  0.0098  -
0.0124 1 .
446  CB   CB   . LYS LYS LYS A A 59  59  . 0.1883 0.1809 0.2665 -0.0202 -0.0117 -
0.0361 1 .
447  CG   CG   . LYS LYS LYS A A 59  59  . 0.1871 0.2679 0.3186 -0.0377 -0.0188 -
0.0584 1 .
448  CD   CD   . LYS LYS LYS A A 59  59  . 0.2907 0.3253 0.4762 -0.0161 0.0001  -
0.1009 1 .
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449  CE   CE   . LYS LYS LYS A A 59  59  . 0.3708 0.4261 0.4933 -0.0433 -0.0462 -
0.0791 1 .
450  NZ   NZ   . LYS LYS LYS A A 59  59  . 0.4349 0.4827 0.5844 -0.0195 0.0184  -
0.1104 1 .
451  C    C    . LYS LYS LYS A A 59  59  . 0.2163 0.1434 0.1876 0.0098  -0.0082
0.0000  1 .
452  O    O    . LYS LYS LYS A A 59  59  . 0.2062 0.1444 0.1605 0.0104  -0.0158 -
0.0029 1 .
453  N    N    . GLY GLY GLY A A 60  60  . 0.1864 0.1361 0.1894 0.0167  -0.0221 -
0.0098 1 .
454  CA   CA   . GLY GLY GLY A A 60  60  . 0.1925 0.1256 0.1513 0.0015  0.0108
0.0028  1 .
455  C    C    . GLY GLY GLY A A 60  60  . 0.1798 0.1378 0.1404 0.0082  0.0150  -
0.0057 1 .
456  O    O    . GLY GLY GLY A A 60  60  . 0.1886 0.1622 0.1650 0.0441  0.0083
0.0021  1 .
457  N    N    . VAL VAL VAL A A 61  61  . 0.1713 0.1229 0.1385 0.0090  0.0035  -
0.0059 1 .
458  CA   CA   . VAL VAL VAL A A 61  61  . 0.1754 0.1113 0.1436 0.0158  0.0208  -
0.0108 1 .
459  CB   CB   . VAL VAL VAL A A 61  61  . 0.1523 0.1498 0.1310 0.0379  0.0055  -
0.0120 1 .
460  CG1  CG1  . VAL VAL VAL A A 61  61  . 0.1798 0.0935 0.1706 0.0127  0.0234  -
0.0260 1 .
461  CG2  CG2  . VAL VAL VAL A A 61  61  . 0.1299 0.1023 0.1447 0.0328  0.0117
0.0140  1 .
462  C    C    . VAL VAL VAL A A 61  61  . 0.1675 0.1237 0.1337 0.0256  0.0017
0.0082  1 .
463  O    O    . VAL VAL VAL A A 61  61  . 0.1821 0.1163 0.1645 0.0008  0.0199  -
0.0203 1 .
464  N    N    . LEU LEU LEU A A 62  62  . 0.2187 0.1289 0.1511 0.0241  -0.0084
0.0033  1 .
465  CA   CA   . LEU LEU LEU A A 62  62  . 0.2143 0.1236 0.1456 0.0068  -0.0004
0.0174  1 .
466  CB   CB   . LEU LEU LEU A A 62  62  . 0.2439 0.1442 0.1592 0.0070  0.0192
0.0233  1 .
467  CG   CG   . LEU LEU LEU A A 62  62  . 0.2790 0.1868 0.1925 0.0190  0.0238
0.0255  1 .
468  CD1  CD1  . LEU LEU LEU A A 62  62  . 0.4309 0.2866 0.1713 0.0370  0.0132
0.0631  1 .
469  CD2  CD2  . LEU LEU LEU A A 62  62  . 0.2772 0.1930 0.2694 0.0076  -0.0786
0.0232  1 .
470  C    C    . LEU LEU LEU A A 62  62  . 0.2095 0.1728 0.1415 0.0074  -0.0028
0.0039  1 .
471  O    O    . LEU LEU LEU A A 62  62  . 0.2281 0.1539 0.1654 0.0059  0.0067  -
0.0124 1 .
472  N    N    . LYS LYS LYS A A 63  63  . 0.2150 0.1609 0.1382 0.0265  0.0055  -
0.0151 1 .
473  CA   CA   . LYS LYS LYS A A 63  63  . 0.2138 0.1517 0.1712 0.0185  -0.0018 -
0.0089 1 .
474  CB   CB   . LYS LYS LYS A A 63  63  . 0.2066 0.1568 0.1935 0.0296  0.0263  -
0.0117 1 .
475  CG   CG   . LYS LYS LYS A A 63  63  . 0.2297 0.1815 0.1826 0.0435  0.0270  -
0.0148 1 .
476  CD   CD   . LYS LYS LYS A A 63  63  . 0.2234 0.2135 0.2498 0.0499  0.0383  -
0.0239 1 .
477  CE   CE   . LYS LYS LYS A A 63  63  . 0.2308 0.2491 0.2895 0.0201  0.0000  -
0.0958 1 .
478  NZ   NZ   . LYS LYS LYS A A 63  63  . 0.2231 0.2859 0.3509 0.0474  0.0269  -
0.0573 1 .
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479  C    C    . LYS LYS LYS A A 63  63  . 0.1818 0.1317 0.1768 0.0129  -0.0029
0.0003  1 .
480  O    O    . LYS LYS LYS A A 63  63  . 0.1921 0.1457 0.2191 0.0181  -0.0118 -
0.0004 1 .
481  N    N    . ALA ALA ALA A A 64  64  . 0.1855 0.1372 0.1580 0.0187  -0.0086 -
0.0166 1 .
482  CA   CA   . ALA ALA ALA A A 64  64  . 0.1740 0.0982 0.1185 0.0000  -0.0211
0.0132  1 .
483  CB   CB   . ALA ALA ALA A A 64  64  . 0.2134 0.0902 0.1192 0.0201  -0.0254 -
0.0233 1 .
484  C    C    . ALA ALA ALA A A 64  64  . 0.1807 0.1014 0.1360 0.0101  -0.0092 -
0.0007 1 .
485  O    O    . ALA ALA ALA A A 64  64  . 0.1692 0.1121 0.1584 -0.0037 -0.0253 -
0.0107 1 .
486  N    N    . VAL VAL VAL A A 65  65  . 0.1905 0.0995 0.1246 0.0061  -0.0128 -
0.0087 1 .
487  CA   CA   . VAL VAL VAL A A 65  65  . 0.1790 0.1056 0.1517 -0.0130 -0.0202
0.0010  1 .
488  CB   CB   . VAL VAL VAL A A 65  65  . 0.1863 0.1304 0.1430 -0.0143 -0.0287
0.0068  1 .
489  CG1  CG1  . VAL VAL VAL A A 65  65  . 0.1928 0.1403 0.2048 0.0321  -0.0721 -
0.0218 1 .
490  CG2  CG2  . VAL VAL VAL A A 65  65  . 0.1799 0.1180 0.2015 0.0166  -0.0442 -
0.0265 1 .
491  C    C    . VAL VAL VAL A A 65  65  . 0.1746 0.1382 0.1467 -0.0076 -0.0102
0.0056  1 .
492  O    O    . VAL VAL VAL A A 65  65  . 0.1671 0.1065 0.1610 -0.0119 -0.0054
0.0170  1 .
493  N    N    . ASP ASP ASP A A 66  66  . 0.1925 0.1171 0.1537 0.0072  -0.0259
0.0061  1 .
494  CA   CA   . ASP ASP ASP A A 66  66  . 0.1950 0.1209 0.1632 -0.0070 -0.0206
0.0115  1 .
495  CB   CB   . ASP ASP ASP A A 66  66  . 0.2386 0.2079 0.1647 0.0011  0.0057
0.0141  1 .
496  CG   CG   . ASP ASP ASP A A 66  66  . 0.3194 0.2707 0.2854 0.0089  0.0114
0.0471  1 .
497  OD1  OD1  . ASP ASP ASP A A 66  66  . 0.3401 0.4277 0.3895 0.0653  0.0127  -
0.0077 1 .
498  OD2  OD2  . ASP ASP ASP A A 66  66  . 0.3677 0.4035 0.3746 0.0581  0.0258  -
0.0080 1 .
499  C    C    . ASP ASP ASP A A 66  66  . 0.1748 0.1389 0.1627 -0.0026 -0.0207
0.0229  1 .
500  O    O    . ASP ASP ASP A A 66  66  . 0.1861 0.1291 0.1846 0.0051  -0.0520 -
0.0032 1 .
501  N    N    . HIS HIS HIS A A 67  67  . 0.1939 0.1185 0.1394 0.0037  -0.0146
0.0202  1 .
502  CA   CA   . HIS HIS HIS A A 67  67  . 0.1790 0.1391 0.1605 0.0155  -0.0247
0.0125  1 .
503  CB   CB   . HIS HIS HIS A A 67  67  . 0.1400 0.1497 0.1488 0.0282  -0.0325
0.0279  1 .
504  CG   CG   . HIS HIS HIS A A 67  67  . 0.2203 0.1301 0.2515 0.0472  -0.0124
0.0052  1 .
505  ND1  ND1  . HIS HIS HIS A A 67  67  . 0.2894 0.2311 0.3084 0.0491  -0.0170 -
0.0746 1 .
506  CE1  CE1  . HIS HIS HIS A A 67  67  . 0.3056 0.2810 0.3532 0.0692  -0.0399 -
0.0332 1 .
507  NE2  NE2  . HIS HIS HIS A A 67  67  . 0.2642 0.2312 0.3309 0.0546  -0.0455 -
0.0281 1 .
508  CD2  CD2  . HIS HIS HIS A A 67  67  . 0.2144 0.1970 0.2539 0.0514  0.0002
0.0186  1 .
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509  C    C    . HIS HIS HIS A A 67  67  . 0.1650 0.1341 0.1470 0.0032  -0.0158
0.0073  1 .
510  O    O    . HIS HIS HIS A A 67  67  . 0.1982 0.1259 0.1428 -0.0035 -0.0287
0.0278  1 .
511  N    N    . ILE ILE ILE A A 68  68  . 0.1856 0.1126 0.1370 0.0092  -0.0188
0.0050  1 .
512  CA   CA   . ILE ILE ILE A A 68  68  . 0.1565 0.0960 0.1220 0.0013  -0.0245
0.0102  1 .
513  CB   CB   . ILE ILE ILE A A 68  68  . 0.1446 0.0934 0.1330 0.0094  -0.0357 -
0.0131 1 .
514  CG1  CG1  . ILE ILE ILE A A 68  68  . 0.1878 0.0780 0.1173 -0.0122 -0.0414 -
0.0047 1 .
515  CD   CD   . ILE ILE ILE A A 68  68  . 0.2251 0.0321 0.2286 -0.0195 -0.0482
0.0123  1 .
516  CG2  CG2  . ILE ILE ILE A A 68  68  . 0.1745 0.1738 0.1386 -0.0119 -0.0232 -
0.0602 1 .
517  C    C    . ILE ILE ILE A A 68  68  . 0.1472 0.1317 0.1479 -0.0054 -0.0119
0.0168  1 .
518  O    O    . ILE ILE ILE A A 68  68  . 0.1509 0.1424 0.1529 -0.0087 -0.0109
0.0127  1 .
519  N    N    . ASN ASN ASN A A 69  69  . 0.1667 0.1253 0.1455 -0.0048 -0.0247 -
0.0009 1 .
520  CA   CA   . ASN ASN ASN A A 69  69  . 0.1909 0.0976 0.1621 -0.0072 -0.0342
0.0175  1 .
521  CB   CB   . ASN ASN ASN A A 69  69  . 0.2181 0.0724 0.1330 0.0127  -0.0259
0.0090  1 .
522  CG   CG   . ASN ASN ASN A A 69  69  . 0.1659 0.1246 0.1482 -0.0097 -0.0418 -
0.0088 1 .
523  OD1  OD1  . ASN ASN ASN A A 69  69  . 0.2043 0.1455 0.1642 0.0161  -0.0327 -
0.0044 1 .
524  ND2  ND2  . ASN ASN ASN A A 69  69  . 0.1904 0.1470 0.1702 -0.0192 -0.0286
0.0073  1 .
525  C    C    . ASN ASN ASN A A 69  69  . 0.2272 0.1347 0.1977 -0.0071 -0.0269 -
0.0016 1 .
526  O    O    . ASN ASN ASN A A 69  69  . 0.2348 0.1271 0.2575 -0.0100 -0.0390
0.0165  1 .
527  N    N    . SER SER SER A A 70  70  . 0.2604 0.1229 0.1895 0.0116  -0.0239 -
0.0106 1 .
528  CA   CA   . SER SER SER A A 70  70  . 0.2643 0.1229 0.1976 -0.0076 -0.0151
0.0027  1 .
529  CB   CB   . SER SER SER A A 70  70  . 0.3389 0.1419 0.2181 0.0109  0.0016
0.0041  1 .
530  OG   OG   . SER SER SER A A 70  70  . 0.5014 0.1898 0.2578 -0.0072 -0.0113 -
0.0265 1 .
531  C    C    . SER SER SER A A 70  70  . 0.2309 0.1308 0.1831 -0.0051 -0.0203
0.0030  1 .
532  O    O    . SER SER SER A A 70  70  . 0.2339 0.1376 0.1898 -0.0110 -0.0163
0.0200  1 .
533  N    N    . THR THR THR A A 71  71  . 0.2065 0.1271 0.1658 0.0084  -0.0287
0.0275  1 .
534  CA   CA   . THR THR THR A A 71  71  . 0.1917 0.1440 0.1702 0.0062  -0.0220
0.0193  1 .
535  CB   CB   . THR THR THR A A 71  71  . 0.1835 0.1464 0.1357 0.0098  -0.0173
0.0333  1 .
536  OG1  OG1  . THR THR THR A A 71  71  . 0.2153 0.1306 0.2013 -0.0254 -0.0100
0.0179  1 .
537  CG2  CG2  . THR THR THR A A 71  71  . 0.1909 0.1467 0.1352 0.0330  -0.0502
0.0438  1 .
538  C    C    . THR THR THR A A 71  71  . 0.1707 0.1429 0.1684 -0.0019 -0.0134
0.0135  1 .
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539  O    O    . THR THR THR A A 71  71  . 0.1784 0.1390 0.2101 0.0172  -0.0027
0.0112  1 .
540  N    N    . ILE ILE ILE A A 72  72  . 0.1972 0.1170 0.1745 0.0074  -0.0202
0.0091  1 .
541  CA   CA   . ILE ILE ILE A A 72  72  . 0.1713 0.1185 0.1635 0.0049  -0.0132
0.0131  1 .
542  CB   CB   . ILE ILE ILE A A 72  72  . 0.1502 0.1190 0.1816 -0.0089 -0.0262
0.0022  1 .
543  CG1  CG1  . ILE ILE ILE A A 72  72  . 0.1890 0.1406 0.1916 -0.0215 -0.0488
0.0240  1 .
544  CD   CD   . ILE ILE ILE A A 72  72  . 0.3304 0.2134 0.2235 -0.0596 -0.0737
0.0333  1 .
545  CG2  CG2  . ILE ILE ILE A A 72  72  . 0.2166 0.1231 0.1960 0.0207  -0.0242
0.0065  1 .
546  C    C    . ILE ILE ILE A A 72  72  . 0.2110 0.1312 0.1835 -0.0054 -0.0069
0.0099  1 .
547  O    O    . ILE ILE ILE A A 72  72  . 0.2020 0.1420 0.1889 0.0112  0.0052
0.0189  1 .
548  N    N    . ALA ALA ALA A A 73  73  . 0.2004 0.1090 0.1668 0.0106  -0.0311
0.0260  1 .
549  CA   CA   . ALA ALA ALA A A 73  73  . 0.1850 0.1451 0.1816 -0.0087 -0.0148
0.0354  1 .
550  CB   CB   . ALA ALA ALA A A 73  73  . 0.2114 0.1482 0.1577 0.0283  -0.0008
0.0217  1 .
551  C    C    . ALA ALA ALA A A 73  73  . 0.2023 0.1611 0.1893 0.0022  -0.0112
0.0033  1 .
552  O    O    . ALA ALA ALA A A 73  73  . 0.1868 0.1519 0.1868 -0.0015 -0.0291
0.0119  1 .
553  N    N    . PRO PRO PRO A A 74  74  . 0.2114 0.1590 0.2101 -0.0060 -0.0119
0.0085  1 .
554  CA   CA   . PRO PRO PRO A A 74  74  . 0.2266 0.1436 0.1957 0.0020  -0.0190
0.0056  1 .
555  CB   CB   . PRO PRO PRO A A 74  74  . 0.2085 0.1564 0.1829 0.0155  -0.0158 -
0.0209 1 .
556  CG   CG   . PRO PRO PRO A A 74  74  . 0.2342 0.1302 0.2331 -0.0067 -0.0329 -
0.0246 1 .
557  CD   CD   . PRO PRO PRO A A 74  74  . 0.2087 0.1096 0.1691 0.0266  -0.0144 -
0.0038 1 .
558  C    C    . PRO PRO PRO A A 74  74  . 0.2082 0.1564 0.1866 -0.0073 -0.0062 -
0.0140 1 .
559  O    O    . PRO PRO PRO A A 74  74  . 0.2618 0.1371 0.2092 0.0009  0.0019
0.0020  1 .
560  N    N    . ALA ALA ALA A A 75  75  . 0.2406 0.1129 0.1983 0.0135  -0.0213
0.0025  1 .
561  CA   CA   . ALA ALA ALA A A 75  75  . 0.2466 0.1419 0.2056 -0.0112 -0.0023
0.0006  1 .
562  CB   CB   . ALA ALA ALA A A 75  75  . 0.2120 0.1831 0.2020 0.0220  -0.0271
0.0077  1 .
563  C    C    . ALA ALA ALA A A 75  75  . 0.2292 0.1597 0.2323 0.0000  0.0139
0.0254  1 .
564  O    O    . ALA ALA ALA A A 75  75  . 0.2543 0.1814 0.2479 -0.0234 -0.0225
0.0158  1 .
565  N    N    . LEU LEU LEU A A 76  76  . 0.2318 0.1364 0.2487 -0.0037 -0.0127
0.0073  1 .
566  CA   CA   . LEU LEU LEU A A 76  76  . 0.2156 0.1449 0.2387 -0.0296 0.0073
0.0166  1 .
567  CB   CB   . LEU LEU LEU A A 76  76  . 0.2292 0.1142 0.2579 -0.0252 0.0076  -
0.0126 1 .
568  CG   CG   . LEU LEU LEU A A 76  76  . 0.2176 0.1718 0.2160 -0.0251 -0.0012
0.0129  1 .
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569  CD1  CD1  . LEU LEU LEU A A 76  76  . 0.2673 0.1418 0.2561 -0.0595 -0.0286
0.0049  1 .
570  CD2  CD2  . LEU LEU LEU A A 76  76  . 0.2344 0.1982 0.1962 -0.0364 -0.0117 -
0.0144 1 .
571  C    C    . LEU LEU LEU A A 76  76  . 0.2484 0.1593 0.2617 -0.0247 -0.0002
0.0220  1 .
572  O    O    . LEU LEU LEU A A 76  76  . 0.2673 0.1867 0.2412 -0.0329 0.0120
0.0601  1 .
573  N    N    . ILE ILE ILE A A 77  77  . 0.2256 0.1491 0.2374 -0.0387 -0.0132
0.0205  1 .
574  CA   CA   . ILE ILE ILE A A 77  77  . 0.2432 0.1618 0.2545 -0.0322 -0.0179
0.0371  1 .
575  CB   CB   . ILE ILE ILE A A 77  77  . 0.2194 0.1362 0.2276 -0.0288 -0.0396
0.0298  1 .
576  CG1  CG1  . ILE ILE ILE A A 77  77  . 0.2996 0.1339 0.2708 0.0039  -0.0074
0.0013  1 .
577  CD   CD   . ILE ILE ILE A A 77  77  . 0.3227 0.1206 0.2863 0.0200  -0.0307
0.0370  1 .
578  CG2  CG2  . ILE ILE ILE A A 77  77  . 0.2501 0.1454 0.2981 -0.0506 -0.0445
0.0376  1 .
579  C    C    . ILE ILE ILE A A 77  77  . 0.2672 0.1887 0.2902 -0.0466 0.0017
0.0259  1 .
580  O    O    . ILE ILE ILE A A 77  77  . 0.3006 0.1926 0.3054 -0.0668 0.0171
0.0288  1 .
581  N    N    . SER SER SER A A 78  78  . 0.3093 0.1864 0.2822 -0.0350 -0.0241
0.0340  1 .
582  CA   CA   . SER SER SER A A 78  78  . 0.3321 0.2045 0.2630 -0.0493 -0.0036
0.0253  1 .
583  CB   CB   . SER SER SER A A 78  78  . 0.3769 0.1665 0.2506 -0.0318 -0.0141
0.0411  1 .
584  OG   OG   . SER SER SER A A 78  78  . 0.4392 0.2101 0.3160 -0.0314 -0.0233 -
0.0096 1 .
585  C    C    . SER SER SER A A 78  78  . 0.3451 0.2384 0.2731 -0.0614 0.0100
0.0310  1 .
586  O    O    . SER SER SER A A 78  78  . 0.4019 0.2531 0.3316 -0.0984 0.0202
0.0329  1 .
587  N    N    . SER SER SER A A 79  79  . 0.3151 0.2092 0.2488 -0.0485 -0.0036
0.0225  1 .
588  CA   CA   . SER SER SER A A 79  79  . 0.3378 0.2185 0.2769 -0.0483 -0.0192
0.0009  1 .
589  CB   CB   . SER SER SER A A 79  79  . 0.3053 0.2091 0.2724 -0.0510 -0.0361
0.0078  1 .
590  OG   OG   . SER SER SER A A 79  79  . 0.2871 0.1579 0.2754 -0.0360 0.0035
0.0088  1 .
591  C    C    . SER SER SER A A 79  79  . 0.3519 0.2224 0.2803 -0.0587 0.0091
0.0013  1 .
592  O    O    . SER SER SER A A 79  79  . 0.4523 0.2608 0.2826 -0.0602 0.0163  -
0.0048 1 .
593  N    N    . GLY GLY GLY A A 80  80  . 0.3047 0.2641 0.2933 -0.0434 -0.0093 -
0.0175 1 .
594  CA   CA   . GLY GLY GLY A A 80  80  . 0.2969 0.2891 0.3218 -0.0506 0.0270  -
0.0114 1 .
595  C    C    . GLY GLY GLY A A 80  80  . 0.2859 0.2917 0.3372 -0.0478 0.0319
0.0046  1 .
596  O    O    . GLY GLY GLY A A 80  80  . 0.3285 0.3171 0.3863 -0.0675 0.0596
0.0157  1 .
597  N    N    . LEU LEU LEU A A 81  81  . 0.2915 0.2923 0.3061 -0.0426 0.0243
0.0374  1 .
598  CA   CA   . LEU LEU LEU A A 81  81  . 0.2616 0.2449 0.2753 -0.0360 0.0222
0.0304  1 .
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599  CB   CB   . LEU LEU LEU A A 81  81  . 0.2706 0.2431 0.2816 -0.0283 0.0026
0.0460  1 .
600  CG   CG   . LEU LEU LEU A A 81  81  . 0.2761 0.2234 0.2394 0.0031  0.0095
0.0531  1 .
601  CD1  CD1  . LEU LEU LEU A A 81  81  . 0.2951 0.2238 0.3174 -0.0427 0.0063
0.0652  1 .
602  CD2  CD2  . LEU LEU LEU A A 81  81  . 0.4238 0.3069 0.2744 0.0043  0.0486
0.0639  1 .
603  C    C    . LEU LEU LEU A A 81  81  . 0.2612 0.2773 0.2860 -0.0314 0.0216
0.0323  1 .
604  O    O    . LEU LEU LEU A A 81  81  . 0.2870 0.2696 0.3005 -0.0294 0.0275
0.0190  1 .
605  N    N    . SER SER SER A A 82  82  . 0.2582 0.2287 0.2877 -0.0299 0.0256
0.0073  1 .
606  CA   CA   . SER SER SER A A 82  82  . 0.2452 0.2507 0.3009 -0.0381 0.0207
0.0271  1 .
607  CB   CB   . SER SER SER A A 82  82  . 0.2791 0.2631 0.3230 -0.0159 0.0198
0.0154  1 .
608  OG   OG   . SER SER SER A A 82  82  . 0.2312 0.2911 0.3946 -0.0485 0.0697
0.0019  1 .
609  C    C    . SER SER SER A A 82  82  . 0.2380 0.2172 0.2664 -0.0297 0.0141
0.0225  1 .
610  O    O    . SER SER SER A A 82  82  . 0.2197 0.2045 0.2396 -0.0384 0.0282
0.0279  1 .
611  N    N    . VAL VAL VAL A A 83  83  . 0.2416 0.2133 0.2432 -0.0265 0.0236
0.0323  1 .
612  CA   CA   . VAL VAL VAL A A 83  83  . 0.2319 0.2134 0.2373 -0.0294 0.0027
0.0142  1 .
613  CB   CB   . VAL VAL VAL A A 83  83  . 0.1872 0.2131 0.2265 -0.0131 -0.0162
0.0239  1 .
614  CG1  CG1  . VAL VAL VAL A A 83  83  . 0.2755 0.1957 0.2107 -0.0238 0.0235
0.0019  1 .
615  CG2  CG2  . VAL VAL VAL A A 83  83  . 0.2189 0.2356 0.2791 0.0323  0.0169
0.0436  1 .
616  C    C    . VAL VAL VAL A A 83  83  . 0.2315 0.2156 0.2462 -0.0173 0.0057
0.0170  1 .
617  O    O    . VAL VAL VAL A A 83  83  . 0.2118 0.1972 0.2784 -0.0442 0.0065
0.0268  1 .
618  N    N    . VAL VAL VAL A A 84  84  . 0.2272 0.2363 0.2623 -0.0304 0.0137
0.0029  1 .
619  CA   CA   . VAL VAL VAL A A 84  84  . 0.2472 0.2368 0.2612 -0.0272 0.0190
0.0201  1 .
620  CB   CB   . VAL VAL VAL A A 84  84  . 0.2343 0.2420 0.2766 -0.0196 0.0156
0.0299  1 .
621  CG1  CG1  . VAL VAL VAL A A 84  84  . 0.2401 0.2332 0.3308 -0.0156 0.0093
0.0088  1 .
622  CG2  CG2  . VAL VAL VAL A A 84  84  . 0.2736 0.2465 0.3565 -0.0232 0.0546
0.0198  1 .
623  C    C    . VAL VAL VAL A A 84  84  . 0.2300 0.2299 0.2724 -0.0329 0.0260
0.0152  1 .
624  O    O    . VAL VAL VAL A A 84  84  . 0.2317 0.2496 0.2377 -0.0354 0.0328
0.0351  1 .
625  N    N    . GLU GLU GLU A A 85  85  . 0.2343 0.2370 0.2782 -0.0232 0.0213
0.0124  1 .
626  CA   CA   . GLU GLU GLU A A 85  85  . 0.2353 0.2265 0.2852 -0.0214 0.0144
0.0221  1 .
627  CB   CB   . GLU GLU GLU A A 85  85  . 0.2460 0.2364 0.3109 -0.0343 0.0198
0.0144  1 .
628  CG   CG   . GLU GLU GLU A A 85  85  . 0.2345 0.3568 0.3434 -0.0232 0.0297
0.0091  1 .
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629  CD   CD   . GLU GLU GLU A A 85  85  . 0.3721 0.4870 0.4547 -0.0492 0.0518
0.0214  1 .
630  OE1  OE1  . GLU GLU GLU A A 85  85  . 0.4012 0.5066 0.4316 -0.0812 0.0551
0.0529  1 .
631  OE2  OE2  . GLU GLU GLU A A 85  85  . 0.4065 0.5414 0.5449 -0.0584 0.0834  -
0.0237 1 .
632  C    C    . GLU GLU GLU A A 85  85  . 0.2393 0.2070 0.2540 -0.0287 0.0174
0.0221  1 .
633  O    O    . GLU GLU GLU A A 85  85  . 0.2299 0.2033 0.2721 -0.0382 0.0147
0.0350  1 .
634  N    N    . GLN GLN GLN A A 86  86  . 0.1992 0.2226 0.2361 -0.0352 -0.0062
0.0353  1 .
635  CA   CA   . GLN GLN GLN A A 86  86  . 0.1816 0.2141 0.1977 -0.0215 0.0217
0.0295  1 .
636  CB   CB   . GLN GLN GLN A A 86  86  . 0.1418 0.2039 0.2034 -0.0375 0.0010
0.0338  1 .
637  CG   CG   . GLN GLN GLN A A 86  86  . 0.1603 0.1868 0.1429 -0.0523 0.0223
0.0579  1 .
638  CD   CD   . GLN GLN GLN A A 86  86  . 0.1668 0.1700 0.1664 -0.0242 0.0306
0.0419  1 .
639  OE1  OE1  . GLN GLN GLN A A 86  86  . 0.2190 0.2173 0.1758 0.0081  0.0089
0.0727  1 .
640  NE2  NE2  . GLN GLN GLN A A 86  86  . 0.1886 0.1737 0.1951 -0.0422 0.0410
0.0289  1 .
641  C    C    . GLN GLN GLN A A 86  86  . 0.2065 0.2162 0.2025 -0.0237 0.0042
0.0310  1 .
642  O    O    . GLN GLN GLN A A 86  86  . 0.1966 0.1755 0.2103 0.0020  -0.0093
0.0216  1 .
643  N    N    . GLU GLU GLU A A 87  87  . 0.2473 0.2290 0.2050 -0.0241 -0.0038
0.0393  1 .
644  CA   CA   . GLU GLU GLU A A 87  87  . 0.2659 0.2387 0.2219 -0.0130 -0.0113
0.0365  1 .
645  CB   CB   . GLU GLU GLU A A 87  87  . 0.2943 0.2803 0.2306 -0.0113 -0.0145
0.0564  1 .
646  CG   CG   . GLU GLU GLU A A 87  87  . 0.2911 0.2788 0.2338 0.0495  0.0028
0.0783  1 .
647  CD   CD   . GLU GLU GLU A A 87  87  . 0.4546 0.4605 0.3642 0.0632  -0.0633 -
0.0084 1 .
648  OE1  OE1  . GLU GLU GLU A A 87  87  . 0.5446 0.5414 0.4769 0.0426  -0.0851
0.0556  1 .
649  OE2  OE2  . GLU GLU GLU A A 87  87  . 0.4487 0.4516 0.4331 0.0503  -0.0455 -
0.0002 1 .
650  C    C    . GLU GLU GLU A A 87  87  . 0.2674 0.2343 0.2245 -0.0058 -0.0109
0.0521  1 .
651  O    O    . GLU GLU GLU A A 87  87  . 0.2860 0.1908 0.2751 -0.0338 -0.0090
0.0730  1 .
652  N    N    . LYS LYS LYS A A 88  88  . 0.2803 0.2230 0.2274 -0.0243 -0.0091
0.0425  1 .
653  CA   CA   . LYS LYS LYS A A 88  88  . 0.2718 0.2473 0.2588 -0.0292 0.0084
0.0355  1 .
654  CB   CB   . LYS LYS LYS A A 88  88  . 0.2804 0.2762 0.2784 -0.0441 0.0085
0.0402  1 .
655  CG   CG   . LYS LYS LYS A A 88  88  . 0.3213 0.3478 0.2876 -0.0613 0.0199
0.0265  1 .
656  CD   CD   . LYS LYS LYS A A 88  88  . 0.3588 0.4850 0.3512 -0.1103 0.0522
0.0887  1 .
657  CE   CE   . LYS LYS LYS A A 88  88  . 0.4755 0.5742 0.3368 -0.0400 0.0235
0.0618  1 .
658  NZ   NZ   . LYS LYS LYS A A 88  88  . 0.4286 0.6170 0.3466 -0.0519 0.0253
0.1178  1 .
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659  C    C    . LYS LYS LYS A A 88  88  . 0.2592 0.2108 0.2318 -0.0170 -0.0181
0.0189  1 .
660  O    O    . LYS LYS LYS A A 88  88  . 0.2177 0.2351 0.2222 -0.0201 0.0157
0.0459  1 .
661  N    N    . LEU LEU LEU A A 89  89  . 0.2350 0.1940 0.2277 -0.0228 -0.0070
0.0367  1 .
662  CA   CA   . LEU LEU LEU A A 89  89  . 0.2174 0.2059 0.2123 -0.0078 -0.0257
0.0285  1 .
663  CB   CB   . LEU LEU LEU A A 89  89  . 0.1792 0.1831 0.2225 -0.0101 -0.0306
0.0400  1 .
664  CG   CG   . LEU LEU LEU A A 89  89  . 0.1941 0.1593 0.2041 -0.0196 -0.0371
0.0140  1 .
665  CD1  CD1  . LEU LEU LEU A A 89  89  . 0.1629 0.1567 0.2768 0.0176  -0.0334
0.0379  1 .
666  CD2  CD2  . LEU LEU LEU A A 89  89  . 0.2625 0.1566 0.1585 -0.0017 0.0053  -
0.0051 1 .
667  C    C    . LEU LEU LEU A A 89  89  . 0.2277 0.1949 0.2068 -0.0074 0.0020
0.0229  1 .
668  O    O    . LEU LEU LEU A A 89  89  . 0.2321 0.2029 0.2532 -0.0097 0.0050
0.0131  1 .
669  N    N    . ASP ASP ASP A A 90  90  . 0.2222 0.1507 0.2192 -0.0181 -0.0119
0.0463  1 .
670  CA   CA   . ASP ASP ASP A A 90  90  . 0.2080 0.1704 0.2185 0.0062  -0.0042
0.0245  1 .
671  CB   CB   . ASP ASP ASP A A 90  90  . 0.2092 0.1455 0.2291 0.0089  0.0030
0.0259  1 .
672  CG   CG   . ASP ASP ASP A A 90  90  . 0.2631 0.2045 0.2152 -0.0030 0.0049
0.0493  1 .
673  OD1  OD1  . ASP ASP ASP A A 90  90  . 0.2277 0.2321 0.2201 -0.0257 -0.0176
0.0100  1 .
674  OD2  OD2  . ASP ASP ASP A A 90  90  . 0.2183 0.2271 0.2353 -0.0062 -0.0261 -
0.0054 1 .
675  C    C    . ASP ASP ASP A A 90  90  . 0.1878 0.1557 0.2038 0.0062  -0.0118
0.0282  1 .
676  O    O    . ASP ASP ASP A A 90  90  . 0.2370 0.1283 0.2083 0.0106  0.0062
0.0173  1 .
677  N    N    . ASN ASN ASN A A 91  91  . 0.2229 0.1900 0.2300 0.0089  -0.0279
0.0486  1 .
678  CA   CA   . ASN ASN ASN A A 91  91  . 0.2504 0.2223 0.2535 0.0264  -0.0105
0.0427  1 .
679  CB   CB   . ASN ASN ASN A A 91  91  . 0.2807 0.2448 0.2534 0.0128  -0.0203
0.0616  1 .
680  CG   CG   . ASN ASN ASN A A 91  91  . 0.3279 0.3011 0.3169 0.0258  -0.0224
0.0393  1 .
681  OD1  OD1  . ASN ASN ASN A A 91  91  . 0.4107 0.4281 0.3857 -0.0365 -0.0189
0.0739  1 .
682  ND2  ND2  . ASN ASN ASN A A 91  91  . 0.4067 0.4411 0.2785 0.0365  -0.0041
0.0561  1 .
683  C    C    . ASN ASN ASN A A 91  91  . 0.2537 0.2370 0.2675 0.0122  -0.0145
0.0411  1 .
684  O    O    . ASN ASN ASN A A 91  91  . 0.2569 0.2325 0.2714 0.0258  -0.0191
0.0398  1 .
685  N    N    . LEU LEU LEU A A 92  92  . 0.2307 0.1971 0.2668 0.0021  -0.0151
0.0325  1 .
686  CA   CA   . LEU LEU LEU A A 92  92  . 0.2390 0.2305 0.2741 -0.0116 -0.0289
0.0386  1 .
687  CB   CB   . LEU LEU LEU A A 92  92  . 0.2410 0.1924 0.3131 -0.0334 -0.0287
0.0404  1 .
688  CG   CG   . LEU LEU LEU A A 92  92  . 0.2960 0.3295 0.3401 -0.0310 -0.0322 -
0.0285 1 .
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689  CD1  CD1  . LEU LEU LEU A A 92  92  . 0.2813 0.2597 0.4620 -0.0361 -0.0668
0.0029  1 .
690  CD2  CD2  . LEU LEU LEU A A 92  92  . 0.3509 0.4229 0.4071 -0.0090 -0.0041
0.0587  1 .
691  C    C    . LEU LEU LEU A A 92  92  . 0.2332 0.2157 0.2733 -0.0172 -0.0285
0.0301  1 .
692  O    O    . LEU LEU LEU A A 92  92  . 0.2345 0.1884 0.2982 -0.0220 -0.0136
0.0417  1 .
693  N    N    . MET MET MET A A 93  93  . 0.2179 0.1877 0.2790 -0.0141 -0.0468
0.0260  1 .
694  CA   CA   . MET MET MET A A 93  93  . 0.2192 0.1663 0.2508 -0.0088 -0.0251
0.0472  1 .
695  CB   CB   . MET MET MET A A 93  93  . 0.1976 0.1153 0.2432 -0.0126 -0.0530
0.0591  1 .
696  CG   CG   . MET MET MET A A 93  93  . 0.2116 0.1560 0.2755 -0.0299 -0.0470
0.0674  1 .
697  SD   SD   . MET MET MET A A 93  93  . 0.2416 0.1805 0.2217 -0.0020 -0.0245
0.0425  1 .
698  CE   CE   . MET MET MET A A 93  93  . 0.2386 0.1408 0.2272 0.0001  0.0080
0.0431  1 .
699  C    C    . MET MET MET A A 93  93  . 0.2101 0.1607 0.2104 -0.0020 -0.0118
0.0497  1 .
700  O    O    . MET MET MET A A 93  93  . 0.2325 0.1699 0.2293 0.0171  -0.0162
0.0278  1 .
701  N    N    . LEU LEU LEU A A 94  94  . 0.2249 0.1566 0.2593 -0.0204 -0.0298
0.0291  1 .
702  CA   CA   . LEU LEU LEU A A 94  94  . 0.2481 0.1740 0.2552 -0.0008 -0.0350
0.0273  1 .
703  CB   CB   . LEU LEU LEU A A 94  94  . 0.2784 0.1664 0.2727 -0.0024 -0.0079
0.0018  1 .
704  CG   CG   . LEU LEU LEU A A 94  94  . 0.3358 0.2469 0.3197 -0.0331 -0.0314 -
0.0209 1 .
705  CD1  CD1  . LEU LEU LEU A A 94  94  . 0.4379 0.2512 0.3227 -0.0540 -0.0140 -
0.0603 1 .
706  CD2  CD2  . LEU LEU LEU A A 94  94  . 0.4646 0.2738 0.2887 -0.1117 0.0248  -
0.0661 1 .
707  C    C    . LEU LEU LEU A A 94  94  . 0.2589 0.1914 0.2530 0.0081  -0.0171
0.0176  1 .
708  O    O    . LEU LEU LEU A A 94  94  . 0.2594 0.1902 0.2434 0.0074  -0.0208
0.0358  1 .
709  N    N    . GLU GLU GLU A A 95  95  . 0.2645 0.1851 0.2355 -0.0030 -0.0370
0.0072  1 .
710  CA   CA   . GLU GLU GLU A A 95  95  . 0.2919 0.2391 0.2420 0.0097  -0.0248
0.0197  1 .
711  CB   CB   . GLU GLU GLU A A 95  95  . 0.2868 0.2121 0.2686 -0.0071 -0.0227
0.0230  1 .
712  CG   CG   . GLU GLU GLU A A 95  95  . 0.3232 0.3258 0.2905 0.0503  -0.0623
0.0156  1 .
713  C    C    . GLU GLU GLU A A 95  95  . 0.2884 0.2246 0.2645 0.0102  -0.0245 -
0.0025 1 .
714  O    O    . GLU GLU GLU A A 95  95  . 0.2812 0.2506 0.2616 0.0199  -0.0193 -
0.0036 1 .
715  N    N    . LEU LEU LEU A A 96  96  . 0.2648 0.1991 0.2282 0.0037  -0.0474
0.0070  1 .
716  CA   CA   . LEU LEU LEU A A 96  96  . 0.2529 0.2161 0.2240 0.0051  -0.0396
0.0106  1 .
717  CB   CB   . LEU LEU LEU A A 96  96  . 0.2639 0.2031 0.2357 0.0077  -0.0758
0.0083  1 .
718  CG   CG   . LEU LEU LEU A A 96  96  . 0.4094 0.2987 0.3351 0.0385  -0.1006 -
0.0044 1 .
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719  CD1  CD1  . LEU LEU LEU A A 96  96  . 0.3628 0.2253 0.3172 0.0305  -0.0944
0.0265  1 .
720  CD2  CD2  . LEU LEU LEU A A 96  96  . 0.3354 0.3130 0.3439 0.0810  -0.1377 -
0.0113 1 .
721  C    C    . LEU LEU LEU A A 96  96  . 0.2576 0.2015 0.2458 0.0144  -0.0243 -
0.0070 1 .
722  O    O    . LEU LEU LEU A A 96  96  . 0.2816 0.2158 0.2485 0.0018  -0.0190
0.0005  1 .
723  N    N    . ASP ASP ASP A A 97  97  . 0.2277 0.1791 0.2613 0.0124  -0.0161
0.0126  1 .
724  CA   CA   . ASP ASP ASP A A 97  97  . 0.2327 0.1397 0.2750 0.0090  -0.0149
0.0109  1 .
725  CB   CB   . ASP ASP ASP A A 97  97  . 0.2115 0.0938 0.2533 -0.0088 -0.0011 -
0.0201 1 .
726  CG   CG   . ASP ASP ASP A A 97  97  . 0.2607 0.1947 0.2696 -0.0178 -0.0207 -
0.0038 1 .
727  OD1  OD1  . ASP ASP ASP A A 97  97  . 0.2077 0.2041 0.2317 -0.0052 -0.0398
0.0160  1 .
728  OD2  OD2  . ASP ASP ASP A A 97  97  . 0.2823 0.2589 0.3221 -0.0108 -0.0619
0.0278  1 .
729  C    C    . ASP ASP ASP A A 97  97  . 0.2200 0.1851 0.2539 0.0143  -0.0181
0.0065  1 .
730  O    O    . ASP ASP ASP A A 97  97  . 0.2518 0.2153 0.2860 0.0278  -0.0222 -
0.0015 1 .
731  N    N    . GLY GLY GLY A A 98  98  . 0.2658 0.1957 0.2552 0.0151  -0.0403
0.0247  1 .
732  CA   CA   . GLY GLY GLY A A 98  98  . 0.2648 0.2293 0.2997 0.0297  -0.0455
0.0394  1 .
733  C    C    . GLY GLY GLY A A 98  98  . 0.2797 0.2478 0.3298 0.0248  -0.0576
0.0464  1 .
734  O    O    . GLY GLY GLY A A 98  98  . 0.3102 0.2549 0.4049 0.0470  -0.0608
0.0734  1 .
735  N    N    . THR THR THR A A 99  99  . 0.2694 0.2229 0.3065 0.0348  -0.0424
0.0262  1 .
736  CA   CA   . THR THR THR A A 99  99  . 0.2750 0.2184 0.2967 0.0332  -0.0418
0.0073  1 .
737  CB   CB   . THR THR THR A A 99  99  . 0.2714 0.2235 0.2905 0.0486  -0.0528
0.0084  1 .
738  OG1  OG1  . THR THR THR A A 99  99  . 0.3071 0.2158 0.3248 0.0434  -0.0443
0.0116  1 .
739  CG2  CG2  . THR THR THR A A 99  99  . 0.3364 0.1565 0.3159 0.0661  -0.0168
0.0179  1 .
740  C    C    . THR THR THR A A 99  99  . 0.2854 0.2664 0.3037 0.0203  -0.0487 -
0.0042 1 .
741  O    O    . THR THR THR A A 99  99  . 0.2715 0.2732 0.3103 0.0040  -0.0453 -
0.0342 1 .
742  N    N    . GLU GLU GLU A A 100 100 . 0.2984 0.2714 0.2651 0.0234  -0.0500
0.0225  1 .
743  CA   CA   . GLU GLU GLU A A 100 100 . 0.3177 0.2466 0.2879 0.0125  -0.0403
0.0221  1 .
744  CB   CB   . GLU GLU GLU A A 100 100 . 0.3298 0.2888 0.3179 0.0258  -0.0520
0.0433  1 .
745  C    C    . GLU GLU GLU A A 100 100 . 0.3230 0.2660 0.2867 0.0237  -0.0262
0.0257  1 .
746  O    O    . GLU GLU GLU A A 100 100 . 0.4052 0.2961 0.3088 0.0090  0.0005
0.0243  1 .
747  N    N    . ASN ASN ASN A A 101 101 . 0.2645 0.2467 0.2673 0.0066  -0.0426
0.0309  1 .
748  CA   CA   . ASN ASN ASN A A 101 101 . 0.2282 0.2501 0.2271 0.0027  -0.0486
0.0249  1 .
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749  CB   CB   . ASN ASN ASN A A 101 101 . 0.2348 0.2776 0.2247 -0.0080 -0.0395
0.0168  1 .
750  CG   CG   . ASN ASN ASN A A 101 101 . 0.2568 0.2916 0.3053 0.0109  -0.0395
0.0240  1 .
751  OD1  OD1  . ASN ASN ASN A A 101 101 . 0.3925 0.4565 0.4107 -0.0559 -0.0254
0.0345  1 .
752  ND2  ND2  . ASN ASN ASN A A 101 101 . 0.2132 0.3024 0.3217 -0.0084 -0.0473
0.0301  1 .
753  C    C    . ASN ASN ASN A A 101 101 . 0.2278 0.2401 0.1937 -0.0012 -0.0406
0.0161  1 .
754  O    O    . ASN ASN ASN A A 101 101 . 0.2191 0.2052 0.2153 0.0169  -0.0483
0.0097  1 .
755  N    N    . LYS LYS LYS A A 102 102 . 0.2123 0.2072 0.1776 0.0244  -0.0475 -
0.0116 1 .
756  CA   CA   . LYS LYS LYS A A 102 102 . 0.2019 0.1779 0.1645 0.0147  -0.0399 -
0.0086 1 .
757  CB   CB   . LYS LYS LYS A A 102 102 . 0.1641 0.1771 0.1622 0.0211  0.0064
0.0052  1 .
758  CG   CG   . LYS LYS LYS A A 102 102 . 0.2025 0.1862 0.1958 0.0506  -0.0034
0.0055  1 .
759  CD   CD   . LYS LYS LYS A A 102 102 . 0.1969 0.1991 0.2232 0.0683  0.0007
0.0203  1 .
760  CE   CE   . LYS LYS LYS A A 102 102 . 0.1846 0.2078 0.2156 -0.0006 -0.0093
0.0305  1 .
761  NZ   NZ   . LYS LYS LYS A A 102 102 . 0.2427 0.2016 0.2054 -0.0268 -0.0381
0.0019  1 .
762  C    C    . LYS LYS LYS A A 102 102 . 0.2166 0.2026 0.2003 0.0094  -0.0227 -
0.0048 1 .
763  O    O    . LYS LYS LYS A A 102 102 . 0.2267 0.2150 0.2025 0.0375  -0.0241 -
0.0006 1 .
764  N    N    . SER SER SER A A 103 103 . 0.2158 0.2047 0.2171 0.0054  -0.0181 -
0.0122 1 .
765  CA   CA   . SER SER SER A A 103 103 . 0.2324 0.2153 0.2261 -0.0078 -0.0197 -
0.0129 1 .
766  CB   CB   . SER SER SER A A 103 103 . 0.2290 0.2107 0.2564 -0.0045 0.0007
0.0200  1 .
767  OG   OG   . SER SER SER A A 103 103 . 0.2396 0.2652 0.3091 0.0468  -0.0113
0.0536  1 .
768  C    C    . SER SER SER A A 103 103 . 0.2472 0.2239 0.2287 -0.0066 -0.0163 -
0.0195 1 .
769  O    O    . SER SER SER A A 103 103 . 0.3055 0.2496 0.2687 -0.0060 -0.0177 -
0.0695 1 .
770  N    N    . LYS LYS LYS A A 104 104 . 0.2291 0.2024 0.2388 -0.0031 -0.0371 -
0.0261 1 .
771  CA   CA   . LYS LYS LYS A A 104 104 . 0.2313 0.2175 0.2273 0.0066  -0.0399 -
0.0076 1 .
772  CB   CB   . LYS LYS LYS A A 104 104 . 0.2378 0.2453 0.2350 -0.0273 -0.0427
0.0142  1 .
773  CG   CG   . LYS LYS LYS A A 104 104 . 0.3357 0.2363 0.2535 0.0084  -0.0455 -
0.0365 1 .
774  CD   CD   . LYS LYS LYS A A 104 104 . 0.3285 0.3341 0.3350 -0.1038 0.0323  -
0.0795 1 .
775  CE   CE   . LYS LYS LYS A A 104 104 . 0.3928 0.4055 0.3964 0.0209  -0.0079 -
0.0414 1 .
776  NZ   NZ   . LYS LYS LYS A A 104 104 . 0.4039 0.2617 0.3410 0.0439  -0.0618 -
0.0582 1 .
777  C    C    . LYS LYS LYS A A 104 104 . 0.2419 0.2187 0.2150 0.0160  -0.0257
0.0055  1 .
778  O    O    . LYS LYS LYS A A 104 104 . 0.2753 0.2344 0.2420 0.0474  -0.0178 -
0.0024 1 .
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779  N    N    . PHE PHE PHE A A 105 105 . 0.2313 0.1586 0.2174 0.0425  -0.0419
0.0061  1 .
780  CA   CA   . PHE PHE PHE A A 105 105 . 0.2029 0.1727 0.1934 0.0198  -0.0260
0.0026  1 .
781  CB   CB   . PHE PHE PHE A A 105 105 . 0.1790 0.1712 0.2208 -0.0007 -0.0275
0.0354  1 .
782  CG   CG   . PHE PHE PHE A A 105 105 . 0.2429 0.1951 0.2368 0.0139  -0.0583
0.0348  1 .
783  CD1  CD1  . PHE PHE PHE A A 105 105 . 0.2444 0.2121 0.2650 0.0015  -0.0338
0.0717  1 .
784  CE1  CE1  . PHE PHE PHE A A 105 105 . 0.2412 0.2053 0.2937 0.0220  -0.0661
0.0269  1 .
785  CZ   CZ   . PHE PHE PHE A A 105 105 . 0.2655 0.2420 0.2260 0.0388  -0.0823
0.0023  1 .
786  CE2  CE2  . PHE PHE PHE A A 105 105 . 0.2555 0.2632 0.3135 -0.0190 -0.0697
0.0365  1 .
787  CD2  CD2  . PHE PHE PHE A A 105 105 . 0.2766 0.1645 0.2812 0.0274  -0.0564
0.0481  1 .
788  C    C    . PHE PHE PHE A A 105 105 . 0.2222 0.1774 0.2049 0.0192  -0.0203
0.0049  1 .
789  O    O    . PHE PHE PHE A A 105 105 . 0.2056 0.1850 0.1812 0.0205  -0.0288
0.0273  1 .
790  N    N    . GLY GLY GLY A A 106 106 . 0.1922 0.1465 0.1993 0.0004  -0.0281 -
0.0021 1 .
791  CA   CA   . GLY GLY GLY A A 106 106 . 0.2029 0.1464 0.1773 0.0023  0.0057
0.0026  1 .
792  C    C    . GLY GLY GLY A A 106 106 . 0.1701 0.1515 0.1735 0.0033  -0.0108
0.0060  1 .
793  O    O    . GLY GLY GLY A A 106 106 . 0.1993 0.1194 0.1951 0.0078  -0.0157 -
0.0034 1 .
794  N    N    . ALA ALA ALA A A 107 107 . 0.1825 0.1719 0.1339 0.0035  -0.0085
0.0009  1 .
795  CA   CA   . ALA ALA ALA A A 107 107 . 0.1754 0.1672 0.1660 0.0099  -0.0266
0.0003  1 .
796  CB   CB   . ALA ALA ALA A A 107 107 . 0.1662 0.1974 0.1724 -0.0396 -0.0264 -
0.0012 1 .
797  C    C    . ALA ALA ALA A A 107 107 . 0.1606 0.1507 0.1769 -0.0002 -0.0039
0.0031  1 .
798  O    O    . ALA ALA ALA A A 107 107 . 0.1603 0.1674 0.2050 0.0003  0.0103
0.0011  1 .
799  N    N    . ASN ASN ASN A A 108 108 . 0.1917 0.1544 0.1678 0.0052  -0.0366
0.0055  1 .
800  CA   CA   . ASN ASN ASN A A 108 108 . 0.1577 0.1517 0.1697 0.0097  -0.0035
0.0142  1 .
801  CB   CB   . ASN ASN ASN A A 108 108 . 0.1548 0.1483 0.1616 0.0075  0.0196
0.0117  1 .
802  CG   CG   . ASN ASN ASN A A 108 108 . 0.1734 0.1628 0.1744 0.0333  0.0123
0.0178  1 .
803  OD1  OD1  . ASN ASN ASN A A 108 108 . 0.1883 0.1850 0.1617 0.0134  0.0228
0.0277  1 .
804  ND2  ND2  . ASN ASN ASN A A 108 108 . 0.1769 0.1356 0.1598 0.0249  0.0104  -
0.0063 1 .
805  C    C    . ASN ASN ASN A A 108 108 . 0.1717 0.1710 0.2061 0.0118  -0.0082 -
0.0019 1 .
806  O    O    . ASN ASN ASN A A 108 108 . 0.1891 0.1838 0.2830 0.0138  -0.0012
0.0116  1 .
807  N    N    . ALA ALA ALA A A 109 109 . 0.1731 0.1451 0.1687 0.0006  0.0025  -
0.0045 1 .
808  CA   CA   . ALA ALA ALA A A 109 109 . 0.1650 0.1682 0.1639 0.0158  -0.0065
0.0014  1 .
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809  CB   CB   . ALA ALA ALA A A 109 109 . 0.1765 0.1408 0.1487 0.0250  -0.0574 -
0.0156 1 .
810  C    C    . ALA ALA ALA A A 109 109 . 0.1809 0.1806 0.1642 0.0129  -0.0114
0.0085  1 .
811  O    O    . ALA ALA ALA A A 109 109 . 0.2009 0.1777 0.1754 0.0170  -0.0034
0.0093  1 .
812  N    N    . ILE ILE ILE A A 110 110 . 0.2008 0.1596 0.1447 0.0216  -0.0001
0.0268  1 .
813  CA   CA   . ILE ILE ILE A A 110 110 . 0.1810 0.1579 0.1478 0.0268  -0.0118
0.0172  1 .
814  CB   CB   . ILE ILE ILE A A 110 110 . 0.1767 0.1387 0.1236 0.0216  -0.0231
0.0272  1 .
815  CG1  CG1  . ILE ILE ILE A A 110 110 . 0.2014 0.1413 0.1687 0.0427  -0.0299
0.0422  1 .
816  CD   CD   . ILE ILE ILE A A 110 110 . 0.1548 0.2015 0.2090 0.0474  -0.0288
0.0198  1 .
817  CG2  CG2  . ILE ILE ILE A A 110 110 . 0.1876 0.1771 0.1488 0.0069  -0.0036
0.0188  1 .
818  C    C    . ILE ILE ILE A A 110 110 . 0.1531 0.1233 0.1403 0.0017  -0.0069
0.0163  1 .
819  O    O    . ILE ILE ILE A A 110 110 . 0.1680 0.1166 0.1592 0.0039  -0.0192
0.0011  1 .
820  N    N    . LEU LEU LEU A A 111 111 . 0.1620 0.1379 0.1278 0.0014  -0.0028
0.0246  1 .
821  CA   CA   . LEU LEU LEU A A 111 111 . 0.1321 0.1062 0.1155 0.0001  -0.0215 -
0.0019 1 .
822  CB   CB   . LEU LEU LEU A A 111 111 . 0.1237 0.0922 0.1322 0.0085  -0.0086 -
0.0090 1 .
823  CG   CG   . LEU LEU LEU A A 111 111 . 0.1601 0.1243 0.1745 -0.0233 -0.0005 -
0.0288 1 .
824  CD1  CD1  . LEU LEU LEU A A 111 111 . 0.1844 0.1437 0.1692 -0.0499 -0.0196
0.0112  1 .
825  CD2  CD2  . LEU LEU LEU A A 111 111 . 0.1541 0.1432 0.1801 -0.0720 -0.0550
0.0149  1 .
826  C    C    . LEU LEU LEU A A 111 111 . 0.1452 0.0950 0.1298 0.0092  -0.0086 -
0.0023 1 .
827  O    O    . LEU LEU LEU A A 111 111 . 0.1580 0.1396 0.1406 -0.0180 -0.0232
0.0074  1 .
828  N    N    . GLY GLY GLY A A 112 112 . 0.1259 0.1196 0.1296 0.0074  -0.0159 -
0.0007 1 .
829  CA   CA   . GLY GLY GLY A A 112 112 . 0.1632 0.0953 0.1888 -0.0216 -0.0275
0.0146  1 .
830  C    C    . GLY GLY GLY A A 112 112 . 0.1625 0.1284 0.1701 0.0000  -0.0052
0.0209  1 .
831  O    O    . GLY GLY GLY A A 112 112 . 0.1583 0.1575 0.1901 0.0043  -0.0181
0.0217  1 .
832  N    N    . VAL VAL VAL A A 113 113 . 0.1883 0.1353 0.1331 -0.0012 -0.0266
0.0179  1 .
833  CA   CA   . VAL VAL VAL A A 113 113 . 0.1775 0.1275 0.1563 -0.0066 -0.0141
0.0142  1 .
834  CB   CB   . VAL VAL VAL A A 113 113 . 0.1868 0.1269 0.1611 0.0009  0.0000
0.0048  1 .
835  CG1  CG1  . VAL VAL VAL A A 113 113 . 0.2015 0.1434 0.2615 -0.0119 0.0040
0.0144  1 .
836  CG2  CG2  . VAL VAL VAL A A 113 113 . 0.1823 0.1220 0.1605 -0.0058 -0.0163
0.0342  1 .
837  C    C    . VAL VAL VAL A A 113 113 . 0.1666 0.1419 0.1720 0.0070  -0.0139
0.0098  1 .
838  O    O    . VAL VAL VAL A A 113 113 . 0.1753 0.1259 0.1813 -0.0048 -0.0039
0.0034  1 .
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839  N    N    . SER SER SER A A 114 114 . 0.1752 0.1122 0.1549 -0.0187 -0.0126
0.0089  1 .
840  CA   CA   . SER SER SER A A 114 114 . 0.1606 0.1430 0.1572 0.0046  -0.0068
0.0042  1 .
841  CB   CB   . SER SER SER A A 114 114 . 0.1466 0.1730 0.1369 0.0092  -0.0133
0.0039  1 .
842  OG   OG   . SER SER SER A A 114 114 . 0.1941 0.1951 0.1620 -0.0097 -0.0041 -
0.0052 1 .
843  C    C    . SER SER SER A A 114 114 . 0.1555 0.1536 0.1598 0.0006  0.0098
0.0166  1 .
844  O    O    . SER SER SER A A 114 114 . 0.1554 0.1564 0.1380 0.0336  -0.0083
0.0383  1 .
845  N    N    . LEU LEU LEU A A 115 115 . 0.1530 0.1010 0.1041 -0.0132 0.0036
0.0293  1 .
846  CA   CA   . LEU LEU LEU A A 115 115 . 0.1188 0.1126 0.1259 -0.0092 -0.0119
0.0098  1 .
847  CB   CB   . LEU LEU LEU A A 115 115 . 0.1049 0.1481 0.1288 -0.0082 0.0098
0.0091  1 .
848  CG   CG   . LEU LEU LEU A A 115 115 . 0.1135 0.1605 0.1314 -0.0027 -0.0002 -
0.0032 1 .
849  CD1  CD1  . LEU LEU LEU A A 115 115 . 0.1636 0.1378 0.1687 -0.0361 0.0274  -
0.0072 1 .
850  CD2  CD2  . LEU LEU LEU A A 115 115 . 0.1762 0.1581 0.1533 -0.0126 -0.0226 -
0.0250 1 .
851  C    C    . LEU LEU LEU A A 115 115 . 0.1481 0.1531 0.1551 -0.0076 0.0016
0.0158  1 .
852  O    O    . LEU LEU LEU A A 115 115 . 0.1332 0.1281 0.1633 0.0013  -0.0101
0.0000  1 .
853  N    N    . ALA ALA ALA A A 116 116 . 0.1470 0.1340 0.1308 -0.0284 -0.0135
0.0241  1 .
854  CA   CA   . ALA ALA ALA A A 116 116 . 0.1467 0.1626 0.1313 -0.0063 -0.0192
0.0145  1 .
855  CB   CB   . ALA ALA ALA A A 116 116 . 0.1545 0.1922 0.1363 -0.0033 -0.0184 -
0.0104 1 .
856  C    C    . ALA ALA ALA A A 116 116 . 0.1455 0.1255 0.1566 -0.0106 -0.0117
0.0047  1 .
857  O    O    . ALA ALA ALA A A 116 116 . 0.1592 0.1553 0.1708 0.0001  -0.0091
0.0467  1 .
858  N    N    . VAL VAL VAL A A 117 117 . 0.1739 0.1482 0.1575 -0.0093 -0.0099
0.0257  1 .
859  CA   CA   . VAL VAL VAL A A 117 117 . 0.1840 0.1614 0.1744 -0.0145 0.0119
0.0014  1 .
860  CB   CB   . VAL VAL VAL A A 117 117 . 0.2091 0.1408 0.1566 -0.0299 0.0130
0.0043  1 .
861  CG1  CG1  . VAL VAL VAL A A 117 117 . 0.2344 0.1925 0.1647 -0.0114 0.0417
0.0032  1 .
862  CG2  CG2  . VAL VAL VAL A A 117 117 . 0.2180 0.1554 0.2244 -0.0716 0.0055  -
0.0232 1 .
863  C    C    . VAL VAL VAL A A 117 117 . 0.1825 0.1462 0.1862 -0.0058 0.0044
0.0105  1 .
864  O    O    . VAL VAL VAL A A 117 117 . 0.1683 0.1713 0.1895 0.0009  -0.0159 -
0.0033 1 .
865  N    N    . CYS CYS CYS A A 118 118 . 0.1823 0.1625 0.1548 -0.0064 -0.0120 -
0.0016 1 .
866  CA   CA   . CYS CYS CYS A A 118 118 . 0.1591 0.1369 0.1622 0.0021  -0.0105
0.0165  1 .
867  CB   CB   . CYS CYS CYS A A 118 118 . 0.1715 0.1537 0.1350 -0.0173 -0.0205
0.0097  1 .
868  SG   SG   . CYS CYS CYS A A 118 118 . 0.2027 0.2046 0.1966 -0.0293 0.0044
0.0057  1 .
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869  C    C    . CYS CYS CYS A A 118 118 . 0.1589 0.1381 0.1546 -0.0217 -0.0024
0.0038  1 .
870  O    O    . CYS CYS CYS A A 118 118 . 0.1624 0.1564 0.1692 0.0018  0.0011
0.0170  1 .
871  N    N    . LYS LYS LYS A A 119 119 . 0.1670 0.1537 0.1366 -0.0183 -0.0021
0.0121  1 .
872  CA   CA   . LYS LYS LYS A A 119 119 . 0.1579 0.1645 0.1636 -0.0305 0.0025
0.0078  1 .
873  CB   CB   . LYS LYS LYS A A 119 119 . 0.1661 0.1583 0.1438 -0.0412 -0.0099
0.0319  1 .
874  CG   CG   . LYS LYS LYS A A 119 119 . 0.1690 0.1415 0.1792 -0.0545 0.0117
0.0571  1 .
875  CD   CD   . LYS LYS LYS A A 119 119 . 0.2545 0.1454 0.1578 -0.0594 0.0516
0.0268  1 .
876  CE   CE   . LYS LYS LYS A A 119 119 . 0.2926 0.2373 0.1952 -0.0475 0.0160
0.0478  1 .
877  NZ   NZ   . LYS LYS LYS A A 119 119 . 0.2835 0.1993 0.2259 -0.0373 0.0156
0.0096  1 .
878  C    C    . LYS LYS LYS A A 119 119 . 0.1541 0.1534 0.1711 -0.0149 0.0075  -
0.0124 1 .
879  O    O    . LYS LYS LYS A A 119 119 . 0.1607 0.1740 0.1957 -0.0034 0.0182  -
0.0208 1 .
880  N    N    . ALA ALA ALA A A 120 120 . 0.1647 0.1465 0.1825 -0.0296 0.0017  -
0.0108 1 .
881  CA   CA   . ALA ALA ALA A A 120 120 . 0.1720 0.1640 0.1983 -0.0079 0.0065  -
0.0166 1 .
882  CB   CB   . ALA ALA ALA A A 120 120 . 0.1746 0.1185 0.1780 0.0036  -0.0123 -
0.0320 1 .
883  C    C    . ALA ALA ALA A A 120 120 . 0.1999 0.2037 0.2043 -0.0045 -0.0031 -
0.0044 1 .
884  O    O    . ALA ALA ALA A A 120 120 . 0.1801 0.2294 0.2315 -0.0032 0.0083
0.0241  1 .
885  N    N    . GLY GLY GLY A A 121 121 . 0.2025 0.1850 0.1957 -0.0268 0.0021
0.0049  1 .
886  CA   CA   . GLY GLY GLY A A 121 121 . 0.1975 0.2070 0.1922 -0.0280 0.0142  -
0.0132 1 .
887  C    C    . GLY GLY GLY A A 121 121 . 0.2068 0.1919 0.2055 -0.0252 0.0180
0.0066  1 .
888  O    O    . GLY GLY GLY A A 121 121 . 0.1633 0.2097 0.2244 -0.0135 0.0223
0.0205  1 .
889  N    N    . ALA ALA ALA A A 122 122 . 0.1972 0.1968 0.2038 -0.0286 0.0191
0.0000  1 .
890  CA   CA   . ALA ALA ALA A A 122 122 . 0.1774 0.1919 0.2111 -0.0292 0.0058  -
0.0032 1 .
891  CB   CB   . ALA ALA ALA A A 122 122 . 0.1799 0.1715 0.2091 -0.0334 0.0316
0.0010  1 .
892  C    C    . ALA ALA ALA A A 122 122 . 0.1994 0.2035 0.2209 -0.0131 0.0104  -
0.0021 1 .
893  O    O    . ALA ALA ALA A A 122 122 . 0.2284 0.2393 0.2543 -0.0156 0.0092  -
0.0113 1 .
894  N    N    . ALA ALA ALA A A 123 123 . 0.1813 0.1959 0.2101 -0.0142 -0.0258 -
0.0087 1 .
895  CA   CA   . ALA ALA ALA A A 123 123 . 0.1739 0.2139 0.2327 -0.0211 0.0007
0.0005  1 .
896  CB   CB   . ALA ALA ALA A A 123 123 . 0.2060 0.2226 0.2408 -0.0188 0.0015  -
0.0131 1 .
897  C    C    . ALA ALA ALA A A 123 123 . 0.1903 0.2091 0.2354 -0.0222 0.0105  -
0.0109 1 .
898  O    O    . ALA ALA ALA A A 123 123 . 0.1845 0.2414 0.3149 -0.0215 0.0236  -
0.0044 1 .
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899  N    N    . GLU GLU GLU A A 124 124 . 0.1848 0.2125 0.2118 -0.0289 0.0224
0.0169  1 .
900  CA   CA   . GLU GLU GLU A A 124 124 . 0.1834 0.2129 0.2482 -0.0493 0.0201
0.0100  1 .
901  CB   CB   . GLU GLU GLU A A 124 124 . 0.2461 0.2553 0.2709 -0.0431 0.0259
0.0033  1 .
902  CG   CG   . GLU GLU GLU A A 124 124 . 0.2780 0.3366 0.3815 -0.0785 -0.0019
0.0368  1 .
903  CD   CD   . GLU GLU GLU A A 124 124 . 0.4287 0.4833 0.4788 -0.1776 -0.0345 -
0.0127 1 .
904  OE1  OE1  . GLU GLU GLU A A 124 124 . 0.4766 0.6397 0.5890 -0.1546 0.0412
0.0652  1 .
905  OE2  OE2  . GLU GLU GLU A A 124 124 . 0.3836 0.4085 0.5155 -0.1927 -0.0557
0.0267  1 .
906  C    C    . GLU GLU GLU A A 124 124 . 0.1962 0.2397 0.2628 -0.0528 0.0344  -
0.0025 1 .
907  O    O    . GLU GLU GLU A A 124 124 . 0.2067 0.3074 0.3226 -0.0625 0.0403  -
0.0116 1 .
908  N    N    . ARG ARG ARG A A 125 125 . 0.2246 0.2905 0.2401 -0.0354 0.0386  -
0.0188 1 .
909  CA   CA   . ARG ARG ARG A A 125 125 . 0.2458 0.2924 0.2929 -0.0223 0.0255  -
0.0190 1 .
910  CB   CB   . ARG ARG ARG A A 125 125 . 0.2730 0.2935 0.2729 -0.0113 0.0127  -
0.0283 1 .
911  CG   CG   . ARG ARG ARG A A 125 125 . 0.3056 0.2921 0.2980 0.0138  0.0290
0.0496  1 .
912  CD   CD   . ARG ARG ARG A A 125 125 . 0.4165 0.3724 0.4329 -0.0387 0.0896
0.0901  1 .
913  NE   NE   . ARG ARG ARG A A 125 125 . 0.4622 0.5050 0.5091 -0.0100 0.0389
0.0785  1 .
914  CZ   CZ   . ARG ARG ARG A A 125 125 . 0.4916 0.5012 0.5779 -0.0056 0.0265
0.0750  1 .
915  NH1  NH1  . ARG ARG ARG A A 125 125 . 0.4415 0.5231 0.5310 -0.0024 -0.0080
0.0708  1 .
916  NH2  NH2  . ARG ARG ARG A A 125 125 . 0.4985 0.5898 0.6159 0.0066  0.0461
0.0760  1 .
917  C    C    . ARG ARG ARG A A 125 125 . 0.2234 0.3066 0.3085 -0.0228 0.0307  -
0.0253 1 .
918  O    O    . ARG ARG ARG A A 125 125 . 0.2303 0.3273 0.3189 -0.0514 0.0628  -
0.0409 1 .
919  N    N    . GLU GLU GLU A A 126 126 . 0.1806 0.2883 0.3163 -0.0202 0.0419  -
0.0168 1 .
920  CA   CA   . GLU GLU GLU A A 126 126 . 0.1877 0.2851 0.3405 -0.0212 0.0361  -
0.0223 1 .
921  CB   CB   . GLU GLU GLU A A 126 126 . 0.1910 0.3127 0.3934 0.0067  0.0373
0.0108  1 .
922  C    C    . GLU GLU GLU A A 126 126 . 0.2095 0.2977 0.3391 -0.0138 0.0362  -
0.0270 1 .
923  O    O    . GLU GLU GLU A A 126 126 . 0.1941 0.3117 0.3827 -0.0300 0.0315  -
0.0593 1 .
924  N    N    . LEU LEU LEU A A 127 127 . 0.2058 0.2763 0.3143 -0.0068 0.0138  -
0.0200 1 .
925  CA   CA   . LEU LEU LEU A A 127 127 . 0.2235 0.2671 0.2561 -0.0174 0.0225  -
0.0026 1 .
926  CB   CB   . LEU LEU LEU A A 127 127 . 0.2604 0.2561 0.2457 -0.0171 0.0265
0.0039  1 .
927  CG   CG   . LEU LEU LEU A A 127 127 . 0.2900 0.3036 0.2523 -0.0049 0.0287
0.0153  1 .
928  CD1  CD1  . LEU LEU LEU A A 127 127 . 0.2772 0.2859 0.3345 -0.0026 0.0646
0.0430  1 .
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929  CD2  CD2  . LEU LEU LEU A A 127 127 . 0.3003 0.2640 0.2243 -0.0241 0.0724
0.0378  1 .
930  C    C    . LEU LEU LEU A A 127 127 . 0.1957 0.2395 0.2405 -0.0219 0.0167  -
0.0060 1 .
931  O    O    . LEU LEU LEU A A 127 127 . 0.1890 0.2535 0.2446 -0.0383 0.0076
0.0162  1 .
932  N    N    . PRO PRO PRO A A 128 128 . 0.2109 0.2323 0.2236 -0.0049 0.0099  -
0.0007 1 .
933  CA   CA   . PRO PRO PRO A A 128 128 . 0.1923 0.2097 0.2230 -0.0223 0.0251  -
0.0067 1 .
934  CB   CB   . PRO PRO PRO A A 128 128 . 0.2158 0.2144 0.2353 -0.0155 0.0228  -
0.0246 1 .
935  CG   CG   . PRO PRO PRO A A 128 128 . 0.2760 0.2595 0.2177 -0.0384 0.0082  -
0.0291 1 .
936  CD   CD   . PRO PRO PRO A A 128 128 . 0.2340 0.2474 0.2508 -0.0276 0.0275  -
0.0239 1 .
937  C    C    . PRO PRO PRO A A 128 128 . 0.1853 0.2113 0.1892 -0.0201 0.0076
0.0033  1 .
938  O    O    . PRO PRO PRO A A 128 128 . 0.1945 0.2299 0.2033 -0.0228 0.0060
0.0131  1 .
939  N    N    . LEU LEU LEU A A 129 129 . 0.1554 0.1999 0.1743 -0.0190 0.0189
0.0072  1 .
940  CA   CA   . LEU LEU LEU A A 129 129 . 0.1626 0.1809 0.1628 -0.0079 0.0154  -
0.0026 1 .
941  CB   CB   . LEU LEU LEU A A 129 129 . 0.1681 0.2017 0.1829 0.0111  0.0167
0.0107  1 .
942  CG   CG   . LEU LEU LEU A A 129 129 . 0.1602 0.1344 0.1801 -0.0102 0.0420
0.0014  1 .
943  CD1  CD1  . LEU LEU LEU A A 129 129 . 0.2137 0.1263 0.1397 -0.0204 0.0311  -
0.0022 1 .
944  CD2  CD2  . LEU LEU LEU A A 129 129 . 0.1948 0.1556 0.1395 -0.0036 0.0468
0.0057  1 .
945  C    C    . LEU LEU LEU A A 129 129 . 0.1750 0.1861 0.1619 -0.0037 0.0239
0.0071  1 .
946  O    O    . LEU LEU LEU A A 129 129 . 0.1828 0.1832 0.1674 0.0037  0.0228
0.0120  1 .
947  N    N    . TYR TYR TYR A A 130 130 . 0.1430 0.1948 0.1580 -0.0074 0.0134  -
0.0188 1 .
948  CA   CA   . TYR TYR TYR A A 130 130 . 0.1936 0.1664 0.1211 -0.0144 0.0241
0.0031  1 .
949  CB   CB   . TYR TYR TYR A A 130 130 . 0.1634 0.1594 0.1484 -0.0023 0.0244  -
0.0305 1 .
950  CG   CG   . TYR TYR TYR A A 130 130 . 0.1820 0.1775 0.1595 -0.0041 0.0070  -
0.0107 1 .
951  CD1  CD1  . TYR TYR TYR A A 130 130 . 0.1790 0.2144 0.2154 -0.0296 0.0244  -
0.0444 1 .
952  CE1  CE1  . TYR TYR TYR A A 130 130 . 0.2201 0.2218 0.1972 -0.0218 0.0075
0.0013  1 .
953  CZ   CZ   . TYR TYR TYR A A 130 130 . 0.2116 0.2383 0.2457 0.0540  -0.0054
0.0054  1 .
954  OH   OH   . TYR TYR TYR A A 130 130 . 0.1586 0.2790 0.3259 0.0130  -0.0262 -
0.0048 1 .
955  CE2  CE2  . TYR TYR TYR A A 130 130 . 0.1688 0.1882 0.2361 0.0205  -0.0108 -
0.0019 1 .
956  CD2  CD2  . TYR TYR TYR A A 130 130 . 0.1382 0.1901 0.1819 0.0168  -0.0248 -
0.0100 1 .
957  C    C    . TYR TYR TYR A A 130 130 . 0.1739 0.1966 0.1529 -0.0025 0.0224
0.0016  1 .
958  O    O    . TYR TYR TYR A A 130 130 . 0.1890 0.1873 0.1889 0.0201  0.0244
0.0001  1 .
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959  N    N    . ARG ARG ARG A A 131 131 . 0.1730 0.1752 0.1563 -0.0253 0.0257  -
0.0058 1 .
960  CA   CA   . ARG ARG ARG A A 131 131 . 0.1808 0.2092 0.2009 -0.0204 0.0306
0.0036  1 .
961  CB   CB   . ARG ARG ARG A A 131 131 . 0.2054 0.2350 0.2821 0.0027  0.0273  -
0.0033 1 .
962  CG   CG   . ARG ARG ARG A A 131 131 . 0.2681 0.2927 0.3622 -0.0152 0.0605  -
0.0091 1 .
963  CD   CD   . ARG ARG ARG A A 131 131 . 0.2915 0.4353 0.4988 0.0067  0.1214  -
0.0157 1 .
964  NE   NE   . ARG ARG ARG A A 131 131 . 0.4345 0.5338 0.5818 0.0193  0.0813  -
0.0030 1 .
965  CZ   CZ   . ARG ARG ARG A A 131 131 . 0.5625 0.5800 0.6505 -0.0195 0.0296  -
0.0226 1 .
966  NH1  NH1  . ARG ARG ARG A A 131 131 . 0.6096 0.5809 0.6888 0.0076  0.0138
0.0024  1 .
967  NH2  NH2  . ARG ARG ARG A A 131 131 . 0.6021 0.6632 0.6166 -0.0742 0.0544  -
0.0081 1 .
968  C    C    . ARG ARG ARG A A 131 131 . 0.1879 0.2183 0.2060 -0.0174 0.0152
0.0030  1 .
969  O    O    . ARG ARG ARG A A 131 131 . 0.2055 0.2381 0.1898 -0.0306 0.0596
0.0159  1 .
970  N    N    . HIS HIS HIS A A 132 132 . 0.1736 0.1636 0.1817 -0.0113 0.0244  -
0.0145 1 .
971  CA   CA   . HIS HIS HIS A A 132 132 . 0.1613 0.1650 0.1798 -0.0219 0.0149
0.0060  1 .
972  CB   CB   . HIS HIS HIS A A 132 132 . 0.2176 0.1563 0.1858 -0.0272 -0.0105
0.0011  1 .
973  CG   CG   . HIS HIS HIS A A 132 132 . 0.2001 0.1650 0.1827 -0.0143 0.0011  -
0.0029 1 .
974  ND1  ND1  . HIS HIS HIS A A 132 132 . 0.2335 0.1607 0.2297 -0.0342 0.0520  -
0.0045 1 .
975  CE1  CE1  . HIS HIS HIS A A 132 132 . 0.2457 0.2291 0.2726 0.0019  0.0593
0.0322  1 .
976  NE2  NE2  . HIS HIS HIS A A 132 132 . 0.2272 0.2184 0.1904 -0.0275 0.0248
0.0358  1 .
977  CD2  CD2  . HIS HIS HIS A A 132 132 . 0.2191 0.1685 0.1649 0.0100  0.0092
0.0243  1 .
978  C    C    . HIS HIS HIS A A 132 132 . 0.1830 0.1354 0.1739 -0.0122 0.0196
0.0000  1 .
979  O    O    . HIS HIS HIS A A 132 132 . 0.2012 0.2012 0.1739 -0.0358 0.0328
0.0483  1 .
980  N    N    . ILE ILE ILE A A 133 133 . 0.1780 0.1701 0.1764 -0.0176 0.0209  -
0.0131 1 .
981  CA   CA   . ILE ILE ILE A A 133 133 . 0.1871 0.1900 0.1436 -0.0064 0.0252  -
0.0031 1 .
982  CB   CB   . ILE ILE ILE A A 133 133 . 0.1723 0.1953 0.1567 -0.0307 0.0298  -
0.0160 1 .
983  CG1  CG1  . ILE ILE ILE A A 133 133 . 0.2037 0.1882 0.1209 -0.0164 0.0216
0.0121  1 .
984  CD   CD   . ILE ILE ILE A A 133 133 . 0.1998 0.1917 0.1915 -0.0595 0.0216  -
0.0107 1 .
985  CG2  CG2  . ILE ILE ILE A A 133 133 . 0.1720 0.2013 0.2169 0.0062  0.0058
0.0290  1 .
986  C    C    . ILE ILE ILE A A 133 133 . 0.2018 0.1983 0.1517 -0.0108 0.0231
0.0234  1 .
987  O    O    . ILE ILE ILE A A 133 133 . 0.2376 0.2289 0.1899 0.0010  0.0263
0.0264  1 .
988  N    N    . ALA ALA ALA A A 134 134 . 0.2560 0.2019 0.1805 0.0017  0.0144
0.0214  1 .
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989  CA   CA   . ALA ALA ALA A A 134 134 . 0.2472 0.2001 0.2099 -0.0284 0.0274
0.0309  1 .
990  CB   CB   . ALA ALA ALA A A 134 134 . 0.2581 0.2023 0.2127 -0.0297 0.0462
0.0068  1 .
991  C    C    . ALA ALA ALA A A 134 134 . 0.2626 0.2231 0.2115 -0.0316 0.0099
0.0279  1 .
992  O    O    . ALA ALA ALA A A 134 134 . 0.2960 0.2285 0.2085 -0.0303 0.0073
0.0494  1 .
993  N    N    . GLN GLN GLN A A 135 135 . 0.2585 0.2568 0.2201 -0.0311 0.0231
0.0286  1 .
994  CA   CA   . GLN GLN GLN A A 135 135 . 0.2630 0.2490 0.2244 -0.0251 0.0260
0.0233  1 .
995  CB   CB   . GLN GLN GLN A A 135 135 . 0.2437 0.2537 0.2124 -0.0211 0.0349
0.0334  1 .
996  CG   CG   . GLN GLN GLN A A 135 135 . 0.2180 0.3123 0.3110 -0.0127 0.0393
0.0250  1 .
997  CD   CD   . GLN GLN GLN A A 135 135 . 0.2526 0.3426 0.3030 -0.0113 0.0361
0.0121  1 .
998  OE1  OE1  . GLN GLN GLN A A 135 135 . 0.3249 0.3965 0.3819 -0.0599 0.0527
0.0027  1 .
999  NE2  NE2  . GLN GLN GLN A A 135 135 . 0.3479 0.3309 0.3135 0.0411  0.0636
0.0004  1 .
1000 C    C    . GLN GLN GLN A A 135 135 . 0.2742 0.2687 0.2193 -0.0212 0.0123
0.0305  1 .
1001 O    O    . GLN GLN GLN A A 135 135 . 0.3225 0.2824 0.2381 -0.0499 0.0670
0.0466  1 .
1002 N    N    . LEU LEU LEU A A 136 136 . 0.2452 0.2451 0.2143 -0.0377 0.0368
0.0125  1 .
1003 CA   CA   . LEU LEU LEU A A 136 136 . 0.2553 0.2797 0.2249 -0.0293 0.0136
0.0221  1 .
1004 CB   CB   . LEU LEU LEU A A 136 136 . 0.2587 0.2610 0.1849 -0.0381 -0.0018
0.0174  1 .
1005 CG   CG   . LEU LEU LEU A A 136 136 . 0.2003 0.1910 0.1937 -0.0737 0.0148
0.0204  1 .
1006 CD1  CD1  . LEU LEU LEU A A 136 136 . 0.2447 0.2120 0.1758 -0.0507 0.0356
0.0654  1 .
1007 CD2  CD2  . LEU LEU LEU A A 136 136 . 0.2796 0.2466 0.2088 -0.0638 0.0082
0.0112  1 .
1008 C    C    . LEU LEU LEU A A 136 136 . 0.2858 0.2905 0.2162 -0.0278 0.0111
0.0139  1 .
1009 O    O    . LEU LEU LEU A A 136 136 . 0.3044 0.3190 0.2486 -0.0302 0.0106
0.0239  1 .
1010 N    N    . ALA ALA ALA A A 137 137 . 0.2923 0.2975 0.2163 -0.0354 0.0271
0.0165  1 .
1011 CA   CA   . ALA ALA ALA A A 137 137 . 0.2954 0.3166 0.2060 -0.0375 0.0265
0.0277  1 .
1012 CB   CB   . ALA ALA ALA A A 137 137 . 0.2854 0.3010 0.2172 -0.0547 0.0159
0.0146  1 .
1013 C    C    . ALA ALA ALA A A 137 137 . 0.3251 0.3565 0.2397 -0.0232 0.0192
0.0162  1 .
1014 O    O    . ALA ALA ALA A A 137 137 . 0.3232 0.4103 0.2396 -0.0227 0.0222
0.0446  1 .
1015 N    N    . GLY GLY GLY A A 138 138 . 0.3435 0.3701 0.2294 -0.0370 0.0477
0.0240  1 .
1016 CA   CA   . GLY GLY GLY A A 138 138 . 0.3786 0.3968 0.2630 -0.0183 0.0467
0.0056  1 .
1017 C    C    . GLY GLY GLY A A 138 138 . 0.3799 0.4070 0.2684 -0.0227 0.0375
0.0077  1 .
1018 O    O    . GLY GLY GLY A A 138 138 . 0.3987 0.4397 0.2669 -0.0184 0.0498
0.0092  1 .
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1019 N    N    . ASN ASN ASN A A 139 139 . 0.3439 0.3845 0.2561 -0.0352 0.0581
0.0214  1 .
1020 CA   CA   . ASN ASN ASN A A 139 139 . 0.3264 0.3960 0.2491 -0.0281 0.0580
0.0215  1 .
1021 CB   CB   . ASN ASN ASN A A 139 139 . 0.2883 0.3994 0.2667 -0.0439 0.0505
0.0357  1 .
1022 CG   CG   . ASN ASN ASN A A 139 139 . 0.3218 0.4351 0.2577 -0.0354 0.0399
0.0516  1 .
1023 OD1  OD1  . ASN ASN ASN A A 139 139 . 0.2735 0.3800 0.2467 -0.0366 0.0250
0.0220  1 .
1024 ND2  ND2  . ASN ASN ASN A A 139 139 . 0.2757 0.4548 0.2285 -0.0553 0.0305
0.1121  1 .
1025 C    C    . ASN ASN ASN A A 139 139 . 0.3516 0.4195 0.3017 -0.0220 0.0658  -
0.0055 1 .
1026 O    O    . ASN ASN ASN A A 139 139 . 0.2891 0.4276 0.2271 -0.0019 0.1209  -
0.0314 1 .
1027 N    N    . SER SER SER A A 140 140 . 0.3969 0.4572 0.3377 -0.0175 0.0512  -
0.0419 1 .
1028 CA   CA   . SER SER SER A A 140 140 . 0.4143 0.4701 0.3868 -0.0068 0.0305  -
0.0309 1 .
1029 CB   CB   . SER SER SER A A 140 140 . 0.4277 0.4965 0.4310 -0.0061 0.0504  -
0.0248 1 .
1030 OG   OG   . SER SER SER A A 140 140 . 0.4496 0.5461 0.5169 0.0262  0.1022  -
0.0234 1 .
1031 C    C    . SER SER SER A A 140 140 . 0.4301 0.4857 0.3984 -0.0096 0.0107  -
0.0297 1 .
1032 O    O    . SER SER SER A A 140 140 . 0.4193 0.5095 0.4570 0.0052  0.0015  -
0.0484 1 .
1033 N    N    . ASP ASP ASP A A 141 141 . 0.4391 0.4660 0.3804 -0.0282 -0.0048 -
0.0340 1 .
1034 CA   CA   . ASP ASP ASP A A 141 141 . 0.4468 0.4456 0.3605 -0.0363 0.0018  -
0.0046 1 .
1035 CB   CB   . ASP ASP ASP A A 141 141 . 0.4626 0.4410 0.3660 -0.0451 -0.0101 -
0.0204 1 .
1036 CG   CG   . ASP ASP ASP A A 141 141 . 0.5203 0.4565 0.3628 -0.0515 0.0188  -
0.0135 1 .
1037 C    C    . ASP ASP ASP A A 141 141 . 0.4059 0.4329 0.3591 -0.0354 -0.0079 -
0.0155 1 .
1038 O    O    . ASP ASP ASP A A 141 141 . 0.4348 0.4636 0.3732 -0.0116 -0.0252 -
0.0314 1 .
1039 N    N    . LEU LEU LEU A A 142 142 . 0.3587 0.3670 0.2684 -0.0505 -0.0032 -
0.0131 1 .
1040 CA   CA   . LEU LEU LEU A A 142 142 . 0.2832 0.3157 0.2654 -0.0601 -0.0026 -
0.0061 1 .
1041 CB   CB   . LEU LEU LEU A A 142 142 . 0.2790 0.3230 0.1712 -0.0494 0.0337  -
0.0137 1 .
1042 CG   CG   . LEU LEU LEU A A 142 142 . 0.2590 0.2919 0.2809 -0.0462 0.0282  -
0.0110 1 .
1043 CD1  CD1  . LEU LEU LEU A A 142 142 . 0.3138 0.3897 0.2429 -0.0207 0.0203  -
0.0647 1 .
1044 CD2  CD2  . LEU LEU LEU A A 142 142 . 0.2418 0.3267 0.3228 -0.0797 0.0837  -
0.0516 1 .
1045 C    C    . LEU LEU LEU A A 142 142 . 0.2876 0.2997 0.2568 -0.0407 -0.0033
0.0048  1 .
1046 O    O    . LEU LEU LEU A A 142 142 . 0.2806 0.3325 0.2411 -0.0416 -0.0018 -
0.0125 1 .
1047 N    N    . ILE ILE ILE A A 143 143 . 0.2631 0.2679 0.1859 -0.0276 -0.0023
0.0223  1 .
1048 CA   CA   . ILE ILE ILE A A 143 143 . 0.2485 0.2511 0.1823 -0.0217 -0.0100
0.0240  1 .
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1049 CB   CB   . ILE ILE ILE A A 143 143 . 0.2559 0.2907 0.1895 -0.0238 -0.0183
0.0075  1 .
1050 CG1  CG1  . ILE ILE ILE A A 143 143 . 0.3515 0.2295 0.2706 -0.0171 0.0011
0.0637  1 .
1051 CD   CD   . ILE ILE ILE A A 143 143 . 0.3937 0.3544 0.3450 0.0271  0.0039  -
0.0392 1 .
1052 CG2  CG2  . ILE ILE ILE A A 143 143 . 0.2830 0.3032 0.2217 -0.0276 -0.0036
0.0111  1 .
1053 C    C    . ILE ILE ILE A A 143 143 . 0.2210 0.1953 0.1720 -0.0023 0.0142
0.0189  1 .
1054 O    O    . ILE ILE ILE A A 143 143 . 0.2019 0.2055 0.1763 0.0027  -0.0002
0.0451  1 .
1055 N    N    . LEU LEU LEU A A 144 144 . 0.1732 0.1722 0.1218 -0.0234 0.0177
0.0200  1 .
1056 CA   CA   . LEU LEU LEU A A 144 144 . 0.1436 0.1613 0.1191 -0.0107 0.0134  -
0.0001 1 .
1057 CB   CB   . LEU LEU LEU A A 144 144 . 0.1613 0.1301 0.1393 0.0002  -0.0239
0.0069  1 .
1058 CG   CG   . LEU LEU LEU A A 144 144 . 0.1526 0.2391 0.1250 -0.0019 0.0086  -
0.0125 1 .
1059 CD1  CD1  . LEU LEU LEU A A 144 144 . 0.2364 0.2152 0.1453 0.0522  0.0035
0.0065  1 .
1060 CD2  CD2  . LEU LEU LEU A A 144 144 . 0.2148 0.2602 0.1759 -0.0631 -0.0417
0.0221  1 .
1061 C    C    . LEU LEU LEU A A 144 144 . 0.1604 0.1646 0.1399 -0.0141 0.0117  -
0.0123 1 .
1062 O    O    . LEU LEU LEU A A 144 144 . 0.1676 0.1890 0.1367 -0.0258 0.0289  -
0.0401 1 .
1063 N    N    . PRO PRO PRO A A 145 145 . 0.1701 0.1663 0.1169 -0.0056 0.0063  -
0.0194 1 .
1064 CA   CA   . PRO PRO PRO A A 145 145 . 0.1721 0.1579 0.1196 -0.0124 0.0022  -
0.0298 1 .
1065 CB   CB   . PRO PRO PRO A A 145 145 . 0.2017 0.1510 0.0727 0.0028  -0.0268 -
0.0597 1 .
1066 CG   CG   . PRO PRO PRO A A 145 145 . 0.1220 0.1560 0.1133 -0.0265 -0.0220 -
0.0135 1 .
1067 CD   CD   . PRO PRO PRO A A 145 145 . 0.1495 0.1698 0.1040 -0.0280 0.0063  -
0.0309 1 .
1068 C    C    . PRO PRO PRO A A 145 145 . 0.1735 0.1602 0.1058 -0.0140 0.0073  -
0.0252 1 .
1069 O    O    . PRO PRO PRO A A 145 145 . 0.1733 0.1435 0.1126 -0.0196 -0.0021 -
0.0285 1 .
1070 N    N    . VAL VAL VAL A A 146 146 . 0.1741 0.1643 0.0861 -0.0542 0.0080  -
0.0274 1 .
1071 CA   CA   . VAL VAL VAL A A 146 146 . 0.1768 0.1739 0.1172 -0.0319 0.0139  -
0.0239 1 .
1072 CB   CB   . VAL VAL VAL A A 146 146 . 0.1860 0.2046 0.1075 -0.0358 0.0077  -
0.0140 1 .
1073 CG1  CG1  . VAL VAL VAL A A 146 146 . 0.1796 0.1950 0.1916 -0.0646 -0.0131 -
0.0461 1 .
1074 CG2  CG2  . VAL VAL VAL A A 146 146 . 0.2194 0.1893 0.1268 -0.0063 0.0283  -
0.0640 1 .
1075 C    C    . VAL VAL VAL A A 146 146 . 0.1881 0.1579 0.1128 -0.0065 0.0054  -
0.0179 1 .
1076 O    O    . VAL VAL VAL A A 146 146 . 0.2243 0.1912 0.0912 -0.0109 0.0086  -
0.0438 1 .
1077 N    N    . PRO PRO PRO A A 147 147 . 0.1929 0.1537 0.1228 -0.0050 0.0183  -
0.0205 1 .
1078 CA   CA   . PRO PRO PRO A A 147 147 . 0.1637 0.1765 0.1398 -0.0165 0.0354  -
0.0137 1 .
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1079 CB   CB   . PRO PRO PRO A A 147 147 . 0.1941 0.1647 0.1264 0.0038  0.0282  -
0.0157 1 .
1080 CG   CG   . PRO PRO PRO A A 147 147 . 0.1643 0.1536 0.1079 0.0052  0.0537  -
0.0254 1 .
1081 CD   CD   . PRO PRO PRO A A 147 147 . 0.1839 0.1659 0.1192 0.0093  0.0268  -
0.0143 1 .
1082 C    C    . PRO PRO PRO A A 147 147 . 0.1874 0.1722 0.1685 -0.0069 0.0109  -
0.0262 1 .
1083 O    O    . PRO PRO PRO A A 147 147 . 0.1806 0.1796 0.1463 -0.0399 0.0242  -
0.0636 1 .
1084 N    N    . ALA ALA ALA A A 148 148 . 0.1685 0.1619 0.1284 -0.0066 0.0313  -
0.0315 1 .
1085 CA   CA   . ALA ALA ALA A A 148 148 . 0.1796 0.1620 0.1188 -0.0102 -0.0023 -
0.0324 1 .
1086 CB   CB   . ALA ALA ALA A A 148 148 . 0.1881 0.2034 0.1484 -0.0077 -0.0127 -
0.0190 1 .
1087 C    C    . ALA ALA ALA A A 148 148 . 0.2007 0.1635 0.1357 -0.0203 0.0239  -
0.0139 1 .
1088 O    O    . ALA ALA ALA A A 148 148 . 0.2282 0.1746 0.1794 -0.0436 0.0313  -
0.0095 1 .
1089 N    N    . PHE PHE PHE A A 149 149 . 0.2003 0.2033 0.1082 -0.0394 0.0153
0.0076  1 .
1090 CA   CA   . PHE PHE PHE A A 149 149 . 0.2059 0.1940 0.1069 -0.0235 0.0246  -
0.0153 1 .
1091 CB   CB   . PHE PHE PHE A A 149 149 . 0.1809 0.1802 0.1323 -0.0162 0.0100  -
0.0177 1 .
1092 CG   CG   . PHE PHE PHE A A 149 149 . 0.1912 0.1749 0.1592 -0.0290 -0.0033 -
0.0042 1 .
1093 CD1  CD1  . PHE PHE PHE A A 149 149 . 0.1725 0.1741 0.1548 -0.0175 0.0109  -
0.0181 1 .
1094 CE1  CE1  . PHE PHE PHE A A 149 149 . 0.1952 0.1821 0.1667 0.0008  0.0369  -
0.0090 1 .
1095 CZ   CZ   . PHE PHE PHE A A 149 149 . 0.2067 0.1590 0.1425 -0.0325 -0.0120
0.0240  1 .
1096 CE2  CE2  . PHE PHE PHE A A 149 149 . 0.1959 0.1372 0.1183 -0.0186 -0.0227
0.0019  1 .
1097 CD2  CD2  . PHE PHE PHE A A 149 149 . 0.2074 0.1953 0.1914 -0.0201 -0.0093 -
0.0149 1 .
1098 C    C    . PHE PHE PHE A A 149 149 . 0.2072 0.1861 0.1749 -0.0368 0.0191  -
0.0381 1 .
1099 O    O    . PHE PHE PHE A A 149 149 . 0.2186 0.2035 0.1625 -0.0586 0.0142  -
0.0409 1 .
1100 N    N    . ASN ASN ASN A A 150 150 . 0.2220 0.1970 0.1587 -0.0269 0.0246  -
0.0454 1 .
1101 CA   CA   . ASN ASN ASN A A 150 150 . 0.2371 0.1922 0.1869 -0.0367 0.0070  -
0.0376 1 .
1102 CB   CB   . ASN ASN ASN A A 150 150 . 0.2321 0.2013 0.2314 -0.0419 0.0260  -
0.0553 1 .
1103 CG   CG   . ASN ASN ASN A A 150 150 . 0.2649 0.2784 0.2704 -0.0473 0.0051  -
0.0642 1 .
1104 OD1  OD1  . ASN ASN ASN A A 150 150 . 0.3671 0.3295 0.2459 -0.0228 0.0303  -
0.0653 1 .
1105 ND2  ND2  . ASN ASN ASN A A 150 150 . 0.2552 0.1968 0.2522 -0.0451 -0.0237 -
0.0517 1 .
1106 C    C    . ASN ASN ASN A A 150 150 . 0.2612 0.2315 0.2041 -0.0495 0.0156  -
0.0366 1 .
1107 O    O    . ASN ASN ASN A A 150 150 . 0.2703 0.2467 0.2276 -0.0497 -0.0027 -
0.0244 1 .
1108 N    N    . VAL VAL VAL A A 151 151 . 0.2393 0.1982 0.2000 -0.0403 0.0087  -
0.0132 1 .
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1109 CA   CA   . VAL VAL VAL A A 151 151 . 0.2471 0.2093 0.2316 -0.0355 0.0283  -
0.0258 1 .
1110 CB   CB   . VAL VAL VAL A A 151 151 . 0.2707 0.2342 0.2409 -0.0271 0.0191  -
0.0152 1 .
1111 CG1  CG1  . VAL VAL VAL A A 151 151 . 0.2812 0.2443 0.2779 -0.0914 0.0100  -
0.0392 1 .
1112 CG2  CG2  . VAL VAL VAL A A 151 151 . 0.2504 0.2052 0.2686 -0.0535 0.0218  -
0.0493 1 .
1113 C    C    . VAL VAL VAL A A 151 151 . 0.2543 0.2048 0.2152 -0.0496 0.0136  -
0.0276 1 .
1114 O    O    . VAL VAL VAL A A 151 151 . 0.2860 0.2086 0.2047 -0.0493 0.0521  -
0.0282 1 .
1115 N    N    . ILE ILE ILE A A 152 152 . 0.2200 0.1919 0.2158 -0.0318 0.0634  -
0.0797 1 .
1116 CA   CA   . ILE ILE ILE A A 152 152 . 0.2380 0.2506 0.2720 -0.0596 0.0403  -
0.0676 1 .
1117 CB   CB   . ILE ILE ILE A A 152 152 . 0.1906 0.2830 0.2694 -0.0386 0.0512  -
0.0535 1 .
1118 CG1  CG1  . ILE ILE ILE A A 152 152 . 0.2185 0.2702 0.3373 -0.0919 0.0229  -
0.0830 1 .
1119 CD   CD   . ILE ILE ILE A A 152 152 . 0.2129 0.3418 0.2605 -0.1324 -0.0008 -
0.0013 1 .
1120 CG2  CG2  . ILE ILE ILE A A 152 152 . 0.2065 0.3162 0.2934 -0.0406 0.0989  -
0.0514 1 .
1121 C    C    . ILE ILE ILE A A 152 152 . 0.2645 0.2609 0.2497 -0.0376 0.0215  -
0.0439 1 .
1122 O    O    . ILE ILE ILE A A 152 152 . 0.3224 0.2955 0.1871 -0.0537 0.0638  -
0.0555 1 .
1123 N    N    . ASN ASN ASN A A 153 153 . 0.2554 0.2855 0.2349 -0.0398 0.0299  -
0.0424 1 .
1124 CA   CA   . ASN ASN ASN A A 153 153 . 0.2581 0.2832 0.2318 -0.0338 0.0156  -
0.0338 1 .
1125 CB   CB   . ASN ASN ASN A A 153 153 . 0.2552 0.2815 0.1981 -0.0333 -0.0090 -
0.0600 1 .
1126 CG   CG   . ASN ASN ASN A A 153 153 . 0.2721 0.3473 0.2550 -0.0369 -0.0096 -
0.0463 1 .
1127 OD1  OD1  . ASN ASN ASN A A 153 153 . 0.2133 0.3130 0.2381 -0.0391 -0.0205 -
0.0315 1 .
1128 ND2  ND2  . ASN ASN ASN A A 153 153 . 0.2952 0.3592 0.3123 0.0473  0.0006  -
0.0134 1 .
1129 C    C    . ASN ASN ASN A A 153 153 . 0.2692 0.2859 0.2425 -0.0173 0.0111  -
0.0234 1 .
1130 O    O    . ASN ASN ASN A A 153 153 . 0.2500 0.3058 0.2774 -0.0312 0.0543  -
0.0118 1 .
1131 N    N    . GLY GLY GLY A A 154 154 . 0.2952 0.3063 0.2768 -0.0053 0.0273  -
0.0208 1 .
1132 CA   CA   . GLY GLY GLY A A 154 154 . 0.2615 0.3127 0.2861 -0.0175 0.0318  -
0.0173 1 .
1133 C    C    . GLY GLY GLY A A 154 154 . 0.2633 0.3057 0.2311 -0.0231 0.0294  -
0.0225 1 .
1134 O    O    . GLY GLY GLY A A 154 154 . 0.2618 0.3111 0.2174 -0.0410 0.0327  -
0.0161 1 .
1135 N    N    . GLY GLY GLY A A 155 155 . 0.2461 0.2858 0.2152 -0.0093 0.0211  -
0.0147 1 .
1136 CA   CA   . GLY GLY GLY A A 155 155 . 0.2734 0.2985 0.2497 -0.0275 0.0214  -
0.0098 1 .
1137 C    C    . GLY GLY GLY A A 155 155 . 0.2841 0.3086 0.2991 -0.0045 0.0154  -
0.0122 1 .
1138 O    O    . GLY GLY GLY A A 155 155 . 0.2430 0.3039 0.3144 -0.0390 0.0342  -
0.0052 1 .
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1139 N    N    . SER SER SER A A 156 156 . 0.2837 0.2979 0.2956 -0.0188 0.0113  -
0.0221 1 .
1140 CA   CA   . SER SER SER A A 156 156 . 0.3027 0.3222 0.3261 0.0094  -0.0016 -
0.0300 1 .
1141 CB   CB   . SER SER SER A A 156 156 . 0.2948 0.3056 0.3576 0.0266  0.0025  -
0.0112 1 .
1142 OG   OG   . SER SER SER A A 156 156 . 0.2323 0.4296 0.3704 -0.0082 -0.0199 -
0.0324 1 .
1143 C    C    . SER SER SER A A 156 156 . 0.2838 0.2978 0.2971 0.0045  0.0059  -
0.0341 1 .
1144 O    O    . SER SER SER A A 156 156 . 0.3164 0.3393 0.2901 -0.0017 -0.0163 -
0.0649 1 .
1145 N    N    . HIS HIS HIS A A 157 157 . 0.2554 0.2764 0.2763 0.0033  0.0308  -
0.0205 1 .
1146 CA   CA   . HIS HIS HIS A A 157 157 . 0.2473 0.2636 0.2569 -0.0033 0.0253  -
0.0178 1 .
1147 CB   CB   . HIS HIS HIS A A 157 157 . 0.2563 0.2755 0.2680 -0.0061 0.0432  -
0.0173 1 .
1148 CG   CG   . HIS HIS HIS A A 157 157 . 0.2037 0.2651 0.2749 -0.0448 0.0234  -
0.0170 1 .
1149 ND1  ND1  . HIS HIS HIS A A 157 157 . 0.2681 0.2687 0.2599 -0.0472 0.0252
0.0106  1 .
1150 CE1  CE1  . HIS HIS HIS A A 157 157 . 0.2688 0.2640 0.3486 -0.0668 0.0340
0.0033  1 .
1151 NE2  NE2  . HIS HIS HIS A A 157 157 . 0.2257 0.2661 0.3008 -0.0828 0.0068  -
0.0254 1 .
1152 CD2  CD2  . HIS HIS HIS A A 157 157 . 0.2028 0.2889 0.3501 -0.0722 0.0235  -
0.0059 1 .
1153 C    C    . HIS HIS HIS A A 157 157 . 0.2394 0.2949 0.2413 -0.0133 0.0319  -
0.0032 1 .
1154 O    O    . HIS HIS HIS A A 157 157 . 0.1994 0.2586 0.2421 -0.0151 0.0276
0.0055  1 .
1155 N    N    . ALA ALA ALA A A 158 158 . 0.2448 0.2864 0.2556 -0.0325 -0.0044 -
0.0079 1 .
1156 CA   CA   . ALA ALA ALA A A 158 158 . 0.2470 0.2904 0.2678 -0.0361 0.0339  -
0.0203 1 .
1157 CB   CB   . ALA ALA ALA A A 158 158 . 0.2703 0.2681 0.2965 -0.0122 0.0232
0.0010  1 .
1158 C    C    . ALA ALA ALA A A 158 158 . 0.2393 0.2946 0.2745 -0.0212 0.0308  -
0.0299 1 .
1159 O    O    . ALA ALA ALA A A 158 158 . 0.2400 0.3407 0.2953 -0.0244 0.0552  -
0.0472 1 .
1160 N    N    . GLY GLY GLY A A 159 159 . 0.2559 0.3132 0.2985 -0.0394 0.0454  -
0.0402 1 .
1161 CA   CA   . GLY GLY GLY A A 159 159 . 0.2987 0.3565 0.3207 -0.0601 0.0471  -
0.0303 1 .
1162 C    C    . GLY GLY GLY A A 159 159 . 0.3267 0.3496 0.3310 -0.0519 0.0304  -
0.0169 1 .
1163 O    O    . GLY GLY GLY A A 159 159 . 0.3497 0.4119 0.3920 -0.0357 0.0321  -
0.0261 1 .
1164 N    N    . ASN ASN ASN A A 160 160 . 0.3074 0.3728 0.3610 -0.0658 0.0294  -
0.0315 1 .
1165 CA   CA   . ASN ASN ASN A A 160 160 . 0.2967 0.3460 0.3321 -0.0564 0.0271  -
0.0392 1 .
1166 CB   CB   . ASN ASN ASN A A 160 160 . 0.2767 0.3325 0.3143 -0.0441 0.0326  -
0.0537 1 .
1167 CG   CG   . ASN ASN ASN A A 160 160 . 0.3017 0.3045 0.3701 -0.0477 0.0320  -
0.0482 1 .
1168 OD1  OD1  . ASN ASN ASN A A 160 160 . 0.2195 0.3064 0.2808 -0.0460 0.0228  -
0.0355 1 .
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1169 ND2  ND2  . ASN ASN ASN A A 160 160 . 0.2821 0.3631 0.2726 -0.0463 0.1068  -
0.0322 1 .
1170 C    C    . ASN ASN ASN A A 160 160 . 0.2615 0.3300 0.3122 -0.0523 0.0375  -
0.0243 1 .
1171 O    O    . ASN ASN ASN A A 160 160 . 0.2269 0.3348 0.3541 -0.0932 0.0276  -
0.0364 1 .
1172 N    N    . LYS LYS LYS A A 161 161 . 0.2715 0.3331 0.2797 -0.0712 0.0421  -
0.0238 1 .
1173 CA   CA   . LYS LYS LYS A A 161 161 . 0.2622 0.3625 0.2861 -0.0618 0.0388  -
0.0095 1 .
1174 CB   CB   . LYS LYS LYS A A 161 161 . 0.2696 0.3681 0.2798 -0.0721 0.0345  -
0.0295 1 .
1175 CG   CG   . LYS LYS LYS A A 161 161 . 0.2998 0.4508 0.3920 -0.1464 0.0343
0.0098  1 .
1176 CD   CD   . LYS LYS LYS A A 161 161 . 0.2926 0.5491 0.5064 -0.1376 0.0579
0.0044  1 .
1177 CE   CE   . LYS LYS LYS A A 161 161 . 0.3508 0.5655 0.5312 -0.1633 0.0497  -
0.0089 1 .
1178 NZ   NZ   . LYS LYS LYS A A 161 161 . 0.3308 0.5927 0.6091 -0.1550 0.0474  -
0.0338 1 .
1179 C    C    . LYS LYS LYS A A 161 161 . 0.2808 0.3399 0.2896 -0.0484 0.0149  -
0.0252 1 .
1180 O    O    . LYS LYS LYS A A 161 161 . 0.3010 0.3827 0.2788 -0.0489 0.0312  -
0.0008 1 .
1181 N    N    . LEU LEU LEU A A 162 162 . 0.2896 0.3801 0.2862 -0.0497 0.0323  -
0.0253 1 .
1182 CA   CA   . LEU LEU LEU A A 162 162 . 0.2788 0.3523 0.2761 -0.0269 0.0267  -
0.0231 1 .
1183 CB   CB   . LEU LEU LEU A A 162 162 . 0.2664 0.3636 0.2586 -0.0198 0.0272  -
0.0247 1 .
1184 CG   CG   . LEU LEU LEU A A 162 162 . 0.2652 0.3669 0.2567 -0.0046 0.0533  -
0.0430 1 .
1185 CD1  CD1  . LEU LEU LEU A A 162 162 . 0.3822 0.4195 0.2465 -0.0611 0.1060  -
0.0656 1 .
1186 CD2  CD2  . LEU LEU LEU A A 162 162 . 0.2656 0.3490 0.3185 0.0170  0.0221  -
0.0624 1 .
1187 C    C    . LEU LEU LEU A A 162 162 . 0.2711 0.3468 0.2656 -0.0408 0.0159  -
0.0051 1 .
1188 O    O    . LEU LEU LEU A A 162 162 . 0.2611 0.3752 0.2822 -0.0345 0.0205
0.0055  1 .
1189 N    N    . ALA ALA ALA A A 163 163 . 0.2080 0.3178 0.2608 -0.0175 -0.0048
0.0002  1 .
1190 CA   CA   . ALA ALA ALA A A 163 163 . 0.2093 0.3301 0.2479 -0.0146 0.0102  -
0.0178 1 .
1191 CB   CB   . ALA ALA ALA A A 163 163 . 0.1728 0.3487 0.2292 -0.0203 -0.0331 -
0.0123 1 .
1192 C    C    . ALA ALA ALA A A 163 163 . 0.2427 0.3209 0.2854 -0.0190 0.0269  -
0.0410 1 .
1193 O    O    . ALA ALA ALA A A 163 163 . 0.2327 0.3190 0.2989 -0.0158 0.0645  -
0.0430 1 .
1194 N    N    . MET MET MET A A 164 164 . 0.2601 0.3477 0.2791 -0.0277 0.0627  -
0.0265 1 .
1195 CA   CA   . MET MET MET A A 164 164 . 0.2682 0.3292 0.2724 -0.0512 0.0528  -
0.0312 1 .
1196 CB   CB   . MET MET MET A A 164 164 . 0.2862 0.3496 0.2605 -0.0504 0.0562  -
0.0250 1 .
1197 CG   CG   . MET MET MET A A 164 164 . 0.3215 0.3677 0.2819 -0.0567 0.0421  -
0.0395 1 .
1198 SD   SD   . MET MET MET A A 164 164 . 0.2673 0.3991 0.3206 -0.0799 0.0111  -
0.0661 1 .
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1199 CE   CE   . MET MET MET A A 164 164 . 0.3438 0.4770 0.2551 -0.0412 -0.0081 -
0.0314 1 .
1200 C    C    . MET MET MET A A 164 164 . 0.2627 0.2883 0.2611 -0.0439 0.0551  -
0.0277 1 .
1201 O    O    . MET MET MET A A 164 164 . 0.2740 0.3107 0.2777 -0.0760 0.0590  -
0.0355 1 .
1202 N    N    . GLN GLN GLN A A 165 165 . 0.2313 0.2832 0.2504 -0.0631 0.0456  -
0.0457 1 .
1203 CA   CA   . GLN GLN GLN A A 165 165 . 0.2523 0.2648 0.2355 -0.0495 0.0437  -
0.0280 1 .
1204 CB   CB   . GLN GLN GLN A A 165 165 . 0.2372 0.2745 0.2295 -0.0642 0.0250  -
0.0278 1 .
1205 CG   CG   . GLN GLN GLN A A 165 165 . 0.2286 0.2470 0.2321 -0.0703 0.0302  -
0.0889 1 .
1206 CD   CD   . GLN GLN GLN A A 165 165 . 0.2319 0.2738 0.2218 -0.0518 0.0391  -
0.0220 1 .
1207 OE1  OE1  . GLN GLN GLN A A 165 165 . 0.2628 0.3503 0.2905 -0.0890 0.1078  -
0.0665 1 .
1208 NE2  NE2  . GLN GLN GLN A A 165 165 . 0.1942 0.2337 0.2495 -0.0665 0.0461  -
0.0734 1 .
1209 C    C    . GLN GLN GLN A A 165 165 . 0.2319 0.2411 0.2144 -0.0534 0.0311  -
0.0125 1 .
1210 O    O    . GLN GLN GLN A A 165 165 . 0.2582 0.2433 0.2253 -0.0349 0.0323  -
0.0351 1 .
1211 N    N    . GLU GLU GLU A A 166 166 . 0.2472 0.2149 0.1900 -0.0546 0.0236  -
0.0496 1 .
1212 CA   CA   . GLU GLU GLU A A 166 166 . 0.2672 0.2345 0.2354 -0.0561 0.0311  -
0.0438 1 .
1213 CB   CB   . GLU GLU GLU A A 166 166 . 0.2731 0.2239 0.2374 -0.0704 0.0240  -
0.0477 1 .
1214 CG   CG   . GLU GLU GLU A A 166 166 . 0.2784 0.2359 0.2747 -0.0773 0.0561  -
0.0668 1 .
1215 CD   CD   . GLU GLU GLU A A 166 166 . 0.2847 0.2922 0.3074 -0.0902 0.0362  -
0.0495 1 .
1216 OE1  OE1  . GLU GLU GLU A A 166 166 . 0.2120 0.3512 0.3204 -0.0961 -0.0216 -
0.0370 1 .
1217 OE2  OE2  . GLU GLU GLU A A 166 166 . 0.2873 0.2654 0.3479 -0.0240 0.0858  -
0.0513 1 .
1218 C    C    . GLU GLU GLU A A 166 166 . 0.2594 0.2335 0.2049 -0.0382 0.0261  -
0.0441 1 .
1219 O    O    . GLU GLU GLU A A 166 166 . 0.2092 0.2589 0.2214 -0.0318 0.0086  -
0.0483 1 .
1220 N    N    . PHE PHE PHE A A 167 167 . 0.2624 0.2301 0.2081 -0.0428 0.0631  -
0.0477 1 .
1221 CA   CA   . PHE PHE PHE A A 167 167 . 0.2543 0.2063 0.2173 -0.0477 0.0416  -
0.0427 1 .
1222 CB   CB   . PHE PHE PHE A A 167 167 . 0.2515 0.2461 0.2484 -0.0633 0.0310  -
0.0321 1 .
1223 CG   CG   . PHE PHE PHE A A 167 167 . 0.2608 0.2435 0.2867 -0.0421 0.0649  -
0.0528 1 .
1224 CD1  CD1  . PHE PHE PHE A A 167 167 . 0.2960 0.2563 0.2340 -0.0630 0.0332  -
0.0438 1 .
1225 CE1  CE1  . PHE PHE PHE A A 167 167 . 0.3117 0.2889 0.2977 -0.0595 0.0491  -
0.0255 1 .
1226 CZ   CZ   . PHE PHE PHE A A 167 167 . 0.3185 0.2930 0.2985 -0.0611 0.0271  -
0.0193 1 .
1227 CE2  CE2  . PHE PHE PHE A A 167 167 . 0.2978 0.3374 0.3432 -0.0730 0.0555  -
0.0484 1 .
1228 CD2  CD2  . PHE PHE PHE A A 167 167 . 0.2473 0.2914 0.3056 -0.0275 0.0218  -
0.0613 1 .
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1229 C    C    . PHE PHE PHE A A 167 167 . 0.2270 0.2314 0.2163 -0.0607 0.0229  -
0.0169 1 .
1230 O    O    . PHE PHE PHE A A 167 167 . 0.2196 0.2404 0.2177 -0.0467 0.0242  -
0.0405 1 .
1231 N    N    . MET MET MET A A 168 168 . 0.2244 0.2369 0.1738 -0.0417 0.0154  -
0.0272 1 .
1232 CA   CA   . MET MET MET A A 168 168 . 0.2158 0.2041 0.1854 -0.0314 0.0168  -
0.0282 1 .
1233 CB   CB   . MET MET MET A A 168 168 . 0.2132 0.2058 0.1932 -0.0356 0.0289  -
0.0312 1 .
1234 CG   CG   . MET MET MET A A 168 168 . 0.3054 0.1978 0.2413 -0.0433 0.0387  -
0.0227 1 .
1235 SD   SD   . MET MET MET A A 168 168 . 0.2619 0.2713 0.2900 -0.0575 -0.0130 -
0.0172 1 .
1236 CE   CE   . MET MET MET A A 168 168 . 0.2445 0.2845 0.3003 -0.0251 -0.0547 -
0.0638 1 .
1237 C    C    . MET MET MET A A 168 168 . 0.2062 0.2009 0.1666 -0.0290 0.0011  -
0.0255 1 .
1238 O    O    . MET MET MET A A 168 168 . 0.2347 0.2358 0.2027 -0.0627 -0.0311 -
0.0466 1 .
1239 N    N    . ILE ILE ILE A A 169 169 . 0.2024 0.1798 0.1549 -0.0185 0.0097  -
0.0506 1 .
1240 CA   CA   . ILE ILE ILE A A 169 169 . 0.1944 0.1841 0.1545 -0.0168 -0.0030 -
0.0368 1 .
1241 CB   CB   . ILE ILE ILE A A 169 169 . 0.1623 0.1982 0.1504 -0.0295 -0.0235 -
0.0122 1 .
1242 CG1  CG1  . ILE ILE ILE A A 169 169 . 0.2111 0.1950 0.1268 -0.0221 -0.0431
0.0309  1 .
1243 CD   CD   . ILE ILE ILE A A 169 169 . 0.2391 0.1593 0.2056 -0.0092 0.0116
0.0139  1 .
1244 CG2  CG2  . ILE ILE ILE A A 169 169 . 0.1713 0.2240 0.2100 -0.0549 -0.0063 -
0.0624 1 .
1245 C    C    . ILE ILE ILE A A 169 169 . 0.1997 0.2134 0.1519 -0.0331 -0.0023 -
0.0294 1 .
1246 O    O    . ILE ILE ILE A A 169 169 . 0.1859 0.1696 0.1491 -0.0494 0.0225  -
0.0487 1 .
1247 N    N    . LEU LEU LEU A A 170 170 . 0.2065 0.1966 0.1222 -0.0374 0.0163  -
0.0410 1 .
1248 CA   CA   . LEU LEU LEU A A 170 170 . 0.1820 0.1748 0.1515 -0.0266 -0.0068 -
0.0147 1 .
1249 CB   CB   . LEU LEU LEU A A 170 170 . 0.1958 0.1886 0.1600 -0.0092 -0.0086 -
0.0263 1 .
1250 CG   CG   . LEU LEU LEU A A 170 170 . 0.2005 0.2147 0.2062 0.0003  0.0297
0.0021  1 .
1251 CD1  CD1  . LEU LEU LEU A A 170 170 . 0.2315 0.3332 0.1935 0.0025  0.0705  -
0.0271 1 .
1252 CD2  CD2  . LEU LEU LEU A A 170 170 . 0.2997 0.3555 0.2143 0.0503  0.0190
0.0546  1 .
1253 C    C    . LEU LEU LEU A A 170 170 . 0.1952 0.2072 0.1473 -0.0327 0.0008  -
0.0155 1 .
1254 O    O    . LEU LEU LEU A A 170 170 . 0.2031 0.1868 0.1319 -0.0474 -0.0174 -
0.0293 1 .
1255 N    N    . PRO PRO PRO A A 171 171 . 0.2103 0.2036 0.1449 -0.0263 -0.0165 -
0.0272 1 .
1256 CA   CA   . PRO PRO PRO A A 171 171 . 0.2073 0.2133 0.1431 -0.0086 0.0086  -
0.0073 1 .
1257 CB   CB   . PRO PRO PRO A A 171 171 . 0.2271 0.2037 0.1293 -0.0116 -0.0126 -
0.0317 1 .
1258 CG   CG   . PRO PRO PRO A A 171 171 . 0.2458 0.2623 0.1794 0.0237  -0.0132 -
0.0471 1 .
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1259 CD   CD   . PRO PRO PRO A A 171 171 . 0.2172 0.1766 0.0903 -0.0153 -0.0761 -
0.0288 1 .
1260 C    C    . PRO PRO PRO A A 171 171 . 0.1976 0.2151 0.1472 -0.0093 0.0193  -
0.0177 1 .
1261 O    O    . PRO PRO PRO A A 171 171 . 0.2243 0.2021 0.1220 -0.0231 0.0163  -
0.0522 1 .
1262 N    N    . VAL VAL VAL A A 172 172 . 0.2328 0.1850 0.1349 -0.0327 0.0192  -
0.0101 1 .
1263 CA   CA   . VAL VAL VAL A A 172 172 . 0.2376 0.2156 0.1559 -0.0145 0.0296  -
0.0207 1 .
1264 CB   CB   . VAL VAL VAL A A 172 172 . 0.2188 0.2049 0.1856 -0.0238 0.0262  -
0.0220 1 .
1265 CG1  CG1  . VAL VAL VAL A A 172 172 . 0.2478 0.1870 0.1830 -0.0066 0.0076
0.0152  1 .
1266 CG2  CG2  . VAL VAL VAL A A 172 172 . 0.2504 0.2432 0.2171 -0.0460 0.0247  -
0.0529 1 .
1267 C    C    . VAL VAL VAL A A 172 172 . 0.2257 0.2054 0.1480 -0.0272 -0.0035 -
0.0393 1 .
1268 O    O    . VAL VAL VAL A A 172 172 . 0.2542 0.2106 0.1456 -0.0342 0.0208  -
0.0511 1 .
1269 N    N    . GLY GLY GLY A A 173 173 . 0.2320 0.2143 0.1502 -0.0146 0.0027  -
0.0410 1 .
1270 CA   CA   . GLY GLY GLY A A 173 173 . 0.2427 0.2225 0.2050 -0.0231 0.0075  -
0.0552 1 .
1271 C    C    . GLY GLY GLY A A 173 173 . 0.2464 0.2101 0.1986 0.0022  0.0075  -
0.0609 1 .
1272 O    O    . GLY GLY GLY A A 173 173 . 0.2852 0.2224 0.1988 -0.0162 0.0172  -
0.0810 1 .
1273 N    N    . ALA ALA ALA A A 174 174 . 0.2323 0.2146 0.1398 -0.0265 0.0203  -
0.0451 1 .
1274 CA   CA   . ALA ALA ALA A A 174 174 . 0.2430 0.2365 0.1547 -0.0187 0.0106  -
0.0706 1 .
1275 CB   CB   . ALA ALA ALA A A 174 174 . 0.2421 0.2292 0.1059 -0.0327 0.0077  -
0.0829 1 .
1276 C    C    . ALA ALA ALA A A 174 174 . 0.2337 0.2170 0.1826 -0.0209 0.0085  -
0.0549 1 .
1277 O    O    . ALA ALA ALA A A 174 174 . 0.2793 0.2569 0.1678 -0.0420 0.0366  -
0.0371 1 .
1278 N    N    . GLU GLU GLU A A 175 175 . 0.2707 0.2296 0.2368 -0.0097 0.0165  -
0.0696 1 .
1279 CA   CA   . GLU GLU GLU A A 175 175 . 0.2649 0.2661 0.2899 -0.0146 0.0251  -
0.0467 1 .
1280 CB   CB   . GLU GLU GLU A A 175 175 . 0.2760 0.2364 0.3445 -0.0163 0.0456  -
0.0641 1 .
1281 CG   CG   . GLU GLU GLU A A 175 175 . 0.3661 0.2977 0.4865 -0.0108 0.0303  -
0.0526 1 .
1282 CD   CD   . GLU GLU GLU A A 175 175 . 0.4901 0.3803 0.5958 0.0943  0.0797  -
0.0065 1 .
1283 C    C    . GLU GLU GLU A A 175 175 . 0.2725 0.2552 0.2665 -0.0119 0.0456  -
0.0417 1 .
1284 O    O    . GLU GLU GLU A A 175 175 . 0.2786 0.2894 0.2426 -0.0021 0.0642  -
0.0503 1 .
1285 N    N    . SER SER SER A A 176 176 . 0.2414 0.2376 0.2159 -0.0127 0.0480  -
0.0238 1 .
1286 CA   CA   . SER SER SER A A 176 176 . 0.2104 0.2267 0.1904 0.0027  0.0470  -
0.0218 1 .
1287 CB   CB   . SER SER SER A A 176 176 . 0.2140 0.2324 0.2027 -0.0169 0.0321
0.0164  1 .
1288 OG   OG   . SER SER SER A A 176 176 . 0.2188 0.1946 0.1713 0.0235  0.0545  -
0.0010 1 .
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1289 C    C    . SER SER SER A A 176 176 . 0.1971 0.2120 0.1782 -0.0039 0.0316  -
0.0287 1 .
1290 O    O    . SER SER SER A A 176 176 . 0.2136 0.1996 0.1442 -0.0101 0.0255  -
0.0092 1 .
1291 N    N    . PHE PHE PHE A A 177 177 . 0.1997 0.1791 0.1643 0.0005  0.0574  -
0.0128 1 .
1292 CA   CA   . PHE PHE PHE A A 177 177 . 0.2049 0.1286 0.1310 0.0099  0.0246  -
0.0116 1 .
1293 CB   CB   . PHE PHE PHE A A 177 177 . 0.1905 0.1418 0.1407 -0.0024 0.0290  -
0.0236 1 .
1294 CG   CG   . PHE PHE PHE A A 177 177 . 0.1385 0.1302 0.1192 -0.0072 0.0334  -
0.0077 1 .
1295 CD1  CD1  . PHE PHE PHE A A 177 177 . 0.1167 0.1232 0.1300 0.0006  0.0261  -
0.0092 1 .
1296 CE1  CE1  . PHE PHE PHE A A 177 177 . 0.2040 0.0953 0.1349 -0.0121 0.0251  -
0.0335 1 .
1297 CZ   CZ   . PHE PHE PHE A A 177 177 . 0.2205 0.1753 0.1304 -0.0220 0.0150  -
0.0334 1 .
1298 CE2  CE2  . PHE PHE PHE A A 177 177 . 0.2159 0.1573 0.1786 -0.0191 0.0432  -
0.0256 1 .
1299 CD2  CD2  . PHE PHE PHE A A 177 177 . 0.1758 0.1019 0.1420 -0.0181 0.0119  -
0.0131 1 .
1300 C    C    . PHE PHE PHE A A 177 177 . 0.1785 0.1685 0.1443 0.0023  0.0030  -
0.0175 1 .
1301 O    O    . PHE PHE PHE A A 177 177 . 0.2008 0.1660 0.1444 -0.0198 0.0080
0.0046  1 .
1302 N    N    . ARG ARG ARG A A 178 178 . 0.2060 0.1794 0.1645 -0.0063 -0.0066 -
0.0199 1 .
1303 CA   CA   . ARG ARG ARG A A 178 178 . 0.2106 0.1837 0.1561 -0.0095 0.0009  -
0.0154 1 .
1304 CB   CB   . ARG ARG ARG A A 178 178 . 0.2125 0.2097 0.1829 -0.0236 -0.0196 -
0.0617 1 .
1305 CG   CG   . ARG ARG ARG A A 178 178 . 0.3406 0.3296 0.2954 -0.0338 0.0045  -
0.0639 1 .
1306 CD   CD   . ARG ARG ARG A A 178 178 . 0.4637 0.3985 0.2899 0.0426  0.0365  -
0.0627 1 .
1307 NE   NE   . ARG ARG ARG A A 178 178 . 0.4042 0.5294 0.4854 0.0630  0.0133  -
0.0490 1 .
1308 CZ   CZ   . ARG ARG ARG A A 178 178 . 0.5077 0.5574 0.5002 0.0872  0.0063  -
0.0649 1 .
1309 NH1  NH1  . ARG ARG ARG A A 178 178 . 0.6421 0.5765 0.5539 0.0908  -0.0463 -
0.0559 1 .
1310 NH2  NH2  . ARG ARG ARG A A 178 178 . 0.3338 0.5382 0.4953 0.0848  0.0921  -
0.1083 1 .
1311 C    C    . ARG ARG ARG A A 178 178 . 0.1968 0.1872 0.1437 -0.0117 0.0099  -
0.0317 1 .
1312 O    O    . ARG ARG ARG A A 178 178 . 0.2204 0.1740 0.1339 -0.0082 0.0201  -
0.0297 1 .
1313 N    N    . ASP ASP ASP A A 179 179 . 0.2070 0.1868 0.1526 -0.0017 0.0148  -
0.0497 1 .
1314 CA   CA   . ASP ASP ASP A A 179 179 . 0.2254 0.2064 0.1616 -0.0062 0.0197  -
0.0597 1 .
1315 CB   CB   . ASP ASP ASP A A 179 179 . 0.2589 0.2035 0.1725 -0.0193 0.0081  -
0.0887 1 .
1316 CG   CG   . ASP ASP ASP A A 179 179 . 0.2822 0.2152 0.2309 -0.0035 0.0181  -
0.0474 1 .
1317 OD1  OD1  . ASP ASP ASP A A 179 179 . 0.3555 0.2449 0.2775 0.0120  -0.0093 -
0.0370 1 .
1318 OD2  OD2  . ASP ASP ASP A A 179 179 . 0.3389 0.2390 0.2399 0.0107  0.0627  -
0.0600 1 .
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1319 C    C    . ASP ASP ASP A A 179 179 . 0.2250 0.1944 0.1532 -0.0101 0.0109  -
0.0457 1 .
1320 O    O    . ASP ASP ASP A A 179 179 . 0.2153 0.1618 0.1449 -0.0142 0.0151  -
0.0368 1 .
1321 N    N    . ALA ALA ALA A A 180 180 . 0.2084 0.1600 0.1324 -0.0113 0.0097  -
0.0459 1 .
1322 CA   CA   . ALA ALA ALA A A 180 180 . 0.1951 0.1820 0.1014 -0.0101 0.0089  -
0.0365 1 .
1323 CB   CB   . ALA ALA ALA A A 180 180 . 0.1944 0.1868 0.1339 -0.0148 0.0164  -
0.0303 1 .
1324 C    C    . ALA ALA ALA A A 180 180 . 0.1832 0.1761 0.1261 -0.0078 0.0169  -
0.0092 1 .
1325 O    O    . ALA ALA ALA A A 180 180 . 0.2090 0.1758 0.1325 -0.0148 0.0315  -
0.0464 1 .
1326 N    N    . MET MET MET A A 181 181 . 0.1852 0.1524 0.1271 -0.0199 0.0107  -
0.0188 1 .
1327 CA   CA   . MET MET MET A A 181 181 . 0.1959 0.1543 0.1195 -0.0283 -0.0073 -
0.0185 1 .
1328 CB   CB   . MET MET MET A A 181 181 . 0.1667 0.1459 0.1380 -0.0389 -0.0174 -
0.0137 1 .
1329 CG   CG   . MET MET MET A A 181 181 . 0.1922 0.1323 0.1678 -0.0175 0.0282  -
0.0253 1 .
1330 SD   SD   . MET MET MET A A 181 181 . 0.2164 0.1758 0.1760 -0.0292 0.0038  -
0.0371 1 .
1331 CE   CE   . MET MET MET A A 181 181 . 0.2566 0.1616 0.1337 0.0058  -0.0298
0.0029  1 .
1332 C    C    . MET MET MET A A 181 181 . 0.1819 0.1675 0.1402 -0.0156 0.0005  -
0.0124 1 .
1333 O    O    . MET MET MET A A 181 181 . 0.1948 0.1843 0.1407 -0.0429 0.0353  -
0.0268 1 .
1334 N    N    . ARG ARG ARG A A 182 182 . 0.2061 0.1379 0.1222 -0.0077 0.0016
0.0003  1 .
1335 CA   CA   . ARG ARG ARG A A 182 182 . 0.1957 0.1532 0.1600 -0.0146 0.0130  -
0.0158 1 .
1336 CB   CB   . ARG ARG ARG A A 182 182 . 0.2171 0.1521 0.1858 -0.0032 0.0204  -
0.0078 1 .
1337 CG   CG   . ARG ARG ARG A A 182 182 . 0.2711 0.1329 0.1807 -0.0046 0.0399
0.0161  1 .
1338 CD   CD   . ARG ARG ARG A A 182 182 . 0.3499 0.1052 0.3362 0.0244  0.0675  -
0.0415 1 .
1339 NE   NE   . ARG ARG ARG A A 182 182 . 0.4003 0.2579 0.4178 -0.0229 0.0305  -
0.0562 1 .
1340 CZ   CZ   . ARG ARG ARG A A 182 182 . 0.3883 0.3273 0.3924 -0.0072 0.0127  -
0.0591 1 .
1341 NH1  NH1  . ARG ARG ARG A A 182 182 . 0.4815 0.2757 0.3166 -0.0115 -0.0101 -
0.1151 1 .
1342 NH2  NH2  . ARG ARG ARG A A 182 182 . 0.3673 0.3479 0.3147 0.0453  0.0254  -
0.0552 1 .
1343 C    C    . ARG ARG ARG A A 182 182 . 0.2033 0.1745 0.1442 -0.0085 0.0309  -
0.0106 1 .
1344 O    O    . ARG ARG ARG A A 182 182 . 0.1963 0.1990 0.1770 -0.0393 0.0105  -
0.0427 1 .
1345 N    N    . LEU LEU LEU A A 183 183 . 0.2060 0.1919 0.1634 -0.0094 -0.0083 -
0.0223 1 .
1346 CA   CA   . LEU LEU LEU A A 183 183 . 0.2265 0.1994 0.1725 -0.0151 0.0020  -
0.0141 1 .
1347 CB   CB   . LEU LEU LEU A A 183 183 . 0.2693 0.2045 0.1389 -0.0297 -0.0080 -
0.0517 1 .
1348 CG   CG   . LEU LEU LEU A A 183 183 . 0.2564 0.1725 0.1961 0.0320  0.0041  -
0.0347 1 .
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1349 CD1  CD1  . LEU LEU LEU A A 183 183 . 0.2446 0.2407 0.2240 0.0308  -0.0033 -
0.0763 1 .
1350 CD2  CD2  . LEU LEU LEU A A 183 183 . 0.3017 0.1980 0.1642 -0.0077 -0.0150 -
0.0746 1 .
1351 C    C    . LEU LEU LEU A A 183 183 . 0.2160 0.1915 0.2103 -0.0225 0.0061  -
0.0135 1 .
1352 O    O    . LEU LEU LEU A A 183 183 . 0.2251 0.2006 0.1941 -0.0573 0.0130  -
0.0253 1 .
1353 N    N    . GLY GLY GLY A A 184 184 . 0.2002 0.1544 0.2023 -0.0143 0.0183  -
0.0284 1 .
1354 CA   CA   . GLY GLY GLY A A 184 184 . 0.2113 0.1516 0.1961 -0.0138 0.0217  -
0.0113 1 .
1355 C    C    . GLY GLY GLY A A 184 184 . 0.2048 0.1332 0.1920 -0.0174 0.0091  -
0.0250 1 .
1356 O    O    . GLY GLY GLY A A 184 184 . 0.2227 0.1736 0.1495 -0.0409 0.0174  -
0.0316 1 .
1357 N    N    . ALA ALA ALA A A 185 185 . 0.2143 0.1313 0.1629 -0.0363 0.0067  -
0.0271 1 .
1358 CA   CA   . ALA ALA ALA A A 185 185 . 0.2311 0.1624 0.1764 -0.0491 0.0087  -
0.0089 1 .
1359 CB   CB   . ALA ALA ALA A A 185 185 . 0.1952 0.1760 0.1606 -0.0138 0.0077  -
0.0370 1 .
1360 C    C    . ALA ALA ALA A A 185 185 . 0.2355 0.1557 0.1845 -0.0401 0.0158  -
0.0343 1 .
1361 O    O    . ALA ALA ALA A A 185 185 . 0.2891 0.1605 0.1929 -0.0548 0.0299  -
0.0405 1 .
1362 N    N    . GLU GLU GLU A A 186 186 . 0.2470 0.1441 0.1666 -0.0406 0.0111  -
0.0275 1 .
1363 CA   CA   . GLU GLU GLU A A 186 186 . 0.2560 0.1655 0.2181 -0.0273 0.0205  -
0.0393 1 .
1364 CB   CB   . GLU GLU GLU A A 186 186 . 0.2541 0.1997 0.2191 -0.0297 0.0225  -
0.0482 1 .
1365 CG   CG   . GLU GLU GLU A A 186 186 . 0.2647 0.1805 0.2631 -0.0175 0.0100  -
0.0618 1 .
1366 CD   CD   . GLU GLU GLU A A 186 186 . 0.2304 0.2115 0.2838 -0.0164 0.0060  -
0.0497 1 .
1367 OE1  OE1  . GLU GLU GLU A A 186 186 . 0.3075 0.2778 0.2699 0.0327  -0.0221 -
0.0548 1 .
1368 OE2  OE2  . GLU GLU GLU A A 186 186 . 0.2966 0.2026 0.2028 0.0129  -0.0248 -
0.0697 1 .
1369 C    C    . GLU GLU GLU A A 186 186 . 0.2726 0.1784 0.1934 -0.0132 0.0147  -
0.0418 1 .
1370 O    O    . GLU GLU GLU A A 186 186 . 0.2796 0.1694 0.1974 -0.0357 0.0245  -
0.0593 1 .
1371 N    N    . VAL VAL VAL A A 187 187 . 0.2779 0.1736 0.1996 -0.0103 0.0018  -
0.0526 1 .
1372 CA   CA   . VAL VAL VAL A A 187 187 . 0.2235 0.1722 0.1435 -0.0133 0.0223  -
0.0528 1 .
1373 CB   CB   . VAL VAL VAL A A 187 187 . 0.2340 0.1454 0.1758 -0.0097 0.0152  -
0.0441 1 .
1374 CG1  CG1  . VAL VAL VAL A A 187 187 . 0.2175 0.1672 0.1406 -0.0390 0.0030  -
0.0345 1 .
1375 CG2  CG2  . VAL VAL VAL A A 187 187 . 0.2587 0.1205 0.1356 -0.0247 0.0280  -
0.0624 1 .
1376 C    C    . VAL VAL VAL A A 187 187 . 0.2331 0.1932 0.1894 -0.0330 0.0238  -
0.0559 1 .
1377 O    O    . VAL VAL VAL A A 187 187 . 0.2389 0.1928 0.1871 -0.0444 0.0035  -
0.0444 1 .
1378 N    N    . TYR TYR TYR A A 188 188 . 0.2224 0.1660 0.1550 -0.0391 0.0290  -
0.0573 1 .
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1379 CA   CA   . TYR TYR TYR A A 188 188 . 0.2142 0.1604 0.1621 -0.0572 0.0239  -
0.0572 1 .
1380 CB   CB   . TYR TYR TYR A A 188 188 . 0.1885 0.1395 0.1618 -0.0696 0.0532  -
0.0785 1 .
1381 CG   CG   . TYR TYR TYR A A 188 188 . 0.2363 0.1527 0.1611 -0.0511 -0.0005 -
0.0647 1 .
1382 CD1  CD1  . TYR TYR TYR A A 188 188 . 0.1878 0.2112 0.1556 -0.0520 0.0717  -
0.0595 1 .
1383 CE1  CE1  . TYR TYR TYR A A 188 188 . 0.1936 0.1631 0.1970 -0.0903 0.0400  -
0.0595 1 .
1384 CZ   CZ   . TYR TYR TYR A A 188 188 . 0.1529 0.1625 0.1509 -0.0060 0.0166  -
0.0279 1 .
1385 OH   OH   . TYR TYR TYR A A 188 188 . 0.2162 0.1604 0.1923 -0.0679 0.0827  -
0.0581 1 .
1386 CE2  CE2  . TYR TYR TYR A A 188 188 . 0.2181 0.1676 0.2333 -0.0153 0.0240  -
0.0539 1 .
1387 CD2  CD2  . TYR TYR TYR A A 188 188 . 0.2337 0.1756 0.1655 -0.0355 0.0238  -
0.0480 1 .
1388 C    C    . TYR TYR TYR A A 188 188 . 0.2028 0.1762 0.1651 -0.0541 0.0053  -
0.0586 1 .
1389 O    O    . TYR TYR TYR A A 188 188 . 0.2321 0.2079 0.1758 -0.0802 0.0084  -
0.0576 1 .
1390 N    N    . HIS HIS HIS A A 189 189 . 0.2641 0.1659 0.1721 -0.0569 0.0078  -
0.0593 1 .
1391 CA   CA   . HIS HIS HIS A A 189 189 . 0.2631 0.1764 0.1927 -0.0701 0.0000  -
0.0385 1 .
1392 CB   CB   . HIS HIS HIS A A 189 189 . 0.2383 0.1917 0.2249 -0.0823 -0.0018 -
0.0404 1 .
1393 CG   CG   . HIS HIS HIS A A 189 189 . 0.2556 0.2291 0.2239 -0.0583 0.0208  -
0.0809 1 .
1394 ND1  ND1  . HIS HIS HIS A A 189 189 . 0.3262 0.2647 0.3491 -0.0212 -0.0218 -
0.1286 1 .
1395 CE1  CE1  . HIS HIS HIS A A 189 189 . 0.2445 0.1792 0.3098 -0.0125 0.0232  -
0.0606 1 .
1396 NE2  NE2  . HIS HIS HIS A A 189 189 . 0.3269 0.3161 0.2911 -0.0757 0.0453  -
0.0532 1 .
1397 CD2  CD2  . HIS HIS HIS A A 189 189 . 0.2396 0.2559 0.2527 -0.0499 0.0146  -
0.0273 1 .
1398 C    C    . HIS HIS HIS A A 189 189 . 0.2514 0.1662 0.1783 -0.0796 0.0041  -
0.0477 1 .
1399 O    O    . HIS HIS HIS A A 189 189 . 0.3088 0.1970 0.2037 -0.0682 -0.0037 -
0.0468 1 .
1400 N    N    . THR THR THR A A 190 190 . 0.2618 0.1737 0.1871 -0.0882 0.0000  -
0.0377 1 .
1401 CA   CA   . THR THR THR A A 190 190 . 0.2850 0.1978 0.1965 -0.0862 -0.0048 -
0.0626 1 .
1402 CB   CB   . THR THR THR A A 190 190 . 0.2626 0.2065 0.1914 -0.0897 -0.0261 -
0.0958 1 .
1403 OG1  OG1  . THR THR THR A A 190 190 . 0.3213 0.2078 0.2483 -0.0636 0.0034  -
0.0916 1 .
1404 CG2  CG2  . THR THR THR A A 190 190 . 0.3354 0.2042 0.2485 -0.1490 -0.0106 -
0.1000 1 .
1405 C    C    . THR THR THR A A 190 190 . 0.2725 0.2022 0.1807 -0.0836 -0.0145 -
0.0608 1 .
1406 O    O    . THR THR THR A A 190 190 . 0.3127 0.2005 0.2125 -0.0997 0.0062  -
0.0732 1 .
1407 N    N    . LEU LEU LEU A A 191 191 . 0.2849 0.2162 0.1989 -0.0682 -0.0200 -
0.0270 1 .
1408 CA   CA   . LEU LEU LEU A A 191 191 . 0.2563 0.2222 0.1827 -0.0730 0.0019  -
0.0428 1 .
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1409 CB   CB   . LEU LEU LEU A A 191 191 . 0.2655 0.2155 0.1909 -0.0554 0.0026  -
0.0240 1 .
1410 CG   CG   . LEU LEU LEU A A 191 191 . 0.2281 0.2145 0.1844 -0.0743 -0.0240 -
0.0303 1 .
1411 CD1  CD1  . LEU LEU LEU A A 191 191 . 0.2483 0.2526 0.1583 -0.0939 -0.0157 -
0.0077 1 .
1412 CD2  CD2  . LEU LEU LEU A A 191 191 . 0.2678 0.2245 0.2390 -0.0922 -0.0006
0.0075  1 .
1413 C    C    . LEU LEU LEU A A 191 191 . 0.2447 0.2217 0.1853 -0.0639 0.0214  -
0.0278 1 .
1414 O    O    . LEU LEU LEU A A 191 191 . 0.2410 0.2136 0.2222 -0.0644 -0.0176 -
0.0696 1 .
1415 N    N    . LYS LYS LYS A A 192 192 . 0.2532 0.2217 0.1748 -0.0612 0.0429  -
0.0281 1 .
1416 CA   CA   . LYS LYS LYS A A 192 192 . 0.2784 0.2283 0.1766 -0.0732 0.0286  -
0.0198 1 .
1417 CB   CB   . LYS LYS LYS A A 192 192 . 0.2524 0.2511 0.1903 -0.0674 0.0393  -
0.0308 1 .
1418 CG   CG   . LYS LYS LYS A A 192 192 . 0.2860 0.3048 0.1794 -0.0945 0.0224  -
0.0503 1 .
1419 CD   CD   . LYS LYS LYS A A 192 192 . 0.2928 0.3644 0.2326 -0.0409 -0.0329 -
0.0587 1 .
1420 CE   CE   . LYS LYS LYS A A 192 192 . 0.3124 0.4366 0.2685 -0.0556 -0.0410 -
0.0663 1 .
1421 NZ   NZ   . LYS LYS LYS A A 192 192 . 0.2591 0.3770 0.2738 -0.0860 -0.0129 -
0.0617 1 .
1422 C    C    . LYS LYS LYS A A 192 192 . 0.2590 0.2412 0.2237 -0.0729 0.0324  -
0.0281 1 .
1423 O    O    . LYS LYS LYS A A 192 192 . 0.2574 0.2611 0.2166 -0.0899 0.0223  -
0.0440 1 .
1424 N    N    . GLY GLY GLY A A 193 193 . 0.2974 0.2297 0.1877 -0.0730 0.0138  -
0.0247 1 .
1425 CA   CA   . GLY GLY GLY A A 193 193 . 0.2865 0.2388 0.2361 -0.0844 0.0017  -
0.0240 1 .
1426 C    C    . GLY GLY GLY A A 193 193 . 0.2608 0.2657 0.2160 -0.0809 0.0081  -
0.0304 1 .
1427 O    O    . GLY GLY GLY A A 193 193 . 0.2824 0.2730 0.2507 -0.1193 -0.0027 -
0.0433 1 .
1428 N    N    . VAL VAL VAL A A 194 194 . 0.2601 0.2335 0.2247 -0.0816 0.0008  -
0.0140 1 .
1429 CA   CA   . VAL VAL VAL A A 194 194 . 0.2719 0.2336 0.2300 -0.0716 0.0014  -
0.0133 1 .
1430 CB   CB   . VAL VAL VAL A A 194 194 . 0.2779 0.2397 0.2555 -0.0579 0.0031  -
0.0216 1 .
1431 CG1  CG1  . VAL VAL VAL A A 194 194 . 0.3310 0.2561 0.1830 -0.0638 -0.0230 -
0.0745 1 .
1432 CG2  CG2  . VAL VAL VAL A A 194 194 . 0.2864 0.2367 0.2487 -0.0840 -0.0028 -
0.0821 1 .
1433 C    C    . VAL VAL VAL A A 194 194 . 0.2932 0.2553 0.2671 -0.0733 -0.0010 -
0.0238 1 .
1434 O    O    . VAL VAL VAL A A 194 194 . 0.3178 0.2986 0.2759 -0.1063 -0.0222 -
0.0394 1 .
1435 N    N    . ILE ILE ILE A A 195 195 . 0.2891 0.2145 0.2220 -0.0824 0.0089  -
0.0203 1 .
1436 CA   CA   . ILE ILE ILE A A 195 195 . 0.2812 0.2342 0.2666 -0.0875 0.0038  -
0.0302 1 .
1437 CB   CB   . ILE ILE ILE A A 195 195 . 0.3267 0.1859 0.2585 -0.0619 0.0126  -
0.0430 1 .
1438 CG1  CG1  . ILE ILE ILE A A 195 195 . 0.2056 0.1791 0.2349 -0.0857 0.0227  -
0.0302 1 .
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1439 CD   CD   . ILE ILE ILE A A 195 195 . 0.2774 0.1974 0.3138 -0.1031 0.0429  -
0.0379 1 .
1440 CG2  CG2  . ILE ILE ILE A A 195 195 . 0.2701 0.2800 0.2634 -0.1177 0.0344  -
0.0462 1 .
1441 C    C    . ILE ILE ILE A A 195 195 . 0.2897 0.2446 0.2576 -0.0806 0.0029  -
0.0321 1 .
1442 O    O    . ILE ILE ILE A A 195 195 . 0.2775 0.2874 0.2544 -0.1170 -0.0280 -
0.0469 1 .
1443 N    N    . LYS LYS LYS A A 196 196 . 0.2841 0.2370 0.2798 -0.0959 0.0072  -
0.0309 1 .
1444 CA   CA   . LYS LYS LYS A A 196 196 . 0.3052 0.2481 0.2811 -0.1022 0.0097  -
0.0234 1 .
1445 CB   CB   . LYS LYS LYS A A 196 196 . 0.2957 0.2568 0.2661 -0.0834 0.0140  -
0.0208 1 .
1446 CG   CG   . LYS LYS LYS A A 196 196 . 0.3351 0.3067 0.3461 -0.0621 -0.0106
0.0131  1 .
1447 CD   CD   . LYS LYS LYS A A 196 196 . 0.4502 0.4709 0.4778 -0.0178 -0.0701
0.0133  1 .
1448 CE   CE   . LYS LYS LYS A A 196 196 . 0.5157 0.5211 0.5489 0.0209  -0.0754
0.0428  1 .
1449 NZ   NZ   . LYS LYS LYS A A 196 196 . 0.5357 0.5915 0.6075 0.0420  -0.0689
0.0438  1 .
1450 C    C    . LYS LYS LYS A A 196 196 . 0.3345 0.2950 0.3229 -0.1084 0.0239  -
0.0292 1 .
1451 O    O    . LYS LYS LYS A A 196 196 . 0.3149 0.3257 0.2824 -0.1381 0.0260  -
0.0298 1 .
1452 N    N    . ASP ASP ASP A A 197 197 . 0.3407 0.2675 0.3189 -0.1123 0.0311  -
0.0282 1 .
1453 CA   CA   . ASP ASP ASP A A 197 197 . 0.3574 0.3152 0.3697 -0.1153 0.0261  -
0.0249 1 .
1454 CB   CB   . ASP ASP ASP A A 197 197 . 0.3876 0.2939 0.3919 -0.1173 0.0103  -
0.0492 1 .
1455 CG   CG   . ASP ASP ASP A A 197 197 . 0.4400 0.3625 0.4312 -0.1168 0.0033  -
0.0322 1 .
1456 OD1  OD1  . ASP ASP ASP A A 197 197 . 0.5056 0.4099 0.4819 -0.1195 0.0435  -
0.0749 1 .
1457 OD2  OD2  . ASP ASP ASP A A 197 197 . 0.5750 0.4234 0.4708 -0.1668 -0.0206 -
0.0338 1 .
1458 C    C    . ASP ASP ASP A A 197 197 . 0.3712 0.3310 0.3701 -0.1109 0.0182  -
0.0201 1 .
1459 O    O    . ASP ASP ASP A A 197 197 . 0.3701 0.3690 0.3810 -0.1563 0.0557
0.0065  1 .
1460 N    N    . LYS LYS LYS A A 198 198 . 0.3641 0.3406 0.3577 -0.1007 0.0129  -
0.0244 1 .
1461 CA   CA   . LYS LYS LYS A A 198 198 . 0.3344 0.3746 0.3861 -0.0798 0.0062  -
0.0342 1 .
1462 CB   CB   . LYS LYS LYS A A 198 198 . 0.3348 0.3707 0.3996 -0.0726 0.0003  -
0.0168 1 .
1463 CG   CG   . LYS LYS LYS A A 198 198 . 0.3781 0.4121 0.4008 -0.0602 -0.0244 -
0.0071 1 .
1464 CD   CD   . LYS LYS LYS A A 198 198 . 0.4619 0.4263 0.4225 -0.0542 -0.0569 -
0.0385 1 .
1465 CE   CE   . LYS LYS LYS A A 198 198 . 0.4692 0.4459 0.4402 -0.0787 -0.0890
0.0010  1 .
1466 NZ   NZ   . LYS LYS LYS A A 198 198 . 0.4962 0.5054 0.3618 -0.1004 -0.0673
0.0184  1 .
1467 C    C    . LYS LYS LYS A A 198 198 . 0.3353 0.4018 0.4065 -0.0851 0.0029  -
0.0402 1 .
1468 O    O    . LYS LYS LYS A A 198 198 . 0.3163 0.4301 0.4287 -0.1140 0.0028  -
0.0490 1 .
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1469 N    N    . TYR TYR TYR A A 199 199 . 0.3003 0.3874 0.3667 -0.0894 -0.0157 -
0.0424 1 .
1470 CA   CA   . TYR TYR TYR A A 199 199 . 0.3024 0.4038 0.3827 -0.0639 -0.0033 -
0.0297 1 .
1471 CB   CB   . TYR TYR TYR A A 199 199 . 0.2582 0.4032 0.3544 -0.0286 -0.0068 -
0.0168 1 .
1472 CG   CG   . TYR TYR TYR A A 199 199 . 0.2935 0.4502 0.3647 -0.0303 0.0047  -
0.0337 1 .
1473 CD1  CD1  . TYR TYR TYR A A 199 199 . 0.3057 0.3632 0.3162 -0.0368 -0.0120 -
0.0709 1 .
1474 CE1  CE1  . TYR TYR TYR A A 199 199 . 0.3847 0.3738 0.3580 -0.0031 -0.0244 -
0.0701 1 .
1475 CZ   CZ   . TYR TYR TYR A A 199 199 . 0.3917 0.3832 0.3672 0.0119  -0.0342 -
0.0597 1 .
1476 OH   OH   . TYR TYR TYR A A 199 199 . 0.5171 0.4121 0.3406 -0.0246 -0.0245 -
0.0433 1 .
1477 CE2  CE2  . TYR TYR TYR A A 199 199 . 0.3784 0.4973 0.3735 -0.0115 -0.0435 -
0.0326 1 .
1478 CD2  CD2  . TYR TYR TYR A A 199 199 . 0.3130 0.4956 0.3779 -0.0059 -0.0299 -
0.0361 1 .
1479 C    C    . TYR TYR TYR A A 199 199 . 0.3394 0.4063 0.3769 -0.0570 0.0053  -
0.0271 1 .
1480 O    O    . TYR TYR TYR A A 199 199 . 0.3833 0.4389 0.4287 -0.0778 0.0185  -
0.0624 1 .
1481 N    N    . GLY GLY GLY A A 200 200 . 0.3460 0.4000 0.3822 -0.0666 0.0052  -
0.0190 1 .
1482 CA   CA   . GLY GLY GLY A A 200 200 . 0.3306 0.3796 0.3584 -0.0677 -0.0103 -
0.0240 1 .
1483 C    C    . GLY GLY GLY A A 200 200 . 0.3263 0.3725 0.3536 -0.0601 -0.0057 -
0.0195 1 .
1484 O    O    . GLY GLY GLY A A 200 200 . 0.3038 0.3779 0.3004 -0.0782 0.0169  -
0.0394 1 .
1485 N    N    . LYS LYS LYS A A 201 201 . 0.3306 0.3663 0.3557 -0.0468 -0.0025 -
0.0128 1 .
1486 CA   CA   . LYS LYS LYS A A 201 201 . 0.3300 0.3762 0.3662 -0.0316 -0.0154 -
0.0183 1 .
1487 CB   CB   . LYS LYS LYS A A 201 201 . 0.3657 0.4066 0.4096 -0.0153 -0.0200 -
0.0017 1 .
1488 CG   CG   . LYS LYS LYS A A 201 201 . 0.4149 0.4349 0.4907 -0.0287 -0.0197 -
0.0317 1 .
1489 CD   CD   . LYS LYS LYS A A 201 201 . 0.5181 0.5269 0.5494 0.0039  -0.0458 -
0.0150 1 .
1490 CE   CE   . LYS LYS LYS A A 201 201 . 0.5260 0.5755 0.6182 -0.0024 -0.0154 -
0.0066 1 .
1491 NZ   NZ   . LYS LYS LYS A A 201 201 . 0.6112 0.5929 0.6853 -0.0394 0.0011  -
0.0260 1 .
1492 C    C    . LYS LYS LYS A A 201 201 . 0.3121 0.3648 0.3332 -0.0377 -0.0114 -
0.0156 1 .
1493 O    O    . LYS LYS LYS A A 201 201 . 0.2842 0.3468 0.3206 -0.0580 -0.0086 -
0.0335 1 .
1494 N    N    . ASP ASP ASP A A 202 202 . 0.2773 0.3491 0.2706 -0.0519 -0.0077 -
0.0230 1 .
1495 CA   CA   . ASP ASP ASP A A 202 202 . 0.2730 0.3613 0.2970 -0.0484 -0.0072 -
0.0226 1 .
1496 CB   CB   . ASP ASP ASP A A 202 202 . 0.2837 0.3870 0.2903 -0.0621 0.0093  -
0.0356 1 .
1497 CG   CG   . ASP ASP ASP A A 202 202 . 0.3472 0.4913 0.3980 -0.0363 0.0271  -
0.0751 1 .
1498 OD1  OD1  . ASP ASP ASP A A 202 202 . 0.3763 0.6327 0.5888 -0.0468 0.0781  -
0.1073 1 .
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1499 OD2  OD2  . ASP ASP ASP A A 202 202 . 0.4106 0.5975 0.4693 -0.0851 0.0630  -
0.1592 1 .
1500 C    C    . ASP ASP ASP A A 202 202 . 0.2558 0.3204 0.2800 -0.0518 -0.0073 -
0.0290 1 .
1501 O    O    . ASP ASP ASP A A 202 202 . 0.3053 0.3234 0.2713 -0.0374 0.0045  -
0.0398 1 .
1502 N    N    . ALA ALA ALA A A 203 203 . 0.2407 0.2848 0.2402 -0.0764 -0.0153 -
0.0271 1 .
1503 CA   CA   . ALA ALA ALA A A 203 203 . 0.2038 0.2689 0.2078 -0.0825 -0.0443 -
0.0418 1 .
1504 CB   CB   . ALA ALA ALA A A 203 203 . 0.2189 0.2848 0.1835 -0.0986 -0.0572 -
0.0595 1 .
1505 C    C    . ALA ALA ALA A A 203 203 . 0.2287 0.2857 0.2193 -0.0561 -0.0156 -
0.0262 1 .
1506 O    O    . ALA ALA ALA A A 203 203 . 0.2531 0.2747 0.2424 -0.0512 -0.0152
0.0003  1 .
1507 N    N    . THR THR THR A A 204 204 . 0.2097 0.2575 0.2050 -0.0495 -0.0197 -
0.0362 1 .
1508 CA   CA   . THR THR THR A A 204 204 . 0.2093 0.2499 0.2206 -0.0686 -0.0139 -
0.0687 1 .
1509 CB   CB   . THR THR THR A A 204 204 . 0.2525 0.2446 0.2255 -0.0689 -0.0474 -
0.0644 1 .
1510 OG1  OG1  . THR THR THR A A 204 204 . 0.2290 0.3216 0.3191 -0.0219 -0.0536 -
0.0286 1 .
1511 CG2  CG2  . THR THR THR A A 204 204 . 0.2568 0.3031 0.2701 -0.0631 -0.0286 -
0.1262 1 .
1512 C    C    . THR THR THR A A 204 204 . 0.2106 0.2269 0.2118 -0.0641 -0.0039 -
0.0614 1 .
1513 O    O    . THR THR THR A A 204 204 . 0.2005 0.2405 0.1993 -0.0628 -0.0061 -
0.0969 1 .
1514 N    N    . ASN ASN ASN A A 205 205 . 0.1984 0.2258 0.1686 -0.0762 0.0183  -
0.0596 1 .
1515 CA   CA   . ASN ASN ASN A A 205 205 . 0.2157 0.2043 0.1837 -0.0570 0.0205  -
0.0351 1 .
1516 CB   CB   . ASN ASN ASN A A 205 205 . 0.2085 0.2622 0.2004 -0.0437 0.0221  -
0.0445 1 .
1517 CG   CG   . ASN ASN ASN A A 205 205 . 0.3230 0.2982 0.2380 0.0204  0.0321  -
0.0274 1 .
1518 OD1  OD1  . ASN ASN ASN A A 205 205 . 0.4127 0.3448 0.2360 0.0803  -0.0257 -
0.0588 1 .
1519 ND2  ND2  . ASN ASN ASN A A 205 205 . 0.3705 0.2156 0.3584 -0.0192 0.0322  -
0.0537 1 .
1520 C    C    . ASN ASN ASN A A 205 205 . 0.2205 0.2386 0.2070 -0.0592 0.0133  -
0.0204 1 .
1521 O    O    . ASN ASN ASN A A 205 205 . 0.2001 0.2597 0.1908 -0.0893 0.0016
0.0081  1 .
1522 N    N    . VAL VAL VAL A A 206 206 . 0.2133 0.1931 0.1776 -0.0602 0.0119  -
0.0427 1 .
1523 CA   CA   . VAL VAL VAL A A 206 206 . 0.1760 0.1904 0.2044 -0.0242 0.0280  -
0.0221 1 .
1524 CB   CB   . VAL VAL VAL A A 206 206 . 0.1513 0.1510 0.1785 -0.0242 0.0312  -
0.0253 1 .
1525 CG1  CG1  . VAL VAL VAL A A 206 206 . 0.1927 0.1063 0.2154 -0.0230 0.0493  -
0.0525 1 .
1526 CG2  CG2  . VAL VAL VAL A A 206 206 . 0.1596 0.2147 0.1697 -0.0361 0.0099  -
0.0315 1 .
1527 C    C    . VAL VAL VAL A A 206 206 . 0.1979 0.1981 0.1967 -0.0398 0.0308  -
0.0214 1 .
1528 O    O    . VAL VAL VAL A A 206 206 . 0.2125 0.2323 0.2229 -0.0555 0.0652  -
0.0447 1 .
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1529 N    N    . GLY GLY GLY A A 207 207 . 0.1792 0.2224 0.1912 -0.0197 0.0429  -
0.0087 1 .
1530 CA   CA   . GLY GLY GLY A A 207 207 . 0.1660 0.1840 0.1899 -0.0328 0.0280  -
0.0193 1 .
1531 C    C    . GLY GLY GLY A A 207 207 . 0.1829 0.1950 0.1921 -0.0196 0.0169  -
0.0285 1 .
1532 O    O    . GLY GLY GLY A A 207 207 . 0.1831 0.1842 0.1957 -0.0348 0.0039  -
0.0248 1 .
1533 N    N    . ASP ASP ASP A A 208 208 . 0.1934 0.2000 0.1697 -0.0380 0.0213  -
0.0067 1 .
1534 CA   CA   . ASP ASP ASP A A 208 208 . 0.1705 0.1982 0.1818 -0.0241 0.0232  -
0.0238 1 .
1535 CB   CB   . ASP ASP ASP A A 208 208 . 0.1736 0.2072 0.1782 0.0003  0.0211  -
0.0275 1 .
1536 CG   CG   . ASP ASP ASP A A 208 208 . 0.1982 0.2258 0.2382 -0.0128 0.0208  -
0.0147 1 .
1537 OD1  OD1  . ASP ASP ASP A A 208 208 . 0.1883 0.2551 0.2618 -0.0040 0.0052  -
0.0249 1 .
1538 OD2  OD2  . ASP ASP ASP A A 208 208 . 0.2468 0.2492 0.3258 0.0284  -0.0057 -
0.0120 1 .
1539 C    C    . ASP ASP ASP A A 208 208 . 0.1762 0.2081 0.1672 -0.0116 0.0232  -
0.0255 1 .
1540 O    O    . ASP ASP ASP A A 208 208 . 0.1808 0.1767 0.1733 -0.0095 0.0213  -
0.0240 1 .
1541 N    N    . GLU GLU GLU A A 209 209 . 0.1696 0.1942 0.1715 -0.0131 0.0061  -
0.0181 1 .
1542 CA   CA   . GLU GLU GLU A A 209 209 . 0.1713 0.1702 0.1587 -0.0126 0.0033  -
0.0041 1 .
1543 CB   CB   . GLU GLU GLU A A 209 209 . 0.1882 0.2034 0.1804 0.0025  -0.0173 -
0.0028 1 .
1544 CG   CG   . GLU GLU GLU A A 209 209 . 0.2051 0.1732 0.2317 -0.0281 0.0097
0.0021  1 .
1545 CD   CD   . GLU GLU GLU A A 209 209 . 0.2909 0.3077 0.3081 -0.0157 0.0388  -
0.0263 1 .
1546 OE1  OE1  . GLU GLU GLU A A 209 209 . 0.2283 0.3511 0.3482 -0.0635 -0.0136 -
0.0412 1 .
1547 OE2  OE2  . GLU GLU GLU A A 209 209 . 0.2650 0.3633 0.3775 -0.0038 0.0582  -
0.0531 1 .
1548 C    C    . GLU GLU GLU A A 209 209 . 0.1740 0.1640 0.1630 -0.0351 -0.0041 -
0.0238 1 .
1549 O    O    . GLU GLU GLU A A 209 209 . 0.1903 0.1607 0.1475 -0.0110 0.0111  -
0.0159 1 .
1550 N    N    . GLY GLY GLY A A 210 210 . 0.1627 0.1401 0.1471 -0.0426 -0.0061 -
0.0150 1 .
1551 CA   CA   . GLY GLY GLY A A 210 210 . 0.1533 0.1542 0.1846 -0.0394 0.0078  -
0.0230 1 .
1552 C    C    . GLY GLY GLY A A 210 210 . 0.1592 0.1535 0.1495 -0.0216 0.0144  -
0.0213 1 .
1553 O    O    . GLY GLY GLY A A 210 210 . 0.1938 0.1733 0.2035 -0.0608 0.0338  -
0.0341 1 .
1554 N    N    . GLY GLY GLY A A 211 211 . 0.1825 0.1851 0.1641 -0.0607 0.0165  -
0.0243 1 .
1555 CA   CA   . GLY GLY GLY A A 211 211 . 0.1694 0.1935 0.1423 -0.0752 0.0345  -
0.0522 1 .
1556 C    C    . GLY GLY GLY A A 211 211 . 0.2265 0.1854 0.1838 -0.0754 0.0315  -
0.0411 1 .
1557 O    O    . GLY GLY GLY A A 211 211 . 0.2035 0.2057 0.2095 -0.0861 0.0469  -
0.0546 1 .
1558 N    N    . PHE PHE PHE A A 212 212 . 0.2219 0.2245 0.2028 -0.0991 0.0512  -
0.0207 1 .
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1559 CA   CA   . PHE PHE PHE A A 212 212 . 0.2490 0.2133 0.1990 -0.0805 0.0458  -
0.0280 1 .
1560 CB   CB   . PHE PHE PHE A A 212 212 . 0.2587 0.1620 0.2108 -0.0605 0.0435  -
0.0228 1 .
1561 CG   CG   . PHE PHE PHE A A 212 212 . 0.2793 0.2336 0.2493 -0.0673 0.0088  -
0.0165 1 .
1562 CD1  CD1  . PHE PHE PHE A A 212 212 . 0.2358 0.2017 0.2261 -0.0647 0.0376  -
0.0423 1 .
1563 CE1  CE1  . PHE PHE PHE A A 212 212 . 0.2547 0.2544 0.2469 -0.0734 -0.0051 -
0.0260 1 .
1564 CZ   CZ   . PHE PHE PHE A A 212 212 . 0.2597 0.2165 0.2905 -0.0706 0.0080  -
0.0069 1 .
1565 CE2  CE2  . PHE PHE PHE A A 212 212 . 0.2321 0.2217 0.3210 -0.0807 0.0021  -
0.0507 1 .
1566 CD2  CD2  . PHE PHE PHE A A 212 212 . 0.2093 0.1488 0.2378 -0.0667 -0.0600 -
0.0276 1 .
1567 C    C    . PHE PHE PHE A A 212 212 . 0.2443 0.2271 0.2159 -0.0604 0.0390  -
0.0237 1 .
1568 O    O    . PHE PHE PHE A A 212 212 . 0.3105 0.2461 0.2118 -0.0840 0.0865  -
0.0450 1 .
1569 N    N    . ALA ALA ALA A A 213 213 . 0.2702 0.2697 0.2418 -0.0461 0.0565  -
0.0558 1 .
1570 CA   CA   . ALA ALA ALA A A 213 213 . 0.2561 0.2740 0.2883 -0.0671 0.0544  -
0.0478 1 .
1571 CB   CB   . ALA ALA ALA A A 213 213 . 0.2984 0.2834 0.3085 -0.0341 0.0689  -
0.0567 1 .
1572 C    C    . ALA ALA ALA A A 213 213 . 0.2971 0.3254 0.2923 -0.0594 0.0626  -
0.0387 1 .
1573 O    O    . ALA ALA ALA A A 213 213 . 0.2521 0.3621 0.2851 -0.1133 0.0681  -
0.0558 1 .
1574 N    N    . PRO PRO PRO A A 214 214 . 0.2896 0.3025 0.2582 -0.0689 0.0536  -
0.0388 1 .
1575 CA   CA   . PRO PRO PRO A A 214 214 . 0.3039 0.3462 0.2913 -0.0506 0.0409  -
0.0306 1 .
1576 CB   CB   . PRO PRO PRO A A 214 214 . 0.3030 0.3319 0.3071 -0.0454 0.0369  -
0.0314 1 .
1577 CG   CG   . PRO PRO PRO A A 214 214 . 0.2684 0.3859 0.2198 -0.0496 0.0247  -
0.0345 1 .
1578 CD   CD   . PRO PRO PRO A A 214 214 . 0.3131 0.3444 0.2504 -0.0585 0.0543  -
0.0437 1 .
1579 C    C    . PRO PRO PRO A A 214 214 . 0.3329 0.3519 0.3049 -0.0402 0.0290  -
0.0123 1 .
1580 O    O    . PRO PRO PRO A A 214 214 . 0.3974 0.3578 0.2967 -0.0411 0.0451  -
0.0065 1 .
1581 N    N    . ASN ASN ASN A A 215 215 . 0.3363 0.3668 0.3074 -0.0587 0.0307  -
0.0176 1 .
1582 CA   CA   . ASN ASN ASN A A 215 215 . 0.3197 0.4151 0.3182 -0.0664 0.0228  -
0.0121 1 .
1583 CB   CB   . ASN ASN ASN A A 215 215 . 0.3334 0.4492 0.3217 -0.0810 0.0477  -
0.0056 1 .
1584 C    C    . ASN ASN ASN A A 215 215 . 0.3381 0.4049 0.3349 -0.0822 0.0218  -
0.0192 1 .
1585 O    O    . ASN ASN ASN A A 215 215 . 0.2934 0.4838 0.3948 -0.0935 0.0163  -
0.0214 1 .
1586 N    N    . ILE ILE ILE A A 216 216 . 0.3253 0.3883 0.3085 -0.0837 0.0161  -
0.0207 1 .
1587 CA   CA   . ILE ILE ILE A A 216 216 . 0.2895 0.3604 0.3376 -0.0643 0.0129  -
0.0163 1 .
1588 CB   CB   . ILE ILE ILE A A 216 216 . 0.3036 0.3369 0.3177 -0.0578 0.0231  -
0.0093 1 .
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1589 CG1  CG1  . ILE ILE ILE A A 216 216 . 0.2797 0.3711 0.3412 -0.0364 0.0709  -
0.0311 1 .
1590 CD   CD   . ILE ILE ILE A A 216 216 . 0.3455 0.4058 0.2988 0.0163  0.0618  -
0.0511 1 .
1591 CG2  CG2  . ILE ILE ILE A A 216 216 . 0.3175 0.3549 0.3619 -0.0404 0.0088
0.0146  1 .
1592 C    C    . ILE ILE ILE A A 216 216 . 0.2817 0.3570 0.3296 -0.0489 0.0240  -
0.0236 1 .
1593 O    O    . ILE ILE ILE A A 216 216 . 0.2578 0.3693 0.3914 -0.0591 0.0384  -
0.0408 1 .
1594 N    N    . LEU LEU LEU A A 217 217 . 0.2481 0.3580 0.3225 -0.0556 0.0176  -
0.0156 1 .
1595 CA   CA   . LEU LEU LEU A A 217 217 . 0.2745 0.3454 0.3420 -0.0329 0.0334  -
0.0064 1 .
1596 CB   CB   . LEU LEU LEU A A 217 217 . 0.2785 0.3572 0.3685 -0.0396 0.0244  -
0.0162 1 .
1597 CG   CG   . LEU LEU LEU A A 217 217 . 0.3129 0.3988 0.3904 -0.0426 0.0239  -
0.0128 1 .
1598 CD1  CD1  . LEU LEU LEU A A 217 217 . 0.3699 0.3937 0.4004 -0.0542 0.0660  -
0.0411 1 .
1599 CD2  CD2  . LEU LEU LEU A A 217 217 . 0.3186 0.4248 0.3750 -0.0735 0.0081  -
0.0573 1 .
1600 C    C    . LEU LEU LEU A A 217 217 . 0.3131 0.3515 0.3582 -0.0361 0.0274  -
0.0123 1 .
1601 O    O    . LEU LEU LEU A A 217 217 . 0.3637 0.3590 0.3757 -0.0343 0.0242  -
0.0039 1 .
1602 N    N    . GLU GLU GLU A A 218 218 . 0.2853 0.3532 0.3569 -0.0601 0.0279  -
0.0038 1 .
1603 CA   CA   . GLU GLU GLU A A 218 218 . 0.2845 0.3539 0.3648 -0.0606 0.0509  -
0.0157 1 .
1604 CB   CB   . GLU GLU GLU A A 218 218 . 0.2555 0.3527 0.3818 -0.0866 0.0278  -
0.0200 1 .
1605 CG   CG   . GLU GLU GLU A A 218 218 . 0.2433 0.3930 0.4536 -0.0422 0.0685
0.0030  1 .
1606 C    C    . GLU GLU GLU A A 218 218 . 0.2574 0.3304 0.3488 -0.0546 0.0435  -
0.0126 1 .
1607 O    O    . GLU GLU GLU A A 218 218 . 0.2729 0.3506 0.3371 -0.0625 0.0699  -
0.0123 1 .
1608 N    N    . ASN ASN ASN A A 219 219 . 0.2492 0.3378 0.3285 -0.0637 0.0649  -
0.0260 1 .
1609 CA   CA   . ASN ASN ASN A A 219 219 . 0.2818 0.3568 0.3434 -0.0403 0.0432  -
0.0361 1 .
1610 CB   CB   . ASN ASN ASN A A 219 219 . 0.2847 0.3571 0.3276 -0.0443 0.0668  -
0.0341 1 .
1611 CG   CG   . ASN ASN ASN A A 219 219 . 0.3154 0.4304 0.3834 -0.0115 0.0270  -
0.0514 1 .
1612 OD1  OD1  . ASN ASN ASN A A 219 219 . 0.3440 0.4783 0.4626 0.0054  0.0225  -
0.0391 1 .
1613 ND2  ND2  . ASN ASN ASN A A 219 219 . 0.2007 0.3367 0.2373 -0.0418 0.0677  -
0.0224 1 .
1614 C    C    . ASN ASN ASN A A 219 219 . 0.2849 0.3534 0.3460 -0.0471 0.0328  -
0.0360 1 .
1615 O    O    . ASN ASN ASN A A 219 219 . 0.2496 0.3296 0.3301 -0.0623 -0.0170 -
0.0420 1 .
1616 N    N    . SER SER SER A A 220 220 . 0.2723 0.3848 0.3352 -0.0570 0.0134  -
0.0414 1 .
1617 CA   CA   . SER SER SER A A 220 220 . 0.3115 0.3686 0.3596 -0.0735 0.0104  -
0.0434 1 .
1618 CB   CB   . SER SER SER A A 220 220 . 0.3177 0.3960 0.3604 -0.0814 0.0258  -
0.0431 1 .
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1619 OG   OG   . SER SER SER A A 220 220 . 0.3405 0.4432 0.4511 -0.1166 0.0240  -
0.0427 1 .
1620 C    C    . SER SER SER A A 220 220 . 0.3228 0.3556 0.3503 -0.0743 0.0231  -
0.0437 1 .
1621 O    O    . SER SER SER A A 220 220 . 0.3622 0.3973 0.3516 -0.0812 0.0468  -
0.0451 1 .
1622 N    N    . GLU GLU GLU A A 221 221 . 0.3424 0.3484 0.3309 -0.0661 0.0151  -
0.0384 1 .
1623 CA   CA   . GLU GLU GLU A A 221 221 . 0.3244 0.3602 0.3189 -0.0713 0.0099  -
0.0266 1 .
1624 CB   CB   . GLU GLU GLU A A 221 221 . 0.3318 0.3934 0.3410 -0.0709 0.0162  -
0.0143 1 .
1625 CG   CG   . GLU GLU GLU A A 221 221 . 0.3591 0.4042 0.3707 -0.0853 -0.0246 -
0.0122 1 .
1626 CD   CD   . GLU GLU GLU A A 221 221 . 0.4322 0.4306 0.3894 -0.1126 -0.0542
0.0219  1 .
1627 OE1  OE1  . GLU GLU GLU A A 221 221 . 0.5086 0.4574 0.3644 -0.1773 -0.0243 -
0.0143 1 .
1628 OE2  OE2  . GLU GLU GLU A A 221 221 . 0.3415 0.4711 0.4115 -0.0908 -0.1014
0.0547  1 .
1629 C    C    . GLU GLU GLU A A 221 221 . 0.3048 0.3297 0.3111 -0.0620 0.0203  -
0.0190 1 .
1630 O    O    . GLU GLU GLU A A 221 221 . 0.2963 0.3533 0.3310 -0.1058 -0.0033 -
0.0300 1 .
1631 N    N    . ALA ALA ALA A A 222 222 . 0.3083 0.3284 0.2680 -0.0652 0.0220  -
0.0296 1 .
1632 CA   CA   . ALA ALA ALA A A 222 222 . 0.2843 0.2790 0.2834 -0.0643 0.0197  -
0.0328 1 .
1633 CB   CB   . ALA ALA ALA A A 222 222 . 0.3308 0.2856 0.2914 -0.0542 0.0179  -
0.0405 1 .
1634 C    C    . ALA ALA ALA A A 222 222 . 0.2785 0.2688 0.3006 -0.0571 0.0159  -
0.0238 1 .
1635 O    O    . ALA ALA ALA A A 222 222 . 0.2698 0.2834 0.3066 -0.0817 0.0130  -
0.0497 1 .
1636 N    N    . LEU LEU LEU A A 223 223 . 0.2583 0.2888 0.2957 -0.0820 0.0176  -
0.0509 1 .
1637 CA   CA   . LEU LEU LEU A A 223 223 . 0.2783 0.3166 0.3093 -0.0740 0.0154  -
0.0237 1 .
1638 CB   CB   . LEU LEU LEU A A 223 223 . 0.2670 0.3296 0.3226 -0.0545 0.0136  -
0.0078 1 .
1639 CG   CG   . LEU LEU LEU A A 223 223 . 0.2655 0.3471 0.3607 -0.0503 0.0187  -
0.0235 1 .
1640 CD1  CD1  . LEU LEU LEU A A 223 223 . 0.2445 0.3930 0.3514 -0.0794 0.0176  -
0.0104 1 .
1641 CD2  CD2  . LEU LEU LEU A A 223 223 . 0.2388 0.3333 0.3555 -0.0648 0.0797  -
0.0040 1 .
1642 C    C    . LEU LEU LEU A A 223 223 . 0.2804 0.3268 0.3094 -0.0594 0.0252  -
0.0287 1 .
1643 O    O    . LEU LEU LEU A A 223 223 . 0.2842 0.3194 0.3061 -0.0878 0.0168  -
0.0366 1 .
1644 N    N    . GLU GLU GLU A A 224 224 . 0.2803 0.3378 0.3177 -0.0739 0.0433  -
0.0302 1 .
1645 CA   CA   . GLU GLU GLU A A 224 224 . 0.2980 0.3246 0.3172 -0.0696 0.0446  -
0.0191 1 .
1646 CB   CB   . GLU GLU GLU A A 224 224 . 0.3133 0.3585 0.3680 -0.0708 0.0376  -
0.0325 1 .
1647 CG   CG   . GLU GLU GLU A A 224 224 . 0.4547 0.4077 0.4657 -0.0628 0.0175
0.0013  1 .
1648 CD   CD   . GLU GLU GLU A A 224 224 . 0.5461 0.5310 0.5186 -0.0242 -0.0199 -
0.0294 1 .
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1649 OE1  OE1  . GLU GLU GLU A A 224 224 . 0.5829 0.5703 0.6618 0.0125  -0.0204 -
0.0271 1 .
1650 OE2  OE2  . GLU GLU GLU A A 224 224 . 0.5892 0.5361 0.6448 0.0298  -0.0123 -
0.0293 1 .
1651 C    C    . GLU GLU GLU A A 224 224 . 0.2831 0.3117 0.3134 -0.0695 0.0395  -
0.0432 1 .
1652 O    O    . GLU GLU GLU A A 224 224 . 0.2821 0.3142 0.3148 -0.0943 0.0289  -
0.0595 1 .
1653 N    N    . LEU LEU LEU A A 225 225 . 0.2898 0.2986 0.2703 -0.0684 0.0281  -
0.0394 1 .
1654 CA   CA   . LEU LEU LEU A A 225 225 . 0.2592 0.2864 0.2648 -0.0463 0.0410  -
0.0444 1 .
1655 CB   CB   . LEU LEU LEU A A 225 225 . 0.2229 0.2760 0.2321 -0.0437 0.0602  -
0.0487 1 .
1656 CG   CG   . LEU LEU LEU A A 225 225 . 0.2746 0.2728 0.2739 -0.0503 0.0901  -
0.0511 1 .
1657 CD1  CD1  . LEU LEU LEU A A 225 225 . 0.2854 0.2723 0.3163 -0.0323 0.0535  -
0.1094 1 .
1658 CD2  CD2  . LEU LEU LEU A A 225 225 . 0.3296 0.2899 0.3502 -0.0631 0.0980  -
0.0121 1 .
1659 C    C    . LEU LEU LEU A A 225 225 . 0.2368 0.2567 0.2402 -0.0504 0.0271  -
0.0452 1 .
1660 O    O    . LEU LEU LEU A A 225 225 . 0.2671 0.2826 0.2738 -0.0835 0.0080  -
0.0786 1 .
1661 N    N    . VAL VAL VAL A A 226 226 . 0.2896 0.3044 0.2428 -0.0607 0.0303  -
0.0608 1 .
1662 CA   CA   . VAL VAL VAL A A 226 226 . 0.2617 0.2853 0.2392 -0.0540 0.0466  -
0.0579 1 .
1663 CB   CB   . VAL VAL VAL A A 226 226 . 0.2872 0.3143 0.2333 -0.0516 0.0445  -
0.0568 1 .
1664 CG1  CG1  . VAL VAL VAL A A 226 226 . 0.2693 0.2482 0.2440 -0.0993 0.0403  -
0.0175 1 .
1665 CG2  CG2  . VAL VAL VAL A A 226 226 . 0.3040 0.2965 0.1946 -0.0629 0.0619  -
0.0695 1 .
1666 C    C    . VAL VAL VAL A A 226 226 . 0.2660 0.3011 0.2357 -0.0547 0.0268  -
0.0495 1 .
1667 O    O    . VAL VAL VAL A A 226 226 . 0.2615 0.2603 0.2203 -0.0565 0.0476  -
0.0750 1 .
1668 N    N    . LYS LYS LYS A A 227 227 . 0.2749 0.3187 0.2536 -0.0760 0.0326  -
0.0523 1 .
1669 CA   CA   . LYS LYS LYS A A 227 227 . 0.2824 0.3174 0.2380 -0.0616 0.0238  -
0.0536 1 .
1670 CB   CB   . LYS LYS LYS A A 227 227 . 0.2893 0.3367 0.2527 -0.0472 0.0122  -
0.0725 1 .
1671 CG   CG   . LYS LYS LYS A A 227 227 . 0.3930 0.3573 0.2835 -0.0531 0.0275  -
0.1066 1 .
1672 CD   CD   . LYS LYS LYS A A 227 227 . 0.4783 0.4761 0.4417 -0.0215 0.0398  -
0.1145 1 .
1673 CE   CE   . LYS LYS LYS A A 227 227 . 0.5816 0.5742 0.4432 0.0170  0.0033  -
0.1254 1 .
1674 NZ   NZ   . LYS LYS LYS A A 227 227 . 0.6144 0.5591 0.5551 -0.0084 -0.0535 -
0.1612 1 .
1675 C    C    . LYS LYS LYS A A 227 227 . 0.2705 0.2952 0.2340 -0.0688 0.0155  -
0.0579 1 .
1676 O    O    . LYS LYS LYS A A 227 227 . 0.2871 0.2561 0.2221 -0.0824 0.0028  -
0.0292 1 .
1677 N    N    . GLU GLU GLU A A 228 228 . 0.3118 0.3016 0.2383 -0.0730 0.0244  -
0.0625 1 .
1678 CA   CA   . GLU GLU GLU A A 228 228 . 0.3017 0.2746 0.2312 -0.0643 0.0261  -
0.0656 1 .
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1679 CB   CB   . GLU GLU GLU A A 228 228 . 0.2875 0.3362 0.2570 -0.0768 0.0272  -
0.0826 1 .
1680 C    C    . GLU GLU GLU A A 228 228 . 0.3149 0.2667 0.2462 -0.0564 0.0300  -
0.0658 1 .
1681 O    O    . GLU GLU GLU A A 228 228 . 0.3264 0.2478 0.2710 -0.0800 0.0025  -
0.0678 1 .
1682 N    N    . ALA ALA ALA A A 229 229 . 0.2948 0.2660 0.2532 -0.0818 0.0259  -
0.0696 1 .
1683 CA   CA   . ALA ALA ALA A A 229 229 . 0.3008 0.2581 0.2307 -0.0500 0.0156  -
0.0761 1 .
1684 CB   CB   . ALA ALA ALA A A 229 229 . 0.3252 0.2399 0.2166 -0.0380 0.0267  -
0.1077 1 .
1685 C    C    . ALA ALA ALA A A 229 229 . 0.2587 0.2200 0.2278 -0.0555 0.0235  -
0.0609 1 .
1686 O    O    . ALA ALA ALA A A 229 229 . 0.2913 0.2262 0.2288 -0.0601 0.0331  -
0.0548 1 .
1687 N    N    . ILE ILE ILE A A 230 230 . 0.2631 0.2121 0.2366 -0.0635 0.0162  -
0.0814 1 .
1688 CA   CA   . ILE ILE ILE A A 230 230 . 0.2563 0.2085 0.2368 -0.0392 0.0329  -
0.0716 1 .
1689 CB   CB   . ILE ILE ILE A A 230 230 . 0.2151 0.1850 0.2233 -0.0365 0.0435  -
0.0745 1 .
1690 CG1  CG1  . ILE ILE ILE A A 230 230 . 0.2379 0.1803 0.1989 -0.0289 0.0252  -
0.0638 1 .
1691 CD   CD   . ILE ILE ILE A A 230 230 . 0.2962 0.2480 0.2190 -0.0930 -0.0285 -
0.0569 1 .
1692 CG2  CG2  . ILE ILE ILE A A 230 230 . 0.2856 0.2526 0.2422 -0.0077 0.0799  -
0.0878 1 .
1693 C    C    . ILE ILE ILE A A 230 230 . 0.2507 0.2255 0.2422 -0.0346 0.0127  -
0.0806 1 .
1694 O    O    . ILE ILE ILE A A 230 230 . 0.2810 0.2178 0.2156 -0.0365 0.0058  -
0.0988 1 .
1695 N    N    . ASP ASP ASP A A 231 231 . 0.2940 0.2439 0.2736 -0.0467 0.0161  -
0.0814 1 .
1696 CA   CA   . ASP ASP ASP A A 231 231 . 0.3089 0.2815 0.2971 -0.0534 0.0115  -
0.0740 1 .
1697 CB   CB   . ASP ASP ASP A A 231 231 . 0.3229 0.3110 0.3063 -0.0653 -0.0070 -
0.0788 1 .
1698 CG   CG   . ASP ASP ASP A A 231 231 . 0.3873 0.3998 0.4236 -0.0871 -0.0203 -
0.0277 1 .
1699 OD1  OD1  . ASP ASP ASP A A 231 231 . 0.4155 0.5785 0.5840 -0.0919 -0.0334 -
0.0325 1 .
1700 OD2  OD2  . ASP ASP ASP A A 231 231 . 0.4204 0.5417 0.3209 -0.1450 -0.0179 -
0.0061 1 .
1701 C    C    . ASP ASP ASP A A 231 231 . 0.3174 0.2567 0.3051 -0.0520 0.0289  -
0.0693 1 .
1702 O    O    . ASP ASP ASP A A 231 231 . 0.3042 0.2601 0.3290 -0.0727 0.0505  -
0.0775 1 .
1703 N    N    . LYS LYS LYS A A 232 232 . 0.3421 0.2475 0.2727 -0.0678 0.0220  -
0.0784 1 .
1704 CA   CA   . LYS LYS LYS A A 232 232 . 0.3692 0.2839 0.3019 -0.0483 0.0170  -
0.0654 1 .
1705 CB   CB   . LYS LYS LYS A A 232 232 . 0.4047 0.2910 0.2640 -0.0571 0.0026  -
0.0821 1 .
1706 CG   CG   . LYS LYS LYS A A 232 232 . 0.5107 0.3897 0.3544 -0.0442 0.0398  -
0.0365 1 .
1707 CD   CD   . LYS LYS LYS A A 232 232 . 0.5443 0.4788 0.4122 -0.0865 0.0716
0.0030  1 .
1708 CE   CE   . LYS LYS LYS A A 232 232 . 0.5926 0.5484 0.4562 -0.0834 0.0374
0.0520  1 .
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1709 NZ   NZ   . LYS LYS LYS A A 232 232 . 0.6246 0.6243 0.4385 -0.1279 0.0479
0.0926  1 .
1710 C    C    . LYS LYS LYS A A 232 232 . 0.3543 0.2674 0.2775 -0.0391 0.0087  -
0.0567 1 .
1711 O    O    . LYS LYS LYS A A 232 232 . 0.3946 0.2873 0.2952 -0.0425 0.0272  -
0.0773 1 .
1712 N    N    . ALA ALA ALA A A 233 233 . 0.3398 0.2497 0.2413 -0.0493 0.0013  -
0.0496 1 .
1713 CA   CA   . ALA ALA ALA A A 233 233 . 0.3155 0.2172 0.2608 -0.0363 0.0067  -
0.0452 1 .
1714 CB   CB   . ALA ALA ALA A A 233 233 . 0.3296 0.2127 0.3002 -0.0516 0.0085  -
0.0634 1 .
1715 C    C    . ALA ALA ALA A A 233 233 . 0.3246 0.2501 0.2783 -0.0389 0.0075  -
0.0385 1 .
1716 O    O    . ALA ALA ALA A A 233 233 . 0.3647 0.3066 0.2771 -0.0202 -0.0188 -
0.0767 1 .
1717 N    N    . GLY GLY GLY A A 234 234 . 0.3456 0.2622 0.2639 -0.0445 0.0276  -
0.0475 1 .
1718 CA   CA   . GLY GLY GLY A A 234 234 . 0.3371 0.2619 0.2740 -0.0692 0.0413  -
0.0469 1 .
1719 C    C    . GLY GLY GLY A A 234 234 . 0.3141 0.2562 0.2705 -0.0583 0.0337  -
0.0503 1 .
1720 O    O    . GLY GLY GLY A A 234 234 . 0.3404 0.2516 0.2656 -0.0710 0.0747  -
0.0382 1 .
1721 N    N    . TYR TYR TYR A A 235 235 . 0.3157 0.2363 0.2358 -0.0598 0.0255  -
0.0489 1 .
1722 CA   CA   . TYR TYR TYR A A 235 235 . 0.2691 0.1885 0.1944 -0.0746 0.0119  -
0.0704 1 .
1723 CB   CB   . TYR TYR TYR A A 235 235 . 0.2704 0.1962 0.1770 -0.0845 -0.0075 -
0.0816 1 .
1724 CG   CG   . TYR TYR TYR A A 235 235 . 0.2881 0.1881 0.2046 -0.0394 0.0133  -
0.0778 1 .
1725 CD1  CD1  . TYR TYR TYR A A 235 235 . 0.2840 0.2069 0.1704 -0.0434 0.0200  -
0.0168 1 .
1726 CE1  CE1  . TYR TYR TYR A A 235 235 . 0.2345 0.2040 0.2113 -0.0355 0.0074  -
0.0656 1 .
1727 CZ   CZ   . TYR TYR TYR A A 235 235 . 0.2637 0.1985 0.2099 -0.0361 0.0163  -
0.0770 1 .
1728 OH   OH   . TYR TYR TYR A A 235 235 . 0.3302 0.2041 0.2815 -0.0252 0.0254  -
0.1164 1 .
1729 CE2  CE2  . TYR TYR TYR A A 235 235 . 0.3221 0.2276 0.2034 -0.0224 0.0007  -
0.0673 1 .
1730 CD2  CD2  . TYR TYR TYR A A 235 235 . 0.2898 0.1657 0.2276 -0.0325 -0.0066 -
0.1101 1 .
1731 C    C    . TYR TYR TYR A A 235 235 . 0.2719 0.1998 0.2082 -0.0565 0.0037  -
0.0531 1 .
1732 O    O    . TYR TYR TYR A A 235 235 . 0.2981 0.1895 0.1962 -0.0755 -0.0026 -
0.0760 1 .
1733 N    N    . THR THR THR A A 236 236 . 0.3018 0.2055 0.2281 -0.0735 -0.0045 -
0.0472 1 .
1734 CA   CA   . THR THR THR A A 236 236 . 0.2934 0.2352 0.2417 -0.0764 -0.0101 -
0.0542 1 .
1735 CB   CB   . THR THR THR A A 236 236 . 0.3265 0.2586 0.2701 -0.0845 0.0063  -
0.0315 1 .
1736 OG1  OG1  . THR THR THR A A 236 236 . 0.4137 0.3283 0.3291 -0.1323 0.0141  -
0.0031 1 .
1737 CG2  CG2  . THR THR THR A A 236 236 . 0.3225 0.3350 0.2627 -0.0800 -0.0023 -
0.0223 1 .
1738 C    C    . THR THR THR A A 236 236 . 0.3063 0.2312 0.2606 -0.0723 -0.0260 -
0.0639 1 .
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1739 O    O    . THR THR THR A A 236 236 . 0.3372 0.2867 0.2355 -0.0545 -0.0389 -
0.0716 1 .
1740 N    N    . GLU GLU GLU A A 237 237 . 0.3351 0.2712 0.2715 -0.0749 -0.0099 -
0.0574 1 .
1741 CA   CA   . GLU GLU GLU A A 237 237 . 0.3587 0.2994 0.2880 -0.0805 0.0015  -
0.0644 1 .
1742 CB   CB   . GLU GLU GLU A A 237 237 . 0.4069 0.3215 0.3051 -0.0710 0.0199  -
0.0709 1 .
1743 C    C    . GLU GLU GLU A A 237 237 . 0.3614 0.3024 0.2698 -0.0713 0.0135  -
0.0474 1 .
1744 O    O    . GLU GLU GLU A A 237 237 . 0.3901 0.3562 0.2623 -0.0865 -0.0008 -
0.0606 1 .
1745 N    N    . LYS LYS LYS A A 238 238 . 0.3195 0.2449 0.2131 -0.0587 0.0071  -
0.0794 1 .
1746 CA   CA   . LYS LYS LYS A A 238 238 . 0.2694 0.2404 0.2136 -0.0421 0.0307  -
0.0509 1 .
1747 CB   CB   . LYS LYS LYS A A 238 238 . 0.2969 0.2364 0.2409 -0.0144 0.0470  -
0.0425 1 .
1748 CG   CG   . LYS LYS LYS A A 238 238 . 0.3250 0.2828 0.3147 0.0274  0.0422  -
0.0505 1 .
1749 CD   CD   . LYS LYS LYS A A 238 238 . 0.3927 0.3365 0.3133 0.0058  0.0402  -
0.0131 1 .
1750 CE   CE   . LYS LYS LYS A A 238 238 . 0.5227 0.2952 0.4116 0.0633  0.0876
0.0284  1 .
1751 C    C    . LYS LYS LYS A A 238 238 . 0.2445 0.2285 0.1749 -0.0471 0.0260  -
0.0490 1 .
1752 O    O    . LYS LYS LYS A A 238 238 . 0.2900 0.2044 0.1397 -0.0547 0.0267  -
0.0457 1 .
1753 N    N    . ILE ILE ILE A A 239 239 . 0.2371 0.2158 0.1568 -0.0362 0.0004  -
0.0653 1 .
1754 CA   CA   . ILE ILE ILE A A 239 239 . 0.2494 0.2098 0.1782 -0.0248 0.0169  -
0.0438 1 .
1755 CB   CB   . ILE ILE ILE A A 239 239 . 0.2639 0.1830 0.1638 -0.0200 0.0129  -
0.0632 1 .
1756 CG1  CG1  . ILE ILE ILE A A 239 239 . 0.3074 0.1977 0.1738 0.0041  0.0237  -
0.0249 1 .
1757 CD   CD   . ILE ILE ILE A A 239 239 . 0.2910 0.1942 0.1392 -0.0133 -0.0017 -
0.0217 1 .
1758 CG2  CG2  . ILE ILE ILE A A 239 239 . 0.3283 0.2029 0.2203 -0.0093 0.0085  -
0.0974 1 .
1759 C    C    . ILE ILE ILE A A 239 239 . 0.2421 0.2208 0.1849 -0.0305 0.0119  -
0.0411 1 .
1760 O    O    . ILE ILE ILE A A 239 239 . 0.2671 0.2664 0.2480 -0.0691 0.0019  -
0.0506 1 .
1761 N    N    . VAL VAL VAL A A 240 240 . 0.2280 0.2007 0.1659 -0.0391 0.0022  -
0.0496 1 .
1762 CA   CA   . VAL VAL VAL A A 240 240 . 0.2295 0.2205 0.1667 -0.0036 0.0025  -
0.0672 1 .
1763 CB   CB   . VAL VAL VAL A A 240 240 . 0.2490 0.2262 0.1791 -0.0162 0.0051  -
0.0624 1 .
1764 CG1  CG1  . VAL VAL VAL A A 240 240 . 0.2941 0.3144 0.1689 0.0292  0.0039  -
0.0729 1 .
1765 CG2  CG2  . VAL VAL VAL A A 240 240 . 0.2653 0.2334 0.1997 -0.0575 -0.0261 -
0.0657 1 .
1766 C    C    . VAL VAL VAL A A 240 240 . 0.2252 0.2295 0.1794 -0.0087 0.0039  -
0.0491 1 .
1767 O    O    . VAL VAL VAL A A 240 240 . 0.2166 0.2308 0.1643 -0.0220 -0.0211 -
0.0688 1 .
1768 N    N    . ILE ILE ILE A A 241 241 . 0.2136 0.2225 0.2057 -0.0306 0.0022  -
0.0635 1 .
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1769 CA   CA   . ILE ILE ILE A A 241 241 . 0.1993 0.2361 0.2143 -0.0448 0.0215  -
0.0394 1 .
1770 CB   CB   . ILE ILE ILE A A 241 241 . 0.1877 0.2525 0.2078 -0.0642 0.0125  -
0.0447 1 .
1771 CG1  CG1  . ILE ILE ILE A A 241 241 . 0.1962 0.2645 0.2309 -0.0698 0.0440  -
0.0358 1 .
1772 CD   CD   . ILE ILE ILE A A 241 241 . 0.1978 0.2072 0.2301 -0.0961 -0.0121 -
0.0242 1 .
1773 CG2  CG2  . ILE ILE ILE A A 241 241 . 0.2095 0.2784 0.2817 -0.0396 0.0374  -
0.0297 1 .
1774 C    C    . ILE ILE ILE A A 241 241 . 0.1981 0.2425 0.1989 -0.0331 0.0096  -
0.0230 1 .
1775 O    O    . ILE ILE ILE A A 241 241 . 0.2132 0.2386 0.2008 -0.0536 -0.0114 -
0.0516 1 .
1776 N    N    . GLY GLY GLY A A 242 242 . 0.2022 0.2074 0.1792 -0.0421 0.0038  -
0.0425 1 .
1777 CA   CA   . GLY GLY GLY A A 242 242 . 0.2132 0.2469 0.1928 -0.0121 -0.0057 -
0.0337 1 .
1778 C    C    . GLY GLY GLY A A 242 242 . 0.2239 0.2440 0.1932 -0.0234 -0.0174 -
0.0422 1 .
1779 O    O    . GLY GLY GLY A A 242 242 . 0.2473 0.2678 0.1940 -0.0247 -0.0118 -
0.0460 1 .
1780 N    N    . MET MET MET A A 243 243 . 0.2001 0.2494 0.2196 -0.0169 -0.0126 -
0.0683 1 .
1781 CA   CA   . MET MET MET A A 243 243 . 0.2032 0.2731 0.2440 -0.0328 -0.0045 -
0.0511 1 .
1782 CB   CB   . MET MET MET A A 243 243 . 0.2137 0.2997 0.2989 -0.0383 0.0084  -
0.0433 1 .
1783 CG   CG   . MET MET MET A A 243 243 . 0.1765 0.3257 0.3705 -0.0895 0.0195  -
0.0493 1 .
1784 SD   SD   . MET MET MET A A 243 243 . 0.2154 0.4198 0.3904 -0.0983 0.0247  -
0.0981 1 .
1785 CE   CE   . MET MET MET A A 243 243 . 0.2259 0.4660 0.3558 -0.0817 0.0595  -
0.0889 1 .
1786 C    C    . MET MET MET A A 243 243 . 0.2126 0.2664 0.2440 -0.0379 0.0044  -
0.0304 1 .
1787 O    O    . MET MET MET A A 243 243 . 0.1965 0.2769 0.2415 -0.0268 -0.0163 -
0.0184 1 .
1788 N    N    . ASP ASP ASP A A 244 244 . 0.2039 0.2422 0.2342 -0.0342 -0.0100 -
0.0424 1 .
1789 CA   CA   . ASP ASP ASP A A 244 244 . 0.1789 0.2532 0.2189 -0.0440 0.0125  -
0.0505 1 .
1790 CB   CB   . ASP ASP ASP A A 244 244 . 0.1831 0.2404 0.2248 -0.0450 -0.0034 -
0.0487 1 .
1791 CG   CG   . ASP ASP ASP A A 244 244 . 0.1966 0.2598 0.2161 -0.0056 0.0057  -
0.0433 1 .
1792 OD1  OD1  . ASP ASP ASP A A 244 244 . 0.1902 0.3010 0.2103 -0.0240 0.0159  -
0.0095 1 .
1793 OD2  OD2  . ASP ASP ASP A A 244 244 . 0.2029 0.3003 0.2834 -0.0473 -0.0495 -
0.0574 1 .
1794 C    C    . ASP ASP ASP A A 244 244 . 0.2097 0.2509 0.2263 -0.0358 0.0138  -
0.0520 1 .
1795 O    O    . ASP ASP ASP A A 244 244 . 0.2174 0.2668 0.2235 -0.0589 0.0108  -
0.0407 1 .
1796 N    N    . VAL VAL VAL A A 245 245 . 0.1825 0.2729 0.2346 -0.0270 0.0317  -
0.0708 1 .
1797 CA   CA   . VAL VAL VAL A A 245 245 . 0.2084 0.3168 0.2665 -0.0316 0.0370  -
0.0743 1 .
1798 CB   CB   . VAL VAL VAL A A 245 245 . 0.1921 0.3114 0.2662 -0.0036 0.0297  -
0.0657 1 .
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1799 CG1  CG1  . VAL VAL VAL A A 245 245 . 0.1875 0.3642 0.3154 -0.0336 0.0595  -
0.1121 1 .
1800 CG2  CG2  . VAL VAL VAL A A 245 245 . 0.2357 0.3304 0.3264 0.0003  0.0348  -
0.1067 1 .
1801 C    C    . VAL VAL VAL A A 245 245 . 0.2342 0.2896 0.2756 -0.0326 0.0277  -
0.0542 1 .
1802 O    O    . VAL VAL VAL A A 245 245 . 0.2016 0.3247 0.2454 -0.0509 0.0004  -
0.0560 1 .
1803 N    N    . ALA ALA ALA A A 246 246 . 0.2146 0.2731 0.2692 -0.0356 0.0054  -
0.0390 1 .
1804 CA   CA   . ALA ALA ALA A A 246 246 . 0.2042 0.2555 0.2567 -0.0234 -0.0006 -
0.0395 1 .
1805 CB   CB   . ALA ALA ALA A A 246 246 . 0.2157 0.2673 0.2513 -0.0347 0.0042  -
0.0317 1 .
1806 C    C    . ALA ALA ALA A A 246 246 . 0.2294 0.3095 0.2630 -0.0261 0.0077  -
0.0396 1 .
1807 O    O    . ALA ALA ALA A A 246 246 . 0.2486 0.3004 0.2733 -0.0318 0.0007  -
0.1004 1 .
1808 N    N    . ALA ALA ALA A A 247 247 . 0.1647 0.2856 0.2797 -0.0150 -0.0222 -
0.0585 1 .
1809 CA   CA   . ALA ALA ALA A A 247 247 . 0.2203 0.3164 0.2888 -0.0090 -0.0011 -
0.0447 1 .
1810 CB   CB   . ALA ALA ALA A A 247 247 . 0.2108 0.2984 0.2753 0.0109  -0.0238 -
0.0418 1 .
1811 C    C    . ALA ALA ALA A A 247 247 . 0.2548 0.3255 0.3061 -0.0159 0.0060  -
0.0534 1 .
1812 O    O    . ALA ALA ALA A A 247 247 . 0.2775 0.3749 0.3437 -0.0156 0.0185  -
0.0745 1 .
1813 N    N    . SER SER SER A A 248 248 . 0.2893 0.3338 0.2846 -0.0208 0.0152  -
0.0448 1 .
1814 CA   CA   . SER SER SER A A 248 248 . 0.2842 0.3194 0.3025 -0.0250 0.0176  -
0.0293 1 .
1815 CB   CB   . SER SER SER A A 248 248 . 0.2857 0.3075 0.2941 -0.0229 0.0145  -
0.0228 1 .
1816 OG   OG   . SER SER SER A A 248 248 . 0.2387 0.3470 0.3034 -0.0557 0.0051  -
0.0094 1 .
1817 C    C    . SER SER SER A A 248 248 . 0.2676 0.3180 0.2982 -0.0198 0.0183  -
0.0321 1 .
1818 O    O    . SER SER SER A A 248 248 . 0.3110 0.3502 0.2848 -0.0035 0.0316  -
0.0536 1 .
1819 N    N    . GLU GLU GLU A A 249 249 . 0.2520 0.3385 0.2930 -0.0379 0.0290  -
0.0290 1 .
1820 CA   CA   . GLU GLU GLU A A 249 249 . 0.2244 0.3630 0.3109 -0.0435 0.0213  -
0.0169 1 .
1821 CB   CB   . GLU GLU GLU A A 249 249 . 0.1748 0.3734 0.3157 -0.0373 0.0174  -
0.0269 1 .
1822 CG   CG   . GLU GLU GLU A A 249 249 . 0.1904 0.3496 0.3527 -0.1033 0.0429  -
0.0284 1 .
1823 CD   CD   . GLU GLU GLU A A 249 249 . 0.3339 0.3785 0.3692 -0.0348 0.0059  -
0.0211 1 .
1824 OE1  OE1  . GLU GLU GLU A A 249 249 . 0.2767 0.3723 0.3852 -0.0321 0.0412  -
0.0635 1 .
1825 OE2  OE2  . GLU GLU GLU A A 249 249 . 0.3012 0.3969 0.3918 -0.0606 -0.0095 -
0.0240 1 .
1826 C    C    . GLU GLU GLU A A 249 249 . 0.2569 0.3988 0.3318 -0.0513 0.0198  -
0.0208 1 .
1827 O    O    . GLU GLU GLU A A 249 249 . 0.2234 0.4562 0.3314 -0.0563 0.0375  -
0.0129 1 .
1828 N    N    . PHE PHE PHE A A 250 250 . 0.2592 0.3944 0.3020 -0.0331 0.0115  -
0.0248 1 .
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1829 CA   CA   . PHE PHE PHE A A 250 250 . 0.2830 0.3661 0.3189 -0.0274 0.0202  -
0.0214 1 .
1830 CB   CB   . PHE PHE PHE A A 250 250 . 0.2687 0.3809 0.3179 -0.0151 0.0327  -
0.0297 1 .
1831 CG   CG   . PHE PHE PHE A A 250 250 . 0.2785 0.3628 0.2993 -0.0435 0.0228  -
0.0389 1 .
1832 CD1  CD1  . PHE PHE PHE A A 250 250 . 0.2734 0.3535 0.2765 -0.0497 0.0236  -
0.0038 1 .
1833 CE1  CE1  . PHE PHE PHE A A 250 250 . 0.2480 0.3678 0.3305 -0.0578 0.0339  -
0.0350 1 .
1834 CZ   CZ   . PHE PHE PHE A A 250 250 . 0.2605 0.4120 0.3284 -0.0604 0.0148  -
0.0301 1 .
1835 CE2  CE2  . PHE PHE PHE A A 250 250 . 0.2859 0.4473 0.3626 -0.0313 0.0421  -
0.0630 1 .
1836 CD2  CD2  . PHE PHE PHE A A 250 250 . 0.2533 0.4457 0.2935 -0.0533 0.0192  -
0.0516 1 .
1837 C    C    . PHE PHE PHE A A 250 250 . 0.3028 0.3859 0.3259 -0.0109 0.0215  -
0.0309 1 .
1838 O    O    . PHE PHE PHE A A 250 250 . 0.3257 0.4161 0.3163 -0.0137 0.0231  -
0.0516 1 .
1839 N    N    . TYR TYR TYR A A 251 251 . 0.3261 0.3850 0.3503 0.0045  0.0177  -
0.0336 1 .
1840 CA   CA   . TYR TYR TYR A A 251 251 . 0.3036 0.3910 0.3540 0.0250  0.0071  -
0.0462 1 .
1841 CB   CB   . TYR TYR TYR A A 251 251 . 0.3148 0.3938 0.3455 0.0366  0.0030  -
0.0349 1 .
1842 CG   CG   . TYR TYR TYR A A 251 251 . 0.3128 0.3941 0.3941 0.0294  -0.0163 -
0.0080 1 .
1843 CD1  CD1  . TYR TYR TYR A A 251 251 . 0.3334 0.4372 0.4066 0.0535  -0.0160 -
0.0079 1 .
1844 CE1  CE1  . TYR TYR TYR A A 251 251 . 0.3064 0.4238 0.4464 0.0646  -0.0533
0.0143  1 .
1845 CZ   CZ   . TYR TYR TYR A A 251 251 . 0.3976 0.4715 0.4747 0.0255  -0.0695
0.0456  1 .
1846 OH   OH   . TYR TYR TYR A A 251 251 . 0.4531 0.5282 0.5468 0.0260  -0.1143
0.0757  1 .
1847 CE2  CE2  . TYR TYR TYR A A 251 251 . 0.3655 0.4594 0.4443 0.0077  -0.0720
0.0292  1 .
1848 CD2  CD2  . TYR TYR TYR A A 251 251 . 0.3462 0.3803 0.4653 0.0385  -0.0189
0.0603  1 .
1849 C    C    . TYR TYR TYR A A 251 251 . 0.3096 0.4282 0.4004 0.0234  0.0254  -
0.0567 1 .
1850 O    O    . TYR TYR TYR A A 251 251 . 0.2115 0.4347 0.4153 0.0117  0.0347  -
0.0677 1 .
1851 N    N    . ARG ARG ARG A A 252 252 . 0.3364 0.4459 0.4324 0.0233  0.0160  -
0.0551 1 .
1852 CA   CA   . ARG ARG ARG A A 252 252 . 0.3675 0.4820 0.4511 0.0260  0.0136  -
0.0358 1 .
1853 CB   CB   . ARG ARG ARG A A 252 252 . 0.3633 0.4897 0.4587 0.0380  0.0163  -
0.0338 1 .
1854 CG   CG   . ARG ARG ARG A A 252 252 . 0.3888 0.5420 0.4505 0.0439  0.0276  -
0.0265 1 .
1855 CD   CD   . ARG ARG ARG A A 252 252 . 0.4163 0.6106 0.4998 0.0393  -0.0096 -
0.0556 1 .
1856 NE   NE   . ARG ARG ARG A A 252 252 . 0.4541 0.6449 0.5670 0.0719  0.0036  -
0.0364 1 .
1857 CZ   CZ   . ARG ARG ARG A A 252 252 . 0.4513 0.6279 0.5443 0.0425  0.0143  -
0.0320 1 .
1858 NH1  NH1  . ARG ARG ARG A A 252 252 . 0.3859 0.6252 0.5086 0.0127  0.0708  -
0.0950 1 .
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1859 NH2  NH2  . ARG ARG ARG A A 252 252 . 0.3639 0.6039 0.5470 0.0681  0.0217  -
0.0599 1 .
1860 C    C    . ARG ARG ARG A A 252 252 . 0.4035 0.4994 0.4746 0.0192  0.0032  -
0.0357 1 .
1861 O    O    . ARG ARG ARG A A 252 252 . 0.3797 0.5117 0.4921 0.0108  0.0120  -
0.0424 1 .
1862 N    N    . ASP ASP ASP A A 253 253 . 0.4392 0.5211 0.4794 0.0187  -0.0065 -
0.0266 1 .
1863 CA   CA   . ASP ASP ASP A A 253 253 . 0.4497 0.5584 0.4843 0.0037  -0.0122 -
0.0242 1 .
1864 CB   CB   . ASP ASP ASP A A 253 253 . 0.4552 0.5743 0.4754 0.0010  -0.0103 -
0.0177 1 .
1865 C    C    . ASP ASP ASP A A 253 253 . 0.4396 0.5723 0.4882 -0.0008 -0.0018 -
0.0244 1 .
1866 O    O    . ASP ASP ASP A A 253 253 . 0.4113 0.5859 0.5132 0.0051  -0.0093 -
0.0281 1 .
1867 N    N    . GLY GLY GLY A A 254 254 . 0.3977 0.5674 0.4878 0.0049  -0.0099 -
0.0171 1 .
1868 CA   CA   . GLY GLY GLY A A 254 254 . 0.3598 0.5282 0.4656 0.0040  -0.0196 -
0.0184 1 .
1869 C    C    . GLY GLY GLY A A 254 254 . 0.3358 0.5125 0.4465 0.0006  -0.0294 -
0.0109 1 .
1870 O    O    . GLY GLY GLY A A 254 254 . 0.3177 0.5448 0.4487 0.0170  -0.0218 -
0.0195 1 .
1871 N    N    . LYS LYS LYS A A 255 255 . 0.3311 0.4722 0.4382 -0.0114 -0.0221 -
0.0068 1 .
1872 CA   CA   . LYS LYS LYS A A 255 255 . 0.3330 0.4568 0.4308 -0.0058 -0.0314
0.0064  1 .
1873 CB   CB   . LYS LYS LYS A A 255 255 . 0.3526 0.4464 0.4342 -0.0105 -0.0257
0.0040  1 .
1874 CG   CG   . LYS LYS LYS A A 255 255 . 0.3652 0.4928 0.4756 -0.0154 -0.0766
0.0046  1 .
1875 C    C    . LYS LYS LYS A A 255 255 . 0.3253 0.4302 0.4180 0.0037  -0.0104
0.0023  1 .
1876 O    O    . LYS LYS LYS A A 255 255 . 0.3152 0.4510 0.4041 0.0128  0.0130
0.0009  1 .
1877 N    N    . TYR TYR TYR A A 256 256 . 0.3036 0.4298 0.3935 0.0122  -0.0127 -
0.0007 1 .
1878 CA   CA   . TYR TYR TYR A A 256 256 . 0.3326 0.4133 0.3922 0.0008  -0.0117 -
0.0059 1 .
1879 CB   CB   . TYR TYR TYR A A 256 256 . 0.2978 0.4122 0.3890 -0.0024 -0.0196 -
0.0136 1 .
1880 CG   CG   . TYR TYR TYR A A 256 256 . 0.2983 0.4131 0.3374 -0.0123 -0.0425 -
0.0110 1 .
1881 CD1  CD1  . TYR TYR TYR A A 256 256 . 0.2793 0.3653 0.3373 -0.0281 -0.0270 -
0.0110 1 .
1882 CE1  CE1  . TYR TYR TYR A A 256 256 . 0.3091 0.3741 0.3304 -0.0144 -0.0192 -
0.0340 1 .
1883 CZ   CZ   . TYR TYR TYR A A 256 256 . 0.2649 0.3867 0.3789 0.0069  -0.0624 -
0.0297 1 .
1884 OH   OH   . TYR TYR TYR A A 256 256 . 0.2113 0.4489 0.3917 0.0002  -0.0675 -
0.0664 1 .
1885 CE2  CE2  . TYR TYR TYR A A 256 256 . 0.2845 0.3989 0.3304 -0.0652 -0.0531 -
0.0518 1 .
1886 CD2  CD2  . TYR TYR TYR A A 256 256 . 0.2524 0.3954 0.2932 -0.0352 -0.0638 -
0.0523 1 .
1887 C    C    . TYR TYR TYR A A 256 256 . 0.3407 0.4242 0.3845 -0.0050 -0.0048 -
0.0095 1 .
1888 O    O    . TYR TYR TYR A A 256 256 . 0.3307 0.4224 0.3928 -0.0136 0.0035  -
0.0194 1 .
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1889 N    N    . ASP ASP ASP A A 257 257 . 0.3542 0.4278 0.3744 -0.0246 -0.0004 -
0.0222 1 .
1890 CA   CA   . ASP ASP ASP A A 257 257 . 0.3505 0.4164 0.3694 -0.0246 0.0025  -
0.0207 1 .
1891 CB   CB   . ASP ASP ASP A A 257 257 . 0.3309 0.4345 0.3780 -0.0118 0.0055  -
0.0295 1 .
1892 CG   CG   . ASP ASP ASP A A 257 257 . 0.3424 0.4181 0.3945 -0.0043 0.0160  -
0.0332 1 .
1893 OD1  OD1  . ASP ASP ASP A A 257 257 . 0.3386 0.4321 0.4400 0.0302  0.1012  -
0.0391 1 .
1894 OD2  OD2  . ASP ASP ASP A A 257 257 . 0.2735 0.4915 0.3601 -0.0212 0.0175  -
0.0087 1 .
1895 C    C    . ASP ASP ASP A A 257 257 . 0.3515 0.4161 0.3709 -0.0293 0.0244  -
0.0258 1 .
1896 O    O    . ASP ASP ASP A A 257 257 . 0.3802 0.4057 0.3654 -0.0544 0.0089  -
0.0348 1 .
1897 N    N    . LEU LEU LEU A A 258 258 . 0.3446 0.3995 0.3770 -0.0354 0.0156  -
0.0224 1 .
1898 CA   CA   . LEU LEU LEU A A 258 258 . 0.3486 0.3797 0.3794 -0.0308 0.0179  -
0.0325 1 .
1899 CB   CB   . LEU LEU LEU A A 258 258 . 0.3399 0.3794 0.3778 -0.0466 0.0103  -
0.0381 1 .
1900 CG   CG   . LEU LEU LEU A A 258 258 . 0.3276 0.3924 0.3973 -0.0609 -0.0010 -
0.0434 1 .
1901 CD1  CD1  . LEU LEU LEU A A 258 258 . 0.2453 0.3928 0.4571 -0.0605 0.0325  -
0.0847 1 .
1902 CD2  CD2  . LEU LEU LEU A A 258 258 . 0.3733 0.3328 0.4327 -0.1010 0.0367  -
0.0407 1 .
1903 C    C    . LEU LEU LEU A A 258 258 . 0.3297 0.3642 0.3793 -0.0387 0.0273  -
0.0180 1 .
1904 O    O    . LEU LEU LEU A A 258 258 . 0.3151 0.3886 0.3768 -0.0389 0.0477  -
0.0193 1 .
1905 N    N    . ASP ASP ASP A A 259 259 . 0.3441 0.3649 0.3849 -0.0534 0.0260  -
0.0272 1 .
1906 CA   CA   . ASP ASP ASP A A 259 259 . 0.3478 0.3880 0.3898 -0.0437 0.0328  -
0.0080 1 .
1907 CB   CB   . ASP ASP ASP A A 259 259 . 0.3463 0.3963 0.3893 -0.0401 0.0458
0.0019  1 .
1908 CG   CG   . ASP ASP ASP A A 259 259 . 0.3671 0.4443 0.4681 -0.0593 0.0546
0.0223  1 .
1909 OD1  OD1  . ASP ASP ASP A A 259 259 . 0.2649 0.5320 0.5404 -0.1048 0.1200
0.0174  1 .
1910 OD2  OD2  . ASP ASP ASP A A 259 259 . 0.4073 0.4917 0.5288 -0.0971 0.0961
0.0760  1 .
1911 C    C    . ASP ASP ASP A A 259 259 . 0.3521 0.4070 0.3858 -0.0230 0.0278  -
0.0083 1 .
1912 O    O    . ASP ASP ASP A A 259 259 . 0.3283 0.4330 0.3696 -0.0098 0.0275  -
0.0102 1 .
1913 N    N    . PHE PHE PHE A A 260 260 . 0.3394 0.4042 0.3871 -0.0270 0.0308  -
0.0192 1 .
1914 CA   CA   . PHE PHE PHE A A 260 260 . 0.3273 0.4166 0.3779 -0.0049 0.0081  -
0.0226 1 .
1915 CB   CB   . PHE PHE PHE A A 260 260 . 0.2796 0.4329 0.3655 0.0103  -0.0057 -
0.0105 1 .
1916 CG   CG   . PHE PHE PHE A A 260 260 . 0.2664 0.3985 0.3128 0.0270  -0.0399 -
0.0464 1 .
1917 CD1  CD1  . PHE PHE PHE A A 260 260 . 0.2108 0.4309 0.3119 0.0199  -0.0418 -
0.0664 1 .
1918 CE1  CE1  . PHE PHE PHE A A 260 260 . 0.2648 0.4660 0.2905 0.0070  -0.0449 -
0.0207 1 .
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1919 CZ   CZ   . PHE PHE PHE A A 260 260 . 0.3550 0.3801 0.3666 -0.0245 0.0063  -
0.0634 1 .
1920 CE2  CE2  . PHE PHE PHE A A 260 260 . 0.2474 0.4131 0.3565 0.0077  -0.0219 -
0.0405 1 .
1921 CD2  CD2  . PHE PHE PHE A A 260 260 . 0.2491 0.3621 0.3492 0.0521  0.0271  -
0.0849 1 .
1922 C    C    . PHE PHE PHE A A 260 260 . 0.3483 0.4315 0.3778 -0.0063 0.0316  -
0.0114 1 .
1923 O    O    . PHE PHE PHE A A 260 260 . 0.3343 0.4341 0.3866 -0.0132 0.0297  -
0.0335 1 .
1924 N    N    . LYS LYS LYS A A 261 261 . 0.3296 0.4300 0.3719 0.0048  0.0323
0.0077  1 .
1925 CA   CA   . LYS LYS LYS A A 261 261 . 0.3655 0.4639 0.4152 -0.0032 0.0359
0.0076  1 .
1926 CB   CB   . LYS LYS LYS A A 261 261 . 0.3528 0.4654 0.4259 -0.0054 0.0297
0.0193  1 .
1927 CG   CG   . LYS LYS LYS A A 261 261 . 0.3425 0.4579 0.4323 0.0108  0.0557
0.0121  1 .
1928 CD   CD   . LYS LYS LYS A A 261 261 . 0.3112 0.3396 0.3966 -0.0280 0.1027  -
0.0351 1 .
1929 CE   CE   . LYS LYS LYS A A 261 261 . 0.3017 0.3265 0.3687 0.0381  0.1121  -
0.0138 1 .
1930 NZ   NZ   . LYS LYS LYS A A 261 261 . 0.2602 0.3120 0.2769 0.0002  0.0766  -
0.0057 1 .
1931 C    C    . LYS LYS LYS A A 261 261 . 0.3933 0.4920 0.4297 -0.0071 0.0355
0.0106  1 .
1932 O    O    . LYS LYS LYS A A 261 261 . 0.3915 0.5389 0.4328 -0.0108 0.0406
0.0124  1 .
1933 N    N    . SER SER SER A A 262 262 . 0.4084 0.5047 0.4536 -0.0190 0.0352  -
0.0001 1 .
1934 CA   CA   . SER SER SER A A 262 262 . 0.4463 0.5127 0.4817 -0.0162 0.0431
0.0001  1 .
1935 CB   CB   . SER SER SER A A 262 262 . 0.4536 0.5045 0.5042 -0.0172 0.0424
0.0031  1 .
1936 OG   OG   . SER SER SER A A 262 262 . 0.4533 0.4735 0.4776 -0.0411 0.0683
0.0120  1 .
1937 C    C    . SER SER SER A A 262 262 . 0.4649 0.5305 0.4935 -0.0073 0.0400
0.0061  1 .
1938 O    O    . SER SER SER A A 262 262 . 0.4285 0.5399 0.4723 -0.0347 0.0727
0.0145  1 .
1939 N    N    . PRO PRO PRO A A 263 263 . 0.4807 0.5518 0.5126 -0.0009 0.0467
0.0075  1 .
1940 CA   CA   . PRO PRO PRO A A 263 263 . 0.4949 0.5498 0.5255 0.0077  0.0432
0.0031  1 .
1941 CB   CB   . PRO PRO PRO A A 263 263 . 0.5136 0.5515 0.5236 0.0109  0.0503
0.0023  1 .
1942 CG   CG   . PRO PRO PRO A A 263 263 . 0.5157 0.5712 0.5182 0.0274  0.0522
0.0058  1 .
1943 CD   CD   . PRO PRO PRO A A 263 263 . 0.4832 0.5596 0.5145 0.0114  0.0390
0.0133  1 .
1944 C    C    . PRO PRO PRO A A 263 263 . 0.4861 0.5600 0.5321 0.0053  0.0445
0.0010  1 .
1945 O    O    . PRO PRO PRO A A 263 263 . 0.4619 0.5539 0.5480 0.0069  0.0518  -
0.0030 1 .
1946 N    N    . THR THR THR A A 264 264 . 0.4960 0.5768 0.5500 0.0032  0.0442  -
0.0002 1 .
1947 CA   CA   . THR THR THR A A 264 264 . 0.5201 0.6057 0.5635 0.0029  0.0253  -
0.0049 1 .
1948 CB   CB   . THR THR THR A A 264 264 . 0.5250 0.6026 0.5660 -0.0017 0.0273
0.0012  1 .
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1949 OG1  OG1  . THR THR THR A A 264 264 . 0.5249 0.6567 0.5579 0.0071  0.0173
0.0041  1 .
1950 CG2  CG2  . THR THR THR A A 264 264 . 0.4795 0.6274 0.5338 0.0202  0.0391  -
0.0137 1 .
1951 C    C    . THR THR THR A A 264 264 . 0.5351 0.6124 0.5799 -0.0031 0.0208  -
0.0040 1 .
1952 O    O    . THR THR THR A A 264 264 . 0.5417 0.6273 0.5920 -0.0059 0.0278
0.0036  1 .
1953 N    N    . ASP ASP ASP A A 265 265 . 0.5243 0.6140 0.5710 -0.0015 0.0155  -
0.0064 1 .
1954 CA   CA   . ASP ASP ASP A A 265 265 . 0.5510 0.6043 0.5935 -0.0055 0.0067  -
0.0002 1 .
1955 CB   CB   . ASP ASP ASP A A 265 265 . 0.5433 0.5992 0.6024 -0.0030 0.0068  -
0.0023 1 .
1956 CG   CG   . ASP ASP ASP A A 265 265 . 0.5611 0.6018 0.6448 -0.0126 0.0086
0.0117  1 .
1957 OD1  OD1  . ASP ASP ASP A A 265 265 . 0.4394 0.6540 0.6868 -0.0111 0.0191
0.0166  1 .
1958 OD2  OD2  . ASP ASP ASP A A 265 265 . 0.5695 0.5986 0.7075 -0.0425 0.0080
0.0279  1 .
1959 C    C    . ASP ASP ASP A A 265 265 . 0.5460 0.5949 0.5863 -0.0087 0.0092  -
0.0010 1 .
1960 O    O    . ASP ASP ASP A A 265 265 . 0.5374 0.5934 0.5898 -0.0041 0.0084  -
0.0023 1 .
1961 N    N    . PRO PRO PRO A A 266 266 . 0.5478 0.5927 0.5862 -0.0057 0.0072
0.0007  1 .
1962 CA   CA   . PRO PRO PRO A A 266 266 . 0.5305 0.5944 0.5807 -0.0124 0.0124
0.0000  1 .
1963 CB   CB   . PRO PRO PRO A A 266 266 . 0.5369 0.5888 0.5894 -0.0082 0.0125
0.0038  1 .
1964 CG   CG   . PRO PRO PRO A A 266 266 . 0.5607 0.5890 0.5814 -0.0114 0.0082
0.0076  1 .
1965 CD   CD   . PRO PRO PRO A A 266 266 . 0.5576 0.5854 0.5803 -0.0022 0.0088  -
0.0015 1 .
1966 C    C    . PRO PRO PRO A A 266 266 . 0.5096 0.6068 0.5774 -0.0147 0.0030
0.0003  1 .
1967 O    O    . PRO PRO PRO A A 266 266 . 0.4347 0.6373 0.5859 -0.0255 -0.0036 -
0.0017 1 .
1968 N    N    . SER SER SER A A 267 267 . 0.5190 0.5998 0.5778 -0.0147 0.0056  -
0.0045 1 .
1969 CA   CA   . SER SER SER A A 267 267 . 0.5058 0.5925 0.5700 -0.0088 0.0123  -
0.0039 1 .
1970 CB   CB   . SER SER SER A A 267 267 . 0.5171 0.6035 0.5723 -0.0108 0.0169
0.0081  1 .
1971 OG   OG   . SER SER SER A A 267 267 . 0.4422 0.6404 0.6165 0.0028  0.0335
0.0372  1 .
1972 C    C    . SER SER SER A A 267 267 . 0.5089 0.5894 0.5537 -0.0079 0.0037  -
0.0108 1 .
1973 O    O    . SER SER SER A A 267 267 . 0.4876 0.5980 0.5329 -0.0102 0.0117  -
0.0304 1 .
1974 N    N    . ARG ARG ARG A A 268 268 . 0.4770 0.5581 0.5333 -0.0152 0.0024  -
0.0110 1 .
1975 CA   CA   . ARG ARG ARG A A 268 268 . 0.4489 0.5363 0.5126 -0.0174 0.0058  -
0.0063 1 .
1976 CB   CB   . ARG ARG ARG A A 268 268 . 0.4546 0.5404 0.4818 -0.0145 0.0083  -
0.0150 1 .
1977 CG   CG   . ARG ARG ARG A A 268 268 . 0.3927 0.5577 0.4862 -0.0402 0.0207  -
0.0139 1 .
1978 CD   CD   . ARG ARG ARG A A 268 268 . 0.4160 0.5992 0.5033 -0.0383 0.0329  -
0.0310 1 .
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1979 NE   NE   . ARG ARG ARG A A 268 268 . 0.4203 0.6213 0.5116 -0.0668 0.0589  -
0.0324 1 .
1980 CZ   CZ   . ARG ARG ARG A A 268 268 . 0.4096 0.6084 0.4995 -0.0563 0.0277  -
0.0146 1 .
1981 NH1  NH1  . ARG ARG ARG A A 268 268 . 0.4113 0.6388 0.5117 -0.0396 0.0466
0.0157  1 .
1982 NH2  NH2  . ARG ARG ARG A A 268 268 . 0.3062 0.5775 0.4903 -0.0408 0.0671  -
0.0160 1 .
1983 C    C    . ARG ARG ARG A A 268 268 . 0.4242 0.5207 0.5069 -0.0244 -0.0009 -
0.0141 1 .
1984 O    O    . ARG ARG ARG A A 268 268 . 0.4012 0.5316 0.5258 -0.0468 -0.0040 -
0.0299 1 .
1985 N    N    . TYR TYR TYR A A 269 269 . 0.3792 0.5105 0.4946 -0.0316 0.0054  -
0.0085 1 .
1986 CA   CA   . TYR TYR TYR A A 269 269 . 0.3805 0.5152 0.4779 -0.0158 0.0037  -
0.0095 1 .
1987 CB   CB   . TYR TYR TYR A A 269 269 . 0.3569 0.5014 0.4753 -0.0344 0.0062  -
0.0191 1 .
1988 CG   CG   . TYR TYR TYR A A 269 269 . 0.3609 0.4903 0.4804 -0.0418 0.0148  -
0.0019 1 .
1989 CD1  CD1  . TYR TYR TYR A A 269 269 . 0.2446 0.4470 0.4407 -0.0582 -0.0063 -
0.0180 1 .
1990 CE1  CE1  . TYR TYR TYR A A 269 269 . 0.3745 0.4856 0.4626 -0.0683 0.0259  -
0.0399 1 .
1991 CZ   CZ   . TYR TYR TYR A A 269 269 . 0.3441 0.5036 0.4457 -0.0512 0.0314  -
0.0446 1 .
1992 OH   OH   . TYR TYR TYR A A 269 269 . 0.4132 0.5521 0.4465 -0.0332 0.0054  -
0.0932 1 .
1993 CE2  CE2  . TYR TYR TYR A A 269 269 . 0.3202 0.5119 0.4600 -0.0494 0.0306  -
0.0269 1 .
1994 CD2  CD2  . TYR TYR TYR A A 269 269 . 0.3035 0.4950 0.4832 -0.0649 0.0467  -
0.0364 1 .
1995 C    C    . TYR TYR TYR A A 269 269 . 0.3734 0.5219 0.4711 -0.0196 0.0031  -
0.0169 1 .
1996 O    O    . TYR TYR TYR A A 269 269 . 0.2572 0.5231 0.4475 -0.0233 -0.0121 -
0.0241 1 .
1997 N    N    . ILE ILE ILE A A 270 270 . 0.3481 0.4986 0.4657 -0.0003 0.0088  -
0.0199 1 .
1998 CA   CA   . ILE ILE ILE A A 270 270 . 0.3607 0.4846 0.4650 -0.0067 -0.0091 -
0.0189 1 .
1999 CB   CB   . ILE ILE ILE A A 270 270 . 0.3625 0.4845 0.4731 -0.0096 -0.0082 -
0.0178 1 .
2000 CG1  CG1  . ILE ILE ILE A A 270 270 . 0.3061 0.4375 0.4805 -0.0174 -0.0023 -
0.0368 1 .
2001 CD   CD   . ILE ILE ILE A A 270 270 . 0.2464 0.4512 0.4344 -0.0218 0.0022  -
0.0843 1 .
2002 CG2  CG2  . ILE ILE ILE A A 270 270 . 0.3644 0.4647 0.4938 -0.0100 -0.0137 -
0.0201 1 .
2003 C    C    . ILE ILE ILE A A 270 270 . 0.3868 0.4943 0.4582 -0.0035 -0.0062 -
0.0213 1 .
2004 O    O    . ILE ILE ILE A A 270 270 . 0.3942 0.5187 0.4682 -0.0087 -0.0009 -
0.0213 1 .
2005 N    N    . THR THR THR A A 271 271 . 0.3349 0.4922 0.4478 -0.0014 -0.0208 -
0.0159 1 .
2006 CA   CA   . THR THR THR A A 271 271 . 0.3398 0.4824 0.4398 0.0040  -0.0147 -
0.0175 1 .
2007 CB   CB   . THR THR THR A A 271 271 . 0.3382 0.4775 0.4430 0.0008  -0.0151 -
0.0355 1 .
2008 OG1  OG1  . THR THR THR A A 271 271 . 0.3344 0.4966 0.4623 0.0018  -0.0258 -
0.0275 1 .
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2009 CG2  CG2  . THR THR THR A A 271 271 . 0.3417 0.5223 0.4688 0.0001  -0.0253 -
0.0200 1 .
2010 C    C    . THR THR THR A A 271 271 . 0.3400 0.4736 0.4287 -0.0022 -0.0216 -
0.0202 1 .
2011 O    O    . THR THR THR A A 271 271 . 0.3047 0.4810 0.4237 -0.0012 -0.0328 -
0.0307 1 .
2012 N    N    . GLY GLY GLY A A 272 272 . 0.3477 0.4749 0.4261 -0.0062 -0.0193 -
0.0168 1 .
2013 CA   CA   . GLY GLY GLY A A 272 272 . 0.3644 0.4659 0.4151 0.0095  -0.0185 -
0.0274 1 .
2014 C    C    . GLY GLY GLY A A 272 272 . 0.3761 0.4765 0.4053 0.0039  -0.0369 -
0.0353 1 .
2015 O    O    . GLY GLY GLY A A 272 272 . 0.3477 0.4895 0.3882 0.0035  -0.0452 -
0.0618 1 .
2016 N    N    . ASP ASP ASP A A 273 273 . 0.3454 0.4971 0.4255 0.0113  -0.0371 -
0.0227 1 .
2017 CA   CA   . ASP ASP ASP A A 273 273 . 0.3610 0.4820 0.4456 -0.0037 -0.0591 -
0.0236 1 .
2018 CB   CB   . ASP ASP ASP A A 273 273 . 0.3888 0.5172 0.4555 0.0063  -0.0626 -
0.0105 1 .
2019 CG   CG   . ASP ASP ASP A A 273 273 . 0.4337 0.5409 0.5478 -0.0064 -0.0456
0.0067  1 .
2020 OD1  OD1  . ASP ASP ASP A A 273 273 . 0.4042 0.6173 0.6587 -0.0557 -0.0370 -
0.0283 1 .
2021 OD2  OD2  . ASP ASP ASP A A 273 273 . 0.4634 0.6502 0.6252 0.0190  -0.0909
0.0188  1 .
2022 C    C    . ASP ASP ASP A A 273 273 . 0.3559 0.4835 0.4366 -0.0088 -0.0558 -
0.0372 1 .
2023 O    O    . ASP ASP ASP A A 273 273 . 0.3929 0.5159 0.4824 -0.0242 -0.0566 -
0.0489 1 .
2024 N    N    . GLN GLN GLN A A 274 274 . 0.3332 0.4551 0.4290 -0.0136 -0.0536 -
0.0375 1 .
2025 CA   CA   . GLN GLN GLN A A 274 274 . 0.3330 0.4665 0.4219 -0.0167 -0.0307 -
0.0346 1 .
2026 CB   CB   . GLN GLN GLN A A 274 274 . 0.3218 0.5088 0.4442 -0.0200 -0.0256 -
0.0334 1 .
2027 CG   CG   . GLN GLN GLN A A 274 274 . 0.3262 0.5325 0.4989 -0.0249 -0.0053 -
0.0439 1 .
2028 CD   CD   . GLN GLN GLN A A 274 274 . 0.3106 0.5634 0.6120 -0.0399 0.0273  -
0.0460 1 .
2029 OE1  OE1  . GLN GLN GLN A A 274 274 . 0.2081 0.5553 0.6629 -0.0958 0.0083  -
0.0619 1 .
2030 NE2  NE2  . GLN GLN GLN A A 274 274 . 0.3586 0.5536 0.7068 -0.0592 0.0961  -
0.0313 1 .
2031 C    C    . GLN GLN GLN A A 274 274 . 0.3155 0.4218 0.4128 -0.0212 -0.0303 -
0.0362 1 .
2032 O    O    . GLN GLN GLN A A 274 274 . 0.2902 0.4207 0.3797 -0.0334 -0.0397 -
0.0310 1 .
2033 N    N    . LEU LEU LEU A A 275 275 . 0.3148 0.4132 0.3761 -0.0236 -0.0368 -
0.0527 1 .
2034 CA   CA   . LEU LEU LEU A A 275 275 . 0.2854 0.3904 0.3718 -0.0272 -0.0217 -
0.0658 1 .
2035 CB   CB   . LEU LEU LEU A A 275 275 . 0.3057 0.3957 0.3823 -0.0319 -0.0223 -
0.0700 1 .
2036 CG   CG   . LEU LEU LEU A A 275 275 . 0.2490 0.3782 0.4152 -0.0012 -0.0147 -
0.0256 1 .
2037 CD1  CD1  . LEU LEU LEU A A 275 275 . 0.2456 0.4045 0.3957 -0.0368 0.0436  -
0.0189 1 .
2038 CD2  CD2  . LEU LEU LEU A A 275 275 . 0.2907 0.3484 0.4106 -0.0208 0.0369  -
0.0435 1 .
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2039 C    C    . LEU LEU LEU A A 275 275 . 0.2862 0.3682 0.3672 -0.0473 -0.0320 -
0.0677 1 .
2040 O    O    . LEU LEU LEU A A 275 275 . 0.2819 0.3928 0.3502 -0.0450 -0.0257 -
0.0893 1 .
2041 N    N    . GLY GLY GLY A A 276 276 . 0.2568 0.3921 0.3528 -0.0612 -0.0393 -
0.0694 1 .
2042 CA   CA   . GLY GLY GLY A A 276 276 . 0.2588 0.3853 0.3653 -0.0547 -0.0410 -
0.0581 1 .
2043 C    C    . GLY GLY GLY A A 276 276 . 0.2619 0.3945 0.3937 -0.0513 -0.0373 -
0.0479 1 .
2044 O    O    . GLY GLY GLY A A 276 276 . 0.2690 0.4028 0.3844 -0.0729 -0.0584 -
0.0515 1 .
2045 N    N    . ALA ALA ALA A A 277 277 . 0.2552 0.4108 0.3909 -0.0573 -0.0319 -
0.0462 1 .
2046 CA   CA   . ALA ALA ALA A A 277 277 . 0.2478 0.4038 0.3880 -0.0417 -0.0298 -
0.0352 1 .
2047 CB   CB   . ALA ALA ALA A A 277 277 . 0.2362 0.4286 0.3857 -0.0545 -0.0366 -
0.0499 1 .
2048 C    C    . ALA ALA ALA A A 277 277 . 0.2680 0.3959 0.3760 -0.0319 -0.0264 -
0.0515 1 .
2049 O    O    . ALA ALA ALA A A 277 277 . 0.2735 0.4487 0.3887 -0.0289 -0.0479 -
0.0594 1 .
2050 N    N    . LEU LEU LEU A A 278 278 . 0.2849 0.4046 0.3691 -0.0144 -0.0003 -
0.0333 1 .
2051 CA   CA   . LEU LEU LEU A A 278 278 . 0.2927 0.3977 0.3528 -0.0262 0.0089  -
0.0397 1 .
2052 CB   CB   . LEU LEU LEU A A 278 278 . 0.3028 0.4029 0.3530 -0.0290 0.0130  -
0.0486 1 .
2053 CG   CG   . LEU LEU LEU A A 278 278 . 0.3887 0.3911 0.3977 -0.0526 0.0141  -
0.0377 1 .
2054 CD1  CD1  . LEU LEU LEU A A 278 278 . 0.4639 0.4138 0.4065 -0.0731 0.0410  -
0.0446 1 .
2055 CD2  CD2  . LEU LEU LEU A A 278 278 . 0.3997 0.4284 0.4221 -0.1099 0.0202  -
0.0785 1 .
2056 C    C    . LEU LEU LEU A A 278 278 . 0.2764 0.3632 0.3451 -0.0207 0.0154  -
0.0358 1 .
2057 O    O    . LEU LEU LEU A A 278 278 . 0.2671 0.3590 0.3089 -0.0538 -0.0085 -
0.0313 1 .
2058 N    N    . TYR TYR TYR A A 279 279 . 0.2991 0.3717 0.3318 -0.0116 0.0165  -
0.0228 1 .
2059 CA   CA   . TYR TYR TYR A A 279 279 . 0.2770 0.3499 0.3268 -0.0071 -0.0071 -
0.0375 1 .
2060 CB   CB   . TYR TYR TYR A A 279 279 . 0.2709 0.3576 0.3328 -0.0155 0.0045  -
0.0323 1 .
2061 CG   CG   . TYR TYR TYR A A 279 279 . 0.2089 0.3292 0.3245 -0.0340 -0.0159 -
0.0411 1 .
2062 CD1  CD1  . TYR TYR TYR A A 279 279 . 0.2322 0.3134 0.3323 -0.0552 -0.0035 -
0.0567 1 .
2063 CE1  CE1  . TYR TYR TYR A A 279 279 . 0.2465 0.3177 0.3003 -0.0241 -0.0064 -
0.0536 1 .
2064 CZ   CZ   . TYR TYR TYR A A 279 279 . 0.1993 0.2784 0.2847 0.0008  -0.0058 -
0.0475 1 .
2065 OH   OH   . TYR TYR TYR A A 279 279 . 0.2376 0.3524 0.3175 -0.0771 -0.0056 -
0.0964 1 .
2066 CE2  CE2  . TYR TYR TYR A A 279 279 . 0.2023 0.3822 0.2904 -0.0226 0.0208  -
0.0377 1 .
2067 CD2  CD2  . TYR TYR TYR A A 279 279 . 0.2311 0.2985 0.3245 -0.0284 -0.0217 -
0.0441 1 .
2068 C    C    . TYR TYR TYR A A 279 279 . 0.3018 0.3633 0.3083 -0.0021 -0.0187 -
0.0435 1 .
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2069 O    O    . TYR TYR TYR A A 279 279 . 0.2708 0.3370 0.3088 -0.0272 -0.0457 -
0.0582 1 .
2070 N    N    . GLN GLN GLN A A 280 280 . 0.2913 0.3774 0.3426 -0.0092 -0.0265 -
0.0465 1 .
2071 CA   CA   . GLN GLN GLN A A 280 280 . 0.3287 0.3916 0.3321 -0.0101 -0.0335 -
0.0474 1 .
2072 CB   CB   . GLN GLN GLN A A 280 280 . 0.3525 0.4159 0.3427 -0.0039 -0.0269 -
0.0441 1 .
2073 CG   CG   . GLN GLN GLN A A 280 280 . 0.3792 0.3995 0.3510 -0.0094 -0.0394 -
0.0535 1 .
2074 CD   CD   . GLN GLN GLN A A 280 280 . 0.4523 0.4658 0.4491 -0.0264 -0.0222 -
0.0487 1 .
2075 OE1  OE1  . GLN GLN GLN A A 280 280 . 0.4487 0.5086 0.5082 -0.0238 -0.0258 -
0.0736 1 .
2076 NE2  NE2  . GLN GLN GLN A A 280 280 . 0.4412 0.4796 0.4268 -0.0499 -0.0961 -
0.0411 1 .
2077 C    C    . GLN GLN GLN A A 280 280 . 0.3384 0.3984 0.3626 -0.0225 -0.0282 -
0.0667 1 .
2078 O    O    . GLN GLN GLN A A 280 280 . 0.3062 0.4137 0.3656 -0.0340 -0.0526 -
0.0942 1 .
2079 N    N    . ASP ASP ASP A A 281 281 . 0.3362 0.3913 0.3489 -0.0405 -0.0252 -
0.0611 1 .
2080 CA   CA   . ASP ASP ASP A A 281 281 . 0.3510 0.4064 0.3742 -0.0372 -0.0132 -
0.0496 1 .
2081 CB   CB   . ASP ASP ASP A A 281 281 . 0.3522 0.4352 0.3987 -0.0373 -0.0001 -
0.0487 1 .
2082 CG   CG   . ASP ASP ASP A A 281 281 . 0.4011 0.5313 0.4654 -0.0480 -0.0018 -
0.0184 1 .
2083 OD1  OD1  . ASP ASP ASP A A 281 281 . 0.3280 0.6137 0.5073 -0.0897 -0.0823 -
0.0099 1 .
2084 OD2  OD2  . ASP ASP ASP A A 281 281 . 0.3288 0.6423 0.6126 -0.0831 0.0502  -
0.0178 1 .
2085 C    C    . ASP ASP ASP A A 281 281 . 0.3230 0.3709 0.3563 -0.0370 0.0010  -
0.0593 1 .
2086 O    O    . ASP ASP ASP A A 281 281 . 0.3007 0.3651 0.3554 -0.0617 -0.0095 -
0.0648 1 .
2087 N    N    . PHE PHE PHE A A 282 282 . 0.2984 0.3729 0.3427 -0.0460 -0.0114 -
0.0667 1 .
2088 CA   CA   . PHE PHE PHE A A 282 282 . 0.3065 0.3633 0.3288 -0.0343 0.0045  -
0.0724 1 .
2089 CB   CB   . PHE PHE PHE A A 282 282 . 0.3112 0.3763 0.3168 -0.0493 0.0177  -
0.0755 1 .
2090 CG   CG   . PHE PHE PHE A A 282 282 . 0.3446 0.4306 0.3497 -0.0193 0.0422  -
0.0604 1 .
2091 CD1  CD1  . PHE PHE PHE A A 282 282 . 0.3362 0.4633 0.3398 -0.0475 0.0509  -
0.0763 1 .
2092 CE1  CE1  . PHE PHE PHE A A 282 282 . 0.4198 0.5509 0.3708 -0.0439 0.0754  -
0.0711 1 .
2093 CZ   CZ   . PHE PHE PHE A A 282 282 . 0.4426 0.5211 0.3858 -0.0269 0.0670  -
0.0515 1 .
2094 CE2  CE2  . PHE PHE PHE A A 282 282 . 0.3529 0.4882 0.3543 -0.0242 0.0675  -
0.0401 1 .
2095 CD2  CD2  . PHE PHE PHE A A 282 282 . 0.3658 0.5036 0.3181 -0.0191 0.0794  -
0.0189 1 .
2096 C    C    . PHE PHE PHE A A 282 282 . 0.2759 0.3360 0.2975 -0.0470 -0.0039 -
0.0738 1 .
2097 O    O    . PHE PHE PHE A A 282 282 . 0.2965 0.3091 0.3120 -0.0726 0.0147  -
0.0993 1 .
2098 N    N    . VAL VAL VAL A A 283 283 . 0.2795 0.3329 0.2886 -0.0659 -0.0195 -
0.0879 1 .
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2099 CA   CA   . VAL VAL VAL A A 283 283 . 0.2671 0.3298 0.2849 -0.0668 -0.0241 -
0.0877 1 .
2100 CB   CB   . VAL VAL VAL A A 283 283 . 0.2705 0.3024 0.2776 -0.0368 -0.0107 -
0.1026 1 .
2101 CG1  CG1  . VAL VAL VAL A A 283 283 . 0.3036 0.3898 0.2601 -0.0689 -0.0180 -
0.0799 1 .
2102 CG2  CG2  . VAL VAL VAL A A 283 283 . 0.2782 0.4077 0.2822 -0.1018 -0.0629 -
0.0910 1 .
2103 C    C    . VAL VAL VAL A A 283 283 . 0.2930 0.3479 0.3123 -0.0424 -0.0307 -
0.0836 1 .
2104 O    O    . VAL VAL VAL A A 283 283 . 0.2776 0.3711 0.3037 -0.0609 -0.0465 -
0.0887 1 .
2105 N    N    . ARG ARG ARG A A 284 284 . 0.2980 0.3583 0.3424 -0.0639 -0.0231 -
0.0648 1 .
2106 CA   CA   . ARG ARG ARG A A 284 284 . 0.3048 0.3645 0.3573 -0.0759 -0.0323 -
0.0643 1 .
2107 CB   CB   . ARG ARG ARG A A 284 284 . 0.3142 0.3766 0.3716 -0.0732 -0.0255 -
0.0641 1 .
2108 CG   CG   . ARG ARG ARG A A 284 284 . 0.3671 0.4096 0.4094 -0.0953 -0.0370 -
0.0818 1 .
2109 CD   CD   . ARG ARG ARG A A 284 284 . 0.3634 0.5003 0.4438 -0.0943 -0.0392 -
0.0932 1 .
2110 NE   NE   . ARG ARG ARG A A 284 284 . 0.4414 0.5423 0.4357 -0.0662 -0.0074 -
0.1277 1 .
2111 CZ   CZ   . ARG ARG ARG A A 284 284 . 0.4957 0.5698 0.4749 -0.0003 -0.0174 -
0.0933 1 .
2112 NH1  NH1  . ARG ARG ARG A A 284 284 . 0.6052 0.5546 0.4523 0.0579  -0.0011 -
0.0856 1 .
2113 NH2  NH2  . ARG ARG ARG A A 284 284 . 0.4744 0.5972 0.4550 -0.0032 -0.0096 -
0.1057 1 .
2114 C    C    . ARG ARG ARG A A 284 284 . 0.2867 0.3510 0.3571 -0.0798 -0.0144 -
0.0668 1 .
2115 O    O    . ARG ARG ARG A A 284 284 . 0.3169 0.3920 0.3554 -0.1027 -0.0129 -
0.0919 1 .
2116 N    N    . ASP ASP ASP A A 285 285 . 0.2843 0.3487 0.3342 -0.0903 -0.0161 -
0.0666 1 .
2117 CA   CA   . ASP ASP ASP A A 285 285 . 0.3069 0.3678 0.3501 -0.0677 0.0033  -
0.0470 1 .
2118 CB   CB   . ASP ASP ASP A A 285 285 . 0.3187 0.4071 0.3731 -0.0753 0.0091  -
0.0602 1 .
2119 CG   CG   . ASP ASP ASP A A 285 285 . 0.3148 0.4713 0.4444 -0.0713 0.0084  -
0.0735 1 .
2120 OD1  OD1  . ASP ASP ASP A A 285 285 . 0.3094 0.5715 0.4803 -0.1439 -0.0129 -
0.1397 1 .
2121 OD2  OD2  . ASP ASP ASP A A 285 285 . 0.2855 0.5115 0.5682 -0.1175 0.0658  -
0.0830 1 .
2122 C    C    . ASP ASP ASP A A 285 285 . 0.3194 0.3432 0.3388 -0.0697 -0.0066 -
0.0321 1 .
2123 O    O    . ASP ASP ASP A A 285 285 . 0.3518 0.3173 0.3658 -0.1246 -0.0093 -
0.0383 1 .
2124 N    N    . TYR TYR TYR A A 286 286 . 0.3183 0.3239 0.3164 -0.0730 0.0004  -
0.0322 1 .
2125 CA   CA   . TYR TYR TYR A A 286 286 . 0.3041 0.3338 0.2704 -0.0606 -0.0050 -
0.0276 1 .
2126 CB   CB   . TYR TYR TYR A A 286 286 . 0.3274 0.3371 0.2765 -0.0618 0.0146  -
0.0366 1 .
2127 CG   CG   . TYR TYR TYR A A 286 286 . 0.3530 0.3766 0.3144 -0.0809 0.0121  -
0.0434 1 .
2128 CD1  CD1  . TYR TYR TYR A A 286 286 . 0.4118 0.3493 0.2731 -0.0984 -0.0296 -
0.0744 1 .
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2129 CE1  CE1  . TYR TYR TYR A A 286 286 . 0.4472 0.3965 0.2889 -0.1062 0.0211  -
0.0319 1 .
2130 CZ   CZ   . TYR TYR TYR A A 286 286 . 0.4437 0.4297 0.3500 -0.1154 0.0396  -
0.0192 1 .
2131 OH   OH   . TYR TYR TYR A A 286 286 . 0.5171 0.5621 0.4464 -0.1593 0.0504  -
0.0433 1 .
2132 CE2  CE2  . TYR TYR TYR A A 286 286 . 0.4253 0.4523 0.3605 -0.0976 0.0128  -
0.0285 1 .
2133 CD2  CD2  . TYR TYR TYR A A 286 286 . 0.3436 0.4266 0.3437 -0.0904 0.0082  -
0.0353 1 .
2134 C    C    . TYR TYR TYR A A 286 286 . 0.2910 0.3227 0.2707 -0.0570 -0.0044 -
0.0386 1 .
2135 O    O    . TYR TYR TYR A A 286 286 . 0.2700 0.3128 0.2848 -0.0943 -0.0160 -
0.0423 1 .
2136 N    N    . PRO PRO PRO A A 287 287 . 0.2944 0.3105 0.2620 -0.0537 -0.0063 -
0.0530 1 .
2137 CA   CA   . PRO PRO PRO A A 287 287 . 0.2770 0.2979 0.2545 -0.0551 -0.0031 -
0.0618 1 .
2138 CB   CB   . PRO PRO PRO A A 287 287 . 0.2900 0.2990 0.2488 -0.0568 -0.0068 -
0.0542 1 .
2139 CG   CG   . PRO PRO PRO A A 287 287 . 0.2960 0.3166 0.2879 -0.0495 -0.0051 -
0.0505 1 .
2140 CD   CD   . PRO PRO PRO A A 287 287 . 0.3052 0.3229 0.2830 -0.0521 -0.0052 -
0.0488 1 .
2141 C    C    . PRO PRO PRO A A 287 287 . 0.2837 0.3079 0.2611 -0.0359 -0.0039 -
0.0405 1 .
2142 O    O    . PRO PRO PRO A A 287 287 . 0.2525 0.3084 0.2718 -0.0718 -0.0076 -
0.0771 1 .
2143 N    N    . VAL VAL VAL A A 288 288 . 0.2727 0.3022 0.2378 -0.0395 -0.0057 -
0.0501 1 .
2144 CA   CA   . VAL VAL VAL A A 288 288 . 0.2673 0.2902 0.2450 -0.0337 -0.0120 -
0.0334 1 .
2145 CB   CB   . VAL VAL VAL A A 288 288 . 0.2647 0.2939 0.2139 -0.0303 -0.0356 -
0.0334 1 .
2146 CG1  CG1  . VAL VAL VAL A A 288 288 . 0.2842 0.2788 0.2370 -0.0315 -0.0305 -
0.0490 1 .
2147 CG2  CG2  . VAL VAL VAL A A 288 288 . 0.2287 0.3071 0.2414 -0.0510 0.0169  -
0.0467 1 .
2148 C    C    . VAL VAL VAL A A 288 288 . 0.2696 0.2868 0.2050 -0.0372 -0.0337 -
0.0179 1 .
2149 O    O    . VAL VAL VAL A A 288 288 . 0.2795 0.3023 0.2352 -0.0364 -0.0642 -
0.0447 1 .
2150 N    N    . VAL VAL VAL A A 289 289 . 0.2534 0.2648 0.1947 -0.0369 -0.0272 -
0.0282 1 .
2151 CA   CA   . VAL VAL VAL A A 289 289 . 0.2370 0.2531 0.1699 -0.0410 -0.0311 -
0.0327 1 .
2152 CB   CB   . VAL VAL VAL A A 289 289 . 0.2475 0.2215 0.1916 -0.0116 -0.0373 -
0.0198 1 .
2153 CG1  CG1  . VAL VAL VAL A A 289 289 . 0.2753 0.2445 0.1632 -0.0079 -0.0649 -
0.0498 1 .
2154 CG2  CG2  . VAL VAL VAL A A 289 289 . 0.2547 0.2780 0.1996 0.0207  -0.0214 -
0.0028 1 .
2155 C    C    . VAL VAL VAL A A 289 289 . 0.2289 0.2570 0.2000 -0.0290 -0.0181 -
0.0135 1 .
2156 O    O    . VAL VAL VAL A A 289 289 . 0.2365 0.2984 0.2040 -0.0593 -0.0457 -
0.0205 1 .
2157 N    N    . SER SER SER A A 290 290 . 0.1939 0.2554 0.1958 -0.0407 -0.0247 -
0.0374 1 .
2158 CA   CA   . SER SER SER A A 290 290 . 0.1691 0.2281 0.1923 -0.0120 -0.0058 -
0.0301 1 .
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2159 CB   CB   . SER SER SER A A 290 290 . 0.1757 0.2074 0.2090 -0.0225 0.0076  -
0.0379 1 .
2160 OG   OG   . SER SER SER A A 290 290 . 0.2014 0.2325 0.1973 -0.0210 -0.0152 -
0.0334 1 .
2161 C    C    . SER SER SER A A 290 290 . 0.1682 0.2134 0.1679 -0.0262 -0.0127 -
0.0328 1 .
2162 O    O    . SER SER SER A A 290 290 . 0.2099 0.2584 0.2156 -0.0368 -0.0016 -
0.0304 1 .
2163 N    N    . ILE ILE ILE A A 291 291 . 0.1421 0.2627 0.1856 -0.0406 -0.0288 -
0.0832 1 .
2164 CA   CA   . ILE ILE ILE A A 291 291 . 0.1686 0.2634 0.2076 -0.0257 -0.0161 -
0.0655 1 .
2165 CB   CB   . ILE ILE ILE A A 291 291 . 0.1675 0.2633 0.2100 -0.0306 -0.0104 -
0.0650 1 .
2166 CG1  CG1  . ILE ILE ILE A A 291 291 . 0.1928 0.2834 0.2431 -0.0150 -0.0170 -
0.0588 1 .
2167 CD   CD   . ILE ILE ILE A A 291 291 . 0.2123 0.3635 0.2691 -0.0469 -0.0171 -
0.0748 1 .
2168 CG2  CG2  . ILE ILE ILE A A 291 291 . 0.1816 0.3239 0.2119 -0.0230 0.0307  -
0.0504 1 .
2169 C    C    . ILE ILE ILE A A 291 291 . 0.1834 0.2300 0.1807 -0.0259 -0.0303 -
0.0370 1 .
2170 O    O    . ILE ILE ILE A A 291 291 . 0.2170 0.2548 0.1506 -0.0428 -0.0439 -
0.0611 1 .
2171 N    N    . GLU GLU GLU A A 292 292 . 0.1946 0.2297 0.1776 -0.0255 -0.0237 -
0.0455 1 .
2172 CA   CA   . GLU GLU GLU A A 292 292 . 0.1829 0.2226 0.2011 -0.0034 -0.0310 -
0.0307 1 .
2173 CB   CB   . GLU GLU GLU A A 292 292 . 0.1970 0.1889 0.1529 -0.0091 -0.0397 -
0.0046 1 .
2174 CG   CG   . GLU GLU GLU A A 292 292 . 0.1935 0.1923 0.1265 -0.0263 -0.0333 -
0.0406 1 .
2175 CD   CD   . GLU GLU GLU A A 292 292 . 0.2223 0.2207 0.2335 -0.0216 -0.0280 -
0.0270 1 .
2176 OE1  OE1  . GLU GLU GLU A A 292 292 . 0.2103 0.2784 0.3068 -0.0600 -0.0290 -
0.0750 1 .
2177 OE2  OE2  . GLU GLU GLU A A 292 292 . 0.2070 0.1950 0.1972 -0.0355 -0.0010 -
0.0251 1 .
2178 C    C    . GLU GLU GLU A A 292 292 . 0.2074 0.2500 0.1927 -0.0122 -0.0246 -
0.0353 1 .
2179 O    O    . GLU GLU GLU A A 292 292 . 0.2024 0.2889 0.2127 -0.0165 -0.0216 -
0.0500 1 .
2180 N    N    . ASP ASP ASP A A 293 293 . 0.2143 0.2505 0.2223 -0.0207 -0.0264 -
0.0362 1 .
2181 CA   CA   . ASP ASP ASP A A 293 293 . 0.2154 0.2818 0.2239 -0.0329 -0.0212 -
0.0557 1 .
2182 CB   CB   . ASP ASP ASP A A 293 293 . 0.2197 0.2720 0.2281 -0.0429 -0.0175 -
0.0565 1 .
2183 CG   CG   . ASP ASP ASP A A 293 293 . 0.2144 0.2615 0.2633 -0.0138 0.0079  -
0.0489 1 .
2184 OD1  OD1  . ASP ASP ASP A A 293 293 . 0.1734 0.3481 0.2583 -0.0207 -0.0317 -
0.0415 1 .
2185 OD2  OD2  . ASP ASP ASP A A 293 293 . 0.1900 0.3116 0.2476 0.0112  -0.0240 -
0.0121 1 .
2186 C    C    . ASP ASP ASP A A 293 293 . 0.2290 0.3190 0.2215 -0.0417 -0.0171 -
0.0465 1 .
2187 O    O    . ASP ASP ASP A A 293 293 . 0.2035 0.3483 0.2077 -0.0548 -0.0228 -
0.0625 1 .
2188 N    N    . PRO PRO PRO A A 294 294 . 0.2106 0.3175 0.2211 -0.0325 -0.0382 -
0.0406 1 .
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2189 CA   CA   . PRO PRO PRO A A 294 294 . 0.2310 0.3080 0.2532 -0.0281 -0.0389 -
0.0521 1 .
2190 CB   CB   . PRO PRO PRO A A 294 294 . 0.2321 0.3137 0.2343 -0.0187 -0.0241 -
0.0475 1 .
2191 CG   CG   . PRO PRO PRO A A 294 294 . 0.2187 0.3522 0.2381 -0.0206 -0.0649 -
0.0320 1 .
2192 CD   CD   . PRO PRO PRO A A 294 294 . 0.2098 0.3270 0.2012 -0.0246 -0.0384 -
0.0555 1 .
2193 C    C    . PRO PRO PRO A A 294 294 . 0.2588 0.3074 0.2734 -0.0210 -0.0211 -
0.0554 1 .
2194 O    O    . PRO PRO PRO A A 294 294 . 0.2280 0.3148 0.2479 -0.0183 -0.0321 -
0.0614 1 .
2195 N    N    . PHE PHE PHE A A 295 295 . 0.2539 0.3021 0.2888 0.0025  -0.0314 -
0.0458 1 .
2196 CA   CA   . PHE PHE PHE A A 295 295 . 0.2754 0.3327 0.3066 0.0102  -0.0294 -
0.0618 1 .
2197 CB   CB   . PHE PHE PHE A A 295 295 . 0.2890 0.3276 0.3279 0.0126  -0.0251 -
0.0413 1 .
2198 CG   CG   . PHE PHE PHE A A 295 295 . 0.2574 0.3489 0.2772 -0.0276 -0.0549 -
0.0482 1 .
2199 CD1  CD1  . PHE PHE PHE A A 295 295 . 0.2774 0.3968 0.3419 -0.0143 -0.0144 -
0.0156 1 .
2200 CE1  CE1  . PHE PHE PHE A A 295 295 . 0.3071 0.3885 0.2972 -0.0294 -0.0137
0.0060  1 .
2201 CZ   CZ   . PHE PHE PHE A A 295 295 . 0.2614 0.4716 0.3408 -0.0305 -0.0243 -
0.0057 1 .
2202 CE2  CE2  . PHE PHE PHE A A 295 295 . 0.2749 0.4093 0.3293 -0.0787 -0.0359 -
0.0152 1 .
2203 CD2  CD2  . PHE PHE PHE A A 295 295 . 0.2519 0.3857 0.3098 -0.0178 -0.0227 -
0.0612 1 .
2204 C    C    . PHE PHE PHE A A 295 295 . 0.2758 0.3286 0.3246 0.0137  -0.0174 -
0.0561 1 .
2205 O    O    . PHE PHE PHE A A 295 295 . 0.2361 0.3594 0.2945 0.0192  -0.0296 -
0.0550 1 .
2206 N    N    . ASP ASP ASP A A 296 296 . 0.2354 0.3253 0.3184 0.0248  -0.0104 -
0.0726 1 .
2207 CA   CA   . ASP ASP ASP A A 296 296 . 0.2426 0.3133 0.3316 0.0382  -0.0027 -
0.0544 1 .
2208 CB   CB   . ASP ASP ASP A A 296 296 . 0.2357 0.3232 0.3283 0.0362  0.0312  -
0.0617 1 .
2209 CG   CG   . ASP ASP ASP A A 296 296 . 0.2672 0.3462 0.3105 0.0234  0.0333  -
0.0446 1 .
2210 OD1  OD1  . ASP ASP ASP A A 296 296 . 0.2660 0.4717 0.3842 0.0050  -0.0134 -
0.0443 1 .
2211 OD2  OD2  . ASP ASP ASP A A 296 296 . 0.2709 0.3823 0.3904 0.0048  0.0455  -
0.0404 1 .
2212 C    C    . ASP ASP ASP A A 296 296 . 0.2250 0.3161 0.3027 0.0367  -0.0075 -
0.0516 1 .
2213 O    O    . ASP ASP ASP A A 296 296 . 0.2031 0.3511 0.2914 0.0532  -0.0436 -
0.0504 1 .
2214 N    N    . GLN GLN GLN A A 297 297 . 0.2414 0.3214 0.2991 0.0226  -0.0357 -
0.0499 1 .
2215 CA   CA   . GLN GLN GLN A A 297 297 . 0.2423 0.3352 0.2929 0.0071  -0.0264 -
0.0498 1 .
2216 CB   CB   . GLN GLN GLN A A 297 297 . 0.2296 0.3269 0.2723 0.0044  -0.0340 -
0.0537 1 .
2217 CG   CG   . GLN GLN GLN A A 297 297 . 0.2259 0.3617 0.2622 0.0043  -0.0033 -
0.0526 1 .
2218 CD   CD   . GLN GLN GLN A A 297 297 . 0.2533 0.3778 0.2813 -0.0304 -0.0172 -
0.0445 1 .
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2219 OE1  OE1  . GLN GLN GLN A A 297 297 . 0.2283 0.3950 0.3054 0.0047  -0.0449 -
0.0444 1 .
2220 NE2  NE2  . GLN GLN GLN A A 297 297 . 0.2237 0.3599 0.3266 -0.0447 -0.0025 -
0.0580 1 .
2221 C    C    . GLN GLN GLN A A 297 297 . 0.2760 0.3698 0.3206 -0.0018 -0.0269 -
0.0294 1 .
2222 O    O    . GLN GLN GLN A A 297 297 . 0.2471 0.4112 0.3274 -0.0012 -0.0407 -
0.0280 1 .
2223 N    N    . ASP ASP ASP A A 298 298 . 0.2569 0.3700 0.3388 0.0028  -0.0412 -
0.0255 1 .
2224 CA   CA   . ASP ASP ASP A A 298 298 . 0.3043 0.3851 0.3499 -0.0039 -0.0456 -
0.0189 1 .
2225 CB   CB   . ASP ASP ASP A A 298 298 . 0.3419 0.3892 0.3629 0.0186  -0.0514 -
0.0264 1 .
2226 CG   CG   . ASP ASP ASP A A 298 298 . 0.3939 0.4493 0.3849 -0.0204 -0.0296 -
0.0094 1 .
2227 OD1  OD1  . ASP ASP ASP A A 298 298 . 0.2546 0.4253 0.3271 -0.0283 -0.0755
0.0200  1 .
2228 OD2  OD2  . ASP ASP ASP A A 298 298 . 0.5074 0.5618 0.3392 0.0380  -0.0875 -
0.1016 1 .
2229 C    C    . ASP ASP ASP A A 298 298 . 0.3109 0.3774 0.3511 0.0058  -0.0514 -
0.0160 1 .
2230 O    O    . ASP ASP ASP A A 298 298 . 0.2908 0.4471 0.3589 0.0243  -0.0776 -
0.0158 1 .
2231 N    N    . ASP ASP ASP A A 299 299 . 0.2893 0.3923 0.3651 -0.0042 -0.0720 -
0.0391 1 .
2232 CA   CA   . ASP ASP ASP A A 299 299 . 0.2740 0.3552 0.3383 0.0001  -0.0712 -
0.0438 1 .
2233 CB   CB   . ASP ASP ASP A A 299 299 . 0.2557 0.3787 0.3551 -0.0105 -0.0785 -
0.0534 1 .
2234 CG   CG   . ASP ASP ASP A A 299 299 . 0.2900 0.3841 0.3648 -0.0160 -0.0506 -
0.0483 1 .
2235 OD1  OD1  . ASP ASP ASP A A 299 299 . 0.2327 0.4817 0.4003 0.0424  -0.0860 -
0.0733 1 .
2236 OD2  OD2  . ASP ASP ASP A A 299 299 . 0.3169 0.4280 0.3780 -0.0418 -0.0062 -
0.0740 1 .
2237 C    C    . ASP ASP ASP A A 299 299 . 0.2665 0.3551 0.3527 0.0103  -0.0826 -
0.0384 1 .
2238 O    O    . ASP ASP ASP A A 299 299 . 0.2711 0.3773 0.3611 0.0212  -0.0931 -
0.0615 1 .
2239 N    N    . TRP TRP TRP A A 300 300 . 0.2611 0.3817 0.3484 0.0195  -0.0774 -
0.0314 1 .
2240 CA   CA   . TRP TRP TRP A A 300 300 . 0.2792 0.3968 0.3371 0.0247  -0.0703 -
0.0350 1 .
2241 CB   CB   . TRP TRP TRP A A 300 300 . 0.2814 0.4061 0.3508 0.0354  -0.0710 -
0.0361 1 .
2242 CG   CG   . TRP TRP TRP A A 300 300 . 0.3047 0.3920 0.3652 0.0091  -0.0406 -
0.0247 1 .
2243 CD1  CD1  . TRP TRP TRP A A 300 300 . 0.3237 0.4220 0.3718 0.0229  -0.0351 -
0.0448 1 .
2244 NE1  NE1  . TRP TRP TRP A A 300 300 . 0.3520 0.4244 0.3633 0.0182  -0.0420 -
0.0434 1 .
2245 CE2  CE2  . TRP TRP TRP A A 300 300 . 0.3107 0.4042 0.3110 0.0412  -0.0201 -
0.0055 1 .
2246 CD2  CD2  . TRP TRP TRP A A 300 300 . 0.2831 0.4013 0.3426 0.0398  -0.0354 -
0.0102 1 .
2247 CE3  CE3  . TRP TRP TRP A A 300 300 . 0.2992 0.3528 0.3249 0.0379  -0.0224
0.0101  1 .
2248 CZ3  CZ3  . TRP TRP TRP A A 300 300 . 0.2448 0.3556 0.3648 0.0955  -0.0482 -
0.0054 1 .
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2249 CH2  CH2  . TRP TRP TRP A A 300 300 . 0.2533 0.4007 0.3088 0.0772  -0.0329 -
0.0081 1 .
2250 CZ2  CZ2  . TRP TRP TRP A A 300 300 . 0.3119 0.3727 0.2956 0.0434  0.0158  -
0.0186 1 .
2251 C    C    . TRP TRP TRP A A 300 300 . 0.3052 0.4355 0.3606 0.0353  -0.0707 -
0.0364 1 .
2252 O    O    . TRP TRP TRP A A 300 300 . 0.2836 0.4729 0.3490 0.0401  -0.0920 -
0.0475 1 .
2253 N    N    . ALA ALA ALA A A 301 301 . 0.2898 0.4535 0.3637 0.0397  -0.0547 -
0.0288 1 .
2254 CA   CA   . ALA ALA ALA A A 301 301 . 0.3041 0.4356 0.3803 0.0344  -0.0471 -
0.0246 1 .
2255 CB   CB   . ALA ALA ALA A A 301 301 . 0.3086 0.4677 0.3827 0.0338  -0.0550 -
0.0148 1 .
2256 C    C    . ALA ALA ALA A A 301 301 . 0.3040 0.4353 0.3768 0.0467  -0.0398 -
0.0230 1 .
2257 O    O    . ALA ALA ALA A A 301 301 . 0.3299 0.4693 0.3718 0.0535  -0.0534 -
0.0314 1 .
2258 N    N    . ALA ALA ALA A A 302 302 . 0.3037 0.4144 0.3672 0.0397  -0.0362 -
0.0273 1 .
2259 CA   CA   . ALA ALA ALA A A 302 302 . 0.2957 0.3934 0.3258 0.0257  -0.0293 -
0.0246 1 .
2260 CB   CB   . ALA ALA ALA A A 302 302 . 0.3119 0.4047 0.3270 0.0235  -0.0266 -
0.0347 1 .
2261 C    C    . ALA ALA ALA A A 302 302 . 0.3064 0.3901 0.3294 0.0179  -0.0358 -
0.0290 1 .
2262 O    O    . ALA ALA ALA A A 302 302 . 0.2721 0.3939 0.2915 0.0458  -0.0641 -
0.0397 1 .
2263 N    N    . TRP TRP TRP A A 303 303 . 0.3018 0.3970 0.3211 0.0111  -0.0335 -
0.0466 1 .
2264 CA   CA   . TRP TRP TRP A A 303 303 . 0.2912 0.3961 0.3097 0.0085  -0.0347 -
0.0350 1 .
2265 CB   CB   . TRP TRP TRP A A 303 303 . 0.2991 0.4001 0.3169 0.0118  -0.0365 -
0.0199 1 .
2266 CG   CG   . TRP TRP TRP A A 303 303 . 0.2686 0.3613 0.2990 0.0242  -0.0547 -
0.0537 1 .
2267 CD1  CD1  . TRP TRP TRP A A 303 303 . 0.2159 0.4398 0.3013 0.0625  -0.0349 -
0.0091 1 .
2268 NE1  NE1  . TRP TRP TRP A A 303 303 . 0.2394 0.3884 0.2823 0.0264  -0.0500 -
0.0371 1 .
2269 CE2  CE2  . TRP TRP TRP A A 303 303 . 0.2513 0.3754 0.2754 0.0444  -0.0145 -
0.0301 1 .
2270 CD2  CD2  . TRP TRP TRP A A 303 303 . 0.2132 0.3514 0.2245 0.0244  -0.0548 -
0.0372 1 .
2271 CE3  CE3  . TRP TRP TRP A A 303 303 . 0.2530 0.3568 0.2204 0.0441  -0.0665 -
0.0668 1 .
2272 CZ3  CZ3  . TRP TRP TRP A A 303 303 . 0.2043 0.3336 0.2003 0.0756  -0.0233 -
0.0528 1 .
2273 CH2  CH2  . TRP TRP TRP A A 303 303 . 0.2025 0.3433 0.2072 0.0104  0.0488  -
0.0275 1 .
2274 CZ2  CZ2  . TRP TRP TRP A A 303 303 . 0.2176 0.3329 0.2384 0.0499  -0.0095 -
0.0302 1 .
2275 C    C    . TRP TRP TRP A A 303 303 . 0.3173 0.4047 0.3316 0.0044  -0.0257 -
0.0241 1 .
2276 O    O    . TRP TRP TRP A A 303 303 . 0.3075 0.4293 0.3013 0.0147  -0.0222 -
0.0296 1 .
2277 N    N    . SER SER SER A A 304 304 . 0.3036 0.3962 0.3369 -0.0120 -0.0289 -
0.0171 1 .
2278 CA   CA   . SER SER SER A A 304 304 . 0.3473 0.4229 0.3398 -0.0041 -0.0346 -
0.0304 1 .
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2279 CB   CB   . SER SER SER A A 304 304 . 0.3646 0.4116 0.3601 0.0019  -0.0186 -
0.0251 1 .
2280 OG   OG   . SER SER SER A A 304 304 . 0.3666 0.4569 0.3654 0.0267  -0.0953 -
0.0212 1 .
2281 C    C    . SER SER SER A A 304 304 . 0.3411 0.4463 0.3558 -0.0103 -0.0273 -
0.0384 1 .
2282 O    O    . SER SER SER A A 304 304 . 0.3139 0.4770 0.3129 0.0031  -0.0648 -
0.0524 1 .
2283 N    N    . LYS LYS LYS A A 305 305 . 0.3442 0.4604 0.3527 -0.0251 -0.0305 -
0.0400 1 .
2284 CA   CA   . LYS LYS LYS A A 305 305 . 0.3571 0.4550 0.3927 -0.0228 -0.0279 -
0.0353 1 .
2285 CB   CB   . LYS LYS LYS A A 305 305 . 0.3471 0.4795 0.3867 -0.0323 -0.0376 -
0.0475 1 .
2286 CG   CG   . LYS LYS LYS A A 305 305 . 0.4531 0.5032 0.5129 -0.0598 -0.0394 -
0.0582 1 .
2287 CD   CD   . LYS LYS LYS A A 305 305 . 0.4479 0.5437 0.5735 -0.0492 -0.0340 -
0.0504 1 .
2288 CE   CE   . LYS LYS LYS A A 305 305 . 0.5730 0.5613 0.6233 -0.0740 -0.0652 -
0.0353 1 .
2289 NZ   NZ   . LYS LYS LYS A A 305 305 . 0.6730 0.5826 0.6813 -0.0640 -0.0713
0.0006  1 .
2290 C    C    . LYS LYS LYS A A 305 305 . 0.3412 0.4508 0.3730 -0.0190 -0.0298 -
0.0314 1 .
2291 O    O    . LYS LYS LYS A A 305 305 . 0.3248 0.4677 0.3775 -0.0146 -0.0533 -
0.0405 1 .
2292 N    N    . PHE PHE PHE A A 306 306 . 0.3356 0.4193 0.3450 -0.0106 -0.0279 -
0.0319 1 .
2293 CA   CA   . PHE PHE PHE A A 306 306 . 0.3247 0.4030 0.3266 -0.0088 -0.0357 -
0.0353 1 .
2294 CB   CB   . PHE PHE PHE A A 306 306 . 0.3146 0.3702 0.3004 0.0090  -0.0388 -
0.0323 1 .
2295 CG   CG   . PHE PHE PHE A A 306 306 . 0.3181 0.4113 0.3674 0.0032  -0.0371 -
0.0494 1 .
2296 CD1  CD1  . PHE PHE PHE A A 306 306 . 0.3581 0.3846 0.3875 -0.0005 -0.0168 -
0.0424 1 .
2297 CE1  CE1  . PHE PHE PHE A A 306 306 . 0.2956 0.4075 0.3581 -0.0243 -0.0015 -
0.0453 1 .
2298 CZ   CZ   . PHE PHE PHE A A 306 306 . 0.2834 0.4511 0.4160 -0.0273 -0.0071 -
0.0524 1 .
2299 CE2  CE2  . PHE PHE PHE A A 306 306 . 0.3421 0.4357 0.4189 -0.0292 -0.0331 -
0.0444 1 .
2300 CD2  CD2  . PHE PHE PHE A A 306 306 . 0.2956 0.4229 0.3725 0.0070  -0.0660 -
0.0290 1 .
2301 C    C    . PHE PHE PHE A A 306 306 . 0.3256 0.3943 0.3216 0.0071  -0.0306 -
0.0412 1 .
2302 O    O    . PHE PHE PHE A A 306 306 . 0.3040 0.4368 0.3037 0.0064  -0.0638 -
0.0436 1 .
2303 N    N    . THR THR THR A A 307 307 . 0.3288 0.4227 0.3219 0.0160  -0.0219 -
0.0418 1 .
2304 CA   CA   . THR THR THR A A 307 307 . 0.3510 0.4360 0.3075 0.0107  -0.0379 -
0.0478 1 .
2305 CB   CB   . THR THR THR A A 307 307 . 0.3761 0.4469 0.3124 0.0036  -0.0238 -
0.0385 1 .
2306 OG1  OG1  . THR THR THR A A 307 307 . 0.3137 0.4876 0.2709 0.0075  -0.0603 -
0.0720 1 .
2307 CG2  CG2  . THR THR THR A A 307 307 . 0.3139 0.4473 0.2680 0.0167  -0.0529 -
0.0488 1 .
2308 C    C    . THR THR THR A A 307 307 . 0.3688 0.4345 0.3073 0.0278  -0.0527 -
0.0405 1 .
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2309 O    O    . THR THR THR A A 307 307 . 0.3563 0.4266 0.2888 0.0301  -0.0843 -
0.0487 1 .
2310 N    N    . ALA ALA ALA A A 308 308 . 0.3698 0.4359 0.3188 0.0222  -0.0678 -
0.0329 1 .
2311 CA   CA   . ALA ALA ALA A A 308 308 . 0.3972 0.4297 0.3148 0.0242  -0.0526 -
0.0414 1 .
2312 CB   CB   . ALA ALA ALA A A 308 308 . 0.3599 0.4542 0.3083 0.0156  -0.0906 -
0.0311 1 .
2313 C    C    . ALA ALA ALA A A 308 308 . 0.3876 0.4401 0.3439 0.0099  -0.0437 -
0.0272 1 .
2314 O    O    . ALA ALA ALA A A 308 308 . 0.4093 0.4503 0.3231 0.0097  -0.0441 -
0.0520 1 .
2315 N    N    . ASN ASN ASN A A 309 309 . 0.3994 0.4415 0.3538 -0.0032 -0.0403 -
0.0306 1 .
2316 CA   CA   . ASN ASN ASN A A 309 309 . 0.3924 0.4300 0.3738 -0.0141 -0.0464 -
0.0361 1 .
2317 CB   CB   . ASN ASN ASN A A 309 309 . 0.3995 0.4422 0.3817 -0.0151 -0.0547 -
0.0440 1 .
2318 CG   CG   . ASN ASN ASN A A 309 309 . 0.4470 0.4728 0.4504 0.0170  -0.0663 -
0.0521 1 .
2319 OD1  OD1  . ASN ASN ASN A A 309 309 . 0.4803 0.4924 0.5179 0.0282  -0.0857 -
0.1121 1 .
2320 ND2  ND2  . ASN ASN ASN A A 309 309 . 0.4021 0.5287 0.4470 0.0635  -0.1331 -
0.0724 1 .
2321 C    C    . ASN ASN ASN A A 309 309 . 0.3883 0.4356 0.3938 -0.0180 -0.0399 -
0.0304 1 .
2322 O    O    . ASN ASN ASN A A 309 309 . 0.3817 0.4500 0.3945 -0.0161 -0.0637 -
0.0340 1 .
2323 N    N    . VAL VAL VAL A A 310 310 . 0.3648 0.4351 0.3460 -0.0123 -0.0401 -
0.0328 1 .
2324 CA   CA   . VAL VAL VAL A A 310 310 . 0.3692 0.4164 0.3161 -0.0092 -0.0316 -
0.0411 1 .
2325 CB   CB   . VAL VAL VAL A A 310 310 . 0.3798 0.4221 0.3017 -0.0197 -0.0305 -
0.0312 1 .
2326 CG1  CG1  . VAL VAL VAL A A 310 310 . 0.3704 0.4504 0.3681 -0.0055 -0.0329 -
0.0503 1 .
2327 CG2  CG2  . VAL VAL VAL A A 310 310 . 0.3719 0.3926 0.2870 -0.0166 -0.0850 -
0.0654 1 .
2328 C    C    . VAL VAL VAL A A 310 310 . 0.3424 0.3887 0.2885 -0.0162 -0.0434 -
0.0423 1 .
2329 O    O    . VAL VAL VAL A A 310 310 . 0.3619 0.4017 0.3002 -0.0174 -0.0360 -
0.0471 1 .
2330 N    N    . GLY GLY GLY A A 311 311 . 0.3188 0.3805 0.2688 -0.0008 -0.0534 -
0.0448 1 .
2331 CA   CA   . GLY GLY GLY A A 311 311 . 0.3107 0.3862 0.2690 -0.0005 -0.0652 -
0.0336 1 .
2332 C    C    . GLY GLY GLY A A 311 311 . 0.3028 0.3750 0.2691 0.0035  -0.0579 -
0.0268 1 .
2333 O    O    . GLY GLY GLY A A 311 311 . 0.3057 0.3931 0.2744 -0.0198 -0.0671 -
0.0397 1 .
2334 N    N    . ILE ILE ILE A A 312 312 . 0.2762 0.3546 0.2424 -0.0198 -0.0583 -
0.0221 1 .
2335 CA   CA   . ILE ILE ILE A A 312 312 . 0.2573 0.3152 0.2087 -0.0228 -0.0457 -
0.0146 1 .
2336 CB   CB   . ILE ILE ILE A A 312 312 . 0.2495 0.2755 0.2059 -0.0295 -0.0381 -
0.0298 1 .
2337 CG1  CG1  . ILE ILE ILE A A 312 312 . 0.2135 0.3605 0.2124 -0.0253 -0.0533
0.0075  1 .
2338 CD   CD   . ILE ILE ILE A A 312 312 . 0.2792 0.3332 0.2188 -0.0997 -0.0127 -
0.0052 1 .
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2339 CG2  CG2  . ILE ILE ILE A A 312 312 . 0.2433 0.2874 0.2437 -0.0339 -0.0108 -
0.0593 1 .
2340 C    C    . ILE ILE ILE A A 312 312 . 0.2252 0.2930 0.2096 -0.0046 -0.0243 -
0.0175 1 .
2341 O    O    . ILE ILE ILE A A 312 312 . 0.2283 0.2918 0.1870 -0.0211 -0.0323 -
0.0168 1 .
2342 N    N    . GLN GLN GLN A A 313 313 . 0.2273 0.2828 0.1806 -0.0190 -0.0209 -
0.0509 1 .
2343 CA   CA   . GLN GLN GLN A A 313 313 . 0.1794 0.2620 0.2026 -0.0165 -0.0133 -
0.0506 1 .
2344 CB   CB   . GLN GLN GLN A A 313 313 . 0.1941 0.2137 0.1935 -0.0218 -0.0302 -
0.0377 1 .
2345 CG   CG   . GLN GLN GLN A A 313 313 . 0.1822 0.2343 0.2024 0.0073  -0.0034 -
0.0699 1 .
2346 CD   CD   . GLN GLN GLN A A 313 313 . 0.2059 0.2567 0.2059 -0.0270 -0.0468 -
0.0232 1 .
2347 OE1  OE1  . GLN GLN GLN A A 313 313 . 0.2031 0.2702 0.1608 -0.0089 -0.0448 -
0.0367 1 .
2348 NE2  NE2  . GLN GLN GLN A A 313 313 . 0.2237 0.1907 0.1785 -0.0301 -0.0547 -
0.0327 1 .
2349 C    C    . GLN GLN GLN A A 313 313 . 0.1955 0.2548 0.1918 -0.0164 -0.0432 -
0.0455 1 .
2350 O    O    . GLN GLN GLN A A 313 313 . 0.2196 0.3040 0.1793 -0.0397 -0.0469 -
0.0524 1 .
2351 N    N    . ILE ILE ILE A A 314 314 . 0.2114 0.2641 0.1912 -0.0045 -0.0511 -
0.0380 1 .
2352 CA   CA   . ILE ILE ILE A A 314 314 . 0.1932 0.2382 0.1905 0.0014  -0.0330 -
0.0358 1 .
2353 CB   CB   . ILE ILE ILE A A 314 314 . 0.2382 0.2620 0.2360 -0.0101 -0.0275 -
0.0329 1 .
2354 CG1  CG1  . ILE ILE ILE A A 314 314 . 0.2636 0.2264 0.2700 -0.0298 -0.0172 -
0.0194 1 .
2355 CD   CD   . ILE ILE ILE A A 314 314 . 0.1841 0.2664 0.2510 -0.0402 0.0109  -
0.0186 1 .
2356 CG2  CG2  . ILE ILE ILE A A 314 314 . 0.1810 0.2968 0.2311 0.0008  0.0081
0.0005  1 .
2357 C    C    . ILE ILE ILE A A 314 314 . 0.2011 0.2207 0.1846 -0.0125 -0.0293 -
0.0144 1 .
2358 O    O    . ILE ILE ILE A A 314 314 . 0.2162 0.2426 0.1326 -0.0125 -0.0295 -
0.0340 1 .
2359 N    N    . VAL VAL VAL A A 315 315 . 0.2021 0.2396 0.1760 -0.0185 -0.0288 -
0.0263 1 .
2360 CA   CA   . VAL VAL VAL A A 315 315 . 0.1885 0.2391 0.1888 -0.0095 -0.0339 -
0.0182 1 .
2361 CB   CB   . VAL VAL VAL A A 315 315 . 0.1814 0.1986 0.1502 -0.0092 -0.0303 -
0.0191 1 .
2362 CG1  CG1  . VAL VAL VAL A A 315 315 . 0.1880 0.2763 0.2024 -0.0337 -0.0334 -
0.0299 1 .
2363 CG2  CG2  . VAL VAL VAL A A 315 315 . 0.1836 0.2027 0.1648 0.0129  -0.0290 -
0.0366 1 .
2364 C    C    . VAL VAL VAL A A 315 315 . 0.1894 0.2190 0.1530 -0.0173 -0.0453 -
0.0193 1 .
2365 O    O    . VAL VAL VAL A A 315 315 . 0.2031 0.2358 0.1953 -0.0197 -0.0276 -
0.0215 1 .
2366 N    N    . GLY GLY GLY A A 316 316 . 0.2049 0.2242 0.1619 0.0106  -0.0704 -
0.0339 1 .
2367 CA   CA   . GLY GLY GLY A A 316 316 . 0.1661 0.2268 0.1602 0.0224  -0.0383 -
0.0111 1 .
2368 C    C    . GLY GLY GLY A A 316 316 . 0.2007 0.2364 0.1787 0.0062  -0.0175 -
0.0331 1 .
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2369 O    O    . GLY GLY GLY A A 316 316 . 0.1920 0.2408 0.1913 0.0135  -0.0296 -
0.0419 1 .
2370 N    N    . ASP ASP ASP A A 317 317 . 0.1878 0.2370 0.1627 -0.0025 -0.0167 -
0.0163 1 .
2371 CA   CA   . ASP ASP ASP A A 317 317 . 0.1931 0.1958 0.1617 0.0044  -0.0174 -
0.0137 1 .
2372 CB   CB   . ASP ASP ASP A A 317 317 . 0.1835 0.2110 0.1452 0.0131  -0.0110 -
0.0081 1 .
2373 CG   CG   . ASP ASP ASP A A 317 317 . 0.1805 0.2060 0.1730 -0.0031 -0.0406 -
0.0078 1 .
2374 OD1  OD1  . ASP ASP ASP A A 317 317 . 0.2278 0.2351 0.2023 0.0188  -0.0715 -
0.0253 1 .
2375 OD2  OD2  . ASP ASP ASP A A 317 317 . 0.1927 0.2333 0.1839 -0.0092 -0.0272 -
0.0143 1 .
2376 C    C    . ASP ASP ASP A A 317 317 . 0.1985 0.2249 0.1789 0.0025  0.0012  -
0.0223 1 .
2377 O    O    . ASP ASP ASP A A 317 317 . 0.1761 0.2194 0.2004 0.0131  0.0054
0.0013  1 .
2378 N    N    . ASP ASP ASP A A 318 318 . 0.1898 0.2376 0.2087 0.0231  0.0000  -
0.0069 1 .
2379 CA   CA   . ASP ASP ASP A A 318 318 . 0.2126 0.2325 0.2036 0.0120  0.0171  -
0.0193 1 .
2380 CB   CB   . ASP ASP ASP A A 318 318 . 0.1969 0.2445 0.2365 0.0087  0.0205  -
0.0138 1 .
2381 CG   CG   . ASP ASP ASP A A 318 318 . 0.2331 0.2497 0.2780 -0.0093 -0.0169 -
0.0162 1 .
2382 OD1  OD1  . ASP ASP ASP A A 318 318 . 0.2103 0.2687 0.2395 -0.0292 -0.0539 -
0.0127 1 .
2383 OD2  OD2  . ASP ASP ASP A A 318 318 . 0.2072 0.3494 0.3172 -0.0227 -0.0285
0.0059  1 .
2384 C    C    . ASP ASP ASP A A 318 318 . 0.2139 0.2463 0.2288 0.0126  0.0038  -
0.0240 1 .
2385 O    O    . ASP ASP ASP A A 318 318 . 0.1928 0.2514 0.2312 0.0025  -0.0186 -
0.0283 1 .
2386 N    N    . LEU LEU LEU A A 319 319 . 0.2249 0.2481 0.1957 0.0007  -0.0226 -
0.0259 1 .
2387 CA   CA   . LEU LEU LEU A A 319 319 . 0.2194 0.2616 0.2342 0.0248  -0.0169 -
0.0232 1 .
2388 CB   CB   . LEU LEU LEU A A 319 319 . 0.2180 0.2827 0.2199 0.0025  -0.0506 -
0.0476 1 .
2389 CG   CG   . LEU LEU LEU A A 319 319 . 0.2012 0.3019 0.2909 0.0469  -0.0216 -
0.0218 1 .
2390 CD1  CD1  . LEU LEU LEU A A 319 319 . 0.1577 0.3418 0.3020 0.0568  -0.0312 -
0.0400 1 .
2391 CD2  CD2  . LEU LEU LEU A A 319 319 . 0.2282 0.3787 0.2426 0.0409  0.0070  -
0.0297 1 .
2392 C    C    . LEU LEU LEU A A 319 319 . 0.2351 0.2510 0.2074 0.0128  -0.0265 -
0.0117 1 .
2393 O    O    . LEU LEU LEU A A 319 319 . 0.2365 0.2637 0.2101 0.0306  -0.0483
0.0034  1 .
2394 N    N    . THR THR THR A A 320 320 . 0.2160 0.2597 0.1817 0.0193  -0.0306 -
0.0031 1 .
2395 CA   CA   . THR THR THR A A 320 320 . 0.2186 0.2461 0.1756 0.0020  -0.0239 -
0.0122 1 .
2396 CB   CB   . THR THR THR A A 320 320 . 0.2281 0.2290 0.1678 0.0176  -0.0261 -
0.0173 1 .
2397 OG1  OG1  . THR THR THR A A 320 320 . 0.2019 0.2728 0.2391 0.0113  0.0268  -
0.0264 1 .
2398 CG2  CG2  . THR THR THR A A 320 320 . 0.2749 0.2681 0.1949 0.0288  -0.0348
0.0153  1 .
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2399 C    C    . THR THR THR A A 320 320 . 0.2194 0.2355 0.1686 -0.0080 -0.0221
0.0044  1 .
2400 O    O    . THR THR THR A A 320 320 . 0.1923 0.2244 0.1810 0.0259  -0.0357
0.0132  1 .
2401 N    N    . VAL VAL VAL A A 321 321 . 0.1896 0.2434 0.1445 0.0219  -0.0138
0.0075  1 .
2402 CA   CA   . VAL VAL VAL A A 321 321 . 0.1831 0.1941 0.1750 0.0058  -0.0137 -
0.0039 1 .
2403 CB   CB   . VAL VAL VAL A A 321 321 . 0.2284 0.1967 0.2037 0.0134  -0.0001
0.0103  1 .
2404 CG1  CG1  . VAL VAL VAL A A 321 321 . 0.2145 0.2401 0.2195 -0.0137 0.0041  -
0.0098 1 .
2405 CG2  CG2  . VAL VAL VAL A A 321 321 . 0.2079 0.2042 0.1891 0.0111  -0.0496 -
0.0085 1 .
2406 C    C    . VAL VAL VAL A A 321 321 . 0.1994 0.1606 0.1378 0.0162  -0.0105
0.0244  1 .
2407 O    O    . VAL VAL VAL A A 321 321 . 0.2056 0.1766 0.1506 0.0216  -0.0181
0.0061  1 .
2408 N    N    . THR THR THR A A 322 322 . 0.1834 0.1761 0.1483 0.0288  -0.0200
0.0285  1 .
2409 CA   CA   . THR THR THR A A 322 322 . 0.1883 0.1722 0.1544 0.0096  -0.0173
0.0164  1 .
2410 CB   CB   . THR THR THR A A 322 322 . 0.1417 0.1779 0.1546 0.0000  -0.0210
0.0248  1 .
2411 OG1  OG1  . THR THR THR A A 322 322 . 0.2029 0.1748 0.1397 -0.0067 -0.0148 -
0.0208 1 .
2412 CG2  CG2  . THR THR THR A A 322 322 . 0.1461 0.2025 0.2050 -0.0171 0.0080
0.0289  1 .
2413 C    C    . THR THR THR A A 322 322 . 0.2177 0.1983 0.1663 0.0022  -0.0249
0.0091  1 .
2414 O    O    . THR THR THR A A 322 322 . 0.2033 0.1962 0.1642 -0.0026 -0.0219
0.0262  1 .
2415 N    N    . ASN ASN ASN A A 323 323 . 0.2082 0.2073 0.2005 0.0210  -0.0358
0.0197  1 .
2416 CA   CA   . ASN ASN ASN A A 323 323 . 0.2573 0.2431 0.1896 0.0274  -0.0195
0.0189  1 .
2417 CB   CB   . ASN ASN ASN A A 323 323 . 0.2524 0.2384 0.2157 0.0182  -0.0247
0.0121  1 .
2418 CG   CG   . ASN ASN ASN A A 323 323 . 0.3202 0.2533 0.2621 0.0523  0.0033
0.0019  1 .
2419 OD1  OD1  . ASN ASN ASN A A 323 323 . 0.4731 0.3250 0.2991 0.0809  0.0225
0.0398  1 .
2420 ND2  ND2  . ASN ASN ASN A A 323 323 . 0.2568 0.2917 0.2213 0.0284  -0.0152
0.0000  1 .
2421 C    C    . ASN ASN ASN A A 323 323 . 0.2600 0.2828 0.2148 0.0177  -0.0022
0.0195  1 .
2422 O    O    . ASN ASN ASN A A 323 323 . 0.2756 0.2858 0.1878 0.0258  0.0006
0.0374  1 .
2423 N    N    . PRO PRO PRO A A 324 324 . 0.2934 0.2994 0.2335 0.0084  -0.0062
0.0426  1 .
2424 CA   CA   . PRO PRO PRO A A 324 324 . 0.3012 0.3108 0.2501 0.0254  -0.0084
0.0238  1 .
2425 CB   CB   . PRO PRO PRO A A 324 324 . 0.2921 0.3079 0.2205 0.0078  -0.0180
0.0401  1 .
2426 CG   CG   . PRO PRO PRO A A 324 324 . 0.2861 0.3419 0.2839 0.0134  -0.0122
0.0376  1 .
2427 CD   CD   . PRO PRO PRO A A 324 324 . 0.2732 0.3102 0.2166 0.0109  0.0064
0.0161  1 .
2428 C    C    . PRO PRO PRO A A 324 324 . 0.3304 0.3096 0.2693 0.0273  -0.0223
0.0217  1 .
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2429 O    O    . PRO PRO PRO A A 324 324 . 0.3515 0.3082 0.2397 0.0205  -0.0256
0.0438  1 .
2430 N    N    . LYS LYS LYS A A 325 325 . 0.3458 0.3375 0.2856 0.0375  -0.0167
0.0185  1 .
2431 CA   CA   . LYS LYS LYS A A 325 325 . 0.3407 0.3270 0.3047 0.0414  -0.0229
0.0147  1 .
2432 CB   CB   . LYS LYS LYS A A 325 325 . 0.3901 0.3671 0.3527 0.0403  -0.0121
0.0104  1 .
2433 CG   CG   . LYS LYS LYS A A 325 325 . 0.4438 0.3566 0.4234 0.0241  -0.0053
0.0220  1 .
2434 CD   CD   . LYS LYS LYS A A 325 325 . 0.4906 0.4295 0.5580 0.0435  0.0407  -
0.0206 1 .
2435 CE   CE   . LYS LYS LYS A A 325 325 . 0.5206 0.4838 0.6439 0.0047  0.0161
0.0023  1 .
2436 C    C    . LYS LYS LYS A A 325 325 . 0.3411 0.3575 0.2994 0.0490  -0.0289
0.0077  1 .
2437 O    O    . LYS LYS LYS A A 325 325 . 0.3624 0.3900 0.2864 0.0514  -0.0611
0.0207  1 .
2438 N    N    . ARG ARG ARG A A 326 326 . 0.2753 0.3006 0.2761 0.0565  -0.0222 -
0.0031 1 .
2439 CA   CA   . ARG ARG ARG A A 326 326 . 0.2864 0.3255 0.2903 0.0498  -0.0083
0.0013  1 .
2440 CB   CB   . ARG ARG ARG A A 326 326 . 0.2871 0.3326 0.2553 0.0524  -0.0200 -
0.0064 1 .
2441 CG   CG   . ARG ARG ARG A A 326 326 . 0.3410 0.3718 0.3674 0.0648  -0.0122 -
0.0226 1 .
2442 CD   CD   . ARG ARG ARG A A 326 326 . 0.3813 0.3587 0.4124 0.0212  0.0278
0.0096  1 .
2443 NE   NE   . ARG ARG ARG A A 326 326 . 0.2982 0.3418 0.3377 0.0156  0.0492  -
0.0250 1 .
2444 CZ   CZ   . ARG ARG ARG A A 326 326 . 0.2833 0.2548 0.2499 0.0794  -0.0011 -
0.0152 1 .
2445 NH1  NH1  . ARG ARG ARG A A 326 326 . 0.3608 0.3785 0.2956 0.1467  0.0395  -
0.0215 1 .
2446 NH2  NH2  . ARG ARG ARG A A 326 326 . 0.2884 0.3544 0.3600 0.0535  -0.0027 -
0.0179 1 .
2447 C    C    . ARG ARG ARG A A 326 326 . 0.2692 0.3264 0.2471 0.0439  -0.0088 -
0.0010 1 .
2448 O    O    . ARG ARG ARG A A 326 326 . 0.2553 0.3240 0.2622 0.0526  0.0060
0.0092  1 .
2449 N    N    . ILE ILE ILE A A 327 327 . 0.2582 0.3242 0.2301 0.0504  -0.0240
0.0110  1 .
2450 CA   CA   . ILE ILE ILE A A 327 327 . 0.2642 0.3105 0.2060 0.0562  -0.0300
0.0277  1 .
2451 CB   CB   . ILE ILE ILE A A 327 327 . 0.2642 0.2844 0.2264 0.0505  -0.0055
0.0029  1 .
2452 CG1  CG1  . ILE ILE ILE A A 327 327 . 0.2732 0.2665 0.1850 0.0572  -0.0440 -
0.0011 1 .
2453 CD   CD   . ILE ILE ILE A A 327 327 . 0.2742 0.2048 0.2206 0.0538  -0.0645
0.0430  1 .
2454 CG2  CG2  . ILE ILE ILE A A 327 327 . 0.2335 0.2938 0.2367 0.0830  -0.0117 -
0.0120 1 .
2455 C    C    . ILE ILE ILE A A 327 327 . 0.3108 0.3196 0.2348 0.0407  -0.0373
0.0192  1 .
2456 O    O    . ILE ILE ILE A A 327 327 . 0.3204 0.3638 0.2433 0.0379  -0.0538
0.0179  1 .
2457 N    N    . GLU GLU GLU A A 328 328 . 0.3363 0.3305 0.2309 0.0379  -0.0352
0.0509  1 .
2458 CA   CA   . GLU GLU GLU A A 328 328 . 0.3772 0.3486 0.2410 0.0178  -0.0306
0.0341  1 .
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2459 CB   CB   . GLU GLU GLU A A 328 328 . 0.4188 0.3625 0.2619 0.0046  -0.0285
0.0412  1 .
2460 C    C    . GLU GLU GLU A A 328 328 . 0.3628 0.3582 0.2689 0.0177  -0.0233
0.0263  1 .
2461 O    O    . GLU GLU GLU A A 328 328 . 0.3862 0.3884 0.2836 0.0112  -0.0186
0.0227  1 .
2462 N    N    . ARG ARG ARG A A 329 329 . 0.3453 0.3473 0.2805 0.0412  -0.0349
0.0069  1 .
2463 CA   CA   . ARG ARG ARG A A 329 329 . 0.3454 0.3556 0.3173 0.0423  -0.0293
0.0159  1 .
2464 CB   CB   . ARG ARG ARG A A 329 329 . 0.3385 0.3484 0.3113 0.0543  -0.0236
0.0244  1 .
2465 CG   CG   . ARG ARG ARG A A 329 329 . 0.3620 0.3784 0.3212 0.0346  -0.0121
0.0163  1 .
2466 CD   CD   . ARG ARG ARG A A 329 329 . 0.3745 0.4233 0.3870 0.0423  0.0207
0.0273  1 .
2467 NE   NE   . ARG ARG ARG A A 329 329 . 0.4523 0.4416 0.4519 -0.0001 0.0379
0.0297  1 .
2468 CZ   CZ   . ARG ARG ARG A A 329 329 . 0.4471 0.4533 0.5117 0.0211  0.0172  -
0.0070 1 .
2469 NH1  NH1  . ARG ARG ARG A A 329 329 . 0.5062 0.4944 0.5003 0.0075  0.0403  -
0.0404 1 .
2470 NH2  NH2  . ARG ARG ARG A A 329 329 . 0.4273 0.4678 0.5654 0.0345  -0.0406
0.0164  1 .
2471 C    C    . ARG ARG ARG A A 329 329 . 0.3428 0.3791 0.3215 0.0417  -0.0449
0.0169  1 .
2472 O    O    . ARG ARG ARG A A 329 329 . 0.3367 0.4184 0.3381 0.0385  -0.0708
0.0162  1 .
2473 N    N    . ALA ALA ALA A A 330 330 . 0.3215 0.3456 0.2765 0.0599  -0.0695
0.0394  1 .
2474 CA   CA   . ALA ALA ALA A A 330 330 . 0.3265 0.3562 0.2635 0.0519  -0.0612
0.0295  1 .
2475 CB   CB   . ALA ALA ALA A A 330 330 . 0.3491 0.3269 0.3052 0.0406  -0.0734
0.0475  1 .
2476 C    C    . ALA ALA ALA A A 330 330 . 0.3359 0.3528 0.2775 0.0584  -0.0480
0.0244  1 .
2477 O    O    . ALA ALA ALA A A 330 330 . 0.3637 0.3643 0.2247 0.0576  -0.0279
0.0052  1 .
2478 N    N    . VAL VAL VAL A A 331 331 . 0.3322 0.3507 0.2424 0.0550  -0.0429
0.0355  1 .
2479 CA   CA   . VAL VAL VAL A A 331 331 . 0.3528 0.3920 0.2650 0.0438  -0.0305
0.0223  1 .
2480 CB   CB   . VAL VAL VAL A A 331 331 . 0.3487 0.3747 0.2482 0.0378  -0.0349
0.0177  1 .
2481 CG1  CG1  . VAL VAL VAL A A 331 331 . 0.3677 0.3921 0.2659 0.0240  0.0123
0.0096  1 .
2482 CG2  CG2  . VAL VAL VAL A A 331 331 . 0.3256 0.3822 0.2339 0.0309  -0.0366
0.0338  1 .
2483 C    C    . VAL VAL VAL A A 331 331 . 0.3833 0.4222 0.3097 0.0272  -0.0334
0.0139  1 .
2484 O    O    . VAL VAL VAL A A 331 331 . 0.3917 0.4574 0.2923 0.0229  -0.0212
0.0019  1 .
2485 N    N    . GLU GLU GLU A A 332 332 . 0.4178 0.4427 0.3307 0.0334  -0.0349
0.0217  1 .
2486 CA   CA   . GLU GLU GLU A A 332 332 . 0.4306 0.4757 0.3631 0.0245  -0.0576
0.0245  1 .
2487 CB   CB   . GLU GLU GLU A A 332 332 . 0.4548 0.4941 0.3742 0.0251  -0.0499
0.0110  1 .
2488 CG   CG   . GLU GLU GLU A A 332 332 . 0.5231 0.6326 0.5162 0.0147  -0.0402
0.0358  1 .
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2489 CD   CD   . GLU GLU GLU A A 332 332 . 0.6652 0.8038 0.6258 0.0351  -0.0110
0.0076  1 .
2490 OE1  OE1  . GLU GLU GLU A A 332 332 . 0.7720 0.8447 0.6686 0.0405  -0.0536
0.0144  1 .
2491 OE2  OE2  . GLU GLU GLU A A 332 332 . 0.6448 0.8696 0.7113 0.0164  -0.0331 -
0.0118 1 .
2492 C    C    . GLU GLU GLU A A 332 332 . 0.4386 0.4763 0.3566 0.0251  -0.0535
0.0208  1 .
2493 O    O    . GLU GLU GLU A A 332 332 . 0.4533 0.5177 0.2965 0.0356  -0.0927
0.0438  1 .
2494 N    N    . GLU GLU GLU A A 333 333 . 0.4061 0.4553 0.3311 0.0260  -0.0697
0.0248  1 .
2495 CA   CA   . GLU GLU GLU A A 333 333 . 0.3972 0.4377 0.3438 0.0287  -0.0662
0.0106  1 .
2496 CB   CB   . GLU GLU GLU A A 333 333 . 0.3680 0.4464 0.3671 0.0308  -0.0572
0.0122  1 .
2497 CG   CG   . GLU GLU GLU A A 333 333 . 0.4206 0.4677 0.4324 0.0309  -0.1100
0.0038  1 .
2498 CD   CD   . GLU GLU GLU A A 333 333 . 0.4794 0.5451 0.5430 0.0369  -0.0662 -
0.0056 1 .
2499 OE1  OE1  . GLU GLU GLU A A 333 333 . 0.4844 0.5449 0.6673 0.0637  -0.0954
0.0219  1 .
2500 OE2  OE2  . GLU GLU GLU A A 333 333 . 0.5661 0.5771 0.5549 0.0227  -0.0829
0.0065  1 .
2501 C    C    . GLU GLU GLU A A 333 333 . 0.3714 0.4176 0.3251 0.0223  -0.0537
0.0013  1 .
2502 O    O    . GLU GLU GLU A A 333 333 . 0.3745 0.4470 0.3323 0.0534  -0.0696 -
0.0032 1 .
2503 N    N    . LYS LYS LYS A A 334 334 . 0.3770 0.4082 0.3116 0.0116  -0.0517 -
0.0156 1 .
2504 CA   CA   . LYS LYS LYS A A 334 334 . 0.3546 0.3793 0.2736 -0.0030 -0.0340 -
0.0263 1 .
2505 CB   CB   . LYS LYS LYS A A 334 334 . 0.3884 0.3957 0.2885 -0.0063 -0.0303 -
0.0321 1 .
2506 CG   CG   . LYS LYS LYS A A 334 334 . 0.3716 0.4340 0.2844 0.0153  0.0177  -
0.0240 1 .
2507 CD   CD   . LYS LYS LYS A A 334 334 . 0.4292 0.5444 0.3082 -0.0196 0.0233  -
0.0092 1 .
2508 CE   CE   . LYS LYS LYS A A 334 334 . 0.4934 0.5621 0.3849 0.0014  0.0957
0.0095  1 .
2509 C    C    . LYS LYS LYS A A 334 334 . 0.3586 0.3663 0.3076 0.0009  -0.0341 -
0.0308 1 .
2510 O    O    . LYS LYS LYS A A 334 334 . 0.3556 0.3812 0.2918 -0.0105 -0.0399 -
0.0264 1 .
2511 N    N    . ALA ALA ALA A A 335 335 . 0.3189 0.3645 0.2633 0.0102  -0.0505 -
0.0247 1 .
2512 CA   CA   . ALA ALA ALA A A 335 335 . 0.3007 0.3515 0.2952 0.0047  -0.0514 -
0.0176 1 .
2513 CB   CB   . ALA ALA ALA A A 335 335 . 0.3002 0.3541 0.2956 0.0318  -0.0419 -
0.0169 1 .
2514 C    C    . ALA ALA ALA A A 335 335 . 0.2924 0.3489 0.2910 0.0072  -0.0429 -
0.0111 1 .
2515 O    O    . ALA ALA ALA A A 335 335 . 0.2793 0.3728 0.2939 -0.0007 -0.0730 -
0.0126 1 .
2516 N    N    . CYS CYS CYS A A 336 336 . 0.2806 0.3401 0.2442 0.0111  -0.0444 -
0.0268 1 .
2517 CA   CA   . CYS CYS CYS A A 336 336 . 0.2840 0.3097 0.2468 0.0183  -0.0252 -
0.0172 1 .
2518 CB   CB   . CYS CYS CYS A A 336 336 . 0.2785 0.2818 0.2260 0.0248  -0.0170 -
0.0315 1 .
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2519 SG   SG   . CYS CYS CYS A A 336 336 . 0.2826 0.3606 0.2772 0.0169  -0.0624 -
0.0262 1 .
2520 C    C    . CYS CYS CYS A A 336 336 . 0.2730 0.2880 0.2349 0.0172  -0.0224 -
0.0255 1 .
2521 O    O    . CYS CYS CYS A A 336 336 . 0.2768 0.3394 0.2768 0.0230  0.0055
0.0042  1 .
2522 N    N    . ASN ASN ASN A A 337 337 . 0.2588 0.2678 0.2107 0.0087  -0.0401 -
0.0316 1 .
2523 CA   CA   . ASN ASN ASN A A 337 337 . 0.2254 0.2574 0.1964 0.0167  -0.0418 -
0.0254 1 .
2524 CB   CB   . ASN ASN ASN A A 337 337 . 0.2561 0.2701 0.2066 -0.0011 -0.0483 -
0.0353 1 .
2525 CG   CG   . ASN ASN ASN A A 337 337 . 0.2442 0.3033 0.2301 0.0075  -0.0522 -
0.0114 1 .
2526 OD1  OD1  . ASN ASN ASN A A 337 337 . 0.3048 0.4314 0.2655 -0.0160 -0.1020 -
0.0370 1 .
2527 ND2  ND2  . ASN ASN ASN A A 337 337 . 0.1842 0.2389 0.1544 -0.0103 -0.0496 -
0.0139 1 .
2528 C    C    . ASN ASN ASN A A 337 337 . 0.2272 0.2669 0.1934 0.0110  -0.0302 -
0.0300 1 .
2529 O    O    . ASN ASN ASN A A 337 337 . 0.2170 0.2844 0.1596 0.0155  -0.0512 -
0.0203 1 .
2530 N    N    . CYS CYS CYS A A 338 338 . 0.2105 0.2578 0.1792 -0.0035 -0.0403 -
0.0182 1 .
2531 CA   CA   . CYS CYS CYS A A 338 338 . 0.2105 0.2310 0.1736 0.0157  -0.0391 -
0.0252 1 .
2532 CB   CB   . CYS CYS CYS A A 338 338 . 0.1921 0.2303 0.1770 0.0056  -0.0624 -
0.0269 1 .
2533 SG   SG   . CYS CYS CYS A A 338 338 . 0.2080 0.2711 0.1890 -0.0027 -0.0374
0.0009  1 .
2534 C    C    . CYS CYS CYS A A 338 338 . 0.1996 0.2040 0.1825 0.0028  -0.0200 -
0.0239 1 .
2535 O    O    . CYS CYS CYS A A 338 338 . 0.1953 0.2067 0.1725 0.0105  -0.0295 -
0.0309 1 .
2536 N    N    . LEU LEU LEU A A 339 339 . 0.1980 0.1994 0.1511 0.0113  -0.0264 -
0.0484 1 .
2537 CA   CA   . LEU LEU LEU A A 339 339 . 0.2087 0.1830 0.1209 -0.0019 -0.0300 -
0.0278 1 .
2538 CB   CB   . LEU LEU LEU A A 339 339 . 0.2154 0.1966 0.1184 -0.0078 -0.0158 -
0.0233 1 .
2539 CG   CG   . LEU LEU LEU A A 339 339 . 0.2002 0.1888 0.1798 0.0060  -0.0448 -
0.0264 1 .
2540 CD1  CD1  . LEU LEU LEU A A 339 339 . 0.2316 0.2133 0.2497 0.0406  -0.0125
0.0037  1 .
2541 CD2  CD2  . LEU LEU LEU A A 339 339 . 0.2042 0.2742 0.1638 0.0049  -0.0153
0.0218  1 .
2542 C    C    . LEU LEU LEU A A 339 339 . 0.1917 0.1850 0.1475 0.0080  -0.0134 -
0.0165 1 .
2543 O    O    . LEU LEU LEU A A 339 339 . 0.1896 0.2168 0.0991 0.0160  -0.0025 -
0.0346 1 .
2544 N    N    . LEU LEU LEU A A 340 340 . 0.1827 0.2012 0.1371 -0.0165 -0.0172
0.0057  1 .
2545 CA   CA   . LEU LEU LEU A A 340 340 . 0.1567 0.2043 0.1454 -0.0117 -0.0126
0.0067  1 .
2546 CB   CB   . LEU LEU LEU A A 340 340 . 0.1881 0.1739 0.1682 -0.0399 -0.0113
0.0142  1 .
2547 CG   CG   . LEU LEU LEU A A 340 340 . 0.1714 0.2178 0.1682 -0.0208 0.0189
0.0062  1 .
2548 CD1  CD1  . LEU LEU LEU A A 340 340 . 0.1928 0.1953 0.1402 -0.0199 0.0247
0.0368  1 .
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2549 CD2  CD2  . LEU LEU LEU A A 340 340 . 0.2038 0.1860 0.1348 -0.0315 0.0503
0.0019  1 .
2550 C    C    . LEU LEU LEU A A 340 340 . 0.1698 0.1820 0.1546 0.0011  -0.0189
0.0047  1 .
2551 O    O    . LEU LEU LEU A A 340 340 . 0.1834 0.1827 0.1774 -0.0172 -0.0413 -
0.0078 1 .
2552 N    N    . LEU LEU LEU A A 341 341 . 0.1566 0.2100 0.1212 -0.0280 -0.0236 -
0.0103 1 .
2553 CA   CA   . LEU LEU LEU A A 341 341 . 0.1778 0.1958 0.1228 -0.0181 -0.0051
0.0152  1 .
2554 CB   CB   . LEU LEU LEU A A 341 341 . 0.1820 0.1972 0.1361 -0.0212 -0.0132
0.0152  1 .
2555 CG   CG   . LEU LEU LEU A A 341 341 . 0.1903 0.1631 0.2405 0.0013  -0.0228
0.0245  1 .
2556 CD1  CD1  . LEU LEU LEU A A 341 341 . 0.2480 0.2702 0.2527 0.0304  -0.0105
0.0375  1 .
2557 CD2  CD2  . LEU LEU LEU A A 341 341 . 0.2142 0.2886 0.2248 0.0166  0.0576
0.0048  1 .
2558 C    C    . LEU LEU LEU A A 341 341 . 0.1860 0.1725 0.1269 -0.0110 -0.0116
0.0058  1 .
2559 O    O    . LEU LEU LEU A A 341 341 . 0.1886 0.2069 0.1358 0.0076  -0.0029
0.0011  1 .
2560 N    N    . LYS LYS LYS A A 342 342 . 0.1763 0.1875 0.1147 0.0063  -0.0142 -
0.0050 1 .
2561 CA   CA   . LYS LYS LYS A A 342 342 . 0.1803 0.1960 0.1418 0.0002  -0.0028
0.0010  1 .
2562 CB   CB   . LYS LYS LYS A A 342 342 . 0.1508 0.1865 0.1702 -0.0096 -0.0091
0.0066  1 .
2563 CG   CG   . LYS LYS LYS A A 342 342 . 0.1642 0.1774 0.2421 -0.0159 -0.0008 -
0.0018 1 .
2564 CD   CD   . LYS LYS LYS A A 342 342 . 0.1442 0.1736 0.2253 -0.0335 -0.0067
0.0201  1 .
2565 CE   CE   . LYS LYS LYS A A 342 342 . 0.1846 0.2535 0.3169 -0.0805 0.0023
0.0053  1 .
2566 NZ   NZ   . LYS LYS LYS A A 342 342 . 0.1686 0.2629 0.2835 -0.0147 -0.0035 -
0.0310 1 .
2567 C    C    . LYS LYS LYS A A 342 342 . 0.1679 0.1762 0.1310 0.0153  -0.0145 -
0.0024 1 .
2568 O    O    . LYS LYS LYS A A 342 342 . 0.2196 0.1828 0.1453 0.0277  -0.0270 -
0.0063 1 .
2569 N    N    . VAL VAL VAL A A 343 343 . 0.1737 0.1964 0.1401 -0.0079 -0.0126
0.0037  1 .
2570 CA   CA   . VAL VAL VAL A A 343 343 . 0.1635 0.1701 0.1540 0.0122  -0.0191 -
0.0053 1 .
2571 CB   CB   . VAL VAL VAL A A 343 343 . 0.1982 0.2154 0.2030 -0.0037 -0.0187 -
0.0152 1 .
2572 CG1  CG1  . VAL VAL VAL A A 343 343 . 0.2031 0.2179 0.2396 0.0171  0.0030
0.0063  1 .
2573 CG2  CG2  . VAL VAL VAL A A 343 343 . 0.1549 0.2392 0.2148 -0.0234 -0.0332
0.0009  1 .
2574 C    C    . VAL VAL VAL A A 343 343 . 0.1710 0.1692 0.1599 0.0038  -0.0159
0.0018  1 .
2575 O    O    . VAL VAL VAL A A 343 343 . 0.2045 0.1756 0.1785 0.0035  0.0002
0.0067  1 .
2576 N    N    . ASN ASN ASN A A 344 344 . 0.1297 0.1762 0.1217 0.0087  -0.0281 -
0.0116 1 .
2577 CA   CA   . ASN ASN ASN A A 344 344 . 0.1366 0.1604 0.1339 0.0189  -0.0120
0.0087  1 .
2578 CB   CB   . ASN ASN ASN A A 344 344 . 0.1690 0.1517 0.1507 0.0034  -0.0370
0.0389  1 .
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2579 CG   CG   . ASN ASN ASN A A 344 344 . 0.1745 0.1708 0.1648 0.0047  -0.0037 -
0.0023 1 .
2580 OD1  OD1  . ASN ASN ASN A A 344 344 . 0.2081 0.1790 0.1918 -0.0313 -0.0355
0.0391  1 .
2581 ND2  ND2  . ASN ASN ASN A A 344 344 . 0.1782 0.2329 0.1722 0.0209  -0.0014 -
0.0020 1 .
2582 C    C    . ASN ASN ASN A A 344 344 . 0.1468 0.1628 0.1673 0.0115  -0.0235
0.0022  1 .
2583 O    O    . ASN ASN ASN A A 344 344 . 0.1575 0.2011 0.1967 0.0319  -0.0175 -
0.0031 1 .
2584 N    N    . GLN GLN GLN A A 345 345 . 0.1668 0.1449 0.1401 0.0084  -0.0210
0.0226  1 .
2585 CA   CA   . GLN GLN GLN A A 345 345 . 0.1508 0.1676 0.1618 0.0075  -0.0217
0.0035  1 .
2586 CB   CB   . GLN GLN GLN A A 345 345 . 0.1644 0.1417 0.1382 0.0033  -0.0279
0.0097  1 .
2587 CG   CG   . GLN GLN GLN A A 345 345 . 0.1525 0.1892 0.1540 -0.0126 -0.0007 -
0.0228 1 .
2588 CD   CD   . GLN GLN GLN A A 345 345 . 0.1262 0.2188 0.1362 -0.0140 -0.0044 -
0.0299 1 .
2589 OE1  OE1  . GLN GLN GLN A A 345 345 . 0.1880 0.2579 0.1434 0.0135  -0.0267
0.0012  1 .
2590 NE2  NE2  . GLN GLN GLN A A 345 345 . 0.1445 0.2222 0.1754 -0.0260 0.0039  -
0.0074 1 .
2591 C    C    . GLN GLN GLN A A 345 345 . 0.1691 0.1679 0.1758 -0.0025 -0.0172 -
0.0071 1 .
2592 O    O    . GLN GLN GLN A A 345 345 . 0.2116 0.1881 0.1930 0.0177  -0.0352
0.0049  1 .
2593 N    N    . ILE ILE ILE A A 346 346 . 0.1497 0.1779 0.1637 0.0041  -0.0152
0.0072  1 .
2594 CA   CA   . ILE ILE ILE A A 346 346 . 0.1873 0.1802 0.1846 0.0039  -0.0173
0.0091  1 .
2595 CB   CB   . ILE ILE ILE A A 346 346 . 0.1991 0.2016 0.1572 0.0063  -0.0111
0.0283  1 .
2596 CG1  CG1  . ILE ILE ILE A A 346 346 . 0.2079 0.1996 0.1953 0.0287  -0.0062
0.0786  1 .
2597 CD   CD   . ILE ILE ILE A A 346 346 . 0.2524 0.2446 0.1783 0.0492  -0.0549
0.0997  1 .
2598 CG2  CG2  . ILE ILE ILE A A 346 346 . 0.1710 0.2452 0.1707 0.0271  -0.0107
0.0377  1 .
2599 C    C    . ILE ILE ILE A A 346 346 . 0.1914 0.1902 0.1974 0.0037  -0.0127
0.0075  1 .
2600 O    O    . ILE ILE ILE A A 346 346 . 0.2090 0.1814 0.2189 -0.0011 -0.0468
0.0010  1 .
2601 N    N    . GLY GLY GLY A A 347 347 . 0.1830 0.1822 0.1968 0.0075  -0.0304
0.0087  1 .
2602 CA   CA   . GLY GLY GLY A A 347 347 . 0.1591 0.1758 0.1469 0.0012  -0.0080 -
0.0054 1 .
2603 C    C    . GLY GLY GLY A A 347 347 . 0.1781 0.1748 0.1495 -0.0048 -0.0202 -
0.0079 1 .
2604 O    O    . GLY GLY GLY A A 347 347 . 0.1859 0.1904 0.1966 -0.0057 -0.0191 -
0.0099 1 .
2605 N    N    . SER SER SER A A 348 348 . 0.1674 0.1822 0.1437 -0.0072 -0.0054 -
0.0243 1 .
2606 CA   CA   . SER SER SER A A 348 348 . 0.1869 0.1724 0.1571 -0.0077 0.0011  -
0.0086 1 .
2607 CB   CB   . SER SER SER A A 348 348 . 0.2389 0.1796 0.1807 0.0040  0.0129
0.0001  1 .
2608 OG   OG   . SER SER SER A A 348 348 . 0.2798 0.2126 0.2059 -0.0099 -0.0143
0.0238  1 .
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2609 C    C    . SER SER SER A A 348 348 . 0.1759 0.1749 0.1413 -0.0002 0.0056
0.0116  1 .
2610 O    O    . SER SER SER A A 348 348 . 0.2057 0.2209 0.1685 -0.0071 0.0073  -
0.0043 1 .
2611 N    N    . VAL VAL VAL A A 349 349 . 0.1577 0.1847 0.1352 0.0000  -0.0226
0.0091  1 .
2612 CA   CA   . VAL VAL VAL A A 349 349 . 0.1586 0.1784 0.1517 0.0261  -0.0171
0.0041  1 .
2613 CB   CB   . VAL VAL VAL A A 349 349 . 0.1928 0.2161 0.2041 0.0324  -0.0167
0.0000  1 .
2614 CG1  CG1  . VAL VAL VAL A A 349 349 . 0.1909 0.2162 0.1833 0.0616  -0.0110 -
0.0272 1 .
2615 CG2  CG2  . VAL VAL VAL A A 349 349 . 0.1592 0.2003 0.1531 -0.0012 -0.0018
0.0115  1 .
2616 C    C    . VAL VAL VAL A A 349 349 . 0.2038 0.2035 0.1758 0.0030  -0.0076
0.0006  1 .
2617 O    O    . VAL VAL VAL A A 349 349 . 0.1740 0.1759 0.1719 0.0114  -0.0113 -
0.0116 1 .
2618 N    N    . THR THR THR A A 350 350 . 0.1995 0.1825 0.1575 -0.0059 -0.0211
0.0153  1 .
2619 CA   CA   . THR THR THR A A 350 350 . 0.2052 0.1986 0.1721 -0.0072 -0.0175
0.0187  1 .
2620 CB   CB   . THR THR THR A A 350 350 . 0.2029 0.2006 0.1907 -0.0456 -0.0254
0.0308  1 .
2621 OG1  OG1  . THR THR THR A A 350 350 . 0.2255 0.2138 0.2175 -0.0124 -0.0083
0.0478  1 .
2622 CG2  CG2  . THR THR THR A A 350 350 . 0.2461 0.2445 0.2269 -0.0253 -0.0546
0.0598  1 .
2623 C    C    . THR THR THR A A 350 350 . 0.2060 0.1977 0.1882 -0.0144 -0.0035
0.0127  1 .
2624 O    O    . THR THR THR A A 350 350 . 0.2225 0.2205 0.1723 0.0000  -0.0336
0.0060  1 .
2625 N    N    . GLU GLU GLU A A 351 351 . 0.2058 0.1923 0.1898 0.0139  -0.0007
0.0035  1 .
2626 CA   CA   . GLU GLU GLU A A 351 351 . 0.1971 0.2037 0.1906 0.0091  0.0131
0.0102  1 .
2627 CB   CB   . GLU GLU GLU A A 351 351 . 0.2189 0.2082 0.2177 0.0247  0.0071
0.0001  1 .
2628 CG   CG   . GLU GLU GLU A A 351 351 . 0.2103 0.2353 0.2379 0.0215  -0.0042 -
0.0048 1 .
2629 CD   CD   . GLU GLU GLU A A 351 351 . 0.2671 0.2684 0.2833 0.0385  0.0063  -
0.0164 1 .
2630 OE1  OE1  . GLU GLU GLU A A 351 351 . 0.2457 0.2551 0.2654 0.0097  -0.0147 -
0.0165 1 .
2631 OE2  OE2  . GLU GLU GLU A A 351 351 . 0.2493 0.2854 0.2920 0.0323  -0.0142
0.0494  1 .
2632 C    C    . GLU GLU GLU A A 351 351 . 0.2066 0.2183 0.1819 0.0250  0.0009  -
0.0036 1 .
2633 O    O    . GLU GLU GLU A A 351 351 . 0.2341 0.2258 0.1570 0.0162  -0.0107
0.0030  1 .
2634 N    N    . ALA ALA ALA A A 352 352 . 0.2018 0.1805 0.1528 0.0140  -0.0021
0.0200  1 .
2635 CA   CA   . ALA ALA ALA A A 352 352 . 0.2025 0.1833 0.1310 0.0039  0.0014
0.0123  1 .
2636 CB   CB   . ALA ALA ALA A A 352 352 . 0.2240 0.1759 0.1497 -0.0116 -0.0250
0.0341  1 .
2637 C    C    . ALA ALA ALA A A 352 352 . 0.2031 0.1960 0.1475 0.0045  -0.0084
0.0103  1 .
2638 O    O    . ALA ALA ALA A A 352 352 . 0.2255 0.2041 0.1697 0.0012  -0.0375 -
0.0007 1 .
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2639 N    N    . ILE ILE ILE A A 353 353 . 0.2053 0.2103 0.1367 -0.0057 0.0032
0.0250  1 .
2640 CA   CA   . ILE ILE ILE A A 353 353 . 0.1874 0.2138 0.1627 0.0063  0.0024
0.0132  1 .
2641 CB   CB   . ILE ILE ILE A A 353 353 . 0.1821 0.2282 0.1563 -0.0053 -0.0013
0.0063  1 .
2642 CG1  CG1  . ILE ILE ILE A A 353 353 . 0.1680 0.2323 0.1562 0.0316  0.0020
0.0231  1 .
2643 CD   CD   . ILE ILE ILE A A 353 353 . 0.2461 0.2653 0.2210 -0.0179 0.0340  -
0.0093 1 .
2644 CG2  CG2  . ILE ILE ILE A A 353 353 . 0.2189 0.2598 0.1529 -0.0196 0.0189  -
0.0055 1 .
2645 C    C    . ILE ILE ILE A A 353 353 . 0.2036 0.2112 0.1583 -0.0090 0.0061
0.0163  1 .
2646 O    O    . ILE ILE ILE A A 353 353 . 0.2207 0.2469 0.1595 -0.0170 0.0092  -
0.0016 1 .
2647 N    N    . GLN GLN GLN A A 354 354 . 0.2159 0.2444 0.1691 -0.0017 0.0112
0.0274  1 .
2648 CA   CA   . GLN GLN GLN A A 354 354 . 0.2317 0.2340 0.1898 -0.0043 -0.0134
0.0233  1 .
2649 CB   CB   . GLN GLN GLN A A 354 354 . 0.2543 0.2244 0.2022 -0.0026 -0.0129
0.0429  1 .
2650 CG   CG   . GLN GLN GLN A A 354 354 . 0.3234 0.2739 0.3130 -0.0268 -0.0334
0.0521  1 .
2651 CD   CD   . GLN GLN GLN A A 354 354 . 0.4024 0.3006 0.4154 -0.0132 0.0180
0.0441  1 .
2652 OE1  OE1  . GLN GLN GLN A A 354 354 . 0.4816 0.3895 0.4734 0.0073  0.0449
0.1100  1 .
2653 NE2  NE2  . GLN GLN GLN A A 354 354 . 0.4539 0.3257 0.3933 -0.0434 -0.0016
0.1214  1 .
2654 C    C    . GLN GLN GLN A A 354 354 . 0.2218 0.2572 0.1759 -0.0019 -0.0044
0.0143  1 .
2655 O    O    . GLN GLN GLN A A 354 354 . 0.2613 0.2542 0.1728 0.0052  -0.0180
0.0261  1 .
2656 N    N    . ALA ALA ALA A A 355 355 . 0.2309 0.2123 0.1360 -0.0115 -0.0123
0.0213  1 .
2657 CA   CA   . ALA ALA ALA A A 355 355 . 0.2054 0.2342 0.1635 0.0060  -0.0010
0.0139  1 .
2658 CB   CB   . ALA ALA ALA A A 355 355 . 0.2270 0.2558 0.1443 0.0208  0.0042
0.0147  1 .
2659 C    C    . ALA ALA ALA A A 355 355 . 0.2121 0.2332 0.1776 0.0086  -0.0055
0.0000  1 .
2660 O    O    . ALA ALA ALA A A 355 355 . 0.2110 0.2430 0.1839 -0.0069 -0.0158
0.0158  1 .
2661 N    N    . CYS CYS CYS A A 356 356 . 0.2125 0.2072 0.1667 0.0034  -0.0109
0.0115  1 .
2662 CA   CA   . CYS CYS CYS A A 356 356 . 0.2113 0.2154 0.1381 0.0214  -0.0181
0.0337  1 .
2663 CB   CB   . CYS CYS CYS A A 356 356 . 0.2122 0.2175 0.1263 0.0369  -0.0173
0.0350  1 .
2664 SG   SG   . CYS CYS CYS A A 356 356 . 0.2516 0.2425 0.1761 0.0107  -0.0349 -
0.0020 1 .
2665 C    C    . CYS CYS CYS A A 356 356 . 0.2454 0.2512 0.1634 -0.0004 -0.0072
0.0184  1 .
2666 O    O    . CYS CYS CYS A A 356 356 . 0.2499 0.2318 0.1698 -0.0111 -0.0187
0.0422  1 .
2667 N    N    . LYS LYS LYS A A 357 357 . 0.2379 0.2540 0.1411 -0.0066 -0.0100
0.0287  1 .
2668 CA   CA   . LYS LYS LYS A A 357 357 . 0.2491 0.2979 0.1791 0.0011  0.0013
0.0183  1 .
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2669 CB   CB   . LYS LYS LYS A A 357 357 . 0.2590 0.3227 0.1900 -0.0197 -0.0040
0.0328  1 .
2670 CG   CG   . LYS LYS LYS A A 357 357 . 0.3077 0.3623 0.2659 -0.0176 -0.0244
0.0357  1 .
2671 CD   CD   . LYS LYS LYS A A 357 357 . 0.2943 0.4917 0.3599 -0.0683 -0.0062
0.0808  1 .
2672 CE   CE   . LYS LYS LYS A A 357 357 . 0.3651 0.5716 0.3982 -0.0745 -0.0126
0.1175  1 .
2673 NZ   NZ   . LYS LYS LYS A A 357 357 . 0.4503 0.5137 0.4547 -0.0897 -0.0129
0.1605  1 .
2674 C    C    . LYS LYS LYS A A 357 357 . 0.2656 0.2812 0.1817 0.0018  -0.0022
0.0231  1 .
2675 O    O    . LYS LYS LYS A A 357 357 . 0.2779 0.2867 0.1717 0.0000  0.0057
0.0150  1 .
2676 N    N    . LEU LEU LEU A A 358 358 . 0.2564 0.2760 0.1916 0.0147  -0.0022
0.0171  1 .
2677 CA   CA   . LEU LEU LEU A A 358 358 . 0.2638 0.2738 0.2082 0.0128  -0.0038
0.0093  1 .
2678 CB   CB   . LEU LEU LEU A A 358 358 . 0.2705 0.2939 0.2210 0.0331  0.0083
0.0067  1 .
2679 CG   CG   . LEU LEU LEU A A 358 358 . 0.3063 0.3296 0.1955 0.0229  -0.0226
0.0159  1 .
2680 CD1  CD1  . LEU LEU LEU A A 358 358 . 0.3771 0.3323 0.2497 0.0411  -0.0629
0.0827  1 .
2681 CD2  CD2  . LEU LEU LEU A A 358 358 . 0.3579 0.3413 0.2598 -0.0101 0.0302  -
0.0074 1 .
2682 C    C    . LEU LEU LEU A A 358 358 . 0.2731 0.2707 0.2151 0.0064  0.0006
0.0202  1 .
2683 O    O    . LEU LEU LEU A A 358 358 . 0.3170 0.2763 0.2219 -0.0161 -0.0115
0.0182  1 .
2684 N    N    . ALA ALA ALA A A 359 359 . 0.2453 0.2482 0.1852 -0.0064 -0.0001
0.0279  1 .
2685 CA   CA   . ALA ALA ALA A A 359 359 . 0.2421 0.2366 0.1798 0.0094  0.0093
0.0142  1 .
2686 CB   CB   . ALA ALA ALA A A 359 359 . 0.2108 0.2339 0.1395 -0.0029 -0.0048
0.0131  1 .
2687 C    C    . ALA ALA ALA A A 359 359 . 0.2499 0.2576 0.1903 0.0133  -0.0119
0.0046  1 .
2688 O    O    . ALA ALA ALA A A 359 359 . 0.2539 0.2294 0.1890 -0.0154 -0.0237
0.0054  1 .
2689 N    N    . GLN GLN GLN A A 360 360 . 0.2318 0.2490 0.1818 0.0045  0.0017
0.0008  1 .
2690 CA   CA   . GLN GLN GLN A A 360 360 . 0.2445 0.2714 0.1775 0.0323  -0.0055
0.0224  1 .
2691 CB   CB   . GLN GLN GLN A A 360 360 . 0.2483 0.2833 0.1983 0.0242  0.0137  -
0.0034 1 .
2692 CG   CG   . GLN GLN GLN A A 360 360 . 0.2760 0.3211 0.1856 0.0484  -0.0303
0.0207  1 .
2693 CD   CD   . GLN GLN GLN A A 360 360 . 0.2852 0.3214 0.2738 0.0288  -0.0181 -
0.0048 1 .
2694 OE1  OE1  . GLN GLN GLN A A 360 360 . 0.3465 0.3131 0.2755 0.0260  0.0216
0.0020  1 .
2695 NE2  NE2  . GLN GLN GLN A A 360 360 . 0.2639 0.2585 0.1355 0.0174  -0.0187
0.0220  1 .
2696 C    C    . GLN GLN GLN A A 360 360 . 0.2673 0.2890 0.1917 0.0145  -0.0047
0.0161  1 .
2697 O    O    . GLN GLN GLN A A 360 360 . 0.2853 0.2824 0.1958 0.0212  -0.0027
0.0083  1 .
2698 N    N    . GLU GLU GLU A A 361 361 . 0.2691 0.2806 0.1756 0.0028  -0.0150
0.0367  1 .
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2699 CA   CA   . GLU GLU GLU A A 361 361 . 0.3332 0.3447 0.2326 -0.0095 -0.0120
0.0428  1 .
2700 CB   CB   . GLU GLU GLU A A 361 361 . 0.3084 0.3455 0.2378 -0.0453 -0.0270
0.0403  1 .
2701 CG   CG   . GLU GLU GLU A A 361 361 . 0.3886 0.4319 0.4472 -0.0175 -0.0194
0.0390  1 .
2702 CD   CD   . GLU GLU GLU A A 361 361 . 0.5240 0.4917 0.5795 -0.0188 -0.0298
0.0003  1 .
2703 OE1  OE1  . GLU GLU GLU A A 361 361 . 0.5699 0.5440 0.5911 -0.0274 -0.0586
0.0549  1 .
2704 OE2  OE2  . GLU GLU GLU A A 361 361 . 0.5868 0.4743 0.6577 -0.0095 0.0072
0.0359  1 .
2705 C    C    . GLU GLU GLU A A 361 361 . 0.3187 0.3454 0.2150 -0.0249 -0.0087
0.0285  1 .
2706 O    O    . GLU GLU GLU A A 361 361 . 0.3810 0.4101 0.2339 0.0007  -0.0043
0.0237  1 .
2707 N    N    . ASN ASN ASN A A 362 362 . 0.3087 0.3650 0.2013 -0.0028 -0.0155
0.0094  1 .
2708 CA   CA   . ASN ASN ASN A A 362 362 . 0.3232 0.3493 0.2124 0.0000  -0.0259
0.0232  1 .
2709 CB   CB   . ASN ASN ASN A A 362 362 . 0.2947 0.3371 0.2241 0.0121  -0.0357
0.0205  1 .
2710 CG   CG   . ASN ASN ASN A A 362 362 . 0.3856 0.3810 0.2320 0.0142  -0.0481
0.0542  1 .
2711 OD1  OD1  . ASN ASN ASN A A 362 362 . 0.4328 0.4713 0.2214 0.0403  -0.0974
0.0742  1 .
2712 ND2  ND2  . ASN ASN ASN A A 362 362 . 0.3951 0.3946 0.2051 0.0237  -0.0325
0.0433  1 .
2713 C    C    . ASN ASN ASN A A 362 362 . 0.3008 0.3479 0.2155 -0.0078 -0.0163
0.0087  1 .
2714 O    O    . ASN ASN ASN A A 362 362 . 0.2980 0.3896 0.2194 -0.0038 -0.0539
0.0006  1 .
2715 N    N    . GLY GLY GLY A A 363 363 . 0.3001 0.3288 0.1853 -0.0044 -0.0001
0.0129  1 .
2716 CA   CA   . GLY GLY GLY A A 363 363 . 0.3014 0.3072 0.2055 -0.0239 -0.0078 -
0.0125 1 .
2717 C    C    . GLY GLY GLY A A 363 363 . 0.3123 0.2897 0.2108 -0.0279 0.0007  -
0.0257 1 .
2718 O    O    . GLY GLY GLY A A 363 363 . 0.3717 0.3100 0.2109 -0.0375 0.0029  -
0.0279 1 .
2719 N    N    . TRP TRP TRP A A 364 364 . 0.2837 0.2805 0.1885 -0.0220 -0.0327 -
0.0298 1 .
2720 CA   CA   . TRP TRP TRP A A 364 364 . 0.2425 0.2685 0.2035 -0.0026 -0.0239 -
0.0241 1 .
2721 CB   CB   . TRP TRP TRP A A 364 364 . 0.2459 0.2625 0.1775 0.0207  -0.0297 -
0.0412 1 .
2722 CG   CG   . TRP TRP TRP A A 364 364 . 0.2644 0.3413 0.1813 0.0425  -0.0380 -
0.0242 1 .
2723 CD1  CD1  . TRP TRP TRP A A 364 364 . 0.2683 0.3646 0.2053 0.0430  -0.0738 -
0.0416 1 .
2724 NE1  NE1  . TRP TRP TRP A A 364 364 . 0.3431 0.3133 0.1802 0.0574  -0.0432 -
0.0570 1 .
2725 CE2  CE2  . TRP TRP TRP A A 364 364 . 0.2830 0.3125 0.2138 0.0359  -0.0454 -
0.0508 1 .
2726 CD2  CD2  . TRP TRP TRP A A 364 364 . 0.2936 0.3308 0.1989 0.0350  -0.0635 -
0.0298 1 .
2727 CE3  CE3  . TRP TRP TRP A A 364 364 . 0.2779 0.3286 0.1838 0.0235  -0.0496 -
0.0537 1 .
2728 CZ3  CZ3  . TRP TRP TRP A A 364 364 . 0.2453 0.2521 0.2396 0.0104  -0.0086 -
0.0494 1 .
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2729 CH2  CH2  . TRP TRP TRP A A 364 364 . 0.2665 0.3356 0.2720 0.0374  -0.0208 -
0.0057 1 .
2730 CZ2  CZ2  . TRP TRP TRP A A 364 364 . 0.2934 0.3703 0.2422 0.0248  -0.0359 -
0.0363 1 .
2731 C    C    . TRP TRP TRP A A 364 364 . 0.2565 0.2589 0.1645 -0.0091 -0.0296 -
0.0226 1 .
2732 O    O    . TRP TRP TRP A A 364 364 . 0.2573 0.2966 0.1506 -0.0179 -0.0457 -
0.0019 1 .
2733 N    N    . GLY GLY GLY A A 365 365 . 0.2490 0.2266 0.1653 0.0012  -0.0303 -
0.0093 1 .
2734 CA   CA   . GLY GLY GLY A A 365 365 . 0.2141 0.2318 0.1544 0.0119  -0.0285 -
0.0148 1 .
2735 C    C    . GLY GLY GLY A A 365 365 . 0.1933 0.2011 0.1440 -0.0046 -0.0105
0.0127  1 .
2736 O    O    . GLY GLY GLY A A 365 365 . 0.2010 0.2394 0.1134 0.0070  -0.0339 -
0.0122 1 .
2737 N    N    . VAL VAL VAL A A 366 366 . 0.1716 0.2093 0.1237 -0.0027 -0.0248 -
0.0085 1 .
2738 CA   CA   . VAL VAL VAL A A 366 366 . 0.2104 0.1883 0.1328 -0.0046 -0.0136 -
0.0095 1 .
2739 CB   CB   . VAL VAL VAL A A 366 366 . 0.2136 0.1629 0.1040 -0.0131 -0.0345 -
0.0120 1 .
2740 CG1  CG1  . VAL VAL VAL A A 366 366 . 0.2419 0.2360 0.1058 -0.0111 -0.0249 -
0.0748 1 .
2741 CG2  CG2  . VAL VAL VAL A A 366 366 . 0.2082 0.1697 0.1245 -0.0099 -0.0373
0.0251  1 .
2742 C    C    . VAL VAL VAL A A 366 366 . 0.1931 0.1940 0.1414 -0.0069 -0.0135 -
0.0080 1 .
2743 O    O    . VAL VAL VAL A A 366 366 . 0.2097 0.2118 0.1172 -0.0155 -0.0044
0.0030  1 .
2744 N    N    . MET MET MET A A 367 367 . 0.1970 0.1884 0.1094 -0.0215 -0.0111 -
0.0076 1 .
2745 CA   CA   . MET MET MET A A 367 367 . 0.1863 0.1594 0.1256 -0.0260 -0.0193 -
0.0156 1 .
2746 CB   CB   . MET MET MET A A 367 367 . 0.2024 0.1916 0.1287 -0.0164 -0.0060
0.0056  1 .
2747 CG   CG   . MET MET MET A A 367 367 . 0.1971 0.1911 0.0804 -0.0655 0.0088
0.0324  1 .
2748 SD   SD   . MET MET MET A A 367 367 . 0.2014 0.2633 0.1933 -0.0290 -0.0089 -
0.0334 1 .
2749 CE   CE   . MET MET MET A A 367 367 . 0.3556 0.2694 0.2408 -0.0767 0.1086
0.0003  1 .
2750 C    C    . MET MET MET A A 367 367 . 0.1634 0.1639 0.1185 -0.0033 -0.0208 -
0.0161 1 .
2751 O    O    . MET MET MET A A 367 367 . 0.1534 0.1655 0.1255 0.0015  -0.0331 -
0.0289 1 .
2752 N    N    . VAL VAL VAL A A 368 368 . 0.1491 0.1639 0.1137 -0.0114 -0.0109 -
0.0203 1 .
2753 CA   CA   . VAL VAL VAL A A 368 368 . 0.1329 0.1624 0.1054 -0.0076 -0.0003 -
0.0143 1 .
2754 CB   CB   . VAL VAL VAL A A 368 368 . 0.1002 0.1502 0.0765 -0.0190 -0.0117
0.0041  1 .
2755 CG1  CG1  . VAL VAL VAL A A 368 368 . 0.1456 0.1744 0.0777 -0.0355 0.0094  -
0.0116 1 .
2756 CG2  CG2  . VAL VAL VAL A A 368 368 . 0.1713 0.1745 0.1593 -0.0125 0.0271
0.0279  1 .
2757 C    C    . VAL VAL VAL A A 368 368 . 0.1441 0.1272 0.1033 -0.0075 -0.0083 -
0.0016 1 .
2758 O    O    . VAL VAL VAL A A 368 368 . 0.1591 0.1502 0.0934 0.0040  -0.0118 -
0.0011 1 .
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2759 N    N    . SER SER SER A A 369 369 . 0.1426 0.1612 0.0940 0.0027  0.0096
0.0054  1 .
2760 CA   CA   . SER SER SER A A 369 369 . 0.1588 0.1794 0.1069 -0.0258 0.0015
0.0043  1 .
2761 CB   CB   . SER SER SER A A 369 369 . 0.1499 0.1701 0.1082 -0.0336 0.0034  -
0.0096 1 .
2762 OG   OG   . SER SER SER A A 369 369 . 0.1475 0.1845 0.1295 -0.0027 0.0176
0.0059  1 .
2763 C    C    . SER SER SER A A 369 369 . 0.1654 0.1391 0.1140 -0.0273 -0.0059 -
0.0019 1 .
2764 O    O    . SER SER SER A A 369 369 . 0.2041 0.1576 0.1622 -0.0206 -0.0075 -
0.0010 1 .
2765 N    N    . HIS HIS HIS A A 370 370 . 0.1658 0.1701 0.1034 -0.0001 -0.0109 -
0.0067 1 .
2766 CA   CA   . HIS HIS HIS A A 370 370 . 0.1597 0.1456 0.1094 -0.0003 -0.0075 -
0.0162 1 .
2767 CB   CB   . HIS HIS HIS A A 370 370 . 0.1860 0.1372 0.1315 -0.0214 -0.0126 -
0.0210 1 .
2768 CG   CG   . HIS HIS HIS A A 370 370 . 0.1732 0.1317 0.1193 -0.0177 -0.0194
0.0011  1 .
2769 ND1  ND1  . HIS HIS HIS A A 370 370 . 0.2083 0.1745 0.1486 -0.0264 0.0438  -
0.0251 1 .
2770 CE1  CE1  . HIS HIS HIS A A 370 370 . 0.1801 0.1808 0.1791 0.0111  -0.0005 -
0.0022 1 .
2771 NE2  NE2  . HIS HIS HIS A A 370 370 . 0.2168 0.1944 0.1881 -0.0081 -0.0163
0.0075  1 .
2772 CD2  CD2  . HIS HIS HIS A A 370 370 . 0.1579 0.1532 0.1749 -0.0417 -0.0065 -
0.0085 1 .
2773 C    C    . HIS HIS HIS A A 370 370 . 0.1447 0.1725 0.1194 0.0006  -0.0046 -
0.0225 1 .
2774 O    O    . HIS HIS HIS A A 370 370 . 0.1551 0.1612 0.1350 0.0270  0.0018  -
0.0324 1 .
2775 N    N    . ARG ARG ARG A A 371 371 . 0.1392 0.1305 0.1075 -0.0116 0.0079  -
0.0373 1 .
2776 CA   CA   . ARG ARG ARG A A 371 371 . 0.1219 0.1098 0.1218 -0.0012 0.0113  -
0.0097 1 .
2777 CB   CB   . ARG ARG ARG A A 371 371 . 0.1288 0.0790 0.0847 -0.0146 -0.0081 -
0.0204 1 .
2778 CG   CG   . ARG ARG ARG A A 371 371 . 0.1763 0.1146 0.0732 -0.0132 -0.0335 -
0.0177 1 .
2779 CD   CD   . ARG ARG ARG A A 371 371 . 0.1608 0.1900 0.1648 -0.0310 -0.0207 -
0.0065 1 .
2780 NE   NE   . ARG ARG ARG A A 371 371 . 0.1644 0.1909 0.1575 0.0034  -0.0261 -
0.0143 1 .
2781 CZ   CZ   . ARG ARG ARG A A 371 371 . 0.1886 0.1686 0.1763 -0.0111 0.0038  -
0.0253 1 .
2782 NH1  NH1  . ARG ARG ARG A A 371 371 . 0.1642 0.1643 0.1560 -0.0387 -0.0355 -
0.0183 1 .
2783 NH2  NH2  . ARG ARG ARG A A 371 371 . 0.1611 0.1891 0.1633 -0.0098 -0.0139
0.0003  1 .
2784 C    C    . ARG ARG ARG A A 371 371 . 0.1306 0.1175 0.1242 -0.0089 0.0020  -
0.0056 1 .
2785 O    O    . ARG ARG ARG A A 371 371 . 0.1350 0.1335 0.1121 -0.0009 0.0122  -
0.0140 1 .
2786 N    N    . SER SER SER A A 372 372 . 0.1332 0.1250 0.1268 -0.0213 0.0159  -
0.0126 1 .
2787 CA   CA   . SER SER SER A A 372 372 . 0.1427 0.1533 0.1224 -0.0198 -0.0003 -
0.0006 1 .
2788 CB   CB   . SER SER SER A A 372 372 . 0.1153 0.1705 0.1696 0.0025  0.0034  -
0.0012 1 .
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2789 OG   OG   . SER SER SER A A 372 372 . 0.1418 0.1879 0.1897 -0.0116 -0.0055 -
0.0008 1 .
2790 C    C    . SER SER SER A A 372 372 . 0.1665 0.1542 0.1515 -0.0018 -0.0144
0.0010  1 .
2791 O    O    . SER SER SER A A 372 372 . 0.1717 0.1452 0.1309 0.0048  0.0232
0.0103  1 .
2792 N    N    . GLY GLY GLY A A 373 373 . 0.1484 0.1400 0.1310 -0.0271 0.0027  -
0.0205 1 .
2793 CA   CA   . GLY GLY GLY A A 373 373 . 0.1341 0.1507 0.1262 -0.0075 -0.0052
0.0134  1 .
2794 C    C    . GLY GLY GLY A A 373 373 . 0.1409 0.1325 0.1552 0.0086  0.0147
0.0114  1 .
2795 O    O    . GLY GLY GLY A A 373 373 . 0.1449 0.1556 0.2246 0.0045  0.0279
0.0213  1 .
2796 N    N    . GLU GLU GLU A A 374 374 . 0.1425 0.1495 0.1386 -0.0097 -0.0040
0.0192  1 .
2797 CA   CA   . GLU GLU GLU A A 374 374 . 0.1490 0.1382 0.1259 0.0043  -0.0051 -
0.0060 1 .
2798 CB   CB   . GLU GLU GLU A A 374 374 . 0.2009 0.1111 0.1121 -0.0270 0.0078  -
0.0078 1 .
2799 CG   CG   . GLU GLU GLU A A 374 374 . 0.2042 0.1139 0.1224 -0.0616 -0.0133
0.0140  1 .
2800 CD   CD   . GLU GLU GLU A A 374 374 . 0.1501 0.1380 0.1429 0.0003  0.0084  -
0.0078 1 .
2801 OE1  OE1  . GLU GLU GLU A A 374 374 . 0.1809 0.1629 0.1678 0.0141  -0.0019
0.0179  1 .
2802 OE2  OE2  . GLU GLU GLU A A 374 374 . 0.2032 0.1734 0.1617 0.0198  -0.0092
0.0220  1 .
2803 C    C    . GLU GLU GLU A A 374 374 . 0.1348 0.1378 0.1056 0.0016  -0.0160
0.0145  1 .
2804 O    O    . GLU GLU GLU A A 374 374 . 0.1448 0.1383 0.1106 -0.0179 0.0177  -
0.0128 1 .
2805 N    N    . THR THR THR A A 375 375 . 0.1305 0.1263 0.0963 0.0051  -0.0148
0.0094  1 .
2806 CA   CA   . THR THR THR A A 375 375 . 0.1218 0.1309 0.1127 -0.0054 -0.0148
0.0016  1 .
2807 CB   CB   . THR THR THR A A 375 375 . 0.1290 0.1230 0.1153 0.0065  0.0159  -
0.0094 1 .
2808 OG1  OG1  . THR THR THR A A 375 375 . 0.1671 0.1496 0.1609 0.0075  0.0326  -
0.0356 1 .
2809 CG2  CG2  . THR THR THR A A 375 375 . 0.1859 0.1544 0.2089 -0.0056 0.0050  -
0.0493 1 .
2810 C    C    . THR THR THR A A 375 375 . 0.1329 0.1486 0.1231 0.0046  -0.0096 -
0.0063 1 .
2811 O    O    . THR THR THR A A 375 375 . 0.1293 0.1193 0.1508 -0.0190 -0.0083 -
0.0174 1 .
2812 N    N    . GLU GLU GLU A A 376 376 . 0.1592 0.1784 0.1558 -0.0019 -0.0160
0.0192  1 .
2813 CA   CA   . GLU GLU GLU A A 376 376 . 0.1553 0.2027 0.1634 0.0032  -0.0198
0.0262  1 .
2814 CB   CB   . GLU GLU GLU A A 376 376 . 0.1493 0.2191 0.1907 0.0075  -0.0635
0.0091  1 .
2815 CG   CG   . GLU GLU GLU A A 376 376 . 0.1553 0.2247 0.2026 0.0123  -0.0217 -
0.0289 1 .
2816 CD   CD   . GLU GLU GLU A A 376 376 . 0.2072 0.2137 0.2015 -0.0025 -0.0350
0.0059  1 .
2817 OE1  OE1  . GLU GLU GLU A A 376 376 . 0.1760 0.3313 0.2213 -0.0069 -0.0031 -
0.0123 1 .
2818 OE2  OE2  . GLU GLU GLU A A 376 376 . 0.1787 0.1583 0.1500 0.0273  -0.0049 -
0.0121 1 .
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2819 C    C    . GLU GLU GLU A A 376 376 . 0.1535 0.1643 0.1709 -0.0102 -0.0106
0.0107  1 .
2820 O    O    . GLU GLU GLU A A 376 376 . 0.1689 0.1809 0.1730 -0.0058 0.0253
0.0000  1 .
2821 N    N    . ASP ASP ASP A A 377 377 . 0.1289 0.1096 0.1456 -0.0117 -0.0084
0.0038  1 .
2822 CA   CA   . ASP ASP ASP A A 377 377 . 0.1640 0.1435 0.1251 0.0006  -0.0097 -
0.0094 1 .
2823 CB   CB   . ASP ASP ASP A A 377 377 . 0.1819 0.1358 0.1677 -0.0149 0.0038
0.0150  1 .
2824 CG   CG   . ASP ASP ASP A A 377 377 . 0.2727 0.1881 0.1893 -0.0435 -0.0052
0.0048  1 .
2825 OD1  OD1  . ASP ASP ASP A A 377 377 . 0.3049 0.2955 0.2637 -0.0466 0.0304  -
0.0178 1 .
2826 OD2  OD2  . ASP ASP ASP A A 377 377 . 0.2160 0.2492 0.2403 -0.0667 0.0136  -
0.0344 1 .
2827 C    C    . ASP ASP ASP A A 377 377 . 0.1816 0.1700 0.1721 -0.0106 -0.0093 -
0.0077 1 .
2828 O    O    . ASP ASP ASP A A 377 377 . 0.1637 0.2070 0.1877 -0.0346 0.0071  -
0.0104 1 .
2829 N    N    . THR THR THR A A 378 378 . 0.1831 0.1467 0.1148 -0.0052 0.0020  -
0.0109 1 .
2830 CA   CA   . THR THR THR A A 378 378 . 0.1691 0.1248 0.1263 -0.0135 -0.0094 -
0.0019 1 .
2831 CB   CB   . THR THR THR A A 378 378 . 0.1634 0.1318 0.1380 -0.0001 0.0071
0.0011  1 .
2832 OG1  OG1  . THR THR THR A A 378 378 . 0.1811 0.1581 0.1620 0.0223  -0.0025
0.0280  1 .
2833 CG2  CG2  . THR THR THR A A 378 378 . 0.1881 0.1671 0.1482 0.0030  -0.0169
0.0308  1 .
2834 C    C    . THR THR THR A A 378 378 . 0.1506 0.1190 0.1171 -0.0021 -0.0027 -
0.0010 1 .
2835 O    O    . THR THR THR A A 378 378 . 0.1852 0.1417 0.1256 0.0110  -0.0049
0.0060  1 .
2836 N    N    . PHE PHE PHE A A 379 379 . 0.1371 0.1179 0.1203 -0.0345 -0.0014
0.0046  1 .
2837 CA   CA   . PHE PHE PHE A A 379 379 . 0.1621 0.1192 0.1342 -0.0183 -0.0117 -
0.0001 1 .
2838 CB   CB   . PHE PHE PHE A A 379 379 . 0.1711 0.1179 0.1389 -0.0091 -0.0069 -
0.0077 1 .
2839 CG   CG   . PHE PHE PHE A A 379 379 . 0.1719 0.1356 0.1483 -0.0270 -0.0006
0.0049  1 .
2840 CD1  CD1  . PHE PHE PHE A A 379 379 . 0.2422 0.1601 0.1107 0.0049  0.0068
0.0146  1 .
2841 CE1  CE1  . PHE PHE PHE A A 379 379 . 0.2685 0.1278 0.1827 -0.0144 0.0243
0.0171  1 .
2842 CZ   CZ   . PHE PHE PHE A A 379 379 . 0.1678 0.1664 0.2004 0.0265  0.0177
0.0199  1 .
2843 CE2  CE2  . PHE PHE PHE A A 379 379 . 0.1553 0.1675 0.2016 0.0014  0.0113
0.0310  1 .
2844 CD2  CD2  . PHE PHE PHE A A 379 379 . 0.1561 0.2000 0.2014 0.0072  -0.0046
0.0738  1 .
2845 C    C    . PHE PHE PHE A A 379 379 . 0.1438 0.1495 0.1333 -0.0091 -0.0044 -
0.0095 1 .
2846 O    O    . PHE PHE PHE A A 379 379 . 0.1615 0.1249 0.1112 -0.0159 -0.0132 -
0.0124 1 .
2847 N    N    . ILE ILE ILE A A 380 380 . 0.1346 0.1195 0.1277 -0.0166 -0.0175 -
0.0252 1 .
2848 CA   CA   . ILE ILE ILE A A 380 380 . 0.1314 0.1619 0.1049 -0.0091 -0.0009 -
0.0103 1 .
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2849 CB   CB   . ILE ILE ILE A A 380 380 . 0.1507 0.1335 0.1433 -0.0209 0.0077
0.0070  1 .
2850 CG1  CG1  . ILE ILE ILE A A 380 380 . 0.1103 0.1857 0.1147 -0.0357 0.0099
0.0356  1 .
2851 CD   CD   . ILE ILE ILE A A 380 380 . 0.1075 0.2122 0.1497 -0.0365 0.0142  -
0.0155 1 .
2852 CG2  CG2  . ILE ILE ILE A A 380 380 . 0.1526 0.1454 0.1110 0.0057  -0.0012
0.0183  1 .
2853 C    C    . ILE ILE ILE A A 380 380 . 0.1441 0.1167 0.1346 -0.0155 -0.0079
0.0103  1 .
2854 O    O    . ILE ILE ILE A A 380 380 . 0.1602 0.1339 0.0957 -0.0140 -0.0005
0.0195  1 .
2855 N    N    . ALA ALA ALA A A 381 381 . 0.1537 0.1209 0.1214 -0.0065 0.0072  -
0.0016 1 .
2856 CA   CA   . ALA ALA ALA A A 381 381 . 0.1158 0.1247 0.1279 -0.0124 0.0033
0.0045  1 .
2857 CB   CB   . ALA ALA ALA A A 381 381 . 0.1841 0.0806 0.1191 -0.0046 0.0057
0.0306  1 .
2858 C    C    . ALA ALA ALA A A 381 381 . 0.1508 0.1263 0.1116 -0.0255 0.0003
0.0045  1 .
2859 O    O    . ALA ALA ALA A A 381 381 . 0.1630 0.1381 0.1383 -0.0411 0.0064  -
0.0109 1 .
2860 N    N    . ASP ASP ASP A A 382 382 . 0.1246 0.1051 0.1012 -0.0175 0.0002
0.0011  1 .
2861 CA   CA   . ASP ASP ASP A A 382 382 . 0.1408 0.1520 0.1301 -0.0049 -0.0033
0.0056  1 .
2862 CB   CB   . ASP ASP ASP A A 382 382 . 0.1402 0.1818 0.1270 0.0067  0.0014
0.0174  1 .
2863 CG   CG   . ASP ASP ASP A A 382 382 . 0.1614 0.1846 0.1709 0.0221  -0.0077 -
0.0067 1 .
2864 OD1  OD1  . ASP ASP ASP A A 382 382 . 0.1978 0.2546 0.2288 -0.0122 -0.0081
0.0631  1 .
2865 OD2  OD2  . ASP ASP ASP A A 382 382 . 0.1834 0.2368 0.2509 0.0331  0.0648
0.0142  1 .
2866 C    C    . ASP ASP ASP A A 382 382 . 0.1426 0.1227 0.1018 0.0136  0.0068
0.0037  1 .
2867 O    O    . ASP ASP ASP A A 382 382 . 0.1482 0.1743 0.1203 0.0009  0.0089
0.0045  1 .
2868 N    N    . LEU LEU LEU A A 383 383 . 0.1176 0.1107 0.1031 -0.0064 0.0060
0.0077  1 .
2869 CA   CA   . LEU LEU LEU A A 383 383 . 0.1321 0.1274 0.1141 0.0173  -0.0099 -
0.0093 1 .
2870 CB   CB   . LEU LEU LEU A A 383 383 . 0.1220 0.1354 0.1068 0.0317  -0.0018
0.0049  1 .
2871 CG   CG   . LEU LEU LEU A A 383 383 . 0.1395 0.1215 0.1111 0.0231  -0.0025
0.0183  1 .
2872 CD1  CD1  . LEU LEU LEU A A 383 383 . 0.1600 0.1444 0.1200 0.0002  -0.0144
0.0231  1 .
2873 CD2  CD2  . LEU LEU LEU A A 383 383 . 0.1553 0.1584 0.1454 0.0207  0.0417  -
0.0040 1 .
2874 C    C    . LEU LEU LEU A A 383 383 . 0.1517 0.1457 0.1121 -0.0062 -0.0075 -
0.0020 1 .
2875 O    O    . LEU LEU LEU A A 383 383 . 0.1792 0.1876 0.1208 -0.0114 -0.0041 -
0.0034 1 .
2876 N    N    . VAL VAL VAL A A 384 384 . 0.1645 0.1318 0.0997 -0.0232 0.0086  -
0.0191 1 .
2877 CA   CA   . VAL VAL VAL A A 384 384 . 0.1425 0.1613 0.1228 -0.0258 -0.0022 -
0.0082 1 .
2878 CB   CB   . VAL VAL VAL A A 384 384 . 0.1772 0.1411 0.1396 -0.0291 -0.0148 -
0.0097 1 .
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2879 CG1  CG1  . VAL VAL VAL A A 384 384 . 0.1555 0.1501 0.1010 0.0002  -0.0309
0.0116  1 .
2880 CG2  CG2  . VAL VAL VAL A A 384 384 . 0.1647 0.1806 0.1114 -0.0363 -0.0292 -
0.0344 1 .
2881 C    C    . VAL VAL VAL A A 384 384 . 0.1675 0.1522 0.1364 -0.0073 0.0027
0.0000  1 .
2882 O    O    . VAL VAL VAL A A 384 384 . 0.1744 0.1941 0.1166 0.0033  0.0117  -
0.0004 1 .
2883 N    N    . VAL VAL VAL A A 385 385 . 0.1477 0.1677 0.1417 -0.0032 0.0231
0.0094  1 .
2884 CA   CA   . VAL VAL VAL A A 385 385 . 0.1551 0.1816 0.1537 0.0017  0.0212
0.0185  1 .
2885 CB   CB   . VAL VAL VAL A A 385 385 . 0.1377 0.1729 0.1200 0.0108  0.0332
0.0188  1 .
2886 CG1  CG1  . VAL VAL VAL A A 385 385 . 0.1283 0.2276 0.1214 0.0110  0.0356  -
0.0239 1 .
2887 CG2  CG2  . VAL VAL VAL A A 385 385 . 0.1942 0.1303 0.1579 -0.0262 -0.0127
0.0091  1 .
2888 C    C    . VAL VAL VAL A A 385 385 . 0.1791 0.1680 0.1588 -0.0059 0.0215
0.0093  1 .
2889 O    O    . VAL VAL VAL A A 385 385 . 0.1796 0.2096 0.1603 -0.0040 0.0201
0.0259  1 .
2890 N    N    . GLY GLY GLY A A 386 386 . 0.1820 0.1409 0.1561 -0.0279 0.0328
0.0149  1 .
2891 CA   CA   . GLY GLY GLY A A 386 386 . 0.1959 0.1812 0.1290 -0.0120 0.0293
0.0148  1 .
2892 C    C    . GLY GLY GLY A A 386 386 . 0.1876 0.1733 0.1642 0.0018  0.0151  -
0.0014 1 .
2893 O    O    . GLY GLY GLY A A 386 386 . 0.1921 0.2051 0.1635 -0.0048 0.0130
0.0298  1 .
2894 N    N    . LEU LEU LEU A A 387 387 . 0.1494 0.1807 0.1536 0.0039  0.0014
0.0123  1 .
2895 CA   CA   . LEU LEU LEU A A 387 387 . 0.1672 0.1812 0.1297 -0.0106 -0.0023 -
0.0054 1 .
2896 CB   CB   . LEU LEU LEU A A 387 387 . 0.1477 0.1698 0.1403 0.0014  -0.0046 -
0.0017 1 .
2897 CG   CG   . LEU LEU LEU A A 387 387 . 0.1765 0.1878 0.1646 -0.0116 0.0020  -
0.0395 1 .
2898 CD1  CD1  . LEU LEU LEU A A 387 387 . 0.2160 0.2882 0.1697 0.0477  -0.0090 -
0.0383 1 .
2899 CD2  CD2  . LEU LEU LEU A A 387 387 . 0.3222 0.1947 0.2126 -0.0200 -0.0091
0.0050  1 .
2900 C    C    . LEU LEU LEU A A 387 387 . 0.1822 0.1812 0.1530 -0.0077 -0.0078
0.0098  1 .
2901 O    O    . LEU LEU LEU A A 387 387 . 0.2022 0.2043 0.1518 0.0056  -0.0094
0.0293  1 .
2902 N    N    . CYS CYS CYS A A 388 388 . 0.2014 0.1838 0.1551 -0.0133 0.0040  -
0.0032 1 .
2903 CA   CA   . CYS CYS CYS A A 388 388 . 0.2035 0.2463 0.1458 -0.0174 0.0217  -
0.0072 1 .
2904 CB   CB   . CYS CYS CYS A A 388 388 . 0.1957 0.2685 0.1681 -0.0168 0.0420
0.0254  1 .
2905 SG   SG   . CYS CYS CYS A A 388 388 . 0.3104 0.3543 0.2757 -0.0147 0.0462
0.0027  1 .
2906 C    C    . CYS CYS CYS A A 388 388 . 0.1801 0.2149 0.1448 -0.0078 0.0123  -
0.0094 1 .
2907 O    O    . CYS CYS CYS A A 388 388 . 0.2415 0.2768 0.1594 -0.0245 0.0439  -
0.0221 1 .
2908 N    N    . THR THR THR A A 389 389 . 0.1636 0.1953 0.1355 -0.0138 0.0221  -
0.0117 1 .
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2909 CA   CA   . THR THR THR A A 389 389 . 0.1763 0.1866 0.1453 -0.0037 0.0120  -
0.0130 1 .
2910 CB   CB   . THR THR THR A A 389 389 . 0.2215 0.1744 0.1612 -0.0072 0.0177
0.0100  1 .
2911 OG1  OG1  . THR THR THR A A 389 389 . 0.1942 0.1999 0.1804 -0.0039 -0.0012
0.0127  1 .
2912 CG2  CG2  . THR THR THR A A 389 389 . 0.2092 0.2200 0.2025 -0.0314 0.0388  -
0.0619 1 .
2913 C    C    . THR THR THR A A 389 389 . 0.1897 0.2072 0.1523 -0.0034 0.0158  -
0.0099 1 .
2914 O    O    . THR THR THR A A 389 389 . 0.2136 0.2512 0.1803 -0.0112 -0.0253 -
0.0365 1 .
2915 N    N    . GLY GLY GLY A A 390 390 . 0.1924 0.1900 0.1174 -0.0074 0.0173  -
0.0020 1 .
2916 CA   CA   . GLY GLY GLY A A 390 390 . 0.1845 0.1765 0.0978 -0.0229 0.0149  -
0.0112 1 .
2917 C    C    . GLY GLY GLY A A 390 390 . 0.1722 0.1578 0.1305 -0.0113 0.0024
0.0015  1 .
2918 O    O    . GLY GLY GLY A A 390 390 . 0.1884 0.1729 0.0931 -0.0260 -0.0215 -
0.0203 1 .
2919 N    N    . GLN GLN GLN A A 391 391 . 0.2004 0.1860 0.0809 -0.0312 -0.0076 -
0.0043 1 .
2920 CA   CA   . GLN GLN GLN A A 391 391 . 0.1540 0.1848 0.0982 -0.0297 -0.0055 -
0.0345 1 .
2921 CB   CB   . GLN GLN GLN A A 391 391 . 0.1798 0.2518 0.1779 -0.0062 -0.0006
0.0281  1 .
2922 CG   CG   . GLN GLN GLN A A 391 391 . 0.1746 0.2591 0.1905 -0.0252 -0.0227
0.0494  1 .
2923 CD   CD   . GLN GLN GLN A A 391 391 . 0.2166 0.2467 0.1751 -0.0321 -0.0283 -
0.0253 1 .
2924 OE1  OE1  . GLN GLN GLN A A 391 391 . 0.2181 0.2835 0.2136 -0.0074 -0.0346 -
0.0336 1 .
2925 NE2  NE2  . GLN GLN GLN A A 391 391 . 0.1922 0.2608 0.1583 -0.0095 -0.0384 -
0.0222 1 .
2926 C    C    . GLN GLN GLN A A 391 391 . 0.1746 0.1646 0.1105 -0.0011 -0.0047 -
0.0248 1 .
2927 O    O    . GLN GLN GLN A A 391 391 . 0.1921 0.1698 0.0785 0.0049  -0.0031 -
0.0142 1 .
2928 N    N    . ILE ILE ILE A A 392 392 . 0.1823 0.1659 0.0831 -0.0154 0.0088  -
0.0252 1 .
2929 CA   CA   . ILE ILE ILE A A 392 392 . 0.1649 0.1699 0.1048 -0.0204 0.0083  -
0.0280 1 .
2930 CB   CB   . ILE ILE ILE A A 392 392 . 0.1708 0.1715 0.0836 0.0040  -0.0017 -
0.0100 1 .
2931 CG1  CG1  . ILE ILE ILE A A 392 392 . 0.1277 0.1506 0.0978 0.0025  -0.0027 -
0.0242 1 .
2932 CD   CD   . ILE ILE ILE A A 392 392 . 0.1418 0.2191 0.1141 -0.0384 -0.0381 -
0.0572 1 .
2933 CG2  CG2  . ILE ILE ILE A A 392 392 . 0.1581 0.1726 0.1336 0.0166  0.0059  -
0.0495 1 .
2934 C    C    . ILE ILE ILE A A 392 392 . 0.1660 0.1572 0.0940 -0.0181 -0.0214 -
0.0113 1 .
2935 O    O    . ILE ILE ILE A A 392 392 . 0.1758 0.1691 0.1150 -0.0170 0.0129  -
0.0193 1 .
2936 N    N    . LYS LYS LYS A A 393 393 . 0.1450 0.1485 0.1111 -0.0174 -0.0146 -
0.0077 1 .
2937 CA   CA   . LYS LYS LYS A A 393 393 . 0.1455 0.1557 0.0994 -0.0230 -0.0121 -
0.0293 1 .
2938 CB   CB   . LYS LYS LYS A A 393 393 . 0.1691 0.1485 0.1536 -0.0136 -0.0278 -
0.0376 1 .
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2939 CG   CG   . LYS LYS LYS A A 393 393 . 0.1486 0.2107 0.1778 0.0084  -0.0257 -
0.0623 1 .
2940 CD   CD   . LYS LYS LYS A A 393 393 . 0.1252 0.2338 0.1715 -0.0271 -0.0003 -
0.0534 1 .
2941 CE   CE   . LYS LYS LYS A A 393 393 . 0.1248 0.2434 0.2230 -0.0369 -0.0299 -
0.0570 1 .
2942 NZ   NZ   . LYS LYS LYS A A 393 393 . 0.1605 0.2855 0.2321 -0.0141 -0.0176 -
0.0219 1 .
2943 C    C    . LYS LYS LYS A A 393 393 . 0.1566 0.1308 0.1010 -0.0011 0.0067  -
0.0262 1 .
2944 O    O    . LYS LYS LYS A A 393 393 . 0.1834 0.1359 0.1026 -0.0232 -0.0115 -
0.0187 1 .
2945 N    N    . THR THR THR A A 394 394 . 0.1554 0.1613 0.0940 -0.0070 -0.0094 -
0.0302 1 .
2946 CA   CA   . THR THR THR A A 394 394 . 0.1728 0.1707 0.1087 -0.0234 -0.0081 -
0.0155 1 .
2947 CB   CB   . THR THR THR A A 394 394 . 0.1398 0.1444 0.1098 -0.0020 -0.0357 -
0.0187 1 .
2948 OG1  OG1  . THR THR THR A A 394 394 . 0.1688 0.1396 0.1087 -0.0273 -0.0008 -
0.0321 1 .
2949 CG2  CG2  . THR THR THR A A 394 394 . 0.1593 0.1593 0.1923 -0.0150 0.0307
0.0096  1 .
2950 C    C    . THR THR THR A A 394 394 . 0.1552 0.1441 0.1248 -0.0161 -0.0029 -
0.0080 1 .
2951 O    O    . THR THR THR A A 394 394 . 0.1474 0.1763 0.1153 -0.0159 -0.0068 -
0.0083 1 .
2952 N    N    . GLY GLY GLY A A 395 395 . 0.1684 0.1411 0.0889 -0.0167 0.0209  -
0.0280 1 .
2953 CA   CA   . GLY GLY GLY A A 395 395 . 0.1977 0.1411 0.0901 -0.0316 0.0161  -
0.0037 1 .
2954 C    C    . GLY GLY GLY A A 395 395 . 0.1601 0.1518 0.1208 -0.0295 0.0072  -
0.0132 1 .
2955 O    O    . GLY GLY GLY A A 395 395 . 0.1709 0.1485 0.1333 -0.0392 0.0178  -
0.0381 1 .
2956 N    N    . ALA ALA ALA A A 396 396 . 0.1800 0.1495 0.1403 -0.0268 -0.0007 -
0.0116 1 .
2957 CA   CA   . ALA ALA ALA A A 396 396 . 0.1639 0.1368 0.1344 -0.0184 0.0127
0.0081  1 .
2958 CB   CB   . ALA ALA ALA A A 396 396 . 0.1395 0.1391 0.1365 -0.0276 0.0371
0.0101  1 .
2959 C    C    . ALA ALA ALA A A 396 396 . 0.1538 0.1411 0.1123 -0.0245 0.0139  -
0.0049 1 .
2960 O    O    . ALA ALA ALA A A 396 396 . 0.1894 0.1600 0.1367 -0.0361 -0.0061 -
0.0150 1 .
2961 N    N    . PRO PRO PRO A A 397 397 . 0.1514 0.1375 0.1383 -0.0265 0.0124  -
0.0391 1 .
2962 CA   CA   . PRO PRO PRO A A 397 397 . 0.1882 0.1578 0.1325 -0.0067 -0.0018 -
0.0457 1 .
2963 CB   CB   . PRO PRO PRO A A 397 397 . 0.1767 0.1499 0.1804 -0.0282 0.0024  -
0.0566 1 .
2964 CG   CG   . PRO PRO PRO A A 397 397 . 0.1831 0.1704 0.1717 -0.0448 0.0006  -
0.0216 1 .
2965 CD   CD   . PRO PRO PRO A A 397 397 . 0.1892 0.1321 0.1659 -0.0103 -0.0007 -
0.0660 1 .
2966 C    C    . PRO PRO PRO A A 397 397 . 0.1998 0.1537 0.1420 -0.0017 -0.0032 -
0.0279 1 .
2967 O    O    . PRO PRO PRO A A 397 397 . 0.2139 0.1915 0.1806 0.0049  -0.0105 -
0.0259 1 .
2968 N    N    . CYS CYS CYS A A 398 398 . 0.1454 0.1656 0.1307 -0.0144 0.0065  -
0.0297 1 .
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2969 CA   CA   . CYS CYS CYS A A 398 398 . 0.1481 0.1422 0.1211 -0.0346 -0.0037 -
0.0078 1 .
2970 CB   CB   . CYS CYS CYS A A 398 398 . 0.1420 0.1602 0.1084 -0.0547 0.0137  -
0.0269 1 .
2971 SG   SG   . CYS CYS CYS A A 398 398 . 0.2093 0.1985 0.1974 -0.0643 0.0141  -
0.0163 1 .
2972 C    C    . CYS CYS CYS A A 398 398 . 0.1312 0.1238 0.1250 -0.0147 0.0014  -
0.0092 1 .
2973 O    O    . CYS CYS CYS A A 398 398 . 0.1388 0.1086 0.1025 -0.0276 -0.0135
0.0019  1 .
2974 N    N    . ARG ARG ARG A A 399 399 . 0.1450 0.1202 0.1288 -0.0435 0.0035  -
0.0317 1 .
2975 CA   CA   . ARG ARG ARG A A 399 399 . 0.1320 0.1119 0.1322 -0.0336 0.0250  -
0.0253 1 .
2976 CB   CB   . ARG ARG ARG A A 399 399 . 0.1548 0.1462 0.1212 -0.0329 0.0005  -
0.0358 1 .
2977 CG   CG   . ARG ARG ARG A A 399 399 . 0.1078 0.1357 0.1742 -0.0087 0.0114  -
0.0275 1 .
2978 CD   CD   . ARG ARG ARG A A 399 399 . 0.1229 0.1053 0.1340 0.0022  0.0161  -
0.0237 1 .
2979 NE   NE   . ARG ARG ARG A A 399 399 . 0.1431 0.0943 0.1148 0.0007  0.0169  -
0.0119 1 .
2980 CZ   CZ   . ARG ARG ARG A A 399 399 . 0.1856 0.1441 0.1535 -0.0083 0.0389  -
0.0006 1 .
2981 NH1  NH1  . ARG ARG ARG A A 399 399 . 0.1622 0.1468 0.2055 -0.0286 0.0149  -
0.0138 1 .
2982 NH2  NH2  . ARG ARG ARG A A 399 399 . 0.1961 0.1702 0.1485 0.0116  -0.0050 -
0.0257 1 .
2983 C    C    . ARG ARG ARG A A 399 399 . 0.1241 0.1159 0.1116 -0.0200 0.0090  -
0.0208 1 .
2984 O    O    . ARG ARG ARG A A 399 399 . 0.1316 0.1215 0.1074 0.0014  0.0127  -
0.0074 1 .
2985 N    N    . SER SER SER A A 400 400 . 0.1184 0.1378 0.1106 -0.0110 0.0136  -
0.0102 1 .
2986 CA   CA   . SER SER SER A A 400 400 . 0.1012 0.0931 0.0981 -0.0184 -0.0042 -
0.0055 1 .
2987 CB   CB   . SER SER SER A A 400 400 . 0.1209 0.0856 0.1070 0.0103  -0.0165
0.0198  1 .
2988 OG   OG   . SER SER SER A A 400 400 . 0.1687 0.0843 0.1087 -0.0024 0.0141  -
0.0082 1 .
2989 C    C    . SER SER SER A A 400 400 . 0.1117 0.1081 0.0964 -0.0042 -0.0057 -
0.0102 1 .
2990 O    O    . SER SER SER A A 400 400 . 0.1383 0.1127 0.1179 -0.0026 -0.0031 -
0.0115 1 .
2991 N    N    . GLU GLU GLU A A 401 401 . 0.1232 0.0998 0.1128 0.0027  0.0031  -
0.0057 1 .
2992 CA   CA   . GLU GLU GLU A A 401 401 . 0.1167 0.1175 0.0944 0.0042  -0.0056 -
0.0170 1 .
2993 CB   CB   . GLU GLU GLU A A 401 401 . 0.0971 0.1117 0.1346 -0.0017 -0.0096 -
0.0238 1 .
2994 CG   CG   . GLU GLU GLU A A 401 401 . 0.1073 0.1052 0.1205 -0.0209 0.0015
0.0192  1 .
2995 CD   CD   . GLU GLU GLU A A 401 401 . 0.0926 0.1192 0.1183 -0.0087 0.0014  -
0.0012 1 .
2996 OE1  OE1  . GLU GLU GLU A A 401 401 . 0.1579 0.1392 0.1232 0.0242  0.0194  -
0.0245 1 .
2997 OE2  OE2  . GLU GLU GLU A A 401 401 . 0.1348 0.1529 0.1718 -0.0023 0.0006  -
0.0020 1 .
2998 C    C    . GLU GLU GLU A A 401 401 . 0.1450 0.1102 0.1099 -0.0076 -0.0005 -
0.0231 1 .
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2999 O    O    . GLU GLU GLU A A 401 401 . 0.1642 0.1314 0.1003 -0.0025 -0.0191 -
0.0206 1 .
3000 N    N    . ARG ARG ARG A A 402 402 . 0.1107 0.0964 0.0752 -0.0086 -0.0105 -
0.0273 1 .
3001 CA   CA   . ARG ARG ARG A A 402 402 . 0.1263 0.1186 0.0759 -0.0171 -0.0071 -
0.0145 1 .
3002 CB   CB   . ARG ARG ARG A A 402 402 . 0.1149 0.1293 0.0766 -0.0070 0.0025  -
0.0240 1 .
3003 CG   CG   . ARG ARG ARG A A 402 402 . 0.0996 0.1045 0.0985 0.0012  0.0224
0.0035  1 .
3004 CD   CD   . ARG ARG ARG A A 402 402 . 0.1160 0.0813 0.0745 0.0300  -0.0055 -
0.0172 1 .
3005 NE   NE   . ARG ARG ARG A A 402 402 . 0.1249 0.1295 0.1134 -0.0147 -0.0173 -
0.0284 1 .
3006 CZ   CZ   . ARG ARG ARG A A 402 402 . 0.0797 0.1302 0.1181 -0.0044 0.0068  -
0.0200 1 .
3007 NH1  NH1  . ARG ARG ARG A A 402 402 . 0.1434 0.1440 0.1345 -0.0211 0.0006  -
0.0209 1 .
3008 NH2  NH2  . ARG ARG ARG A A 402 402 . 0.1634 0.1428 0.1558 0.0094  0.0353  -
0.0379 1 .
3009 C    C    . ARG ARG ARG A A 402 402 . 0.1340 0.1180 0.0991 -0.0226 -0.0055 -
0.0176 1 .
3010 O    O    . ARG ARG ARG A A 402 402 . 0.1478 0.1085 0.1123 -0.0215 -0.0014 -
0.0246 1 .
3011 N    N    . LEU LEU LEU A A 403 403 . 0.1170 0.1048 0.1350 -0.0137 -0.0184
0.0006  1 .
3012 CA   CA   . LEU LEU LEU A A 403 403 . 0.1451 0.1162 0.1248 0.0098  -0.0013
0.0059  1 .
3013 CB   CB   . LEU LEU LEU A A 403 403 . 0.1476 0.0902 0.1127 -0.0072 0.0052
0.0370  1 .
3014 CG   CG   . LEU LEU LEU A A 403 403 . 0.1155 0.1207 0.1428 -0.0053 0.0257  -
0.0414 1 .
3015 CD1  CD1  . LEU LEU LEU A A 403 403 . 0.1821 0.1192 0.1160 -0.0269 -0.0046 -
0.0084 1 .
3016 CD2  CD2  . LEU LEU LEU A A 403 403 . 0.1270 0.1614 0.1601 -0.0086 0.0191  -
0.0187 1 .
3017 C    C    . LEU LEU LEU A A 403 403 . 0.1440 0.1144 0.1230 0.0025  -0.0005
0.0039  1 .
3018 O    O    . LEU LEU LEU A A 403 403 . 0.1423 0.1481 0.1275 -0.0092 0.0155
0.0141  1 .
3019 N    N    . ALA ALA ALA A A 404 404 . 0.1251 0.1339 0.1127 -0.0149 -0.0023 -
0.0332 1 .
3020 CA   CA   . ALA ALA ALA A A 404 404 . 0.1446 0.1081 0.0733 -0.0136 0.0274  -
0.0055 1 .
3021 CB   CB   . ALA ALA ALA A A 404 404 . 0.1410 0.1063 0.1239 -0.0304 0.0106  -
0.0378 1 .
3022 C    C    . ALA ALA ALA A A 404 404 . 0.1489 0.1118 0.1135 -0.0095 0.0058  -
0.0044 1 .
3023 O    O    . ALA ALA ALA A A 404 404 . 0.1423 0.1078 0.1230 -0.0098 -0.0023
0.0033  1 .
3024 N    N    . LYS LYS LYS A A 405 405 . 0.1548 0.1111 0.0847 0.0030  -0.0021
0.0015  1 .
3025 CA   CA   . LYS LYS LYS A A 405 405 . 0.1449 0.1252 0.0814 -0.0004 0.0013  -
0.0032 1 .
3026 CB   CB   . LYS LYS LYS A A 405 405 . 0.1234 0.1036 0.1250 -0.0065 0.0115  -
0.0120 1 .
3027 CG   CG   . LYS LYS LYS A A 405 405 . 0.1553 0.1146 0.1269 -0.0013 0.0196  -
0.0558 1 .
3028 CD   CD   . LYS LYS LYS A A 405 405 . 0.1955 0.0753 0.0921 0.0124  0.0033  -
0.0035 1 .
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3029 CE   CE   . LYS LYS LYS A A 405 405 . 0.2031 0.0911 0.1214 0.0078  0.0007  -
0.0103 1 .
3030 NZ   NZ   . LYS LYS LYS A A 405 405 . 0.1329 0.1508 0.0957 -0.0020 0.0070  -
0.0177 1 .
3031 C    C    . LYS LYS LYS A A 405 405 . 0.1191 0.1244 0.1277 -0.0020 0.0063
0.0002  1 .
3032 O    O    . LYS LYS LYS A A 405 405 . 0.1353 0.1387 0.0893 -0.0279 0.0052
0.0059  1 .
3033 N    N    . TYR TYR TYR A A 406 406 . 0.1585 0.1297 0.1377 -0.0136 0.0051  -
0.0243 1 .
3034 CA   CA   . TYR TYR TYR A A 406 406 . 0.1408 0.1310 0.1376 -0.0155 0.0158  -
0.0176 1 .
3035 CB   CB   . TYR TYR TYR A A 406 406 . 0.1421 0.1161 0.1318 -0.0300 -0.0043 -
0.0351 1 .
3036 CG   CG   . TYR TYR TYR A A 406 406 . 0.1321 0.1025 0.1146 -0.0007 0.0127  -
0.0246 1 .
3037 CD1  CD1  . TYR TYR TYR A A 406 406 . 0.1582 0.1075 0.1005 0.0035  -0.0048 -
0.0140 1 .
3038 CE1  CE1  . TYR TYR TYR A A 406 406 . 0.1064 0.1123 0.1128 -0.0059 0.0182  -
0.0238 1 .
3039 CZ   CZ   . TYR TYR TYR A A 406 406 . 0.1298 0.1237 0.1111 -0.0128 0.0025  -
0.0169 1 .
3040 OH   OH   . TYR TYR TYR A A 406 406 . 0.1837 0.1818 0.1408 0.0052  0.0091  -
0.0399 1 .
3041 CE2  CE2  . TYR TYR TYR A A 406 406 . 0.1405 0.1285 0.0841 0.0075  -0.0020 -
0.0139 1 .
3042 CD2  CD2  . TYR TYR TYR A A 406 406 . 0.1339 0.1667 0.1639 -0.0362 0.0252  -
0.0698 1 .
3043 C    C    . TYR TYR TYR A A 406 406 . 0.1609 0.1343 0.1448 -0.0031 0.0009  -
0.0062 1 .
3044 O    O    . TYR TYR TYR A A 406 406 . 0.1308 0.1378 0.1044 -0.0052 0.0110  -
0.0064 1 .
3045 N    N    . ASN ASN ASN A A 407 407 . 0.1324 0.0923 0.1103 -0.0146 -0.0080
0.0054  1 .
3046 CA   CA   . ASN ASN ASN A A 407 407 . 0.1433 0.1243 0.1156 -0.0164 -0.0008 -
0.0148 1 .
3047 CB   CB   . ASN ASN ASN A A 407 407 . 0.1650 0.1226 0.0916 0.0045  0.0150
0.0106  1 .
3048 CG   CG   . ASN ASN ASN A A 407 407 . 0.1762 0.1220 0.1129 -0.0107 0.0138  -
0.0038 1 .
3049 OD1  OD1  . ASN ASN ASN A A 407 407 . 0.1846 0.1390 0.1039 -0.0121 0.0216  -
0.0021 1 .
3050 ND2  ND2  . ASN ASN ASN A A 407 407 . 0.1227 0.1554 0.1188 0.0293  0.0356  -
0.0157 1 .
3051 C    C    . ASN ASN ASN A A 407 407 . 0.1212 0.1146 0.1175 -0.0033 -0.0045 -
0.0097 1 .
3052 O    O    . ASN ASN ASN A A 407 407 . 0.1356 0.1431 0.1216 -0.0290 0.0268  -
0.0056 1 .
3053 N    N    . GLN GLN GLN A A 408 408 . 0.1550 0.1035 0.0914 -0.0241 0.0105  -
0.0125 1 .
3054 CA   CA   . GLN GLN GLN A A 408 408 . 0.1382 0.1138 0.0881 -0.0118 0.0096  -
0.0151 1 .
3055 CB   CB   . GLN GLN GLN A A 408 408 . 0.1448 0.0986 0.1055 -0.0086 0.0238
0.0029  1 .
3056 CG   CG   . GLN GLN GLN A A 408 408 . 0.1780 0.1149 0.1590 -0.0290 0.0218  -
0.0143 1 .
3057 CD   CD   . GLN GLN GLN A A 408 408 . 0.1881 0.1599 0.2146 -0.0128 -0.0002
0.0285  1 .
3058 OE1  OE1  . GLN GLN GLN A A 408 408 . 0.1788 0.1761 0.1995 -0.0167 -0.0289
0.0171  1 .
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3059 NE2  NE2  . GLN GLN GLN A A 408 408 . 0.2213 0.1994 0.2502 -0.0532 0.0052
0.0561  1 .
3060 C    C    . GLN GLN GLN A A 408 408 . 0.1441 0.1400 0.1073 -0.0111 0.0145  -
0.0066 1 .
3061 O    O    . GLN GLN GLN A A 408 408 . 0.1387 0.1366 0.1279 -0.0057 0.0281  -
0.0057 1 .
3062 N    N    . LEU LEU LEU A A 409 409 . 0.1658 0.1442 0.0793 -0.0107 0.0096  -
0.0068 1 .
3063 CA   CA   . LEU LEU LEU A A 409 409 . 0.1475 0.1474 0.1006 0.0119  -0.0035 -
0.0197 1 .
3064 CB   CB   . LEU LEU LEU A A 409 409 . 0.1156 0.1364 0.1042 0.0171  0.0000  -
0.0158 1 .
3065 CG   CG   . LEU LEU LEU A A 409 409 . 0.1349 0.1269 0.1087 0.0032  -0.0018 -
0.0133 1 .
3066 CD1  CD1  . LEU LEU LEU A A 409 409 . 0.1371 0.1647 0.1481 -0.0068 -0.0123 -
0.0076 1 .
3067 CD2  CD2  . LEU LEU LEU A A 409 409 . 0.1538 0.1203 0.1104 -0.0075 0.0164  -
0.0113 1 .
3068 C    C    . LEU LEU LEU A A 409 409 . 0.1549 0.1399 0.1244 0.0035  0.0009  -
0.0044 1 .
3069 O    O    . LEU LEU LEU A A 409 409 . 0.1727 0.1590 0.1106 0.0096  0.0083  -
0.0038 1 .
3070 N    N    . MET MET MET A A 410 410 . 0.1582 0.1440 0.1412 0.0168  -0.0177 -
0.0022 1 .
3071 CA   CA   . MET MET MET A A 410 410 . 0.1672 0.1270 0.1570 0.0072  0.0013  -
0.0085 1 .
3072 CB   CB   . MET MET MET A A 410 410 . 0.1654 0.1172 0.1443 0.0059  -0.0035 -
0.0116 1 .
3073 CG   CG   . MET MET MET A A 410 410 . 0.1869 0.1706 0.1849 -0.0151 -0.0017
0.0481  1 .
3074 SD   SD   . MET MET MET A A 410 410 . 0.2913 0.2065 0.1968 -0.0066 0.0058
0.0132  1 .
3075 CE   CE   . MET MET MET A A 410 410 . 0.2949 0.1680 0.0893 -0.0224 0.0453  -
0.0624 1 .
3076 C    C    . MET MET MET A A 410 410 . 0.1539 0.1251 0.1557 0.0166  0.0178
0.0030  1 .
3077 O    O    . MET MET MET A A 410 410 . 0.1804 0.1295 0.1549 0.0169  0.0279  -
0.0111 1 .
3078 N    N    . ARG ARG ARG A A 411 411 . 0.1482 0.1194 0.1262 -0.0011 -0.0077 -
0.0042 1 .
3079 CA   CA   . ARG ARG ARG A A 411 411 . 0.1523 0.1278 0.1047 0.0043  -0.0098
0.0221  1 .
3080 CB   CB   . ARG ARG ARG A A 411 411 . 0.1812 0.1324 0.1129 0.0154  0.0015
0.0193  1 .
3081 CG   CG   . ARG ARG ARG A A 411 411 . 0.1996 0.1484 0.1396 0.0261  -0.0042 -
0.0008 1 .
3082 CD   CD   . ARG ARG ARG A A 411 411 . 0.1714 0.1432 0.0952 -0.0249 -0.0113
0.0067  1 .
3083 NE   NE   . ARG ARG ARG A A 411 411 . 0.1964 0.2555 0.1933 -0.0145 -0.0015 -
0.0057 1 .
3084 CZ   CZ   . ARG ARG ARG A A 411 411 . 0.2102 0.2177 0.1740 0.0256  0.0072  -
0.0271 1 .
3085 NH1  NH1  . ARG ARG ARG A A 411 411 . 0.2527 0.2206 0.1518 0.0145  -0.0021 -
0.0125 1 .
3086 NH2  NH2  . ARG ARG ARG A A 411 411 . 0.1777 0.1958 0.2214 -0.0146 0.0059
0.0173  1 .
3087 C    C    . ARG ARG ARG A A 411 411 . 0.1643 0.1679 0.1315 0.0046  0.0085
0.0113  1 .
3088 O    O    . ARG ARG ARG A A 411 411 . 0.1616 0.1716 0.1511 0.0104  -0.0046
0.0026  1 .
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3089 N    N    . ILE ILE ILE A A 412 412 . 0.1719 0.1641 0.1101 0.0014  -0.0033
0.0139  1 .
3090 CA   CA   . ILE ILE ILE A A 412 412 . 0.1602 0.1385 0.1123 0.0107  -0.0002
0.0189  1 .
3091 CB   CB   . ILE ILE ILE A A 412 412 . 0.1850 0.1449 0.1245 0.0116  -0.0021
0.0313  1 .
3092 CG1  CG1  . ILE ILE ILE A A 412 412 . 0.1764 0.1482 0.1511 0.0204  0.0118  -
0.0068 1 .
3093 CD   CD   . ILE ILE ILE A A 412 412 . 0.1427 0.1449 0.1390 0.0248  -0.0009
0.0132  1 .
3094 CG2  CG2  . ILE ILE ILE A A 412 412 . 0.1814 0.1691 0.0880 -0.0155 0.0085
0.0196  1 .
3095 C    C    . ILE ILE ILE A A 412 412 . 0.1608 0.1622 0.1301 0.0045  -0.0052
0.0119  1 .
3096 O    O    . ILE ILE ILE A A 412 412 . 0.1717 0.1964 0.1317 0.0199  0.0177
0.0086  1 .
3097 N    N    . GLU GLU GLU A A 413 413 . 0.1784 0.1498 0.1301 0.0064  0.0072  -
0.0139 1 .
3098 CA   CA   . GLU GLU GLU A A 413 413 . 0.2080 0.1858 0.1704 -0.0032 0.0065  -
0.0405 1 .
3099 CB   CB   . GLU GLU GLU A A 413 413 . 0.1952 0.1908 0.1505 -0.0310 -0.0041 -
0.0544 1 .
3100 CG   CG   . GLU GLU GLU A A 413 413 . 0.1995 0.1794 0.2295 -0.0283 0.0112  -
0.0586 1 .
3101 CD   CD   . GLU GLU GLU A A 413 413 . 0.2040 0.1944 0.1565 -0.0215 0.0270  -
0.0346 1 .
3102 OE1  OE1  . GLU GLU GLU A A 413 413 . 0.2679 0.2306 0.2229 -0.0108 0.0304
0.0059  1 .
3103 OE2  OE2  . GLU GLU GLU A A 413 413 . 0.2062 0.2207 0.2212 0.0038  0.0376
0.0038  1 .
3104 C    C    . GLU GLU GLU A A 413 413 . 0.2156 0.1915 0.1695 0.0187  0.0102  -
0.0295 1 .
3105 O    O    . GLU GLU GLU A A 413 413 . 0.1704 0.2089 0.1863 0.0137  0.0267  -
0.0327 1 .
3106 N    N    . GLU GLU GLU A A 414 414 . 0.1970 0.1881 0.1519 0.0307  -0.0105 -
0.0163 1 .
3107 CA   CA   . GLU GLU GLU A A 414 414 . 0.2326 0.2262 0.1793 0.0236  -0.0001 -
0.0085 1 .
3108 CB   CB   . GLU GLU GLU A A 414 414 . 0.2443 0.2521 0.1662 0.0442  -0.0189 -
0.0094 1 .
3109 CG   CG   . GLU GLU GLU A A 414 414 . 0.2976 0.3139 0.1878 0.0518  -0.0152
0.0006  1 .
3110 CD   CD   . GLU GLU GLU A A 414 414 . 0.3022 0.3539 0.2105 0.0136  -0.0044
0.0056  1 .
3111 OE1  OE1  . GLU GLU GLU A A 414 414 . 0.4073 0.3347 0.2169 0.0155  0.0199
0.0253  1 .
3112 OE2  OE2  . GLU GLU GLU A A 414 414 . 0.3721 0.4320 0.2784 0.0431  0.0186  -
0.0083 1 .
3113 C    C    . GLU GLU GLU A A 414 414 . 0.2102 0.2456 0.1758 0.0223  0.0124  -
0.0182 1 .
3114 O    O    . GLU GLU GLU A A 414 414 . 0.2400 0.2599 0.2122 0.0307  0.0442  -
0.0222 1 .
3115 N    N    . GLU GLU GLU A A 415 415 . 0.1942 0.2031 0.1631 0.0008  0.0089
0.0026  1 .
3116 CA   CA   . GLU GLU GLU A A 415 415 . 0.2308 0.2467 0.1673 -0.0057 0.0232  -
0.0134 1 .
3117 CB   CB   . GLU GLU GLU A A 415 415 . 0.2195 0.2346 0.2486 -0.0130 0.0256
0.0042  1 .
3118 CG   CG   . GLU GLU GLU A A 415 415 . 0.3578 0.2800 0.2922 -0.0743 0.0603  -
0.0493 1 .
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3119 CD   CD   . GLU GLU GLU A A 415 415 . 0.4918 0.3725 0.4696 -0.0065 0.0163
0.0164  1 .
3120 OE2  OE2  . GLU GLU GLU A A 415 415 . 0.3484 0.5574 0.5145 -0.0029 -0.1029 -
0.0007 1 .
3121 C    C    . GLU GLU GLU A A 415 415 . 0.2094 0.2932 0.1815 -0.0187 0.0283
0.0087  1 .
3122 O    O    . GLU GLU GLU A A 415 415 . 0.2018 0.3337 0.1965 -0.0249 0.0167
0.0189  1 .
3123 N    N    . LEU LEU LEU A A 416 416 . 0.2202 0.2673 0.1544 -0.0025 0.0109  -
0.0144 1 .
3124 CA   CA   . LEU LEU LEU A A 416 416 . 0.2574 0.2741 0.2088 -0.0008 0.0393
0.0095  1 .
3125 CB   CB   . LEU LEU LEU A A 416 416 . 0.2364 0.2542 0.1810 -0.0045 0.0319
0.0065  1 .
3126 CG   CG   . LEU LEU LEU A A 416 416 . 0.2488 0.2557 0.2683 -0.0062 0.0379
0.0115  1 .
3127 CD1  CD1  . LEU LEU LEU A A 416 416 . 0.3020 0.3665 0.2645 0.0710  -0.0043
0.0685  1 .
3128 CD2  CD2  . LEU LEU LEU A A 416 416 . 0.3213 0.3267 0.3449 -0.0459 0.0784  -
0.0083 1 .
3129 C    C    . LEU LEU LEU A A 416 416 . 0.2980 0.3144 0.2234 0.0086  0.0487
0.0047  1 .
3130 O    O    . LEU LEU LEU A A 416 416 . 0.2947 0.3484 0.2205 0.0008  0.0740
0.0265  1 .
3131 N    N    . GLY GLY GLY A A 417 417 . 0.3414 0.3310 0.2741 0.0056  0.0647  -
0.0010 1 .
3132 CA   CA   . GLY GLY GLY A A 417 417 . 0.4110 0.4015 0.3410 0.0155  0.0674  -
0.0163 1 .
3133 C    C    . GLY GLY GLY A A 417 417 . 0.4445 0.4628 0.3894 0.0111  0.0554  -
0.0354 1 .
3134 O    O    . GLY GLY GLY A A 417 417 . 0.4389 0.4960 0.3908 0.0008  0.0907  -
0.0691 1 .
3135 N    N    . ASP ASP ASP A A 418 418 . 0.4747 0.5059 0.4455 0.0064  0.0612  -
0.0282 1 .
3136 CA   CA   . ASP ASP ASP A A 418 418 . 0.4573 0.5212 0.4319 0.0007  0.0423  -
0.0096 1 .
3137 CB   CB   . ASP ASP ASP A A 418 418 . 0.4812 0.5232 0.4537 0.0147  0.0384  -
0.0193 1 .
3138 C    C    . ASP ASP ASP A A 418 418 . 0.4262 0.5175 0.4426 0.0019  0.0355  -
0.0110 1 .
3139 O    O    . ASP ASP ASP A A 418 418 . 0.4419 0.5848 0.4533 -0.0111 0.0257  -
0.0091 1 .
3140 N    N    . GLU GLU GLU A A 419 419 . 0.3785 0.5100 0.4151 -0.0037 0.0553
0.0000  1 .
3141 CA   CA   . GLU GLU GLU A A 419 419 . 0.3605 0.4822 0.4068 -0.0002 0.0327
0.0175  1 .
3142 CB   CB   . GLU GLU GLU A A 419 419 . 0.3237 0.4891 0.4068 0.0037  0.0339
0.0223  1 .
3143 C    C    . GLU GLU GLU A A 419 419 . 0.3757 0.4654 0.3936 -0.0088 0.0346
0.0196  1 .
3144 O    O    . GLU GLU GLU A A 419 419 . 0.4002 0.4574 0.3709 -0.0069 -0.0014
0.0225  1 .
3145 N    N    . ALA ALA ALA A A 420 420 . 0.3861 0.4720 0.4045 -0.0184 0.0431  -
0.0050 1 .
3146 CA   CA   . ALA ALA ALA A A 420 420 . 0.3726 0.4564 0.3711 -0.0149 0.0302  -
0.0071 1 .
3147 CB   CB   . ALA ALA ALA A A 420 420 . 0.3620 0.4429 0.3825 -0.0279 0.0636
0.0149  1 .
3148 C    C    . ALA ALA ALA A A 420 420 . 0.3808 0.4439 0.3922 -0.0051 0.0223  -
0.0266 1 .
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3149 O    O    . ALA ALA ALA A A 420 420 . 0.4235 0.5044 0.3957 0.0065  0.0109  -
0.0478 1 .
3150 N    N    . ARG ARG ARG A A 421 421 . 0.3580 0.4321 0.3790 -0.0054 0.0386  -
0.0466 1 .
3151 CA   CA   . ARG ARG ARG A A 421 421 . 0.2862 0.3698 0.3220 -0.0132 0.0682  -
0.0372 1 .
3152 CB   CB   . ARG ARG ARG A A 421 421 . 0.2875 0.3665 0.3574 0.0136  0.1010  -
0.0142 1 .
3153 CG   CG   . ARG ARG ARG A A 421 421 . 0.3355 0.4362 0.3683 -0.0016 0.1434  -
0.0484 1 .
3154 C    C    . ARG ARG ARG A A 421 421 . 0.2640 0.3018 0.3144 -0.0177 0.0547  -
0.0318 1 .
3155 O    O    . ARG ARG ARG A A 421 421 . 0.3037 0.3050 0.2948 -0.0695 0.1021  -
0.0620 1 .
3156 N    N    . PHE PHE PHE A A 422 422 . 0.2504 0.2316 0.2304 -0.0139 0.0289  -
0.0166 1 .
3157 CA   CA   . PHE PHE PHE A A 422 422 . 0.2270 0.1890 0.1930 -0.0026 0.0166  -
0.0237 1 .
3158 CB   CB   . PHE PHE PHE A A 422 422 . 0.2271 0.1825 0.1940 0.0089  0.0092  -
0.0116 1 .
3159 CG   CG   . PHE PHE PHE A A 422 422 . 0.2115 0.1749 0.1412 -0.0071 0.0142  -
0.0365 1 .
3160 CD1  CD1  . PHE PHE PHE A A 422 422 . 0.2106 0.2172 0.1177 0.0095  0.0204  -
0.0250 1 .
3161 CE1  CE1  . PHE PHE PHE A A 422 422 . 0.1647 0.2151 0.1686 0.0049  -0.0155 -
0.0269 1 .
3162 CZ   CZ   . PHE PHE PHE A A 422 422 . 0.2160 0.2034 0.1637 -0.0070 -0.0164 -
0.0317 1 .
3163 CE2  CE2  . PHE PHE PHE A A 422 422 . 0.2212 0.2745 0.1603 -0.0427 0.0004  -
0.0494 1 .
3164 CD2  CD2  . PHE PHE PHE A A 422 422 . 0.2113 0.2236 0.1894 -0.0475 0.0032  -
0.0148 1 .
3165 C    C    . PHE PHE PHE A A 422 422 . 0.2459 0.1786 0.1869 0.0047  0.0086  -
0.0144 1 .
3166 O    O    . PHE PHE PHE A A 422 422 . 0.2641 0.2103 0.1401 0.0136  0.0221  -
0.0142 1 .
3167 N    N    . ALA ALA ALA A A 423 423 . 0.1872 0.2074 0.1583 0.0118  0.0113
0.0012  1 .
3168 CA   CA   . ALA ALA ALA A A 423 423 . 0.2073 0.1934 0.1640 -0.0075 -0.0155 -
0.0106 1 .
3169 CB   CB   . ALA ALA ALA A A 423 423 . 0.2134 0.2283 0.1535 -0.0013 -0.0027 -
0.0197 1 .
3170 C    C    . ALA ALA ALA A A 423 423 . 0.2052 0.1961 0.1556 -0.0151 -0.0118 -
0.0054 1 .
3171 O    O    . ALA ALA ALA A A 423 423 . 0.2235 0.2125 0.1426 -0.0157 0.0034  -
0.0118 1 .
3172 N    N    . GLY GLY GLY A A 424 424 . 0.1802 0.1928 0.1333 -0.0307 -0.0087 -
0.0102 1 .
3173 CA   CA   . GLY GLY GLY A A 424 424 . 0.2109 0.1742 0.1412 -0.0316 -0.0084
0.0032  1 .
3174 C    C    . GLY GLY GLY A A 424 424 . 0.2119 0.1777 0.1180 -0.0091 0.0000  -
0.0068 1 .
3175 O    O    . GLY GLY GLY A A 424 424 . 0.2078 0.1941 0.1131 -0.0067 0.0106  -
0.0211 1 .
3176 N    N    . HIS HIS HIS A A 425 425 . 0.2184 0.1869 0.1312 -0.0261 -0.0055 -
0.0341 1 .
3177 CA   CA   . HIS HIS HIS A A 425 425 . 0.2197 0.1645 0.1327 -0.0168 -0.0044 -
0.0369 1 .
3178 CB   CB   . HIS HIS HIS A A 425 425 . 0.2505 0.1633 0.0814 -0.0196 0.0049  -
0.0532 1 .
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3179 CG   CG   . HIS HIS HIS A A 425 425 . 0.2011 0.1434 0.1365 -0.0138 -0.0057 -
0.0611 1 .
3180 ND1  ND1  . HIS HIS HIS A A 425 425 . 0.2902 0.2252 0.1742 -0.0327 0.0330  -
0.0498 1 .
3181 CE1  CE1  . HIS HIS HIS A A 425 425 . 0.2639 0.2172 0.1302 -0.0137 0.0217  -
0.0357 1 .
3182 NE2  NE2  . HIS HIS HIS A A 425 425 . 0.3130 0.2453 0.1697 -0.0041 -0.0110 -
0.0917 1 .
3183 CD2  CD2  . HIS HIS HIS A A 425 425 . 0.2709 0.1822 0.1816 -0.0079 -0.0392 -
0.0582 1 .
3184 C    C    . HIS HIS HIS A A 425 425 . 0.2136 0.1938 0.1372 -0.0075 0.0066  -
0.0355 1 .
3185 O    O    . HIS HIS HIS A A 425 425 . 0.2038 0.2267 0.1445 -0.0162 -0.0089 -
0.0228 1 .
3186 N    N    . ASN ASN ASN A A 426 426 . 0.2211 0.1818 0.0827 -0.0280 0.0144  -
0.0393 1 .
3187 CA   CA   . ASN ASN ASN A A 426 426 . 0.2280 0.1813 0.1257 -0.0118 0.0111  -
0.0498 1 .
3188 CB   CB   . ASN ASN ASN A A 426 426 . 0.1960 0.1539 0.1003 -0.0300 0.0259  -
0.0365 1 .
3189 CG   CG   . ASN ASN ASN A A 426 426 . 0.2388 0.1994 0.1657 0.0121  -0.0218 -
0.0419 1 .
3190 OD1  OD1  . ASN ASN ASN A A 426 426 . 0.3109 0.2671 0.1790 -0.0305 0.0032  -
0.0076 1 .
3191 ND2  ND2  . ASN ASN ASN A A 426 426 . 0.1816 0.1855 0.0655 -0.0251 0.0018  -
0.0064 1 .
3192 C    C    . ASN ASN ASN A A 426 426 . 0.2567 0.1890 0.1493 -0.0368 0.0299  -
0.0456 1 .
3193 O    O    . ASN ASN ASN A A 426 426 . 0.3243 0.2161 0.1598 -0.0335 0.0169  -
0.0684 1 .
3194 N    N    . PHE PHE PHE A A 427 427 . 0.2337 0.1920 0.0874 -0.0235 0.0275  -
0.0225 1 .
3195 CA   CA   . PHE PHE PHE A A 427 427 . 0.2353 0.1972 0.1494 -0.0321 0.0118  -
0.0281 1 .
3196 CB   CB   . PHE PHE PHE A A 427 427 . 0.2447 0.2298 0.1349 -0.0357 0.0131  -
0.0346 1 .
3197 CG   CG   . PHE PHE PHE A A 427 427 . 0.2171 0.2427 0.1537 -0.0072 0.0038  -
0.0367 1 .
3198 CD1  CD1  . PHE PHE PHE A A 427 427 . 0.1909 0.2031 0.2006 -0.0353 0.0187
0.0052  1 .
3199 CE1  CE1  . PHE PHE PHE A A 427 427 . 0.2451 0.2568 0.2524 -0.0141 -0.0331
0.0208  1 .
3200 CZ   CZ   . PHE PHE PHE A A 427 427 . 0.2262 0.2504 0.2538 -0.0580 -0.0225 -
0.0424 1 .
3201 CE2  CE2  . PHE PHE PHE A A 427 427 . 0.2405 0.3037 0.2910 -0.0100 -0.0372 -
0.0626 1 .
3202 CD2  CD2  . PHE PHE PHE A A 427 427 . 0.2143 0.2858 0.2767 -0.0062 0.0166  -
0.0723 1 .
3203 C    C    . PHE PHE PHE A A 427 427 . 0.2542 0.2302 0.1907 -0.0307 0.0084  -
0.0337 1 .
3204 O    O    . PHE PHE PHE A A 427 427 . 0.3161 0.2592 0.1913 -0.0321 0.0093  -
0.0514 1 .
3205 N    N    . ARG ARG ARG A A 428 428 . 0.2739 0.2347 0.1485 -0.0042 0.0015  -
0.0085 1 .
3206 CA   CA   . ARG ARG ARG A A 428 428 . 0.2881 0.2759 0.2122 -0.0104 -0.0013 -
0.0176 1 .
3207 CB   CB   . ARG ARG ARG A A 428 428 . 0.2805 0.2800 0.2030 0.0151  0.0119  -
0.0195 1 .
3208 CG   CG   . ARG ARG ARG A A 428 428 . 0.3199 0.3600 0.2603 -0.0222 -0.0124 -
0.0151 1 .
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3209 CD   CD   . ARG ARG ARG A A 428 428 . 0.3397 0.4488 0.2492 0.0339  0.0111  -
0.0256 1 .
3210 NE   NE   . ARG ARG ARG A A 428 428 . 0.3749 0.4181 0.2478 0.0472  0.0045  -
0.0450 1 .
3211 CZ   CZ   . ARG ARG ARG A A 428 428 . 0.4030 0.4275 0.3368 0.0398  -0.0289 -
0.0170 1 .
3212 NH1  NH1  . ARG ARG ARG A A 428 428 . 0.3496 0.4983 0.2729 0.0000  -0.0752 -
0.0795 1 .
3213 NH2  NH2  . ARG ARG ARG A A 428 428 . 0.3870 0.4779 0.3076 0.0665  -0.0558
0.0368  1 .
3214 C    C    . ARG ARG ARG A A 428 428 . 0.3360 0.2824 0.2066 -0.0055 -0.0203
0.0012  1 .
3215 O    O    . ARG ARG ARG A A 428 428 . 0.3906 0.2680 0.2247 -0.0007 -0.0322 -
0.0037 1 .
3216 N    N    . ASN ASN ASN A A 429 429 . 0.3120 0.3177 0.2217 -0.0166 -0.0260
0.0212  1 .
3217 CA   CA   . ASN ASN ASN A A 429 429 . 0.3515 0.3183 0.2259 -0.0321 -0.0146
0.0176  1 .
3218 CB   CB   . ASN ASN ASN A A 429 429 . 0.3757 0.3811 0.2631 -0.0285 -0.0139
0.0505  1 .
3219 CG   CG   . ASN ASN ASN A A 429 429 . 0.4561 0.4180 0.3201 -0.0400 -0.0114
0.0617  1 .
3220 OD1  OD1  . ASN ASN ASN A A 429 429 . 0.4739 0.4052 0.3442 -0.0349 0.0537  -
0.0017 1 .
3221 ND2  ND2  . ASN ASN ASN A A 429 429 . 0.5067 0.4845 0.3694 0.0484  -0.0639
0.0785  1 .
3222 C    C    . ASN ASN ASN A A 429 429 . 0.3269 0.2944 0.2113 -0.0426 0.0008
0.0064  1 .
3223 O    O    . ASN ASN ASN A A 429 429 . 0.3827 0.2718 0.1552 -0.0497 0.0113  -
0.0101 1 .
3224 N    N    . PRO PRO PRO A A 430 430 . 0.3150 0.2501 0.1575 -0.0276 0.0063  -
0.0017 1 .
3225 CA   CA   . PRO PRO PRO A A 430 430 . 0.2989 0.2938 0.1514 -0.0385 0.0133  -
0.0093 1 .
3226 CB   CB   . PRO PRO PRO A A 430 430 . 0.3354 0.2846 0.1805 -0.0208 -0.0070 -
0.0236 1 .
3227 CG   CG   . PRO PRO PRO A A 430 430 . 0.3265 0.2806 0.1808 -0.0035 0.0123  -
0.0536 1 .
3228 CD   CD   . PRO PRO PRO A A 430 430 . 0.3142 0.3002 0.1514 -0.0278 0.0094  -
0.0009 1 .
3229 C    C    . PRO PRO PRO A A 430 430 . 0.3165 0.2983 0.1651 -0.0242 0.0174  -
0.0107 1 .
3230 O    O    . PRO PRO PRO A A 430 430 . 0.2847 0.3421 0.1646 -0.0671 0.0248
0.0075  1 .
3231 N    N    . SER SER SER A A 431 431 . 0.3648 0.3245 0.2066 -0.0517 -0.0028 -
0.0095 1 .
3232 CA   CA   . SER SER SER A A 431 431 . 0.3683 0.3709 0.2875 -0.0361 0.0101
0.0125  1 .
3233 CB   CB   . SER SER SER A A 431 431 . 0.3820 0.4038 0.3227 -0.0521 -0.0245
0.0256  1 .
3234 OG   OG   . SER SER SER A A 431 431 . 0.4153 0.5048 0.3183 -0.0506 -0.0406
0.0216  1 .
3235 C    C    . SER SER SER A A 431 431 . 0.3813 0.4042 0.3065 -0.0400 0.0023
0.0162  1 .
3236 O    O    . SER SER SER A A 431 431 . 0.3674 0.4150 0.3062 -0.0305 0.0303
0.0338  1 .
3237 N    N    . VAL VAL VAL A A 432 432 . 0.3671 0.3613 0.2748 -0.0457 0.0037  -
0.0018 1 .
3238 CA   CA   . VAL VAL VAL A A 432 432 . 0.3425 0.3780 0.2664 -0.0330 0.0206  -
0.0062 1 .
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3239 CB   CB   . VAL VAL VAL A A 432 432 . 0.3560 0.3837 0.2708 -0.0277 0.0113  -
0.0294 1 .
3240 CG1  CG1  . VAL VAL VAL A A 432 432 . 0.3525 0.3557 0.1785 0.0090  0.0573  -
0.0662 1 .
3241 CG2  CG2  . VAL VAL VAL A A 432 432 . 0.2733 0.3511 0.2757 -0.0342 0.0099  -
0.0512 1 .
3242 C    C    . VAL VAL VAL A A 432 432 . 0.3488 0.3947 0.2791 -0.0280 0.0257  -
0.0122 1 .
3243 O    O    . VAL VAL VAL A A 432 432 . 0.3582 0.4745 0.2666 0.0011  0.0362
0.0169  1 .
3244 N    N    . LEU LEU LEU A A 433 433 . 0.3070 0.3832 0.2297 -0.0383 0.0481
0.0196  1 .
3245 CA   CA   . LEU LEU LEU A A 433 433 . 0.3122 0.3814 0.2468 -0.0526 0.0569
0.0282  1 .
3246 CB   CB   . LEU LEU LEU A A 433 433 . 0.3336 0.3765 0.2079 -0.0630 0.0381
0.0271  1 .
3247 CG   CG   . LEU LEU LEU A A 433 433 . 0.3481 0.3617 0.1598 -0.0577 0.0893  -
0.0151 1 .
3248 CD1  CD1  . LEU LEU LEU A A 433 433 . 0.4101 0.3120 0.1153 -0.0494 0.0769
0.0043  1 .
3249 CD2  CD2  . LEU LEU LEU A A 433 433 . 0.3653 0.3526 0.3306 -0.0944 0.0240  -
0.0351 1 .
3250 C    C    . LEU LEU LEU A A 433 433 . 0.3100 0.3641 0.2722 -0.0707 0.0298
0.0322  1 .
3251 O    O    . LEU LEU LEU A A 433 433 . 0.3248 0.3550 0.2844 -0.0642 0.0823  -
0.0218 1 .
3252 MG+2 MG+2 . MG2 MG2 MG2 A . 600 600 . 0.2041 0.2451 0.1824 -0.0188 -0.0045 -
0.0324 1 .
3253 MG+2 MG+2 . MG2 MG2 MG2 A . 601 601 . 0.2073 0.2513 0.1903 -0.0199 -0.0092 -
0.0324 1 .
3254 O3P  O3P  . XSP XSP XSP A . 602 602 . 0.1996 0.2889 0.1959 -0.0391 0.0392  -
0.0073 1 .
3255 P    P    . XSP XSP XSP A . 602 602 . 0.1984 0.2244 0.2109 -0.0085 0.0093  -
0.0227 1 .
3256 O1P  O1P  . XSP XSP XSP A . 602 602 . 0.1565 0.2463 0.2141 -0.0460 -0.0095 -
0.0125 1 .
3257 O2P  O2P  . XSP XSP XSP A . 602 602 . 0.1696 0.2107 0.1629 -0.0239 0.0107  -
0.0447 1 .
3258 O3   O3   . XSP XSP XSP A . 602 602 . 0.1669 0.2548 0.2213 -0.0195 0.0211  -
0.0635 1 .
3259 C2   C2   . XSP XSP XSP A . 602 602 . 0.2167 0.2998 0.2550 -0.0284 -0.0052 -
0.0125 1 .
3260 C1   C1   . XSP XSP XSP A . 602 602 . 0.2498 0.2421 0.2285 -0.0141 0.0185  -
0.0343 1 .
3261 O2   O2   . XSP XSP XSP A . 602 602 . 0.1934 0.1931 0.1899 -0.0042 0.0214  -
0.0015 1 .
3262 O1   O1   . XSP XSP XSP A . 602 602 . 0.2121 0.2316 0.1830 -0.0201 -0.0275 -
0.0434 1 .
3263 C3   C3   . XSP XSP XSP A . 602 602 . 0.2860 0.3359 0.3880 -0.0451 0.0149  -
0.0237 1 .
3264 O4   O4   . XSP XSP XSP A . 602 602 . 0.2924 0.4119 0.5063 -0.0200 -0.0049 -
0.0067 1 .
3265 O3   O3   . TRS TRS TRS A . 603 603 . 0.4226 0.4671 0.5100 0.0112  0.0406
0.0333  1 .
3266 C3   C3   . TRS TRS TRS A . 603 603 . 0.3989 0.4521 0.4643 0.0084  0.0130
0.0113  1 .
3267 C    C    . TRS TRS TRS A . 603 603 . 0.3993 0.4663 0.4491 0.0132  -0.0032
0.0045  1 .
3268 N    N    . TRS TRS TRS A . 603 603 . 0.4010 0.4545 0.4492 0.0083  0.0079
0.0070  1 .
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3269 C2   C2   . TRS TRS TRS A . 603 603 . 0.4074 0.4618 0.4622 0.0373  -0.0062 -
0.0117 1 .
3270 O2   O2   . TRS TRS TRS A . 603 603 . 0.3811 0.5205 0.4806 0.0268  -0.0323 -
0.0389 1 .
3271 C1   C1   . TRS TRS TRS A . 603 603 . 0.3967 0.4681 0.4179 0.0039  -0.0156
0.0161  1 .
3272 O1   O1   . TRS TRS TRS A . 603 603 . 0.2989 0.4176 0.3698 0.0357  -0.0570
0.0157  1 .
3273 N    N    . SER SER SER B B 1   1   . 0.3819 0.3738 0.3849 -0.0200 -0.0284
0.0500  1 .
3274 CA   CA   . SER SER SER B B 1   1   . 0.3668 0.3820 0.3723 -0.0064 -0.0295
0.0328  1 .
3275 CB   CB   . SER SER SER B B 1   1   . 0.3733 0.4104 0.3723 -0.0009 -0.0317
0.0409  1 .
3276 OG   OG   . SER SER SER B B 1   1   . 0.4343 0.5304 0.4333 0.0003  -0.0479
0.0469  1 .
3277 C    C    . SER SER SER B B 1   1   . 0.3476 0.3499 0.3504 -0.0017 -0.0331
0.0346  1 .
3278 O    O    . SER SER SER B B 1   1   . 0.3626 0.3600 0.3666 -0.0061 -0.0280
0.0358  1 .
3279 N    N    . ILE ILE ILE B B 2   2   . 0.3188 0.3039 0.3088 0.0238  -0.0306
0.0371  1 .
3280 CA   CA   . ILE ILE ILE B B 2   2   . 0.2788 0.2772 0.3040 0.0267  -0.0017
0.0205  1 .
3281 CB   CB   . ILE ILE ILE B B 2   2   . 0.2558 0.2661 0.2776 0.0239  0.0162
0.0345  1 .
3282 CG1  CG1  . ILE ILE ILE B B 2   2   . 0.3177 0.2275 0.2609 0.0127  -0.0015
0.0213  1 .
3283 CD   CD   . ILE ILE ILE B B 2   2   . 0.3045 0.2911 0.2474 0.0441  0.0510
0.1042  1 .
3284 CG2  CG2  . ILE ILE ILE B B 2   2   . 0.2367 0.1969 0.2693 0.0534  -0.0169
0.0169  1 .
3285 C    C    . ILE ILE ILE B B 2   2   . 0.2870 0.3021 0.3042 0.0280  0.0092
0.0269  1 .
3286 O    O    . ILE ILE ILE B B 2   2   . 0.2688 0.3456 0.3275 0.0512  0.0141
0.0431  1 .
3287 N    N    . GLU GLU GLU B B 3   3   . 0.2405 0.2903 0.2961 0.0302  0.0153
0.0410  1 .
3288 CA   CA   . GLU GLU GLU B B 3   3   . 0.2538 0.2779 0.3050 0.0154  0.0216
0.0254  1 .
3289 CB   CB   . GLU GLU GLU B B 3   3   . 0.2610 0.2706 0.3157 0.0143  0.0286
0.0271  1 .
3290 CG   CG   . GLU GLU GLU B B 3   3   . 0.3126 0.3530 0.3822 -0.0212 0.0288
0.0295  1 .
3291 CD   CD   . GLU GLU GLU B B 3   3   . 0.4354 0.3846 0.4859 -0.0442 0.0357
0.0377  1 .
3292 OE1  OE1  . GLU GLU GLU B B 3   3   . 0.4957 0.4734 0.5465 -0.0947 0.0636
0.0647  1 .
3293 OE2  OE2  . GLU GLU GLU B B 3   3   . 0.4954 0.3842 0.5410 -0.0171 0.0474
0.0810  1 .
3294 C    C    . GLU GLU GLU B B 3   3   . 0.2402 0.2797 0.2798 0.0196  0.0283
0.0221  1 .
3295 O    O    . GLU GLU GLU B B 3   3   . 0.2498 0.2790 0.3037 0.0175  0.0422
0.0325  1 .
3296 N    N    . LYS LYS LYS B B 4   4   . 0.2131 0.2669 0.2754 0.0232  0.0089
0.0241  1 .
3297 CA   CA   . LYS LYS LYS B B 4   4   . 0.1869 0.2698 0.2379 0.0139  0.0230
0.0318  1 .
3298 CB   CB   . LYS LYS LYS B B 4   4   . 0.2032 0.2923 0.2222 0.0158  0.0371
0.0296  1 .
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3299 CG   CG   . LYS LYS LYS B B 4   4   . 0.2794 0.3384 0.2550 -0.0085 0.0214
0.0446  1 .
3300 CD   CD   . LYS LYS LYS B B 4   4   . 0.4414 0.4562 0.3265 0.0055  -0.0138
0.0802  1 .
3301 CE   CE   . LYS LYS LYS B B 4   4   . 0.4998 0.4910 0.4570 -0.0062 0.0232  -
0.0009 1 .
3302 NZ   NZ   . LYS LYS LYS B B 4   4   . 0.6420 0.5982 0.5004 -0.0098 0.0646  -
0.0304 1 .
3303 C    C    . LYS LYS LYS B B 4   4   . 0.1876 0.2574 0.2316 0.0167  0.0180
0.0092  1 .
3304 O    O    . LYS LYS LYS B B 4   4   . 0.1777 0.2247 0.2581 0.0249  0.0169
0.0141  1 .
3305 N    N    . ILE ILE ILE B B 5   5   . 0.1865 0.2519 0.2442 0.0250  0.0284
0.0269  1 .
3306 CA   CA   . ILE ILE ILE B B 5   5   . 0.1883 0.2440 0.2444 0.0238  0.0301
0.0068  1 .
3307 CB   CB   . ILE ILE ILE B B 5   5   . 0.1859 0.2019 0.2573 0.0021  0.0297
0.0052  1 .
3308 CG1  CG1  . ILE ILE ILE B B 5   5   . 0.2080 0.2379 0.2134 0.0637  0.0155  -
0.0241 1 .
3309 CD   CD   . ILE ILE ILE B B 5   5   . 0.2659 0.1895 0.2976 0.0742  0.0612
0.0690  1 .
3310 CG2  CG2  . ILE ILE ILE B B 5   5   . 0.1629 0.2545 0.2432 0.0146  0.0399  -
0.0280 1 .
3311 C    C    . ILE ILE ILE B B 5   5   . 0.2182 0.2355 0.2547 0.0267  0.0324  -
0.0008 1 .
3312 O    O    . ILE ILE ILE B B 5   5   . 0.2126 0.2802 0.2995 0.0422  0.0543  -
0.0167 1 .
3313 N    N    . TRP TRP TRP B B 6   6   . 0.1934 0.1999 0.2502 0.0230  0.0239
0.0074  1 .
3314 CA   CA   . TRP TRP TRP B B 6   6   . 0.2054 0.2148 0.2208 0.0210  0.0296
0.0083  1 .
3315 CB   CB   . TRP TRP TRP B B 6   6   . 0.1999 0.2167 0.2196 -0.0112 0.0287
0.0243  1 .
3316 CG   CG   . TRP TRP TRP B B 6   6   . 0.2655 0.2535 0.2331 -0.0059 0.0249
0.0229  1 .
3317 CD1  CD1  . TRP TRP TRP B B 6   6   . 0.2465 0.2568 0.2680 -0.0019 0.0073
0.0201  1 .
3318 NE1  NE1  . TRP TRP TRP B B 6   6   . 0.2841 0.2840 0.2552 -0.0092 0.0278
0.0273  1 .
3319 CE2  CE2  . TRP TRP TRP B B 6   6   . 0.3122 0.2682 0.2676 0.0147  0.0397
0.0119  1 .
3320 CD2  CD2  . TRP TRP TRP B B 6   6   . 0.2562 0.2822 0.2345 0.0181  0.0426
0.0423  1 .
3321 CE3  CE3  . TRP TRP TRP B B 6   6   . 0.3252 0.2986 0.2533 0.0488  0.0791
0.0200  1 .
3322 CZ3  CZ3  . TRP TRP TRP B B 6   6   . 0.3783 0.3281 0.2933 0.0284  0.0708
0.0045  1 .
3323 CH2  CH2  . TRP TRP TRP B B 6   6   . 0.3370 0.3337 0.2255 0.0309  0.0933  -
0.0137 1 .
3324 CZ2  CZ2  . TRP TRP TRP B B 6   6   . 0.2957 0.3399 0.2483 0.0005  0.0715
0.0122  1 .
3325 C    C    . TRP TRP TRP B B 6   6   . 0.2038 0.2080 0.2118 0.0131  0.0153
0.0105  1 .
3326 O    O    . TRP TRP TRP B B 6   6   . 0.2001 0.2034 0.2339 0.0253  0.0274
0.0241  1 .
3327 N    N    . ALA ALA ALA B B 7   7   . 0.1827 0.1983 0.1700 0.0084  0.0190
0.0173  1 .
3328 CA   CA   . ALA ALA ALA B B 7   7   . 0.1889 0.1780 0.1676 0.0086  0.0005
0.0156  1 .
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3329 CB   CB   . ALA ALA ALA B B 7   7   . 0.2129 0.1775 0.1615 0.0275  0.0179
0.0236  1 .
3330 C    C    . ALA ALA ALA B B 7   7   . 0.1982 0.1835 0.1510 0.0209  -0.0022
0.0246  1 .
3331 O    O    . ALA ALA ALA B B 7   7   . 0.1865 0.1705 0.1786 0.0442  0.0450
0.0055  1 .
3332 N    N    . ARG ARG ARG B B 8   8   . 0.1911 0.1593 0.1496 0.0248  0.0015
0.0198  1 .
3333 CA   CA   . ARG ARG ARG B B 8   8   . 0.1525 0.1718 0.1630 0.0183  0.0082
0.0202  1 .
3334 CB   CB   . ARG ARG ARG B B 8   8   . 0.1905 0.1548 0.1494 0.0326  0.0458  -
0.0083 1 .
3335 CG   CG   . ARG ARG ARG B B 8   8   . 0.2127 0.1620 0.1619 0.0478  0.0257  -
0.0136 1 .
3336 CD   CD   . ARG ARG ARG B B 8   8   . 0.2343 0.1457 0.2083 0.0430  0.0179
0.0411  1 .
3337 NE   NE   . ARG ARG ARG B B 8   8   . 0.1827 0.2014 0.2059 0.0327  0.0152
0.0157  1 .
3338 CZ   CZ   . ARG ARG ARG B B 8   8   . 0.2585 0.2010 0.2067 0.0055  0.0245
0.0191  1 .
3339 NH1  NH1  . ARG ARG ARG B B 8   8   . 0.2065 0.2243 0.2281 0.0400  0.0268  -
0.0267 1 .
3340 NH2  NH2  . ARG ARG ARG B B 8   8   . 0.2583 0.2711 0.2812 0.0270  0.0198
0.0321  1 .
3341 C    C    . ARG ARG ARG B B 8   8   . 0.1751 0.1779 0.1795 0.0195  0.0143
0.0085  1 .
3342 O    O    . ARG ARG ARG B B 8   8   . 0.1628 0.2228 0.1554 0.0037  0.0025
0.0112  1 .
3343 N    N    . GLU GLU GLU B B 9   9   . 0.1755 0.1690 0.1717 0.0065  0.0067  -
0.0115 1 .
3344 CA   CA   . GLU GLU GLU B B 9   9   . 0.2096 0.1652 0.1785 0.0151  0.0214  -
0.0046 1 .
3345 CB   CB   . GLU GLU GLU B B 9   9   . 0.2545 0.2062 0.1576 -0.0214 0.0279  -
0.0179 1 .
3346 CG   CG   . GLU GLU GLU B B 9   9   . 0.3199 0.2402 0.2174 -0.0505 0.0308  -
0.0387 1 .
3347 CD   CD   . GLU GLU GLU B B 9   9   . 0.3665 0.2187 0.1851 -0.0093 0.0356  -
0.0543 1 .
3348 OE1  OE1  . GLU GLU GLU B B 9   9   . 0.3337 0.2117 0.2407 0.0344  0.0078  -
0.0372 1 .
3349 OE2  OE2  . GLU GLU GLU B B 9   9   . 0.3712 0.2603 0.2238 -0.0274 0.0360  -
0.0399 1 .
3350 C    C    . GLU GLU GLU B B 9   9   . 0.2003 0.1834 0.1743 0.0303  0.0115
0.0340  1 .
3351 O    O    . GLU GLU GLU B B 9   9   . 0.2508 0.2619 0.1928 0.0772  0.0377
0.0465  1 .
3352 N    N    . ILE ILE ILE B B 10  10  . 0.1742 0.1384 0.1663 0.0247  0.0037
0.0184  1 .
3353 CA   CA   . ILE ILE ILE B B 10  10  . 0.1481 0.1120 0.1714 -0.0007 0.0032
0.0007  1 .
3354 CB   CB   . ILE ILE ILE B B 10  10  . 0.1759 0.1476 0.1540 -0.0114 -0.0019 -
0.0047 1 .
3355 CG1  CG1  . ILE ILE ILE B B 10  10  . 0.1632 0.1694 0.1326 -0.0051 -0.0135 -
0.0142 1 .
3356 CD   CD   . ILE ILE ILE B B 10  10  . 0.1738 0.1737 0.2456 0.0107  -0.0090 -
0.0246 1 .
3357 CG2  CG2  . ILE ILE ILE B B 10  10  . 0.1656 0.1567 0.2566 -0.0243 -0.0020 -
0.0014 1 .
3358 C    C    . ILE ILE ILE B B 10  10  . 0.1845 0.1613 0.1529 0.0023  0.0052  -
0.0094 1 .
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3359 O    O    . ILE ILE ILE B B 10  10  . 0.1947 0.1401 0.1834 -0.0078 0.0065  -
0.0018 1 .
3360 N    N    . LEU LEU LEU B B 11  11  . 0.1521 0.1229 0.1277 -0.0048 0.0141  -
0.0217 1 .
3361 CA   CA   . LEU LEU LEU B B 11  11  . 0.1594 0.1106 0.1208 0.0000  0.0049  -
0.0248 1 .
3362 CB   CB   . LEU LEU LEU B B 11  11  . 0.2140 0.1433 0.1072 0.0110  -0.0032 -
0.0291 1 .
3363 CG   CG   . LEU LEU LEU B B 11  11  . 0.2305 0.1345 0.1435 0.0500  0.0180  -
0.0572 1 .
3364 CD1  CD1  . LEU LEU LEU B B 11  11  . 0.2445 0.1950 0.1391 -0.0095 -0.0172 -
0.0564 1 .
3365 CD2  CD2  . LEU LEU LEU B B 11  11  . 0.2789 0.1283 0.1929 0.0551  0.0206  -
0.0649 1 .
3366 C    C    . LEU LEU LEU B B 11  11  . 0.1509 0.1245 0.1040 0.0019  0.0060  -
0.0003 1 .
3367 O    O    . LEU LEU LEU B B 11  11  . 0.1776 0.1141 0.0966 -0.0051 0.0265
0.0111  1 .
3368 N    N    . ASP ASP ASP B B 12  12  . 0.1670 0.1342 0.0913 -0.0003 0.0121  -
0.0082 1 .
3369 CA   CA   . ASP ASP ASP B B 12  12  . 0.1564 0.1031 0.1104 0.0225  0.0059  -
0.0219 1 .
3370 CB   CB   . ASP ASP ASP B B 12  12  . 0.1754 0.1155 0.1445 0.0137  0.0332  -
0.0031 1 .
3371 CG   CG   . ASP ASP ASP B B 12  12  . 0.1643 0.1247 0.1716 0.0234  0.0059  -
0.0307 1 .
3372 OD1  OD1  . ASP ASP ASP B B 12  12  . 0.1704 0.1067 0.1638 -0.0034 0.0291  -
0.0167 1 .
3373 OD2  OD2  . ASP ASP ASP B B 12  12  . 0.2090 0.1891 0.1691 0.0165  0.0289
0.0314  1 .
3374 C    C    . ASP ASP ASP B B 12  12  . 0.1642 0.0967 0.1146 -0.0062 0.0110  -
0.0068 1 .
3375 O    O    . ASP ASP ASP B B 12  12  . 0.1397 0.1151 0.1122 -0.0020 0.0074  -
0.0131 1 .
3376 N    N    . SER SER SER B B 13  13  . 0.1571 0.0897 0.0755 0.0022  0.0138  -
0.0200 1 .
3377 CA   CA   . SER SER SER B B 13  13  . 0.1475 0.1184 0.0884 -0.0115 -0.0043 -
0.0289 1 .
3378 CB   CB   . SER SER SER B B 13  13  . 0.1798 0.1217 0.0876 0.0036  0.0021  -
0.0190 1 .
3379 OG   OG   . SER SER SER B B 13  13  . 0.1749 0.1261 0.1400 -0.0119 -0.0076 -
0.0203 1 .
3380 C    C    . SER SER SER B B 13  13  . 0.1465 0.1261 0.0995 -0.0036 0.0048  -
0.0040 1 .
3381 O    O    . SER SER SER B B 13  13  . 0.1482 0.1351 0.1311 -0.0094 -0.0058 -
0.0246 1 .
3382 N    N    . ARG ARG ARG B B 14  14  . 0.1739 0.1044 0.1252 -0.0073 0.0052  -
0.0326 1 .
3383 CA   CA   . ARG ARG ARG B B 14  14  . 0.2008 0.1538 0.1573 -0.0151 0.0067  -
0.0191 1 .
3384 CB   CB   . ARG ARG ARG B B 14  14  . 0.2047 0.1349 0.1465 -0.0705 0.0357
0.0124  1 .
3385 CG   CG   . ARG ARG ARG B B 14  14  . 0.2437 0.2419 0.2648 -0.0154 0.0531  -
0.0301 1 .
3386 CD   CD   . ARG ARG ARG B B 14  14  . 0.2561 0.3308 0.2868 0.0071  0.0147
0.0540  1 .
3387 NE   NE   . ARG ARG ARG B B 14  14  . 0.2860 0.2330 0.2638 -0.0302 -0.0243
0.0580  1 .
3388 CZ   CZ   . ARG ARG ARG B B 14  14  . 0.2490 0.1505 0.2361 -0.0101 0.0041
0.0122  1 .
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3389 NH1  NH1  . ARG ARG ARG B B 14  14  . 0.2696 0.1399 0.2839 -0.0014 0.0213
0.0211  1 .
3390 NH2  NH2  . ARG ARG ARG B B 14  14  . 0.2024 0.1887 0.2424 -0.0616 -0.0139
0.0058  1 .
3391 C    C    . ARG ARG ARG B B 14  14  . 0.2107 0.1604 0.1571 -0.0319 0.0174  -
0.0221 1 .
3392 O    O    . ARG ARG ARG B B 14  14  . 0.2154 0.2057 0.1702 -0.0443 0.0152  -
0.0396 1 .
3393 N    N    . GLY GLY GLY B B 15  15  . 0.1665 0.1321 0.1123 0.0037  0.0201  -
0.0146 1 .
3394 CA   CA   . GLY GLY GLY B B 15  15  . 0.2037 0.1211 0.1522 0.0040  0.0152  -
0.0212 1 .
3395 C    C    . GLY GLY GLY B B 15  15  . 0.2043 0.1592 0.1607 -0.0109 0.0120  -
0.0160 1 .
3396 O    O    . GLY GLY GLY B B 15  15  . 0.2272 0.1486 0.1624 -0.0024 0.0218  -
0.0462 1 .
3397 N    N    . ASN ASN ASN B B 16  16  . 0.1740 0.1303 0.1578 -0.0174 0.0112  -
0.0049 1 .
3398 CA   CA   . ASN ASN ASN B B 16  16  . 0.1973 0.1599 0.1670 0.0010  0.0074  -
0.0173 1 .
3399 CB   CB   . ASN ASN ASN B B 16  16  . 0.1944 0.1687 0.1607 -0.0100 0.0411  -
0.0142 1 .
3400 CG   CG   . ASN ASN ASN B B 16  16  . 0.2263 0.2202 0.2040 -0.0330 0.0418  -
0.0302 1 .
3401 OD1  OD1  . ASN ASN ASN B B 16  16  . 0.2609 0.2368 0.2191 -0.0677 0.0307  -
0.0342 1 .
3402 ND2  ND2  . ASN ASN ASN B B 16  16  . 0.3057 0.1859 0.2182 -0.0239 0.0565  -
0.0007 1 .
3403 C    C    . ASN ASN ASN B B 16  16  . 0.1856 0.1545 0.1391 0.0040  0.0209  -
0.0159 1 .
3404 O    O    . ASN ASN ASN B B 16  16  . 0.2083 0.1280 0.1435 0.0184  0.0235  -
0.0249 1 .
3405 N    N    . PRO PRO PRO B B 17  17  . 0.1911 0.1391 0.1436 0.0143  0.0033  -
0.0369 1 .
3406 CA   CA   . PRO PRO PRO B B 17  17  . 0.1824 0.0943 0.1332 -0.0002 0.0193  -
0.0308 1 .
3407 CB   CB   . PRO PRO PRO B B 17  17  . 0.2058 0.1201 0.1550 -0.0094 0.0175  -
0.0403 1 .
3408 CG   CG   . PRO PRO PRO B B 17  17  . 0.1559 0.1779 0.1605 0.0013  0.0023  -
0.0255 1 .
3409 CD   CD   . PRO PRO PRO B B 17  17  . 0.1885 0.1207 0.1490 -0.0116 0.0288  -
0.0424 1 .
3410 C    C    . PRO PRO PRO B B 17  17  . 0.1737 0.1025 0.1583 0.0130  0.0135  -
0.0159 1 .
3411 O    O    . PRO PRO PRO B B 17  17  . 0.1914 0.1124 0.1371 0.0121  0.0302  -
0.0336 1 .
3412 N    N    . THR THR THR B B 18  18  . 0.1717 0.1370 0.1573 0.0122  -0.0084 -
0.0340 1 .
3413 CA   CA   . THR THR THR B B 18  18  . 0.1865 0.1386 0.1475 0.0275  0.0083  -
0.0149 1 .
3414 CB   CB   . THR THR THR B B 18  18  . 0.1798 0.0938 0.1367 0.0084  0.0056  -
0.0302 1 .
3415 OG1  OG1  . THR THR THR B B 18  18  . 0.1886 0.1667 0.1539 0.0341  -0.0010 -
0.0140 1 .
3416 CG2  CG2  . THR THR THR B B 18  18  . 0.2152 0.0770 0.1287 0.0117  0.0338  -
0.0183 1 .
3417 C    C    . THR THR THR B B 18  18  . 0.1765 0.1207 0.1531 0.0249  0.0131  -
0.0279 1 .
3418 O    O    . THR THR THR B B 18  18  . 0.2338 0.1354 0.1568 0.0340  0.0069  -
0.0109 1 .
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3419 N    N    . VAL VAL VAL B B 19  19  . 0.1817 0.1221 0.1562 0.0189  0.0007  -
0.0145 1 .
3420 CA   CA   . VAL VAL VAL B B 19  19  . 0.1803 0.1278 0.1576 0.0184  0.0030  -
0.0039 1 .
3421 CB   CB   . VAL VAL VAL B B 19  19  . 0.1657 0.1012 0.1536 0.0142  0.0035
0.0122  1 .
3422 CG1  CG1  . VAL VAL VAL B B 19  19  . 0.1643 0.1604 0.2583 0.0352  -0.0118
0.0202  1 .
3423 CG2  CG2  . VAL VAL VAL B B 19  19  . 0.2090 0.1070 0.2613 -0.0053 0.0290  -
0.0103 1 .
3424 C    C    . VAL VAL VAL B B 19  19  . 0.1956 0.1224 0.1489 0.0287  0.0093
0.0030  1 .
3425 O    O    . VAL VAL VAL B B 19  19  . 0.1938 0.1441 0.1229 0.0072  0.0423
0.0023  1 .
3426 N    N    . GLU GLU GLU B B 20  20  . 0.1606 0.1099 0.1404 0.0154  0.0145
0.0123  1 .
3427 CA   CA   . GLU GLU GLU B B 20  20  . 0.1444 0.1379 0.1210 0.0206  -0.0332
0.0094  1 .
3428 CB   CB   . GLU GLU GLU B B 20  20  . 0.2009 0.1285 0.1355 0.0365  -0.0111
0.0083  1 .
3429 CG   CG   . GLU GLU GLU B B 20  20  . 0.1766 0.1096 0.1767 0.0292  -0.0119
0.0398  1 .
3430 CD   CD   . GLU GLU GLU B B 20  20  . 0.2270 0.1898 0.2033 0.0579  0.0004
0.0182  1 .
3431 OE1  OE1  . GLU GLU GLU B B 20  20  . 0.2284 0.2185 0.3342 0.0426  0.0450
0.0156  1 .
3432 OE2  OE2  . GLU GLU GLU B B 20  20  . 0.2252 0.1763 0.2526 0.0227  0.0489  -
0.0151 1 .
3433 C    C    . GLU GLU GLU B B 20  20  . 0.1846 0.1675 0.1242 0.0120  0.0040
0.0142  1 .
3434 O    O    . GLU GLU GLU B B 20  20  . 0.1935 0.1761 0.1779 0.0620  -0.0111
0.0089  1 .
3435 N    N    . VAL VAL VAL B B 21  21  . 0.1410 0.1562 0.1418 0.0042  -0.0030
0.0178  1 .
3436 CA   CA   . VAL VAL VAL B B 21  21  . 0.1705 0.1523 0.1615 -0.0078 -0.0018
0.0210  1 .
3437 CB   CB   . VAL VAL VAL B B 21  21  . 0.1616 0.1711 0.1580 -0.0113 0.0046
0.0378  1 .
3438 CG1  CG1  . VAL VAL VAL B B 21  21  . 0.1701 0.2251 0.2405 0.0033  -0.0240
0.0233  1 .
3439 CG2  CG2  . VAL VAL VAL B B 21  21  . 0.2341 0.1390 0.2012 0.0066  -0.0390
0.0116  1 .
3440 C    C    . VAL VAL VAL B B 21  21  . 0.2036 0.1557 0.1667 0.0152  0.0062
0.0190  1 .
3441 O    O    . VAL VAL VAL B B 21  21  . 0.1814 0.1361 0.1691 0.0091  0.0333
0.0064  1 .
3442 N    N    . ASP ASP ASP B B 22  22  . 0.1997 0.1460 0.1961 0.0206  0.0198
0.0293  1 .
3443 CA   CA   . ASP ASP ASP B B 22  22  . 0.1890 0.1987 0.1995 0.0078  0.0037
0.0320  1 .
3444 CB   CB   . ASP ASP ASP B B 22  22  . 0.2157 0.1738 0.1784 0.0094  0.0033
0.0194  1 .
3445 CG   CG   . ASP ASP ASP B B 22  22  . 0.2019 0.2258 0.1978 0.0027  0.0143
0.0287  1 .
3446 OD1  OD1  . ASP ASP ASP B B 22  22  . 0.2578 0.2073 0.1990 -0.0028 0.0086
0.0263  1 .
3447 OD2  OD2  . ASP ASP ASP B B 22  22  . 0.1990 0.2898 0.2592 0.0365  0.0038
0.0502  1 .
3448 C    C    . ASP ASP ASP B B 22  22  . 0.1925 0.2006 0.1926 0.0117  0.0111
0.0187  1 .
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3449 O    O    . ASP ASP ASP B B 22  22  . 0.1811 0.1974 0.2296 0.0330  0.0305
0.0194  1 .
3450 N    N    . LEU LEU LEU B B 23  23  . 0.1528 0.1663 0.1875 0.0042  -0.0004
0.0263  1 .
3451 CA   CA   . LEU LEU LEU B B 23  23  . 0.1919 0.2052 0.2032 0.0025  0.0042
0.0234  1 .
3452 CB   CB   . LEU LEU LEU B B 23  23  . 0.1663 0.1818 0.1769 0.0132  -0.0136
0.0285  1 .
3453 CG   CG   . LEU LEU LEU B B 23  23  . 0.2262 0.2434 0.2079 0.0238  -0.0201
0.0733  1 .
3454 CD1  CD1  . LEU LEU LEU B B 23  23  . 0.2029 0.2683 0.2315 0.0393  -0.0127
0.0541  1 .
3455 CD2  CD2  . LEU LEU LEU B B 23  23  . 0.2560 0.2372 0.2112 0.0340  -0.0352
0.1203  1 .
3456 C    C    . LEU LEU LEU B B 23  23  . 0.2072 0.2032 0.1991 0.0115  0.0030
0.0283  1 .
3457 O    O    . LEU LEU LEU B B 23  23  . 0.2008 0.1813 0.2117 0.0240  0.0003
0.0054  1 .
3458 N    N    . TYR TYR TYR B B 24  24  . 0.1707 0.2234 0.1812 0.0189  0.0163
0.0367  1 .
3459 CA   CA   . TYR TYR TYR B B 24  24  . 0.1995 0.2199 0.2040 0.0106  0.0090
0.0181  1 .
3460 CB   CB   . TYR TYR TYR B B 24  24  . 0.2485 0.2638 0.1994 0.0239  -0.0129
0.0249  1 .
3461 CG   CG   . TYR TYR TYR B B 24  24  . 0.1883 0.2439 0.2499 0.0065  0.0075
0.0408  1 .
3462 CD1  CD1  . TYR TYR TYR B B 24  24  . 0.2581 0.2798 0.2495 0.0216  -0.0136
0.0504  1 .
3463 CE1  CE1  . TYR TYR TYR B B 24  24  . 0.2439 0.3721 0.2813 0.0136  -0.0160
0.0667  1 .
3464 CZ   CZ   . TYR TYR TYR B B 24  24  . 0.2437 0.3348 0.2958 0.0038  -0.0229
0.0518  1 .
3465 OH   OH   . TYR TYR TYR B B 24  24  . 0.3170 0.4821 0.2778 0.0248  -0.0417
0.0390  1 .
3466 CE2  CE2  . TYR TYR TYR B B 24  24  . 0.2917 0.3395 0.2562 -0.0247 -0.0079
0.0408  1 .
3467 CD2  CD2  . TYR TYR TYR B B 24  24  . 0.2426 0.2934 0.2677 0.0201  -0.0151
0.1129  1 .
3468 C    C    . TYR TYR TYR B B 24  24  . 0.2162 0.2503 0.2314 0.0025  0.0116
0.0182  1 .
3469 O    O    . TYR TYR TYR B B 24  24  . 0.2071 0.2772 0.2475 0.0173  0.0121
0.0128  1 .
3470 N    N    . THR THR THR B B 25  25  . 0.2239 0.2432 0.2477 -0.0101 0.0054
0.0110  1 .
3471 CA   CA   . THR THR THR B B 25  25  . 0.2504 0.2600 0.2734 -0.0131 0.0048
0.0245  1 .
3472 CB   CB   . THR THR THR B B 25  25  . 0.2371 0.2308 0.2676 -0.0182 0.0115
0.0307  1 .
3473 OG1  OG1  . THR THR THR B B 25  25  . 0.2940 0.2559 0.2662 0.0373  0.0323
0.0555  1 .
3474 CG2  CG2  . THR THR THR B B 25  25  . 0.2463 0.2640 0.2944 0.0236  0.0324
0.0732  1 .
3475 C    C    . THR THR THR B B 25  25  . 0.2433 0.2678 0.2796 -0.0194 -0.0057
0.0398  1 .
3476 O    O    . THR THR THR B B 25  25  . 0.2371 0.2947 0.2867 -0.0464 0.0136
0.0434  1 .
3477 N    N    . ALA ALA ALA B B 26  26  . 0.2802 0.2791 0.2930 -0.0144 -0.0109
0.0230  1 .
3478 CA   CA   . ALA ALA ALA B B 26  26  . 0.3031 0.3190 0.3190 -0.0083 -0.0042
0.0326  1 .
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3479 CB   CB   . ALA ALA ALA B B 26  26  . 0.3118 0.3514 0.3464 -0.0309 0.0009
0.0281  1 .
3480 C    C    . ALA ALA ALA B B 26  26  . 0.3165 0.3185 0.3401 -0.0008 -0.0020
0.0470  1 .
3481 O    O    . ALA ALA ALA B B 26  26  . 0.3314 0.3200 0.3966 0.0056  0.0025
0.0856  1 .
3482 N    N    . LYS LYS LYS B B 27  27  . 0.2877 0.2909 0.3386 -0.0078 -0.0012
0.0399  1 .
3483 CA   CA   . LYS LYS LYS B B 27  27  . 0.2884 0.2835 0.3252 0.0019  -0.0021
0.0307  1 .
3484 CB   CB   . LYS LYS LYS B B 27  27  . 0.3313 0.2865 0.3233 0.0105  -0.0238
0.0326  1 .
3485 CG   CG   . LYS LYS LYS B B 27  27  . 0.3223 0.3510 0.3464 -0.0056 -0.0511
0.0205  1 .
3486 CD   CD   . LYS LYS LYS B B 27  27  . 0.3764 0.4030 0.3821 -0.0355 -0.0719
0.0515  1 .
3487 CE   CE   . LYS LYS LYS B B 27  27  . 0.4683 0.4357 0.4121 -0.0899 -0.0446
0.0307  1 .
3488 NZ   NZ   . LYS LYS LYS B B 27  27  . 0.5446 0.4871 0.4983 -0.0757 -0.0236
0.0681  1 .
3489 C    C    . LYS LYS LYS B B 27  27  . 0.2699 0.2681 0.3118 -0.0005 0.0042
0.0311  1 .
3490 O    O    . LYS LYS LYS B B 27  27  . 0.2777 0.2896 0.3577 0.0103  0.0046
0.0383  1 .
3491 N    N    . GLY GLY GLY B B 28  28  . 0.2210 0.2630 0.3091 -0.0149 -0.0082
0.0413  1 .
3492 CA   CA   . GLY GLY GLY B B 28  28  . 0.2538 0.2408 0.2840 -0.0251 -0.0300
0.0279  1 .
3493 C    C    . GLY GLY GLY B B 28  28  . 0.2315 0.2529 0.2668 -0.0126 -0.0041
0.0547  1 .
3494 O    O    . GLY GLY GLY B B 28  28  . 0.2114 0.2108 0.2872 -0.0029 0.0028
0.0597  1 .
3495 N    N    . LEU LEU LEU B B 29  29  . 0.2160 0.2255 0.2422 -0.0069 -0.0052
0.0322  1 .
3496 CA   CA   . LEU LEU LEU B B 29  29  . 0.2342 0.2538 0.2323 -0.0001 -0.0138
0.0354  1 .
3497 CB   CB   . LEU LEU LEU B B 29  29  . 0.1962 0.2634 0.2185 0.0254  -0.0414
0.0647  1 .
3498 CG   CG   . LEU LEU LEU B B 29  29  . 0.2883 0.2701 0.2564 0.0121  -0.0705
0.0363  1 .
3499 CD1  CD1  . LEU LEU LEU B B 29  29  . 0.3297 0.1880 0.2738 -0.0406 -0.1025
0.0455  1 .
3500 CD2  CD2  . LEU LEU LEU B B 29  29  . 0.2914 0.3768 0.3070 0.0025  -0.1170
0.0488  1 .
3501 C    C    . LEU LEU LEU B B 29  29  . 0.2126 0.2085 0.2251 0.0220  0.0113
0.0270  1 .
3502 O    O    . LEU LEU LEU B B 29  29  . 0.2512 0.1994 0.2642 0.0217  0.0349
0.0409  1 .
3503 N    N    . PHE PHE PHE B B 30  30  . 0.1788 0.1905 0.1985 0.0006  0.0033
0.0286  1 .
3504 CA   CA   . PHE PHE PHE B B 30  30  . 0.1740 0.2061 0.1987 -0.0012 0.0093
0.0010  1 .
3505 CB   CB   . PHE PHE PHE B B 30  30  . 0.1806 0.2215 0.1889 -0.0029 -0.0039 -
0.0023 1 .
3506 CG   CG   . PHE PHE PHE B B 30  30  . 0.2104 0.2121 0.2167 -0.0143 0.0094
0.0189  1 .
3507 CD1  CD1  . PHE PHE PHE B B 30  30  . 0.2099 0.2113 0.2445 -0.0092 -0.0079 -
0.0103 1 .
3508 CE1  CE1  . PHE PHE PHE B B 30  30  . 0.2343 0.2137 0.2340 0.0222  -0.0330
0.0278  1 .
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3509 CZ   CZ   . PHE PHE PHE B B 30  30  . 0.2630 0.2281 0.2241 0.0091  -0.0104 -
0.0058 1 .
3510 CE2  CE2  . PHE PHE PHE B B 30  30  . 0.2695 0.2148 0.1882 -0.0190 -0.0472
0.0135  1 .
3511 CD2  CD2  . PHE PHE PHE B B 30  30  . 0.1660 0.2465 0.1982 -0.0430 -0.0195
0.0353  1 .
3512 C    C    . PHE PHE PHE B B 30  30  . 0.1860 0.1778 0.2176 -0.0024 0.0148
0.0071  1 .
3513 O    O    . PHE PHE PHE B B 30  30  . 0.2159 0.2157 0.2765 -0.0186 0.0230  -
0.0321 1 .
3514 N    N    . ARG ARG ARG B B 31  31  . 0.1553 0.1510 0.1693 -0.0028 0.0119
0.0293  1 .
3515 CA   CA   . ARG ARG ARG B B 31  31  . 0.1466 0.1528 0.1531 0.0088  -0.0110
0.0256  1 .
3516 CB   CB   . ARG ARG ARG B B 31  31  . 0.1467 0.1767 0.1843 0.0268  -0.0380
0.0153  1 .
3517 CG   CG   . ARG ARG ARG B B 31  31  . 0.1817 0.1871 0.1652 -0.0066 -0.0594
0.0181  1 .
3518 CD   CD   . ARG ARG ARG B B 31  31  . 0.1740 0.2340 0.2069 0.0191  -0.0474
0.0385  1 .
3519 NE   NE   . ARG ARG ARG B B 31  31  . 0.2577 0.2209 0.2123 0.0057  -0.0356 -
0.0180 1 .
3520 CZ   CZ   . ARG ARG ARG B B 31  31  . 0.2950 0.2624 0.3149 -0.0063 -0.0394
0.0221  1 .
3521 NH1  NH1  . ARG ARG ARG B B 31  31  . 0.3486 0.1631 0.3282 -0.0051 -0.1711
0.0467  1 .
3522 NH2  NH2  . ARG ARG ARG B B 31  31  . 0.2991 0.2899 0.3172 -0.1163 -0.0274
0.0439  1 .
3523 C    C    . ARG ARG ARG B B 31  31  . 0.1640 0.1509 0.1672 0.0197  0.0122
0.0094  1 .
3524 O    O    . ARG ARG ARG B B 31  31  . 0.2117 0.1440 0.1857 0.0038  0.0087  -
0.0010 1 .
3525 N    N    . ALA ALA ALA B B 32  32  . 0.1334 0.1382 0.1428 0.0107  0.0267
0.0173  1 .
3526 CA   CA   . ALA ALA ALA B B 32  32  . 0.1725 0.1656 0.1323 -0.0051 0.0187
0.0222  1 .
3527 CB   CB   . ALA ALA ALA B B 32  32  . 0.2069 0.2152 0.1318 -0.0287 -0.0124
0.0095  1 .
3528 C    C    . ALA ALA ALA B B 32  32  . 0.1671 0.1653 0.1266 0.0030  0.0160
0.0009  1 .
3529 O    O    . ALA ALA ALA B B 32  32  . 0.1737 0.2000 0.1768 0.0240  0.0033  -
0.0204 1 .
3530 N    N    . ALA ALA ALA B B 33  33  . 0.1196 0.1410 0.1638 0.0183  0.0141  -
0.0019 1 .
3531 CA   CA   . ALA ALA ALA B B 33  33  . 0.1481 0.1618 0.1281 -0.0092 0.0098  -
0.0012 1 .
3532 CB   CB   . ALA ALA ALA B B 33  33  . 0.1632 0.1658 0.1864 0.0224  0.0020
0.0031  1 .
3533 C    C    . ALA ALA ALA B B 33  33  . 0.1931 0.1686 0.1631 0.0060  0.0033
0.0128  1 .
3534 O    O    . ALA ALA ALA B B 33  33  . 0.2176 0.1392 0.1832 0.0177  0.0027  -
0.0105 1 .
3535 N    N    . VAL VAL VAL B B 34  34  . 0.1812 0.1508 0.1578 0.0156  0.0107
0.0232  1 .
3536 CA   CA   . VAL VAL VAL B B 34  34  . 0.1995 0.1555 0.1769 0.0326  0.0342
0.0170  1 .
3537 CB   CB   . VAL VAL VAL B B 34  34  . 0.1715 0.1564 0.1972 0.0282  0.0357
0.0444  1 .
3538 CG1  CG1  . VAL VAL VAL B B 34  34  . 0.2543 0.1664 0.2342 0.0595  0.0759
0.0454  1 .
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3539 CG2  CG2  . VAL VAL VAL B B 34  34  . 0.1529 0.1965 0.2082 0.0373  0.0306
0.0202  1 .
3540 C    C    . VAL VAL VAL B B 34  34  . 0.1713 0.1158 0.1653 0.0299  0.0081
0.0117  1 .
3541 O    O    . VAL VAL VAL B B 34  34  . 0.1961 0.1358 0.1734 0.0265  0.0162  -
0.0068 1 .
3542 N    N    . PRO PRO PRO B B 35  35  . 0.1545 0.1085 0.1478 0.0271  0.0038  -
0.0005 1 .
3543 CA   CA   . PRO PRO PRO B B 35  35  . 0.1696 0.0923 0.1520 0.0009  0.0286  -
0.0135 1 .
3544 CB   CB   . PRO PRO PRO B B 35  35  . 0.1564 0.1172 0.1181 0.0030  0.0180
0.0034  1 .
3545 CG   CG   . PRO PRO PRO B B 35  35  . 0.1296 0.1164 0.1411 0.0010  0.0311  -
0.0131 1 .
3546 CD   CD   . PRO PRO PRO B B 35  35  . 0.1934 0.1674 0.1811 0.0194  0.0211  -
0.0166 1 .
3547 C    C    . PRO PRO PRO B B 35  35  . 0.1680 0.1153 0.1781 0.0021  0.0224
0.0154  1 .
3548 O    O    . PRO PRO PRO B B 35  35  . 0.2123 0.1474 0.2083 0.0167  0.0257
0.0070  1 .
3549 N    N    . SER SER SER B B 36  36  . 0.2030 0.1017 0.1706 -0.0180 0.0164
0.0082  1 .
3550 CA   CA   . SER SER SER B B 36  36  . 0.2200 0.1331 0.1716 -0.0301 0.0265
0.0084  1 .
3551 CB   CB   . SER SER SER B B 36  36  . 0.2931 0.1265 0.1927 -0.0183 0.0151  -
0.0023 1 .
3552 OG   OG   . SER SER SER B B 36  36  . 0.3161 0.1862 0.2416 -0.0429 0.0387  -
0.0390 1 .
3553 C    C    . SER SER SER B B 36  36  . 0.2000 0.1687 0.1484 0.0038  0.0104
0.0063  1 .
3554 O    O    . SER SER SER B B 36  36  . 0.1962 0.1433 0.1655 -0.0135 0.0134
0.0071  1 .
3555 N    N    . GLY GLY GLY B B 37  37  . 0.1712 0.1150 0.1536 0.0099  0.0157
0.0112  1 .
3556 CA   CA   . GLY GLY GLY B B 37  37  . 0.1964 0.1759 0.1443 -0.0119 0.0107
0.0042  1 .
3557 C    C    . GLY GLY GLY B B 37  37  . 0.2016 0.1618 0.1495 -0.0012 -0.0056 -
0.0020 1 .
3558 O    O    . GLY GLY GLY B B 37  37  . 0.2640 0.1912 0.1907 0.0059  0.0196  -
0.0252 1 .
3559 N    N    . ALA ALA ALA B B 38  38  . 0.1892 0.1704 0.1480 -0.0261 0.0068  -
0.0187 1 .
3560 CA   CA   . ALA ALA ALA B B 38  38  . 0.2120 0.1655 0.1886 -0.0253 0.0080
0.0029  1 .
3561 CB   CB   . ALA ALA ALA B B 38  38  . 0.2018 0.2007 0.2133 -0.0252 0.0028
0.0107  1 .
3562 C    C    . ALA ALA ALA B B 38  38  . 0.2476 0.1761 0.1887 -0.0105 0.0236  -
0.0013 1 .
3563 O    O    . ALA ALA ALA B B 38  38  . 0.2838 0.1603 0.2183 -0.0042 0.0373
0.0115  1 .
3564 N    N    . SER SER SER B B 39  39  . 0.2029 0.1769 0.1442 -0.0134 0.0115
0.0002  1 .
3565 CA   CA   . SER SER SER B B 39  39  . 0.1946 0.1740 0.1563 0.0100  0.0270
0.0017  1 .
3566 CB   CB   . SER SER SER B B 39  39  . 0.1709 0.1593 0.1794 -0.0207 0.0396  -
0.0039 1 .
3567 OG   OG   . SER SER SER B B 39  39  . 0.2037 0.1678 0.1602 -0.0008 0.0251
0.0111  1 .
3568 C    C    . SER SER SER B B 39  39  . 0.1863 0.1570 0.1568 -0.0229 0.0315  -
0.0024 1 .
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3569 O    O    . SER SER SER B B 39  39  . 0.2484 0.1541 0.0978 0.0142  0.0108  -
0.0177 1 .
3570 N    N    . THR THR THR B B 40  40  . 0.2229 0.1965 0.1855 0.0110  0.0300
0.0065  1 .
3571 CA   CA   . THR THR THR B B 40  40  . 0.2095 0.1894 0.1526 0.0163  0.0308
0.0105  1 .
3572 CB   CB   . THR THR THR B B 40  40  . 0.2687 0.1961 0.1778 0.0117  0.0430
0.0018  1 .
3573 OG1  OG1  . THR THR THR B B 40  40  . 0.2470 0.2194 0.2377 0.0260  0.0300  -
0.0074 1 .
3574 CG2  CG2  . THR THR THR B B 40  40  . 0.3058 0.1757 0.1686 0.0556  0.0422  -
0.0048 1 .
3575 C    C    . THR THR THR B B 40  40  . 0.2313 0.2030 0.1929 -0.0006 0.0134
0.0054  1 .
3576 O    O    . THR THR THR B B 40  40  . 0.2506 0.1933 0.1854 -0.0109 -0.0148 -
0.0042 1 .
3577 N    N    . GLY GLY GLY B B 41  41  . 0.2172 0.1773 0.1448 0.0188  0.0062
0.0114  1 .
3578 CA   CA   . GLY GLY GLY B B 41  41  . 0.2299 0.1603 0.1546 0.0258  0.0186
0.0092  1 .
3579 C    C    . GLY GLY GLY B B 41  41  . 0.2164 0.1507 0.1432 0.0119  0.0371
0.0018  1 .
3580 O    O    . GLY GLY GLY B B 41  41  . 0.2237 0.1885 0.1558 -0.0001 0.0490  -
0.0098 1 .
3581 N    N    . ILE ILE ILE B B 42  42  . 0.1886 0.1513 0.1316 0.0046  0.0341
0.0100  1 .
3582 CA   CA   . ILE ILE ILE B B 42  42  . 0.2187 0.1574 0.1715 0.0059  0.0314
0.0069  1 .
3583 CB   CB   . ILE ILE ILE B B 42  42  . 0.2159 0.1329 0.1734 -0.0154 0.0093
0.0213  1 .
3584 CG1  CG1  . ILE ILE ILE B B 42  42  . 0.2560 0.1539 0.1712 -0.0047 0.0465
0.0192  1 .
3585 CD   CD   . ILE ILE ILE B B 42  42  . 0.3023 0.2379 0.2279 -0.0264 0.0275
0.0209  1 .
3586 CG2  CG2  . ILE ILE ILE B B 42  42  . 0.2385 0.1843 0.2588 0.0445  -0.0086
0.0499  1 .
3587 C    C    . ILE ILE ILE B B 42  42  . 0.2206 0.1723 0.1604 -0.0067 0.0233
0.0006  1 .
3588 O    O    . ILE ILE ILE B B 42  42  . 0.2466 0.1982 0.2181 0.0085  0.0501  -
0.0116 1 .
3589 N    N    . TYR TYR TYR B B 43  43  . 0.2120 0.1003 0.1443 -0.0055 0.0109
0.0073  1 .
3590 CA   CA   . TYR TYR TYR B B 43  43  . 0.2166 0.1340 0.1384 -0.0124 0.0086
0.0053  1 .
3591 CB   CB   . TYR TYR TYR B B 43  43  . 0.2410 0.1361 0.1374 -0.0161 0.0394
0.0434  1 .
3592 CG   CG   . TYR TYR TYR B B 43  43  . 0.2361 0.1332 0.1687 -0.0026 0.0299
0.0368  1 .
3593 CD1  CD1  . TYR TYR TYR B B 43  43  . 0.2102 0.1265 0.1148 -0.0057 0.0119
0.0315  1 .
3594 CE1  CE1  . TYR TYR TYR B B 43  43  . 0.2447 0.1549 0.1108 -0.0132 0.0261
0.0334  1 .
3595 CZ   CZ   . TYR TYR TYR B B 43  43  . 0.2387 0.1658 0.2011 0.0027  0.0280
0.0338  1 .
3596 OH   OH   . TYR TYR TYR B B 43  43  . 0.2433 0.1293 0.1597 -0.0039 0.0386
0.0182  1 .
3597 CE2  CE2  . TYR TYR TYR B B 43  43  . 0.2805 0.1409 0.1498 0.0210  0.0572
0.0478  1 .
3598 CD2  CD2  . TYR TYR TYR B B 43  43  . 0.2854 0.1744 0.1830 0.0250  0.0206
0.0451  1 .
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3599 C    C    . TYR TYR TYR B B 43  43  . 0.1989 0.1420 0.1557 -0.0045 0.0010
0.0084  1 .
3600 O    O    . TYR TYR TYR B B 43  43  . 0.1877 0.1524 0.1810 -0.0092 0.0297
0.0140  1 .
3601 N    N    . GLU GLU GLU B B 44  44  . 0.2184 0.1437 0.1411 -0.0039 0.0089
0.0249  1 .
3602 CA   CA   . GLU GLU GLU B B 44  44  . 0.2168 0.1449 0.1616 0.0162  0.0433
0.0312  1 .
3603 CB   CB   . GLU GLU GLU B B 44  44  . 0.1930 0.1837 0.1677 0.0135  0.0361  -
0.0121 1 .
3604 CG   CG   . GLU GLU GLU B B 44  44  . 0.2205 0.1509 0.2006 0.0611  0.0379
0.0118  1 .
3605 CD   CD   . GLU GLU GLU B B 44  44  . 0.2037 0.1589 0.1797 -0.0032 -0.0013 -
0.0117 1 .
3606 OE1  OE1  . GLU GLU GLU B B 44  44  . 0.2719 0.1456 0.2182 0.0319  0.0330
0.0015  1 .
3607 OE2  OE2  . GLU GLU GLU B B 44  44  . 0.2299 0.1848 0.2621 0.0158  0.0166
0.0204  1 .
3608 C    C    . GLU GLU GLU B B 44  44  . 0.2375 0.1823 0.1873 -0.0005 0.0351
0.0171  1 .
3609 O    O    . GLU GLU GLU B B 44  44  . 0.2502 0.1378 0.1706 -0.0024 0.0175
0.0427  1 .
3610 N    N    . ALA ALA ALA B B 45  45  . 0.1915 0.1581 0.1785 0.0126  0.0381
0.0067  1 .
3611 CA   CA   . ALA ALA ALA B B 45  45  . 0.2109 0.1716 0.1842 0.0154  0.0313
0.0055  1 .
3612 CB   CB   . ALA ALA ALA B B 45  45  . 0.1935 0.2077 0.2239 0.0093  0.0237  -
0.0092 1 .
3613 C    C    . ALA ALA ALA B B 45  45  . 0.1870 0.1758 0.1635 0.0252  0.0218
0.0134  1 .
3614 O    O    . ALA ALA ALA B B 45  45  . 0.2307 0.1772 0.2002 0.0450  0.0434
0.0131  1 .
3615 N    N    . LEU LEU LEU B B 46  46  . 0.2164 0.1691 0.1517 0.0251  0.0128  -
0.0191 1 .
3616 CA   CA   . LEU LEU LEU B B 46  46  . 0.2219 0.1922 0.1626 0.0252  0.0120  -
0.0026 1 .
3617 CB   CB   . LEU LEU LEU B B 46  46  . 0.2624 0.2249 0.1752 0.0482  0.0052  -
0.0291 1 .
3618 CG   CG   . LEU LEU LEU B B 46  46  . 0.3419 0.2822 0.2734 -0.0247 -0.0105 -
0.0199 1 .
3619 CD1  CD1  . LEU LEU LEU B B 46  46  . 0.4968 0.3440 0.3500 -0.0670 -0.0862 -
0.0178 1 .
3620 CD2  CD2  . LEU LEU LEU B B 46  46  . 0.4103 0.3659 0.3792 0.0182  0.0463  -
0.0147 1 .
3621 C    C    . LEU LEU LEU B B 46  46  . 0.2216 0.1827 0.1981 0.0208  0.0099  -
0.0213 1 .
3622 O    O    . LEU LEU LEU B B 46  46  . 0.2902 0.2241 0.2053 0.0043  0.0150
0.0250  1 .
3623 N    N    . GLU GLU GLU B B 47  47  . 0.2404 0.1747 0.1681 0.0052  -0.0053 -
0.0085 1 .
3624 CA   CA   . GLU GLU GLU B B 47  47  . 0.2469 0.1939 0.1562 0.0126  -0.0124 -
0.0159 1 .
3625 CB   CB   . GLU GLU GLU B B 47  47  . 0.2601 0.2200 0.1651 0.0019  0.0148  -
0.0179 1 .
3626 CG   CG   . GLU GLU GLU B B 47  47  . 0.2927 0.2400 0.2019 0.0059  -0.0114 -
0.0120 1 .
3627 CD   CD   . GLU GLU GLU B B 47  47  . 0.3182 0.2852 0.3015 -0.0016 -0.0229 -
0.0610 1 .
3628 OE1  OE1  . GLU GLU GLU B B 47  47  . 0.3389 0.2141 0.3156 -0.0414 0.0172  -
0.0436 1 .
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3629 OE2  OE2  . GLU GLU GLU B B 47  47  . 0.3063 0.2490 0.2868 0.0210  0.0077  -
0.0429 1 .
3630 C    C    . GLU GLU GLU B B 47  47  . 0.2510 0.1945 0.1717 -0.0073 -0.0014 -
0.0240 1 .
3631 O    O    . GLU GLU GLU B B 47  47  . 0.2713 0.2158 0.1889 -0.0071 0.0223  -
0.0134 1 .
3632 N    N    . LEU LEU LEU B B 48  48  . 0.2315 0.1502 0.1535 0.0412  0.0089  -
0.0473 1 .
3633 CA   CA   . LEU LEU LEU B B 48  48  . 0.2564 0.1919 0.1949 0.0248  0.0011  -
0.0393 1 .
3634 CB   CB   . LEU LEU LEU B B 48  48  . 0.2441 0.1614 0.1951 0.0031  0.0061  -
0.0350 1 .
3635 CG   CG   . LEU LEU LEU B B 48  48  . 0.2439 0.2035 0.2310 0.0291  0.0173  -
0.0386 1 .
3636 CD1  CD1  . LEU LEU LEU B B 48  48  . 0.3309 0.1943 0.2822 -0.0059 0.0511  -
0.0672 1 .
3637 CD2  CD2  . LEU LEU LEU B B 48  48  . 0.2364 0.2022 0.2252 0.0270  -0.0083 -
0.0097 1 .
3638 C    C    . LEU LEU LEU B B 48  48  . 0.2706 0.2000 0.2203 0.0046  -0.0059 -
0.0318 1 .
3639 O    O    . LEU LEU LEU B B 48  48  . 0.2912 0.1370 0.1994 -0.0041 0.0075  -
0.0388 1 .
3640 N    N    . ARG ARG ARG B B 49  49  . 0.2952 0.1675 0.2205 0.0082  -0.0083 -
0.0573 1 .
3641 CA   CA   . ARG ARG ARG B B 49  49  . 0.2707 0.1583 0.1956 0.0380  -0.0094 -
0.0772 1 .
3642 CB   CB   . ARG ARG ARG B B 49  49  . 0.3007 0.1983 0.2142 0.0524  -0.0128 -
0.0984 1 .
3643 CG   CG   . ARG ARG ARG B B 49  49  . 0.3029 0.2186 0.2566 0.0905  0.0000  -
0.0758 1 .
3644 CD   CD   . ARG ARG ARG B B 49  49  . 0.4355 0.1148 0.1740 0.0360  -0.0193 -
0.0119 1 .
3645 NE   NE   . ARG ARG ARG B B 49  49  . 0.3823 0.1870 0.2142 0.0307  0.0490  -
0.0178 1 .
3646 CZ   CZ   . ARG ARG ARG B B 49  49  . 0.3595 0.1848 0.2002 0.0651  0.0564  -
0.0086 1 .
3647 NH1  NH1  . ARG ARG ARG B B 49  49  . 0.3368 0.1831 0.2437 0.0218  0.0552  -
0.0395 1 .
3648 NH2  NH2  . ARG ARG ARG B B 49  49  . 0.3206 0.1433 0.1834 -0.0089 0.0399  -
0.0346 1 .
3649 C    C    . ARG ARG ARG B B 49  49  . 0.3037 0.1830 0.2109 0.0455  0.0002  -
0.0565 1 .
3650 O    O    . ARG ARG ARG B B 49  49  . 0.3439 0.2055 0.2264 0.0518  -0.0044 -
0.0339 1 .
3651 N    N    . ASP ASP ASP B B 50  50  . 0.3162 0.1635 0.2067 0.0494  0.0128  -
0.0619 1 .
3652 CA   CA   . ASP ASP ASP B B 50  50  . 0.3220 0.1797 0.2234 0.0412  0.0240  -
0.0698 1 .
3653 CB   CB   . ASP ASP ASP B B 50  50  . 0.3510 0.1867 0.2203 0.0214  0.0222  -
0.0766 1 .
3654 CG   CG   . ASP ASP ASP B B 50  50  . 0.2705 0.2063 0.2263 0.0422  0.0295  -
0.0649 1 .
3655 OD1  OD1  . ASP ASP ASP B B 50  50  . 0.2868 0.2330 0.2483 0.0575  0.0382  -
0.0134 1 .
3656 OD2  OD2  . ASP ASP ASP B B 50  50  . 0.3288 0.1711 0.1982 0.0336  0.0554  -
0.0305 1 .
3657 C    C    . ASP ASP ASP B B 50  50  . 0.3290 0.2136 0.2692 0.0331  0.0320  -
0.0503 1 .
3658 O    O    . ASP ASP ASP B B 50  50  . 0.3641 0.1921 0.3043 0.0562  0.0390  -
0.0516 1 .
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3659 N    N    . GLY GLY GLY B B 51  51  . 0.3383 0.2173 0.2989 0.0147  0.0161  -
0.0570 1 .
3660 CA   CA   . GLY GLY GLY B B 51  51  . 0.3706 0.2737 0.3129 0.0006  -0.0051 -
0.0342 1 .
3661 C    C    . GLY GLY GLY B B 51  51  . 0.4000 0.2721 0.3299 -0.0027 -0.0066 -
0.0387 1 .
3662 O    O    . GLY GLY GLY B B 51  51  . 0.4471 0.2563 0.3808 0.0071  -0.0203 -
0.0199 1 .
3663 N    N    . ASP ASP ASP B B 52  52  . 0.3866 0.2530 0.3115 -0.0008 -0.0084 -
0.0396 1 .
3664 CA   CA   . ASP ASP ASP B B 52  52  . 0.3893 0.2771 0.3194 0.0001  -0.0094 -
0.0280 1 .
3665 CB   CB   . ASP ASP ASP B B 52  52  . 0.4003 0.2585 0.3046 -0.0164 -0.0034 -
0.0488 1 .
3666 CG   CG   . ASP ASP ASP B B 52  52  . 0.3914 0.3244 0.3618 -0.0221 -0.0023 -
0.0437 1 .
3667 OD1  OD1  . ASP ASP ASP B B 52  52  . 0.5145 0.3102 0.4342 -0.0363 -0.0330 -
0.1628 1 .
3668 OD2  OD2  . ASP ASP ASP B B 52  52  . 0.4521 0.3255 0.3262 0.0276  0.0907  -
0.0983 1 .
3669 C    C    . ASP ASP ASP B B 52  52  . 0.3989 0.2997 0.3465 -0.0118 -0.0083 -
0.0133 1 .
3670 O    O    . ASP ASP ASP B B 52  52  . 0.4058 0.2715 0.3794 0.0020  -0.0123 -
0.0123 1 .
3671 N    N    . LYS LYS LYS B B 53  53  . 0.3804 0.3073 0.3500 -0.0227 -0.0104 -
0.0226 1 .
3672 CA   CA   . LYS LYS LYS B B 53  53  . 0.4006 0.3191 0.3919 -0.0234 -0.0320 -
0.0125 1 .
3673 CB   CB   . LYS LYS LYS B B 53  53  . 0.3785 0.3310 0.4030 -0.0356 -0.0212
0.0157  1 .
3674 CG   CG   . LYS LYS LYS B B 53  53  . 0.4417 0.4161 0.4073 -0.0034 -0.0412 -
0.0037 1 .
3675 C    C    . LYS LYS LYS B B 53  53  . 0.4032 0.3070 0.4036 -0.0232 -0.0140 -
0.0156 1 .
3676 O    O    . LYS LYS LYS B B 53  53  . 0.4169 0.3107 0.4260 -0.0077 -0.0380 -
0.0102 1 .
3677 N    N    . GLN GLN GLN B B 54  54  . 0.4148 0.2663 0.3711 -0.0281 -0.0126 -
0.0446 1 .
3678 CA   CA   . GLN GLN GLN B B 54  54  . 0.4265 0.3014 0.3721 -0.0332 -0.0288 -
0.0527 1 .
3679 CB   CB   . GLN GLN GLN B B 54  54  . 0.4411 0.3506 0.3869 -0.0349 -0.0191 -
0.0664 1 .
3680 CG   CG   . GLN GLN GLN B B 54  54  . 0.4664 0.3831 0.4852 -0.0663 -0.0195 -
0.0385 1 .
3681 CD   CD   . GLN GLN GLN B B 54  54  . 0.4719 0.4904 0.5169 -0.0622 -0.0615 -
0.0993 1 .
3682 C    C    . GLN GLN GLN B B 54  54  . 0.4191 0.3035 0.3514 -0.0177 -0.0308 -
0.0474 1 .
3683 O    O    . GLN GLN GLN B B 54  54  . 0.4864 0.2982 0.3636 -0.0320 -0.0558 -
0.0739 1 .
3684 N    N    . ARG ARG ARG B B 55  55  . 0.3793 0.2509 0.3097 -0.0134 -0.0124 -
0.0464 1 .
3685 CA   CA   . ARG ARG ARG B B 55  55  . 0.3140 0.2287 0.2610 -0.0179 0.0025  -
0.0352 1 .
3686 CB   CB   . ARG ARG ARG B B 55  55  . 0.3014 0.2205 0.2559 -0.0102 0.0143  -
0.0258 1 .
3687 CG   CG   . ARG ARG ARG B B 55  55  . 0.2379 0.1748 0.2354 -0.0366 -0.0239 -
0.0520 1 .
3688 CD   CD   . ARG ARG ARG B B 55  55  . 0.3002 0.2057 0.1597 0.0204  -0.0061
0.0089  1 .
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3689 NE   NE   . ARG ARG ARG B B 55  55  . 0.2856 0.2210 0.2152 -0.0276 0.0216  -
0.0299 1 .
3690 CZ   CZ   . ARG ARG ARG B B 55  55  . 0.3187 0.1714 0.2061 -0.0183 -0.0194 -
0.0121 1 .
3691 NH1  NH1  . ARG ARG ARG B B 55  55  . 0.2756 0.1951 0.1659 0.0285  0.0282  -
0.0269 1 .
3692 NH2  NH2  . ARG ARG ARG B B 55  55  . 0.3148 0.2051 0.2406 -0.0251 0.0049  -
0.0249 1 .
3693 C    C    . ARG ARG ARG B B 55  55  . 0.3072 0.2296 0.2689 -0.0031 0.0036  -
0.0418 1 .
3694 O    O    . ARG ARG ARG B B 55  55  . 0.3117 0.2330 0.2415 0.0055  0.0001  -
0.0688 1 .
3695 N    N    . TYR TYR TYR B B 56  56  . 0.2764 0.1945 0.2370 -0.0084 0.0212  -
0.0542 1 .
3696 CA   CA   . TYR TYR TYR B B 56  56  . 0.2739 0.2142 0.2297 -0.0206 0.0036  -
0.0467 1 .
3697 CB   CB   . TYR TYR TYR B B 56  56  . 0.2457 0.1830 0.2070 -0.0151 0.0247  -
0.0492 1 .
3698 CG   CG   . TYR TYR TYR B B 56  56  . 0.2309 0.2058 0.2007 -0.0255 -0.0165 -
0.0403 1 .
3699 CD1  CD1  . TYR TYR TYR B B 56  56  . 0.2694 0.1637 0.1818 -0.0281 -0.0028 -
0.0159 1 .
3700 CE1  CE1  . TYR TYR TYR B B 56  56  . 0.2822 0.1953 0.1590 -0.0089 -0.0466
0.0094  1 .
3701 CZ   CZ   . TYR TYR TYR B B 56  56  . 0.2554 0.1848 0.1838 -0.0379 0.0044  -
0.0414 1 .
3702 OH   OH   . TYR TYR TYR B B 56  56  . 0.3142 0.1908 0.1520 -0.0394 0.0065  -
0.0135 1 .
3703 CE2  CE2  . TYR TYR TYR B B 56  56  . 0.2873 0.1942 0.1683 -0.0529 0.0226  -
0.0495 1 .
3704 CD2  CD2  . TYR TYR TYR B B 56  56  . 0.2700 0.1796 0.1804 -0.0160 -0.0185 -
0.0045 1 .
3705 C    C    . TYR TYR TYR B B 56  56  . 0.2797 0.2175 0.2550 -0.0191 0.0031  -
0.0393 1 .
3706 O    O    . TYR TYR TYR B B 56  56  . 0.3203 0.2022 0.2446 -0.0178 0.0122  -
0.0331 1 .
3707 N    N    . LEU LEU LEU B B 57  57  . 0.3067 0.2554 0.3068 -0.0314 0.0137  -
0.0325 1 .
3708 CA   CA   . LEU LEU LEU B B 57  57  . 0.3325 0.2440 0.3336 -0.0389 0.0096  -
0.0302 1 .
3709 CB   CB   . LEU LEU LEU B B 57  57  . 0.3214 0.2746 0.3459 -0.0488 0.0157  -
0.0125 1 .
3710 CG   CG   . LEU LEU LEU B B 57  57  . 0.3597 0.2882 0.3693 -0.0298 0.0228
0.0727  1 .
3711 CD1  CD1  . LEU LEU LEU B B 57  57  . 0.4441 0.3460 0.3823 -0.0318 0.0595
0.1130  1 .
3712 CD2  CD2  . LEU LEU LEU B B 57  57  . 0.4299 0.2550 0.4119 0.0184  0.0978
0.0348  1 .
3713 C    C    . LEU LEU LEU B B 57  57  . 0.3260 0.2365 0.3194 -0.0443 0.0130  -
0.0532 1 .
3714 O    O    . LEU LEU LEU B B 57  57  . 0.3587 0.2397 0.3593 -0.0496 0.0241  -
0.0632 1 .
3715 N    N    . GLY GLY GLY B B 58  58  . 0.2993 0.1778 0.3129 -0.0315 0.0072  -
0.0616 1 .
3716 CA   CA   . GLY GLY GLY B B 58  58  . 0.3144 0.1975 0.2549 -0.0254 -0.0094 -
0.0451 1 .
3717 C    C    . GLY GLY GLY B B 58  58  . 0.2666 0.1723 0.2305 -0.0089 -0.0021 -
0.0282 1 .
3718 O    O    . GLY GLY GLY B B 58  58  . 0.3005 0.1608 0.2361 0.0129  0.0219  -
0.0256 1 .
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3719 N    N    . LYS LYS LYS B B 59  59  . 0.2723 0.1767 0.2435 -0.0076 0.0023  -
0.0305 1 .
3720 CA   CA   . LYS LYS LYS B B 59  59  . 0.2416 0.1959 0.2106 -0.0143 0.0174  -
0.0281 1 .
3721 CB   CB   . LYS LYS LYS B B 59  59  . 0.2278 0.2374 0.2279 -0.0198 0.0556  -
0.0245 1 .
3722 CG   CG   . LYS LYS LYS B B 59  59  . 0.2759 0.2341 0.3317 -0.0634 0.0776  -
0.0490 1 .
3723 CD   CD   . LYS LYS LYS B B 59  59  . 0.3133 0.3339 0.4691 -0.0421 0.1209
0.0200  1 .
3724 CE   CE   . LYS LYS LYS B B 59  59  . 0.3868 0.4250 0.4636 -0.0528 0.1632
0.0201  1 .
3725 NZ   NZ   . LYS LYS LYS B B 59  59  . 0.4205 0.3948 0.5402 0.0029  0.0834
0.0122  1 .
3726 C    C    . LYS LYS LYS B B 59  59  . 0.2377 0.2146 0.1966 -0.0191 0.0248  -
0.0245 1 .
3727 O    O    . LYS LYS LYS B B 59  59  . 0.2294 0.1537 0.1616 0.0253  0.0347  -
0.0237 1 .
3728 N    N    . GLY GLY GLY B B 60  60  . 0.2311 0.1754 0.1697 0.0052  0.0399  -
0.0360 1 .
3729 CA   CA   . GLY GLY GLY B B 60  60  . 0.2001 0.2109 0.1815 -0.0047 0.0330  -
0.0251 1 .
3730 C    C    . GLY GLY GLY B B 60  60  . 0.2435 0.1895 0.1810 0.0029  0.0318  -
0.0314 1 .
3731 O    O    . GLY GLY GLY B B 60  60  . 0.2361 0.1959 0.1773 0.0225  0.0221  -
0.0263 1 .
3732 N    N    . VAL VAL VAL B B 61  61  . 0.2003 0.1558 0.1610 0.0050  0.0345  -
0.0239 1 .
3733 CA   CA   . VAL VAL VAL B B 61  61  . 0.1976 0.1227 0.1525 0.0202  0.0169  -
0.0242 1 .
3734 CB   CB   . VAL VAL VAL B B 61  61  . 0.2189 0.1023 0.1505 0.0176  0.0303  -
0.0175 1 .
3735 CG1  CG1  . VAL VAL VAL B B 61  61  . 0.2161 0.1149 0.1586 0.0238  0.0165  -
0.0287 1 .
3736 CG2  CG2  . VAL VAL VAL B B 61  61  . 0.2823 0.1325 0.1363 0.0468  -0.0347
0.0247  1 .
3737 C    C    . VAL VAL VAL B B 61  61  . 0.2065 0.1484 0.1815 0.0101  0.0059  -
0.0159 1 .
3738 O    O    . VAL VAL VAL B B 61  61  . 0.2148 0.1594 0.2116 0.0274  0.0067  -
0.0189 1 .
3739 N    N    . LEU LEU LEU B B 62  62  . 0.2325 0.1535 0.1729 0.0249  0.0094  -
0.0298 1 .
3740 CA   CA   . LEU LEU LEU B B 62  62  . 0.2311 0.2001 0.1940 0.0155  0.0064  -
0.0320 1 .
3741 CB   CB   . LEU LEU LEU B B 62  62  . 0.2184 0.2317 0.1640 0.0169  -0.0002 -
0.0389 1 .
3742 CG   CG   . LEU LEU LEU B B 62  62  . 0.2624 0.2560 0.1961 0.0481  -0.0030 -
0.0731 1 .
3743 CD1  CD1  . LEU LEU LEU B B 62  62  . 0.3024 0.2896 0.2129 0.0039  -0.0040 -
0.1117 1 .
3744 CD2  CD2  . LEU LEU LEU B B 62  62  . 0.2917 0.3248 0.2480 0.0451  0.0504
0.0012  1 .
3745 C    C    . LEU LEU LEU B B 62  62  . 0.2366 0.1790 0.1990 0.0305  0.0199  -
0.0325 1 .
3746 O    O    . LEU LEU LEU B B 62  62  . 0.2533 0.1811 0.2277 0.0687  0.0091  -
0.0445 1 .
3747 N    N    . LYS LYS LYS B B 63  63  . 0.2601 0.1647 0.1905 0.0387  0.0359  -
0.0431 1 .
3748 CA   CA   . LYS LYS LYS B B 63  63  . 0.2556 0.1910 0.2053 0.0293  0.0305  -
0.0200 1 .
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3749 CB   CB   . LYS LYS LYS B B 63  63  . 0.2796 0.1483 0.2195 0.0147  0.0322  -
0.0211 1 .
3750 CG   CG   . LYS LYS LYS B B 63  63  . 0.2877 0.2441 0.2531 0.0048  0.0054  -
0.0378 1 .
3751 CD   CD   . LYS LYS LYS B B 63  63  . 0.4058 0.2210 0.3268 -0.0207 -0.0017 -
0.0354 1 .
3752 CE   CE   . LYS LYS LYS B B 63  63  . 0.3961 0.2401 0.3071 -0.0407 0.0195  -
0.0313 1 .
3753 NZ   NZ   . LYS LYS LYS B B 63  63  . 0.4306 0.2402 0.3967 0.0112  0.0074
0.0149  1 .
3754 C    C    . LYS LYS LYS B B 63  63  . 0.2320 0.1677 0.1974 0.0369  0.0301  -
0.0033 1 .
3755 O    O    . LYS LYS LYS B B 63  63  . 0.2637 0.1614 0.2308 0.0535  0.0234  -
0.0210 1 .
3756 N    N    . ALA ALA ALA B B 64  64  . 0.2487 0.1922 0.1792 0.0405  0.0331  -
0.0062 1 .
3757 CA   CA   . ALA ALA ALA B B 64  64  . 0.2284 0.1918 0.1836 0.0286  0.0389  -
0.0121 1 .
3758 CB   CB   . ALA ALA ALA B B 64  64  . 0.2185 0.2111 0.1860 0.0443  0.0594  -
0.0171 1 .
3759 C    C    . ALA ALA ALA B B 64  64  . 0.2190 0.2075 0.2031 0.0324  0.0244  -
0.0147 1 .
3760 O    O    . ALA ALA ALA B B 64  64  . 0.1840 0.1989 0.2260 0.0610  0.0163  -
0.0199 1 .
3761 N    N    . VAL VAL VAL B B 65  65  . 0.2203 0.1973 0.1840 0.0346  0.0310  -
0.0258 1 .
3762 CA   CA   . VAL VAL VAL B B 65  65  . 0.2084 0.1855 0.1917 0.0409  0.0315  -
0.0039 1 .
3763 CB   CB   . VAL VAL VAL B B 65  65  . 0.1959 0.2096 0.1876 0.0229  0.0306  -
0.0006 1 .
3764 CG1  CG1  . VAL VAL VAL B B 65  65  . 0.1994 0.2108 0.2173 0.0296  0.0602
0.0517  1 .
3765 CG2  CG2  . VAL VAL VAL B B 65  65  . 0.2257 0.1257 0.2219 0.0807  0.0090
0.0007  1 .
3766 C    C    . VAL VAL VAL B B 65  65  . 0.2241 0.2211 0.2155 0.0175  0.0165  -
0.0154 1 .
3767 O    O    . VAL VAL VAL B B 65  65  . 0.2123 0.2186 0.2208 0.0191  0.0336  -
0.0150 1 .
3768 N    N    . ASP ASP ASP B B 66  66  . 0.2634 0.2108 0.2461 0.0364  0.0364  -
0.0075 1 .
3769 CA   CA   . ASP ASP ASP B B 66  66  . 0.2627 0.2175 0.2815 0.0340  0.0325  -
0.0204 1 .
3770 CB   CB   . ASP ASP ASP B B 66  66  . 0.2727 0.2410 0.2767 0.0458  0.0590  -
0.0414 1 .
3771 CG   CG   . ASP ASP ASP B B 66  66  . 0.3250 0.3136 0.3918 0.0499  0.0471  -
0.0153 1 .
3772 OD1  OD1  . ASP ASP ASP B B 66  66  . 0.4922 0.3956 0.4851 0.1415  0.0782
0.0026  1 .
3773 OD2  OD2  . ASP ASP ASP B B 66  66  . 0.3522 0.3954 0.3220 0.0217  0.0726  -
0.0459 1 .
3774 C    C    . ASP ASP ASP B B 66  66  . 0.2629 0.1964 0.2854 0.0368  0.0358
0.0000  1 .
3775 O    O    . ASP ASP ASP B B 66  66  . 0.2603 0.1819 0.2839 0.0534  0.0181  -
0.0003 1 .
3776 N    N    . HIS HIS HIS B B 67  67  . 0.2667 0.1809 0.2545 0.0633  0.0281  -
0.0157 1 .
3777 CA   CA   . HIS HIS HIS B B 67  67  . 0.2528 0.1889 0.2569 0.0571  0.0405  -
0.0222 1 .
3778 CB   CB   . HIS HIS HIS B B 67  67  . 0.2584 0.1899 0.2548 0.0394  0.0479  -
0.0232 1 .
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3779 CG   CG   . HIS HIS HIS B B 67  67  . 0.2423 0.1887 0.3141 0.0734  0.0471  -
0.0368 1 .
3780 ND1  ND1  . HIS HIS HIS B B 67  67  . 0.3557 0.2527 0.3164 0.0591  0.1385  -
0.0524 1 .
3781 CE1  CE1  . HIS HIS HIS B B 67  67  . 0.3204 0.2608 0.3622 0.0127  0.1057  -
0.0688 1 .
3782 NE2  NE2  . HIS HIS HIS B B 67  67  . 0.2961 0.1895 0.2982 0.0323  0.0821  -
0.0361 1 .
3783 CD2  CD2  . HIS HIS HIS B B 67  67  . 0.2586 0.1793 0.2491 0.0579  0.0874  -
0.0265 1 .
3784 C    C    . HIS HIS HIS B B 67  67  . 0.2153 0.1978 0.2542 0.0470  0.0221  -
0.0056 1 .
3785 O    O    . HIS HIS HIS B B 67  67  . 0.2581 0.2238 0.2688 0.0675  0.0254
0.0171  1 .
3786 N    N    . ILE ILE ILE B B 68  68  . 0.2004 0.1783 0.2140 0.0496  0.0288
0.0094  1 .
3787 CA   CA   . ILE ILE ILE B B 68  68  . 0.1867 0.1895 0.2294 0.0549  0.0377
0.0006  1 .
3788 CB   CB   . ILE ILE ILE B B 68  68  . 0.1717 0.1824 0.2018 0.0510  0.0467  -
0.0024 1 .
3789 CG1  CG1  . ILE ILE ILE B B 68  68  . 0.1987 0.1778 0.1707 0.0893  0.0540
0.0299  1 .
3790 CD   CD   . ILE ILE ILE B B 68  68  . 0.2157 0.1879 0.1879 0.1165  0.0155
0.0472  1 .
3791 CG2  CG2  . ILE ILE ILE B B 68  68  . 0.1848 0.1756 0.1802 0.0430  0.0154
0.0229  1 .
3792 C    C    . ILE ILE ILE B B 68  68  . 0.1930 0.2104 0.2113 0.0410  0.0345
0.0080  1 .
3793 O    O    . ILE ILE ILE B B 68  68  . 0.2118 0.2297 0.2398 0.0392  0.0148  -
0.0071 1 .
3794 N    N    . ASN ASN ASN B B 69  69  . 0.1933 0.1959 0.2270 0.0715  0.0344  -
0.0055 1 .
3795 CA   CA   . ASN ASN ASN B B 69  69  . 0.2062 0.2404 0.2430 0.0571  0.0380  -
0.0023 1 .
3796 CB   CB   . ASN ASN ASN B B 69  69  . 0.1864 0.2308 0.2331 0.0856  0.0540  -
0.0013 1 .
3797 CG   CG   . ASN ASN ASN B B 69  69  . 0.2088 0.2110 0.2221 0.0461  0.0665
0.0095  1 .
3798 OD1  OD1  . ASN ASN ASN B B 69  69  . 0.1992 0.2035 0.2021 0.0695  0.0405
0.0324  1 .
3799 ND2  ND2  . ASN ASN ASN B B 69  69  . 0.2343 0.2761 0.1883 0.0544  0.0336  -
0.0343 1 .
3800 C    C    . ASN ASN ASN B B 69  69  . 0.2219 0.2409 0.2854 0.0526  0.0368  -
0.0025 1 .
3801 O    O    . ASN ASN ASN B B 69  69  . 0.2143 0.3174 0.3042 0.0634  0.0505
0.0041  1 .
3802 N    N    . SER SER SER B B 70  70  . 0.2628 0.2540 0.2976 0.0811  0.0391  -
0.0113 1 .
3803 CA   CA   . SER SER SER B B 70  70  . 0.2683 0.2859 0.3129 0.0778  0.0364  -
0.0091 1 .
3804 CB   CB   . SER SER SER B B 70  70  . 0.2819 0.2758 0.3002 0.0973  0.0158  -
0.0292 1 .
3805 OG   OG   . SER SER SER B B 70  70  . 0.3358 0.3885 0.3277 0.1122  0.0232  -
0.0793 1 .
3806 C    C    . SER SER SER B B 70  70  . 0.2760 0.2943 0.3106 0.0745  0.0379
0.0077  1 .
3807 O    O    . SER SER SER B B 70  70  . 0.2762 0.3255 0.3440 0.0783  0.0557
0.0261  1 .
3808 N    N    . THR THR THR B B 71  71  . 0.2689 0.2819 0.2889 0.0742  0.0364
0.0050  1 .
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3809 CA   CA   . THR THR THR B B 71  71  . 0.2336 0.2688 0.2998 0.0571  0.0294
0.0179  1 .
3810 CB   CB   . THR THR THR B B 71  71  . 0.2470 0.2932 0.2925 0.0423  0.0159
0.0219  1 .
3811 OG1  OG1  . THR THR THR B B 71  71  . 0.2974 0.2497 0.3878 0.0428  0.0549
0.0077  1 .
3812 CG2  CG2  . THR THR THR B B 71  71  . 0.2810 0.2979 0.3495 0.0662  0.0430
0.0613  1 .
3813 C    C    . THR THR THR B B 71  71  . 0.2311 0.2763 0.2770 0.0494  0.0191
0.0193  1 .
3814 O    O    . THR THR THR B B 71  71  . 0.2306 0.2540 0.3176 0.0741  0.0260
0.0350  1 .
3815 N    N    . ILE ILE ILE B B 72  72  . 0.2148 0.2073 0.2455 0.0672  0.0167
0.0199  1 .
3816 CA   CA   . ILE ILE ILE B B 72  72  . 0.1969 0.2196 0.2301 0.0442  0.0206
0.0141  1 .
3817 CB   CB   . ILE ILE ILE B B 72  72  . 0.2080 0.2092 0.2536 0.0515  0.0343
0.0115  1 .
3818 CG1  CG1  . ILE ILE ILE B B 72  72  . 0.1954 0.2415 0.2747 0.0464  0.0607
0.0222  1 .
3819 CD   CD   . ILE ILE ILE B B 72  72  . 0.1975 0.2798 0.2704 0.0741  0.0556
0.0522  1 .
3820 CG2  CG2  . ILE ILE ILE B B 72  72  . 0.2270 0.2423 0.2103 0.0479  0.0211  -
0.0093 1 .
3821 C    C    . ILE ILE ILE B B 72  72  . 0.2227 0.2336 0.2452 0.0407  0.0092
0.0111  1 .
3822 O    O    . ILE ILE ILE B B 72  72  . 0.2095 0.2384 0.2562 0.0608  0.0256
0.0202  1 .
3823 N    N    . ALA ALA ALA B B 73  73  . 0.2145 0.2285 0.2211 0.0501  0.0161
0.0330  1 .
3824 CA   CA   . ALA ALA ALA B B 73  73  . 0.2139 0.2341 0.2520 0.0460  0.0112
0.0151  1 .
3825 CB   CB   . ALA ALA ALA B B 73  73  . 0.2099 0.2421 0.2620 0.0504  -0.0060
0.0235  1 .
3826 C    C    . ALA ALA ALA B B 73  73  . 0.2271 0.2348 0.2489 0.0326  0.0211
0.0058  1 .
3827 O    O    . ALA ALA ALA B B 73  73  . 0.1760 0.2617 0.2878 0.0591  0.0107
0.0250  1 .
3828 N    N    . PRO PRO PRO B B 74  74  . 0.2339 0.2169 0.2712 0.0270  0.0219
0.0144  1 .
3829 CA   CA   . PRO PRO PRO B B 74  74  . 0.2438 0.2361 0.2653 0.0445  0.0183
0.0022  1 .
3830 CB   CB   . PRO PRO PRO B B 74  74  . 0.2408 0.2259 0.2787 0.0299  0.0106  -
0.0245 1 .
3831 CG   CG   . PRO PRO PRO B B 74  74  . 0.2331 0.2194 0.2869 0.0382  0.0482  -
0.0062 1 .
3832 CD   CD   . PRO PRO PRO B B 74  74  . 0.2225 0.2451 0.2523 0.0619  0.0192  -
0.0147 1 .
3833 C    C    . PRO PRO PRO B B 74  74  . 0.2266 0.2121 0.2693 0.0459  0.0093
0.0172  1 .
3834 O    O    . PRO PRO PRO B B 74  74  . 0.2467 0.2405 0.2923 0.0448  0.0203
0.0287  1 .
3835 N    N    . ALA ALA ALA B B 75  75  . 0.2345 0.2618 0.2675 0.0527  0.0243
0.0297  1 .
3836 CA   CA   . ALA ALA ALA B B 75  75  . 0.2046 0.2617 0.2636 0.0455  0.0070
0.0455  1 .
3837 CB   CB   . ALA ALA ALA B B 75  75  . 0.2368 0.2332 0.2731 0.0528  0.0070
0.0674  1 .
3838 C    C    . ALA ALA ALA B B 75  75  . 0.2247 0.2611 0.2715 0.0407  0.0071
0.0514  1 .
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3839 O    O    . ALA ALA ALA B B 75  75  . 0.2081 0.2518 0.2899 0.0399  -0.0065
0.0582  1 .
3840 N    N    . LEU LEU LEU B B 76  76  . 0.2145 0.2620 0.2801 0.0439  0.0121
0.0399  1 .
3841 CA   CA   . LEU LEU LEU B B 76  76  . 0.1976 0.2388 0.2701 0.0425  0.0236
0.0361  1 .
3842 CB   CB   . LEU LEU LEU B B 76  76  . 0.1378 0.2506 0.2708 0.0308  0.0164
0.0537  1 .
3843 CG   CG   . LEU LEU LEU B B 76  76  . 0.1760 0.2661 0.2537 0.0462  0.0532
0.0780  1 .
3844 CD1  CD1  . LEU LEU LEU B B 76  76  . 0.1300 0.2443 0.3201 0.0573  0.0496
0.0158  1 .
3845 CD2  CD2  . LEU LEU LEU B B 76  76  . 0.2328 0.3853 0.2137 0.0046  0.0012
0.0435  1 .
3846 C    C    . LEU LEU LEU B B 76  76  . 0.1936 0.2478 0.2503 0.0402  0.0133
0.0339  1 .
3847 O    O    . LEU LEU LEU B B 76  76  . 0.2041 0.2270 0.2546 0.0381  -0.0003
0.0509  1 .
3848 N    N    . ILE ILE ILE B B 77  77  . 0.2007 0.2634 0.2605 0.0594  -0.0005
0.0351  1 .
3849 CA   CA   . ILE ILE ILE B B 77  77  . 0.1951 0.2548 0.2680 0.0562  0.0029
0.0413  1 .
3850 CB   CB   . ILE ILE ILE B B 77  77  . 0.1888 0.2689 0.2558 0.0552  0.0051
0.0530  1 .
3851 CG1  CG1  . ILE ILE ILE B B 77  77  . 0.1797 0.2900 0.2421 0.0880  0.0222
0.0150  1 .
3852 CD   CD   . ILE ILE ILE B B 77  77  . 0.2938 0.3278 0.2898 0.0596  -0.0484
0.0190  1 .
3853 CG2  CG2  . ILE ILE ILE B B 77  77  . 0.2066 0.2343 0.2343 0.0332  0.0133
0.0611  1 .
3854 C    C    . ILE ILE ILE B B 77  77  . 0.2155 0.2689 0.2883 0.0398  0.0010
0.0258  1 .
3855 O    O    . ILE ILE ILE B B 77  77  . 0.2131 0.2649 0.3020 0.0443  -0.0027
0.0590  1 .
3856 N    N    . SER SER SER B B 78  78  . 0.2223 0.2965 0.3204 0.0783  0.0167
0.0098  1 .
3857 CA   CA   . SER SER SER B B 78  78  . 0.2568 0.3029 0.3335 0.0590  -0.0072
0.0136  1 .
3858 CB   CB   . SER SER SER B B 78  78  . 0.1958 0.3278 0.3358 0.1270  -0.0098 -
0.0565 1 .
3859 OG   OG   . SER SER SER B B 78  78  . 0.3741 0.4305 0.3664 0.0723  0.0263
0.0020  1 .
3860 C    C    . SER SER SER B B 78  78  . 0.2584 0.3020 0.3420 0.0471  0.0039
0.0199  1 .
3861 O    O    . SER SER SER B B 78  78  . 0.2385 0.3068 0.3667 0.0520  0.0080
0.0631  1 .
3862 N    N    . SER SER SER B B 79  79  . 0.2239 0.2472 0.3182 0.0571  0.0297
0.0239  1 .
3863 CA   CA   . SER SER SER B B 79  79  . 0.2259 0.2333 0.2942 0.0469  0.0242
0.0220  1 .
3864 CB   CB   . SER SER SER B B 79  79  . 0.2238 0.2367 0.3307 0.0320  0.0382
0.0160  1 .
3865 OG   OG   . SER SER SER B B 79  79  . 0.2122 0.2271 0.3170 0.0240  0.0110
0.0389  1 .
3866 C    C    . SER SER SER B B 79  79  . 0.2223 0.2730 0.2846 0.0314  0.0147
0.0170  1 .
3867 O    O    . SER SER SER B B 79  79  . 0.2019 0.2774 0.2946 0.0383  -0.0109
0.0375  1 .
3868 N    N    . GLY GLY GLY B B 80  80  . 0.2279 0.2577 0.2971 0.0407  0.0000
0.0240  1 .
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3869 CA   CA   . GLY GLY GLY B B 80  80  . 0.2398 0.2604 0.3003 0.0384  -0.0217
0.0336  1 .
3870 C    C    . GLY GLY GLY B B 80  80  . 0.2207 0.2667 0.2903 0.0321  -0.0142
0.0309  1 .
3871 O    O    . GLY GLY GLY B B 80  80  . 0.2316 0.2967 0.3574 0.0491  -0.0155
0.0332  1 .
3872 N    N    . LEU LEU LEU B B 81  81  . 0.2214 0.2581 0.2807 0.0352  -0.0053
0.0448  1 .
3873 CA   CA   . LEU LEU LEU B B 81  81  . 0.2655 0.2387 0.2618 0.0294  -0.0036
0.0582  1 .
3874 CB   CB   . LEU LEU LEU B B 81  81  . 0.2637 0.2584 0.2577 0.0282  0.0169
0.0655  1 .
3875 CG   CG   . LEU LEU LEU B B 81  81  . 0.2996 0.2120 0.2866 0.0362  -0.0330
0.0861  1 .
3876 CD1  CD1  . LEU LEU LEU B B 81  81  . 0.3047 0.2318 0.2573 0.0053  0.0284
0.0663  1 .
3877 CD2  CD2  . LEU LEU LEU B B 81  81  . 0.3280 0.2364 0.3329 0.0065  -0.0339
0.0977  1 .
3878 C    C    . LEU LEU LEU B B 81  81  . 0.2332 0.2675 0.2722 0.0372  -0.0036
0.0428  1 .
3879 O    O    . LEU LEU LEU B B 81  81  . 0.2718 0.2811 0.2745 0.0156  -0.0094
0.0408  1 .
3880 N    N    . SER SER SER B B 82  82  . 0.2237 0.2617 0.2924 0.0344  -0.0011
0.0520  1 .
3881 CA   CA   . SER SER SER B B 82  82  . 0.2213 0.2562 0.3050 0.0182  0.0167
0.0436  1 .
3882 CB   CB   . SER SER SER B B 82  82  . 0.2252 0.2566 0.3379 0.0132  0.0090
0.0402  1 .
3883 OG   OG   . SER SER SER B B 82  82  . 0.2245 0.2651 0.3966 -0.0202 0.0120
0.0290  1 .
3884 C    C    . SER SER SER B B 82  82  . 0.2118 0.2537 0.2759 0.0221  0.0068
0.0479  1 .
3885 O    O    . SER SER SER B B 82  82  . 0.1997 0.2359 0.2842 0.0234  0.0072
0.0546  1 .
3886 N    N    . VAL VAL VAL B B 83  83  . 0.1971 0.2292 0.2693 0.0319  -0.0024
0.0309  1 .
3887 CA   CA   . VAL VAL VAL B B 83  83  . 0.2117 0.2106 0.2329 0.0187  -0.0056
0.0163  1 .
3888 CB   CB   . VAL VAL VAL B B 83  83  . 0.2209 0.2034 0.2221 0.0176  -0.0049
0.0095  1 .
3889 CG1  CG1  . VAL VAL VAL B B 83  83  . 0.2340 0.1977 0.2139 0.0135  0.0111  -
0.0203 1 .
3890 CG2  CG2  . VAL VAL VAL B B 83  83  . 0.2178 0.2112 0.2672 0.0221  0.0219
0.0250  1 .
3891 C    C    . VAL VAL VAL B B 83  83  . 0.2223 0.2030 0.2468 0.0296  -0.0023
0.0339  1 .
3892 O    O    . VAL VAL VAL B B 83  83  . 0.2041 0.2051 0.2612 0.0374  -0.0061
0.0505  1 .
3893 N    N    . VAL VAL VAL B B 84  84  . 0.2251 0.1875 0.2533 0.0226  -0.0138
0.0188  1 .
3894 CA   CA   . VAL VAL VAL B B 84  84  . 0.2354 0.1852 0.2350 0.0094  -0.0153
0.0363  1 .
3895 CB   CB   . VAL VAL VAL B B 84  84  . 0.2276 0.2093 0.2601 0.0017  -0.0041
0.0302  1 .
3896 CG1  CG1  . VAL VAL VAL B B 84  84  . 0.2719 0.2233 0.2706 0.0301  -0.0339
0.0501  1 .
3897 CG2  CG2  . VAL VAL VAL B B 84  84  . 0.2282 0.2513 0.3369 -0.0327 -0.0122
0.0172  1 .
3898 C    C    . VAL VAL VAL B B 84  84  . 0.2362 0.2061 0.2422 -0.0013 0.0013
0.0285  1 .
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3899 O    O    . VAL VAL VAL B B 84  84  . 0.2214 0.2382 0.2821 -0.0051 -0.0079
0.0423  1 .
3900 N    N    . GLU GLU GLU B B 85  85  . 0.2117 0.2226 0.2704 0.0220  0.0000
0.0435  1 .
3901 CA   CA   . GLU GLU GLU B B 85  85  . 0.2101 0.1965 0.2569 0.0115  0.0040
0.0328  1 .
3902 CB   CB   . GLU GLU GLU B B 85  85  . 0.2072 0.2431 0.2836 0.0229  -0.0021
0.0453  1 .
3903 CG   CG   . GLU GLU GLU B B 85  85  . 0.2707 0.2761 0.3435 -0.0149 -0.0102 -
0.0093 1 .
3904 CD   CD   . GLU GLU GLU B B 85  85  . 0.3786 0.3980 0.4110 -0.0147 -0.0323
0.0502  1 .
3905 OE1  OE1  . GLU GLU GLU B B 85  85  . 0.3130 0.4005 0.5116 0.0036  -0.0393
0.0915  1 .
3906 OE2  OE2  . GLU GLU GLU B B 85  85  . 0.4315 0.4068 0.4569 -0.0480 -0.0075
0.1019  1 .
3907 C    C    . GLU GLU GLU B B 85  85  . 0.2117 0.2240 0.2428 0.0075  0.0012
0.0233  1 .
3908 O    O    . GLU GLU GLU B B 85  85  . 0.1936 0.1990 0.2480 0.0129  -0.0252
0.0375  1 .
3909 N    N    . GLN GLN GLN B B 86  86  . 0.1944 0.2104 0.2414 0.0122  -0.0144
0.0186  1 .
3910 CA   CA   . GLN GLN GLN B B 86  86  . 0.2170 0.2011 0.2585 0.0060  -0.0001
0.0367  1 .
3911 CB   CB   . GLN GLN GLN B B 86  86  . 0.1852 0.2272 0.2322 0.0209  -0.0221
0.0195  1 .
3912 CG   CG   . GLN GLN GLN B B 86  86  . 0.2030 0.2369 0.1960 -0.0057 -0.0137
0.0366  1 .
3913 CD   CD   . GLN GLN GLN B B 86  86  . 0.1645 0.2156 0.2176 -0.0035 -0.0022
0.0668  1 .
3914 OE1  OE1  . GLN GLN GLN B B 86  86  . 0.1992 0.1879 0.2638 0.0225  -0.0150
0.0312  1 .
3915 NE2  NE2  . GLN GLN GLN B B 86  86  . 0.1599 0.2068 0.2191 0.0043  0.0044
0.0115  1 .
3916 C    C    . GLN GLN GLN B B 86  86  . 0.2083 0.2112 0.2624 0.0259  -0.0071
0.0189  1 .
3917 O    O    . GLN GLN GLN B B 86  86  . 0.2055 0.1892 0.2641 0.0399  -0.0321
0.0072  1 .
3918 N    N    . GLU GLU GLU B B 87  87  . 0.2082 0.2054 0.2590 0.0257  -0.0114
0.0298  1 .
3919 CA   CA   . GLU GLU GLU B B 87  87  . 0.2411 0.2252 0.2589 0.0249  -0.0054
0.0380  1 .
3920 CB   CB   . GLU GLU GLU B B 87  87  . 0.2952 0.2146 0.2631 0.0221  -0.0052
0.0280  1 .
3921 CG   CG   . GLU GLU GLU B B 87  87  . 0.3236 0.2741 0.3103 0.0468  -0.0067
0.0688  1 .
3922 CD   CD   . GLU GLU GLU B B 87  87  . 0.5357 0.4273 0.3903 0.0355  -0.0186
0.0506  1 .
3923 OE1  OE1  . GLU GLU GLU B B 87  87  . 0.6237 0.4176 0.4968 0.0087  -0.0375
0.0363  1 .
3924 OE2  OE2  . GLU GLU GLU B B 87  87  . 0.6580 0.5058 0.4387 0.0238  -0.0356
0.1255  1 .
3925 C    C    . GLU GLU GLU B B 87  87  . 0.2311 0.2219 0.2464 0.0234  -0.0057
0.0296  1 .
3926 O    O    . GLU GLU GLU B B 87  87  . 0.2023 0.2435 0.2543 0.0287  -0.0054
0.0032  1 .
3927 N    N    . LYS LYS LYS B B 88  88  . 0.2023 0.2467 0.2130 0.0296  -0.0204
0.0398  1 .
3928 CA   CA   . LYS LYS LYS B B 88  88  . 0.1965 0.2173 0.2235 0.0325  -0.0082
0.0333  1 .
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3929 CB   CB   . LYS LYS LYS B B 88  88  . 0.2022 0.2308 0.2249 0.0111  -0.0238
0.0413  1 .
3930 CG   CG   . LYS LYS LYS B B 88  88  . 0.2038 0.3161 0.2031 -0.0213 -0.0261 -
0.0095 1 .
3931 CD   CD   . LYS LYS LYS B B 88  88  . 0.2063 0.4042 0.1931 -0.0318 0.0022
0.0067  1 .
3932 CE   CE   . LYS LYS LYS B B 88  88  . 0.3082 0.5201 0.3307 -0.1049 -0.0491 -
0.0801 1 .
3933 NZ   NZ   . LYS LYS LYS B B 88  88  . 0.3943 0.5091 0.4437 -0.0921 -0.0324 -
0.0899 1 .
3934 C    C    . LYS LYS LYS B B 88  88  . 0.1935 0.1976 0.2359 0.0174  -0.0058
0.0324  1 .
3935 O    O    . LYS LYS LYS B B 88  88  . 0.1996 0.2323 0.2505 0.0316  -0.0083
0.0355  1 .
3936 N    N    . LEU LEU LEU B B 89  89  . 0.1898 0.2071 0.2445 0.0237  -0.0061
0.0355  1 .
3937 CA   CA   . LEU LEU LEU B B 89  89  . 0.2012 0.1915 0.2197 0.0254  -0.0124
0.0569  1 .
3938 CB   CB   . LEU LEU LEU B B 89  89  . 0.2259 0.1912 0.2208 0.0172  -0.0130
0.0793  1 .
3939 CG   CG   . LEU LEU LEU B B 89  89  . 0.1960 0.2074 0.2442 0.0101  0.0028
0.0558  1 .
3940 CD1  CD1  . LEU LEU LEU B B 89  89  . 0.1709 0.2042 0.2253 0.0345  -0.0107
0.0285  1 .
3941 CD2  CD2  . LEU LEU LEU B B 89  89  . 0.2142 0.1939 0.2363 0.0408  0.0208
0.0430  1 .
3942 C    C    . LEU LEU LEU B B 89  89  . 0.2176 0.1928 0.2164 0.0286  -0.0107
0.0461  1 .
3943 O    O    . LEU LEU LEU B B 89  89  . 0.2109 0.1888 0.2341 0.0610  0.0146
0.0284  1 .
3944 N    N    . ASP ASP ASP B B 90  90  . 0.2021 0.1802 0.2153 0.0423  0.0063
0.0442  1 .
3945 CA   CA   . ASP ASP ASP B B 90  90  . 0.2114 0.1788 0.2159 0.0432  0.0136
0.0348  1 .
3946 CB   CB   . ASP ASP ASP B B 90  90  . 0.1999 0.1791 0.2057 0.0672  0.0341
0.0329  1 .
3947 CG   CG   . ASP ASP ASP B B 90  90  . 0.2239 0.2338 0.2033 0.0450  0.0047
0.0163  1 .
3948 OD1  OD1  . ASP ASP ASP B B 90  90  . 0.1905 0.2358 0.2375 0.0792  0.0232
0.0214  1 .
3949 OD2  OD2  . ASP ASP ASP B B 90  90  . 0.1943 0.2185 0.2294 0.0190  0.0288
0.0420  1 .
3950 C    C    . ASP ASP ASP B B 90  90  . 0.2061 0.1889 0.2474 0.0407  0.0013
0.0182  1 .
3951 O    O    . ASP ASP ASP B B 90  90  . 0.2234 0.1643 0.2471 0.0531  0.0092
0.0240  1 .
3952 N    N    . ASN ASN ASN B B 91  91  . 0.2174 0.2100 0.2432 0.0304  0.0042
0.0395  1 .
3953 CA   CA   . ASN ASN ASN B B 91  91  . 0.2393 0.2386 0.2772 0.0198  0.0057
0.0219  1 .
3954 CB   CB   . ASN ASN ASN B B 91  91  . 0.2587 0.2823 0.2851 0.0237  -0.0068
0.0160  1 .
3955 CG   CG   . ASN ASN ASN B B 91  91  . 0.3417 0.3408 0.3641 0.0092  -0.0151 -
0.0055 1 .
3956 OD1  OD1  . ASN ASN ASN B B 91  91  . 0.4794 0.4909 0.5075 0.0113  -0.0940 -
0.0036 1 .
3957 ND2  ND2  . ASN ASN ASN B B 91  91  . 0.3546 0.2765 0.4046 -0.0218 -0.0130
0.0934  1 .
3958 C    C    . ASN ASN ASN B B 91  91  . 0.2270 0.2488 0.2732 0.0194  0.0102
0.0329  1 .
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3959 O    O    . ASN ASN ASN B B 91  91  . 0.1848 0.2047 0.2677 0.0140  0.0152  -
0.0107 1 .
3960 N    N    . LEU LEU LEU B B 92  92  . 0.2502 0.2464 0.2741 0.0465  0.0266
0.0536  1 .
3961 CA   CA   . LEU LEU LEU B B 92  92  . 0.2411 0.2222 0.2644 0.0469  0.0231
0.0418  1 .
3962 CB   CB   . LEU LEU LEU B B 92  92  . 0.2886 0.2420 0.2792 0.0567  0.0448
0.0597  1 .
3963 CG   CG   . LEU LEU LEU B B 92  92  . 0.3398 0.2462 0.3884 0.0897  0.0598
0.0841  1 .
3964 CD1  CD1  . LEU LEU LEU B B 92  92  . 0.2930 0.2520 0.3680 0.1370  0.0530
0.0867  1 .
3965 CD2  CD2  . LEU LEU LEU B B 92  92  . 0.2548 0.2352 0.3697 0.0682  0.0614
0.0938  1 .
3966 C    C    . LEU LEU LEU B B 92  92  . 0.2346 0.2372 0.2723 0.0496  0.0285
0.0432  1 .
3967 O    O    . LEU LEU LEU B B 92  92  . 0.1886 0.2299 0.3009 0.0599  0.0318
0.0467  1 .
3968 N    N    . MET MET MET B B 93  93  . 0.1743 0.2097 0.2595 0.0589  0.0114
0.0324  1 .
3969 CA   CA   . MET MET MET B B 93  93  . 0.1901 0.2178 0.2447 0.0561  0.0007
0.0416  1 .
3970 CB   CB   . MET MET MET B B 93  93  . 0.1712 0.1954 0.2358 0.0755  -0.0034
0.0457  1 .
3971 CG   CG   . MET MET MET B B 93  93  . 0.2218 0.1831 0.2611 0.0558  -0.0326
0.0938  1 .
3972 SD   SD   . MET MET MET B B 93  93  . 0.2117 0.2329 0.2595 0.0665  0.0170
0.0322  1 .
3973 CE   CE   . MET MET MET B B 93  93  . 0.2109 0.2027 0.2179 0.0322  -0.0385
0.0611  1 .
3974 C    C    . MET MET MET B B 93  93  . 0.1903 0.2115 0.2388 0.0504  -0.0066
0.0254  1 .
3975 O    O    . MET MET MET B B 93  93  . 0.2127 0.2012 0.2115 0.0642  0.0128
0.0244  1 .
3976 N    N    . LEU LEU LEU B B 94  94  . 0.2071 0.2292 0.2454 0.0656  0.0209
0.0356  1 .
3977 CA   CA   . LEU LEU LEU B B 94  94  . 0.2411 0.2183 0.2656 0.0680  0.0195
0.0253  1 .
3978 CB   CB   . LEU LEU LEU B B 94  94  . 0.2405 0.2183 0.2457 0.0461  0.0319
0.0164  1 .
3979 CG   CG   . LEU LEU LEU B B 94  94  . 0.3031 0.3194 0.2985 0.0948  0.0096
0.0190  1 .
3980 CD1  CD1  . LEU LEU LEU B B 94  94  . 0.2674 0.3848 0.3457 0.0529  0.1092
0.0066  1 .
3981 CD2  CD2  . LEU LEU LEU B B 94  94  . 0.2520 0.3747 0.4004 0.0818  -0.0003 -
0.0236 1 .
3982 C    C    . LEU LEU LEU B B 94  94  . 0.2509 0.2313 0.2807 0.0605  0.0131
0.0234  1 .
3983 O    O    . LEU LEU LEU B B 94  94  . 0.2637 0.1892 0.2765 0.0672  0.0036
0.0059  1 .
3984 N    N    . GLU GLU GLU B B 95  95  . 0.2347 0.2367 0.2643 0.0667  0.0126
0.0332  1 .
3985 CA   CA   . GLU GLU GLU B B 95  95  . 0.2561 0.2421 0.2852 0.0588  0.0061
0.0172  1 .
3986 CB   CB   . GLU GLU GLU B B 95  95  . 0.2270 0.2717 0.3169 0.0702  0.0007
0.0303  1 .
3987 CG   CG   . GLU GLU GLU B B 95  95  . 0.3006 0.3526 0.3406 0.0817  -0.0043
0.0487  1 .
3988 CD   CD   . GLU GLU GLU B B 95  95  . 0.4425 0.4627 0.5037 0.0020  0.0346
0.0758  1 .
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3989 OE1  OE1  . GLU GLU GLU B B 95  95  . 0.3981 0.5478 0.6254 0.0869  0.0216
0.1016  1 .
3990 OE2  OE2  . GLU GLU GLU B B 95  95  . 0.5386 0.6190 0.4662 -0.0034 0.0166
0.0483  1 .
3991 C    C    . GLU GLU GLU B B 95  95  . 0.2735 0.2479 0.2708 0.0619  0.0225
0.0281  1 .
3992 O    O    . GLU GLU GLU B B 95  95  . 0.2683 0.2242 0.2776 0.0823  0.0286
0.0163  1 .
3993 N    N    . LEU LEU LEU B B 96  96  . 0.2758 0.2205 0.2801 0.0758  0.0149
0.0433  1 .
3994 CA   CA   . LEU LEU LEU B B 96  96  . 0.2317 0.2249 0.2678 0.0752  0.0264
0.0248  1 .
3995 CB   CB   . LEU LEU LEU B B 96  96  . 0.2343 0.2609 0.2850 0.0566  0.0422
0.0385  1 .
3996 CG   CG   . LEU LEU LEU B B 96  96  . 0.2261 0.2516 0.3538 0.0627  0.0401
0.0234  1 .
3997 CD1  CD1  . LEU LEU LEU B B 96  96  . 0.2352 0.3151 0.3693 0.0354  0.0924
0.0801  1 .
3998 CD2  CD2  . LEU LEU LEU B B 96  96  . 0.2103 0.2771 0.3166 0.0941  0.0629
0.0010  1 .
3999 C    C    . LEU LEU LEU B B 96  96  . 0.2698 0.2425 0.2784 0.0676  0.0145
0.0024  1 .
4000 O    O    . LEU LEU LEU B B 96  96  . 0.2833 0.2201 0.2966 0.0927  0.0179  -
0.0248 1 .
4001 N    N    . ASP ASP ASP B B 97  97  . 0.2064 0.2061 0.2668 0.0796  0.0212
0.0025  1 .
4002 CA   CA   . ASP ASP ASP B B 97  97  . 0.2523 0.2309 0.2794 0.0620  0.0221
0.0050  1 .
4003 CB   CB   . ASP ASP ASP B B 97  97  . 0.2155 0.1895 0.2749 0.0734  0.0428  -
0.0204 1 .
4004 CG   CG   . ASP ASP ASP B B 97  97  . 0.2552 0.2273 0.2586 0.0761  0.0300  -
0.0243 1 .
4005 OD1  OD1  . ASP ASP ASP B B 97  97  . 0.2517 0.2491 0.2932 0.0514  0.0352  -
0.0393 1 .
4006 OD2  OD2  . ASP ASP ASP B B 97  97  . 0.2942 0.2904 0.2551 0.0786  0.0545
0.0153  1 .
4007 C    C    . ASP ASP ASP B B 97  97  . 0.2435 0.2326 0.2774 0.0604  0.0102
0.0156  1 .
4008 O    O    . ASP ASP ASP B B 97  97  . 0.2608 0.2272 0.2673 0.0475  -0.0010
0.0280  1 .
4009 N    N    . GLY GLY GLY B B 98  98  . 0.2282 0.2488 0.2526 0.0691  0.0091
0.0343  1 .
4010 CA   CA   . GLY GLY GLY B B 98  98  . 0.2749 0.2236 0.2971 0.0529  0.0156
0.0499  1 .
4011 C    C    . GLY GLY GLY B B 98  98  . 0.3052 0.2745 0.3297 0.0444  0.0057
0.0492  1 .
4012 O    O    . GLY GLY GLY B B 98  98  . 0.3074 0.2798 0.3718 0.0804  0.0105
0.0595  1 .
4013 N    N    . THR THR THR B B 99  99  . 0.2879 0.2043 0.3274 0.0648  0.0196
0.0403  1 .
4014 CA   CA   . THR THR THR B B 99  99  . 0.2982 0.2393 0.3176 0.0447  0.0201
0.0160  1 .
4015 CB   CB   . THR THR THR B B 99  99  . 0.2878 0.2415 0.3199 0.0616  0.0183
0.0208  1 .
4016 OG1  OG1  . THR THR THR B B 99  99  . 0.2732 0.2012 0.3236 0.0493  -0.0113 -
0.0049 1 .
4017 CG2  CG2  . THR THR THR B B 99  99  . 0.2883 0.2288 0.3307 0.0248  0.0520
0.0172  1 .
4018 C    C    . THR THR THR B B 99  99  . 0.3088 0.2517 0.3337 0.0425  0.0378
0.0174  1 .
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4019 O    O    . THR THR THR B B 99  99  . 0.3364 0.2721 0.3627 -0.0023 0.0483
0.0072  1 .
4020 N    N    . GLU GLU GLU B B 100 100 . 0.3231 0.2729 0.3280 0.0444  0.0241
0.0159  1 .
4021 CA   CA   . GLU GLU GLU B B 100 100 . 0.3353 0.3161 0.3339 0.0394  0.0224
0.0110  1 .
4022 CB   CB   . GLU GLU GLU B B 100 100 . 0.3684 0.3676 0.3713 0.0298  0.0194
0.0343  1 .
4023 CG   CG   . GLU GLU GLU B B 100 100 . 0.4287 0.4039 0.3912 0.0198  0.0214
0.0313  1 .
4024 CD   CD   . GLU GLU GLU B B 100 100 . 0.4927 0.6107 0.4977 0.0094  0.0839
0.0791  1 .
4025 C    C    . GLU GLU GLU B B 100 100 . 0.3257 0.2942 0.3249 0.0354  0.0136
0.0013  1 .
4026 O    O    . GLU GLU GLU B B 100 100 . 0.3611 0.3290 0.3330 0.0497  0.0197  -
0.0413 1 .
4027 N    N    . ASN ASN ASN B B 101 101 . 0.2855 0.2739 0.2692 0.0405  0.0160
0.0005  1 .
4028 CA   CA   . ASN ASN ASN B B 101 101 . 0.2639 0.2494 0.2662 0.0264  0.0221
0.0026  1 .
4029 CB   CB   . ASN ASN ASN B B 101 101 . 0.3087 0.2959 0.2982 0.0093  0.0172  -
0.0134 1 .
4030 CG   CG   . ASN ASN ASN B B 101 101 . 0.3569 0.2896 0.3722 0.0044  0.0121  -
0.0062 1 .
4031 OD1  OD1  . ASN ASN ASN B B 101 101 . 0.4774 0.3978 0.4289 0.0019  -0.0202 -
0.0479 1 .
4032 ND2  ND2  . ASN ASN ASN B B 101 101 . 0.3471 0.2678 0.4134 -0.0764 0.0307  -
0.0336 1 .
4033 C    C    . ASN ASN ASN B B 101 101 . 0.2492 0.2467 0.2386 0.0289  0.0087  -
0.0095 1 .
4034 O    O    . ASN ASN ASN B B 101 101 . 0.2561 0.2137 0.2310 0.0269  0.0176  -
0.0138 1 .
4035 N    N    . LYS LYS LYS B B 102 102 . 0.2511 0.2081 0.2351 0.0332  0.0255  -
0.0027 1 .
4036 CA   CA   . LYS LYS LYS B B 102 102 . 0.2254 0.1862 0.2058 0.0512  0.0226  -
0.0145 1 .
4037 CB   CB   . LYS LYS LYS B B 102 102 . 0.2702 0.1752 0.2189 0.0226  0.0144  -
0.0130 1 .
4038 CG   CG   . LYS LYS LYS B B 102 102 . 0.2644 0.1590 0.1966 0.0739  0.0199  -
0.0178 1 .
4039 CD   CD   . LYS LYS LYS B B 102 102 . 0.3324 0.1528 0.2462 0.0694  0.0103  -
0.0345 1 .
4040 CE   CE   . LYS LYS LYS B B 102 102 . 0.2343 0.1701 0.2283 0.0389  -0.0007
0.0174  1 .
4041 NZ   NZ   . LYS LYS LYS B B 102 102 . 0.2322 0.1642 0.2401 0.0624  -0.0471
0.0052  1 .
4042 C    C    . LYS LYS LYS B B 102 102 . 0.2631 0.2109 0.2539 0.0425  0.0159  -
0.0150 1 .
4043 O    O    . LYS LYS LYS B B 102 102 . 0.3005 0.1928 0.2524 0.0592  0.0194  -
0.0255 1 .
4044 N    N    . SER SER SER B B 103 103 . 0.2640 0.2045 0.2597 0.0346  0.0216  -
0.0119 1 .
4045 CA   CA   . SER SER SER B B 103 103 . 0.3051 0.2511 0.2881 0.0218  0.0336  -
0.0225 1 .
4046 CB   CB   . SER SER SER B B 103 103 . 0.2933 0.2764 0.3115 0.0038  0.0255
0.0023  1 .
4047 OG   OG   . SER SER SER B B 103 103 . 0.3635 0.2567 0.3628 0.0449  0.0305  -
0.0093 1 .
4048 C    C    . SER SER SER B B 103 103 . 0.3259 0.2682 0.2886 0.0122  0.0249  -
0.0229 1 .
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4049 O    O    . SER SER SER B B 103 103 . 0.3838 0.3215 0.2807 0.0378  0.0454  -
0.0641 1 .
4050 N    N    . LYS LYS LYS B B 104 104 . 0.2916 0.2529 0.2644 0.0459  0.0475  -
0.0142 1 .
4051 CA   CA   . LYS LYS LYS B B 104 104 . 0.2990 0.2530 0.2737 0.0362  0.0264
0.0038  1 .
4052 CB   CB   . LYS LYS LYS B B 104 104 . 0.2856 0.2685 0.2523 0.0489  0.0257
0.0069  1 .
4053 CG   CG   . LYS LYS LYS B B 104 104 . 0.2981 0.3019 0.2675 0.0774  0.0179
0.0286  1 .
4054 CD   CD   . LYS LYS LYS B B 104 104 . 0.2462 0.4091 0.3716 0.0461  0.0544  -
0.0144 1 .
4055 CE   CE   . LYS LYS LYS B B 104 104 . 0.2379 0.3969 0.4641 0.0266  -0.0232 -
0.0132 1 .
4056 NZ   NZ   . LYS LYS LYS B B 104 104 . 0.2890 0.4368 0.5125 0.1440  -0.0110 -
0.0520 1 .
4057 C    C    . LYS LYS LYS B B 104 104 . 0.2624 0.2394 0.2638 0.0222  0.0166
0.0027  1 .
4058 O    O    . LYS LYS LYS B B 104 104 . 0.3006 0.2199 0.2922 0.0179  0.0190  -
0.0108 1 .
4059 N    N    . PHE PHE PHE B B 105 105 . 0.2576 0.2218 0.2550 0.0349  0.0274  -
0.0102 1 .
4060 CA   CA   . PHE PHE PHE B B 105 105 . 0.2202 0.2261 0.2359 0.0290  0.0058
0.0042  1 .
4061 CB   CB   . PHE PHE PHE B B 105 105 . 0.2388 0.2295 0.2366 0.0073  0.0034
0.0155  1 .
4062 CG   CG   . PHE PHE PHE B B 105 105 . 0.2539 0.2772 0.2317 0.0177  0.0139
0.0423  1 .
4063 CD1  CD1  . PHE PHE PHE B B 105 105 . 0.2799 0.2420 0.2614 0.0187  0.0087
0.0819  1 .
4064 CE1  CE1  . PHE PHE PHE B B 105 105 . 0.2858 0.2470 0.2080 0.0278  0.0322
0.0557  1 .
4065 CZ   CZ   . PHE PHE PHE B B 105 105 . 0.3270 0.2793 0.2709 0.0739  0.0287
0.0275  1 .
4066 CE2  CE2  . PHE PHE PHE B B 105 105 . 0.3107 0.2894 0.3160 0.0318  0.0228
0.0793  1 .
4067 CD2  CD2  . PHE PHE PHE B B 105 105 . 0.2577 0.2471 0.2433 0.0189  0.0160
0.0713  1 .
4068 C    C    . PHE PHE PHE B B 105 105 . 0.2226 0.2297 0.2390 0.0302  0.0070
0.0000  1 .
4069 O    O    . PHE PHE PHE B B 105 105 . 0.2096 0.2283 0.2219 0.0501  -0.0153 -
0.0025 1 .
4070 N    N    . GLY GLY GLY B B 106 106 . 0.2207 0.2186 0.2071 0.0444  -0.0071 -
0.0164 1 .
4071 CA   CA   . GLY GLY GLY B B 106 106 . 0.1963 0.1852 0.2270 0.0155  0.0133  -
0.0143 1 .
4072 C    C    . GLY GLY GLY B B 106 106 . 0.2017 0.1743 0.1956 0.0259  0.0043
0.0003  1 .
4073 O    O    . GLY GLY GLY B B 106 106 . 0.2180 0.1969 0.2354 0.0285  0.0207  -
0.0047 1 .
4074 N    N    . ALA ALA ALA B B 107 107 . 0.2230 0.1363 0.1816 0.0389  0.0204
0.0214  1 .
4075 CA   CA   . ALA ALA ALA B B 107 107 . 0.2378 0.1570 0.1691 0.0306  0.0202
0.0177  1 .
4076 CB   CB   . ALA ALA ALA B B 107 107 . 0.2227 0.1281 0.2063 0.0240  0.0509
0.0097  1 .
4077 C    C    . ALA ALA ALA B B 107 107 . 0.2212 0.1597 0.1983 0.0335  0.0146
0.0046  1 .
4078 O    O    . ALA ALA ALA B B 107 107 . 0.2113 0.1641 0.2058 0.0328  -0.0163
0.0177  1 .
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4079 N    N    . ASN ASN ASN B B 108 108 . 0.2127 0.1560 0.1685 0.0469  0.0106  -
0.0002 1 .
4080 CA   CA   . ASN ASN ASN B B 108 108 . 0.2039 0.1682 0.1628 0.0280  0.0232  -
0.0023 1 .
4081 CB   CB   . ASN ASN ASN B B 108 108 . 0.1953 0.1389 0.2330 0.0289  0.0071  -
0.0407 1 .
4082 CG   CG   . ASN ASN ASN B B 108 108 . 0.2248 0.1821 0.1856 0.0218  0.0128  -
0.0190 1 .
4083 OD1  OD1  . ASN ASN ASN B B 108 108 . 0.2340 0.2121 0.2447 0.0533  0.0014  -
0.0316 1 .
4084 ND2  ND2  . ASN ASN ASN B B 108 108 . 0.1696 0.1699 0.2237 -0.0038 0.0150  -
0.0268 1 .
4085 C    C    . ASN ASN ASN B B 108 108 . 0.2141 0.1743 0.2187 0.0159  0.0224  -
0.0075 1 .
4086 O    O    . ASN ASN ASN B B 108 108 . 0.2192 0.2139 0.2621 0.0235  0.0420
0.0198  1 .
4087 N    N    . ALA ALA ALA B B 109 109 . 0.1828 0.1605 0.1686 0.0383  0.0045  -
0.0162 1 .
4088 CA   CA   . ALA ALA ALA B B 109 109 . 0.1880 0.1544 0.1831 0.0217  0.0213  -
0.0130 1 .
4089 CB   CB   . ALA ALA ALA B B 109 109 . 0.1932 0.1675 0.1646 0.0249  0.0164  -
0.0030 1 .
4090 C    C    . ALA ALA ALA B B 109 109 . 0.1895 0.1700 0.1971 0.0379  0.0133
0.0010  1 .
4091 O    O    . ALA ALA ALA B B 109 109 . 0.2199 0.2027 0.2295 0.0359  0.0311
0.0198  1 .
4092 N    N    . ILE ILE ILE B B 110 110 . 0.2037 0.1515 0.1851 0.0370  0.0082  -
0.0079 1 .
4093 CA   CA   . ILE ILE ILE B B 110 110 . 0.1925 0.1537 0.1787 0.0457  0.0045  -
0.0021 1 .
4094 CB   CB   . ILE ILE ILE B B 110 110 . 0.2050 0.1519 0.1823 0.0363  0.0005
0.0158  1 .
4095 CG1  CG1  . ILE ILE ILE B B 110 110 . 0.1925 0.1560 0.1895 0.0415  0.0323
0.0475  1 .
4096 CD   CD   . ILE ILE ILE B B 110 110 . 0.2675 0.2282 0.2199 0.1011  0.0592
0.0809  1 .
4097 CG2  CG2  . ILE ILE ILE B B 110 110 . 0.2078 0.1606 0.2037 0.0491  -0.0083
0.0008  1 .
4098 C    C    . ILE ILE ILE B B 110 110 . 0.1855 0.1263 0.1589 0.0265  -0.0034
0.0080  1 .
4099 O    O    . ILE ILE ILE B B 110 110 . 0.1445 0.1740 0.1965 0.0175  0.0091
0.0044  1 .
4100 N    N    . LEU LEU LEU B B 111 111 . 0.1783 0.1073 0.1407 0.0387  0.0067  -
0.0080 1 .
4101 CA   CA   . LEU LEU LEU B B 111 111 . 0.1872 0.0977 0.1329 0.0362  0.0170
0.0125  1 .
4102 CB   CB   . LEU LEU LEU B B 111 111 . 0.1510 0.1097 0.1556 0.0193  0.0143
0.0057  1 .
4103 CG   CG   . LEU LEU LEU B B 111 111 . 0.1703 0.1650 0.1774 0.0031  0.0206  -
0.0239 1 .
4104 CD1  CD1  . LEU LEU LEU B B 111 111 . 0.2056 0.1592 0.1178 -0.0039 0.0001  -
0.0152 1 .
4105 CD2  CD2  . LEU LEU LEU B B 111 111 . 0.1179 0.1714 0.1703 0.0132  0.0354
0.0203  1 .
4106 C    C    . LEU LEU LEU B B 111 111 . 0.1724 0.1284 0.1577 0.0213  0.0169
0.0144  1 .
4107 O    O    . LEU LEU LEU B B 111 111 . 0.2003 0.1208 0.2156 0.0294  0.0237
0.0172  1 .
4108 N    N    . GLY GLY GLY B B 112 112 . 0.1793 0.1432 0.1374 0.0292  0.0218
0.0326  1 .
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4109 CA   CA   . GLY GLY GLY B B 112 112 . 0.1787 0.1442 0.1644 0.0081  0.0095
0.0529  1 .
4110 C    C    . GLY GLY GLY B B 112 112 . 0.1620 0.1804 0.1845 0.0272  0.0018
0.0085  1 .
4111 O    O    . GLY GLY GLY B B 112 112 . 0.1431 0.1692 0.1752 0.0426  0.0014
0.0100  1 .
4112 N    N    . VAL VAL VAL B B 113 113 . 0.1895 0.1719 0.1864 0.0327  0.0003
0.0059  1 .
4113 CA   CA   . VAL VAL VAL B B 113 113 . 0.1572 0.1555 0.1842 0.0425  -0.0005 -
0.0050 1 .
4114 CB   CB   . VAL VAL VAL B B 113 113 . 0.1585 0.1736 0.1926 0.0580  -0.0030 -
0.0187 1 .
4115 CG1  CG1  . VAL VAL VAL B B 113 113 . 0.1490 0.1488 0.2048 0.0255  0.0060
0.0105  1 .
4116 CG2  CG2  . VAL VAL VAL B B 113 113 . 0.1870 0.2038 0.1995 0.0286  0.0197  -
0.0205 1 .
4117 C    C    . VAL VAL VAL B B 113 113 . 0.1679 0.1610 0.1835 0.0428  0.0053
0.0073  1 .
4118 O    O    . VAL VAL VAL B B 113 113 . 0.1648 0.1712 0.1614 0.0338  0.0023  -
0.0026 1 .
4119 N    N    . SER SER SER B B 114 114 . 0.1701 0.1499 0.1479 0.0456  -0.0069
0.0218  1 .
4120 CA   CA   . SER SER SER B B 114 114 . 0.2026 0.1261 0.1649 0.0294  0.0067
0.0013  1 .
4121 CB   CB   . SER SER SER B B 114 114 . 0.1720 0.1463 0.1596 0.0133  0.0078  -
0.0178 1 .
4122 OG   OG   . SER SER SER B B 114 114 . 0.2358 0.1647 0.1676 0.0238  -0.0037
0.0172  1 .
4123 C    C    . SER SER SER B B 114 114 . 0.1666 0.1402 0.1795 0.0229  -0.0130
0.0178  1 .
4124 O    O    . SER SER SER B B 114 114 . 0.1853 0.1506 0.1936 0.0270  0.0048
0.0350  1 .
4125 N    N    . LEU LEU LEU B B 115 115 . 0.1478 0.1407 0.1798 0.0313  0.0035
0.0123  1 .
4126 CA   CA   . LEU LEU LEU B B 115 115 . 0.1523 0.1355 0.1717 0.0058  0.0143
0.0248  1 .
4127 CB   CB   . LEU LEU LEU B B 115 115 . 0.1461 0.1221 0.1892 0.0024  0.0030
0.0242  1 .
4128 CG   CG   . LEU LEU LEU B B 115 115 . 0.1541 0.1475 0.1234 0.0295  0.0059
0.0065  1 .
4129 CD1  CD1  . LEU LEU LEU B B 115 115 . 0.1980 0.1866 0.1811 0.0043  -0.0310
0.0370  1 .
4130 CD2  CD2  . LEU LEU LEU B B 115 115 . 0.2427 0.1806 0.1964 0.0174  0.0309  -
0.0060 1 .
4131 C    C    . LEU LEU LEU B B 115 115 . 0.1728 0.1493 0.1593 -0.0094 -0.0022
0.0170  1 .
4132 O    O    . LEU LEU LEU B B 115 115 . 0.1943 0.1270 0.1793 -0.0053 0.0204
0.0434  1 .
4133 N    N    . ALA ALA ALA B B 116 116 . 0.1449 0.1595 0.1608 0.0002  0.0205
0.0178  1 .
4134 CA   CA   . ALA ALA ALA B B 116 116 . 0.1752 0.1602 0.1460 0.0023  -0.0228
0.0112  1 .
4135 CB   CB   . ALA ALA ALA B B 116 116 . 0.2122 0.1666 0.1514 0.0032  0.0375
0.0050  1 .
4136 C    C    . ALA ALA ALA B B 116 116 . 0.1658 0.1512 0.1771 0.0007  -0.0024
0.0064  1 .
4137 O    O    . ALA ALA ALA B B 116 116 . 0.2103 0.1848 0.1639 0.0033  -0.0252
0.0056  1 .
4138 N    N    . VAL VAL VAL B B 117 117 . 0.1870 0.1795 0.1587 0.0131  -0.0292
0.0066  1 .
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4139 CA   CA   . VAL VAL VAL B B 117 117 . 0.1603 0.1436 0.1798 0.0157  -0.0205
0.0129  1 .
4140 CB   CB   . VAL VAL VAL B B 117 117 . 0.1818 0.1504 0.1986 0.0269  -0.0221
0.0140  1 .
4141 CG1  CG1  . VAL VAL VAL B B 117 117 . 0.2043 0.1462 0.1901 0.0342  -0.0607 -
0.0117 1 .
4142 CG2  CG2  . VAL VAL VAL B B 117 117 . 0.2056 0.1705 0.2206 0.0415  0.0157
0.0356  1 .
4143 C    C    . VAL VAL VAL B B 117 117 . 0.1927 0.1713 0.1959 0.0146  -0.0106
0.0280  1 .
4144 O    O    . VAL VAL VAL B B 117 117 . 0.1693 0.1424 0.1968 0.0172  -0.0347
0.0097  1 .
4145 N    N    . CYS CYS CYS B B 118 118 . 0.1610 0.1680 0.1979 0.0241  0.0068
0.0232  1 .
4146 CA   CA   . CYS CYS CYS B B 118 118 . 0.1860 0.1612 0.1592 0.0136  0.0132
0.0365  1 .
4147 CB   CB   . CYS CYS CYS B B 118 118 . 0.1548 0.2029 0.1908 0.0045  0.0133
0.0062  1 .
4148 SG   SG   . CYS CYS CYS B B 118 118 . 0.2279 0.1792 0.2096 0.0006  -0.0077
0.0211  1 .
4149 C    C    . CYS CYS CYS B B 118 118 . 0.1713 0.1722 0.1772 0.0089  0.0141
0.0186  1 .
4150 O    O    . CYS CYS CYS B B 118 118 . 0.1931 0.1679 0.1671 -0.0014 0.0111
0.0152  1 .
4151 N    N    . LYS LYS LYS B B 119 119 . 0.1818 0.1514 0.1763 0.0189  0.0002
0.0423  1 .
4152 CA   CA   . LYS LYS LYS B B 119 119 . 0.1749 0.1667 0.1841 0.0151  -0.0024
0.0426  1 .
4153 CB   CB   . LYS LYS LYS B B 119 119 . 0.1660 0.1758 0.1822 -0.0013 -0.0068
0.0170  1 .
4154 CG   CG   . LYS LYS LYS B B 119 119 . 0.1884 0.1893 0.1625 -0.0279 -0.0314 -
0.0102 1 .
4155 CD   CD   . LYS LYS LYS B B 119 119 . 0.1645 0.2127 0.1651 -0.0283 -0.0316 -
0.0252 1 .
4156 CE   CE   . LYS LYS LYS B B 119 119 . 0.1940 0.3202 0.1993 -0.0159 0.0009
0.0103  1 .
4157 NZ   NZ   . LYS LYS LYS B B 119 119 . 0.2017 0.2732 0.2253 0.0260  -0.0237 -
0.0077 1 .
4158 C    C    . LYS LYS LYS B B 119 119 . 0.1713 0.1697 0.1973 0.0227  -0.0112
0.0227  1 .
4159 O    O    . LYS LYS LYS B B 119 119 . 0.1775 0.2012 0.2041 0.0040  -0.0021
0.0045  1 .
4160 N    N    . ALA ALA ALA B B 120 120 . 0.1930 0.1952 0.1585 0.0122  0.0028
0.0163  1 .
4161 CA   CA   . ALA ALA ALA B B 120 120 . 0.1791 0.2027 0.1773 0.0199  -0.0110
0.0207  1 .
4162 CB   CB   . ALA ALA ALA B B 120 120 . 0.2213 0.1779 0.2014 0.0231  0.0092
0.0274  1 .
4163 C    C    . ALA ALA ALA B B 120 120 . 0.2073 0.2027 0.1900 0.0041  -0.0048
0.0182  1 .
4164 O    O    . ALA ALA ALA B B 120 120 . 0.2057 0.2077 0.2107 0.0073  -0.0027
0.0040  1 .
4165 N    N    . GLY GLY GLY B B 121 121 . 0.1765 0.2014 0.1521 -0.0047 0.0035
0.0379  1 .
4166 CA   CA   . GLY GLY GLY B B 121 121 . 0.1846 0.1794 0.2109 -0.0030 -0.0118
0.0132  1 .
4167 C    C    . GLY GLY GLY B B 121 121 . 0.2061 0.1993 0.2191 -0.0091 -0.0085
0.0267  1 .
4168 O    O    . GLY GLY GLY B B 121 121 . 0.2050 0.1973 0.2311 0.0001  -0.0246
0.0307  1 .
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4169 N    N    . ALA ALA ALA B B 122 122 . 0.1561 0.1724 0.2042 -0.0037 0.0033
0.0203  1 .
4170 CA   CA   . ALA ALA ALA B B 122 122 . 0.1676 0.1796 0.2008 -0.0049 0.0011
0.0321  1 .
4171 CB   CB   . ALA ALA ALA B B 122 122 . 0.1522 0.1849 0.2150 -0.0154 -0.0114
0.0102  1 .
4172 C    C    . ALA ALA ALA B B 122 122 . 0.1764 0.1796 0.2190 -0.0005 -0.0052
0.0164  1 .
4173 O    O    . ALA ALA ALA B B 122 122 . 0.1936 0.1882 0.2677 -0.0106 -0.0039
0.0283  1 .
4174 N    N    . ALA ALA ALA B B 123 123 . 0.1912 0.1975 0.2221 -0.0155 0.0194
0.0400  1 .
4175 CA   CA   . ALA ALA ALA B B 123 123 . 0.2131 0.1989 0.2287 -0.0110 -0.0018
0.0350  1 .
4176 CB   CB   . ALA ALA ALA B B 123 123 . 0.2164 0.1948 0.2357 -0.0129 -0.0244
0.0120  1 .
4177 C    C    . ALA ALA ALA B B 123 123 . 0.2242 0.2216 0.2657 -0.0079 0.0083
0.0426  1 .
4178 O    O    . ALA ALA ALA B B 123 123 . 0.2597 0.1896 0.3213 -0.0234 -0.0112
0.0437  1 .
4179 N    N    . GLU GLU GLU B B 124 124 . 0.2226 0.2417 0.2674 0.0112  -0.0042
0.0468  1 .
4180 CA   CA   . GLU GLU GLU B B 124 124 . 0.2347 0.2582 0.2963 0.0053  -0.0103
0.0395  1 .
4181 CB   CB   . GLU GLU GLU B B 124 124 . 0.2425 0.2531 0.3209 0.0131  -0.0079
0.0269  1 .
4182 CG   CG   . GLU GLU GLU B B 124 124 . 0.2886 0.3949 0.3778 0.0164  0.0162
0.0167  1 .
4183 CD   CD   . GLU GLU GLU B B 124 124 . 0.4418 0.5869 0.4885 -0.0148 0.0699
0.0186  1 .
4184 OE1  OE1  . GLU GLU GLU B B 124 124 . 0.4004 0.6736 0.5587 -0.0330 0.0746  -
0.0009 1 .
4185 OE2  OE2  . GLU GLU GLU B B 124 124 . 0.4901 0.5936 0.5828 -0.0319 0.0617
0.0149  1 .
4186 C    C    . GLU GLU GLU B B 124 124 . 0.2471 0.2343 0.3133 -0.0039 -0.0120
0.0367  1 .
4187 O    O    . GLU GLU GLU B B 124 124 . 0.2649 0.2782 0.3404 -0.0264 -0.0228
0.0448  1 .
4188 N    N    . ARG ARG ARG B B 125 125 . 0.2392 0.2375 0.2994 -0.0185 -0.0067
0.0297  1 .
4189 CA   CA   . ARG ARG ARG B B 125 125 . 0.2413 0.2412 0.2971 -0.0079 -0.0137
0.0176  1 .
4190 CB   CB   . ARG ARG ARG B B 125 125 . 0.2427 0.2058 0.3140 -0.0238 -0.0234
0.0287  1 .
4191 CG   CG   . ARG ARG ARG B B 125 125 . 0.2631 0.2613 0.3227 0.0113  -0.0899
0.0454  1 .
4192 CD   CD   . ARG ARG ARG B B 125 125 . 0.2322 0.3310 0.4668 0.0014  -0.1308
0.0460  1 .
4193 NE   NE   . ARG ARG ARG B B 125 125 . 0.4327 0.4720 0.5727 0.0184  -0.1019
0.0427  1 .
4194 CZ   CZ   . ARG ARG ARG B B 125 125 . 0.4806 0.5126 0.6202 0.0170  -0.0602
0.0454  1 .
4195 NH1  NH1  . ARG ARG ARG B B 125 125 . 0.5510 0.4967 0.6452 -0.0241 -0.0249
0.0552  1 .
4196 NH2  NH2  . ARG ARG ARG B B 125 125 . 0.5110 0.5213 0.5733 -0.0115 -0.0329
0.0638  1 .
4197 C    C    . ARG ARG ARG B B 125 125 . 0.2415 0.2353 0.2962 -0.0220 0.0085
0.0168  1 .
4198 O    O    . ARG ARG ARG B B 125 125 . 0.2633 0.2577 0.3223 -0.0224 -0.0196
0.0242  1 .
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4199 N    N    . GLU GLU GLU B B 126 126 . 0.2190 0.2322 0.3004 -0.0275 0.0169
0.0278  1 .
4200 CA   CA   . GLU GLU GLU B B 126 126 . 0.2510 0.2233 0.3188 -0.0427 0.0263
0.0210  1 .
4201 CB   CB   . GLU GLU GLU B B 126 126 . 0.2742 0.2431 0.3267 -0.0598 0.0079
0.0323  1 .
4202 CG   CG   . GLU GLU GLU B B 126 126 . 0.3160 0.3062 0.4587 -0.0663 0.0727
0.0502  1 .
4203 CD   CD   . GLU GLU GLU B B 126 126 . 0.3822 0.4567 0.6503 -0.0890 0.0425
0.0177  1 .
4204 OE1  OE1  . GLU GLU GLU B B 126 126 . 0.4238 0.4336 0.7003 -0.1166 0.0707
0.0371  1 .
4205 OE2  OE2  . GLU GLU GLU B B 126 126 . 0.4895 0.5859 0.7392 -0.0659 0.0672
0.0056  1 .
4206 C    C    . GLU GLU GLU B B 126 126 . 0.2897 0.2312 0.2898 -0.0354 0.0145
0.0204  1 .
4207 O    O    . GLU GLU GLU B B 126 126 . 0.3036 0.2201 0.3277 -0.0458 0.0209
0.0259  1 .
4208 N    N    . LEU LEU LEU B B 127 127 . 0.2512 0.1977 0.2712 -0.0217 -0.0032
0.0035  1 .
4209 CA   CA   . LEU LEU LEU B B 127 127 . 0.2347 0.1968 0.2202 -0.0186 -0.0010
0.0206  1 .
4210 CB   CB   . LEU LEU LEU B B 127 127 . 0.2613 0.2287 0.2362 0.0008  -0.0360
0.0057  1 .
4211 CG   CG   . LEU LEU LEU B B 127 127 . 0.2436 0.2648 0.2951 -0.0183 -0.0326
0.0178  1 .
4212 CD1  CD1  . LEU LEU LEU B B 127 127 . 0.2723 0.2836 0.2525 -0.0484 -0.0108
0.0579  1 .
4213 CD2  CD2  . LEU LEU LEU B B 127 127 . 0.2660 0.2646 0.3610 -0.0363 -0.0443 -
0.0076 1 .
4214 C    C    . LEU LEU LEU B B 127 127 . 0.2250 0.1927 0.2066 -0.0137 0.0160
0.0095  1 .
4215 O    O    . LEU LEU LEU B B 127 127 . 0.2187 0.2003 0.2439 -0.0387 0.0198
0.0268  1 .
4216 N    N    . PRO PRO PRO B B 128 128 . 0.2298 0.1907 0.2431 -0.0123 0.0014
0.0143  1 .
4217 CA   CA   . PRO PRO PRO B B 128 128 . 0.2360 0.1791 0.2527 -0.0151 0.0109
0.0196  1 .
4218 CB   CB   . PRO PRO PRO B B 128 128 . 0.2430 0.1663 0.2686 -0.0095 0.0297
0.0148  1 .
4219 CG   CG   . PRO PRO PRO B B 128 128 . 0.2418 0.2632 0.2571 0.0229  0.0018
0.0123  1 .
4220 CD   CD   . PRO PRO PRO B B 128 128 . 0.2295 0.2127 0.2527 -0.0067 0.0354
0.0141  1 .
4221 C    C    . PRO PRO PRO B B 128 128 . 0.2279 0.1540 0.2065 -0.0144 -0.0095
0.0200  1 .
4222 O    O    . PRO PRO PRO B B 128 128 . 0.2257 0.1973 0.2005 -0.0119 -0.0049
0.0159  1 .
4223 N    N    . LEU LEU LEU B B 129 129 . 0.2357 0.1664 0.2226 -0.0279 -0.0077
0.0266  1 .
4224 CA   CA   . LEU LEU LEU B B 129 129 . 0.1964 0.1097 0.1627 -0.0200 -0.0058
0.0172  1 .
4225 CB   CB   . LEU LEU LEU B B 129 129 . 0.1792 0.1438 0.1680 -0.0288 -0.0206
0.0157  1 .
4226 CG   CG   . LEU LEU LEU B B 129 129 . 0.1828 0.1274 0.2178 -0.0043 -0.0280
0.0137  1 .
4227 CD1  CD1  . LEU LEU LEU B B 129 129 . 0.1896 0.2015 0.2043 0.0002  -0.0409
0.0338  1 .
4228 CD2  CD2  . LEU LEU LEU B B 129 129 . 0.1798 0.1864 0.1312 -0.0003 0.0068  -
0.0509 1 .
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4229 C    C    . LEU LEU LEU B B 129 129 . 0.1850 0.1608 0.2001 -0.0180 -0.0122
0.0180  1 .
4230 O    O    . LEU LEU LEU B B 129 129 . 0.1815 0.1597 0.2174 0.0115  -0.0047
0.0245  1 .
4231 N    N    . TYR TYR TYR B B 130 130 . 0.1853 0.1426 0.1804 -0.0122 0.0039
0.0083  1 .
4232 CA   CA   . TYR TYR TYR B B 130 130 . 0.1626 0.1550 0.1776 -0.0207 -0.0188
0.0020  1 .
4233 CB   CB   . TYR TYR TYR B B 130 130 . 0.1795 0.1237 0.1939 -0.0240 -0.0022
0.0037  1 .
4234 CG   CG   . TYR TYR TYR B B 130 130 . 0.2273 0.1452 0.1898 -0.0136 -0.0300
0.0168  1 .
4235 CD1  CD1  . TYR TYR TYR B B 130 130 . 0.2627 0.1455 0.1889 -0.0088 -0.0224
0.0152  1 .
4236 CE1  CE1  . TYR TYR TYR B B 130 130 . 0.2623 0.1645 0.3017 -0.0190 -0.0215
0.0032  1 .
4237 CZ   CZ   . TYR TYR TYR B B 130 130 . 0.2697 0.1934 0.2878 -0.0446 -0.0203
0.0158  1 .
4238 OH   OH   . TYR TYR TYR B B 130 130 . 0.2774 0.1816 0.3604 -0.0355 0.0187
0.0400  1 .
4239 CE2  CE2  . TYR TYR TYR B B 130 130 . 0.2363 0.1669 0.2629 -0.0189 0.0154
0.0136  1 .
4240 CD2  CD2  . TYR TYR TYR B B 130 130 . 0.2143 0.1339 0.1895 -0.0340 -0.0186
0.0213  1 .
4241 C    C    . TYR TYR TYR B B 130 130 . 0.1881 0.1577 0.1653 -0.0268 -0.0239
0.0027  1 .
4242 O    O    . TYR TYR TYR B B 130 130 . 0.1895 0.1391 0.1817 -0.0211 -0.0024 -
0.0033 1 .
4243 N    N    . ARG ARG ARG B B 131 131 . 0.2003 0.1817 0.1955 -0.0233 -0.0165
0.0004  1 .
4244 CA   CA   . ARG ARG ARG B B 131 131 . 0.1909 0.1674 0.2159 -0.0310 -0.0203
0.0082  1 .
4245 CB   CB   . ARG ARG ARG B B 131 131 . 0.2309 0.1787 0.2178 -0.0227 0.0022  -
0.0048 1 .
4246 CG   CG   . ARG ARG ARG B B 131 131 . 0.2333 0.2155 0.3283 -0.0028 -0.0072 -
0.0207 1 .
4247 CD   CD   . ARG ARG ARG B B 131 131 . 0.4014 0.2356 0.4229 -0.0801 -0.0038 -
0.0001 1 .
4248 C    C    . ARG ARG ARG B B 131 131 . 0.1866 0.2015 0.2245 -0.0319 -0.0093
0.0188  1 .
4249 O    O    . ARG ARG ARG B B 131 131 . 0.2126 0.2122 0.2279 -0.0308 -0.0332
0.0221  1 .
4250 N    N    . HIS HIS HIS B B 132 132 . 0.1660 0.1685 0.2141 -0.0192 -0.0198
0.0093  1 .
4251 CA   CA   . HIS HIS HIS B B 132 132 . 0.1935 0.1823 0.2291 -0.0160 -0.0015
0.0255  1 .
4252 CB   CB   . HIS HIS HIS B B 132 132 . 0.2054 0.1817 0.2280 -0.0157 0.0029
0.0177  1 .
4253 CG   CG   . HIS HIS HIS B B 132 132 . 0.1516 0.1817 0.2294 -0.0082 -0.0161
0.0117  1 .
4254 ND1  ND1  . HIS HIS HIS B B 132 132 . 0.1765 0.1738 0.2825 -0.0248 -0.0038
0.0137  1 .
4255 CE1  CE1  . HIS HIS HIS B B 132 132 . 0.2258 0.2267 0.2765 -0.0074 0.0150
0.0145  1 .
4256 NE2  NE2  . HIS HIS HIS B B 132 132 . 0.2138 0.1834 0.2546 0.0348  -0.0176
0.0296  1 .
4257 CD2  CD2  . HIS HIS HIS B B 132 132 . 0.2075 0.2088 0.2506 0.0324  -0.0036
0.0220  1 .
4258 C    C    . HIS HIS HIS B B 132 132 . 0.1986 0.1749 0.2209 -0.0133 -0.0050
0.0273  1 .
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4259 O    O    . HIS HIS HIS B B 132 132 . 0.1822 0.2001 0.2328 -0.0141 -0.0153
0.0281  1 .
4260 N    N    . ILE ILE ILE B B 133 133 . 0.1758 0.1654 0.2074 -0.0103 0.0015
0.0279  1 .
4261 CA   CA   . ILE ILE ILE B B 133 133 . 0.2021 0.1793 0.1765 -0.0165 -0.0081
0.0263  1 .
4262 CB   CB   . ILE ILE ILE B B 133 133 . 0.1981 0.1664 0.1822 -0.0377 0.0108
0.0258  1 .
4263 CG1  CG1  . ILE ILE ILE B B 133 133 . 0.1912 0.1803 0.1593 -0.0160 -0.0355
0.0282  1 .
4264 CD   CD   . ILE ILE ILE B B 133 133 . 0.1749 0.2078 0.2245 -0.0243 -0.0306
0.0170  1 .
4265 CG2  CG2  . ILE ILE ILE B B 133 133 . 0.2202 0.1792 0.2081 -0.0384 -0.0089
0.0346  1 .
4266 C    C    . ILE ILE ILE B B 133 133 . 0.1984 0.1937 0.1723 -0.0079 -0.0119
0.0083  1 .
4267 O    O    . ILE ILE ILE B B 133 133 . 0.1937 0.2040 0.2099 -0.0025 -0.0231
0.0063  1 .
4268 N    N    . ALA ALA ALA B B 134 134 . 0.1983 0.1773 0.1645 -0.0012 -0.0385 -
0.0021 1 .
4269 CA   CA   . ALA ALA ALA B B 134 134 . 0.1981 0.1952 0.1708 -0.0012 -0.0292 -
0.0100 1 .
4270 CB   CB   . ALA ALA ALA B B 134 134 . 0.2427 0.1991 0.1833 -0.0039 -0.0537 -
0.0316 1 .
4271 C    C    . ALA ALA ALA B B 134 134 . 0.2148 0.2058 0.1831 -0.0019 -0.0357 -
0.0001 1 .
4272 O    O    . ALA ALA ALA B B 134 134 . 0.2348 0.2078 0.1986 -0.0003 -0.0555
0.0208  1 .
4273 N    N    . GLN GLN GLN B B 135 135 . 0.2163 0.2318 0.2026 -0.0001 -0.0319
0.0090  1 .
4274 CA   CA   . GLN GLN GLN B B 135 135 . 0.2131 0.2452 0.2287 0.0077  -0.0210
0.0142  1 .
4275 CB   CB   . GLN GLN GLN B B 135 135 . 0.2434 0.2409 0.2728 -0.0070 -0.0333
0.0182  1 .
4276 CG   CG   . GLN GLN GLN B B 135 135 . 0.2847 0.2695 0.2925 0.0024  -0.0283 -
0.0125 1 .
4277 CD   CD   . GLN GLN GLN B B 135 135 . 0.3138 0.2762 0.3171 -0.0199 -0.0272 -
0.0144 1 .
4278 OE1  OE1  . GLN GLN GLN B B 135 135 . 0.2762 0.3407 0.3586 -0.0544 -0.0203
0.0075  1 .
4279 NE2  NE2  . GLN GLN GLN B B 135 135 . 0.3633 0.2890 0.3317 -0.0140 -0.0413
0.0109  1 .
4280 C    C    . GLN GLN GLN B B 135 135 . 0.2380 0.2488 0.2334 0.0112  -0.0329
0.0081  1 .
4281 O    O    . GLN GLN GLN B B 135 135 . 0.2477 0.2753 0.2561 0.0077  -0.0679 -
0.0055 1 .
4282 N    N    . LEU LEU LEU B B 136 136 . 0.2221 0.2166 0.2095 -0.0033 -0.0134
0.0029  1 .
4283 CA   CA   . LEU LEU LEU B B 136 136 . 0.2501 0.2293 0.2178 0.0139  -0.0249
0.0166  1 .
4284 CB   CB   . LEU LEU LEU B B 136 136 . 0.2397 0.2123 0.2224 0.0053  -0.0076
0.0218  1 .
4285 CG   CG   . LEU LEU LEU B B 136 136 . 0.2497 0.2104 0.2337 0.0635  -0.0138 -
0.0017 1 .
4286 CD1  CD1  . LEU LEU LEU B B 136 136 . 0.1910 0.1895 0.2329 0.0093  -0.0662
0.0125  1 .
4287 CD2  CD2  . LEU LEU LEU B B 136 136 . 0.2307 0.2767 0.3308 0.0517  -0.0614
0.0044  1 .
4288 C    C    . LEU LEU LEU B B 136 136 . 0.2542 0.2374 0.2619 0.0129  -0.0216
0.0179  1 .
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4289 O    O    . LEU LEU LEU B B 136 136 . 0.2646 0.2383 0.2814 0.0439  -0.0555
0.0281  1 .
4290 N    N    . ALA ALA ALA B B 137 137 . 0.2479 0.2533 0.2222 0.0032  -0.0155 -
0.0027 1 .
4291 CA   CA   . ALA ALA ALA B B 137 137 . 0.2570 0.2659 0.2466 -0.0105 -0.0260
0.0010  1 .
4292 CB   CB   . ALA ALA ALA B B 137 137 . 0.2331 0.2600 0.2242 0.0127  0.0003
0.0110  1 .
4293 C    C    . ALA ALA ALA B B 137 137 . 0.2844 0.2961 0.2599 -0.0092 -0.0312
0.0002  1 .
4294 O    O    . ALA ALA ALA B B 137 137 . 0.3304 0.3046 0.2720 -0.0158 -0.0380
0.0088  1 .
4295 N    N    . GLY GLY GLY B B 138 138 . 0.2966 0.2769 0.2871 -0.0260 -0.0614 -
0.0082 1 .
4296 CA   CA   . GLY GLY GLY B B 138 138 . 0.3355 0.3334 0.2665 0.0007  -0.0614 -
0.0053 1 .
4297 C    C    . GLY GLY GLY B B 138 138 . 0.3482 0.3368 0.2840 -0.0066 -0.0546 -
0.0060 1 .
4298 O    O    . GLY GLY GLY B B 138 138 . 0.3663 0.3657 0.2758 0.0228  -0.0656 -
0.0239 1 .
4299 N    N    . ASN ASN ASN B B 139 139 . 0.3166 0.3222 0.2834 -0.0150 -0.0639
0.0199  1 .
4300 CA   CA   . ASN ASN ASN B B 139 139 . 0.3540 0.3354 0.2834 -0.0312 -0.0442
0.0094  1 .
4301 CB   CB   . ASN ASN ASN B B 139 139 . 0.3465 0.3101 0.2822 -0.0369 -0.0533
0.0291  1 .
4302 CG   CG   . ASN ASN ASN B B 139 139 . 0.3193 0.3310 0.2813 -0.0503 -0.0771
0.0141  1 .
4303 OD1  OD1  . ASN ASN ASN B B 139 139 . 0.3998 0.4286 0.2982 -0.0583 -0.1086
0.0332  1 .
4304 ND2  ND2  . ASN ASN ASN B B 139 139 . 0.2765 0.3142 0.2415 0.0111  -0.1048
0.0020  1 .
4305 C    C    . ASN ASN ASN B B 139 139 . 0.3740 0.3445 0.3258 -0.0363 -0.0413 -
0.0055 1 .
4306 O    O    . ASN ASN ASN B B 139 139 . 0.3799 0.3327 0.3023 -0.0422 -0.0372 -
0.0279 1 .
4307 N    N    . SER SER SER B B 140 140 . 0.4287 0.3860 0.3765 -0.0182 -0.0215 -
0.0112 1 .
4308 CA   CA   . SER SER SER B B 140 140 . 0.4728 0.4300 0.4300 -0.0349 -0.0176 -
0.0009 1 .
4309 CB   CB   . SER SER SER B B 140 140 . 0.4846 0.4270 0.4345 -0.0455 -0.0207 -
0.0121 1 .
4310 OG   OG   . SER SER SER B B 140 140 . 0.5518 0.4964 0.4644 -0.0743 -0.0513 -
0.0303 1 .
4311 C    C    . SER SER SER B B 140 140 . 0.4838 0.4429 0.4604 -0.0240 -0.0026
0.0022  1 .
4312 O    O    . SER SER SER B B 140 140 . 0.5451 0.4497 0.5270 -0.0266 0.0132
0.0213  1 .
4313 N    N    . ASP ASP ASP B B 141 141 . 0.4685 0.4645 0.4492 -0.0239 -0.0170 -
0.0002 1 .
4314 CA   CA   . ASP ASP ASP B B 141 141 . 0.4451 0.4538 0.4122 -0.0044 -0.0201 -
0.0097 1 .
4315 CB   CB   . ASP ASP ASP B B 141 141 . 0.4641 0.4705 0.4341 -0.0017 -0.0059 -
0.0028 1 .
4316 CG   CG   . ASP ASP ASP B B 141 141 . 0.5014 0.4947 0.4112 -0.0287 -0.0006 -
0.0232 1 .
4317 C    C    . ASP ASP ASP B B 141 141 . 0.4101 0.4223 0.4109 -0.0014 -0.0259 -
0.0182 1 .
4318 O    O    . ASP ASP ASP B B 141 141 . 0.4266 0.4386 0.4281 -0.0043 -0.0522 -
0.0352 1 .
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4319 N    N    . LEU LEU LEU B B 142 142 . 0.3595 0.3876 0.3424 -0.0021 -0.0351 -
0.0194 1 .
4320 CA   CA   . LEU LEU LEU B B 142 142 . 0.3073 0.3247 0.3093 0.0061  -0.0271 -
0.0252 1 .
4321 CB   CB   . LEU LEU LEU B B 142 142 . 0.2934 0.2959 0.2625 0.0088  -0.0181 -
0.0394 1 .
4322 CG   CG   . LEU LEU LEU B B 142 142 . 0.2882 0.2502 0.3231 0.0292  -0.0169 -
0.0270 1 .
4323 CD1  CD1  . LEU LEU LEU B B 142 142 . 0.4029 0.3482 0.3122 0.0029  -0.0551
0.0016  1 .
4324 CD2  CD2  . LEU LEU LEU B B 142 142 . 0.3691 0.2917 0.3063 0.0444  -0.0231 -
0.0558 1 .
4325 C    C    . LEU LEU LEU B B 142 142 . 0.3028 0.3146 0.2797 -0.0003 -0.0341 -
0.0162 1 .
4326 O    O    . LEU LEU LEU B B 142 142 . 0.3268 0.3434 0.3403 -0.0014 -0.0543 -
0.0323 1 .
4327 N    N    . ILE ILE ILE B B 143 143 . 0.2941 0.2986 0.2038 -0.0066 -0.0430
0.0118  1 .
4328 CA   CA   . ILE ILE ILE B B 143 143 . 0.2524 0.2881 0.2130 -0.0006 -0.0480
0.0074  1 .
4329 CB   CB   . ILE ILE ILE B B 143 143 . 0.2742 0.3564 0.2066 0.0059  -0.0440
0.0110  1 .
4330 CG1  CG1  . ILE ILE ILE B B 143 143 . 0.3447 0.3804 0.2859 0.0063  -0.0430 -
0.0264 1 .
4331 CD   CD   . ILE ILE ILE B B 143 143 . 0.4445 0.3618 0.4081 0.0002  -0.0349 -
0.0940 1 .
4332 CG2  CG2  . ILE ILE ILE B B 143 143 . 0.3204 0.4938 0.2653 0.0261  -0.0529
0.0633  1 .
4333 C    C    . ILE ILE ILE B B 143 143 . 0.2403 0.2375 0.1803 0.0122  -0.0397 -
0.0028 1 .
4334 O    O    . ILE ILE ILE B B 143 143 . 0.2469 0.1872 0.2199 -0.0160 -0.0538
0.0127  1 .
4335 N    N    . LEU LEU LEU B B 144 144 . 0.2040 0.1894 0.1600 0.0074  -0.0384 -
0.0113 1 .
4336 CA   CA   . LEU LEU LEU B B 144 144 . 0.1941 0.1537 0.1533 0.0057  -0.0265 -
0.0033 1 .
4337 CB   CB   . LEU LEU LEU B B 144 144 . 0.2331 0.1559 0.1727 0.0201  -0.0151
0.0061  1 .
4338 CG   CG   . LEU LEU LEU B B 144 144 . 0.2343 0.1782 0.1732 -0.0100 -0.0264 -
0.0145 1 .
4339 CD1  CD1  . LEU LEU LEU B B 144 144 . 0.3097 0.1782 0.0765 0.0403  0.0159
0.0284  1 .
4340 CD2  CD2  . LEU LEU LEU B B 144 144 . 0.2273 0.2377 0.1904 -0.0453 -0.0723
0.0264  1 .
4341 C    C    . LEU LEU LEU B B 144 144 . 0.2186 0.1464 0.1264 0.0118  -0.0031
0.0042  1 .
4342 O    O    . LEU LEU LEU B B 144 144 . 0.2595 0.1550 0.1429 0.0046  0.0057
0.0040  1 .
4343 N    N    . PRO PRO PRO B B 145 145 . 0.2377 0.1433 0.1126 0.0038  0.0133
0.0069  1 .
4344 CA   CA   . PRO PRO PRO B B 145 145 . 0.2065 0.1124 0.1341 -0.0074 0.0264  -
0.0258 1 .
4345 CB   CB   . PRO PRO PRO B B 145 145 . 0.2521 0.1239 0.0940 0.0039  0.0185  -
0.0285 1 .
4346 CG   CG   . PRO PRO PRO B B 145 145 . 0.2370 0.1433 0.1201 -0.0159 0.0501  -
0.0272 1 .
4347 CD   CD   . PRO PRO PRO B B 145 145 . 0.2300 0.1229 0.0828 0.0026  0.0056  -
0.0201 1 .
4348 C    C    . PRO PRO PRO B B 145 145 . 0.2018 0.1091 0.1307 0.0011  0.0047  -
0.0282 1 .
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4349 O    O    . PRO PRO PRO B B 145 145 . 0.1988 0.1270 0.1492 0.0160  -0.0060 -
0.0048 1 .
4350 N    N    . VAL VAL VAL B B 146 146 . 0.2167 0.1359 0.1116 0.0026  0.0161  -
0.0279 1 .
4351 CA   CA   . VAL VAL VAL B B 146 146 . 0.2082 0.1356 0.1055 -0.0034 0.0111  -
0.0064 1 .
4352 CB   CB   . VAL VAL VAL B B 146 146 . 0.2093 0.1720 0.1115 -0.0059 0.0176  -
0.0350 1 .
4353 CG1  CG1  . VAL VAL VAL B B 146 146 . 0.2316 0.2457 0.1289 0.0159  0.0547  -
0.0568 1 .
4354 CG2  CG2  . VAL VAL VAL B B 146 146 . 0.2919 0.1117 0.1274 -0.0064 -0.0203 -
0.0075 1 .
4355 C    C    . VAL VAL VAL B B 146 146 . 0.1943 0.1473 0.1191 0.0109  -0.0108
0.0028  1 .
4356 O    O    . VAL VAL VAL B B 146 146 . 0.2306 0.1632 0.1485 0.0259  -0.0112 -
0.0123 1 .
4357 N    N    . PRO PRO PRO B B 147 147 . 0.1876 0.1453 0.1092 0.0132  -0.0044 -
0.0048 1 .
4358 CA   CA   . PRO PRO PRO B B 147 147 . 0.1707 0.1411 0.1105 0.0132  -0.0093 -
0.0019 1 .
4359 CB   CB   . PRO PRO PRO B B 147 147 . 0.2085 0.1234 0.0852 0.0431  0.0062
0.0121  1 .
4360 CG   CG   . PRO PRO PRO B B 147 147 . 0.1480 0.1537 0.1173 0.0133  -0.0302 -
0.0138 1 .
4361 CD   CD   . PRO PRO PRO B B 147 147 . 0.1990 0.1162 0.1094 0.0371  -0.0426
0.0049  1 .
4362 C    C    . PRO PRO PRO B B 147 147 . 0.1699 0.1486 0.1266 0.0165  -0.0006
0.0045  1 .
4363 O    O    . PRO PRO PRO B B 147 147 . 0.1787 0.1761 0.1636 0.0155  0.0208  -
0.0105 1 .
4364 N    N    . ALA ALA ALA B B 148 148 . 0.1756 0.1764 0.1185 0.0202  0.0039
0.0083  1 .
4365 CA   CA   . ALA ALA ALA B B 148 148 . 0.1644 0.1156 0.0986 0.0236  -0.0319 -
0.0014 1 .
4366 CB   CB   . ALA ALA ALA B B 148 148 . 0.2186 0.1403 0.0847 0.0253  0.0072
0.0176  1 .
4367 C    C    . ALA ALA ALA B B 148 148 . 0.1724 0.1583 0.1024 0.0304  -0.0085
0.0137  1 .
4368 O    O    . ALA ALA ALA B B 148 148 . 0.1727 0.1733 0.1501 0.0561  -0.0085
0.0118  1 .
4369 N    N    . PHE PHE PHE B B 149 149 . 0.1727 0.1711 0.1012 0.0401  -0.0153
0.0183  1 .
4370 CA   CA   . PHE PHE PHE B B 149 149 . 0.1732 0.1507 0.1283 0.0414  -0.0235
0.0101  1 .
4371 CB   CB   . PHE PHE PHE B B 149 149 . 0.1726 0.1495 0.1189 0.0591  -0.0261
0.0223  1 .
4372 CG   CG   . PHE PHE PHE B B 149 149 . 0.1561 0.1380 0.0809 0.0235  0.0057  -
0.0077 1 .
4373 CD1  CD1  . PHE PHE PHE B B 149 149 . 0.1340 0.1421 0.1438 0.0593  0.0138
0.0489  1 .
4374 CE1  CE1  . PHE PHE PHE B B 149 149 . 0.1994 0.1492 0.1016 0.0147  0.0157  -
0.0141 1 .
4375 CZ   CZ   . PHE PHE PHE B B 149 149 . 0.1783 0.1082 0.1433 0.0375  0.0454  -
0.0033 1 .
4376 CE2  CE2  . PHE PHE PHE B B 149 149 . 0.1492 0.1548 0.1289 0.0364  0.0127  -
0.0019 1 .
4377 CD2  CD2  . PHE PHE PHE B B 149 149 . 0.1862 0.1530 0.1388 0.0498  -0.0211
0.0074  1 .
4378 C    C    . PHE PHE PHE B B 149 149 . 0.1555 0.1518 0.1486 0.0426  -0.0053
0.0224  1 .
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4379 O    O    . PHE PHE PHE B B 149 149 . 0.1556 0.1425 0.1577 0.0186  0.0140
0.0191  1 .
4380 N    N    . ASN ASN ASN B B 150 150 . 0.1751 0.1478 0.1237 0.0293  0.0312
0.0140  1 .
4381 CA   CA   . ASN ASN ASN B B 150 150 . 0.1600 0.1837 0.1767 0.0384  0.0273  -
0.0114 1 .
4382 CB   CB   . ASN ASN ASN B B 150 150 . 0.2354 0.1584 0.2619 0.0286  0.0632  -
0.0533 1 .
4383 CG   CG   . ASN ASN ASN B B 150 150 . 0.2572 0.2452 0.3134 0.0371  0.1021  -
0.0260 1 .
4384 OD1  OD1  . ASN ASN ASN B B 150 150 . 0.3236 0.2814 0.3500 0.0420  0.1145  -
0.0022 1 .
4385 ND2  ND2  . ASN ASN ASN B B 150 150 . 0.3401 0.2536 0.3407 0.0945  0.0967  -
0.0094 1 .
4386 C    C    . ASN ASN ASN B B 150 150 . 0.2003 0.2363 0.1644 0.0033  0.0074
0.0071  1 .
4387 O    O    . ASN ASN ASN B B 150 150 . 0.2442 0.3834 0.2231 -0.0256 0.0159
0.0310  1 .
4388 N    N    . VAL VAL VAL B B 151 151 . 0.1818 0.2171 0.1395 0.0593  -0.0055 -
0.0117 1 .
4389 CA   CA   . VAL VAL VAL B B 151 151 . 0.2029 0.2150 0.1628 0.0608  -0.0024 -
0.0196 1 .
4390 CB   CB   . VAL VAL VAL B B 151 151 . 0.2355 0.2193 0.1943 0.0838  -0.0160 -
0.0194 1 .
4391 CG1  CG1  . VAL VAL VAL B B 151 151 . 0.3095 0.2072 0.2404 0.0580  -0.0365
0.0168  1 .
4392 CG2  CG2  . VAL VAL VAL B B 151 151 . 0.2312 0.2258 0.2114 0.0312  0.0235  -
0.0385 1 .
4393 C    C    . VAL VAL VAL B B 151 151 . 0.2243 0.2390 0.1659 0.0626  0.0066  -
0.0303 1 .
4394 O    O    . VAL VAL VAL B B 151 151 . 0.1980 0.2781 0.1533 0.0686  -0.0021 -
0.0244 1 .
4395 N    N    . ILE ILE ILE B B 152 152 . 0.2139 0.1966 0.1943 0.0430  -0.0081 -
0.0345 1 .
4396 CA   CA   . ILE ILE ILE B B 152 152 . 0.2217 0.2153 0.2411 0.0450  -0.0243 -
0.0396 1 .
4397 CB   CB   . ILE ILE ILE B B 152 152 . 0.2439 0.1870 0.2376 0.0231  -0.0228 -
0.0203 1 .
4398 CG1  CG1  . ILE ILE ILE B B 152 152 . 0.2630 0.2143 0.3002 0.0366  -0.0068 -
0.0178 1 .
4399 CD   CD   . ILE ILE ILE B B 152 152 . 0.3200 0.2545 0.2873 -0.0244 -0.0133 -
0.0391 1 .
4400 CG2  CG2  . ILE ILE ILE B B 152 152 . 0.1973 0.2078 0.2484 0.0507  -0.0499 -
0.0462 1 .
4401 C    C    . ILE ILE ILE B B 152 152 . 0.2638 0.2479 0.2508 0.0443  -0.0342 -
0.0446 1 .
4402 O    O    . ILE ILE ILE B B 152 152 . 0.2661 0.2441 0.2220 0.0894  -0.0375 -
0.0445 1 .
4403 N    N    . ASN ASN ASN B B 153 153 . 0.2842 0.2547 0.2257 0.0382  -0.0313 -
0.0657 1 .
4404 CA   CA   . ASN ASN ASN B B 153 153 . 0.2928 0.2939 0.2847 0.0307  -0.0380 -
0.0236 1 .
4405 CB   CB   . ASN ASN ASN B B 153 153 . 0.3293 0.3450 0.2777 0.0663  -0.0254 -
0.0702 1 .
4406 CG   CG   . ASN ASN ASN B B 153 153 . 0.3944 0.4369 0.3961 0.0518  -0.0520 -
0.0426 1 .
4407 OD1  OD1  . ASN ASN ASN B B 153 153 . 0.5365 0.5929 0.5866 0.0039  -0.0880 -
0.0621 1 .
4408 ND2  ND2  . ASN ASN ASN B B 153 153 . 0.4537 0.5414 0.3428 0.0408  -0.0766 -
0.1991 1 .
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4409 C    C    . ASN ASN ASN B B 153 153 . 0.3022 0.3013 0.2612 0.0363  -0.0471 -
0.0538 1 .
4410 O    O    . ASN ASN ASN B B 153 153 . 0.2787 0.3189 0.2457 0.0348  -0.0652 -
0.0359 1 .
4411 N    N    . GLY GLY GLY B B 154 154 . 0.2629 0.2538 0.2322 0.0326  -0.0816 -
0.0198 1 .
4412 CA   CA   . GLY GLY GLY B B 154 154 . 0.2602 0.2687 0.2397 0.0348  -0.0574 -
0.0321 1 .
4413 C    C    . GLY GLY GLY B B 154 154 . 0.2686 0.2701 0.2230 0.0303  -0.0552 -
0.0481 1 .
4414 O    O    . GLY GLY GLY B B 154 154 . 0.2363 0.3030 0.2164 0.0740  -0.0571 -
0.0919 1 .
4415 N    N    . GLY GLY GLY B B 155 155 . 0.2969 0.2783 0.2377 0.0569  -0.0710 -
0.0482 1 .
4416 CA   CA   . GLY GLY GLY B B 155 155 . 0.2932 0.2923 0.2554 0.0552  -0.0367 -
0.0531 1 .
4417 C    C    . GLY GLY GLY B B 155 155 . 0.2889 0.2919 0.2628 0.0298  -0.0247 -
0.0290 1 .
4418 O    O    . GLY GLY GLY B B 155 155 . 0.2985 0.2977 0.2095 -0.0100 -0.0321 -
0.0176 1 .
4419 N    N    . SER SER SER B B 156 156 . 0.2789 0.2659 0.2708 0.0280  -0.0046 -
0.0249 1 .
4420 CA   CA   . SER SER SER B B 156 156 . 0.3228 0.3020 0.3027 0.0193  0.0034  -
0.0225 1 .
4421 CB   CB   . SER SER SER B B 156 156 . 0.2883 0.3015 0.3259 0.0295  0.0231  -
0.0580 1 .
4422 OG   OG   . SER SER SER B B 156 156 . 0.3423 0.2981 0.3568 0.0315  -0.0101
0.0000  1 .
4423 C    C    . SER SER SER B B 156 156 . 0.3459 0.3129 0.3111 0.0010  0.0124  -
0.0263 1 .
4424 O    O    . SER SER SER B B 156 156 . 0.3897 0.2941 0.3633 -0.0021 0.0205  -
0.0485 1 .
4425 N    N    . HIS HIS HIS B B 157 157 . 0.3194 0.2910 0.2895 0.0048  0.0258
0.0007  1 .
4426 CA   CA   . HIS HIS HIS B B 157 157 . 0.3255 0.3276 0.3162 0.0108  0.0139
0.0220  1 .
4427 CB   CB   . HIS HIS HIS B B 157 157 . 0.3040 0.3436 0.2879 0.0427  0.0437
0.0371  1 .
4428 CG   CG   . HIS HIS HIS B B 157 157 . 0.3317 0.3337 0.3802 0.0403  0.0042
0.0123  1 .
4429 ND1  ND1  . HIS HIS HIS B B 157 157 . 0.3546 0.3334 0.4115 0.0116  0.0150
0.0827  1 .
4430 CE1  CE1  . HIS HIS HIS B B 157 157 . 0.3890 0.3469 0.4388 0.0310  -0.0163
0.0115  1 .
4431 NE2  NE2  . HIS HIS HIS B B 157 157 . 0.4433 0.3138 0.4303 0.0284  0.0100  -
0.0035 1 .
4432 CD2  CD2  . HIS HIS HIS B B 157 157 . 0.3859 0.3693 0.3678 0.0365  -0.0027 -
0.0311 1 .
4433 C    C    . HIS HIS HIS B B 157 157 . 0.3166 0.3754 0.3236 0.0137  0.0234
0.0303  1 .
4434 O    O    . HIS HIS HIS B B 157 157 . 0.3578 0.4434 0.3512 0.0347  0.0195
0.0507  1 .
4435 N    N    . ALA ALA ALA B B 158 158 . 0.3326 0.3800 0.2960 -0.0162 0.0080
0.0159  1 .
4436 CA   CA   . ALA ALA ALA B B 158 158 . 0.2419 0.2862 0.2824 -0.0328 -0.0203 -
0.0023 1 .
4437 CB   CB   . ALA ALA ALA B B 158 158 . 0.3070 0.3372 0.3041 -0.0320 0.0116
0.0307  1 .
4438 C    C    . ALA ALA ALA B B 158 158 . 0.2870 0.3150 0.3126 -0.0395 -0.0074
0.0257  1 .
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4439 O    O    . ALA ALA ALA B B 158 158 . 0.2858 0.3224 0.3421 -0.0241 -0.0274
0.0174  1 .
4440 N    N    . GLY GLY GLY B B 159 159 . 0.2328 0.3062 0.3053 -0.0535 -0.0433
0.0099  1 .
4441 CA   CA   . GLY GLY GLY B B 159 159 . 0.2817 0.3102 0.2944 -0.0546 -0.0044 -
0.0241 1 .
4442 C    C    . GLY GLY GLY B B 159 159 . 0.2837 0.3321 0.3082 -0.0406 -0.0042 -
0.0318 1 .
4443 O    O    . GLY GLY GLY B B 159 159 . 0.3083 0.3656 0.3107 -0.0456 -0.0149 -
0.0160 1 .
4444 N    N    . ASN ASN ASN B B 160 160 . 0.2551 0.3171 0.2576 -0.0214 0.0030  -
0.0439 1 .
4445 CA   CA   . ASN ASN ASN B B 160 160 . 0.2666 0.2922 0.2709 -0.0108 -0.0051 -
0.0514 1 .
4446 CB   CB   . ASN ASN ASN B B 160 160 . 0.2114 0.2615 0.2321 -0.0082 -0.0134 -
0.0622 1 .
4447 CG   CG   . ASN ASN ASN B B 160 160 . 0.2645 0.2815 0.2706 0.0062  -0.0235 -
0.0435 1 .
4448 OD1  OD1  . ASN ASN ASN B B 160 160 . 0.3288 0.2797 0.2794 0.0472  -0.0904 -
0.0218 1 .
4449 ND2  ND2  . ASN ASN ASN B B 160 160 . 0.2469 0.2313 0.2405 0.0246  -0.0696 -
0.0781 1 .
4450 C    C    . ASN ASN ASN B B 160 160 . 0.2237 0.2911 0.2487 -0.0112 -0.0182 -
0.0493 1 .
4451 O    O    . ASN ASN ASN B B 160 160 . 0.2798 0.3281 0.2637 -0.0021 -0.0594 -
0.0610 1 .
4452 N    N    . LYS LYS LYS B B 161 161 . 0.2499 0.3060 0.2416 -0.0127 -0.0376 -
0.0243 1 .
4453 CA   CA   . LYS LYS LYS B B 161 161 . 0.2474 0.3035 0.2775 -0.0302 -0.0468 -
0.0282 1 .
4454 CB   CB   . LYS LYS LYS B B 161 161 . 0.2742 0.3225 0.2598 -0.0470 -0.0104 -
0.0154 1 .
4455 CG   CG   . LYS LYS LYS B B 161 161 . 0.2828 0.3712 0.3257 -0.0636 -0.0756 -
0.0347 1 .
4456 CD   CD   . LYS LYS LYS B B 161 161 . 0.4356 0.4889 0.4421 -0.0509 -0.0899 -
0.0649 1 .
4457 CE   CE   . LYS LYS LYS B B 161 161 . 0.4968 0.4087 0.4912 -0.1399 -0.1263 -
0.0182 1 .
4458 NZ   NZ   . LYS LYS LYS B B 161 161 . 0.5387 0.4160 0.4948 -0.1722 -0.1977 -
0.0112 1 .
4459 C    C    . LYS LYS LYS B B 161 161 . 0.2943 0.2759 0.2619 -0.0127 -0.0596 -
0.0336 1 .
4460 O    O    . LYS LYS LYS B B 161 161 . 0.3021 0.3204 0.3150 0.0006  -0.0654 -
0.0277 1 .
4461 N    N    . LEU LEU LEU B B 162 162 . 0.2830 0.2787 0.2908 -0.0068 -0.0725 -
0.0438 1 .
4462 CA   CA   . LEU LEU LEU B B 162 162 . 0.2419 0.2596 0.2552 0.0169  -0.0894 -
0.0562 1 .
4463 CB   CB   . LEU LEU LEU B B 162 162 . 0.2734 0.2595 0.2759 0.0165  -0.0776 -
0.0681 1 .
4464 CG   CG   . LEU LEU LEU B B 162 162 . 0.2166 0.2537 0.2056 0.0139  -0.0658 -
0.0740 1 .
4465 CD1  CD1  . LEU LEU LEU B B 162 162 . 0.2889 0.3490 0.2710 0.0431  -0.0304 -
0.0621 1 .
4466 CD2  CD2  . LEU LEU LEU B B 162 162 . 0.2650 0.2557 0.2865 0.0479  -0.0770 -
0.0620 1 .
4467 C    C    . LEU LEU LEU B B 162 162 . 0.2491 0.2431 0.2655 0.0272  -0.0636 -
0.0350 1 .
4468 O    O    . LEU LEU LEU B B 162 162 . 0.2455 0.2572 0.2521 0.0379  -0.0893 -
0.0387 1 .
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4469 N    N    . ALA ALA ALA B B 163 163 . 0.2421 0.2431 0.2673 0.0194  -0.0801 -
0.0455 1 .
4470 CA   CA   . ALA ALA ALA B B 163 163 . 0.2305 0.2260 0.2444 0.0263  -0.0468 -
0.0232 1 .
4471 CB   CB   . ALA ALA ALA B B 163 163 . 0.2340 0.2456 0.2932 -0.0039 -0.0617 -
0.0099 1 .
4472 C    C    . ALA ALA ALA B B 163 163 . 0.2129 0.2280 0.2317 0.0213  -0.0417 -
0.0363 1 .
4473 O    O    . ALA ALA ALA B B 163 163 . 0.2680 0.2592 0.2382 0.0143  -0.0410 -
0.0587 1 .
4474 N    N    . MET MET MET B B 164 164 . 0.2240 0.2248 0.2154 0.0221  -0.0466 -
0.0227 1 .
4475 CA   CA   . MET MET MET B B 164 164 . 0.2124 0.1965 0.2112 0.0344  -0.0124 -
0.0409 1 .
4476 CB   CB   . MET MET MET B B 164 164 . 0.2330 0.2273 0.1852 0.0225  -0.0275 -
0.0332 1 .
4477 CG   CG   . MET MET MET B B 164 164 . 0.2200 0.2183 0.1696 0.0330  -0.0046 -
0.0587 1 .
4478 SD   SD   . MET MET MET B B 164 164 . 0.2274 0.2253 0.2267 0.0143  -0.0480 -
0.0555 1 .
4479 CE   CE   . MET MET MET B B 164 164 . 0.2273 0.2504 0.2217 -0.0145 -0.0822 -
0.0018 1 .
4480 C    C    . MET MET MET B B 164 164 . 0.2484 0.2017 0.2208 0.0441  -0.0192 -
0.0447 1 .
4481 O    O    . MET MET MET B B 164 164 . 0.2473 0.2103 0.2306 0.0563  -0.0493 -
0.0358 1 .
4482 N    N    . GLN GLN GLN B B 165 165 . 0.2169 0.1808 0.1825 0.0350  -0.0037 -
0.0456 1 .
4483 CA   CA   . GLN GLN GLN B B 165 165 . 0.2295 0.1897 0.2126 0.0435  -0.0066 -
0.0271 1 .
4484 CB   CB   . GLN GLN GLN B B 165 165 . 0.2321 0.2301 0.2102 0.0630  0.0190  -
0.0304 1 .
4485 CG   CG   . GLN GLN GLN B B 165 165 . 0.2054 0.1826 0.2142 0.0460  0.0288  -
0.0159 1 .
4486 CD   CD   . GLN GLN GLN B B 165 165 . 0.2229 0.2337 0.1935 0.0529  0.0227  -
0.0302 1 .
4487 OE1  OE1  . GLN GLN GLN B B 165 165 . 0.2805 0.2151 0.2196 0.1250  -0.0142 -
0.0210 1 .
4488 NE2  NE2  . GLN GLN GLN B B 165 165 . 0.2479 0.2109 0.2695 0.0423  0.0293
0.0108  1 .
4489 C    C    . GLN GLN GLN B B 165 165 . 0.2476 0.1937 0.1840 0.0494  -0.0229 -
0.0252 1 .
4490 O    O    . GLN GLN GLN B B 165 165 . 0.2821 0.2169 0.1952 0.0990  -0.0345 -
0.0330 1 .
4491 N    N    . GLU GLU GLU B B 166 166 . 0.2549 0.1587 0.1658 0.0412  -0.0244 -
0.0363 1 .
4492 CA   CA   . GLU GLU GLU B B 166 166 . 0.2339 0.1772 0.1600 0.0399  -0.0146 -
0.0376 1 .
4493 CB   CB   . GLU GLU GLU B B 166 166 . 0.2308 0.2258 0.1802 0.0405  0.0192  -
0.0271 1 .
4494 CG   CG   . GLU GLU GLU B B 166 166 . 0.2509 0.2630 0.2794 0.0476  0.0000  -
0.0805 1 .
4495 CD   CD   . GLU GLU GLU B B 166 166 . 0.2569 0.2561 0.3002 0.0296  -0.0011 -
0.0427 1 .
4496 OE1  OE1  . GLU GLU GLU B B 166 166 . 0.2991 0.1970 0.2489 0.0513  0.0346  -
0.0073 1 .
4497 OE2  OE2  . GLU GLU GLU B B 166 166 . 0.3454 0.3415 0.3688 0.1129  0.0303  -
0.0450 1 .
4498 C    C    . GLU GLU GLU B B 166 166 . 0.2251 0.1761 0.1282 0.0477  -0.0034 -
0.0311 1 .
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4499 O    O    . GLU GLU GLU B B 166 166 . 0.2003 0.1769 0.1371 0.0531  -0.0211 -
0.0084 1 .
4500 N    N    . PHE PHE PHE B B 167 167 . 0.2079 0.1602 0.0954 0.0530  -0.0045 -
0.0363 1 .
4501 CA   CA   . PHE PHE PHE B B 167 167 . 0.1839 0.1491 0.1189 0.0351  0.0149  -
0.0473 1 .
4502 CB   CB   . PHE PHE PHE B B 167 167 . 0.1900 0.1703 0.1334 0.0182  -0.0056 -
0.0169 1 .
4503 CG   CG   . PHE PHE PHE B B 167 167 . 0.1997 0.1841 0.1679 -0.0081 0.0035  -
0.0078 1 .
4504 CD1  CD1  . PHE PHE PHE B B 167 167 . 0.1480 0.1761 0.2728 -0.0156 -0.0348 -
0.0157 1 .
4505 CE1  CE1  . PHE PHE PHE B B 167 167 . 0.1869 0.1735 0.2282 -0.0005 -0.0290
0.0163  1 .
4506 CZ   CZ   . PHE PHE PHE B B 167 167 . 0.1686 0.2306 0.2338 -0.0081 -0.0506 -
0.0091 1 .
4507 CE2  CE2  . PHE PHE PHE B B 167 167 . 0.1659 0.1749 0.2438 0.0322  0.0241
0.0108  1 .
4508 CD2  CD2  . PHE PHE PHE B B 167 167 . 0.1870 0.2125 0.2132 0.0451  0.0069
0.0392  1 .
4509 C    C    . PHE PHE PHE B B 167 167 . 0.1859 0.1565 0.1238 0.0188  -0.0049 -
0.0157 1 .
4510 O    O    . PHE PHE PHE B B 167 167 . 0.2519 0.1625 0.1629 0.0299  -0.0015
0.0078  1 .
4511 N    N    . MET MET MET B B 168 168 . 0.1841 0.1583 0.1249 0.0333  -0.0054 -
0.0058 1 .
4512 CA   CA   . MET MET MET B B 168 168 . 0.1888 0.1591 0.1190 0.0290  0.0014  -
0.0363 1 .
4513 CB   CB   . MET MET MET B B 168 168 . 0.1922 0.1714 0.1788 0.0423  0.0172  -
0.0261 1 .
4514 CG   CG   . MET MET MET B B 168 168 . 0.1928 0.2139 0.1134 0.0524  -0.0077 -
0.0294 1 .
4515 SD   SD   . MET MET MET B B 168 168 . 0.2461 0.2235 0.3312 0.0609  0.0294
0.0130  1 .
4516 CE   CE   . MET MET MET B B 168 168 . 0.2407 0.2428 0.2282 0.0280  0.0751
0.0772  1 .
4517 C    C    . MET MET MET B B 168 168 . 0.1978 0.1365 0.1532 0.0316  0.0295  -
0.0098 1 .
4518 O    O    . MET MET MET B B 168 168 . 0.2163 0.1320 0.1377 0.0188  0.0270
0.0165  1 .
4519 N    N    . ILE ILE ILE B B 169 169 . 0.1978 0.1249 0.1339 0.0304  0.0195  -
0.0136 1 .
4520 CA   CA   . ILE ILE ILE B B 169 169 . 0.2131 0.1711 0.1593 0.0405  0.0116  -
0.0150 1 .
4521 CB   CB   . ILE ILE ILE B B 169 169 . 0.1827 0.1691 0.1357 0.0392  0.0231
0.0284  1 .
4522 CG1  CG1  . ILE ILE ILE B B 169 169 . 0.1944 0.1770 0.0971 0.0624  0.0062
0.0252  1 .
4523 CD   CD   . ILE ILE ILE B B 169 169 . 0.1893 0.1758 0.1990 0.0609  0.0059
0.0219  1 .
4524 CG2  CG2  . ILE ILE ILE B B 169 169 . 0.2010 0.1826 0.1570 0.0001  -0.0107 -
0.0211 1 .
4525 C    C    . ILE ILE ILE B B 169 169 . 0.1983 0.1747 0.1486 0.0241  0.0071
0.0075  1 .
4526 O    O    . ILE ILE ILE B B 169 169 . 0.1921 0.1779 0.1282 0.0481  0.0244  -
0.0009 1 .
4527 N    N    . LEU LEU LEU B B 170 170 . 0.2197 0.1749 0.1347 0.0482  0.0077  -
0.0170 1 .
4528 CA   CA   . LEU LEU LEU B B 170 170 . 0.1920 0.1381 0.1069 0.0538  0.0133  -
0.0159 1 .
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4529 CB   CB   . LEU LEU LEU B B 170 170 . 0.2154 0.1651 0.1236 0.0569  -0.0206
0.0106  1 .
4530 CG   CG   . LEU LEU LEU B B 170 170 . 0.1762 0.1750 0.1074 0.0521  -0.0324
0.0276  1 .
4531 CD1  CD1  . LEU LEU LEU B B 170 170 . 0.2464 0.1171 0.2102 0.0122  -0.0136
0.0320  1 .
4532 CD2  CD2  . LEU LEU LEU B B 170 170 . 0.2239 0.1855 0.1972 0.0613  -0.0765
0.0390  1 .
4533 C    C    . LEU LEU LEU B B 170 170 . 0.2335 0.1537 0.1352 0.0358  0.0336
0.0082  1 .
4534 O    O    . LEU LEU LEU B B 170 170 . 0.2454 0.1640 0.1338 0.0412  0.0491
0.0005  1 .
4535 N    N    . PRO PRO PRO B B 171 171 . 0.2314 0.1427 0.1126 0.0272  0.0438
0.0089  1 .
4536 CA   CA   . PRO PRO PRO B B 171 171 . 0.2269 0.1425 0.1041 0.0343  0.0375
0.0168  1 .
4537 CB   CB   . PRO PRO PRO B B 171 171 . 0.2492 0.1459 0.1123 0.0378  0.0285
0.0373  1 .
4538 CG   CG   . PRO PRO PRO B B 171 171 . 0.2648 0.1764 0.2061 0.0542  0.0427  -
0.0045 1 .
4539 CD   CD   . PRO PRO PRO B B 171 171 . 0.2334 0.1603 0.0751 0.0596  0.0570
0.0266  1 .
4540 C    C    . PRO PRO PRO B B 171 171 . 0.2263 0.1710 0.1512 0.0226  0.0328
0.0193  1 .
4541 O    O    . PRO PRO PRO B B 171 171 . 0.2247 0.1812 0.1262 0.0130  0.0241  -
0.0132 1 .
4542 N    N    . VAL VAL VAL B B 172 172 . 0.2544 0.1700 0.1343 0.0347  0.0208
0.0187  1 .
4543 CA   CA   . VAL VAL VAL B B 172 172 . 0.2686 0.1526 0.1735 0.0198  0.0299
0.0058  1 .
4544 CB   CB   . VAL VAL VAL B B 172 172 . 0.2766 0.1524 0.1874 0.0353  0.0319
0.0237  1 .
4545 CG1  CG1  . VAL VAL VAL B B 172 172 . 0.2837 0.1271 0.1934 0.0682  0.0646  -
0.0275 1 .
4546 CG2  CG2  . VAL VAL VAL B B 172 172 . 0.2591 0.2118 0.1824 0.0065  0.0116  -
0.0133 1 .
4547 C    C    . VAL VAL VAL B B 172 172 . 0.2511 0.1650 0.1495 0.0079  0.0356
0.0043  1 .
4548 O    O    . VAL VAL VAL B B 172 172 . 0.2474 0.1691 0.1647 0.0249  0.0262  -
0.0198 1 .
4549 N    N    . GLY GLY GLY B B 173 173 . 0.2822 0.1404 0.1626 0.0177  0.0528  -
0.0065 1 .
4550 CA   CA   . GLY GLY GLY B B 173 173 . 0.2956 0.1353 0.1840 0.0109  0.0238  -
0.0042 1 .
4551 C    C    . GLY GLY GLY B B 173 173 . 0.3066 0.1733 0.1838 0.0194  0.0470  -
0.0124 1 .
4552 O    O    . GLY GLY GLY B B 173 173 . 0.3465 0.1685 0.1938 0.0170  0.0396  -
0.0264 1 .
4553 N    N    . ALA ALA ALA B B 174 174 . 0.2913 0.1637 0.1387 0.0190  0.0300
0.0065  1 .
4554 CA   CA   . ALA ALA ALA B B 174 174 . 0.2905 0.1586 0.1478 0.0031  0.0421  -
0.0110 1 .
4555 CB   CB   . ALA ALA ALA B B 174 174 . 0.2985 0.1514 0.1051 0.0420  0.0460
0.0140  1 .
4556 C    C    . ALA ALA ALA B B 174 174 . 0.2589 0.1814 0.1715 0.0156  0.0233  -
0.0088 1 .
4557 O    O    . ALA ALA ALA B B 174 174 . 0.2767 0.1898 0.1839 0.0174  0.0437  -
0.0195 1 .
4558 N    N    . GLU GLU GLU B B 175 175 . 0.2865 0.1827 0.1688 0.0030  0.0162  -
0.0220 1 .
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4559 CA   CA   . GLU GLU GLU B B 175 175 . 0.2728 0.2135 0.2211 0.0058  0.0261  -
0.0203 1 .
4560 CB   CB   . GLU GLU GLU B B 175 175 . 0.2725 0.1717 0.2721 0.0195  0.0333  -
0.0330 1 .
4561 CG   CG   . GLU GLU GLU B B 175 175 . 0.3555 0.2730 0.3108 0.0423  0.0559  -
0.0267 1 .
4562 CD   CD   . GLU GLU GLU B B 175 175 . 0.5210 0.3856 0.3522 0.0338  -0.0116 -
0.0562 1 .
4563 C    C    . GLU GLU GLU B B 175 175 . 0.2660 0.1935 0.2116 0.0027  0.0036  -
0.0256 1 .
4564 O    O    . GLU GLU GLU B B 175 175 . 0.3292 0.2416 0.2026 -0.0020 -0.0172 -
0.0529 1 .
4565 N    N    . SER SER SER B B 176 176 . 0.2537 0.1677 0.1320 0.0139  0.0043  -
0.0201 1 .
4566 CA   CA   . SER SER SER B B 176 176 . 0.2264 0.1365 0.1629 -0.0047 0.0022  -
0.0157 1 .
4567 CB   CB   . SER SER SER B B 176 176 . 0.2208 0.1347 0.1474 0.0108  -0.0207 -
0.0124 1 .
4568 OG   OG   . SER SER SER B B 176 176 . 0.2350 0.1189 0.1819 0.0029  -0.0216 -
0.0222 1 .
4569 C    C    . SER SER SER B B 176 176 . 0.1881 0.1401 0.1652 0.0003  0.0012  -
0.0226 1 .
4570 O    O    . SER SER SER B B 176 176 . 0.1934 0.1440 0.1432 0.0163  -0.0025 -
0.0108 1 .
4571 N    N    . PHE PHE PHE B B 177 177 . 0.2059 0.1621 0.1343 0.0075  -0.0037 -
0.0132 1 .
4572 CA   CA   . PHE PHE PHE B B 177 177 . 0.1922 0.1292 0.1372 0.0211  -0.0186 -
0.0073 1 .
4573 CB   CB   . PHE PHE PHE B B 177 177 . 0.1613 0.1406 0.1003 0.0164  -0.0038
0.0132  1 .
4574 CG   CG   . PHE PHE PHE B B 177 177 . 0.1502 0.1269 0.0952 0.0120  -0.0208 -
0.0084 1 .
4575 CD1  CD1  . PHE PHE PHE B B 177 177 . 0.1972 0.1040 0.1620 0.0106  0.0077  -
0.0083 1 .
4576 CE1  CE1  . PHE PHE PHE B B 177 177 . 0.1933 0.1565 0.1358 0.0108  -0.0029 -
0.0312 1 .
4577 CZ   CZ   . PHE PHE PHE B B 177 177 . 0.2340 0.1512 0.1509 0.0364  0.0005  -
0.0374 1 .
4578 CE2  CE2  . PHE PHE PHE B B 177 177 . 0.1498 0.1356 0.1060 0.0278  0.0126  -
0.0162 1 .
4579 CD2  CD2  . PHE PHE PHE B B 177 177 . 0.1810 0.1489 0.0808 0.0186  -0.0044
0.0031  1 .
4580 C    C    . PHE PHE PHE B B 177 177 . 0.1801 0.1527 0.1511 -0.0015 0.0008  -
0.0005 1 .
4581 O    O    . PHE PHE PHE B B 177 177 . 0.1913 0.1361 0.0999 0.0091  -0.0122 -
0.0031 1 .
4582 N    N    . ARG ARG ARG B B 178 178 . 0.2192 0.1312 0.1478 0.0191  -0.0057 -
0.0125 1 .
4583 CA   CA   . ARG ARG ARG B B 178 178 . 0.1951 0.1483 0.1753 0.0127  0.0025
0.0025  1 .
4584 CB   CB   . ARG ARG ARG B B 178 178 . 0.1910 0.1379 0.1716 -0.0021 0.0267
0.0106  1 .
4585 CG   CG   . ARG ARG ARG B B 178 178 . 0.2322 0.2658 0.2494 -0.0347 0.0206  -
0.0099 1 .
4586 CD   CD   . ARG ARG ARG B B 178 178 . 0.4092 0.2876 0.2973 -0.1456 0.0029  -
0.0130 1 .
4587 NE   NE   . ARG ARG ARG B B 178 178 . 0.3108 0.3842 0.3461 -0.0705 -0.0589
0.0231  1 .
4588 CZ   CZ   . ARG ARG ARG B B 178 178 . 0.4573 0.2478 0.3681 -0.0303 -0.0151 -
0.0196 1 .
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4589 NH1  NH1  . ARG ARG ARG B B 178 178 . 0.4980 0.2219 0.4640 0.0127  -0.0813 -
0.0341 1 .
4590 NH2  NH2  . ARG ARG ARG B B 178 178 . 0.3996 0.1811 0.3858 0.0076  0.0573
0.0225  1 .
4591 C    C    . ARG ARG ARG B B 178 178 . 0.1740 0.1144 0.1206 0.0077  -0.0016 -
0.0141 1 .
4592 O    O    . ARG ARG ARG B B 178 178 . 0.1882 0.0974 0.1558 0.0125  0.0050  -
0.0158 1 .
4593 N    N    . ASP ASP ASP B B 179 179 . 0.1928 0.1026 0.1216 0.0229  0.0051  -
0.0149 1 .
4594 CA   CA   . ASP ASP ASP B B 179 179 . 0.1740 0.1281 0.1152 -0.0078 0.0012  -
0.0266 1 .
4595 CB   CB   . ASP ASP ASP B B 179 179 . 0.1834 0.1820 0.0985 0.0058  -0.0073 -
0.0462 1 .
4596 CG   CG   . ASP ASP ASP B B 179 179 . 0.1762 0.1922 0.1688 -0.0108 0.0187  -
0.0116 1 .
4597 OD1  OD1  . ASP ASP ASP B B 179 179 . 0.3791 0.2223 0.1953 0.0263  0.0118  -
0.0155 1 .
4598 OD2  OD2  . ASP ASP ASP B B 179 179 . 0.3044 0.2590 0.2438 0.1123  0.0274  -
0.0074 1 .
4599 C    C    . ASP ASP ASP B B 179 179 . 0.1746 0.1390 0.1386 0.0123  0.0002  -
0.0050 1 .
4600 O    O    . ASP ASP ASP B B 179 179 . 0.1877 0.1381 0.1461 0.0163  -0.0003 -
0.0027 1 .
4601 N    N    . ALA ALA ALA B B 180 180 . 0.2059 0.1474 0.1123 0.0277  -0.0198
0.0121  1 .
4602 CA   CA   . ALA ALA ALA B B 180 180 . 0.1714 0.1407 0.1217 0.0134  -0.0141
0.0025  1 .
4603 CB   CB   . ALA ALA ALA B B 180 180 . 0.1753 0.1188 0.1164 0.0641  -0.0199
0.0028  1 .
4604 C    C    . ALA ALA ALA B B 180 180 . 0.1725 0.1400 0.1338 0.0120  0.0020  -
0.0070 1 .
4605 O    O    . ALA ALA ALA B B 180 180 . 0.1814 0.1578 0.1230 0.0138  0.0039  -
0.0119 1 .
4606 N    N    . MET MET MET B B 181 181 . 0.1895 0.1224 0.1244 0.0109  0.0026  -
0.0036 1 .
4607 CA   CA   . MET MET MET B B 181 181 . 0.1765 0.1359 0.1316 0.0113  0.0061  -
0.0242 1 .
4608 CB   CB   . MET MET MET B B 181 181 . 0.1799 0.1493 0.1235 0.0106  0.0249  -
0.0100 1 .
4609 CG   CG   . MET MET MET B B 181 181 . 0.1674 0.1088 0.1678 0.0005  -0.0118 -
0.0117 1 .
4610 SD   SD   . MET MET MET B B 181 181 . 0.2145 0.1600 0.1617 0.0309  0.0092  -
0.0195 1 .
4611 CE   CE   . MET MET MET B B 181 181 . 0.2567 0.1114 0.1402 0.0400  -0.0379 -
0.0194 1 .
4612 C    C    . MET MET MET B B 181 181 . 0.1846 0.1334 0.1399 0.0043  0.0112  -
0.0135 1 .
4613 O    O    . MET MET MET B B 181 181 . 0.1885 0.1507 0.1620 0.0212  0.0195  -
0.0063 1 .
4614 N    N    . ARG ARG ARG B B 182 182 . 0.1953 0.1104 0.1281 0.0140  0.0187  -
0.0017 1 .
4615 CA   CA   . ARG ARG ARG B B 182 182 . 0.1816 0.1297 0.1446 0.0164  0.0118  -
0.0084 1 .
4616 CB   CB   . ARG ARG ARG B B 182 182 . 0.2054 0.1198 0.1713 0.0418  0.0075  -
0.0078 1 .
4617 CG   CG   . ARG ARG ARG B B 182 182 . 0.1972 0.1595 0.1613 0.0381  -0.0033 -
0.0123 1 .
4618 CD   CD   . ARG ARG ARG B B 182 182 . 0.2475 0.1222 0.3712 0.0466  0.0583  -
0.0277 1 .
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4619 NE   NE   . ARG ARG ARG B B 182 182 . 0.3137 0.3396 0.4282 0.0545  0.0260  -
0.0879 1 .
4620 CZ   CZ   . ARG ARG ARG B B 182 182 . 0.3849 0.3804 0.4095 0.0128  0.0295  -
0.0829 1 .
4621 NH1  NH1  . ARG ARG ARG B B 182 182 . 0.4245 0.4320 0.2940 -0.0134 0.1429  -
0.1397 1 .
4622 NH2  NH2  . ARG ARG ARG B B 182 182 . 0.3842 0.4085 0.4495 -0.0146 -0.0506 -
0.0474 1 .
4623 C    C    . ARG ARG ARG B B 182 182 . 0.1536 0.1243 0.1544 0.0205  -0.0007 -
0.0129 1 .
4624 O    O    . ARG ARG ARG B B 182 182 . 0.1831 0.1374 0.1406 0.0373  0.0023  -
0.0139 1 .
4625 N    N    . LEU LEU LEU B B 183 183 . 0.1636 0.1244 0.1228 0.0243  0.0156  -
0.0141 1 .
4626 CA   CA   . LEU LEU LEU B B 183 183 . 0.1768 0.1397 0.1299 0.0347  0.0054  -
0.0072 1 .
4627 CB   CB   . LEU LEU LEU B B 183 183 . 0.2132 0.1499 0.1185 0.0231  0.0064  -
0.0142 1 .
4628 CG   CG   . LEU LEU LEU B B 183 183 . 0.2333 0.1686 0.1791 0.0238  0.0016  -
0.0119 1 .
4629 CD1  CD1  . LEU LEU LEU B B 183 183 . 0.2772 0.1580 0.1999 0.0164  0.0381  -
0.0107 1 .
4630 CD2  CD2  . LEU LEU LEU B B 183 183 . 0.3319 0.2083 0.1623 0.0422  -0.0329 -
0.0574 1 .
4631 C    C    . LEU LEU LEU B B 183 183 . 0.1532 0.1668 0.1394 0.0105  0.0101  -
0.0040 1 .
4632 O    O    . LEU LEU LEU B B 183 183 . 0.1657 0.1875 0.1398 0.0185  0.0004  -
0.0152 1 .
4633 N    N    . GLY GLY GLY B B 184 184 . 0.1759 0.1845 0.1216 0.0341  0.0174  -
0.0205 1 .
4634 CA   CA   . GLY GLY GLY B B 184 184 . 0.1792 0.1805 0.1733 0.0293  0.0085  -
0.0068 1 .
4635 C    C    . GLY GLY GLY B B 184 184 . 0.1657 0.1572 0.1596 0.0190  0.0126  -
0.0183 1 .
4636 O    O    . GLY GLY GLY B B 184 184 . 0.1837 0.1494 0.1596 0.0331  -0.0023 -
0.0073 1 .
4637 N    N    . ALA ALA ALA B B 185 185 . 0.1559 0.1330 0.1331 0.0363  0.0115  -
0.0230 1 .
4638 CA   CA   . ALA ALA ALA B B 185 185 . 0.1703 0.1619 0.1574 0.0144  0.0133  -
0.0040 1 .
4639 CB   CB   . ALA ALA ALA B B 185 185 . 0.1975 0.1071 0.1514 -0.0294 0.0048  -
0.0095 1 .
4640 C    C    . ALA ALA ALA B B 185 185 . 0.1562 0.1294 0.1505 0.0117  0.0048  -
0.0087 1 .
4641 O    O    . ALA ALA ALA B B 185 185 . 0.1672 0.1448 0.1531 0.0022  0.0070  -
0.0097 1 .
4642 N    N    . GLU GLU GLU B B 186 186 . 0.1683 0.1724 0.1235 0.0147  0.0289  -
0.0159 1 .
4643 CA   CA   . GLU GLU GLU B B 186 186 . 0.1793 0.1506 0.1566 0.0320  0.0049  -
0.0229 1 .
4644 CB   CB   . GLU GLU GLU B B 186 186 . 0.1986 0.1012 0.1568 0.0309  0.0126  -
0.0178 1 .
4645 CG   CG   . GLU GLU GLU B B 186 186 . 0.1869 0.1563 0.1619 0.0303  0.0383
0.0192  1 .
4646 CD   CD   . GLU GLU GLU B B 186 186 . 0.2394 0.2102 0.1977 0.0443  0.0723  -
0.0014 1 .
4647 OE1  OE1  . GLU GLU GLU B B 186 186 . 0.3259 0.2528 0.2098 0.0738  0.0819
0.0340  1 .
4648 OE2  OE2  . GLU GLU GLU B B 186 186 . 0.2880 0.1736 0.2241 0.0573  0.0617  -
0.0142 1 .
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4649 C    C    . GLU GLU GLU B B 186 186 . 0.1782 0.1581 0.1478 0.0210  -0.0040 -
0.0218 1 .
4650 O    O    . GLU GLU GLU B B 186 186 . 0.1885 0.1834 0.1457 0.0191  -0.0044 -
0.0030 1 .
4651 N    N    . VAL VAL VAL B B 187 187 . 0.1890 0.1630 0.1602 0.0340  0.0133  -
0.0325 1 .
4652 CA   CA   . VAL VAL VAL B B 187 187 . 0.2020 0.1480 0.1386 0.0281  0.0041  -
0.0210 1 .
4653 CB   CB   . VAL VAL VAL B B 187 187 . 0.1716 0.1415 0.1429 0.0201  -0.0235 -
0.0168 1 .
4654 CG1  CG1  . VAL VAL VAL B B 187 187 . 0.2119 0.1553 0.1457 0.0047  -0.0253 -
0.0244 1 .
4655 CG2  CG2  . VAL VAL VAL B B 187 187 . 0.2063 0.2356 0.1186 0.0694  0.0004  -
0.0320 1 .
4656 C    C    . VAL VAL VAL B B 187 187 . 0.1637 0.1558 0.1353 0.0012  0.0146  -
0.0197 1 .
4657 O    O    . VAL VAL VAL B B 187 187 . 0.1878 0.1395 0.1347 0.0290  0.0062  -
0.0190 1 .
4658 N    N    . TYR TYR TYR B B 188 188 . 0.1735 0.1530 0.1378 0.0274  0.0138  -
0.0203 1 .
4659 CA   CA   . TYR TYR TYR B B 188 188 . 0.1532 0.1355 0.1427 0.0096  0.0127  -
0.0145 1 .
4660 CB   CB   . TYR TYR TYR B B 188 188 . 0.1629 0.1456 0.1220 0.0278  0.0188  -
0.0253 1 .
4661 CG   CG   . TYR TYR TYR B B 188 188 . 0.1931 0.1040 0.1237 0.0175  0.0153  -
0.0251 1 .
4662 CD1  CD1  . TYR TYR TYR B B 188 188 . 0.1784 0.0794 0.1114 -0.0268 0.0014  -
0.0009 1 .
4663 CE1  CE1  . TYR TYR TYR B B 188 188 . 0.1806 0.1644 0.1007 -0.0098 0.0207  -
0.0125 1 .
4664 CZ   CZ   . TYR TYR TYR B B 188 188 . 0.2261 0.1299 0.1020 -0.0125 0.0112  -
0.0349 1 .
4665 OH   OH   . TYR TYR TYR B B 188 188 . 0.1714 0.1955 0.1209 -0.0323 0.0262  -
0.0441 1 .
4666 CE2  CE2  . TYR TYR TYR B B 188 188 . 0.2479 0.1717 0.1275 -0.0167 -0.0067 -
0.0503 1 .
4667 CD2  CD2  . TYR TYR TYR B B 188 188 . 0.2033 0.1694 0.1393 0.0186  -0.0177 -
0.0536 1 .
4668 C    C    . TYR TYR TYR B B 188 188 . 0.1576 0.1470 0.1493 0.0116  0.0087  -
0.0136 1 .
4669 O    O    . TYR TYR TYR B B 188 188 . 0.1200 0.1756 0.1327 0.0256  0.0058  -
0.0038 1 .
4670 N    N    . HIS HIS HIS B B 189 189 . 0.1747 0.1578 0.1299 0.0354  0.0158
0.0175  1 .
4671 CA   CA   . HIS HIS HIS B B 189 189 . 0.1870 0.1979 0.1823 0.0275  0.0102  -
0.0064 1 .
4672 CB   CB   . HIS HIS HIS B B 189 189 . 0.2077 0.1921 0.1610 0.0256  0.0376
0.0144  1 .
4673 CG   CG   . HIS HIS HIS B B 189 189 . 0.2502 0.2130 0.2132 -0.0171 0.0354
0.0674  1 .
4674 ND1  ND1  . HIS HIS HIS B B 189 189 . 0.2737 0.3763 0.2525 0.0010  0.0337
0.0272  1 .
4675 CE1  CE1  . HIS HIS HIS B B 189 189 . 0.3016 0.3491 0.2556 0.0217  0.0519  -
0.0195 1 .
4676 NE2  NE2  . HIS HIS HIS B B 189 189 . 0.3134 0.3032 0.3531 -0.0052 0.0396
0.0436  1 .
4677 CD2  CD2  . HIS HIS HIS B B 189 189 . 0.3564 0.1937 0.2975 -0.0262 0.0624
0.0042  1 .
4678 C    C    . HIS HIS HIS B B 189 189 . 0.1803 0.1853 0.1646 0.0217  -0.0004
0.0067  1 .
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4679 O    O    . HIS HIS HIS B B 189 189 . 0.1950 0.2084 0.1876 0.0142  0.0001  -
0.0037 1 .
4680 N    N    . THR THR THR B B 190 190 . 0.1732 0.1689 0.1466 0.0477  0.0209
0.0049  1 .
4681 CA   CA   . THR THR THR B B 190 190 . 0.1565 0.1947 0.1584 0.0117  0.0113  -
0.0053 1 .
4682 CB   CB   . THR THR THR B B 190 190 . 0.1510 0.1688 0.1380 0.0035  0.0077  -
0.0100 1 .
4683 OG1  OG1  . THR THR THR B B 190 190 . 0.2284 0.1708 0.2022 0.0190  0.0631  -
0.0178 1 .
4684 CG2  CG2  . THR THR THR B B 190 190 . 0.2015 0.2475 0.1189 0.0293  0.0745  -
0.0176 1 .
4685 C    C    . THR THR THR B B 190 190 . 0.1553 0.1753 0.1489 0.0196  0.0013
0.0232  1 .
4686 O    O    . THR THR THR B B 190 190 . 0.1680 0.1746 0.1872 0.0118  0.0056
0.0075  1 .
4687 N    N    . LEU LEU LEU B B 191 191 . 0.1739 0.1536 0.1552 0.0292  0.0366
0.0153  1 .
4688 CA   CA   . LEU LEU LEU B B 191 191 . 0.1582 0.1493 0.1448 0.0127  0.0070
0.0125  1 .
4689 CB   CB   . LEU LEU LEU B B 191 191 . 0.1466 0.1345 0.1665 0.0343  0.0456
0.0101  1 .
4690 CG   CG   . LEU LEU LEU B B 191 191 . 0.1707 0.1570 0.1782 0.0272  0.0272
0.0193  1 .
4691 CD1  CD1  . LEU LEU LEU B B 191 191 . 0.1447 0.2311 0.1914 0.0804  0.0455
0.0360  1 .
4692 CD2  CD2  . LEU LEU LEU B B 191 191 . 0.1779 0.2367 0.2233 0.0258  0.0506
0.0510  1 .
4693 C    C    . LEU LEU LEU B B 191 191 . 0.1561 0.1615 0.1643 0.0125  0.0169
0.0069  1 .
4694 O    O    . LEU LEU LEU B B 191 191 . 0.1767 0.1927 0.1647 0.0214  0.0164
0.0024  1 .
4695 N    N    . LYS LYS LYS B B 192 192 . 0.1504 0.1902 0.1334 0.0122  0.0150
0.0051  1 .
4696 CA   CA   . LYS LYS LYS B B 192 192 . 0.1314 0.2026 0.1245 0.0038  0.0103  -
0.0029 1 .
4697 CB   CB   . LYS LYS LYS B B 192 192 . 0.1961 0.2066 0.1387 -0.0079 -0.0033
0.0186  1 .
4698 CG   CG   . LYS LYS LYS B B 192 192 . 0.1614 0.2103 0.1312 -0.0029 0.0003
0.0046  1 .
4699 CD   CD   . LYS LYS LYS B B 192 192 . 0.2498 0.2385 0.1871 -0.0125 0.0182
0.0022  1 .
4700 CE   CE   . LYS LYS LYS B B 192 192 . 0.2733 0.3141 0.1896 -0.0498 0.0152
0.0057  1 .
4701 NZ   NZ   . LYS LYS LYS B B 192 192 . 0.3113 0.3205 0.2109 -0.0195 0.0528  -
0.0275 1 .
4702 C    C    . LYS LYS LYS B B 192 192 . 0.1799 0.2171 0.1665 0.0126  0.0109
0.0012  1 .
4703 O    O    . LYS LYS LYS B B 192 192 . 0.1748 0.2411 0.1723 0.0048  0.0267
0.0216  1 .
4704 N    N    . GLY GLY GLY B B 193 193 . 0.1963 0.2165 0.1874 0.0339  0.0196
0.0204  1 .
4705 CA   CA   . GLY GLY GLY B B 193 193 . 0.1762 0.2451 0.2079 0.0386  0.0113
0.0066  1 .
4706 C    C    . GLY GLY GLY B B 193 193 . 0.2029 0.2385 0.2324 0.0267  0.0089
0.0035  1 .
4707 O    O    . GLY GLY GLY B B 193 193 . 0.1956 0.2655 0.2493 0.0208  -0.0182
0.0066  1 .
4708 N    N    . VAL VAL VAL B B 194 194 . 0.2128 0.2257 0.2116 0.0408  0.0258
0.0108  1 .
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4709 CA   CA   . VAL VAL VAL B B 194 194 . 0.2228 0.2419 0.2261 0.0247  0.0457
0.0067  1 .
4710 CB   CB   . VAL VAL VAL B B 194 194 . 0.2441 0.2504 0.2027 0.0029  0.0418  -
0.0040 1 .
4711 CG1  CG1  . VAL VAL VAL B B 194 194 . 0.3156 0.2270 0.2789 0.0047  0.0444
0.0131  1 .
4712 CG2  CG2  . VAL VAL VAL B B 194 194 . 0.2611 0.2355 0.2098 0.0150  0.0893  -
0.0078 1 .
4713 C    C    . VAL VAL VAL B B 194 194 . 0.2045 0.2476 0.2342 0.0194  0.0495  -
0.0070 1 .
4714 O    O    . VAL VAL VAL B B 194 194 . 0.2043 0.2758 0.2714 0.0450  0.0454
0.0043  1 .
4715 N    N    . ILE ILE ILE B B 195 195 . 0.1983 0.2371 0.2398 0.0362  0.0651  -
0.0204 1 .
4716 CA   CA   . ILE ILE ILE B B 195 195 . 0.1838 0.2508 0.2329 0.0191  0.0671  -
0.0283 1 .
4717 CB   CB   . ILE ILE ILE B B 195 195 . 0.1852 0.2171 0.2393 0.0484  0.0544  -
0.0436 1 .
4718 CG1  CG1  . ILE ILE ILE B B 195 195 . 0.1694 0.2841 0.2569 0.0226  0.0391  -
0.0464 1 .
4719 CD   CD   . ILE ILE ILE B B 195 195 . 0.1802 0.2382 0.2744 -0.0035 0.0162  -
0.0367 1 .
4720 CG2  CG2  . ILE ILE ILE B B 195 195 . 0.1718 0.2539 0.2347 -0.0016 0.0332  -
0.0726 1 .
4721 C    C    . ILE ILE ILE B B 195 195 . 0.2022 0.2593 0.2770 0.0255  0.0536  -
0.0302 1 .
4722 O    O    . ILE ILE ILE B B 195 195 . 0.1762 0.2626 0.2874 0.0307  0.0493  -
0.0448 1 .
4723 N    N    . LYS LYS LYS B B 196 196 . 0.1829 0.2532 0.2548 0.0426  0.0454  -
0.0132 1 .
4724 CA   CA   . LYS LYS LYS B B 196 196 . 0.2098 0.2789 0.2873 0.0187  0.0239  -
0.0063 1 .
4725 CB   CB   . LYS LYS LYS B B 196 196 . 0.1939 0.3019 0.2690 0.0151  0.0285
0.0123  1 .
4726 CG   CG   . LYS LYS LYS B B 196 196 . 0.3360 0.3383 0.3518 -0.0167 -0.0536
0.0194  1 .
4727 CD   CD   . LYS LYS LYS B B 196 196 . 0.4227 0.3978 0.3723 -0.0200 -0.0819
0.0932  1 .
4728 C    C    . LYS LYS LYS B B 196 196 . 0.2109 0.2931 0.2923 0.0121  0.0254  -
0.0001 1 .
4729 O    O    . LYS LYS LYS B B 196 196 . 0.2058 0.3149 0.3539 0.0069  0.0231
0.0032  1 .
4730 N    N    . ASP ASP ASP B B 197 197 . 0.1886 0.2698 0.2939 0.0143  0.0399
0.0038  1 .
4731 CA   CA   . ASP ASP ASP B B 197 197 . 0.2233 0.3180 0.3150 0.0009  0.0503
0.0046  1 .
4732 CB   CB   . ASP ASP ASP B B 197 197 . 0.2222 0.3277 0.3242 0.0093  0.0521  -
0.0086 1 .
4733 CG   CG   . ASP ASP ASP B B 197 197 . 0.2812 0.3744 0.3457 0.0471  0.0479  -
0.0045 1 .
4734 OD1  OD1  . ASP ASP ASP B B 197 197 . 0.3647 0.4553 0.4097 0.0171  -0.0174 -
0.0098 1 .
4735 OD2  OD2  . ASP ASP ASP B B 197 197 . 0.3487 0.4764 0.4373 0.0939  -0.0252
0.0149  1 .
4736 C    C    . ASP ASP ASP B B 197 197 . 0.2312 0.3480 0.3359 0.0021  0.0431
0.0191  1 .
4737 O    O    . ASP ASP ASP B B 197 197 . 0.2466 0.4161 0.3946 0.0014  0.0238
0.0297  1 .
4738 N    N    . LYS LYS LYS B B 198 198 . 0.2162 0.3351 0.2928 0.0092  0.0509
0.0148  1 .
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4739 CA   CA   . LYS LYS LYS B B 198 198 . 0.2353 0.3411 0.2951 0.0115  0.0287
0.0149  1 .
4740 CB   CB   . LYS LYS LYS B B 198 198 . 0.2640 0.3599 0.2822 0.0090  0.0179
0.0203  1 .
4741 CG   CG   . LYS LYS LYS B B 198 198 . 0.3119 0.3808 0.3402 0.0011  0.0101
0.0151  1 .
4742 CD   CD   . LYS LYS LYS B B 198 198 . 0.4434 0.4384 0.3363 0.0454  0.0211
0.0174  1 .
4743 CE   CE   . LYS LYS LYS B B 198 198 . 0.4787 0.4867 0.3449 0.0413  0.0452
0.0545  1 .
4744 NZ   NZ   . LYS LYS LYS B B 198 198 . 0.6112 0.6253 0.3737 0.0372  0.0724  -
0.0154 1 .
4745 C    C    . LYS LYS LYS B B 198 198 . 0.2301 0.3464 0.2899 -0.0095 0.0310
0.0070  1 .
4746 O    O    . LYS LYS LYS B B 198 198 . 0.2232 0.3727 0.3011 -0.0180 0.0567  -
0.0033 1 .
4747 N    N    . TYR TYR TYR B B 199 199 . 0.2143 0.3234 0.2367 0.0008  0.0368  -
0.0054 1 .
4748 CA   CA   . TYR TYR TYR B B 199 199 . 0.2177 0.2699 0.2405 0.0036  0.0149
0.0107  1 .
4749 CB   CB   . TYR TYR TYR B B 199 199 . 0.2221 0.2622 0.2182 0.0158  0.0127  -
0.0112 1 .
4750 CG   CG   . TYR TYR TYR B B 199 199 . 0.2555 0.2898 0.2581 0.0350  -0.0004 -
0.0077 1 .
4751 CD1  CD1  . TYR TYR TYR B B 199 199 . 0.1497 0.3737 0.3031 0.0451  -0.0130 -
0.0237 1 .
4752 CE1  CE1  . TYR TYR TYR B B 199 199 . 0.1874 0.3644 0.3269 0.0945  0.0302
0.0153  1 .
4753 CZ   CZ   . TYR TYR TYR B B 199 199 . 0.3328 0.3754 0.3369 0.0749  -0.0015 -
0.0084 1 .
4754 OH   OH   . TYR TYR TYR B B 199 199 . 0.4676 0.4677 0.3036 0.1773  0.0034  -
0.0606 1 .
4755 CE2  CE2  . TYR TYR TYR B B 199 199 . 0.3308 0.3927 0.2746 0.0807  -0.0185
0.0054  1 .
4756 CD2  CD2  . TYR TYR TYR B B 199 199 . 0.3280 0.3156 0.2556 -0.0054 0.0050
0.0350  1 .
4757 C    C    . TYR TYR TYR B B 199 199 . 0.2120 0.2771 0.2436 0.0015  0.0342  -
0.0074 1 .
4758 O    O    . TYR TYR TYR B B 199 199 . 0.2590 0.2926 0.2762 -0.0144 0.0392
0.0007  1 .
4759 N    N    . GLY GLY GLY B B 200 200 . 0.2141 0.2918 0.2544 0.0027  0.0401
0.0141  1 .
4760 CA   CA   . GLY GLY GLY B B 200 200 . 0.2259 0.3306 0.2406 0.0062  0.0516
0.0022  1 .
4761 C    C    . GLY GLY GLY B B 200 200 . 0.2617 0.3479 0.2878 -0.0043 0.0423
0.0274  1 .
4762 O    O    . GLY GLY GLY B B 200 200 . 0.2244 0.3501 0.2564 0.0033  0.0308  -
0.0095 1 .
4763 N    N    . LYS LYS LYS B B 201 201 . 0.2992 0.4236 0.3036 -0.0154 0.0580
0.0299  1 .
4764 CA   CA   . LYS LYS LYS B B 201 201 . 0.3294 0.4301 0.3380 -0.0292 0.0522
0.0305  1 .
4765 CB   CB   . LYS LYS LYS B B 201 201 . 0.3435 0.4539 0.3331 -0.0170 0.0408
0.0525  1 .
4766 C    C    . LYS LYS LYS B B 201 201 . 0.3410 0.4269 0.3449 -0.0296 0.0420
0.0151  1 .
4767 O    O    . LYS LYS LYS B B 201 201 . 0.3439 0.4470 0.3487 -0.0333 0.0564
0.0193  1 .
4768 N    N    . ASP ASP ASP B B 202 202 . 0.3458 0.3888 0.3569 -0.0474 0.0640
0.0084  1 .
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4769 CA   CA   . ASP ASP ASP B B 202 202 . 0.3648 0.4006 0.3945 -0.0584 0.0465  -
0.0065 1 .
4770 CB   CB   . ASP ASP ASP B B 202 202 . 0.4199 0.4146 0.4576 -0.0589 0.0165  -
0.0289 1 .
4771 CG   CG   . ASP ASP ASP B B 202 202 . 0.5069 0.5156 0.5579 -0.0089 0.0051  -
0.0089 1 .
4772 OD1  OD1  . ASP ASP ASP B B 202 202 . 0.5328 0.5622 0.6944 0.0257  0.0489  -
0.0582 1 .
4773 OD2  OD2  . ASP ASP ASP B B 202 202 . 0.6833 0.5491 0.7899 0.0029  -0.0080 -
0.0327 1 .
4774 C    C    . ASP ASP ASP B B 202 202 . 0.3167 0.3626 0.3618 -0.0675 0.0510  -
0.0267 1 .
4775 O    O    . ASP ASP ASP B B 202 202 . 0.3460 0.3653 0.3805 -0.0698 0.0495  -
0.0547 1 .
4776 N    N    . ALA ALA ALA B B 203 203 . 0.2496 0.3377 0.3179 -0.0760 0.0675  -
0.0408 1 .
4777 CA   CA   . ALA ALA ALA B B 203 203 . 0.2361 0.2716 0.2910 -0.0498 0.0691  -
0.0387 1 .
4778 CB   CB   . ALA ALA ALA B B 203 203 . 0.2291 0.2957 0.2999 -0.0680 0.0642  -
0.0263 1 .
4779 C    C    . ALA ALA ALA B B 203 203 . 0.2132 0.2613 0.2644 -0.0363 0.0550  -
0.0438 1 .
4780 O    O    . ALA ALA ALA B B 203 203 . 0.2440 0.2070 0.2811 -0.0044 0.0590  -
0.0398 1 .
4781 N    N    . THR THR THR B B 204 204 . 0.1764 0.2291 0.2600 -0.0113 0.0439  -
0.0396 1 .
4782 CA   CA   . THR THR THR B B 204 204 . 0.1971 0.2318 0.2455 -0.0283 0.0728  -
0.0411 1 .
4783 CB   CB   . THR THR THR B B 204 204 . 0.2174 0.2636 0.2298 -0.0017 0.0775  -
0.0133 1 .
4784 OG1  OG1  . THR THR THR B B 204 204 . 0.2523 0.2824 0.3251 -0.0128 0.0237  -
0.0039 1 .
4785 CG2  CG2  . THR THR THR B B 204 204 . 0.2087 0.3038 0.3320 -0.0200 0.1316  -
0.0681 1 .
4786 C    C    . THR THR THR B B 204 204 . 0.1742 0.2069 0.1982 -0.0144 0.0530  -
0.0353 1 .
4787 O    O    . THR THR THR B B 204 204 . 0.2219 0.2413 0.1649 -0.0211 0.0574  -
0.0345 1 .
4788 N    N    . ASN ASN ASN B B 205 205 . 0.1814 0.2227 0.2145 -0.0375 0.0438  -
0.0529 1 .
4789 CA   CA   . ASN ASN ASN B B 205 205 . 0.1813 0.2191 0.2135 -0.0263 0.0337  -
0.0559 1 .
4790 CB   CB   . ASN ASN ASN B B 205 205 . 0.2099 0.2363 0.2277 -0.0258 0.0161  -
0.0592 1 .
4791 CG   CG   . ASN ASN ASN B B 205 205 . 0.2267 0.2838 0.2720 -0.0451 0.0251  -
0.0407 1 .
4792 OD1  OD1  . ASN ASN ASN B B 205 205 . 0.3041 0.3005 0.2585 -0.0223 -0.0422 -
0.0405 1 .
4793 ND2  ND2  . ASN ASN ASN B B 205 205 . 0.2405 0.3178 0.3642 -0.0491 0.0605  -
0.1425 1 .
4794 C    C    . ASN ASN ASN B B 205 205 . 0.2025 0.1996 0.2095 -0.0416 0.0265  -
0.0584 1 .
4795 O    O    . ASN ASN ASN B B 205 205 . 0.2057 0.2100 0.2138 -0.0661 0.0416  -
0.0210 1 .
4796 N    N    . VAL VAL VAL B B 206 206 . 0.1839 0.1946 0.2020 -0.0423 0.0525  -
0.0507 1 .
4797 CA   CA   . VAL VAL VAL B B 206 206 . 0.1871 0.1666 0.2054 -0.0381 0.0377  -
0.0346 1 .
4798 CB   CB   . VAL VAL VAL B B 206 206 . 0.2025 0.1589 0.2015 -0.0342 0.0751  -
0.0235 1 .
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4799 CG1  CG1  . VAL VAL VAL B B 206 206 . 0.2080 0.1584 0.1823 0.0090  0.0233  -
0.0453 1 .
4800 CG2  CG2  . VAL VAL VAL B B 206 206 . 0.1974 0.2257 0.1684 -0.0749 0.0952  -
0.0390 1 .
4801 C    C    . VAL VAL VAL B B 206 206 . 0.1782 0.2082 0.2157 -0.0221 0.0384  -
0.0281 1 .
4802 O    O    . VAL VAL VAL B B 206 206 . 0.1865 0.2235 0.2226 -0.0355 0.0200  -
0.0555 1 .
4803 N    N    . GLY GLY GLY B B 207 207 . 0.1470 0.1756 0.2043 -0.0158 0.0164  -
0.0335 1 .
4804 CA   CA   . GLY GLY GLY B B 207 207 . 0.1741 0.2191 0.2594 -0.0220 0.0060  -
0.0164 1 .
4805 C    C    . GLY GLY GLY B B 207 207 . 0.1591 0.1827 0.2088 -0.0141 0.0076  -
0.0049 1 .
4806 O    O    . GLY GLY GLY B B 207 207 . 0.1810 0.1932 0.1832 -0.0245 -0.0070 -
0.0420 1 .
4807 N    N    . ASP ASP ASP B B 208 208 . 0.1516 0.1805 0.2354 -0.0193 0.0264  -
0.0296 1 .
4808 CA   CA   . ASP ASP ASP B B 208 208 . 0.1316 0.1671 0.2212 -0.0182 0.0304  -
0.0173 1 .
4809 CB   CB   . ASP ASP ASP B B 208 208 . 0.1986 0.1658 0.2543 -0.0064 0.0330  -
0.0199 1 .
4810 CG   CG   . ASP ASP ASP B B 208 208 . 0.2061 0.2295 0.2627 -0.0391 0.0235  -
0.0074 1 .
4811 OD1  OD1  . ASP ASP ASP B B 208 208 . 0.2147 0.2218 0.2735 -0.0276 0.0237  -
0.0784 1 .
4812 OD2  OD2  . ASP ASP ASP B B 208 208 . 0.2486 0.2060 0.3359 -0.0203 0.0003  -
0.0419 1 .
4813 C    C    . ASP ASP ASP B B 208 208 . 0.1525 0.1661 0.1786 -0.0101 0.0167  -
0.0175 1 .
4814 O    O    . ASP ASP ASP B B 208 208 . 0.1529 0.1636 0.1927 -0.0282 0.0079  -
0.0323 1 .
4815 N    N    . GLU GLU GLU B B 209 209 . 0.1457 0.1649 0.1724 -0.0187 0.0190  -
0.0205 1 .
4816 CA   CA   . GLU GLU GLU B B 209 209 . 0.1810 0.1831 0.1569 -0.0042 0.0190  -
0.0164 1 .
4817 CB   CB   . GLU GLU GLU B B 209 209 . 0.1808 0.1655 0.2074 0.0153  0.0187
0.0021  1 .
4818 CG   CG   . GLU GLU GLU B B 209 209 . 0.2329 0.1836 0.2892 0.0549  0.0277
0.0321  1 .
4819 CD   CD   . GLU GLU GLU B B 209 209 . 0.3326 0.2822 0.3626 0.0393  0.0320
0.0290  1 .
4820 OE1  OE1  . GLU GLU GLU B B 209 209 . 0.3451 0.2941 0.3211 0.0186  0.0845
0.0489  1 .
4821 OE2  OE2  . GLU GLU GLU B B 209 209 . 0.5631 0.2824 0.5121 0.1133  0.0619
0.0678  1 .
4822 C    C    . GLU GLU GLU B B 209 209 . 0.1525 0.1605 0.1429 -0.0190 0.0182  -
0.0004 1 .
4823 O    O    . GLU GLU GLU B B 209 209 . 0.1889 0.1854 0.1307 -0.0425 0.0439  -
0.0157 1 .
4824 N    N    . GLY GLY GLY B B 210 210 . 0.1631 0.1582 0.0938 -0.0112 0.0324  -
0.0021 1 .
4825 CA   CA   . GLY GLY GLY B B 210 210 . 0.1405 0.1678 0.1423 -0.0049 0.0220  -
0.0014 1 .
4826 C    C    . GLY GLY GLY B B 210 210 . 0.1800 0.1752 0.1174 0.0143  0.0144  -
0.0059 1 .
4827 O    O    . GLY GLY GLY B B 210 210 . 0.1955 0.1909 0.1528 -0.0005 0.0420  -
0.0315 1 .
4828 N    N    . GLY GLY GLY B B 211 211 . 0.2041 0.1881 0.1548 -0.0362 0.0318  -
0.0141 1 .
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4829 CA   CA   . GLY GLY GLY B B 211 211 . 0.1990 0.1898 0.1321 -0.0224 0.0538
0.0021  1 .
4830 C    C    . GLY GLY GLY B B 211 211 . 0.2043 0.2124 0.1500 -0.0279 0.0479
0.0169  1 .
4831 O    O    . GLY GLY GLY B B 211 211 . 0.1959 0.2011 0.1629 -0.0369 0.0617  -
0.0131 1 .
4832 N    N    . PHE PHE PHE B B 212 212 . 0.1737 0.2499 0.1688 -0.0034 0.0451  -
0.0172 1 .
4833 CA   CA   . PHE PHE PHE B B 212 212 . 0.1960 0.2515 0.1956 0.0233  0.0264  -
0.0080 1 .
4834 CB   CB   . PHE PHE PHE B B 212 212 . 0.1612 0.2392 0.1968 0.0546  0.0051  -
0.0068 1 .
4835 CG   CG   . PHE PHE PHE B B 212 212 . 0.1622 0.2224 0.1698 0.0402  -0.0010
0.0012  1 .
4836 CD1  CD1  . PHE PHE PHE B B 212 212 . 0.1253 0.1806 0.1974 0.0378  0.0042  -
0.0113 1 .
4837 CE1  CE1  . PHE PHE PHE B B 212 212 . 0.1962 0.2579 0.1312 0.0979  0.0091
0.0439  1 .
4838 CZ   CZ   . PHE PHE PHE B B 212 212 . 0.1821 0.2276 0.1304 0.0652  0.0146
0.0270  1 .
4839 CE2  CE2  . PHE PHE PHE B B 212 212 . 0.2015 0.2561 0.1780 0.0590  0.0203
0.0096  1 .
4840 CD2  CD2  . PHE PHE PHE B B 212 212 . 0.1745 0.2688 0.1617 0.0908  0.0249  -
0.0032 1 .
4841 C    C    . PHE PHE PHE B B 212 212 . 0.2332 0.2475 0.2474 0.0359  -0.0090 -
0.0394 1 .
4842 O    O    . PHE PHE PHE B B 212 212 . 0.2140 0.2478 0.2067 0.0290  -0.0310 -
0.0480 1 .
4843 N    N    . ALA ALA ALA B B 213 213 . 0.2256 0.2549 0.2246 0.0180  -0.0413 -
0.0577 1 .
4844 CA   CA   . ALA ALA ALA B B 213 213 . 0.2589 0.2857 0.2548 0.0153  -0.0387 -
0.0520 1 .
4845 CB   CB   . ALA ALA ALA B B 213 213 . 0.2737 0.2959 0.2029 0.0391  -0.0077 -
0.0551 1 .
4846 C    C    . ALA ALA ALA B B 213 213 . 0.2947 0.3168 0.2807 0.0072  -0.0356 -
0.0533 1 .
4847 O    O    . ALA ALA ALA B B 213 213 . 0.2624 0.3437 0.2919 -0.0178 -0.0553 -
0.0776 1 .
4848 N    N    . PRO PRO PRO B B 214 214 . 0.2828 0.3051 0.2651 0.0093  -0.0383 -
0.0567 1 .
4849 CA   CA   . PRO PRO PRO B B 214 214 . 0.2988 0.3059 0.3011 0.0026  -0.0310 -
0.0479 1 .
4850 CB   CB   . PRO PRO PRO B B 214 214 . 0.3007 0.3504 0.3083 -0.0174 -0.0061 -
0.0552 1 .
4851 CG   CG   . PRO PRO PRO B B 214 214 . 0.3317 0.3290 0.3017 -0.0176 -0.0166 -
0.0671 1 .
4852 CD   CD   . PRO PRO PRO B B 214 214 . 0.3095 0.2869 0.2319 -0.0021 -0.0269 -
0.0660 1 .
4853 C    C    . PRO PRO PRO B B 214 214 . 0.3001 0.3244 0.3255 0.0104  -0.0490 -
0.0424 1 .
4854 O    O    . PRO PRO PRO B B 214 214 . 0.2957 0.2947 0.2848 0.0426  -0.1089 -
0.0862 1 .
4855 N    N    . ASN ASN ASN B B 215 215 . 0.2789 0.3358 0.3307 0.0040  -0.0618 -
0.0417 1 .
4856 CA   CA   . ASN ASN ASN B B 215 215 . 0.2880 0.3545 0.3066 0.0131  -0.0497 -
0.0213 1 .
4857 CB   CB   . ASN ASN ASN B B 215 215 . 0.2992 0.3730 0.3526 -0.0001 -0.0452 -
0.0335 1 .
4858 CG   CG   . ASN ASN ASN B B 215 215 . 0.3620 0.4544 0.3522 -0.0116 -0.0658 -
0.0469 1 .
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4859 OD1  OD1  . ASN ASN ASN B B 215 215 . 0.3276 0.4475 0.4055 -0.0481 -0.0677 -
0.1110 1 .
4860 ND2  ND2  . ASN ASN ASN B B 215 215 . 0.4519 0.5558 0.3615 -0.0108 -0.0679 -
0.0075 1 .
4861 C    C    . ASN ASN ASN B B 215 215 . 0.2769 0.3535 0.3394 0.0187  -0.0302 -
0.0096 1 .
4862 O    O    . ASN ASN ASN B B 215 215 . 0.2702 0.3920 0.3531 0.0452  -0.0245
0.0044  1 .
4863 N    N    . ILE ILE ILE B B 216 216 . 0.2494 0.3286 0.2613 0.0345  -0.0270 -
0.0044 1 .
4864 CA   CA   . ILE ILE ILE B B 216 216 . 0.2547 0.3028 0.2693 0.0092  -0.0209 -
0.0158 1 .
4865 CB   CB   . ILE ILE ILE B B 216 216 . 0.2528 0.2674 0.2822 0.0171  -0.0210 -
0.0081 1 .
4866 CG1  CG1  . ILE ILE ILE B B 216 216 . 0.2521 0.2698 0.2593 -0.0001 -0.0019 -
0.0443 1 .
4867 CD   CD   . ILE ILE ILE B B 216 216 . 0.3341 0.2952 0.2830 0.0689  -0.0797 -
0.0855 1 .
4868 CG2  CG2  . ILE ILE ILE B B 216 216 . 0.2653 0.3328 0.2106 0.0160  -0.0398 -
0.0057 1 .
4869 C    C    . ILE ILE ILE B B 216 216 . 0.2490 0.2504 0.2540 -0.0077 -0.0184 -
0.0169 1 .
4870 O    O    . ILE ILE ILE B B 216 216 . 0.2759 0.2979 0.3080 0.0130  -0.0512 -
0.0513 1 .
4871 N    N    . LEU LEU LEU B B 217 217 . 0.2981 0.2818 0.2908 0.0069  -0.0344 -
0.0176 1 .
4872 CA   CA   . LEU LEU LEU B B 217 217 . 0.3028 0.3121 0.3175 0.0122  -0.0341
0.0003  1 .
4873 CB   CB   . LEU LEU LEU B B 217 217 . 0.3267 0.2948 0.3342 0.0005  -0.0595 -
0.0089 1 .
4874 CG   CG   . LEU LEU LEU B B 217 217 . 0.3540 0.3161 0.3703 0.0139  -0.0348
0.0273  1 .
4875 CD1  CD1  . LEU LEU LEU B B 217 217 . 0.3533 0.3745 0.3549 -0.0041 -0.0423 -
0.0170 1 .
4876 CD2  CD2  . LEU LEU LEU B B 217 217 . 0.3473 0.3993 0.4703 -0.0007 -0.0413
0.0143  1 .
4877 C    C    . LEU LEU LEU B B 217 217 . 0.2870 0.3078 0.2981 0.0153  -0.0341 -
0.0124 1 .
4878 O    O    . LEU LEU LEU B B 217 217 . 0.2872 0.3354 0.3106 0.0187  -0.0558 -
0.0182 1 .
4879 N    N    . GLU GLU GLU B B 218 218 . 0.2550 0.3016 0.3099 0.0299  -0.0416 -
0.0018 1 .
4880 CA   CA   . GLU GLU GLU B B 218 218 . 0.2340 0.2642 0.2687 0.0193  -0.0201 -
0.0141 1 .
4881 CB   CB   . GLU GLU GLU B B 218 218 . 0.2377 0.2910 0.3171 0.0410  -0.0177
0.0080  1 .
4882 CG   CG   . GLU GLU GLU B B 218 218 . 0.3125 0.3393 0.4098 -0.0095 0.0195  -
0.0348 1 .
4883 CD   CD   . GLU GLU GLU B B 218 218 . 0.4777 0.4730 0.5201 -0.0279 -0.0061
0.0024  1 .
4884 OE1  OE1  . GLU GLU GLU B B 218 218 . 0.5566 0.5460 0.6355 -0.0850 -0.0052 -
0.0073 1 .
4885 OE2  OE2  . GLU GLU GLU B B 218 218 . 0.4900 0.5553 0.5739 -0.0850 -0.0168 -
0.0028 1 .
4886 C    C    . GLU GLU GLU B B 218 218 . 0.2515 0.2672 0.2742 0.0156  -0.0411 -
0.0026 1 .
4887 O    O    . GLU GLU GLU B B 218 218 . 0.2524 0.2666 0.2426 0.0087  -0.0819 -
0.0054 1 .
4888 N    N    . ASN ASN ASN B B 219 219 . 0.2242 0.2334 0.2682 0.0129  -0.0403 -
0.0078 1 .
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4889 CA   CA   . ASN ASN ASN B B 219 219 . 0.2290 0.2335 0.2695 0.0226  -0.0339 -
0.0035 1 .
4890 CB   CB   . ASN ASN ASN B B 219 219 . 0.2413 0.2225 0.2732 0.0131  -0.0584 -
0.0147 1 .
4891 CG   CG   . ASN ASN ASN B B 219 219 . 0.2456 0.2485 0.2478 0.0187  -0.0564
0.0105  1 .
4892 OD1  OD1  . ASN ASN ASN B B 219 219 . 0.2921 0.2634 0.3791 0.0301  -0.0859 -
0.0042 1 .
4893 ND2  ND2  . ASN ASN ASN B B 219 219 . 0.1489 0.1686 0.2237 0.0394  -0.0204 -
0.0406 1 .
4894 C    C    . ASN ASN ASN B B 219 219 . 0.2225 0.2180 0.2366 0.0232  -0.0246
0.0103  1 .
4895 O    O    . ASN ASN ASN B B 219 219 . 0.2331 0.2083 0.2590 0.0200  -0.0294 -
0.0111 1 .
4896 N    N    . SER SER SER B B 220 220 . 0.2431 0.2403 0.2387 0.0440  -0.0358
0.0081  1 .
4897 CA   CA   . SER SER SER B B 220 220 . 0.2553 0.2450 0.2461 0.0243  -0.0013
0.0141  1 .
4898 CB   CB   . SER SER SER B B 220 220 . 0.2883 0.2750 0.2266 0.0065  -0.0212
0.0105  1 .
4899 OG   OG   . SER SER SER B B 220 220 . 0.2805 0.3221 0.3326 0.0024  0.0557  -
0.0092 1 .
4900 C    C    . SER SER SER B B 220 220 . 0.2492 0.2346 0.2115 0.0189  -0.0139
0.0054  1 .
4901 O    O    . SER SER SER B B 220 220 . 0.2592 0.2471 0.2079 0.0191  -0.0111
0.0222  1 .
4902 N    N    . GLU GLU GLU B B 221 221 . 0.2263 0.2285 0.2180 0.0161  -0.0103
0.0061  1 .
4903 CA   CA   . GLU GLU GLU B B 221 221 . 0.2349 0.2379 0.2171 0.0152  -0.0248 -
0.0061 1 .
4904 CB   CB   . GLU GLU GLU B B 221 221 . 0.2505 0.2597 0.2170 0.0041  -0.0266 -
0.0093 1 .
4905 CG   CG   . GLU GLU GLU B B 221 221 . 0.3138 0.3350 0.2903 0.0228  -0.0291
0.0123  1 .
4906 CD   CD   . GLU GLU GLU B B 221 221 . 0.3959 0.4496 0.3863 0.0413  0.0085
0.0032  1 .
4907 OE1  OE1  . GLU GLU GLU B B 221 221 . 0.4786 0.5173 0.4706 0.0585  0.0647
0.0381  1 .
4908 OE2  OE2  . GLU GLU GLU B B 221 221 . 0.4647 0.5046 0.3825 0.0511  0.0587  -
0.0135 1 .
4909 C    C    . GLU GLU GLU B B 221 221 . 0.2372 0.2170 0.2109 0.0215  -0.0261 -
0.0122 1 .
4910 O    O    . GLU GLU GLU B B 221 221 . 0.2105 0.1964 0.2148 0.0422  -0.0480 -
0.0105 1 .
4911 N    N    . ALA ALA ALA B B 222 222 . 0.2141 0.2195 0.1822 0.0168  -0.0502 -
0.0148 1 .
4912 CA   CA   . ALA ALA ALA B B 222 222 . 0.2164 0.2199 0.1799 0.0162  -0.0342 -
0.0265 1 .
4913 CB   CB   . ALA ALA ALA B B 222 222 . 0.2067 0.2334 0.1889 0.0441  -0.0532 -
0.0514 1 .
4914 C    C    . ALA ALA ALA B B 222 222 . 0.2048 0.1946 0.1744 0.0169  -0.0281 -
0.0102 1 .
4915 O    O    . ALA ALA ALA B B 222 222 . 0.2203 0.1803 0.1738 0.0385  -0.0297 -
0.0119 1 .
4916 N    N    . LEU LEU LEU B B 223 223 . 0.2053 0.1714 0.1597 0.0235  -0.0159 -
0.0052 1 .
4917 CA   CA   . LEU LEU LEU B B 223 223 . 0.2031 0.1647 0.1754 0.0420  -0.0178 -
0.0213 1 .
4918 CB   CB   . LEU LEU LEU B B 223 223 . 0.1910 0.2006 0.1709 0.0399  -0.0107 -
0.0119 1 .
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4919 CG   CG   . LEU LEU LEU B B 223 223 . 0.1959 0.1520 0.1632 0.0384  -0.0080
0.0113  1 .
4920 CD1  CD1  . LEU LEU LEU B B 223 223 . 0.2189 0.1778 0.2143 -0.0051 -0.0488
0.0497  1 .
4921 CD2  CD2  . LEU LEU LEU B B 223 223 . 0.1728 0.2396 0.2186 0.0427  -0.0144
0.0127  1 .
4922 C    C    . LEU LEU LEU B B 223 223 . 0.2078 0.2009 0.1689 0.0364  -0.0164 -
0.0072 1 .
4923 O    O    . LEU LEU LEU B B 223 223 . 0.2287 0.2258 0.1609 0.0153  -0.0045 -
0.0152 1 .
4924 N    N    . GLU GLU GLU B B 224 224 . 0.2122 0.2114 0.1555 0.0297  0.0145  -
0.0171 1 .
4925 CA   CA   . GLU GLU GLU B B 224 224 . 0.2258 0.2199 0.2054 0.0349  0.0135  -
0.0046 1 .
4926 CB   CB   . GLU GLU GLU B B 224 224 . 0.2441 0.2465 0.2549 0.0284  0.0294  -
0.0058 1 .
4927 CG   CG   . GLU GLU GLU B B 224 224 . 0.3376 0.3549 0.3648 0.0286  0.0824  -
0.0158 1 .
4928 CD   CD   . GLU GLU GLU B B 224 224 . 0.5203 0.4814 0.4405 -0.0078 0.1291  -
0.0206 1 .
4929 OE1  OE1  . GLU GLU GLU B B 224 224 . 0.5564 0.5089 0.5766 -0.0943 0.1445  -
0.0488 1 .
4930 OE2  OE2  . GLU GLU GLU B B 224 224 . 0.6052 0.5773 0.5700 0.0606  0.1300
0.0510  1 .
4931 C    C    . GLU GLU GLU B B 224 224 . 0.2534 0.2262 0.2051 0.0209  0.0184  -
0.0018 1 .
4932 O    O    . GLU GLU GLU B B 224 224 . 0.2387 0.2275 0.2018 0.0306  0.0376  -
0.0007 1 .
4933 N    N    . LEU LEU LEU B B 225 225 . 0.2204 0.2303 0.1955 0.0294  0.0097
0.0114  1 .
4934 CA   CA   . LEU LEU LEU B B 225 225 . 0.1873 0.2165 0.1662 0.0276  0.0123  -
0.0058 1 .
4935 CB   CB   . LEU LEU LEU B B 225 225 . 0.2293 0.2247 0.1776 0.0172  -0.0038 -
0.0421 1 .
4936 CG   CG   . LEU LEU LEU B B 225 225 . 0.1902 0.2327 0.2326 0.0370  -0.0096 -
0.0043 1 .
4937 CD1  CD1  . LEU LEU LEU B B 225 225 . 0.3022 0.2274 0.1616 0.0507  -0.0094 -
0.0010 1 .
4938 CD2  CD2  . LEU LEU LEU B B 225 225 . 0.1874 0.3159 0.2406 0.0825  -0.0045
0.0134  1 .
4939 C    C    . LEU LEU LEU B B 225 225 . 0.2023 0.1759 0.1504 0.0313  0.0010  -
0.0121 1 .
4940 O    O    . LEU LEU LEU B B 225 225 . 0.2024 0.2051 0.1929 0.0090  0.0035
0.0107  1 .
4941 N    N    . VAL VAL VAL B B 226 226 . 0.1804 0.1883 0.1527 0.0155  0.0073  -
0.0050 1 .
4942 CA   CA   . VAL VAL VAL B B 226 226 . 0.1773 0.1576 0.1270 0.0203  0.0058  -
0.0242 1 .
4943 CB   CB   . VAL VAL VAL B B 226 226 . 0.1912 0.2004 0.1594 0.0348  -0.0003 -
0.0388 1 .
4944 CG1  CG1  . VAL VAL VAL B B 226 226 . 0.1786 0.2073 0.1655 0.0353  0.0055  -
0.0367 1 .
4945 CG2  CG2  . VAL VAL VAL B B 226 226 . 0.2014 0.2184 0.1865 0.0455  -0.0004 -
0.0553 1 .
4946 C    C    . VAL VAL VAL B B 226 226 . 0.1829 0.1570 0.1459 0.0095  0.0187  -
0.0083 1 .
4947 O    O    . VAL VAL VAL B B 226 226 . 0.2266 0.1743 0.1396 0.0191  0.0243  -
0.0258 1 .
4948 N    N    . LYS LYS LYS B B 227 227 . 0.2101 0.1839 0.1584 0.0380  0.0270  -
0.0060 1 .
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4949 CA   CA   . LYS LYS LYS B B 227 227 . 0.2560 0.2064 0.1726 0.0357  0.0363  -
0.0042 1 .
4950 CB   CB   . LYS LYS LYS B B 227 227 . 0.3109 0.1978 0.1537 0.0391  0.0492  -
0.0182 1 .
4951 CG   CG   . LYS LYS LYS B B 227 227 . 0.4193 0.2103 0.1925 0.0395  0.0607  -
0.0888 1 .
4952 C    C    . LYS LYS LYS B B 227 227 . 0.2258 0.2090 0.1784 0.0246  0.0389  -
0.0001 1 .
4953 O    O    . LYS LYS LYS B B 227 227 . 0.2607 0.2028 0.2028 0.0435  0.0546
0.0083  1 .
4954 N    N    . GLU GLU GLU B B 228 228 . 0.2569 0.2462 0.2063 0.0201  0.0384
0.0015  1 .
4955 CA   CA   . GLU GLU GLU B B 228 228 . 0.2389 0.2192 0.1945 0.0147  0.0363
0.0126  1 .
4956 CB   CB   . GLU GLU GLU B B 228 228 . 0.2324 0.2686 0.1870 0.0169  0.0296
0.0231  1 .
4957 CG   CG   . GLU GLU GLU B B 228 228 . 0.2531 0.2408 0.2672 0.0284  0.0026
0.0363  1 .
4958 CD   CD   . GLU GLU GLU B B 228 228 . 0.2819 0.4471 0.3951 -0.0079 -0.0041
0.0117  1 .
4959 C    C    . GLU GLU GLU B B 228 228 . 0.2405 0.2355 0.2083 0.0173  0.0504  -
0.0051 1 .
4960 O    O    . GLU GLU GLU B B 228 228 . 0.2455 0.2382 0.2315 0.0270  0.0709
0.0258  1 .
4961 N    N    . ALA ALA ALA B B 229 229 . 0.1890 0.2231 0.1514 0.0363  0.0323  -
0.0116 1 .
4962 CA   CA   . ALA ALA ALA B B 229 229 . 0.2068 0.1883 0.1735 0.0297  0.0283
0.0003  1 .
4963 CB   CB   . ALA ALA ALA B B 229 229 . 0.1778 0.2220 0.1345 0.0497  0.0433
0.0116  1 .
4964 C    C    . ALA ALA ALA B B 229 229 . 0.2066 0.1985 0.1692 0.0400  0.0311  -
0.0070 1 .
4965 O    O    . ALA ALA ALA B B 229 229 . 0.2256 0.1822 0.1731 0.0573  0.0425
0.0080  1 .
4966 N    N    . ILE ILE ILE B B 230 230 . 0.1757 0.1882 0.1551 0.0587  0.0283
0.0024  1 .
4967 CA   CA   . ILE ILE ILE B B 230 230 . 0.2059 0.1835 0.1723 0.0480  0.0363  -
0.0166 1 .
4968 CB   CB   . ILE ILE ILE B B 230 230 . 0.1791 0.1715 0.1735 0.0568  0.0272  -
0.0237 1 .
4969 CG1  CG1  . ILE ILE ILE B B 230 230 . 0.2087 0.1493 0.1608 0.0769  0.0295
0.0019  1 .
4970 CD   CD   . ILE ILE ILE B B 230 230 . 0.2666 0.1563 0.1479 0.0841  -0.0123 -
0.0059 1 .
4971 CG2  CG2  . ILE ILE ILE B B 230 230 . 0.2175 0.2069 0.1927 0.0455  -0.0019 -
0.0319 1 .
4972 C    C    . ILE ILE ILE B B 230 230 . 0.2369 0.2211 0.2292 0.0410  0.0288  -
0.0131 1 .
4973 O    O    . ILE ILE ILE B B 230 230 . 0.2520 0.1910 0.2220 0.0548  0.0414  -
0.0113 1 .
4974 N    N    . ASP ASP ASP B B 231 231 . 0.2459 0.2191 0.2041 0.0373  0.0561
0.0000  1 .
4975 CA   CA   . ASP ASP ASP B B 231 231 . 0.2969 0.2361 0.2660 0.0526  0.0543  -
0.0213 1 .
4976 CB   CB   . ASP ASP ASP B B 231 231 . 0.3151 0.2437 0.2881 0.0271  0.0511  -
0.0171 1 .
4977 CG   CG   . ASP ASP ASP B B 231 231 . 0.3687 0.3683 0.3884 0.0512  0.0681  -
0.0052 1 .
4978 OD1  OD1  . ASP ASP ASP B B 231 231 . 0.4807 0.3682 0.6158 -0.0007 0.1133  -
0.0236 1 .
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4979 OD2  OD2  . ASP ASP ASP B B 231 231 . 0.3726 0.5205 0.3275 -0.0351 0.0537  -
0.0103 1 .
4980 C    C    . ASP ASP ASP B B 231 231 . 0.2985 0.2369 0.2713 0.0340  0.0362  -
0.0213 1 .
4981 O    O    . ASP ASP ASP B B 231 231 . 0.3380 0.2187 0.2870 0.0517  0.0659  -
0.0421 1 .
4982 N    N    . LYS LYS LYS B B 232 232 . 0.3053 0.2607 0.2613 0.0447  0.0318  -
0.0135 1 .
4983 CA   CA   . LYS LYS LYS B B 232 232 . 0.2864 0.2729 0.3000 0.0483  0.0187  -
0.0166 1 .
4984 CB   CB   . LYS LYS LYS B B 232 232 . 0.2986 0.3039 0.3029 0.0525  0.0163  -
0.0217 1 .
4985 CG   CG   . LYS LYS LYS B B 232 232 . 0.3714 0.3456 0.3413 0.0394  0.0008  -
0.0301 1 .
4986 CD   CD   . LYS LYS LYS B B 232 232 . 0.4641 0.4063 0.4931 -0.0029 -0.0334 -
0.0505 1 .
4987 CE   CE   . LYS LYS LYS B B 232 232 . 0.4491 0.5240 0.4878 0.0307  0.0025  -
0.0208 1 .
4988 NZ   NZ   . LYS LYS LYS B B 232 232 . 0.4834 0.5798 0.5820 -0.0043 0.0162  -
0.0079 1 .
4989 C    C    . LYS LYS LYS B B 232 232 . 0.2832 0.2819 0.2979 0.0517  0.0156
0.0047  1 .
4990 O    O    . LYS LYS LYS B B 232 232 . 0.2914 0.2814 0.3382 0.0706  0.0111  -
0.0096 1 .
4991 N    N    . ALA ALA ALA B B 233 233 . 0.2320 0.2567 0.2607 0.0493  0.0464
0.0037  1 .
4992 CA   CA   . ALA ALA ALA B B 233 233 . 0.2351 0.2229 0.2524 0.0491  0.0242  -
0.0057 1 .
4993 CB   CB   . ALA ALA ALA B B 233 233 . 0.2183 0.2610 0.2222 0.0543  0.0454  -
0.0121 1 .
4994 C    C    . ALA ALA ALA B B 233 233 . 0.2293 0.2228 0.2640 0.0504  0.0346  -
0.0043 1 .
4995 O    O    . ALA ALA ALA B B 233 233 . 0.3094 0.2201 0.3117 0.0359  0.0395  -
0.0217 1 .
4996 N    N    . GLY GLY GLY B B 234 234 . 0.2726 0.2056 0.2538 0.0565  0.0191  -
0.0050 1 .
4997 CA   CA   . GLY GLY GLY B B 234 234 . 0.2986 0.2384 0.2516 0.0504  0.0204  -
0.0241 1 .
4998 C    C    . GLY GLY GLY B B 234 234 . 0.3078 0.2317 0.2457 0.0401  0.0220  -
0.0220 1 .
4999 O    O    . GLY GLY GLY B B 234 234 . 0.3476 0.1990 0.2720 0.0677  0.0192  -
0.0475 1 .
5000 N    N    . TYR TYR TYR B B 235 235 . 0.2873 0.2275 0.2065 0.0646  0.0389  -
0.0307 1 .
5001 CA   CA   . TYR TYR TYR B B 235 235 . 0.2653 0.2183 0.1910 0.0347  0.0461  -
0.0155 1 .
5002 CB   CB   . TYR TYR TYR B B 235 235 . 0.2520 0.1990 0.1840 0.0355  0.0451
0.0002  1 .
5003 CG   CG   . TYR TYR TYR B B 235 235 . 0.2958 0.2419 0.2088 0.0046  0.0410  -
0.0031 1 .
5004 CD1  CD1  . TYR TYR TYR B B 235 235 . 0.2791 0.2217 0.2193 0.0122  0.0504  -
0.0283 1 .
5005 CE1  CE1  . TYR TYR TYR B B 235 235 . 0.3124 0.2135 0.2996 0.0260  0.0541  -
0.0158 1 .
5006 CZ   CZ   . TYR TYR TYR B B 235 235 . 0.3307 0.1993 0.2482 0.0008  0.0521  -
0.0437 1 .
5007 OH   OH   . TYR TYR TYR B B 235 235 . 0.3707 0.2180 0.2823 0.0209  0.0664  -
0.0007 1 .
5008 CE2  CE2  . TYR TYR TYR B B 235 235 . 0.4132 0.1857 0.2338 0.0129  0.0498  -
0.0164 1 .
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5009 CD2  CD2  . TYR TYR TYR B B 235 235 . 0.3134 0.1934 0.1831 0.0123  0.0939  -
0.0160 1 .
5010 C    C    . TYR TYR TYR B B 235 235 . 0.2582 0.2271 0.1828 0.0344  0.0406  -
0.0194 1 .
5011 O    O    . TYR TYR TYR B B 235 235 . 0.2505 0.1929 0.1492 0.0431  0.0391  -
0.0151 1 .
5012 N    N    . THR THR THR B B 236 236 . 0.2810 0.2137 0.1914 0.0227  0.0369  -
0.0331 1 .
5013 CA   CA   . THR THR THR B B 236 236 . 0.2812 0.2383 0.2201 0.0221  0.0479  -
0.0059 1 .
5014 CB   CB   . THR THR THR B B 236 236 . 0.2912 0.2766 0.2308 0.0005  0.0384
0.0016  1 .
5015 OG1  OG1  . THR THR THR B B 236 236 . 0.2698 0.3516 0.3103 0.0241  0.0561
0.0257  1 .
5016 CG2  CG2  . THR THR THR B B 236 236 . 0.2651 0.2967 0.2666 0.0362  0.0812
0.0322  1 .
5017 C    C    . THR THR THR B B 236 236 . 0.2778 0.2373 0.1926 0.0245  0.0553  -
0.0067 1 .
5018 O    O    . THR THR THR B B 236 236 . 0.3146 0.2745 0.1747 0.0392  0.0626
0.0044  1 .
5019 N    N    . GLU GLU GLU B B 237 237 . 0.2749 0.2491 0.2036 0.0209  0.0449  -
0.0201 1 .
5020 CA   CA   . GLU GLU GLU B B 237 237 . 0.3014 0.2640 0.2583 0.0159  0.0329  -
0.0377 1 .
5021 CB   CB   . GLU GLU GLU B B 237 237 . 0.3414 0.2956 0.3135 0.0032  0.0335  -
0.0620 1 .
5022 CG   CG   . GLU GLU GLU B B 237 237 . 0.4450 0.4010 0.4180 0.0115  0.0891  -
0.0317 1 .
5023 CD   CD   . GLU GLU GLU B B 237 237 . 0.6536 0.5029 0.5910 0.0117  0.0980  -
0.0363 1 .
5024 OE1  OE1  . GLU GLU GLU B B 237 237 . 0.7482 0.5087 0.6676 -0.0151 0.1235  -
0.0050 1 .
5025 OE2  OE2  . GLU GLU GLU B B 237 237 . 0.7033 0.6579 0.6798 0.0097  0.1224  -
0.0366 1 .
5026 C    C    . GLU GLU GLU B B 237 237 . 0.2885 0.2744 0.2378 0.0137  0.0109  -
0.0411 1 .
5027 O    O    . GLU GLU GLU B B 237 237 . 0.3079 0.3342 0.2055 0.0324  0.0116  -
0.0464 1 .
5028 N    N    . LYS LYS LYS B B 238 238 . 0.2696 0.2520 0.2005 0.0221  0.0197  -
0.0251 1 .
5029 CA   CA   . LYS LYS LYS B B 238 238 . 0.2817 0.2066 0.2115 0.0315  0.0227  -
0.0268 1 .
5030 CB   CB   . LYS LYS LYS B B 238 238 . 0.3303 0.1723 0.2515 0.0223  0.0153  -
0.0218 1 .
5031 CG   CG   . LYS LYS LYS B B 238 238 . 0.3682 0.1697 0.2614 0.0596  0.0629  -
0.0541 1 .
5032 CD   CD   . LYS LYS LYS B B 238 238 . 0.4933 0.2467 0.3957 0.0654  0.0010  -
0.0270 1 .
5033 CE   CE   . LYS LYS LYS B B 238 238 . 0.5694 0.1922 0.5348 0.0285  -0.0201 -
0.0182 1 .
5034 NZ   NZ   . LYS LYS LYS B B 238 238 . 0.6985 0.3456 0.6292 0.0012  0.0030  -
0.0041 1 .
5035 C    C    . LYS LYS LYS B B 238 238 . 0.2390 0.1981 0.1748 0.0210  0.0068  -
0.0280 1 .
5036 O    O    . LYS LYS LYS B B 238 238 . 0.2611 0.1910 0.1722 0.0293  0.0140  -
0.0331 1 .
5037 N    N    . ILE ILE ILE B B 239 239 . 0.2677 0.1553 0.1489 0.0591  0.0047  -
0.0409 1 .
5038 CA   CA   . ILE ILE ILE B B 239 239 . 0.2486 0.1556 0.1586 0.0437  0.0190  -
0.0339 1 .
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5039 CB   CB   . ILE ILE ILE B B 239 239 . 0.2587 0.1770 0.1432 0.0289  0.0184  -
0.0456 1 .
5040 CG1  CG1  . ILE ILE ILE B B 239 239 . 0.2823 0.1853 0.1809 0.0661  -0.0375 -
0.0065 1 .
5041 CD   CD   . ILE ILE ILE B B 239 239 . 0.2478 0.2317 0.1534 0.0548  -0.0358
0.0061  1 .
5042 CG2  CG2  . ILE ILE ILE B B 239 239 . 0.2396 0.1171 0.1423 0.0157  -0.0004 -
0.0423 1 .
5043 C    C    . ILE ILE ILE B B 239 239 . 0.2183 0.1740 0.1689 0.0341  0.0216  -
0.0084 1 .
5044 O    O    . ILE ILE ILE B B 239 239 . 0.2451 0.1735 0.1846 0.0581  0.0541
0.0183  1 .
5045 N    N    . VAL VAL VAL B B 240 240 . 0.2023 0.1384 0.1190 0.0306  0.0447  -
0.0095 1 .
5046 CA   CA   . VAL VAL VAL B B 240 240 . 0.2191 0.1339 0.1337 0.0058  0.0283  -
0.0148 1 .
5047 CB   CB   . VAL VAL VAL B B 240 240 . 0.2032 0.1395 0.1155 -0.0001 0.0340  -
0.0071 1 .
5048 CG1  CG1  . VAL VAL VAL B B 240 240 . 0.2745 0.1424 0.1517 0.0352  0.0367  -
0.0187 1 .
5049 CG2  CG2  . VAL VAL VAL B B 240 240 . 0.2027 0.1343 0.1349 0.0008  0.0145
0.0521  1 .
5050 C    C    . VAL VAL VAL B B 240 240 . 0.2215 0.1388 0.1376 0.0231  0.0345  -
0.0232 1 .
5051 O    O    . VAL VAL VAL B B 240 240 . 0.2602 0.1347 0.1085 0.0329  0.0466  -
0.0071 1 .
5052 N    N    . ILE ILE ILE B B 241 241 . 0.1929 0.1362 0.1390 0.0276  0.0299  -
0.0360 1 .
5053 CA   CA   . ILE ILE ILE B B 241 241 . 0.1926 0.1378 0.1475 0.0259  0.0124  -
0.0430 1 .
5054 CB   CB   . ILE ILE ILE B B 241 241 . 0.1541 0.1508 0.1310 0.0319  -0.0184 -
0.0490 1 .
5055 CG1  CG1  . ILE ILE ILE B B 241 241 . 0.2193 0.1843 0.1748 0.0344  -0.0200
0.0047  1 .
5056 CD   CD   . ILE ILE ILE B B 241 241 . 0.2337 0.2076 0.2026 -0.0358 0.0302  -
0.0198 1 .
5057 CG2  CG2  . ILE ILE ILE B B 241 241 . 0.1665 0.1416 0.1557 -0.0347 0.0089  -
0.0382 1 .
5058 C    C    . ILE ILE ILE B B 241 241 . 0.1871 0.1470 0.1302 0.0111  -0.0125 -
0.0250 1 .
5059 O    O    . ILE ILE ILE B B 241 241 . 0.2106 0.1533 0.1110 0.0368  0.0047  -
0.0160 1 .
5060 N    N    . GLY GLY GLY B B 242 242 . 0.1824 0.1319 0.1074 0.0419  0.0248  -
0.0147 1 .
5061 CA   CA   . GLY GLY GLY B B 242 242 . 0.2023 0.1302 0.1350 0.0220  0.0070  -
0.0178 1 .
5062 C    C    . GLY GLY GLY B B 242 242 . 0.1655 0.1297 0.1257 0.0206  0.0058  -
0.0085 1 .
5063 O    O    . GLY GLY GLY B B 242 242 . 0.2254 0.1280 0.1488 0.0459  0.0025  -
0.0228 1 .
5064 N    N    . MET MET MET B B 243 243 . 0.1769 0.1084 0.1233 0.0303  0.0024
0.0094  1 .
5065 CA   CA   . MET MET MET B B 243 243 . 0.1723 0.1565 0.1497 0.0080  0.0048  -
0.0096 1 .
5066 CB   CB   . MET MET MET B B 243 243 . 0.1596 0.1413 0.1832 0.0091  0.0339  -
0.0141 1 .
5067 CG   CG   . MET MET MET B B 243 243 . 0.1608 0.2343 0.2503 0.0046  0.0651
0.0081  1 .
5068 SD   SD   . MET MET MET B B 243 243 . 0.2353 0.1994 0.2346 0.0062  0.0065  -
0.0240 1 .
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5069 CE   CE   . MET MET MET B B 243 243 . 0.2159 0.2595 0.3417 -0.0613 -0.0089 -
0.0979 1 .
5070 C    C    . MET MET MET B B 243 243 . 0.1782 0.1661 0.1443 0.0186  -0.0092 -
0.0244 1 .
5071 O    O    . MET MET MET B B 243 243 . 0.1808 0.1323 0.1378 0.0370  -0.0217 -
0.0372 1 .
5072 N    N    . ASP ASP ASP B B 244 244 . 0.2074 0.1150 0.0954 0.0372  -0.0054 -
0.0121 1 .
5073 CA   CA   . ASP ASP ASP B B 244 244 . 0.1723 0.1423 0.1247 0.0368  0.0090  -
0.0025 1 .
5074 CB   CB   . ASP ASP ASP B B 244 244 . 0.1734 0.1409 0.1349 0.0394  0.0308  -
0.0205 1 .
5075 CG   CG   . ASP ASP ASP B B 244 244 . 0.2021 0.1417 0.1141 0.0672  0.0113
0.0110  1 .
5076 OD1  OD1  . ASP ASP ASP B B 244 244 . 0.2313 0.1246 0.1426 0.0310  0.0284
0.0137  1 .
5077 OD2  OD2  . ASP ASP ASP B B 244 244 . 0.2165 0.1460 0.1668 0.0342  0.0539
0.0352  1 .
5078 C    C    . ASP ASP ASP B B 244 244 . 0.1883 0.1517 0.1440 0.0277  0.0104  -
0.0161 1 .
5079 O    O    . ASP ASP ASP B B 244 244 . 0.2104 0.1577 0.1684 0.0328  0.0086  -
0.0048 1 .
5080 N    N    . VAL VAL VAL B B 245 245 . 0.1706 0.1197 0.1280 0.0212  -0.0055
0.0010  1 .
5081 CA   CA   . VAL VAL VAL B B 245 245 . 0.1894 0.1338 0.1044 0.0174  0.0111  -
0.0208 1 .
5082 CB   CB   . VAL VAL VAL B B 245 245 . 0.2105 0.1118 0.1111 0.0078  0.0095
0.0027  1 .
5083 CG1  CG1  . VAL VAL VAL B B 245 245 . 0.1828 0.1748 0.1057 -0.0462 0.0105
0.0028  1 .
5084 CG2  CG2  . VAL VAL VAL B B 245 245 . 0.2043 0.1497 0.1075 0.0405  0.0134  -
0.0146 1 .
5085 C    C    . VAL VAL VAL B B 245 245 . 0.1677 0.1444 0.1379 0.0308  0.0000  -
0.0269 1 .
5086 O    O    . VAL VAL VAL B B 245 245 . 0.1873 0.1691 0.1571 0.0298  -0.0234 -
0.0254 1 .
5087 N    N    . ALA ALA ALA B B 246 246 . 0.1700 0.1526 0.1056 0.0371  0.0018  -
0.0270 1 .
5088 CA   CA   . ALA ALA ALA B B 246 246 . 0.1886 0.1320 0.0924 0.0269  -0.0167 -
0.0208 1 .
5089 CB   CB   . ALA ALA ALA B B 246 246 . 0.2526 0.1671 0.1131 0.0035  0.0000  -
0.0211 1 .
5090 C    C    . ALA ALA ALA B B 246 246 . 0.2131 0.1477 0.1268 0.0091  -0.0253 -
0.0306 1 .
5091 O    O    . ALA ALA ALA B B 246 246 . 0.2144 0.1692 0.1468 0.0231  -0.0447 -
0.0529 1 .
5092 N    N    . ALA ALA ALA B B 247 247 . 0.2064 0.1356 0.1350 0.0141  -0.0098
0.0000  1 .
5093 CA   CA   . ALA ALA ALA B B 247 247 . 0.2095 0.1394 0.1315 0.0099  -0.0210 -
0.0233 1 .
5094 CB   CB   . ALA ALA ALA B B 247 247 . 0.1933 0.1372 0.1144 -0.0052 -0.0624 -
0.0133 1 .
5095 C    C    . ALA ALA ALA B B 247 247 . 0.1978 0.1728 0.1459 0.0152  -0.0359 -
0.0199 1 .
5096 O    O    . ALA ALA ALA B B 247 247 . 0.2261 0.1546 0.1679 0.0157  -0.0256 -
0.0361 1 .
5097 N    N    . SER SER SER B B 248 248 . 0.1948 0.1702 0.1240 0.0421  -0.0408 -
0.0352 1 .
5098 CA   CA   . SER SER SER B B 248 248 . 0.2290 0.1935 0.1601 0.0347  -0.0527 -
0.0471 1 .
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5099 CB   CB   . SER SER SER B B 248 248 . 0.2247 0.1721 0.1869 0.0202  -0.0350 -
0.0386 1 .
5100 OG   OG   . SER SER SER B B 248 248 . 0.2062 0.1758 0.1642 0.0232  -0.0288 -
0.0116 1 .
5101 C    C    . SER SER SER B B 248 248 . 0.2653 0.1881 0.1904 0.0216  -0.0445 -
0.0466 1 .
5102 O    O    . SER SER SER B B 248 248 . 0.3170 0.1706 0.1981 0.0420  -0.0644 -
0.0684 1 .
5103 N    N    . GLU GLU GLU B B 249 249 . 0.2483 0.1862 0.1687 0.0232  -0.0436 -
0.0456 1 .
5104 CA   CA   . GLU GLU GLU B B 249 249 . 0.2384 0.1826 0.1915 0.0166  -0.0592 -
0.0438 1 .
5105 CB   CB   . GLU GLU GLU B B 249 249 . 0.2239 0.1613 0.1649 0.0266  -0.0476 -
0.0317 1 .
5106 CG   CG   . GLU GLU GLU B B 249 249 . 0.2348 0.2217 0.1687 0.0416  -0.0229 -
0.0790 1 .
5107 CD   CD   . GLU GLU GLU B B 249 249 . 0.2979 0.2891 0.2930 0.0621  -0.0378 -
0.0822 1 .
5108 OE1  OE1  . GLU GLU GLU B B 249 249 . 0.3325 0.4215 0.3741 0.0609  -0.0882 -
0.1104 1 .
5109 OE2  OE2  . GLU GLU GLU B B 249 249 . 0.3473 0.2548 0.3514 -0.0018 -0.0029 -
0.0146 1 .
5110 C    C    . GLU GLU GLU B B 249 249 . 0.2507 0.1895 0.1945 0.0264  -0.0441 -
0.0422 1 .
5111 O    O    . GLU GLU GLU B B 249 249 . 0.3182 0.2396 0.2336 0.0011  -0.0866 -
0.0758 1 .
5112 N    N    . PHE PHE PHE B B 250 250 . 0.2578 0.1825 0.2099 0.0284  -0.0304 -
0.0482 1 .
5113 CA   CA   . PHE PHE PHE B B 250 250 . 0.2399 0.1830 0.2035 0.0132  -0.0358 -
0.0351 1 .
5114 CB   CB   . PHE PHE PHE B B 250 250 . 0.2754 0.2032 0.2133 0.0180  -0.0423 -
0.0548 1 .
5115 CG   CG   . PHE PHE PHE B B 250 250 . 0.2216 0.1524 0.1988 0.0159  -0.0084 -
0.0345 1 .
5116 CD1  CD1  . PHE PHE PHE B B 250 250 . 0.2462 0.2007 0.2890 0.0231  -0.0728 -
0.0280 1 .
5117 CE1  CE1  . PHE PHE PHE B B 250 250 . 0.2907 0.2035 0.2156 0.0324  -0.0498 -
0.0408 1 .
5118 CZ   CZ   . PHE PHE PHE B B 250 250 . 0.2569 0.2048 0.2180 -0.0322 -0.0634
0.0096  1 .
5119 CE2  CE2  . PHE PHE PHE B B 250 250 . 0.2631 0.1717 0.2410 0.0089  -0.0826 -
0.0922 1 .
5120 CD2  CD2  . PHE PHE PHE B B 250 250 . 0.2070 0.2271 0.2185 0.0278  -0.0653 -
0.0763 1 .
5121 C    C    . PHE PHE PHE B B 250 250 . 0.2439 0.1659 0.1995 0.0124  -0.0211 -
0.0422 1 .
5122 O    O    . PHE PHE PHE B B 250 250 . 0.2555 0.1807 0.2388 -0.0166 -0.0411 -
0.0537 1 .
5123 N    N    . TYR TYR TYR B B 251 251 . 0.2735 0.1540 0.2161 -0.0094 -0.0532 -
0.0492 1 .
5124 CA   CA   . TYR TYR TYR B B 251 251 . 0.2828 0.1707 0.2065 -0.0028 -0.0604 -
0.0427 1 .
5125 CB   CB   . TYR TYR TYR B B 251 251 . 0.2772 0.1686 0.2273 0.0119  -0.0506 -
0.0095 1 .
5126 CG   CG   . TYR TYR TYR B B 251 251 . 0.3255 0.1733 0.2038 0.0377  -0.0409 -
0.0359 1 .
5127 CD1  CD1  . TYR TYR TYR B B 251 251 . 0.2710 0.2237 0.2306 0.0084  -0.0201
0.0029  1 .
5128 CE1  CE1  . TYR TYR TYR B B 251 251 . 0.3426 0.2181 0.2829 0.0481  -0.0256
0.0161  1 .
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5129 CZ   CZ   . TYR TYR TYR B B 251 251 . 0.3818 0.3272 0.3073 0.1191  0.0207
0.0572  1 .
5130 OH   OH   . TYR TYR TYR B B 251 251 . 0.4360 0.3935 0.3133 0.1660  0.0034
0.1024  1 .
5131 CE2  CE2  . TYR TYR TYR B B 251 251 . 0.4046 0.3460 0.3131 0.1435  0.0074
0.0843  1 .
5132 CD2  CD2  . TYR TYR TYR B B 251 251 . 0.4027 0.2569 0.2792 0.1571  -0.0143
0.0490  1 .
5133 C    C    . TYR TYR TYR B B 251 251 . 0.2688 0.1820 0.2226 -0.0073 -0.0466 -
0.0433 1 .
5134 O    O    . TYR TYR TYR B B 251 251 . 0.3073 0.2228 0.2482 0.0074  -0.0450 -
0.0549 1 .
5135 N    N    . ARG ARG ARG B B 252 252 . 0.2546 0.1637 0.2211 -0.0055 -0.0606 -
0.0483 1 .
5136 CA   CA   . ARG ARG ARG B B 252 252 . 0.2566 0.1873 0.2638 -0.0192 -0.0621 -
0.0347 1 .
5137 CB   CB   . ARG ARG ARG B B 252 252 . 0.2580 0.2070 0.2729 -0.0017 -0.0748 -
0.0198 1 .
5138 CG   CG   . ARG ARG ARG B B 252 252 . 0.3807 0.1909 0.3104 -0.0031 -0.0436 -
0.0390 1 .
5139 CD   CD   . ARG ARG ARG B B 252 252 . 0.3798 0.2706 0.3457 0.0155  -0.0112
0.0069  1 .
5140 NE   NE   . ARG ARG ARG B B 252 252 . 0.4600 0.3002 0.3909 0.0028  -0.0383 -
0.0039 1 .
5141 CZ   CZ   . ARG ARG ARG B B 252 252 . 0.4262 0.2785 0.3195 0.0078  -0.0242
0.0066  1 .
5142 NH1  NH1  . ARG ARG ARG B B 252 252 . 0.4677 0.2200 0.4275 0.0174  -0.0255 -
0.0341 1 .
5143 NH2  NH2  . ARG ARG ARG B B 252 252 . 0.4355 0.3399 0.3197 0.0315  -0.0996 -
0.0639 1 .
5144 C    C    . ARG ARG ARG B B 252 252 . 0.2480 0.2074 0.2524 -0.0016 -0.0505 -
0.0419 1 .
5145 O    O    . ARG ARG ARG B B 252 252 . 0.2226 0.1923 0.2676 -0.0026 -0.0494 -
0.0158 1 .
5146 N    N    . ASP ASP ASP B B 253 253 . 0.2676 0.2293 0.2857 -0.0087 -0.0359 -
0.0214 1 .
5147 CA   CA   . ASP ASP ASP B B 253 253 . 0.2939 0.2475 0.2875 0.0018  -0.0453 -
0.0257 1 .
5148 CB   CB   . ASP ASP ASP B B 253 253 . 0.3004 0.2845 0.3253 -0.0104 -0.0502 -
0.0120 1 .
5149 CG   CG   . ASP ASP ASP B B 253 253 . 0.4029 0.3650 0.3942 -0.0205 -0.0594 -
0.0506 1 .
5150 OD1  OD1  . ASP ASP ASP B B 253 253 . 0.5237 0.4162 0.5299 -0.0491 -0.1373 -
0.1165 1 .
5151 OD2  OD2  . ASP ASP ASP B B 253 253 . 0.4399 0.3705 0.4326 -0.0098 -0.0736 -
0.1014 1 .
5152 C    C    . ASP ASP ASP B B 253 253 . 0.2705 0.2324 0.2871 0.0182  -0.0362 -
0.0140 1 .
5153 O    O    . ASP ASP ASP B B 253 253 . 0.2447 0.2233 0.2984 0.0053  -0.0332 -
0.0186 1 .
5154 N    N    . GLY GLY GLY B B 254 254 . 0.2387 0.1770 0.2568 0.0194  -0.0483 -
0.0240 1 .
5155 CA   CA   . GLY GLY GLY B B 254 254 . 0.2563 0.2056 0.2438 0.0455  -0.0331 -
0.0125 1 .
5156 C    C    . GLY GLY GLY B B 254 254 . 0.2375 0.2118 0.2424 0.0259  -0.0262 -
0.0156 1 .
5157 O    O    . GLY GLY GLY B B 254 254 . 0.2690 0.1973 0.2912 0.0264  -0.0231 -
0.0087 1 .
5158 N    N    . LYS LYS LYS B B 255 255 . 0.2465 0.1922 0.2296 0.0275  -0.0428 -
0.0221 1 .
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5159 CA   CA   . LYS LYS LYS B B 255 255 . 0.2272 0.2221 0.2529 0.0092  -0.0228 -
0.0076 1 .
5160 CB   CB   . LYS LYS LYS B B 255 255 . 0.2537 0.2309 0.2627 -0.0037 -0.0281
0.0031  1 .
5161 CG   CG   . LYS LYS LYS B B 255 255 . 0.2462 0.2704 0.3013 0.0058  -0.0366
0.0292  1 .
5162 CD   CD   . LYS LYS LYS B B 255 255 . 0.2828 0.3070 0.4566 -0.1109 0.0087
0.0913  1 .
5163 CE   CE   . LYS LYS LYS B B 255 255 . 0.3108 0.4451 0.5335 -0.0587 -0.0051
0.0745  1 .
5164 NZ   NZ   . LYS LYS LYS B B 255 255 . 0.2774 0.5768 0.6636 -0.0480 -0.0117
0.0672  1 .
5165 C    C    . LYS LYS LYS B B 255 255 . 0.2374 0.2069 0.2541 0.0083  -0.0316 -
0.0254 1 .
5166 O    O    . LYS LYS LYS B B 255 255 . 0.2447 0.1837 0.2862 0.0176  -0.0520 -
0.0080 1 .
5167 N    N    . TYR TYR TYR B B 256 256 . 0.2376 0.1744 0.2759 0.0007  -0.0457 -
0.0402 1 .
5168 CA   CA   . TYR TYR TYR B B 256 256 . 0.2246 0.2175 0.2314 -0.0042 -0.0444 -
0.0345 1 .
5169 CB   CB   . TYR TYR TYR B B 256 256 . 0.2226 0.1691 0.2510 0.0019  -0.0352 -
0.0616 1 .
5170 CG   CG   . TYR TYR TYR B B 256 256 . 0.2101 0.1226 0.1923 -0.0007 -0.0104 -
0.0288 1 .
5171 CD1  CD1  . TYR TYR TYR B B 256 256 . 0.1876 0.1569 0.1993 0.0301  -0.0181 -
0.0206 1 .
5172 CE1  CE1  . TYR TYR TYR B B 256 256 . 0.1963 0.0991 0.1872 0.0109  -0.0464 -
0.0220 1 .
5173 CZ   CZ   . TYR TYR TYR B B 256 256 . 0.1703 0.1549 0.1744 0.0150  -0.0163
0.0189  1 .
5174 OH   OH   . TYR TYR TYR B B 256 256 . 0.1795 0.1004 0.1595 -0.0081 -0.0095 -
0.0132 1 .
5175 CE2  CE2  . TYR TYR TYR B B 256 256 . 0.1642 0.1337 0.2142 -0.0025 0.0298  -
0.0075 1 .
5176 CD2  CD2  . TYR TYR TYR B B 256 256 . 0.2251 0.1241 0.2123 0.0297  -0.0658 -
0.0456 1 .
5177 C    C    . TYR TYR TYR B B 256 256 . 0.2220 0.2126 0.2627 0.0019  -0.0343 -
0.0292 1 .
5178 O    O    . TYR TYR TYR B B 256 256 . 0.2401 0.2368 0.2549 0.0070  -0.0260 -
0.0226 1 .
5179 N    N    . ASP ASP ASP B B 257 257 . 0.2157 0.2077 0.2585 0.0147  -0.0729 -
0.0296 1 .
5180 CA   CA   . ASP ASP ASP B B 257 257 . 0.2594 0.2531 0.2993 -0.0006 -0.0756 -
0.0187 1 .
5181 CB   CB   . ASP ASP ASP B B 257 257 . 0.2332 0.2820 0.2630 0.0059  -0.0692 -
0.0327 1 .
5182 CG   CG   . ASP ASP ASP B B 257 257 . 0.2701 0.3220 0.3114 0.0009  -0.0800 -
0.0427 1 .
5183 OD1  OD1  . ASP ASP ASP B B 257 257 . 0.2890 0.3090 0.2831 0.0027  -0.0908 -
0.0188 1 .
5184 OD2  OD2  . ASP ASP ASP B B 257 257 . 0.3115 0.3346 0.3469 0.0608  -0.1006 -
0.0803 1 .
5185 C    C    . ASP ASP ASP B B 257 257 . 0.2743 0.2495 0.2930 0.0007  -0.0764 -
0.0323 1 .
5186 O    O    . ASP ASP ASP B B 257 257 . 0.2945 0.2148 0.2747 0.0002  -0.1113 -
0.0349 1 .
5187 N    N    . LEU LEU LEU B B 258 258 . 0.2743 0.2599 0.3109 0.0295  -0.0793 -
0.0347 1 .
5188 CA   CA   . LEU LEU LEU B B 258 258 . 0.2897 0.2535 0.2956 0.0192  -0.0848 -
0.0263 1 .
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5189 CB   CB   . LEU LEU LEU B B 258 258 . 0.2726 0.2565 0.3060 0.0431  -0.0572 -
0.0343 1 .
5190 CG   CG   . LEU LEU LEU B B 258 258 . 0.2781 0.2424 0.2760 0.0253  -0.0172 -
0.0295 1 .
5191 CD1  CD1  . LEU LEU LEU B B 258 258 . 0.2451 0.3130 0.3346 0.0540  -0.0265 -
0.0273 1 .
5192 CD2  CD2  . LEU LEU LEU B B 258 258 . 0.2352 0.2373 0.3115 0.0163  -0.0509 -
0.0175 1 .
5193 C    C    . LEU LEU LEU B B 258 258 . 0.2851 0.2657 0.3283 0.0136  -0.0777 -
0.0297 1 .
5194 O    O    . LEU LEU LEU B B 258 258 . 0.2978 0.2310 0.3134 0.0077  -0.1423 -
0.0266 1 .
5195 N    N    . ASP ASP ASP B B 259 259 . 0.2595 0.2604 0.3164 -0.0237 -0.0678 -
0.0199 1 .
5196 CA   CA   . ASP ASP ASP B B 259 259 . 0.3057 0.3153 0.3442 -0.0194 -0.0487 -
0.0290 1 .
5197 CB   CB   . ASP ASP ASP B B 259 259 . 0.2718 0.3147 0.3548 -0.0147 -0.0523 -
0.0219 1 .
5198 CG   CG   . ASP ASP ASP B B 259 259 . 0.3128 0.3758 0.3715 -0.0174 -0.0526 -
0.0110 1 .
5199 OD1  OD1  . ASP ASP ASP B B 259 259 . 0.3008 0.3207 0.3846 -0.0314 -0.0973
0.0137  1 .
5200 OD2  OD2  . ASP ASP ASP B B 259 259 . 0.3012 0.3914 0.4902 -0.0521 -0.0412
0.0464  1 .
5201 C    C    . ASP ASP ASP B B 259 259 . 0.3110 0.3340 0.3424 -0.0181 -0.0400 -
0.0263 1 .
5202 O    O    . ASP ASP ASP B B 259 259 . 0.3129 0.3059 0.3372 -0.0196 -0.0631 -
0.0509 1 .
5203 N    N    . PHE PHE PHE B B 260 260 . 0.3035 0.3320 0.3393 -0.0172 -0.0529 -
0.0342 1 .
5204 CA   CA   . PHE PHE PHE B B 260 260 . 0.3125 0.3197 0.3294 -0.0033 -0.0414 -
0.0080 1 .
5205 CB   CB   . PHE PHE PHE B B 260 260 . 0.3097 0.2853 0.3679 -0.0287 -0.0148
0.0060  1 .
5206 CG   CG   . PHE PHE PHE B B 260 260 . 0.2911 0.2261 0.2406 -0.0155 -0.0088
0.0246  1 .
5207 CD1  CD1  . PHE PHE PHE B B 260 260 . 0.3069 0.2045 0.1934 0.0080  -0.0345
0.0262  1 .
5208 CE1  CE1  . PHE PHE PHE B B 260 260 . 0.2539 0.1960 0.2375 0.0292  -0.0405 -
0.0104 1 .
5209 CZ   CZ   . PHE PHE PHE B B 260 260 . 0.2471 0.2570 0.1857 0.0735  -0.0212
0.0018  1 .
5210 CE2  CE2  . PHE PHE PHE B B 260 260 . 0.2817 0.1095 0.2492 -0.0108 -0.0443 -
0.0052 1 .
5211 CD2  CD2  . PHE PHE PHE B B 260 260 . 0.2422 0.2015 0.2503 -0.0019 -0.0205 -
0.0277 1 .
5212 C    C    . PHE PHE PHE B B 260 260 . 0.3471 0.3084 0.3232 -0.0025 -0.0448 -
0.0177 1 .
5213 O    O    . PHE PHE PHE B B 260 260 . 0.3487 0.3285 0.3101 0.0202  -0.0465 -
0.0154 1 .
5214 N    N    . LYS LYS LYS B B 261 261 . 0.3327 0.2786 0.3117 0.0000  -0.0728 -
0.0233 1 .
5215 CA   CA   . LYS LYS LYS B B 261 261 . 0.3244 0.2890 0.2925 -0.0161 -0.0106
0.0189  1 .
5216 CB   CB   . LYS LYS LYS B B 261 261 . 0.3366 0.3208 0.3165 -0.0147 -0.0271
0.0344  1 .
5217 CG   CG   . LYS LYS LYS B B 261 261 . 0.3089 0.3199 0.3244 -0.0320 0.0173  -
0.0222 1 .
5218 CD   CD   . LYS LYS LYS B B 261 261 . 0.3748 0.2625 0.2696 0.0350  -0.0244 -
0.0312 1 .
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5219 CE   CE   . LYS LYS LYS B B 261 261 . 0.3015 0.2712 0.2577 0.0174  -0.0052 -
0.0426 1 .
5220 NZ   NZ   . LYS LYS LYS B B 261 261 . 0.3009 0.2630 0.1817 -0.0212 -0.0155 -
0.0586 1 .
5221 C    C    . LYS LYS LYS B B 261 261 . 0.3645 0.3306 0.3135 -0.0100 -0.0289
0.0108  1 .
5222 O    O    . LYS LYS LYS B B 261 261 . 0.3893 0.3431 0.3040 -0.0384 -0.0394
0.0453  1 .
5223 N    N    . SER SER SER B B 262 262 . 0.3556 0.3220 0.3527 -0.0310 -0.0134
0.0254  1 .
5224 CA   CA   . SER SER SER B B 262 262 . 0.3668 0.3410 0.3817 -0.0211 -0.0350 -
0.0039 1 .
5225 CB   CB   . SER SER SER B B 262 262 . 0.3693 0.3550 0.3957 -0.0091 -0.0343 -
0.0008 1 .
5226 OG   OG   . SER SER SER B B 262 262 . 0.4106 0.3741 0.4145 -0.0215 -0.0214
0.0237  1 .
5227 C    C    . SER SER SER B B 262 262 . 0.3825 0.3536 0.4063 -0.0219 -0.0425 -
0.0071 1 .
5228 O    O    . SER SER SER B B 262 262 . 0.3789 0.3296 0.3782 -0.0366 -0.0733 -
0.0228 1 .
5229 N    N    . PRO PRO PRO B B 263 263 . 0.4109 0.3594 0.4054 -0.0316 -0.0547 -
0.0249 1 .
5230 CA   CA   . PRO PRO PRO B B 263 263 . 0.4322 0.3951 0.4278 -0.0274 -0.0410 -
0.0235 1 .
5231 CB   CB   . PRO PRO PRO B B 263 263 . 0.4383 0.3876 0.4485 -0.0462 -0.0452 -
0.0310 1 .
5232 CG   CG   . PRO PRO PRO B B 263 263 . 0.4429 0.3751 0.4177 -0.0246 -0.0562 -
0.0542 1 .
5233 CD   CD   . PRO PRO PRO B B 263 263 . 0.4276 0.3741 0.4326 -0.0267 -0.0495 -
0.0185 1 .
5234 C    C    . PRO PRO PRO B B 263 263 . 0.4315 0.3998 0.4396 -0.0351 -0.0293 -
0.0149 1 .
5235 O    O    . PRO PRO PRO B B 263 263 . 0.4215 0.3812 0.4490 -0.0473 -0.0276 -
0.0204 1 .
5236 N    N    . THR THR THR B B 264 264 . 0.4266 0.4117 0.4475 -0.0381 -0.0155 -
0.0098 1 .
5237 CA   CA   . THR THR THR B B 264 264 . 0.4239 0.4297 0.4512 -0.0511 -0.0055 -
0.0008 1 .
5238 CB   CB   . THR THR THR B B 264 264 . 0.4346 0.4472 0.4561 -0.0499 -0.0041
0.0053  1 .
5239 OG1  OG1  . THR THR THR B B 264 264 . 0.4414 0.4838 0.4663 -0.0632 0.0299  -
0.0390 1 .
5240 CG2  CG2  . THR THR THR B B 264 264 . 0.4516 0.4972 0.4859 -0.0290 -0.0271
0.0100  1 .
5241 C    C    . THR THR THR B B 264 264 . 0.4380 0.4472 0.4599 -0.0410 -0.0048 -
0.0073 1 .
5242 O    O    . THR THR THR B B 264 264 . 0.4460 0.4415 0.4825 -0.0695 -0.0056 -
0.0202 1 .
5243 N    N    . ASP ASP ASP B B 265 265 . 0.4192 0.4336 0.4455 -0.0450 0.0021  -
0.0021 1 .
5244 CA   CA   . ASP ASP ASP B B 265 265 . 0.4193 0.4304 0.4480 -0.0197 -0.0058
0.0049  1 .
5245 CB   CB   . ASP ASP ASP B B 265 265 . 0.4038 0.4438 0.4543 -0.0353 0.0021  -
0.0057 1 .
5246 CG   CG   . ASP ASP ASP B B 265 265 . 0.4140 0.4567 0.4881 -0.0165 -0.0054
0.0293  1 .
5247 OD1  OD1  . ASP ASP ASP B B 265 265 . 0.4321 0.5559 0.5598 0.0089  -0.0024
0.0412  1 .
5248 OD2  OD2  . ASP ASP ASP B B 265 265 . 0.3788 0.4838 0.4913 -0.0171 -0.0605
0.0474  1 .
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5249 C    C    . ASP ASP ASP B B 265 265 . 0.4057 0.4297 0.4559 -0.0148 -0.0109
0.0005  1 .
5250 O    O    . ASP ASP ASP B B 265 265 . 0.3911 0.4265 0.4733 -0.0141 -0.0361
0.0085  1 .
5251 N    N    . PRO PRO PRO B B 266 266 . 0.4067 0.4064 0.4512 -0.0033 -0.0126
0.0018  1 .
5252 CA   CA   . PRO PRO PRO B B 266 266 . 0.4056 0.4116 0.4423 -0.0080 -0.0047 -
0.0054 1 .
5253 CB   CB   . PRO PRO PRO B B 266 266 . 0.4098 0.4128 0.4392 0.0000  -0.0125
0.0041  1 .
5254 CG   CG   . PRO PRO PRO B B 266 266 . 0.4014 0.3621 0.4572 0.0057  -0.0055 -
0.0222 1 .
5255 CD   CD   . PRO PRO PRO B B 266 266 . 0.4177 0.4129 0.4573 -0.0050 -0.0136 -
0.0088 1 .
5256 C    C    . PRO PRO PRO B B 266 266 . 0.3941 0.4148 0.4375 -0.0176 -0.0075 -
0.0016 1 .
5257 O    O    . PRO PRO PRO B B 266 266 . 0.3798 0.3604 0.4554 -0.0617 0.0001  -
0.0021 1 .
5258 N    N    . SER SER SER B B 267 267 . 0.3508 0.3920 0.4304 -0.0345 0.0000  -
0.0018 1 .
5259 CA   CA   . SER SER SER B B 267 267 . 0.3788 0.4012 0.4316 -0.0283 -0.0151 -
0.0042 1 .
5260 CB   CB   . SER SER SER B B 267 267 . 0.3717 0.4232 0.4411 -0.0207 -0.0038 -
0.0107 1 .
5261 OG   OG   . SER SER SER B B 267 267 . 0.4339 0.4730 0.4604 -0.0404 -0.0291 -
0.0097 1 .
5262 C    C    . SER SER SER B B 267 267 . 0.3564 0.3845 0.4078 -0.0446 -0.0168 -
0.0087 1 .
5263 O    O    . SER SER SER B B 267 267 . 0.3747 0.3979 0.4289 -0.0569 -0.0052
0.0044  1 .
5264 N    N    . ARG ARG ARG B B 268 268 . 0.3241 0.3356 0.3841 -0.0401 -0.0433
0.0098  1 .
5265 CA   CA   . ARG ARG ARG B B 268 268 . 0.3154 0.3344 0.3751 -0.0391 -0.0375
0.0057  1 .
5266 CB   CB   . ARG ARG ARG B B 268 268 . 0.3112 0.3305 0.3604 -0.0493 -0.0469
0.0046  1 .
5267 CG   CG   . ARG ARG ARG B B 268 268 . 0.2863 0.3340 0.3369 -0.0500 -0.0272 -
0.0189 1 .
5268 CD   CD   . ARG ARG ARG B B 268 268 . 0.3236 0.3349 0.3426 -0.0358 -0.0137 -
0.0090 1 .
5269 NE   NE   . ARG ARG ARG B B 268 268 . 0.2928 0.3122 0.3557 -0.0402 0.0061  -
0.0404 1 .
5270 CZ   CZ   . ARG ARG ARG B B 268 268 . 0.2731 0.3531 0.3373 -0.0481 -0.0336 -
0.0174 1 .
5271 NH1  NH1  . ARG ARG ARG B B 268 268 . 0.3017 0.3374 0.3936 -0.0967 -0.0302 -
0.0491 1 .
5272 NH2  NH2  . ARG ARG ARG B B 268 268 . 0.2786 0.3610 0.3972 -0.0801 -0.0385 -
0.0610 1 .
5273 C    C    . ARG ARG ARG B B 268 268 . 0.3006 0.3190 0.3812 -0.0215 -0.0330
0.0043  1 .
5274 O    O    . ARG ARG ARG B B 268 268 . 0.3102 0.3021 0.3993 -0.0398 -0.0421
0.0017  1 .
5275 N    N    . TYR TYR TYR B B 269 269 . 0.3027 0.3147 0.3796 -0.0170 -0.0121
0.0054  1 .
5276 CA   CA   . TYR TYR TYR B B 269 269 . 0.2734 0.2904 0.3750 -0.0005 -0.0192 -
0.0104 1 .
5277 CB   CB   . TYR TYR TYR B B 269 269 . 0.2974 0.2733 0.3787 0.0049  -0.0138 -
0.0027 1 .
5278 CG   CG   . TYR TYR TYR B B 269 269 . 0.2603 0.3039 0.3935 -0.0109 -0.0336 -
0.0109 1 .
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5279 CD1  CD1  . TYR TYR TYR B B 269 269 . 0.2516 0.2537 0.3648 -0.0320 -0.0537 -
0.0648 1 .
5280 CE1  CE1  . TYR TYR TYR B B 269 269 . 0.3203 0.2785 0.3421 -0.0366 -0.0367 -
0.0392 1 .
5281 CZ   CZ   . TYR TYR TYR B B 269 269 . 0.3935 0.2824 0.4026 -0.0133 -0.0144 -
0.0127 1 .
5282 OH   OH   . TYR TYR TYR B B 269 269 . 0.4088 0.3852 0.3683 -0.0122 -0.0138 -
0.0352 1 .
5283 CE2  CE2  . TYR TYR TYR B B 269 269 . 0.3130 0.3310 0.4141 0.0213  -0.0143 -
0.0536 1 .
5284 CD2  CD2  . TYR TYR TYR B B 269 269 . 0.3559 0.2717 0.4120 -0.0358 -0.0299 -
0.0150 1 .
5285 C    C    . TYR TYR TYR B B 269 269 . 0.2876 0.2889 0.3848 -0.0084 -0.0015
0.0061  1 .
5286 O    O    . TYR TYR TYR B B 269 269 . 0.2900 0.3000 0.3817 -0.0275 -0.0063
0.0103  1 .
5287 N    N    . ILE ILE ILE B B 270 270 . 0.2825 0.2372 0.3469 -0.0017 -0.0116
0.0085  1 .
5288 CA   CA   . ILE ILE ILE B B 270 270 . 0.2766 0.2259 0.3553 -0.0057 -0.0082 -
0.0033 1 .
5289 CB   CB   . ILE ILE ILE B B 270 270 . 0.2470 0.1935 0.3254 -0.0065 -0.0142
0.0080  1 .
5290 CG1  CG1  . ILE ILE ILE B B 270 270 . 0.2122 0.1974 0.3254 -0.0117 0.0078  -
0.0208 1 .
5291 CD   CD   . ILE ILE ILE B B 270 270 . 0.2312 0.1836 0.3155 0.0577  -0.0070 -
0.0199 1 .
5292 CG2  CG2  . ILE ILE ILE B B 270 270 . 0.2553 0.2381 0.4090 -0.0471 -0.0185 -
0.0035 1 .
5293 C    C    . ILE ILE ILE B B 270 270 . 0.2667 0.1916 0.3039 -0.0128 -0.0053
0.0051  1 .
5294 O    O    . ILE ILE ILE B B 270 270 . 0.2792 0.2271 0.3411 0.0097  -0.0067 -
0.0128 1 .
5295 N    N    . THR THR THR B B 271 271 . 0.2903 0.2144 0.3451 -0.0064 -0.0006 -
0.0082 1 .
5296 CA   CA   . THR THR THR B B 271 271 . 0.2524 0.2070 0.3082 -0.0009 -0.0053
0.0059  1 .
5297 CB   CB   . THR THR THR B B 271 271 . 0.2735 0.2224 0.3142 -0.0052 0.0149
0.0014  1 .
5298 OG1  OG1  . THR THR THR B B 271 271 . 0.3123 0.2255 0.2954 0.0165  0.0309
0.0187  1 .
5299 CG2  CG2  . THR THR THR B B 271 271 . 0.2888 0.2036 0.3736 0.0245  0.0157
0.0575  1 .
5300 C    C    . THR THR THR B B 271 271 . 0.2525 0.2301 0.3111 -0.0007 0.0031
0.0102  1 .
5301 O    O    . THR THR THR B B 271 271 . 0.1930 0.2520 0.3307 0.0179  -0.0051
0.0205  1 .
5302 N    N    . GLY GLY GLY B B 272 272 . 0.2438 0.2214 0.2817 -0.0110 0.0170
0.0033  1 .
5303 CA   CA   . GLY GLY GLY B B 272 272 . 0.2505 0.2066 0.2561 -0.0032 0.0225  -
0.0026 1 .
5304 C    C    . GLY GLY GLY B B 272 272 . 0.2598 0.2087 0.2624 0.0022  0.0221
0.0000  1 .
5305 O    O    . GLY GLY GLY B B 272 272 . 0.2441 0.1667 0.2525 0.0103  0.0091  -
0.0163 1 .
5306 N    N    . ASP ASP ASP B B 273 273 . 0.2246 0.2186 0.2295 -0.0003 0.0136
0.0115  1 .
5307 CA   CA   . ASP ASP ASP B B 273 273 . 0.2784 0.2674 0.2784 -0.0036 0.0294
0.0104  1 .
5308 CB   CB   . ASP ASP ASP B B 273 273 . 0.3073 0.3045 0.2926 0.0075  0.0246
0.0404  1 .
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5309 CG   CG   . ASP ASP ASP B B 273 273 . 0.4163 0.4351 0.4274 -0.0085 0.0245  -
0.0034 1 .
5310 OD1  OD1  . ASP ASP ASP B B 273 273 . 0.5971 0.4187 0.5660 -0.0644 -0.0388 -
0.0029 1 .
5311 OD2  OD2  . ASP ASP ASP B B 273 273 . 0.5024 0.6341 0.6395 -0.0141 0.0644
0.0064  1 .
5312 C    C    . ASP ASP ASP B B 273 273 . 0.2797 0.2462 0.2744 -0.0107 0.0197
0.0128  1 .
5313 O    O    . ASP ASP ASP B B 273 273 . 0.2687 0.2131 0.2840 -0.0230 0.0389
0.0078  1 .
5314 N    N    . GLN GLN GLN B B 274 274 . 0.2721 0.2285 0.2800 -0.0074 0.0073
0.0200  1 .
5315 CA   CA   . GLN GLN GLN B B 274 274 . 0.2666 0.2368 0.2804 -0.0056 0.0192
0.0230  1 .
5316 CB   CB   . GLN GLN GLN B B 274 274 . 0.2823 0.2512 0.2861 -0.0062 0.0316
0.0243  1 .
5317 CG   CG   . GLN GLN GLN B B 274 274 . 0.2913 0.2714 0.3595 -0.0330 0.0629  -
0.0017 1 .
5318 CD   CD   . GLN GLN GLN B B 274 274 . 0.2840 0.3316 0.3940 -0.0261 0.0337  -
0.0283 1 .
5319 OE1  OE1  . GLN GLN GLN B B 274 274 . 0.2609 0.2823 0.3860 -0.0172 0.0244  -
0.0256 1 .
5320 NE2  NE2  . GLN GLN GLN B B 274 274 . 0.3228 0.3647 0.5017 -0.0037 0.1004  -
0.0721 1 .
5321 C    C    . GLN GLN GLN B B 274 274 . 0.2402 0.2184 0.2746 -0.0042 0.0105
0.0180  1 .
5322 O    O    . GLN GLN GLN B B 274 274 . 0.2051 0.2308 0.2833 0.0131  0.0152
0.0160  1 .
5323 N    N    . LEU LEU LEU B B 275 275 . 0.2307 0.1918 0.2092 0.0149  0.0047
0.0266  1 .
5324 CA   CA   . LEU LEU LEU B B 275 275 . 0.2061 0.2030 0.2081 -0.0011 0.0101
0.0062  1 .
5325 CB   CB   . LEU LEU LEU B B 275 275 . 0.1966 0.2091 0.1826 0.0133  -0.0210
0.0074  1 .
5326 CG   CG   . LEU LEU LEU B B 275 275 . 0.1629 0.1921 0.1986 0.0141  0.0000
0.0214  1 .
5327 CD1  CD1  . LEU LEU LEU B B 275 275 . 0.2111 0.2057 0.2214 0.0366  -0.0322 -
0.0146 1 .
5328 CD2  CD2  . LEU LEU LEU B B 275 275 . 0.2291 0.1156 0.1466 -0.0095 0.0287
0.0067  1 .
5329 C    C    . LEU LEU LEU B B 275 275 . 0.2026 0.2045 0.2077 0.0002  0.0084
0.0045  1 .
5330 O    O    . LEU LEU LEU B B 275 275 . 0.1990 0.1652 0.2088 0.0067  -0.0036
0.0098  1 .
5331 N    N    . GLY GLY GLY B B 276 276 . 0.1988 0.1764 0.2132 -0.0167 0.0005
0.0137  1 .
5332 CA   CA   . GLY GLY GLY B B 276 276 . 0.1945 0.1890 0.1863 0.0175  0.0143  -
0.0134 1 .
5333 C    C    . GLY GLY GLY B B 276 276 . 0.2129 0.2086 0.2045 -0.0033 0.0152  -
0.0071 1 .
5334 O    O    . GLY GLY GLY B B 276 276 . 0.2060 0.2068 0.1747 0.0007  0.0192
0.0030  1 .
5335 N    N    . ALA ALA ALA B B 277 277 . 0.2094 0.2075 0.2101 -0.0037 0.0395
0.0137  1 .
5336 CA   CA   . ALA ALA ALA B B 277 277 . 0.2146 0.1920 0.2378 0.0159  0.0405
0.0093  1 .
5337 CB   CB   . ALA ALA ALA B B 277 277 . 0.2216 0.2129 0.2892 0.0192  0.0723
0.0279  1 .
5338 C    C    . ALA ALA ALA B B 277 277 . 0.2311 0.1936 0.2376 0.0007  0.0353
0.0115  1 .
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5339 O    O    . ALA ALA ALA B B 277 277 . 0.2333 0.1634 0.2321 0.0106  0.0435
0.0152  1 .
5340 N    N    . LEU LEU LEU B B 278 278 . 0.2234 0.1665 0.2246 0.0009  0.0173
0.0152  1 .
5341 CA   CA   . LEU LEU LEU B B 278 278 . 0.2153 0.2014 0.2156 -0.0014 -0.0036
0.0053  1 .
5342 CB   CB   . LEU LEU LEU B B 278 278 . 0.2292 0.1718 0.2394 0.0285  0.0077  -
0.0002 1 .
5343 CG   CG   . LEU LEU LEU B B 278 278 . 0.2744 0.2672 0.2692 0.0591  -0.0151 -
0.0198 1 .
5344 CD1  CD1  . LEU LEU LEU B B 278 278 . 0.3325 0.2245 0.3408 0.0320  0.0423
0.0227  1 .
5345 CD2  CD2  . LEU LEU LEU B B 278 278 . 0.3459 0.3810 0.2974 0.0297  -0.0118 -
0.0843 1 .
5346 C    C    . LEU LEU LEU B B 278 278 . 0.2086 0.1814 0.1885 0.0050  0.0017  -
0.0013 1 .
5347 O    O    . LEU LEU LEU B B 278 278 . 0.2120 0.2111 0.1860 0.0091  -0.0178 -
0.0187 1 .
5348 N    N    . TYR TYR TYR B B 279 279 . 0.1711 0.1609 0.1736 -0.0083 -0.0026
0.0030  1 .
5349 CA   CA   . TYR TYR TYR B B 279 279 . 0.1703 0.1348 0.1574 0.0000  -0.0055 -
0.0165 1 .
5350 CB   CB   . TYR TYR TYR B B 279 279 . 0.1652 0.1401 0.1313 0.0239  0.0174  -
0.0323 1 .
5351 CG   CG   . TYR TYR TYR B B 279 279 . 0.1916 0.1162 0.1071 0.0282  -0.0054 -
0.0246 1 .
5352 CD1  CD1  . TYR TYR TYR B B 279 279 . 0.1742 0.1475 0.1567 -0.0150 0.0190  -
0.0207 1 .
5353 CE1  CE1  . TYR TYR TYR B B 279 279 . 0.1918 0.1621 0.1203 0.0031  0.0121  -
0.0125 1 .
5354 CZ   CZ   . TYR TYR TYR B B 279 279 . 0.1847 0.1389 0.1307 0.0149  0.0059  -
0.0129 1 .
5355 OH   OH   . TYR TYR TYR B B 279 279 . 0.2222 0.1323 0.1404 0.0221  -0.0065
0.0041  1 .
5356 CE2  CE2  . TYR TYR TYR B B 279 279 . 0.2079 0.0995 0.1037 0.0193  0.0220  -
0.0101 1 .
5357 CD2  CD2  . TYR TYR TYR B B 279 279 . 0.1465 0.1205 0.1545 -0.0048 0.0369  -
0.0346 1 .
5358 C    C    . TYR TYR TYR B B 279 279 . 0.1885 0.1552 0.1383 0.0082  0.0079  -
0.0005 1 .
5359 O    O    . TYR TYR TYR B B 279 279 . 0.2012 0.1541 0.1477 -0.0005 0.0150  -
0.0009 1 .
5360 N    N    . GLN GLN GLN B B 280 280 . 0.1838 0.1813 0.1273 0.0099  0.0253
0.0025  1 .
5361 CA   CA   . GLN GLN GLN B B 280 280 . 0.2300 0.2095 0.1578 0.0143  0.0177
0.0111  1 .
5362 CB   CB   . GLN GLN GLN B B 280 280 . 0.2222 0.2067 0.1344 0.0098  0.0096
0.0364  1 .
5363 CG   CG   . GLN GLN GLN B B 280 280 . 0.3031 0.2585 0.2179 0.0464  -0.0200
0.0580  1 .
5364 CD   CD   . GLN GLN GLN B B 280 280 . 0.4768 0.4339 0.3619 0.0008  -0.1197
0.0484  1 .
5365 OE1  OE1  . GLN GLN GLN B B 280 280 . 0.5313 0.4575 0.4828 -0.0265 -0.1782 -
0.0358 1 .
5366 NE2  NE2  . GLN GLN GLN B B 280 280 . 0.5774 0.4324 0.4495 -0.0062 -0.0916
0.0664  1 .
5367 C    C    . GLN GLN GLN B B 280 280 . 0.2432 0.1993 0.1625 0.0171  0.0142
0.0198  1 .
5368 O    O    . GLN GLN GLN B B 280 280 . 0.2658 0.2171 0.1811 0.0225  0.0211  -
0.0172 1 .
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5369 N    N    . ASP ASP ASP B B 281 281 . 0.1973 0.2100 0.1847 0.0123  0.0231  -
0.0034 1 .
5370 CA   CA   . ASP ASP ASP B B 281 281 . 0.2131 0.2250 0.2201 0.0206  0.0160
0.0114  1 .
5371 CB   CB   . ASP ASP ASP B B 281 281 . 0.2366 0.2314 0.2556 0.0092  0.0255
0.0125  1 .
5372 CG   CG   . ASP ASP ASP B B 281 281 . 0.3108 0.3214 0.3218 -0.0033 0.0110
0.0248  1 .
5373 OD1  OD1  . ASP ASP ASP B B 281 281 . 0.3057 0.3979 0.3471 -0.0002 0.0853
0.0100  1 .
5374 OD2  OD2  . ASP ASP ASP B B 281 281 . 0.3487 0.3320 0.4986 -0.0579 0.0307
0.0235  1 .
5375 C    C    . ASP ASP ASP B B 281 281 . 0.2199 0.2356 0.2161 0.0269  0.0173
0.0041  1 .
5376 O    O    . ASP ASP ASP B B 281 281 . 0.2244 0.2339 0.2061 0.0369  0.0346  -
0.0070 1 .
5377 N    N    . PHE PHE PHE B B 282 282 . 0.2076 0.2207 0.1550 0.0284  0.0184
0.0214  1 .
5378 CA   CA   . PHE PHE PHE B B 282 282 . 0.2047 0.1814 0.1916 0.0217  0.0218
0.0114  1 .
5379 CB   CB   . PHE PHE PHE B B 282 282 . 0.2394 0.1999 0.1871 0.0056  0.0144
0.0056  1 .
5380 CG   CG   . PHE PHE PHE B B 282 282 . 0.2956 0.2121 0.1915 0.0418  -0.0039
0.0242  1 .
5381 CD1  CD1  . PHE PHE PHE B B 282 282 . 0.2787 0.1732 0.2003 0.0399  0.0177  -
0.0123 1 .
5382 CE1  CE1  . PHE PHE PHE B B 282 282 . 0.3578 0.2729 0.2171 0.0071  -0.0226
0.0015  1 .
5383 CZ   CZ   . PHE PHE PHE B B 282 282 . 0.3409 0.2493 0.2608 0.0217  -0.0194
0.0061  1 .
5384 CE2  CE2  . PHE PHE PHE B B 282 282 . 0.3633 0.2564 0.2841 0.0088  -0.0278
0.0242  1 .
5385 CD2  CD2  . PHE PHE PHE B B 282 282 . 0.3250 0.2168 0.1837 0.0492  -0.0248
0.0076  1 .
5386 C    C    . PHE PHE PHE B B 282 282 . 0.2250 0.1856 0.1613 0.0217  0.0018
0.0056  1 .
5387 O    O    . PHE PHE PHE B B 282 282 . 0.2713 0.1874 0.1611 0.0430  0.0022  -
0.0201 1 .
5388 N    N    . VAL VAL VAL B B 283 283 . 0.1745 0.1726 0.1488 0.0013  0.0027  -
0.0100 1 .
5389 CA   CA   . VAL VAL VAL B B 283 283 . 0.1990 0.1871 0.1646 0.0068  0.0165  -
0.0152 1 .
5390 CB   CB   . VAL VAL VAL B B 283 283 . 0.1851 0.1970 0.1491 -0.0023 0.0232  -
0.0165 1 .
5391 CG1  CG1  . VAL VAL VAL B B 283 283 . 0.1945 0.2383 0.1843 0.0394  -0.0239 -
0.0219 1 .
5392 CG2  CG2  . VAL VAL VAL B B 283 283 . 0.1582 0.1703 0.1305 0.0051  0.0267  -
0.0251 1 .
5393 C    C    . VAL VAL VAL B B 283 283 . 0.2159 0.1892 0.1553 0.0094  0.0262  -
0.0100 1 .
5394 O    O    . VAL VAL VAL B B 283 283 . 0.2611 0.1796 0.1574 0.0167  0.0392
0.0022  1 .
5395 N    N    . ARG ARG ARG B B 284 284 . 0.2173 0.2073 0.1657 0.0317  0.0307  -
0.0150 1 .
5396 CA   CA   . ARG ARG ARG B B 284 284 . 0.2424 0.2094 0.1797 0.0373  0.0547
0.0013  1 .
5397 CB   CB   . ARG ARG ARG B B 284 284 . 0.2562 0.1844 0.2192 0.0165  0.0837  -
0.0081 1 .
5398 CG   CG   . ARG ARG ARG B B 284 284 . 0.2146 0.1974 0.2394 -0.0004 0.0495  -
0.0136 1 .
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5399 CD   CD   . ARG ARG ARG B B 284 284 . 0.3138 0.3449 0.2443 0.0028  0.0328  -
0.0103 1 .
5400 NE   NE   . ARG ARG ARG B B 284 284 . 0.3295 0.4218 0.2652 -0.0367 -0.0174 -
0.0039 1 .
5401 CZ   CZ   . ARG ARG ARG B B 284 284 . 0.3840 0.4066 0.3025 -0.0118 -0.0273 -
0.0229 1 .
5402 NH1  NH1  . ARG ARG ARG B B 284 284 . 0.4149 0.4377 0.2971 -0.0385 -0.0114 -
0.0234 1 .
5403 NH2  NH2  . ARG ARG ARG B B 284 284 . 0.4474 0.4457 0.2548 0.0242  -0.0577 -
0.0256 1 .
5404 C    C    . ARG ARG ARG B B 284 284 . 0.2383 0.2026 0.1870 0.0296  0.0445  -
0.0006 1 .
5405 O    O    . ARG ARG ARG B B 284 284 . 0.2969 0.2191 0.1772 0.0441  0.0355  -
0.0124 1 .
5406 N    N    . ASP ASP ASP B B 285 285 . 0.2197 0.2304 0.1989 0.0255  0.0276
0.0204  1 .
5407 CA   CA   . ASP ASP ASP B B 285 285 . 0.2322 0.2211 0.1823 0.0287  0.0401
0.0314  1 .
5408 CB   CB   . ASP ASP ASP B B 285 285 . 0.2372 0.2131 0.1747 0.0194  0.0360
0.0384  1 .
5409 CG   CG   . ASP ASP ASP B B 285 285 . 0.2884 0.2537 0.2534 -0.0095 0.0540
0.0023  1 .
5410 OD1  OD1  . ASP ASP ASP B B 285 285 . 0.3266 0.3239 0.2627 -0.0537 0.0463
0.0308  1 .
5411 OD2  OD2  . ASP ASP ASP B B 285 285 . 0.3141 0.3195 0.3303 -0.0734 0.0462
0.0193  1 .
5412 C    C    . ASP ASP ASP B B 285 285 . 0.2297 0.2309 0.2028 0.0374  0.0343
0.0278  1 .
5413 O    O    . ASP ASP ASP B B 285 285 . 0.2202 0.2334 0.2199 0.0511  0.0477
0.0229  1 .
5414 N    N    . TYR TYR TYR B B 286 286 . 0.2413 0.2180 0.1880 0.0240  0.0256  -
0.0008 1 .
5415 CA   CA   . TYR TYR TYR B B 286 286 . 0.2299 0.2010 0.1553 0.0169  0.0351  -
0.0058 1 .
5416 CB   CB   . TYR TYR TYR B B 286 286 . 0.2424 0.1755 0.1816 0.0245  0.0186  -
0.0243 1 .
5417 CG   CG   . TYR TYR TYR B B 286 286 . 0.2455 0.2566 0.1998 0.0283  0.0507  -
0.0384 1 .
5418 CD1  CD1  . TYR TYR TYR B B 286 286 . 0.2911 0.3231 0.1574 0.0165  0.0211  -
0.0100 1 .
5419 CE1  CE1  . TYR TYR TYR B B 286 286 . 0.2753 0.3572 0.2131 0.0401  0.0465  -
0.0333 1 .
5420 CZ   CZ   . TYR TYR TYR B B 286 286 . 0.2915 0.3948 0.2827 -0.0277 0.0332  -
0.0493 1 .
5421 OH   OH   . TYR TYR TYR B B 286 286 . 0.3202 0.5792 0.3937 -0.0208 0.0038  -
0.0620 1 .
5422 CE2  CE2  . TYR TYR TYR B B 286 286 . 0.3048 0.3694 0.2314 -0.0408 0.0204  -
0.0380 1 .
5423 CD2  CD2  . TYR TYR TYR B B 286 286 . 0.2361 0.2928 0.1912 0.0007  0.0308  -
0.0346 1 .
5424 C    C    . TYR TYR TYR B B 286 286 . 0.2249 0.1971 0.1838 0.0341  0.0324  -
0.0077 1 .
5425 O    O    . TYR TYR TYR B B 286 286 . 0.2273 0.2042 0.1697 0.0201  0.0179
0.0087  1 .
5426 N    N    . PRO PRO PRO B B 287 287 . 0.2117 0.1885 0.1674 0.0369  0.0376
0.0155  1 .
5427 CA   CA   . PRO PRO PRO B B 287 287 . 0.2139 0.1438 0.1843 0.0282  0.0281  -
0.0081 1 .
5428 CB   CB   . PRO PRO PRO B B 287 287 . 0.2536 0.1580 0.1805 0.0587  0.0105
0.0033  1 .
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5429 CG   CG   . PRO PRO PRO B B 287 287 . 0.2049 0.1854 0.2378 0.0148  0.0137  -
0.0076 1 .
5430 CD   CD   . PRO PRO PRO B B 287 287 . 0.2404 0.1957 0.2061 0.0387  0.0315
0.0393  1 .
5431 C    C    . PRO PRO PRO B B 287 287 . 0.2085 0.1484 0.1669 0.0171  0.0373  -
0.0137 1 .
5432 O    O    . PRO PRO PRO B B 287 287 . 0.2289 0.1521 0.1496 0.0211  0.0258  -
0.0318 1 .
5433 N    N    . VAL VAL VAL B B 288 288 . 0.2076 0.1608 0.1492 0.0449  0.0193  -
0.0132 1 .
5434 CA   CA   . VAL VAL VAL B B 288 288 . 0.1617 0.1577 0.1450 0.0321  0.0108  -
0.0099 1 .
5435 CB   CB   . VAL VAL VAL B B 288 288 . 0.1417 0.1615 0.1333 0.0021  -0.0040 -
0.0009 1 .
5436 CG1  CG1  . VAL VAL VAL B B 288 288 . 0.2198 0.1645 0.1296 0.0259  0.0127  -
0.0002 1 .
5437 CG2  CG2  . VAL VAL VAL B B 288 288 . 0.1495 0.1783 0.1415 0.0195  -0.0039 -
0.0313 1 .
5438 C    C    . VAL VAL VAL B B 288 288 . 0.1830 0.1580 0.1283 0.0147  0.0094  -
0.0061 1 .
5439 O    O    . VAL VAL VAL B B 288 288 . 0.2343 0.2206 0.1213 0.0359  0.0177
0.0168  1 .
5440 N    N    . VAL VAL VAL B B 289 289 . 0.1751 0.1286 0.1237 -0.0009 0.0076  -
0.0110 1 .
5441 CA   CA   . VAL VAL VAL B B 289 289 . 0.1597 0.1297 0.0902 0.0156  0.0270  -
0.0073 1 .
5442 CB   CB   . VAL VAL VAL B B 289 289 . 0.1954 0.1355 0.1217 0.0199  0.0344  -
0.0205 1 .
5443 CG1  CG1  . VAL VAL VAL B B 289 289 . 0.2238 0.1933 0.1479 0.0487  0.0204  -
0.0516 1 .
5444 CG2  CG2  . VAL VAL VAL B B 289 289 . 0.2051 0.1396 0.1066 0.0129  0.0188  -
0.0157 1 .
5445 C    C    . VAL VAL VAL B B 289 289 . 0.1648 0.1320 0.1358 0.0187  0.0012  -
0.0014 1 .
5446 O    O    . VAL VAL VAL B B 289 289 . 0.1826 0.1396 0.1160 0.0159  0.0066  -
0.0069 1 .
5447 N    N    . SER SER SER B B 290 290 . 0.1901 0.1423 0.1283 0.0126  0.0180  -
0.0019 1 .
5448 CA   CA   . SER SER SER B B 290 290 . 0.1505 0.1199 0.1167 0.0009  0.0106  -
0.0096 1 .
5449 CB   CB   . SER SER SER B B 290 290 . 0.1340 0.1429 0.1308 -0.0149 0.0208  -
0.0288 1 .
5450 OG   OG   . SER SER SER B B 290 290 . 0.1704 0.1498 0.1536 0.0137  0.0423
0.0133  1 .
5451 C    C    . SER SER SER B B 290 290 . 0.1297 0.1111 0.1189 0.0087  0.0066  -
0.0199 1 .
5452 O    O    . SER SER SER B B 290 290 . 0.1613 0.1198 0.1265 -0.0036 -0.0088 -
0.0292 1 .
5453 N    N    . ILE ILE ILE B B 291 291 . 0.1413 0.0970 0.0810 -0.0162 -0.0019 -
0.0133 1 .
5454 CA   CA   . ILE ILE ILE B B 291 291 . 0.1403 0.1123 0.1061 -0.0007 0.0009  -
0.0186 1 .
5455 CB   CB   . ILE ILE ILE B B 291 291 . 0.1557 0.0995 0.1114 -0.0098 0.0204  -
0.0313 1 .
5456 CG1  CG1  . ILE ILE ILE B B 291 291 . 0.0959 0.1464 0.1369 -0.0159 -0.0111
0.0088  1 .
5457 CD   CD   . ILE ILE ILE B B 291 291 . 0.1494 0.1457 0.1625 -0.0220 0.0417
0.0226  1 .
5458 CG2  CG2  . ILE ILE ILE B B 291 291 . 0.1602 0.0919 0.1110 -0.0155 -0.0354 -
0.0300 1 .
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5459 C    C    . ILE ILE ILE B B 291 291 . 0.1311 0.1409 0.0939 0.0266  0.0014  -
0.0099 1 .
5460 O    O    . ILE ILE ILE B B 291 291 . 0.1624 0.1453 0.1016 0.0279  0.0090  -
0.0181 1 .
5461 N    N    . GLU GLU GLU B B 292 292 . 0.1485 0.1239 0.0734 0.0335  -0.0066 -
0.0143 1 .
5462 CA   CA   . GLU GLU GLU B B 292 292 . 0.1366 0.1165 0.0607 0.0155  0.0189
0.0092  1 .
5463 CB   CB   . GLU GLU GLU B B 292 292 . 0.1509 0.0872 0.0677 0.0174  0.0148
0.0180  1 .
5464 CG   CG   . GLU GLU GLU B B 292 292 . 0.1556 0.1181 0.0600 0.0127  0.0189
0.0103  1 .
5465 CD   CD   . GLU GLU GLU B B 292 292 . 0.2344 0.1497 0.1363 0.0113  0.0257  -
0.0135 1 .
5466 OE1  OE1  . GLU GLU GLU B B 292 292 . 0.2143 0.1676 0.1307 0.0221  0.0335  -
0.0199 1 .
5467 OE2  OE2  . GLU GLU GLU B B 292 292 . 0.2069 0.1385 0.1420 0.0122  0.0484  -
0.0195 1 .
5468 C    C    . GLU GLU GLU B B 292 292 . 0.1200 0.1223 0.0889 0.0072  0.0010  -
0.0040 1 .
5469 O    O    . GLU GLU GLU B B 292 292 . 0.1612 0.1200 0.1283 0.0094  -0.0124 -
0.0126 1 .
5470 N    N    . ASP ASP ASP B B 293 293 . 0.1755 0.1012 0.0928 0.0110  -0.0015 -
0.0052 1 .
5471 CA   CA   . ASP ASP ASP B B 293 293 . 0.1679 0.1193 0.1017 0.0066  0.0088  -
0.0215 1 .
5472 CB   CB   . ASP ASP ASP B B 293 293 . 0.1928 0.1875 0.0910 0.0228  0.0279  -
0.0149 1 .
5473 CG   CG   . ASP ASP ASP B B 293 293 . 0.1610 0.1765 0.1460 0.0090  -0.0128
0.0009  1 .
5474 OD1  OD1  . ASP ASP ASP B B 293 293 . 0.1657 0.1700 0.1350 0.0349  -0.0092
0.0067  1 .
5475 OD2  OD2  . ASP ASP ASP B B 293 293 . 0.2132 0.1842 0.1111 0.0249  0.0159  -
0.0062 1 .
5476 C    C    . ASP ASP ASP B B 293 293 . 0.1650 0.1337 0.1318 0.0129  -0.0074 -
0.0088 1 .
5477 O    O    . ASP ASP ASP B B 293 293 . 0.1644 0.1290 0.1187 0.0011  -0.0022 -
0.0146 1 .
5478 N    N    . PRO PRO PRO B B 294 294 . 0.1627 0.1355 0.0928 -0.0074 -0.0112 -
0.0010 1 .
5479 CA   CA   . PRO PRO PRO B B 294 294 . 0.1721 0.1366 0.1073 -0.0044 -0.0097 -
0.0262 1 .
5480 CB   CB   . PRO PRO PRO B B 294 294 . 0.1698 0.1645 0.0879 -0.0075 -0.0358 -
0.0212 1 .
5481 CG   CG   . PRO PRO PRO B B 294 294 . 0.1497 0.1670 0.0897 -0.0184 0.0227  -
0.0134 1 .
5482 CD   CD   . PRO PRO PRO B B 294 294 . 0.1924 0.1338 0.0957 -0.0181 -0.0020 -
0.0241 1 .
5483 C    C    . PRO PRO PRO B B 294 294 . 0.1572 0.1444 0.0911 -0.0014 -0.0259 -
0.0062 1 .
5484 O    O    . PRO PRO PRO B B 294 294 . 0.1771 0.1271 0.1220 -0.0223 -0.0080 -
0.0175 1 .
5485 N    N    . PHE PHE PHE B B 295 295 . 0.1873 0.1331 0.0930 0.0117  -0.0132 -
0.0133 1 .
5486 CA   CA   . PHE PHE PHE B B 295 295 . 0.1760 0.1215 0.0945 0.0177  -0.0081 -
0.0024 1 .
5487 CB   CB   . PHE PHE PHE B B 295 295 . 0.1762 0.1343 0.0766 0.0111  -0.0063
0.0155  1 .
5488 CG   CG   . PHE PHE PHE B B 295 295 . 0.1299 0.1192 0.1151 0.0088  -0.0111
0.0084  1 .
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5489 CD1  CD1  . PHE PHE PHE B B 295 295 . 0.1437 0.1362 0.1352 0.0046  0.0183  -
0.0108 1 .
5490 CE1  CE1  . PHE PHE PHE B B 295 295 . 0.1814 0.1433 0.1189 0.0165  -0.0051
0.0005  1 .
5491 CZ   CZ   . PHE PHE PHE B B 295 295 . 0.1862 0.1889 0.1187 -0.0072 -0.0311
0.0248  1 .
5492 CE2  CE2  . PHE PHE PHE B B 295 295 . 0.1829 0.1495 0.1103 -0.0076 -0.0065
0.0133  1 .
5493 CD2  CD2  . PHE PHE PHE B B 295 295 . 0.1818 0.1139 0.1013 0.0361  -0.0019
0.0164  1 .
5494 C    C    . PHE PHE PHE B B 295 295 . 0.1447 0.1170 0.1176 0.0068  -0.0052 -
0.0098 1 .
5495 O    O    . PHE PHE PHE B B 295 295 . 0.1836 0.1265 0.1154 0.0117  -0.0174 -
0.0331 1 .
5496 N    N    . ASP ASP ASP B B 296 296 . 0.1843 0.1093 0.1141 0.0234  -0.0081 -
0.0055 1 .
5497 CA   CA   . ASP ASP ASP B B 296 296 . 0.1902 0.1112 0.1436 0.0213  0.0066  -
0.0036 1 .
5498 CB   CB   . ASP ASP ASP B B 296 296 . 0.1914 0.0898 0.1466 0.0166  0.0095
0.0026  1 .
5499 CG   CG   . ASP ASP ASP B B 296 296 . 0.2255 0.1378 0.1701 0.0453  -0.0090 -
0.0074 1 .
5500 OD1  OD1  . ASP ASP ASP B B 296 296 . 0.2648 0.1242 0.1617 0.0238  -0.0344 -
0.0302 1 .
5501 OD2  OD2  . ASP ASP ASP B B 296 296 . 0.2289 0.1546 0.1494 0.0338  -0.0464 -
0.0384 1 .
5502 C    C    . ASP ASP ASP B B 296 296 . 0.1958 0.0982 0.1475 0.0214  0.0028  -
0.0001 1 .
5503 O    O    . ASP ASP ASP B B 296 296 . 0.1923 0.1067 0.1273 0.0039  -0.0149 -
0.0086 1 .
5504 N    N    . GLN GLN GLN B B 297 297 . 0.1791 0.0892 0.1269 0.0054  0.0253
0.0129  1 .
5505 CA   CA   . GLN GLN GLN B B 297 297 . 0.1877 0.1046 0.1090 0.0171  0.0056  -
0.0168 1 .
5506 CB   CB   . GLN GLN GLN B B 297 297 . 0.2324 0.0792 0.1315 -0.0047 0.0316
0.0156  1 .
5507 CG   CG   . GLN GLN GLN B B 297 297 . 0.2406 0.0822 0.1260 -0.0274 0.0059  -
0.0412 1 .
5508 CD   CD   . GLN GLN GLN B B 297 297 . 0.2350 0.1441 0.1942 0.0114  0.0038  -
0.0299 1 .
5509 OE1  OE1  . GLN GLN GLN B B 297 297 . 0.2590 0.1602 0.1518 0.0201  0.0324  -
0.0046 1 .
5510 NE2  NE2  . GLN GLN GLN B B 297 297 . 0.2290 0.1775 0.2101 -0.0338 0.0383  -
0.0031 1 .
5511 C    C    . GLN GLN GLN B B 297 297 . 0.1715 0.1276 0.1341 0.0029  -0.0045 -
0.0118 1 .
5512 O    O    . GLN GLN GLN B B 297 297 . 0.1875 0.1232 0.1526 -0.0069 0.0080  -
0.0130 1 .
5513 N    N    . ASP ASP ASP B B 298 298 . 0.2021 0.1221 0.1248 0.0079  -0.0113
0.0049  1 .
5514 CA   CA   . ASP ASP ASP B B 298 298 . 0.2069 0.1234 0.1343 0.0065  -0.0032 -
0.0078 1 .
5515 CB   CB   . ASP ASP ASP B B 298 298 . 0.2328 0.1081 0.1604 0.0293  0.0046  -
0.0008 1 .
5516 CG   CG   . ASP ASP ASP B B 298 298 . 0.1920 0.1384 0.1847 0.0235  -0.0135
0.0248  1 .
5517 OD1  OD1  . ASP ASP ASP B B 298 298 . 0.2145 0.1817 0.2223 -0.0052 0.0118
0.0514  1 .
5518 OD2  OD2  . ASP ASP ASP B B 298 298 . 0.2760 0.2289 0.2152 -0.0136 0.0500  -
0.0151 1 .
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5519 C    C    . ASP ASP ASP B B 298 298 . 0.1484 0.1218 0.1217 0.0107  -0.0055 -
0.0121 1 .
5520 O    O    . ASP ASP ASP B B 298 298 . 0.1858 0.0986 0.1384 0.0029  -0.0192
0.0057  1 .
5521 N    N    . ASP ASP ASP B B 299 299 . 0.1997 0.1462 0.1481 0.0135  -0.0119 -
0.0038 1 .
5522 CA   CA   . ASP ASP ASP B B 299 299 . 0.1648 0.1081 0.1362 -0.0104 -0.0058 -
0.0012 1 .
5523 CB   CB   . ASP ASP ASP B B 299 299 . 0.1588 0.1289 0.1416 -0.0141 0.0129  -
0.0048 1 .
5524 CG   CG   . ASP ASP ASP B B 299 299 . 0.1551 0.1145 0.1317 -0.0270 -0.0063 -
0.0093 1 .
5525 OD1  OD1  . ASP ASP ASP B B 299 299 . 0.2135 0.1372 0.1589 0.0039  -0.0260 -
0.0064 1 .
5526 OD2  OD2  . ASP ASP ASP B B 299 299 . 0.1926 0.1420 0.1918 0.0049  -0.0271 -
0.0080 1 .
5527 C    C    . ASP ASP ASP B B 299 299 . 0.1689 0.1475 0.1509 0.0061  -0.0143 -
0.0046 1 .
5528 O    O    . ASP ASP ASP B B 299 299 . 0.1725 0.1217 0.1168 -0.0072 -0.0028
0.0118  1 .
5529 N    N    . TRP TRP TRP B B 300 300 . 0.1604 0.1443 0.1263 -0.0129 -0.0129 -
0.0090 1 .
5530 CA   CA   . TRP TRP TRP B B 300 300 . 0.1544 0.1533 0.1052 -0.0069 -0.0078 -
0.0283 1 .
5531 CB   CB   . TRP TRP TRP B B 300 300 . 0.1491 0.1678 0.1025 -0.0015 0.0233  -
0.0237 1 .
5532 CG   CG   . TRP TRP TRP B B 300 300 . 0.1670 0.1258 0.1087 0.0267  0.0011  -
0.0065 1 .
5533 CD1  CD1  . TRP TRP TRP B B 300 300 . 0.1886 0.1398 0.1008 0.0306  -0.0218 -
0.0422 1 .
5534 NE1  NE1  . TRP TRP TRP B B 300 300 . 0.1941 0.1455 0.1950 -0.0072 -0.0042 -
0.0107 1 .
5535 CE2  CE2  . TRP TRP TRP B B 300 300 . 0.1892 0.1040 0.1284 0.0076  -0.0131
0.0080  1 .
5536 CD2  CD2  . TRP TRP TRP B B 300 300 . 0.2192 0.1311 0.1226 -0.0032 0.0077  -
0.0045 1 .
5537 CE3  CE3  . TRP TRP TRP B B 300 300 . 0.1936 0.1120 0.1882 0.0038  0.0225
0.0006  1 .
5538 CZ3  CZ3  . TRP TRP TRP B B 300 300 . 0.1861 0.1420 0.1317 -0.0057 0.0341
0.0174  1 .
5539 CH2  CH2  . TRP TRP TRP B B 300 300 . 0.2064 0.1935 0.1820 0.0528  0.0127  -
0.0063 1 .
5540 CZ2  CZ2  . TRP TRP TRP B B 300 300 . 0.2092 0.1908 0.1569 -0.0021 -0.0295
0.0246  1 .
5541 C    C    . TRP TRP TRP B B 300 300 . 0.1804 0.1606 0.1438 -0.0108 0.0132  -
0.0087 1 .
5542 O    O    . TRP TRP TRP B B 300 300 . 0.1771 0.1380 0.1183 -0.0181 -0.0150 -
0.0108 1 .
5543 N    N    . ALA ALA ALA B B 301 301 . 0.1851 0.1390 0.1196 -0.0114 0.0107  -
0.0021 1 .
5544 CA   CA   . ALA ALA ALA B B 301 301 . 0.2067 0.1438 0.1266 0.0029  0.0028
0.0041  1 .
5545 CB   CB   . ALA ALA ALA B B 301 301 . 0.2177 0.1304 0.1415 -0.0251 -0.0189
0.0172  1 .
5546 C    C    . ALA ALA ALA B B 301 301 . 0.2015 0.1565 0.1346 0.0014  -0.0007
0.0054  1 .
5547 O    O    . ALA ALA ALA B B 301 301 . 0.2421 0.1226 0.1231 0.0168  0.0190  -
0.0043 1 .
5548 N    N    . ALA ALA ALA B B 302 302 . 0.1436 0.1519 0.1049 0.0038  -0.0203
0.0048  1 .
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5549 CA   CA   . ALA ALA ALA B B 302 302 . 0.1539 0.1417 0.1253 0.0075  -0.0251 -
0.0035 1 .
5550 CB   CB   . ALA ALA ALA B B 302 302 . 0.1675 0.1504 0.1186 0.0115  -0.0521 -
0.0065 1 .
5551 C    C    . ALA ALA ALA B B 302 302 . 0.1609 0.1272 0.1342 0.0042  0.0026  -
0.0022 1 .
5552 O    O    . ALA ALA ALA B B 302 302 . 0.1877 0.1538 0.1176 -0.0046 0.0178  -
0.0139 1 .
5553 N    N    . TRP TRP TRP B B 303 303 . 0.1893 0.1215 0.1208 -0.0124 0.0127  -
0.0112 1 .
5554 CA   CA   . TRP TRP TRP B B 303 303 . 0.1823 0.1183 0.1129 -0.0169 0.0065  -
0.0144 1 .
5555 CB   CB   . TRP TRP TRP B B 303 303 . 0.1949 0.1353 0.1311 -0.0113 -0.0042 -
0.0054 1 .
5556 CG   CG   . TRP TRP TRP B B 303 303 . 0.2123 0.0640 0.1171 -0.0086 -0.0235 -
0.0018 1 .
5557 CD1  CD1  . TRP TRP TRP B B 303 303 . 0.1714 0.1108 0.0671 0.0036  -0.0045 -
0.0273 1 .
5558 NE1  NE1  . TRP TRP TRP B B 303 303 . 0.2094 0.0969 0.1092 0.0227  -0.0038
0.0248  1 .
5559 CE2  CE2  . TRP TRP TRP B B 303 303 . 0.1997 0.0994 0.0959 0.0044  -0.0231 -
0.0128 1 .
5560 CD2  CD2  . TRP TRP TRP B B 303 303 . 0.1399 0.0970 0.0699 -0.0118 -0.0167
0.0171  1 .
5561 CE3  CE3  . TRP TRP TRP B B 303 303 . 0.1705 0.0745 0.1124 0.0218  0.0303  -
0.0039 1 .
5562 CZ3  CZ3  . TRP TRP TRP B B 303 303 . 0.1968 0.1036 0.0772 0.0409  -0.0360 -
0.0107 1 .
5563 CH2  CH2  . TRP TRP TRP B B 303 303 . 0.2335 0.0759 0.1278 -0.0020 -0.0429 -
0.0202 1 .
5564 CZ2  CZ2  . TRP TRP TRP B B 303 303 . 0.1394 0.0899 0.1135 -0.0037 0.0043
0.0297  1 .
5565 C    C    . TRP TRP TRP B B 303 303 . 0.1793 0.1316 0.1198 0.0000  -0.0131 -
0.0012 1 .
5566 O    O    . TRP TRP TRP B B 303 303 . 0.2130 0.1168 0.1044 -0.0003 0.0023  -
0.0045 1 .
5567 N    N    . SER SER SER B B 304 304 . 0.1772 0.1307 0.0829 0.0038  -0.0337
0.0019  1 .
5568 CA   CA   . SER SER SER B B 304 304 . 0.1731 0.1499 0.1137 0.0163  -0.0155 -
0.0058 1 .
5569 CB   CB   . SER SER SER B B 304 304 . 0.1519 0.1828 0.1551 0.0387  -0.0008
0.0021  1 .
5570 OG   OG   . SER SER SER B B 304 304 . 0.2179 0.1610 0.1738 0.0194  0.0130  -
0.0066 1 .
5571 C    C    . SER SER SER B B 304 304 . 0.1897 0.1524 0.1345 0.0074  -0.0069
0.0025  1 .
5572 O    O    . SER SER SER B B 304 304 . 0.2097 0.1192 0.1208 0.0031  0.0055  -
0.0079 1 .
5573 N    N    . LYS LYS LYS B B 305 305 . 0.1812 0.1387 0.1347 0.0170  0.0029
0.0020  1 .
5574 CA   CA   . LYS LYS LYS B B 305 305 . 0.2029 0.1680 0.1635 0.0044  0.0201
0.0065  1 .
5575 CB   CB   . LYS LYS LYS B B 305 305 . 0.1931 0.1841 0.2005 -0.0198 0.0372
0.0063  1 .
5576 CG   CG   . LYS LYS LYS B B 305 305 . 0.2398 0.2649 0.2186 0.0150  0.0635  -
0.0128 1 .
5577 CD   CD   . LYS LYS LYS B B 305 305 . 0.3127 0.3752 0.3713 -0.0359 0.0656
0.0068  1 .
5578 CE   CE   . LYS LYS LYS B B 305 305 . 0.3046 0.5359 0.4713 0.0403  0.0775  -
0.0099 1 .
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5579 NZ   NZ   . LYS LYS LYS B B 305 305 . 0.4398 0.6113 0.5747 0.0651  0.0634
0.0240  1 .
5580 C    C    . LYS LYS LYS B B 305 305 . 0.2090 0.1608 0.1472 0.0099  0.0163
0.0099  1 .
5581 O    O    . LYS LYS LYS B B 305 305 . 0.2398 0.1568 0.1429 0.0086  0.0161
0.0107  1 .
5582 N    N    . PHE PHE PHE B B 306 306 . 0.1555 0.1482 0.1092 0.0158  -0.0108
0.0178  1 .
5583 CA   CA   . PHE PHE PHE B B 306 306 . 0.1849 0.1490 0.1121 0.0139  -0.0138
0.0019  1 .
5584 CB   CB   . PHE PHE PHE B B 306 306 . 0.2066 0.1818 0.1205 0.0053  -0.0332
0.0123  1 .
5585 CG   CG   . PHE PHE PHE B B 306 306 . 0.2012 0.1160 0.1428 0.0044  0.0050  -
0.0218 1 .
5586 CD1  CD1  . PHE PHE PHE B B 306 306 . 0.1893 0.1782 0.2367 0.0358  -0.0156 -
0.0348 1 .
5587 CE1  CE1  . PHE PHE PHE B B 306 306 . 0.2053 0.1664 0.1484 0.0164  -0.0066 -
0.0308 1 .
5588 CZ   CZ   . PHE PHE PHE B B 306 306 . 0.2299 0.1127 0.1988 -0.0061 -0.0004 -
0.0043 1 .
5589 CE2  CE2  . PHE PHE PHE B B 306 306 . 0.1875 0.1448 0.2316 0.0075  -0.0185 -
0.0010 1 .
5590 CD2  CD2  . PHE PHE PHE B B 306 306 . 0.2212 0.1292 0.1258 -0.0024 -0.0172 -
0.0365 1 .
5591 C    C    . PHE PHE PHE B B 306 306 . 0.1833 0.1598 0.1324 0.0134  -0.0072
0.0121  1 .
5592 O    O    . PHE PHE PHE B B 306 306 . 0.2240 0.1344 0.1304 0.0156  0.0014  -
0.0049 1 .
5593 N    N    . THR THR THR B B 307 307 . 0.1893 0.1535 0.0976 0.0020  0.0016
0.0030  1 .
5594 CA   CA   . THR THR THR B B 307 307 . 0.2016 0.1824 0.1186 -0.0097 -0.0056 -
0.0074 1 .
5595 CB   CB   . THR THR THR B B 307 307 . 0.1942 0.1807 0.1188 -0.0054 0.0082  -
0.0184 1 .
5596 OG1  OG1  . THR THR THR B B 307 307 . 0.2209 0.1425 0.1068 0.0219  0.0093  -
0.0168 1 .
5597 CG2  CG2  . THR THR THR B B 307 307 . 0.2668 0.1401 0.1513 -0.0468 -0.0037 -
0.0096 1 .
5598 C    C    . THR THR THR B B 307 307 . 0.2107 0.1503 0.1199 -0.0095 -0.0045 -
0.0125 1 .
5599 O    O    . THR THR THR B B 307 307 . 0.2229 0.1502 0.1087 0.0069  0.0091  -
0.0211 1 .
5600 N    N    . ALA ALA ALA B B 308 308 . 0.2342 0.1612 0.1012 0.0105  -0.0043
0.0009  1 .
5601 CA   CA   . ALA ALA ALA B B 308 308 . 0.2405 0.1673 0.1451 0.0126  -0.0045 -
0.0089 1 .
5602 CB   CB   . ALA ALA ALA B B 308 308 . 0.2628 0.1708 0.1352 0.0267  -0.0032
0.0050  1 .
5603 C    C    . ALA ALA ALA B B 308 308 . 0.2083 0.1764 0.1391 0.0096  0.0020  -
0.0134 1 .
5604 O    O    . ALA ALA ALA B B 308 308 . 0.2512 0.2614 0.1513 0.0374  0.0005  -
0.0426 1 .
5605 N    N    . ASN ASN ASN B B 309 309 . 0.1922 0.1523 0.1314 0.0073  0.0123
0.0117  1 .
5606 CA   CA   . ASN ASN ASN B B 309 309 . 0.1935 0.1858 0.1420 0.0061  0.0016  -
0.0109 1 .
5607 CB   CB   . ASN ASN ASN B B 309 309 . 0.2255 0.1956 0.2194 0.0138  0.0339
0.0083  1 .
5608 CG   CG   . ASN ASN ASN B B 309 309 . 0.3879 0.2977 0.2528 -0.0339 0.0151
0.0337  1 .
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5609 OD1  OD1  . ASN ASN ASN B B 309 309 . 0.5385 0.3515 0.3589 -0.0617 -0.0498
0.1329  1 .
5610 ND2  ND2  . ASN ASN ASN B B 309 309 . 0.5161 0.3289 0.3907 -0.0146 0.0928  -
0.0014 1 .
5611 C    C    . ASN ASN ASN B B 309 309 . 0.1844 0.1712 0.1403 -0.0043 0.0068  -
0.0220 1 .
5612 O    O    . ASN ASN ASN B B 309 309 . 0.2193 0.1810 0.2090 -0.0061 0.0274
0.0022  1 .
5613 N    N    . VAL VAL VAL B B 310 310 . 0.1908 0.1602 0.1159 0.0099  0.0058  -
0.0139 1 .
5614 CA   CA   . VAL VAL VAL B B 310 310 . 0.2084 0.1782 0.1020 0.0103  0.0008  -
0.0227 1 .
5615 CB   CB   . VAL VAL VAL B B 310 310 . 0.2043 0.2085 0.1116 0.0026  -0.0078
0.0094  1 .
5616 CG1  CG1  . VAL VAL VAL B B 310 310 . 0.2518 0.2043 0.2060 -0.0041 -0.0334 -
0.0276 1 .
5617 CG2  CG2  . VAL VAL VAL B B 310 310 . 0.1795 0.1490 0.1692 0.0151  0.0194
0.0128  1 .
5618 C    C    . VAL VAL VAL B B 310 310 . 0.1933 0.1672 0.0839 0.0264  0.0106  -
0.0148 1 .
5619 O    O    . VAL VAL VAL B B 310 310 . 0.2086 0.1445 0.1096 0.0129  0.0119  -
0.0343 1 .
5620 N    N    . GLY GLY GLY B B 311 311 . 0.2329 0.1633 0.0896 0.0178  -0.0095 -
0.0184 1 .
5621 CA   CA   . GLY GLY GLY B B 311 311 . 0.2096 0.1461 0.0680 0.0127  0.0339  -
0.0025 1 .
5622 C    C    . GLY GLY GLY B B 311 311 . 0.1971 0.1801 0.1068 -0.0063 0.0052
0.0075  1 .
5623 O    O    . GLY GLY GLY B B 311 311 . 0.2362 0.1671 0.0916 0.0035  0.0049  -
0.0121 1 .
5624 N    N    . ILE ILE ILE B B 312 312 . 0.2002 0.1479 0.0812 -0.0009 0.0223  -
0.0130 1 .
5625 CA   CA   . ILE ILE ILE B B 312 312 . 0.1692 0.1365 0.0969 0.0008  -0.0001
0.0113  1 .
5626 CB   CB   . ILE ILE ILE B B 312 312 . 0.1325 0.1097 0.0850 -0.0113 -0.0052
0.0125  1 .
5627 CG1  CG1  . ILE ILE ILE B B 312 312 . 0.1892 0.1142 0.1200 -0.0128 -0.0376 -
0.0080 1 .
5628 CD   CD   . ILE ILE ILE B B 312 312 . 0.2515 0.2174 0.1164 -0.0115 -0.0271 -
0.0621 1 .
5629 CG2  CG2  . ILE ILE ILE B B 312 312 . 0.1699 0.1660 0.1268 0.0023  0.0303  -
0.0030 1 .
5630 C    C    . ILE ILE ILE B B 312 312 . 0.1778 0.1212 0.0878 0.0190  0.0057
0.0038  1 .
5631 O    O    . ILE ILE ILE B B 312 312 . 0.2010 0.1582 0.1008 0.0400  0.0123  -
0.0011 1 .
5632 N    N    . GLN GLN GLN B B 313 313 . 0.1588 0.1062 0.1001 0.0027  0.0413
0.0045  1 .
5633 CA   CA   . GLN GLN GLN B B 313 313 . 0.1561 0.0945 0.0950 -0.0001 0.0250  -
0.0082 1 .
5634 CB   CB   . GLN GLN GLN B B 313 313 . 0.1691 0.0864 0.1191 0.0101  0.0443  -
0.0058 1 .
5635 CG   CG   . GLN GLN GLN B B 313 313 . 0.1976 0.1176 0.1017 -0.0040 0.0370  -
0.0049 1 .
5636 CD   CD   . GLN GLN GLN B B 313 313 . 0.1661 0.1578 0.1261 -0.0080 0.0105
0.0076  1 .
5637 OE1  OE1  . GLN GLN GLN B B 313 313 . 0.2162 0.1850 0.1726 -0.0113 0.0129
0.0133  1 .
5638 NE2  NE2  . GLN GLN GLN B B 313 313 . 0.2100 0.1457 0.1151 0.0388  0.0175  -
0.0010 1 .
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5639 C    C    . GLN GLN GLN B B 313 313 . 0.1234 0.1150 0.0888 0.0124  0.0131
0.0015  1 .
5640 O    O    . GLN GLN GLN B B 313 313 . 0.1758 0.1269 0.0887 0.0015  -0.0020 -
0.0264 1 .
5641 N    N    . ILE ILE ILE B B 314 314 . 0.1608 0.1013 0.0759 0.0258  0.0175  -
0.0157 1 .
5642 CA   CA   . ILE ILE ILE B B 314 314 . 0.1596 0.1011 0.0898 0.0120  0.0092
0.0002  1 .
5643 CB   CB   . ILE ILE ILE B B 314 314 . 0.1743 0.1052 0.0915 0.0148  0.0239
0.0200  1 .
5644 CG1  CG1  . ILE ILE ILE B B 314 314 . 0.1177 0.1449 0.1337 0.0464  0.0047  -
0.0278 1 .
5645 CD   CD   . ILE ILE ILE B B 314 314 . 0.1194 0.2189 0.1734 0.0079  0.0221
0.0039  1 .
5646 CG2  CG2  . ILE ILE ILE B B 314 314 . 0.2305 0.1084 0.1526 0.0106  -0.0123
0.0012  1 .
5647 C    C    . ILE ILE ILE B B 314 314 . 0.1341 0.1205 0.1085 -0.0025 0.0038  -
0.0055 1 .
5648 O    O    . ILE ILE ILE B B 314 314 . 0.1495 0.1138 0.0731 0.0028  0.0096  -
0.0031 1 .
5649 N    N    . VAL VAL VAL B B 315 315 . 0.1717 0.1072 0.0973 -0.0035 0.0004  -
0.0059 1 .
5650 CA   CA   . VAL VAL VAL B B 315 315 . 0.1667 0.0952 0.1046 0.0233  -0.0003
0.0026  1 .
5651 CB   CB   . VAL VAL VAL B B 315 315 . 0.1865 0.0899 0.0878 0.0277  0.0306
0.0084  1 .
5652 CG1  CG1  . VAL VAL VAL B B 315 315 . 0.1450 0.1266 0.1345 0.0393  0.0303  -
0.0251 1 .
5653 CG2  CG2  . VAL VAL VAL B B 315 315 . 0.1613 0.1107 0.1255 0.0295  0.0104  -
0.0149 1 .
5654 C    C    . VAL VAL VAL B B 315 315 . 0.1290 0.1215 0.0769 0.0059  -0.0008
0.0044  1 .
5655 O    O    . VAL VAL VAL B B 315 315 . 0.1372 0.1456 0.1002 0.0131  -0.0041
0.0119  1 .
5656 N    N    . GLY GLY GLY B B 316 316 . 0.1524 0.1193 0.0929 0.0236  0.0132
0.0020  1 .
5657 CA   CA   . GLY GLY GLY B B 316 316 . 0.1693 0.1313 0.0837 0.0455  0.0146  -
0.0221 1 .
5658 C    C    . GLY GLY GLY B B 316 316 . 0.1565 0.1371 0.1109 0.0174  0.0164
0.0071  1 .
5659 O    O    . GLY GLY GLY B B 316 316 . 0.1941 0.1388 0.1272 0.0143  0.0209
0.0050  1 .
5660 N    N    . ASP ASP ASP B B 317 317 . 0.1811 0.1169 0.1039 0.0226  0.0236  -
0.0040 1 .
5661 CA   CA   . ASP ASP ASP B B 317 317 . 0.1957 0.1288 0.1090 0.0262  0.0057  -
0.0271 1 .
5662 CB   CB   . ASP ASP ASP B B 317 317 . 0.2089 0.1701 0.1082 0.0206  -0.0132 -
0.0051 1 .
5663 CG   CG   . ASP ASP ASP B B 317 317 . 0.1555 0.0985 0.0956 0.0281  0.0034  -
0.0409 1 .
5664 OD1  OD1  . ASP ASP ASP B B 317 317 . 0.1942 0.1720 0.1449 0.0375  0.0191
0.0210  1 .
5665 OD2  OD2  . ASP ASP ASP B B 317 317 . 0.1354 0.1503 0.1265 0.0013  0.0141  -
0.0099 1 .
5666 C    C    . ASP ASP ASP B B 317 317 . 0.1831 0.1278 0.1137 0.0122  0.0022  -
0.0121 1 .
5667 O    O    . ASP ASP ASP B B 317 317 . 0.2040 0.1162 0.1484 0.0204  0.0067  -
0.0230 1 .
5668 N    N    . ASP ASP ASP B B 318 318 . 0.2071 0.1551 0.1210 0.0220  0.0161
0.0188  1 .
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5669 CA   CA   . ASP ASP ASP B B 318 318 . 0.2052 0.1588 0.1220 0.0196  -0.0106 -
0.0015 1 .
5670 CB   CB   . ASP ASP ASP B B 318 318 . 0.1959 0.1385 0.1179 0.0145  -0.0396 -
0.0070 1 .
5671 CG   CG   . ASP ASP ASP B B 318 318 . 0.1631 0.1335 0.1473 0.0236  -0.0198 -
0.0079 1 .
5672 OD1  OD1  . ASP ASP ASP B B 318 318 . 0.2485 0.1933 0.1458 0.0464  0.0190  -
0.0031 1 .
5673 OD2  OD2  . ASP ASP ASP B B 318 318 . 0.2121 0.2220 0.2308 -0.0097 -0.0309 -
0.0015 1 .
5674 C    C    . ASP ASP ASP B B 318 318 . 0.2074 0.1493 0.1163 0.0238  -0.0021
0.0031  1 .
5675 O    O    . ASP ASP ASP B B 318 318 . 0.2093 0.1436 0.1235 0.0033  0.0037
0.0085  1 .
5676 N    N    . LEU LEU LEU B B 319 319 . 0.1991 0.1508 0.0943 -0.0005 0.0020  -
0.0043 1 .
5677 CA   CA   . LEU LEU LEU B B 319 319 . 0.1730 0.1318 0.0946 0.0122  -0.0148 -
0.0247 1 .
5678 CB   CB   . LEU LEU LEU B B 319 319 . 0.2034 0.1618 0.0707 0.0275  -0.0102 -
0.0269 1 .
5679 CG   CG   . LEU LEU LEU B B 319 319 . 0.1923 0.1174 0.1163 0.0215  -0.0150
0.0055  1 .
5680 CD1  CD1  . LEU LEU LEU B B 319 319 . 0.1966 0.1110 0.1363 -0.0081 -0.0054 -
0.0268 1 .
5681 CD2  CD2  . LEU LEU LEU B B 319 319 . 0.2366 0.1716 0.1118 0.0131  -0.0629 -
0.0375 1 .
5682 C    C    . LEU LEU LEU B B 319 319 . 0.1770 0.1437 0.1213 0.0101  -0.0035 -
0.0064 1 .
5683 O    O    . LEU LEU LEU B B 319 319 . 0.1925 0.1758 0.1308 0.0240  0.0149  -
0.0254 1 .
5684 N    N    . THR THR THR B B 320 320 . 0.1869 0.1521 0.1070 0.0043  -0.0068
0.0162  1 .
5685 CA   CA   . THR THR THR B B 320 320 . 0.1750 0.1320 0.1313 0.0098  -0.0027
0.0135  1 .
5686 CB   CB   . THR THR THR B B 320 320 . 0.1914 0.1544 0.1247 0.0180  -0.0131
0.0178  1 .
5687 OG1  OG1  . THR THR THR B B 320 320 . 0.1721 0.1509 0.1640 0.0227  -0.0041 -
0.0063 1 .
5688 CG2  CG2  . THR THR THR B B 320 320 . 0.2084 0.2064 0.0863 0.0383  -0.0038
0.0092  1 .
5689 C    C    . THR THR THR B B 320 320 . 0.1680 0.1535 0.1373 0.0177  -0.0011
0.0010  1 .
5690 O    O    . THR THR THR B B 320 320 . 0.1743 0.1362 0.1275 0.0168  0.0151
0.0198  1 .
5691 N    N    . VAL VAL VAL B B 321 321 . 0.1979 0.1406 0.1443 0.0147  0.0035
0.0087  1 .
5692 CA   CA   . VAL VAL VAL B B 321 321 . 0.1860 0.1357 0.1417 0.0263  0.0069  -
0.0010 1 .
5693 CB   CB   . VAL VAL VAL B B 321 321 . 0.1832 0.1144 0.1306 0.0188  -0.0095
0.0000  1 .
5694 CG1  CG1  . VAL VAL VAL B B 321 321 . 0.1682 0.1217 0.1253 0.0290  0.0079
0.0175  1 .
5695 CG2  CG2  . VAL VAL VAL B B 321 321 . 0.2031 0.1399 0.1820 0.0458  -0.0089
0.0114  1 .
5696 C    C    . VAL VAL VAL B B 321 321 . 0.1942 0.1455 0.1361 0.0226  0.0028
0.0051  1 .
5697 O    O    . VAL VAL VAL B B 321 321 . 0.2105 0.1639 0.1305 0.0215  0.0004
0.0359  1 .
5698 N    N    . THR THR THR B B 322 322 . 0.2043 0.1341 0.1171 0.0101  -0.0110
0.0143  1 .
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5699 CA   CA   . THR THR THR B B 322 322 . 0.1763 0.1683 0.1467 0.0213  0.0038
0.0098  1 .
5700 CB   CB   . THR THR THR B B 322 322 . 0.1715 0.1597 0.1500 0.0060  0.0012
0.0220  1 .
5701 OG1  OG1  . THR THR THR B B 322 322 . 0.1903 0.1796 0.1329 0.0244  0.0049
0.0010  1 .
5702 CG2  CG2  . THR THR THR B B 322 322 . 0.2053 0.1741 0.1472 -0.0138 0.0149  -
0.0242 1 .
5703 C    C    . THR THR THR B B 322 322 . 0.2074 0.1865 0.1754 0.0241  0.0042
0.0101  1 .
5704 O    O    . THR THR THR B B 322 322 . 0.2009 0.1619 0.1807 0.0149  0.0197
0.0108  1 .
5705 N    N    . ASN ASN ASN B B 323 323 . 0.2055 0.1596 0.1667 0.0330  0.0099
0.0011  1 .
5706 CA   CA   . ASN ASN ASN B B 323 323 . 0.1718 0.1912 0.1768 0.0317  -0.0078 -
0.0040 1 .
5707 CB   CB   . ASN ASN ASN B B 323 323 . 0.1779 0.1654 0.1721 0.0210  -0.0160
0.0133  1 .
5708 CG   CG   . ASN ASN ASN B B 323 323 . 0.2281 0.2051 0.1942 0.0320  -0.0066 -
0.0101 1 .
5709 OD1  OD1  . ASN ASN ASN B B 323 323 . 0.2892 0.2896 0.2582 0.0867  -0.0695 -
0.0427 1 .
5710 ND2  ND2  . ASN ASN ASN B B 323 323 . 0.2710 0.1870 0.1888 0.0215  0.0367  -
0.0123 1 .
5711 C    C    . ASN ASN ASN B B 323 323 . 0.2110 0.2035 0.2154 0.0109  -0.0035
0.0110  1 .
5712 O    O    . ASN ASN ASN B B 323 323 . 0.2019 0.1974 0.2162 0.0470  0.0001
0.0323  1 .
5713 N    N    . PRO PRO PRO B B 324 324 . 0.2057 0.2472 0.2143 0.0074  0.0055
0.0176  1 .
5714 CA   CA   . PRO PRO PRO B B 324 324 . 0.2156 0.2209 0.2364 0.0034  -0.0089
0.0235  1 .
5715 CB   CB   . PRO PRO PRO B B 324 324 . 0.2243 0.2289 0.2359 -0.0239 0.0093
0.0337  1 .
5716 CG   CG   . PRO PRO PRO B B 324 324 . 0.2489 0.2408 0.2236 0.0102  -0.0151
0.0010  1 .
5717 CD   CD   . PRO PRO PRO B B 324 324 . 0.2059 0.2451 0.2555 -0.0091 0.0014
0.0252  1 .
5718 C    C    . PRO PRO PRO B B 324 324 . 0.2279 0.2253 0.2320 0.0015  0.0027
0.0174  1 .
5719 O    O    . PRO PRO PRO B B 324 324 . 0.2276 0.2521 0.2418 0.0186  0.0067
0.0410  1 .
5720 N    N    . LYS LYS LYS B B 325 325 . 0.2344 0.2666 0.2560 0.0270  -0.0008
0.0211  1 .
5721 CA   CA   . LYS LYS LYS B B 325 325 . 0.2491 0.2249 0.2515 0.0198  -0.0010
0.0175  1 .
5722 CB   CB   . LYS LYS LYS B B 325 325 . 0.2588 0.2763 0.2734 0.0263  0.0107
0.0133  1 .
5723 CG   CG   . LYS LYS LYS B B 325 325 . 0.2646 0.3156 0.3616 0.0195  -0.0177 -
0.0147 1 .
5724 C    C    . LYS LYS LYS B B 325 325 . 0.2375 0.2440 0.2189 0.0185  -0.0083
0.0186  1 .
5725 O    O    . LYS LYS LYS B B 325 325 . 0.2530 0.2281 0.2334 0.0468  -0.0185
0.0563  1 .
5726 N    N    . ARG ARG ARG B B 326 326 . 0.2281 0.2084 0.2182 0.0276  -0.0084
0.0382  1 .
5727 CA   CA   . ARG ARG ARG B B 326 326 . 0.1843 0.1905 0.1792 0.0184  -0.0038
0.0226  1 .
5728 CB   CB   . ARG ARG ARG B B 326 326 . 0.2216 0.2105 0.1593 -0.0118 0.0013  -
0.0013 1 .
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5729 CG   CG   . ARG ARG ARG B B 326 326 . 0.2881 0.2632 0.2785 -0.0002 0.0556  -
0.0580 1 .
5730 CD   CD   . ARG ARG ARG B B 326 326 . 0.2820 0.2848 0.3560 0.0087  0.0726  -
0.0132 1 .
5731 NE   NE   . ARG ARG ARG B B 326 326 . 0.2664 0.2320 0.2406 0.0057  0.0429  -
0.0492 1 .
5732 CZ   CZ   . ARG ARG ARG B B 326 326 . 0.2456 0.1920 0.2452 0.0339  -0.0053
0.0196  1 .
5733 NH1  NH1  . ARG ARG ARG B B 326 326 . 0.2255 0.1526 0.1494 -0.0053 0.0379
0.0381  1 .
5734 NH2  NH2  . ARG ARG ARG B B 326 326 . 0.3089 0.2094 0.2259 0.0917  -0.0869
0.0011  1 .
5735 C    C    . ARG ARG ARG B B 326 326 . 0.1624 0.1735 0.1594 -0.0017 -0.0148
0.0302  1 .
5736 O    O    . ARG ARG ARG B B 326 326 . 0.1898 0.1592 0.1668 0.0246  -0.0033
0.0428  1 .
5737 N    N    . ILE ILE ILE B B 327 327 . 0.2055 0.1779 0.1543 0.0198  -0.0179
0.0323  1 .
5738 CA   CA   . ILE ILE ILE B B 327 327 . 0.1715 0.1694 0.1392 0.0221  0.0001
0.0366  1 .
5739 CB   CB   . ILE ILE ILE B B 327 327 . 0.1702 0.1739 0.1610 0.0044  -0.0205
0.0211  1 .
5740 CG1  CG1  . ILE ILE ILE B B 327 327 . 0.1926 0.1966 0.1584 0.0204  -0.0024
0.0259  1 .
5741 CD   CD   . ILE ILE ILE B B 327 327 . 0.2466 0.1524 0.1361 0.0068  0.0195
0.0361  1 .
5742 CG2  CG2  . ILE ILE ILE B B 327 327 . 0.1699 0.1899 0.1838 -0.0413 0.0082  -
0.0073 1 .
5743 C    C    . ILE ILE ILE B B 327 327 . 0.1927 0.1858 0.1659 0.0266  -0.0014
0.0380  1 .
5744 O    O    . ILE ILE ILE B B 327 327 . 0.2203 0.1632 0.1396 0.0263  -0.0130
0.0575  1 .
5745 N    N    . GLU GLU GLU B B 328 328 . 0.2014 0.1826 0.1862 0.0431  -0.0085
0.0340  1 .
5746 CA   CA   . GLU GLU GLU B B 328 328 . 0.1940 0.2460 0.2236 0.0479  -0.0073
0.0502  1 .
5747 CB   CB   . GLU GLU GLU B B 328 328 . 0.2261 0.2635 0.2842 0.0629  0.0140
0.0392  1 .
5748 CG   CG   . GLU GLU GLU B B 328 328 . 0.3132 0.3814 0.3989 0.0325  0.0041
0.0561  1 .
5749 CD   CD   . GLU GLU GLU B B 328 328 . 0.4437 0.5669 0.5484 0.0004  -0.0372
0.0247  1 .
5750 OE1  OE1  . GLU GLU GLU B B 328 328 . 0.4299 0.5941 0.5699 0.0345  -0.0194
0.0416  1 .
5751 OE2  OE2  . GLU GLU GLU B B 328 328 . 0.4572 0.6654 0.6810 -0.0023 -0.0171
0.0707  1 .
5752 C    C    . GLU GLU GLU B B 328 328 . 0.2127 0.2276 0.2029 0.0482  -0.0061
0.0289  1 .
5753 O    O    . GLU GLU GLU B B 328 328 . 0.2371 0.2741 0.1915 0.0427  -0.0322
0.0276  1 .
5754 N    N    . ARG ARG ARG B B 329 329 . 0.2067 0.2076 0.1819 0.0555  -0.0030
0.0434  1 .
5755 CA   CA   . ARG ARG ARG B B 329 329 . 0.1787 0.1815 0.1789 0.0315  -0.0093
0.0215  1 .
5756 CB   CB   . ARG ARG ARG B B 329 329 . 0.2173 0.1950 0.1639 0.0215  -0.0132
0.0146  1 .
5757 CG   CG   . ARG ARG ARG B B 329 329 . 0.2151 0.1715 0.1734 0.0035  -0.0102 -
0.0066 1 .
5758 CD   CD   . ARG ARG ARG B B 329 329 . 0.2579 0.1695 0.2185 -0.0010 0.0015  -
0.0098 1 .
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5759 NE   NE   . ARG ARG ARG B B 329 329 . 0.2350 0.2373 0.2323 0.0084  0.0007  -
0.0208 1 .
5760 CZ   CZ   . ARG ARG ARG B B 329 329 . 0.2678 0.2231 0.2523 0.0263  -0.0047
0.0131  1 .
5761 NH1  NH1  . ARG ARG ARG B B 329 329 . 0.2674 0.2028 0.2686 0.0851  0.0125
0.0298  1 .
5762 NH2  NH2  . ARG ARG ARG B B 329 329 . 0.2694 0.2034 0.2838 0.0504  -0.0092
0.0174  1 .
5763 C    C    . ARG ARG ARG B B 329 329 . 0.2237 0.1758 0.1683 0.0398  0.0012
0.0321  1 .
5764 O    O    . ARG ARG ARG B B 329 329 . 0.2480 0.1606 0.1728 0.0478  0.0026
0.0283  1 .
5765 N    N    . ALA ALA ALA B B 330 330 . 0.2108 0.1663 0.1319 0.0521  -0.0087
0.0229  1 .
5766 CA   CA   . ALA ALA ALA B B 330 330 . 0.1793 0.1623 0.1253 0.0136  -0.0235
0.0333  1 .
5767 CB   CB   . ALA ALA ALA B B 330 330 . 0.2067 0.1353 0.1413 0.0238  -0.0259
0.0441  1 .
5768 C    C    . ALA ALA ALA B B 330 330 . 0.1882 0.1606 0.1486 0.0054  -0.0070
0.0243  1 .
5769 O    O    . ALA ALA ALA B B 330 330 . 0.2173 0.1796 0.1544 0.0163  -0.0202
0.0083  1 .
5770 N    N    . VAL VAL VAL B B 331 331 . 0.1901 0.1601 0.1573 0.0111  -0.0284
0.0048  1 .
5771 CA   CA   . VAL VAL VAL B B 331 331 . 0.2227 0.2029 0.1587 -0.0056 -0.0278
0.0027  1 .
5772 CB   CB   . VAL VAL VAL B B 331 331 . 0.2324 0.1867 0.1759 0.0052  -0.0252
0.0068  1 .
5773 CG1  CG1  . VAL VAL VAL B B 331 331 . 0.1958 0.2318 0.1968 -0.0393 -0.0355 -
0.0176 1 .
5774 CG2  CG2  . VAL VAL VAL B B 331 331 . 0.2132 0.1861 0.2006 -0.0209 -0.0361
0.0467  1 .
5775 C    C    . VAL VAL VAL B B 331 331 . 0.2276 0.2066 0.1802 0.0133  -0.0218 -
0.0007 1 .
5776 O    O    . VAL VAL VAL B B 331 331 . 0.2478 0.2190 0.2076 0.0228  -0.0285 -
0.0062 1 .
5777 N    N    . GLU GLU GLU B B 332 332 . 0.2465 0.2288 0.1761 0.0277  -0.0150
0.0108  1 .
5778 CA   CA   . GLU GLU GLU B B 332 332 . 0.2708 0.2444 0.2035 0.0260  -0.0196
0.0281  1 .
5779 CB   CB   . GLU GLU GLU B B 332 332 . 0.2972 0.2350 0.1778 0.0596  -0.0092
0.0503  1 .
5780 CG   CG   . GLU GLU GLU B B 332 332 . 0.3901 0.3341 0.2778 0.0435  0.0077
0.1270  1 .
5781 C    C    . GLU GLU GLU B B 332 332 . 0.2366 0.2111 0.1679 0.0328  -0.0165
0.0174  1 .
5782 O    O    . GLU GLU GLU B B 332 332 . 0.2739 0.2777 0.1978 0.0097  -0.0247
0.0086  1 .
5783 N    N    . GLU GLU GLU B B 333 333 . 0.2181 0.1816 0.1844 0.0076  -0.0189
0.0006  1 .
5784 CA   CA   . GLU GLU GLU B B 333 333 . 0.2186 0.1679 0.1428 0.0106  -0.0167
0.0059  1 .
5785 CB   CB   . GLU GLU GLU B B 333 333 . 0.2040 0.1545 0.1950 0.0141  -0.0254 -
0.0070 1 .
5786 CG   CG   . GLU GLU GLU B B 333 333 . 0.2542 0.1835 0.2300 0.0318  0.0017
0.0170  1 .
5787 CD   CD   . GLU GLU GLU B B 333 333 . 0.2677 0.2531 0.2222 0.0004  0.0227  -
0.0356 1 .
5788 OE1  OE1  . GLU GLU GLU B B 333 333 . 0.2953 0.2557 0.2033 -0.0015 0.0207
0.0000  1 .
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5789 OE2  OE2  . GLU GLU GLU B B 333 333 . 0.2740 0.2715 0.2197 0.0651  -0.0364 -
0.0337 1 .
5790 C    C    . GLU GLU GLU B B 333 333 . 0.1933 0.1676 0.1199 -0.0091 -0.0191 -
0.0045 1 .
5791 O    O    . GLU GLU GLU B B 333 333 . 0.2326 0.1740 0.1501 0.0002  -0.0130
0.0119  1 .
5792 N    N    . LYS LYS LYS B B 334 334 . 0.2363 0.1554 0.1114 -0.0065 -0.0255 -
0.0156 1 .
5793 CA   CA   . LYS LYS LYS B B 334 334 . 0.1875 0.1973 0.1397 0.0150  -0.0139 -
0.0130 1 .
5794 CB   CB   . LYS LYS LYS B B 334 334 . 0.2021 0.2039 0.1393 -0.0249 -0.0218 -
0.0477 1 .
5795 CG   CG   . LYS LYS LYS B B 334 334 . 0.2256 0.3189 0.1350 -0.0096 -0.0289 -
0.0649 1 .
5796 CD   CD   . LYS LYS LYS B B 334 334 . 0.3363 0.4150 0.1076 -0.0364 -0.0054 -
0.0974 1 .
5797 CE   CE   . LYS LYS LYS B B 334 334 . 0.4325 0.5744 0.3802 -0.0148 -0.0697 -
0.0151 1 .
5798 NZ   NZ   . LYS LYS LYS B B 334 334 . 0.4585 0.6407 0.4152 -0.0383 -0.0305
0.0036  1 .
5799 C    C    . LYS LYS LYS B B 334 334 . 0.1837 0.1297 0.1325 0.0039  -0.0125 -
0.0131 1 .
5800 O    O    . LYS LYS LYS B B 334 334 . 0.1854 0.1647 0.1218 0.0256  -0.0251 -
0.0073 1 .
5801 N    N    . ALA ALA ALA B B 335 335 . 0.1959 0.1196 0.1048 0.0189  -0.0115
0.0049  1 .
5802 CA   CA   . ALA ALA ALA B B 335 335 . 0.1538 0.1441 0.1351 0.0242  -0.0095 -
0.0068 1 .
5803 CB   CB   . ALA ALA ALA B B 335 335 . 0.2463 0.1145 0.1609 0.0366  -0.0256 -
0.0115 1 .
5804 C    C    . ALA ALA ALA B B 335 335 . 0.1604 0.1304 0.1317 0.0113  -0.0050 -
0.0115 1 .
5805 O    O    . ALA ALA ALA B B 335 335 . 0.1773 0.1242 0.1385 -0.0094 -0.0277
0.0087  1 .
5806 N    N    . CYS CYS CYS B B 336 336 . 0.1738 0.1427 0.1424 0.0173  -0.0004 -
0.0005 1 .
5807 CA   CA   . CYS CYS CYS B B 336 336 . 0.1905 0.1184 0.1311 0.0271  -0.0258 -
0.0037 1 .
5808 CB   CB   . CYS CYS CYS B B 336 336 . 0.1582 0.1642 0.1212 0.0301  -0.0091
0.0229  1 .
5809 SG   SG   . CYS CYS CYS B B 336 336 . 0.2142 0.1800 0.1558 0.0128  -0.0046 -
0.0021 1 .
5810 C    C    . CYS CYS CYS B B 336 336 . 0.1638 0.1624 0.1561 0.0084  -0.0079
0.0194  1 .
5811 O    O    . CYS CYS CYS B B 336 336 . 0.1985 0.1553 0.2207 0.0014  -0.0402
0.0052  1 .
5812 N    N    . ASN ASN ASN B B 337 337 . 0.1750 0.1110 0.1387 0.0109  -0.0036 -
0.0078 1 .
5813 CA   CA   . ASN ASN ASN B B 337 337 . 0.1828 0.1448 0.1261 0.0024  0.0185
0.0248  1 .
5814 CB   CB   . ASN ASN ASN B B 337 337 . 0.1664 0.1490 0.1027 0.0247  0.0229
0.0076  1 .
5815 CG   CG   . ASN ASN ASN B B 337 337 . 0.1988 0.1584 0.1348 -0.0016 0.0123
0.0094  1 .
5816 OD1  OD1  . ASN ASN ASN B B 337 337 . 0.2203 0.2474 0.1599 0.0164  0.0457  -
0.0455 1 .
5817 ND2  ND2  . ASN ASN ASN B B 337 337 . 0.1239 0.0992 0.0845 0.0174  -0.0031 -
0.0103 1 .
5818 C    C    . ASN ASN ASN B B 337 337 . 0.1827 0.1137 0.1067 0.0021  -0.0035
0.0186  1 .
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5819 O    O    . ASN ASN ASN B B 337 337 . 0.1610 0.1396 0.1065 -0.0236 -0.0098
0.0073  1 .
5820 N    N    . CYS CYS CYS B B 338 338 . 0.1636 0.1137 0.1202 -0.0107 0.0189
0.0063  1 .
5821 CA   CA   . CYS CYS CYS B B 338 338 . 0.1921 0.1289 0.0917 0.0026  -0.0020 -
0.0134 1 .
5822 CB   CB   . CYS CYS CYS B B 338 338 . 0.1635 0.1411 0.0907 0.0213  0.0236
0.0098  1 .
5823 SG   SG   . CYS CYS CYS B B 338 338 . 0.2299 0.1715 0.1743 0.0026  0.0032
0.0374  1 .
5824 C    C    . CYS CYS CYS B B 338 338 . 0.1643 0.1562 0.1099 -0.0057 0.0205  -
0.0209 1 .
5825 O    O    . CYS CYS CYS B B 338 338 . 0.1864 0.1291 0.0994 0.0150  0.0181
0.0042  1 .
5826 N    N    . LEU LEU LEU B B 339 339 . 0.1559 0.1413 0.0789 0.0179  0.0056  -
0.0025 1 .
5827 CA   CA   . LEU LEU LEU B B 339 339 . 0.1743 0.1464 0.0873 0.0276  -0.0106
0.0062  1 .
5828 CB   CB   . LEU LEU LEU B B 339 339 . 0.1503 0.1579 0.0889 0.0328  0.0100
0.0130  1 .
5829 CG   CG   . LEU LEU LEU B B 339 339 . 0.1382 0.1409 0.1023 0.0106  0.0105  -
0.0057 1 .
5830 CD1  CD1  . LEU LEU LEU B B 339 339 . 0.1894 0.1024 0.1470 0.0227  0.0054  -
0.0277 1 .
5831 CD2  CD2  . LEU LEU LEU B B 339 339 . 0.1466 0.2062 0.2056 -0.0081 0.0154
0.0026  1 .
5832 C    C    . LEU LEU LEU B B 339 339 . 0.1778 0.1297 0.0944 0.0069  -0.0070
0.0149  1 .
5833 O    O    . LEU LEU LEU B B 339 339 . 0.2199 0.1553 0.1206 -0.0091 -0.0160 -
0.0004 1 .
5834 N    N    . LEU LEU LEU B B 340 340 . 0.1733 0.1144 0.0651 0.0118  -0.0184
0.0186  1 .
5835 CA   CA   . LEU LEU LEU B B 340 340 . 0.1667 0.1094 0.0860 0.0070  -0.0021
0.0228  1 .
5836 CB   CB   . LEU LEU LEU B B 340 340 . 0.1640 0.1507 0.1119 0.0242  -0.0082
0.0179  1 .
5837 CG   CG   . LEU LEU LEU B B 340 340 . 0.1362 0.1124 0.0972 0.0254  -0.0388
0.0225  1 .
5838 CD1  CD1  . LEU LEU LEU B B 340 340 . 0.1458 0.1566 0.1309 0.0160  0.0322
0.0105  1 .
5839 CD2  CD2  . LEU LEU LEU B B 340 340 . 0.2143 0.1477 0.0933 -0.0161 -0.0722
0.0359  1 .
5840 C    C    . LEU LEU LEU B B 340 340 . 0.1751 0.1367 0.1305 0.0191  0.0084
0.0203  1 .
5841 O    O    . LEU LEU LEU B B 340 340 . 0.1916 0.1468 0.1269 0.0128  0.0273
0.0101  1 .
5842 N    N    . LEU LEU LEU B B 341 341 . 0.1372 0.1291 0.1278 0.0019  0.0280
0.0234  1 .
5843 CA   CA   . LEU LEU LEU B B 341 341 . 0.1668 0.1551 0.1220 0.0191  0.0136
0.0067  1 .
5844 CB   CB   . LEU LEU LEU B B 341 341 . 0.1650 0.1634 0.1398 0.0184  0.0216
0.0117  1 .
5845 CG   CG   . LEU LEU LEU B B 341 341 . 0.1714 0.1869 0.2220 0.0093  0.0292
0.0437  1 .
5846 CD1  CD1  . LEU LEU LEU B B 341 341 . 0.2143 0.2733 0.2346 0.0373  -0.0341
0.0064  1 .
5847 CD2  CD2  . LEU LEU LEU B B 341 341 . 0.2071 0.2026 0.2478 -0.0323 0.0317  -
0.0118 1 .
5848 C    C    . LEU LEU LEU B B 341 341 . 0.1857 0.1601 0.1275 0.0380  0.0189
0.0140  1 .
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5849 O    O    . LEU LEU LEU B B 341 341 . 0.1891 0.1351 0.1504 0.0506  0.0098
0.0120  1 .
5850 N    N    . LYS LYS LYS B B 342 342 . 0.2056 0.1390 0.1270 0.0080  0.0189
0.0000  1 .
5851 CA   CA   . LYS LYS LYS B B 342 342 . 0.1882 0.1684 0.1283 0.0122  0.0081
0.0233  1 .
5852 CB   CB   . LYS LYS LYS B B 342 342 . 0.1940 0.1872 0.1670 0.0197  0.0065  -
0.0139 1 .
5853 CG   CG   . LYS LYS LYS B B 342 342 . 0.1828 0.1968 0.1456 0.0283  0.0132
0.0143  1 .
5854 CD   CD   . LYS LYS LYS B B 342 342 . 0.1519 0.1791 0.2078 0.0202  0.0142
0.0475  1 .
5855 CE   CE   . LYS LYS LYS B B 342 342 . 0.1671 0.2176 0.1553 0.0050  0.0301
0.0623  1 .
5856 NZ   NZ   . LYS LYS LYS B B 342 342 . 0.2125 0.2333 0.2516 0.0122  0.0231
0.0334  1 .
5857 C    C    . LYS LYS LYS B B 342 342 . 0.1913 0.1580 0.1572 0.0258  0.0051
0.0076  1 .
5858 O    O    . LYS LYS LYS B B 342 342 . 0.2068 0.1293 0.1435 0.0393  0.0078
0.0268  1 .
5859 N    N    . VAL VAL VAL B B 343 343 . 0.1864 0.1326 0.1474 0.0180  0.0181
0.0042  1 .
5860 CA   CA   . VAL VAL VAL B B 343 343 . 0.1693 0.1273 0.1790 -0.0074 0.0208  -
0.0069 1 .
5861 CB   CB   . VAL VAL VAL B B 343 343 . 0.2240 0.1317 0.1764 -0.0220 0.0011  -
0.0152 1 .
5862 CG1  CG1  . VAL VAL VAL B B 343 343 . 0.2183 0.1351 0.2466 -0.0360 -0.0026 -
0.0146 1 .
5863 CG2  CG2  . VAL VAL VAL B B 343 343 . 0.1862 0.2060 0.1863 -0.0189 0.0151
0.0189  1 .
5864 C    C    . VAL VAL VAL B B 343 343 . 0.1829 0.1517 0.1531 0.0059  0.0143  -
0.0086 1 .
5865 O    O    . VAL VAL VAL B B 343 343 . 0.1555 0.1867 0.2016 0.0106  -0.0066 -
0.0017 1 .
5866 N    N    . ASN ASN ASN B B 344 344 . 0.1780 0.1200 0.1592 0.0126  0.0070  -
0.0026 1 .
5867 CA   CA   . ASN ASN ASN B B 344 344 . 0.2102 0.1373 0.1408 0.0200  0.0062  -
0.0014 1 .
5868 CB   CB   . ASN ASN ASN B B 344 344 . 0.1777 0.1709 0.1345 0.0173  0.0124  -
0.0188 1 .
5869 CG   CG   . ASN ASN ASN B B 344 344 . 0.1782 0.1482 0.1558 0.0309  0.0209
0.0031  1 .
5870 OD1  OD1  . ASN ASN ASN B B 344 344 . 0.2038 0.1837 0.1724 0.0333  0.0393  -
0.0011 1 .
5871 ND2  ND2  . ASN ASN ASN B B 344 344 . 0.2135 0.1703 0.2230 -0.0003 -0.0014 -
0.0222 1 .
5872 C    C    . ASN ASN ASN B B 344 344 . 0.2089 0.1224 0.1423 0.0091  0.0146
0.0017  1 .
5873 O    O    . ASN ASN ASN B B 344 344 . 0.2623 0.1569 0.1737 0.0172  0.0182  -
0.0004 1 .
5874 N    N    . GLN GLN GLN B B 345 345 . 0.2074 0.0960 0.1260 0.0218  0.0202
0.0330  1 .
5875 CA   CA   . GLN GLN GLN B B 345 345 . 0.1873 0.1148 0.1349 0.0219  0.0215
0.0279  1 .
5876 CB   CB   . GLN GLN GLN B B 345 345 . 0.1454 0.1135 0.1032 0.0173  0.0237
0.0425  1 .
5877 CG   CG   . GLN GLN GLN B B 345 345 . 0.1607 0.1434 0.1372 0.0206  0.0327  -
0.0109 1 .
5878 CD   CD   . GLN GLN GLN B B 345 345 . 0.1288 0.1234 0.1376 -0.0097 0.0148
0.0378  1 .
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5879 OE1  OE1  . GLN GLN GLN B B 345 345 . 0.2087 0.1906 0.2426 -0.0009 0.0395  -
0.0054 1 .
5880 NE2  NE2  . GLN GLN GLN B B 345 345 . 0.1680 0.0884 0.1192 0.0133  0.0127
0.0227  1 .
5881 C    C    . GLN GLN GLN B B 345 345 . 0.1885 0.1501 0.1594 0.0103  0.0138
0.0142  1 .
5882 O    O    . GLN GLN GLN B B 345 345 . 0.2198 0.1630 0.1980 0.0172  0.0080
0.0065  1 .
5883 N    N    . ILE ILE ILE B B 346 346 . 0.1595 0.1357 0.1363 0.0126  0.0045
0.0236  1 .
5884 CA   CA   . ILE ILE ILE B B 346 346 . 0.1767 0.1639 0.1687 0.0104  0.0064
0.0034  1 .
5885 CB   CB   . ILE ILE ILE B B 346 346 . 0.1663 0.1523 0.1607 0.0166  -0.0174 -
0.0038 1 .
5886 CG1  CG1  . ILE ILE ILE B B 346 346 . 0.1649 0.1655 0.1745 0.0307  -0.0025
0.0343  1 .
5887 CD   CD   . ILE ILE ILE B B 346 346 . 0.2241 0.1676 0.1870 0.0014  -0.0239
0.0606  1 .
5888 CG2  CG2  . ILE ILE ILE B B 346 346 . 0.2340 0.1638 0.2000 -0.0272 0.0061
0.0124  1 .
5889 C    C    . ILE ILE ILE B B 346 346 . 0.1947 0.1750 0.1666 0.0297  0.0077
0.0193  1 .
5890 O    O    . ILE ILE ILE B B 346 346 . 0.2462 0.1688 0.2057 0.0494  0.0462
0.0232  1 .
5891 N    N    . GLY GLY GLY B B 347 347 . 0.2230 0.1763 0.1548 0.0303  0.0175
0.0357  1 .
5892 CA   CA   . GLY GLY GLY B B 347 347 . 0.1703 0.1557 0.1616 0.0178  0.0203
0.0249  1 .
5893 C    C    . GLY GLY GLY B B 347 347 . 0.1590 0.1627 0.1616 0.0355  -0.0029
0.0286  1 .
5894 O    O    . GLY GLY GLY B B 347 347 . 0.1870 0.1860 0.1928 0.0215  0.0208  -
0.0039 1 .
5895 N    N    . SER SER SER B B 348 348 . 0.1609 0.1510 0.1728 0.0224  0.0014
0.0266  1 .
5896 CA   CA   . SER SER SER B B 348 348 . 0.1798 0.1847 0.1967 0.0205  -0.0100
0.0002  1 .
5897 CB   CB   . SER SER SER B B 348 348 . 0.2021 0.2130 0.2115 0.0175  -0.0408
0.0041  1 .
5898 OG   OG   . SER SER SER B B 348 348 . 0.2192 0.2524 0.2074 0.0680  -0.0268
0.0054  1 .
5899 C    C    . SER SER SER B B 348 348 . 0.1869 0.1835 0.2076 0.0199  -0.0034
0.0080  1 .
5900 O    O    . SER SER SER B B 348 348 . 0.2049 0.1630 0.1588 0.0238  -0.0003 -
0.0039 1 .
5901 N    N    . VAL VAL VAL B B 349 349 . 0.1755 0.1569 0.1931 0.0247  -0.0234
0.0241  1 .
5902 CA   CA   . VAL VAL VAL B B 349 349 . 0.1790 0.1674 0.1569 0.0162  -0.0147
0.0084  1 .
5903 CB   CB   . VAL VAL VAL B B 349 349 . 0.1961 0.1325 0.1509 0.0176  -0.0079
0.0073  1 .
5904 CG1  CG1  . VAL VAL VAL B B 349 349 . 0.2185 0.1762 0.1680 0.0255  0.0044
0.0094  1 .
5905 CG2  CG2  . VAL VAL VAL B B 349 349 . 0.1536 0.1764 0.1918 0.0280  -0.0068
0.0073  1 .
5906 C    C    . VAL VAL VAL B B 349 349 . 0.1695 0.1619 0.1647 0.0148  0.0060
0.0127  1 .
5907 O    O    . VAL VAL VAL B B 349 349 . 0.1914 0.1566 0.1718 0.0350  0.0129
0.0029  1 .
5908 N    N    . THR THR THR B B 350 350 . 0.1852 0.1814 0.2042 0.0144  0.0039
0.0054  1 .
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5909 CA   CA   . THR THR THR B B 350 350 . 0.1756 0.2067 0.1933 0.0305  0.0124
0.0332  1 .
5910 CB   CB   . THR THR THR B B 350 350 . 0.1612 0.2165 0.2098 0.0199  0.0166
0.0553  1 .
5911 OG1  OG1  . THR THR THR B B 350 350 . 0.1659 0.2273 0.2454 0.0320  0.0214
0.0658  1 .
5912 CG2  CG2  . THR THR THR B B 350 350 . 0.1906 0.2762 0.2642 0.0221  -0.0253
0.0562  1 .
5913 C    C    . THR THR THR B B 350 350 . 0.1772 0.1732 0.1792 -0.0040 0.0054
0.0173  1 .
5914 O    O    . THR THR THR B B 350 350 . 0.1803 0.1851 0.1926 0.0161  0.0303
0.0250  1 .
5915 N    N    . GLU GLU GLU B B 351 351 . 0.1694 0.1548 0.1628 0.0135  0.0004
0.0209  1 .
5916 CA   CA   . GLU GLU GLU B B 351 351 . 0.1790 0.1706 0.1924 0.0025  0.0031
0.0103  1 .
5917 CB   CB   . GLU GLU GLU B B 351 351 . 0.1991 0.1421 0.2081 0.0203  -0.0176 -
0.0086 1 .
5918 CG   CG   . GLU GLU GLU B B 351 351 . 0.2226 0.1779 0.2645 0.0621  0.0094
0.0116  1 .
5919 CD   CD   . GLU GLU GLU B B 351 351 . 0.2151 0.2323 0.2730 0.0497  0.0130
0.0156  1 .
5920 OE1  OE1  . GLU GLU GLU B B 351 351 . 0.2486 0.2231 0.2732 0.0318  0.0114  -
0.0095 1 .
5921 OE2  OE2  . GLU GLU GLU B B 351 351 . 0.2826 0.2313 0.3431 0.0756  0.0157
0.0599  1 .
5922 C    C    . GLU GLU GLU B B 351 351 . 0.1717 0.1562 0.1552 0.0252  0.0017
0.0095  1 .
5923 O    O    . GLU GLU GLU B B 351 351 . 0.1995 0.1577 0.1768 0.0312  -0.0082
0.0277  1 .
5924 N    N    . ALA ALA ALA B B 352 352 . 0.1402 0.1801 0.1735 0.0204  0.0115
0.0177  1 .
5925 CA   CA   . ALA ALA ALA B B 352 352 . 0.1483 0.1769 0.1710 0.0441  -0.0265
0.0055  1 .
5926 CB   CB   . ALA ALA ALA B B 352 352 . 0.1612 0.1699 0.1847 0.0461  -0.0182
0.0373  1 .
5927 C    C    . ALA ALA ALA B B 352 352 . 0.1616 0.1726 0.1645 0.0294  -0.0159
0.0101  1 .
5928 O    O    . ALA ALA ALA B B 352 352 . 0.1814 0.1590 0.1578 0.0339  -0.0070
0.0263  1 .
5929 N    N    . ILE ILE ILE B B 353 353 . 0.1777 0.1938 0.1728 0.0198  -0.0125
0.0156  1 .
5930 CA   CA   . ILE ILE ILE B B 353 353 . 0.1714 0.1715 0.1656 -0.0023 -0.0068
0.0117  1 .
5931 CB   CB   . ILE ILE ILE B B 353 353 . 0.1892 0.1918 0.1554 0.0006  -0.0064
0.0168  1 .
5932 CG1  CG1  . ILE ILE ILE B B 353 353 . 0.2498 0.1541 0.1857 -0.0094 -0.0083
0.0161  1 .
5933 CD   CD   . ILE ILE ILE B B 353 353 . 0.2655 0.1858 0.2355 -0.0336 0.0327
0.0180  1 .
5934 CG2  CG2  . ILE ILE ILE B B 353 353 . 0.1857 0.1647 0.2226 -0.0318 0.0149
0.0346  1 .
5935 C    C    . ILE ILE ILE B B 353 353 . 0.1550 0.1696 0.1297 0.0098  -0.0091
0.0002  1 .
5936 O    O    . ILE ILE ILE B B 353 353 . 0.1563 0.1953 0.1608 0.0265  -0.0123
0.0095  1 .
5937 N    N    . GLN GLN GLN B B 354 354 . 0.1792 0.1802 0.1471 0.0034  -0.0136
0.0169  1 .
5938 CA   CA   . GLN GLN GLN B B 354 354 . 0.2002 0.1904 0.1795 0.0231  0.0012
0.0264  1 .
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5939 CB   CB   . GLN GLN GLN B B 354 354 . 0.1696 0.2348 0.1859 0.0331  -0.0056
0.0207  1 .
5940 CG   CG   . GLN GLN GLN B B 354 354 . 0.2702 0.3364 0.3222 0.0416  0.0042
0.0321  1 .
5941 CD   CD   . GLN GLN GLN B B 354 354 . 0.3212 0.4085 0.4363 0.0795  0.0136  -
0.0253 1 .
5942 OE1  OE1  . GLN GLN GLN B B 354 354 . 0.3257 0.4462 0.5151 0.0852  -0.0644 -
0.0338 1 .
5943 NE2  NE2  . GLN GLN GLN B B 354 354 . 0.3375 0.5219 0.4936 0.0652  0.0164  -
0.0206 1 .
5944 C    C    . GLN GLN GLN B B 354 354 . 0.1948 0.2046 0.1823 0.0133  -0.0018
0.0055  1 .
5945 O    O    . GLN GLN GLN B B 354 354 . 0.1983 0.2226 0.1743 0.0372  0.0047
0.0098  1 .
5946 N    N    . ALA ALA ALA B B 355 355 . 0.1902 0.1900 0.1787 0.0220  -0.0105
0.0037  1 .
5947 CA   CA   . ALA ALA ALA B B 355 355 . 0.1854 0.1752 0.1614 -0.0076 -0.0045 -
0.0009 1 .
5948 CB   CB   . ALA ALA ALA B B 355 355 . 0.1914 0.1846 0.1333 -0.0195 -0.0053
0.0195  1 .
5949 C    C    . ALA ALA ALA B B 355 355 . 0.2024 0.1764 0.1638 0.0064  0.0021
0.0147  1 .
5950 O    O    . ALA ALA ALA B B 355 355 . 0.1836 0.1764 0.1412 0.0192  -0.0148
0.0238  1 .
5951 N    N    . CYS CYS CYS B B 356 356 . 0.1967 0.1707 0.1388 0.0150  -0.0001
0.0088  1 .
5952 CA   CA   . CYS CYS CYS B B 356 356 . 0.2154 0.1909 0.1314 0.0080  -0.0247
0.0057  1 .
5953 CB   CB   . CYS CYS CYS B B 356 356 . 0.2333 0.1536 0.1855 0.0154  -0.0104
0.0132  1 .
5954 SG   SG   . CYS CYS CYS B B 356 356 . 0.2288 0.1836 0.2064 0.0117  0.0080
0.0225  1 .
5955 C    C    . CYS CYS CYS B B 356 356 . 0.2066 0.1793 0.1489 -0.0059 -0.0083
0.0038  1 .
5956 O    O    . CYS CYS CYS B B 356 356 . 0.2313 0.1984 0.2099 0.0025  0.0074  -
0.0059 1 .
5957 N    N    . LYS LYS LYS B B 357 357 . 0.2101 0.1897 0.1528 -0.0145 -0.0251
0.0146  1 .
5958 CA   CA   . LYS LYS LYS B B 357 357 . 0.2379 0.2251 0.1774 -0.0121 -0.0332
0.0246  1 .
5959 CB   CB   . LYS LYS LYS B B 357 357 . 0.2470 0.2514 0.1758 -0.0201 -0.0085
0.0347  1 .
5960 CG   CG   . LYS LYS LYS B B 357 357 . 0.2497 0.2478 0.2426 -0.0356 -0.0465
0.0396  1 .
5961 CD   CD   . LYS LYS LYS B B 357 357 . 0.3141 0.3272 0.3781 0.0104  0.0216
0.0003  1 .
5962 CE   CE   . LYS LYS LYS B B 357 357 . 0.4179 0.4442 0.4748 0.0120  0.0210  -
0.0626 1 .
5963 NZ   NZ   . LYS LYS LYS B B 357 357 . 0.4819 0.5170 0.5236 0.0825  0.0334  -
0.0541 1 .
5964 C    C    . LYS LYS LYS B B 357 357 . 0.2436 0.2187 0.1838 -0.0131 -0.0187
0.0133  1 .
5965 O    O    . LYS LYS LYS B B 357 357 . 0.2811 0.2313 0.1671 -0.0210 -0.0142
0.0241  1 .
5966 N    N    . LEU LEU LEU B B 358 358 . 0.1982 0.1831 0.1689 -0.0151 -0.0292
0.0180  1 .
5967 CA   CA   . LEU LEU LEU B B 358 358 . 0.2306 0.1972 0.1747 0.0034  -0.0220
0.0246  1 .
5968 CB   CB   . LEU LEU LEU B B 358 358 . 0.2368 0.1899 0.2001 0.0033  -0.0279
0.0273  1 .
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5969 CG   CG   . LEU LEU LEU B B 358 358 . 0.2473 0.2296 0.2331 -0.0078 -0.0167
0.0211  1 .
5970 CD1  CD1  . LEU LEU LEU B B 358 358 . 0.2753 0.2970 0.2221 0.0006  -0.0731
0.0457  1 .
5971 CD2  CD2  . LEU LEU LEU B B 358 358 . 0.2628 0.1517 0.2600 0.0180  0.0150
0.0209  1 .
5972 C    C    . LEU LEU LEU B B 358 358 . 0.2056 0.1863 0.1742 0.0038  -0.0272
0.0118  1 .
5973 O    O    . LEU LEU LEU B B 358 358 . 0.2341 0.1912 0.1558 0.0118  -0.0291
0.0071  1 .
5974 N    N    . ALA ALA ALA B B 359 359 . 0.1857 0.1916 0.1630 0.0063  -0.0127
0.0076  1 .
5975 CA   CA   . ALA ALA ALA B B 359 359 . 0.1698 0.1940 0.1676 0.0159  -0.0254 -
0.0054 1 .
5976 CB   CB   . ALA ALA ALA B B 359 359 . 0.2069 0.2073 0.1557 0.0135  -0.0326
0.0146  1 .
5977 C    C    . ALA ALA ALA B B 359 359 . 0.2031 0.2031 0.1862 -0.0102 -0.0173
0.0031  1 .
5978 O    O    . ALA ALA ALA B B 359 359 . 0.2155 0.1882 0.1471 -0.0036 -0.0106 -
0.0218 1 .
5979 N    N    . GLN GLN GLN B B 360 360 . 0.2279 0.2075 0.1844 -0.0070 -0.0252
0.0127  1 .
5980 CA   CA   . GLN GLN GLN B B 360 360 . 0.2333 0.1859 0.1741 -0.0105 -0.0297
0.0175  1 .
5981 CB   CB   . GLN GLN GLN B B 360 360 . 0.2574 0.1794 0.1826 -0.0111 -0.0293
0.0321  1 .
5982 CG   CG   . GLN GLN GLN B B 360 360 . 0.2667 0.2568 0.1444 -0.0079 -0.0440
0.0717  1 .
5983 CD   CD   . GLN GLN GLN B B 360 360 . 0.2694 0.2112 0.2122 0.0001  -0.0186
0.0056  1 .
5984 OE1  OE1  . GLN GLN GLN B B 360 360 . 0.3950 0.2608 0.2689 0.0225  -0.0888 -
0.0167 1 .
5985 NE2  NE2  . GLN GLN GLN B B 360 360 . 0.2610 0.2161 0.1971 -0.0211 -0.0335
0.0655  1 .
5986 C    C    . GLN GLN GLN B B 360 360 . 0.2360 0.2106 0.1967 -0.0128 -0.0207
0.0003  1 .
5987 O    O    . GLN GLN GLN B B 360 360 . 0.2211 0.2675 0.1856 -0.0143 -0.0083
0.0010  1 .
5988 N    N    . GLU GLU GLU B B 361 361 . 0.1990 0.2240 0.1888 -0.0042 -0.0188
0.0081  1 .
5989 CA   CA   . GLU GLU GLU B B 361 361 . 0.2428 0.2549 0.2028 -0.0082 -0.0127
0.0242  1 .
5990 CB   CB   . GLU GLU GLU B B 361 361 . 0.2347 0.3014 0.2112 -0.0227 -0.0053
0.0245  1 .
5991 CG   CG   . GLU GLU GLU B B 361 361 . 0.3296 0.3630 0.3514 0.0032  0.0342
0.0167  1 .
5992 CD   CD   . GLU GLU GLU B B 361 361 . 0.4212 0.5438 0.5370 0.0462  0.0514
0.0088  1 .
5993 OE1  OE1  . GLU GLU GLU B B 361 361 . 0.4523 0.5725 0.5856 0.1329  -0.0031
0.0423  1 .
5994 OE2  OE2  . GLU GLU GLU B B 361 361 . 0.5025 0.6599 0.6041 -0.0071 0.0556
0.0310  1 .
5995 C    C    . GLU GLU GLU B B 361 361 . 0.2316 0.2365 0.1803 -0.0053 -0.0254
0.0165  1 .
5996 O    O    . GLU GLU GLU B B 361 361 . 0.2675 0.2736 0.1635 -0.0118 -0.0536
0.0353  1 .
5997 N    N    . ASN ASN ASN B B 362 362 . 0.2198 0.2055 0.1701 -0.0029 -0.0205
0.0093  1 .
5998 CA   CA   . ASN ASN ASN B B 362 362 . 0.2207 0.2303 0.1742 0.0075  -0.0276
0.0036  1 .
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5999 CB   CB   . ASN ASN ASN B B 362 362 . 0.2394 0.2355 0.1946 0.0101  -0.0236
0.0316  1 .
6000 CG   CG   . ASN ASN ASN B B 362 362 . 0.2561 0.2309 0.1714 0.0210  -0.0296
0.0406  1 .
6001 OD1  OD1  . ASN ASN ASN B B 362 362 . 0.3087 0.3231 0.2114 0.0171  -0.0787
0.0960  1 .
6002 ND2  ND2  . ASN ASN ASN B B 362 362 . 0.3043 0.2770 0.1809 0.0412  -0.0401
0.0526  1 .
6003 C    C    . ASN ASN ASN B B 362 362 . 0.2275 0.2308 0.1831 -0.0114 -0.0208
0.0079  1 .
6004 O    O    . ASN ASN ASN B B 362 362 . 0.2703 0.2691 0.2008 -0.0180 -0.0308
0.0116  1 .
6005 N    N    . GLY GLY GLY B B 363 363 . 0.2427 0.2297 0.1636 0.0139  -0.0305 -
0.0101 1 .
6006 CA   CA   . GLY GLY GLY B B 363 363 . 0.2195 0.2382 0.1627 -0.0034 -0.0098 -
0.0292 1 .
6007 C    C    . GLY GLY GLY B B 363 363 . 0.2101 0.2143 0.1851 0.0002  -0.0011 -
0.0277 1 .
6008 O    O    . GLY GLY GLY B B 363 363 . 0.2523 0.2520 0.1842 -0.0096 0.0019  -
0.0458 1 .
6009 N    N    . TRP TRP TRP B B 364 364 . 0.1998 0.1790 0.1262 -0.0149 -0.0108 -
0.0242 1 .
6010 CA   CA   . TRP TRP TRP B B 364 364 . 0.1885 0.1507 0.1218 0.0018  -0.0188 -
0.0181 1 .
6011 CB   CB   . TRP TRP TRP B B 364 364 . 0.1644 0.1426 0.1397 0.0276  0.0069  -
0.0328 1 .
6012 CG   CG   . TRP TRP TRP B B 364 364 . 0.2144 0.1576 0.1189 -0.0169 -0.0130 -
0.0195 1 .
6013 CD1  CD1  . TRP TRP TRP B B 364 364 . 0.2216 0.1822 0.1962 -0.0183 0.0312
0.0381  1 .
6014 NE1  NE1  . TRP TRP TRP B B 364 364 . 0.2215 0.1644 0.1362 0.0001  -0.0226
0.0021  1 .
6015 CE2  CE2  . TRP TRP TRP B B 364 364 . 0.2281 0.1820 0.1474 -0.0167 -0.0128 -
0.0101 1 .
6016 CD2  CD2  . TRP TRP TRP B B 364 364 . 0.2366 0.1013 0.1178 -0.0132 -0.0110 -
0.0013 1 .
6017 CE3  CE3  . TRP TRP TRP B B 364 364 . 0.1698 0.1461 0.0996 -0.0378 -0.0325
0.0010  1 .
6018 CZ3  CZ3  . TRP TRP TRP B B 364 364 . 0.1889 0.1314 0.1252 0.0142  -0.0089
0.0071  1 .
6019 CH2  CH2  . TRP TRP TRP B B 364 364 . 0.1936 0.1607 0.1103 0.0240  -0.0010
0.0119  1 .
6020 CZ2  CZ2  . TRP TRP TRP B B 364 364 . 0.2477 0.1881 0.1025 -0.0054 -0.0296
0.0016  1 .
6021 C    C    . TRP TRP TRP B B 364 364 . 0.1662 0.1424 0.1427 -0.0078 -0.0062 -
0.0240 1 .
6022 O    O    . TRP TRP TRP B B 364 364 . 0.2079 0.1594 0.1815 -0.0297 -0.0146 -
0.0035 1 .
6023 N    N    . GLY GLY GLY B B 365 365 . 0.2050 0.1467 0.1341 -0.0043 -0.0235
0.0050  1 .
6024 CA   CA   . GLY GLY GLY B B 365 365 . 0.1803 0.1378 0.0984 -0.0088 -0.0140 -
0.0079 1 .
6025 C    C    . GLY GLY GLY B B 365 365 . 0.1924 0.1332 0.1159 -0.0058 -0.0081 -
0.0040 1 .
6026 O    O    . GLY GLY GLY B B 365 365 . 0.1987 0.1446 0.1039 -0.0076 -0.0104
0.0101  1 .
6027 N    N    . VAL VAL VAL B B 366 366 . 0.1921 0.1345 0.0989 0.0015  -0.0023
0.0046  1 .
6028 CA   CA   . VAL VAL VAL B B 366 366 . 0.1582 0.1443 0.1195 0.0122  -0.0148
0.0058  1 .
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6029 CB   CB   . VAL VAL VAL B B 366 366 . 0.1391 0.1312 0.1117 0.0122  -0.0061
0.0039  1 .
6030 CG1  CG1  . VAL VAL VAL B B 366 366 . 0.2306 0.1868 0.0976 0.0310  0.0080  -
0.0049 1 .
6031 CG2  CG2  . VAL VAL VAL B B 366 366 . 0.1726 0.1609 0.1458 0.0266  0.0032
0.0477  1 .
6032 C    C    . VAL VAL VAL B B 366 366 . 0.1639 0.1426 0.1254 0.0049  -0.0103
0.0080  1 .
6033 O    O    . VAL VAL VAL B B 366 366 . 0.2014 0.1709 0.1298 0.0024  -0.0263 -
0.0148 1 .
6034 N    N    . MET MET MET B B 367 367 . 0.1651 0.1309 0.0918 -0.0001 -0.0251 -
0.0053 1 .
6035 CA   CA   . MET MET MET B B 367 367 . 0.1587 0.1397 0.1188 0.0201  -0.0063 -
0.0055 1 .
6036 CB   CB   . MET MET MET B B 367 367 . 0.1506 0.1506 0.0985 0.0253  -0.0148
0.0035  1 .
6037 CG   CG   . MET MET MET B B 367 367 . 0.1638 0.1593 0.0974 0.0019  -0.0356
0.0199  1 .
6038 SD   SD   . MET MET MET B B 367 367 . 0.2084 0.2017 0.1731 0.0136  0.0113  -
0.0131 1 .
6039 CE   CE   . MET MET MET B B 367 367 . 0.2330 0.3360 0.2123 0.0548  -0.0109 -
0.0886 1 .
6040 C    C    . MET MET MET B B 367 367 . 0.1847 0.1424 0.1271 0.0032  -0.0085 -
0.0010 1 .
6041 O    O    . MET MET MET B B 367 367 . 0.2068 0.1494 0.1181 0.0161  -0.0017
0.0018  1 .
6042 N    N    . VAL VAL VAL B B 368 368 . 0.1871 0.1529 0.1036 0.0144  0.0108
0.0072  1 .
6043 CA   CA   . VAL VAL VAL B B 368 368 . 0.1493 0.1508 0.1094 0.0032  0.0087
0.0038  1 .
6044 CB   CB   . VAL VAL VAL B B 368 368 . 0.1430 0.1277 0.1063 -0.0115 0.0146
0.0086  1 .
6045 CG1  CG1  . VAL VAL VAL B B 368 368 . 0.1840 0.1484 0.1188 0.0076  0.0340
0.0048  1 .
6046 CG2  CG2  . VAL VAL VAL B B 368 368 . 0.1643 0.1793 0.0837 0.0047  -0.0379
0.0255  1 .
6047 C    C    . VAL VAL VAL B B 368 368 . 0.1641 0.1507 0.1055 0.0172  -0.0011 -
0.0009 1 .
6048 O    O    . VAL VAL VAL B B 368 368 . 0.1653 0.1533 0.0979 0.0233  -0.0213 -
0.0049 1 .
6049 N    N    . SER SER SER B B 369 369 . 0.1377 0.0981 0.0921 0.0200  -0.0084 -
0.0062 1 .
6050 CA   CA   . SER SER SER B B 369 369 . 0.1535 0.1462 0.0649 0.0001  0.0003
0.0025  1 .
6051 CB   CB   . SER SER SER B B 369 369 . 0.1481 0.1375 0.0917 -0.0071 0.0118
0.0045  1 .
6052 OG   OG   . SER SER SER B B 369 369 . 0.1976 0.1462 0.1394 -0.0073 -0.0240
0.0381  1 .
6053 C    C    . SER SER SER B B 369 369 . 0.1282 0.1359 0.0939 0.0297  0.0061  -
0.0010 1 .
6054 O    O    . SER SER SER B B 369 369 . 0.1743 0.1276 0.1210 0.0174  0.0115
0.0285  1 .
6055 N    N    . HIS HIS HIS B B 370 370 . 0.1553 0.1372 0.0612 0.0119  -0.0268
0.0008  1 .
6056 CA   CA   . HIS HIS HIS B B 370 370 . 0.1600 0.1209 0.0872 0.0323  0.0027  -
0.0192 1 .
6057 CB   CB   . HIS HIS HIS B B 370 370 . 0.1355 0.0732 0.0865 0.0228  -0.0007
0.0143  1 .
6058 CG   CG   . HIS HIS HIS B B 370 370 . 0.1325 0.1110 0.0935 0.0106  0.0036  -
0.0177 1 .
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6059 ND1  ND1  . HIS HIS HIS B B 370 370 . 0.1694 0.1520 0.1283 0.0104  -0.0057 -
0.0111 1 .
6060 CE1  CE1  . HIS HIS HIS B B 370 370 . 0.2108 0.1790 0.1379 0.0207  0.0068  -
0.0118 1 .
6061 NE2  NE2  . HIS HIS HIS B B 370 370 . 0.1680 0.1522 0.1842 0.0289  0.0040  -
0.0088 1 .
6062 CD2  CD2  . HIS HIS HIS B B 370 370 . 0.1178 0.1333 0.1528 -0.0293 0.0093
0.0016  1 .
6063 C    C    . HIS HIS HIS B B 370 370 . 0.1710 0.1234 0.1058 0.0108  0.0059
0.0063  1 .
6064 O    O    . HIS HIS HIS B B 370 370 . 0.2046 0.1020 0.1176 0.0200  0.0068
0.0131  1 .
6065 N    N    . ARG ARG ARG B B 371 371 . 0.1688 0.0974 0.0765 0.0371  0.0095
0.0028  1 .
6066 CA   CA   . ARG ARG ARG B B 371 371 . 0.1466 0.1447 0.0948 0.0165  0.0138
0.0142  1 .
6067 CB   CB   . ARG ARG ARG B B 371 371 . 0.1270 0.1332 0.0719 0.0298  0.0236
0.0088  1 .
6068 CG   CG   . ARG ARG ARG B B 371 371 . 0.1394 0.1221 0.0404 0.0413  -0.0022
0.0102  1 .
6069 CD   CD   . ARG ARG ARG B B 371 371 . 0.1597 0.1023 0.0971 -0.0337 0.0421
0.0356  1 .
6070 NE   NE   . ARG ARG ARG B B 371 371 . 0.2123 0.1329 0.1337 -0.0147 0.0212
0.0040  1 .
6071 CZ   CZ   . ARG ARG ARG B B 371 371 . 0.1478 0.1369 0.1485 0.0092  -0.0184 -
0.0121 1 .
6072 NH1  NH1  . ARG ARG ARG B B 371 371 . 0.2021 0.1439 0.1755 0.0575  0.0024
0.0198  1 .
6073 NH2  NH2  . ARG ARG ARG B B 371 371 . 0.2022 0.1462 0.1613 -0.0205 -0.0217
0.0170  1 .
6074 C    C    . ARG ARG ARG B B 371 371 . 0.1610 0.1442 0.1076 0.0077  0.0222  -
0.0014 1 .
6075 O    O    . ARG ARG ARG B B 371 371 . 0.1968 0.1406 0.0964 0.0244  0.0262
0.0244  1 .
6076 N    N    . SER SER SER B B 372 372 . 0.1506 0.1493 0.1280 -0.0062 0.0218
0.0043  1 .
6077 CA   CA   . SER SER SER B B 372 372 . 0.1512 0.1429 0.1292 -0.0152 0.0203  -
0.0072 1 .
6078 CB   CB   . SER SER SER B B 372 372 . 0.1503 0.1463 0.1579 -0.0119 0.0274
0.0228  1 .
6079 OG   OG   . SER SER SER B B 372 372 . 0.2168 0.1405 0.1688 -0.0034 0.0327  -
0.0312 1 .
6080 C    C    . SER SER SER B B 372 372 . 0.1657 0.1317 0.1501 -0.0186 0.0092
0.0054  1 .
6081 O    O    . SER SER SER B B 372 372 . 0.2078 0.1786 0.1624 -0.0116 0.0117
0.0111  1 .
6082 N    N    . GLY GLY GLY B B 373 373 . 0.1842 0.1048 0.1481 -0.0234 0.0354  -
0.0091 1 .
6083 CA   CA   . GLY GLY GLY B B 373 373 . 0.2080 0.0987 0.1572 -0.0031 -0.0045 -
0.0034 1 .
6084 C    C    . GLY GLY GLY B B 373 373 . 0.1617 0.1285 0.1778 0.0081  -0.0066 -
0.0107 1 .
6085 O    O    . GLY GLY GLY B B 373 373 . 0.1996 0.1043 0.1989 -0.0026 -0.0255 -
0.0145 1 .
6086 N    N    . GLU GLU GLU B B 374 374 . 0.1925 0.1242 0.1326 -0.0060 -0.0161
0.0157  1 .
6087 CA   CA   . GLU GLU GLU B B 374 374 . 0.1513 0.1284 0.1030 -0.0018 -0.0031 -
0.0125 1 .
6088 CB   CB   . GLU GLU GLU B B 374 374 . 0.1653 0.0830 0.0771 0.0192  -0.0118
0.0023  1 .
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6089 CG   CG   . GLU GLU GLU B B 374 374 . 0.1664 0.1984 0.1055 -0.0010 0.0320
0.0210  1 .
6090 CD   CD   . GLU GLU GLU B B 374 374 . 0.1578 0.1422 0.1165 0.0315  -0.0048
0.0027  1 .
6091 OE1  OE1  . GLU GLU GLU B B 374 374 . 0.1842 0.1656 0.1529 -0.0130 -0.0076 -
0.0043 1 .
6092 OE2  OE2  . GLU GLU GLU B B 374 374 . 0.1820 0.1579 0.1427 0.0260  0.0003
0.0295  1 .
6093 C    C    . GLU GLU GLU B B 374 374 . 0.1589 0.1323 0.1436 -0.0089 0.0000
0.0054  1 .
6094 O    O    . GLU GLU GLU B B 374 374 . 0.1754 0.1676 0.1394 -0.0182 0.0228  -
0.0020 1 .
6095 N    N    . THR THR THR B B 375 375 . 0.1515 0.1262 0.1335 -0.0141 0.0157  -
0.0143 1 .
6096 CA   CA   . THR THR THR B B 375 375 . 0.1479 0.1405 0.1396 0.0017  0.0055  -
0.0120 1 .
6097 CB   CB   . THR THR THR B B 375 375 . 0.1316 0.1525 0.1212 0.0094  0.0075  -
0.0179 1 .
6098 OG1  OG1  . THR THR THR B B 375 375 . 0.1336 0.1726 0.1814 -0.0114 0.0286  -
0.0314 1 .
6099 CG2  CG2  . THR THR THR B B 375 375 . 0.1823 0.1693 0.2388 0.0112  0.0296  -
0.0309 1 .
6100 C    C    . THR THR THR B B 375 375 . 0.1573 0.1160 0.1109 -0.0089 0.0034
0.0013  1 .
6101 O    O    . THR THR THR B B 375 375 . 0.1480 0.1470 0.1508 -0.0036 -0.0022
0.0035  1 .
6102 N    N    . GLU GLU GLU B B 376 376 . 0.1778 0.1182 0.1444 -0.0144 -0.0090 -
0.0048 1 .
6103 CA   CA   . GLU GLU GLU B B 376 376 . 0.1894 0.1541 0.1673 -0.0151 -0.0106
0.0232  1 .
6104 CB   CB   . GLU GLU GLU B B 376 376 . 0.1952 0.1514 0.1637 0.0013  0.0073
0.0390  1 .
6105 CG   CG   . GLU GLU GLU B B 376 376 . 0.2566 0.1997 0.2283 -0.0296 0.0047  -
0.0427 1 .
6106 CD   CD   . GLU GLU GLU B B 376 376 . 0.2282 0.2324 0.2128 -0.0248 0.0028  -
0.0101 1 .
6107 OE1  OE1  . GLU GLU GLU B B 376 376 . 0.2881 0.2381 0.1855 -0.0709 0.0102
0.0035  1 .
6108 OE2  OE2  . GLU GLU GLU B B 376 376 . 0.2182 0.1997 0.1638 0.0161  0.0169
0.0222  1 .
6109 C    C    . GLU GLU GLU B B 376 376 . 0.1752 0.1557 0.1486 0.0037  -0.0005
0.0035  1 .
6110 O    O    . GLU GLU GLU B B 376 376 . 0.2007 0.1732 0.1802 -0.0265 -0.0149 -
0.0001 1 .
6111 N    N    . ASP ASP ASP B B 377 377 . 0.1580 0.1443 0.1359 -0.0042 0.0140
0.0221  1 .
6112 CA   CA   . ASP ASP ASP B B 377 377 . 0.1573 0.1522 0.1359 0.0064  -0.0056 -
0.0041 1 .
6113 CB   CB   . ASP ASP ASP B B 377 377 . 0.1558 0.1806 0.1939 0.0114  -0.0103 -
0.0137 1 .
6114 CG   CG   . ASP ASP ASP B B 377 377 . 0.2273 0.2826 0.2488 0.0368  -0.0220 -
0.0315 1 .
6115 OD1  OD1  . ASP ASP ASP B B 377 377 . 0.3067 0.3491 0.3544 0.0801  -0.0785 -
0.0633 1 .
6116 OD2  OD2  . ASP ASP ASP B B 377 377 . 0.2201 0.2567 0.2515 -0.0288 0.0434  -
0.0604 1 .
6117 C    C    . ASP ASP ASP B B 377 377 . 0.1744 0.1697 0.1564 -0.0014 0.0015
0.0112  1 .
6118 O    O    . ASP ASP ASP B B 377 377 . 0.1538 0.1912 0.1531 -0.0124 0.0095  -
0.0016 1 .
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6119 N    N    . THR THR THR B B 378 378 . 0.1462 0.1417 0.0737 0.0050  -0.0010 -
0.0062 1 .
6120 CA   CA   . THR THR THR B B 378 378 . 0.1478 0.1120 0.1205 0.0302  0.0043  -
0.0110 1 .
6121 CB   CB   . THR THR THR B B 378 378 . 0.1377 0.1313 0.1423 0.0077  -0.0194
0.0128  1 .
6122 OG1  OG1  . THR THR THR B B 378 378 . 0.2094 0.1507 0.1995 -0.0063 -0.0144
0.0258  1 .
6123 CG2  CG2  . THR THR THR B B 378 378 . 0.1443 0.1818 0.0892 0.0181  -0.0513 -
0.0340 1 .
6124 C    C    . THR THR THR B B 378 378 . 0.1429 0.1023 0.1112 0.0227  0.0073  -
0.0131 1 .
6125 O    O    . THR THR THR B B 378 378 . 0.1954 0.1089 0.1233 0.0232  -0.0003 -
0.0074 1 .
6126 N    N    . PHE PHE PHE B B 379 379 . 0.1423 0.1332 0.1283 0.0159  -0.0051
0.0094  1 .
6127 CA   CA   . PHE PHE PHE B B 379 379 . 0.1445 0.1233 0.1465 0.0241  -0.0011 -
0.0030 1 .
6128 CB   CB   . PHE PHE PHE B B 379 379 . 0.1456 0.1282 0.1643 0.0358  -0.0034 -
0.0091 1 .
6129 CG   CG   . PHE PHE PHE B B 379 379 . 0.1333 0.1096 0.1711 0.0424  0.0015  -
0.0346 1 .
6130 CD1  CD1  . PHE PHE PHE B B 379 379 . 0.1543 0.1568 0.1924 0.0545  -0.0107 -
0.0165 1 .
6131 CE1  CE1  . PHE PHE PHE B B 379 379 . 0.1925 0.1693 0.1978 0.0536  -0.0176 -
0.0186 1 .
6132 CZ   CZ   . PHE PHE PHE B B 379 379 . 0.2154 0.1732 0.2427 0.0561  0.0235  -
0.0317 1 .
6133 CE2  CE2  . PHE PHE PHE B B 379 379 . 0.2262 0.1843 0.2846 0.0372  -0.0333
0.0084  1 .
6134 CD2  CD2  . PHE PHE PHE B B 379 379 . 0.1723 0.1443 0.2468 0.0328  -0.0137
0.0153  1 .
6135 C    C    . PHE PHE PHE B B 379 379 . 0.1087 0.1000 0.1233 0.0115  -0.0195
0.0052  1 .
6136 O    O    . PHE PHE PHE B B 379 379 . 0.1491 0.0999 0.1348 0.0156  -0.0130 -
0.0098 1 .
6137 N    N    . ILE ILE ILE B B 380 380 . 0.1337 0.1124 0.1234 0.0229  0.0154
0.0103  1 .
6138 CA   CA   . ILE ILE ILE B B 380 380 . 0.1562 0.1203 0.1312 0.0046  0.0050
0.0024  1 .
6139 CB   CB   . ILE ILE ILE B B 380 380 . 0.1120 0.1211 0.1706 0.0065  -0.0181
0.0063  1 .
6140 CG1  CG1  . ILE ILE ILE B B 380 380 . 0.1142 0.1179 0.1538 -0.0198 -0.0451 -
0.0043 1 .
6141 CD   CD   . ILE ILE ILE B B 380 380 . 0.1220 0.1064 0.1619 -0.0130 0.0120
0.0205  1 .
6142 CG2  CG2  . ILE ILE ILE B B 380 380 . 0.1663 0.0929 0.1713 0.0216  0.0100
0.0111  1 .
6143 C    C    . ILE ILE ILE B B 380 380 . 0.1725 0.1018 0.1379 0.0107  0.0003
0.0006  1 .
6144 O    O    . ILE ILE ILE B B 380 380 . 0.1984 0.0984 0.1241 0.0355  0.0041
0.0113  1 .
6145 N    N    . ALA ALA ALA B B 381 381 . 0.1415 0.1038 0.1442 0.0082  -0.0106
0.0032  1 .
6146 CA   CA   . ALA ALA ALA B B 381 381 . 0.1369 0.1290 0.1261 0.0198  -0.0247
0.0085  1 .
6147 CB   CB   . ALA ALA ALA B B 381 381 . 0.1669 0.0767 0.1050 0.0211  -0.0104
0.0289  1 .
6148 C    C    . ALA ALA ALA B B 381 381 . 0.1761 0.1335 0.1553 0.0065  -0.0105 -
0.0035 1 .
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6149 O    O    . ALA ALA ALA B B 381 381 . 0.1733 0.1388 0.1603 0.0234  -0.0270
0.0024  1 .
6150 N    N    . ASP ASP ASP B B 382 382 . 0.1678 0.1383 0.1730 0.0066  -0.0121
0.0031  1 .
6151 CA   CA   . ASP ASP ASP B B 382 382 . 0.1838 0.1471 0.1525 0.0011  -0.0224
0.0216  1 .
6152 CB   CB   . ASP ASP ASP B B 382 382 . 0.1644 0.1205 0.1654 0.0076  -0.0054
0.0401  1 .
6153 CG   CG   . ASP ASP ASP B B 382 382 . 0.2047 0.1865 0.2060 -0.0091 -0.0121
0.0168  1 .
6154 OD1  OD1  . ASP ASP ASP B B 382 382 . 0.2000 0.2250 0.2624 -0.0068 -0.0150
0.0502  1 .
6155 OD2  OD2  . ASP ASP ASP B B 382 382 . 0.1888 0.1841 0.2508 -0.0263 -0.0677 -
0.0298 1 .
6156 C    C    . ASP ASP ASP B B 382 382 . 0.1744 0.1342 0.1236 0.0098  -0.0116
0.0182  1 .
6157 O    O    . ASP ASP ASP B B 382 382 . 0.1711 0.1252 0.1155 0.0031  -0.0277 -
0.0012 1 .
6158 N    N    . LEU LEU LEU B B 383 383 . 0.1614 0.1216 0.1160 -0.0125 -0.0080
0.0242  1 .
6159 CA   CA   . LEU LEU LEU B B 383 383 . 0.1796 0.1277 0.1404 0.0036  -0.0168
0.0019  1 .
6160 CB   CB   . LEU LEU LEU B B 383 383 . 0.1835 0.1088 0.1249 0.0118  -0.0458
0.0111  1 .
6161 CG   CG   . LEU LEU LEU B B 383 383 . 0.1780 0.0938 0.1426 0.0008  -0.0583
0.0040  1 .
6162 CD1  CD1  . LEU LEU LEU B B 383 383 . 0.1899 0.1099 0.2027 0.0230  -0.0319
0.0178  1 .
6163 CD2  CD2  . LEU LEU LEU B B 383 383 . 0.1447 0.1086 0.1394 -0.0199 -0.0034
0.0381  1 .
6164 C    C    . LEU LEU LEU B B 383 383 . 0.1763 0.1260 0.1513 -0.0095 -0.0085
0.0120  1 .
6165 O    O    . LEU LEU LEU B B 383 383 . 0.1747 0.1480 0.1561 0.0197  -0.0121 -
0.0036 1 .
6166 N    N    . VAL VAL VAL B B 384 384 . 0.1600 0.1325 0.1136 0.0141  0.0097
0.0133  1 .
6167 CA   CA   . VAL VAL VAL B B 384 384 . 0.1730 0.1275 0.1288 0.0024  -0.0002 -
0.0073 1 .
6168 CB   CB   . VAL VAL VAL B B 384 384 . 0.1645 0.1240 0.0895 0.0127  -0.0012
0.0068  1 .
6169 CG1  CG1  . VAL VAL VAL B B 384 384 . 0.1802 0.1122 0.1445 0.0005  -0.0205
0.0305  1 .
6170 CG2  CG2  . VAL VAL VAL B B 384 384 . 0.1487 0.1808 0.0842 -0.0213 0.0115  -
0.0049 1 .
6171 C    C    . VAL VAL VAL B B 384 384 . 0.1892 0.1298 0.1335 0.0073  -0.0245
0.0061  1 .
6172 O    O    . VAL VAL VAL B B 384 384 . 0.2198 0.1251 0.1310 0.0145  -0.0088 -
0.0171 1 .
6173 N    N    . VAL VAL VAL B B 385 385 . 0.1695 0.1120 0.1340 0.0084  -0.0277
0.0065  1 .
6174 CA   CA   . VAL VAL VAL B B 385 385 . 0.1706 0.1331 0.1379 -0.0171 -0.0503
0.0281  1 .
6175 CB   CB   . VAL VAL VAL B B 385 385 . 0.1438 0.1255 0.1280 -0.0158 -0.0541
0.0306  1 .
6176 CG1  CG1  . VAL VAL VAL B B 385 385 . 0.1972 0.1420 0.1504 -0.0258 -0.0657 -
0.0237 1 .
6177 CG2  CG2  . VAL VAL VAL B B 385 385 . 0.1694 0.1829 0.1362 0.0302  -0.0287 -
0.0138 1 .
6178 C    C    . VAL VAL VAL B B 385 385 . 0.1665 0.1565 0.1398 0.0005  -0.0108
0.0298  1 .
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6179 O    O    . VAL VAL VAL B B 385 385 . 0.1953 0.1803 0.1852 -0.0108 -0.0308
0.0260  1 .
6180 N    N    . GLY GLY GLY B B 386 386 . 0.1614 0.1191 0.1878 0.0023  -0.0050
0.0252  1 .
6181 CA   CA   . GLY GLY GLY B B 386 386 . 0.1814 0.1912 0.1502 -0.0025 -0.0297
0.0216  1 .
6182 C    C    . GLY GLY GLY B B 386 386 . 0.1978 0.1560 0.1914 0.0016  -0.0400
0.0228  1 .
6183 O    O    . GLY GLY GLY B B 386 386 . 0.2191 0.2051 0.1833 -0.0148 -0.0652
0.0006  1 .
6184 N    N    . LEU LEU LEU B B 387 387 . 0.1911 0.1908 0.1660 -0.0084 -0.0176
0.0518  1 .
6185 CA   CA   . LEU LEU LEU B B 387 387 . 0.1971 0.1593 0.1495 -0.0030 -0.0048
0.0241  1 .
6186 CB   CB   . LEU LEU LEU B B 387 387 . 0.2118 0.1503 0.1446 0.0274  0.0039
0.0435  1 .
6187 CG   CG   . LEU LEU LEU B B 387 387 . 0.1896 0.1883 0.1696 0.0101  0.0149
0.0232  1 .
6188 CD1  CD1  . LEU LEU LEU B B 387 387 . 0.3249 0.1433 0.1864 0.0041  0.0347
0.0549  1 .
6189 CD2  CD2  . LEU LEU LEU B B 387 387 . 0.2379 0.2149 0.2006 0.0633  0.0106
0.0620  1 .
6190 C    C    . LEU LEU LEU B B 387 387 . 0.2390 0.1689 0.1442 -0.0066 -0.0013
0.0131  1 .
6191 O    O    . LEU LEU LEU B B 387 387 . 0.2639 0.1667 0.1841 0.0107  -0.0142
0.0130  1 .
6192 N    N    . CYS CYS CYS B B 388 388 . 0.2150 0.2071 0.1712 0.0014  -0.0203
0.0137  1 .
6193 CA   CA   . CYS CYS CYS B B 388 388 . 0.2447 0.2336 0.1800 -0.0199 -0.0157
0.0126  1 .
6194 CB   CB   . CYS CYS CYS B B 388 388 . 0.2622 0.2605 0.2073 -0.0276 -0.0404
0.0469  1 .
6195 SG   SG   . CYS CYS CYS B B 388 388 . 0.3986 0.3585 0.3492 -0.0196 -0.0524 -
0.0033 1 .
6196 C    C    . CYS CYS CYS B B 388 388 . 0.2519 0.2014 0.2053 -0.0327 -0.0320
0.0178  1 .
6197 O    O    . CYS CYS CYS B B 388 388 . 0.3003 0.2093 0.2104 -0.0329 -0.0261 -
0.0279 1 .
6198 N    N    . THR THR THR B B 389 389 . 0.2072 0.1835 0.1929 -0.0066 -0.0269
0.0029  1 .
6199 CA   CA   . THR THR THR B B 389 389 . 0.1967 0.1635 0.1596 -0.0049 -0.0357
0.0067  1 .
6200 CB   CB   . THR THR THR B B 389 389 . 0.1373 0.1116 0.1650 -0.0072 -0.0072 -
0.0068 1 .
6201 OG1  OG1  . THR THR THR B B 389 389 . 0.1964 0.1830 0.1511 0.0300  -0.0079
0.0167  1 .
6202 CG2  CG2  . THR THR THR B B 389 389 . 0.1841 0.1577 0.1865 0.0174  0.0257  -
0.0014 1 .
6203 C    C    . THR THR THR B B 389 389 . 0.2100 0.1547 0.1528 -0.0035 -0.0219 -
0.0068 1 .
6204 O    O    . THR THR THR B B 389 389 . 0.2363 0.1751 0.1614 -0.0078 -0.0261 -
0.0015 1 .
6205 N    N    . GLY GLY GLY B B 390 390 . 0.2149 0.1156 0.1467 0.0140  -0.0321
0.0094  1 .
6206 CA   CA   . GLY GLY GLY B B 390 390 . 0.1986 0.1446 0.1390 -0.0045 -0.0114
0.0011  1 .
6207 C    C    . GLY GLY GLY B B 390 390 . 0.1808 0.1420 0.1244 0.0066  -0.0017
0.0127  1 .
6208 O    O    . GLY GLY GLY B B 390 390 . 0.2141 0.1427 0.1074 0.0152  -0.0256
0.0162  1 .
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6209 N    N    . GLN GLN GLN B B 391 391 . 0.1849 0.1134 0.1043 0.0037  -0.0098
0.0025  1 .
6210 CA   CA   . GLN GLN GLN B B 391 391 . 0.1728 0.1214 0.0878 0.0000  -0.0062
0.0030  1 .
6211 CB   CB   . GLN GLN GLN B B 391 391 . 0.2165 0.1640 0.1736 0.0042  -0.0139
0.0136  1 .
6212 CG   CG   . GLN GLN GLN B B 391 391 . 0.2390 0.1998 0.1937 -0.0571 -0.0560
0.0464  1 .
6213 CD   CD   . GLN GLN GLN B B 391 391 . 0.2198 0.2054 0.1953 -0.0475 -0.0143
0.0361  1 .
6214 OE1  OE1  . GLN GLN GLN B B 391 391 . 0.2346 0.2356 0.1731 -0.0403 -0.0305
0.0648  1 .
6215 NE2  NE2  . GLN GLN GLN B B 391 391 . 0.2850 0.1918 0.1917 -0.0169 -0.0295
0.0493  1 .
6216 C    C    . GLN GLN GLN B B 391 391 . 0.1509 0.1299 0.1022 0.0209  0.0008  -
0.0024 1 .
6217 O    O    . GLN GLN GLN B B 391 391 . 0.1903 0.1563 0.1082 0.0219  0.0001
0.0277  1 .
6218 N    N    . ILE ILE ILE B B 392 392 . 0.1733 0.1280 0.0909 0.0204  0.0013  -
0.0046 1 .
6219 CA   CA   . ILE ILE ILE B B 392 392 . 0.1929 0.1241 0.0908 0.0096  0.0190  -
0.0076 1 .
6220 CB   CB   . ILE ILE ILE B B 392 392 . 0.2077 0.1157 0.1353 0.0103  0.0026  -
0.0005 1 .
6221 CG1  CG1  . ILE ILE ILE B B 392 392 . 0.1371 0.1549 0.0993 0.0028  -0.0139 -
0.0091 1 .
6222 CD   CD   . ILE ILE ILE B B 392 392 . 0.2525 0.1364 0.0948 -0.0059 0.0092
0.0155  1 .
6223 CG2  CG2  . ILE ILE ILE B B 392 392 . 0.2258 0.1275 0.1506 0.0519  -0.0034 -
0.0097 1 .
6224 C    C    . ILE ILE ILE B B 392 392 . 0.1887 0.1282 0.1101 0.0185  0.0155
0.0111  1 .
6225 O    O    . ILE ILE ILE B B 392 392 . 0.1812 0.1133 0.1192 0.0206  0.0113  -
0.0040 1 .
6226 N    N    . LYS LYS LYS B B 393 393 . 0.1575 0.1161 0.1013 -0.0068 0.0048
0.0084  1 .
6227 CA   CA   . LYS LYS LYS B B 393 393 . 0.1724 0.1361 0.0887 0.0071  0.0187
0.0048  1 .
6228 CB   CB   . LYS LYS LYS B B 393 393 . 0.1893 0.1506 0.0792 0.0226  0.0378
0.0043  1 .
6229 CG   CG   . LYS LYS LYS B B 393 393 . 0.2127 0.1394 0.1564 0.0375  0.0709
0.0177  1 .
6230 CD   CD   . LYS LYS LYS B B 393 393 . 0.2303 0.1174 0.1211 0.0124  0.0105
0.0036  1 .
6231 CE   CE   . LYS LYS LYS B B 393 393 . 0.2171 0.1955 0.1824 -0.0071 0.0528  -
0.0564 1 .
6232 NZ   NZ   . LYS LYS LYS B B 393 393 . 0.2290 0.1400 0.1752 0.0074  0.0266  -
0.0210 1 .
6233 C    C    . LYS LYS LYS B B 393 393 . 0.1520 0.1523 0.0987 0.0319  0.0079  -
0.0032 1 .
6234 O    O    . LYS LYS LYS B B 393 393 . 0.1645 0.1616 0.0983 0.0401  0.0013  -
0.0004 1 .
6235 N    N    . THR THR THR B B 394 394 . 0.1742 0.1313 0.0826 0.0296  0.0085
0.0028  1 .
6236 CA   CA   . THR THR THR B B 394 394 . 0.1477 0.1489 0.0845 0.0325  -0.0015 -
0.0097 1 .
6237 CB   CB   . THR THR THR B B 394 394 . 0.2056 0.1007 0.1011 0.0103  0.0248  -
0.0124 1 .
6238 OG1  OG1  . THR THR THR B B 394 394 . 0.1947 0.1501 0.1144 0.0371  0.0255  -
0.0106 1 .
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6239 CG2  CG2  . THR THR THR B B 394 394 . 0.1981 0.0885 0.1408 0.0290  0.0399
0.0045  1 .
6240 C    C    . THR THR THR B B 394 394 . 0.1459 0.1294 0.1262 0.0285  -0.0012 -
0.0023 1 .
6241 O    O    . THR THR THR B B 394 394 . 0.1625 0.1426 0.1106 -0.0028 0.0228
0.0240  1 .
6242 N    N    . GLY GLY GLY B B 395 395 . 0.1376 0.1344 0.1106 0.0140  -0.0141 -
0.0059 1 .
6243 CA   CA   . GLY GLY GLY B B 395 395 . 0.1344 0.1625 0.1280 0.0338  -0.0225 -
0.0102 1 .
6244 C    C    . GLY GLY GLY B B 395 395 . 0.1292 0.1208 0.1008 0.0090  0.0001  -
0.0066 1 .
6245 O    O    . GLY GLY GLY B B 395 395 . 0.1716 0.0982 0.0862 0.0006  0.0046  -
0.0044 1 .
6246 N    N    . ALA ALA ALA B B 396 396 . 0.1428 0.1357 0.1032 0.0181  0.0080  -
0.0037 1 .
6247 CA   CA   . ALA ALA ALA B B 396 396 . 0.1174 0.1230 0.1223 0.0231  -0.0048
0.0200  1 .
6248 CB   CB   . ALA ALA ALA B B 396 396 . 0.1432 0.1357 0.1411 -0.0136 -0.0298 -
0.0196 1 .
6249 C    C    . ALA ALA ALA B B 396 396 . 0.1547 0.1346 0.1310 0.0007  0.0216  -
0.0169 1 .
6250 O    O    . ALA ALA ALA B B 396 396 . 0.1383 0.1448 0.1351 0.0235  0.0270
0.0102  1 .
6251 N    N    . PRO PRO PRO B B 397 397 . 0.1624 0.1256 0.1160 0.0082  0.0236
0.0051  1 .
6252 CA   CA   . PRO PRO PRO B B 397 397 . 0.1814 0.1057 0.0896 0.0010  -0.0039 -
0.0078 1 .
6253 CB   CB   . PRO PRO PRO B B 397 397 . 0.1675 0.1306 0.1247 0.0134  0.0153  -
0.0111 1 .
6254 CG   CG   . PRO PRO PRO B B 397 397 . 0.2068 0.1392 0.1228 0.0145  0.0410
0.0300  1 .
6255 CD   CD   . PRO PRO PRO B B 397 397 . 0.1660 0.1142 0.1320 0.0388  0.0309
0.0020  1 .
6256 C    C    . PRO PRO PRO B B 397 397 . 0.1838 0.1158 0.1281 0.0054  -0.0138 -
0.0007 1 .
6257 O    O    . PRO PRO PRO B B 397 397 . 0.2129 0.1682 0.1175 0.0268  -0.0249 -
0.0240 1 .
6258 N    N    . CYS CYS CYS B B 398 398 . 0.1666 0.1369 0.1053 0.0003  0.0066  -
0.0060 1 .
6259 CA   CA   . CYS CYS CYS B B 398 398 . 0.1287 0.1483 0.1025 -0.0043 0.0056
0.0145  1 .
6260 CB   CB   . CYS CYS CYS B B 398 398 . 0.1273 0.1726 0.1137 -0.0155 -0.0060 -
0.0031 1 .
6261 SG   SG   . CYS CYS CYS B B 398 398 . 0.1699 0.2244 0.1793 -0.0320 0.0319  -
0.0048 1 .
6262 C    C    . CYS CYS CYS B B 398 398 . 0.1595 0.1291 0.1152 -0.0005 -0.0055
0.0079  1 .
6263 O    O    . CYS CYS CYS B B 398 398 . 0.1604 0.1485 0.1135 0.0228  0.0097
0.0137  1 .
6264 N    N    . ARG ARG ARG B B 399 399 . 0.1384 0.1235 0.1068 0.0078  0.0164
0.0106  1 .
6265 CA   CA   . ARG ARG ARG B B 399 399 . 0.1436 0.1360 0.1119 -0.0084 0.0141  -
0.0099 1 .
6266 CB   CB   . ARG ARG ARG B B 399 399 . 0.1357 0.0852 0.0891 -0.0161 0.0188  -
0.0192 1 .
6267 CG   CG   . ARG ARG ARG B B 399 399 . 0.1340 0.1261 0.1510 -0.0204 0.0310
0.0075  1 .
6268 CD   CD   . ARG ARG ARG B B 399 399 . 0.1742 0.1006 0.1270 0.0036  0.0455  -
0.0276 1 .
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6269 NE   NE   . ARG ARG ARG B B 399 399 . 0.1319 0.1223 0.1126 -0.0071 0.0238  -
0.0131 1 .
6270 CZ   CZ   . ARG ARG ARG B B 399 399 . 0.1207 0.1225 0.1588 -0.0230 0.0282  -
0.0356 1 .
6271 NH1  NH1  . ARG ARG ARG B B 399 399 . 0.1302 0.1971 0.2399 -0.0268 0.0045  -
0.0308 1 .
6272 NH2  NH2  . ARG ARG ARG B B 399 399 . 0.1480 0.1488 0.1532 0.0204  0.0214  -
0.0253 1 .
6273 C    C    . ARG ARG ARG B B 399 399 . 0.1210 0.1104 0.0955 -0.0256 0.0069  -
0.0084 1 .
6274 O    O    . ARG ARG ARG B B 399 399 . 0.1373 0.1181 0.1169 -0.0235 -0.0137
0.0117  1 .
6275 N    N    . SER SER SER B B 400 400 . 0.1257 0.0815 0.0904 -0.0164 0.0154  -
0.0209 1 .
6276 CA   CA   . SER SER SER B B 400 400 . 0.1064 0.1109 0.0699 -0.0036 -0.0016
0.0027  1 .
6277 CB   CB   . SER SER SER B B 400 400 . 0.1119 0.1252 0.1150 0.0083  -0.0069
0.0070  1 .
6278 OG   OG   . SER SER SER B B 400 400 . 0.1583 0.1313 0.1039 0.0100  -0.0136 -
0.0159 1 .
6279 C    C    . SER SER SER B B 400 400 . 0.1124 0.1118 0.0663 -0.0018 0.0149  -
0.0013 1 .
6280 O    O    . SER SER SER B B 400 400 . 0.1379 0.1032 0.1051 -0.0095 0.0113  -
0.0265 1 .
6281 N    N    . GLU GLU GLU B B 401 401 . 0.1208 0.1024 0.0948 0.0040  0.0106  -
0.0105 1 .
6282 CA   CA   . GLU GLU GLU B B 401 401 . 0.1277 0.1042 0.0860 0.0034  0.0179  -
0.0096 1 .
6283 CB   CB   . GLU GLU GLU B B 401 401 . 0.1225 0.1054 0.0919 -0.0117 0.0280  -
0.0155 1 .
6284 CG   CG   . GLU GLU GLU B B 401 401 . 0.0763 0.0932 0.0761 0.0044  -0.0126
0.0154  1 .
6285 CD   CD   . GLU GLU GLU B B 401 401 . 0.1046 0.1041 0.0891 0.0008  -0.0039
0.0032  1 .
6286 OE1  OE1  . GLU GLU GLU B B 401 401 . 0.1519 0.0755 0.0987 -0.0117 0.0165  -
0.0140 1 .
6287 OE2  OE2  . GLU GLU GLU B B 401 401 . 0.1294 0.1359 0.1657 0.0059  -0.0076
0.0140  1 .
6288 C    C    . GLU GLU GLU B B 401 401 . 0.1280 0.1181 0.1146 -0.0070 0.0045
0.0003  1 .
6289 O    O    . GLU GLU GLU B B 401 401 . 0.1497 0.1237 0.1221 0.0059  -0.0108 -
0.0194 1 .
6290 N    N    . ARG ARG ARG B B 402 402 . 0.1167 0.0959 0.0785 -0.0055 0.0153  -
0.0094 1 .
6291 CA   CA   . ARG ARG ARG B B 402 402 . 0.1309 0.0568 0.0673 -0.0017 0.0165  -
0.0177 1 .
6292 CB   CB   . ARG ARG ARG B B 402 402 . 0.1159 0.0602 0.0859 -0.0251 0.0062  -
0.0426 1 .
6293 CG   CG   . ARG ARG ARG B B 402 402 . 0.1182 0.0468 0.1139 -0.0044 -0.0056
0.0084  1 .
6294 CD   CD   . ARG ARG ARG B B 402 402 . 0.1691 0.0949 0.1068 0.0005  -0.0382 -
0.0007 1 .
6295 NE   NE   . ARG ARG ARG B B 402 402 . 0.1729 0.1213 0.0898 -0.0118 0.0170
0.0008  1 .
6296 CZ   CZ   . ARG ARG ARG B B 402 402 . 0.1372 0.1011 0.1274 -0.0178 -0.0036
0.0158  1 .
6297 NH1  NH1  . ARG ARG ARG B B 402 402 . 0.1566 0.1076 0.1146 0.0008  0.0211
0.0230  1 .
6298 NH2  NH2  . ARG ARG ARG B B 402 402 . 0.1635 0.1153 0.1201 -0.0009 -0.0006
0.0026  1 .
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6299 C    C    . ARG ARG ARG B B 402 402 . 0.1214 0.1104 0.0839 0.0000  0.0046  -
0.0231 1 .
6300 O    O    . ARG ARG ARG B B 402 402 . 0.1356 0.1229 0.0985 -0.0093 0.0066  -
0.0163 1 .
6301 N    N    . LEU LEU LEU B B 403 403 . 0.1487 0.0910 0.1027 0.0145  0.0139  -
0.0108 1 .
6302 CA   CA   . LEU LEU LEU B B 403 403 . 0.1279 0.0978 0.1219 0.0027  -0.0096 -
0.0022 1 .
6303 CB   CB   . LEU LEU LEU B B 403 403 . 0.1309 0.1212 0.1628 0.0193  -0.0072
0.0104  1 .
6304 CG   CG   . LEU LEU LEU B B 403 403 . 0.1107 0.1093 0.1275 -0.0063 0.0182  -
0.0244 1 .
6305 CD1  CD1  . LEU LEU LEU B B 403 403 . 0.2237 0.1404 0.1146 -0.0164 0.0208
0.0237  1 .
6306 CD2  CD2  . LEU LEU LEU B B 403 403 . 0.1552 0.1382 0.1592 -0.0338 -0.0113 -
0.0208 1 .
6307 C    C    . LEU LEU LEU B B 403 403 . 0.1273 0.1107 0.1257 0.0071  -0.0051
0.0033  1 .
6308 O    O    . LEU LEU LEU B B 403 403 . 0.1456 0.1153 0.1233 0.0083  -0.0011 -
0.0217 1 .
6309 N    N    . ALA ALA ALA B B 404 404 . 0.1185 0.1254 0.0735 -0.0063 -0.0042 -
0.0007 1 .
6310 CA   CA   . ALA ALA ALA B B 404 404 . 0.1243 0.1351 0.0848 -0.0004 -0.0261 -
0.0085 1 .
6311 CB   CB   . ALA ALA ALA B B 404 404 . 0.1279 0.1532 0.1294 -0.0023 0.0025  -
0.0243 1 .
6312 C    C    . ALA ALA ALA B B 404 404 . 0.1361 0.1174 0.0921 -0.0130 -0.0124
0.0006  1 .
6313 O    O    . ALA ALA ALA B B 404 404 . 0.1507 0.1476 0.1275 -0.0129 -0.0167
0.0100  1 .
6314 N    N    . LYS LYS LYS B B 405 405 . 0.1420 0.1100 0.0973 0.0033  -0.0058
0.0077  1 .
6315 CA   CA   . LYS LYS LYS B B 405 405 . 0.1482 0.0831 0.0610 0.0051  -0.0142 -
0.0069 1 .
6316 CB   CB   . LYS LYS LYS B B 405 405 . 0.1533 0.0507 0.0866 0.0061  -0.0018
0.0010  1 .
6317 CG   CG   . LYS LYS LYS B B 405 405 . 0.1521 0.1165 0.1110 0.0141  -0.0185 -
0.0191 1 .
6318 CD   CD   . LYS LYS LYS B B 405 405 . 0.1624 0.0813 0.0662 0.0130  -0.0242
0.0114  1 .
6319 CE   CE   . LYS LYS LYS B B 405 405 . 0.1835 0.0884 0.1117 0.0066  -0.0328
0.0070  1 .
6320 NZ   NZ   . LYS LYS LYS B B 405 405 . 0.1371 0.1141 0.1054 0.0064  0.0083
0.0011  1 .
6321 C    C    . LYS LYS LYS B B 405 405 . 0.1375 0.1044 0.1001 0.0086  -0.0091
0.0068  1 .
6322 O    O    . LYS LYS LYS B B 405 405 . 0.1477 0.1034 0.0907 -0.0074 -0.0111
0.0032  1 .
6323 N    N    . TYR TYR TYR B B 406 406 . 0.1380 0.1052 0.0842 0.0008  0.0128
0.0001  1 .
6324 CA   CA   . TYR TYR TYR B B 406 406 . 0.1358 0.1027 0.1137 0.0071  0.0142  -
0.0047 1 .
6325 CB   CB   . TYR TYR TYR B B 406 406 . 0.1213 0.0938 0.1233 0.0193  0.0192
0.0143  1 .
6326 CG   CG   . TYR TYR TYR B B 406 406 . 0.1085 0.1086 0.1118 0.0056  0.0144
0.0057  1 .
6327 CD1  CD1  . TYR TYR TYR B B 406 406 . 0.1490 0.1083 0.1100 0.0330  0.0195
0.0092  1 .
6328 CE1  CE1  . TYR TYR TYR B B 406 406 . 0.1638 0.1015 0.1168 -0.0297 -0.0024 -
0.0068 1 .
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6329 CZ   CZ   . TYR TYR TYR B B 406 406 . 0.1299 0.1153 0.1003 0.0209  0.0035
0.0052  1 .
6330 OH   OH   . TYR TYR TYR B B 406 406 . 0.1912 0.1298 0.1371 0.0190  0.0294
0.0291  1 .
6331 CE2  CE2  . TYR TYR TYR B B 406 406 . 0.1479 0.0931 0.1278 0.0345  -0.0001 -
0.0231 1 .
6332 CD2  CD2  . TYR TYR TYR B B 406 406 . 0.1755 0.1204 0.1190 0.0027  0.0167  -
0.0108 1 .
6333 C    C    . TYR TYR TYR B B 406 406 . 0.1646 0.0918 0.0991 0.0001  -0.0073
0.0086  1 .
6334 O    O    . TYR TYR TYR B B 406 406 . 0.1791 0.1067 0.0870 -0.0023 -0.0096
0.0033  1 .
6335 N    N    . ASN ASN ASN B B 407 407 . 0.1562 0.0852 0.0899 0.0169  0.0085
0.0174  1 .
6336 CA   CA   . ASN ASN ASN B B 407 407 . 0.1248 0.1073 0.0647 -0.0170 -0.0030 -
0.0033 1 .
6337 CB   CB   . ASN ASN ASN B B 407 407 . 0.1026 0.1117 0.0634 -0.0126 -0.0058 -
0.0127 1 .
6338 CG   CG   . ASN ASN ASN B B 407 407 . 0.0863 0.1075 0.0834 0.0004  -0.0022
0.0054  1 .
6339 OD1  OD1  . ASN ASN ASN B B 407 407 . 0.1543 0.1305 0.1019 0.0428  -0.0103
0.0007  1 .
6340 ND2  ND2  . ASN ASN ASN B B 407 407 . 0.1371 0.0876 0.0884 0.0181  -0.0276 -
0.0058 1 .
6341 C    C    . ASN ASN ASN B B 407 407 . 0.1352 0.1146 0.1010 0.0069  -0.0126 -
0.0078 1 .
6342 O    O    . ASN ASN ASN B B 407 407 . 0.1573 0.1011 0.1223 0.0192  -0.0323
0.0175  1 .
6343 N    N    . GLN GLN GLN B B 408 408 . 0.1253 0.1169 0.1083 0.0173  0.0093  -
0.0071 1 .
6344 CA   CA   . GLN GLN GLN B B 408 408 . 0.1352 0.1278 0.0952 0.0099  0.0085  -
0.0278 1 .
6345 CB   CB   . GLN GLN GLN B B 408 408 . 0.1250 0.1022 0.1215 0.0186  -0.0112 -
0.0073 1 .
6346 CG   CG   . GLN GLN GLN B B 408 408 . 0.1256 0.1331 0.1295 0.0099  0.0139  -
0.0084 1 .
6347 CD   CD   . GLN GLN GLN B B 408 408 . 0.1762 0.2106 0.2035 -0.0150 -0.0048
0.0338  1 .
6348 OE1  OE1  . GLN GLN GLN B B 408 408 . 0.2257 0.1538 0.2055 0.0629  0.0113
0.0511  1 .
6349 NE2  NE2  . GLN GLN GLN B B 408 408 . 0.1795 0.2431 0.2242 0.0273  0.0068  -
0.0077 1 .
6350 C    C    . GLN GLN GLN B B 408 408 . 0.1491 0.1225 0.1169 -0.0012 -0.0103 -
0.0059 1 .
6351 O    O    . GLN GLN GLN B B 408 408 . 0.1346 0.1323 0.1163 -0.0102 -0.0179
0.0000  1 .
6352 N    N    . LEU LEU LEU B B 409 409 . 0.1319 0.1133 0.0916 0.0088  -0.0014 -
0.0076 1 .
6353 CA   CA   . LEU LEU LEU B B 409 409 . 0.1572 0.0752 0.1084 0.0014  0.0011  -
0.0121 1 .
6354 CB   CB   . LEU LEU LEU B B 409 409 . 0.1291 0.0762 0.0859 0.0313  0.0216
0.0068  1 .
6355 CG   CG   . LEU LEU LEU B B 409 409 . 0.1461 0.1111 0.1565 0.0026  -0.0217
0.0123  1 .
6356 CD1  CD1  . LEU LEU LEU B B 409 409 . 0.1763 0.1390 0.1375 -0.0060 0.0194
0.0443  1 .
6357 CD2  CD2  . LEU LEU LEU B B 409 409 . 0.1214 0.1205 0.1266 0.0313  -0.0149 -
0.0027 1 .
6358 C    C    . LEU LEU LEU B B 409 409 . 0.1447 0.0922 0.1358 0.0071  -0.0282
0.0097  1 .
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6359 O    O    . LEU LEU LEU B B 409 409 . 0.1793 0.1180 0.1053 0.0038  -0.0288
0.0045  1 .
6360 N    N    . MET MET MET B B 410 410 . 0.1614 0.1038 0.1432 0.0145  -0.0197
0.0108  1 .
6361 CA   CA   . MET MET MET B B 410 410 . 0.1625 0.1092 0.1545 0.0165  -0.0273
0.0057  1 .
6362 CB   CB   . MET MET MET B B 410 410 . 0.1266 0.1107 0.1494 0.0225  -0.0130
0.0277  1 .
6363 CG   CG   . MET MET MET B B 410 410 . 0.1460 0.1768 0.1958 -0.0012 -0.0203
0.0416  1 .
6364 SD   SD   . MET MET MET B B 410 410 . 0.2423 0.1990 0.1917 0.0164  -0.0084
0.0166  1 .
6365 CE   CE   . MET MET MET B B 410 410 . 0.1541 0.1969 0.0931 0.0382  -0.0322 -
0.0754 1 .
6366 C    C    . MET MET MET B B 410 410 . 0.1826 0.1460 0.1457 0.0113  -0.0082 -
0.0096 1 .
6367 O    O    . MET MET MET B B 410 410 . 0.2180 0.1428 0.1514 -0.0066 -0.0068
0.0004  1 .
6368 N    N    . ARG ARG ARG B B 411 411 . 0.1309 0.1375 0.1267 0.0218  -0.0040
0.0097  1 .
6369 CA   CA   . ARG ARG ARG B B 411 411 . 0.1533 0.1401 0.1357 0.0096  -0.0398
0.0038  1 .
6370 CB   CB   . ARG ARG ARG B B 411 411 . 0.1589 0.1698 0.1332 0.0021  -0.0340
0.0195  1 .
6371 CG   CG   . ARG ARG ARG B B 411 411 . 0.1536 0.1541 0.1119 0.0194  -0.0432
0.0352  1 .
6372 CD   CD   . ARG ARG ARG B B 411 411 . 0.1605 0.2071 0.1292 0.0044  -0.0073
0.0105  1 .
6373 NE   NE   . ARG ARG ARG B B 411 411 . 0.1830 0.1667 0.1578 -0.0148 0.0075  -
0.0001 1 .
6374 CZ   CZ   . ARG ARG ARG B B 411 411 . 0.2200 0.1978 0.1525 0.0000  -0.0037
0.0004  1 .
6375 NH1  NH1  . ARG ARG ARG B B 411 411 . 0.2193 0.1803 0.1723 0.0126  -0.0119
0.0261  1 .
6376 NH2  NH2  . ARG ARG ARG B B 411 411 . 0.1971 0.1637 0.2078 0.0084  0.0040
0.0281  1 .
6377 C    C    . ARG ARG ARG B B 411 411 . 0.1692 0.1511 0.1365 0.0067  -0.0281
0.0037  1 .
6378 O    O    . ARG ARG ARG B B 411 411 . 0.1943 0.1415 0.1519 -0.0105 -0.0374
0.0208  1 .
6379 N    N    . ILE ILE ILE B B 412 412 . 0.1466 0.1042 0.1046 0.0102  -0.0422
0.0154  1 .
6380 CA   CA   . ILE ILE ILE B B 412 412 . 0.1705 0.1017 0.1302 0.0067  -0.0329
0.0050  1 .
6381 CB   CB   . ILE ILE ILE B B 412 412 . 0.1628 0.0960 0.1140 0.0296  -0.0249
0.0099  1 .
6382 CG1  CG1  . ILE ILE ILE B B 412 412 . 0.1670 0.0840 0.1271 0.0370  -0.0038
0.0123  1 .
6383 CD   CD   . ILE ILE ILE B B 412 412 . 0.1900 0.0838 0.1742 -0.0240 -0.0021
0.0025  1 .
6384 CG2  CG2  . ILE ILE ILE B B 412 412 . 0.1806 0.1618 0.1194 0.0143  -0.0277
0.0084  1 .
6385 C    C    . ILE ILE ILE B B 412 412 . 0.1923 0.1396 0.1612 0.0038  -0.0317 -
0.0040 1 .
6386 O    O    . ILE ILE ILE B B 412 412 . 0.2164 0.1224 0.1821 0.0007  -0.0535
0.0042  1 .
6387 N    N    . GLU GLU GLU B B 413 413 . 0.2081 0.1197 0.1272 0.0207  -0.0194 -
0.0129 1 .
6388 CA   CA   . GLU GLU GLU B B 413 413 . 0.2146 0.1374 0.1289 0.0168  0.0031  -
0.0147 1 .
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6389 CB   CB   . GLU GLU GLU B B 413 413 . 0.2216 0.1096 0.1635 0.0226  -0.0056 -
0.0368 1 .
6390 CG   CG   . GLU GLU GLU B B 413 413 . 0.2410 0.1696 0.1669 0.0138  0.0294  -
0.0154 1 .
6391 CD   CD   . GLU GLU GLU B B 413 413 . 0.2509 0.2126 0.2385 0.0170  0.0105  -
0.0379 1 .
6392 OE1  OE1  . GLU GLU GLU B B 413 413 . 0.2287 0.2084 0.2435 -0.0243 -0.0339
0.0116  1 .
6393 OE2  OE2  . GLU GLU GLU B B 413 413 . 0.3217 0.1708 0.2853 -0.0053 -0.0076 -
0.0629 1 .
6394 C    C    . GLU GLU GLU B B 413 413 . 0.2232 0.1525 0.1491 0.0042  -0.0322
0.0001  1 .
6395 O    O    . GLU GLU GLU B B 413 413 . 0.2260 0.1837 0.1638 -0.0110 -0.0133 -
0.0262 1 .
6396 N    N    . GLU GLU GLU B B 414 414 . 0.2130 0.1611 0.1255 -0.0091 -0.0323
0.0097  1 .
6397 CA   CA   . GLU GLU GLU B B 414 414 . 0.2177 0.1722 0.1462 -0.0152 -0.0460
0.0289  1 .
6398 CB   CB   . GLU GLU GLU B B 414 414 . 0.2460 0.1721 0.1560 -0.0252 -0.0525
0.0470  1 .
6399 CG   CG   . GLU GLU GLU B B 414 414 . 0.3214 0.1505 0.1902 -0.0458 -0.0532
0.0223  1 .
6400 CD   CD   . GLU GLU GLU B B 414 414 . 0.2696 0.2124 0.2086 -0.0259 -0.0245 -
0.0001 1 .
6401 OE1  OE1  . GLU GLU GLU B B 414 414 . 0.3110 0.3732 0.2420 -0.0068 -0.0297 -
0.0099 1 .
6402 OE2  OE2  . GLU GLU GLU B B 414 414 . 0.3281 0.2899 0.2470 -0.0372 -0.0062
0.0168  1 .
6403 C    C    . GLU GLU GLU B B 414 414 . 0.2138 0.1747 0.1707 -0.0235 -0.0226
0.0100  1 .
6404 O    O    . GLU GLU GLU B B 414 414 . 0.2761 0.1599 0.2368 -0.0140 -0.0157
0.0260  1 .
6405 N    N    . GLU GLU GLU B B 415 415 . 0.2291 0.1813 0.1904 -0.0101 -0.0205
0.0058  1 .
6406 CA   CA   . GLU GLU GLU B B 415 415 . 0.2214 0.1873 0.2062 -0.0401 -0.0173 -
0.0214 1 .
6407 CB   CB   . GLU GLU GLU B B 415 415 . 0.2106 0.2071 0.2630 0.0034  -0.0138
0.0183  1 .
6408 CG   CG   . GLU GLU GLU B B 415 415 . 0.3321 0.3117 0.2785 -0.0907 0.0398
0.0024  1 .
6409 CD   CD   . GLU GLU GLU B B 415 415 . 0.2612 0.2094 0.3564 0.0354  0.0224
0.0821  1 .
6410 C    C    . GLU GLU GLU B B 415 415 . 0.2453 0.2339 0.2420 -0.0361 -0.0319
0.0034  1 .
6411 O    O    . GLU GLU GLU B B 415 415 . 0.2869 0.2159 0.2589 -0.0809 -0.0233
0.0012  1 .
6412 N    N    . LEU LEU LEU B B 416 416 . 0.2523 0.2357 0.1835 -0.0141 -0.0495 -
0.0013 1 .
6413 CA   CA   . LEU LEU LEU B B 416 416 . 0.2778 0.2493 0.2237 -0.0161 -0.0582 -
0.0110 1 .
6414 CB   CB   . LEU LEU LEU B B 416 416 . 0.2519 0.2669 0.1958 -0.0096 -0.0642
0.0080  1 .
6415 CG   CG   . LEU LEU LEU B B 416 416 . 0.2627 0.2494 0.2585 -0.0300 -0.0612 -
0.0048 1 .
6416 CD1  CD1  . LEU LEU LEU B B 416 416 . 0.3025 0.1904 0.2779 -0.0002 -0.0022
0.0173  1 .
6417 CD2  CD2  . LEU LEU LEU B B 416 416 . 0.2977 0.3238 0.3580 -0.0005 -0.0909 -
0.0451 1 .
6418 C    C    . LEU LEU LEU B B 416 416 . 0.3205 0.2757 0.2446 -0.0064 -0.0537 -
0.0134 1 .
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6419 O    O    . LEU LEU LEU B B 416 416 . 0.3342 0.2777 0.2631 -0.0023 -0.0958 -
0.0245 1 .
6420 N    N    . GLY GLY GLY B B 417 417 . 0.3360 0.2857 0.2727 -0.0073 -0.0584 -
0.0247 1 .
6421 CA   CA   . GLY GLY GLY B B 417 417 . 0.3877 0.3387 0.3146 -0.0065 -0.0376 -
0.0317 1 .
6422 C    C    . GLY GLY GLY B B 417 417 . 0.4234 0.3523 0.3344 -0.0250 -0.0270 -
0.0492 1 .
6423 O    O    . GLY GLY GLY B B 417 417 . 0.4278 0.3329 0.2849 -0.0319 -0.0191 -
0.0620 1 .
6424 N    N    . ASP ASP ASP B B 418 418 . 0.4687 0.3703 0.3766 -0.0254 -0.0333 -
0.0401 1 .
6425 CA   CA   . ASP ASP ASP B B 418 418 . 0.4935 0.4029 0.3954 -0.0253 -0.0334 -
0.0316 1 .
6426 CB   CB   . ASP ASP ASP B B 418 418 . 0.5102 0.3884 0.4123 -0.0372 -0.0397 -
0.0258 1 .
6427 C    C    . ASP ASP ASP B B 418 418 . 0.4877 0.4160 0.4037 -0.0389 -0.0138 -
0.0213 1 .
6428 O    O    . ASP ASP ASP B B 418 418 . 0.5380 0.4562 0.4075 -0.0585 -0.0137 -
0.0278 1 .
6429 N    N    . GLU GLU GLU B B 419 419 . 0.4532 0.3974 0.3914 -0.0432 -0.0361 -
0.0182 1 .
6430 CA   CA   . GLU GLU GLU B B 419 419 . 0.4162 0.3817 0.3852 -0.0451 -0.0325
0.0029  1 .
6431 CB   CB   . GLU GLU GLU B B 419 419 . 0.3988 0.3950 0.4015 -0.0497 -0.0368
0.0129  1 .
6432 CG   CG   . GLU GLU GLU B B 419 419 . 0.4357 0.4362 0.4504 -0.0587 -0.0438
0.0085  1 .
6433 C    C    . GLU GLU GLU B B 419 419 . 0.3850 0.3661 0.3665 -0.0337 -0.0277
0.0073  1 .
6434 O    O    . GLU GLU GLU B B 419 419 . 0.3969 0.3645 0.3798 -0.0501 -0.0377
0.0262  1 .
6435 N    N    . ALA ALA ALA B B 420 420 . 0.3700 0.3425 0.3562 -0.0321 -0.0236 -
0.0022 1 .
6436 CA   CA   . ALA ALA ALA B B 420 420 . 0.3512 0.3424 0.3264 -0.0227 -0.0318
0.0043  1 .
6437 CB   CB   . ALA ALA ALA B B 420 420 . 0.3312 0.3580 0.3408 -0.0147 -0.0354
0.0043  1 .
6438 C    C    . ALA ALA ALA B B 420 420 . 0.3470 0.3166 0.3240 -0.0191 -0.0146 -
0.0141 1 .
6439 O    O    . ALA ALA ALA B B 420 420 . 0.4131 0.3601 0.3223 -0.0224 0.0069
0.0060  1 .
6440 N    N    . ARG ARG ARG B B 421 421 . 0.3407 0.2873 0.2888 -0.0230 -0.0287 -
0.0311 1 .
6441 CA   CA   . ARG ARG ARG B B 421 421 . 0.3137 0.2714 0.3295 -0.0354 -0.0284 -
0.0431 1 .
6442 CB   CB   . ARG ARG ARG B B 421 421 . 0.3385 0.2635 0.3247 -0.0429 -0.0538 -
0.0572 1 .
6443 CG   CG   . ARG ARG ARG B B 421 421 . 0.3518 0.2963 0.4013 -0.1003 -0.0624 -
0.0377 1 .
6444 C    C    . ARG ARG ARG B B 421 421 . 0.2942 0.2501 0.2990 -0.0201 -0.0164 -
0.0396 1 .
6445 O    O    . ARG ARG ARG B B 421 421 . 0.3247 0.2974 0.3810 -0.0400 -0.0289 -
0.0900 1 .
6446 N    N    . PHE PHE PHE B B 422 422 . 0.2699 0.1899 0.2286 -0.0040 -0.0331 -
0.0045 1 .
6447 CA   CA   . PHE PHE PHE B B 422 422 . 0.2649 0.1808 0.1996 0.0045  -0.0209
0.0089  1 .
6448 CB   CB   . PHE PHE PHE B B 422 422 . 0.2543 0.2002 0.2234 0.0331  -0.0251 -
0.0139 1 .
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6449 CG   CG   . PHE PHE PHE B B 422 422 . 0.2361 0.1740 0.1493 0.0320  0.0083
0.0222  1 .
6450 CD1  CD1  . PHE PHE PHE B B 422 422 . 0.1929 0.1422 0.1731 0.0230  -0.0190 -
0.0140 1 .
6451 CE1  CE1  . PHE PHE PHE B B 422 422 . 0.1823 0.1295 0.1608 0.0398  -0.0118
0.0313  1 .
6452 CZ   CZ   . PHE PHE PHE B B 422 422 . 0.2051 0.1953 0.1611 0.0014  -0.0118 -
0.0005 1 .
6453 CE2  CE2  . PHE PHE PHE B B 422 422 . 0.2364 0.1550 0.1198 0.0263  -0.0425
0.0411  1 .
6454 CD2  CD2  . PHE PHE PHE B B 422 422 . 0.1960 0.1804 0.1415 0.0242  -0.0031 -
0.0009 1 .
6455 C    C    . PHE PHE PHE B B 422 422 . 0.2775 0.1699 0.1832 0.0181  -0.0051 -
0.0088 1 .
6456 O    O    . PHE PHE PHE B B 422 422 . 0.3124 0.1758 0.1678 0.0158  -0.0065 -
0.0179 1 .
6457 N    N    . ALA ALA ALA B B 423 423 . 0.2903 0.1166 0.1741 0.0029  -0.0186
0.0243  1 .
6458 CA   CA   . ALA ALA ALA B B 423 423 . 0.2952 0.1645 0.1707 -0.0058 -0.0026 -
0.0098 1 .
6459 CB   CB   . ALA ALA ALA B B 423 423 . 0.2996 0.1422 0.2320 0.0191  -0.0007
0.0124  1 .
6460 C    C    . ALA ALA ALA B B 423 423 . 0.2861 0.1557 0.1749 0.0188  -0.0086 -
0.0217 1 .
6461 O    O    . ALA ALA ALA B B 423 423 . 0.3582 0.1770 0.1726 0.0362  0.0175
0.0086  1 .
6462 N    N    . GLY GLY GLY B B 424 424 . 0.2778 0.1367 0.1815 0.0169  0.0069  -
0.0245 1 .
6463 CA   CA   . GLY GLY GLY B B 424 424 . 0.2661 0.1791 0.1489 0.0142  0.0236
0.0006  1 .
6464 C    C    . GLY GLY GLY B B 424 424 . 0.3157 0.1888 0.1625 0.0227  0.0293  -
0.0098 1 .
6465 O    O    . GLY GLY GLY B B 424 424 . 0.3176 0.2010 0.1535 0.0124  0.0370
0.0220  1 .
6466 N    N    . HIS HIS HIS B B 425 425 . 0.3330 0.2424 0.1358 0.0223  0.0377  -
0.0047 1 .
6467 CA   CA   . HIS HIS HIS B B 425 425 . 0.3263 0.2488 0.1635 0.0349  0.0372  -
0.0185 1 .
6468 CB   CB   . HIS HIS HIS B B 425 425 . 0.3415 0.2795 0.1382 0.0460  0.0533  -
0.0202 1 .
6469 CG   CG   . HIS HIS HIS B B 425 425 . 0.3577 0.3261 0.1749 0.0405  0.0352  -
0.0520 1 .
6470 ND1  ND1  . HIS HIS HIS B B 425 425 . 0.3618 0.4078 0.2204 0.0301  0.0109  -
0.0134 1 .
6471 CE1  CE1  . HIS HIS HIS B B 425 425 . 0.4328 0.4058 0.1278 0.0434  0.0386  -
0.0710 1 .
6472 NE2  NE2  . HIS HIS HIS B B 425 425 . 0.4258 0.3898 0.2166 0.0377  0.0457  -
0.0664 1 .
6473 CD2  CD2  . HIS HIS HIS B B 425 425 . 0.3863 0.3654 0.1861 0.0870  0.0628  -
0.0607 1 .
6474 C    C    . HIS HIS HIS B B 425 425 . 0.3350 0.2465 0.1773 0.0190  0.0330  -
0.0248 1 .
6475 O    O    . HIS HIS HIS B B 425 425 . 0.3785 0.2341 0.2086 0.0337  0.0296
0.0050  1 .
6476 N    N    . ASN ASN ASN B B 426 426 . 0.2980 0.2585 0.1878 0.0081  -0.0110 -
0.0298 1 .
6477 CA   CA   . ASN ASN ASN B B 426 426 . 0.3139 0.2638 0.2294 -0.0090 -0.0020 -
0.0115 1 .
6478 CB   CB   . ASN ASN ASN B B 426 426 . 0.3485 0.2746 0.2340 -0.0288 -0.0145 -
0.0305 1 .
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6479 CG   CG   . ASN ASN ASN B B 426 426 . 0.4617 0.3379 0.2861 -0.0187 -0.0051 -
0.0301 1 .
6480 OD1  OD1  . ASN ASN ASN B B 426 426 . 0.5425 0.5608 0.2694 -0.0646 -0.0497 -
0.0765 1 .
6481 ND2  ND2  . ASN ASN ASN B B 426 426 . 0.6265 0.3547 0.3549 -0.0704 -0.0001 -
0.1352 1 .
6482 C    C    . ASN ASN ASN B B 426 426 . 0.2533 0.1928 0.2331 -0.0150 -0.0087
0.0087  1 .
6483 O    O    . ASN ASN ASN B B 426 426 . 0.2761 0.2283 0.2259 -0.0202 -0.0332
0.0129  1 .
6484 N    N    . PHE PHE PHE B B 427 427 . 0.2833 0.1692 0.1734 -0.0052 -0.0176
0.0264  1 .
6485 CA   CA   . PHE PHE PHE B B 427 427 . 0.2356 0.1571 0.2046 0.0076  -0.0090
0.0109  1 .
6486 CB   CB   . PHE PHE PHE B B 427 427 . 0.2667 0.1661 0.2018 0.0025  -0.0086
0.0057  1 .
6487 CG   CG   . PHE PHE PHE B B 427 427 . 0.2397 0.2093 0.2035 0.0067  -0.0262
0.0069  1 .
6488 CD1  CD1  . PHE PHE PHE B B 427 427 . 0.2291 0.2661 0.2321 -0.0129 0.0056
0.0607  1 .
6489 CE1  CE1  . PHE PHE PHE B B 427 427 . 0.2287 0.2958 0.3016 -0.0134 -0.0038
0.0251  1 .
6490 CZ   CZ   . PHE PHE PHE B B 427 427 . 0.2333 0.2599 0.2213 -0.0280 -0.0335
0.0261  1 .
6491 CE2  CE2  . PHE PHE PHE B B 427 427 . 0.2389 0.2918 0.2214 -0.0169 -0.0655
0.0236  1 .
6492 CD2  CD2  . PHE PHE PHE B B 427 427 . 0.2570 0.2137 0.1746 -0.0290 -0.0487 -
0.0076 1 .
6493 C    C    . PHE PHE PHE B B 427 427 . 0.2392 0.1882 0.2009 -0.0096 -0.0162
0.0057  1 .
6494 O    O    . PHE PHE PHE B B 427 427 . 0.2498 0.1767 0.2252 0.0055  -0.0222 -
0.0018 1 .
6495 N    N    . ARG ARG ARG B B 428 428 . 0.2478 0.1888 0.1997 -0.0459 -0.0458
0.0244  1 .
6496 CA   CA   . ARG ARG ARG B B 428 428 . 0.2489 0.2134 0.2484 -0.0269 -0.0454
0.0273  1 .
6497 CB   CB   . ARG ARG ARG B B 428 428 . 0.2424 0.2343 0.1922 -0.0326 -0.0353
0.0534  1 .
6498 CG   CG   . ARG ARG ARG B B 428 428 . 0.2234 0.2127 0.1818 -0.0262 -0.0270
0.0507  1 .
6499 CD   CD   . ARG ARG ARG B B 428 428 . 0.3231 0.2176 0.1514 -0.0282 0.0572  -
0.0268 1 .
6500 NE   NE   . ARG ARG ARG B B 428 428 . 0.3014 0.2171 0.1374 -0.0269 0.0058  -
0.0072 1 .
6501 CZ   CZ   . ARG ARG ARG B B 428 428 . 0.1882 0.1859 0.1537 -0.0228 -0.0127 -
0.0137 1 .
6502 NH1  NH1  . ARG ARG ARG B B 428 428 . 0.2727 0.2424 0.1066 -0.0180 -0.0395 -
0.0518 1 .
6503 NH2  NH2  . ARG ARG ARG B B 428 428 . 0.3038 0.2083 0.1761 -0.0167 -0.0090
0.0037  1 .
6504 C    C    . ARG ARG ARG B B 428 428 . 0.2805 0.2332 0.2942 -0.0145 -0.0542
0.0143  1 .
6505 O    O    . ARG ARG ARG B B 428 428 . 0.3173 0.2183 0.3940 -0.0161 -0.0813
0.0020  1 .
6506 N    N    . ASN ASN ASN B B 429 429 . 0.3210 0.2308 0.2046 -0.0315 -0.0435
0.0198  1 .
6507 CA   CA   . ASN ASN ASN B B 429 429 . 0.3199 0.2555 0.2173 -0.0401 -0.0219
0.0122  1 .
6508 CB   CB   . ASN ASN ASN B B 429 429 . 0.3465 0.3096 0.2566 -0.0411 -0.0107
0.0163  1 .
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6509 CG   CG   . ASN ASN ASN B B 429 429 . 0.3825 0.3686 0.3258 -0.0301 -0.0277
0.0113  1 .
6510 OD1  OD1  . ASN ASN ASN B B 429 429 . 0.5260 0.4451 0.3726 -0.1002 -0.0410 -
0.0259 1 .
6511 ND2  ND2  . ASN ASN ASN B B 429 429 . 0.4378 0.4537 0.2751 -0.0419 -0.0248
0.0582  1 .
6512 C    C    . ASN ASN ASN B B 429 429 . 0.3325 0.2741 0.2180 -0.0400 -0.0216 -
0.0005 1 .
6513 O    O    . ASN ASN ASN B B 429 429 . 0.3884 0.2483 0.2161 -0.0383 -0.0277
0.0159  1 .
6514 N    N    . PRO PRO PRO B B 430 430 . 0.3554 0.2777 0.2172 -0.0441 -0.0313
0.0011  1 .
6515 CA   CA   . PRO PRO PRO B B 430 430 . 0.3667 0.3043 0.2365 -0.0647 -0.0228 -
0.0035 1 .
6516 CB   CB   . PRO PRO PRO B B 430 430 . 0.3830 0.3203 0.2290 -0.0419 -0.0242
0.0166  1 .
6517 CG   CG   . PRO PRO PRO B B 430 430 . 0.3661 0.3037 0.1459 -0.0746 -0.0140 -
0.0265 1 .
6518 CD   CD   . PRO PRO PRO B B 430 430 . 0.3208 0.2814 0.1965 -0.0568 -0.0150 -
0.0133 1 .
6519 C    C    . PRO PRO PRO B B 430 430 . 0.4220 0.3717 0.3264 -0.0524 -0.0227 -
0.0060 1 .
6520 O    O    . PRO PRO PRO B B 430 430 . 0.4726 0.3807 0.3602 -0.0815 -0.0356 -
0.0047 1 .
6521 N    N    . SER SER SER B B 431 431 . 0.4379 0.4276 0.3873 -0.0417 -0.0236 -
0.0146 1 .
6522 CA   CA   . SER SER SER B B 431 431 . 0.4636 0.4899 0.4530 -0.0463 -0.0146 -
0.0246 1 .
6523 CB   CB   . SER SER SER B B 431 431 . 0.4385 0.5029 0.4485 -0.0490 -0.0194 -
0.0197 1 .
6524 OG   OG   . SER SER SER B B 431 431 . 0.4828 0.5487 0.4745 -0.0598 -0.0418 -
0.0286 1 .
6525 C    C    . SER SER SER B B 431 431 . 0.5004 0.5281 0.4962 -0.0418 -0.0130 -
0.0337 1 .
6526 O    O    . SER SER SER B B 431 431 . 0.5145 0.5558 0.5252 -0.0605 -0.0173 -
0.0464 1 .
6527 N    N    . VAL VAL VAL B B 432 432 . 0.5261 0.5470 0.5055 -0.0348 0.0009  -
0.0304 1 .
6528 CA   CA   . VAL VAL VAL B B 432 432 . 0.5708 0.5783 0.5359 -0.0217 0.0000  -
0.0224 1 .
6529 CB   CB   . VAL VAL VAL B B 432 432 . 0.5580 0.5783 0.5304 -0.0225 0.0040  -
0.0293 1 .
6530 CG1  CG1  . VAL VAL VAL B B 432 432 . 0.5478 0.5771 0.4751 -0.0228 0.0027  -
0.0302 1 .
6531 CG2  CG2  . VAL VAL VAL B B 432 432 . 0.5534 0.5960 0.5473 -0.0150 -0.0055 -
0.0142 1 .
6532 C    C    . VAL VAL VAL B B 432 432 . 0.6076 0.6003 0.5676 -0.0160 -0.0026 -
0.0193 1 .
6533 O    O    . VAL VAL VAL B B 432 432 . 0.6428 0.6053 0.5665 -0.0153 -0.0048 -
0.0282 1 .
6534 N    N    . LEU LEU LEU B B 433 433 . 0.6276 0.6296 0.5850 -0.0192 -0.0127 -
0.0030 1 .
6535 CA   CA   . LEU LEU LEU B B 433 433 . 0.6446 0.6492 0.6143 -0.0152 -0.0156
0.0035  1 .
6536 CB   CB   . LEU LEU LEU B B 433 433 . 0.6479 0.6579 0.6343 -0.0113 -0.0164
0.0121  1 .
6537 CG   CG   . LEU LEU LEU B B 433 433 . 0.6442 0.6591 0.6267 0.0021  -0.0261
0.0069  1 .
6538 CD1  CD1  . LEU LEU LEU B B 433 433 . 0.6270 0.6364 0.6465 -0.0166 -0.0377
0.0127  1 .
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6539 CD2  CD2  . LEU LEU LEU B B 433 433 . 0.6699 0.6889 0.6679 0.0288  -0.0381 -
0.0091 1 .
6540 C    C    . LEU LEU LEU B B 433 433 . 0.6497 0.6603 0.6339 -0.0291 -0.0181
0.0111  1 .
6541 O    O    . LEU LEU LEU B B 433 433 . 0.6522 0.6645 0.6486 -0.0506 -0.0313
0.0062  1 .
6542 MG+2 MG+2 . MG2 MG2 MG2 B . 600 600 . 0.2120 0.1657 0.0999 0.0179  0.0203
0.0004  1 .
6543 MG+2 MG+2 . MG2 MG2 MG2 B . 601 601 . 0.2096 0.1522 0.1306 0.0141  0.0282  -
0.0068 1 .
6544 O3P  O3P  . YAP YAP YAP B . 602 602 . 0.2693 0.1639 0.1415 0.0101  -0.0112
0.0076  1 .
6545 P    P    . YAP YAP YAP B . 602 602 . 0.1875 0.1556 0.1550 0.0155  -0.0131 -
0.0057 1 .
6546 O1P  O1P  . YAP YAP YAP B . 602 602 . 0.1888 0.1532 0.1680 -0.0062 -0.0293
0.0225  1 .
6547 O2P  O2P  . YAP YAP YAP B . 602 602 . 0.1811 0.1499 0.1641 -0.0105 -0.0059 -
0.0640 1 .
6548 O3   O3   . YAP YAP YAP B . 602 602 . 0.1927 0.1783 0.1773 -0.0002 -0.0193 -
0.0082 1 .
6549 C2   C2   . YAP YAP YAP B . 602 602 . 0.2741 0.1801 0.1903 0.0017  -0.0025
0.0145  1 .
6550 C3   C3   . YAP YAP YAP B . 602 602 . 0.3343 0.2283 0.2649 0.0483  0.0014
0.0878  1 .
6551 C1   C1   . YAP YAP YAP B . 602 602 . 0.2517 0.1943 0.2174 -0.0052 0.0090  -
0.0061 1 .
6552 O1   O1   . YAP YAP YAP B . 602 602 . 0.2520 0.1563 0.1626 0.0035  0.0180
0.0262  1 .
6553 O2   O2   . YAP YAP YAP B . 602 602 . 0.2323 0.1419 0.1736 0.0382  0.0067
0.0074  1 .
6554 O    O    . HOH HOH HOH S . 1   1   . 0.2315 0.0993 0.1539 0.0409  0.0161  -
0.0204 1 .
6555 O    O    . HOH HOH HOH S . 2   2   . 0.1761 0.1054 0.1059 -0.0088 -0.0064 -
0.0136 1 .
6556 O    O    . HOH HOH HOH S . 3   3   . 0.1604 0.1572 0.0958 0.0059  0.0240  -
0.0044 1 .
6557 O    O    . HOH HOH HOH S . 4   4   . 0.2010 0.1050 0.1110 0.0042  -0.0080
0.0017  1 .
6558 O    O    . HOH HOH HOH S . 5   5   . 0.1582 0.1560 0.1556 0.0098  -0.0010 -
0.0056 1 .
6559 O    O    . HOH HOH HOH S . 6   6   . 0.1657 0.1164 0.1313 -0.0311 0.0221  -
0.0240 1 .
6560 O    O    . HOH HOH HOH S . 7   7   . 0.1635 0.1810 0.1580 -0.0143 0.0267  -
0.0102 1 .
6561 O    O    . HOH HOH HOH S . 8   8   . 0.2531 0.1826 0.1092 -0.0046 -0.0096 -
0.0112 1 .
6562 O    O    . HOH HOH HOH S . 9   9   . 0.1975 0.1977 0.1431 0.0181  0.0031  -
0.0218 1 .
6563 O    O    . HOH HOH HOH S . 10  10  . 0.2310 0.1020 0.1569 0.0147  0.0082  -
0.0001 1 .
6564 O    O    . HOH HOH HOH S . 11  11  . 0.2479 0.1336 0.2131 0.0221  0.0042  -
0.0007 1 .
6565 O    O    . HOH HOH HOH S . 12  12  . 0.1186 0.1963 0.1516 0.0012  -0.0069 -
0.0049 1 .
6566 O    O    . HOH HOH HOH S . 13  13  . 0.1913 0.1308 0.1650 0.0356  -0.0181
0.0010  1 .
6567 O    O    . HOH HOH HOH S . 14  14  . 0.1631 0.1799 0.1229 0.0497  0.0326
0.0233  1 .
6568 O    O    . HOH HOH HOH S . 15  15  . 0.2007 0.2122 0.1978 0.0042  -0.0173 -
0.0217 1 .
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6569 O    O    . HOH HOH HOH S . 16  16  . 0.1749 0.1950 0.1915 0.0080  -0.0181 -
0.0011 1 .
6570 O    O    . HOH HOH HOH S . 17  17  . 0.1913 0.1644 0.1479 -0.0562 -0.0073 -
0.0120 1 .
6571 O    O    . HOH HOH HOH S . 18  18  . 0.1969 0.0950 0.1778 0.0378  -0.0322 -
0.0061 1 .
6572 O    O    . HOH HOH HOH S . 19  19  . 0.1996 0.1744 0.1579 -0.0186 -0.0108
0.0118  1 .
6573 O    O    . HOH HOH HOH S . 20  20  . 0.1865 0.1723 0.1761 0.0333  -0.0169 -
0.0758 1 .
6574 O    O    . HOH HOH HOH S . 21  21  . 0.2949 0.2299 0.1183 0.0277  0.0207  -
0.0297 1 .
6575 O    O    . HOH HOH HOH S . 22  22  . 0.2770 0.1934 0.1886 0.0396  -0.0176
0.0330  1 .
6576 O    O    . HOH HOH HOH S . 23  23  . 0.2453 0.1231 0.1511 0.0094  -0.0144
0.0241  1 .
6577 O    O    . HOH HOH HOH S . 24  24  . 0.2394 0.2070 0.1720 -0.0106 -0.0163 -
0.0042 1 .
6578 O    O    . HOH HOH HOH S . 25  25  . 0.2328 0.1925 0.1979 -0.0148 -0.0146
0.0058  1 .
6579 O    O    . HOH HOH HOH S . 26  26  . 0.3347 0.0924 0.1821 -0.0325 0.0243  -
0.0068 1 .
6580 O    O    . HOH HOH HOH S . 27  27  . 0.1464 0.2179 0.1462 0.0359  -0.0187 -
0.0197 1 .
6581 O    O    . HOH HOH HOH S . 28  28  . 0.2333 0.1477 0.1912 0.0265  0.0107
0.0348  1 .
6582 O    O    . HOH HOH HOH S . 29  29  . 0.2093 0.1798 0.2070 0.0623  0.0278  -
0.0297 1 .
6583 O    O    . HOH HOH HOH S . 30  30  . 0.2897 0.1901 0.2094 0.0600  -0.0530
0.0263  1 .
6584 O    O    . HOH HOH HOH S . 31  31  . 0.1691 0.1888 0.2416 0.0012  0.0459  -
0.0347 1 .
6585 O    O    . HOH HOH HOH S . 32  32  . 0.2219 0.1612 0.1788 0.0592  0.0188  -
0.0067 1 .
6586 O    O    . HOH HOH HOH S . 33  33  . 0.2574 0.1530 0.2853 0.0073  0.0078  -
0.0179 1 .
6587 O    O    . HOH HOH HOH S . 34  34  . 0.1557 0.2095 0.2435 0.0348  0.0214
0.0204  1 .
6588 O    O    . HOH HOH HOH S . 35  35  . 0.2218 0.1329 0.3043 -0.0042 0.0045
0.0124  1 .
6589 O    O    . HOH HOH HOH S . 36  36  . 0.2562 0.2241 0.1946 0.0466  -0.0866 -
0.0528 1 .
6590 O    O    . HOH HOH HOH S . 37  37  . 0.2082 0.2082 0.3093 -0.0195 -0.0117 -
0.0339 1 .
6591 O    O    . HOH HOH HOH S . 38  38  . 0.2755 0.2486 0.1526 0.0258  0.0112
0.0207  1 .
6592 O    O    . HOH HOH HOH S . 39  39  . 0.2088 0.2703 0.4026 0.0382  0.0807
0.0684  1 .
6593 O    O    . HOH HOH HOH S . 40  40  . 0.2252 0.2108 0.2456 -0.0385 0.0350
0.0433  1 .
6594 O    O    . HOH HOH HOH S . 41  41  . 0.1320 0.2397 0.2214 -0.0281 0.0112  -
0.0145 1 .
6595 O    O    . HOH HOH HOH S . 42  42  . 0.3892 0.1960 0.2347 -0.0933 0.0210  -
0.0350 1 .
6596 O    O    . HOH HOH HOH S . 43  43  . 0.2323 0.2492 0.1732 0.0559  -0.0237 -
0.0507 1 .
6597 O    O    . HOH HOH HOH S . 44  44  . 0.3159 0.1522 0.2060 0.0166  0.0061  -
0.0438 1 .
6598 O    O    . HOH HOH HOH S . 45  45  . 0.1944 0.1819 0.1792 0.0149  0.0346
0.0186  1 .
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6599 O    O    . HOH HOH HOH S . 46  46  . 0.2456 0.2310 0.1882 -0.0267 -0.0548 -
0.0053 1 .
6600 O    O    . HOH HOH HOH S . 47  47  . 0.2139 0.2082 0.2042 0.0201  -0.0200
0.0036  1 .
6601 O    O    . HOH HOH HOH S . 48  48  . 0.2951 0.2557 0.2378 0.0054  -0.0184 -
0.0172 1 .
6602 O    O    . HOH HOH HOH S . 49  49  . 0.1962 0.3081 0.3044 -0.0573 0.0295
0.0756  1 .
6603 O    O    . HOH HOH HOH S . 50  50  . 0.2216 0.2160 0.2060 0.0246  -0.0711 -
0.0398 1 .
6604 O    O    . HOH HOH HOH S . 51  51  . 0.2560 0.2153 0.1801 -0.0480 -0.0122 -
0.0224 1 .
6605 O    O    . HOH HOH HOH S . 52  52  . 0.3008 0.1686 0.1640 -0.0225 -0.0236 -
0.0159 1 .
6606 O    O    . HOH HOH HOH S . 53  53  . 0.2961 0.2417 0.1932 0.0618  -0.0100
0.0408  1 .
6607 O    O    . HOH HOH HOH S . 54  54  . 0.2610 0.1828 0.1687 0.0596  -0.0055
0.0225  1 .
6608 O    O    . HOH HOH HOH S . 55  55  . 0.2480 0.1726 0.1555 0.0627  0.0198  -
0.0250 1 .
6609 O    O    . HOH HOH HOH S . 56  56  . 0.2993 0.2401 0.2186 0.0159  0.0409
0.0252  1 .
6610 O    O    . HOH HOH HOH S . 57  57  . 0.1945 0.1688 0.2732 -0.0353 0.0102  -
0.0434 1 .
6611 O    O    . HOH HOH HOH S . 58  58  . 0.2231 0.1853 0.2374 -0.0490 0.0310  -
0.0551 1 .
6612 O    O    . HOH HOH HOH S . 59  59  . 0.2645 0.1744 0.2997 -0.0524 0.0322  -
0.0097 1 .
6613 O    O    . HOH HOH HOH S . 60  60  . 0.1918 0.3529 0.2505 0.0206  -0.0209 -
0.0518 1 .
6614 O    O    . HOH HOH HOH S . 61  61  . 0.4003 0.2704 0.2465 0.0933  0.0261
0.0053  1 .
6615 O    O    . HOH HOH HOH S . 62  62  . 0.2728 0.3408 0.1993 0.0231  0.0126  -
0.0672 1 .
6616 O    O    . HOH HOH HOH S . 63  63  . 0.1980 0.2219 0.2368 0.0285  0.0502
0.0400  1 .
6617 O    O    . HOH HOH HOH S . 64  64  . 0.3071 0.1829 0.1938 0.0093  0.0180  -
0.0460 1 .
6618 O    O    . HOH HOH HOH S . 65  65  . 0.3057 0.2040 0.2324 0.0089  -0.0351 -
0.0685 1 .
6619 O    O    . HOH HOH HOH S . 66  66  . 0.3252 0.2813 0.1776 0.0352  -0.0506 -
0.0528 1 .
6620 O    O    . HOH HOH HOH S . 67  67  . 0.2810 0.1559 0.2735 0.0238  0.0303  -
0.0204 1 .
6621 O    O    . HOH HOH HOH S . 68  68  . 0.2564 0.1602 0.2616 0.0410  0.0208
0.0600  1 .
6622 O    O    . HOH HOH HOH S . 69  69  . 0.2544 0.1753 0.2150 -0.0269 0.0346  -
0.0123 1 .
6623 O    O    . HOH HOH HOH S . 70  70  . 0.1966 0.3070 0.2476 -0.0154 -0.0454
0.0746  1 .
6624 O    O    . HOH HOH HOH S . 71  71  . 0.2485 0.2256 0.3224 0.0049  -0.0335
0.0263  1 .
6625 O    O    . HOH HOH HOH S . 72  72  . 0.3211 0.2084 0.2447 0.0324  0.1028  -
0.0160 1 .
6626 O    O    . HOH HOH HOH S . 73  73  . 0.2499 0.2011 0.2542 0.0762  0.0064
0.0054  1 .
6627 O    O    . HOH HOH HOH S . 74  74  . 0.2301 0.3029 0.2666 -0.0531 -0.0167 -
0.0831 1 .
6628 O    O    . HOH HOH HOH S . 75  75  . 0.2347 0.3684 0.3173 -0.0261 0.0016  -
0.1491 1 .
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6629 O    O    . HOH HOH HOH S . 76  76  . 0.1834 0.1919 0.2521 0.0292  0.0181  -
0.0534 1 .
6630 O    O    . HOH HOH HOH S . 77  77  . 0.3994 0.1968 0.2282 -0.0932 -0.0812 -
0.0663 1 .
6631 O    O    . HOH HOH HOH S . 78  78  . 0.3472 0.2875 0.1697 0.0282  -0.0486 -
0.0070 1 .
6632 O    O    . HOH HOH HOH S . 79  79  . 0.2799 0.2637 0.2085 0.1477  -0.0254 -
0.0927 1 .
6633 O    O    . HOH HOH HOH S . 80  80  . 0.3369 0.2906 0.2489 0.0506  0.0073
0.0031  1 .
6634 O    O    . HOH HOH HOH S . 81  81  . 0.2737 0.2685 0.2826 -0.0785 0.0356
0.0722  1 .
6635 O    O    . HOH HOH HOH S . 82  82  . 0.3754 0.1286 0.3004 -0.0073 -0.0528
0.0267  1 .
6636 O    O    . HOH HOH HOH S . 83  83  . 0.3743 0.1618 0.2599 -0.0403 -0.0379 -
0.0555 1 .
6637 O    O    . HOH HOH HOH S . 84  84  . 0.3392 0.2754 0.2731 0.1187  0.0092  -
0.0392 1 .
6638 O    O    . HOH HOH HOH S . 85  85  . 0.2084 0.2548 0.2858 -0.0057 0.0139  -
0.0247 1 .
6639 O    O    . HOH HOH HOH S . 86  86  . 0.1971 0.3446 0.2440 -0.0494 -0.0582 -
0.0729 1 .
6640 O    O    . HOH HOH HOH S . 87  87  . 0.1891 0.2088 0.2652 0.0047  0.0157
0.0507  1 .
6641 O    O    . HOH HOH HOH S . 88  88  . 0.2246 0.2213 0.2037 -0.0019 -0.0482 -
0.0162 1 .
6642 O    O    . HOH HOH HOH S . 89  89  . 0.3896 0.1873 0.1688 0.0108  -0.0072 -
0.0039 1 .
6643 O    O    . HOH HOH HOH S . 90  90  . 0.3363 0.2831 0.2180 -0.0206 0.0850  -
0.0692 1 .
6644 O    O    . HOH HOH HOH S . 91  91  . 0.3488 0.2882 0.4141 -0.0357 0.0569  -
0.1501 1 .
6645 O    O    . HOH HOH HOH S . 92  92  . 0.2858 0.2923 0.2649 -0.0477 -0.0165 -
0.0396 1 .
6646 O    O    . HOH HOH HOH S . 93  93  . 0.2296 0.2176 0.2871 0.0500  -0.0401
0.0734  1 .
6647 O    O    . HOH HOH HOH S . 94  94  . 0.2513 0.3224 0.2794 0.0776  0.0318  -
0.0539 1 .
6648 O    O    . HOH HOH HOH S . 95  95  . 0.4202 0.3719 0.2244 0.0465  -0.0432 -
0.1018 1 .
6649 O    O    . HOH HOH HOH S . 96  96  . 0.3607 0.2791 0.1623 0.0627  -0.0106
0.0011  1 .
6650 O    O    . HOH HOH HOH S . 97  97  . 0.1999 0.2973 0.2203 0.0115  -0.0783 -
0.0512 1 .
6651 O    O    . HOH HOH HOH S . 98  98  . 0.3047 0.1661 0.2955 0.0121  -0.0815 -
0.0221 1 .
6652 O    O    . HOH HOH HOH S . 99  99  . 0.2645 0.2412 0.2641 0.0733  -0.0161 -
0.0099 1 .
6653 O    O    . HOH HOH HOH S . 100 100 . 0.3330 0.3527 0.2323 0.0178  0.0315  -
0.0280 1 .
6654 O    O    . HOH HOH HOH S . 101 101 . 0.3014 0.1649 0.4033 0.0302  0.0418  -
0.0388 1 .
6655 O    O    . HOH HOH HOH S . 102 102 . 0.1621 0.3141 0.3598 0.0151  -0.0057
0.0004  1 .
6656 O    O    . HOH HOH HOH S . 103 103 . 0.3424 0.2572 0.2677 -0.0008 0.0512
0.0651  1 .
6657 O    O    . HOH HOH HOH S . 104 104 . 0.2888 0.3681 0.3502 0.0743  -0.0684
0.0594  1 .
6658 O    O    . HOH HOH HOH S . 105 105 . 0.3370 0.2500 0.2937 -0.0370 0.0184
0.0470  1 .
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6659 O    O    . HOH HOH HOH S . 106 106 . 0.2632 0.1754 0.3517 -0.0466 -0.0055 -
0.0122 1 .
6660 O    O    . HOH HOH HOH S . 107 107 . 0.3742 0.2562 0.2236 0.1165  0.0064
0.0438  1 .
6661 O    O    . HOH HOH HOH S . 108 108 . 0.2527 0.2575 0.3246 0.0399  -0.0023 -
0.0043 1 .
6662 O    O    . HOH HOH HOH S . 109 109 . 0.2466 0.1633 0.2830 -0.0021 -0.0198
0.0175  1 .
6663 O    O    . HOH HOH HOH S . 110 110 . 0.2366 0.1753 0.2187 0.0562  -0.0127 -
0.0031 1 .
6664 O    O    . HOH HOH HOH S . 111 111 . 0.4029 0.3953 0.4454 -0.0119 -0.1943
0.1308  1 .
6665 O    O    . HOH HOH HOH S . 112 112 . 0.3807 0.3088 0.2357 -0.0124 0.0397  -
0.0604 1 .
6666 O    O    . HOH HOH HOH S . 113 113 . 0.4524 0.3481 0.1440 -0.1267 0.0101  -
0.0267 1 .
6667 O    O    . HOH HOH HOH S . 114 114 . 0.3356 0.2151 0.1926 0.0510  0.0447  -
0.0372 1 .
6668 O    O    . HOH HOH HOH S . 115 115 . 0.2250 0.3638 0.3366 -0.0159 -0.0272
0.0916  1 .
6669 O    O    . HOH HOH HOH S . 116 116 . 0.2156 0.2934 0.3292 -0.1013 0.0539  -
0.0438 1 .
6670 O    O    . HOH HOH HOH S . 117 117 . 0.3895 0.2610 0.4549 0.0413  -0.0115 -
0.0326 1 .
6671 O    O    . HOH HOH HOH S . 118 118 . 0.3060 0.2534 0.2288 0.0166  0.0276  -
0.0071 1 .
6672 O    O    . HOH HOH HOH S . 119 119 . 0.2088 0.3288 0.2778 -0.0234 0.0106  -
0.0969 1 .
6673 O    O    . HOH HOH HOH S . 120 120 . 0.2661 0.3552 0.3587 0.1488  0.0230  -
0.0479 1 .
6674 O    O    . HOH HOH HOH S . 121 121 . 0.2064 0.2911 0.2954 -0.0022 -0.0628 -
0.0700 1 .
6675 O    O    . HOH HOH HOH S . 122 122 . 0.3026 0.2041 0.3602 0.0458  -0.1546 -
0.0905 1 .
6676 O    O    . HOH HOH HOH S . 123 123 . 0.5004 0.2750 0.4034 -0.0856 -0.1485 -
0.0449 1 .
6677 O    O    . HOH HOH HOH S . 124 124 . 0.3769 0.5545 0.4212 0.0716  0.0119
0.0806  1 .
6678 O    O    . HOH HOH HOH S . 125 125 . 0.1785 0.2941 0.4089 -0.0675 0.0580
0.0852  1 .
6679 O    O    . HOH HOH HOH S . 126 126 . 0.2995 0.3153 0.3144 -0.0896 -0.1129
0.0768  1 .
6680 O    O    . HOH HOH HOH S . 127 127 . 0.3113 0.2008 0.2775 0.0574  -0.0549 -
0.0118 1 .
6681 O    O    . HOH HOH HOH S . 128 128 . 0.3097 0.2484 0.3815 -0.0066 0.0663  -
0.0448 1 .
6682 O    O    . HOH HOH HOH S . 129 129 . 0.2960 0.2149 0.3124 -0.0054 -0.0508 -
0.0315 1 .
6683 O    O    . HOH HOH HOH S . 130 130 . 0.3015 0.2673 0.3119 0.0671  0.1086
0.0046  1 .
6684 O    O    . HOH HOH HOH S . 131 131 . 0.2874 0.3620 0.4033 0.0679  0.0023
0.0317  1 .
6685 O    O    . HOH HOH HOH S . 132 132 . 0.3812 0.2686 0.3949 0.1040  -0.0425
0.0313  1 .
6686 O    O    . HOH HOH HOH S . 133 133 . 0.2560 0.3492 0.2319 -0.0192 0.0119  -
0.0003 1 .
6687 O    O    . HOH HOH HOH S . 134 134 . 0.2108 0.2852 0.3290 -0.0175 0.0164
0.0792  1 .
6688 O    O    . HOH HOH HOH S . 135 135 . 0.2269 0.2567 0.2421 -0.0117 0.0294  -
0.0227 1 .
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6689 O    O    . HOH HOH HOH S . 136 136 . 0.2788 0.3741 0.3803 -0.0752 0.1272  -
0.0929 1 .
6690 O    O    . HOH HOH HOH S . 137 137 . 0.4415 0.2246 0.3241 0.0125  0.0371
0.0595  1 .
6691 O    O    . HOH HOH HOH S . 138 138 . 0.3641 0.3831 0.2672 0.0349  -0.0363
0.0597  1 .
6692 O    O    . HOH HOH HOH S . 139 139 . 0.1969 0.1926 0.3061 0.0139  -0.0140
0.0023  1 .
6693 O    O    . HOH HOH HOH S . 140 140 . 0.3453 0.3899 0.2465 -0.1190 0.0427  -
0.0732 1 .
6694 O    O    . HOH HOH HOH S . 141 141 . 0.1797 0.3887 0.4729 0.0593  -0.0897 -
0.0523 1 .
6695 O    O    . HOH HOH HOH S . 142 142 . 0.2229 0.2779 0.4780 -0.0633 0.0672
0.0669  1 .
6696 O    O    . HOH HOH HOH S . 143 143 . 0.2826 0.2660 0.2057 -0.0149 0.0612  -
0.0124 1 .
6697 O    O    . HOH HOH HOH S . 144 144 . 0.2970 0.2484 0.3373 0.0439  -0.0286 -
0.0450 1 .
6698 O    O    . HOH HOH HOH S . 145 145 . 0.2597 0.2877 0.1777 0.0911  0.0468
0.0518  1 .
6699 O    O    . HOH HOH HOH S . 146 146 . 0.3353 0.3093 0.2399 0.0228  0.0134  -
0.0899 1 .
6700 O    O    . HOH HOH HOH S . 147 147 . 0.3245 0.3662 0.3689 -0.0036 -0.0062
0.1678  1 .
6701 O    O    . HOH HOH HOH S . 148 148 . 0.2879 0.3475 0.4913 -0.0031 -0.0147
0.1242  1 .
6702 O    O    . HOH HOH HOH S . 149 149 . 0.3018 0.3641 0.2438 -0.0256 0.0543  -
0.0609 1 .
6703 O    O    . HOH HOH HOH S . 150 150 . 0.3174 0.3813 0.5174 -0.0095 0.1484  -
0.1201 1 .
6704 O    O    . HOH HOH HOH S . 151 151 . 0.3172 0.2428 0.3487 0.0187  -0.0963 -
0.0248 1 .
6705 O    O    . HOH HOH HOH S . 152 152 . 0.3210 0.3983 0.3142 0.0575  0.0344
0.0190  1 .
6706 O    O    . HOH HOH HOH S . 153 153 . 0.5252 0.2490 0.4302 -0.1129 0.1682  -
0.1175 1 .
6707 O    O    . HOH HOH HOH S . 154 154 . 0.2430 0.3788 0.3210 -0.1009 -0.0507
0.0115  1 .
6708 O    O    . HOH HOH HOH S . 155 155 . 0.3850 0.3245 0.3319 0.0244  0.1204  -
0.0061 1 .
6709 O    O    . HOH HOH HOH S . 156 156 . 0.2378 0.3110 0.3262 0.0085  -0.0146
0.0925  1 .
6710 O    O    . HOH HOH HOH S . 157 157 . 0.2796 0.1895 0.3997 0.0278  0.0383  -
0.0503 1 .
6711 O    O    . HOH HOH HOH S . 158 158 . 0.3142 0.2753 0.3295 -0.0306 -0.0100 -
0.0343 1 .
6712 O    O    . HOH HOH HOH S . 159 159 . 0.2941 0.3710 0.2671 -0.0969 -0.0493 -
0.0900 1 .
6713 O    O    . HOH HOH HOH S . 160 160 . 0.4320 0.4497 0.2144 0.0188  -0.0079 -
0.1258 1 .
6714 O    O    . HOH HOH HOH S . 161 161 . 0.3208 0.3233 0.3224 0.0819  -0.0472
0.0122  1 .
6715 O    O    . HOH HOH HOH S . 162 162 . 0.3382 0.5462 0.3937 0.0538  -0.0139 -
0.0839 1 .
6716 O    O    . HOH HOH HOH S . 163 163 . 0.3377 0.2943 0.3576 -0.0300 -0.0965
0.0157  1 .
6717 O    O    . HOH HOH HOH S . 164 164 . 0.2842 0.2853 0.3665 0.0913  0.0000
0.0513  1 .
6718 O    O    . HOH HOH HOH S . 165 165 . 0.3825 0.2677 0.4170 -0.0217 0.0124
0.0726  1 .
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6719 O    O    . HOH HOH HOH S . 166 166 . 0.2517 0.4781 0.3811 -0.0388 0.0511  -
0.0935 1 .
6720 O    O    . HOH HOH HOH S . 167 167 . 0.4159 0.2543 0.4314 0.0990  0.0406  -
0.0442 1 .
6721 O    O    . HOH HOH HOH S . 168 168 . 0.3133 0.4517 0.2744 0.0387  -0.0346 -
0.0710 1 .
6722 O    O    . HOH HOH HOH S . 169 169 . 0.3799 0.3604 0.4324 0.0192  0.1525  -
0.1637 1 .
6723 O    O    . HOH HOH HOH S . 170 170 . 0.2558 0.4059 0.3687 0.0207  -0.0550 -
0.0259 1 .
6724 O    O    . HOH HOH HOH S . 171 171 . 0.3872 0.2289 0.3416 0.1028  -0.0031 -
0.1099 1 .
6725 O    O    . HOH HOH HOH S . 172 172 . 0.4698 0.3641 0.3163 -0.1211 -0.0221
0.0578  1 .
6726 O    O    . HOH HOH HOH S . 173 173 . 0.4201 0.2525 0.2720 0.1036  0.0141
0.0495  1 .
6727 O    O    . HOH HOH HOH S . 174 174 . 0.2271 0.3501 0.3041 -0.0677 0.0988  -
0.0552 1 .
6728 O    O    . HOH HOH HOH S . 175 175 . 0.2944 0.4282 0.4378 0.0680  0.0381
0.0959  1 .
6729 O    O    . HOH HOH HOH S . 176 176 . 0.2535 0.3222 0.3909 0.0359  -0.0456 -
0.0160 1 .
6730 O    O    . HOH HOH HOH S . 177 177 . 0.4958 0.2589 0.3393 0.0815  -0.0318
0.0663  1 .
6731 O    O    . HOH HOH HOH S . 178 178 . 0.3452 0.3922 0.5244 0.0605  0.0047
0.1389  1 .
6732 O    O    . HOH HOH HOH S . 179 179 . 0.3910 0.2897 0.4854 -0.1192 0.0974  -
0.0570 1 .
6733 O    O    . HOH HOH HOH S . 180 180 . 0.3269 0.2761 0.3569 0.0893  -0.0669
0.0066  1 .
6734 O    O    . HOH HOH HOH S . 181 181 . 0.3266 0.3595 0.2786 0.0199  -0.0521
0.0597  1 .
6735 O    O    . HOH HOH HOH S . 182 182 . 0.3310 0.3720 0.3386 0.0392  0.0281
0.0027  1 .
6736 O    O    . HOH HOH HOH S . 183 183 . 0.2871 0.3291 0.2309 -0.0317 0.0757  -
0.0684 1 .
6737 O    O    . HOH HOH HOH S . 184 184 . 0.3475 0.6449 0.4780 -0.0420 -0.0006 -
0.3496 1 .
6738 O    O    . HOH HOH HOH S . 185 185 . 0.4207 0.2978 0.3227 -0.0109 0.0254  -
0.0568 1 .
6739 O    O    . HOH HOH HOH S . 186 186 . 0.4013 0.5233 0.3260 0.0196  -0.1369 -
0.0759 1 .
6740 O    O    . HOH HOH HOH S . 187 187 . 0.8218 0.2814 0.4308 -0.0276 -0.0379 -
0.0632 1 .
6741 O    O    . HOH HOH HOH S . 188 188 . 0.4359 0.2514 0.3886 0.0887  0.0373
0.0251  1 .
6742 O    O    . HOH HOH HOH S . 189 189 . 0.2230 0.4250 0.3837 0.0000  -0.0143 -
0.0392 1 .
6743 O    O    . HOH HOH HOH S . 190 190 . 0.2811 0.2743 0.2048 0.0159  -0.0387
0.0704  1 .
6744 O    O    . HOH HOH HOH S . 191 191 . 0.6283 0.3728 0.3746 0.0071  0.0084  -
0.1521 1 .
6745 O    O    . HOH HOH HOH S . 192 192 . 0.3570 0.4279 0.2473 0.0294  0.0351  -
0.0197 1 .
6746 O    O    . HOH HOH HOH S . 193 193 . 0.2906 0.3517 0.2807 -0.0761 -0.0059 -
0.0413 1 .
6747 O    O    . HOH HOH HOH S . 194 194 . 0.3465 0.3296 0.5208 0.1212  -0.0567 -
0.0501 1 .
6748 O    O    . HOH HOH HOH S . 195 195 . 0.2927 0.2764 0.4046 0.1186  -0.0382 -
0.0202 1 .
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6749 O    O    . HOH HOH HOH S . 196 196 . 0.3835 0.4701 0.3191 -0.0423 -0.1505 -
0.0715 1 .
6750 O    O    . HOH HOH HOH S . 197 197 . 0.6045 0.3814 0.3591 -0.1938 0.0645  -
0.0038 1 .
6751 O    O    . HOH HOH HOH S . 198 198 . 0.3507 0.3835 0.3600 0.0306  -0.1056 -
0.0315 1 .
6752 O    O    . HOH HOH HOH S . 199 199 . 0.2781 0.3630 0.4640 0.0538  -0.1144 -
0.1770 1 .
6753 O    O    . HOH HOH HOH S . 200 200 . 0.3322 0.6832 0.2843 -0.1935 -0.0713 -
0.2032 1 .
6754 O    O    . HOH HOH HOH S . 201 201 . 0.6382 0.2308 0.4588 -0.0234 0.0279  -
0.0153 1 .
6755 O    O    . HOH HOH HOH S . 202 202 . 0.2531 0.4503 0.4928 -0.0269 -0.0308
0.1144  1 .
6756 O    O    . HOH HOH HOH S . 203 203 . 0.3071 0.3367 0.3409 -0.1305 -0.0239 -
0.1261 1 .
6757 O    O    . HOH HOH HOH S . 204 204 . 0.5780 0.4032 0.1979 0.0372  0.0805  -
0.0636 1 .
6758 O    O    . HOH HOH HOH S . 205 205 . 0.4764 0.2735 0.8000 -0.0526 0.0600  -
0.1553 1 .
6759 O    O    . HOH HOH HOH S . 206 206 . 0.4462 0.2435 0.1480 0.0764  -0.0433 -
0.0359 1 .
6760 O    O    . HOH HOH HOH S . 207 207 . 0.4181 0.4484 0.5717 -0.0081 0.0072  -
0.0203 1 .
6761 O    O    . HOH HOH HOH S . 208 208 . 0.3272 0.4380 0.2896 0.0534  0.0896  -
0.0059 1 .
6762 O    O    . HOH HOH HOH S . 209 209 . 0.4728 0.5492 0.3136 -0.0728 -0.0123
0.0209  1 .
6763 O    O    . HOH HOH HOH S . 210 210 . 0.3774 0.2666 0.3466 -0.1287 -0.0237 -
0.0198 1 .
6764 O    O    . HOH HOH HOH S . 211 211 . 0.3706 0.5380 0.3866 0.0492  -0.0640
0.0256  1 .
6765 O    O    . HOH HOH HOH S . 212 212 . 0.5020 0.2918 0.4175 -0.0767 0.0189
0.1237  1 .
6766 O    O    . HOH HOH HOH S . 213 213 . 0.5513 0.3430 0.3621 0.0394  0.0983  -
0.1073 1 .
6767 O    O    . HOH HOH HOH S . 214 214 . 0.4562 0.4099 0.3864 -0.1188 0.0366  -
0.0204 1 .
6768 O    O    . HOH HOH HOH S . 215 215 . 0.4721 0.3207 0.5499 0.1214  0.1109  -
0.0940 1 .
6769 O    O    . HOH HOH HOH S . 216 216 . 0.3270 0.6885 0.2547 0.3032  -0.0763 -
0.0881 1 .
6770 O    O    . HOH HOH HOH S . 217 217 . 0.3346 0.4844 0.2538 -0.0725 -0.0996 -
0.0602 1 .
6771 O    O    . HOH HOH HOH S . 218 218 . 0.4573 0.4200 0.5368 -0.1244 0.0980
0.1223  1 .
6772 O    O    . HOH HOH HOH S . 219 219 . 0.4824 0.3527 0.4342 0.1729  -0.0726
0.0272  1 .
6773 O    O    . HOH HOH HOH S . 220 220 . 0.6025 0.4035 0.1342 0.0008  0.0858
0.0188  1 .
6774 O    O    . HOH HOH HOH S . 221 221 . 0.4151 0.6000 0.4180 0.0586  -0.0832 -
0.2116 1 .
6775 O    O    . HOH HOH HOH S . 222 222 . 0.3971 0.3077 0.3279 -0.0068 -0.0076 -
0.1187 1 .
6776 O    O    . HOH HOH HOH S . 223 223 . 0.4219 0.2959 0.3284 0.0131  0.0436
0.0876  1 .
6777 O    O    . HOH HOH HOH S . 224 224 . 0.3177 0.2623 0.4105 0.0302  -0.0595 -
0.1246 1 .
6778 O    O    . HOH HOH HOH S . 225 225 . 0.3350 0.6763 0.4465 0.0907  0.1081
0.0052  1 .
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6779 O    O    . HOH HOH HOH S . 226 226 . 0.2775 0.3994 0.5920 0.0660  -0.0319
0.1095  1 .
6780 O    O    . HOH HOH HOH S . 227 227 . 0.3318 0.4320 0.3727 -0.0272 -0.0306 -
0.0516 1 .
6781 O    O    . HOH HOH HOH S . 228 228 . 0.4091 0.2901 0.3580 0.1024  -0.0801 -
0.0745 1 .
6782 O    O    . HOH HOH HOH S . 229 229 . 0.2850 0.3580 0.3933 0.0169  0.0105
0.0268  1 .
6783 O    O    . HOH HOH HOH S . 230 230 . 0.3743 0.3507 0.4916 -0.0301 0.0367
0.0186  1 .
6784 O    O    . HOH HOH HOH S . 231 231 . 0.2130 0.4828 0.3545 -0.0065 0.0600  -
0.0002 1 .
6785 O    O    . HOH HOH HOH S . 232 232 . 0.2494 0.4644 0.4556 0.0061  -0.0610
0.1792  1 .
6786 O    O    . HOH HOH HOH S . 233 233 . 0.7483 0.3871 0.2205 0.1921  -0.1386 -
0.0937 1 .
6787 O    O    . HOH HOH HOH S . 234 234 . 0.3784 0.2427 0.3713 0.0050  0.0009  -
0.0019 1 .
6788 O    O    . HOH HOH HOH S . 235 235 . 0.5987 0.2981 0.5311 -0.0231 -0.0369 -
0.2287 1 .
6789 O    O    . HOH HOH HOH S . 236 236 . 0.4289 0.7619 0.4701 -0.2329 -0.0644 -
0.0486 1 .
6790 O    O    . HOH HOH HOH S . 237 237 . 0.2829 0.5111 0.2853 -0.0002 -0.0118
0.0021  1 .
6791 O    O    . HOH HOH HOH S . 238 238 . 0.2989 0.4844 0.2661 0.0179  0.0723  -
0.0005 1 .
6792 O    O    . HOH HOH HOH S . 239 239 . 0.5730 0.1870 0.4327 0.0668  0.0305  -
0.0175 1 .
6793 O    O    . HOH HOH HOH S . 240 240 . 0.4034 0.2525 0.4785 -0.0277 0.0370
0.0626  1 .
6794 O    O    . HOH HOH HOH S . 241 241 . 0.3734 0.3441 0.6620 0.1577  0.0027  -
0.2656 1 .
6795 O    O    . HOH HOH HOH S . 242 242 . 0.3119 0.4054 0.4604 -0.0848 0.0102
0.0266  1 .
6796 O    O    . HOH HOH HOH S . 243 243 . 0.3899 0.3858 0.2303 0.0345  0.0140  -
0.0462 1 .
6797 O    O    . HOH HOH HOH S . 244 244 . 0.2889 0.3290 0.6080 0.0010  0.0318
0.0154  1 .
6798 O    O    . HOH HOH HOH S . 245 245 . 0.2926 0.3906 0.4717 -0.0114 -0.0298
0.1300  1 .
6799 O    O    . HOH HOH HOH S . 246 246 . 0.2439 0.3840 0.4501 -0.0731 -0.0831
0.0794  1 .
6800 O    O    . HOH HOH HOH S . 247 247 . 0.5086 0.3070 0.3688 0.0839  0.0690
0.1625  1 .
6801 O    O    . HOH HOH HOH S . 248 248 . 0.4794 0.3555 0.2850 -0.0604 0.0009
0.0364  1 .
6802 O    O    . HOH HOH HOH S . 249 249 . 0.3237 0.2675 0.3421 0.0299  -0.1219 -
0.0166 1 .
6803 O    O    . HOH HOH HOH S . 250 250 . 0.6622 0.4351 0.2641 0.2556  0.0757  -
0.1750 1 .
6804 O    O    . HOH HOH HOH S . 251 251 . 0.3866 0.4182 0.4029 0.0362  -0.0993
0.0593  1 .
6805 O    O    . HOH HOH HOH S . 252 252 . 0.4723 0.6247 0.2996 -0.1351 -0.0644
0.0950  1 .
6806 O    O    . HOH HOH HOH S . 253 253 . 0.5582 0.2816 0.4788 -0.0347 -0.0275 -
0.1734 1 .
6807 O    O    . HOH HOH HOH S . 254 254 . 0.4164 0.4854 0.2726 0.0189  -0.0584
0.0366  1 .
6808 O    O    . HOH HOH HOH S . 255 255 . 0.2730 0.3711 0.3188 -0.0534 -0.0785
0.0681  1 .
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6809 O    O    . HOH HOH HOH S . 256 256 . 0.3521 0.5058 0.4609 -0.1530 -0.0555
0.0352  1 .
6810 O    O    . HOH HOH HOH S . 257 257 . 0.5059 0.4192 0.3956 0.0637  -0.0133 -
0.0749 1 .
6811 O    O    . HOH HOH HOH S . 258 258 . 0.5013 0.3485 0.4080 0.0541  0.0780  -
0.1407 1 .
6812 O    O    . HOH HOH HOH S . 259 259 . 0.4824 0.2658 0.4182 -0.0484 -0.0353 -
0.0759 1 .
6813 O    O    . HOH HOH HOH S . 260 260 . 0.4639 0.3444 0.3610 0.0166  0.0632  -
0.0484 1 .
6814 O    O    . HOH HOH HOH S . 261 261 . 0.5049 0.4298 0.4923 0.1080  0.1984
0.0649  1 .
6815 O    O    . HOH HOH HOH S . 262 262 . 0.8828 0.7459 0.6667 -0.1508 0.2653  -
0.1044 1 .
6816 O    O    . HOH HOH HOH S . 263 263 . 0.6858 0.3060 0.6232 -0.0082 0.2170
0.0185  1 .
6817 O    O    . HOH HOH HOH S . 264 264 . 0.2963 0.2548 0.3462 0.0012  0.0055
0.0840  1 .
6818 O    O    . HOH HOH HOH S . 265 265 . 0.5119 0.4627 0.5447 -0.0272 -0.0567
0.1674  1 .
6819 O    O    . HOH HOH HOH S . 266 266 . 0.5289 0.3320 0.3271 -0.0187 0.0395
0.0712  1 .
6820 O    O    . HOH HOH HOH S . 267 267 . 0.3058 0.6262 0.5388 -0.0860 -0.1077 -
0.2201 1 .
6821 O    O    . HOH HOH HOH S . 268 268 . 0.4067 0.4211 0.4957 -0.0834 -0.0684
0.1027  1 .
6822 O    O    . HOH HOH HOH S . 269 269 . 0.2221 0.4545 0.4077 -0.0478 0.0466  -
0.0433 1 .
6823 O    O    . HOH HOH HOH S . 270 270 . 0.5210 0.4220 0.3227 -0.1466 0.1005
0.0341  1 .
6824 O    O    . HOH HOH HOH S . 271 271 . 0.4465 0.3716 0.6839 -0.0057 0.1028  -
0.1377 1 .
6825 O    O    . HOH HOH HOH S . 272 272 . 0.4790 0.3594 0.4251 -0.0131 0.0367
0.0422  1 .
6826 O    O    . HOH HOH HOH S . 273 273 . 0.5642 0.4405 0.3552 -0.1328 -0.0451 -
0.0112 1 .
6827 O    O    . HOH HOH HOH S . 274 274 . 0.8132 1.2262 0.3659 0.0604  0.2214
0.4749  1 .
6828 O    O    . HOH HOH HOH S . 275 275 . 0.6494 0.2178 0.5138 0.1648  -0.0716 -
0.0222 1 .
6829 O    O    . HOH HOH HOH S . 276 276 . 0.3404 0.5726 0.2884 0.1154  -0.0790 -
0.0143 1 .
6830 O    O    . HOH HOH HOH S . 277 277 . 0.5100 0.4115 0.4335 0.0971  -0.0669 -
0.1234 1 .
6831 O    O    . HOH HOH HOH S . 278 278 . 0.5431 0.3490 0.5525 0.0392  -0.0200
0.0956  1 .
6832 O    O    . HOH HOH HOH S . 279 279 . 0.3225 0.2807 0.3254 0.1210  -0.0665 -
0.1002 1 .
6833 O    O    . HOH HOH HOH S . 280 280 . 0.3545 0.2824 0.4659 -0.0324 0.0248
0.0887  1 .
6834 O    O    . HOH HOH HOH S . 281 281 . 0.5493 0.3129 0.6398 0.0111  0.0311
0.0207  1 .
6835 O    O    . HOH HOH HOH S . 282 282 . 0.5544 0.7042 0.4475 -0.4868 0.0226  -
0.2813 1 .
6836 O    O    . HOH HOH HOH S . 283 283 . 0.3501 0.2728 0.2987 0.0523  0.0265  -
0.0145 1 .
6837 O    O    . HOH HOH HOH S . 284 284 . 0.8501 0.8052 0.8343 -0.1917 0.2514  -
0.3711 1 .
6838 O    O    . HOH HOH HOH S . 285 285 . 0.3798 0.4553 0.5110 -0.0116 0.0014  -
0.0132 1 .
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6839 O    O    . HOH HOH HOH S . 286 286 . 0.6739 0.5720 0.5466 0.2067  0.0791  -
0.0921 1 .
6840 O    O    . HOH HOH HOH S . 287 287 . 0.3472 0.4820 0.4232 -0.0381 -0.0600
0.0975  1 .
6841 O    O    . HOH HOH HOH S . 288 288 . 0.6103 0.6101 0.9864 -0.3079 -0.3980
0.3788  1 .
6842 O    O    . HOH HOH HOH S . 289 289 . 0.6277 0.6560 0.5530 0.2049  -0.0314
0.0401  1 .
6843 O    O    . HOH HOH HOH S . 290 290 . 0.4894 0.4241 0.5569 0.1682  -0.0568
0.0127  1 .
6844 O    O    . HOH HOH HOH S . 291 291 . 0.8562 0.3262 0.4832 -0.0226 -0.0368 -
0.0486 1 .
6845 O    O    . HOH HOH HOH S . 292 292 . 0.7301 0.6872 0.5423 0.1461  -0.2957
0.0300  1 .
6846 O    O    . HOH HOH HOH S . 293 293 . 0.6318 0.7194 0.6760 0.0933  -0.2361 -
0.0390 1 .
6847 O    O    . HOH HOH HOH S . 294 294 . 0.6985 0.6307 0.4009 0.1554  -0.1112 -
0.0392 1 .
6848 O    O    . HOH HOH HOH S . 295 295 . 0.3980 0.4081 0.4865 -0.0724 -0.0435
0.1474  1 .
6849 O    O    . HOH HOH HOH S . 296 296 . 0.2155 0.5214 0.5380 -0.0196 -0.0490 -
0.0804 1 .
6850 O    O    . HOH HOH HOH S . 297 297 . 0.2249 0.6123 0.5219 0.0336  -0.0285
0.0997  1 .
6851 O    O    . HOH HOH HOH S . 298 298 . 0.2820 0.4122 0.5759 0.0074  -0.0425 -
0.1039 1 .
6852 O    O    . HOH HOH HOH S . 299 299 . 0.7935 0.5533 0.6469 0.1087  0.0874  -
0.1140 1 .
6853 O    O    . HOH HOH HOH S . 300 300 . 0.4794 1.3201 0.6193 0.4099  -0.1527 -
0.1729 1 .
6854 O    O    . HOH HOH HOH S . 301 301 . 0.7134 0.4556 0.6283 0.1630  0.0547  -
0.0713 1 .
6855 O    O    . HOH HOH HOH S . 302 302 . 0.6237 0.5483 0.7084 0.0348  -0.2199
0.0420  1 .
6856 O    O    . HOH HOH HOH S . 303 303 . 0.6695 0.2805 0.8312 0.0732  0.1233
0.0209  1 .
6857 O    O    . HOH HOH HOH S . 304 304 . 0.3502 0.4640 0.6637 0.0706  0.0290  -
0.0675 1 .
6858 O    O    . HOH HOH HOH S . 305 305 . 0.3600 0.3073 0.4257 0.0310  -0.0057
0.1316  1 .
6859 O    O    . HOH HOH HOH S . 306 306 . 0.2553 0.2507 0.2440 -0.0145 -0.0264 -
0.0328 1 .
6860 O    O    . HOH HOH HOH S . 307 307 . 0.2776 0.3838 0.4278 0.0381  0.0376  -
0.0697 1 .
6861 O    O    . HOH HOH HOH S . 308 308 . 0.4060 0.5591 0.5841 -0.0563 0.1190  -
0.1930 1 .
6862 O    O    . HOH HOH HOH S . 309 309 . 0.4347 0.9505 0.7536 0.1165  0.1073
0.1943  1 .
6863 O    O    . HOH HOH HOH S . 310 310 . 0.3998 0.7485 0.5199 0.1631  0.1500  -
0.0300 1 .
6864 O    O    . HOH HOH HOH S . 311 311 . 0.1596 0.2638 0.2134 -0.0122 -0.0221
0.0001  1 .
6865 O    O    . HOH HOH HOH S . 312 312 . 0.4617 0.4207 0.4014 -0.0802 -0.0511 -
0.0717 1 .
6866 O    O    . HOH HOH HOH S . 313 313 . 0.1734 0.2991 0.1721 -0.0256 -0.0716 -
0.0588 1 .
6867 O    O    . HOH HOH HOH S . 314 314 . 0.4850 0.4043 0.6614 -0.0410 -0.0149 -
0.2239 1 .
6868 O    O    . HOH HOH HOH S . 315 315 . 0.6260 0.4875 0.5676 -0.0132 -0.0519
0.0370  1 .
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6869 O    O    . HOH HOH HOH S . 316 316 . 0.7444 0.4613 0.6794 0.2757  0.1352
0.1032  1 .
6870 O    O    . HOH HOH HOH S . 317 317 . 0.3273 0.2927 0.2589 -0.0261 -0.0138 -
0.0039 1 .
6871 O    O    . HOH HOH HOH S . 318 318 . 0.5304 0.5372 0.4683 0.0750  0.0648
0.0472  1 .
6872 O    O    . HOH HOH HOH S . 319 319 . 0.3777 0.4287 0.4115 -0.0177 -0.1281 -
0.0097 1 .
6873 O    O    . HOH HOH HOH S . 320 320 . 0.8125 0.9496 0.3113 0.6327  -0.3768 -
0.0933 1 .
6874 O    O    . HOH HOH HOH S . 321 321 . 0.5113 0.7647 1.1366 -0.0412 0.3340
0.0762  1 .
6875 O    O    . HOH HOH HOH S . 322 322 . 0.1654 0.7583 1.0087 -0.0174 -0.0262
0.5059  1 .
6876 O    O    . HOH HOH HOH S . 323 323 . 0.6014 0.3131 0.3460 0.0603  -0.1105 -
0.0659 1 .
6877 O    O    . HOH HOH HOH S . 324 324 . 0.6649 0.4674 0.4463 0.0553  0.0068
0.0908  1 .
6878 O    O    . HOH HOH HOH S . 325 325 . 0.4398 0.4189 0.2530 0.0668  -0.1150
0.0349  1 .
6879 O    O    . HOH HOH HOH S . 326 326 . 0.4201 0.5167 0.4942 0.2007  0.1647
0.0814  1 .
6880 O    O    . HOH HOH HOH S . 327 327 . 0.4777 0.3506 0.4731 0.1227  -0.0170 -
0.0797 1 .
6881 O    O    . HOH HOH HOH S . 328 328 . 0.3687 0.3289 0.4960 0.0839  -0.0228 -
0.0376 1 .
6882 O    O    . HOH HOH HOH S . 329 329 . 0.7223 0.4639 0.7811 0.1579  -0.0305
0.1184  1 .
6883 O    O    . HOH HOH HOH S . 330 330 . 0.4715 0.3225 0.3323 -0.0036 -0.0598 -
0.1013 1 .
6884 O    O    . HOH HOH HOH S . 331 331 . 0.5812 0.3713 0.3802 0.0131  -0.0564 -
0.1558 1 .
6885 O    O    . HOH HOH HOH S . 332 332 . 0.3259 0.3029 0.2861 -0.0020 0.0349
0.0619  1 .
6886 O    O    . HOH HOH HOH S . 333 333 . 0.6809 0.4462 0.5223 0.0782  -0.0860
0.0396  1 .
6887 O    O    . HOH HOH HOH S . 334 334 . 0.4351 0.4113 0.4389 0.0520  -0.0604 -
0.0776 1 .
6888 O    O    . HOH HOH HOH S . 335 335 . 0.3527 0.6977 0.8278 -0.0037 0.1044
0.2870  1 .
6889 O    O    . HOH HOH HOH S . 336 336 . 0.5642 0.6232 0.4203 -0.1246 0.0376
0.0120  1 .
6890 O    O    . HOH HOH HOH S . 337 337 . 0.4038 0.3126 0.3014 -0.0877 0.0849
0.0580  1 .
6891 O    O    . HOH HOH HOH S . 338 338 . 0.5183 0.5455 0.6123 0.0935  0.1589
0.0594  1 .
6892 O    O    . HOH HOH HOH S . 339 339 . 0.4534 0.4905 0.4623 -0.0328 -0.0196
0.2179  1 .
6893 O    O    . HOH HOH HOH S . 340 340 . 0.6925 0.5058 0.4710 -0.0652 -0.1820 -
0.0759 1 .
6894 O    O    . HOH HOH HOH S . 341 341 . 0.7028 0.6393 0.4067 -0.0210 0.2118
0.1295  1 .
6895 O    O    . HOH HOH HOH S . 342 342 . 0.5784 0.6055 0.8573 0.1446  -0.1727
0.0657  1 .
6896 O    O    . HOH HOH HOH S . 343 343 . 0.5412 0.3297 0.4959 -0.0554 -0.0414
0.0052  1 .
6897 O    O    . HOH HOH HOH S . 344 344 . 0.4451 0.2961 0.4651 0.0402  -0.0342
0.0174  1 .
6898 O    O    . HOH HOH HOH S . 345 345 . 0.6593 0.4087 0.6086 -0.0939 0.0897  -
0.0550 1 .
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6899 O    O    . HOH HOH HOH S . 346 346 . 0.5074 0.3401 0.3557 0.0343  -0.1078
0.0382  1 .
6900 O    O    . HOH HOH HOH S . 347 347 . 0.7274 0.3071 0.7083 0.0883  0.0007
0.1316  1 .
6901 O    O    . HOH HOH HOH S . 348 348 . 0.3587 0.3694 0.3901 -0.0764 0.0701  -
0.0950 1 .
6902 O    O    . HOH HOH HOH S . 349 349 . 0.4762 0.6076 0.6042 -0.1297 -0.0204
0.1919  1 .
6903 O    O    . HOH HOH HOH S . 350 350 . 0.7331 0.4101 0.6283 0.2007  0.1993
0.0575  1 .
6904 O    O    . HOH HOH HOH S . 351 351 . 0.6691 0.5773 0.4764 -0.1162 -0.1553
0.1767  1 .
6905 O    O    . HOH HOH HOH S . 352 352 . 0.4328 0.7620 0.3256 0.0723  0.0478  -
0.0174 1 .
6906 O    O    . HOH HOH HOH S . 353 353 . 0.4150 0.3843 0.5039 -0.0989 0.1237  -
0.0722 1 .
6907 O    O    . HOH HOH HOH S . 354 354 . 0.5128 0.6752 0.6488 -0.0627 0.2748  -
0.1718 1 .
6908 O    O    . HOH HOH HOH S . 355 355 . 0.4510 0.7004 0.6369 0.0966  0.0077
0.0975  1 .
6909 O    O    . HOH HOH HOH S . 356 356 . 0.7146 0.6066 0.5862 -0.0971 0.0382  -
0.2700 1 .
6910 O    O    . HOH HOH HOH S . 357 357 . 0.4504 0.6923 0.4329 -0.2205 0.1009
0.1347  1 .
6911 O    O    . HOH HOH HOH S . 358 358 . 0.3828 0.7187 0.3124 -0.1611 -0.0176
0.0031  1 .
6912 O    O    . HOH HOH HOH S . 359 359 . 0.3711 0.6706 0.3350 0.0647  -0.0226 -
0.0912 1 .
6913 O    O    . HOH HOH HOH S . 360 360 . 0.6363 0.4773 0.4765 0.0637  -0.1123
0.0812  1 .
6914 O    O    . HOH HOH HOH S . 361 361 . 0.5732 0.3868 0.3978 -0.1531 0.0509  -
0.1122 1 .
6915 O    O    . HOH HOH HOH S . 362 362 . 0.4161 0.5741 0.4665 0.0808  0.0054  -
0.2549 1 .
6916 O    O    . HOH HOH HOH S . 363 363 . 0.5114 0.4181 0.4277 -0.0457 0.1560  -
0.0831 1 .
6917 O    O    . HOH HOH HOH S . 364 364 . 0.5922 0.5322 0.6101 0.1794  0.1781
0.0863  1 .
6918 O    O    . HOH HOH HOH S . 365 365 . 0.7925 0.3587 0.6930 -0.0721 0.0835  -
0.0258 1 .
6919 O    O    . HOH HOH HOH S . 366 366 . 0.4800 0.6965 0.2505 0.0818  -0.0281 -
0.0175 1 .
6920 O    O    . HOH HOH HOH S . 367 367 . 0.4936 0.6986 0.6686 0.0651  0.1523
0.2806  1 .
6921 O    O    . HOH HOH HOH S . 368 368 . 0.5194 0.5249 0.8912 -0.0146 -0.1381
0.1371  1 .
6922 O    O    . HOH HOH HOH S . 369 369 . 0.6482 0.4051 0.6304 0.0613  0.0228
0.1700  1 .
6923 O    O    . HOH HOH HOH S . 370 370 . 0.3783 0.4509 0.5060 0.0049  0.0490  -
0.1271 1 .
6924 O    O    . HOH HOH HOH S . 371 371 . 0.7171 0.4882 0.6810 -0.0151 0.0924  -
0.2712 1 .
6925 O    O    . HOH HOH HOH S . 372 372 . 0.4379 0.9125 0.6781 0.0986  -0.0945
0.0897  1 .
6926 O    O    . HOH HOH HOH S . 373 373 . 0.7059 0.5738 0.5163 -0.0536 0.1002
0.0091  1 .
6927 O    O    . HOH HOH HOH S . 374 374 . 0.3557 0.2122 0.4660 -0.0351 0.0084
0.0342  1 .
6928 O    O    . HOH HOH HOH S . 375 375 . 0.5728 0.8330 0.5844 -0.0434 -0.2286
0.0146  1 .
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6929 O    O    . HOH HOH HOH S . 376 376 . 0.3948 0.4167 0.6277 -0.1639 0.2292  -
0.1923 1 .
6930 O    O    . HOH HOH HOH S . 377 377 . 0.3785 0.6198 0.4811 -0.1149 0.0568
0.0969  1 .
6931 O    O    . HOH HOH HOH S . 378 378 . 0.2462 0.7176 0.6390 -0.0178 -0.0792 -
0.1174 1 .
6932 O    O    . HOH HOH HOH S . 379 379 . 0.4785 0.6926 0.6449 -0.1777 0.0177  -
0.2001 1 .
6933 O    O    . HOH HOH HOH S . 380 380 . 0.5740 0.2359 0.5703 -0.1038 -0.0021 -
0.0520 1 .
6934 O    O    . HOH HOH HOH S . 381 381 . 0.5603 0.6614 1.0147 -0.0085 0.0394  -
0.3904 1 .
6935 O    O    . HOH HOH HOH S . 382 382 . 0.7745 0.6250 0.4763 0.0580  0.1877  -
0.0862 1 .
6936 O    O    . HOH HOH HOH S . 383 383 . 0.8679 0.6647 0.9454 0.0613  0.5296
0.0912  1 .
6937 O    O    . HOH HOH HOH S . 384 384 . 0.7102 0.6270 0.6289 -0.0029 0.0864  -
0.1833 1 .
6938 O    O    . HOH HOH HOH S . 385 385 . 0.5400 0.5399 0.4299 -0.0219 -0.0667 -
0.1105 1 .
6939 O    O    . HOH HOH HOH S . 386 386 . 0.5592 0.8147 0.5158 -0.1126 0.0434  -
0.1088 1 .
6940 O    O    . HOH HOH HOH S . 387 387 . 0.4542 0.6676 0.5751 -0.0369 0.1030  -
0.0301 1 .
6941 O    O    . HOH HOH HOH S . 388 388 . 0.3730 0.9513 0.5734 -0.0357 0.0379  -
0.0381 1 .
6942 O    O    . HOH HOH HOH S . 389 389 . 0.3107 0.5553 1.0111 -0.0732 -0.2816 -
0.0263 1 .
6943 O    O    . HOH HOH HOH S . 390 390 . 0.3450 0.6515 0.6921 0.1255  -0.3430 -
0.0162 1 .
6944 O    O    . HOH HOH HOH S . 391 391 . 0.3837 0.7963 0.4479 0.0647  -0.1096 -
0.0221 1 .
6945 O    O    . HOH HOH HOH S . 392 392 . 0.5125 0.8969 0.4274 -0.0688 -0.3468
0.1306  1 .
6946 O    O    . HOH HOH HOH S . 393 393 . 0.4327 0.6729 0.4952 -0.1169 -0.0775 -
0.0903 1 .
6947 O    O    . HOH HOH HOH S . 394 394 . 0.5848 1.0262 0.6425 -0.2242 -0.0258 -
0.2262 1 .
6948 O    O    . HOH HOH HOH S . 395 395 . 0.5423 0.5035 0.2945 0.0214  -0.0551 -
0.1113 1 .
6949 O    O    . HOH HOH HOH S . 396 396 . 0.3149 0.4848 0.4930 -0.0878 0.0155  -
0.0049 1 .
6950 O    O    . HOH HOH HOH S . 397 397 . 0.5509 0.4519 0.5658 0.0120  0.1136  -
0.0085 1 .
6951 O    O    . HOH HOH HOH S . 398 398 . 0.5911 0.6165 0.2760 -0.0199 -0.0347 -
0.0211 1 .
6952 O    O    . HOH HOH HOH S . 399 399 . 0.5307 0.5495 0.2909 0.0824  -0.0672 -
0.0070 1 .
6953 O    O    . HOH HOH HOH S . 400 400 . 0.3683 0.6551 0.3686 -0.0520 -0.0382 -
0.0647 1 .
6954 O    O    . HOH HOH HOH S . 401 401 . 1.1207 0.6021 0.3784 -0.0947 0.0141
0.0491  1 .
6955 O    O    . HOH HOH HOH S . 402 402 . 0.3436 0.6001 0.7780 -0.0214 -0.0297 -
0.2103 1 .
6956 O    O    . HOH HOH HOH S . 403 403 . 0.6887 1.2639 0.8142 0.1555  0.5558
0.0244  1 .
6957 O    O    . HOH HOH HOH S . 404 404 . 0.4130 0.5230 0.4475 0.1319  -0.2266 -
0.0825 1 .
6958 O    O    . HOH HOH HOH S . 405 405 . 0.5653 0.6471 0.3585 0.0273  0.0323
0.1538  1 .
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6959 O    O    . HOH HOH HOH S . 406 406 . 0.3587 0.7279 0.4426 0.0765  -0.0970 -
0.0154 1 .
6960 O    O    . HOH HOH HOH S . 407 407 . 0.5729 0.5080 0.7173 -0.0620 -0.0447
0.0931  1 .
6961 O    O    . HOH HOH HOH S . 408 408 . 0.4048 0.4985 0.3157 -0.0753 -0.0366 -
0.0189 1 .
6962 O    O    . HOH HOH HOH S . 409 409 . 0.4069 0.5159 0.2926 0.0492  -0.0222
0.0109  1 .
6963 O    O    . HOH HOH HOH S . 410 410 . 0.6372 0.5001 0.7998 0.0312  -0.3209
0.0737  1 .
6964 O    O    . HOH HOH HOH S . 411 411 . 0.5750 0.5026 0.4137 0.1127  -0.0188
0.0027  1 .
6965 O    O    . HOH HOH HOH S . 412 412 . 0.5927 0.8081 0.4605 -0.0769 -0.1563
0.0880  1 .
6966 O    O    . HOH HOH HOH S . 413 413 . 0.6763 0.6072 0.4324 -0.1852 0.0390  -
0.0699 1 .
6967 O    O    . HOH HOH HOH S . 414 414 . 0.5566 0.4622 0.5860 -0.0785 0.1308  -
0.1408 1 .
6968 O    O    . HOH HOH HOH S . 415 415 . 0.5081 0.6369 0.4457 0.1475  -0.0492 -
0.1083 1 .
6969 O    O    . HOH HOH HOH S . 416 416 . 0.2165 0.3450 1.1416 -0.0208 -0.1005 -
0.1040 1 .
6970 O    O    . HOH HOH HOH S . 417 417 . 0.4914 0.4597 0.6437 0.0548  -0.0544 -
0.1105 1 .
6971 O    O    . HOH HOH HOH S . 418 418 . 0.4822 0.4985 0.6407 0.1087  -0.1354
0.1038  1 .
6972 O    O    . HOH HOH HOH S . 419 419 . 0.4057 0.4686 0.4359 -0.0182 0.0233  -
0.0236 1 .
6973 O    O    . HOH HOH HOH S . 420 420 . 0.4662 0.5695 0.4971 0.0871  -0.1182
0.0403  1 .
6974 O    O    . HOH HOH HOH S . 421 421 . 0.5262 0.8845 0.4682 0.0034  0.0095  -
0.0954 1 .
6975 O    O    . HOH HOH HOH S . 422 422 . 0.6850 0.5141 0.3602 -0.0910 -0.1216
0.1256  1 .
6976 O    O    . HOH HOH HOH S . 423 423 . 0.8549 0.6576 0.9289 -0.1330 0.1766  -
0.5104 1 .
6977 O    O    . HOH HOH HOH S . 424 424 . 0.6211 0.5070 0.6940 -0.0668 -0.0099
0.0879  1 .
6978 O    O    . HOH HOH HOH S . 425 425 . 0.3030 0.6355 0.5018 0.0423  0.0568  -
0.0464 1 .
6979 O    O    . HOH HOH HOH S . 426 426 . 1.1640 0.4718 0.5895 -0.0020 -0.1001
0.0333  1 .
6980 O    O    . HOH HOH HOH S . 427 427 . 0.2373 0.1788 0.2551 0.0041  -0.0234 -
0.0386 1 .
6981 O    O    . HOH HOH HOH S . 428 428 . 0.2860 0.3533 0.4603 0.0186  -0.0277
0.0517  1 .
6982 O    O    . HOH HOH HOH S . 429 429 . 0.2280 0.2170 0.2093 0.0429  0.0184
0.0244  1 .
6983 O    O    . HOH HOH HOH S . 430 430 . 0.3914 0.4781 0.8282 -0.1601 -0.2183
0.0708  1 .
6984 O    O    . HOH HOH HOH S . 431 431 . 0.3840 0.4318 0.4575 -0.0209 0.0587
0.1124  1 .
6985 O    O    . HOH HOH HOH S . 432 432 . 0.3515 0.4791 0.4535 0.0341  0.0142
0.1663  1 .
6986 O    O    . HOH HOH HOH S . 433 433 . 0.4390 0.4951 0.3440 0.0476  0.0660
0.0020  1 .
6987 O    O    . HOH HOH HOH S . 434 434 . 0.3493 0.4500 0.4916 -0.0131 0.1722  -
0.0663 1 .
6988 O    O    . HOH HOH HOH S . 435 435 . 0.6575 0.4328 0.5687 0.0640  -0.0116 -
0.0370 1 .
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6989 O    O    . HOH HOH HOH S . 436 436 . 0.6726 0.6944 0.8117 -0.1110 -0.0840 -
0.2477 1 .
6990 O    O    . HOH HOH HOH S . 437 437 . 0.5527 0.5871 0.4581 -0.2679 -0.0767
0.0505  1 .
6991 O    O    . HOH HOH HOH S . 438 438 . 0.3258 0.4423 0.2941 0.0504  0.0066  -
0.1092 1 .
6992 O    O    . HOH HOH HOH S . 439 439 . 0.4914 0.5093 0.3722 0.1603  0.0185  -
0.1106 1 .
6993 O    O    . HOH HOH HOH S . 440 440 . 0.5367 0.8938 0.3356 0.1700  -0.0366
0.1044  1 .
6994 O    O    . HOH HOH HOH S . 441 441 . 0.5689 0.5514 0.5017 0.2500  0.1320
0.1792  1 .
6995 O    O    . HOH HOH HOH S . 442 442 . 0.7253 0.8006 0.2284 0.1530  0.1684  -
0.0053 1 .
6996 O    O    . HOH HOH HOH S . 443 443 . 0.5583 0.3800 0.2865 0.0309  0.0051  -
0.0970 1 .
6997 O    O    . HOH HOH HOH S . 444 444 . 0.6036 0.4085 0.2868 0.0265  0.1750  -
0.0090 1 .
6998 O    O    . HOH HOH HOH S . 445 445 . 0.3542 0.5540 0.4523 0.1298  -0.0119 -
0.1085 1 .
6999 O    O    . HOH HOH HOH S . 446 446 . 0.5255 0.3714 0.5846 0.1226  -0.0337
0.2152  1 .
7000 O    O    . HOH HOH HOH S . 447 447 . 0.4160 0.2898 0.3360 0.0566  -0.0196
0.0950  1 .
7001 O    O    . HOH HOH HOH S . 448 448 . 0.6430 0.8018 0.6784 0.1035  -0.2791 -
0.2726 1 .
7002 O    O    . HOH HOH HOH S . 449 449 . 0.5056 0.5131 0.3035 0.0533  0.0688  -
0.0885 1 .
7003 O    O    . HOH HOH HOH S . 450 450 . 0.5919 0.4308 0.4979 0.1441  -0.2034 -
0.2042 1 .
7004 O    O    . HOH HOH HOH S . 451 451 . 0.8015 1.0810 0.5663 -0.2950 -0.1533
0.0457  1 .
7005 O    O    . HOH HOH HOH S . 452 452 . 0.4787 0.6618 0.8897 -0.0865 0.1859  -
0.1563 1 .
7006 O    O    . HOH HOH HOH S . 453 453 . 0.3356 0.5742 0.6955 -0.0653 0.0751  -
0.0209 1 .
7007 O    O    . HOH HOH HOH S . 454 454 . 0.3718 0.2839 0.7406 0.0015  -0.1711
0.1829  1 .
7008 O    O    . HOH HOH HOH S . 455 455 . 0.6032 0.3920 0.7484 -0.0495 0.0397  -
0.0966 1 .
7009 O    O    . HOH HOH HOH S . 456 456 . 0.7066 0.3788 0.6985 0.0550  -0.2363 -
0.1079 1 .
7010 O    O    . HOH HOH HOH S . 457 457 . 0.5405 0.4879 0.4400 0.0852  0.1324  -
0.0049 1 .
7011 O    O    . HOH HOH HOH S . 458 458 . 0.4267 0.3061 0.3667 0.1275  0.1072  -
0.0362 1 .
7012 O    O    . HOH HOH HOH S . 459 459 . 0.4546 0.3300 0.3955 -0.0078 -0.0600 -
0.1009 1 .
7013 O    O    . HOH HOH HOH S . 460 460 . 0.4948 0.3336 0.4162 0.0041  -0.0360 -
0.1256 1 .
7014 O    O    . HOH HOH HOH S . 461 461 . 0.2116 0.1197 0.1265 -0.0008 -0.0097
0.0035  1 .
7015 O    O    . HOH HOH HOH S . 462 462 . 0.2100 0.1888 0.1396 0.0254  0.0102  -
0.0263 1 .
7016 O    O    . HOH HOH HOH S . 463 463 . 0.6214 0.3570 0.6085 -0.0852 -0.1323
0.1136  1 .
7017 O    O    . HOH HOH HOH S . 464 464 . 0.5494 0.4431 0.3308 -0.1503 -0.0321 -
0.1277 1 .
7018 O    O    . HOH HOH HOH S . 465 465 . 0.3143 0.3032 0.2681 0.0235  0.0495
0.0603  1 .
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7019 O    O    . HOH HOH HOH S . 466 466 . 0.4031 0.6746 0.5207 -0.0565 0.0616
0.2249  1 .
7020 O    O    . HOH HOH HOH S . 467 467 . 0.4416 0.3925 0.5214 0.0939  0.0764  -
0.0551 1 .
7021 O    O    . HOH HOH HOH S . 468 468 . 0.4606 0.4640 0.4496 -0.0281 0.0600  -
0.0676 1 .
7022 O    O    . HOH HOH HOH S . 469 469 . 0.4396 0.2876 0.6170 -0.0478 -0.0429 -
0.1011 1 .
7023 O    O    . HOH HOH HOH S . 470 470 . 0.6838 0.4846 0.6132 0.0470  0.2303  -
0.0174 1 .
7024 O    O    . HOH HOH HOH S . 471 471 . 0.4284 0.6041 0.9229 0.0281  0.0156  -
0.1177 1 .
7025 O    O    . HOH HOH HOH S . 472 472 . 0.7870 0.3580 0.8056 -0.2300 -0.0602
0.2401  1 .
7026 O    O    . HOH HOH HOH S . 473 473 . 0.4830 0.4545 0.5983 -0.0019 0.0388  -
0.0044 1 .
7027 O    O    . HOH HOH HOH S . 474 474 . 0.6392 0.6569 0.9285 0.0558  0.3297  -
0.1508 1 .
7028 O    O    . HOH HOH HOH S . 475 475 . 0.4001 0.4148 0.5399 0.0614  -0.0191
0.0816  1 .
7029 O    O    . HOH HOH HOH S . 476 476 . 0.4228 0.2774 0.6789 0.0353  0.2097  -
0.1336 1 .
7030 O    O    . HOH HOH HOH S . 477 477 . 0.6248 0.6758 0.4550 0.2950  0.1421  -
0.0765 1 .
7031 O    O    . HOH HOH HOH S . 478 478 . 0.3267 0.5223 0.4460 0.1654  0.1069
0.1397  1 .
7032 O    O    . HOH HOH HOH S . 479 479 . 0.2839 0.3519 0.3292 0.1178  -0.0013
0.0004  1 .
7033 O    O    . HOH HOH HOH S . 480 480 . 0.2896 0.4451 0.7768 0.1248  -0.0987 -
0.1891 1 .
7034 O    O    . HOH HOH HOH S . 481 481 . 0.3699 0.4938 0.6446 0.0505  0.0250
0.0932  1 .
7035 O    O    . HOH HOH HOH S . 482 482 . 0.3790 0.5543 0.5321 -0.0867 -0.0994
0.1307  1 .
7036 O    O    . HOH HOH HOH S . 483 483 . 0.4784 0.3787 0.6392 -0.0312 -0.1549
0.0639  1 .
7037 O    O    . HOH HOH HOH S . 484 484 . 0.3594 0.7098 0.4749 -0.0621 0.0941  -
0.0595 1 .
7038 O    O    . HOH HOH HOH S . 485 485 . 0.5102 0.4524 0.4979 0.0898  -0.1961
0.0450  1 .
7039 O    O    . HOH HOH HOH S . 486 486 . 0.9455 0.5031 0.5955 -0.2180 0.0699  -
0.0942 1 .
7040 O    O    . HOH HOH HOH S . 487 487 . 0.4794 0.6745 0.4821 0.0118  -0.1685
0.1205  1 .
7041 O    O    . HOH HOH HOH S . 488 488 . 0.8303 0.6353 0.4171 0.1886  -0.0406
0.1125  1 .
7042 O    O    . HOH HOH HOH S . 489 489 . 0.4179 0.4356 0.6264 0.1112  -0.0810 -
0.0094 1 .
7043 O    O    . HOH HOH HOH S . 490 490 . 0.3670 0.5014 0.7271 0.1543  -0.0165
0.1358  1 .
7044 O    O    . HOH HOH HOH S . 491 491 . 0.4507 0.1927 0.6189 0.0313  -0.0739 -
0.0680 1 .
7045 O    O    . HOH HOH HOH S . 492 492 . 0.5938 0.2778 0.6572 0.1205  0.1631
0.1772  1 .
7046 O    O    . HOH HOH HOH S . 493 493 . 0.3944 0.3165 0.4514 0.0809  0.0686
0.0854  1 .
7047 O    O    . HOH HOH HOH S . 494 494 . 0.4077 0.3724 0.8799 0.0789  -0.1432
0.0187  1 .
7048 O    O    . HOH HOH HOH S . 495 495 . 0.5182 0.4609 0.4974 0.1911  0.0553  -
0.1398 1 .
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7049 O    O    . HOH HOH HOH S . 496 496 . 0.4774 0.3085 0.7969 0.0322  0.0587  -
0.0218 1 .
7050 O    O    . HOH HOH HOH S . 497 497 . 0.4327 0.5903 0.5772 -0.1941 -0.0077 -
0.0173 1 .
7051 O    O    . HOH HOH HOH S . 498 498 . 0.3546 0.3883 0.2760 0.1045  -0.0889
0.0303  1 .
7052 O    O    . HOH HOH HOH S . 499 499 . 0.5164 0.3410 0.3875 0.0214  0.0217
0.0449  1 .
7053 O    O    . HOH HOH HOH S . 500 500 . 0.7042 0.4636 1.2473 0.0140  0.2072
0.0266  1 .
7054 O    O    . HOH HOH HOH S . 501 501 . 0.6394 0.6006 0.5827 -0.1017 -0.2066
0.2825  1 .
7055 O    O    . HOH HOH HOH S . 502 502 . 0.5741 0.5514 0.7044 0.0836  0.1952
0.2164  1 .
7056 O    O    . HOH HOH HOH S . 503 503 . 0.6442 0.3777 0.7251 0.0152  -0.1774 -
0.0756 1 .
7057 O    O    . HOH HOH HOH S . 504 504 . 0.4416 0.2891 0.2909 -0.0044 0.0380
0.0645  1 .
7058 O    O    . HOH HOH HOH S . 505 505 . 0.4732 0.5448 0.5261 -0.1994 -0.2241
0.0335  1 .
7059 O    O    . HOH HOH HOH S . 506 506 . 0.6171 0.3746 0.4939 0.0224  0.0423
0.0484  1 .
7060 O    O    . HOH HOH HOH S . 507 507 . 0.5461 0.5555 0.5551 -0.0606 -0.1296
0.0395  1 .
7061 O    O    . HOH HOH HOH S . 508 508 . 0.3955 0.4219 0.4372 0.0189  0.0099  -
0.0413 1 .
7062 O    O    . HOH HOH HOH S . 509 509 . 0.4045 0.4752 0.3294 -0.1160 0.0820  -
0.0750 1 .
7063 O    O    . HOH HOH HOH S . 510 510 . 0.5345 0.4646 0.6722 -0.0832 -0.2447 -
0.0784 1 .
7064 O    O    . HOH HOH HOH S . 511 511 . 0.3690 0.2718 0.5494 0.0194  0.0308
0.0296  1 .
7065 O    O    . HOH HOH HOH S . 512 512 . 0.4546 0.6723 0.8283 -0.0457 0.1023
0.1059  1 .
7066 O    O    . HOH HOH HOH S . 513 513 . 0.8710 0.6338 0.1636 -0.2838 -0.0547
0.1200  1 .
7067 O    O    . HOH HOH HOH S . 514 514 . 0.5397 0.2234 0.4067 0.0118  0.0607  -
0.1316 1 .
7068 O    O    . HOH HOH HOH S . 515 515 . 0.6999 0.9193 0.1819 0.3319  0.0256  -
0.0424 1 .
7069 O    O    . HOH HOH HOH S . 516 516 . 0.7008 0.4153 0.5725 0.0175  0.1569  -
0.0753 1 .
7070 O    O    . HOH HOH HOH S . 517 517 . 0.6226 0.3665 0.4827 0.0532  -0.1160 -
0.0959 1 .
7071 O    O    . HOH HOH HOH S . 518 518 . 0.6813 0.4401 0.3172 0.0357  0.1345  -
0.1505 1 .
7072 O    O    . HOH HOH HOH S . 519 519 . 1.0472 0.3440 0.4380 -0.0868 -0.0073 -
0.0554 1 .
7073 O    O    . HOH HOH HOH S . 520 520 . 0.3162 0.9601 0.7861 0.0531  -0.0298
0.1071  1 .
7074 O    O    . HOH HOH HOH S . 521 521 . 0.4921 0.7190 0.7667 0.0754  0.0372
0.0757  1 .
7075 O    O    . HOH HOH HOH S . 522 522 . 0.3951 0.9113 0.3582 0.1402  -0.0007
0.1079  1 .
7076 O    O    . HOH HOH HOH S . 523 523 . 0.8293 0.3480 0.7168 -0.1149 -0.2746
0.0001  1 .
7077 O    O    . HOH HOH HOH S . 524 524 . 0.3793 0.6592 0.6409 -0.0132 0.0007  -
0.0783 1 .
7078 O    O    . HOH HOH HOH S . 525 525 . 0.5225 0.5054 0.4512 -0.1338 -0.0482 -
0.0904 1 .
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7079 O    O    . HOH HOH HOH S . 526 526 . 0.3144 0.6087 0.3910 -0.0798 0.0909
0.0274  1 .
7080 O    O    . HOH HOH HOH S . 527 527 . 0.4042 0.4767 0.4493 0.0596  0.0195  -
0.0096 1 .
7081 O    O    . HOH HOH HOH S . 528 528 . 0.5910 0.7089 0.3965 0.1680  0.1588  -
0.0005 1 .
7082 O    O    . HOH HOH HOH S . 529 529 . 0.3217 0.7771 0.7199 0.0119  -0.0622
0.0895  1 .
7083 O    O    . HOH HOH HOH S . 530 530 . 0.3323 0.5827 0.5084 -0.0544 -0.1224
0.0019  1 .
7084 O    O    . HOH HOH HOH S . 531 531 . 0.6578 0.5734 0.6389 -0.1551 0.0815  -
0.0245 1 .
7085 O    O    . HOH HOH HOH S . 532 532 . 0.4620 0.7891 0.5074 -0.0212 0.0333  -
0.1785 1 .
7086 O    O    . HOH HOH HOH S . 533 533 . 0.4826 0.4450 0.5721 0.0964  0.1599
0.0829  1 .
7087 O    O    . HOH HOH HOH S . 534 534 . 0.8828 0.5593 0.9933 0.0855  0.0719
0.0859  1 .
7088 O    O    . HOH HOH HOH S . 535 535 . 0.5087 0.4186 0.7479 0.0053  0.0500
0.0220  1 .
7089 O    O    . HOH HOH HOH S . 536 536 . 0.8380 0.6556 0.5488 0.1821  0.0244
0.0499  1 .
7090 O    O    . HOH HOH HOH S . 537 537 . 0.2124 0.1236 0.1182 0.0379  0.0557  -
0.0036 1 .
7091 O    O    . HOH HOH HOH S . 538 538 . 0.4786 0.4603 0.3627 -0.0856 0.1419  -
0.0686 1 .
7092 O    O    . HOH HOH HOH S . 539 539 . 0.7748 0.4808 0.4060 0.1193  -0.1967 -
0.1631 1 .
7093 O    O    . HOH HOH HOH S . 540 540 . 0.5176 0.5173 0.5139 0.0192  -0.2047 -
0.1364 1 .
7094 O    O    . HOH HOH HOH S . 541 541 . 0.5926 0.4536 0.5780 -0.0947 -0.2062 -
0.0015 1 .
7095 O    O    . HOH HOH HOH S . 542 542 . 0.5436 0.2827 0.4464 0.0776  -0.1304 -
0.0921 1 .
7096 O    O    . HOH HOH HOH S . 543 543 . 0.7614 0.8512 0.8344 0.0096  -0.3127 -
0.1495 1 .
7097 O    O    . HOH HOH HOH S . 544 544 . 0.7399 0.8104 0.7759 0.3755  -0.2643 -
0.2944 1 .
7098 O    O    . HOH HOH HOH S . 545 545 . 0.3903 0.5120 0.4796 0.0529  -0.0832 -
0.2078 1 .
7099 O    O    . HOH HOH HOH S . 546 546 . 0.6441 0.6183 0.6379 0.1316  0.1662
0.0838  1 .
7100 O    O    . HOH HOH HOH S . 547 547 . 0.5180 0.4414 0.9873 -0.1943 0.0623  -
0.0672 1 .
7101 O    O    . HOH HOH HOH S . 548 548 . 0.6121 0.5010 0.7477 0.1308  0.0660  -
0.0349 1 .
7102 O    O    . HOH HOH HOH S . 549 549 . 0.3583 0.2519 0.3524 -0.0592 0.0181  -
0.0282 1 .
7103 O    O    . HOH HOH HOH S . 550 550 . 0.5413 0.3502 0.3948 0.0950  0.1118
0.0313  1 .
7104 O    O    . HOH HOH HOH S . 551 551 . 0.3282 0.7152 0.4984 -0.1112 0.0474
0.1330  1 .
7105 O    O    . HOH HOH HOH S . 552 552 . 0.8892 0.6053 0.7520 -0.0472 0.3049
0.1203  1 .
7106 O    O    . HOH HOH HOH S . 553 553 . 0.6748 0.3227 0.5364 0.0371  0.1074
0.2557  1 .
7107 O    O    . HOH HOH HOH S . 554 554 . 0.6350 0.4518 0.1659 -0.1208 -0.0444
0.1136  1 .
7108 O    O    . HOH HOH HOH S . 555 555 . 0.2475 0.2404 0.1615 0.0320  -0.0347 -
0.0223 1 .
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7109 O    O    . HOH HOH HOH S . 556 556 . 0.4191 0.5179 0.2980 0.0983  -0.0457
0.1976  1 .
7110 O    O    . HOH HOH HOH S . 557 557 . 0.4171 0.3021 0.2476 0.0340  -0.0863 -
0.0223 1 .
7111 O    O    . HOH HOH HOH S . 558 558 . 0.5388 0.6019 0.3710 -0.1312 -0.0811 -
0.0411 1 .
7112 O    O    . HOH HOH HOH S . 559 559 . 0.5126 0.4151 0.3688 0.1164  0.0489  -
0.1092 1 .
7113 O    O    . HOH HOH HOH S . 560 560 . 0.3467 0.3572 0.4755 0.0380  0.1488  -
0.0748 1 .
7114 O    O    . HOH HOH HOH S . 561 561 . 0.6973 0.4907 0.3392 0.0733  0.0300  -
0.0330 1 .
7115 O    O    . HOH HOH HOH S . 562 562 . 0.3755 0.4976 0.4605 -0.0176 -0.0590 -
0.0136 1 .
7116 O    O    . HOH HOH HOH S . 563 563 . 0.4635 0.5014 0.3359 0.0038  -0.1049 -
0.0150 1 .
7117 O    O    . HOH HOH HOH S . 564 564 . 0.4181 0.6675 0.4387 0.0716  0.0561
0.2167  1 .
7118 O    O    . HOH HOH HOH S . 565 565 . 0.4385 0.6948 0.3944 0.0915  0.0868
0.2350  1 .
7119 O    O    . HOH HOH HOH S . 566 566 . 0.4941 0.3513 0.6436 0.1461  -0.0641 -
0.0467 1 .
7120 O    O    . HOH HOH HOH S . 567 567 . 0.3181 0.3534 0.6140 0.0476  0.0587
0.0525  1 .
7121 O    O    . HOH HOH HOH S . 568 568 . 0.4243 0.6934 0.5851 0.1179  0.0640
0.1196  1 .
7122 O    O    . HOH HOH HOH S . 569 569 . 0.4963 0.5122 0.4787 -0.1401 0.0529  -
0.0412 1 .
7123 O    O    . HOH HOH HOH S . 570 570 . 0.3808 0.7456 0.4082 0.2143  -0.0881 -
0.1087 1 .
7124 O    O    . HOH HOH HOH S . 571 571 . 0.3920 0.5506 0.2550 0.0730  0.0032
0.0648  1 .
7125 O    O    . HOH HOH HOH S . 572 572 . 0.4762 0.5531 0.7413 -0.1021 -0.0946 -
0.0019 1 .
7126 O    O    . HOH HOH HOH S . 573 573 . 0.3672 0.3327 0.3973 0.0329  -0.0193
0.0567  1 .
7127 O    O    . HOH HOH HOH S . 574 574 . 0.6646 0.4243 0.4776 -0.2094 0.0290
0.0307  1 .
7128 O    O    . HOH HOH HOH S . 575 575 . 0.3003 0.5053 0.2980 -0.0638 0.0162  -
0.0247 1 .
7129 O    O    . HOH HOH HOH S . 576 576 . 0.5760 0.5039 0.5743 -0.0220 -0.1051 -
0.0235 1 .
7130 O    O    . HOH HOH HOH S . 577 577 . 0.3240 0.4173 0.4628 -0.2177 0.1030  -
0.2111 1 .
7131 O    O    . HOH HOH HOH S . 578 578 . 0.3340 0.5889 0.4421 -0.0929 0.0748  -
0.2738 1 .
7132 O    O    . HOH HOH HOH S . 579 579 . 0.2256 0.6586 0.5375 0.1844  -0.2405 -
0.0357 1 .
7133 O    O    . HOH HOH HOH S . 580 580 . 0.3294 0.6761 0.4342 0.0472  0.0911  -
0.1936 1 .
7134 O    O    . HOH HOH HOH S . 581 581 . 0.5150 0.5050 0.4316 -0.1243 -0.1426 -
0.0187 1 .
7135 O    O    . HOH HOH HOH S . 582 582 . 0.4103 0.4852 0.3160 -0.0249 0.0044
0.0779  1 .
7136 O    O    . HOH HOH HOH S . 583 583 . 0.5339 0.5643 0.3656 0.1295  -0.0692 -
0.2054 1 .
7137 O    O    . HOH HOH HOH S . 584 584 . 0.4467 0.4300 0.4622 -0.0638 -0.0638
0.0287  1 .
7138 O    O    . HOH HOH HOH S . 585 585 . 0.3933 0.2468 0.3875 -0.0334 -0.0542
0.0006  1 .
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7139 O    O    . HOH HOH HOH S . 586 586 . 0.3359 0.6377 0.4109 -0.1397 0.1269  -
0.2097 1 .
7140 O    O    . HOH HOH HOH S . 587 587 . 0.4760 0.4026 0.3633 0.0734  -0.0652 -
0.1227 1 .
7141 O    O    . HOH HOH HOH S . 588 588 . 0.6556 0.4089 0.4405 0.2068  -0.0749 -
0.0475 1 .
7142 O    O    . HOH HOH HOH S . 589 589 . 0.6666 0.6314 0.4417 -0.4326 -0.2132 -
0.1281 1 .
7143 O    O    . HOH HOH HOH S . 590 590 . 0.6792 0.3366 0.5000 0.1032  0.1999
0.0830  1 .
7144 O    O    . HOH HOH HOH S . 591 591 . 0.5554 0.5781 0.7887 -0.0202 0.3689  -
0.0820 1 .
7145 O    O    . HOH HOH HOH S . 592 592 . 0.7485 0.7564 0.2250 -0.0723 -0.2175 -
0.1062 1 .
7146 O    O    . HOH HOH HOH S . 593 593 . 0.5101 0.4101 0.3035 0.0309  0.0267
0.0092  1 .
7147 O    O    . HOH HOH HOH S . 594 594 . 0.8561 0.3293 0.2205 -0.0870 0.0599
0.0299  1 .
7148 O    O    . HOH HOH HOH S . 595 595 . 0.7412 0.2691 0.4750 0.0053  0.0082  -
0.1589 1 .
7149 O    O    . HOH HOH HOH S . 596 596 . 0.3967 0.5395 0.5884 -0.1154 -0.2237
0.3046  1 .
7150 O    O    . HOH HOH HOH S . 597 597 . 0.7061 0.8112 0.5173 -0.1117 0.1980  -
0.1991 1 .
7151 O    O    . HOH HOH HOH S . 598 598 . 0.4894 0.8513 0.3337 -0.0584 0.0517
0.1310  1 .
7152 O    O    . HOH HOH HOH S . 599 599 . 0.3977 0.3269 0.3591 0.0115  -0.0998 -
0.0487 1 .
7153 O    O    . HOH HOH HOH S . 600 600 . 0.3485 0.4838 0.5556 0.0115  -0.0025
0.2369  1 .
7154 O    O    . HOH HOH HOH S . 601 601 . 0.6292 0.4591 0.2708 0.0187  -0.0225
0.0284  1 .
7155 O    O    . HOH HOH HOH S . 602 602 . 0.5496 0.2321 0.5412 0.0536  -0.0304
0.1298  1 .
7156 O    O    . HOH HOH HOH S . 603 603 . 0.9358 0.4673 0.6861 -0.1900 -0.2203 -
0.0745 1 .
7157 O    O    . HOH HOH HOH S . 604 604 . 0.3993 0.6583 0.5551 0.0089  -0.1489 -
0.0441 1 .
7158 O    O    . HOH HOH HOH S . 605 605 . 0.5579 0.5241 0.4310 0.1242  0.0064
0.0458  1 .
7159 O    O    . HOH HOH HOH S . 606 606 . 0.4083 0.2749 0.5216 0.0168  0.0460
0.1214  1 .
7160 O    O    . HOH HOH HOH S . 607 607 . 0.7368 0.4141 0.4160 0.0017  0.0840  -
0.1650 1 .
7161 O    O    . HOH HOH HOH S . 608 608 . 0.3398 0.3542 0.5581 -0.0897 -0.1692
0.0505  1 .
7162 O    O    . HOH HOH HOH S . 609 609 . 0.3148 0.8661 0.5985 0.0469  0.0388
0.0348  1 .
7163 O    O    . HOH HOH HOH S . 610 610 . 0.3334 0.6583 0.5621 0.1630  -0.1001
0.0267  1 .
7164 O    O    . HOH HOH HOH S . 611 611 . 0.5447 0.4299 0.3466 0.0707  0.1303
0.0280  1 .
7165 O    O    . HOH HOH HOH S . 612 612 . 0.5960 0.4499 0.7396 0.0115  -0.3191
0.0618  1 .
7166 O    O    . HOH HOH HOH S . 613 613 . 0.3435 0.5037 0.4062 -0.1131 -0.0192
0.0137  1 .
7167 O    O    . HOH HOH HOH S . 614 614 . 0.3692 0.3955 0.3341 0.0733  0.1627
0.1013  1 .
7168 O    O    . HOH HOH HOH S . 615 615 . 0.6356 0.3787 0.2691 0.0698  0.0181  -
0.0948 1 .
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7169 O    O    . HOH HOH HOH S . 616 616 . 0.6024 0.6163 0.6717 0.0249  -0.1002
0.0820  1 .
7170 O    O    . HOH HOH HOH S . 617 617 . 0.3872 0.4115 0.5573 -0.0595 -0.0285 -
0.1282 1 .
7171 O    O    . HOH HOH HOH S . 618 618 . 0.6023 0.9299 1.5219 0.1120  -0.1307
0.4106  1 .
7172 O    O    . HOH HOH HOH S . 619 619 . 1.3688 0.4966 0.4125 0.2945  0.0022  -
0.0378 1 .
7173 O    O    . HOH HOH HOH S . 620 620 . 0.7683 0.5613 0.3584 -0.1152 -0.0830 -
0.0748 1 .
7174 O    O    . HOH HOH HOH S . 621 621 . 0.5331 0.6148 0.7461 -0.0368 -0.0822 -
0.3251 1 .
7175 O    O    . HOH HOH HOH S . 622 622 . 0.4252 0.4186 0.4685 -0.1570 -0.0054 -
0.0087 1 .
7176 O    O    . HOH HOH HOH S . 623 623 . 0.4773 0.7727 0.7029 -0.0346 -0.0251 -
0.1399 1 .
7177 O    O    . HOH HOH HOH S . 624 624 . 0.6280 0.6943 0.4767 0.2883  -0.1576
0.1945  1 .
7178 O    O    . HOH HOH HOH S . 625 625 . 0.6408 0.5030 1.0497 0.0471  0.1083  -
0.0585 1 .
7179 O    O    . HOH HOH HOH S . 626 626 . 0.6620 0.7247 0.6906 -0.0639 -0.0951
0.2479  1 .
7180 O    O    . HOH HOH HOH S . 627 627 . 0.8131 0.3752 0.6087 0.0569  -0.0567 -
0.0040 1 .
7181 O    O    . HOH HOH HOH S . 628 628 . 0.5314 0.5885 0.4300 -0.0969 -0.1097 -
0.0626 1 .
7182 O    O    . HOH HOH HOH S . 629 629 . 0.5694 1.0629 0.2428 0.4108  0.3437
0.2758  1 .
7183 O    O    . HOH HOH HOH S . 630 630 . 0.2907 0.4215 0.6141 0.1892  -0.2524
0.1103  1 .
7184 O    O    . HOH HOH HOH S . 631 631 . 0.4772 0.4890 1.0686 0.1514  -0.0268
0.0475  1 .
7185 O    O    . HOH HOH HOH S . 632 632 . 1.0661 0.2517 0.8443 0.1407  0.3370  -
0.0166 1 .
7186 O    O    . HOH HOH HOH S . 633 633 . 0.3528 0.4496 0.5132 0.1015  0.0011  -
0.0059 1 .
7187 O    O    . HOH HOH HOH S . 634 634 . 0.4263 0.5481 0.4200 -0.0188 0.0753
0.0670  1 .
7188 O    O    . HOH HOH HOH S . 635 635 . 0.7177 0.7037 0.6221 -0.0599 0.1284
0.0297  1 .
7189 O    O    . HOH HOH HOH S . 636 636 . 0.6809 0.1190 0.9228 0.0427  -0.2604 -
0.1406 1 .
7190 O    O    . HOH HOH HOH S . 637 637 . 0.6501 0.6288 0.4444 -0.2668 -0.2441
0.1046  1 .
7191 O    O    . HOH HOH HOH S . 638 638 . 0.5696 0.4729 0.7583 0.1620  -0.0855 -
0.1497 1 .
7192 O    O    . HOH HOH HOH S . 639 639 . 0.5557 0.4019 0.6996 0.0163  -0.1428 -
0.1518 1 .
7193 O    O    . HOH HOH HOH S . 640 640 . 0.3616 0.5700 0.5936 0.2226  -0.2259
0.1181  1 .
7194 O    O    . HOH HOH HOH S . 641 641 . 0.6876 0.6275 0.6206 -0.1329 0.0376  -
0.0942 1 .
7195 O    O    . HOH HOH HOH S . 642 642 . 0.6947 0.5331 0.6517 -0.0759 -0.3173
0.0482  1 .
7196 O    O    . HOH HOH HOH S . 643 643 . 0.6178 0.4290 0.7347 -0.1272 0.0336
0.2382  1 .
7197 O    O    . HOH HOH HOH S . 644 644 . 1.2125 0.3516 0.5978 -0.3996 -0.0590
0.0186  1 .
7198 O    O    . HOH HOH HOH S . 645 645 . 0.8348 0.5216 0.3744 0.1172  -0.1267
0.0198  1 .
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7199 O    O    . HOH HOH HOH S . 646 646 . 0.5550 0.3646 0.8758 -0.0455 0.0436  -
0.1798 1 .
7200 O    O    . HOH HOH HOH S . 647 647 . 0.5152 0.8895 0.4470 0.0886  0.4534
0.0400  1 .
7201 O    O    . HOH HOH HOH S . 648 648 . 0.7318 0.4039 0.5261 0.0105  0.0093
0.1111  1 .
7202 O    O    . HOH HOH HOH S . 649 649 . 0.0944 1.0300 0.9470 0.2319  0.1107  -
0.0236 1 .
7203 O    O    . HOH HOH HOH S . 650 650 . 0.5230 0.5570 0.7009 0.1985  0.0369
0.0379  1 .
7204 O    O    . HOH HOH HOH S . 651 651 . 0.4019 0.5008 0.5387 0.1305  0.0691
0.1144  1 .
7205 O    O    . HOH HOH HOH S . 652 652 . 0.4293 0.5450 0.5275 -0.2290 0.0519  -
0.0690 1 .
7206 O    O    . HOH HOH HOH S . 653 653 . 0.5773 1.1582 0.5687 0.4705  -0.0422
0.0707  1 .
7207 O    O    . HOH HOH HOH S . 654 654 . 0.4557 0.6517 0.3515 -0.0158 -0.1448 -
0.1487 1 .
7208 O    O    . HOH HOH HOH S . 655 655 . 0.5208 0.4434 0.6651 0.0642  0.0994
0.1736  1 .
7209 O    O    . HOH HOH HOH S . 656 656 . 0.4272 0.5950 0.5774 0.0679  -0.0609
0.1124  1 .
7210 O    O    . HOH HOH HOH S . 657 657 . 0.6592 0.7031 0.5651 0.2311  -0.0228 -
0.0807 1 .
7211 O    O    . HOH HOH HOH S . 658 658 . 0.9453 0.7238 0.4654 -0.5603 -0.2566 -
0.1938 1 .
7212 O    O    . HOH HOH HOH S . 659 659 . 0.4435 0.5266 0.3714 0.1159  -0.0388
0.0105  1 .
7213 O    O    . HOH HOH HOH S . 660 660 . 0.6235 0.7142 0.7577 0.3929  -0.4505 -
0.1695 1 .
7214 O    O    . HOH HOH HOH S . 661 661 . 0.9085 0.5828 0.2839 -0.2962 0.0667
0.0350  1 .
7215 O    O    . HOH HOH HOH S . 662 662 . 0.7184 0.6694 0.1816 -0.0284 0.1946
0.0589  1 .
7216 O    O    . HOH HOH HOH S . 663 663 . 0.5130 0.3638 0.3872 0.1190  0.0042
0.0711  1 .
7217 O    O    . HOH HOH HOH S . 664 664 . 1.0046 0.2909 0.6855 -0.3327 0.0737
0.2909  1 .
7218 O    O    . HOH HOH HOH S . 665 665 . 0.5874 0.8451 0.5885 -0.2471 -0.1497
0.2865  1 .
7219 O    O    . HOH HOH HOH S . 666 666 . 0.4536 0.8121 0.4759 0.0842  0.0672
0.3199  1 .
7220 O    O    . HOH HOH HOH S . 667 667 . 0.5071 0.6079 0.4989 -0.2675 0.1800
0.0875  1 .
7221 O    O    . HOH HOH HOH S . 668 668 . 0.6933 0.2790 0.5517 0.0523  -0.1601 -
0.0002 1 .
7222 O    O    . HOH HOH HOH S . 669 669 . 0.8123 0.3861 0.3930 -0.1218 -0.1449
0.0793  1 .
7223 O    O    . HOH HOH HOH S . 670 670 . 0.5833 0.6126 0.5362 0.1649  0.0204
0.0379  1 .
7224 O    O    . HOH HOH HOH S . 671 671 . 0.5192 0.5125 0.4538 0.0807  -0.0608 -
0.0404 1 .
7225 O    O    . HOH HOH HOH S . 672 672 . 0.7616 0.6093 0.4497 -0.2284 0.0242
0.0072  1 .
7226 O    O    . HOH HOH HOH S . 673 673 . 0.7918 0.4811 0.8381 0.1853  -0.3184 -
0.0231 1 .
7227 O    O    . HOH HOH HOH S . 674 674 . 0.5094 0.4185 0.5721 -0.2405 0.0274  -
0.1766 1 .
7228 O    O    . HOH HOH HOH S . 675 675 . 0.7979 0.4846 0.6205 0.0073  -0.0771
0.0629  1 .
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7229 O    O    . HOH HOH HOH S . 676 676 . 0.5853 1.0452 0.4786 0.4317  -0.1517
0.0646  1 .
7230 O    O    . HOH HOH HOH S . 677 677 . 0.3666 0.8161 0.7531 0.0805  -0.0718
0.1973  1 .
7231 O    O    . HOH HOH HOH S . 678 678 . 0.7221 0.5823 0.5630 -0.0203 0.0068
0.0540  1 .
7232 O    O    . HOH HOH HOH S . 679 679 . 0.4535 0.5317 0.6419 -0.1079 -0.1841
0.0737  1 .
7233 O    O    . HOH HOH HOH S . 680 680 . 0.3927 0.7768 0.5134 0.0867  -0.1244
0.2185  1 .
7234 O    O    . HOH HOH HOH S . 681 681 . 0.7811 0.3172 0.6364 0.2027  -0.0432
0.0713  1 .
7235 O    O    . HOH HOH HOH S . 682 682 . 0.9363 0.6084 1.0269 -0.2671 0.0364  -
0.1777 1 .
7236 O    O    . HOH HOH HOH S . 683 683 . 0.5885 0.7926 0.6301 0.1737  -0.0804
0.0636  1 .
7237 O    O    . HOH HOH HOH S . 684 684 . 0.3683 0.6021 0.6758 0.0717  0.0120
0.1553  1 .
7238 O    O    . HOH HOH HOH S . 685 685 . 0.2557 0.9702 0.8869 0.0639  -0.2738 -
0.1536 1 .
7239 O    O    . HOH HOH HOH S . 686 686 . 0.7317 0.5484 0.5679 -0.2606 0.0366
0.0504  1 .
7240 O    O    . HOH HOH HOH S . 687 687 . 0.7178 0.4486 0.6309 -0.0279 0.1060
0.0701  1 .
7241 O    O    . HOH HOH HOH S . 688 688 . 0.7937 0.4338 0.9846 -0.0018 -0.2293 -
0.0754 1 .
7242 O    O    . HOH HOH HOH S . 689 689 . 0.5273 0.6749 0.4149 -0.1738 0.0823  -
0.0010 1 .
7243 O    O    . HOH HOH HOH S . 690 690 . 0.6508 0.8263 1.1538 -0.1615 0.1649  -
0.1531 1 .
7244 O    O    . HOH HOH HOH S . 691 691 . 0.5254 0.5445 0.6692 0.0675  -0.1015 -
0.0504 1 .
7245 O    O    . HOH HOH HOH S . 692 692 . 0.8079 0.7558 0.6335 0.3227  -0.4555 -
0.5140 1 .
7246 O    O    . HOH HOH HOH S . 693 693 . 0.8261 0.7251 0.4080 0.2908  -0.2930 -
0.1818 1 .
7247 O    O    . HOH HOH HOH S . 694 694 . 0.6749 0.8280 0.8055 -0.1395 -0.3180
0.1905  1 .
7248 O    O    . HOH HOH HOH S . 695 695 . 0.5182 0.9239 0.6461 0.1645  0.1388  -
0.0625 1 .
7249 O    O    . HOH HOH HOH S . 696 696 . 0.7198 0.5704 0.2842 0.0207  -0.2783 -
0.0986 1 .
7250 O    O    . HOH HOH HOH S . 697 697 . 0.9006 0.3757 0.7618 -0.0843 0.0563
0.0251  1 .
7251 O    O    . HOH HOH HOH S . 698 698 . 1.2563 0.2786 0.4198 -0.0751 0.3821
0.1189  1 .
7252 O    O    . HOH HOH HOH S . 699 699 . 0.6485 0.3043 0.8141 -0.0493 -0.0257
0.0460  1 .
7253 O    O    . HOH HOH HOH S . 700 700 . 0.4569 0.6601 0.8658 -0.1283 -0.0825 -
0.0503 1 .
7254 O    O    . HOH HOH HOH S . 701 701 . 0.3936 0.7184 0.7278 -0.1345 0.1129
0.0920  1 .
7255 O    O    . HOH HOH HOH S . 702 702 . 0.7298 0.7576 0.6271 -0.1575 -0.0454 -
0.1451 1 .
7256 O    O    . HOH HOH HOH S . 703 703 . 0.7306 0.7913 0.5348 -0.0935 0.0030  -
0.1318 1 .
7257 O    O    . HOH HOH HOH S . 704 704 . 0.7698 0.3690 0.5757 0.1322  0.0724
0.1086  1 .
7258 O    O    . HOH HOH HOH S . 705 705 . 0.7844 0.5520 0.3450 0.2051  -0.1128 -
0.0514 1 .
```

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7259 O    O    . HOH HOH HOH S . 706 706 . 0.6718 0.6032 0.3940 -0.0750 -0.0544 -
0.0414 1 .
7260 O    O    . HOH HOH HOH S . 707 707 . 1.7641 0.2292 1.2977 0.1954  -0.3326 -
0.1257 1 .
7261 O    O    . HOH HOH HOH S . 708 708 . 0.3223 0.4618 0.5579 0.0088  0.0614
0.0160  1 .
7262 O    O    . HOH HOH HOH S . 709 709 . 1.0051 0.7999 1.0745 0.2315  -0.1807 -
0.2749 1 .
7263 O    O    . HOH HOH HOH S . 710 710 . 0.4670 0.8249 0.7040 -0.0425 0.0604  -
0.2065 1 .
7264 O    O    . HOH HOH HOH S . 711 711 . 0.7123 0.8677 0.6911 -0.2412 -0.0247 -
0.0707 1 .
7265 O    O    . HOH HOH HOH S . 712 712 . 0.7526 0.6273 0.4259 0.0028  0.0535  -
0.1403 1 .
7266 O    O    . HOH HOH HOH S . 713 713 . 0.3689 0.7236 0.8698 0.0899  -0.0374
0.2856  1 .
7267 O    O    . HOH HOH HOH S . 714 714 . 0.8309 0.5146 0.5639 0.0983  -0.1739 -
0.1395 1 .
7268 O    O    . HOH HOH HOH S . 715 715 . 0.6777 0.5781 0.7716 -0.0049 -0.1147
0.1384  1 .
7269 O    O    . HOH HOH HOH S . 716 716 . 0.5052 0.8857 0.4656 0.2872  -0.1864 -
0.4115 1 .
7270 O    O    . HOH HOH HOH S . 717 717 . 0.7692 0.6165 0.6186 0.2974  0.0309  -
0.2298 1 .
7271 O    O    . HOH HOH HOH S . 718 718 . 0.6084 0.8731 0.4740 -0.0525 -0.0935 -
0.1839 1 .
7272 O    O    . HOH HOH HOH S . 719 719 . 0.7627 0.4418 0.6376 -0.0220 -0.1624 -
0.0091 1 .
7273 O    O    . HOH HOH HOH S . 720 720 . 0.7031 0.5930 0.5399 -0.0185 -0.0103 -
0.0826 1 .
7274 O    O    . HOH HOH HOH S . 721 721 . 0.7524 1.0020 0.5062 0.5062  0.0505  -
0.2796 1 .
7275 O    O    . HOH HOH HOH S . 722 722 . 0.5200 0.6578 0.5514 0.1672  -0.0838
0.0719  1 .
7276 O    O    . HOH HOH HOH S . 723 723 . 0.8052 0.4091 0.5238 0.0976  0.0507
0.1197  1 .
7277 O    O    . HOH HOH HOH S . 724 724 . 0.3829 0.4913 0.8028 -0.1647 -0.0749 -
0.0675 1 .
7278 O    O    . HOH HOH HOH S . 725 725 . 0.4264 0.7062 0.7264 -0.1204 0.1861  -
0.0676 1 .
7279 O    O    . HOH HOH HOH S . 726 726 . 0.4149 0.7040 0.7195 -0.2732 -0.1816 -
0.0354 1 .
7280 O    O    . HOH HOH HOH S . 727 727 . 0.5425 0.4467 0.7034 0.1339  -0.1771
0.0247  1 .
7281 O    O    . HOH HOH HOH S . 728 728 . 0.7201 0.3963 0.7657 0.1563  -0.1630 -
0.2057 1 .
7282 O    O    . HOH HOH HOH S . 729 729 . 0.4222 0.5137 0.7930 0.0065  -0.0774 -
0.0810 1 .
7283 O    O    . HOH HOH HOH S . 730 730 . 0.4149 0.8179 0.9956 0.1824  0.0214
0.1368  1 .
7284 O    O    . HOH HOH HOH S . 731 731 . 0.6108 1.1675 0.9618 0.0333  -0.2963 -
0.1232 1 .
7285 O    O    . HOH HOH HOH S . 732 732 . 0.7313 0.6266 0.3765 0.1637  0.3518
0.1649  1 .
7286 O    O    . HOH HOH HOH S . 733 733 . 0.6305 0.5478 0.3661 0.2372  -0.3048 -
0.0881 1 .
7287 O    O    . HOH HOH HOH S . 734 734 . 0.5547 0.6858 0.8739 0.0024  0.2081  -
0.0404 1 .
7288 O    O    . HOH HOH HOH S . 735 735 . 0.6089 0.5748 0.9399 0.0611  0.0730  -
0.1874 1 .
```

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7289 O    O    . HOH HOH HOH S . 736 736 . 0.9298 0.8246 0.2946 0.1397  -0.0171
0.0541  1 .
7290 O    O    . HOH HOH HOH S . 737 737 . 1.0098 1.1624 0.4518 0.0868  0.1655
0.0600  1 .
7291 O    O    . HOH HOH HOH S . 738 738 . 0.5760 0.7529 0.4217 -0.2288 0.0802  -
0.1308 1 .
7292 O    O    . HOH HOH HOH S . 739 739 . 0.8981 0.8544 0.8367 -0.0128 -0.0628 -
0.0735 1 .
7293 O    O    . HOH HOH HOH S . 740 740 . 0.6548 0.4929 0.5376 -0.0148 0.0767
0.1180  1 .
7294 O    O    . HOH HOH HOH S . 741 741 . 0.8282 0.5381 0.7716 0.0092  0.3531  -
0.1807 1 .
7295 O    O    . HOH HOH HOH S . 742 742 . 0.7075 0.5773 0.8028 -0.0772 -0.1411 -
0.2051 1 .
7296 O    O    . HOH HOH HOH S . 743 743 . 0.3625 0.5443 0.4645 0.0068  -0.0693
0.0222  1 .
7297 O    O    . HOH HOH HOH S . 744 744 . 0.3775 0.5060 0.7627 0.0899  0.1022
0.1111  1 .
7298 O    O    . HOH HOH HOH S . 745 745 . 0.2800 0.8149 0.7298 0.0870  -0.0847
0.1405  1 .
7299 O    O    . HOH HOH HOH S . 746 746 . 0.5316 0.6717 0.4864 0.1844  -0.1984 -
0.0611 1 .
7300 O    O    . HOH HOH HOH S . 747 747 . 0.4288 1.0541 0.6346 -0.0621 -0.2294 -
0.3132 1 .
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0.1906 1 .
7302 O    O    . HOH HOH HOH S . 749 749 . 0.7502 0.6057 0.4932 0.0872  -0.1194
0.1237  1 .
7303 O    O    . HOH HOH HOH S . 750 750 . 0.5147 0.8535 0.6272 0.1084  0.1593
0.0352  1 .
7304 O    O    . HOH HOH HOH S . 751 751 . 0.4736 0.6555 0.5021 0.0645  0.1533
0.0480  1 .
7305 O    O    . HOH HOH HOH S . 752 752 . 1.0393 0.8053 0.4439 0.2842  0.0884  -
0.1271 1 .
7306 O    O    . HOH HOH HOH S . 753 753 . 0.4364 0.7097 0.7765 0.4197  -0.1938 -
0.1976 1 .
7307 O    O    . HOH HOH HOH S . 754 754 . 0.5279 0.7157 1.1935 0.1390  -0.0953 -
0.2355 1 .
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0.1083 1 .
7309 O    O    . HOH HOH HOH S . 756 756 . 1.0505 0.7118 0.4088 0.1718  -0.3199 -
0.0541 1 .
7310 O    O    . HOH HOH HOH S . 757 757 . 0.6960 0.6386 0.8128 0.0336  -0.1894
0.2270  1 .
7311 O    O    . HOH HOH HOH S . 758 758 . 0.7670 0.6548 0.3131 0.0248  0.0033  -
0.0884 1 .
7312 O    O    . HOH HOH HOH S . 759 759 . 1.2213 0.5911 0.4302 -0.1933 -0.2447
0.0690  1 .
7313 O    O    . HOH HOH HOH S . 760 760 . 0.5869 1.1670 0.3152 -0.3859 0.0857
0.2173  1 .
7314 O    O    . HOH HOH HOH S . 761 761 . 1.1245 0.8252 0.9594 0.0029  0.2808
0.0774  1 .
7315 O    O    . HOH HOH HOH S . 762 762 . 0.6307 0.9838 0.7027 -0.2731 0.1464  -
0.2958 1 .
7316 O    O    . HOH HOH HOH S . 763 763 . 0.2050 0.8465 0.5704 0.3122  0.0435
0.1275  1 .
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0.0135  1 .
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0.1840  1 .
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0.0255 1 .
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0.1457 1 .
7322 O    O    . HOH HOH HOH S . 769 769 . 1.0085 0.5310 0.6442 0.0673  -0.0741 -
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0.0217 1 .
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0.0214 1 .
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0.1008 1 .
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0.1602 1 .
7334 O    O    . HOH HOH HOH S . 781 781 . 1.5694 1.3691 0.4485 0.4721  0.2476
0.3487  1 .
7335 O    O    . HOH HOH HOH S . 782 782 . 1.3769 0.4407 0.4263 0.3860  -0.3609 -
0.2438 1 .
7336 O    O    . HOH HOH HOH S . 783 783 . 0.4400 0.8028 0.6537 0.2476  0.1581  -
0.2590 1 .
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0.0812  1 .
7338 O    O    . HOH HOH HOH S . 785 785 . 0.9304 0.6765 0.6526 -0.2646 0.0338  -
0.1880 1 .
7339 O    O    . HOH HOH HOH S . 786 786 . 0.1084 0.7993 1.1667 0.1751  -0.2159 -
0.0003 1 .
7340 O    O    . HOH HOH HOH S . 787 787 . 0.8823 0.7909 0.5515 -0.0653 0.1148  -
0.2551 1 .
7341 O    O    . HOH HOH HOH S . 788 788 . 0.6745 0.5131 0.8465 -0.2008 0.0022  -
0.3523 1 .
7342 O    O    . HOH HOH HOH S . 789 789 . 0.2147 0.8541 0.5603 0.1899  -0.0460
0.1510  1 .
7343 O    O    . HOH HOH HOH S . 790 790 . 1.0677 0.3788 0.6820 -0.1011 -0.0449
0.0418  1 .
7344 O    O    . HOH HOH HOH S . 791 791 . 0.9336 0.9299 0.4451 -0.3302 0.3903  -
0.4320 1 .
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0.0685 1 .
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0.1044 1 .
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0.0433 1 .
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0.0611 1 .
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0.1751  1 .
7352 O    O    . HOH HOH HOH S . 799 799 . 0.7762 0.8581 0.3888 0.0309  0.1368
0.0657  1 .
7353 O    O    . HOH HOH HOH S . 800 800 . 0.8879 0.4076 1.0426 0.1515  0.1981  -
0.0588 1 .
7354 O    O    . HOH HOH HOH S . 801 801 . 0.5966 0.8634 1.3101 -0.4847 0.1384  -
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0.1122 1 .
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0.0617  1 .
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0.0482  1 .
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_computing.pdbx_data_reduction_ii    HKL
_computing.cell_refinement           HKL
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_data_extraction.release_date       'June 10, 2010'
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RCSB UNNAMED
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REMARK   3
REMARK   3 REFINEMENT.
REMARK   3   PROGRAM     : REFMAC 5.5.0109
REMARK   3   AUTHORS     : MURSHUDOV,VAGIN,DODSON
REMARK   3
REMARK   3    REFINEMENT TARGET : MAXIMUM LIKELIHOOD
REMARK   3
REMARK   3  DATA USED IN REFINEMENT.
REMARK   3   RESOLUTION RANGE HIGH (ANGSTROMS) :   1.65
REMARK   3   RESOLUTION RANGE LOW  (ANGSTROMS) :  82.76
REMARK   3   DATA CUTOFF            (SIGMA(F)) : NONE
REMARK   3   COMPLETENESS FOR RANGE        (%) :  99.33
REMARK   3   NUMBER OF REFLECTIONS             :  106788
REMARK   3
REMARK   3  FIT TO DATA USED IN REFINEMENT.
REMARK   3   CROSS-VALIDATION METHOD          : THROUGHOUT
REMARK   3   FREE R VALUE TEST SET SELECTION  : RANDOM
REMARK   3   R VALUE     (WORKING + TEST SET) : 0.13662
REMARK   3   R VALUE            (WORKING SET) :  0.13410
REMARK   3   FREE R VALUE                     :  0.18280
REMARK   3   FREE R VALUE TEST SET SIZE   (%) :  5.1
REMARK   3   FREE R VALUE TEST SET COUNT      :  5744
REMARK   3
REMARK   3  FIT IN THE HIGHEST RESOLUTION BIN.
REMARK   3   TOTAL NUMBER OF BINS USED           :      20
REMARK   3   BIN RESOLUTION RANGE HIGH           :    1.650
REMARK   3   BIN RESOLUTION RANGE LOW            :    1.693
REMARK   3   REFLECTION IN BIN     (WORKING SET) :     7625
REMARK   3   BIN COMPLETENESS (WORKING+TEST) (%) :    97.53
REMARK   3   BIN R VALUE           (WORKING SET) :    0.197
REMARK   3   BIN FREE R VALUE SET COUNT          :      445
REMARK   3   BIN FREE R VALUE                    :    0.260
REMARK   3
REMARK   3  NUMBER OF NON-HYDROGEN ATOMS USED IN REFINEMENT.
REMARK   3   ALL ATOMS                :     7359
REMARK   3
REMARK   3  B VALUES.
REMARK   3   FROM WILSON PLOT           (A**2) : NULL
REMARK   3   MEAN B VALUE      (OVERALL, A**2) :  20.908
REMARK   3   OVERALL ANISOTROPIC B VALUE.
REMARK   3    B11 (A**2) :     1.48
REMARK   3    B22 (A**2) :    -0.53
REMARK   3    B33 (A**2) :    -0.95
REMARK   3    B12 (A**2) :     0.00
REMARK   3    B13 (A**2) :     0.00
REMARK   3    B23 (A**2) :     0.00
REMARK   3
REMARK   3  ESTIMATED OVERALL COORDINATE ERROR.
REMARK   3   ESU BASED ON R VALUE                            (A):   0.096
REMARK   3   ESU BASED ON FREE R VALUE                       (A):   0.081
REMARK   3   ESU BASED ON MAXIMUM LIKELIHOOD                 (A):   0.050
REMARK   3   ESU FOR B VALUES BASED ON MAXIMUM LIKELIHOOD (A**2):   3.244
REMARK   3
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REMARK   3 CORRELATION COEFFICIENTS.
REMARK   3   CORRELATION COEFFICIENT FO-FC      :   0.974
REMARK   3   CORRELATION COEFFICIENT FO-FC FREE :   0.959
REMARK   3
REMARK   3  RMS DEVIATIONS FROM IDEAL VALUES        COUNT    RMS    WEIGHT
REMARK   3   BOND LENGTHS REFINED ATOMS        (A):  6656 ; 0.028 ; 0.022
REMARK   3   BOND ANGLES REFINED ATOMS   (DEGREES):  9016 ; 2.077 ; 1.969
REMARK   3   TORSION ANGLES, PERIOD 1    (DEGREES):   864 ; 6.216 ; 5.000
REMARK   3   TORSION ANGLES, PERIOD 2    (DEGREES):   282 ;37.381 ;24.752
REMARK   3   TORSION ANGLES, PERIOD 3    (DEGREES):  1112 ;12.816 ;15.000
REMARK   3   TORSION ANGLES, PERIOD 4    (DEGREES):    37 ;21.210 ;15.000
REMARK   3   CHIRAL-CENTER RESTRAINTS       (A**3):  1025 ; 0.165 ; 0.200
REMARK   3   GENERAL PLANES REFINED ATOMS      (A):  5005 ; 0.013 ; 0.021
REMARK   3
REMARK   3  ISOTROPIC THERMAL FACTOR RESTRAINTS.     COUNT   RMS    WEIGHT
REMARK   3   MAIN-CHAIN BOND REFINED ATOMS  (A**2):  4284 ; 2.410 ; 1.500
REMARK   3   MAIN-CHAIN ANGLE REFINED ATOMS (A**2):  6838 ; 3.388 ; 2.000
REMARK   3   SIDE-CHAIN BOND REFINED ATOMS  (A**2):  2372 ; 5.297 ; 3.000
REMARK   3   SIDE-CHAIN ANGLE REFINED ATOMS (A**2):  2178 ; 7.516 ; 4.500
REMARK   3
REMARK   3 ANISOTROPIC THERMAL FACTOR RESTRAINTS.    COUNT   RMS   WEIGHT
REMARK   3   RIGID-BOND RESTRAINTS          (A**2):  6656 ; 2.875 ; 3.000
REMARK   3
REMARK   3  NCS RESTRAINTS STATISTICS
REMARK   3   NUMBER OF NCS GROUPS : NULL
REMARK   3
REMARK   3  TWIN DETAILS
REMARK   3   NUMBER OF TWIN DOMAINS  : NULL
REMARK   3
REMARK   3
REMARK   3  TLS DETAILS
REMARK   3   NUMBER OF TLS GROUPS  : NULL
REMARK   3
REMARK   3
REMARK   3  BULK SOLVENT MODELLING.
REMARK   3   METHOD USED :  MASK
REMARK   3   PARAMETERS FOR MASK CALCULATION
REMARK   3   VDW PROBE RADIUS   :   1.40
REMARK   3   ION PROBE RADIUS   :   0.80
REMARK   3   SHRINKAGE RADIUS   :   0.80
REMARK   3
REMARK   3  OTHER REFINEMENT REMARKS:
REMARK   3  HYDROGENS HAVE BEEN ADDED IN THE RIDING POSITIONS
REMARK   3  U VALUES      : REFINED INDIVIDUALLY
REMARK   3
;
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GAAERELPLYRHIAQLAGNSDLILPVPAFNVINGGSHAGNKLAMQEFMILPVGAESFRDA
MRLGAEVYHTLKGVIKDKYGKDATNVGDEGGFAPNILENSEALELVKEAIDKAGYTEKIV
IGMDVAASEFYRDGKYDLDFKSPTDPSRYITGDQLGALYQDFVRDYPVVSIEDPFDQDDW
AAWSKFTANVGIQIVGDDLTVTNPKRIERAVEEKACNCLLLKVNQIGSVTEAIQACKLAQ
ENGWGVMVSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEELGDEA
RFAGHNFRNPSVL
;
_entity_poly.pdbx_strand_id              A,B
_entity_poly.type                        'polypeptide(L)'
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_entity_poly.pdbx_target_identifier     ?
#
_entry.id   UNNAMED
#
_exptl.crystals_number   1
_exptl.entry_id          UNNAMED
_exptl.method            'X-RAY DIFFRACTION'
#
_exptl_crystal.id                    1
_exptl_crystal.pdbx_mosaicity        0.614
_exptl_crystal.pdbx_mosaicity_esd    ?
_exptl_crystal.density_Matthews      ?
_exptl_crystal.density_diffrn        ?
_exptl_crystal.density_meas          ?
_exptl_crystal.density_meas_temp     ?
_exptl_crystal.density_percent_sol   ?
_exptl_crystal.size_max              ?
_exptl_crystal.size_mid              ?
_exptl_crystal.size_min              ?
_exptl_crystal.size_rad              ?
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_refine.entry_id                                 UNNAMED
_refine.pdbx_refine_id                           'X-RAY DIFFRACTION'
_refine.ls_d_res_high                            1.6500
_refine.ls_d_res_low                             82.7600
_refine.pdbx_ls_sigma_F                          0.000
_refine.pdbx_data_cutoff_high_absF               ?
_refine.pdbx_data_cutoff_low_absF                ?
_refine.ls_percent_reflns_obs                    99.3300
_refine.ls_number_reflns_obs                     112532
_refine.ls_number_reflns_all                     ?
_refine.pdbx_ls_cross_valid_method               THROUGHOUT
_refine.ls_matrix_type                           ?
_refine.pdbx_R_Free_selection_details            RANDOM
_refine.details
' HYDROGENS HAVE BEEN ADDED IN THE RIDING POSITIONS U VALUES      : REFINED
INDIVIDUALLY '
_refine.ls_R_factor_all                          ?
_refine.ls_R_factor_obs                          0.1366
_refine.ls_R_factor_R_work                       0.1341
_refine.ls_wR_factor_R_work                      0.1365
_refine.ls_R_factor_R_free                       0.1828
_refine.ls_wR_factor_R_free                      0.1845
_refine.ls_percent_reflns_R_free                 5.1000
_refine.ls_number_reflns_R_free                  5744
_refine.ls_number_reflns_R_work                  106788
_refine.ls_R_factor_R_free_error                 ?
_refine.B_iso_mean                               21.2151
_refine.solvent_model_param_bsol                 ?
_refine.solvent_model_param_ksol                 ?
_refine.pdbx_isotropic_thermal_model             ?
_refine.aniso_B[1][1]                            1.4800
_refine.aniso_B[2][2]                            -0.5300
_refine.aniso_B[3][3]                            -0.9500
_refine.aniso_B[1][2]                            0.0000
_refine.aniso_B[1][3]                            0.0000
_refine.aniso_B[2][3]                            0.0000
_refine.correlation_coeff_Fo_to_Fc               0.9740
_refine.correlation_coeff_Fo_to_Fc_free          0.9590
_refine.overall_SU_R_Cruickshank_DPI             0.0961
```

```
_refine.pdbx_overall_SU_R_free_Cruickshank_DPI   ?
_refine.pdbx_overall_SU_R_Blow_DPI               ?
_refine.pdbx_overall_SU_R_free_Blow_DPI          ?
_refine.overall_SU_R_free                        0.0808
_refine.pdbx_overall_ESU_R                       0.0960
_refine.pdbx_overall_ESU_R_Free                  0.0810
_refine.overall_SU_ML                            0.0500
_refine.overall_SU_B                             3.2440
_refine.solvent_model_details                    MASK
_refine.pdbx_solvent_vdw_probe_radii             1.4000
_refine.pdbx_solvent_ion_probe_radii             0.8000
_refine.pdbx_solvent_shrinkage_radii             0.8000
_refine.ls_number_parameters                     ?
_refine.ls_number_restraints                     ?
_refine.pdbx_starting_model                      ?
_refine.pdbx_method_to_determine_struct          ?
_refine.pdbx_stereochemistry_target_values       'MAXIMUM LIKELIHOOD'
_refine.pdbx_stereochem_target_val_spec_case     ?
_refine.overall_FOM_work_R_set                   0.9082
_refine.B_iso_max                                101.080
_refine.B_iso_min                                6.470
_refine.pdbx_overall_phase_error                 ?
_refine.occupancy_max                            1.000
_refine.occupancy_min                            0.500
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_refine_ls_restr.pdbx_refine_id
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_refine_ls_restr.dev_ideal
_refine_ls_restr.dev_ideal_target
_refine_ls_restr.weight
_refine_ls_restr.pdbx_restraint_function
'X-RAY DIFFRACTION' r_bond_refined_d       6656 0.028  0.022  ? ?
'X-RAY DIFFRACTION' r_angle_refined_deg    9016 2.077  1.969  ? ?
'X-RAY DIFFRACTION' r_dihedral_angle_1_deg 864  6.216  5.000  ? ?
'X-RAY DIFFRACTION' r_dihedral_angle_2_deg 282  37.381 24.752 ? ?
'X-RAY DIFFRACTION' r_dihedral_angle_3_deg 1112 12.816 15.000 ? ?
'X-RAY DIFFRACTION' r_dihedral_angle_4_deg 37   21.210 15.000 ? ?
'X-RAY DIFFRACTION' r_chiral_restr         1025 0.165  0.200  ? ?
'X-RAY DIFFRACTION' r_gen_planes_refined   5005 0.013  0.021  ? ?
'X-RAY DIFFRACTION' r_mcbond_it            4284 2.410  1.500  ? ?
'X-RAY DIFFRACTION' r_mcangle_it           6838 3.388  2.000  ? ?
'X-RAY DIFFRACTION' r_scbond_it            2372 5.297  3.000  ? ?
'X-RAY DIFFRACTION' r_scangle_it           2178 7.516  4.500  ? ?
'X-RAY DIFFRACTION' r_rigid_bond_restr     6656 2.875  3.000  ? ?
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_refine_ls_shell.d_res_high                       1.6500
_refine_ls_shell.d_res_low                        1.6930
_refine_ls_shell.pdbx_total_number_of_bins_used   20
_refine_ls_shell.percent_reflns_obs               97.5300
_refine_ls_shell.number_reflns_R_work             7625
_refine_ls_shell.R_factor_all                     ?
_refine_ls_shell.R_factor_R_work                  0.1970
_refine_ls_shell.R_factor_R_free                  0.2600
_refine_ls_shell.percent_reflns_R_free            ?
_refine_ls_shell.number_reflns_R_free             445
_refine_ls_shell.R_factor_R_free_error            ?
_refine_ls_shell.number_reflns_all                8070
_refine_ls_shell.number_reflns_obs                ?
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_refine_ls_shell.pdbx_refine_id                  'X-RAY DIFFRACTION'
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_reflns.d_resolution_low            50.000
_reflns.pdbx_number_measured_all    820578
_reflns.number_obs                  168216
_reflns.pdbx_Rmerge_I_obs           0.063
_reflns.pdbx_netI_over_av_sigmaI    26.664
_reflns.pdbx_netI_over_sigmaI       13.900
_reflns.pdbx_chi_squared            1.424
_reflns.pdbx_redundancy             4.900
_reflns.percent_possible_obs        94.700
_reflns.pdbx_Rmeas_mean             0.064
_reflns.pdbx_average_I_obs          8625.800
_reflns.pdbx_average_sigmaI_obs     323.500
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_reflns_shell.d_res_low
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_reflns_shell.number_unique_obs
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_reflns_shell.Rmerge_I_obs
_reflns_shell.meanI_over_sigI_obs
_reflns_shell.pdbx_Rsym_value
_reflns_shell.pdbx_chi_squared
_reflns_shell.pdbx_redundancy
_reflns_shell.percent_possible_obs
_reflns_shell.pdbx_Rmeas_mean
_reflns_shell.pdbx_netI_over_sigmaI_obs
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_reflns_shell.pdbx_number_anomalous
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_reflns_shell.pdbx_meanI_over_sigI_anomalous
_reflns_shell.pdbx_PCV_mean
_reflns_shell.number_possible
_reflns_shell.number_unique_all
_reflns_shell.Rmerge_F_all
_reflns_shell.Rmerge_F_obs
_reflns_shell.Rmerge_I_all
_reflns_shell.meanI_over_sigI_all
_reflns_shell.percent_possible_all
_reflns_shell.pdbx_Rrim_I_all
_reflns_shell.pdbx_Rpim_I_all
1.420 1.470  ? ? ? ? ?     ? ? 0.785 2.000 ? ? ? ? ? ? ? ? ? 12798 ? ? ? ? 72.800  ?
?
1.470 1.530  ? ? ? ? 0.976 ? ? 0.831 2.700 ? ? ? ? ? ? ? ? ? 15142 ? ? ? ? 86.200  ?
?
1.530 1.600  ? ? ? ? 0.767 ? ? 0.878 3.600 ? ? ? ? ? ? ? ? ? 16319 ? ? ? ? 92.600  ?
?
1.600 1.680  ? ? ? ? 0.551 ? ? 0.926 4.600 ? ? ? ? ? ? ? ? ? 17058 ? ? ? ? 96.700  ?
?
1.680 1.790  ? ? ? ? 0.374 ? ? 0.970 5.100 ? ? ? ? ? ? ? ? ? 17459 ? ? ? ? 98.900  ?
?
1.790 1.930  ? ? ? ? 0.217 ? ? 1.111 5.500 ? ? ? ? ? ? ? ? ? 17607 ? ? ? ? 99.600  ?
?
1.930 2.120  ? ? ? ? 0.118 ? ? 1.307 5.900 ? ? ? ? ? ? ? ? ? 17732 ? ? ? ? 99.800  ?
?
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2.120 2.430  ? ? ? ? 0.073 ? ? 1.632 6.100 ? ? ? ? ? ? ? ? ? 17802 ? ? ? ? 100.000 ?
?
2.430 3.060  ? ? ? ? 0.053 ? ? 2.090 6.100 ? ? ? ? ? ? ? ? ? 17892 ? ? ? ? 100.000 ?
?
3.060 50.000 ? ? ? ? 0.034 ? ? 2.125 5.900 ? ? ? ? ? ? ? ? ? 18407 ? ? ? ? 99.600  ?
?
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_software.pdbx_ordinal
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_software.date
_software.type
_software.contact_author
_software.contact_author_email
_software.classification
_software.location
_software.language
1 HKL         ?    ?               package 'Zbyszek Otwinowski' hkl@hkl-xray.com
'data reduction'  http://www.hkl-xray.com/                      ?
2 REFMAC5     ?    ?               program 'Garib N. Murshudov' garib@ysbl.york.ac.uk
refinement        http://www.ccp4.ac.uk/dist/html/refmac5.html Fortran_77
3 pdb_extract 3.10 'June 10, 2010' package PDB
deposit@deposit.rcsb.org
'data extraction' http://sw-tools.pdb.org/apps/PDB_EXTRACT/    C++
#
_struct_biol.id        1
_struct_biol.details   ?
#
_symmetry.space_group_name_H-M   'P 21 21 2'
_symmetry.entry_id               UNNAMED
_symmetry.Int_Tables_number      18
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CIF File(s) (REQUIRED if paper describes X-ray crystal structures)

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data_UNNAMED
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_atom_site.label_atom_id
_atom_site.label_alt_id
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_atom_site.label_comp_id
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_atom_site.auth_seq_id
_atom_site.label_seq_id
_atom_site.pdbx_PDB_ins_code
_atom_site.Cartn_x
_atom_site.Cartn_y
_atom_site.Cartn_z
_atom_site.occupancy
_atom_site.B_iso_or_equiv
_atom_site.pdbx_PDB_model_num
_atom_site.label_entity_id
_atom_site.type_symbol
ATOM 1    N     N     . SER SER SER A A 1   1   . 65.976  77.019  22.059  1.00 44.42
1 . .
ATOM 2    CA    CA    . SER SER SER A A 1   1   . 67.187  76.340  21.492  1.00 44.16
1 . .
ATOM 3    CB    CB    . SER SER SER A A 1   1   . 66.962  74.824  21.282  1.00 44.78
1 . .
ATOM 4    OG    OG    . SER SER SER A A 1   1   . 66.114  74.534  20.151  1.00 47.88
1 . .
ATOM 5    C     C     . SER SER SER A A 1   1   . 67.653  77.039  20.205  1.00 42.89
1 . .
ATOM 6    O     O     . SER SER SER A A 1   1   . 66.900  77.817  19.583  1.00 43.05
1 . .
ATOM 7    N     N     . ILE ILE ILE A A 2   2   . 68.906  76.751  19.846  1.00 40.87
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ATOM 8    CA    CA    . ILE ILE ILE A A 2   2   . 69.595  77.336  18.722  1.00 38.87
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ATOM 9    CB    CB    . ILE ILE ILE A A 2   2   . 71.099  77.023  18.869  1.00 37.82
1 . .
ATOM 10   CG1   CG1   . ILE ILE ILE A A 2   2   . 71.623  77.778  20.047  1.00 35.48
1 . .
ATOM 11   CD1   CD1   . ILE ILE ILE A A 2   2   . 72.956  77.307  20.551  1.00 34.77
1 . .
ATOM 12   CG2   CG2   . ILE ILE ILE A A 2   2   . 71.875  77.369  17.602  1.00 36.33
1 . .
ATOM 13   C     C     . ILE ILE ILE A A 2   2   . 69.065  76.708  17.459  1.00 38.82
1 . .
ATOM 14   O     O     . ILE ILE ILE A A 2   2   . 69.031  75.493  17.373  1.00 38.91
1 . .
ATOM 15   N     N     . GLN GLN GLN A A 3   3   . 68.676  77.507  16.466  1.00 39.22
1 . .
ATOM 16   CA    CA    . GLN GLN GLN A A 3   3   . 68.149  76.913  15.209  1.00 40.06
1 . .
ATOM 17   CB    CB    . GLN GLN GLN A A 3   3   . 66.936  77.670  14.615  1.00 39.86
1 . .
ATOM 18   CG    CG    . GLN GLN GLN A A 3   3   . 65.789  77.963  15.582  1.00 42.25
1 . .
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ATOM 19   CD    CD    . GLN GLN GLN A A 3   3   . 64.687  78.859  14.961  1.00 46.93
1 . .
ATOM 20   OE1   OE1   . GLN GLN GLN A A 3   3   . 64.955  79.787  14.179  1.00 48.05
1 . .
ATOM 21   NE2   NE2   . GLN GLN GLN A A 3   3   . 63.433  78.571  15.313  1.00 50.56
1 . .
ATOM 22   C     C     . GLN GLN GLN A A 3   3   . 69.223  76.720  14.140  1.00 39.85
1 . .
ATOM 23   O     O     . GLN GLN GLN A A 3   3   . 69.197  75.750  13.394  1.00 40.62
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ATOM 24   N     N     . LYS LYS LYS A A 4   4   . 70.161  77.652  14.062  1.00 39.74
1 . .
ATOM 25   CA    CA    . LYS LYS LYS A A 4   4   . 71.290  77.543  13.136  1.00 39.20
1 . .
ATOM 26   CB    CB    . LYS LYS LYS A A 4   4   . 70.863  77.635  11.662  1.00 39.97
1 . .
ATOM 27   CG    CG    . LYS LYS LYS A A 4   4   . 70.145  78.874  11.216  1.00 44.04
1 . .
ATOM 28   CD    CD    . LYS LYS LYS A A 4   4   . 70.492  79.215  9.726   1.00 49.77
1 . .
ATOM 29   CE    CE    . LYS LYS LYS A A 4   4   . 69.403  78.789  8.731   1.00 52.96
1 . .
ATOM 30   NZ    NZ    . LYS LYS LYS A A 4   4   . 69.802  79.068  7.303   1.00 52.63
1 . .
ATOM 31   C     C     . LYS LYS LYS A A 4   4   . 72.399  78.512  13.462  1.00 37.64
1 . .
ATOM 32   O     O     . LYS LYS LYS A A 4   4   . 72.166  79.517  14.109  1.00 37.56
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ATOM 33   N     N     . ILE ILE ILE A A 5   5   . 73.605  78.186  13.011  1.00 36.45
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ATOM 34   CA    CA    . ILE ILE ILE A A 5   5   . 74.801  79.010  13.226  1.00 35.50
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ATOM 35   CB    CB    . ILE ILE ILE A A 5   5   . 75.684  78.434  14.339  1.00 34.65
1 . .
ATOM 36   CG1   CG1   . ILE ILE ILE A A 5   5   . 75.039  78.693  15.689  1.00 32.08
1 . .
ATOM 37   CD1   CD1   . ILE ILE ILE A A 5   5   . 75.706  77.928  16.796  1.00 27.88
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ATOM 38   CG2   CG2   . ILE ILE ILE A A 5   5   . 77.146  79.004  14.307  1.00 34.85
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ATOM 39   C     C     . ILE ILE ILE A A 5   5   . 75.587  79.128  11.932  1.00 36.07
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ATOM 40   O     O     . ILE ILE ILE A A 5   5   . 76.093  78.134  11.386  1.00 36.89
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ATOM 41   N     N     . TRP TRP TRP A A 6   6   . 75.694  80.351  11.438  1.00 36.37
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ATOM 42   CA    CA    . TRP TRP TRP A A 6   6   . 76.462  80.623  10.221  1.00 36.64
1 . .
ATOM 43   CB    CB    . TRP TRP TRP A A 6   6   . 75.563  81.149  9.073   1.00 38.47
1 . .
ATOM 44   CG    CG    . TRP TRP TRP A A 6   6   . 76.261  80.996  7.701   1.00 48.23
1 . .
ATOM 45   CD1   CD1   . TRP TRP TRP A A 6   6   . 76.629  82.011  6.824   1.00 52.55
1 . .
ATOM 46   NE1   NE1   . TRP TRP TRP A A 6   6   . 77.288  81.475  5.714   1.00 56.84
1 . .
ATOM 47   CE2   CE2   . TRP TRP TRP A A 6   6   . 77.387  80.111  5.862   1.00 58.34
1 . .
ATOM 48   CD2   CD2   . TRP TRP TRP A A 6   6   . 76.755  79.761  7.099   1.00 56.07
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ATOM 49   CE3   CE3   . TRP TRP TRP A A 6   6   . 76.715  78.402  7.480   1.00 59.20
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ATOM 50   CZ3   CZ3   . TRP TRP TRP A A 6   6   . 77.299  77.437  6.628   1.00 61.22
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ATOM 51   CH2   CH2   . TRP TRP TRP A A 6   6   . 77.923  77.824  5.407   1.00 62.41
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ATOM 52   CZ2   CZ2   . TRP TRP TRP A A 6   6   . 77.976  79.148  5.013   1.00 61.10
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ATOM 53   C     C     . TRP TRP TRP A A 6   6   . 77.642  81.548  10.541  1.00 34.72
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ATOM 54   O     O     . TRP TRP TRP A A 6   6   . 77.448  82.657  11.050  1.00 35.58
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ATOM 55   N     N     . ALA ALA ALA A A 7   7   . 78.860  81.074  10.301  1.00 31.56
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ATOM 56   CA    CA    . ALA ALA ALA A A 7   7   . 80.063  81.884  10.480  1.00 28.90
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ATOM 57   CB    CB    . ALA ALA ALA A A 7   7   . 81.122  81.117  11.275  1.00 28.52
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ATOM 58   C     C     . ALA ALA ALA A A 7   7   . 80.625  82.246  9.105   1.00 28.13
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ATOM 59   O     O     . ALA ALA ALA A A 7   7   . 80.550  81.446  8.143   1.00 27.44
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ATOM 60   N     N     . ARG ARG ARG A A 8   8   . 81.189  83.450  9.023   1.00 27.03
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ATOM 61   CA    CA    . ARG ARG ARG A A 8   8   . 81.931  83.934  7.852   1.00 26.14
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ATOM 62   CB    CB    . ARG ARG ARG A A 8   8   . 81.031  84.847  7.035   1.00 24.94
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ATOM 63   CG    CG    . ARG ARG ARG A A 8   8   . 80.628  86.073  7.843   1.00 26.78
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ATOM 64   CD    CD    . ARG ARG ARG A A 8   8   . 79.786  87.017  6.994   1.00 22.75
1 . .
ATOM 65   NE    NE    . ARG ARG ARG A A 8   8   . 78.495  86.399  6.818   1.00 28.74
1 . .
ATOM 66   CZ    CZ    . ARG ARG ARG A A 8   8   . 77.525  86.425  7.710   1.00 28.96
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ATOM 67   NH1   NH1   . ARG ARG ARG A A 8   8   . 77.732  87.028  8.852   1.00 28.25
1 . .
ATOM 68   NH2   NH2   . ARG ARG ARG A A 8   8   . 76.350  85.836  7.459   1.00 31.08
1 . .
ATOM 69   C     C     . ARG ARG ARG A A 8   8   . 83.243  84.689  8.277   1.00 25.24
1 . .
ATOM 70   O     O     . ARG ARG ARG A A 8   8   . 83.439  85.017  9.465   1.00 24.42
1 . .
ATOM 71   N     N     . GLU GLU GLU A A 9   9   . 84.112  84.927  7.306   1.00 24.47
1 . .
ATOM 72   CA    CA    . GLU GLU GLU A A 9   9   . 85.304  85.740  7.449   1.00 27.03
1 . .
ATOM 73   CB    CB    . GLU GLU GLU A A 9   9   . 86.226  85.376  6.299   1.00 27.01
1 . .
ATOM 74   CG    CG    . GLU GLU GLU A A 9   9   . 87.643  85.320  6.619   1.00 30.18
1 . .
ATOM 75   CD    CD    . GLU GLU GLU A A 9   9   . 88.500  84.778  5.461   1.00 30.45
1 . .
ATOM 76   OE1   OE1   . GLU GLU GLU A A 9   9   . 89.551  84.120  5.767   1.00 29.02
1 . .
ATOM 77   OE2   OE2   . GLU GLU GLU A A 9   9   . 88.146  85.027  4.271   1.00 26.80
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ATOM 78   C     C     . GLU GLU GLU A A 9   9   . 84.834  87.190  7.190   1.00 26.58
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ATOM 79   O     O     . GLU GLU GLU A A 9   9   . 84.191  87.421  6.199   1.00 27.71
1 . .
ATOM 80   N     N     . ILE ILE ILE A A 10  10  . 85.132  88.152  8.054   1.00 25.74
1 . .
ATOM 81   CA    CA    . ILE ILE ILE A A 10  10  . 84.994  89.559  7.716   1.00 24.14
1 . .
ATOM 82   CB    CB    . ILE ILE ILE A A 10  10  . 83.980  90.244  8.609   1.00 24.33
1 . .
ATOM 83   CG1   CG1   . ILE ILE ILE A A 10  10  . 84.382  90.047  10.050  1.00 24.10
1 . .
ATOM 84   CD1   CD1   . ILE ILE ILE A A 10  10  . 83.826  91.094  10.913  1.00 27.60
1 . .
ATOM 85   CG2   CG2   . ILE ILE ILE A A 10  10  . 82.524  89.628  8.365   1.00 23.09
1 . .
ATOM 86   C     C     . ILE ILE ILE A A 10  10  . 86.386  90.141  7.865   1.00 23.96
1 . .
ATOM 87   O     O     . ILE ILE ILE A A 10  10  . 87.294  89.422  8.273   1.00 24.85
1 . .
ATOM 88   N     N     . LEU LEU LEU A A 11  11  . 86.571  91.415  7.530   1.00 24.10
1 . .
ATOM 89   CA    CA    . LEU LEU LEU A A 11  11  . 87.852  92.129  7.823   1.00 22.67
1 . .
ATOM 90   CB    CB    . LEU LEU LEU A A 11  11  . 88.246  93.013  6.629   1.00 21.86
1 . .
ATOM 91   CG    CG    . LEU LEU LEU A A 11  11  . 88.505  92.274  5.315   1.00 22.16
1 . .
ATOM 92   CD1   CD1   . LEU LEU LEU A A 11  11  . 89.113  93.257  4.295   1.00 22.45
1 . .
ATOM 93   CD2   CD2   . LEU LEU LEU A A 11  11  . 89.525  91.216  5.569   1.00 20.02
1 . .
ATOM 94   C     C     . LEU LEU LEU A A 11  11  . 87.801  92.998  9.089   1.00 22.07
1 . .
ATOM 95   O     O     . LEU LEU LEU A A 11  11  . 86.802  93.700  9.354   1.00 21.93
1 . .
ATOM 96   N     N     . ASP ASP ASP A A 12  12  . 88.859  92.917  9.885   1.00 21.58
1 . .
ATOM 97   CA    CA    . ASP ASP ASP A A 12  12  . 88.996  93.745  11.088  1.00 22.76
1 . .
ATOM 98   CB    CB    . ASP ASP ASP A A 12  12  . 89.887  93.086  12.174  1.00 22.46
1 . .
ATOM 99   CG    CG    . ASP ASP ASP A A 12  12  . 91.364  93.189  11.882  1.00 24.37
1 . .
ATOM 100  OD1   OD1   . ASP ASP ASP A A 12  12  . 91.760  93.779  10.842  1.00 28.13
1 . .
ATOM 101  OD2   OD2   . ASP ASP ASP A A 12  12  . 92.157  92.658  12.707  1.00 27.53
1 . .
ATOM 102  C     C     . ASP ASP ASP A A 12  12  . 89.501  95.126  10.712  1.00 22.52
1 . .
ATOM 103  O     O     . ASP ASP ASP A A 12  12  . 89.651  95.438  9.517   1.00 21.72
1 . .
ATOM 104  N     N     . SER SER SER A A 13  13  . 89.788  95.936  11.727  1.00 22.90
1 . .
ATOM 105  CA    CA    . SER SER SER A A 13  13  . 90.045  97.347  11.521  1.00 24.83
1 . .
ATOM 106  CB    CB    . SER SER SER A A 13  13  . 89.877  98.118  12.842  1.00 25.38
1 . .
ATOM 107  OG    OG    . SER SER SER A A 13  13  . 90.907  97.837  13.799  1.00 27.35
1 . .
ATOM 108  C     C     . SER SER SER A A 13  13  . 91.427  97.599  10.928  1.00 25.46
1 . .
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ATOM 109  O     O     . SER SER SER A A 13  13  . 91.729  98.718  10.578  1.00 27.37
1 . .
ATOM 110  N     N     . ARG ARG ARG A A 14  14  . 92.249  96.579  10.795  1.00 24.85
1 . .
ATOM 111  CA    CA    . ARG ARG ARG A A 14  14  . 93.553  96.743  10.180  1.00 27.38
1 . .
ATOM 112  CB    CB    . ARG ARG ARG A A 14  14  . 94.564  95.993  11.011  1.00 27.87
1 . .
ATOM 113  CG    CG    . ARG ARG ARG A A 14  14  . 95.867  96.711  11.119  1.00 33.14
1 . .
ATOM 114  CD    CD    . ARG ARG ARG A A 14  14  . 96.583  96.469  12.444  1.00 36.13
1 . .
ATOM 115  NE    NE    . ARG ARG ARG A A 14  14  . 96.148  95.283  13.176  1.00 36.59
1 . .
ATOM 116  CZ    CZ    . ARG ARG ARG A A 14  14  . 96.368  95.090  14.471  1.00 36.54
1 . .
ATOM 117  NH1   NH1   . ARG ARG ARG A A 14  14  . 97.045  95.998  15.156  1.00 37.10
1 . .
ATOM 118  NH2   NH2   . ARG ARG ARG A A 14  14  . 95.952  93.977  15.076  1.00 35.95
1 . .
ATOM 119  C     C     . ARG ARG ARG A A 14  14  . 93.483  96.163  8.762   1.00 27.17
1 . .
ATOM 120  O     O     . ARG ARG ARG A A 14  14  . 94.469  96.126  8.029   1.00 26.51
1 . .
ATOM 121  N     N     . GLY GLY GLY A A 15  15  . 92.280  95.732  8.375   1.00 26.56
1 . .
ATOM 122  CA    CA    . GLY GLY GLY A A 15  15  . 92.092  95.034  7.106   1.00 27.29
1 . .
ATOM 123  C     C     . GLY GLY GLY A A 15  15  . 92.646  93.613  7.086   1.00 28.13
1 . .
ATOM 124  O     O     . GLY GLY GLY A A 15  15  . 92.955  93.099  5.995   1.00 30.02
1 . .
ATOM 125  N     N     . ASN ASN ASN A A 16  16  . 92.804  92.978  8.252   1.00 27.42
1 . .
ATOM 126  CA    CA    . ASN ASN ASN A A 16  16  . 92.973  91.510  8.280   1.00 27.15
1 . .
ATOM 127  CB    CB    . ASN ASN ASN A A 16  16  . 94.004  91.091  9.307   1.00 27.73
1 . .
ATOM 128  CG    CG    . ASN ASN ASN A A 16  16  . 95.297  91.829  9.131   1.00 30.51
1 . .
ATOM 129  OD1   OD1   . ASN ASN ASN A A 16  16  . 95.921  91.807  8.049   1.00 32.37
1 . .
ATOM 130  ND2   ND2   . ASN ASN ASN A A 16  16  . 95.709  92.503  10.186  1.00 32.37
1 . .
ATOM 131  C     C     . ASN ASN ASN A A 16  16  . 91.705  90.714  8.557   1.00 25.82
1 . .
ATOM 132  O     O     . ASN ASN ASN A A 16  16  . 90.799  91.203  9.240   1.00 24.91
1 . .
ATOM 133  N     N     . PRO PRO PRO A A 17  17  . 91.639  89.460  8.053   1.00 25.49
1 . .
ATOM 134  CA    CA    . PRO PRO PRO A A 17  17  . 90.410  88.635  8.330   1.00 24.26
1 . .
ATOM 135  CB    CB    . PRO PRO PRO A A 17  17  . 90.642  87.354  7.515   1.00 25.45
1 . .
ATOM 136  CG    CG    . PRO PRO PRO A A 17  17  . 91.796  87.782  6.446   1.00 26.98
1 . .
ATOM 137  CD    CD    . PRO PRO PRO A A 17  17  . 92.640  88.744  7.241   1.00 24.04
1 . .
ATOM 138  C     C     . PRO PRO PRO A A 17  17  . 90.199  88.215  9.791   1.00 24.14
1 . .
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ATOM 139  O     O     . PRO PRO PRO A A 17  17  . 91.164  87.926  10.560  1.00 20.65
1 . .
ATOM 140  N     N     . THR THR THR A A 18  18  . 88.913  88.122  10.166  1.00 23.61
1 . .
ATOM 141  CA    CA    . THR THR THR A A 18  18  . 88.600  87.613  11.444  1.00 23.86
1 . .
ATOM 142  CB    CB    . THR THR THR A A 18  18  . 88.696  88.722  12.481  1.00 24.55
1 . .
ATOM 143  OG1   OG1   . THR THR THR A A 18  18  . 88.587  88.170  13.793  1.00 27.92
1 . .
ATOM 144  CG2   CG2   . THR THR THR A A 18  18  . 87.527  89.751  12.324  1.00 24.62
1 . .
ATOM 145  C     C     . THR THR THR A A 18  18  . 87.187  86.959  11.374  1.00 25.23
1 . .
ATOM 146  O     O     . THR THR THR A A 18  18  . 86.442  87.045  10.350  1.00 24.60
1 . .
ATOM 147  N     N     . VAL VAL VAL A A 19  19  . 86.835  86.295  12.464  1.00 24.69
1 . .
ATOM 148  CA    CA    . VAL VAL VAL A A 19  19  . 85.650  85.506  12.477  1.00 24.21
1 . .
ATOM 149  CB    CB    . VAL VAL VAL A A 19  19  . 85.835  84.459  13.564  1.00 23.99
1 . .
ATOM 150  CG1   CG1   . VAL VAL VAL A A 19  19  . 84.567  83.674  13.831  1.00 22.67
1 . .
ATOM 151  CG2   CG2   . VAL VAL VAL A A 19  19  . 87.041  83.562  13.210  1.00 25.36
1 . .
ATOM 152  C     C     . VAL VAL VAL A A 19  19  . 84.483  86.383  12.820  1.00 23.81
1 . .
ATOM 153  O     O     . VAL VAL VAL A A 19  19  . 84.561  87.172  13.736  1.00 24.87
1 . .
ATOM 154  N     N     . GLU GLU GLU A A 20  20  . 83.371  86.192  12.144  1.00 24.77
1 . .
ATOM 155  CA    CA    . GLU GLU GLU A A 20  20  . 82.083  86.684  12.623  1.00 24.56
1 . .
ATOM 156  CB    CB    . GLU GLU GLU A A 20  20  . 81.582  87.788  11.718  1.00 25.20
1 . .
ATOM 157  CG    CG    . GLU GLU GLU A A 20  20  . 80.018  88.076  11.730  1.00 29.69
1 . .
ATOM 158  CD    CD    . GLU GLU GLU A A 20  20  . 79.710  89.319  10.929  1.00 35.00
1 . .
ATOM 159  OE1   OE1   . GLU GLU GLU A A 20  20  . 79.172  89.204  9.795   1.00 38.41
1 . .
ATOM 160  OE2   OE2   . GLU GLU GLU A A 20  20  . 80.042  90.427  11.413  1.00 37.21
1 . .
ATOM 161  C     C     . GLU GLU GLU A A 20  20  . 81.082  85.549  12.600  1.00 24.04
1 . .
ATOM 162  O     O     . GLU GLU GLU A A 20  20  . 81.181  84.699  11.745  1.00 24.33
1 . .
ATOM 163  N     N     . VAL VAL VAL A A 21  21  . 80.076  85.586  13.480  1.00 22.45
1 . .
ATOM 164  CA    CA    . VAL VAL VAL A A 21  21  . 79.157  84.478  13.635  1.00 23.20
1 . .
ATOM 165  CB    CB    . VAL VAL VAL A A 21  21  . 79.448  83.782  15.015  1.00 23.19
1 . .
ATOM 166  CG1   CG1   . VAL VAL VAL A A 21  21  . 78.421  82.726  15.350  1.00 22.36
1 . .
ATOM 167  CG2   CG2   . VAL VAL VAL A A 21  21  . 80.860  83.168  15.073  1.00 22.04
1 . .
ATOM 168  C     C     . VAL VAL VAL A A 21  21  . 77.670  84.951  13.624  1.00 23.51
1 . .
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ATOM 169  O     O     . VAL VAL VAL A A 21  21  . 77.343  85.894  14.301  1.00 23.39
1 . .
ATOM 170  N     N     . ASP ASP ASP A A 22  22  . 76.773  84.312  12.903  1.00 25.50
1 . .
ATOM 171  CA    CA    . ASP ASP ASP A A 22  22  . 75.321  84.698  12.986  1.00 27.50
1 . .
ATOM 172  CB    CB    . ASP ASP ASP A A 22  22  . 74.710  84.783  11.587  1.00 27.98
1 . .
ATOM 173  CG    CG    . ASP ASP ASP A A 22  22  . 75.200  85.984  10.768  1.00 30.52
1 . .
ATOM 174  OD1   OD1   . ASP ASP ASP A A 22  22  . 74.755  86.161  9.601   1.00 31.21
1 . .
ATOM 175  OD2   OD2   . ASP ASP ASP A A 22  22  . 76.072  86.725  11.244  1.00 35.05
1 . .
ATOM 176  C     C     . ASP ASP ASP A A 22  22  . 74.582  83.555  13.693  1.00 28.91
1 . .
ATOM 177  O     O     . ASP ASP ASP A A 22  22  . 74.685  82.381  13.271  1.00 29.54
1 . .
ATOM 178  N     N     . LEU LEU LEU A A 23  23  . 73.902  83.816  14.786  1.00 28.80
1 . .
ATOM 179  CA    CA    . LEU LEU LEU A A 23  23  . 73.259  82.720  15.453  1.00 29.55
1 . .
ATOM 180  CB    CB    . LEU LEU LEU A A 23  23  . 73.789  82.495  16.875  1.00 29.34
1 . .
ATOM 181  CG    CG    . LEU LEU LEU A A 23  23  . 73.301  81.301  17.742  1.00 29.90
1 . .
ATOM 182  CD1   CD1   . LEU LEU LEU A A 23  23  . 74.348  81.028  18.748  1.00 29.62
1 . .
ATOM 183  CD2   CD2   . LEU LEU LEU A A 23  23  . 71.964  81.594  18.523  1.00 26.60
1 . .
ATOM 184  C     C     . LEU LEU LEU A A 23  23  . 71.758  83.020  15.407  1.00 31.38
1 . .
ATOM 185  O     O     . LEU LEU LEU A A 23  23  . 71.307  84.160  15.619  1.00 29.39
1 . .
ATOM 186  N     N     . TYR TYR TYR A A 24  24  . 71.013  81.976  15.079  1.00 32.17
1 . .
ATOM 187  CA    CA    . TYR TYR TYR A A 24  24  . 69.606  82.115  14.884  1.00 33.29
1 . .
ATOM 188  CB    CB    . TYR TYR TYR A A 24  24  . 69.209  81.558  13.508  1.00 33.22
1 . .
ATOM 189  CG    CG    . TYR TYR TYR A A 24  24  . 69.604  82.472  12.361  1.00 35.90
1 . .
ATOM 190  CD1   CD1   . TYR TYR TYR A A 24  24  . 70.929  82.488  11.848  1.00 37.11
1 . .
ATOM 191  CE1   CE1   . TYR TYR TYR A A 24  24  . 71.303  83.355  10.770  1.00 38.00
1 . .
ATOM 192  CZ    CZ    . TYR TYR TYR A A 24  24  . 70.351  84.213  10.216  1.00 39.07
1 . .
ATOM 193  OH    OH    . TYR TYR TYR A A 24  24  . 70.679  85.073  9.167   1.00 40.23
1 . .
ATOM 194  CE2   CE2   . TYR TYR TYR A A 24  24  . 69.055  84.222  10.711  1.00 39.11
1 . .
ATOM 195  CD2   CD2   . TYR TYR TYR A A 24  24  . 68.681  83.353  11.795  1.00 37.85
1 . .
ATOM 196  C     C     . TYR TYR TYR A A 24  24  . 68.932  81.384  15.991  1.00 34.18
1 . .
ATOM 197  O     O     . TYR TYR TYR A A 24  24  . 69.235  80.228  16.249  1.00 35.39
1 . .
ATOM 198  N     N     . THR THR THR A A 25  25  . 68.034  82.068  16.673  1.00 35.26
1 . .
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ATOM 199  CA    CA    . THR THR THR A A 25  25  . 67.073  81.405  17.570  1.00 36.12
1 . .
ATOM 200  CB    CB    . THR THR THR A A 25  25  . 67.227  81.907  18.973  1.00 34.84
1 . .
ATOM 201  OG1   OG1   . THR THR THR A A 25  25  . 66.765  83.251  18.968  1.00 31.83
1 . .
ATOM 202  CG2   CG2   . THR THR THR A A 25  25  . 68.732  81.879  19.406  1.00 35.18
1 . .
ATOM 203  C     C     . THR THR THR A A 25  25  . 65.672  81.845  17.132  1.00 37.94
1 . .
ATOM 204  O     O     . THR THR THR A A 25  25  . 65.509  82.467  16.071  1.00 37.74
1 . .
ATOM 205  N     N     . ALA ALA ALA A A 26  26  . 64.675  81.582  17.983  1.00 40.58
1 . .
ATOM 206  CA    CA    . ALA ALA ALA A A 26  26  . 63.255  81.965  17.696  1.00 42.05
1 . .
ATOM 207  CB    CB    . ALA ALA ALA A A 26  26  . 62.303  81.351  18.727  1.00 42.06
1 . .
ATOM 208  C     C     . ALA ALA ALA A A 26  26  . 63.085  83.482  17.656  1.00 42.68
1 . .
ATOM 209  O     O     . ALA ALA ALA A A 26  26  . 62.125  83.977  17.055  1.00 43.22
1 . .
ATOM 210  N     N     . LYS LYS LYS A A 27  27  . 64.006  84.205  18.305  1.00 42.81
1 . .
ATOM 211  CA    CA    . LYS LYS LYS A A 27  27  . 63.983  85.681  18.351  1.00 43.44
1 . .
ATOM 212  CB    CB    . LYS LYS LYS A A 27  27  . 64.670  86.191  19.608  1.00 44.55
1 . .
ATOM 213  CG    CG    . LYS LYS LYS A A 27  27  . 64.132  85.626  20.915  1.00 47.62
1 . .
ATOM 214  CD    CD    . LYS LYS LYS A A 27  27  . 63.040  86.491  21.501  1.00 53.98
1 . .
ATOM 215  CE    CE    . LYS LYS LYS A A 27  27  . 62.705  85.987  22.896  1.00 56.88
1 . .
ATOM 216  NZ    NZ    . LYS LYS LYS A A 27  27  . 61.377  86.418  23.312  1.00 59.23
1 . .
ATOM 217  C     C     . LYS LYS LYS A A 27  27  . 64.606  86.373  17.125  1.00 43.15
1 . .
ATOM 218  O     O     . LYS LYS LYS A A 27  27  . 64.332  87.533  16.880  1.00 44.33
1 . .
ATOM 219  N     N     . GLY GLY GLY A A 28  28  . 65.432  85.663  16.358  1.00 42.37
1 . .
ATOM 220  CA    CA    . GLY GLY GLY A A 28  28  . 66.025  86.200  15.146  1.00 40.57
1 . .
ATOM 221  C     C     . GLY GLY GLY A A 28  28  . 67.526  86.024  15.114  1.00 39.42
1 . .
ATOM 222  O     O     . GLY GLY GLY A A 28  28  . 68.076  85.060  15.684  1.00 38.10
1 . .
ATOM 223  N     N     . LEU LEU LEU A A 29  29  . 68.186  86.956  14.436  1.00 38.43
1 . .
ATOM 224  CA    CA    . LEU LEU LEU A A 29  29  . 69.630  86.839  14.164  1.00 37.79
1 . .
ATOM 225  CB    CB    . LEU LEU LEU A A 29  29  . 69.949  87.456  12.801  1.00 38.49
1 . .
ATOM 226  CG    CG    . LEU LEU LEU A A 29  29  . 71.255  87.207  12.048  1.00 40.89
1 . .
ATOM 227  CD1   CD1   . LEU LEU LEU A A 29  29  . 71.291  88.259  10.943  1.00 45.75
1 . .
ATOM 228  CD2   CD2   . LEU LEU LEU A A 29  29  . 72.528  87.306  12.855  1.00 41.29
1 . .
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ATOM 229  C     C     . LEU LEU LEU A A 29  29  . 70.427  87.537  15.231  1.00 35.65
1 . .
ATOM 230  O     O     . LEU LEU LEU A A 29  29  . 70.147  88.687  15.557  1.00 36.44
1 . .
ATOM 231  N     N     . PHE PHE PHE A A 30  30  . 71.420  86.852  15.773  1.00 32.75
1 . .
ATOM 232  CA    CA    . PHE PHE PHE A A 30  30  . 72.380  87.468  16.695  1.00 30.70
1 . .
ATOM 233  CB    CB    . PHE PHE PHE A A 30  30  . 72.227  86.891  18.107  1.00 29.68
1 . .
ATOM 234  CG    CG    . PHE PHE PHE A A 30  30  . 70.845  87.104  18.624  1.00 31.96
1 . .
ATOM 235  CD1   CD1   . PHE PHE PHE A A 30  30  . 70.510  88.293  19.264  1.00 31.42
1 . .
ATOM 236  CE1   CE1   . PHE PHE PHE A A 30  30  . 69.181  88.543  19.628  1.00 33.38
1 . .
ATOM 237  CZ    CZ    . PHE PHE PHE A A 30  30  . 68.213  87.618  19.358  1.00 32.46
1 . .
ATOM 238  CE2   CE2   . PHE PHE PHE A A 30  30  . 68.537  86.437  18.687  1.00 33.29
1 . .
ATOM 239  CD2   CD2   . PHE PHE PHE A A 30  30  . 69.823  86.197  18.300  1.00 31.13
1 . .
ATOM 240  C     C     . PHE PHE PHE A A 30  30  . 73.790  87.348  16.175  1.00 30.18
1 . .
ATOM 241  O     O     . PHE PHE PHE A A 30  30  . 74.250  86.251  15.858  1.00 30.40
1 . .
ATOM 242  N     N     . ARG ARG ARG A A 31  31  . 74.474  88.484  16.072  1.00 27.89
1 . .
ATOM 243  CA    CA    . ARG ARG ARG A A 31  31  . 75.720  88.500  15.359  1.00 26.01
1 . .
ATOM 244  CB    CB    . ARG ARG ARG A A 31  31  . 75.580  89.377  14.080  1.00 26.76
1 . .
ATOM 245  CG    CG    . ARG ARG ARG A A 31  31  . 76.927  89.647  13.330  1.00 28.45
1 . .
ATOM 246  CD    CD    . ARG ARG ARG A A 31  31  . 76.785  90.479  12.045  1.00 29.12
1 . .
ATOM 247  NE    NE    . ARG ARG ARG A A 31  31  . 75.904  89.817  11.097  1.00 33.50
1 . .
ATOM 248  CZ    CZ    . ARG ARG ARG A A 31  31  . 74.910  90.416  10.459  1.00 36.30
1 . .
ATOM 249  NH1   NH1   . ARG ARG ARG A A 31  31  . 74.674  91.724  10.619  1.00 38.88
1 . .
ATOM 250  NH2   NH2   . ARG ARG ARG A A 31  31  . 74.190  89.725  9.619   1.00 36.75
1 . .
ATOM 251  C     C     . ARG ARG ARG A A 31  31  . 76.798  89.042  16.255  1.00 25.03
1 . .
ATOM 252  O     O     . ARG ARG ARG A A 31  31  . 76.539  89.980  16.978  1.00 22.89
1 . .
ATOM 253  N     N     . ALA ALA ALA A A 32  32  . 78.017  88.479  16.181  1.00 23.62
1 . .
ATOM 254  CA    CA    . ALA ALA ALA A A 32  32  . 79.145  89.035  16.922  1.00 22.82
1 . .
ATOM 255  CB    CB    . ALA ALA ALA A A 32  32  . 79.262  88.370  18.286  1.00 24.09
1 . .
ATOM 256  C     C     . ALA ALA ALA A A 32  32  . 80.408  88.766  16.144  1.00 23.04
1 . .
ATOM 257  O     O     . ALA ALA ALA A A 32  32  . 80.383  87.915  15.274  1.00 24.94
1 . .
ATOM 258  N     N     . ALA ALA ALA A A 33  33  . 81.524  89.416  16.464  1.00 22.51
1 . .
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ATOM 259  CA    CA    . ALA ALA ALA A A 33  33  . 82.753  89.137  15.745  1.00 22.35
1 . .
ATOM 260  CB    CB    . ALA ALA ALA A A 33  33  . 82.944  90.156  14.626  1.00 22.02
1 . .
ATOM 261  C     C     . ALA ALA ALA A A 33  33  . 83.897  89.219  16.684  1.00 23.52
1 . .
ATOM 262  O     O     . ALA ALA ALA A A 33  33  . 83.762  89.727  17.785  1.00 24.67
1 . .
ATOM 263  N     N     . VAL VAL VAL A A 34  34  . 85.063  88.786  16.224  1.00 23.55
1 . .
ATOM 264  CA    CA    . VAL VAL VAL A A 34  34  . 86.159  88.438  17.153  1.00 24.57
1 . .
ATOM 265  CB    CB    . VAL VAL VAL A A 34  34  . 86.645  87.003  16.904  1.00 24.30
1 . .
ATOM 266  CG1   CG1   . VAL VAL VAL A A 34  34  . 87.957  86.702  17.656  1.00 24.86
1 . .
ATOM 267  CG2   CG2   . VAL VAL VAL A A 34  34  . 85.522  85.997  17.300  1.00 24.62
1 . .
ATOM 268  C     C     . VAL VAL VAL A A 34  34  . 87.281  89.417  16.889  1.00 23.87
1 . .
ATOM 269  O     O     . VAL VAL VAL A A 34  34  . 87.643  89.586  15.753  1.00 23.61
1 . .
ATOM 270  N     N     . PRO PRO PRO A A 35  35  . 87.782  90.099  17.919  1.00 23.55
1 . .
ATOM 271  CA    CA    . PRO PRO PRO A A 35  35  . 88.829  91.090  17.644  1.00 23.42
1 . .
ATOM 272  CB    CB    . PRO PRO PRO A A 35  35  . 88.849  91.886  18.921  1.00 22.80
1 . .
ATOM 273  CG    CG    . PRO PRO PRO A A 35  35  . 88.639  90.814  20.043  1.00 21.81
1 . .
ATOM 274  CD    CD    . PRO PRO PRO A A 35  35  . 87.546  89.911  19.370  1.00 24.03
1 . .
ATOM 275  C     C     . PRO PRO PRO A A 35  35  . 90.149  90.358  17.506  1.00 24.32
1 . .
ATOM 276  O     O     . PRO PRO PRO A A 35  35  . 90.134  89.144  17.708  1.00 24.71
1 . .
ATOM 277  N     N     . SER SER SER A A 36  36  . 91.282  91.066  17.247  1.00 25.20
1 . .
ATOM 278  CA    CA    . SER SER SER A A 36  36  . 92.582  90.417  17.097  1.00 25.39
1 . .
ATOM 279  CB    CB    . SER SER SER A A 36  36  . 92.744  90.019  15.621  1.00 25.90
1 . .
ATOM 280  OG    OG    . SER SER SER A A 36  36  . 94.047  89.507  15.337  1.00 29.77
1 . .
ATOM 281  C     C     . SER SER SER A A 36  36  . 93.787  91.290  17.523  1.00 25.96
1 . .
ATOM 282  O     O     . SER SER SER A A 36  36  . 93.933  92.410  17.080  1.00 25.12
1 . .
ATOM 283  N     N     . GLY GLY GLY A A 37  37  . 94.674  90.767  18.361  1.00 28.51
1 . .
ATOM 284  CA    CA    . GLY GLY GLY A A 37  37  . 95.788  91.584  18.919  1.00 28.63
1 . .
ATOM 285  C     C     . GLY GLY GLY A A 37  37  . 96.935  91.708  17.957  1.00 29.99
1 . .
ATOM 286  O     O     . GLY GLY GLY A A 37  37  . 97.037  90.874  17.063  1.00 30.43
1 . .
ATOM 287  N     N     . ALA ALA ALA A A 38  38  . 97.821  92.701  18.142  1.00 30.69
1 . .
ATOM 288  CA    CA    . ALA ALA ALA A A 38  38  . 99.148  92.720  17.468  1.00 31.19
1 . .
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ATOM 289  CB    CB    . ALA ALA ALA A A 38  38  . 99.424  94.036  16.809  1.00 32.27
1 . .
ATOM 290  C     C     . ALA ALA ALA A A 38  38  . 100.270 92.419  18.472  1.00 32.19
1 . .
ATOM 291  O     O     . ALA ALA ALA A A 38  38  . 101.117 91.564  18.190  1.00 31.45
1 . .
ATOM 292  N     N     . SER SER SER A A 39  39  . 100.276 93.111  19.636  1.00 32.06
1 . .
ATOM 293  CA    CA    . SER SER SER A A 39  39  . 101.197 92.800  20.757  1.00 31.30
1 . .
ATOM 294  CB    CB    . SER SER SER A A 39  39  . 101.421 94.048  21.605  1.00 31.23
1 . .
ATOM 295  OG    OG    . SER SER SER A A 39  39  . 100.147 94.643  21.963  1.00 30.51
1 . .
ATOM 296  C     C     . SER SER SER A A 39  39  . 100.548 91.713  21.631  1.00 31.43
1 . .
ATOM 297  O     O     . SER SER SER A A 39  39  . 100.057 91.971  22.739  1.00 29.42
1 . .
ATOM 298  N     N     . THR THR THR A A 40  40  . 100.553 90.498  21.105  1.00 32.15
1 . .
ATOM 299  CA    CA    . THR THR THR A A 40  40  . 99.841  89.373  21.683  1.00 33.03
1 . .
ATOM 300  CB    CB    . THR THR THR A A 40  40  . 99.427  88.355  20.578  1.00 33.68
1 . .
ATOM 301  OG1   OG1   . THR THR THR A A 40  40  . 100.530 88.141  19.689  1.00 35.24
1 . .
ATOM 302  CG2   CG2   . THR THR THR A A 40  40  . 98.248  88.870  19.736  1.00 31.86
1 . .
ATOM 303  C     C     . THR THR THR A A 40  40  . 100.809 88.699  22.656  1.00 34.50
1 . .
ATOM 304  O     O     . THR THR THR A A 40  40  . 102.056 88.495  22.365  1.00 32.85
1 . .
ATOM 305  N     N     . GLY GLY GLY A A 41  41  . 100.267 88.390  23.828  1.00 34.30
1 . .
ATOM 306  CA    CA    . GLY GLY GLY A A 41  41  . 101.079 87.703  24.819  1.00 35.56
1 . .
ATOM 307  C     C     . GLY GLY GLY A A 41  41  . 101.383 86.280  24.405  1.00 35.80
1 . .
ATOM 308  O     O     . GLY GLY GLY A A 41  41  . 100.495 85.611  23.836  1.00 34.59
1 . .
ATOM 309  N     N     . ILE ILE ILE A A 42  42  . 102.613 85.813  24.717  1.00 35.41
1 . .
ATOM 310  CA    CA    . ILE ILE ILE A A 42  42  . 102.998 84.411  24.476  1.00 35.20
1 . .
ATOM 311  CB    CB    . ILE ILE ILE A A 42  42  . 104.472 84.032  24.887  1.00 35.41
1 . .
ATOM 312  CG1   CG1   . ILE ILE ILE A A 42  42  . 104.675 84.100  26.393  1.00 34.96
1 . .
ATOM 313  CD1   CD1   . ILE ILE ILE A A 42  42  . 106.233 83.975  26.809  1.00 37.91
1 . .
ATOM 314  CG2   CG2   . ILE ILE ILE A A 42  42  . 105.554 84.831  24.064  1.00 37.32
1 . .
ATOM 315  C     C     . ILE ILE ILE A A 42  42  . 102.076 83.377  25.111  1.00 34.48
1 . .
ATOM 316  O     O     . ILE ILE ILE A A 42  42  . 102.013 82.236  24.593  1.00 35.07
1 . .
ATOM 317  N     N     . TYR TYR TYR A A 43  43  . 101.385 83.743  26.194  1.00 32.47
1 . .
ATOM 318  CA    CA    . TYR TYR TYR A A 43  43  . 100.484 82.807  26.878  1.00 32.37
1 . .
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ATOM 319  CB    CB    . TYR TYR TYR A A 43  43  . 100.612 82.938  28.406  1.00 33.46
1 . .
ATOM 320  CG    CG    . TYR TYR TYR A A 43  43  . 102.014 82.635  28.843  1.00 37.13
1 . .
ATOM 321  CD1   CD1   . TYR TYR TYR A A 43  43  . 102.928 83.665  29.127  1.00 39.20
1 . .
ATOM 322  CE1   CE1   . TYR TYR TYR A A 43  43  . 104.252 83.380  29.472  1.00 42.62
1 . .
ATOM 323  CZ    CZ    . TYR TYR TYR A A 43  43  . 104.662 82.045  29.503  1.00 42.93
1 . .
ATOM 324  OH    OH    . TYR TYR TYR A A 43  43  . 105.928 81.727  29.839  1.00 44.47
1 . .
ATOM 325  CE2   CE2   . TYR TYR TYR A A 43  43  . 103.790 81.019  29.193  1.00 43.77
1 . .
ATOM 326  CD2   CD2   . TYR TYR TYR A A 43  43  . 102.470 81.315  28.864  1.00 41.05
1 . .
ATOM 327  C     C     . TYR TYR TYR A A 43  43  . 99.034  82.937  26.449  1.00 31.48
1 . .
ATOM 328  O     O     . TYR TYR TYR A A 43  43  . 98.135  82.368  27.084  1.00 31.69
1 . .
ATOM 329  N     N     . GLU GLU GLU A A 44  44  . 98.774  83.671  25.367  1.00 30.56
1 . .
ATOM 330  CA    CA    . GLU GLU GLU A A 44  44  . 97.357  83.836  24.969  1.00 29.63
1 . .
ATOM 331  CB    CB    . GLU GLU GLU A A 44  44  . 97.218  84.994  23.995  1.00 29.08
1 . .
ATOM 332  CG    CG    . GLU GLU GLU A A 44  44  . 97.724  86.336  24.507  1.00 29.53
1 . .
ATOM 333  CD    CD    . GLU GLU GLU A A 44  44  . 97.092  87.540  23.778  1.00 30.32
1 . .
ATOM 334  OE1   OE1   . GLU GLU GLU A A 44  44  . 96.138  87.357  22.986  1.00 32.12
1 . .
ATOM 335  OE2   OE2   . GLU GLU GLU A A 44  44  . 97.496  88.680  24.036  1.00 29.10
1 . .
ATOM 336  C     C     . GLU GLU GLU A A 44  44  . 96.789  82.558  24.348  1.00 29.16
1 . .
ATOM 337  O     O     . GLU GLU GLU A A 44  44  . 97.517  81.813  23.688  1.00 28.33
1 . .
ATOM 338  N     N     . ALA ALA ALA A A 45  45  . 95.479  82.321  24.486  1.00 28.24
1 . .
ATOM 339  CA    CA    . ALA ALA ALA A A 45  45  . 94.897  81.206  23.742  1.00 27.71
1 . .
ATOM 340  CB    CB    . ALA ALA ALA A A 45  45  . 93.306  81.037  24.026  1.00 27.04
1 . .
ATOM 341  C     C     . ALA ALA ALA A A 45  45  . 95.223  81.326  22.246  1.00 27.91
1 . .
ATOM 342  O     O     . ALA ALA ALA A A 45  45  . 95.501  82.428  21.714  1.00 27.55
1 . .
ATOM 343  N     N     . LEU LEU LEU A A 46  46  . 95.263  80.188  21.560  1.00 28.79
1 . .
ATOM 344  CA    CA    . LEU LEU LEU A A 46  46  . 95.605  80.165  20.151  1.00 31.18
1 . .
ATOM 345  CB    CB    . LEU LEU LEU A A 46  46  . 95.849  78.699  19.706  1.00 32.55
1 . .
ATOM 346  CG    CG    . LEU LEU LEU A A 46  46  . 96.465  78.186  18.374  1.00 34.36
1 . .
ATOM 347  CD1   CD1   . LEU LEU LEU A A 46  46  . 95.386  77.846  17.346  1.00 31.67
1 . .
ATOM 348  CD2   CD2   . LEU LEU LEU A A 46  46  . 97.599  79.096  17.791  1.00 35.76
1 . .
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ATOM 349  C     C     . LEU LEU LEU A A 46  46  . 94.511  80.841  19.281  1.00 31.68
1 . .
ATOM 350  O     O     . LEU LEU LEU A A 46  46  . 93.303  80.523  19.355  1.00 30.76
1 . .
ATOM 351  N     N     . GLU GLU GLU A A 47  47  . 94.961  81.805  18.506  1.00 31.77
1 . .
ATOM 352  CA    CA    . GLU GLU GLU A A 47  47  . 94.150  82.418  17.476  1.00 31.59
1 . .
ATOM 353  CB    CB    . GLU GLU GLU A A 47  47  . 94.565  83.870  17.275  1.00 31.38
1 . .
ATOM 354  CG    CG    . GLU GLU GLU A A 47  47  . 94.093  84.474  15.976  1.00 31.66
1 . .
ATOM 355  CD    CD    . GLU GLU GLU A A 47  47  . 94.628  85.885  15.799  1.00 34.36
1 . .
ATOM 356  OE1   OE1   . GLU GLU GLU A A 47  47  . 93.911  86.845  16.263  1.00 31.67
1 . .
ATOM 357  OE2   OE2   . GLU GLU GLU A A 47  47  . 95.784  86.008  15.263  1.00 33.53
1 . .
ATOM 358  C     C     . GLU GLU GLU A A 47  47  . 94.446  81.579  16.238  1.00 31.21
1 . .
ATOM 359  O     O     . GLU GLU GLU A A 47  47  . 95.590  81.527  15.772  1.00 30.07
1 . .
ATOM 360  N     N     . LEU LEU LEU A A 48  48  . 93.434  80.857  15.759  1.00 30.15
1 . .
ATOM 361  CA    CA    . LEU LEU LEU A A 48  48  . 93.719  80.005  14.613  1.00 30.17
1 . .
ATOM 362  CB    CB    . LEU LEU LEU A A 48  48  . 92.838  78.743  14.607  1.00 30.83
1 . .
ATOM 363  CG    CG    . LEU LEU LEU A A 48  48  . 93.042  77.772  13.434  1.00 31.87
1 . .
ATOM 364  CD1   CD1   . LEU LEU LEU A A 48  48  . 94.405  77.019  13.557  1.00 34.08
1 . .
ATOM 365  CD2   CD2   . LEU LEU LEU A A 48  48  . 91.834  76.790  13.273  1.00 30.36
1 . .
ATOM 366  C     C     . LEU LEU LEU A A 48  48  . 93.629  80.773  13.290  1.00 29.77
1 . .
ATOM 367  O     O     . LEU LEU LEU A A 48  48  . 92.551  81.344  12.927  1.00 25.91
1 . .
ATOM 368  N     N     . ARG ARG ARG A A 49  49  . 94.794  80.790  12.612  1.00 30.49
1 . .
ATOM 369  CA    CA    . ARG ARG ARG A A 49  49  . 94.951  81.305  11.273  1.00 32.83
1 . .
ATOM 370  CB    CB    . ARG ARG ARG A A 49  49  . 96.121  82.285  11.243  1.00 33.81
1 . .
ATOM 371  CG    CG    . ARG ARG ARG A A 49  49  . 95.903  83.514  12.077  1.00 35.08
1 . .
ATOM 372  CD    CD    . ARG ARG ARG A A 49  49  . 95.131  84.594  11.339  1.00 35.79
1 . .
ATOM 373  NE    NE    . ARG ARG ARG A A 49  49  . 94.951  85.759  12.235  1.00 36.78
1 . .
ATOM 374  CZ    CZ    . ARG ARG ARG A A 49  49  . 94.242  86.860  11.970  1.00 32.54
1 . .
ATOM 375  NH1   NH1   . ARG ARG ARG A A 49  49  . 93.664  87.024  10.789  1.00 27.45
1 . .
ATOM 376  NH2   NH2   . ARG ARG ARG A A 49  49  . 94.155  87.816  12.897  1.00 31.55
1 . .
ATOM 377  C     C     . ARG ARG ARG A A 49  49  . 95.216  80.229  10.231  1.00 33.73
1 . .
ATOM 378  O     O     . ARG ARG ARG A A 49  49  . 95.805  79.206  10.538  1.00 34.37
1 . .
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ATOM 379  N     N     . ASP ASP ASP A A 50  50  . 94.809  80.481  8.985   1.00 34.48
1 . .
ATOM 380  CA    CA    . ASP ASP ASP A A 50  50  . 95.002  79.519  7.883   1.00 34.20
1 . .
ATOM 381  CB    CB    . ASP ASP ASP A A 50  50  . 94.198  79.933  6.684   1.00 31.98
1 . .
ATOM 382  CG    CG    . ASP ASP ASP A A 50  50  . 92.683  79.929  6.970   1.00 31.30
1 . .
ATOM 383  OD1   OD1   . ASP ASP ASP A A 50  50  . 92.234  79.396  8.006   1.00 25.39
1 . .
ATOM 384  OD2   OD2   . ASP ASP ASP A A 50  50  . 91.927  80.454  6.137   1.00 28.57
1 . .
ATOM 385  C     C     . ASP ASP ASP A A 50  50  . 96.453  79.231  7.493   1.00 35.74
1 . .
ATOM 386  O     O     . ASP ASP ASP A A 50  50  . 96.785  78.062  7.242   1.00 36.36
1 . .
ATOM 387  N     N     . GLY GLY GLY A A 51  51  . 97.312  80.253  7.438   1.00 36.77
1 . .
ATOM 388  CA    CA    . GLY GLY GLY A A 51  51  . 98.748  80.044  7.038   1.00 39.10
1 . .
ATOM 389  C     C     . GLY GLY GLY A A 51  51  . 98.955  79.798  5.534   1.00 40.45
1 . .
ATOM 390  O     O     . GLY GLY GLY A A 51  51  . 100.025 79.337  5.111   1.00 41.92
1 . .
ATOM 391  N     N     . ASP ASP ASP A A 52  52  . 97.934  80.102  4.736   1.00 40.57
1 . .
ATOM 392  CA    CA    . ASP ASP ASP A A 52  52  . 97.954  80.033  3.265   1.00 41.99
1 . .
ATOM 393  CB    CB    . ASP ASP ASP A A 52  52  . 96.509  79.810  2.715   1.00 41.59
1 . .
ATOM 394  CG    CG    . ASP ASP ASP A A 52  52  . 96.443  79.831  1.154   1.00 43.74
1 . .
ATOM 395  OD1   OD1   . ASP ASP ASP A A 52  52  . 95.306  79.708  0.571   1.00 42.86
1 . .
ATOM 396  OD2   OD2   . ASP ASP ASP A A 52  52  . 97.536  79.968  0.519   1.00 44.60
1 . .
ATOM 397  C     C     . ASP ASP ASP A A 52  52  . 98.527  81.333  2.680   1.00 43.19
1 . .
ATOM 398  O     O     . ASP ASP ASP A A 52  52  . 97.791  82.311  2.467   1.00 43.21
1 . .
ATOM 399  N     N     . LYS LYS LYS A A 53  53  . 99.836  81.343  2.433   1.00 44.59
1 . .
ATOM 400  CA    CA    . LYS LYS LYS A A 53  53  . 100.527 82.477  1.817   1.00 45.85
1 . .
ATOM 401  CB    CB    . LYS LYS LYS A A 53  53  . 102.005 82.132  1.569   1.00 46.37
1 . .
ATOM 402  CG    CG    . LYS LYS LYS A A 53  53  . 102.720 81.393  2.728   1.00 49.11
1 . .
ATOM 403  CD    CD    . LYS LYS LYS A A 53  53  . 103.332 82.318  3.805   1.00 53.40
1 . .
ATOM 404  CE    CE    . LYS LYS LYS A A 53  53  . 104.844 81.974  4.066   1.00 56.53
1 . .
ATOM 405  NZ    NZ    . LYS LYS LYS A A 53  53  . 105.144 80.570  4.592   1.00 58.79
1 . .
ATOM 406  C     C     . LYS LYS LYS A A 53  53  . 99.867  83.077  0.519   1.00 46.07
1 . .
ATOM 407  O     O     . LYS LYS LYS A A 53  53  . 100.057 84.255  0.229   1.00 47.22
1 . .
ATOM 408  N     N     . GLN GLN GLN A A 54  54  . 99.082  82.324  -0.248  1.00 46.14
1 . .
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ATOM 409  CA    CA    . GLN GLN GLN A A 54  54  . 98.373  82.933  -1.417  1.00 46.24
1 . .
ATOM 410  CB    CB    . GLN GLN GLN A A 54  54  . 98.113  81.871  -2.519  1.00 47.69
1 . .
ATOM 411  CG    CG    . GLN GLN GLN A A 54  54  . 98.512  82.285  -3.971  1.00 52.41
1 . .
ATOM 412  CD    CD    . GLN GLN GLN A A 54  54  . 100.018 82.699  -4.104  1.00 57.31
1 . .
ATOM 413  OE1   OE1   . GLN GLN GLN A A 54  54  . 100.368 83.559  -4.943  1.00 60.13
1 . .
ATOM 414  NE2   NE2   . GLN GLN GLN A A 54  54  . 100.896 82.101  -3.265  1.00 56.18
1 . .
ATOM 415  C     C     . GLN GLN GLN A A 54  54  . 97.038  83.648  -1.045  1.00 44.50
1 . .
ATOM 416  O     O     . GLN GLN GLN A A 54  54  . 96.151  83.892  -1.916  1.00 44.73
1 . .
ATOM 417  N     N     . ARG ARG ARG A A 55  55  . 96.868  83.959  0.236   1.00 41.22
1 . .
ATOM 418  CA    CA    . ARG ARG ARG A A 55  55  . 95.577  84.504  0.693   1.00 37.88
1 . .
ATOM 419  CB    CB    . ARG ARG ARG A A 55  55  . 94.571  83.376  0.911   1.00 37.24
1 . .
ATOM 420  CG    CG    . ARG ARG ARG A A 55  55  . 93.240  83.876  0.901   1.00 35.51
1 . .
ATOM 421  CD    CD    . ARG ARG ARG A A 55  55  . 92.242  82.786  0.915   1.00 33.81
1 . .
ATOM 422  NE    NE    . ARG ARG ARG A A 55  55  . 90.868  83.348  0.911   1.00 33.51
1 . .
ATOM 423  CZ    CZ    . ARG ARG ARG A A 55  55  . 90.220  83.786  1.994   1.00 28.59
1 . .
ATOM 424  NH1   NH1   . ARG ARG ARG A A 55  55  . 90.792  83.742  3.190   1.00 25.88
1 . .
ATOM 425  NH2   NH2   . ARG ARG ARG A A 55  55  . 88.974  84.227  1.886   1.00 26.57
1 . .
ATOM 426  C     C     . ARG ARG ARG A A 55  55  . 95.760  85.342  1.959   1.00 36.37
1 . .
ATOM 427  O     O     . ARG ARG ARG A A 55  55  . 95.950  84.813  3.073   1.00 36.04
1 . .
ATOM 428  N     N     . TYR TYR TYR A A 56  56  . 95.706  86.654  1.782   1.00 34.81
1 . .
ATOM 429  CA    CA    . TYR TYR TYR A A 56  56  . 95.810  87.585  2.898   1.00 34.06
1 . .
ATOM 430  CB    CB    . TYR TYR TYR A A 56  56  . 94.643  87.384  3.836   1.00 32.53
1 . .
ATOM 431  CG    CG    . TYR TYR TYR A A 56  56  . 93.326  87.874  3.333   1.00 30.00
1 . .
ATOM 432  CD1   CD1   . TYR TYR TYR A A 56  56  . 92.334  87.016  2.994   1.00 29.57
1 . .
ATOM 433  CE1   CE1   . TYR TYR TYR A A 56  56  . 91.022  87.517  2.583   1.00 26.37
1 . .
ATOM 434  CZ    CZ    . TYR TYR TYR A A 56  56  . 90.773  88.866  2.557   1.00 24.97
1 . .
ATOM 435  OH    OH    . TYR TYR TYR A A 56  56  . 89.523  89.389  2.157   1.00 25.01
1 . .
ATOM 436  CE2   CE2   . TYR TYR TYR A A 56  56  . 91.762  89.712  2.924   1.00 25.99
1 . .
ATOM 437  CD2   CD2   . TYR TYR TYR A A 56  56  . 93.023  89.223  3.332   1.00 29.51
1 . .
ATOM 438  C     C     . TYR TYR TYR A A 56  56  . 97.071  87.322  3.670   1.00 34.75
1 . .
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ATOM 439  O     O     . TYR TYR TYR A A 56  56  . 97.043  87.360  4.890   1.00 34.54
1 . .
ATOM 440  N     N     . LEU LEU LEU A A 57  57  . 98.157  87.006  2.957   1.00 36.42
1 . .
ATOM 441  CA    CA    . LEU LEU LEU A A 57  57  . 99.480  86.755  3.550   1.00 38.07
1 . .
ATOM 442  CB    CB    . LEU LEU LEU A A 57  57  . 100.084 88.050  4.085   1.00 39.22
1 . .
ATOM 443  CG    CG    . LEU LEU LEU A A 57  57  . 100.850 88.784  2.961   1.00 43.62
1 . .
ATOM 444  CD1   CD1   . LEU LEU LEU A A 57  57  . 100.311 90.221  2.682   1.00 47.80
1 . .
ATOM 445  CD2   CD2   . LEU LEU LEU A A 57  57  . 102.391 88.788  3.244   1.00 47.51
1 . .
ATOM 446  C     C     . LEU LEU LEU A A 57  57  . 99.470  85.685  4.618   1.00 37.97
1 . .
ATOM 447  O     O     . LEU LEU LEU A A 57  57  . 100.192 85.784  5.595   1.00 39.83
1 . .
ATOM 448  N     N     . GLY GLY GLY A A 58  58  . 98.631  84.665  4.437   1.00 37.74
1 . .
ATOM 449  CA    CA    . GLY GLY GLY A A 58  58  . 98.517  83.561  5.408   1.00 36.66
1 . .
ATOM 450  C     C     . GLY GLY GLY A A 58  58  . 97.573  83.908  6.554   1.00 36.29
1 . .
ATOM 451  O     O     . GLY GLY GLY A A 58  58  . 97.481  83.138  7.526   1.00 36.22
1 . .
ATOM 452  N     N     . LYS LYS LYS A A 59  59  . 96.866  85.048  6.467   1.00 34.62
1 . .
ATOM 453  CA    CA    . LYS LYS LYS A A 59  59  . 96.107  85.479  7.631   1.00 34.51
1 . .
ATOM 454  CB    CB    . LYS LYS LYS A A 59  59  . 96.288  86.982  7.992   1.00 35.09
1 . .
ATOM 455  CG    CG    . LYS LYS LYS A A 59  59  . 97.762  87.570  8.126   1.00 39.06
1 . .
ATOM 456  CD    CD    . LYS LYS LYS A A 59  59  . 98.218  87.843  9.560   1.00 45.60
1 . .
ATOM 457  CE    CE    . LYS LYS LYS A A 59  59  . 99.601  88.571  9.599   1.00 51.40
1 . .
ATOM 458  NZ    NZ    . LYS LYS LYS A A 59  59  . 100.743 87.944  8.792   1.00 54.19
1 . .
ATOM 459  C     C     . LYS LYS LYS A A 59  59  . 94.619  85.123  7.488   1.00 33.42
1 . .
ATOM 460  O     O     . LYS LYS LYS A A 59  59  . 93.808  85.599  8.289   1.00 35.01
1 . .
ATOM 461  N     N     . GLY GLY GLY A A 60  60  . 94.243  84.309  6.504   1.00 31.11
1 . .
ATOM 462  CA    CA    . GLY GLY GLY A A 60  60  . 92.823  83.825  6.426   1.00 29.00
1 . .
ATOM 463  C     C     . GLY GLY GLY A A 60  60  . 92.328  83.209  7.746   1.00 27.67
1 . .
ATOM 464  O     O     . GLY GLY GLY A A 60  60  . 93.149  82.733  8.551   1.00 26.61
1 . .
ATOM 465  N     N     . VAL VAL VAL A A 61  61  . 91.002  83.192  8.004   1.00 26.05
1 . .
ATOM 466  CA    CA    . VAL VAL VAL A A 61  61  . 90.471  82.375  9.148   1.00 24.58
1 . .
ATOM 467  CB    CB    . VAL VAL VAL A A 61  61  . 89.985  83.274  10.314  1.00 24.56
1 . .
ATOM 468  CG1   CG1   . VAL VAL VAL A A 61  61  . 91.134  83.990  11.004  1.00 26.16
1 . .
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ATOM 469  CG2   CG2   . VAL VAL VAL A A 61  61  . 88.778  84.302  9.859   1.00 23.61
1 . .
ATOM 470  C     C     . VAL VAL VAL A A 61  61  . 89.392  81.334  8.677   1.00 25.88
1 . .
ATOM 471  O     O     . VAL VAL VAL A A 61  61  . 88.315  81.114  9.322   1.00 23.92
1 . .
ATOM 472  N     N     . LEU LEU LEU A A 62  62  . 89.667  80.762  7.497   1.00 26.03
1 . .
ATOM 473  CA    CA    . LEU LEU LEU A A 62  62  . 88.758  79.866  6.843   1.00 27.65
1 . .
ATOM 474  CB    CB    . LEU LEU LEU A A 62  62  . 89.262  79.520  5.419   1.00 27.81
1 . .
ATOM 475  CG    CG    . LEU LEU LEU A A 62  62  . 89.147  80.648  4.361   1.00 29.14
1 . .
ATOM 476  CD1   CD1   . LEU LEU LEU A A 62  62  . 89.570  80.110  2.967   1.00 33.62
1 . .
ATOM 477  CD2   CD2   . LEU LEU LEU A A 62  62  . 87.691  81.179  4.291   1.00 28.37
1 . .
ATOM 478  C     C     . LEU LEU LEU A A 62  62  . 88.658  78.602  7.689   1.00 27.35
1 . .
ATOM 479  O     O     . LEU LEU LEU A A 62  62  . 87.575  77.994  7.802   1.00 26.36
1 . .
ATOM 480  N     N     . LYS LYS LYS A A 63  63  . 89.792  78.208  8.270   1.00 25.95
1 . .
ATOM 481  CA    CA    . LYS LYS LYS A A 63  63  . 89.776  77.018  9.124   1.00 27.05
1 . .
ATOM 482  CB    CB    . LYS LYS LYS A A 63  63  . 91.191  76.604  9.530   1.00 26.91
1 . .
ATOM 483  CG    CG    . LYS LYS LYS A A 63  63  . 92.105  76.046  8.331   1.00 28.91
1 . .
ATOM 484  CD    CD    . LYS LYS LYS A A 63  63  . 93.492  75.651  8.866   1.00 29.67
1 . .
ATOM 485  CE    CE    . LYS LYS LYS A A 63  63  . 94.477  75.230  7.747   1.00 33.36
1 . .
ATOM 486  NZ    NZ    . LYS LYS LYS A A 63  63  . 95.918  75.164  8.198   1.00 38.33
1 . .
ATOM 487  C     C     . LYS LYS LYS A A 63  63  . 88.887  77.227  10.384  1.00 26.65
1 . .
ATOM 488  O     O     . LYS LYS LYS A A 63  63  . 88.006  76.411  10.696  1.00 26.69
1 . .
ATOM 489  N     N     . ALA ALA ALA A A 64  64  . 89.095  78.329  11.102  1.00 26.41
1 . .
ATOM 490  CA    CA    . ALA ALA ALA A A 64  64  . 88.313  78.548  12.338  1.00 25.87
1 . .
ATOM 491  CB    CB    . ALA ALA ALA A A 64  64  . 88.792  79.801  13.004  1.00 23.48
1 . .
ATOM 492  C     C     . ALA ALA ALA A A 64  64  . 86.806  78.635  11.962  1.00 26.29
1 . .
ATOM 493  O     O     . ALA ALA ALA A A 64  64  . 85.928  78.090  12.649  1.00 27.13
1 . .
ATOM 494  N     N     . VAL VAL VAL A A 65  65  . 86.524  79.314  10.850  1.00 26.81
1 . .
ATOM 495  CA    CA    . VAL VAL VAL A A 65  65  . 85.136  79.495  10.364  1.00 26.03
1 . .
ATOM 496  CB    CB    . VAL VAL VAL A A 65  65  . 85.099  80.406  9.109   1.00 25.69
1 . .
ATOM 497  CG1   CG1   . VAL VAL VAL A A 65  65  . 83.667  80.374  8.399   1.00 26.42
1 . .
ATOM 498  CG2   CG2   . VAL VAL VAL A A 65  65  . 85.463  81.799  9.508   1.00 21.63
1 . .
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ATOM 499  C     C     . VAL VAL VAL A A 65  65  . 84.498  78.167  10.029  1.00 27.46
1 . .
ATOM 500  O     O     . VAL VAL VAL A A 65  65  . 83.302  77.937  10.353  1.00 28.43
1 . .
ATOM 501  N     N     . ASP ASP ASP A A 66  66  . 85.258  77.277  9.368   1.00 27.53
1 . .
ATOM 502  CA    CA    . ASP ASP ASP A A 66  66  . 84.704  75.909  9.082   1.00 28.34
1 . .
ATOM 503  CB    CB    . ASP ASP ASP A A 66  66  . 85.581  75.178  8.040   1.00 29.55
1 . .
ATOM 504  CG    CG    . ASP ASP ASP A A 66  66  . 85.073  73.775  7.691   1.00 35.34
1 . .
ATOM 505  OD1   OD1   . ASP ASP ASP A A 66  66  . 83.859  73.585  7.410   1.00 39.40
1 . .
ATOM 506  OD2   OD2   . ASP ASP ASP A A 66  66  . 85.923  72.832  7.699   1.00 43.21
1 . .
ATOM 507  C     C     . ASP ASP ASP A A 66  66  . 84.513  75.073  10.373  1.00 27.07
1 . .
ATOM 508  O     O     . ASP ASP ASP A A 66  66  . 83.515  74.315  10.536  1.00 26.32
1 . .
ATOM 509  N     N     . HIS HIS HIS A A 67  67  . 85.443  75.224  11.317  1.00 25.33
1 . .
ATOM 510  CA    CA    . HIS HIS HIS A A 67  67  . 85.212  74.592  12.614  1.00 24.93
1 . .
ATOM 511  CB    CB    . HIS HIS HIS A A 67  67  . 86.351  74.853  13.617  1.00 24.15
1 . .
ATOM 512  CG    CG    . HIS HIS HIS A A 67  67  . 87.623  74.164  13.261  1.00 23.09
1 . .
ATOM 513  ND1   ND1   . HIS HIS HIS A A 67  67  . 87.678  72.820  12.972  1.00 27.18
1 . .
ATOM 514  CE1   CE1   . HIS HIS HIS A A 67  67  . 88.939  72.465  12.738  1.00 29.14
1 . .
ATOM 515  NE2   NE2   . HIS HIS HIS A A 67  67  . 89.707  73.536  12.880  1.00 27.57
1 . .
ATOM 516  CD2   CD2   . HIS HIS HIS A A 67  67  . 88.910  74.607  13.233  1.00 26.03
1 . .
ATOM 517  C     C     . HIS HIS HIS A A 67  67  . 83.850  74.973  13.175  1.00 24.53
1 . .
ATOM 518  O     O     . HIS HIS HIS A A 67  67  . 83.148  74.154  13.740  1.00 26.07
1 . .
ATOM 519  N     N     . ILE ILE ILE A A 68  68  . 83.460  76.221  13.039  1.00 25.25
1 . .
ATOM 520  CA    CA    . ILE ILE ILE A A 68  68  . 82.189  76.642  13.608  1.00 24.37
1 . .
ATOM 521  CB    CB    . ILE ILE ILE A A 68  68  . 82.080  78.197  13.666  1.00 24.77
1 . .
ATOM 522  CG1   CG1   . ILE ILE ILE A A 68  68  . 83.118  78.754  14.637  1.00 23.50
1 . .
ATOM 523  CD1   CD1   . ILE ILE ILE A A 68  68  . 83.517  80.230  14.357  1.00 21.90
1 . .
ATOM 524  CG2   CG2   . ILE ILE ILE A A 68  68  . 80.609  78.662  13.990  1.00 19.25
1 . .
ATOM 525  C     C     . ILE ILE ILE A A 68  68  . 81.000  76.097  12.854  1.00 25.21
1 . .
ATOM 526  O     O     . ILE ILE ILE A A 68  68  . 80.025  75.637  13.454  1.00 26.40
1 . .
ATOM 527  N     N     . ASN ASN ASN A A 69  69  . 81.080  76.154  11.540  1.00 26.11
1 . .
ATOM 528  CA    CA    . ASN ASN ASN A A 69  69  . 79.954  75.882  10.669  1.00 27.85
1 . .
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ATOM 529  CB    CB    . ASN ASN ASN A A 69  69  . 80.279  76.433  9.280   1.00 27.99
1 . .
ATOM 530  CG    CG    . ASN ASN ASN A A 69  69  . 79.934  77.893  9.161   1.00 28.98
1 . .
ATOM 531  OD1   OD1   . ASN ASN ASN A A 69  69  . 79.038  78.358  9.847   1.00 32.15
1 . .
ATOM 532  ND2   ND2   . ASN ASN ASN A A 69  69  . 80.590  78.604  8.255   1.00 28.68
1 . .
ATOM 533  C     C     . ASN ASN ASN A A 69  69  . 79.629  74.387  10.608  1.00 28.30
1 . .
ATOM 534  O     O     . ASN ASN ASN A A 69  69  . 78.452  73.987  10.630  1.00 27.35
1 . .
ATOM 535  N     N     . SER SER SER A A 70  70  . 80.699  73.594  10.631  1.00 28.16
1 . .
ATOM 536  CA    CA    . SER SER SER A A 70  70  . 80.604  72.186  10.385  1.00 29.04
1 . .
ATOM 537  CB    CB    . SER SER SER A A 70  70  . 81.665  71.802  9.327   1.00 29.95
1 . .
ATOM 538  OG    OG    . SER SER SER A A 70  70  . 81.428  72.521  8.075   1.00 31.90
1 . .
ATOM 539  C     C     . SER SER SER A A 70  70  . 80.625  71.269  11.659  1.00 28.79
1 . .
ATOM 540  O     O     . SER SER SER A A 70  70  . 80.096  70.160  11.624  1.00 30.42
1 . .
ATOM 541  N     N     . THR THR THR A A 71  71  . 81.144  71.743  12.782  1.00 27.59
1 . .
ATOM 542  CA    CA    . THR THR THR A A 71  71  . 81.394  70.933  13.965  1.00 26.29
1 . .
ATOM 543  CB    CB    . THR THR THR A A 71  71  . 82.972  70.769  14.215  1.00 26.51
1 . .
ATOM 544  OG1   OG1   . THR THR THR A A 71  71  . 83.556  70.133  13.089  1.00 23.28
1 . .
ATOM 545  CG2   CG2   . THR THR THR A A 71  71  . 83.277  69.866  15.440  1.00 23.33
1 . .
ATOM 546  C     C     . THR THR THR A A 71  71  . 80.807  71.568  15.199  1.00 27.24
1 . .
ATOM 547  O     O     . THR THR THR A A 71  71  . 79.989  70.965  15.901  1.00 28.19
1 . .
ATOM 548  N     N     . ILE ILE ILE A A 72  72  . 81.212  72.793  15.513  1.00 27.51
1 . .
ATOM 549  CA    CA    . ILE ILE ILE A A 72  72  . 80.632  73.413  16.712  1.00 27.34
1 . .
ATOM 550  CB    CB    . ILE ILE ILE A A 72  72  . 81.311  74.694  17.110  1.00 26.63
1 . .
ATOM 551  CG1   CG1   . ILE ILE ILE A A 72  72  . 82.797  74.422  17.467  1.00 28.79
1 . .
ATOM 552  CD1   CD1   . ILE ILE ILE A A 72  72  . 83.536  75.677  17.639  1.00 27.92
1 . .
ATOM 553  CG2   CG2   . ILE ILE ILE A A 72  72  . 80.571  75.322  18.287  1.00 24.74
1 . .
ATOM 554  C     C     . ILE ILE ILE A A 72  72  . 79.115  73.649  16.588  1.00 27.92
1 . .
ATOM 555  O     O     . ILE ILE ILE A A 72  72  . 78.360  73.365  17.535  1.00 29.94
1 . .
ATOM 556  N     N     . ALA ALA ALA A A 73  73  . 78.665  74.124  15.444  1.00 26.29
1 . .
ATOM 557  CA    CA    . ALA ALA ALA A A 73  73  . 77.217  74.443  15.321  1.00 27.75
1 . .
ATOM 558  CB    CB    . ALA ALA ALA A A 73  73  . 76.952  75.189  13.996  1.00 26.13
1 . .
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ATOM 559  C     C     . ALA ALA ALA A A 73  73  . 76.233  73.244  15.487  1.00 28.72
1 . .
ATOM 560  O     O     . ALA ALA ALA A A 73  73  . 75.208  73.355  16.187  1.00 29.57
1 . .
ATOM 561  N     N     . PRO PRO PRO A A 74  74  . 76.501  72.112  14.803  1.00 29.13
1 . .
ATOM 562  CA    CA    . PRO PRO PRO A A 74  74  . 75.588  70.996  15.090  1.00 30.00
1 . .
ATOM 563  CB    CB    . PRO PRO PRO A A 74  74  . 75.979  69.948  14.040  1.00 28.26
1 . .
ATOM 564  CG    CG    . PRO PRO PRO A A 74  74  . 77.449  70.228  13.714  1.00 29.13
1 . .
ATOM 565  CD    CD    . PRO PRO PRO A A 74  74  . 77.637  71.714  13.942  1.00 29.37
1 . .
ATOM 566  C     C     . PRO PRO PRO A A 74  74  . 75.748  70.480  16.548  1.00 30.92
1 . .
ATOM 567  O     O     . PRO PRO PRO A A 74  74  . 74.775  70.024  17.187  1.00 32.44
1 . .
ATOM 568  N     N     . ALA ALA ALA A A 75  75  . 76.942  70.595  17.095  1.00 30.85
1 . .
ATOM 569  CA    CA    . ALA ALA ALA A A 75  75  . 77.143  70.214  18.476  1.00 31.93
1 . .
ATOM 570  CB    CB    . ALA ALA ALA A A 75  75  . 78.653  70.409  18.880  1.00 31.97
1 . .
ATOM 571  C     C     . ALA ALA ALA A A 75  75  . 76.219  71.014  19.401  1.00 32.72
1 . .
ATOM 572  O     O     . ALA ALA ALA A A 75  75  . 75.644  70.477  20.336  1.00 33.54
1 . .
ATOM 573  N     N     . LEU LEU LEU A A 76  76  . 76.062  72.304  19.152  1.00 32.35
1 . .
ATOM 574  CA    CA    . LEU LEU LEU A A 76  76  . 75.340  73.067  20.113  1.00 33.03
1 . .
ATOM 575  CB    CB    . LEU LEU LEU A A 76  76  . 75.812  74.504  20.122  1.00 32.15
1 . .
ATOM 576  CG    CG    . LEU LEU LEU A A 76  76  . 77.264  74.766  20.504  1.00 30.94
1 . .
ATOM 577  CD1   CD1   . LEU LEU LEU A A 76  76  . 77.434  76.234  20.715  1.00 30.03
1 . .
ATOM 578  CD2   CD2   . LEU LEU LEU A A 76  76  . 77.738  74.019  21.756  1.00 28.37
1 . .
ATOM 579  C     C     . LEU LEU LEU A A 76  76  . 73.850  72.978  19.823  1.00 33.91
1 . .
ATOM 580  O     O     . LEU LEU LEU A A 76  76  . 73.035  73.153  20.700  1.00 34.01
1 . .
ATOM 581  N     N     . ILE ILE ILE A A 77  77  . 73.514  72.711  18.579  1.00 35.09
1 . .
ATOM 582  CA    CA    . ILE ILE ILE A A 77  77  . 72.115  72.504  18.178  1.00 36.11
1 . .
ATOM 583  CB    CB    . ILE ILE ILE A A 77  77  . 71.998  72.544  16.652  1.00 35.48
1 . .
ATOM 584  CG1   CG1   . ILE ILE ILE A A 77  77  . 72.464  73.911  16.169  1.00 34.99
1 . .
ATOM 585  CD1   CD1   . ILE ILE ILE A A 77  77  . 72.081  74.201  14.711  1.00 33.71
1 . .
ATOM 586  CG2   CG2   . ILE ILE ILE A A 77  77  . 70.579  72.236  16.184  1.00 34.27
1 . .
ATOM 587  C     C     . ILE ILE ILE A A 77  77  . 71.583  71.184  18.759  1.00 37.16
1 . .
ATOM 588  O     O     . ILE ILE ILE A A 77  77  . 70.472  71.147  19.354  1.00 37.42
1 . .
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ATOM 589  N     N     . SER SER SER A A 78  78  . 72.391  70.125  18.627  1.00 37.91
1 . .
ATOM 590  CA    CA    . SER SER SER A A 78  78  . 72.069  68.782  19.197  1.00 38.22
1 . .
ATOM 591  CB    CB    . SER SER SER A A 78  78  . 73.178  67.739  18.929  1.00 38.38
1 . .
ATOM 592  OG    OG    . SER SER SER A A 78  78  . 73.389  67.456  17.532  1.00 37.05
1 . .
ATOM 593  C     C     . SER SER SER A A 78  78  . 71.811  68.857  20.712  1.00 38.90
1 . .
ATOM 594  O     O     . SER SER SER A A 78  78  . 70.919  68.167  21.207  1.00 39.81
1 . .
ATOM 595  N     N     . SER SER SER A A 79  79  . 72.558  69.697  21.435  1.00 38.67
1 . .
ATOM 596  CA    CA    . SER SER SER A A 79  79  . 72.399  69.787  22.908  1.00 38.70
1 . .
ATOM 597  CB    CB    . SER SER SER A A 79  79  . 73.454  70.711  23.555  1.00 37.98
1 . .
ATOM 598  OG    OG    . SER SER SER A A 79  79  . 73.087  72.067  23.387  1.00 37.42
1 . .
ATOM 599  C     C     . SER SER SER A A 79  79  . 71.020  70.252  23.330  1.00 38.72
1 . .
ATOM 600  O     O     . SER SER SER A A 79  79  . 70.594  69.989  24.450  1.00 39.34
1 . .
ATOM 601  N     N     . GLY GLY GLY A A 80  80  . 70.339  70.966  22.444  1.00 38.63
1 . .
ATOM 602  CA    CA    . GLY GLY GLY A A 80  80  . 68.974  71.460  22.689  1.00 38.39
1 . .
ATOM 603  C     C     . GLY GLY GLY A A 80  80  . 68.941  72.502  23.798  1.00 38.79
1 . .
ATOM 604  O     O     . GLY GLY GLY A A 80  80  . 67.864  72.925  24.187  1.00 39.08
1 . .
ATOM 605  N     N     . LEU LEU LEU A A 81  81  . 70.114  72.926  24.305  1.00 38.51
1 . .
ATOM 606  CA    CA    . LEU LEU LEU A A 81  81  . 70.161  73.893  25.413  1.00 38.31
1 . .
ATOM 607  CB    CB    . LEU LEU LEU A A 81  81  . 71.563  74.027  26.046  1.00 37.99
1 . .
ATOM 608  CG    CG    . LEU LEU LEU A A 81  81  . 72.304  72.843  26.701  1.00 38.75
1 . .
ATOM 609  CD1   CD1   . LEU LEU LEU A A 81  81  . 73.819  73.140  26.894  1.00 35.31
1 . .
ATOM 610  CD2   CD2   . LEU LEU LEU A A 81  81  . 71.665  72.380  28.022  1.00 39.03
1 . .
ATOM 611  C     C     . LEU LEU LEU A A 81  81  . 69.716  75.282  24.954  1.00 38.35
1 . .
ATOM 612  O     O     . LEU LEU LEU A A 81  81  . 70.062  75.732  23.832  1.00 38.44
1 . .
ATOM 613  N     N     . SER SER SER A A 82  82  . 68.974  75.956  25.835  1.00 37.32
1 . .
ATOM 614  CA    CA    . SER SER SER A A 82  82  . 68.624  77.357  25.649  1.00 37.21
1 . .
ATOM 615  CB    CB    . SER SER SER A A 82  82  . 67.683  77.880  26.735  1.00 37.76
1 . .
ATOM 616  OG    OG    . SER SER SER A A 82  82  . 67.135  79.150  26.336  1.00 39.89
1 . .
ATOM 617  C     C     . SER SER SER A A 82  82  . 69.859  78.233  25.640  1.00 36.27
1 . .
ATOM 618  O     O     . SER SER SER A A 82  82  . 70.861  77.930  26.275  1.00 34.79
1 . .
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ATOM 619  N     N     . VAL VAL VAL A A 83  83  . 69.756  79.317  24.878  1.00 35.68
1 . .
ATOM 620  CA    CA    . VAL VAL VAL A A 83  83  . 70.874  80.239  24.727  1.00 34.53
1 . .
ATOM 621  CB    CB    . VAL VAL VAL A A 83  83  . 70.669  81.232  23.567  1.00 33.99
1 . .
ATOM 622  CG1   CG1   . VAL VAL VAL A A 83  83  . 71.012  80.521  22.206  1.00 34.88
1 . .
ATOM 623  CG2   CG2   . VAL VAL VAL A A 83  83  . 69.251  81.826  23.540  1.00 30.09
1 . .
ATOM 624  C     C     . VAL VAL VAL A A 83  83  . 71.226  80.906  26.044  1.00 34.76
1 . .
ATOM 625  O     O     . VAL VAL VAL A A 83  83  . 72.371  81.326  26.224  1.00 35.30
1 . .
ATOM 626  N     N     . VAL VAL VAL A A 84  84  . 70.278  80.920  26.998  1.00 33.52
1 . .
ATOM 627  CA    CA    . VAL VAL VAL A A 84  84  . 70.500  81.567  28.271  1.00 32.94
1 . .
ATOM 628  CB    CB    . VAL VAL VAL A A 84  84  . 69.157  81.833  29.088  1.00 33.25
1 . .
ATOM 629  CG1   CG1   . VAL VAL VAL A A 84  84  . 68.201  82.707  28.258  1.00 29.63
1 . .
ATOM 630  CG2   CG2   . VAL VAL VAL A A 84  84  . 68.483  80.521  29.532  1.00 30.27
1 . .
ATOM 631  C     C     . VAL VAL VAL A A 84  84  . 71.565  80.843  29.078  1.00 33.74
1 . .
ATOM 632  O     O     . VAL VAL VAL A A 84  84  . 72.165  81.401  29.990  1.00 33.56
1 . .
ATOM 633  N     N     . GLU GLU GLU A A 85  85  . 71.824  79.596  28.706  1.00 34.79
1 . .
ATOM 634  CA    CA    . GLU GLU GLU A A 85  85  . 72.730  78.759  29.455  1.00 35.12
1 . .
ATOM 635  CB    CB    . GLU GLU GLU A A 85  85  . 72.283  77.299  29.364  1.00 36.05
1 . .
ATOM 636  CG    CG    . GLU GLU GLU A A 85  85  . 70.872  77.025  30.025  1.00 38.99
1 . .
ATOM 637  CD    CD    . GLU GLU GLU A A 85  85  . 70.872  77.246  31.561  1.00 43.74
1 . .
ATOM 638  OE1   OE1   . GLU GLU GLU A A 85  85  . 72.003  77.267  32.177  1.00 41.27
1 . .
ATOM 639  OE2   OE2   . GLU GLU GLU A A 85  85  . 69.727  77.395  32.132  1.00 48.38
1 . .
ATOM 640  C     C     . GLU GLU GLU A A 85  85  . 74.196  78.963  29.010  1.00 34.94
1 . .
ATOM 641  O     O     . GLU GLU GLU A A 85  85  . 74.850  78.045  28.542  1.00 34.35
1 . .
ATOM 642  N     N     . GLN GLN GLN A A 86  86  . 74.691  80.175  29.190  1.00 33.99
1 . .
ATOM 643  CA    CA    . GLN GLN GLN A A 86  86  . 76.016  80.532  28.712  1.00 34.14
1 . .
ATOM 644  CB    CB    . GLN GLN GLN A A 86  86  . 76.399  81.878  29.319  1.00 33.65
1 . .
ATOM 645  CG    CG    . GLN GLN GLN A A 86  86  . 77.654  82.454  28.763  1.00 32.44
1 . .
ATOM 646  CD    CD    . GLN GLN GLN A A 86  86  . 77.442  82.934  27.340  1.00 29.51
1 . .
ATOM 647  OE1   OE1   . GLN GLN GLN A A 86  86  . 76.350  83.407  26.967  1.00 28.49
1 . .
ATOM 648  NE2   NE2   . GLN GLN GLN A A 86  86  . 78.472  82.800  26.536  1.00 28.36
1 . .
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ATOM 649  C     C     . GLN GLN GLN A A 86  86  . 77.065  79.509  29.109  1.00 34.33
1 . .
ATOM 650  O     O     . GLN GLN GLN A A 86  86  . 77.820  79.030  28.268  1.00 34.56
1 . .
ATOM 651  N     N     . GLU GLU GLU A A 87  87  . 77.075  79.155  30.389  1.00 35.08
1 . .
ATOM 652  CA    CA    . GLU GLU GLU A A 87  87  . 78.117  78.311  31.000  1.00 36.56
1 . .
ATOM 653  CB    CB    . GLU GLU GLU A A 87  87  . 77.957  78.205  32.526  1.00 36.36
1 . .
ATOM 654  CG    CG    . GLU GLU GLU A A 87  87  . 79.113  77.383  33.142  1.00 39.93
1 . .
ATOM 655  CD    CD    . GLU GLU GLU A A 87  87  . 79.269  77.524  34.657  1.00 46.01
1 . .
ATOM 656  OE1   OE1   . GLU GLU GLU A A 87  87  . 78.326  78.058  35.306  1.00 50.12
1 . .
ATOM 657  OE2   OE2   . GLU GLU GLU A A 87  87  . 80.336  77.091  35.204  1.00 46.27
1 . .
ATOM 658  C     C     . GLU GLU GLU A A 87  87  . 78.138  76.934  30.391  1.00 36.82
1 . .
ATOM 659  O     O     . GLU GLU GLU A A 87  87  . 79.200  76.390  30.019  1.00 37.58
1 . .
ATOM 660  N     N     . LYS LYS LYS A A 88  88  . 76.949  76.361  30.281  1.00 36.83
1 . .
ATOM 661  CA    CA    . LYS LYS LYS A A 88  88  . 76.827  75.025  29.733  1.00 35.98
1 . .
ATOM 662  CB    CB    . LYS LYS LYS A A 88  88  . 75.371  74.579  29.804  1.00 36.33
1 . .
ATOM 663  CG    CG    . LYS LYS LYS A A 88  88  . 74.945  74.087  31.188  1.00 40.47
1 . .
ATOM 664  CD    CD    . LYS LYS LYS A A 88  88  . 73.413  73.813  31.191  1.00 45.83
1 . .
ATOM 665  CE    CE    . LYS LYS LYS A A 88  88  . 72.874  73.318  32.531  1.00 49.83
1 . .
ATOM 666  NZ    NZ    . LYS LYS LYS A A 88  88  . 73.694  73.816  33.664  1.00 52.93
1 . .
ATOM 667  C     C     . LYS LYS LYS A A 88  88  . 77.294  75.034  28.294  1.00 35.12
1 . .
ATOM 668  O     O     . LYS LYS LYS A A 88  88  . 78.043  74.121  27.865  1.00 35.36
1 . .
ATOM 669  N     N     . LEU LEU LEU A A 89  89  . 76.859  76.056  27.546  1.00 33.51
1 . .
ATOM 670  CA    CA    . LEU LEU LEU A A 89  89  . 77.166  76.116  26.133  1.00 32.28
1 . .
ATOM 671  CB    CB    . LEU LEU LEU A A 89  89  . 76.295  77.116  25.393  1.00 31.09
1 . .
ATOM 672  CG    CG    . LEU LEU LEU A A 89  89  . 74.840  76.633  25.136  1.00 30.71
1 . .
ATOM 673  CD1   CD1   . LEU LEU LEU A A 89  89  . 73.809  77.745  24.827  1.00 26.01
1 . .
ATOM 674  CD2   CD2   . LEU LEU LEU A A 89  89  . 74.763  75.599  24.010  1.00 28.05
1 . .
ATOM 675  C     C     . LEU LEU LEU A A 89  89  . 78.687  76.312  25.981  1.00 33.00
1 . .
ATOM 676  O     O     . LEU LEU LEU A A 89  89  . 79.312  75.645  25.157  1.00 33.27
1 . .
ATOM 677  N     N     . ASP ASP ASP A A 90  90  . 79.281  77.155  26.815  1.00 32.73
1 . .
ATOM 678  CA    CA    . ASP ASP ASP A A 90  90  . 80.706  77.348  26.765  1.00 34.56
1 . .
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ATOM 679  CB    CB    . ASP ASP ASP A A 90  90  . 81.147  78.547  27.642  1.00 34.78
1 . .
ATOM 680  CG    CG    . ASP ASP ASP A A 90  90  . 80.892  79.900  26.965  1.00 37.41
1 . .
ATOM 681  OD1   OD1   . ASP ASP ASP A A 90  90  . 80.789  79.906  25.721  1.00 38.34
1 . .
ATOM 682  OD2   OD2   . ASP ASP ASP A A 90  90  . 80.771  80.959  27.654  1.00 39.61
1 . .
ATOM 683  C     C     . ASP ASP ASP A A 90  90  . 81.464  76.083  27.136  1.00 34.69
1 . .
ATOM 684  O     O     . ASP ASP ASP A A 90  90  . 82.446  75.763  26.492  1.00 35.47
1 . .
ATOM 685  N     N     . ASN ASN ASN A A 91  91  . 81.010  75.352  28.159  1.00 35.42
1 . .
ATOM 686  CA    CA    . ASN ASN ASN A A 91  91  . 81.744  74.141  28.613  1.00 35.12
1 . .
ATOM 687  CB    CB    . ASN ASN ASN A A 91  91  . 81.183  73.566  29.935  1.00 36.05
1 . .
ATOM 688  CG    CG    . ASN ASN ASN A A 91  91  . 81.460  74.470  31.150  1.00 38.17
1 . .
ATOM 689  OD1   OD1   . ASN ASN ASN A A 91  91  . 82.525  75.058  31.272  1.00 41.24
1 . .
ATOM 690  ND2   ND2   . ASN ASN ASN A A 91  91  . 80.482  74.572  32.049  1.00 41.09
1 . .
ATOM 691  C     C     . ASN ASN ASN A A 91  91  . 81.727  73.089  27.520  1.00 34.27
1 . .
ATOM 692  O     O     . ASN ASN ASN A A 91  91  . 82.785  72.541  27.116  1.00 33.86
1 . .
ATOM 693  N     N     . LEU LEU LEU A A 92  92  . 80.524  72.857  27.011  1.00 33.19
1 . .
ATOM 694  CA    CA    . LEU LEU LEU A A 92  92  . 80.326  72.088  25.786  1.00 34.33
1 . .
ATOM 695  CB    CB    . LEU LEU LEU A A 92  92  . 78.912  72.342  25.210  1.00 34.51
1 . .
ATOM 696  CG    CG    . LEU LEU LEU A A 92  92  . 78.088  71.164  24.714  1.00 36.17
1 . .
ATOM 697  CD1   CD1   . LEU LEU LEU A A 92  92  . 78.200  69.895  25.647  1.00 36.87
1 . .
ATOM 698  CD2   CD2   . LEU LEU LEU A A 92  92  . 76.571  71.584  24.465  1.00 36.22
1 . .
ATOM 699  C     C     . LEU LEU LEU A A 92  92  . 81.411  72.309  24.727  1.00 34.18
1 . .
ATOM 700  O     O     . LEU LEU LEU A A 92  92  . 82.087  71.366  24.333  1.00 34.66
1 . .
ATOM 701  N     N     . MET MET MET A A 93  93  . 81.600  73.554  24.293  1.00 33.99
1 . .
ATOM 702  CA    CA    . MET MET MET A A 93  93  . 82.620  73.873  23.314  1.00 32.98
1 . .
ATOM 703  CB    CB    . MET MET MET A A 93  93  . 82.541  75.343  22.902  1.00 32.95
1 . .
ATOM 704  CG    CG    . MET MET MET A A 93  93  . 81.289  75.712  22.102  1.00 34.16
1 . .
ATOM 705  SD    SD    . MET MET MET A A 93  93  . 81.410  77.314  21.247  1.00 33.53
1 . .
ATOM 706  CE    CE    . MET MET MET A A 93  93  . 81.299  78.409  22.657  1.00 31.75
1 . .
ATOM 707  C     C     . MET MET MET A A 93  93  . 84.026  73.605  23.826  1.00 33.08
1 . .
ATOM 708  O     O     . MET MET MET A A 93  93  . 84.885  73.164  23.071  1.00 32.02
1 . .
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ATOM 709  N     N     . LEU LEU LEU A A 94  94  . 84.288  73.930  25.086  1.00 33.85
1 . .
ATOM 710  CA    CA    . LEU LEU LEU A A 94  94  . 85.649  73.777  25.630  1.00 34.20
1 . .
ATOM 711  CB    CB    . LEU LEU LEU A A 94  94  . 85.836  74.426  27.026  1.00 35.57
1 . .
ATOM 712  CG    CG    . LEU LEU LEU A A 94  94  . 85.555  75.919  27.282  1.00 36.94
1 . .
ATOM 713  CD1   CD1   . LEU LEU LEU A A 94  94  . 85.941  76.325  28.682  1.00 39.26
1 . .
ATOM 714  CD2   CD2   . LEU LEU LEU A A 94  94  . 86.277  76.796  26.346  1.00 36.16
1 . .
ATOM 715  C     C     . LEU LEU LEU A A 94  94  . 85.999  72.299  25.692  1.00 33.89
1 . .
ATOM 716  O     O     . LEU LEU LEU A A 94  94  . 87.152  71.915  25.399  1.00 32.79
1 . .
ATOM 717  N     N     . GLU GLU GLU A A 95  95  . 85.003  71.473  26.020  1.00 33.95
1 . .
ATOM 718  CA    CA    . GLU GLU GLU A A 95  95  . 85.189  69.982  26.047  1.00 35.61
1 . .
ATOM 719  CB    CB    . GLU GLU GLU A A 95  95  . 84.020  69.238  26.714  1.00 37.17
1 . .
ATOM 720  CG    CG    . GLU GLU GLU A A 95  95  . 83.892  69.404  28.259  1.00 43.98
1 . .
ATOM 721  CD    CD    . GLU GLU GLU A A 95  95  . 85.249  69.307  28.989  1.00 50.31
1 . .
ATOM 722  OE1   OE1   . GLU GLU GLU A A 95  95  . 86.124  68.508  28.585  1.00 53.17
1 . .
ATOM 723  OE2   OE2   . GLU GLU GLU A A 95  95  . 85.457  70.037  29.984  1.00 54.60
1 . .
ATOM 724  C     C     . GLU GLU GLU A A 95  95  . 85.360  69.427  24.633  1.00 34.75
1 . .
ATOM 725  O     O     . GLU GLU GLU A A 95  95  . 86.198  68.543  24.413  1.00 33.79
1 . .
ATOM 726  N     N     . LEU LEU LEU A A 96  96  . 84.589  69.964  23.673  1.00 33.56
1 . .
ATOM 727  CA    CA    . LEU LEU LEU A A 96  96  . 84.700  69.498  22.275  1.00 32.71
1 . .
ATOM 728  CB    CB    . LEU LEU LEU A A 96  96  . 83.578  70.082  21.422  1.00 31.68
1 . .
ATOM 729  CG    CG    . LEU LEU LEU A A 96  96  . 83.409  69.460  20.036  1.00 32.63
1 . .
ATOM 730  CD1   CD1   . LEU LEU LEU A A 96  96  . 83.377  67.895  20.063  1.00 32.23
1 . .
ATOM 731  CD2   CD2   . LEU LEU LEU A A 96  96  . 82.133  70.008  19.368  1.00 31.42
1 . .
ATOM 732  C     C     . LEU LEU LEU A A 96  96  . 86.084  69.829  21.670  1.00 33.13
1 . .
ATOM 733  O     O     . LEU LEU LEU A A 96  96  . 86.633  69.129  20.784  1.00 31.99
1 . .
ATOM 734  N     N     . ASP ASP ASP A A 97  97  . 86.617  70.944  22.128  1.00 33.50
1 . .
ATOM 735  CA    CA    . ASP ASP ASP A A 97  97  . 87.917  71.344  21.696  1.00 34.59
1 . .
ATOM 736  CB    CB    . ASP ASP ASP A A 97  97  . 88.160  72.831  21.987  1.00 34.47
1 . .
ATOM 737  CG    CG    . ASP ASP ASP A A 97  97  . 89.593  73.228  21.740  1.00 36.45
1 . .
ATOM 738  OD1   OD1   . ASP ASP ASP A A 97  97  . 89.864  73.860  20.681  1.00 39.12
1 . .
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ATOM 739  OD2   OD2   . ASP ASP ASP A A 97  97  . 90.451  72.870  22.586  1.00 35.78
1 . .
ATOM 740  C     C     . ASP ASP ASP A A 97  97  . 88.913  70.437  22.430  1.00 34.96
1 . .
ATOM 741  O     O     . ASP ASP ASP A A 97  97  . 89.761  69.815  21.784  1.00 34.94
1 . .
ATOM 742  N     N     . GLY GLY GLY A A 98  98  . 88.803  70.394  23.761  1.00 34.88
1 . .
ATOM 743  CA    CA    . GLY GLY GLY A A 98  98  . 89.523  69.441  24.592  1.00 36.12
1 . .
ATOM 744  C     C     . GLY GLY GLY A A 98  98  . 91.023  69.709  24.801  1.00 37.32
1 . .
ATOM 745  O     O     . GLY GLY GLY A A 98  98  . 91.687  68.888  25.460  1.00 37.51
1 . .
ATOM 746  N     N     . THR THR THR A A 99  99  . 91.554  70.812  24.243  1.00 37.23
1 . .
ATOM 747  CA    CA    . THR THR THR A A 99  99  . 92.942  71.271  24.457  1.00 38.22
1 . .
ATOM 748  CB    CB    . THR THR THR A A 99  99  . 93.660  71.656  23.132  1.00 38.85
1 . .
ATOM 749  OG1   OG1   . THR THR THR A A 99  99  . 93.195  72.930  22.673  1.00 38.73
1 . .
ATOM 750  CG2   CG2   . THR THR THR A A 99  99  . 93.435  70.584  21.992  1.00 39.45
1 . .
ATOM 751  C     C     . THR THR THR A A 99  99  . 93.005  72.465  25.460  1.00 38.93
1 . .
ATOM 752  O     O     . THR THR THR A A 99  99  . 91.995  73.148  25.715  1.00 38.15
1 . .
ATOM 753  N     N     . GLU GLU GLU A A 100 100 . 94.184  72.686  26.044  1.00 39.90
1 . .
ATOM 754  CA    CA    . GLU GLU GLU A A 100 100 . 94.393  73.743  27.060  1.00 41.85
1 . .
ATOM 755  CB    CB    . GLU GLU GLU A A 100 100 . 95.817  73.597  27.661  1.00 44.34
1 . .
ATOM 756  CG    CG    . GLU GLU GLU A A 100 100 . 96.239  74.646  28.722  1.00 48.93
1 . .
ATOM 757  CD    CD    . GLU GLU GLU A A 100 100 . 95.452  74.525  30.033  1.00 55.85
1 . .
ATOM 758  OE1   OE1   . GLU GLU GLU A A 100 100 . 95.906  73.773  30.931  1.00 62.03
1 . .
ATOM 759  OE2   OE2   . GLU GLU GLU A A 100 100 . 94.387  75.173  30.177  1.00 57.69
1 . .
ATOM 760  C     C     . GLU GLU GLU A A 100 100 . 94.213  75.150  26.454  1.00 41.06
1 . .
ATOM 761  O     O     . GLU GLU GLU A A 100 100 . 93.435  75.974  26.948  1.00 41.84
1 . .
ATOM 762  N     N     . ASN ASN ASN A A 101 101 . 94.908  75.388  25.350  1.00 39.05
1 . .
ATOM 763  CA    CA    . ASN ASN ASN A A 101 101 . 94.950  76.684  24.740  1.00 38.09
1 . .
ATOM 764  CB    CB    . ASN ASN ASN A A 101 101 . 96.413  76.994  24.346  1.00 39.64
1 . .
ATOM 765  CG    CG    . ASN ASN ASN A A 101 101 . 96.961  76.019  23.318  1.00 45.22
1 . .
ATOM 766  OD1   OD1   . ASN ASN ASN A A 101 101 . 97.855  76.380  22.522  1.00 53.42
1 . .
ATOM 767  ND2   ND2   . ASN ASN ASN A A 101 101 . 96.464  74.749  23.334  1.00 49.50
1 . .
ATOM 768  C     C     . ASN ASN ASN A A 101 101 . 94.017  76.778  23.536  1.00 35.32
1 . .
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ATOM 769  O    O    . ASN ASN ASN A A 101 101 . 94.264  77.515  22.666  1.00 32.90
1 . .
ATOM 770  N    N    . LYS LYS LYS A A 102 102 . 92.943  75.992  23.521  1.00 34.65
1 . .
ATOM 771  CA   CA   . LYS LYS LYS A A 102 102 . 91.947  75.927  22.460  1.00 33.44
1 . .
ATOM 772  CB   CB   . LYS LYS LYS A A 102 102 . 91.023  77.144  22.542  1.00 33.51
1 . .
ATOM 773  CG   CG   . LYS LYS LYS A A 102 102 . 90.633  77.530  23.990  1.00 34.60
1 . .
ATOM 774  CD   CD   . LYS LYS LYS A A 102 102 . 89.255  78.169  24.068  1.00 38.14
1 . .
ATOM 775  CE   CE   . LYS LYS LYS A A 102 102 . 88.913  78.882  25.417  1.00 41.51
1 . .
ATOM 776  NZ   NZ   . LYS LYS LYS A A 102 102 . 89.444  78.376  26.736  1.00 41.16
1 . .
ATOM 777  C    C    . LYS LYS LYS A A 102 102 . 92.567  75.785  21.047  1.00 33.63
1 . .
ATOM 778  O    O    . LYS LYS LYS A A 102 102 . 92.055  76.376  20.131  1.00 32.70
1 . .
ATOM 779  N    N    . SER SER SER A A 103 103 . 93.680  75.048  20.892  1.00 33.02
1 . .
ATOM 780  CA   CA   . SER SER SER A A 103 103 . 94.342  74.908  19.583  1.00 33.29
1 . .
ATOM 781  CB   CB   . SER SER SER A A 103 103 . 95.824  74.608  19.707  1.00 33.49
1 . .
ATOM 782  OG   OG   . SER SER SER A A 103 103 . 95.990  73.410  20.419  1.00 34.64
1 . .
ATOM 783  C    C    . SER SER SER A A 103 103 . 93.719  73.898  18.614  1.00 32.62
1 . .
ATOM 784  O    O    . SER SER SER A A 103 103 . 94.194  73.714  17.505  1.00 33.50
1 . .
ATOM 785  N    N    . LYS LYS LYS A A 104 104 . 92.622  73.267  18.965  1.00 32.15
1 . .
ATOM 786  CA   CA   . LYS LYS LYS A A 104 104 . 92.042  72.434  17.920  1.00 30.97
1 . .
ATOM 787  CB   CB   . LYS LYS LYS A A 104 104 . 91.321  71.211  18.448  1.00 30.76
1 . .
ATOM 788  CG   CG   . LYS LYS LYS A A 104 104 . 90.641  70.402  17.306  1.00 31.30
1 . .
ATOM 789  CD   CD   . LYS LYS LYS A A 104 104 . 89.662  69.409  17.876  1.00 33.86
1 . .
ATOM 790  CE   CE   . LYS LYS LYS A A 104 104 . 90.350  68.310  18.736  1.00 34.48
1 . .
ATOM 791  NZ   NZ   . LYS LYS LYS A A 104 104 . 89.205  67.932  19.622  1.00 37.43
1 . .
ATOM 792  C    C    . LYS LYS LYS A A 104 104 . 91.162  73.286  17.022  1.00 30.08
1 . .
ATOM 793  O    O    . LYS LYS LYS A A 104 104 . 91.365  73.328  15.816  1.00 29.94
1 . .
ATOM 794  N    N    . PHE PHE PHE A A 105 105 . 90.209  73.984  17.617  1.00 30.46
1 . .
ATOM 795  CA   CA   . PHE PHE PHE A A 105 105 . 89.298  74.854  16.866  1.00 30.30
1 . .
ATOM 796  CB   CB   . PHE PHE PHE A A 105 105 . 87.969  74.955  17.588  1.00 31.16
1 . .
ATOM 797  CG   CG   . PHE PHE PHE A A 105 105 . 87.191  73.674  17.628  1.00 33.92
1 . .
ATOM 798  CD1  CD1  . PHE PHE PHE A A 105 105 . 86.219  73.484  18.604  1.00 37.16
1 . .
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ATOM 799  CE1   CE1   . PHE PHE PHE A A 105 105 . 85.478  72.284  18.658  1.00 39.13
1 . .
ATOM 800  CZ    CZ    . PHE PHE PHE A A 105 105 . 85.717  71.284  17.716  1.00 38.13
1 . .
ATOM 801  CE2   CE2   . PHE PHE PHE A A 105 105 . 86.670  71.485  16.745  1.00 36.59
1 . .
ATOM 802  CD2   CD2   . PHE PHE PHE A A 105 105 . 87.406  72.678  16.701  1.00 34.30
1 . .
ATOM 803  C     C     . PHE PHE PHE A A 105 105 . 89.842  76.291  16.742  1.00 29.72
1 . .
ATOM 804  O     O     . PHE PHE PHE A A 105 105 . 89.489  77.005  15.811  1.00 28.76
1 . .
ATOM 805  N     N     . GLY GLY GLY A A 106 106 . 90.653  76.723  17.711  1.00 28.83
1 . .
ATOM 806  CA    CA    . GLY GLY GLY A A 106 106 . 91.019  78.146  17.812  1.00 28.32
1 . .
ATOM 807  C     C     . GLY GLY GLY A A 106 106 . 90.214  78.910  18.824  1.00 28.80
1 . .
ATOM 808  O     O     . GLY GLY GLY A A 106 106 . 88.951  78.735  18.945  1.00 30.01
1 . .
ATOM 809  N     N     . ALA ALA ALA A A 107 107 . 90.890  79.805  19.542  1.00 27.88
1 . .
ATOM 810  CA    CA    . ALA ALA ALA A A 107 107 . 90.160  80.722  20.455  1.00 28.90
1 . .
ATOM 811  CB    CB    . ALA ALA ALA A A 107 107 . 91.102  81.618  21.220  1.00 29.37
1 . .
ATOM 812  C     C     . ALA ALA ALA A A 107 107 . 89.139  81.591  19.717  1.00 28.72
1 . .
ATOM 813  O     O     . ALA ALA ALA A A 107 107 . 88.062  81.915  20.263  1.00 28.49
1 . .
ATOM 814  N     N     . ASN ASN ASN A A 108 108 . 89.517  81.990  18.500  1.00 28.01
1 . .
ATOM 815  CA    CA    . ASN ASN ASN A A 108 108 . 88.672  82.776  17.660  1.00 27.65
1 . .
ATOM 816  CB    CB    . ASN ASN ASN A A 108 108 . 89.420  83.375  16.484  1.00 27.47
1 . .
ATOM 817  CG    CG    . ASN ASN ASN A A 108 108 . 90.318  82.369  15.732  1.00 28.05
1 . .
ATOM 818  OD1   OD1   . ASN ASN ASN A A 108 108 . 90.594  81.236  16.187  1.00 27.74
1 . .
ATOM 819  ND2   ND2   . ASN ASN ASN A A 108 108 . 90.765  82.799  14.539  1.00 24.83
1 . .
ATOM 820  C     C     . ASN ASN ASN A A 108 108 . 87.402  82.060  17.219  1.00 28.84
1 . .
ATOM 821  O     O     . ASN ASN ASN A A 108 108 . 86.357  82.693  17.118  1.00 29.75
1 . .
ATOM 822  N     N     . ALA ALA ALA A A 109 109 . 87.465  80.747  16.989  1.00 29.16
1 . .
ATOM 823  CA    CA    . ALA ALA ALA A A 109 109 . 86.256  80.006  16.696  1.00 28.73
1 . .
ATOM 824  CB    CB    . ALA ALA ALA A A 109 109 . 86.598  78.585  16.214  1.00 28.96
1 . .
ATOM 825  C     C     . ALA ALA ALA A A 109 109 . 85.339  79.953  17.927  1.00 28.94
1 . .
ATOM 826  O     O     . ALA ALA ALA A A 109 109 . 84.170  80.271  17.850  1.00 28.53
1 . .
ATOM 827  N     N     . ILE ILE ILE A A 110 110 . 85.875  79.511  19.064  1.00 29.09
1 . .
ATOM 828  CA    CA    . ILE ILE ILE A A 110 110 . 85.040  79.299  20.232  1.00 29.22
1 . .
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ATOM 829  CB    CB    . ILE ILE ILE A A 110 110 . 85.894  78.606  21.370  1.00 30.09
1 . .
ATOM 830  CG1   CG1   . ILE ILE ILE A A 110 110 . 86.266  77.180  20.919  1.00 29.67
1 . .
ATOM 831  CD1   CD1   . ILE ILE ILE A A 110 110 . 87.056  76.432  21.878  1.00 30.42
1 . .
ATOM 832  CG2   CG2   . ILE ILE ILE A A 110 110 . 85.151  78.570  22.733  1.00 29.49
1 . .
ATOM 833  C     C     . ILE ILE ILE A A 110 110 . 84.436  80.616  20.676  1.00 27.46
1 . .
ATOM 834  O     O     . ILE ILE ILE A A 110 110 . 83.256  80.710  20.943  1.00 28.21
1 . .
ATOM 835  N     N     . LEU LEU LEU A A 111 111 . 85.261  81.638  20.776  1.00 26.95
1 . .
ATOM 836  CA    CA    . LEU LEU LEU A A 111 111 . 84.780  82.987  21.234  1.00 26.62
1 . .
ATOM 837  CB    CB    . LEU LEU LEU A A 111 111 . 85.908  83.997  21.273  1.00 25.64
1 . .
ATOM 838  CG    CG    . LEU LEU LEU A A 111 111 . 85.552  85.376  21.807  1.00 27.10
1 . .
ATOM 839  CD1   CD1   . LEU LEU LEU A A 111 111 . 84.883  85.346  23.210  1.00 23.07
1 . .
ATOM 840  CD2   CD2   . LEU LEU LEU A A 111 111 . 86.824  86.287  21.801  1.00 27.29
1 . .
ATOM 841  C     C     . LEU LEU LEU A A 111 111 . 83.669  83.569  20.377  1.00 26.36
1 . .
ATOM 842  O     O     . LEU LEU LEU A A 111 111 . 82.721  84.094  20.886  1.00 26.82
1 . .
ATOM 843  N     N     . GLY GLY GLY A A 112 112 . 83.793  83.490  19.060  1.00 25.74
1 . .
ATOM 844  CA    CA    . GLY GLY GLY A A 112 112 . 82.735  84.045  18.277  1.00 25.63
1 . .
ATOM 845  C     C     . GLY GLY GLY A A 112 112 . 81.382  83.418  18.526  1.00 26.17
1 . .
ATOM 846  O     O     . GLY GLY GLY A A 112 112 . 80.392  84.120  18.500  1.00 27.16
1 . .
ATOM 847  N     N     . VAL VAL VAL A A 113 113 . 81.311  82.089  18.726  1.00 26.36
1 . .
ATOM 848  CA    CA    . VAL VAL VAL A A 113 113 . 80.024  81.472  19.105  1.00 25.68
1 . .
ATOM 849  CB    CB    . VAL VAL VAL A A 113 113 . 80.085  79.900  19.011  1.00 25.96
1 . .
ATOM 850  CG1   CG1   . VAL VAL VAL A A 113 113 . 78.619  79.252  19.293  1.00 25.02
1 . .
ATOM 851  CG2   CG2   . VAL VAL VAL A A 113 113 . 80.679  79.458  17.664  1.00 22.75
1 . .
ATOM 852  C     C     . VAL VAL VAL A A 113 113 . 79.576  81.894  20.510  1.00 26.00
1 . .
ATOM 853  O     O     . VAL VAL VAL A A 113 113 . 78.373  82.160  20.797  1.00 26.70
1 . .
ATOM 854  N     N     . SER SER SER A A 114 114 . 80.550  81.948  21.396  1.00 25.45
1 . .
ATOM 855  CA    CA    . SER SER SER A A 114 114 . 80.317  82.361  22.774  1.00 26.74
1 . .
ATOM 856  CB    CB    . SER SER SER A A 114 114 . 81.603  82.375  23.573  1.00 26.22
1 . .
ATOM 857  OG    OG    . SER SER SER A A 114 114 . 81.235  82.556  24.882  1.00 29.54
1 . .
ATOM 858  C     C     . SER SER SER A A 114 114 . 79.698  83.733  22.822  1.00 27.22
1 . .
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ATOM 859  O     O     . SER SER SER A A 114 114 . 78.669  83.917  23.509  1.00 25.91
1 . .
ATOM 860  N     N     . LEU LEU LEU A A 115 115 . 80.260  84.678  22.047  1.00 26.95
1 . .
ATOM 861  CA    CA    . LEU LEU LEU A A 115 115 . 79.664  86.063  22.096  1.00 27.34
1 . .
ATOM 862  CB    CB    . LEU LEU LEU A A 115 115 . 80.513  87.091  21.369  1.00 26.55
1 . .
ATOM 863  CG    CG    . LEU LEU LEU A A 115 115 . 81.989  87.136  21.836  1.00 29.09
1 . .
ATOM 864  CD1   CD1   . LEU LEU LEU A A 115 115 . 82.889  87.851  20.821  1.00 27.81
1 . .
ATOM 865  CD2   CD2   . LEU LEU LEU A A 115 115 . 82.106  87.835  23.207  1.00 28.07
1 . .
ATOM 866  C     C     . LEU LEU LEU A A 115 115 . 78.226  86.073  21.554  1.00 26.89
1 . .
ATOM 867  O     O     . LEU LEU LEU A A 115 115 . 77.355  86.788  22.044  1.00 25.56
1 . .
ATOM 868  N     N     . ALA ALA ALA A A 116 116 . 77.999  85.247  20.549  1.00 27.43
1 . .
ATOM 869  CA    CA    . ALA ALA ALA A A 116 116 . 76.751  85.306  19.791  1.00 28.38
1 . .
ATOM 870  CB    CB    . ALA ALA ALA A A 116 116 . 76.904  84.504  18.530  1.00 27.78
1 . .
ATOM 871  C     C     . ALA ALA ALA A A 116 116 . 75.678  84.703  20.655  1.00 28.64
1 . .
ATOM 872  O     O     . ALA ALA ALA A A 116 116 . 74.583  85.221  20.743  1.00 30.12
1 . .
ATOM 873  N     N     . VAL VAL VAL A A 117 117 . 75.997  83.536  21.216  1.00 30.04
1 . .
ATOM 874  CA    CA    . VAL VAL VAL A A 117 117 . 75.161  82.889  22.209  1.00 31.42
1 . .
ATOM 875  CB    CB    . VAL VAL VAL A A 117 117 . 75.858  81.678  22.850  1.00 31.47
1 . .
ATOM 876  CG1   CG1   . VAL VAL VAL A A 117 117 . 75.124  81.279  24.125  1.00 32.82
1 . .
ATOM 877  CG2   CG2   . VAL VAL VAL A A 117 117 . 75.903  80.493  21.864  1.00 30.16
1 . .
ATOM 878  C     C     . VAL VAL VAL A A 117 117 . 74.789  83.882  23.315  1.00 32.17
1 . .
ATOM 879  O     O     . VAL VAL VAL A A 117 117 . 73.604  84.029  23.673  1.00 32.67
1 . .
ATOM 880  N     N     . CYS CYS CYS A A 118 118 . 75.796  84.590  23.824  1.00 31.86
1 . .
ATOM 881  CA    CA    . CYS CYS CYS A A 118 118 . 75.526  85.613  24.828  1.00 32.40
1 . .
ATOM 882  CB    CB    . CYS CYS CYS A A 118 118 . 76.802  86.301  25.269  1.00 32.75
1 . .
ATOM 883  SG    SG    . CYS CYS CYS A A 118 118 . 76.611  87.105  26.878  1.00 35.04
1 . .
ATOM 884  C     C     . CYS CYS CYS A A 118 118 . 74.479  86.623  24.416  1.00 32.66
1 . .
ATOM 885  O     O     . CYS CYS CYS A A 118 118 . 73.569  86.911  25.237  1.00 33.12
1 . .
ATOM 886  N     N     . LYS LYS LYS A A 119 119 . 74.570  87.171  23.179  1.00 32.26
1 . .
ATOM 887  CA    CA    . LYS LYS LYS A A 119 119 . 73.573  88.218  22.757  1.00 31.73
1 . .
ATOM 888  CB    CB    . LYS LYS LYS A A 119 119 . 73.935  88.997  21.484  1.00 30.09
1 . .
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ATOM 889  CG    CG    . LYS LYS LYS A A 119 119 . 75.384  89.620  21.508  1.00 32.06
1 . .
ATOM 890  CD    CD    . LYS LYS LYS A A 119 119 . 75.773  90.404  20.226  1.00 31.70
1 . .
ATOM 891  CE    CE    . LYS LYS LYS A A 119 119 . 77.331  90.792  20.258  1.00 34.62
1 . .
ATOM 892  NZ    NZ    . LYS LYS LYS A A 119 119 . 77.773  91.505  18.996  1.00 31.31
1 . .
ATOM 893  C     C     . LYS LYS LYS A A 119 119 . 72.209  87.570  22.582  1.00 31.89
1 . .
ATOM 894  O     O     . LYS LYS LYS A A 119 119 . 71.188  88.220  22.862  1.00 32.82
1 . .
ATOM 895  N     N     . ALA ALA ALA A A 120 120 . 72.178  86.320  22.086  1.00 31.17
1 . .
ATOM 896  CA    CA    . ALA ALA ALA A A 120 120 . 70.879  85.609  21.874  1.00 30.20
1 . .
ATOM 897  CB    CB    . ALA ALA ALA A A 120 120 . 71.074  84.280  21.136  1.00 28.96
1 . .
ATOM 898  C     C     . ALA ALA ALA A A 120 120 . 70.210  85.360  23.221  1.00 31.07
1 . .
ATOM 899  O     O     . ALA ALA ALA A A 120 120 . 68.977  85.417  23.346  1.00 30.50
1 . .
ATOM 900  N     N     . GLY GLY GLY A A 121 121 . 71.046  85.080  24.220  1.00 32.19
1 . .
ATOM 901  CA    CA    . GLY GLY GLY A A 121 121 . 70.579  84.828  25.581  1.00 34.40
1 . .
ATOM 902  C     C     . GLY GLY GLY A A 121 121 . 69.916  86.026  26.215  1.00 35.73
1 . .
ATOM 903  O     O     . GLY GLY GLY A A 121 121 . 68.858  85.913  26.836  1.00 36.80
1 . .
ATOM 904  N     N     . ALA ALA ALA A A 122 122 . 70.539  87.190  26.048  1.00 36.49
1 . .
ATOM 905  CA    CA    . ALA ALA ALA A A 122 122 . 69.927  88.442  26.457  1.00 36.40
1 . .
ATOM 906  CB    CB    . ALA ALA ALA A A 122 122 . 70.849  89.603  26.198  1.00 35.03
1 . .
ATOM 907  C     C     . ALA ALA ALA A A 122 122 . 68.556  88.656  25.779  1.00 37.22
1 . .
ATOM 908  O     O     . ALA ALA ALA A A 122 122 . 67.656  89.116  26.446  1.00 37.95
1 . .
ATOM 909  N     N     . ALA ALA ALA A A 123 123 . 68.376  88.336  24.490  1.00 38.17
1 . .
ATOM 910  CA    CA    . ALA ALA ALA A A 123 123 . 67.056  88.534  23.849  1.00 39.78
1 . .
ATOM 911  CB    CB    . ALA ALA ALA A A 123 123 . 67.158  88.416  22.386  1.00 39.46
1 . .
ATOM 912  C     C     . ALA ALA ALA A A 123 123 . 65.978  87.562  24.364  1.00 41.58
1 . .
ATOM 913  O     O     . ALA ALA ALA A A 123 123 . 64.747  87.879  24.398  1.00 41.49
1 . .
ATOM 914  N     N     . GLU GLU GLU A A 124 124 . 66.447  86.373  24.737  1.00 42.96
1 . .
ATOM 915  CA    CA    . GLU GLU GLU A A 124 124 . 65.589  85.352  25.302  1.00 44.47
1 . .
ATOM 916  CB    CB    . GLU GLU GLU A A 124 124 . 66.297  84.004  25.284  1.00 45.06
1 . .
ATOM 917  CG    CG    . GLU GLU GLU A A 124 124 . 65.341  82.814  25.425  1.00 49.47
1 . .
ATOM 918  CD    CD    . GLU GLU GLU A A 124 124 . 64.412  82.629  24.214  1.00 52.53
1 . .
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ATOM 919  OE1   OE1   . GLU GLU GLU A A 124 124 . 64.900  82.687  23.042  1.00 52.43
1 . .
ATOM 920  OE2   OE2   . GLU GLU GLU A A 124 124 . 63.198  82.406  24.459  1.00 54.51
1 . .
ATOM 921  C     C     . GLU GLU GLU A A 124 124 . 65.076  85.753  26.709  1.00 44.51
1 . .
ATOM 922  O     O     . GLU GLU GLU A A 124 124 . 63.874  85.639  26.996  1.00 44.93
1 . .
ATOM 923  N     N     . ARG ARG ARG A A 125 125 . 65.975  86.256  27.553  1.00 44.51
1 . .
ATOM 924  CA    CA    . ARG ARG ARG A A 125 125 . 65.635  86.834  28.861  1.00 44.43
1 . .
ATOM 925  CB    CB    . ARG ARG ARG A A 125 125 . 66.919  87.152  29.608  1.00 44.87
1 . .
ATOM 926  CG    CG    . ARG ARG ARG A A 125 125 . 67.695  85.951  30.117  1.00 46.73
1 . .
ATOM 927  CD    CD    . ARG ARG ARG A A 125 125 . 67.250  85.597  31.530  1.00 48.87
1 . .
ATOM 928  NE    NE    . ARG ARG ARG A A 125 125 . 68.028  84.484  32.075  1.00 50.63
1 . .
ATOM 929  CZ    CZ    . ARG ARG ARG A A 125 125 . 67.604  83.215  32.119  1.00 50.68
1 . .
ATOM 930  NH1   NH1   . ARG ARG ARG A A 125 125 . 68.405  82.274  32.635  1.00 49.07
1 . .
ATOM 931  NH2   NH2   . ARG ARG ARG A A 125 125 . 66.376  82.888  31.660  1.00 50.25
1 . .
ATOM 932  C     C     . ARG ARG ARG A A 125 125 . 64.839  88.145  28.780  1.00 44.19
1 . .
ATOM 933  O     O     . ARG ARG ARG A A 125 125 . 64.439  88.695  29.799  1.00 43.02
1 . .
ATOM 934  N     N     . GLU GLU GLU A A 126 126 . 64.644  88.630  27.558  1.00 44.90
1 . .
ATOM 935  CA    CA    . GLU GLU GLU A A 126 126 . 64.078  89.942  27.265  1.00 45.92
1 . .
ATOM 936  CB    CB    . GLU GLU GLU A A 126 126 . 62.546  89.889  27.251  1.00 47.73
1 . .
ATOM 937  CG    CG    . GLU GLU GLU A A 126 126 . 62.131  89.163  25.966  1.00 52.72
1 . .
ATOM 938  CD    CD    . GLU GLU GLU A A 126 126 . 60.714  89.408  25.506  1.00 58.94
1 . .
ATOM 939  OE1   OE1   . GLU GLU GLU A A 126 126 . 60.534  90.061  24.450  1.00 61.90
1 . .
ATOM 940  OE2   OE2   . GLU GLU GLU A A 126 126 . 59.775  88.913  26.161  1.00 62.42
1 . .
ATOM 941  C     C     . GLU GLU GLU A A 126 126 . 64.700  91.084  28.070  1.00 44.91
1 . .
ATOM 942  O     O     . GLU GLU GLU A A 126 126 . 64.000  91.981  28.584  1.00 45.52
1 . .
ATOM 943  N     N     . LEU LEU LEU A A 127 127 . 66.036  91.021  28.127  1.00 42.22
1 . .
ATOM 944  CA    CA    . LEU LEU LEU A A 127 127 . 66.917  91.924  28.848  1.00 40.58
1 . .
ATOM 945  CB    CB    . LEU LEU LEU A A 127 127 . 67.707  91.154  29.905  1.00 40.19
1 . .
ATOM 946  CG    CG    . LEU LEU LEU A A 127 127 . 67.079  90.579  31.171  1.00 41.01
1 . .
ATOM 947  CD1   CD1   . LEU LEU LEU A A 127 127 . 68.094  89.699  31.861  1.00 42.80
1 . .
ATOM 948  CD2   CD2   . LEU LEU LEU A A 127 127 . 66.603  91.720  32.128  1.00 41.63
1 . .
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ATOM 949  C     C     . LEU LEU LEU A A 127 127 . 67.943  92.520  27.896  1.00 39.12
1 . .
ATOM 950  O     O     . LEU LEU LEU A A 127 127 . 68.423  91.850  27.000  1.00 39.48
1 . .
ATOM 951  N     N     . PRO PRO PRO A A 128 128 . 68.285  93.792  28.070  1.00 38.02
1 . .
ATOM 952  CA    CA    . PRO PRO PRO A A 128 128 . 69.455  94.332  27.366  1.00 36.78
1 . .
ATOM 953  CB    CB    . PRO PRO PRO A A 128 128 . 69.540  95.763  27.923  1.00 37.27
1 . .
ATOM 954  CG    CG    . PRO PRO PRO A A 128 128 . 68.778  95.717  29.205  1.00 36.76
1 . .
ATOM 955  CD    CD    . PRO PRO PRO A A 128 128 . 67.617  94.844  28.845  1.00 37.99
1 . .
ATOM 956  C     C     . PRO PRO PRO A A 128 128 . 70.751  93.552  27.663  1.00 34.52
1 . .
ATOM 957  O     O     . PRO PRO PRO A A 128 128 . 70.894  92.917  28.701  1.00 32.47
1 . .
ATOM 958  N     N     . LEU LEU LEU A A 129 129 . 71.686  93.589  26.736  1.00 32.91
1 . .
ATOM 959  CA    CA    . LEU LEU LEU A A 129 129 . 72.875  92.773  26.927  1.00 31.65
1 . .
ATOM 960  CB    CB    . LEU LEU LEU A A 129 129 . 73.801  92.801  25.706  1.00 31.80
1 . .
ATOM 961  CG    CG    . LEU LEU LEU A A 129 129 . 75.163  92.101  25.746  1.00 30.97
1 . .
ATOM 962  CD1   CD1   . LEU LEU LEU A A 129 129 . 75.047  90.601  26.036  1.00 32.85
1 . .
ATOM 963  CD2   CD2   . LEU LEU LEU A A 129 129 . 75.899  92.318  24.392  1.00 29.10
1 . .
ATOM 964  C     C     . LEU LEU LEU A A 129 129 . 73.610  92.986  28.272  1.00 30.71
1 . .
ATOM 965  O     O     . LEU LEU LEU A A 129 129 . 73.928  92.031  28.937  1.00 28.93
1 . .
ATOM 966  N     N     . TYR TYR TYR A A 130 130 . 73.858  94.223  28.672  1.00 31.35
1 . .
ATOM 967  CA    CA    . TYR TYR TYR A A 130 130 . 74.633  94.523  29.899  1.00 31.08
1 . .
ATOM 968  CB    CB    . TYR TYR TYR A A 130 130 . 74.951  96.048  30.008  1.00 31.74
1 . .
ATOM 969  CG    CG    . TYR TYR TYR A A 130 130 . 73.699  96.946  30.027  1.00 32.84
1 . .
ATOM 970  CD1   CD1   . TYR TYR TYR A A 130 130 . 73.119  97.361  31.246  1.00 36.26
1 . .
ATOM 971  CE1   CE1   . TYR TYR TYR A A 130 130 . 71.943  98.146  31.279  1.00 35.76
1 . .
ATOM 972  CZ    CZ    . TYR TYR TYR A A 130 130 . 71.375  98.557  30.076  1.00 37.94
1 . .
ATOM 973  OH    OH    . TYR TYR TYR A A 130 130 . 70.241  99.332  30.067  1.00 41.05
1 . .
ATOM 974  CE2   CE2   . TYR TYR TYR A A 130 130 . 71.957  98.195  28.867  1.00 36.89
1 . .
ATOM 975  CD2   CD2   . TYR TYR TYR A A 130 130 . 73.114  97.375  28.858  1.00 33.45
1 . .
ATOM 976  C     C     . TYR TYR TYR A A 130 130 . 73.950  93.968  31.162  1.00 31.54
1 . .
ATOM 977  O     O     . TYR TYR TYR A A 130 130 . 74.660  93.597  32.112  1.00 29.45
1 . .
ATOM 978  N     N     . ARG ARG ARG A A 131 131 . 72.594  93.884  31.158  1.00 31.67
1 . .
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ATOM 979  CA    CA    . ARG ARG ARG A A 131 131 . 71.849  93.301  32.310  1.00 33.37
1 . .
ATOM 980  CB    CB    . ARG ARG ARG A A 131 131 . 70.352  93.686  32.295  1.00 34.29
1 . .
ATOM 981  CG    CG    . ARG ARG ARG A A 131 131 . 70.101  95.098  32.788  1.00 38.28
1 . .
ATOM 982  CD    CD    . ARG ARG ARG A A 131 131 . 68.571  95.399  32.960  1.00 47.09
1 . .
ATOM 983  NE    NE    . ARG ARG ARG A A 131 131 . 68.326  96.775  33.413  1.00 51.62
1 . .
ATOM 984  CZ    CZ    . ARG ARG ARG A A 131 131 . 68.686  97.274  34.611  1.00 54.53
1 . .
ATOM 985  NH1   NH1   . ARG ARG ARG A A 131 131 . 68.403  98.546  34.893  1.00 54.97
1 . .
ATOM 986  NH2   NH2   . ARG ARG ARG A A 131 131 . 69.337  96.523  35.526  1.00 54.59
1 . .
ATOM 987  C     C     . ARG ARG ARG A A 131 131 . 72.005  91.773  32.376  1.00 32.88
1 . .
ATOM 988  O     O     . ARG ARG ARG A A 131 131 . 72.267  91.184  33.424  1.00 33.81
1 . .
ATOM 989  N     N     . HIS HIS HIS A A 132 132 . 71.892  91.132  31.231  1.00 32.18
1 . .
ATOM 990  CA    CA    . HIS HIS HIS A A 132 132 . 72.098  89.706  31.140  1.00 31.31
1 . .
ATOM 991  CB    CB    . HIS HIS HIS A A 132 132 . 71.854  89.311  29.692  1.00 31.80
1 . .
ATOM 992  CG    CG    . HIS HIS HIS A A 132 132 . 72.032  87.858  29.413  1.00 33.52
1 . .
ATOM 993  ND1   ND1   . HIS HIS HIS A A 132 132 . 71.435  86.877  30.166  1.00 33.14
1 . .
ATOM 994  CE1   CE1   . HIS HIS HIS A A 132 132 . 71.770  85.695  29.685  1.00 33.25
1 . .
ATOM 995  NE2   NE2   . HIS HIS HIS A A 132 132 . 72.537  85.877  28.628  1.00 33.25
1 . .
ATOM 996  CD2   CD2   . HIS HIS HIS A A 132 132 . 72.729  87.217  28.444  1.00 35.98
1 . .
ATOM 997  C     C     . HIS HIS HIS A A 132 132 . 73.519  89.392  31.613  1.00 31.29
1 . .
ATOM 998  O     O     . HIS HIS HIS A A 132 132 . 73.743  88.516  32.477  1.00 31.58
1 . .
ATOM 999  N     N     . ILE ILE ILE A A 133 133 . 74.495  90.124  31.102  1.00 29.72
1 . .
ATOM 1000 CA    CA    . ILE ILE ILE A A 133 133 . 75.830  89.913  31.593  1.00 29.30
1 . .
ATOM 1001 CB    CB    . ILE ILE ILE A A 133 133 . 76.889  90.784  30.865  1.00 27.93
1 . .
ATOM 1002 CG1   CG1   . ILE ILE ILE A A 133 133 . 76.970  90.290  29.425  1.00 27.27
1 . .
ATOM 1003 CD1   CD1   . ILE ILE ILE A A 133 133 . 77.739  91.232  28.453  1.00 28.41
1 . .
ATOM 1004 CG2   CG2   . ILE ILE ILE A A 133 133 . 78.219  90.601  31.504  1.00 23.28
1 . .
ATOM 1005 C     C     . ILE ILE ILE A A 133 133 . 75.932  90.040  33.100  1.00 31.06
1 . .
ATOM 1006 O     O     . ILE ILE ILE A A 133 133 . 76.544  89.214  33.728  1.00 30.68
1 . .
ATOM 1007 N     N     . ALA ALA ALA A A 134 134 . 75.321  91.070  33.668  1.00 34.09
1 . .
ATOM 1008 CA    CA    . ALA ALA ALA A A 134 134 . 75.346  91.277  35.117  1.00 36.37
1 . .
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ATOM 1009 CB    CB    . ALA ALA ALA A A 134 134 . 74.672  92.576  35.424  1.00 37.10
1 . .
ATOM 1010 C     C     . ALA ALA ALA A A 134 134 . 74.678  90.105  35.879  1.00 37.85
1 . .
ATOM 1011 O     O     . ALA ALA ALA A A 134 134 . 75.225  89.598  36.872  1.00 39.47
1 . .
ATOM 1012 N     N     . GLN GLN GLN A A 135 135 . 73.523  89.650  35.395  1.00 37.93
1 . .
ATOM 1013 CA    CA    . GLN GLN GLN A A 135 135 . 72.966  88.387  35.868  1.00 38.25
1 . .
ATOM 1014 CB    CB    . GLN GLN GLN A A 135 135 . 71.615  88.114  35.241  1.00 37.00
1 . .
ATOM 1015 CG    CG    . GLN GLN GLN A A 135 135 . 70.605  89.164  35.617  1.00 38.20
1 . .
ATOM 1016 CD    CD    . GLN GLN GLN A A 135 135 . 69.221  88.764  35.183  1.00 39.39
1 . .
ATOM 1017 OE1   OE1   . GLN GLN GLN A A 135 135 . 68.246  89.457  35.468  1.00 42.86
1 . .
ATOM 1018 NE2   NE2   . GLN GLN GLN A A 135 135 . 69.125  87.648  34.449  1.00 37.30
1 . .
ATOM 1019 C     C     . GLN GLN GLN A A 135 135 . 73.875  87.151  35.707  1.00 38.77
1 . .
ATOM 1020 O     O     . GLN GLN GLN A A 135 135 . 73.963  86.365  36.627  1.00 39.06
1 . .
ATOM 1021 N     N     . LEU LEU LEU A A 136 136 . 74.513  86.913  34.564  1.00 38.93
1 . .
ATOM 1022 CA    CA    . LEU LEU LEU A A 136 136 . 75.573  85.862  34.559  1.00 39.42
1 . .
ATOM 1023 CB    CB    . LEU LEU LEU A A 136 136 . 76.298  85.690  33.188  1.00 38.51
1 . .
ATOM 1024 CG    CG    . LEU LEU LEU A A 136 136 . 75.430  85.513  31.944  1.00 39.70
1 . .
ATOM 1025 CD1   CD1   . LEU LEU LEU A A 136 136 . 76.283  85.547  30.651  1.00 38.10
1 . .
ATOM 1026 CD2   CD2   . LEU LEU LEU A A 136 136 . 74.518  84.267  32.017  1.00 37.41
1 . .
ATOM 1027 C     C     . LEU LEU LEU A A 136 136 . 76.661  86.128  35.599  1.00 39.63
1 . .
ATOM 1028 O     O     . LEU LEU LEU A A 136 136 . 77.305  85.187  36.097  1.00 40.05
1 . .
ATOM 1029 N     N     . ALA ALA ALA A A 137 137 . 76.941  87.387  35.888  1.00 39.74
1 . .
ATOM 1030 CA    CA    . ALA ALA ALA A A 137 137 . 78.074  87.633  36.784  1.00 41.41
1 . .
ATOM 1031 CB    CB    . ALA ALA ALA A A 137 137 . 78.851  88.849  36.365  1.00 40.70
1 . .
ATOM 1032 C     C     . ALA ALA ALA A A 137 137 . 77.648  87.725  38.258  1.00 42.61
1 . .
ATOM 1033 O     O     . ALA ALA ALA A A 137 137 . 78.510  87.729  39.146  1.00 43.03
1 . .
ATOM 1034 N     N     . GLY GLY GLY A A 138 138 . 76.336  87.772  38.507  1.00 43.74
1 . .
ATOM 1035 CA    CA    . GLY GLY GLY A A 138 138 . 75.824  87.993  39.854  1.00 46.36
1 . .
ATOM 1036 C     C     . GLY GLY GLY A A 138 138 . 76.093  89.407  40.349  1.00 48.62
1 . .
ATOM 1037 O     O     . GLY GLY GLY A A 138 138 . 76.496  89.603  41.511  1.00 48.26
1 . .
ATOM 1038 N     N     . ASN ASN ASN A A 139 139 . 75.911  90.397  39.459  1.00 50.09
1 . .
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ATOM 1039 CA    CA    . ASN ASN ASN A A 139 139 . 75.898  91.806  39.870  1.00 51.57
1 . .
ATOM 1040 CB    CB    . ASN ASN ASN A A 139 139 . 76.949  92.638  39.128  1.00 51.29
1 . .
ATOM 1041 CG    CG    . ASN ASN ASN A A 139 139 . 78.376  92.035  39.200  1.00 52.75
1 . .
ATOM 1042 OD1   OD1   . ASN ASN ASN A A 139 139 . 78.822  91.479  40.222  1.00 53.24
1 . .
ATOM 1043 ND2   ND2   . ASN ASN ASN A A 139 139 . 79.101  92.170  38.095  1.00 54.38
1 . .
ATOM 1044 C     C     . ASN ASN ASN A A 139 139 . 74.474  92.409  39.705  1.00 52.96
1 . .
ATOM 1045 O     O     . ASN ASN ASN A A 139 139 . 73.621  91.818  39.017  1.00 52.17
1 . .
ATOM 1046 N     N     . SER SER SER A A 140 140 . 74.220  93.543  40.382  1.00 54.73
1 . .
ATOM 1047 CA    CA    . SER SER SER A A 140 140 . 73.021  94.392  40.136  1.00 56.30
1 . .
ATOM 1048 CB    CB    . SER SER SER A A 140 140 . 71.922  94.198  41.198  1.00 56.90
1 . .
ATOM 1049 OG    OG    . SER SER SER A A 140 140 . 72.496  94.156  42.496  1.00 59.21
1 . .
ATOM 1050 C     C     . SER SER SER A A 140 140 . 73.414  95.868  40.033  1.00 56.78
1 . .
ATOM 1051 O     O     . SER SER SER A A 140 140 . 72.569  96.756  39.766  1.00 57.70
1 . .
ATOM 1052 N     N     . ASP ASP ASP A A 141 141 . 74.704  96.131  40.244  1.00 56.30
1 . .
ATOM 1053 CA    CA    . ASP ASP ASP A A 141 141 . 75.242  97.457  39.969  1.00 55.68
1 . .
ATOM 1054 CB    CB    . ASP ASP ASP A A 141 141 . 76.162  97.943  41.093  1.00 56.66
1 . .
ATOM 1055 CG    CG    . ASP ASP ASP A A 141 141 . 75.395  98.248  42.377  1.00 59.20
1 . .
ATOM 1056 OD1   OD1   . ASP ASP ASP A A 141 141 . 76.036  98.850  43.279  1.00 60.98
1 . .
ATOM 1057 OD2   OD2   . ASP ASP ASP A A 141 141 . 74.168  97.898  42.477  1.00 61.03
1 . .
ATOM 1058 C     C     . ASP ASP ASP A A 141 141 . 75.899  97.531  38.583  1.00 53.78
1 . .
ATOM 1059 O     O     . ASP ASP ASP A A 141 141 . 76.837  96.757  38.221  1.00 54.09
1 . .
ATOM 1060 N     N     . LEU LEU LEU A A 142 142 . 75.369  98.488  37.827  1.00 50.50
1 . .
ATOM 1061 CA    CA    . LEU LEU LEU A A 142 142 . 75.661  98.604  36.415  1.00 47.16
1 . .
ATOM 1062 CB    CB    . LEU LEU LEU A A 142 142 . 74.365  98.500  35.604  1.00 46.14
1 . .
ATOM 1063 CG    CG    . LEU LEU LEU A A 142 142 . 73.595  97.181  35.778  1.00 45.22
1 . .
ATOM 1064 CD1   CD1   . LEU LEU LEU A A 142 142 . 72.136  97.338  35.455  1.00 45.20
1 . .
ATOM 1065 CD2   CD2   . LEU LEU LEU A A 142 142 . 74.200  96.096  34.939  1.00 43.74
1 . .
ATOM 1066 C     C     . LEU LEU LEU A A 142 142 . 76.347  99.944  36.211  1.00 45.47
1 . .
ATOM 1067 O     O     . LEU LEU LEU A A 142 142 . 76.055  100.666 35.254  1.00 45.64
1 . .
ATOM 1068 N     N     . ILE ILE ILE A A 143 143 . 77.282  100.279 37.100  1.00 42.10
1 . .
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ATOM 1069 CA    CA    . ILE ILE ILE A A 143 143 . 77.915  101.571 37.004  1.00 38.94
1 . .
ATOM 1070 CB    CB    . ILE ILE ILE A A 143 143 . 78.813  101.805 38.203  1.00 39.95
1 . .
ATOM 1071 CG1   CG1   . ILE ILE ILE A A 143 143 . 80.045  100.925 38.088  1.00 39.75
1 . .
ATOM 1072 CD1   CD1   . ILE ILE ILE A A 143 143 . 81.105  101.555 37.320  1.00 41.80
1 . .
ATOM 1073 CG2   CG2   . ILE ILE ILE A A 143 143 . 78.002  101.532 39.543  1.00 39.98
1 . .
ATOM 1074 C     C     . ILE ILE ILE A A 143 143 . 78.667  101.740 35.646  1.00 36.00
1 . .
ATOM 1075 O     O     . ILE ILE ILE A A 143 143 . 79.110  100.750 35.048  1.00 34.18
1 . .
ATOM 1076 N     N     . LEU LEU LEU A A 144 144 . 78.751  102.990 35.165  1.00 33.07
1 . .
ATOM 1077 CA    CA    . LEU LEU LEU A A 144 144 . 79.396  103.307 33.896  1.00 30.55
1 . .
ATOM 1078 CB    CB    . LEU LEU LEU A A 144 144 . 78.839  104.590 33.317  1.00 28.94
1 . .
ATOM 1079 CG    CG    . LEU LEU LEU A A 144 144 . 77.573  104.485 32.485  1.00 30.59
1 . .
ATOM 1080 CD1   CD1   . LEU LEU LEU A A 144 144 . 77.791  103.632 31.176  1.00 29.82
1 . .
ATOM 1081 CD2   CD2   . LEU LEU LEU A A 144 144 . 76.399  103.995 33.274  1.00 30.67
1 . .
ATOM 1082 C     C     . LEU LEU LEU A A 144 144 . 80.897  103.504 34.221  1.00 29.66
1 . .
ATOM 1083 O     O     . LEU LEU LEU A A 144 144 . 81.231  104.136 35.241  1.00 29.25
1 . .
ATOM 1084 N     N     . PRO PRO PRO A A 145 145 . 81.771  102.938 33.396  1.00 28.24
1 . .
ATOM 1085 CA    CA    . PRO PRO PRO A A 145 145 . 83.226  103.017 33.630  1.00 27.77
1 . .
ATOM 1086 CB    CB    . PRO PRO PRO A A 145 145 . 83.772  101.966 32.671  1.00 28.66
1 . .
ATOM 1087 CG    CG    . PRO PRO PRO A A 145 145 . 82.847  102.105 31.423  1.00 27.59
1 . .
ATOM 1088 CD    CD    . PRO PRO PRO A A 145 145 . 81.450  102.291 32.097  1.00 28.19
1 . .
ATOM 1089 C     C     . PRO PRO PRO A A 145 145 . 83.864  104.338 33.244  1.00 28.01
1 . .
ATOM 1090 O     O     . PRO PRO PRO A A 145 145 . 83.388  105.037 32.383  1.00 28.41
1 . .
ATOM 1091 N     N     . VAL VAL VAL A A 146 146 . 84.987  104.665 33.847  1.00 27.80
1 . .
ATOM 1092 CA    CA    . VAL VAL VAL A A 146 146 . 85.797  105.737 33.311  1.00 27.95
1 . .
ATOM 1093 CB    CB    . VAL VAL VAL A A 146 146 . 86.973  106.114 34.283  1.00 28.00
1 . .
ATOM 1094 CG1   CG1   . VAL VAL VAL A A 146 146 . 87.966  107.089 33.599  1.00 29.33
1 . .
ATOM 1095 CG2   CG2   . VAL VAL VAL A A 146 146 . 86.423  106.753 35.576  1.00 28.34
1 . .
ATOM 1096 C     C     . VAL VAL VAL A A 146 146 . 86.403  105.172 32.029  1.00 27.23
1 . .
ATOM 1097 O     O     . VAL VAL VAL A A 146 146 . 86.951  104.118 32.098  1.00 27.23
1 . .
ATOM 1098 N     N     . PRO PRO PRO A A 147 147 . 86.302  105.891 30.868  1.00 27.58
1 . .
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ATOM 1099 CA    CA    . PRO PRO PRO A A 147 147 . 86.992  105.470 29.648  1.00 26.67
1 . .
ATOM 1100 CB    CB    . PRO PRO PRO A A 147 147 . 86.291  106.277 28.555  1.00 25.45
1 . .
ATOM 1101 CG    CG    . PRO PRO PRO A A 147 147 . 85.919  107.488 29.203  1.00 27.53
1 . .
ATOM 1102 CD    CD    . PRO PRO PRO A A 147 147 . 85.505  107.105 30.630  1.00 25.77
1 . .
ATOM 1103 C     C     . PRO PRO PRO A A 147 147 . 88.443  105.888 29.751  1.00 26.27
1 . .
ATOM 1104 O     O     . PRO PRO PRO A A 147 147 . 88.735  106.936 30.296  1.00 27.35
1 . .
ATOM 1105 N     N     . ALA ALA ALA A A 148 148 . 89.335  105.047 29.269  1.00 25.11
1 . .
ATOM 1106 CA    CA    . ALA ALA ALA A A 148 148 . 90.761  105.362 29.168  1.00 25.10
1 . .
ATOM 1107 CB    CB    . ALA ALA ALA A A 148 148 . 91.549  104.264 29.809  1.00 24.29
1 . .
ATOM 1108 C     C     . ALA ALA ALA A A 148 148 . 91.166  105.489 27.687  1.00 24.38
1 . .
ATOM 1109 O     O     . ALA ALA ALA A A 148 148 . 91.244  104.487 26.985  1.00 23.86
1 . .
ATOM 1110 N     N     . PHE PHE PHE A A 149 149 . 91.408  106.710 27.215  1.00 24.20
1 . .
ATOM 1111 CA    CA    . PHE PHE PHE A A 149 149 . 91.512  106.954 25.772  1.00 24.05
1 . .
ATOM 1112 CB    CB    . PHE PHE PHE A A 149 149 . 90.924  108.298 25.423  1.00 22.16
1 . .
ATOM 1113 CG    CG    . PHE PHE PHE A A 149 149 . 89.416  108.447 25.646  1.00 23.99
1 . .
ATOM 1114 CD1   CD1   . PHE PHE PHE A A 149 149 . 88.508  107.983 24.710  1.00 22.22
1 . .
ATOM 1115 CE1   CE1   . PHE PHE PHE A A 149 149 . 87.087  108.171 24.899  1.00 23.07
1 . .
ATOM 1116 CZ    CZ    . PHE PHE PHE A A 149 149 . 86.615  108.894 25.950  1.00 19.53
1 . .
ATOM 1117 CE2   CE2   . PHE PHE PHE A A 149 149 . 87.533  109.436 26.866  1.00 21.42
1 . .
ATOM 1118 CD2   CD2   . PHE PHE PHE A A 149 149 . 88.922  109.216 26.709  1.00 23.25
1 . .
ATOM 1119 C     C     . PHE PHE PHE A A 149 149 . 92.968  107.003 25.350  1.00 24.82
1 . .
ATOM 1120 O     O     . PHE PHE PHE A A 149 149 . 93.666  107.936 25.769  1.00 26.60
1 . .
ATOM 1121 N     N     . ASN ASN ASN A A 150 150 . 93.392  106.071 24.483  1.00 25.99
1 . .
ATOM 1122 CA    CA    . ASN ASN ASN A A 150 150 . 94.776  105.907 23.963  1.00 28.15
1 . .
ATOM 1123 CB    CB    . ASN ASN ASN A A 150 150 . 94.957  104.488 23.362  1.00 28.81
1 . .
ATOM 1124 CG    CG    . ASN ASN ASN A A 150 150 . 96.443  104.179 22.899  1.00 32.98
1 . .
ATOM 1125 OD1   OD1   . ASN ASN ASN A A 150 150 . 96.726  103.090 22.387  1.00 39.03
1 . .
ATOM 1126 ND2   ND2   . ASN ASN ASN A A 150 150 . 97.345  105.107 23.069  1.00 32.48
1 . .
ATOM 1127 C     C     . ASN ASN ASN A A 150 150 . 95.040  106.953 22.900  1.00 28.11
1 . .
ATOM 1128 O     O     . ASN ASN ASN A A 150 150 . 94.816  106.693 21.694  1.00 30.43
1 . .
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ATOM 1129 N     N     . VAL VAL VAL A A 151 151 . 95.438  108.149 23.329  1.00 27.09
1 . .
ATOM 1130 CA    CA    . VAL VAL VAL A A 151 151 . 95.568  109.328 22.437  1.00 26.35
1 . .
ATOM 1131 CB    CB    . VAL VAL VAL A A 151 151 . 95.160  110.632 23.161  1.00 26.25
1 . .
ATOM 1132 CG1   CG1   . VAL VAL VAL A A 151 151 . 93.675  110.587 23.654  1.00 27.73
1 . .
ATOM 1133 CG2   CG2   . VAL VAL VAL A A 151 151 . 96.055  110.879 24.340  1.00 26.94
1 . .
ATOM 1134 C     C     . VAL VAL VAL A A 151 151 . 96.974  109.505 21.776  1.00 25.61
1 . .
ATOM 1135 O     O     . VAL VAL VAL A A 151 151 . 97.122  110.228 20.827  1.00 24.42
1 . .
ATOM 1136 N     N     . ILE ILE ILE A A 152 152 . 98.008  108.867 22.274  1.00 25.59
1 . .
ATOM 1137 CA    CA    . ILE ILE ILE A A 152 152 . 99.242  108.780 21.443  1.00 24.46
1 . .
ATOM 1138 CB    CB    . ILE ILE ILE A A 152 152 . 100.359 109.546 22.076  1.00 25.49
1 . .
ATOM 1139 CG1   CG1   . ILE ILE ILE A A 152 152 . 100.004 111.049 22.209  1.00 25.86
1 . .
ATOM 1140 CD1   CD1   . ILE ILE ILE A A 152 152 . 101.264 112.058 22.493  1.00 25.02
1 . .
ATOM 1141 CG2   CG2   . ILE ILE ILE A A 152 152 . 101.778 109.190 21.393  1.00 23.06
1 . .
ATOM 1142 C     C     . ILE ILE ILE A A 152 152 . 99.655  107.302 21.375  1.00 25.22
1 . .
ATOM 1143 O     O     . ILE ILE ILE A A 152 152 . 99.824  106.650 22.427  1.00 24.61
1 . .
ATOM 1144 N     N     . ASN ASN ASN A A 153 153 . 99.817  106.768 20.144  1.00 24.81
1 . .
ATOM 1145 CA    CA    . ASN ASN ASN A A 153 153 . 100.113 105.366 19.924  1.00 25.11
1 . .
ATOM 1146 CB    CB    . ASN ASN ASN A A 153 153 . 99.297  104.869 18.745  1.00 23.77
1 . .
ATOM 1147 CG    CG    . ASN ASN ASN A A 153 153 . 97.794  104.852 19.026  1.00 27.41
1 . .
ATOM 1148 OD1   OD1   . ASN ASN ASN A A 153 153 . 97.326  105.112 20.185  1.00 31.31
1 . .
ATOM 1149 ND2   ND2   . ASN ASN ASN A A 153 153 . 97.024  104.484 17.999  1.00 21.65
1 . .
ATOM 1150 C     C     . ASN ASN ASN A A 153 153 . 101.636 105.211 19.599  1.00 25.82
1 . .
ATOM 1151 O     O     . ASN ASN ASN A A 153 153 . 102.221 106.064 18.918  1.00 26.18
1 . .
ATOM 1152 N     N     . GLY GLY GLY A A 154 154 . 102.234 104.122 20.068  1.00 27.69
1 . .
ATOM 1153 CA    CA    . GLY GLY GLY A A 154 154 . 103.702 103.832 19.922  1.00 29.41
1 . .
ATOM 1154 C     C     . GLY GLY GLY A A 154 154 . 103.837 102.320 19.780  1.00 31.36
1 . .
ATOM 1155 O     O     . GLY GLY GLY A A 154 154 . 102.854 101.611 19.452  1.00 32.82
1 . .
ATOM 1156 N     N     . GLY GLY GLY A A 155 155 . 105.045 101.808 20.024  1.00 32.28
1 . .
ATOM 1157 CA    CA    . GLY GLY GLY A A 155 155 . 105.301 100.385 20.026  1.00 31.17
1 . .
ATOM 1158 C     C     . GLY GLY GLY A A 155 155 . 104.845 99.768  18.712  1.00 31.58
1 . .
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ATOM 1159 O     O     . GLY GLY GLY A A 155 155 . 105.013 100.343 17.625  1.00 30.13
1 . .
ATOM 1160 N     N     . SER SER SER A A 156 156 . 104.236 98.589  18.839  1.00 32.87
1 . .
ATOM 1161 CA    CA    . SER SER SER A A 156 156 . 103.792 97.808  17.686  1.00 33.93
1 . .
ATOM 1162 CB    CB    . SER SER SER A A 156 156 . 103.725 96.295  18.050  1.00 34.50
1 . .
ATOM 1163 OG    OG    . SER SER SER A A 156 156 . 105.019 95.813  18.578  1.00 35.46
1 . .
ATOM 1164 C     C     . SER SER SER A A 156 156 . 102.463 98.364  17.086  1.00 34.06
1 . .
ATOM 1165 O     O     . SER SER SER A A 156 156 . 101.896 97.720  16.198  1.00 33.78
1 . .
ATOM 1166 N     N     . HIS HIS HIS A A 157 157 . 101.997 99.554  17.525  1.00 33.35
1 . .
ATOM 1167 CA    CA    . HIS HIS HIS A A 157 157 . 100.681 100.069 17.011  1.00 33.15
1 . .
ATOM 1168 CB    CB    . HIS HIS HIS A A 157 157 . 99.726  100.450 18.142  1.00 32.73
1 . .
ATOM 1169 CG    CG    . HIS HIS HIS A A 157 157 . 99.276  99.289  18.969  1.00 32.66
1 . .
ATOM 1170 ND1   ND1   . HIS HIS HIS A A 157 157 . 98.527  99.440  20.120  1.00 30.05
1 . .
ATOM 1171 CE1   CE1   . HIS HIS HIS A A 157 157 . 98.283  98.249  20.640  1.00 30.41
1 . .
ATOM 1172 NE2   NE2   . HIS HIS HIS A A 157 157 . 98.838  97.330  19.862  1.00 31.26
1 . .
ATOM 1173 CD2   CD2   . HIS HIS HIS A A 157 157 . 99.457  97.954  18.804  1.00 32.58
1 . .
ATOM 1174 C     C     . HIS HIS HIS A A 157 157 . 100.850 101.272 16.091  1.00 32.92
1 . .
ATOM 1175 O     O     . HIS HIS HIS A A 157 157 . 99.867  101.828 15.595  1.00 31.79
1 . .
ATOM 1176 N     N     . ALA ALA ALA A A 158 158 . 102.111 101.686 15.892  1.00 32.10
1 . .
ATOM 1177 CA    CA    . ALA ALA ALA A A 158 158 . 102.368 102.921 15.170  1.00 32.30
1 . .
ATOM 1178 CB    CB    . ALA ALA ALA A A 158 158 . 102.303 104.081 16.101  1.00 32.11
1 . .
ATOM 1179 C     C     . ALA ALA ALA A A 158 158 . 103.728 102.914 14.498  1.00 32.81
1 . .
ATOM 1180 O     O     . ALA ALA ALA A A 158 158 . 104.690 102.334 15.017  1.00 32.04
1 . .
ATOM 1181 N     N     . GLY GLY GLY A A 159 159 . 103.788 103.593 13.355  1.00 33.59
1 . .
ATOM 1182 CA    CA    . GLY GLY GLY A A 159 159 . 105.029 103.820 12.621  1.00 34.52
1 . .
ATOM 1183 C     C     . GLY GLY GLY A A 159 159 . 105.654 105.111 13.121  1.00 35.43
1 . .
ATOM 1184 O     O     . GLY GLY GLY A A 159 159 . 105.323 106.211 12.604  1.00 35.42
1 . .
ATOM 1185 N     N     . ASN ASN ASN A A 160 160 . 106.508 104.938 14.157  1.00 35.68
1 . .
ATOM 1186 CA    CA    . ASN ASN ASN A A 160 160 . 107.388 105.941 14.788  1.00 35.11
1 . .
ATOM 1187 CB    CB    . ASN ASN ASN A A 160 160 . 106.623 106.899 15.723  1.00 34.89
1 . .
ATOM 1188 CG    CG    . ASN ASN ASN A A 160 160 . 105.697 106.174 16.735  1.00 33.15
1 . .
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ATOM 1189 OD1   OD1   . ASN ASN ASN A A 160 160 . 105.822 104.988 16.985  1.00 29.44
1 . .
ATOM 1190 ND2   ND2   . ASN ASN ASN A A 160 160 . 104.756 106.912 17.300  1.00 32.87
1 . .
ATOM 1191 C     C     . ASN ASN ASN A A 160 160 . 108.475 105.214 15.595  1.00 35.02
1 . .
ATOM 1192 O     O     . ASN ASN ASN A A 160 160 . 108.476 104.004 15.678  1.00 35.27
1 . .
ATOM 1193 N     N     . LYS LYS LYS A A 161 161 . 109.332 105.940 16.282  1.00 35.73
1 . .
ATOM 1194 CA    CA    . LYS LYS LYS A A 161 161 . 110.316 105.270 17.169  1.00 36.49
1 . .
ATOM 1195 CB    CB    . LYS LYS LYS A A 161 161 . 111.594 106.101 17.238  1.00 36.74
1 . .
ATOM 1196 CG    CG    . LYS LYS LYS A A 161 161 . 112.354 106.172 15.913  1.00 38.51
1 . .
ATOM 1197 CD    CD    . LYS LYS LYS A A 161 161 . 113.669 106.936 16.150  1.00 43.51
1 . .
ATOM 1198 CE    CE    . LYS LYS LYS A A 161 161 . 114.175 107.566 14.879  1.00 47.90
1 . .
ATOM 1199 NZ    NZ    . LYS LYS LYS A A 161 161 . 115.630 107.826 15.062  1.00 53.02
1 . .
ATOM 1200 C     C     . LYS LYS LYS A A 161 161 . 109.779 104.970 18.581  1.00 35.95
1 . .
ATOM 1201 O     O     . LYS LYS LYS A A 161 161 . 110.153 103.972 19.224  1.00 34.60
1 . .
ATOM 1202 N     N     . LEU LEU LEU A A 162 162 . 108.886 105.857 19.043  1.00 35.97
1 . .
ATOM 1203 CA    CA    . LEU LEU LEU A A 162 162 . 108.234 105.737 20.347  1.00 35.12
1 . .
ATOM 1204 CB    CB    . LEU LEU LEU A A 162 162 . 106.881 106.460 20.283  1.00 34.56
1 . .
ATOM 1205 CG    CG    . LEU LEU LEU A A 162 162 . 106.130 106.752 21.564  1.00 33.49
1 . .
ATOM 1206 CD1   CD1   . LEU LEU LEU A A 162 162 . 106.976 107.637 22.463  1.00 34.16
1 . .
ATOM 1207 CD2   CD2   . LEU LEU LEU A A 162 162 . 104.730 107.418 21.211  1.00 32.88
1 . .
ATOM 1208 C     C     . LEU LEU LEU A A 162 162 . 108.025 104.264 20.725  1.00 34.37
1 . .
ATOM 1209 O     O     . LEU LEU LEU A A 162 162 . 107.300 103.573 20.031  1.00 32.73
1 . .
ATOM 1210 N     N     . ALA ALA ALA A A 163 163 . 108.654 103.804 21.824  1.00 34.42
1 . .
ATOM 1211 CA    CA    . ALA ALA ALA A A 163 163 . 108.663 102.370 22.137  1.00 34.39
1 . .
ATOM 1212 CB    CB    . ALA ALA ALA A A 163 163 . 109.954 101.959 22.852  1.00 34.22
1 . .
ATOM 1213 C     C     . ALA ALA ALA A A 163 163 . 107.461 101.925 22.953  1.00 34.44
1 . .
ATOM 1214 O     O     . ALA ALA ALA A A 163 163 . 106.936 100.817 22.777  1.00 33.94
1 . .
ATOM 1215 N     N     . MET MET MET A A 164 164 . 107.045 102.751 23.894  1.00 34.25
1 . .
ATOM 1216 CA    CA    . MET MET MET A A 164 164 . 105.881 102.364 24.695  1.00 33.60
1 . .
ATOM 1217 CB    CB    . MET MET MET A A 164 164 . 105.860 103.097 26.018  1.00 34.10
1 . .
ATOM 1218 CG    CG    . MET MET MET A A 164 164 . 107.201 102.931 26.807  1.00 34.98
1 . .
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ATOM 1219 SD    SD    . MET MET MET A A 164 164 . 107.214 103.803 28.396  1.00 38.61
1 . .
ATOM 1220 CE    CE    . MET MET MET A A 164 164 . 108.961 103.631 28.918  1.00 27.58
1 . .
ATOM 1221 C     C     . MET MET MET A A 164 164 . 104.595 102.513 23.856  1.00 32.33
1 . .
ATOM 1222 O     O     . MET MET MET A A 164 164 . 104.452 103.377 22.989  1.00 32.19
1 . .
ATOM 1223 N     N     . GLN GLN GLN A A 165 165 . 103.720 101.575 24.074  1.00 30.98
1 . .
ATOM 1224 CA    CA    . GLN GLN GLN A A 165 165 . 102.598 101.343 23.170  1.00 30.40
1 . .
ATOM 1225 CB    CB    . GLN GLN GLN A A 165 165 . 102.012 99.988  23.473  1.00 31.08
1 . .
ATOM 1226 CG    CG    . GLN GLN GLN A A 165 165 . 100.934 99.509  22.496  1.00 32.15
1 . .
ATOM 1227 CD    CD    . GLN GLN GLN A A 165 165 . 100.622 98.058  22.734  1.00 32.20
1 . .
ATOM 1228 OE1   OE1   . GLN GLN GLN A A 165 165 . 101.294 97.180  22.175  1.00 33.22
1 . .
ATOM 1229 NE2   NE2   . GLN GLN GLN A A 165 165 . 99.575  97.783  23.546  1.00 33.22
1 . .
ATOM 1230 C     C     . GLN GLN GLN A A 165 165 . 101.530 102.430 23.285  1.00 28.97
1 . .
ATOM 1231 O     O     . GLN GLN GLN A A 165 165 . 101.100 102.985 22.266  1.00 27.98
1 . .
ATOM 1232 N     N     . GLU GLU GLU A A 166 166 . 101.164 102.786 24.501  1.00 28.08
1 . .
ATOM 1233 CA    CA    . GLU GLU GLU A A 166 166 . 99.905  103.561 24.665  1.00 29.36
1 . .
ATOM 1234 CB    CB    . GLU GLU GLU A A 166 166 . 98.695  102.629 24.956  1.00 29.67
1 . .
ATOM 1235 CG    CG    . GLU GLU GLU A A 166 166 . 98.642  101.265 24.249  1.00 31.16
1 . .
ATOM 1236 CD    CD    . GLU GLU GLU A A 166 166 . 97.396  100.441 24.654  1.00 34.81
1 . .
ATOM 1237 OE1   OE1   . GLU GLU GLU A A 166 166 . 96.622  100.888 25.565  1.00 33.85
1 . .
ATOM 1238 OE2   OE2   . GLU GLU GLU A A 166 166 . 97.199  99.344  24.053  1.00 38.08
1 . .
ATOM 1239 C     C     . GLU GLU GLU A A 166 166 . 99.919  104.673 25.721  1.00 28.09
1 . .
ATOM 1240 O     O     . GLU GLU GLU A A 166 166 . 100.244 104.442 26.871  1.00 27.89
1 . .
ATOM 1241 N     N     . PHE PHE PHE A A 167 167 . 99.512  105.874 25.346  1.00 28.75
1 . .
ATOM 1242 CA    CA    . PHE PHE PHE A A 167 167 . 99.429  106.950 26.322  1.00 28.94
1 . .
ATOM 1243 CB    CB    . PHE PHE PHE A A 167 167 . 100.330 108.076 25.903  1.00 28.22
1 . .
ATOM 1244 CG    CG    . PHE PHE PHE A A 167 167 . 101.807 107.688 25.871  1.00 31.09
1 . .
ATOM 1245 CD1   CD1   . PHE PHE PHE A A 167 167 . 102.356 107.017 24.755  1.00 31.59
1 . .
ATOM 1246 CE1   CE1   . PHE PHE PHE A A 167 167 . 103.721 106.632 24.730  1.00 34.01
1 . .
ATOM 1247 CZ    CZ    . PHE PHE PHE A A 167 167 . 104.551 106.913 25.820  1.00 31.13
1 . .
ATOM 1248 CE2   CE2   . PHE PHE PHE A A 167 167 . 104.006 107.553 26.942  1.00 32.54
1 . .
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ATOM 1249 CD2   CD2   . PHE PHE PHE A A 167 167 . 102.617 107.921 26.968  1.00 30.59
1 . .
ATOM 1250 C     C     . PHE PHE PHE A A 167 167 . 97.983  107.391 26.435  1.00 28.51
1 . .
ATOM 1251 O     O     . PHE PHE PHE A A 167 167 . 97.441  107.910 25.480  1.00 28.10
1 . .
ATOM 1252 N     N     . MET MET MET A A 168 168 . 97.396  107.193 27.617  1.00 29.10
1 . .
ATOM 1253 CA    CA    . MET MET MET A A 168 168 . 95.899  107.238 27.823  1.00 29.81
1 . .
ATOM 1254 CB    CB    . MET MET MET A A 168 168 . 95.452  105.929 28.480  1.00 29.95
1 . .
ATOM 1255 CG    CG    . MET MET MET A A 168 168 . 95.424  104.704 27.536  1.00 32.56
1 . .
ATOM 1256 SD    SD    . MET MET MET A A 168 168 . 95.067  103.120 28.331  1.00 35.14
1 . .
ATOM 1257 CE    CE    . MET MET MET A A 168 168 . 96.830  102.660 28.727  1.00 29.21
1 . .
ATOM 1258 C     C     . MET MET MET A A 168 168 . 95.441  108.378 28.731  1.00 30.32
1 . .
ATOM 1259 O     O     . MET MET MET A A 168 168 . 96.145  108.746 29.670  1.00 31.20
1 . .
ATOM 1260 N     N     . ILE ILE ILE A A 169 169 . 94.247  108.910 28.488  1.00 30.60
1 . .
ATOM 1261 CA    CA    . ILE ILE ILE A A 169 169 . 93.691  109.926 29.343  1.00 29.86
1 . .
ATOM 1262 CB    CB    . ILE ILE ILE A A 169 169 . 93.451  111.247 28.607  1.00 30.38
1 . .
ATOM 1263 CG1   CG1   . ILE ILE ILE A A 169 169 . 92.627  111.030 27.325  1.00 28.95
1 . .
ATOM 1264 CD1   CD1   . ILE ILE ILE A A 169 169 . 92.121  112.288 26.735  1.00 26.52
1 . .
ATOM 1265 CG2   CG2   . ILE ILE ILE A A 169 169 . 94.789  112.015 28.335  1.00 30.14
1 . .
ATOM 1266 C     C     . ILE ILE ILE A A 169 169 . 92.389  109.420 29.906  1.00 30.16
1 . .
ATOM 1267 O     O     . ILE ILE ILE A A 169 169 . 91.589  108.755 29.210  1.00 29.44
1 . .
ATOM 1268 N     N     . LEU LEU LEU A A 170 170 . 92.168  109.762 31.173  1.00 30.02
1 . .
ATOM 1269 CA    CA    . LEU LEU LEU A A 170 170 . 91.092  109.190 31.940  1.00 28.44
1 . .
ATOM 1270 CB    CB    . LEU LEU LEU A A 170 170 . 91.661  108.245 32.994  1.00 28.23
1 . .
ATOM 1271 CG    CG    . LEU LEU LEU A A 170 170 . 92.117  106.852 32.575  1.00 28.17
1 . .
ATOM 1272 CD1   CD1   . LEU LEU LEU A A 170 170 . 93.587  106.767 32.045  1.00 29.94
1 . .
ATOM 1273 CD2   CD2   . LEU LEU LEU A A 170 170 . 92.015  105.959 33.781  1.00 30.28
1 . .
ATOM 1274 C     C     . LEU LEU LEU A A 170 170 . 90.307  110.323 32.588  1.00 28.08
1 . .
ATOM 1275 O     O     . LEU LEU LEU A A 170 170 . 90.784  110.958 33.514  1.00 28.50
1 . .
ATOM 1276 N     N     . PRO PRO PRO A A 171 171 . 89.099  110.613 32.072  1.00 27.43
1 . .
ATOM 1277 CA    CA    . PRO PRO PRO A A 171 171 . 88.316  111.726 32.639  1.00 26.70
1 . .
ATOM 1278 CB    CB    . PRO PRO PRO A A 171 171 . 87.250  112.006 31.554  1.00 26.55
1 . .
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ATOM 1279 CG    CG    . PRO PRO PRO A A 171 171 . 87.775  111.400 30.289  1.00 26.30
1 . .
ATOM 1280 CD    CD    . PRO PRO PRO A A 171 171 . 88.572  110.178 30.772  1.00 27.05
1 . .
ATOM 1281 C     C     . PRO PRO PRO A A 171 171 . 87.679  111.327 33.987  1.00 26.28
1 . .
ATOM 1282 O     O     . PRO PRO PRO A A 171 171 . 86.429  111.258 34.114  1.00 24.27
1 . .
ATOM 1283 N     N     . VAL VAL VAL A A 172 172 . 88.536  111.046 34.973  1.00 26.54
1 . .
ATOM 1284 CA    CA    . VAL VAL VAL A A 172 172 . 88.082  110.709 36.330  1.00 28.12
1 . .
ATOM 1285 CB    CB    . VAL VAL VAL A A 172 172 . 89.242  110.318 37.310  1.00 28.49
1 . .
ATOM 1286 CG1   CG1   . VAL VAL VAL A A 172 172 . 89.904  109.027 36.834  1.00 27.91
1 . .
ATOM 1287 CG2   CG2   . VAL VAL VAL A A 172 172 . 90.310  111.448 37.485  1.00 30.11
1 . .
ATOM 1288 C     C     . VAL VAL VAL A A 172 172 . 87.176  111.762 36.978  1.00 29.62
1 . .
ATOM 1289 O     O     . VAL VAL VAL A A 172 172 . 86.300  111.410 37.766  1.00 29.06
1 . .
ATOM 1290 N     N     . GLY GLY GLY A A 173 173 . 87.392  113.036 36.623  1.00 30.84
1 . .
ATOM 1291 CA    CA    . GLY GLY GLY A A 173 173 . 86.594  114.162 37.085  1.00 32.35
1 . .
ATOM 1292 C     C     . GLY GLY GLY A A 173 173 . 85.262  114.389 36.355  1.00 33.81
1 . .
ATOM 1293 O     O     . GLY GLY GLY A A 173 173 . 84.495  115.291 36.700  1.00 34.34
1 . .
ATOM 1294 N     N     . ALA ALA ALA A A 174 174 . 84.973  113.597 35.342  1.00 33.39
1 . .
ATOM 1295 CA    CA    . ALA ALA ALA A A 174 174 . 83.814  113.867 34.528  1.00 33.87
1 . .
ATOM 1296 CB    CB    . ALA ALA ALA A A 174 174 . 83.841  112.957 33.279  1.00 32.78
1 . .
ATOM 1297 C     C     . ALA ALA ALA A A 174 174 . 82.518  113.687 35.328  1.00 33.64
1 . .
ATOM 1298 O     O     . ALA ALA ALA A A 174 174 . 82.481  112.950 36.276  1.00 33.64
1 . .
ATOM 1299 N     N     . GLU GLU GLU A A 175 175 . 81.447  114.355 34.942  1.00 35.37
1 . .
ATOM 1300 CA    CA    . GLU GLU GLU A A 175 175 . 80.138  114.198 35.656  1.00 36.06
1 . .
ATOM 1301 CB    CB    . GLU GLU GLU A A 175 175 . 79.236  115.413 35.388  1.00 37.61
1 . .
ATOM 1302 CG    CG    . GLU GLU GLU A A 175 175 . 79.227  116.461 36.557  1.00 45.06
1 . .
ATOM 1303 CD    CD    . GLU GLU GLU A A 175 175 . 78.334  116.039 37.786  1.00 52.89
1 . .
ATOM 1304 OE1   OE1   . GLU GLU GLU A A 175 175 . 78.795  116.215 38.960  1.00 57.76
1 . .
ATOM 1305 OE2   OE2   . GLU GLU GLU A A 175 175 . 77.179  115.545 37.586  1.00 54.38
1 . .
ATOM 1306 C     C     . GLU GLU GLU A A 175 175 . 79.378  112.934 35.294  1.00 34.72
1 . .
ATOM 1307 O     O     . GLU GLU GLU A A 175 175 . 78.487  112.477 36.027  1.00 35.55
1 . .
ATOM 1308 N     N     . SER SER SER A A 176 176 . 79.679  112.382 34.133  1.00 32.56
1 . .
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ATOM 1309 CA    CA    . SER SER SER A A 176 176 . 78.887  111.298 33.593  1.00 31.44
1 . .
ATOM 1310 CB    CB    . SER SER SER A A 176 176 . 77.571  111.837 33.013  1.00 32.51
1 . .
ATOM 1311 OG    OG    . SER SER SER A A 176 176 . 77.818  112.516 31.769  1.00 33.73
1 . .
ATOM 1312 C     C     . SER SER SER A A 176 176 . 79.687  110.565 32.500  1.00 30.29
1 . .
ATOM 1313 O     O     . SER SER SER A A 176 176 . 80.751  111.028 32.078  1.00 28.84
1 . .
ATOM 1314 N     N     . PHE PHE PHE A A 177 177 . 79.177  109.439 32.010  1.00 29.33
1 . .
ATOM 1315 CA    CA    . PHE PHE PHE A A 177 177 . 79.908  108.831 30.911  1.00 29.37
1 . .
ATOM 1316 CB    CB    . PHE PHE PHE A A 177 177 . 79.461  107.425 30.546  1.00 28.63
1 . .
ATOM 1317 CG    CG    . PHE PHE PHE A A 177 177 . 80.381  106.812 29.527  1.00 28.60
1 . .
ATOM 1318 CD1   CD1   . PHE PHE PHE A A 177 177 . 81.629  106.312 29.921  1.00 25.28
1 . .
ATOM 1319 CE1   CE1   . PHE PHE PHE A A 177 177 . 82.554  105.816 28.968  1.00 25.37
1 . .
ATOM 1320 CZ    CZ    . PHE PHE PHE A A 177 177 . 82.260  105.871 27.641  1.00 24.62
1 . .
ATOM 1321 CE2   CE2   . PHE PHE PHE A A 177 177 . 80.980  106.379 27.223  1.00 30.16
1 . .
ATOM 1322 CD2   CD2   . PHE PHE PHE A A 177 177 . 80.069  106.872 28.167  1.00 26.74
1 . .
ATOM 1323 C     C     . PHE PHE PHE A A 177 177 . 79.865  109.764 29.702  1.00 29.44
1 . .
ATOM 1324 O     O     . PHE PHE PHE A A 177 177 . 80.883  110.021 29.048  1.00 27.88
1 . .
ATOM 1325 N     N     . ARG ARG ARG A A 178 178 . 78.669  110.276 29.415  1.00 29.65
1 . .
ATOM 1326 CA    CA    . ARG ARG ARG A A 178 178 . 78.520  111.140 28.270  1.00 30.39
1 . .
ATOM 1327 CB    CB    . ARG ARG ARG A A 178 178 . 77.075  111.590 28.187  1.00 31.72
1 . .
ATOM 1328 CG    CG    . ARG ARG ARG A A 178 178 . 76.741  112.512 27.043  1.00 37.66
1 . .
ATOM 1329 CD    CD    . ARG ARG ARG A A 178 178 . 75.238  113.005 27.165  1.00 46.38
1 . .
ATOM 1330 NE    NE    . ARG ARG ARG A A 178 178 . 74.719  113.569 25.915  1.00 53.22
1 . .
ATOM 1331 CZ    CZ    . ARG ARG ARG A A 178 178 . 74.710  114.882 25.607  1.00 58.88
1 . .
ATOM 1332 NH1   NH1   . ARG ARG ARG A A 178 178 . 74.210  115.296 24.416  1.00 58.53
1 . .
ATOM 1333 NH2   NH2   . ARG ARG ARG A A 178 178 . 75.205  115.794 26.476  1.00 59.86
1 . .
ATOM 1334 C     C     . ARG ARG ARG A A 178 178 . 79.471  112.361 28.418  1.00 30.03
1 . .
ATOM 1335 O     O     . ARG ARG ARG A A 178 178 . 80.040  112.826 27.401  1.00 29.72
1 . .
ATOM 1336 N     N     . ASP ASP ASP A A 179 179 . 79.625  112.886 29.653  1.00 28.17
1 . .
ATOM 1337 CA    CA    . ASP ASP ASP A A 179 179 . 80.497  114.037 29.880  1.00 28.24
1 . .
ATOM 1338 CB    CB    . ASP ASP ASP A A 179 179 . 80.169  114.734 31.243  1.00 29.88
1 . .
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ATOM 1339 CG    CG    . ASP ASP ASP A A 179 179 . 80.999  116.036 31.479  1.00 33.09
1 . .
ATOM 1340 OD1   OD1   . ASP ASP ASP A A 179 179 . 81.790  116.093 32.444  1.00 37.30
1 . .
ATOM 1341 OD2   OD2   . ASP ASP ASP A A 179 179 . 80.895  117.014 30.687  1.00 37.39
1 . .
ATOM 1342 C     C     . ASP ASP ASP A A 179 179 . 82.010  113.677 29.737  1.00 26.93
1 . .
ATOM 1343 O     O     . ASP ASP ASP A A 179 179 . 82.774  114.495 29.305  1.00 26.41
1 . .
ATOM 1344 N     N     . ALA ALA ALA A A 180 180 . 82.400  112.469 30.159  1.00 26.83
1 . .
ATOM 1345 CA    CA    . ALA ALA ALA A A 180 180 . 83.726  111.851 29.938  1.00 26.90
1 . .
ATOM 1346 CB    CB    . ALA ALA ALA A A 180 180 . 83.704  110.430 30.515  1.00 26.13
1 . .
ATOM 1347 C     C     . ALA ALA ALA A A 180 180 . 84.024  111.751 28.448  1.00 26.60
1 . .
ATOM 1348 O     O     . ALA ALA ALA A A 180 180 . 85.164  111.941 28.038  1.00 25.94
1 . .
ATOM 1349 N     N     . MET MET MET A A 181 181 . 82.987  111.496 27.636  1.00 26.65
1 . .
ATOM 1350 CA    CA    . MET MET MET A A 181 181 . 83.222  111.504 26.176  1.00 27.32
1 . .
ATOM 1351 CB    CB    . MET MET MET A A 181 181 . 82.036  110.949 25.359  1.00 27.97
1 . .
ATOM 1352 CG    CG    . MET MET MET A A 181 181 . 81.768  109.429 25.449  1.00 27.35
1 . .
ATOM 1353 SD    SD    . MET MET MET A A 181 181 . 83.278  108.495 25.255  1.00 28.80
1 . .
ATOM 1354 CE    CE    . MET MET MET A A 181 181 . 83.846  108.977 23.593  1.00 25.70
1 . .
ATOM 1355 C     C     . MET MET MET A A 181 181 . 83.669  112.884 25.648  1.00 27.83
1 . .
ATOM 1356 O     O     . MET MET MET A A 181 181 . 84.718  113.010 24.904  1.00 27.49
1 . .
ATOM 1357 N     N     . ARG ARG ARG A A 182 182 . 82.921  113.915 26.058  1.00 26.25
1 . .
ATOM 1358 CA    CA    . ARG ARG ARG A A 182 182 . 83.270  115.275 25.714  1.00 26.55
1 . .
ATOM 1359 CB    CB    . ARG ARG ARG A A 182 182 . 82.244  116.221 26.280  1.00 27.22
1 . .
ATOM 1360 CG    CG    . ARG ARG ARG A A 182 182 . 82.596  117.688 26.120  1.00 28.91
1 . .
ATOM 1361 CD    CD    . ARG ARG ARG A A 182 182 . 81.833  118.609 27.141  1.00 36.51
1 . .
ATOM 1362 NE    NE    . ARG ARG ARG A A 182 182 . 82.301  119.988 26.947  1.00 42.76
1 . .
ATOM 1363 CZ    CZ    . ARG ARG ARG A A 182 182 . 81.613  121.105 27.233  1.00 44.85
1 . .
ATOM 1364 NH1   NH1   . ARG ARG ARG A A 182 182 . 82.167  122.281 26.944  1.00 44.86
1 . .
ATOM 1365 NH2   NH2   . ARG ARG ARG A A 182 182 . 80.377  121.064 27.775  1.00 44.93
1 . .
ATOM 1366 C     C     . ARG ARG ARG A A 182 182 . 84.708  115.660 26.157  1.00 26.59
1 . .
ATOM 1367 O     O     . ARG ARG ARG A A 182 182 . 85.450  116.172 25.392  1.00 27.69
1 . .
ATOM 1368 N     N     . LEU LEU LEU A A 183 183 . 85.095  115.443 27.390  1.00 26.66
1 . .
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ATOM 1369 CA    CA    . LEU LEU LEU A A 183 183 . 86.401  115.822 27.860  1.00 25.80
1 . .
ATOM 1370 CB    CB    . LEU LEU LEU A A 183 183 . 86.513  115.435 29.358  1.00 27.01
1 . .
ATOM 1371 CG    CG    . LEU LEU LEU A A 183 183 . 86.230  116.569 30.377  1.00 25.70
1 . .
ATOM 1372 CD1   CD1   . LEU LEU LEU A A 183 183 . 84.815  117.032 30.220  1.00 27.40
1 . .
ATOM 1373 CD2   CD2   . LEU LEU LEU A A 183 183 . 86.457  116.105 31.837  1.00 23.33
1 . .
ATOM 1374 C     C     . LEU LEU LEU A A 183 183 . 87.482  115.136 27.063  1.00 26.42
1 . .
ATOM 1375 O     O     . LEU LEU LEU A A 183 183 . 88.448  115.773 26.662  1.00 27.08
1 . .
ATOM 1376 N     N     . GLY GLY GLY A A 184 184 . 87.293  113.829 26.820  1.00 25.93
1 . .
ATOM 1377 CA    CA    . GLY GLY GLY A A 184 184 . 88.238  113.017 26.052  1.00 25.30
1 . .
ATOM 1378 C     C     . GLY GLY GLY A A 184 184 . 88.387  113.510 24.632  1.00 24.98
1 . .
ATOM 1379 O     O     . GLY GLY GLY A A 184 184 . 89.537  113.689 24.136  1.00 24.09
1 . .
ATOM 1380 N     N     . ALA ALA ALA A A 185 185 . 87.259  113.797 23.981  1.00 22.95
1 . .
ATOM 1381 CA    CA    . ALA ALA ALA A A 185 185 . 87.341  114.288 22.632  1.00 23.44
1 . .
ATOM 1382 CB    CB    . ALA ALA ALA A A 185 185 . 85.948  114.286 21.921  1.00 22.05
1 . .
ATOM 1383 C     C     . ALA ALA ALA A A 185 185 . 87.975  115.682 22.549  1.00 24.56
1 . .
ATOM 1384 O     O     . ALA ALA ALA A A 185 185 . 88.776  115.959 21.627  1.00 24.57
1 . .
ATOM 1385 N     N     . GLU GLU GLU A A 186 186 . 87.592  116.572 23.462  1.00 25.78
1 . .
ATOM 1386 CA    CA    . GLU GLU GLU A A 186 186 . 88.166  117.928 23.410  1.00 26.97
1 . .
ATOM 1387 CB    CB    . GLU GLU GLU A A 186 186 . 87.458  118.920 24.309  1.00 27.44
1 . .
ATOM 1388 CG    CG    . GLU GLU GLU A A 186 186 . 85.963  119.048 24.034  1.00 29.20
1 . .
ATOM 1389 CD    CD    . GLU GLU GLU A A 186 186 . 85.325  119.997 25.037  1.00 32.63
1 . .
ATOM 1390 OE1   OE1   . GLU GLU GLU A A 186 186 . 86.036  120.410 25.989  1.00 37.79
1 . .
ATOM 1391 OE2   OE2   . GLU GLU GLU A A 186 186 . 84.148  120.367 24.864  1.00 30.86
1 . .
ATOM 1392 C     C     . GLU GLU GLU A A 186 186 . 89.679  117.904 23.677  1.00 26.76
1 . .
ATOM 1393 O     O     . GLU GLU GLU A A 186 186 . 90.396  118.674 23.070  1.00 26.63
1 . .
ATOM 1394 N     N     . VAL VAL VAL A A 187 187 . 90.148  117.034 24.563  1.00 26.29
1 . .
ATOM 1395 CA    CA    . VAL VAL VAL A A 187 187 . 91.580  116.938 24.819  1.00 25.59
1 . .
ATOM 1396 CB    CB    . VAL VAL VAL A A 187 187 . 91.850  116.099 25.998  1.00 25.27
1 . .
ATOM 1397 CG1   CG1   . VAL VAL VAL A A 187 187 . 93.414  115.963 26.172  1.00 24.89
1 . .
ATOM 1398 CG2   CG2   . VAL VAL VAL A A 187 187 . 91.240  116.779 27.247  1.00 26.19
1 . .
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ATOM 1399 C     C     . VAL VAL VAL A A 187 187 . 92.305  116.328 23.597  1.00 27.32
1 . .
ATOM 1400 O     O     . VAL VAL VAL A A 187 187 . 93.378  116.764 23.207  1.00 27.83
1 . .
ATOM 1401 N     N     . TYR TYR TYR A A 188 188 . 91.678  115.333 22.982  1.00 27.91
1 . .
ATOM 1402 CA    CA    . TYR TYR TYR A A 188 188 . 92.189  114.732 21.800  1.00 28.37
1 . .
ATOM 1403 CB    CB    . TYR TYR TYR A A 188 188 . 91.296  113.592 21.382  1.00 28.95
1 . .
ATOM 1404 CG    CG    . TYR TYR TYR A A 188 188 . 91.716  112.900 20.110  1.00 27.80
1 . .
ATOM 1405 CD1   CD1   . TYR TYR TYR A A 188 188 . 92.779  112.039 20.109  1.00 26.58
1 . .
ATOM 1406 CE1   CE1   . TYR TYR TYR A A 188 188 . 93.184  111.360 18.951  1.00 30.13
1 . .
ATOM 1407 CZ    CZ    . TYR TYR TYR A A 188 188 . 92.526  111.575 17.768  1.00 29.84
1 . .
ATOM 1408 OH    OH    . TYR TYR TYR A A 188 188 . 92.957  110.913 16.634  1.00 32.66
1 . .
ATOM 1409 CE2   CE2   . TYR TYR TYR A A 188 188 . 91.442  112.447 17.725  1.00 31.45
1 . .
ATOM 1410 CD2   CD2   . TYR TYR TYR A A 188 188 . 91.027  113.115 18.920  1.00 27.19
1 . .
ATOM 1411 C     C     . TYR TYR TYR A A 188 188 . 92.369  115.761 20.685  1.00 29.18
1 . .
ATOM 1412 O     O     . TYR TYR TYR A A 188 188 . 93.465  115.843 20.077  1.00 29.37
1 . .
ATOM 1413 N     N     . HIS HIS HIS A A 189 189 . 91.317  116.533 20.400  1.00 29.36
1 . .
ATOM 1414 CA    CA    . HIS HIS HIS A A 189 189 . 91.426  117.559 19.371  1.00 29.74
1 . .
ATOM 1415 CB    CB    . HIS HIS HIS A A 189 189 . 90.070  118.154 18.964  1.00 30.02
1 . .
ATOM 1416 CG    CG    . HIS HIS HIS A A 189 189 . 89.156  117.127 18.403  1.00 32.56
1 . .
ATOM 1417 ND1   ND1   . HIS HIS HIS A A 189 189 . 87.899  116.882 18.916  1.00 35.24
1 . .
ATOM 1418 CE1   CE1   . HIS HIS HIS A A 189 189 . 87.344  115.883 18.243  1.00 34.02
1 . .
ATOM 1419 NE2   NE2   . HIS HIS HIS A A 189 189 . 88.200  115.474 17.322  1.00 32.44
1 . .
ATOM 1420 CD2   CD2   . HIS HIS HIS A A 189 189 . 89.333  116.248 17.388  1.00 32.80
1 . .
ATOM 1421 C     C     . HIS HIS HIS A A 189 189 . 92.374  118.650 19.728  1.00 29.18
1 . .
ATOM 1422 O     O     . HIS HIS HIS A A 189 189 . 92.948  119.211 18.829  1.00 29.23
1 . .
ATOM 1423 N     N     . THR THR THR A A 190 190 . 92.510  118.963 21.019  1.00 29.40
1 . .
ATOM 1424 CA    CA    . THR THR THR A A 190 190 . 93.473  119.978 21.476  1.00 29.82
1 . .
ATOM 1425 CB    CB    . THR THR THR A A 190 190 . 93.332  120.280 22.978  1.00 29.46
1 . .
ATOM 1426 OG1   OG1   . THR THR THR A A 190 190 . 92.018  120.800 23.218  1.00 30.61
1 . .
ATOM 1427 CG2   CG2   . THR THR THR A A 190 190 . 94.333  121.371 23.412  1.00 28.13
1 . .
ATOM 1428 C     C     . THR THR THR A A 190 190 . 94.889  119.460 21.168  1.00 30.22
1 . .
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ATOM 1429 O     O     . THR THR THR A A 190 190 . 95.705  120.188 20.645  1.00 30.75
1 . .
ATOM 1430 N     N     . LEU LEU LEU A A 191 191 . 95.119  118.182 21.459  1.00 30.07
1 . .
ATOM 1431 CA    CA    . LEU LEU LEU A A 191 191 . 96.398  117.559 21.284  1.00 30.73
1 . .
ATOM 1432 CB    CB    . LEU LEU LEU A A 191 191 . 96.354  116.169 21.903  1.00 30.43
1 . .
ATOM 1433 CG    CG    . LEU LEU LEU A A 191 191 . 97.466  115.178 21.595  1.00 28.12
1 . .
ATOM 1434 CD1   CD1   . LEU LEU LEU A A 191 191 . 98.842  115.642 22.135  1.00 27.33
1 . .
ATOM 1435 CD2   CD2   . LEU LEU LEU A A 191 191 . 97.054  113.904 22.250  1.00 25.99
1 . .
ATOM 1436 C     C     . LEU LEU LEU A A 191 191 . 96.810  117.521 19.798  1.00 31.79
1 . .
ATOM 1437 O     O     . LEU LEU LEU A A 191 191 . 98.004  117.645 19.449  1.00 32.57
1 . .
ATOM 1438 N     N     . LYS LYS LYS A A 192 192 . 95.818  117.411 18.922  1.00 31.74
1 . .
ATOM 1439 CA    CA    . LYS LYS LYS A A 192 192 . 96.109  117.480 17.511  1.00 31.94
1 . .
ATOM 1440 CB    CB    . LYS LYS LYS A A 192 192 . 94.854  117.257 16.642  1.00 31.34
1 . .
ATOM 1441 CG    CG    . LYS LYS LYS A A 192 192 . 95.134  116.836 15.143  1.00 31.70
1 . .
ATOM 1442 CD    CD    . LYS LYS LYS A A 192 192 . 93.819  116.602 14.311  1.00 30.30
1 . .
ATOM 1443 CE    CE    . LYS LYS LYS A A 192 192 . 94.206  116.417 12.783  1.00 36.16
1 . .
ATOM 1444 NZ    NZ    . LYS LYS LYS A A 192 192 . 93.106  116.050 11.804  1.00 36.61
1 . .
ATOM 1445 C     C     . LYS LYS LYS A A 192 192 . 96.814  118.818 17.177  1.00 32.81
1 . .
ATOM 1446 O     O     . LYS LYS LYS A A 192 192 . 97.813  118.806 16.440  1.00 32.84
1 . .
ATOM 1447 N     N     . GLY GLY GLY A A 193 193 . 96.250  119.928 17.681  1.00 32.69
1 . .
ATOM 1448 CA    CA    . GLY GLY GLY A A 193 193 . 96.813  121.293 17.630  1.00 32.32
1 . .
ATOM 1449 C     C     . GLY GLY GLY A A 193 193 . 98.187  121.395 18.303  1.00 33.15
1 . .
ATOM 1450 O     O     . GLY GLY GLY A A 193 193 . 99.090  121.949 17.727  1.00 33.91
1 . .
ATOM 1451 N     N     . VAL VAL VAL A A 194 194 . 98.377  120.817 19.485  1.00 32.53
1 . .
ATOM 1452 CA    CA    . VAL VAL VAL A A 194 194 . 99.689  120.877 20.127  1.00 32.53
1 . .
ATOM 1453 CB    CB    . VAL VAL VAL A A 194 194 . 99.625  120.256 21.518  1.00 32.37
1 . .
ATOM 1454 CG1   CG1   . VAL VAL VAL A A 194 194 . 101.035 119.941 22.070  1.00 31.63
1 . .
ATOM 1455 CG2   CG2   . VAL VAL VAL A A 194 194 . 98.817  121.149 22.458  1.00 30.72
1 . .
ATOM 1456 C     C     . VAL VAL VAL A A 194 194 . 100.778 120.167 19.302  1.00 34.09
1 . .
ATOM 1457 O     O     . VAL VAL VAL A A 194 194 . 101.872 120.738 19.036  1.00 34.87
1 . .
ATOM 1458 N     N     . ILE ILE ILE A A 195 195 . 100.471 118.937 18.880  1.00 33.60
1 . .
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ATOM 1459 CA    CA    . ILE ILE ILE A A 195 195 . 101.355 118.159 18.049  1.00 33.02
1 . .
ATOM 1460 CB    CB    . ILE ILE ILE A A 195 195 . 100.864 116.774 17.933  1.00 32.17
1 . .
ATOM 1461 CG1   CG1   . ILE ILE ILE A A 195 195 . 101.020 116.034 19.246  1.00 32.09
1 . .
ATOM 1462 CD1   CD1   . ILE ILE ILE A A 195 195 . 100.307 114.567 19.186  1.00 32.70
1 . .
ATOM 1463 CG2   CG2   . ILE ILE ILE A A 195 195 . 101.586 116.041 16.849  1.00 32.11
1 . .
ATOM 1464 C     C     . ILE ILE ILE A A 195 195 . 101.562 118.786 16.665  1.00 33.96
1 . .
ATOM 1465 O     O     . ILE ILE ILE A A 195 195 . 102.715 118.911 16.194  1.00 34.24
1 . .
ATOM 1466 N     N     . LYS LYS LYS A A 196 196 . 100.483 119.227 16.035  1.00 34.95
1 . .
ATOM 1467 CA    CA    . LYS LYS LYS A A 196 196 . 100.632 120.043 14.829  1.00 37.59
1 . .
ATOM 1468 CB    CB    . LYS LYS LYS A A 196 196 . 99.292  120.486 14.224  1.00 37.78
1 . .
ATOM 1469 CG    CG    . LYS LYS LYS A A 196 196 . 99.504  121.213 12.861  1.00 41.78
1 . .
ATOM 1470 CD    CD    . LYS LYS LYS A A 196 196 . 98.276  122.065 12.460  1.00 47.33
1 . .
ATOM 1471 CE    CE    . LYS LYS LYS A A 196 196 . 98.717  123.494 12.034  1.00 51.83
1 . .
ATOM 1472 NZ    NZ    . LYS LYS LYS A A 196 196 . 99.347  124.305 13.157  1.00 51.31
1 . .
ATOM 1473 C     C     . LYS LYS LYS A A 196 196 . 101.609 121.252 15.013  1.00 37.99
1 . .
ATOM 1474 O     O     . LYS LYS LYS A A 196 196 . 102.571 121.365 14.261  1.00 38.77
1 . .
ATOM 1475 N     N     . ASP ASP ASP A A 197 197 . 101.370 122.135 15.990  1.00 38.68
1 . .
ATOM 1476 CA    CA    . ASP ASP ASP A A 197 197 . 102.194 123.346 16.132  1.00 39.27
1 . .
ATOM 1477 CB    CB    . ASP ASP ASP A A 197 197 . 101.638 124.305 17.214  1.00 39.52
1 . .
ATOM 1478 CG    CG    . ASP ASP ASP A A 197 197 . 100.184 124.836 16.929  1.00 43.03
1 . .
ATOM 1479 OD1   OD1   . ASP ASP ASP A A 197 197 . 99.511  125.295 17.928  1.00 42.12
1 . .
ATOM 1480 OD2   OD2   . ASP ASP ASP A A 197 197 . 99.707  124.826 15.748  1.00 46.91
1 . .
ATOM 1481 C     C     . ASP ASP ASP A A 197 197 . 103.673 122.987 16.447  1.00 39.40
1 . .
ATOM 1482 O     O     . ASP ASP ASP A A 197 197 . 104.569 123.804 16.267  1.00 40.38
1 . .
ATOM 1483 N     N     . LYS LYS LYS A A 198 198 . 103.941 121.778 16.923  1.00 39.15
1 . .
ATOM 1484 CA    CA    . LYS LYS LYS A A 198 198 . 105.271 121.482 17.400  1.00 39.60
1 . .
ATOM 1485 CB    CB    . LYS LYS LYS A A 198 198 . 105.205 120.896 18.810  1.00 38.86
1 . .
ATOM 1486 CG    CG    . LYS LYS LYS A A 198 198 . 106.573 121.039 19.548  1.00 42.25
1 . .
ATOM 1487 CD    CD    . LYS LYS LYS A A 198 198 . 106.478 120.596 21.018  1.00 42.73
1 . .
ATOM 1488 CE    CE    . LYS LYS LYS A A 198 198 . 107.843 120.305 21.638  1.00 45.29
1 . .
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ATOM 1489 NZ    NZ    . LYS LYS LYS A A 198 198 . 107.698 119.397 22.866  1.00 45.71
1 . .
ATOM 1490 C     C     . LYS LYS LYS A A 198 198 . 106.080 120.578 16.471  1.00 40.26
1 . .
ATOM 1491 O     O     . LYS LYS LYS A A 198 198 . 107.304 120.731 16.331  1.00 41.47
1 . .
ATOM 1492 N     N     . TYR TYR TYR A A 199 199 . 105.401 119.604 15.865  1.00 40.10
1 . .
ATOM 1493 CA    CA    . TYR TYR TYR A A 199 199 . 106.056 118.657 14.989  1.00 39.16
1 . .
ATOM 1494 CB    CB    . TYR TYR TYR A A 199 199 . 105.846 117.277 15.555  1.00 38.79
1 . .
ATOM 1495 CG    CG    . TYR TYR TYR A A 199 199 . 106.624 117.090 16.835  1.00 38.07
1 . .
ATOM 1496 CD1   CD1   . TYR TYR TYR A A 199 199 . 105.979 116.946 18.056  1.00 35.32
1 . .
ATOM 1497 CE1   CE1   . TYR TYR TYR A A 199 199 . 106.703 116.783 19.247  1.00 37.02
1 . .
ATOM 1498 CZ    CZ    . TYR TYR TYR A A 199 199 . 108.097 116.767 19.179  1.00 37.71
1 . .
ATOM 1499 OH    OH    . TYR TYR TYR A A 199 199 . 108.851 116.624 20.300  1.00 39.64
1 . .
ATOM 1500 CE2   CE2   . TYR TYR TYR A A 199 199 . 108.746 116.926 17.973  1.00 38.79
1 . .
ATOM 1501 CD2   CD2   . TYR TYR TYR A A 199 199 . 108.030 117.077 16.814  1.00 36.19
1 . .
ATOM 1502 C     C     . TYR TYR TYR A A 199 199 . 105.705 118.746 13.488  1.00 38.91
1 . .
ATOM 1503 O     O     . TYR TYR TYR A A 199 199 . 106.409 118.180 12.675  1.00 39.20
1 . .
ATOM 1504 N     N     . GLY GLY GLY A A 200 200 . 104.652 119.482 13.132  1.00 38.36
1 . .
ATOM 1505 CA    CA    . GLY GLY GLY A A 200 200 . 104.194 119.560 11.736  1.00 37.45
1 . .
ATOM 1506 C     C     . GLY GLY GLY A A 200 200 . 102.907 118.782 11.579  1.00 36.90
1 . .
ATOM 1507 O     O     . GLY GLY GLY A A 200 200 . 102.595 117.963 12.426  1.00 34.03
1 . .
ATOM 1508 N     N     . LYS LYS LYS A A 201 201 . 102.164 119.045 10.498  1.00 37.80
1 . .
ATOM 1509 CA    CA    . LYS LYS LYS A A 201 201 . 100.923 118.306 10.203  1.00 39.83
1 . .
ATOM 1510 CB    CB    . LYS LYS LYS A A 201 201 . 100.141 118.985 9.066   1.00 41.41
1 . .
ATOM 1511 CG    CG    . LYS LYS LYS A A 201 201 . 101.053 119.337 7.822   1.00 46.83
1 . .
ATOM 1512 CD    CD    . LYS LYS LYS A A 201 201 . 100.377 120.232 6.680   1.00 50.89
1 . .
ATOM 1513 CE    CE    . LYS LYS LYS A A 201 201 . 101.123 120.151 5.282   1.00 49.57
1 . .
ATOM 1514 NZ    NZ    . LYS LYS LYS A A 201 201 . 102.558 120.632 5.243   1.00 48.27
1 . .
ATOM 1515 C     C     . LYS LYS LYS A A 201 201 . 101.185 116.796 9.919   1.00 39.17
1 . .
ATOM 1516 O     O     . LYS LYS LYS A A 201 201 . 100.372 115.927 10.275  1.00 38.47
1 . .
ATOM 1517 N     N     . ASP ASP ASP A A 202 202 . 102.356 116.486 9.355   1.00 38.06
1 . .
ATOM 1518 CA    CA    . ASP ASP ASP A A 202 202 . 102.764 115.107 9.108   1.00 37.79
1 . .
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ATOM 1519 CB    CB    . ASP ASP ASP A A 202 202 . 104.143 115.087 8.447   1.00 39.43
1 . .
ATOM 1520 CG    CG    . ASP ASP ASP A A 202 202 . 105.127 116.001 9.184   1.00 44.43
1 . .
ATOM 1521 OD1   OD1   . ASP ASP ASP A A 202 202 . 105.134 117.233 8.874   1.00 45.78
1 . .
ATOM 1522 OD2   OD2   . ASP ASP ASP A A 202 202 . 105.826 115.493 10.131  1.00 49.83
1 . .
ATOM 1523 C     C     . ASP ASP ASP A A 202 202 . 102.830 114.272 10.401  1.00 35.97
1 . .
ATOM 1524 O     O     . ASP ASP ASP A A 202 202 . 102.816 113.017 10.346  1.00 35.16
1 . .
ATOM 1525 N     N     . ALA ALA ALA A A 203 203 . 102.940 114.938 11.557  1.00 33.30
1 . .
ATOM 1526 CA    CA    . ALA ALA ALA A A 203 203 . 102.967 114.197 12.826  1.00 32.12
1 . .
ATOM 1527 CB    CB    . ALA ALA ALA A A 203 203 . 103.746 114.945 13.852  1.00 31.08
1 . .
ATOM 1528 C     C     . ALA ALA ALA A A 203 203 . 101.555 113.898 13.370  1.00 32.37
1 . .
ATOM 1529 O     O     . ALA ALA ALA A A 203 203 . 101.431 113.255 14.407  1.00 32.09
1 . .
ATOM 1530 N     N     . THR THR THR A A 204 204 . 100.511 114.359 12.674  1.00 32.01
1 . .
ATOM 1531 CA    CA    . THR THR THR A A 204 204 . 99.104  114.135 13.105  1.00 32.91
1 . .
ATOM 1532 CB    CB    . THR THR THR A A 204 204 . 98.283  115.396 12.881  1.00 32.67
1 . .
ATOM 1533 OG1   OG1   . THR THR THR A A 204 204 . 98.290  115.721 11.476  1.00 32.75
1 . .
ATOM 1534 CG2   CG2   . THR THR THR A A 204 204 . 98.904  116.554 13.686  1.00 35.34
1 . .
ATOM 1535 C     C     . THR THR THR A A 204 204 . 98.338  112.967 12.402  1.00 32.77
1 . .
ATOM 1536 O     O     . THR THR THR A A 204 204 . 97.109  112.877 12.474  1.00 32.37
1 . .
ATOM 1537 N     N     . ASN ASN ASN A A 205 205 . 99.048  112.094 11.696  1.00 31.77
1 . .
ATOM 1538 CA    CA    . ASN ASN ASN A A 205 205 . 98.397  110.831 11.314  1.00 31.38
1 . .
ATOM 1539 CB    CB    . ASN ASN ASN A A 205 205 . 99.051  110.212 10.057  1.00 30.88
1 . .
ATOM 1540 CG    CG    . ASN ASN ASN A A 205 205 . 99.115  111.211 8.915   1.00 33.44
1 . .
ATOM 1541 OD1   OD1   . ASN ASN ASN A A 205 205 . 98.041  111.747 8.438   1.00 30.83
1 . .
ATOM 1542 ND2   ND2   . ASN ASN ASN A A 205 205 . 100.380 111.569 8.506   1.00 32.91
1 . .
ATOM 1543 C     C     . ASN ASN ASN A A 205 205 . 98.286  109.905 12.537  1.00 30.77
1 . .
ATOM 1544 O     O     . ASN ASN ASN A A 205 205 . 98.773  110.259 13.595  1.00 32.53
1 . .
ATOM 1545 N     N     . VAL VAL VAL A A 206 206 . 97.580  108.773 12.437  1.00 29.95
1 . .
ATOM 1546 CA    CA    . VAL VAL VAL A A 206 206 . 97.243  107.989 13.634  1.00 28.52
1 . .
ATOM 1547 CB    CB    . VAL VAL VAL A A 206 206 . 95.692  108.055 13.930  1.00 28.41
1 . .
ATOM 1548 CG1   CG1   . VAL VAL VAL A A 206 206 . 95.218  109.508 13.833  1.00 28.20
1 . .
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ATOM 1549 CG2   CG2   . VAL VAL VAL A A 206 206 . 94.882  107.128 12.930  1.00 25.93
1 . .
ATOM 1550 C     C     . VAL VAL VAL A A 206 206 . 97.693  106.564 13.475  1.00 28.37
1 . .
ATOM 1551 O     O     . VAL VAL VAL A A 206 206 . 97.868  106.088 12.341  1.00 28.33
1 . .
ATOM 1552 N     N     . GLY GLY GLY A A 207 207 . 97.869  105.876 14.605  1.00 28.37
1 . .
ATOM 1553 CA    CA    . GLY GLY GLY A A 207 207 . 98.260  104.465 14.620  1.00 27.08
1 . .
ATOM 1554 C     C     . GLY GLY GLY A A 207 207 . 97.019  103.622 14.757  1.00 27.20
1 . .
ATOM 1555 O     O     . GLY GLY GLY A A 207 207 . 95.892  104.152 14.544  1.00 26.40
1 . .
ATOM 1556 N     N     . ASP ASP ASP A A 208 208 . 97.216  102.325 15.097  1.00 26.16
1 . .
ATOM 1557 CA    CA    . ASP ASP ASP A A 208 208 . 96.143  101.342 14.966  1.00 27.73
1 . .
ATOM 1558 CB    CB    . ASP ASP ASP A A 208 208 . 96.645  99.895  15.168  1.00 28.13
1 . .
ATOM 1559 CG    CG    . ASP ASP ASP A A 208 208 . 97.622  99.447  14.057  1.00 29.74
1 . .
ATOM 1560 OD1   OD1   . ASP ASP ASP A A 208 208 . 97.671  100.109 12.977  1.00 29.12
1 . .
ATOM 1561 OD2   OD2   . ASP ASP ASP A A 208 208 . 98.323  98.417  14.270  1.00 29.75
1 . .
ATOM 1562 C     C     . ASP ASP ASP A A 208 208 . 94.904  101.612 15.828  1.00 26.91
1 . .
ATOM 1563 O     O     . ASP ASP ASP A A 208 208 . 93.817  101.219 15.480  1.00 26.76
1 . .
ATOM 1564 N     N     . GLU GLU GLU A A 209 209 . 95.088  102.303 16.929  1.00 27.75
1 . .
ATOM 1565 CA    CA    . GLU GLU GLU A A 209 209 . 94.038  102.520 17.899  1.00 28.90
1 . .
ATOM 1566 CB    CB    . GLU GLU GLU A A 209 209 . 94.567  102.133 19.292  1.00 29.22
1 . .
ATOM 1567 CG    CG    . GLU GLU GLU A A 209 209 . 94.955  100.675 19.355  1.00 30.94
1 . .
ATOM 1568 CD    CD    . GLU GLU GLU A A 209 209 . 95.032  100.135 20.746  1.00 34.99
1 . .
ATOM 1569 OE1   OE1   . GLU GLU GLU A A 209 209 . 95.375  98.949  20.886  1.00 35.42
1 . .
ATOM 1570 OE2   OE2   . GLU GLU GLU A A 209 209 . 94.730  100.861 21.712  1.00 36.07
1 . .
ATOM 1571 C     C     . GLU GLU GLU A A 209 209 . 93.440  103.921 17.884  1.00 29.03
1 . .
ATOM 1572 O     O     . GLU GLU GLU A A 209 209 . 92.576  104.249 18.744  1.00 29.80
1 . .
ATOM 1573 N     N     . GLY GLY GLY A A 210 210 . 93.851  104.743 16.914  1.00 28.90
1 . .
ATOM 1574 CA    CA    . GLY GLY GLY A A 210 210 . 93.232  106.099 16.730  1.00 28.39
1 . .
ATOM 1575 C     C     . GLY GLY GLY A A 210 210 . 94.049  107.251 17.303  1.00 27.91
1 . .
ATOM 1576 O     O     . GLY GLY GLY A A 210 210 . 93.762  108.424 17.036  1.00 27.96
1 . .
ATOM 1577 N     N     . GLY GLY GLY A A 211 211 . 95.071  106.930 18.087  1.00 28.43
1 . .
ATOM 1578 CA    CA    . GLY GLY GLY A A 211 211 . 95.949  107.953 18.731  1.00 29.13
1 . .
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ATOM 1579 C     C     . GLY GLY GLY A A 211 211 . 96.900  108.554 17.716  1.00 29.44
1 . .
ATOM 1580 O     O     . GLY GLY GLY A A 211 211 . 97.229  107.888 16.758  1.00 31.02
1 . .
ATOM 1581 N     N     . PHE PHE PHE A A 212 212 . 97.341  109.793 17.899  1.00 29.19
1 . .
ATOM 1582 CA    CA    . PHE PHE PHE A A 212 212 . 98.336  110.406 16.994  1.00 29.09
1 . .
ATOM 1583 CB    CB    . PHE PHE PHE A A 212 212 . 98.520  111.888 17.320  1.00 28.03
1 . .
ATOM 1584 CG    CG    . PHE PHE PHE A A 212 212 . 97.239  112.599 17.283  1.00 26.34
1 . .
ATOM 1585 CD1   CD1   . PHE PHE PHE A A 212 212 . 96.642  113.020 18.441  1.00 24.16
1 . .
ATOM 1586 CE1   CE1   . PHE PHE PHE A A 212 212 . 95.365  113.611 18.409  1.00 27.53
1 . .
ATOM 1587 CZ    CZ    . PHE PHE PHE A A 212 212 . 94.677  113.739 17.180  1.00 25.31
1 . .
ATOM 1588 CE2   CE2   . PHE PHE PHE A A 212 212 . 95.274  113.256 16.018  1.00 28.81
1 . .
ATOM 1589 CD2   CD2   . PHE PHE PHE A A 212 212 . 96.554  112.697 16.081  1.00 25.84
1 . .
ATOM 1590 C     C     . PHE PHE PHE A A 212 212 . 99.635  109.650 16.983  1.00 29.99
1 . .
ATOM 1591 O     O     . PHE PHE PHE A A 212 212 . 99.982  109.035 17.969  1.00 30.81
1 . .
ATOM 1592 N     N     . ALA ALA ALA A A 213 213 . 100.301 109.623 15.842  1.00 29.81
1 . .
ATOM 1593 CA    CA    . ALA ALA ALA A A 213 213 . 101.520 108.853 15.767  1.00 31.97
1 . .
ATOM 1594 CB    CB    . ALA ALA ALA A A 213 213 . 101.423 107.799 14.645  1.00 32.74
1 . .
ATOM 1595 C     C     . ALA ALA ALA A A 213 213 . 102.660 109.806 15.484  1.00 31.61
1 . .
ATOM 1596 O     O     . ALA ALA ALA A A 213 213 . 103.201 109.802 14.379  1.00 32.05
1 . .
ATOM 1597 N     N     . PRO PRO PRO A A 214 214 . 102.967 110.672 16.434  1.00 31.29
1 . .
ATOM 1598 CA    CA    . PRO PRO PRO A A 214 214 . 103.996 111.655 16.097  1.00 32.73
1 . .
ATOM 1599 CB    CB    . PRO PRO PRO A A 214 214 . 103.942 112.650 17.261  1.00 30.92
1 . .
ATOM 1600 CG    CG    . PRO PRO PRO A A 214 214 . 103.461 111.829 18.416  1.00 31.29
1 . .
ATOM 1601 CD    CD    . PRO PRO PRO A A 214 214 . 102.624 110.689 17.857  1.00 31.55
1 . .
ATOM 1602 C     C     . PRO PRO PRO A A 214 214 . 105.383 111.030 16.007  1.00 34.15
1 . .
ATOM 1603 O     O     . PRO PRO PRO A A 214 214 . 105.662 110.049 16.644  1.00 33.55
1 . .
ATOM 1604 N     N     . ASN ASN ASN A A 215 215 . 106.243 111.675 15.244  1.00 37.50
1 . .
ATOM 1605 CA    CA    . ASN ASN ASN A A 215 215 . 107.569 111.210 14.923  1.00 40.19
1 . .
ATOM 1606 CB    CB    . ASN ASN ASN A A 215 215 . 108.008 111.907 13.625  1.00 41.90
1 . .
ATOM 1607 CG    CG    . ASN ASN ASN A A 215 215 . 107.303 113.292 13.413  1.00 46.62
1 . .
ATOM 1608 OD1   OD1   . ASN ASN ASN A A 215 215 . 107.942 114.336 13.514  1.00 51.87
1 . .
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ATOM 1609 ND2   ND2   . ASN ASN ASN A A 215 215 . 105.982 113.281 13.106  1.00 49.84
1 . .
ATOM 1610 C     C     . ASN ASN ASN A A 215 215 . 108.552 111.486 16.062  1.00 40.57
1 . .
ATOM 1611 O     O     . ASN ASN ASN A A 215 215 . 109.441 112.327 15.932  1.00 41.42
1 . .
ATOM 1612 N     N     . ILE ILE ILE A A 216 216 . 108.380 110.781 17.180  1.00 40.73
1 . .
ATOM 1613 CA    CA    . ILE ILE ILE A A 216 216 . 109.182 110.991 18.415  1.00 40.57
1 . .
ATOM 1614 CB    CB    . ILE ILE ILE A A 216 216 . 108.390 111.677 19.573  1.00 39.57
1 . .
ATOM 1615 CG1   CG1   . ILE ILE ILE A A 216 216 . 106.994 111.051 19.747  1.00 39.87
1 . .
ATOM 1616 CD1   CD1   . ILE ILE ILE A A 216 216 . 106.396 111.210 21.156  1.00 40.24
1 . .
ATOM 1617 CG2   CG2   . ILE ILE ILE A A 216 216 . 108.253 113.122 19.269  1.00 38.19
1 . .
ATOM 1618 C     C     . ILE ILE ILE A A 216 216 . 109.745 109.690 18.938  1.00 41.12
1 . .
ATOM 1619 O     O     . ILE ILE ILE A A 216 216 . 109.295 108.601 18.542  1.00 41.65
1 . .
ATOM 1620 N     N     . LEU LEU LEU A A 217 217 . 110.749 109.812 19.804  1.00 41.88
1 . .
ATOM 1621 CA    CA    . LEU LEU LEU A A 217 217 . 111.361 108.653 20.442  1.00 41.91
1 . .
ATOM 1622 CB    CB    . LEU LEU LEU A A 217 217 . 112.872 108.614 20.173  1.00 41.88
1 . .
ATOM 1623 CG    CG    . LEU LEU LEU A A 217 217 . 113.699 107.547 20.908  1.00 44.33
1 . .
ATOM 1624 CD1   CD1   . LEU LEU LEU A A 217 217 . 113.258 106.117 20.576  1.00 45.44
1 . .
ATOM 1625 CD2   CD2   . LEU LEU LEU A A 217 217 . 115.194 107.727 20.605  1.00 47.48
1 . .
ATOM 1626 C     C     . LEU LEU LEU A A 217 217 . 111.103 108.605 21.949  1.00 41.43
1 . .
ATOM 1627 O     O     . LEU LEU LEU A A 217 217 . 110.809 107.533 22.482  1.00 42.57
1 . .
ATOM 1628 N     N     . GLU GLU GLU A A 218 218 . 111.234 109.746 22.626  1.00 40.85
1 . .
ATOM 1629 CA    CA    . GLU GLU GLU A A 218 218 . 111.141 109.828 24.118  1.00 40.56
1 . .
ATOM 1630 CB    CB    . GLU GLU GLU A A 218 218 . 111.709 111.142 24.678  1.00 40.97
1 . .
ATOM 1631 CG    CG    . GLU GLU GLU A A 218 218 . 112.977 111.689 24.001  1.00 47.01
1 . .
ATOM 1632 CD    CD    . GLU GLU GLU A A 218 218 . 114.232 111.243 24.699  1.00 53.27
1 . .
ATOM 1633 OE1   OE1   . GLU GLU GLU A A 218 218 . 115.348 111.733 24.359  1.00 55.68
1 . .
ATOM 1634 OE2   OE2   . GLU GLU GLU A A 218 218 . 114.098 110.392 25.603  1.00 57.59
1 . .
ATOM 1635 C     C     . GLU GLU GLU A A 218 218 . 109.694 109.678 24.651  1.00 39.44
1 . .
ATOM 1636 O     O     . GLU GLU GLU A A 218 218 . 108.784 110.414 24.258  1.00 36.87
1 . .
ATOM 1637 N     N     . ASN ASN ASN A A 219 219 . 109.553 108.769 25.614  1.00 39.67
1 . .
ATOM 1638 CA    CA    . ASN ASN ASN A A 219 219 . 108.278 108.408 26.194  1.00 39.87
1 . .
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ATOM 1639 CB    CB    . ASN ASN ASN A A 219 219 . 108.375 107.020 26.869  1.00 39.25
1 . .
ATOM 1640 CG    CG    . ASN ASN ASN A A 219 219 . 108.784 105.919 25.885  1.00 37.71
1 . .
ATOM 1641 OD1   OD1   . ASN ASN ASN A A 219 219 . 109.957 105.429 25.859  1.00 37.20
1 . .
ATOM 1642 ND2   ND2   . ASN ASN ASN A A 219 219 . 107.835 105.546 25.039  1.00 32.43
1 . .
ATOM 1643 C     C     . ASN ASN ASN A A 219 219 . 107.818 109.518 27.132  1.00 40.68
1 . .
ATOM 1644 O     O     . ASN ASN ASN A A 219 219 . 106.614 109.831 27.199  1.00 40.61
1 . .
ATOM 1645 N     N     . SER SER SER A A 220 220 . 108.785 110.151 27.809  1.00 41.31
1 . .
ATOM 1646 CA    CA    . SER SER SER A A 220 220 . 108.533 111.410 28.538  1.00 41.66
1 . .
ATOM 1647 CB    CB    . SER SER SER A A 220 220 . 109.843 111.951 29.162  1.00 41.89
1 . .
ATOM 1648 OG    OG    . SER SER SER A A 220 220 . 110.770 112.356 28.147  1.00 42.68
1 . .
ATOM 1649 C     C     . SER SER SER A A 220 220 . 107.898 112.494 27.634  1.00 41.67
1 . .
ATOM 1650 O     O     . SER SER SER A A 220 220 . 107.009 113.246 28.057  1.00 41.84
1 . .
ATOM 1651 N     N     . GLU GLU GLU A A 221 221 . 108.361 112.578 26.390  1.00 41.15
1 . .
ATOM 1652 CA    CA    . GLU GLU GLU A A 221 221 . 107.853 113.616 25.496  1.00 40.98
1 . .
ATOM 1653 CB    CB    . GLU GLU GLU A A 221 221 . 108.749 113.711 24.247  1.00 41.21
1 . .
ATOM 1654 CG    CG    . GLU GLU GLU A A 221 221 . 108.186 114.573 23.105  1.00 42.01
1 . .
ATOM 1655 CD    CD    . GLU GLU GLU A A 221 221 . 108.108 116.060 23.465  1.00 44.32
1 . .
ATOM 1656 OE1   OE1   . GLU GLU GLU A A 221 221 . 108.560 116.398 24.583  1.00 46.72
1 . .
ATOM 1657 OE2   OE2   . GLU GLU GLU A A 221 221 . 107.590 116.882 22.659  1.00 43.83
1 . .
ATOM 1658 C     C     . GLU GLU GLU A A 221 221 . 106.374 113.394 25.109  1.00 39.83
1 . .
ATOM 1659 O     O     . GLU GLU GLU A A 221 221 . 105.632 114.338 24.859  1.00 39.69
1 . .
ATOM 1660 N     N     . ALA ALA ALA A A 222 222 . 105.989 112.131 25.006  1.00 38.68
1 . .
ATOM 1661 CA    CA    . ALA ALA ALA A A 222 222 . 104.570 111.752 24.792  1.00 37.75
1 . .
ATOM 1662 CB    CB    . ALA ALA ALA A A 222 222 . 104.465 110.247 24.569  1.00 35.88
1 . .
ATOM 1663 C     C     . ALA ALA ALA A A 222 222 . 103.730 112.183 25.987  1.00 37.57
1 . .
ATOM 1664 O     O     . ALA ALA ALA A A 222 222 . 102.688 112.835 25.843  1.00 37.71
1 . .
ATOM 1665 N     N     . LEU LEU LEU A A 223 223 . 104.213 111.856 27.184  1.00 37.79
1 . .
ATOM 1666 CA    CA    . LEU LEU LEU A A 223 223 . 103.543 112.266 28.439  1.00 37.71
1 . .
ATOM 1667 CB    CB    . LEU LEU LEU A A 223 223 . 104.349 111.762 29.636  1.00 37.38
1 . .
ATOM 1668 CG    CG    . LEU LEU LEU A A 223 223 . 104.167 110.287 29.913  1.00 37.89
1 . .
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ATOM 1669 CD1   CD1   . LEU LEU LEU A A 223 223 . 105.189 109.762 30.911  1.00 38.50
1 . .
ATOM 1670 CD2   CD2   . LEU LEU LEU A A 223 223 . 102.732 110.098 30.411  1.00 38.25
1 . .
ATOM 1671 C     C     . LEU LEU LEU A A 223 223 . 103.407 113.785 28.513  1.00 37.87
1 . .
ATOM 1672 O     O     . LEU LEU LEU A A 223 223 . 102.314 114.327 28.779  1.00 38.15
1 . .
ATOM 1673 N     N     . GLU GLU GLU A A 224 224 . 104.527 114.451 28.233  1.00 37.71
1 . .
ATOM 1674 CA    CA    . GLU GLU GLU A A 224 224 . 104.568 115.899 28.093  1.00 38.18
1 . .
ATOM 1675 CB    CB    . GLU GLU GLU A A 224 224 . 105.942 116.410 27.627  1.00 39.06
1 . .
ATOM 1676 CG    CG    . GLU GLU GLU A A 224 224 . 106.058 117.968 27.606  1.00 43.69
1 . .
ATOM 1677 CD    CD    . GLU GLU GLU A A 224 224 . 105.890 118.643 28.996  1.00 49.83
1 . .
ATOM 1678 OE1   OE1   . GLU GLU GLU A A 224 224 . 104.996 119.539 29.138  1.00 52.79
1 . .
ATOM 1679 OE2   OE2   . GLU GLU GLU A A 224 224 . 106.642 118.260 29.942  1.00 52.32
1 . .
ATOM 1680 C     C     . GLU GLU GLU A A 224 224 . 103.504 116.441 27.153  1.00 37.74
1 . .
ATOM 1681 O     O     . GLU GLU GLU A A 224 224 . 102.824 117.429 27.489  1.00 37.03
1 . .
ATOM 1682 N     N     . LEU LEU LEU A A 225 225 . 103.389 115.813 25.984  1.00 36.66
1 . .
ATOM 1683 CA    CA    . LEU LEU LEU A A 225 225 . 102.451 116.284 24.986  1.00 36.36
1 . .
ATOM 1684 CB    CB    . LEU LEU LEU A A 225 225 . 102.657 115.511 23.666  1.00 35.74
1 . .
ATOM 1685 CG    CG    . LEU LEU LEU A A 225 225 . 103.827 115.863 22.734  1.00 36.30
1 . .
ATOM 1686 CD1   CD1   . LEU LEU LEU A A 225 225 . 103.803 114.848 21.636  1.00 34.69
1 . .
ATOM 1687 CD2   CD2   . LEU LEU LEU A A 225 225 . 103.725 117.264 22.122  1.00 34.67
1 . .
ATOM 1688 C     C     . LEU LEU LEU A A 225 225 . 100.995 116.172 25.508  1.00 35.29
1 . .
ATOM 1689 O     O     . LEU LEU LEU A A 225 225 . 100.168 117.043 25.293  1.00 35.70
1 . .
ATOM 1690 N     N     . VAL VAL VAL A A 226 226 . 100.710 115.083 26.196  1.00 35.12
1 . .
ATOM 1691 CA    CA    . VAL VAL VAL A A 226 226 . 99.372  114.806 26.695  1.00 35.14
1 . .
ATOM 1692 CB    CB    . VAL VAL VAL A A 226 226 . 99.297  113.334 27.170  1.00 35.05
1 . .
ATOM 1693 CG1   CG1   . VAL VAL VAL A A 226 226 . 97.956  112.990 27.787  1.00 33.13
1 . .
ATOM 1694 CG2   CG2   . VAL VAL VAL A A 226 226 . 99.595  112.405 25.990  1.00 34.46
1 . .
ATOM 1695 C     C     . VAL VAL VAL A A 226 226 . 99.049  115.809 27.810  1.00 35.84
1 . .
ATOM 1696 O     O     . VAL VAL VAL A A 226 226 . 97.934  116.377 27.841  1.00 34.80
1 . .
ATOM 1697 N     N     . LYS LYS LYS A A 227 227 . 100.031 116.049 28.707  1.00 36.33
1 . .
ATOM 1698 CA    CA    . LYS LYS LYS A A 227 227 . 99.819  116.990 29.829  1.00 36.86
1 . .
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ATOM 1699 CB    CB    . LYS LYS LYS A A 227 227 . 101.073 117.116 30.720  1.00 37.87
1 . .
ATOM 1700 CG    CG    . LYS LYS LYS A A 227 227 . 101.096 118.343 31.701  1.00 42.00
1 . .
ATOM 1701 CD    CD    . LYS LYS LYS A A 227 227 . 102.293 118.324 32.728  1.00 47.81
1 . .
ATOM 1702 CE    CE    . LYS LYS LYS A A 227 227 . 102.007 117.320 33.898  1.00 50.58
1 . .
ATOM 1703 NZ    NZ    . LYS LYS LYS A A 227 227 . 102.821 117.435 35.182  1.00 49.02
1 . .
ATOM 1704 C     C     . LYS LYS LYS A A 227 227 . 99.419  118.358 29.305  1.00 35.87
1 . .
ATOM 1705 O     O     . LYS LYS LYS A A 227 227 . 98.388  118.936 29.714  1.00 36.43
1 . .
ATOM 1706 N     N     . GLU GLU GLU A A 228 228 . 100.219 118.843 28.367  1.00 34.11
1 . .
ATOM 1707 CA    CA    . GLU GLU GLU A A 228 228 . 99.995  120.107 27.720  1.00 34.76
1 . .
ATOM 1708 CB    CB    . GLU GLU GLU A A 228 228 . 101.070 120.316 26.632  1.00 36.42
1 . .
ATOM 1709 CG    CG    . GLU GLU GLU A A 228 228 . 100.905 121.575 25.750  1.00 42.69
1 . .
ATOM 1710 CD    CD    . GLU GLU GLU A A 228 228 . 101.180 122.907 26.476  1.00 51.91
1 . .
ATOM 1711 OE1   OE1   . GLU GLU GLU A A 228 228 . 100.292 123.350 27.273  1.00 55.20
1 . .
ATOM 1712 OE2   OE2   . GLU GLU GLU A A 228 228 . 102.269 123.524 26.216  1.00 56.28
1 . .
ATOM 1713 C     C     . GLU GLU GLU A A 228 228 . 98.559  120.236 27.163  1.00 33.70
1 . .
ATOM 1714 O     O     . GLU GLU GLU A A 228 228 . 97.918  121.274 27.366  1.00 33.47
1 . .
ATOM 1715 N     N     . ALA ALA ALA A A 229 229 . 98.061  119.177 26.499  1.00 32.25
1 . .
ATOM 1716 CA    CA    . ALA ALA ALA A A 229 229 . 96.719  119.193 25.888  1.00 30.72
1 . .
ATOM 1717 CB    CB    . ALA ALA ALA A A 229 229 . 96.556  118.014 24.898  1.00 28.99
1 . .
ATOM 1718 C     C     . ALA ALA ALA A A 229 229 . 95.638  119.168 26.965  1.00 30.34
1 . .
ATOM 1719 O     O     . ALA ALA ALA A A 229 229 . 94.632  119.840 26.852  1.00 30.64
1 . .
ATOM 1720 N     N     . ILE ILE ILE A A 230 230 . 95.834  118.358 28.007  1.00 31.04
1 . .
ATOM 1721 CA    CA    . ILE ILE ILE A A 230 230 . 94.921  118.376 29.161  1.00 31.14
1 . .
ATOM 1722 CB    CB    . ILE ILE ILE A A 230 230 . 95.410  117.466 30.297  1.00 30.59
1 . .
ATOM 1723 CG1   CG1   . ILE ILE ILE A A 230 230 . 95.329  116.015 29.847  1.00 29.32
1 . .
ATOM 1724 CD1   CD1   . ILE ILE ILE A A 230 230 . 96.120  115.022 30.741  1.00 27.84
1 . .
ATOM 1725 CG2   CG2   . ILE ILE ILE A A 230 230 . 94.501  117.638 31.537  1.00 31.86
1 . .
ATOM 1726 C     C     . ILE ILE ILE A A 230 230 . 94.744  119.804 29.692  1.00 32.06
1 . .
ATOM 1727 O     O     . ILE ILE ILE A A 230 230 . 93.621  120.303 29.887  1.00 31.40
1 . .
ATOM 1728 N     N     . ASP ASP ASP A A 231 231 . 95.885  120.439 29.900  1.00 33.61
1 . .
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ATOM 1729 CA    CA    . ASP ASP ASP A A 231 231 . 96.003  121.782 30.442  1.00 35.35
1 . .
ATOM 1730 CB    CB    . ASP ASP ASP A A 231 231 . 97.515  122.078 30.755  1.00 36.46
1 . .
ATOM 1731 CG    CG    . ASP ASP ASP A A 231 231 . 98.090  121.126 31.889  1.00 40.98
1 . .
ATOM 1732 OD1   OD1   . ASP ASP ASP A A 231 231 . 99.321  121.146 32.282  1.00 42.69
1 . .
ATOM 1733 OD2   OD2   . ASP ASP ASP A A 231 231 . 97.268  120.324 32.410  1.00 46.99
1 . .
ATOM 1734 C     C     . ASP ASP ASP A A 231 231 . 95.383  122.802 29.496  1.00 35.12
1 . .
ATOM 1735 O     O     . ASP ASP ASP A A 231 231 . 94.576  123.626 29.914  1.00 35.67
1 . .
ATOM 1736 N     N     . LYS LYS LYS A A 232 232 . 95.699  122.723 28.205  1.00 34.73
1 . .
ATOM 1737 CA    CA    . LYS LYS LYS A A 232 232 . 95.164  123.703 27.283  1.00 35.33
1 . .
ATOM 1738 CB    CB    . LYS LYS LYS A A 232 232 . 95.888  123.587 25.936  1.00 35.90
1 . .
ATOM 1739 CG    CG    . LYS LYS LYS A A 232 232 . 95.723  124.796 25.030  1.00 41.54
1 . .
ATOM 1740 CD    CD    . LYS LYS LYS A A 232 232 . 96.534  124.675 23.738  1.00 49.57
1 . .
ATOM 1741 CE    CE    . LYS LYS LYS A A 232 232 . 95.750  125.315 22.583  1.00 54.20
1 . .
ATOM 1742 NZ    NZ    . LYS LYS LYS A A 232 232 . 96.379  124.941 21.287  1.00 57.32
1 . .
ATOM 1743 C     C     . LYS LYS LYS A A 232 232 . 93.629  123.558 27.105  1.00 35.60
1 . .
ATOM 1744 O     O     . LYS LYS LYS A A 232 232 . 92.928  124.519 26.714  1.00 34.86
1 . .
ATOM 1745 N     N     . ALA ALA ALA A A 233 233 . 93.115  122.361 27.387  1.00 35.10
1 . .
ATOM 1746 CA    CA    . ALA ALA ALA A A 233 233 . 91.698  122.073 27.150  1.00 34.89
1 . .
ATOM 1747 CB    CB    . ALA ALA ALA A A 233 233 . 91.464  120.531 26.862  1.00 34.82
1 . .
ATOM 1748 C     C     . ALA ALA ALA A A 233 233 . 90.925  122.531 28.335  1.00 34.21
1 . .
ATOM 1749 O     O     . ALA ALA ALA A A 233 233 . 89.702  122.686 28.268  1.00 34.06
1 . .
ATOM 1750 N     N     . GLY GLY GLY A A 234 234 . 91.663  122.774 29.427  1.00 34.71
1 . .
ATOM 1751 CA    CA    . GLY GLY GLY A A 234 234 . 91.075  123.322 30.651  1.00 33.46
1 . .
ATOM 1752 C     C     . GLY GLY GLY A A 234 234 . 90.697  122.270 31.670  1.00 33.86
1 . .
ATOM 1753 O     O     . GLY GLY GLY A A 234 234 . 89.901  122.540 32.568  1.00 33.83
1 . .
ATOM 1754 N     N     . TYR TYR TYR A A 235 235 . 91.283  121.072 31.580  1.00 34.14
1 . .
ATOM 1755 CA    CA    . TYR TYR TYR A A 235 235 . 90.844  119.996 32.439  1.00 34.06
1 . .
ATOM 1756 CB    CB    . TYR TYR TYR A A 235 235 . 90.155  118.923 31.587  1.00 34.03
1 . .
ATOM 1757 CG    CG    . TYR TYR TYR A A 235 235 . 88.902  119.371 30.837  1.00 32.92
1 . .
ATOM 1758 CD1   CD1   . TYR TYR TYR A A 235 235 . 88.860  119.308 29.433  1.00 34.66
1 . .
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ATOM 1759 CE1   CE1   . TYR TYR TYR A A 235 235 . 87.704  119.726 28.693  1.00 34.21
1 . .
ATOM 1760 CZ    CZ    . TYR TYR TYR A A 235 235 . 86.585  120.196 29.343  1.00 32.72
1 . .
ATOM 1761 OH    OH    . TYR TYR TYR A A 235 235 . 85.490  120.583 28.558  1.00 33.07
1 . .
ATOM 1762 CE2   CE2   . TYR TYR TYR A A 235 235 . 86.591  120.269 30.758  1.00 33.22
1 . .
ATOM 1763 CD2   CD2   . TYR TYR TYR A A 235 235 . 87.786  119.863 31.499  1.00 30.66
1 . .
ATOM 1764 C     C     . TYR TYR TYR A A 235 235 . 91.919  119.360 33.336  1.00 34.86
1 . .
ATOM 1765 O     O     . TYR TYR TYR A A 235 235 . 91.798  118.203 33.721  1.00 33.38
1 . .
ATOM 1766 N     N     . THR THR THR A A 236 236 . 92.962  120.091 33.697  1.00 36.94
1 . .
ATOM 1767 CA    CA    . THR THR THR A A 236 236 . 93.993  119.494 34.589  1.00 39.96
1 . .
ATOM 1768 CB    CB    . THR THR THR A A 236 236 . 95.072  120.497 34.933  1.00 40.07
1 . .
ATOM 1769 OG1   OG1   . THR THR THR A A 236 236 . 95.369  121.196 33.734  1.00 42.02
1 . .
ATOM 1770 CG2   CG2   . THR THR THR A A 236 236 . 96.340  119.793 35.447  1.00 40.43
1 . .
ATOM 1771 C     C     . THR THR THR A A 236 236 . 93.468  118.857 35.881  1.00 40.69
1 . .
ATOM 1772 O     O     . THR THR THR A A 236 236 . 94.081  117.959 36.440  1.00 41.55
1 . .
ATOM 1773 N     N     . GLU GLU GLU A A 237 237 . 92.323  119.307 36.335  1.00 42.06
1 . .
ATOM 1774 CA    CA    . GLU GLU GLU A A 237 237 . 91.789  118.820 37.583  1.00 43.78
1 . .
ATOM 1775 CB    CB    . GLU GLU GLU A A 237 237 . 90.959  119.950 38.249  1.00 45.71
1 . .
ATOM 1776 CG    CG    . GLU GLU GLU A A 237 237 . 91.673  121.328 38.413  1.00 50.85
1 . .
ATOM 1777 CD    CD    . GLU GLU GLU A A 237 237 . 92.810  121.318 39.460  1.00 58.80
1 . .
ATOM 1778 OE1   OE1   . GLU GLU GLU A A 237 237 . 94.029  121.406 39.077  1.00 61.17
1 . .
ATOM 1779 OE2   OE2   . GLU GLU GLU A A 237 237 . 92.482  121.225 40.676  1.00 62.84
1 . .
ATOM 1780 C     C     . GLU GLU GLU A A 237 237 . 90.906  117.583 37.330  1.00 43.09
1 . .
ATOM 1781 O     O     . GLU GLU GLU A A 237 237 . 90.621  116.798 38.248  1.00 44.18
1 . .
ATOM 1782 N     N     . LYS LYS LYS A A 238 238 . 90.432  117.424 36.097  1.00 40.68
1 . .
ATOM 1783 CA    CA    . LYS LYS LYS A A 238 238 . 89.470  116.371 35.824  1.00 37.83
1 . .
ATOM 1784 CB    CB    . LYS LYS LYS A A 238 238 . 88.268  116.952 35.074  1.00 37.96
1 . .
ATOM 1785 CG    CG    . LYS LYS LYS A A 238 238 . 87.461  118.053 35.842  1.00 39.20
1 . .
ATOM 1786 CD    CD    . LYS LYS LYS A A 238 238 . 86.046  118.243 35.196  1.00 43.85
1 . .
ATOM 1787 CE    CE    . LYS LYS LYS A A 238 238 . 85.100  119.134 36.027  1.00 44.71
1 . .
ATOM 1788 NZ    NZ    . LYS LYS LYS A A 238 238 . 85.785  119.312 37.315  1.00 46.48
1 . .
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ATOM 1789 C     C     . LYS LYS LYS A A 238 238 . 90.068  115.164 35.078  1.00 36.63
1 . .
ATOM 1790 O     O     . LYS LYS LYS A A 238 238 . 89.452  114.136 34.996  1.00 36.13
1 . .
ATOM 1791 N     N     . ILE ILE ILE A A 239 239 . 91.289  115.248 34.564  1.00 35.19
1 . .
ATOM 1792 CA    CA    . ILE ILE ILE A A 239 239 . 91.753  114.145 33.742  1.00 34.33
1 . .
ATOM 1793 CB    CB    . ILE ILE ILE A A 239 239 . 91.723  114.514 32.211  1.00 34.55
1 . .
ATOM 1794 CG1   CG1   . ILE ILE ILE A A 239 239 . 90.271  114.653 31.749  1.00 37.17
1 . .
ATOM 1795 CD1   CD1   . ILE ILE ILE A A 239 239 . 90.047  115.714 30.694  1.00 37.66
1 . .
ATOM 1796 CG2   CG2   . ILE ILE ILE A A 239 239 . 92.399  113.419 31.354  1.00 32.46
1 . .
ATOM 1797 C     C     . ILE ILE ILE A A 239 239 . 93.133  113.715 34.164  1.00 33.61
1 . .
ATOM 1798 O     O     . ILE ILE ILE A A 239 239 . 94.032  114.556 34.288  1.00 33.66
1 . .
ATOM 1799 N     N     . VAL VAL VAL A A 240 240 . 93.318  112.405 34.343  1.00 31.93
1 . .
ATOM 1800 CA    CA    . VAL VAL VAL A A 240 240 . 94.666  111.897 34.703  1.00 31.23
1 . .
ATOM 1801 CB    CB    . VAL VAL VAL A A 240 240 . 94.635  111.202 36.076  1.00 30.34
1 . .
ATOM 1802 CG1   CG1   . VAL VAL VAL A A 240 240 . 94.468  112.255 37.161  1.00 31.11
1 . .
ATOM 1803 CG2   CG2   . VAL VAL VAL A A 240 240 . 93.477  110.166 36.134  1.00 28.45
1 . .
ATOM 1804 C     C     . VAL VAL VAL A A 240 240 . 95.200  110.970 33.607  1.00 30.53
1 . .
ATOM 1805 O     O     . VAL VAL VAL A A 240 240 . 94.518  110.722 32.654  1.00 29.12
1 . .
ATOM 1806 N     N     . ILE ILE ILE A A 241 241 . 96.435  110.489 33.752  1.00 32.23
1 . .
ATOM 1807 CA    CA    . ILE ILE ILE A A 241 241 . 97.117  109.738 32.690  1.00 31.65
1 . .
ATOM 1808 CB    CB    . ILE ILE ILE A A 241 241 . 98.473  110.386 32.382  1.00 32.01
1 . .
ATOM 1809 CG1   CG1   . ILE ILE ILE A A 241 241 . 98.252  111.803 31.854  1.00 33.28
1 . .
ATOM 1810 CD1   CD1   . ILE ILE ILE A A 241 241 . 99.553  112.499 31.384  1.00 32.63
1 . .
ATOM 1811 CG2   CG2   . ILE ILE ILE A A 241 241 . 99.241  109.583 31.370  1.00 30.30
1 . .
ATOM 1812 C     C     . ILE ILE ILE A A 241 241 . 97.318  108.263 33.025  1.00 32.03
1 . .
ATOM 1813 O     O     . ILE ILE ILE A A 241 241 . 97.617  107.930 34.168  1.00 32.95
1 . .
ATOM 1814 N     N     . GLY GLY GLY A A 242 242 . 97.140  107.396 32.014  1.00 32.45
1 . .
ATOM 1815 CA    CA    . GLY GLY GLY A A 242 242 . 97.431  105.960 32.057  1.00 31.39
1 . .
ATOM 1816 C     C     . GLY GLY GLY A A 242 242 . 98.418  105.540 30.932  1.00 32.24
1 . .
ATOM 1817 O     O     . GLY GLY GLY A A 242 242 . 98.458  106.153 29.859  1.00 31.71
1 . .
ATOM 1818 N     N     . MET MET MET A A 243 243 . 99.199  104.474 31.155  1.00 32.04
1 . .
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ATOM 1819 CA    CA    . MET MET MET A A 243 243 . 100.127 103.977 30.127  1.00 32.52
1 . .
ATOM 1820 CB    CB    . MET MET MET A A 243 243 . 101.603 104.245 30.548  1.00 32.15
1 . .
ATOM 1821 CG    CG    . MET MET MET A A 243 243 . 101.880 105.691 30.836  1.00 32.61
1 . .
ATOM 1822 SD    SD    . MET MET MET A A 243 243 . 103.583 105.947 31.478  1.00 41.23
1 . .
ATOM 1823 CE    CE    . MET MET MET A A 243 243 . 104.427 105.328 30.034  1.00 36.01
1 . .
ATOM 1824 C     C     . MET MET MET A A 243 243 . 99.913  102.480 29.889  1.00 32.59
1 . .
ATOM 1825 O     O     . MET MET MET A A 243 243 . 99.517  101.782 30.813  1.00 33.45
1 . .
ATOM 1826 N     N     . ASP ASP ASP A A 244 244 . 100.126 102.004 28.655  1.00 31.68
1 . .
ATOM 1827 CA    CA    . ASP ASP ASP A A 244 244 . 100.418 100.580 28.455  1.00 31.75
1 . .
ATOM 1828 CB    CB    . ASP ASP ASP A A 244 244 . 99.409  99.918  27.525  1.00 31.12
1 . .
ATOM 1829 CG    CG    . ASP ASP ASP A A 244 244 . 99.633  98.421  27.364  1.00 33.17
1 . .
ATOM 1830 OD1   OD1   . ASP ASP ASP A A 244 244 . 98.764  97.809  26.683  1.00 33.16
1 . .
ATOM 1831 OD2   OD2   . ASP ASP ASP A A 244 244 . 100.654 97.841  27.877  1.00 32.61
1 . .
ATOM 1832 C     C     . ASP ASP ASP A A 244 244 . 101.824 100.503 27.882  1.00 31.26
1 . .
ATOM 1833 O     O     . ASP ASP ASP A A 244 244 . 102.055 100.861 26.737  1.00 32.12
1 . .
ATOM 1834 N     N     . VAL VAL VAL A A 245 245 . 102.790 100.092 28.681  1.00 31.08
1 . .
ATOM 1835 CA    CA    . VAL VAL VAL A A 245 245 . 104.142 100.015 28.133  1.00 31.03
1 . .
ATOM 1836 CB    CB    . VAL VAL VAL A A 245 245 . 105.173 99.898  29.268  1.00 30.28
1 . .
ATOM 1837 CG1   CG1   . VAL VAL VAL A A 245 245 . 106.592 99.877  28.717  1.00 31.69
1 . .
ATOM 1838 CG2   CG2   . VAL VAL VAL A A 245 245 . 104.970 101.042 30.269  1.00 29.36
1 . .
ATOM 1839 C     C     . VAL VAL VAL A A 245 245 . 104.252 98.845  27.146  1.00 31.15
1 . .
ATOM 1840 O     O     . VAL VAL VAL A A 245 245 . 104.945 98.939  26.107  1.00 30.78
1 . .
ATOM 1841 N     N     . ALA ALA ALA A A 246 246 . 103.554 97.750  27.475  1.00 31.29
1 . .
ATOM 1842 CA    CA    . ALA ALA ALA A A 246 246 . 103.721 96.449  26.816  1.00 31.71
1 . .
ATOM 1843 CB    CB    . ALA ALA ALA A A 246 246 . 102.989 96.400  25.487  1.00 30.87
1 . .
ATOM 1844 C     C     . ALA ALA ALA A A 246 246 . 105.206 96.107  26.598  1.00 32.70
1 . .
ATOM 1845 O     O     . ALA ALA ALA A A 246 246 . 105.614 95.918  25.441  1.00 31.55
1 . .
ATOM 1846 N     N     . ALA ALA ALA A A 247 247 . 105.981 95.985  27.696  1.00 34.60
1 . .
ATOM 1847 CA    CA    . ALA ALA ALA A A 247 247 . 107.462 95.850  27.605  1.00 35.56
1 . .
ATOM 1848 CB    CB    . ALA ALA ALA A A 247 247 . 108.121 96.101  28.964  1.00 35.78
1 . .
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ATOM 1849 C     C     . ALA ALA ALA A A 247 247 . 107.926 94.503  27.007  1.00 36.52
1 . .
ATOM 1850 O     O     . ALA ALA ALA A A 247 247 . 109.059 94.386  26.521  1.00 36.59
1 . .
ATOM 1851 N     N     . SER SER SER A A 248 248 . 107.036 93.502  27.028  1.00 37.00
1 . .
ATOM 1852 CA    CA    . SER SER SER A A 248 248 . 107.244 92.248  26.313  1.00 37.26
1 . .
ATOM 1853 CB    CB    . SER SER SER A A 248 248 . 106.019 91.356  26.384  1.00 36.52
1 . .
ATOM 1854 OG    OG    . SER SER SER A A 248 248 . 105.754 90.973  27.721  1.00 37.56
1 . .
ATOM 1855 C     C     . SER SER SER A A 248 248 . 107.624 92.469  24.843  1.00 38.87
1 . .
ATOM 1856 O     O     . SER SER SER A A 248 248 . 108.449 91.732  24.313  1.00 38.67
1 . .
ATOM 1857 N     N     . GLU GLU GLU A A 249 249 . 107.042 93.477  24.186  1.00 39.52
1 . .
ATOM 1858 CA    CA    . GLU GLU GLU A A 249 249 . 107.355 93.684  22.782  1.00 40.24
1 . .
ATOM 1859 CB    CB    . GLU GLU GLU A A 249 249 . 106.408 94.716  22.221  1.00 40.58
1 . .
ATOM 1860 CG    CG    . GLU GLU GLU A A 249 249 . 104.946 94.278  22.344  1.00 42.51
1 . .
ATOM 1861 CD    CD    . GLU GLU GLU A A 249 249 . 104.636 93.181  21.362  1.00 44.64
1 . .
ATOM 1862 OE1   OE1   . GLU GLU GLU A A 249 249 . 104.930 93.382  20.156  1.00 44.91
1 . .
ATOM 1863 OE2   OE2   . GLU GLU GLU A A 249 249 . 104.099 92.131  21.783  1.00 47.18
1 . .
ATOM 1864 C     C     . GLU GLU GLU A A 249 249 . 108.829 94.109  22.587  1.00 40.74
1 . .
ATOM 1865 O     O     . GLU GLU GLU A A 249 249 . 109.371 94.024  21.463  1.00 40.49
1 . .
ATOM 1866 N     N     . PHE PHE PHE A A 250 250 . 109.475 94.557  23.666  1.00 41.08
1 . .
ATOM 1867 CA    CA    . PHE PHE PHE A A 250 250 . 110.846 95.083  23.523  1.00 42.54
1 . .
ATOM 1868 CB    CB    . PHE PHE PHE A A 250 250 . 110.901 96.621  23.389  1.00 41.71
1 . .
ATOM 1869 CG    CG    . PHE PHE PHE A A 250 250 . 110.395 97.363  24.575  1.00 41.25
1 . .
ATOM 1870 CD1   CD1   . PHE PHE PHE A A 250 250 . 109.118 97.961  24.554  1.00 40.96
1 . .
ATOM 1871 CE1   CE1   . PHE PHE PHE A A 250 250 . 108.641 98.639  25.676  1.00 39.95
1 . .
ATOM 1872 CZ    CZ    . PHE PHE PHE A A 250 250 . 109.458 98.752  26.809  1.00 38.50
1 . .
ATOM 1873 CE2   CE2   . PHE PHE PHE A A 250 250 . 110.725 98.165  26.813  1.00 39.10
1 . .
ATOM 1874 CD2   CD2   . PHE PHE PHE A A 250 250 . 111.180 97.490  25.712  1.00 38.04
1 . .
ATOM 1875 C     C     . PHE PHE PHE A A 250 250 . 111.843 94.542  24.553  1.00 44.06
1 . .
ATOM 1876 O     O     . PHE PHE PHE A A 250 250 . 112.920 95.107  24.774  1.00 43.79
1 . .
ATOM 1877 N     N     . TYR TYR TYR A A 251 251 . 111.467 93.412  25.127  1.00 46.37
1 . .
ATOM 1878 CA    CA    . TYR TYR TYR A A 251 251 . 112.324 92.642  26.001  1.00 48.53
1 . .
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ATOM 1879 CB    CB    . TYR TYR TYR A A 251 251 . 111.480 91.643  26.760  1.00 48.89
1 . .
ATOM 1880 CG    CG    . TYR TYR TYR A A 251 251 . 112.235 90.826  27.779  1.00 52.69
1 . .
ATOM 1881 CD1   CD1   . TYR TYR TYR A A 251 251 . 113.015 91.449  28.778  1.00 54.70
1 . .
ATOM 1882 CE1   CE1   . TYR TYR TYR A A 251 251 . 113.687 90.703  29.728  1.00 54.18
1 . .
ATOM 1883 CZ    CZ    . TYR TYR TYR A A 251 251 . 113.580 89.335  29.694  1.00 55.17
1 . .
ATOM 1884 OH    OH    . TYR TYR TYR A A 251 251 . 114.238 88.600  30.620  1.00 57.49
1 . .
ATOM 1885 CE2   CE2   . TYR TYR TYR A A 251 251 . 112.822 88.679  28.730  1.00 55.49
1 . .
ATOM 1886 CD2   CD2   . TYR TYR TYR A A 251 251 . 112.151 89.428  27.778  1.00 54.74
1 . .
ATOM 1887 C     C     . TYR TYR TYR A A 251 251 . 113.312 91.912  25.116  1.00 49.72
1 . .
ATOM 1888 O     O     . TYR TYR TYR A A 251 251 . 112.904 91.119  24.239  1.00 49.68
1 . .
ATOM 1889 N     N     . ARG ARG ARG A A 252 252 . 114.600 92.190  25.338  1.00 50.92
1 . .
ATOM 1890 CA    CA    . ARG ARG ARG A A 252 252 . 115.694 91.666  24.509  1.00 52.32
1 . .
ATOM 1891 CB    CB    . ARG ARG ARG A A 252 252 . 116.285 92.759  23.608  1.00 52.38
1 . .
ATOM 1892 CG    CG    . ARG ARG ARG A A 252 252 . 115.293 93.437  22.679  1.00 52.98
1 . .
ATOM 1893 CD    CD    . ARG ARG ARG A A 252 252 . 114.991 92.551  21.497  1.00 52.89
1 . .
ATOM 1894 NE    NE    . ARG ARG ARG A A 252 252 . 114.127 93.200  20.524  1.00 53.80
1 . .
ATOM 1895 CZ    CZ    . ARG ARG ARG A A 252 252 . 112.791 93.173  20.562  1.00 53.71
1 . .
ATOM 1896 NH1   NH1   . ARG ARG ARG A A 252 252 . 112.135 92.548  21.540  1.00 51.67
1 . .
ATOM 1897 NH2   NH2   . ARG ARG ARG A A 252 252 . 112.115 93.785  19.611  1.00 53.80
1 . .
ATOM 1898 C     C     . ARG ARG ARG A A 252 252 . 116.791 91.151  25.406  1.00 53.34
1 . .
ATOM 1899 O     O     . ARG ARG ARG A A 252 252 . 117.436 91.928  26.117  1.00 52.94
1 . .
ATOM 1900 N     N     . ASP ASP ASP A A 253 253 . 116.997 89.841  25.338  1.00 55.10
1 . .
ATOM 1901 CA    CA    . ASP ASP ASP A A 253 253 . 117.951 89.081  26.177  1.00 56.58
1 . .
ATOM 1902 CB    CB    . ASP ASP ASP A A 253 253 . 119.284 88.793  25.411  1.00 57.90
1 . .
ATOM 1903 CG    CG    . ASP ASP ASP A A 253 253 . 119.993 90.058  24.925  1.00 60.19
1 . .
ATOM 1904 OD1   OD1   . ASP ASP ASP A A 253 253 . 120.180 90.215  23.672  1.00 62.02
1 . .
ATOM 1905 OD2   OD2   . ASP ASP ASP A A 253 253 . 120.375 90.876  25.803  1.00 62.06
1 . .
ATOM 1906 C     C     . ASP ASP ASP A A 253 253 . 118.159 89.539  27.660  1.00 56.07
1 . .
ATOM 1907 O     O     . ASP ASP ASP A A 253 253 . 119.293 89.938  28.067  1.00 57.13
1 . .
ATOM 1908 N     N     . GLY GLY GLY A A 254 254 . 117.076 89.483  28.455  1.00 54.03
1 . .
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ATOM 1909 CA    CA    . GLY GLY GLY A A 254 254 . 117.120 89.912  29.855  1.00 51.64
1 . .
ATOM 1910 C     C     . GLY GLY GLY A A 254 254 . 117.094 91.421  30.045  1.00 50.15
1 . .
ATOM 1911 O     O     . GLY GLY GLY A A 254 254 . 116.996 91.915  31.182  1.00 49.55
1 . .
ATOM 1912 N     N     . LYS LYS LYS A A 255 255 . 117.159 92.153  28.934  1.00 48.98
1 . .
ATOM 1913 CA    CA    . LYS LYS LYS A A 255 255 . 117.121 93.629  28.934  1.00 48.37
1 . .
ATOM 1914 CB    CB    . LYS LYS LYS A A 255 255 . 118.468 94.211  28.451  1.00 48.71
1 . .
ATOM 1915 CG    CG    . LYS LYS LYS A A 255 255 . 119.579 94.242  29.523  1.00 50.82
1 . .
ATOM 1916 CD    CD    . LYS LYS LYS A A 255 255 . 120.954 94.621  28.935  1.00 54.97
1 . .
ATOM 1917 CE    CE    . LYS LYS LYS A A 255 255 . 121.627 95.694  29.816  1.00 58.21
1 . .
ATOM 1918 NZ    NZ    . LYS LYS LYS A A 255 255 . 122.974 96.188  29.314  1.00 59.80
1 . .
ATOM 1919 C     C     . LYS LYS LYS A A 255 255 . 115.959 94.252  28.145  1.00 47.22
1 . .
ATOM 1920 O     O     . LYS LYS LYS A A 255 255 . 115.228 93.558  27.435  1.00 47.09
1 . .
ATOM 1921 N     N     . TYR TYR TYR A A 256 256 . 115.817 95.573  28.265  1.00 46.00
1 . .
ATOM 1922 CA    CA    . TYR TYR TYR A A 256 256 . 114.784 96.345  27.542  1.00 45.09
1 . .
ATOM 1923 CB    CB    . TYR TYR TYR A A 256 256 . 113.845 96.997  28.550  1.00 44.46
1 . .
ATOM 1924 CG    CG    . TYR TYR TYR A A 256 256 . 113.115 95.966  29.348  1.00 43.46
1 . .
ATOM 1925 CD1   CD1   . TYR TYR TYR A A 256 256 . 111.953 95.405  28.848  1.00 43.46
1 . .
ATOM 1926 CE1   CE1   . TYR TYR TYR A A 256 256 . 111.241 94.458  29.564  1.00 43.68
1 . .
ATOM 1927 CZ    CZ    . TYR TYR TYR A A 256 256 . 111.692 94.036  30.796  1.00 42.90
1 . .
ATOM 1928 OH    OH    . TYR TYR TYR A A 256 256 . 110.938 93.090  31.436  1.00 40.84
1 . .
ATOM 1929 CE2   CE2   . TYR TYR TYR A A 256 256 . 112.876 94.577  31.333  1.00 43.38
1 . .
ATOM 1930 CD2   CD2   . TYR TYR TYR A A 256 256 . 113.578 95.543  30.594  1.00 42.11
1 . .
ATOM 1931 C     C     . TYR TYR TYR A A 256 256 . 115.301 97.391  26.541  1.00 44.50
1 . .
ATOM 1932 O     O     . TYR TYR TYR A A 256 256 . 116.146 98.235  26.871  1.00 44.54
1 . .
ATOM 1933 N     N     . ASP ASP ASP A A 257 257 . 114.745 97.360  25.325  1.00 43.92
1 . .
ATOM 1934 CA    CA    . ASP ASP ASP A A 257 257 . 115.221 98.198  24.239  1.00 42.34
1 . .
ATOM 1935 CB    CB    . ASP ASP ASP A A 257 257 . 115.700 97.329  23.094  1.00 41.06
1 . .
ATOM 1936 CG    CG    . ASP ASP ASP A A 257 257 . 116.013 98.113  21.844  1.00 39.13
1 . .
ATOM 1937 OD1   OD1   . ASP ASP ASP A A 257 257 . 116.157 99.365  21.925  1.00 34.21
1 . .
ATOM 1938 OD2   OD2   . ASP ASP ASP A A 257 257 . 116.137 97.467  20.760  1.00 37.82
1 . .
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ATOM 1939 C     C     . ASP ASP ASP A A 257 257 . 114.137 99.201  23.800  1.00 43.04
1 . .
ATOM 1940 O     O     . ASP ASP ASP A A 257 257 . 113.257 98.911  22.961  1.00 43.52
1 . .
ATOM 1941 N     N     . LEU LEU LEU A A 258 258 . 114.262 100.393 24.368  1.00 42.89
1 . .
ATOM 1942 CA    CA    . LEU LEU LEU A A 258 258 . 113.439 101.537 24.078  1.00 43.35
1 . .
ATOM 1943 CB    CB    . LEU LEU LEU A A 258 258 . 113.679 102.604 25.164  1.00 43.46
1 . .
ATOM 1944 CG    CG    . LEU LEU LEU A A 258 258 . 113.134 102.208 26.541  1.00 42.97
1 . .
ATOM 1945 CD1   CD1   . LEU LEU LEU A A 258 258 . 113.417 103.336 27.544  1.00 42.52
1 . .
ATOM 1946 CD2   CD2   . LEU LEU LEU A A 258 258 . 111.597 101.888 26.441  1.00 42.55
1 . .
ATOM 1947 C     C     . LEU LEU LEU A A 258 258 . 113.626 102.161 22.693  1.00 43.74
1 . .
ATOM 1948 O     O     . LEU LEU LEU A A 258 258 . 113.072 103.227 22.428  1.00 43.76
1 . .
ATOM 1949 N     N     . ASP ASP ASP A A 259 259 . 114.389 101.509 21.808  1.00 43.88
1 . .
ATOM 1950 CA    CA    . ASP ASP ASP A A 259 259 . 114.479 101.942 20.401  1.00 43.15
1 . .
ATOM 1951 CB    CB    . ASP ASP ASP A A 259 259 . 115.763 102.792 20.193  1.00 44.03
1 . .
ATOM 1952 CG    CG    . ASP ASP ASP A A 259 259 . 115.756 103.653 18.900  1.00 47.62
1 . .
ATOM 1953 OD1   OD1   . ASP ASP ASP A A 259 259 . 114.684 103.802 18.211  1.00 49.94
1 . .
ATOM 1954 OD2   OD2   . ASP ASP ASP A A 259 259 . 116.877 104.204 18.571  1.00 51.24
1 . .
ATOM 1955 C     C     . ASP ASP ASP A A 259 259 . 114.369 100.690 19.503  1.00 41.97
1 . .
ATOM 1956 O     O     . ASP ASP ASP A A 259 259 . 114.932 100.611 18.444  1.00 41.30
1 . .
ATOM 1957 N     N     . PHE PHE PHE A A 260 260 . 113.556 99.726  19.915  1.00 42.63
1 . .
ATOM 1958 CA    CA    . PHE PHE PHE A A 260 260 . 113.442 98.442  19.226  1.00 42.14
1 . .
ATOM 1959 CB    CB    . PHE PHE PHE A A 260 260 . 112.545 97.535  20.042  1.00 42.01
1 . .
ATOM 1960 CG    CG    . PHE PHE PHE A A 260 260 . 111.072 97.831  19.899  1.00 40.89
1 . .
ATOM 1961 CD1   CD1   . PHE PHE PHE A A 260 260 . 110.457 98.789  20.697  1.00 40.32
1 . .
ATOM 1962 CE1   CE1   . PHE PHE PHE A A 260 260 . 109.046 99.049  20.571  1.00 41.76
1 . .
ATOM 1963 CZ    CZ    . PHE PHE PHE A A 260 260 . 108.249 98.309  19.632  1.00 41.29
1 . .
ATOM 1964 CE2   CE2   . PHE PHE PHE A A 260 260 . 108.872 97.334  18.835  1.00 41.90
1 . .
ATOM 1965 CD2   CD2   . PHE PHE PHE A A 260 260 . 110.289 97.104  18.984  1.00 41.98
1 . .
ATOM 1966 C     C     . PHE PHE PHE A A 260 260 . 112.975 98.500  17.755  1.00 43.20
1 . .
ATOM 1967 O     O     . PHE PHE PHE A A 260 260 . 113.138 97.520  17.000  1.00 41.67
1 . .
ATOM 1968 N     N     . LYS LYS LYS A A 261 261 . 112.375 99.629  17.340  1.00 44.59
1 . .
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ATOM 1969 CA    CA    . LYS LYS LYS A A 261 261 . 111.939 99.759  15.950  1.00 46.05
1 . .
ATOM 1970 CB    CB    . LYS LYS LYS A A 261 261 . 110.617 100.550 15.831  1.00 46.04
1 . .
ATOM 1971 CG    CG    . LYS LYS LYS A A 261 261 . 109.381 99.825  16.370  1.00 46.17
1 . .
ATOM 1972 CD    CD    . LYS LYS LYS A A 261 261 . 108.079 100.712 16.330  1.00 44.98
1 . .
ATOM 1973 CE    CE    . LYS LYS LYS A A 261 261 . 107.878 101.567 17.609  1.00 42.96
1 . .
ATOM 1974 NZ    NZ    . LYS LYS LYS A A 261 261 . 106.635 102.410 17.471  1.00 41.56
1 . .
ATOM 1975 C     C     . LYS LYS LYS A A 261 261 . 113.073 100.357 15.085  1.00 46.92
1 . .
ATOM 1976 O     O     . LYS LYS LYS A A 261 261 . 112.905 100.589 13.903  1.00 47.37
1 . .
ATOM 1977 N     N     . SER SER SER A A 262 262 . 114.220 100.612 15.696  1.00 48.14
1 . .
ATOM 1978 CA    CA    . SER SER SER A A 262 262 . 115.422 100.976 14.949  1.00 49.76
1 . .
ATOM 1979 CB    CB    . SER SER SER A A 262 262 . 116.096 102.187 15.596  1.00 49.50
1 . .
ATOM 1980 OG    OG    . SER SER SER A A 262 262 . 115.213 103.299 15.574  1.00 48.46
1 . .
ATOM 1981 C     C     . SER SER SER A A 262 262 . 116.408 99.793  14.782  1.00 51.07
1 . .
ATOM 1982 O     O     . SER SER SER A A 262 262 . 116.376 98.834  15.597  1.00 50.09
1 . .
ATOM 1983 N     N     . PRO PRO PRO A A 263 263 . 117.250 99.844  13.708  1.00 52.63
1 . .
ATOM 1984 CA    CA    . PRO PRO PRO A A 263 263 . 118.324 98.865  13.468  1.00 54.11
1 . .
ATOM 1985 CB    CB    . PRO PRO PRO A A 263 263 . 119.332 99.620  12.560  1.00 53.94
1 . .
ATOM 1986 CG    CG    . PRO PRO PRO A A 263 263 . 118.693 100.993 12.246  1.00 54.20
1 . .
ATOM 1987 CD    CD    . PRO PRO PRO A A 263 263 . 117.209 100.841 12.619  1.00 53.06
1 . .
ATOM 1988 C     C     . PRO PRO PRO A A 263 263 . 118.978 98.495  14.781  1.00 54.83
1 . .
ATOM 1989 O     O     . PRO PRO PRO A A 263 263 . 119.308 99.373  15.555  1.00 54.35
1 . .
ATOM 1990 N     N     . THR THR THR A A 264 264 . 119.092 97.193  15.015  1.00 56.52
1 . .
ATOM 1991 CA    CA    . THR THR THR A A 264 264 . 119.599 96.618  16.243  1.00 58.70
1 . .
ATOM 1992 CB    CB    . THR THR THR A A 264 264 . 119.765 95.102  16.072  1.00 59.28
1 . .
ATOM 1993 OG1   OG1   . THR THR THR A A 264 264 . 118.635 94.562  15.361  1.00 60.34
1 . .
ATOM 1994 CG2   CG2   . THR THR THR A A 264 264 . 119.911 94.413  17.429  1.00 60.14
1 . .
ATOM 1995 C     C     . THR THR THR A A 264 264 . 120.961 97.198  16.640  1.00 59.66
1 . .
ATOM 1996 O     O     . THR THR THR A A 264 264 . 121.857 97.339  15.794  1.00 58.93
1 . .
ATOM 1997 N     N     . ASP ASP ASP A A 265 265 . 121.068 97.552  17.929  1.00 60.74
1 . .
ATOM 1998 CA    CA    . ASP ASP ASP A A 265 265 . 122.305 98.046  18.571  1.00 61.80
1 . .
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ATOM 1999 CB    CB    . ASP ASP ASP A A 265 265 . 122.668 99.498  18.147  1.00 61.97
1 . .
ATOM 2000 CG    CG    . ASP ASP ASP A A 265 265 . 123.782 100.122 19.028  1.00 62.64
1 . .
ATOM 2001 OD1   OD1   . ASP ASP ASP A A 265 265 . 124.428 99.361  19.807  1.00 60.62
1 . .
ATOM 2002 OD2   OD2   . ASP ASP ASP A A 265 265 . 123.975 101.374 18.960  1.00 62.27
1 . .
ATOM 2003 C     C     . ASP ASP ASP A A 265 265 . 122.180 97.918  20.111  1.00 62.11
1 . .
ATOM 2004 O     O     . ASP ASP ASP A A 265 265 . 121.610 98.817  20.773  1.00 61.94
1 . .
ATOM 2005 N     N     . PRO PRO PRO A A 266 266 . 122.739 96.815  20.677  1.00 62.08
1 . .
ATOM 2006 CA    CA    . PRO PRO PRO A A 266 266 . 122.543 96.378  22.074  1.00 61.59
1 . .
ATOM 2007 CB    CB    . PRO PRO PRO A A 266 266 . 123.221 94.987  22.116  1.00 61.68
1 . .
ATOM 2008 CG    CG    . PRO PRO PRO A A 266 266 . 123.364 94.569  20.704  1.00 62.38
1 . .
ATOM 2009 CD    CD    . PRO PRO PRO A A 266 266 . 123.597 95.863  19.949  1.00 62.31
1 . .
ATOM 2010 C     C     . PRO PRO PRO A A 266 266 . 123.131 97.293  23.162  1.00 60.50
1 . .
ATOM 2011 O     O     . PRO PRO PRO A A 266 266 . 122.890 97.067  24.363  1.00 60.71
1 . .
ATOM 2012 N     N     . SER SER SER A A 267 267 . 123.888 98.311  22.760  1.00 59.08
1 . .
ATOM 2013 CA    CA    . SER SER SER A A 267 267 . 124.447 99.226  23.754  1.00 57.25
1 . .
ATOM 2014 CB    CB    . SER SER SER A A 267 267 . 125.620 100.054 23.203  1.00 57.01
1 . .
ATOM 2015 OG    OG    . SER SER SER A A 267 267 . 125.421 100.410 21.853  1.00 55.87
1 . .
ATOM 2016 C     C     . SER SER SER A A 267 267 . 123.322 100.093 24.313  1.00 56.05
1 . .
ATOM 2017 O     O     . SER SER SER A A 267 267 . 123.334 100.439 25.511  1.00 55.65
1 . .
ATOM 2018 N     N     . ARG ARG ARG A A 268 268 . 122.333 100.398 23.463  1.00 54.29
1 . .
ATOM 2019 CA    CA    . ARG ARG ARG A A 268 268 . 121.204 101.249 23.878  1.00 52.84
1 . .
ATOM 2020 CB    CB    . ARG ARG ARG A A 268 268 . 120.424 101.792 22.680  1.00 52.81
1 . .
ATOM 2021 CG    CG    . ARG ARG ARG A A 268 268 . 119.301 100.904 22.159  1.00 52.77
1 . .
ATOM 2022 CD    CD    . ARG ARG ARG A A 268 268 . 119.014 101.297 20.725  1.00 52.67
1 . .
ATOM 2023 NE    NE    . ARG ARG ARG A A 268 268 . 118.222 100.294 20.035  1.00 52.26
1 . .
ATOM 2024 CZ    CZ    . ARG ARG ARG A A 268 268 . 118.268 100.052 18.728  1.00 50.02
1 . .
ATOM 2025 NH1   NH1   . ARG ARG ARG A A 268 268 . 117.492 99.107  18.247  1.00 47.31
1 . .
ATOM 2026 NH2   NH2   . ARG ARG ARG A A 268 268 . 119.080 100.743 17.908  1.00 48.22
1 . .
ATOM 2027 C     C     . ARG ARG ARG A A 268 268 . 120.245 100.578 24.864  1.00 52.05
1 . .
ATOM 2028 O     O     . ARG ARG ARG A A 268 268 . 119.450 101.270 25.518  1.00 52.23
1 . .
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ATOM 2029 N     N     . TYR TYR TYR A A 269 269 . 120.313 99.249  24.972  1.00 50.57
1 . .
ATOM 2030 CA    CA    . TYR TYR TYR A A 269 269 . 119.417 98.517  25.872  1.00 49.33
1 . .
ATOM 2031 CB    CB    . TYR TYR TYR A A 269 269 . 119.493 96.972  25.717  1.00 49.58
1 . .
ATOM 2032 CG    CG    . TYR TYR TYR A A 269 269 . 119.374 96.366  24.306  1.00 49.80
1 . .
ATOM 2033 CD1   CD1   . TYR TYR TYR A A 269 269 . 119.009 97.134  23.179  1.00 49.39
1 . .
ATOM 2034 CE1   CE1   . TYR TYR TYR A A 269 269 . 118.917 96.549  21.910  1.00 47.98
1 . .
ATOM 2035 CZ    CZ    . TYR TYR TYR A A 269 269 . 119.170 95.176  21.774  1.00 47.59
1 . .
ATOM 2036 OH    OH    . TYR TYR TYR A A 269 269 . 119.094 94.541  20.550  1.00 46.90
1 . .
ATOM 2037 CE2   CE2   . TYR TYR TYR A A 269 269 . 119.501 94.410  22.870  1.00 47.39
1 . .
ATOM 2038 CD2   CD2   . TYR TYR TYR A A 269 269 . 119.606 95.000  24.119  1.00 48.87
1 . .
ATOM 2039 C     C     . TYR TYR TYR A A 269 269 . 119.670 98.922  27.323  1.00 48.06
1 . .
ATOM 2040 O     O     . TYR TYR TYR A A 269 269 . 120.800 99.242  27.698  1.00 46.95
1 . .
ATOM 2041 N     N     . ILE ILE ILE A A 270 270 . 118.591 98.934  28.113  1.00 46.21
1 . .
ATOM 2042 CA    CA    . ILE ILE ILE A A 270 270 . 118.649 99.251  29.543  1.00 45.44
1 . .
ATOM 2043 CB    CB    . ILE ILE ILE A A 270 270 . 117.888 100.580 29.885  1.00 45.15
1 . .
ATOM 2044 CG1   CG1   . ILE ILE ILE A A 270 270 . 116.343 100.411 29.661  1.00 43.61
1 . .
ATOM 2045 CD1   CD1   . ILE ILE ILE A A 270 270 . 115.468 101.332 30.400  1.00 40.39
1 . .
ATOM 2046 CG2   CG2   . ILE ILE ILE A A 270 270 . 118.497 101.754 29.105  1.00 43.49
1 . .
ATOM 2047 C     C     . ILE ILE ILE A A 270 270 . 118.070 98.099  30.368  1.00 45.65
1 . .
ATOM 2048 O     O     . ILE ILE ILE A A 270 270 . 117.277 97.315  29.851  1.00 48.09
1 . .
ATOM 2049 N     N     . THR THR THR A A 271 271 . 118.427 98.019  31.641  1.00 44.59
1 . .
ATOM 2050 CA    CA    . THR THR THR A A 271 271 . 117.983 96.959  32.533  1.00 43.55
1 . .
ATOM 2051 CB    CB    . THR THR THR A A 271 271 . 118.894 96.914  33.751  1.00 43.54
1 . .
ATOM 2052 OG1   OG1   . THR THR THR A A 271 271 . 118.652 98.092  34.542  1.00 40.81
1 . .
ATOM 2053 CG2   CG2   . THR THR THR A A 271 271 . 120.442 96.837  33.345  1.00 42.43
1 . .
ATOM 2054 C     C     . THR THR THR A A 271 271 . 116.568 97.267  33.084  1.00 44.10
1 . .
ATOM 2055 O     O     . THR THR THR A A 271 271 . 116.075 98.407  32.965  1.00 42.96
1 . .
ATOM 2056 N     N     . GLY GLY GLY A A 272 272 . 115.953 96.271  33.725  1.00 44.35
1 . .
ATOM 2057 CA    CA    . GLY GLY GLY A A 272 272 . 114.622 96.446  34.314  1.00 46.79
1 . .
ATOM 2058 C     C     . GLY GLY GLY A A 272 272 . 114.580 97.497  35.437  1.00 48.45
1 . .
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ATOM 2059 O     O     . GLY GLY GLY A A 272 272 . 113.523 98.141  35.678  1.00 48.68
1 . .
ATOM 2060 N     N     . ASP ASP ASP A A 273 273 . 115.725 97.659  36.123  1.00 49.12
1 . .
ATOM 2061 CA    CA    . ASP ASP ASP A A 273 273 . 115.893 98.631  37.223  1.00 50.04
1 . .
ATOM 2062 CB    CB    . ASP ASP ASP A A 273 273 . 117.247 98.442  37.938  1.00 50.45
1 . .
ATOM 2063 CG    CG    . ASP ASP ASP A A 273 273 . 117.259 97.263  38.934  1.00 51.12
1 . .
ATOM 2064 OD1   OD1   . ASP ASP ASP A A 273 273 . 116.181 96.662  39.268  1.00 49.30
1 . .
ATOM 2065 OD2   OD2   . ASP ASP ASP A A 273 273 . 118.398 96.952  39.384  1.00 51.88
1 . .
ATOM 2066 C     C     . ASP ASP ASP A A 273 273 . 115.849 100.031 36.662  1.00 49.92
1 . .
ATOM 2067 O     O     . ASP ASP ASP A A 273 273 . 115.118 100.896 37.170  1.00 50.60
1 . .
ATOM 2068 N     N     . GLN GLN GLN A A 274 274 . 116.657 100.236 35.619  1.00 49.70
1 . .
ATOM 2069 CA    CA    . GLN GLN GLN A A 274 274 . 116.664 101.471 34.837  1.00 49.88
1 . .
ATOM 2070 CB    CB    . GLN GLN GLN A A 274 274 . 117.654 101.350 33.665  1.00 50.50
1 . .
ATOM 2071 CG    CG    . GLN GLN GLN A A 274 274 . 119.108 101.131 34.170  1.00 54.07
1 . .
ATOM 2072 CD    CD    . GLN GLN GLN A A 274 274 . 120.174 101.013 33.083  1.00 55.93
1 . .
ATOM 2073 OE1   OE1   . GLN GLN GLN A A 274 274 . 120.217 100.047 32.316  1.00 58.19
1 . .
ATOM 2074 NE2   NE2   . GLN GLN GLN A A 274 274 . 121.072 101.982 33.051  1.00 57.51
1 . .
ATOM 2075 C     C     . GLN GLN GLN A A 274 274 . 115.230 101.813 34.352  1.00 48.54
1 . .
ATOM 2076 O     O     . GLN GLN GLN A A 274 274 . 114.756 102.946 34.507  1.00 47.89
1 . .
ATOM 2077 N     N     . LEU LEU LEU A A 275 275 . 114.573 100.812 33.777  1.00 47.10
1 . .
ATOM 2078 CA    CA    . LEU LEU LEU A A 275 275 . 113.181 100.899 33.367  1.00 46.09
1 . .
ATOM 2079 CB    CB    . LEU LEU LEU A A 275 275 . 112.746 99.570  32.726  1.00 45.92
1 . .
ATOM 2080 CG    CG    . LEU LEU LEU A A 275 275 . 111.449 99.614  31.916  1.00 45.04
1 . .
ATOM 2081 CD1   CD1   . LEU LEU LEU A A 275 275 . 111.365 100.836 31.022  1.00 44.31
1 . .
ATOM 2082 CD2   CD2   . LEU LEU LEU A A 275 275 . 111.312 98.344  31.104  1.00 43.09
1 . .
ATOM 2083 C     C     . LEU LEU LEU A A 275 275 . 112.240 101.316 34.513  1.00 45.44
1 . .
ATOM 2084 O     O     . LEU LEU LEU A A 275 275 . 111.436 102.245 34.354  1.00 45.57
1 . .
ATOM 2085 N     N     . GLY GLY GLY A A 276 276 . 112.335 100.625 35.649  1.00 44.78
1 . .
ATOM 2086 CA    CA    . GLY GLY GLY A A 276 276 . 111.561 100.984 36.843  1.00 44.29
1 . .
ATOM 2087 C     C     . GLY GLY GLY A A 276 276 . 111.766 102.431 37.287  1.00 44.33
1 . .
ATOM 2088 O     O     . GLY GLY GLY A A 276 276 . 110.775 103.151 37.566  1.00 44.32
1 . .
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ATOM 2089 N     N     . ALA ALA ALA A A 277 277 . 113.043 102.853 37.326  1.00 43.12
1 . .
ATOM 2090 CA    CA    . ALA ALA ALA A A 277 277 . 113.448 104.182 37.791  1.00 42.69
1 . .
ATOM 2091 CB    CB    . ALA ALA ALA A A 277 277 . 115.029 104.351 37.772  1.00 42.20
1 . .
ATOM 2092 C     C     . ALA ALA ALA A A 277 277 . 112.819 105.187 36.879  1.00 42.32
1 . .
ATOM 2093 O     O     . ALA ALA ALA A A 277 277 . 112.332 106.223 37.311  1.00 42.97
1 . .
ATOM 2094 N     N     . LEU LEU LEU A A 278 278 . 112.857 104.876 35.593  1.00 42.26
1 . .
ATOM 2095 CA    CA    . LEU LEU LEU A A 278 278 . 112.171 105.650 34.595  1.00 42.09
1 . .
ATOM 2096 CB    CB    . LEU LEU LEU A A 278 278 . 112.395 104.995 33.241  1.00 42.76
1 . .
ATOM 2097 CG    CG    . LEU LEU LEU A A 278 278 . 112.033 105.829 32.024  1.00 45.15
1 . .
ATOM 2098 CD1   CD1   . LEU LEU LEU A A 278 278 . 112.868 107.149 32.022  1.00 48.95
1 . .
ATOM 2099 CD2   CD2   . LEU LEU LEU A A 278 278 . 112.319 105.011 30.787  1.00 46.02
1 . .
ATOM 2100 C     C     . LEU LEU LEU A A 278 278 . 110.645 105.759 34.957  1.00 41.13
1 . .
ATOM 2101 O     O     . LEU LEU LEU A A 278 278 . 110.062 106.853 34.919  1.00 40.15
1 . .
ATOM 2102 N     N     . TYR TYR TYR A A 279 279 . 110.025 104.671 35.397  1.00 39.97
1 . .
ATOM 2103 CA    CA    . TYR TYR TYR A A 279 279 . 108.607 104.789 35.771  1.00 39.87
1 . .
ATOM 2104 CB    CB    . TYR TYR TYR A A 279 279 . 107.965 103.423 36.005  1.00 38.88
1 . .
ATOM 2105 CG    CG    . TYR TYR TYR A A 279 279 . 108.032 102.492 34.782  1.00 37.61
1 . .
ATOM 2106 CD1   CD1   . TYR TYR TYR A A 279 279 . 107.972 103.004 33.476  1.00 34.60
1 . .
ATOM 2107 CE1   CE1   . TYR TYR TYR A A 279 279 . 108.026 102.153 32.362  1.00 34.22
1 . .
ATOM 2108 CZ    CZ    . TYR TYR TYR A A 279 279 . 108.147 100.772 32.528  1.00 35.95
1 . .
ATOM 2109 OH    OH    . TYR TYR TYR A A 279 279 . 108.199 99.914  31.396  1.00 33.59
1 . .
ATOM 2110 CE2   CE2   . TYR TYR TYR A A 279 279 . 108.231 100.249 33.825  1.00 36.03
1 . .
ATOM 2111 CD2   CD2   . TYR TYR TYR A A 279 279 . 108.158 101.100 34.932  1.00 35.95
1 . .
ATOM 2112 C     C     . TYR TYR TYR A A 279 279 . 108.398 105.743 36.963  1.00 40.34
1 . .
ATOM 2113 O     O     . TYR TYR TYR A A 279 279 . 107.407 106.515 36.991  1.00 40.35
1 . .
ATOM 2114 N     N     . GLN GLN GLN A A 280 280 . 109.361 105.749 37.892  1.00 40.08
1 . .
ATOM 2115 CA    CA    . GLN GLN GLN A A 280 280 . 109.277 106.562 39.121  1.00 40.72
1 . .
ATOM 2116 CB    CB    . GLN GLN GLN A A 280 280 . 110.322 106.169 40.193  1.00 40.85
1 . .
ATOM 2117 CG    CG    . GLN GLN GLN A A 280 280 . 110.187 104.724 40.778  1.00 43.26
1 . .
ATOM 2118 CD    CD    . GLN GLN GLN A A 280 280 . 108.996 104.536 41.749  1.00 45.97
1 . .
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ATOM 2119 OE1   OE1   . GLN GLN GLN A A 280 280 . 108.347 105.509 42.168  1.00 48.04
1 . .
ATOM 2120 NE2   NE2   . GLN GLN GLN A A 280 280 . 108.714 103.271 42.111  1.00 45.30
1 . .
ATOM 2121 C     C     . GLN GLN GLN A A 280 280 . 109.301 108.058 38.805  1.00 40.17
1 . .
ATOM 2122 O     O     . GLN GLN GLN A A 280 280 . 108.493 108.815 39.348  1.00 39.21
1 . .
ATOM 2123 N     N     . ASP ASP ASP A A 281 281 . 110.177 108.454 37.881  1.00 40.75
1 . .
ATOM 2124 CA    CA    . ASP ASP ASP A A 281 281 . 110.127 109.799 37.284  1.00 41.08
1 . .
ATOM 2125 CB    CB    . ASP ASP ASP A A 281 281 . 111.260 109.989 36.285  1.00 41.60
1 . .
ATOM 2126 CG    CG    . ASP ASP ASP A A 281 281 . 112.657 109.761 36.919  1.00 43.80
1 . .
ATOM 2127 OD1   OD1   . ASP ASP ASP A A 281 281 . 112.773 109.764 38.177  1.00 48.80
1 . .
ATOM 2128 OD2   OD2   . ASP ASP ASP A A 281 281 . 113.642 109.569 36.168  1.00 44.02
1 . .
ATOM 2129 C     C     . ASP ASP ASP A A 281 281 . 108.732 110.140 36.664  1.00 41.30
1 . .
ATOM 2130 O     O     . ASP ASP ASP A A 281 281 . 108.064 111.046 37.144  1.00 41.38
1 . .
ATOM 2131 N     N     . PHE PHE PHE A A 282 282 . 108.283 109.392 35.656  1.00 40.78
1 . .
ATOM 2132 CA    CA    . PHE PHE PHE A A 282 282 . 106.944 109.613 35.078  1.00 40.78
1 . .
ATOM 2133 CB    CB    . PHE PHE PHE A A 282 282 . 106.522 108.456 34.128  1.00 40.89
1 . .
ATOM 2134 CG    CG    . PHE PHE PHE A A 282 282 . 107.469 108.218 32.961  1.00 41.44
1 . .
ATOM 2135 CD1   CD1   . PHE PHE PHE A A 282 282 . 107.379 107.040 32.218  1.00 41.74
1 . .
ATOM 2136 CE1   CE1   . PHE PHE PHE A A 282 282 . 108.219 106.807 31.153  1.00 42.15
1 . .
ATOM 2137 CZ    CZ    . PHE PHE PHE A A 282 282 . 109.184 107.750 30.809  1.00 44.46
1 . .
ATOM 2138 CE2   CE2   . PHE PHE PHE A A 282 282 . 109.302 108.908 31.539  1.00 43.64
1 . .
ATOM 2139 CD2   CD2   . PHE PHE PHE A A 282 282 . 108.438 109.148 32.610  1.00 42.41
1 . .
ATOM 2140 C     C     . PHE PHE PHE A A 282 282 . 105.876 109.788 36.168  1.00 39.54
1 . .
ATOM 2141 O     O     . PHE PHE PHE A A 282 282 . 105.119 110.723 36.135  1.00 39.85
1 . .
ATOM 2142 N     N     . VAL VAL VAL A A 283 283 . 105.853 108.909 37.155  1.00 39.41
1 . .
ATOM 2143 CA    CA    . VAL VAL VAL A A 283 283 . 104.876 109.016 38.236  1.00 40.49
1 . .
ATOM 2144 CB    CB    . VAL VAL VAL A A 283 283 . 104.845 107.759 39.091  1.00 40.82
1 . .
ATOM 2145 CG1   CG1   . VAL VAL VAL A A 283 283 . 103.809 107.899 40.246  1.00 42.69
1 . .
ATOM 2146 CG2   CG2   . VAL VAL VAL A A 283 283 . 104.469 106.532 38.203  1.00 42.28
1 . .
ATOM 2147 C     C     . VAL VAL VAL A A 283 283 . 104.981 110.307 39.082  1.00 40.47
1 . .
ATOM 2148 O     O     . VAL VAL VAL A A 283 283 . 103.953 110.841 39.552  1.00 38.29
1 . .
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ATOM 2149 N     N     . ARG ARG ARG A A 284 284 . 106.197 110.861 39.201  1.00 41.57
1 . .
ATOM 2150 CA    CA    . ARG ARG ARG A A 284 284 . 106.350 112.125 39.946  1.00 42.40
1 . .
ATOM 2151 CB    CB    . ARG ARG ARG A A 284 284 . 107.665 112.183 40.716  1.00 43.53
1 . .
ATOM 2152 CG    CG    . ARG ARG ARG A A 284 284 . 108.802 112.632 39.867  1.00 46.41
1 . .
ATOM 2153 CD    CD    . ARG ARG ARG A A 284 284 . 109.945 113.260 40.619  1.00 49.80
1 . .
ATOM 2154 NE    NE    . ARG ARG ARG A A 284 284 . 110.843 113.796 39.584  1.00 51.25
1 . .
ATOM 2155 CZ    CZ    . ARG ARG ARG A A 284 284 . 111.966 113.222 39.169  1.00 52.40
1 . .
ATOM 2156 NH1   NH1   . ARG ARG ARG A A 284 284 . 112.418 112.108 39.718  1.00 53.01
1 . .
ATOM 2157 NH2   NH2   . ARG ARG ARG A A 284 284 . 112.661 113.792 38.208  1.00 55.03
1 . .
ATOM 2158 C     C     . ARG ARG ARG A A 284 284 . 106.153 113.397 39.099  1.00 42.30
1 . .
ATOM 2159 O     O     . ARG ARG ARG A A 284 284 . 105.558 114.367 39.576  1.00 42.40
1 . .
ATOM 2160 N     N     . ASP ASP ASP A A 285 285 . 106.648 113.390 37.854  1.00 41.50
1 . .
ATOM 2161 CA    CA    . ASP ASP ASP A A 285 285 . 106.518 114.533 36.955  1.00 41.00
1 . .
ATOM 2162 CB    CB    . ASP ASP ASP A A 285 285 . 107.572 114.444 35.866  1.00 41.73
1 . .
ATOM 2163 CG    CG    . ASP ASP ASP A A 285 285 . 109.012 114.382 36.427  1.00 44.19
1 . .
ATOM 2164 OD1   OD1   . ASP ASP ASP A A 285 285 . 109.230 114.563 37.661  1.00 42.69
1 . .
ATOM 2165 OD2   OD2   . ASP ASP ASP A A 285 285 . 109.917 114.130 35.596  1.00 48.59
1 . .
ATOM 2166 C     C     . ASP ASP ASP A A 285 285 . 105.135 114.653 36.284  1.00 40.18
1 . .
ATOM 2167 O     O     . ASP ASP ASP A A 285 285 . 104.781 115.727 35.795  1.00 40.61
1 . .
ATOM 2168 N     N     . TYR TYR TYR A A 286 286 . 104.362 113.563 36.244  1.00 38.42
1 . .
ATOM 2169 CA    CA    . TYR TYR TYR A A 286 286 . 103.078 113.555 35.518  1.00 36.14
1 . .
ATOM 2170 CB    CB    . TYR TYR TYR A A 286 286 . 103.242 112.894 34.134  1.00 36.06
1 . .
ATOM 2171 CG    CG    . TYR TYR TYR A A 286 286 . 104.327 113.535 33.264  1.00 37.13
1 . .
ATOM 2172 CD1   CD1   . TYR TYR TYR A A 286 286 . 104.026 114.582 32.406  1.00 38.81
1 . .
ATOM 2173 CE1   CE1   . TYR TYR TYR A A 286 286 . 105.014 115.172 31.627  1.00 41.19
1 . .
ATOM 2174 CZ    CZ    . TYR TYR TYR A A 286 286 . 106.320 114.726 31.722  1.00 41.76
1 . .
ATOM 2175 OH    OH    . TYR TYR TYR A A 286 286 . 107.275 115.313 30.951  1.00 46.51
1 . .
ATOM 2176 CE2   CE2   . TYR TYR TYR A A 286 286 . 106.654 113.703 32.553  1.00 39.71
1 . .
ATOM 2177 CD2   CD2   . TYR TYR TYR A A 286 286 . 105.660 113.110 33.330  1.00 37.99
1 . .
ATOM 2178 C     C     . TYR TYR TYR A A 286 286 . 102.045 112.832 36.361  1.00 34.54
1 . .
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ATOM 2179 O     O     . TYR TYR TYR A A 286 286 . 102.417 111.928 37.129  1.00 33.09
1 . .
ATOM 2180 N     N     . PRO PRO PRO A A 287 287 . 100.744 113.198 36.201  1.00 34.23
1 . .
ATOM 2181 CA    CA    . PRO PRO PRO A A 287 287 . 99.574  112.545 36.847  1.00 33.17
1 . .
ATOM 2182 CB    CB    . PRO PRO PRO A A 287 287 . 98.426  113.526 36.586  1.00 32.96
1 . .
ATOM 2183 CG    CG    . PRO PRO PRO A A 287 287 . 98.737  114.131 35.314  1.00 33.34
1 . .
ATOM 2184 CD    CD    . PRO PRO PRO A A 287 287 . 100.297 114.161 35.172  1.00 34.43
1 . .
ATOM 2185 C     C     . PRO PRO PRO A A 287 287 . 99.233  111.157 36.276  1.00 33.39
1 . .
ATOM 2186 O     O     . PRO PRO PRO A A 287 287 . 98.060  110.871 35.865  1.00 33.85
1 . .
ATOM 2187 N     N     . VAL VAL VAL A A 288 288 . 100.250 110.295 36.296  1.00 33.33
1 . .
ATOM 2188 CA    CA    . VAL VAL VAL A A 288 288 . 100.145 108.910 35.880  1.00 33.33
1 . .
ATOM 2189 CB    CB    . VAL VAL VAL A A 288 288 . 101.509 108.342 35.398  1.00 32.90
1 . .
ATOM 2190 CG1   CG1   . VAL VAL VAL A A 288 288 . 101.470 106.799 35.237  1.00 27.92
1 . .
ATOM 2191 CG2   CG2   . VAL VAL VAL A A 288 288 . 101.934 109.027 34.115  1.00 33.66
1 . .
ATOM 2192 C     C     . VAL VAL VAL A A 288 288 . 99.657  108.103 37.060  1.00 34.17
1 . .
ATOM 2193 O     O     . VAL VAL VAL A A 288 288 . 100.399 107.955 38.048  1.00 35.38
1 . .
ATOM 2194 N     N     . VAL VAL VAL A A 289 289 . 98.453  107.546 36.925  1.00 32.72
1 . .
ATOM 2195 CA    CA    . VAL VAL VAL A A 289 289 . 97.804  106.840 37.986  1.00 31.90
1 . .
ATOM 2196 CB    CB    . VAL VAL VAL A A 289 289 . 96.381  107.369 38.120  1.00 32.36
1 . .
ATOM 2197 CG1   CG1   . VAL VAL VAL A A 289 289 . 96.406  108.869 38.354  1.00 31.86
1 . .
ATOM 2198 CG2   CG2   . VAL VAL VAL A A 289 289 . 95.584  107.061 36.844  1.00 34.07
1 . .
ATOM 2199 C     C     . VAL VAL VAL A A 289 289 . 97.735  105.360 37.693  1.00 32.53
1 . .
ATOM 2200 O     O     . VAL VAL VAL A A 289 289 . 97.183  104.578 38.485  1.00 33.78
1 . .
ATOM 2201 N     N     . SER SER SER A A 290 290 . 98.287  104.946 36.542  1.00 32.66
1 . .
ATOM 2202 CA    CA    . SER SER SER A A 290 290 . 98.158  103.573 36.061  1.00 31.68
1 . .
ATOM 2203 CB    CB    . SER SER SER A A 290 290 . 96.759  103.357 35.437  1.00 31.64
1 . .
ATOM 2204 OG    OG    . SER SER SER A A 290 290 . 96.657  101.976 35.087  1.00 30.75
1 . .
ATOM 2205 C     C     . SER SER SER A A 290 290 . 99.178  103.216 35.017  1.00 31.54
1 . .
ATOM 2206 O     O     . SER SER SER A A 290 290 . 99.308  103.911 34.024  1.00 32.39
1 . .
ATOM 2207 N     N     . ILE ILE ILE A A 291 291 . 99.862  102.103 35.202  1.00 32.15
1 . .
ATOM 2208 CA    CA    . ILE ILE ILE A A 291 291 . 100.853 101.616 34.200  1.00 32.38
1 . .
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ATOM 2209 CB    CB    . ILE ILE ILE A A 291 291 . 102.318 101.793 34.655  1.00 32.35
1 . .
ATOM 2210 CG1   CG1   . ILE ILE ILE A A 291 291 . 102.647 103.250 34.873  1.00 32.54
1 . .
ATOM 2211 CD1   CD1   . ILE ILE ILE A A 291 291 . 103.959 103.493 35.645  1.00 34.20
1 . .
ATOM 2212 CG2   CG2   . ILE ILE ILE A A 291 291 . 103.268 101.159 33.625  1.00 29.67
1 . .
ATOM 2213 C     C     . ILE ILE ILE A A 291 291 . 100.654 100.114 33.948  1.00 32.56
1 . .
ATOM 2214 O     O     . ILE ILE ILE A A 291 291 . 100.543 99.320  34.885  1.00 34.11
1 . .
ATOM 2215 N     N     . GLU GLU GLU A A 292 292 . 100.627 99.732  32.675  1.00 31.85
1 . .
ATOM 2216 CA    CA    . GLU GLU GLU A A 292 292 . 100.226 98.411  32.311  1.00 31.11
1 . .
ATOM 2217 CB    CB    . GLU GLU GLU A A 292 292 . 99.046  98.488  31.347  1.00 30.13
1 . .
ATOM 2218 CG    CG    . GLU GLU GLU A A 292 292 . 98.732  97.174  30.591  1.00 32.59
1 . .
ATOM 2219 CD    CD    . GLU GLU GLU A A 292 292 . 97.614  97.297  29.531  1.00 36.45
1 . .
ATOM 2220 OE1   OE1   . GLU GLU GLU A A 292 292 . 97.543  96.385  28.676  1.00 35.56
1 . .
ATOM 2221 OE2   OE2   . GLU GLU GLU A A 292 292 . 96.801  98.284  29.529  1.00 38.63
1 . .
ATOM 2222 C     C     . GLU GLU GLU A A 292 292 . 101.431 97.746  31.687  1.00 30.55
1 . .
ATOM 2223 O     O     . GLU GLU GLU A A 292 292 . 102.204 98.402  31.010  1.00 30.30
1 . .
ATOM 2224 N     N     . ASP ASP ASP A A 293 293 . 101.570 96.441  31.927  1.00 31.26
1 . .
ATOM 2225 CA    CA    . ASP ASP ASP A A 293 293 . 102.718 95.660  31.475  1.00 32.16
1 . .
ATOM 2226 CB    CB    . ASP ASP ASP A A 293 293 . 102.494 95.142  30.048  1.00 31.95
1 . .
ATOM 2227 CG    CG    . ASP ASP ASP A A 293 293 . 101.582 93.889  30.002  1.00 33.32
1 . .
ATOM 2228 OD1   OD1   . ASP ASP ASP A A 293 293 . 101.401 93.178  31.030  1.00 34.62
1 . .
ATOM 2229 OD2   OD2   . ASP ASP ASP A A 293 293 . 101.050 93.611  28.912  1.00 33.99
1 . .
ATOM 2230 C     C     . ASP ASP ASP A A 293 293 . 104.062 96.418  31.590  1.00 31.80
1 . .
ATOM 2231 O     O     . ASP ASP ASP A A 293 293 . 104.798 96.573  30.611  1.00 32.89
1 . .
ATOM 2232 N     N     . PRO PRO PRO A A 294 294 . 104.379 96.924  32.775  1.00 31.44
1 . .
ATOM 2233 CA    CA    . PRO PRO PRO A A 294 294 . 105.661 97.654  32.782  1.00 31.60
1 . .
ATOM 2234 CB    CB    . PRO PRO PRO A A 294 294 . 105.693 98.245  34.190  1.00 29.91
1 . .
ATOM 2235 CG    CG    . PRO PRO PRO A A 294 294 . 104.925 97.252  34.976  1.00 30.98
1 . .
ATOM 2236 CD    CD    . PRO PRO PRO A A 294 294 . 103.737 96.967  34.089  1.00 30.63
1 . .
ATOM 2237 C     C     . PRO PRO PRO A A 294 294 . 106.904 96.788  32.530  1.00 32.45
1 . .
ATOM 2238 O     O     . PRO PRO PRO A A 294 294 . 107.944 97.324  32.178  1.00 34.23
1 . .
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ATOM 2239 N     N     . PHE PHE PHE A A 295 295 . 106.815 95.485  32.733  1.00 34.01
1 . .
ATOM 2240 CA    CA    . PHE PHE PHE A A 295 295 . 107.894 94.552  32.403  1.00 35.52
1 . .
ATOM 2241 CB    CB    . PHE PHE PHE A A 295 295 . 108.586 94.060  33.677  1.00 35.80
1 . .
ATOM 2242 CG    CG    . PHE PHE PHE A A 295 295 . 108.977 95.183  34.599  1.00 35.80
1 . .
ATOM 2243 CD1   CD1   . PHE PHE PHE A A 295 295 . 110.136 95.974  34.328  1.00 36.11
1 . .
ATOM 2244 CE1   CE1   . PHE PHE PHE A A 295 295 . 110.470 97.050  35.137  1.00 32.87
1 . .
ATOM 2245 CZ    CZ    . PHE PHE PHE A A 295 295 . 109.649 97.344  36.236  1.00 34.02
1 . .
ATOM 2246 CE2   CE2   . PHE PHE PHE A A 295 295 . 108.483 96.583  36.475  1.00 34.87
1 . .
ATOM 2247 CD2   CD2   . PHE PHE PHE A A 295 295 . 108.165 95.512  35.663  1.00 34.10
1 . .
ATOM 2248 C     C     . PHE PHE PHE A A 295 295 . 107.409 93.365  31.574  1.00 36.88
1 . .
ATOM 2249 O     O     . PHE PHE PHE A A 295 295 . 106.191 93.152  31.388  1.00 37.79
1 . .
ATOM 2250 N     N     . ASP ASP ASP A A 296 296 . 108.364 92.599  31.072  1.00 37.63
1 . .
ATOM 2251 CA    CA    . ASP ASP ASP A A 296 296 . 108.092 91.342  30.344  1.00 38.95
1 . .
ATOM 2252 CB    CB    . ASP ASP ASP A A 296 296 . 109.423 90.644  30.027  1.00 39.77
1 . .
ATOM 2253 CG    CG    . ASP ASP ASP A A 296 296 . 109.250 89.524  29.042  1.00 40.04
1 . .
ATOM 2254 OD1   OD1   . ASP ASP ASP A A 296 296 . 108.974 89.823  27.835  1.00 37.98
1 . .
ATOM 2255 OD2   OD2   . ASP ASP ASP A A 296 296 . 109.358 88.360  29.506  1.00 41.14
1 . .
ATOM 2256 C     C     . ASP ASP ASP A A 296 296 . 107.143 90.357  31.060  1.00 39.55
1 . .
ATOM 2257 O     O     . ASP ASP ASP A A 296 296 . 107.154 90.259  32.295  1.00 39.93
1 . .
ATOM 2258 N     N     . GLN GLN GLN A A 297 297 . 106.333 89.627  30.283  1.00 39.50
1 . .
ATOM 2259 CA    CA    . GLN GLN GLN A A 297 297 . 105.377 88.634  30.801  1.00 39.82
1 . .
ATOM 2260 CB    CB    . GLN GLN GLN A A 297 297 . 104.651 87.946  29.632  1.00 39.70
1 . .
ATOM 2261 CG    CG    . GLN GLN GLN A A 297 297 . 105.667 87.297  28.619  1.00 39.71
1 . .
ATOM 2262 CD    CD    . GLN GLN GLN A A 297 297 . 105.222 87.450  27.167  1.00 38.79
1 . .
ATOM 2263 OE1   OE1   . GLN GLN GLN A A 297 297 . 104.014 87.408  26.871  1.00 37.54
1 . .
ATOM 2264 NE2   NE2   . GLN GLN GLN A A 297 297 . 106.202 87.681  26.249  1.00 39.10
1 . .
ATOM 2265 C     C     . GLN GLN GLN A A 297 297 . 105.997 87.534  31.656  1.00 40.34
1 . .
ATOM 2266 O     O     . GLN GLN GLN A A 297 297 . 105.253 86.820  32.315  1.00 38.18
1 . .
ATOM 2267 N     N     . ASP ASP ASP A A 298 298 . 107.332 87.356  31.597  1.00 42.60
1 . .
ATOM 2268 CA    CA    . ASP ASP ASP A A 298 298 . 108.018 86.304  32.417  1.00 44.85
1 . .
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ATOM 2269 CB    CB    . ASP ASP ASP A A 298 298 . 108.823 85.319  31.549  1.00 45.13
1 . .
ATOM 2270 CG    CG    . ASP ASP ASP A A 298 298 . 107.935 84.377  30.739  1.00 46.92
1 . .
ATOM 2271 OD1   OD1   . ASP ASP ASP A A 298 298 . 106.943 83.843  31.321  1.00 47.51
1 . .
ATOM 2272 OD2   OD2   . ASP ASP ASP A A 298 298 . 108.256 84.183  29.527  1.00 47.39
1 . .
ATOM 2273 C     C     . ASP ASP ASP A A 298 298 . 108.938 86.876  33.483  1.00 45.92
1 . .
ATOM 2274 O     O     . ASP ASP ASP A A 298 298 . 109.620 86.129  34.207  1.00 46.80
1 . .
ATOM 2275 N     N     . ASP ASP ASP A A 299 299 . 108.961 88.206  33.578  1.00 46.45
1 . .
ATOM 2276 CA    CA    . ASP ASP ASP A A 299 299 . 109.919 88.900  34.430  1.00 46.61
1 . .
ATOM 2277 CB    CB    . ASP ASP ASP A A 299 299 . 110.416 90.176  33.729  1.00 46.55
1 . .
ATOM 2278 CG    CG    . ASP ASP ASP A A 299 299 . 111.639 90.779  34.398  1.00 47.42
1 . .
ATOM 2279 OD1   OD1   . ASP ASP ASP A A 299 299 . 112.100 90.246  35.431  1.00 46.19
1 . .
ATOM 2280 OD2   OD2   . ASP ASP ASP A A 299 299 . 112.142 91.802  33.875  1.00 49.60
1 . .
ATOM 2281 C     C     . ASP ASP ASP A A 299 299 . 109.303 89.211  35.794  1.00 46.13
1 . .
ATOM 2282 O     O     . ASP ASP ASP A A 299 299 . 109.240 90.379  36.187  1.00 45.91
1 . .
ATOM 2283 N     N     . TRP TRP TRP A A 300 300 . 108.882 88.159  36.503  1.00 46.16
1 . .
ATOM 2284 CA    CA    . TRP TRP TRP A A 300 300 . 108.033 88.277  37.701  1.00 47.32
1 . .
ATOM 2285 CB    CB    . TRP TRP TRP A A 300 300 . 107.632 86.902  38.222  1.00 47.46
1 . .
ATOM 2286 CG    CG    . TRP TRP TRP A A 300 300 . 106.705 86.202  37.333  1.00 46.68
1 . .
ATOM 2287 CD1   CD1   . TRP TRP TRP A A 300 300 . 107.033 85.450  36.256  1.00 45.62
1 . .
ATOM 2288 NE1   NE1   . TRP TRP TRP A A 300 300 . 105.890 84.958  35.658  1.00 44.47
1 . .
ATOM 2289 CE2   CE2   . TRP TRP TRP A A 300 300 . 104.798 85.388  36.362  1.00 45.47
1 . .
ATOM 2290 CD2   CD2   . TRP TRP TRP A A 300 300 . 105.277 86.173  37.433  1.00 46.60
1 . .
ATOM 2291 CE3   CE3   . TRP TRP TRP A A 300 300 . 104.358 86.747  38.307  1.00 47.81
1 . .
ATOM 2292 CZ3   CZ3   . TRP TRP TRP A A 300 300 . 102.990 86.502  38.096  1.00 48.97
1 . .
ATOM 2293 CH2   CH2   . TRP TRP TRP A A 300 300 . 102.545 85.701  37.027  1.00 46.64
1 . .
ATOM 2294 CZ2   CZ2   . TRP TRP TRP A A 300 300 . 103.430 85.139  36.152  1.00 45.03
1 . .
ATOM 2295 C     C     . TRP TRP TRP A A 300 300 . 108.661 89.058  38.847  1.00 48.06
1 . .
ATOM 2296 O     O     . TRP TRP TRP A A 300 300 . 107.942 89.775  39.589  1.00 48.89
1 . .
ATOM 2297 N     N     . ALA ALA ALA A A 301 301 . 109.986 88.914  38.981  1.00 48.08
1 . .
ATOM 2298 CA    CA    . ALA ALA ALA A A 301 301 . 110.755 89.621  40.008  1.00 48.18
1 . .
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ATOM 2299 CB    CB    . ALA ALA ALA A A 301 301 . 112.208 89.117  40.070  1.00 48.04
1 . .
ATOM 2300 C     C     . ALA ALA ALA A A 301 301 . 110.725 91.123  39.830  1.00 47.82
1 . .
ATOM 2301 O     O     . ALA ALA ALA A A 301 301 . 110.570 91.862  40.809  1.00 48.71
1 . .
ATOM 2302 N     N     . ALA ALA ALA A A 302 302 . 110.897 91.592  38.598  1.00 47.24
1 . .
ATOM 2303 CA    CA    . ALA ALA ALA A A 302 302 . 110.784 93.055  38.343  1.00 46.09
1 . .
ATOM 2304 CB    CB    . ALA ALA ALA A A 302 302 . 111.229 93.412  36.903  1.00 45.19
1 . .
ATOM 2305 C     C     . ALA ALA ALA A A 302 302 . 109.360 93.574  38.647  1.00 44.94
1 . .
ATOM 2306 O     O     . ALA ALA ALA A A 302 302 . 109.193 94.658  39.193  1.00 44.59
1 . .
ATOM 2307 N     N     . TRP TRP TRP A A 303 303 . 108.345 92.780  38.313  1.00 44.75
1 . .
ATOM 2308 CA    CA    . TRP TRP TRP A A 303 303 . 106.941 93.139  38.580  1.00 44.27
1 . .
ATOM 2309 CB    CB    . TRP TRP TRP A A 303 303 . 105.975 92.109  37.998  1.00 43.99
1 . .
ATOM 2310 CG    CG    . TRP TRP TRP A A 303 303 . 105.721 92.161  36.506  1.00 42.43
1 . .
ATOM 2311 CD1   CD1   . TRP TRP TRP A A 303 303 . 106.530 91.687  35.522  1.00 40.19
1 . .
ATOM 2312 NE1   NE1   . TRP TRP TRP A A 303 303 . 105.929 91.877  34.297  1.00 42.87
1 . .
ATOM 2313 CE2   CE2   . TRP TRP TRP A A 303 303 . 104.703 92.467  34.482  1.00 40.68
1 . .
ATOM 2314 CD2   CD2   . TRP TRP TRP A A 303 303 . 104.538 92.663  35.860  1.00 40.51
1 . .
ATOM 2315 CE3   CE3   . TRP TRP TRP A A 303 303 . 103.354 93.263  36.323  1.00 41.09
1 . .
ATOM 2316 CZ3   CZ3   . TRP TRP TRP A A 303 303 . 102.388 93.644  35.394  1.00 40.63
1 . .
ATOM 2317 CH2   CH2   . TRP TRP TRP A A 303 303 . 102.583 93.420  34.025  1.00 38.87
1 . .
ATOM 2318 CZ2   CZ2   . TRP TRP TRP A A 303 303 . 103.730 92.844  33.549  1.00 39.95
1 . .
ATOM 2319 C     C     . TRP TRP TRP A A 303 303 . 106.641 93.269  40.082  1.00 44.53
1 . .
ATOM 2320 O     O     . TRP TRP TRP A A 303 303 . 106.110 94.307  40.519  1.00 44.76
1 . .
ATOM 2321 N     N     . SER SER SER A A 304 304 . 106.951 92.232  40.868  1.00 44.22
1 . .
ATOM 2322 CA    CA    . SER SER SER A A 304 304 . 106.693 92.293  42.331  1.00 44.51
1 . .
ATOM 2323 CB    CB    . SER SER SER A A 304 304 . 107.121 90.994  43.011  1.00 44.26
1 . .
ATOM 2324 OG    OG    . SER SER SER A A 304 304 . 106.758 89.885  42.217  1.00 44.46
1 . .
ATOM 2325 C     C     . SER SER SER A A 304 304 . 107.374 93.496  43.010  1.00 44.56
1 . .
ATOM 2326 O     O     . SER SER SER A A 304 304 . 106.755 94.233  43.778  1.00 44.97
1 . .
ATOM 2327 N     N     . LYS LYS LYS A A 305 305 . 108.641 93.715  42.675  1.00 45.13
1 . .
ATOM 2328 CA    CA    . LYS LYS LYS A A 305 305 . 109.433 94.802  43.234  1.00 46.16
1 . .
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ATOM 2329 CB    CB    . LYS LYS LYS A A 305 305 . 110.922 94.613  42.859  1.00 46.77
1 . .
ATOM 2330 CG    CG    . LYS LYS LYS A A 305 305 . 111.773 95.887  42.969  1.00 47.72
1 . .
ATOM 2331 CD    CD    . LYS LYS LYS A A 305 305 . 113.067 95.811  42.180  1.00 49.04
1 . .
ATOM 2332 CE    CE    . LYS LYS LYS A A 305 305 . 114.228 95.501  43.069  1.00 51.69
1 . .
ATOM 2333 NZ    NZ    . LYS LYS LYS A A 305 305 . 115.537 95.905  42.418  1.00 56.52
1 . .
ATOM 2334 C     C     . LYS LYS LYS A A 305 305 . 108.924 96.186  42.808  1.00 46.41
1 . .
ATOM 2335 O     O     . LYS LYS LYS A A 305 305 . 108.832 97.100  43.620  1.00 46.70
1 . .
ATOM 2336 N     N     . PHE PHE PHE A A 306 306 . 108.631 96.373  41.527  1.00 46.08
1 . .
ATOM 2337 CA    CA    . PHE PHE PHE A A 306 306 . 108.059 97.643  41.148  1.00 46.13
1 . .
ATOM 2338 CB    CB    . PHE PHE PHE A A 306 306 . 107.931 97.797  39.623  1.00 46.51
1 . .
ATOM 2339 CG    CG    . PHE PHE PHE A A 306 306 . 107.380 99.131  39.191  1.00 46.72
1 . .
ATOM 2340 CD1   CD1   . PHE PHE PHE A A 306 306 . 108.196 100.257 39.160  1.00 47.06
1 . .
ATOM 2341 CE1   CE1   . PHE PHE PHE A A 306 306 . 107.677 101.507 38.768  1.00 47.62
1 . .
ATOM 2342 CZ    CZ    . PHE PHE PHE A A 306 306 . 106.333 101.625 38.413  1.00 46.87
1 . .
ATOM 2343 CE2   CE2   . PHE PHE PHE A A 306 306 . 105.518 100.501 38.452  1.00 48.26
1 . .
ATOM 2344 CD2   CD2   . PHE PHE PHE A A 306 306 . 106.040 99.261  38.828  1.00 46.82
1 . .
ATOM 2345 C     C     . PHE PHE PHE A A 306 306 . 106.721 97.883  41.867  1.00 45.77
1 . .
ATOM 2346 O     O     . PHE PHE PHE A A 306 306 . 106.528 98.977  42.380  1.00 46.45
1 . .
ATOM 2347 N     N     . THR THR THR A A 307 307 . 105.816 96.899  41.915  1.00 45.23
1 . .
ATOM 2348 CA    CA    . THR THR THR A A 307 307 . 104.490 97.092  42.550  1.00 45.35
1 . .
ATOM 2349 CB    CB    . THR THR THR A A 307 307 . 103.520 95.886  42.215  1.00 45.70
1 . .
ATOM 2350 OG1   OG1   . THR THR THR A A 307 307 . 103.213 95.884  40.798  1.00 45.52
1 . .
ATOM 2351 CG2   CG2   . THR THR THR A A 307 307 . 102.202 95.904  43.050  1.00 43.90
1 . .
ATOM 2352 C     C     . THR THR THR A A 307 307 . 104.533 97.381  44.075  1.00 45.46
1 . .
ATOM 2353 O     O     . THR THR THR A A 307 307 . 103.740 98.182  44.618  1.00 45.54
1 . .
ATOM 2354 N     N     . ALA ALA ALA A A 308 308 . 105.447 96.717  44.771  1.00 45.74
1 . .
ATOM 2355 CA    CA    . ALA ALA ALA A A 308 308 . 105.577 96.882  46.237  1.00 45.82
1 . .
ATOM 2356 CB    CB    . ALA ALA ALA A A 308 308 . 106.543 95.792  46.821  1.00 45.82
1 . .
ATOM 2357 C     C     . ALA ALA ALA A A 308 308 . 106.076 98.319  46.549  1.00 45.70
1 . .
ATOM 2358 O     O     . ALA ALA ALA A A 308 308 . 106.032 98.814  47.694  1.00 44.51
1 . .
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ATOM 2359 N     N     . ASN ASN ASN A A 309 309 . 106.517 98.972  45.481  1.00 45.70
1 . .
ATOM 2360 CA    CA    . ASN ASN ASN A A 309 309 . 107.165 100.265 45.559  1.00 46.37
1 . .
ATOM 2361 CB    CB    . ASN ASN ASN A A 309 309 . 108.546 100.139 44.899  1.00 47.84
1 . .
ATOM 2362 CG    CG    . ASN ASN ASN A A 309 309 . 109.555 101.007 45.547  1.00 51.40
1 . .
ATOM 2363 OD1   OD1   . ASN ASN ASN A A 309 309 . 109.354 101.460 46.686  1.00 56.30
1 . .
ATOM 2364 ND2   ND2   . ASN ASN ASN A A 309 309 . 110.651 101.276 44.841  1.00 53.95
1 . .
ATOM 2365 C     C     . ASN ASN ASN A A 309 309 . 106.409 101.459 44.954  1.00 45.06
1 . .
ATOM 2366 O     O     . ASN ASN ASN A A 309 309 . 106.991 102.522 44.734  1.00 45.50
1 . .
ATOM 2367 N     N     . VAL VAL VAL A A 310 310 . 105.122 101.292 44.673  1.00 43.89
1 . .
ATOM 2368 CA    CA    . VAL VAL VAL A A 310 310 . 104.265 102.399 44.183  1.00 42.55
1 . .
ATOM 2369 CB    CB    . VAL VAL VAL A A 310 310 . 104.048 102.358 42.643  1.00 42.92
1 . .
ATOM 2370 CG1   CG1   . VAL VAL VAL A A 310 310 . 105.367 102.470 41.893  1.00 44.22
1 . .
ATOM 2371 CG2   CG2   . VAL VAL VAL A A 310 310 . 103.220 101.086 42.249  1.00 42.49
1 . .
ATOM 2372 C     C     . VAL VAL VAL A A 310 310 . 102.891 102.257 44.796  1.00 40.56
1 . .
ATOM 2373 O     O     . VAL VAL VAL A A 310 310 . 102.559 101.174 45.263  1.00 39.88
1 . .
ATOM 2374 N     N     . GLY GLY GLY A A 311 311 . 102.104 103.336 44.757  1.00 39.09
1 . .
ATOM 2375 CA    CA    . GLY GLY GLY A A 311 311 . 100.703 103.304 45.224  1.00 38.67
1 . .
ATOM 2376 C     C     . GLY GLY GLY A A 311 311 . 99.707  103.484 44.089  1.00 38.38
1 . .
ATOM 2377 O     O     . GLY GLY GLY A A 311 311 . 98.503  103.629 44.346  1.00 38.08
1 . .
ATOM 2378 N     N     . ILE ILE ILE A A 312 312 . 100.197 103.495 42.830  1.00 37.60
1 . .
ATOM 2379 CA    CA    . ILE ILE ILE A A 312 312 . 99.295  103.567 41.637  1.00 37.51
1 . .
ATOM 2380 CB    CB    . ILE ILE ILE A A 312 312 . 99.955  104.284 40.412  1.00 37.36
1 . .
ATOM 2381 CG1   CG1   . ILE ILE ILE A A 312 312 . 100.831 103.288 39.620  1.00 38.51
1 . .
ATOM 2382 CD1   CD1   . ILE ILE ILE A A 312 312 . 102.246 103.689 39.390  1.00 38.93
1 . .
ATOM 2383 CG2   CG2   . ILE ILE ILE A A 312 312 . 100.618 105.581 40.854  1.00 35.45
1 . .
ATOM 2384 C     C     . ILE ILE ILE A A 312 312 . 98.721  102.203 41.185  1.00 36.64
1 . .
ATOM 2385 O     O     . ILE ILE ILE A A 312 312 . 99.076  101.159 41.737  1.00 37.53
1 . .
ATOM 2386 N     N     . GLN GLN GLN A A 313 313 . 97.879  102.204 40.154  1.00 35.18
1 . .
ATOM 2387 CA    CA    . GLN GLN GLN A A 313 313 . 97.368  100.939 39.600  1.00 32.67
1 . .
ATOM 2388 CB    CB    . GLN GLN GLN A A 313 313 . 96.010  101.163 38.910  1.00 32.48
1 . .
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ATOM 2389 CG    CG    . GLN GLN GLN A A 313 313 . 95.553  100.039 37.972  1.00 29.83
1 . .
ATOM 2390 CD    CD    . GLN GLN GLN A A 313 313 . 94.093  100.241 37.534  1.00 29.42
1 . .
ATOM 2391 OE1   OE1   . GLN GLN GLN A A 313 313 . 93.146  99.866  38.268  1.00 26.15
1 . .
ATOM 2392 NE2   NE2   . GLN GLN GLN A A 313 313 . 93.900  100.829 36.322  1.00 25.59
1 . .
ATOM 2393 C     C     . GLN GLN GLN A A 313 313 . 98.454  100.307 38.693  1.00 32.03
1 . .
ATOM 2394 O     O     . GLN GLN GLN A A 313 313 . 99.122  101.005 37.936  1.00 30.63
1 . .
ATOM 2395 N     N     . ILE ILE ILE A A 314 314 . 98.670  98.991  38.831  1.00 32.06
1 . .
ATOM 2396 CA    CA    . ILE ILE ILE A A 314 314 . 99.624  98.290  38.008  1.00 32.03
1 . .
ATOM 2397 CB    CB    . ILE ILE ILE A A 314 314 . 100.817 97.675  38.795  1.00 32.71
1 . .
ATOM 2398 CG1   CG1   . ILE ILE ILE A A 314 314 . 101.547 98.745  39.609  1.00 31.57
1 . .
ATOM 2399 CD1   CD1   . ILE ILE ILE A A 314 314 . 102.016 99.918  38.785  1.00 33.95
1 . .
ATOM 2400 CG2   CG2   . ILE ILE ILE A A 314 314 . 101.800 96.975  37.814  1.00 31.73
1 . .
ATOM 2401 C     C     . ILE ILE ILE A A 314 314 . 98.838  97.217  37.310  1.00 32.31
1 . .
ATOM 2402 O     O     . ILE ILE ILE A A 314 314 . 98.183  96.400  37.960  1.00 32.19
1 . .
ATOM 2403 N     N     . VAL VAL VAL A A 315 315 . 98.849  97.264  35.977  1.00 31.74
1 . .
ATOM 2404 CA    CA    . VAL VAL VAL A A 315 315 . 97.950  96.397  35.211  1.00 32.01
1 . .
ATOM 2405 CB    CB    . VAL VAL VAL A A 315 315 . 97.088  97.163  34.143  1.00 30.65
1 . .
ATOM 2406 CG1   CG1   . VAL VAL VAL A A 315 315 . 95.823  96.336  33.790  1.00 31.01
1 . .
ATOM 2407 CG2   CG2   . VAL VAL VAL A A 315 315 . 96.685  98.502  34.654  1.00 29.48
1 . .
ATOM 2408 C     C     . VAL VAL VAL A A 315 315 . 98.679  95.205  34.551  1.00 32.21
1 . .
ATOM 2409 O     O     . VAL VAL VAL A A 315 315 . 99.626  95.376  33.770  1.00 32.51
1 . .
ATOM 2410 N     N     . GLY GLY GLY A A 316 316 . 98.214  94.013  34.883  1.00 31.75
1 . .
ATOM 2411 CA    CA    . GLY GLY GLY A A 316 316 . 98.608  92.844  34.128  1.00 32.59
1 . .
ATOM 2412 C     C     . GLY GLY GLY A A 316 316 . 97.785  92.587  32.857  1.00 32.34
1 . .
ATOM 2413 O     O     . GLY GLY GLY A A 316 316 . 96.513  92.553  32.872  1.00 31.03
1 . .
ATOM 2414 N     N     . ASP ASP ASP A A 317 317 . 98.526  92.342  31.774  1.00 31.79
1 . .
ATOM 2415 CA    CA    . ASP ASP ASP A A 317 317 . 97.932  92.040  30.474  1.00 31.93
1 . .
ATOM 2416 CB    CB    . ASP ASP ASP A A 317 317 . 98.161  93.245  29.523  1.00 31.83
1 . .
ATOM 2417 CG    CG    . ASP ASP ASP A A 317 317 . 97.636  93.004  28.068  1.00 32.13
1 . .
ATOM 2418 OD1   OD1   . ASP ASP ASP A A 317 317 . 97.920  93.833  27.178  1.00 29.38
1 . .
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ATOM 2419 OD2   OD2   . ASP ASP ASP A A 317 317 . 96.947  91.991  27.814  1.00 36.83
1 . .
ATOM 2420 C     C     . ASP ASP ASP A A 317 317 . 98.590  90.748  29.948  1.00 32.24
1 . .
ATOM 2421 O     O     . ASP ASP ASP A A 317 317 . 98.131  89.651  30.245  1.00 31.32
1 . .
ATOM 2422 N     N     . ASP ASP ASP A A 318 318 . 99.692  90.908  29.198  1.00 32.97
1 . .
ATOM 2423 CA    CA    . ASP ASP ASP A A 318 318 . 100.523 89.802  28.754  1.00 33.91
1 . .
ATOM 2424 CB    CB    . ASP ASP ASP A A 318 318 . 101.671 90.316  27.860  1.00 34.44
1 . .
ATOM 2425 CG    CG    . ASP ASP ASP A A 318 318 . 101.169 90.880  26.513  1.00 37.95
1 . .
ATOM 2426 OD1   OD1   . ASP ASP ASP A A 318 318 . 99.936  90.758  26.201  1.00 41.62
1 . .
ATOM 2427 OD2   OD2   . ASP ASP ASP A A 318 318 . 102.003 91.461  25.774  1.00 40.38
1 . .
ATOM 2428 C     C     . ASP ASP ASP A A 318 318 . 101.046 88.982  29.947  1.00 33.55
1 . .
ATOM 2429 O     O     . ASP ASP ASP A A 318 318 . 101.378 87.808  29.808  1.00 33.90
1 . .
ATOM 2430 N     N     . LEU LEU LEU A A 319 319 . 101.084 89.593  31.125  1.00 33.17
1 . .
ATOM 2431 CA    CA    . LEU LEU LEU A A 319 319 . 101.415 88.862  32.334  1.00 32.53
1 . .
ATOM 2432 CB    CB    . LEU LEU LEU A A 319 319 . 101.637 89.824  33.502  1.00 31.33
1 . .
ATOM 2433 CG    CG    . LEU LEU LEU A A 319 319 . 102.186 89.128  34.755  1.00 29.55
1 . .
ATOM 2434 CD1   CD1   . LEU LEU LEU A A 319 319 . 103.748 88.999  34.699  1.00 27.46
1 . .
ATOM 2435 CD2   CD2   . LEU LEU LEU A A 319 319 . 101.747 89.822  36.012  1.00 27.86
1 . .
ATOM 2436 C     C     . LEU LEU LEU A A 319 319 . 100.318 87.870  32.694  1.00 33.61
1 . .
ATOM 2437 O     O     . LEU LEU LEU A A 319 319 . 100.614 86.734  33.063  1.00 34.09
1 . .
ATOM 2438 N     N     . THR THR THR A A 320 320 . 99.054  88.288  32.598  1.00 33.29
1 . .
ATOM 2439 CA    CA    . THR THR THR A A 320 320 . 97.958  87.459  33.096  1.00 32.40
1 . .
ATOM 2440 CB    CB    . THR THR THR A A 320 320 . 96.998  88.316  33.903  1.00 32.78
1 . .
ATOM 2441 OG1   OG1   . THR THR THR A A 320 320 . 96.992  89.626  33.332  1.00 32.71
1 . .
ATOM 2442 CG2   CG2   . THR THR THR A A 320 320 . 97.455  88.417  35.394  1.00 32.29
1 . .
ATOM 2443 C     C     . THR THR THR A A 320 320 . 97.150  86.781  32.004  1.00 32.36
1 . .
ATOM 2444 O     O     . THR THR THR A A 320 320 . 96.459  85.769  32.268  1.00 33.29
1 . .
ATOM 2445 N     N     . VAL VAL VAL A A 321 321 . 97.202  87.352  30.799  1.00 31.40
1 . .
ATOM 2446 CA    CA    . VAL VAL VAL A A 321 321 . 96.395  86.923  29.648  1.00 30.77
1 . .
ATOM 2447 CB    CB    . VAL VAL VAL A A 321 321 . 97.120  85.911  28.788  1.00 30.84
1 . .
ATOM 2448 CG1   CG1   . VAL VAL VAL A A 321 321 . 98.485  86.506  28.277  1.00 30.84
1 . .
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ATOM 2449 CG2   CG2   . VAL VAL VAL A A 321 321 . 97.368  84.627  29.577  1.00 32.42
1 . .
ATOM 2450 C     C     . VAL VAL VAL A A 321 321 . 94.992  86.424  30.003  1.00 30.53
1 . .
ATOM 2451 O     O     . VAL VAL VAL A A 321 321 . 94.578  85.336  29.596  1.00 30.74
1 . .
ATOM 2452 N     N     . THR THR THR A A 322 322 . 94.280  87.192  30.808  1.00 30.44
1 . .
ATOM 2453 CA    CA    . THR THR THR A A 322 322 . 92.883  86.887  31.152  1.00 30.64
1 . .
ATOM 2454 CB    CB    . THR THR THR A A 322 322 . 91.956  87.316  29.989  1.00 30.39
1 . .
ATOM 2455 OG1   OG1   . THR THR THR A A 322 322 . 92.401  88.592  29.500  1.00 29.17
1 . .
ATOM 2456 CG2   CG2   . THR THR THR A A 322 322 . 90.488  87.444  30.449  1.00 29.42
1 . .
ATOM 2457 C     C     . THR THR THR A A 322 322 . 92.680  85.426  31.587  1.00 32.38
1 . .
ATOM 2458 O     O     . THR THR THR A A 322 322 . 91.627  84.832  31.389  1.00 32.53
1 . .
ATOM 2459 N     N     . ASN ASN ASN A A 323 323 . 93.713  84.867  32.212  1.00 35.13
1 . .
ATOM 2460 CA    CA    . ASN ASN ASN A A 323 323 . 93.821  83.447  32.548  1.00 37.01
1 . .
ATOM 2461 CB    CB    . ASN ASN ASN A A 323 323 . 95.104  82.950  31.893  1.00 38.09
1 . .
ATOM 2462 CG    CG    . ASN ASN ASN A A 323 323 . 95.245  81.458  31.923  1.00 41.50
1 . .
ATOM 2463 OD1   OD1   . ASN ASN ASN A A 323 323 . 95.198  80.846  32.993  1.00 45.98
1 . .
ATOM 2464 ND2   ND2   . ASN ASN ASN A A 323 323 . 95.491  80.852  30.745  1.00 41.37
1 . .
ATOM 2465 C     C     . ASN ASN ASN A A 323 323 . 93.877  83.180  34.067  1.00 37.91
1 . .
ATOM 2466 O     O     . ASN ASN ASN A A 323 323 . 94.860  83.546  34.724  1.00 37.40
1 . .
ATOM 2467 N     N     . PRO PRO PRO A A 324 324 . 92.839  82.522  34.622  1.00 39.49
1 . .
ATOM 2468 CA    CA    . PRO PRO PRO A A 324 324 . 92.791  82.239  36.054  1.00 41.03
1 . .
ATOM 2469 CB    CB    . PRO PRO PRO A A 324 324 . 91.583  81.309  36.187  1.00 41.25
1 . .
ATOM 2470 CG    CG    . PRO PRO PRO A A 324 324 . 90.662  81.800  35.095  1.00 41.18
1 . .
ATOM 2471 CD    CD    . PRO PRO PRO A A 324 324 . 91.609  82.067  33.945  1.00 39.38
1 . .
ATOM 2472 C     C     . PRO PRO PRO A A 324 324 . 94.069  81.614  36.653  1.00 42.11
1 . .
ATOM 2473 O     O     . PRO PRO PRO A A 324 324 . 94.476  81.998  37.757  1.00 42.90
1 . .
ATOM 2474 N     N     . LYS LYS LYS A A 325 325 . 94.715  80.695  35.952  1.00 42.99
1 . .
ATOM 2475 CA    CA    . LYS LYS LYS A A 325 325 . 95.975  80.135  36.479  1.00 43.86
1 . .
ATOM 2476 CB    CB    . LYS LYS LYS A A 325 325 . 96.506  79.001  35.593  1.00 44.65
1 . .
ATOM 2477 CG    CG    . LYS LYS LYS A A 325 325 . 97.981  78.627  35.930  1.00 49.18
1 . .
ATOM 2478 CD    CD    . LYS LYS LYS A A 325 325 . 99.067  79.073  34.864  1.00 54.12
1 . .
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ATOM 2479 CE    CE    . LYS LYS LYS A A 325 325 . 100.485 79.290  35.492  1.00 56.49
1 . .
ATOM 2480 NZ    NZ    . LYS LYS LYS A A 325 325 . 100.491 80.429  36.475  1.00 57.39
1 . .
ATOM 2481 C     C     . LYS LYS LYS A A 325 325 . 97.071  81.185  36.670  1.00 43.29
1 . .
ATOM 2482 O     O     . LYS LYS LYS A A 325 325 . 97.788  81.163  37.685  1.00 43.76
1 . .
ATOM 2483 N     N     . ARG ARG ARG A A 326 326 . 97.220  82.091  35.695  1.00 42.28
1 . .
ATOM 2484 CA    CA    . ARG ARG ARG A A 326 326 . 98.303  83.096  35.695  1.00 40.78
1 . .
ATOM 2485 CB    CB    . ARG ARG ARG A A 326 326 . 98.503  83.688  34.284  1.00 41.08
1 . .
ATOM 2486 CG    CG    . ARG ARG ARG A A 326 326 . 99.444  82.861  33.396  1.00 42.02
1 . .
ATOM 2487 CD    CD    . ARG ARG ARG A A 326 326 . 100.494 83.745  32.728  1.00 45.32
1 . .
ATOM 2488 NE    NE    . ARG ARG ARG A A 326 326 . 101.824 83.155  32.864  1.00 49.46
1 . .
ATOM 2489 CZ    CZ    . ARG ARG ARG A A 326 326 . 102.995 83.782  32.719  1.00 48.39
1 . .
ATOM 2490 NH1   NH1   . ARG ARG ARG A A 326 326 . 103.052 85.061  32.444  1.00 44.33
1 . .
ATOM 2491 NH2   NH2   . ARG ARG ARG A A 326 326 . 104.142 83.103  32.883  1.00 51.84
1 . .
ATOM 2492 C     C     . ARG ARG ARG A A 326 326 . 98.019  84.204  36.710  1.00 40.07
1 . .
ATOM 2493 O     O     . ARG ARG ARG A A 326 326 . 98.941  84.756  37.361  1.00 38.76
1 . .
ATOM 2494 N     N     . ILE ILE ILE A A 327 327 . 96.723  84.517  36.805  1.00 39.34
1 . .
ATOM 2495 CA    CA    . ILE ILE ILE A A 327 327 . 96.153  85.428  37.792  1.00 39.25
1 . .
ATOM 2496 CB    CB    . ILE ILE ILE A A 327 327 . 94.579  85.626  37.579  1.00 38.50
1 . .
ATOM 2497 CG1   CG1   . ILE ILE ILE A A 327 327 . 94.295  86.305  36.215  1.00 37.63
1 . .
ATOM 2498 CD1   CD1   . ILE ILE ILE A A 327 327 . 92.795  86.252  35.780  1.00 35.17
1 . .
ATOM 2499 CG2   CG2   . ILE ILE ILE A A 327 327 . 93.908  86.397  38.762  1.00 36.01
1 . .
ATOM 2500 C     C     . ILE ILE ILE A A 327 327 . 96.495  84.939  39.214  1.00 40.74
1 . .
ATOM 2501 O     O     . ILE ILE ILE A A 327 327 . 97.089  85.700  39.984  1.00 41.11
1 . .
ATOM 2502 N     N     . GLU GLU GLU A A 328 328 . 96.154  83.686  39.561  1.00 42.05
1 . .
ATOM 2503 CA    CA    . GLU GLU GLU A A 328 328 . 96.536  83.111  40.886  1.00 43.15
1 . .
ATOM 2504 CB    CB    . GLU GLU GLU A A 328 328 . 96.224  81.623  40.990  1.00 43.38
1 . .
ATOM 2505 CG    CG    . GLU GLU GLU A A 328 328 . 94.755  81.267  40.715  1.00 48.60
1 . .
ATOM 2506 CD    CD    . GLU GLU GLU A A 328 328 . 93.809  81.484  41.908  1.00 54.89
1 . .
ATOM 2507 OE1   OE1   . GLU GLU GLU A A 328 328 . 92.704  80.857  41.899  1.00 57.75
1 . .
ATOM 2508 OE2   OE2   . GLU GLU GLU A A 328 328 . 94.154  82.266  42.851  1.00 57.24
1 . .
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ATOM 2509 C     C     . GLU GLU GLU A A 328 328 . 98.005  83.309  41.188  1.00 43.25
1 . .
ATOM 2510 O     O     . GLU GLU GLU A A 328 328 . 98.375  83.694  42.306  1.00 43.68
1 . .
ATOM 2511 N     N     . ARG ARG ARG A A 329 329 . 98.855  83.061  40.196  1.00 43.44
1 . .
ATOM 2512 CA    CA    . ARG ARG ARG A A 329 329 . 100.294 83.241  40.405  1.00 43.76
1 . .
ATOM 2513 CB    CB    . ARG ARG ARG A A 329 329 . 101.095 82.650  39.243  1.00 43.84
1 . .
ATOM 2514 CG    CG    . ARG ARG ARG A A 329 329 . 102.585 82.911  39.297  1.00 45.72
1 . .
ATOM 2515 CD    CD    . ARG ARG ARG A A 329 329 . 103.359 81.905  38.421  1.00 47.53
1 . .
ATOM 2516 NE    NE    . ARG ARG ARG A A 329 329 . 104.812 82.145  38.425  1.00 46.62
1 . .
ATOM 2517 CZ    CZ    . ARG ARG ARG A A 329 329 . 105.610 81.847  37.400  1.00 46.59
1 . .
ATOM 2518 NH1   NH1   . ARG ARG ARG A A 329 329 . 105.078 81.300  36.295  1.00 41.69
1 . .
ATOM 2519 NH2   NH2   . ARG ARG ARG A A 329 329 . 106.938 82.119  37.461  1.00 46.80
1 . .
ATOM 2520 C     C     . ARG ARG ARG A A 329 329 . 100.645 84.707  40.661  1.00 43.83
1 . .
ATOM 2521 O     O     . ARG ARG ARG A A 329 329 . 101.485 85.000  41.517  1.00 44.25
1 . .
ATOM 2522 N     N     . ALA ALA ALA A A 330 330 . 100.008 85.618  39.917  1.00 43.23
1 . .
ATOM 2523 CA    CA    . ALA ALA ALA A A 330 330 . 100.191 87.065  40.114  1.00 42.70
1 . .
ATOM 2524 CB    CB    . ALA ALA ALA A A 330 330 . 99.566  87.879  38.941  1.00 41.81
1 . .
ATOM 2525 C     C     . ALA ALA ALA A A 330 330 . 99.694  87.597  41.472  1.00 42.47
1 . .
ATOM 2526 O     O     . ALA ALA ALA A A 330 330 . 100.353 88.450  42.102  1.00 42.36
1 . .
ATOM 2527 N     N     . VAL VAL VAL A A 331 331 . 98.539  87.118  41.912  1.00 42.16
1 . .
ATOM 2528 CA    CA    . VAL VAL VAL A A 331 331 . 98.041  87.474  43.234  1.00 42.94
1 . .
ATOM 2529 CB    CB    . VAL VAL VAL A A 331 331 . 96.640  86.844  43.520  1.00 42.06
1 . .
ATOM 2530 CG1   CG1   . VAL VAL VAL A A 331 331 . 96.313  86.888  45.037  1.00 42.27
1 . .
ATOM 2531 CG2   CG2   . VAL VAL VAL A A 331 331 . 95.551  87.515  42.687  1.00 39.97
1 . .
ATOM 2532 C     C     . VAL VAL VAL A A 331 331 . 99.039  87.032  44.339  1.00 44.56
1 . .
ATOM 2533 O     O     . VAL VAL VAL A A 331 331 . 99.425  87.837  45.171  1.00 44.93
1 . .
ATOM 2534 N     N     . GLU GLU GLU A A 332 332 . 99.428  85.758  44.321  1.00 46.05
1 . .
ATOM 2535 CA    CA    . GLU GLU GLU A A 332 332 . 100.399 85.201  45.257  1.00 48.02
1 . .
ATOM 2536 CB    CB    . GLU GLU GLU A A 332 332 . 100.500 83.675  45.027  1.00 49.42
1 . .
ATOM 2537 CG    CG    . GLU GLU GLU A A 332 332 . 101.726 82.932  45.632  1.00 54.39
1 . .
ATOM 2538 CD    CD    . GLU GLU GLU A A 332 332 . 101.571 82.618  47.161  1.00 60.49
1 . .
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ATOM 2539 OE1 OE1 . GLU GLU GLU A A 332 332 . 101.790 81.437 47.576 1.00 63.01
1 . .
ATOM 2540 OE2 OE2 . GLU GLU GLU A A 332 332 . 101.242 83.551 47.949 1.00 63.35
1 . .
ATOM 2541 C C . GLU GLU GLU A A 332 332 . 101.797 85.889 45.214 1.00 47.70
1 . .
ATOM 2542 O O . GLU GLU GLU A A 332 332 . 102.409 86.096 46.251 1.00 47.94
1 . .
ATOM 2543 N N . GLU GLU GLU A A 333 333 . 102.297 86.255 44.045 1.00 47.16
1 . .
ATOM 2544 CA CA . GLU GLU GLU A A 333 333 . 103.598 86.958 43.990 1.00 47.51
1 . .
ATOM 2545 CB CB . GLU GLU GLU A A 333 333 . 104.375 86.562 42.731 1.00 48.04
1 . .
ATOM 2546 CG CG . GLU GLU GLU A A 333 333 . 104.559 85.044 42.683 1.00 51.88
1 . .
ATOM 2547 CD CD . GLU GLU GLU A A 333 333 . 105.656 84.512 41.750 1.00 56.58
1 . .
ATOM 2548 OE1 OE1 . GLU GLU GLU A A 333 333 . 105.383 83.462 41.109 1.00 57.79
1 . .
ATOM 2549 OE2 OE2 . GLU GLU GLU A A 333 333 . 106.793 85.078 41.696 1.00 59.70
1 . .
ATOM 2550 C C . GLU GLU GLU A A 333 333 . 103.439 88.493 44.113 1.00 47.02
1 . .
ATOM 2551 O O . GLU GLU GLU A A 333 333 . 104.416 89.261 43.930 1.00 46.72
1 . .
ATOM 2552 N N . LYS LYS LYS A A 334 334 . 102.204 88.926 44.434 1.00 46.11
1 . .
ATOM 2553 CA CA . LYS LYS LYS A A 334 334 . 101.827 90.349 44.351 1.00 45.86
1 . .
ATOM 2554 CB CB . LYS LYS LYS A A 334 334 . 102.226 91.115 45.653 1.00 46.52
1 . .
ATOM 2555 CG CG . LYS LYS LYS A A 334 334 . 101.355 90.868 46.910 1.00 48.62
1 . .
ATOM 2556 CD CD . LYS LYS LYS A A 334 334 . 99.783 90.783 46.612 1.00 54.20
1 . .
ATOM 2557 CE CE . LYS LYS LYS A A 334 334 . 99.292 91.592 45.322 1.00 57.19
1 . .
ATOM 2558 NZ NZ . LYS LYS LYS A A 334 334 . 97.925 91.196 44.802 1.00 55.89
1 . .
ATOM 2559 C C . LYS LYS LYS A A 334 334 . 102.438 91.029 43.097 1.00 44.58
1 . .
ATOM 2560 O O . LYS LYS LYS A A 334 334 . 103.092 92.085 43.190 1.00 45.04
1 . .
ATOM 2561 N N . ALA ALA ALA A A 335 335 . 102.256 90.430 41.919 1.00 42.61
1 . .
ATOM 2562 CA CA . ALA ALA ALA A A 335 335 . 102.870 91.023 40.709 1.00 40.53
1 . .
ATOM 2563 CB CB . ALA ALA ALA A A 335 335 . 102.820 90.037 39.537 1.00 40.46
1 . .
ATOM 2564 C C . ALA ALA ALA A A 335 335 . 102.221 92.363 40.325 1.00 38.99
1 . .
ATOM 2565 O O . ALA ALA ALA A A 335 335 . 102.898 93.302 39.857 1.00 38.86
1 . .
ATOM 2566 N N . CYS CYS CYS A A 336 336 . 100.913 92.463 40.536 1.00 36.93
1 . .
ATOM 2567 CA CA . CYS CYS CYS A A 336 336 . 100.178 93.584 39.987 1.00 36.42
1 . .
ATOM 2568 CB CB . CYS CYS CYS A A 336 336 . 99.947 93.371 38.462 1.00 36.43
1 . .

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ATOM 2569 SG    SG    . CYS CYS CYS A A 336 336 . 98.883  91.935  38.038  1.00 39.15
1 . .
ATOM 2570 C     C     . CYS CYS CYS A A 336 336 . 98.871  93.695  40.764  1.00 35.82
1 . .
ATOM 2571 O     O     . CYS CYS CYS A A 336 336 . 98.547  92.795  41.567  1.00 35.17
1 . .
ATOM 2572 N     N     . ASN ASN ASN A A 337 337 . 98.128  94.787  40.554  1.00 34.58
1 . .
ATOM 2573 CA    CA    . ASN ASN ASN A A 337 337 . 96.902  94.972  41.323  1.00 34.05
1 . .
ATOM 2574 CB    CB    . ASN ASN ASN A A 337 337 . 97.075  96.049  42.402  1.00 34.03
1 . .
ATOM 2575 CG    CG    . ASN ASN ASN A A 337 337 . 97.474  97.401  41.809  1.00 35.88
1 . .
ATOM 2576 OD1   OD1   . ASN ASN ASN A A 337 337 . 98.416  98.057  42.290  1.00 37.28
1 . .
ATOM 2577 ND2   ND2   . ASN ASN ASN A A 337 337 . 96.780  97.811  40.738  1.00 35.66
1 . .
ATOM 2578 C     C     . ASN ASN ASN A A 337 337 . 95.707  95.245  40.434  1.00 33.63
1 . .
ATOM 2579 O     O     . ASN ASN ASN A A 337 337 . 94.619  95.627  40.929  1.00 33.35
1 . .
ATOM 2580 N     N     . CYS CYS CYS A A 338 338 . 95.887  94.986  39.128  1.00 33.28
1 . .
ATOM 2581 CA    CA    . CYS CYS CYS A A 338 338 . 94.781  95.117  38.158  1.00 32.79
1 . .
ATOM 2582 CB    CB    . CYS CYS CYS A A 338 338 . 94.707  96.566  37.596  1.00 33.13
1 . .
ATOM 2583 SG    SG    . CYS CYS CYS A A 338 338 . 93.147  96.969  36.656  1.00 35.02
1 . .
ATOM 2584 C     C     . CYS CYS CYS A A 338 338 . 94.857  94.098  37.013  1.00 32.00
1 . .
ATOM 2585 O     O     . CYS CYS CYS A A 338 338 . 95.920  93.877  36.400  1.00 32.60
1 . .
ATOM 2586 N     N     . LEU LEU LEU A A 339 339 . 93.718  93.504  36.695  1.00 30.79
1 . .
ATOM 2587 CA    CA    . LEU LEU LEU A A 339 339 . 93.639  92.566  35.550  1.00 31.27
1 . .
ATOM 2588 CB    CB    . LEU LEU LEU A A 339 339 . 92.681  91.404  35.882  1.00 31.33
1 . .
ATOM 2589 CG    CG    . LEU LEU LEU A A 339 339 . 92.304  90.463  34.735  1.00 30.96
1 . .
ATOM 2590 CD1   CD1   . LEU LEU LEU A A 339 339 . 93.571  89.737  34.189  1.00 29.21
1 . .
ATOM 2591 CD2   CD2   . LEU LEU LEU A A 339 339 . 91.259  89.501  35.155  1.00 30.74
1 . .
ATOM 2592 C     C     . LEU LEU LEU A A 339 339 . 93.218  93.293  34.226  1.00 30.70
1 . .
ATOM 2593 O     O     . LEU LEU LEU A A 339 339 . 92.251  94.059  34.204  1.00 29.40
1 . .
ATOM 2594 N     N     . LEU LEU LEU A A 340 340 . 93.948  93.080  33.128  1.00 30.91
1 . .
ATOM 2595 CA    CA    . LEU LEU LEU A A 340 340 . 93.380  93.544  31.876  1.00 30.49
1 . .
ATOM 2596 CB    CB    . LEU LEU LEU A A 340 340 . 94.414  94.020  30.868  1.00 31.10
1 . .
ATOM 2597 CG    CG    . LEU LEU LEU A A 340 340 . 93.762  94.851  29.723  1.00 30.96
1 . .
ATOM 2598 CD1   CD1   . LEU LEU LEU A A 340 340 . 93.532  96.272  30.237  1.00 30.40
1 . .
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ATOM 2599 CD2   CD2   . LEU LEU LEU A A 340 340 . 94.575  94.924  28.448  1.00 30.98
1 . .
ATOM 2600 C     C     . LEU LEU LEU A A 340 340 . 92.472  92.436  31.335  1.00 30.11
1 . .
ATOM 2601 O     O     . LEU LEU LEU A A 340 340 . 92.906  91.333  31.165  1.00 29.93
1 . .
ATOM 2602 N     N     . LEU LEU LEU A A 341 341 . 91.197  92.737  31.137  1.00 29.21
1 . .
ATOM 2603 CA    CA    . LEU LEU LEU A A 341 341 . 90.236  91.705  30.704  1.00 29.31
1 . .
ATOM 2604 CB    CB    . LEU LEU LEU A A 341 341 . 88.899  91.851  31.428  1.00 28.72
1 . .
ATOM 2605 CG    CG    . LEU LEU LEU A A 341 341 . 88.012  90.599  31.275  1.00 31.52
1 . .
ATOM 2606 CD1   CD1   . LEU LEU LEU A A 341 341 . 88.311  89.573  32.370  1.00 32.13
1 . .
ATOM 2607 CD2   CD2   . LEU LEU LEU A A 341 341 . 86.575  90.977  31.377  1.00 34.79
1 . .
ATOM 2608 C     C     . LEU LEU LEU A A 341 341 . 90.004  91.711  29.170  1.00 28.85
1 . .
ATOM 2609 O     O     . LEU LEU LEU A A 341 341 . 89.513  92.677  28.620  1.00 28.31
1 . .
ATOM 2610 N     N     . LYS LYS LYS A A 342 342 . 90.351  90.599  28.513  1.00 28.48
1 . .
ATOM 2611 CA    CA    . LYS LYS LYS A A 342 342 . 90.316  90.445  27.040  1.00 28.33
1 . .
ATOM 2612 CB    CB    . LYS LYS LYS A A 342 342 . 91.750  90.416  26.496  1.00 27.52
1 . .
ATOM 2613 CG    CG    . LYS LYS LYS A A 342 342 . 92.293  91.810  26.268  1.00 26.30
1 . .
ATOM 2614 CD    CD    . LYS LYS LYS A A 342 342 . 93.746  91.742  25.821  1.00 24.06
1 . .
ATOM 2615 CE    CE    . LYS LYS LYS A A 342 342 . 94.224  93.088  25.461  1.00 24.83
1 . .
ATOM 2616 NZ    NZ    . LYS LYS LYS A A 342 342 . 95.711  93.084  25.112  1.00 26.06
1 . .
ATOM 2617 C     C     . LYS LYS LYS A A 342 342 . 89.684  89.098  26.736  1.00 28.46
1 . .
ATOM 2618 O     O     . LYS LYS LYS A A 342 342 . 90.354  88.098  26.813  1.00 29.00
1 . .
ATOM 2619 N     N     . VAL VAL VAL A A 343 343 . 88.387  89.058  26.447  1.00 28.96
1 . .
ATOM 2620 CA    CA    . VAL VAL VAL A A 343 343 . 87.736  87.793  26.176  1.00 28.81
1 . .
ATOM 2621 CB    CB    . VAL VAL VAL A A 343 343 . 86.289  87.962  25.674  1.00 29.17
1 . .
ATOM 2622 CG1   CG1   . VAL VAL VAL A A 343 343 . 85.386  88.508  26.803  1.00 26.74
1 . .
ATOM 2623 CG2   CG2   . VAL VAL VAL A A 343 343 . 86.238  88.934  24.471  1.00 29.72
1 . .
ATOM 2624 C     C     . VAL VAL VAL A A 343 343 . 88.578  86.928  25.233  1.00 29.79
1 . .
ATOM 2625 O     O     . VAL VAL VAL A A 343 343 . 88.626  85.684  25.386  1.00 30.07
1 . .
ATOM 2626 N     N     . ASN ASN ASN A A 344 344 . 89.298  87.550  24.301  1.00 29.33
1 . .
ATOM 2627 CA    CA    . ASN ASN ASN A A 344 344 . 89.940  86.725  23.279  1.00 29.70
1 . .
ATOM 2628 CB    CB    . ASN ASN ASN A A 344 344 . 89.969  87.349  21.855  1.00 30.06
1 . .
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ATOM 2629 CG    CG    . ASN ASN ASN A A 344 344 . 91.323  88.023  21.535  1.00 30.17
1 . .
ATOM 2630 OD1   OD1   . ASN ASN ASN A A 344 344 . 91.768  88.961  22.233  1.00 30.68
1 . .
ATOM 2631 ND2   ND2   . ASN ASN ASN A A 344 344 . 91.976  87.536  20.504  1.00 25.37
1 . .
ATOM 2632 C     C     . ASN ASN ASN A A 344 344 . 91.319  86.244  23.688  1.00 29.48
1 . .
ATOM 2633 O     O     . ASN ASN ASN A A 344 344 . 91.870  85.384  22.998  1.00 29.60
1 . .
ATOM 2634 N     N     . GLN GLN GLN A A 345 345 . 91.866  86.767  24.789  1.00 28.67
1 . .
ATOM 2635 CA    CA    . GLN GLN GLN A A 345 345 . 93.074  86.150  25.380  1.00 29.07
1 . .
ATOM 2636 CB    CB    . GLN GLN GLN A A 345 345 . 93.661  87.047  26.461  1.00 28.68
1 . .
ATOM 2637 CG    CG    . GLN GLN GLN A A 345 345 . 94.736  87.990  25.948  1.00 27.82
1 . .
ATOM 2638 CD    CD    . GLN GLN GLN A A 345 345 . 95.180  88.918  27.001  1.00 29.02
1 . .
ATOM 2639 OE1   OE1   . GLN GLN GLN A A 345 345 . 94.518  89.061  28.066  1.00 25.37
1 . .
ATOM 2640 NE2   NE2   . GLN GLN GLN A A 345 345 . 96.371  89.502  26.796  1.00 30.42
1 . .
ATOM 2641 C     C     . GLN GLN GLN A A 345 345 . 92.816  84.768  26.009  1.00 29.23
1 . .
ATOM 2642 O     O     . GLN GLN GLN A A 345 345 . 93.760  83.974  26.184  1.00 29.73
1 . .
ATOM 2643 N     N     . ILE ILE ILE A A 346 346 . 91.558  84.516  26.390  1.00 28.50
1 . .
ATOM 2644 CA    CA    . ILE ILE ILE A A 346 346 . 91.173  83.271  27.057  1.00 28.47
1 . .
ATOM 2645 CB    CB    . ILE ILE ILE A A 346 346 . 90.581  83.482  28.511  1.00 28.68
1 . .
ATOM 2646 CG1   CG1   . ILE ILE ILE A A 346 346 . 90.518  82.141  29.262  1.00 29.43
1 . .
ATOM 2647 CD1   CD1   . ILE ILE ILE A A 346 346 . 91.863  81.462  29.457  1.00 30.57
1 . .
ATOM 2648 CG2   CG2   . ILE ILE ILE A A 346 346 . 89.143  84.124  28.523  1.00 26.29
1 . .
ATOM 2649 C     C     . ILE ILE ILE A A 346 346 . 90.220  82.422  26.180  1.00 28.93
1 . .
ATOM 2650 O     O     . ILE ILE ILE A A 346 346 . 90.397  81.188  26.062  1.00 28.52
1 . .
ATOM 2651 N     N     . GLY GLY GLY A A 347 347 . 89.198  83.056  25.585  1.00 27.42
1 . .
ATOM 2652 CA    CA    . GLY GLY GLY A A 347 347 . 88.553  82.389  24.469  1.00 26.59
1 . .
ATOM 2653 C     C     . GLY GLY GLY A A 347 347 . 87.084  82.126  24.676  1.00 27.22
1 . .
ATOM 2654 O     O     . GLY GLY GLY A A 347 347 . 86.457  81.525  23.819  1.00 27.57
1 . .
ATOM 2655 N     N     . SER SER SER A A 348 348 . 86.510  82.584  25.777  1.00 27.54
1 . .
ATOM 2656 CA    CA    . SER SER SER A A 348 348 . 85.086  82.393  26.016  1.00 28.99
1 . .
ATOM 2657 CB    CB    . SER SER SER A A 348 348 . 84.755  80.967  26.507  1.00 29.88
1 . .
ATOM 2658 OG    OG    . SER SER SER A A 348 348 . 84.837  80.859  27.925  1.00 32.22
1 . .
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ATOM 2659 C     C     . SER SER SER A A 348 348 . 84.595  83.404  27.025  1.00 29.08
1 . .
ATOM 2660 O     O     . SER SER SER A A 348 348 . 85.371  83.869  27.862  1.00 28.70
1 . .
ATOM 2661 N     N     . VAL VAL VAL A A 349 349 . 83.304  83.731  26.920  1.00 28.30
1 . .
ATOM 2662 CA    CA    . VAL VAL VAL A A 349 349 . 82.661  84.618  27.842  1.00 29.36
1 . .
ATOM 2663 CB    CB    . VAL VAL VAL A A 349 349 . 81.181  84.866  27.393  1.00 30.00
1 . .
ATOM 2664 CG1   CG1   . VAL VAL VAL A A 349 349 . 80.394  85.651  28.418  1.00 28.96
1 . .
ATOM 2665 CG2   CG2   . VAL VAL VAL A A 349 349 . 81.158  85.607  26.050  1.00 29.15
1 . .
ATOM 2666 C     C     . VAL VAL VAL A A 349 349 . 82.705  84.084  29.273  1.00 31.27
1 . .
ATOM 2667 O     O     . VAL VAL VAL A A 349 349 . 83.052  84.826  30.234  1.00 32.07
1 . .
ATOM 2668 N     N     . THR THR THR A A 350 350 . 82.401  82.798  29.426  1.00 32.34
1 . .
ATOM 2669 CA    CA    . THR THR THR A A 350 350 . 82.290  82.221  30.754  1.00 33.66
1 . .
ATOM 2670 CB    CB    . THR THR THR A A 350 350 . 81.842  80.753  30.727  1.00 33.44
1 . .
ATOM 2671 OG1   OG1   . THR THR THR A A 350 350 . 80.500  80.685  30.269  1.00 36.88
1 . .
ATOM 2672 CG2   CG2   . THR THR THR A A 350 350 . 81.858  80.171  32.134  1.00 35.62
1 . .
ATOM 2673 C     C     . THR THR THR A A 350 350 . 83.654  82.308  31.380  1.00 32.96
1 . .
ATOM 2674 O     O     . THR THR THR A A 350 350 . 83.775  82.685  32.513  1.00 33.06
1 . .
ATOM 2675 N     N     . GLU GLU GLU A A 351 351 . 84.692  81.953  30.651  1.00 33.30
1 . .
ATOM 2676 CA    CA    . GLU GLU GLU A A 351 351 . 86.007  82.073  31.246  1.00 33.47
1 . .
ATOM 2677 CB    CB    . GLU GLU GLU A A 351 351 . 87.064  81.506  30.349  1.00 34.32
1 . .
ATOM 2678 CG    CG    . GLU GLU GLU A A 351 351 . 87.063  79.975  30.414  1.00 36.31
1 . .
ATOM 2679 CD    CD    . GLU GLU GLU A A 351 351 . 87.761  79.424  29.204  1.00 37.98
1 . .
ATOM 2680 OE1   OE1   . GLU GLU GLU A A 351 351 . 87.361  79.799  28.045  1.00 38.30
1 . .
ATOM 2681 OE2   OE2   . GLU GLU GLU A A 351 351 . 88.711  78.652  29.425  1.00 39.30
1 . .
ATOM 2682 C     C     . GLU GLU GLU A A 351 351 . 86.378  83.464  31.611  1.00 33.76
1 . .
ATOM 2683 O     O     . GLU GLU GLU A A 351 351 . 86.945  83.667  32.688  1.00 34.45
1 . .
ATOM 2684 N     N     . ALA ALA ALA A A 352 352 . 86.063  84.434  30.741  1.00 32.75
1 . .
ATOM 2685 CA    CA    . ALA ALA ALA A A 352 352 . 86.410  85.824  31.035  1.00 32.38
1 . .
ATOM 2686 CB    CB    . ALA ALA ALA A A 352 352 . 86.197  86.724  29.799  1.00 31.91
1 . .
ATOM 2687 C     C     . ALA ALA ALA A A 352 352 . 85.690  86.389  32.286  1.00 32.22
1 . .
ATOM 2688 O     O     . ALA ALA ALA A A 352 352 . 86.292  87.100  33.070  1.00 31.68
1 . .
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ATOM 2689 N     N     . ILE ILE ILE A A 353 353 . 84.415  86.056  32.470  1.00 32.34
1 . .
ATOM 2690 CA    CA    . ILE ILE ILE A A 353 353 . 83.708  86.483  33.657  1.00 32.32
1 . .
ATOM 2691 CB    CB    . ILE ILE ILE A A 353 353 . 82.247  86.055  33.568  1.00 31.97
1 . .
ATOM 2692 CG1   CG1   . ILE ILE ILE A A 353 353 . 81.546  86.790  32.410  1.00 32.39
1 . .
ATOM 2693 CD1   CD1   . ILE ILE ILE A A 353 353 . 80.016  86.408  32.238  1.00 33.22
1 . .
ATOM 2694 CG2   CG2   . ILE ILE ILE A A 353 353 . 81.570  86.202  34.962  1.00 30.81
1 . .
ATOM 2695 C     C     . ILE ILE ILE A A 353 353 . 84.314  85.848  34.931  1.00 34.36
1 . .
ATOM 2696 O     O     . ILE ILE ILE A A 353 353 . 84.374  86.488  35.986  1.00 34.33
1 . .
ATOM 2697 N     N     . GLN GLN GLN A A 354 354 . 84.696  84.569  34.835  1.00 35.82
1 . .
ATOM 2698 CA    CA    . GLN GLN GLN A A 354 354 . 85.404  83.884  35.907  1.00 37.19
1 . .
ATOM 2699 CB    CB    . GLN GLN GLN A A 354 354 . 85.626  82.366  35.607  1.00 38.36
1 . .
ATOM 2700 CG    CG    . GLN GLN GLN A A 354 354 . 84.348  81.458  35.775  1.00 44.03
1 . .
ATOM 2701 CD    CD    . GLN GLN GLN A A 354 354 . 84.478  80.027  35.157  1.00 49.87
1 . .
ATOM 2702 OE1   OE1   . GLN GLN GLN A A 354 354 . 83.557  79.188  35.288  1.00 53.80
1 . .
ATOM 2703 NE2   NE2   . GLN GLN GLN A A 354 354 . 85.610  79.751  34.501  1.00 51.96
1 . .
ATOM 2704 C     C     . GLN GLN GLN A A 354 354 . 86.762  84.566  36.204  1.00 36.69
1 . .
ATOM 2705 O     O     . GLN GLN GLN A A 354 354 . 87.111  84.700  37.375  1.00 36.93
1 . .
ATOM 2706 N     N     . ALA ALA ALA A A 355 355 . 87.540  84.945  35.186  1.00 36.39
1 . .
ATOM 2707 CA    CA    . ALA ALA ALA A A 355 355 . 88.843  85.632  35.419  1.00 35.76
1 . .
ATOM 2708 CB    CB    . ALA ALA ALA A A 355 355 . 89.593  85.870  34.098  1.00 35.56
1 . .
ATOM 2709 C     C     . ALA ALA ALA A A 355 355 . 88.617  86.975  36.144  1.00 36.15
1 . .
ATOM 2710 O     O     . ALA ALA ALA A A 355 355 . 89.440  87.438  36.921  1.00 35.26
1 . .
ATOM 2711 N     N     . CYS CYS CYS A A 356 356 . 87.470  87.598  35.858  1.00 36.89
1 . .
ATOM 2712 CA    CA    . CYS CYS CYS A A 356 356 . 87.131  88.910  36.393  1.00 36.76
1 . .
ATOM 2713 CB    CB    . CYS CYS CYS A A 356 356 . 85.915  89.475  35.652  1.00 36.17
1 . .
ATOM 2714 SG    SG    . CYS CYS CYS A A 356 356 . 85.321  91.086  36.304  1.00 39.17
1 . .
ATOM 2715 C     C     . CYS CYS CYS A A 356 356 . 86.800  88.779  37.879  1.00 36.67
1 . .
ATOM 2716 O     O     . CYS CYS CYS A A 356 356 . 87.305  89.520  38.720  1.00 35.83
1 . .
ATOM 2717 N     N     . LYS LYS LYS A A 357 357 . 85.913  87.854  38.195  1.00 37.64
1 . .
ATOM 2718 CA    CA    . LYS LYS LYS A A 357 357 . 85.439  87.743  39.579  1.00 39.07
1 . .
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ATOM 2719 CB    CB    . LYS LYS LYS A A 357 357 . 84.294  86.763  39.642  1.00 39.86
1 . .
ATOM 2720 CG    CG    . LYS LYS LYS A A 357 357 . 83.091  87.277  38.834  1.00 44.82
1 . .
ATOM 2721 CD    CD    . LYS LYS LYS A A 357 357 . 81.723  86.720  39.348  1.00 51.88
1 . .
ATOM 2722 CE    CE    . LYS LYS LYS A A 357 357 . 81.571  85.187  39.167  1.00 56.77
1 . .
ATOM 2723 NZ    NZ    . LYS LYS LYS A A 357 357 . 81.900  84.318  40.392  1.00 60.68
1 . .
ATOM 2724 C     C     . LYS LYS LYS A A 357 357 . 86.615  87.345  40.444  1.00 37.79
1 . .
ATOM 2725 O     O     . LYS LYS LYS A A 357 357 . 86.865  87.918  41.476  1.00 38.08
1 . .
ATOM 2726 N     N     . LEU LEU LEU A A 358 358 . 87.396  86.408  39.952  1.00 37.49
1 . .
ATOM 2727 CA    CA    . LEU LEU LEU A A 358 358 . 88.675  86.101  40.549  1.00 37.64
1 . .
ATOM 2728 CB    CB    . LEU LEU LEU A A 358 358 . 89.463  85.126  39.668  1.00 38.34
1 . .
ATOM 2729 CG    CG    . LEU LEU LEU A A 358 358 . 90.841  84.646  40.153  1.00 39.21
1 . .
ATOM 2730 CD1   CD1   . LEU LEU LEU A A 358 358 . 90.775  83.833  41.529  1.00 39.48
1 . .
ATOM 2731 CD2   CD2   . LEU LEU LEU A A 358 358 . 91.445  83.772  39.069  1.00 39.35
1 . .
ATOM 2732 C     C     . LEU LEU LEU A A 358 358 . 89.511  87.346  40.866  1.00 37.60
1 . .
ATOM 2733 O     O     . LEU LEU LEU A A 358 358 . 89.980  87.478  41.991  1.00 38.28
1 . .
ATOM 2734 N     N     . ALA ALA ALA A A 359 359 . 89.706  88.278  39.932  1.00 36.39
1 . .
ATOM 2735 CA    CA    . ALA ALA ALA A A 359 359 . 90.519  89.450  40.284  1.00 35.49
1 . .
ATOM 2736 CB    CB    . ALA ALA ALA A A 359 359 . 90.818  90.312  39.101  1.00 35.33
1 . .
ATOM 2737 C     C     . ALA ALA ALA A A 359 359 . 89.854  90.263  41.370  1.00 35.29
1 . .
ATOM 2738 O     O     . ALA ALA ALA A A 359 359 . 90.521  90.676  42.305  1.00 35.16
1 . .
ATOM 2739 N     N     . GLN GLN GLN A A 360 360 . 88.543  90.461  41.251  1.00 34.99
1 . .
ATOM 2740 CA    CA    . GLN GLN GLN A A 360 360 . 87.817  91.344  42.137  1.00 36.09
1 . .
ATOM 2741 CB    CB    . GLN GLN GLN A A 360 360 . 86.391  91.596  41.592  1.00 36.29
1 . .
ATOM 2742 CG    CG    . GLN GLN GLN A A 360 360 . 86.313  92.423  40.218  1.00 37.63
1 . .
ATOM 2743 CD    CD    . GLN GLN GLN A A 360 360 . 84.854  92.571  39.621  1.00 38.50
1 . .
ATOM 2744 OE1   OE1   . GLN GLN GLN A A 360 360 . 84.483  93.624  39.094  1.00 40.06
1 . .
ATOM 2745 NE2   NE2   . GLN GLN GLN A A 360 360 . 84.057  91.528  39.717  1.00 40.13
1 . .
ATOM 2746 C     C     . GLN GLN GLN A A 360 360 . 87.773  90.761  43.557  1.00 36.78
1 . .
ATOM 2747 O     O     . GLN GLN GLN A A 360 360 . 87.815  91.498  44.554  1.00 37.09
1 . .
ATOM 2748 N     N     . GLU GLU GLU A A 361 361 . 87.681  89.441  43.667  1.00 37.87
1 . .
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ATOM 2749 CA    CA    . GLU GLU GLU A A 361 361 . 87.655  88.821  44.995  1.00 39.61
1 . .
ATOM 2750 CB    CB    . GLU GLU GLU A A 361 361 . 87.180  87.377  44.914  1.00 40.53
1 . .
ATOM 2751 CG    CG    . GLU GLU GLU A A 361 361 . 85.679  87.235  44.677  1.00 45.70
1 . .
ATOM 2752 CD    CD    . GLU GLU GLU A A 361 361 . 85.347  85.869  44.047  1.00 52.62
1 . .
ATOM 2753 OE1   OE1   . GLU GLU GLU A A 361 361 . 86.309  85.051  43.957  1.00 54.92
1 . .
ATOM 2754 OE2   OE2   . GLU GLU GLU A A 361 361 . 84.153  85.628  43.643  1.00 55.18
1 . .
ATOM 2755 C     C     . GLU GLU GLU A A 361 361 . 89.030  88.913  45.656  1.00 39.48
1 . .
ATOM 2756 O     O     . GLU GLU GLU A A 361 361 . 89.135  88.870  46.855  1.00 40.59
1 . .
ATOM 2757 N     N     . ASN ASN ASN A A 362 362 . 90.094  89.056  44.880  1.00 39.48
1 . .
ATOM 2758 CA    CA    . ASN ASN ASN A A 362 362 . 91.403  89.234  45.499  1.00 39.61
1 . .
ATOM 2759 CB    CB    . ASN ASN ASN A A 362 362 . 92.452  88.464  44.735  1.00 39.29
1 . .
ATOM 2760 CG    CG    . ASN ASN ASN A A 362 362 . 92.505  86.980  45.147  1.00 41.39
1 . .
ATOM 2761 OD1   OD1   . ASN ASN ASN A A 362 362 . 93.190  86.609  46.109  1.00 44.42
1 . .
ATOM 2762 ND2   ND2   . ASN ASN ASN A A 362 362 . 91.819  86.133  44.397  1.00 39.99
1 . .
ATOM 2763 C     C     . ASN ASN ASN A A 362 362 . 91.753  90.717  45.681  1.00 39.22
1 . .
ATOM 2764 O     O     . ASN ASN ASN A A 362 362 . 92.928  91.070  45.888  1.00 39.85
1 . .
ATOM 2765 N     N     . GLY GLY GLY A A 363 363 . 90.735  91.580  45.589  1.00 38.43
1 . .
ATOM 2766 CA    CA    . GLY GLY GLY A A 363 363 . 90.908  93.047  45.717  1.00 39.61
1 . .
ATOM 2767 C     C     . GLY GLY GLY A A 363 363 . 91.586  93.791  44.552  1.00 40.11
1 . .
ATOM 2768 O     O     . GLY GLY GLY A A 363 363 . 92.059  94.944  44.693  1.00 39.57
1 . .
ATOM 2769 N     N     . TRP TRP TRP A A 364 364 . 91.655  93.138  43.395  1.00 39.75
1 . .
ATOM 2770 CA    CA    . TRP TRP TRP A A 364 364 . 92.263  93.761  42.227  1.00 39.40
1 . .
ATOM 2771 CB    CB    . TRP TRP TRP A A 364 364 . 92.662  92.660  41.302  1.00 40.22
1 . .
ATOM 2772 CG    CG    . TRP TRP TRP A A 364 364 . 94.004  92.092  41.521  1.00 43.21
1 . .
ATOM 2773 CD1   CD1   . TRP TRP TRP A A 364 364 . 94.784  92.132  42.662  1.00 45.13
1 . .
ATOM 2774 NE1   NE1   . TRP TRP TRP A A 364 364 . 95.991  91.489  42.423  1.00 44.87
1 . .
ATOM 2775 CE2   CE2   . TRP TRP TRP A A 364 364 . 95.979  91.006  41.140  1.00 44.41
1 . .
ATOM 2776 CD2   CD2   . TRP TRP TRP A A 364 364 . 94.745  91.365  40.553  1.00 43.85
1 . .
ATOM 2777 CE3   CE3   . TRP TRP TRP A A 364 364 . 94.490  90.990  39.229  1.00 43.00
1 . .
ATOM 2778 CZ3   CZ3   . TRP TRP TRP A A 364 364 . 95.464  90.285  38.539  1.00 42.25
1 . .
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ATOM 2779 CH2   CH2   . TRP TRP TRP A A 364 364 . 96.654  89.923  39.146  1.00 42.89
1 . .
ATOM 2780 CZ2   CZ2   . TRP TRP TRP A A 364 364 . 96.937  90.271  40.448  1.00 44.76
1 . .
ATOM 2781 C     C     . TRP TRP TRP A A 364 364 . 91.266  94.659  41.506  1.00 38.14
1 . .
ATOM 2782 O     O     . TRP TRP TRP A A 364 364 . 90.047  94.437  41.555  1.00 38.63
1 . .
ATOM 2783 N     N     . GLY GLY GLY A A 365 365 . 91.754  95.671  40.813  1.00 37.02
1 . .
ATOM 2784 CA    CA    . GLY GLY GLY A A 365 365 . 90.901  96.290  39.790  1.00 34.58
1 . .
ATOM 2785 C     C     . GLY GLY GLY A A 365 365 . 90.764  95.385  38.549  1.00 33.48
1 . .
ATOM 2786 O     O     . GLY GLY GLY A A 365 365 . 91.562  94.438  38.352  1.00 32.19
1 . .
ATOM 2787 N     N     . VAL VAL VAL A A 366 366 . 89.768  95.690  37.716  1.00 32.25
1 . .
ATOM 2788 CA    CA    . VAL VAL VAL A A 366 366 . 89.624  95.061  36.370  1.00 31.29
1 . .
ATOM 2789 CB    CB    . VAL VAL VAL A A 366 366 . 88.469  93.968  36.325  1.00 30.75
1 . .
ATOM 2790 CG1   CG1   . VAL VAL VAL A A 366 366 . 88.361  93.318  34.951  1.00 29.82
1 . .
ATOM 2791 CG2   CG2   . VAL VAL VAL A A 366 366 . 88.655  92.866  37.363  1.00 30.49
1 . .
ATOM 2792 C     C     . VAL VAL VAL A A 366 366 . 89.313  96.141  35.303  1.00 30.92
1 . .
ATOM 2793 O     O     . VAL VAL VAL A A 366 366 . 88.243  96.801  35.358  1.00 30.59
1 . .
ATOM 2794 N     N     . MET MET MET A A 367 367 . 90.241  96.304  34.353  1.00 29.36
1 . .
ATOM 2795 CA    CA    . MET MET MET A A 367 367 . 90.023  97.114  33.154  1.00 28.16
1 . .
ATOM 2796 CB    CB    . MET MET MET A A 367 367 . 91.212  98.065  32.890  1.00 27.79
1 . .
ATOM 2797 CG    CG    . MET MET MET A A 367 367 . 90.906  99.144  31.761  1.00 28.24
1 . .
ATOM 2798 SD    SD    . MET MET MET A A 367 367 . 92.519  99.847  31.201  1.00 29.50
1 . .
ATOM 2799 CE    CE    . MET MET MET A A 367 367 . 92.550  101.300 32.235  1.00 29.66
1 . .
ATOM 2800 C     C     . MET MET MET A A 367 367 . 89.732  96.265  31.876  1.00 27.47
1 . .
ATOM 2801 O     O     . MET MET MET A A 367 367 . 90.640  95.596  31.319  1.00 25.75
1 . .
ATOM 2802 N     N     . VAL VAL VAL A A 368 368 . 88.486  96.374  31.398  1.00 25.90
1 . .
ATOM 2803 CA    CA    . VAL VAL VAL A A 368 368 . 88.083  95.736  30.166  1.00 25.68
1 . .
ATOM 2804 CB    CB    . VAL VAL VAL A A 368 368 . 86.511  95.765  29.965  1.00 26.35
1 . .
ATOM 2805 CG1   CG1   . VAL VAL VAL A A 368 368 . 86.106  95.210  28.574  1.00 24.66
1 . .
ATOM 2806 CG2   CG2   . VAL VAL VAL A A 368 368 . 85.825  94.939  31.087  1.00 24.99
1 . .
ATOM 2807 C     C     . VAL VAL VAL A A 368 368 . 88.794  96.410  29.014  1.00 25.56
1 . .
ATOM 2808 O     O     . VAL VAL VAL A A 368 368 . 89.030  97.641  29.022  1.00 25.82
1 . .
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ATOM 2809 N     N     . SER SER SER A A 369 369 . 89.124  95.606  28.015  1.00 25.06
1 . .
ATOM 2810 CA    CA    . SER SER SER A A 369 369 . 89.935  96.071  26.891  1.00 25.69
1 . .
ATOM 2811 CB    CB    . SER SER SER A A 369 369 . 91.412  95.668  27.131  1.00 25.02
1 . .
ATOM 2812 OG    OG    . SER SER SER A A 369 369 . 92.244  96.120  26.055  1.00 25.91
1 . .
ATOM 2813 C     C     . SER SER SER A A 369 369 . 89.502  95.558  25.527  1.00 25.12
1 . .
ATOM 2814 O     O     . SER SER SER A A 369 369 . 89.218  94.382  25.363  1.00 26.73
1 . .
ATOM 2815 N     N     . HIS HIS HIS A A 370 370 . 89.460  96.436  24.538  1.00 25.27
1 . .
ATOM 2816 CA    CA    . HIS HIS HIS A A 370 370 . 89.480  96.021  23.116  1.00 25.47
1 . .
ATOM 2817 CB    CB    . HIS HIS HIS A A 370 370 . 89.385  97.272  22.226  1.00 25.04
1 . .
ATOM 2818 CG    CG    . HIS HIS HIS A A 370 370 . 90.546  98.213  22.375  1.00 25.70
1 . .
ATOM 2819 ND1   ND1   . HIS HIS HIS A A 370 370 . 90.792  99.230  21.486  1.00 27.60
1 . .
ATOM 2820 CE1   CE1   . HIS HIS HIS A A 370 370 . 91.882  99.891  21.846  1.00 24.27
1 . .
ATOM 2821 NE2   NE2   . HIS HIS HIS A A 370 370 . 92.334  99.355  22.961  1.00 23.75
1 . .
ATOM 2822 CD2   CD2   . HIS HIS HIS A A 370 370 . 91.537  98.288  23.302  1.00 25.70
1 . .
ATOM 2823 C     C     . HIS HIS HIS A A 370 370 . 90.824  95.351  22.766  1.00 26.51
1 . .
ATOM 2824 O     O     . HIS HIS HIS A A 370 370 . 91.722  95.289  23.617  1.00 24.70
1 . .
ATOM 2825 N     N     . ARG ARG ARG A A 371 371 . 90.948  94.900  21.491  1.00 27.24
1 . .
ATOM 2826 CA    CA    . ARG ARG ARG A A 371 371 . 92.256  94.613  20.918  1.00 26.79
1 . .
ATOM 2827 CB    CB    . ARG ARG ARG A A 371 371 . 92.288  93.222  20.300  1.00 26.37
1 . .
ATOM 2828 CG    CG    . ARG ARG ARG A A 371 371 . 91.888  92.067  21.229  1.00 27.85
1 . .
ATOM 2829 CD    CD    . ARG ARG ARG A A 371 371 . 92.838  91.857  22.424  1.00 26.08
1 . .
ATOM 2830 NE    NE    . ARG ARG ARG A A 371 371 . 94.323  91.892  22.237  1.00 28.16
1 . .
ATOM 2831 CZ    CZ    . ARG ARG ARG A A 371 371 . 95.136  90.820  22.368  1.00 27.66
1 . .
ATOM 2832 NH1   NH1   . ARG ARG ARG A A 371 371 . 94.600  89.612  22.531  1.00 27.89
1 . .
ATOM 2833 NH2   NH2   . ARG ARG ARG A A 371 371 . 96.491  90.917  22.315  1.00 27.07
1 . .
ATOM 2834 C     C     . ARG ARG ARG A A 371 371 . 92.567  95.691  19.872  1.00 26.69
1 . .
ATOM 2835 O     O     . ARG ARG ARG A A 371 371 . 91.703  96.420  19.400  1.00 25.98
1 . .
ATOM 2836 N     N     . SER SER SER A A 372 372 . 93.844  95.785  19.577  1.00 27.18
1 . .
ATOM 2837 CA    CA    . SER SER SER A A 372 372 . 94.396  96.591  18.533  1.00 27.38
1 . .
ATOM 2838 CB    CB    . SER SER SER A A 372 372 . 95.816  96.087  18.445  1.00 27.68
1 . .
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ATOM 2839 OG    OG    . SER SER SER A A 372 372 . 96.424  96.857  17.558  1.00 35.08
1 . .
ATOM 2840 C     C     . SER SER SER A A 372 372 . 93.705  96.382  17.151  1.00 26.57
1 . .
ATOM 2841 O     O     . SER SER SER A A 372 372 . 93.562  97.348  16.374  1.00 25.99
1 . .
ATOM 2842 N     N     . GLY GLY GLY A A 373 373 . 93.329  95.131  16.839  1.00 24.81
1 . .
ATOM 2843 CA    CA    . GLY GLY GLY A A 373 373 . 92.556  94.829  15.662  1.00 25.84
1 . .
ATOM 2844 C     C     . GLY GLY GLY A A 373 373 . 91.075  94.744  16.101  1.00 25.26
1 . .
ATOM 2845 O     O     . GLY GLY GLY A A 373 373 . 90.716  93.792  16.764  1.00 26.39
1 . .
ATOM 2846 N     N     . GLU GLU GLU A A 374 374 . 90.220  95.715  15.791  1.00 24.33
1 . .
ATOM 2847 CA    CA    . GLU GLU GLU A A 374 374 . 88.819  95.567  16.247  1.00 23.82
1 . .
ATOM 2848 CB    CB    . GLU GLU GLU A A 374 374 . 88.404  96.684  17.178  1.00 23.44
1 . .
ATOM 2849 CG    CG    . GLU GLU GLU A A 374 374 . 88.799  96.425  18.603  1.00 23.39
1 . .
ATOM 2850 CD    CD    . GLU GLU GLU A A 374 374 . 87.798  95.501  19.253  1.00 25.55
1 . .
ATOM 2851 OE1   OE1   . GLU GLU GLU A A 374 374 . 86.632  95.377  18.748  1.00 25.60
1 . .
ATOM 2852 OE2   OE2   . GLU GLU GLU A A 374 374 . 88.176  94.872  20.263  1.00 26.70
1 . .
ATOM 2853 C     C     . GLU GLU GLU A A 374 374 . 87.843  95.503  15.167  1.00 24.06
1 . .
ATOM 2854 O     O     . GLU GLU GLU A A 374 374 . 88.219  95.490  14.032  1.00 22.81
1 . .
ATOM 2855 N     N     . THR THR THR A A 375 375 . 86.557  95.447  15.521  1.00 25.56
1 . .
ATOM 2856 CA    CA    . THR THR THR A A 375 375 . 85.534  95.368  14.496  1.00 26.16
1 . .
ATOM 2857 CB    CB    . THR THR THR A A 375 375 . 84.965  93.887  14.325  1.00 26.63
1 . .
ATOM 2858 OG1   OG1   . THR THR THR A A 375 375 . 84.122  93.532  15.432  1.00 24.67
1 . .
ATOM 2859 CG2   CG2   . THR THR THR A A 375 375 . 86.116  92.861  14.244  1.00 26.15
1 . .
ATOM 2860 C     C     . THR THR THR A A 375 375 . 84.449  96.305  14.914  1.00 26.78
1 . .
ATOM 2861 O     O     . THR THR THR A A 375 375 . 84.572  96.937  15.924  1.00 27.69
1 . .
ATOM 2862 N     N     . GLU GLU GLU A A 376 376 . 83.389  96.386  14.117  1.00 26.92
1 . .
ATOM 2863 CA    CA    . GLU GLU GLU A A 376 376 . 82.214  97.165  14.426  1.00 26.99
1 . .
ATOM 2864 CB    CB    . GLU GLU GLU A A 376 376 . 81.378  97.349  13.118  1.00 27.71
1 . .
ATOM 2865 CG    CG    . GLU GLU GLU A A 376 376 . 80.971  96.069  12.289  1.00 27.59
1 . .
ATOM 2866 CD    CD    . GLU GLU GLU A A 376 376 . 82.080  95.525  11.338  1.00 31.56
1 . .
ATOM 2867 OE1   OE1   . GLU GLU GLU A A 376 376 . 83.315  95.663  11.603  1.00 31.06
1 . .
ATOM 2868 OE2   OE2   . GLU GLU GLU A A 376 376 . 81.693  94.902  10.323  1.00 33.04
1 . .
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ATOM 2869 C     C     . GLU GLU GLU A A 376 376 . 81.386  96.634  15.610  1.00 27.18
1 . .
ATOM 2870 O     O     . GLU GLU GLU A A 376 376 . 80.396  97.234  16.014  1.00 27.91
1 . .
ATOM 2871 N     N     . ASP ASP ASP A A 377 377 . 81.776  95.485  16.143  1.00 27.62
1 . .
ATOM 2872 CA    CA    . ASP ASP ASP A A 377 377 . 81.116  94.815  17.313  1.00 27.42
1 . .
ATOM 2873 CB    CB    . ASP ASP ASP A A 377 377 . 81.755  93.413  17.453  1.00 27.67
1 . .
ATOM 2874 CG    CG    . ASP ASP ASP A A 377 377 . 81.265  92.612  18.654  1.00 31.15
1 . .
ATOM 2875 OD1   OD1   . ASP ASP ASP A A 377 377 . 82.116  92.526  19.622  1.00 33.46
1 . .
ATOM 2876 OD2   OD2   . ASP ASP ASP A A 377 377 . 80.097  92.054  18.607  1.00 27.50
1 . .
ATOM 2877 C     C     . ASP ASP ASP A A 377 377 . 81.247  95.701  18.591  1.00 27.22
1 . .
ATOM 2878 O     O     . ASP ASP ASP A A 377 377 . 82.318  96.331  18.845  1.00 28.18
1 . .
ATOM 2879 N     N     . THR THR THR A A 378 378 . 80.169  95.811  19.361  1.00 26.42
1 . .
ATOM 2880 CA    CA    . THR THR THR A A 378 378 . 80.156  96.650  20.548  1.00 25.88
1 . .
ATOM 2881 CB    CB    . THR THR THR A A 378 378 . 79.032  97.682  20.531  1.00 25.72
1 . .
ATOM 2882 OG1   OG1   . THR THR THR A A 378 378 . 77.746  97.004  20.587  1.00 26.86
1 . .
ATOM 2883 CG2   CG2   . THR THR THR A A 378 378 . 79.100  98.565  19.248  1.00 25.07
1 . .
ATOM 2884 C     C     . THR THR THR A A 378 378 . 79.940  95.777  21.788  1.00 26.71
1 . .
ATOM 2885 O     O     . THR THR THR A A 378 378 . 79.501  96.268  22.850  1.00 28.03
1 . .
ATOM 2886 N     N     . PHE PHE PHE A A 379 379 . 80.255  94.493  21.702  1.00 25.73
1 . .
ATOM 2887 CA    CA    . PHE PHE PHE A A 379 379 . 80.127  93.643  22.902  1.00 26.35
1 . .
ATOM 2888 CB    CB    . PHE PHE PHE A A 379 379 . 80.623  92.219  22.622  1.00 26.99
1 . .
ATOM 2889 CG    CG    . PHE PHE PHE A A 379 379 . 80.279  91.264  23.695  1.00 28.71
1 . .
ATOM 2890 CD1   CD1   . PHE PHE PHE A A 379 379 . 81.197  90.998  24.714  1.00 30.07
1 . .
ATOM 2891 CE1   CE1   . PHE PHE PHE A A 379 379 . 80.887  90.118  25.742  1.00 31.89
1 . .
ATOM 2892 CZ    CZ    . PHE PHE PHE A A 379 379 . 79.635  89.441  25.747  1.00 34.79
1 . .
ATOM 2893 CE2   CE2   . PHE PHE PHE A A 379 379 . 78.699  89.696  24.729  1.00 32.20
1 . .
ATOM 2894 CD2   CD2   . PHE PHE PHE A A 379 379 . 79.031  90.626  23.696  1.00 31.40
1 . .
ATOM 2895 C     C     . PHE PHE PHE A A 379 379 . 80.770  94.177  24.232  1.00 25.85
1 . .
ATOM 2896 O     O     . PHE PHE PHE A A 379 379 . 80.085  94.233  25.264  1.00 23.55
1 . .
ATOM 2897 N     N     . ILE ILE ILE A A 380 380 . 82.070  94.525  24.206  1.00 24.37
1 . .
ATOM 2898 CA    CA    . ILE ILE ILE A A 380 380 . 82.766  94.852  25.418  1.00 24.14
1 . .
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ATOM 2899 CB    CB    . ILE ILE ILE A A 380 380 . 84.317  95.059  25.216  1.00 24.61
1 . .
ATOM 2900 CG1   CG1   . ILE ILE ILE A A 380 380 . 84.689  96.267  24.328  1.00 21.91
1 . .
ATOM 2901 CD1   CD1   . ILE ILE ILE A A 380 380 . 86.384  96.382  24.143  1.00 20.56
1 . .
ATOM 2902 CG2   CG2   . ILE ILE ILE A A 380 380 . 84.928  93.767  24.720  1.00 24.88
1 . .
ATOM 2903 C     C     . ILE ILE ILE A A 380 380 . 82.210  96.041  26.150  1.00 25.11
1 . .
ATOM 2904 O     O     . ILE ILE ILE A A 380 380 . 82.472  96.237  27.346  1.00 25.87
1 . .
ATOM 2905 N     N     . ALA ALA ALA A A 381 381 . 81.446  96.833  25.426  1.00 25.41
1 . .
ATOM 2906 CA    CA    . ALA ALA ALA A A 381 381 . 80.713  97.926  25.999  1.00 25.97
1 . .
ATOM 2907 CB    CB    . ALA ALA ALA A A 381 381 . 80.060  98.788  24.891  1.00 26.45
1 . .
ATOM 2908 C     C     . ALA ALA ALA A A 381 381 . 79.660  97.477  27.018  1.00 26.21
1 . .
ATOM 2909 O     O     . ALA ALA ALA A A 381 381 . 79.606  98.021  28.168  1.00 26.41
1 . .
ATOM 2910 N     N     . ASP ASP ASP A A 382 382 . 78.837  96.522  26.627  1.00 25.03
1 . .
ATOM 2911 CA    CA    . ASP ASP ASP A A 382 382 . 77.872  95.988  27.575  1.00 26.59
1 . .
ATOM 2912 CB    CB    . ASP ASP ASP A A 382 382 . 76.847  95.152  26.876  1.00 27.10
1 . .
ATOM 2913 CG    CG    . ASP ASP ASP A A 382 382 . 75.867  95.979  26.057  1.00 30.76
1 . .
ATOM 2914 OD1   OD1   . ASP ASP ASP A A 382 382 . 76.300  96.491  25.006  1.00 33.81
1 . .
ATOM 2915 OD2   OD2   . ASP ASP ASP A A 382 382 . 74.634  96.046  26.399  1.00 34.82
1 . .
ATOM 2916 C     C     . ASP ASP ASP A A 382 382 . 78.531  95.144  28.673  1.00 26.69
1 . .
ATOM 2917 O     O     . ASP ASP ASP A A 382 382 . 78.050  95.083  29.837  1.00 26.32
1 . .
ATOM 2918 N     N     . LEU LEU LEU A A 383 383 . 79.652  94.524  28.298  1.00 26.60
1 . .
ATOM 2919 CA    CA    . LEU LEU LEU A A 383 383 . 80.434  93.700  29.161  1.00 26.22
1 . .
ATOM 2920 CB    CB    . LEU LEU LEU A A 383 383 . 81.585  93.032  28.413  1.00 27.14
1 . .
ATOM 2921 CG    CG    . LEU LEU LEU A A 383 383 . 82.443  92.021  29.185  1.00 26.89
1 . .
ATOM 2922 CD1   CD1   . LEU LEU LEU A A 383 383 . 81.571  90.823  29.532  1.00 26.35
1 . .
ATOM 2923 CD2   CD2   . LEU LEU LEU A A 383 383 . 83.644  91.570  28.397  1.00 27.55
1 . .
ATOM 2924 C     C     . LEU LEU LEU A A 383 383 . 80.996  94.458  30.334  1.00 27.08
1 . .
ATOM 2925 O     O     . LEU LEU LEU A A 383 383 . 81.010  93.918  31.437  1.00 27.62
1 . .
ATOM 2926 N     N     . VAL VAL VAL A A 384 384 . 81.484  95.671  30.123  1.00 27.46
1 . .
ATOM 2927 CA    CA    . VAL VAL VAL A A 384 384 . 82.136  96.420  31.218  1.00 27.47
1 . .
ATOM 2928 CB    CB    . VAL VAL VAL A A 384 384 . 83.065  97.516  30.675  1.00 27.16
1 . .
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ATOM 2929 CG1   CG1   . VAL VAL VAL A A 384 384 . 82.265  98.662  29.933  1.00 25.45
1 . .
ATOM 2930 CG2   CG2   . VAL VAL VAL A A 384 384 . 83.942  98.045  31.772  1.00 28.16
1 . .
ATOM 2931 C     C     . VAL VAL VAL A A 384 384 . 81.101  96.940  32.249  1.00 27.69
1 . .
ATOM 2932 O     O     . VAL VAL VAL A A 384 384 . 81.339  96.989  33.448  1.00 28.22
1 . .
ATOM 2933 N     N     . VAL VAL VAL A A 385 385 . 79.949  97.325  31.745  1.00 28.12
1 . .
ATOM 2934 CA    CA    . VAL VAL VAL A A 385 385 . 78.812  97.653  32.566  1.00 27.91
1 . .
ATOM 2935 CB    CB    . VAL VAL VAL A A 385 385 . 77.673  98.216  31.709  1.00 27.35
1 . .
ATOM 2936 CG1   CG1   . VAL VAL VAL A A 385 385 . 76.430  98.521  32.543  1.00 29.14
1 . .
ATOM 2937 CG2   CG2   . VAL VAL VAL A A 385 385 . 78.082  99.498  31.041  1.00 27.42
1 . .
ATOM 2938 C     C     . VAL VAL VAL A A 385 385 . 78.290  96.450  33.359  1.00 28.53
1 . .
ATOM 2939 O     O     . VAL VAL VAL A A 385 385 . 78.185  96.535  34.596  1.00 29.32
1 . .
ATOM 2940 N     N     . GLY GLY GLY A A 386 386 . 77.949  95.357  32.659  1.00 28.74
1 . .
ATOM 2941 CA    CA    . GLY GLY GLY A A 386 386 . 77.497  94.102  33.283  1.00 29.31
1 . .
ATOM 2942 C     C     . GLY GLY GLY A A 386 386 . 78.455  93.575  34.370  1.00 29.54
1 . .
ATOM 2943 O     O     . GLY GLY GLY A A 386 386 . 77.995  93.029  35.382  1.00 29.77
1 . .
ATOM 2944 N     N     . LEU LEU LEU A A 387 387 . 79.771  93.714  34.156  1.00 28.95
1 . .
ATOM 2945 CA    CA    . LEU LEU LEU A A 387 387 . 80.763  93.244  35.094  1.00 30.12
1 . .
ATOM 2946 CB    CB    . LEU LEU LEU A A 387 387 . 82.074  92.924  34.383  1.00 31.20
1 . .
ATOM 2947 CG    CG    . LEU LEU LEU A A 387 387 . 82.011  91.757  33.391  1.00 31.47
1 . .
ATOM 2948 CD1   CD1   . LEU LEU LEU A A 387 387 . 83.424  91.409  32.938  1.00 32.08
1 . .
ATOM 2949 CD2   CD2   . LEU LEU LEU A A 387 387 . 81.307  90.529  33.961  1.00 32.64
1 . .
ATOM 2950 C     C     . LEU LEU LEU A A 387 387 . 81.052  94.268  36.177  1.00 32.01
1 . .
ATOM 2951 O     O     . LEU LEU LEU A A 387 387 . 81.830  93.977  37.076  1.00 32.49
1 . .
ATOM 2952 N     N     . CYS CYS CYS A A 388 388 . 80.473  95.477  36.058  1.00 32.64
1 . .
ATOM 2953 CA    CA    . CYS CYS CYS A A 388 388 . 80.665  96.530  37.019  1.00 34.38
1 . .
ATOM 2954 CB    CB    . CYS CYS CYS A A 388 388 . 80.025  96.097  38.314  1.00 36.12
1 . .
ATOM 2955 SG    SG    . CYS CYS CYS A A 388 388 . 79.102  97.317  39.156  1.00 46.19
1 . .
ATOM 2956 C     C     . CYS CYS CYS A A 388 388 . 82.127  96.810  37.312  1.00 33.91
1 . .
ATOM 2957 O     O     . CYS CYS CYS A A 388 388 . 82.439  97.115  38.478  1.00 34.51
1 . .
ATOM 2958 N     N     . THR THR THR A A 389 389 . 83.020  96.707  36.309  1.00 32.10
1 . .
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ATOM 2959 CA    CA    . THR THR THR A A 389 389 . 84.457  96.861  36.564  1.00 31.28
1 . .
ATOM 2960 CB    CB    . THR THR THR A A 389 389 . 85.383  96.219  35.476  1.00 31.58
1 . .
ATOM 2961 OG1   OG1   . THR THR THR A A 389 389 . 85.755  97.197  34.485  1.00 31.46
1 . .
ATOM 2962 CG2   CG2   . THR THR THR A A 389 389 . 84.746  95.071  34.790  1.00 30.84
1 . .
ATOM 2963 C     C     . THR THR THR A A 389 389 . 84.941  98.295  36.743  1.00 31.48
1 . .
ATOM 2964 O     O     . THR THR THR A A 389 389 . 86.036  98.537  37.294  1.00 32.52
1 . .
ATOM 2965 N     N     . GLY GLY GLY A A 390 390 . 84.210  99.247  36.201  1.00 30.62
1 . .
ATOM 2966 CA    CA    . GLY GLY GLY A A 390 390 . 84.543  100.654 36.457  1.00 29.46
1 . .
ATOM 2967 C     C     . GLY GLY GLY A A 390 390 . 85.612  101.275 35.553  1.00 28.13
1 . .
ATOM 2968 O     O     . GLY GLY GLY A A 390 390 . 85.867  102.471 35.662  1.00 26.76
1 . .
ATOM 2969 N     N     . GLN GLN GLN A A 391 391 . 86.238  100.497 34.668  1.00 26.87
1 . .
ATOM 2970 CA    CA    . GLN GLN GLN A A 391 391 . 87.254  101.042 33.741  1.00 26.04
1 . .
ATOM 2971 CB    CB    . GLN GLN GLN A A 391 391 . 88.623  101.187 34.428  1.00 26.28
1 . .
ATOM 2972 CG    CG    . GLN GLN GLN A A 391 391 . 88.874  100.329 35.623  1.00 24.76
1 . .
ATOM 2973 CD    CD    . GLN GLN GLN A A 391 391 . 90.382  100.277 36.058  1.00 26.70
1 . .
ATOM 2974 OE1   OE1   . GLN GLN GLN A A 391 391 . 91.248  100.926 35.466  1.00 27.00
1 . .
ATOM 2975 NE2   NE2   . GLN GLN GLN A A 391 391 . 90.670  99.485  37.097  1.00 23.78
1 . .
ATOM 2976 C     C     . GLN GLN GLN A A 391 391 . 87.358  100.244 32.426  1.00 25.62
1 . .
ATOM 2977 O     O     . GLN GLN GLN A A 391 391 . 87.417  99.034  32.446  1.00 26.43
1 . .
ATOM 2978 N     N     . ILE ILE ILE A A 392 392 . 87.360  100.943 31.286  1.00 25.79
1 . .
ATOM 2979 CA    CA    . ILE ILE ILE A A 392 392 . 87.435  100.315 29.974  1.00 23.85
1 . .
ATOM 2980 CB    CB    . ILE ILE ILE A A 392 392 . 86.046  100.306 29.263  1.00 23.49
1 . .
ATOM 2981 CG1   CG1   . ILE ILE ILE A A 392 392 . 86.173  99.500  27.934  1.00 23.96
1 . .
ATOM 2982 CD1   CD1   . ILE ILE ILE A A 392 392 . 84.902  99.083  27.215  1.00 20.53
1 . .
ATOM 2983 CG2   CG2   . ILE ILE ILE A A 392 392 . 85.544  101.746 29.083  1.00 19.40
1 . .
ATOM 2984 C     C     . ILE ILE ILE A A 392 392 . 88.420  101.145 29.186  1.00 24.79
1 . .
ATOM 2985 O     O     . ILE ILE ILE A A 392 392 . 88.357  102.366 29.260  1.00 25.15
1 . .
ATOM 2986 N     N     . LYS LYS LYS A A 393 393 . 89.365  100.493 28.494  1.00 25.48
1 . .
ATOM 2987 CA    CA    . LYS LYS LYS A A 393 393 . 90.144  101.098 27.392  1.00 24.81
1 . .
ATOM 2988 CB    CB    . LYS LYS LYS A A 393 393 . 91.689  100.911 27.575  1.00 24.30
1 . .
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ATOM 2989 CG    CG    . LYS LYS LYS A A 393 393 . 92.242  99.522  27.324  1.00 24.01
1 . .
ATOM 2990 CD    CD    . LYS LYS LYS A A 393 393 . 93.818  99.460  27.600  1.00 26.85
1 . .
ATOM 2991 CE    CE    . LYS LYS LYS A A 393 393 . 94.533  98.469  26.737  1.00 22.83
1 . .
ATOM 2992 NZ    NZ    . LYS LYS LYS A A 393 393 . 96.068  98.555  26.966  1.00 25.28
1 . .
ATOM 2993 C     C     . LYS LYS LYS A A 393 393 . 89.672  100.479 26.034  1.00 24.92
1 . .
ATOM 2994 O     O     . LYS LYS LYS A A 393 393 . 89.733  99.241  25.843  1.00 25.10
1 . .
ATOM 2995 N     N     . THR THR THR A A 394 394 . 89.196  101.310 25.105  1.00 24.20
1 . .
ATOM 2996 CA    CA    . THR THR THR A A 394 394 . 88.722  100.796 23.827  1.00 24.91
1 . .
ATOM 2997 CB    CB    . THR THR THR A A 394 394 . 87.201  100.324 23.850  1.00 25.62
1 . .
ATOM 2998 OG1   OG1   . THR THR THR A A 394 394 . 86.786  99.940  22.515  1.00 28.69
1 . .
ATOM 2999 CG2   CG2   . THR THR THR A A 394 394 . 86.292  101.418 24.342  1.00 21.24
1 . .
ATOM 3000 C     C     . THR THR THR A A 394 394 . 89.024  101.801 22.715  1.00 25.01
1 . .
ATOM 3001 O     O     . THR THR THR A A 394 394 . 88.216  101.979 21.754  1.00 25.31
1 . .
ATOM 3002 N     N     . GLY GLY GLY A A 395 395 . 90.185  102.455 22.841  1.00 23.56
1 . .
ATOM 3003 CA    CA    . GLY GLY GLY A A 395 395 . 90.674  103.365 21.798  1.00 22.27
1 . .
ATOM 3004 C     C     . GLY GLY GLY A A 395 395 . 90.690  104.850 22.109  1.00 22.54
1 . .
ATOM 3005 O     O     . GLY GLY GLY A A 395 395 . 90.104  105.320 23.114  1.00 21.24
1 . .
ATOM 3006 N     N     . ALA ALA ALA A A 396 396 . 91.353  105.591 21.205  1.00 23.23
1 . .
ATOM 3007 CA    CA    . ALA ALA ALA A A 396 396 . 91.282  107.012 21.142  1.00 22.77
1 . .
ATOM 3008 CB    CB    . ALA ALA ALA A A 396 396 . 92.172  107.519 20.077  1.00 23.44
1 . .
ATOM 3009 C     C     . ALA ALA ALA A A 396 396 . 89.833  107.263 20.719  1.00 23.80
1 . .
ATOM 3010 O     O     . ALA ALA ALA A A 396 396 . 89.186  106.349 20.230  1.00 23.28
1 . .
ATOM 3011 N     N     . PRO PRO PRO A A 397 397 . 89.336  108.508 20.886  1.00 23.24
1 . .
ATOM 3012 CA    CA    . PRO PRO PRO A A 397 397 . 87.993  108.798 20.345  1.00 23.85
1 . .
ATOM 3013 CB    CB    . PRO PRO PRO A A 397 397 . 87.567  110.009 21.123  1.00 23.05
1 . .
ATOM 3014 CG    CG    . PRO PRO PRO A A 397 397 . 88.953  110.730 21.398  1.00 23.33
1 . .
ATOM 3015 CD    CD    . PRO PRO PRO A A 397 397 . 90.002  109.670 21.489  1.00 21.81
1 . .
ATOM 3016 C     C     . PRO PRO PRO A A 397 397 . 88.139  109.113 18.841  1.00 24.75
1 . .
ATOM 3017 O     O     . PRO PRO PRO A A 397 397 . 87.811  110.186 18.406  1.00 24.50
1 . .
ATOM 3018 N     N     . CYS CYS CYS A A 398 398 . 88.619  108.138 18.078  1.00 25.52
1 . .
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ATOM 3019 CA    CA    . CYS CYS CYS A A 398 398 . 88.925  108.277 16.654  1.00 25.84
1 . .
ATOM 3020 CB    CB    . CYS CYS CYS A A 398 398 . 90.329  108.919 16.531  1.00 26.66
1 . .
ATOM 3021 SG    SG    . CYS CYS CYS A A 398 398 . 90.858  108.950 14.806  1.00 29.44
1 . .
ATOM 3022 C     C     . CYS CYS CYS A A 398 398 . 88.970  106.857 16.074  1.00 25.06
1 . .
ATOM 3023 O     O     . CYS CYS CYS A A 398 398 . 89.527  105.974 16.728  1.00 26.48
1 . .
ATOM 3024 N     N     . ARG ARG ARG A A 399 399 . 88.442  106.640 14.853  1.00 23.85
1 . .
ATOM 3025 CA    CA    . ARG ARG ARG A A 399 399 . 88.198  105.295 14.240  1.00 22.02
1 . .
ATOM 3026 CB    CB    . ARG ARG ARG A A 399 399 . 89.383  104.360 14.308  1.00 21.59
1 . .
ATOM 3027 CG    CG    . ARG ARG ARG A A 399 399 . 90.682  104.995 13.779  1.00 22.03
1 . .
ATOM 3028 CD    CD    . ARG ARG ARG A A 399 399 . 91.921  104.135 13.960  1.00 20.43
1 . .
ATOM 3029 NE    NE    . ARG ARG ARG A A 399 399 . 91.903  102.827 13.279  1.00 20.67
1 . .
ATOM 3030 CZ    CZ    . ARG ARG ARG A A 399 399 . 92.964  102.337 12.613  1.00 22.24
1 . .
ATOM 3031 NH1   NH1   . ARG ARG ARG A A 399 399 . 94.073  103.083 12.519  1.00 21.33
1 . .
ATOM 3032 NH2   NH2   . ARG ARG ARG A A 399 399 . 92.928  101.127 12.009  1.00 21.85
1 . .
ATOM 3033 C     C     . ARG ARG ARG A A 399 399 . 86.980  104.603 14.827  1.00 22.36
1 . .
ATOM 3034 O     O     . ARG ARG ARG A A 399 399 . 86.953  104.237 15.995  1.00 22.97
1 . .
ATOM 3035 N     N     . SER SER SER A A 400 400 . 85.963  104.415 14.015  1.00 22.41
1 . .
ATOM 3036 CA    CA    . SER SER SER A A 400 400 . 84.700  103.870 14.528  1.00 23.76
1 . .
ATOM 3037 CB    CB    . SER SER SER A A 400 400 . 83.622  103.973 13.456  1.00 24.46
1 . .
ATOM 3038 OG    OG    . SER SER SER A A 400 400 . 83.365  105.331 13.253  1.00 23.56
1 . .
ATOM 3039 C     C     . SER SER SER A A 400 400 . 84.727  102.451 15.137  1.00 24.40
1 . .
ATOM 3040 O     O     . SER SER SER A A 400 400 . 83.751  102.068 15.817  1.00 25.84
1 . .
ATOM 3041 N     N     . GLU GLU GLU A A 401 401 . 85.810  101.671 14.962  1.00 23.60
1 . .
ATOM 3042 CA    CA    . GLU GLU GLU A A 401 401 . 85.886  100.414 15.716  1.00 22.67
1 . .
ATOM 3043 CB    CB    . GLU GLU GLU A A 401 401 . 86.952  99.466  15.217  1.00 22.74
1 . .
ATOM 3044 CG    CG    . GLU GLU GLU A A 401 401 . 88.444  99.915  15.465  1.00 24.03
1 . .
ATOM 3045 CD    CD    . GLU GLU GLU A A 401 401 . 88.982  100.946 14.403  1.00 24.38
1 . .
ATOM 3046 OE1   OE1   . GLU GLU GLU A A 401 401 . 88.199  101.441 13.553  1.00 23.04
1 . .
ATOM 3047 OE2   OE2   . GLU GLU GLU A A 401 401 . 90.202  101.245 14.416  1.00 25.44
1 . .
ATOM 3048 C     C     . GLU GLU GLU A A 401 401 . 86.149  100.756 17.191  1.00 22.98
1 . .
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ATOM 3049 O     O     . GLU GLU GLU A A 401 401 . 86.031  99.900  18.047  1.00 21.18
1 . .
ATOM 3050 N     N     . ARG ARG ARG A A 402 402 . 86.527  102.015 17.468  1.00 23.97
1 . .
ATOM 3051 CA    CA    . ARG ARG ARG A A 402 402 . 86.639  102.493 18.860  1.00 23.09
1 . .
ATOM 3052 CB    CB    . ARG ARG ARG A A 402 402 . 87.816  103.477 19.029  1.00 23.31
1 . .
ATOM 3053 CG    CG    . ARG ARG ARG A A 402 402 . 89.167  103.035 18.403  1.00 24.31
1 . .
ATOM 3054 CD    CD    . ARG ARG ARG A A 402 402 . 89.627  101.637 18.816  1.00 27.52
1 . .
ATOM 3055 NE    NE    . ARG ARG ARG A A 402 402 . 90.383  100.991 17.746  1.00 29.34
1 . .
ATOM 3056 CZ    CZ    . ARG ARG ARG A A 402 402 . 91.014  99.819  17.792  1.00 27.76
1 . .
ATOM 3057 NH1   NH1   . ARG ARG ARG A A 402 402 . 91.110  99.098  18.917  1.00 28.92
1 . .
ATOM 3058 NH2   NH2   . ARG ARG ARG A A 402 402 . 91.604  99.396  16.700  1.00 27.39
1 . .
ATOM 3059 C     C     . ARG ARG ARG A A 402 402 . 85.322  103.176 19.300  1.00 22.17
1 . .
ATOM 3060 O     O     . ARG ARG ARG A A 402 402 . 84.784  102.866 20.350  1.00 20.52
1 . .
ATOM 3061 N     N     . LEU LEU LEU A A 403 403 . 84.832  104.090 18.460  1.00 21.49
1 . .
ATOM 3062 CA    CA    . LEU LEU LEU A A 403 403 . 83.727  104.960 18.768  1.00 20.18
1 . .
ATOM 3063 CB    CB    . LEU LEU LEU A A 403 403 . 83.559  106.097 17.724  1.00 20.86
1 . .
ATOM 3064 CG    CG    . LEU LEU LEU A A 403 403 . 84.380  107.388 17.819  1.00 19.39
1 . .
ATOM 3065 CD1   CD1   . LEU LEU LEU A A 403 403 . 84.680  107.700 19.309  1.00 20.10
1 . .
ATOM 3066 CD2   CD2   . LEU LEU LEU A A 403 403 . 85.691  107.263 16.977  1.00 22.27
1 . .
ATOM 3067 C     C     . LEU LEU LEU A A 403 403 . 82.468  104.153 18.832  1.00 20.59
1 . .
ATOM 3068 O     O     . LEU LEU LEU A A 403 403 . 81.547  104.572 19.500  1.00 22.05
1 . .
ATOM 3069 N     N     . ALA ALA ALA A A 404 404 . 82.396  103.022 18.134  1.00 20.72
1 . .
ATOM 3070 CA    CA    . ALA ALA ALA A A 404 404 . 81.192  102.155 18.248  1.00 20.49
1 . .
ATOM 3071 CB    CB    . ALA ALA ALA A A 404 404 . 81.237  101.041 17.319  1.00 18.53
1 . .
ATOM 3072 C     C     . ALA ALA ALA A A 404 404 . 81.013  101.658 19.704  1.00 21.43
1 . .
ATOM 3073 O     O     . ALA ALA ALA A A 404 404 . 79.866  101.562 20.152  1.00 18.94
1 . .
ATOM 3074 N     N     . LYS LYS LYS A A 405 405 . 82.125  101.409 20.434  1.00 19.91
1 . .
ATOM 3075 CA    CA    . LYS LYS LYS A A 405 405 . 82.024  101.082 21.877  1.00 22.42
1 . .
ATOM 3076 CB    CB    . LYS LYS LYS A A 405 405 . 83.343  100.443 22.426  1.00 21.52
1 . .
ATOM 3077 CG    CG    . LYS LYS LYS A A 405 405 . 83.547  98.986  22.110  1.00 24.23
1 . .
ATOM 3078 CD    CD    . LYS LYS LYS A A 405 405 . 83.769  98.708  20.590  1.00 26.66
1 . .
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ATOM 3079 CE    CE    . LYS LYS LYS A A 405 405 . 84.853  97.649  20.291  1.00 25.65
1 . .
ATOM 3080 NZ    NZ    . LYS LYS LYS A A 405 405 . 84.792  97.070  18.811  1.00 26.83
1 . .
ATOM 3081 C     C     . LYS LYS LYS A A 405 405 . 81.693  102.339 22.749  1.00 22.34
1 . .
ATOM 3082 O     O     . LYS LYS LYS A A 405 405 . 80.764  102.339 23.549  1.00 21.78
1 . .
ATOM 3083 N     N     . TYR TYR TYR A A 406 406 . 82.502  103.392 22.653  1.00 22.01
1 . .
ATOM 3084 CA    CA    . TYR TYR TYR A A 406 406 . 82.113  104.581 23.358  1.00 21.75
1 . .
ATOM 3085 CB    CB    . TYR TYR TYR A A 406 406 . 83.054  105.659 23.030  1.00 20.99
1 . .
ATOM 3086 CG    CG    . TYR TYR TYR A A 406 406 . 84.503  105.331 23.464  1.00 18.05
1 . .
ATOM 3087 CD1   CD1   . TYR TYR TYR A A 406 406 . 84.799  105.021 24.789  1.00 14.37
1 . .
ATOM 3088 CE1   CE1   . TYR TYR TYR A A 406 406 . 86.167  104.729 25.203  1.00 18.70
1 . .
ATOM 3089 CZ    CZ    . TYR TYR TYR A A 406 406 . 87.201  104.797 24.259  1.00 16.65
1 . .
ATOM 3090 OH    OH    . TYR TYR TYR A A 406 406 . 88.514  104.458 24.648  1.00 21.49
1 . .
ATOM 3091 CE2   CE2   . TYR TYR TYR A A 406 406 . 86.928  105.099 22.957  1.00 15.47
1 . .
ATOM 3092 CD2   CD2   . TYR TYR TYR A A 406 406 . 85.538  105.358 22.542  1.00 15.78
1 . .
ATOM 3093 C     C     . TYR TYR TYR A A 406 406 . 80.653  105.034 23.058  1.00 21.90
1 . .
ATOM 3094 O     O     . TYR TYR TYR A A 406 406 . 80.001  105.491 23.951  1.00 22.40
1 . .
ATOM 3095 N     N     . ASN ASN ASN A A 407 407 . 80.187  104.954 21.825  1.00 20.76
1 . .
ATOM 3096 CA    CA    . ASN ASN ASN A A 407 407 . 78.828  105.420 21.506  1.00 21.90
1 . .
ATOM 3097 CB    CB    . ASN ASN ASN A A 407 407 . 78.517  105.373 19.974  1.00 21.01
1 . .
ATOM 3098 CG    CG    . ASN ASN ASN A A 407 407 . 79.183  106.506 19.229  1.00 22.50
1 . .
ATOM 3099 OD1   OD1   . ASN ASN ASN A A 407 407 . 79.460  107.587 19.809  1.00 23.14
1 . .
ATOM 3100 ND2   ND2   . ASN ASN ASN A A 407 407 . 79.481  106.280 17.963  1.00 21.57
1 . .
ATOM 3101 C     C     . ASN ASN ASN A A 407 407 . 77.813  104.571 22.182  1.00 21.82
1 . .
ATOM 3102 O     O     . ASN ASN ASN A A 407 407 . 76.779  105.064 22.616  1.00 23.30
1 . .
ATOM 3103 N     N     . GLN GLN GLN A A 408 408 . 78.085  103.273 22.198  1.00 21.68
1 . .
ATOM 3104 CA    CA    . GLN GLN GLN A A 408 408 . 77.283  102.316 22.938  1.00 22.74
1 . .
ATOM 3105 CB    CB    . GLN GLN GLN A A 408 408 . 77.662  100.849 22.558  1.00 21.32
1 . .
ATOM 3106 CG    CG    . GLN GLN GLN A A 408 408 . 76.905  99.717  23.291  1.00 20.13
1 . .
ATOM 3107 CD    CD    . GLN GLN GLN A A 408 408 . 75.425  99.615  22.930  1.00 25.15
1 . .
ATOM 3108 OE1   OE1   . GLN GLN GLN A A 408 408 . 74.920  100.403 22.139  1.00 28.67
1 . .
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ATOM 3109 NE2   NE2   . GLN GLN GLN A A 408 408 . 74.709  98.657  23.556  1.00 23.22
1 . .
ATOM 3110 C     C     . GLN GLN GLN A A 408 408 . 77.202  102.580 24.454  1.00 23.48
1 . .
ATOM 3111 O     O     . GLN GLN GLN A A 408 408 . 76.094  102.554 25.066  1.00 23.77
1 . .
ATOM 3112 N     N     . LEU LEU LEU A A 409 409 . 78.344  102.819 25.071  1.00 23.22
1 . .
ATOM 3113 CA    CA    . LEU LEU LEU A A 409 409 . 78.315  103.226 26.487  1.00 25.04
1 . .
ATOM 3114 CB    CB    . LEU LEU LEU A A 409 409 . 79.712  103.408 27.092  1.00 23.58
1 . .
ATOM 3115 CG    CG    . LEU LEU LEU A A 409 409 . 80.509  102.115 27.258  1.00 24.09
1 . .
ATOM 3116 CD1   CD1   . LEU LEU LEU A A 409 409 . 82.068  102.353 27.232  1.00 24.26
1 . .
ATOM 3117 CD2   CD2   . LEU LEU LEU A A 409 409 . 80.087  101.414 28.502  1.00 18.63
1 . .
ATOM 3118 C     C     . LEU LEU LEU A A 409 409 . 77.430  104.466 26.751  1.00 25.75
1 . .
ATOM 3119 O     O     . LEU LEU LEU A A 409 409 . 76.726  104.508 27.745  1.00 26.35
1 . .
ATOM 3120 N     N     . MET MET MET A A 410 410 . 77.448  105.463 25.864  1.00 26.71
1 . .
ATOM 3121 CA    CA    . MET MET MET A A 410 410 . 76.565  106.598 26.053  1.00 27.14
1 . .
ATOM 3122 CB    CB    . MET MET MET A A 410 410 . 76.860  107.678 25.034  1.00 28.55
1 . .
ATOM 3123 CG    CG    . MET MET MET A A 410 410 . 78.257  108.330 25.187  1.00 29.54
1 . .
ATOM 3124 SD    SD    . MET MET MET A A 410 410 . 78.274  109.869 24.223  1.00 32.67
1 . .
ATOM 3125 CE    CE    . MET MET MET A A 410 410 . 78.792  109.257 22.622  1.00 27.84
1 . .
ATOM 3126 C     C     . MET MET MET A A 410 410 . 75.093  106.209 25.935  1.00 27.65
1 . .
ATOM 3127 O     O     . MET MET MET A A 410 410 . 74.289  106.757 26.642  1.00 28.29
1 . .
ATOM 3128 N     N     . ARG ARG ARG A A 411 411 . 74.766  105.282 25.033  1.00 27.93
1 . .
ATOM 3129 CA    CA    . ARG ARG ARG A A 411 411 . 73.426  104.729 24.831  1.00 27.72
1 . .
ATOM 3130 CB    CB    . ARG ARG ARG A A 411 411 . 73.408  103.783 23.632  1.00 27.21
1 . .
ATOM 3131 CG    CG    . ARG ARG ARG A A 411 411 . 73.326  104.469 22.237  1.00 25.97
1 . .
ATOM 3132 CD    CD    . ARG ARG ARG A A 411 411 . 73.025  103.490 21.035  1.00 23.46
1 . .
ATOM 3133 NE    NE    . ARG ARG ARG A A 411 411 . 73.714  103.932 19.806  1.00 29.72
1 . .
ATOM 3134 CZ    CZ    . ARG ARG ARG A A 411 411 . 74.862  103.414 19.359  1.00 31.55
1 . .
ATOM 3135 NH1   NH1   . ARG ARG ARG A A 411 411 . 75.400  102.385 19.999  1.00 31.94
1 . .
ATOM 3136 NH2   NH2   . ARG ARG ARG A A 411 411 . 75.452  103.893 18.260  1.00 32.93
1 . .
ATOM 3137 C     C     . ARG ARG ARG A A 411 411 . 72.958  103.947 26.065  1.00 29.26
1 . .
ATOM 3138 O     O     . ARG ARG ARG A A 411 411 . 71.747  103.969 26.448  1.00 27.60
1 . .
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ATOM 3139 N     N     . ILE ILE ILE A A 412 412 . 73.912  103.250 26.685  1.00 29.40
1 . .
ATOM 3140 CA    CA    . ILE ILE ILE A A 412 412 . 73.587  102.454 27.856  1.00 29.89
1 . .
ATOM 3141 CB    CB    . ILE ILE ILE A A 412 412 . 74.733  101.466 28.262  1.00 29.02
1 . .
ATOM 3142 CG1   CG1   . ILE ILE ILE A A 412 412 . 74.889  100.305 27.267  1.00 27.72
1 . .
ATOM 3143 CD1   CD1   . ILE ILE ILE A A 412 412 . 76.319  99.674  27.315  1.00 27.77
1 . .
ATOM 3144 CG2   CG2   . ILE ILE ILE A A 412 412 . 74.516  100.905 29.654  1.00 28.69
1 . .
ATOM 3145 C     C     . ILE ILE ILE A A 412 412 . 73.276  103.428 28.995  1.00 31.65
1 . .
ATOM 3146 O     O     . ILE ILE ILE A A 412 412 . 72.321  103.210 29.754  1.00 33.50
1 . .
ATOM 3147 N     N     . GLU GLU GLU A A 413 413 . 74.064  104.498 29.122  1.00 32.46
1 . .
ATOM 3148 CA    CA    . GLU GLU GLU A A 413 413 . 73.860  105.462 30.196  1.00 33.25
1 . .
ATOM 3149 CB    CB    . GLU GLU GLU A A 413 413 . 74.942  106.525 30.176  1.00 33.18
1 . .
ATOM 3150 CG    CG    . GLU GLU GLU A A 413 413 . 74.789  107.691 31.168  1.00 32.09
1 . .
ATOM 3151 CD    CD    . GLU GLU GLU A A 413 413 . 76.076  108.549 31.170  1.00 32.96
1 . .
ATOM 3152 OE1   OE1   . GLU GLU GLU A A 413 413 . 76.312  109.311 30.211  1.00 32.03
1 . .
ATOM 3153 OE2   OE2   . GLU GLU GLU A A 413 413 . 76.881  108.425 32.106  1.00 32.48
1 . .
ATOM 3154 C     C     . GLU GLU GLU A A 413 413 . 72.479  106.093 30.040  1.00 34.21
1 . .
ATOM 3155 O     O     . GLU GLU GLU A A 413 413 . 71.718  106.204 30.990  1.00 34.47
1 . .
ATOM 3156 N     N     . GLU GLU GLU A A 414 414 . 72.193  106.515 28.837  1.00 34.63
1 . .
ATOM 3157 CA    CA    . GLU GLU GLU A A 414 414 . 70.929  107.068 28.511  1.00 37.17
1 . .
ATOM 3158 CB    CB    . GLU GLU GLU A A 414 414 . 71.000  107.577 27.069  1.00 37.27
1 . .
ATOM 3159 CG    CG    . GLU GLU GLU A A 414 414 . 69.665  107.704 26.355  1.00 40.58
1 . .
ATOM 3160 CD    CD    . GLU GLU GLU A A 414 414 . 69.817  108.237 24.927  1.00 42.78
1 . .
ATOM 3161 OE1   OE1   . GLU GLU GLU A A 414 414 . 70.901  108.744 24.563  1.00 40.93
1 . .
ATOM 3162 OE2   OE2   . GLU GLU GLU A A 414 414 . 68.817  108.174 24.185  1.00 46.94
1 . .
ATOM 3163 C     C     . GLU GLU GLU A A 414 414 . 69.760  106.064 28.808  1.00 38.24
1 . .
ATOM 3164 O     O     . GLU GLU GLU A A 414 414 . 68.716  106.483 29.266  1.00 38.97
1 . .
ATOM 3165 N     N     . GLU GLU GLU A A 415 415 . 69.976  104.755 28.638  1.00 38.79
1 . .
ATOM 3166 CA    CA    . GLU GLU GLU A A 415 415 . 68.959  103.761 28.882  1.00 40.05
1 . .
ATOM 3167 CB    CB    . GLU GLU GLU A A 415 415 . 69.330  102.457 28.152  1.00 40.91
1 . .
ATOM 3168 CG    CG    . GLU GLU GLU A A 415 415 . 68.365  101.236 28.331  1.00 45.55
1 . .
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ATOM 3169 CD    CD    . GLU GLU GLU A A 415 415 . 66.979  101.433 27.682  1.00 53.62
1 . .
ATOM 3170 OE1   OE1   . GLU GLU GLU A A 415 415 . 65.928  101.059 28.294  1.00 56.38
1 . .
ATOM 3171 OE2   OE2   . GLU GLU GLU A A 415 415 . 66.930  101.965 26.543  1.00 58.20
1 . .
ATOM 3172 C     C     . GLU GLU GLU A A 415 415 . 68.701  103.512 30.392  1.00 40.22
1 . .
ATOM 3173 O     O     . GLU GLU GLU A A 415 415 . 67.558  103.198 30.800  1.00 40.77
1 . .
ATOM 3174 N     N     . LEU LEU LEU A A 416 416 . 69.759  103.619 31.197  1.00 39.38
1 . .
ATOM 3175 CA    CA    . LEU LEU LEU A A 416 416 . 69.668  103.537 32.660  1.00 40.05
1 . .
ATOM 3176 CB    CB    . LEU LEU LEU A A 416 416 . 71.076  103.369 33.316  1.00 38.39
1 . .
ATOM 3177 CG    CG    . LEU LEU LEU A A 416 416 . 71.638  101.963 33.033  1.00 35.88
1 . .
ATOM 3178 CD1   CD1   . LEU LEU LEU A A 416 416 . 73.192  101.813 33.108  1.00 31.67
1 . .
ATOM 3179 CD2   CD2   . LEU LEU LEU A A 416 416 . 70.946  100.920 33.919  1.00 33.75
1 . .
ATOM 3180 C     C     . LEU LEU LEU A A 416 416 . 68.896  104.690 33.308  1.00 41.59
1 . .
ATOM 3181 O     O     . LEU LEU LEU A A 416 416 . 68.415  104.552 34.433  1.00 41.60
1 . .
ATOM 3182 N     N     . GLY GLY GLY A A 417 417 . 68.761  105.819 32.608  1.00 43.43
1 . .
ATOM 3183 CA    CA    . GLY GLY GLY A A 417 417 . 68.068  106.970 33.187  1.00 45.21
1 . .
ATOM 3184 C     C     . GLY GLY GLY A A 417 417 . 68.724  107.459 34.476  1.00 46.88
1 . .
ATOM 3185 O     O     . GLY GLY GLY A A 417 417 . 69.969  107.650 34.539  1.00 46.92
1 . .
ATOM 3186 N     N     . ASP ASP ASP A A 418 418 . 67.901  107.652 35.509  1.00 48.27
1 . .
ATOM 3187 CA    CA    . ASP ASP ASP A A 418 418 . 68.373  108.287 36.745  1.00 49.38
1 . .
ATOM 3188 CB    CB    . ASP ASP ASP A A 418 418 . 67.281  109.095 37.467  1.00 51.58
1 . .
ATOM 3189 CG    CG    . ASP ASP ASP A A 418 418 . 67.847  110.399 38.062  1.00 56.57
1 . .
ATOM 3190 OD1   OD1   . ASP ASP ASP A A 418 418 . 68.879  110.331 38.800  1.00 61.54
1 . .
ATOM 3191 OD2   OD2   . ASP ASP ASP A A 418 418 . 67.297  111.498 37.753  1.00 61.77
1 . .
ATOM 3192 C     C     . ASP ASP ASP A A 418 418 . 69.033  107.300 37.674  1.00 48.53
1 . .
ATOM 3193 O     O     . ASP ASP ASP A A 418 418 . 69.696  107.689 38.659  1.00 48.47
1 . .
ATOM 3194 N     N     . GLU GLU GLU A A 419 419 . 68.873  106.018 37.332  1.00 47.07
1 . .
ATOM 3195 CA    CA    . GLU GLU GLU A A 419 419 . 69.693  104.969 37.911  1.00 46.01
1 . .
ATOM 3196 CB    CB    . GLU GLU GLU A A 419 419 . 69.109  103.604 37.572  1.00 47.55
1 . .
ATOM 3197 CG    CG    . GLU GLU GLU A A 419 419 . 67.535  103.560 37.515  1.00 53.53
1 . .
ATOM 3198 CD    CD    . GLU GLU GLU A A 419 419 . 67.004  102.522 36.482  1.00 60.48
1 . .
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ATOM 3199 OE1   OE1   . GLU GLU GLU A A 419 419 . 65.974  102.790 35.788  1.00 62.29
1 . .
ATOM 3200 OE2   OE2   . GLU GLU GLU A A 419 419 . 67.641  101.434 36.360  1.00 65.00
1 . .
ATOM 3201 C     C     . GLU GLU GLU A A 419 419 . 71.178  105.072 37.461  1.00 43.92
1 . .
ATOM 3202 O     O     . GLU GLU GLU A A 419 419 . 72.037  104.423 38.053  1.00 42.73
1 . .
ATOM 3203 N     N     . ALA ALA ALA A A 420 420 . 71.484  105.888 36.437  1.00 41.48
1 . .
ATOM 3204 CA    CA    . ALA ALA ALA A A 420 420 . 72.863  105.940 35.915  1.00 39.79
1 . .
ATOM 3205 CB    CB    . ALA ALA ALA A A 420 420 . 72.948  106.776 34.656  1.00 38.99
1 . .
ATOM 3206 C     C     . ALA ALA ALA A A 420 420 . 73.830  106.478 36.943  1.00 38.65
1 . .
ATOM 3207 O     O     . ALA ALA ALA A A 420 420 . 73.586  107.553 37.487  1.00 40.33
1 . .
ATOM 3208 N     N     . ARG ARG ARG A A 421 421 . 74.904  105.753 37.215  1.00 36.92
1 . .
ATOM 3209 CA    CA    . ARG ARG ARG A A 421 421 . 76.008  106.268 38.037  1.00 36.88
1 . .
ATOM 3210 CB    CB    . ARG ARG ARG A A 421 421 . 76.173  105.453 39.343  1.00 38.06
1 . .
ATOM 3211 CG    CG    . ARG ARG ARG A A 421 421 . 74.947  105.396 40.286  1.00 42.85
1 . .
ATOM 3212 CD    CD    . ARG ARG ARG A A 421 421 . 74.780  106.644 41.211  1.00 48.69
1 . .
ATOM 3213 NE    NE    . ARG ARG ARG A A 421 421 . 73.461  106.582 41.836  1.00 52.76
1 . .
ATOM 3214 CZ    CZ    . ARG ARG ARG A A 421 421 . 72.338  107.074 41.301  1.00 55.64
1 . .
ATOM 3215 NH1   NH1   . ARG ARG ARG A A 421 421 . 72.354  107.713 40.126  1.00 57.92
1 . .
ATOM 3216 NH2   NH2   . ARG ARG ARG A A 421 421 . 71.189  106.927 41.938  1.00 55.47
1 . .
ATOM 3217 C     C     . ARG ARG ARG A A 421 421 . 77.345  106.174 37.327  1.00 35.33
1 . .
ATOM 3218 O     O     . ARG ARG ARG A A 421 421 . 77.626  105.212 36.625  1.00 36.78
1 . .
ATOM 3219 N     N     . PHE PHE PHE A A 422 422 . 78.233  107.099 37.605  1.00 33.13
1 . .
ATOM 3220 CA    CA    . PHE PHE PHE A A 422 422 . 79.518  107.100 36.946  1.00 31.06
1 . .
ATOM 3221 CB    CB    . PHE PHE PHE A A 422 422 . 79.695  108.466 36.246  1.00 29.86
1 . .
ATOM 3222 CG    CG    . PHE PHE PHE A A 422 422 . 81.021  108.618 35.536  1.00 29.58
1 . .
ATOM 3223 CD1   CD1   . PHE PHE PHE A A 422 422 . 81.296  107.855 34.384  1.00 24.89
1 . .
ATOM 3224 CE1   CE1   . PHE PHE PHE A A 422 422 . 82.535  107.960 33.721  1.00 24.88
1 . .
ATOM 3225 CZ    CZ    . PHE PHE PHE A A 422 422 . 83.510  108.836 34.196  1.00 25.89
1 . .
ATOM 3226 CE2   CE2   . PHE PHE PHE A A 422 422 . 83.252  109.649 35.354  1.00 29.06
1 . .
ATOM 3227 CD2   CD2   . PHE PHE PHE A A 422 422 . 82.004  109.510 36.023  1.00 27.64
1 . .
ATOM 3228 C     C     . PHE PHE PHE A A 422 422 . 80.751  106.719 37.847  1.00 30.14
1 . .
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ATOM 3229 O     O     . PHE PHE PHE A A 422 422 . 81.001  107.333 38.865  1.00 30.73
1 . .
ATOM 3230 N     N     . ALA ALA ALA A A 423 423 . 81.536  105.720 37.468  1.00 28.99
1 . .
ATOM 3231 CA    CA    . ALA ALA ALA A A 423 423 . 82.674  105.276 38.332  1.00 28.09
1 . .
ATOM 3232 CB    CB    . ALA ALA ALA A A 423 423 . 83.516  104.178 37.708  1.00 27.17
1 . .
ATOM 3233 C     C     . ALA ALA ALA A A 423 423 . 83.561  106.368 38.893  1.00 26.77
1 . .
ATOM 3234 O     O     . ALA ALA ALA A A 423 423 . 83.881  106.357 40.089  1.00 25.77
1 . .
ATOM 3235 N     N     . GLY GLY GLY A A 424 424 . 83.923  107.331 38.059  1.00 27.43
1 . .
ATOM 3236 CA    CA    . GLY GLY GLY A A 424 424 . 84.784  108.445 38.475  1.00 27.67
1 . .
ATOM 3237 C     C     . GLY GLY GLY A A 424 424 . 86.121  108.099 39.152  1.00 28.84
1 . .
ATOM 3238 O     O     . GLY GLY GLY A A 424 424 . 86.904  107.261 38.658  1.00 28.37
1 . .
ATOM 3239 N     N     . HIS HIS HIS A A 425 425 . 86.387  108.776 40.290  1.00 29.38
1 . .
ATOM 3240 CA    CA    . HIS HIS HIS A A 425 425 . 87.636  108.568 41.101  1.00 29.26
1 . .
ATOM 3241 CB    CB    . HIS HIS HIS A A 425 425 . 87.806  109.707 42.173  1.00 29.37
1 . .
ATOM 3242 CG    CG    . HIS HIS HIS A A 425 425 . 88.116  111.054 41.576  1.00 30.47
1 . .
ATOM 3243 ND1   ND1   . HIS HIS HIS A A 425 425 . 89.406  111.446 41.242  1.00 32.68
1 . .
ATOM 3244 CE1   CE1   . HIS HIS HIS A A 425 425 . 89.373  112.666 40.724  1.00 32.16
1 . .
ATOM 3245 NE2   NE2   . HIS HIS HIS A A 425 425 . 88.108  113.074 40.693  1.00 31.96
1 . .
ATOM 3246 CD2   CD2   . HIS HIS HIS A A 425 425 . 87.300  112.079 41.204  1.00 30.51
1 . .
ATOM 3247 C     C     . HIS HIS HIS A A 425 425 . 87.619  107.172 41.733  1.00 28.11
1 . .
ATOM 3248 O     O     . HIS HIS HIS A A 425 425 . 88.611  106.671 42.268  1.00 26.23
1 . .
ATOM 3249 N     N     . ASN ASN ASN A A 426 426 . 86.468  106.539 41.662  1.00 28.31
1 . .
ATOM 3250 CA    CA    . ASN ASN ASN A A 426 426 . 86.383  105.131 42.056  1.00 30.87
1 . .
ATOM 3251 CB    CB    . ASN ASN ASN A A 426 426 . 85.038  104.933 42.787  1.00 31.35
1 . .
ATOM 3252 CG    CG    . ASN ASN ASN A A 426 426 . 85.088  105.507 44.203  1.00 33.40
1 . .
ATOM 3253 OD1   OD1   . ASN ASN ASN A A 426 426 . 85.884  105.042 45.052  1.00 35.98
1 . .
ATOM 3254 ND2   ND2   . ASN ASN ASN A A 426 426 . 84.295  106.521 44.456  1.00 32.97
1 . .
ATOM 3255 C     C     . ASN ASN ASN A A 426 426 . 86.613  104.051 40.962  1.00 31.92
1 . .
ATOM 3256 O     O     . ASN ASN ASN A A 426 426 . 86.198  102.907 41.117  1.00 33.56
1 . .
ATOM 3257 N     N     . PHE PHE PHE A A 427 427 . 87.268  104.394 39.856  1.00 32.92
1 . .
ATOM 3258 CA    CA    . PHE PHE PHE A A 427 427 . 87.477  103.424 38.781  1.00 33.78
1 . .
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ATOM 3259 CB    CB    . PHE PHE PHE A A 427 427 . 88.203  104.063 37.599  1.00 32.51
1 . .
ATOM 3260 CG    CG    . PHE PHE PHE A A 427 427 . 89.616  104.543 37.920  1.00 32.82
1 . .
ATOM 3261 CD1   CD1   . PHE PHE PHE A A 427 427 . 89.819  105.788 38.491  1.00 31.15
1 . .
ATOM 3262 CE1   CE1   . PHE PHE PHE A A 427 427 . 91.095  106.223 38.801  1.00 32.65
1 . .
ATOM 3263 CZ    CZ    . PHE PHE PHE A A 427 427 . 92.213  105.425 38.510  1.00 33.89
1 . .
ATOM 3264 CE2   CE2   . PHE PHE PHE A A 427 427 . 92.041  104.175 37.921  1.00 32.63
1 . .
ATOM 3265 CD2   CD2   . PHE PHE PHE A A 427 427 . 90.739  103.733 37.648  1.00 33.97
1 . .
ATOM 3266 C     C     . PHE PHE PHE A A 427 427 . 88.238  102.179 39.259  1.00 35.72
1 . .
ATOM 3267 O     O     . PHE PHE PHE A A 427 427 . 88.016  101.124 38.721  1.00 37.06
1 . .
ATOM 3268 N     N     . ARG ARG ARG A A 428 428 . 89.136  102.274 40.242  1.00 36.96
1 . .
ATOM 3269 CA    CA    . ARG ARG ARG A A 428 428 . 89.717  101.053 40.749  1.00 38.84
1 . .
ATOM 3270 CB    CB    . ARG ARG ARG A A 428 428 . 90.937  101.304 41.633  1.00 38.23
1 . .
ATOM 3271 CG    CG    . ARG ARG ARG A A 428 428 . 92.008  101.995 40.889  1.00 38.01
1 . .
ATOM 3272 CD    CD    . ARG ARG ARG A A 428 428 . 93.168  102.406 41.769  1.00 39.42
1 . .
ATOM 3273 NE    NE    . ARG ARG ARG A A 428 428 . 93.812  101.239 42.338  1.00 40.97
1 . .
ATOM 3274 CZ    CZ    . ARG ARG ARG A A 428 428 . 95.033  101.216 42.856  1.00 42.48
1 . .
ATOM 3275 NH1   NH1   . ARG ARG ARG A A 428 428 . 95.784  102.308 42.901  1.00 44.06
1 . .
ATOM 3276 NH2   NH2   . ARG ARG ARG A A 428 428 . 95.503  100.076 43.345  1.00 43.88
1 . .
ATOM 3277 C     C     . ARG ARG ARG A A 428 428 . 88.690  100.203 41.509  1.00 40.45
1 . .
ATOM 3278 O     O     . ARG ARG ARG A A 428 428 . 88.816  98.962  41.518  1.00 41.55
1 . .
ATOM 3279 N     N     . ASN ASN ASN A A 429 429 . 87.676  100.840 42.112  1.00 41.03
1 . .
ATOM 3280 CA    CA    . ASN ASN ASN A A 429 429 . 86.892  100.188 43.195  1.00 42.15
1 . .
ATOM 3281 CB    CB    . ASN ASN ASN A A 429 429 . 87.586  100.402 44.592  1.00 42.72
1 . .
ATOM 3282 CG    CG    . ASN ASN ASN A A 429 429 . 87.495  101.895 45.144  1.00 45.55
1 . .
ATOM 3283 OD1   OD1   . ASN ASN ASN A A 429 429 . 88.096  102.857 44.620  1.00 46.85
1 . .
ATOM 3284 ND2   ND2   . ASN ASN ASN A A 429 429 . 86.800  102.038 46.268  1.00 50.62
1 . .
ATOM 3285 C     C     . ASN ASN ASN A A 429 429 . 85.428  100.576 43.254  1.00 41.45
1 . .
ATOM 3286 O     O     . ASN ASN ASN A A 429 429 . 84.947  101.034 44.276  1.00 41.95
1 . .
ATOM 3287 N     N     . PRO PRO PRO A A 430 430 . 84.703  100.369 42.172  1.00 41.75
1 . .
ATOM 3288 CA    CA    . PRO PRO PRO A A 430 430 . 83.358  100.930 42.054  1.00 42.66
1 . .
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ATOM 3289 CB    CB    . PRO PRO PRO A A 430 430 . 83.044  100.750 40.544  1.00 42.53
1 . .
ATOM 3290 CG    CG    . PRO PRO PRO A A 430 430 . 83.879  99.662  40.120  1.00 41.09
1 . .
ATOM 3291 CD    CD    . PRO PRO PRO A A 430 430 . 85.147  99.748  40.909  1.00 41.78
1 . .
ATOM 3292 C     C     . PRO PRO PRO A A 430 430 . 82.235  100.329 42.923  1.00 44.24
1 . .
ATOM 3293 O     O     . PRO PRO PRO A A 430 430 . 81.112  100.885 42.974  1.00 43.45
1 . .
ATOM 3294 N     N     . SER SER SER A A 431 431 . 82.521  99.210  43.586  1.00 46.53
1 . .
ATOM 3295 CA    CA    . SER SER SER A A 431 431 . 81.535  98.510  44.402  1.00 48.77
1 . .
ATOM 3296 CB    CB    . SER SER SER A A 431 431 . 82.080  97.151  44.919  1.00 49.35
1 . .
ATOM 3297 OG    OG    . SER SER SER A A 431 431 . 83.411  97.257  45.433  1.00 51.17
1 . .
ATOM 3298 C     C     . SER SER SER A A 431 431 . 81.028  99.403  45.543  1.00 49.68
1 . .
ATOM 3299 O     O     . SER SER SER A A 431 431 . 79.879  99.275  45.944  1.00 50.61
1 . .
ATOM 3300 N     N     . VAL VAL VAL A A 432 432 . 81.853  100.352 46.006  1.00 49.66
1 . .
ATOM 3301 CA    CA    . VAL VAL VAL A A 432 432 . 81.451  101.255 47.091  1.00 49.43
1 . .
ATOM 3302 CB    CB    . VAL VAL VAL A A 432 432 . 82.655  102.049 47.667  1.00 49.19
1 . .
ATOM 3303 CG1   CG1   . VAL VAL VAL A A 432 432 . 83.983  101.227 47.611  1.00 50.10
1 . .
ATOM 3304 CG2   CG2   . VAL VAL VAL A A 432 432 . 82.812  103.344 46.933  1.00 48.54
1 . .
ATOM 3305 C     C     . VAL VAL VAL A A 432 432 . 80.367  102.270 46.686  1.00 49.32
1 . .
ATOM 3306 O     O     . VAL VAL VAL A A 432 432 . 79.851  103.003 47.521  1.00 49.99
1 . .
ATOM 3307 N     N     . LEU LEU LEU A A 433 433 . 80.018  102.344 45.417  1.00 48.39
1 . .
ATOM 3308 CA    CA    . LEU LEU LEU A A 433 433 . 79.209  103.473 44.994  1.00 48.34
1 . .
ATOM 3309 CB    CB    . LEU LEU LEU A A 433 433 . 79.651  103.991 43.607  1.00 48.08
1 . .
ATOM 3310 CG    CG    . LEU LEU LEU A A 433 433 . 81.009  104.744 43.601  1.00 47.10
1 . .
ATOM 3311 CD1   CD1   . LEU LEU LEU A A 433 433 . 81.539  104.995 42.184  1.00 45.48
1 . .
ATOM 3312 CD2   CD2   . LEU LEU LEU A A 433 433 . 80.919  106.054 44.359  1.00 44.58
1 . .
ATOM 3313 C     C     . LEU LEU LEU A A 433 433 . 77.713  103.217 45.090  1.00 48.36
1 . .
ATOM 3314 O     O     . LEU LEU LEU A A 433 433 . 77.277  102.124 44.810  1.00 48.78
1 . .
ATOM 3315 G+2   G+2   . MG2 MG2 MG2 A . 601 601 . 98.219  95.670  26.947  1.00 11.21
1 . .
ATOM 3316 G+2   G+2   . MG2 MG2 MG2 A . 602 602 . 99.199  93.733  23.578  1.00 13.17
1 . .
ATOM 3317 O4P   O4P   . 2PG 2PG 2PG A . 603 603 . 95.506  94.089  21.043  1.00 27.43
1 . .
ATOM 3318 P     P     . 2PG 2PG 2PG A . 603 603 . 97.019  94.347  21.320  1.00 28.17
1 . .
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ATOM 3319 O2P   O2P   . 2PG 2PG 2PG A . 603 603 . 97.844  94.632  20.126  1.00 27.70
1 . .
ATOM 3320 O3P   O3P   . 2PG 2PG 2PG A . 603 603 . 97.631  93.408  22.318  1.00 27.91
1 . .
ATOM 3321 O1P   O1P   . 2PG 2PG 2PG A . 603 603 . 96.929  95.740  22.091  1.00 30.17
1 . .
ATOM 3322 C2    C2    . 2PG 2PG 2PG A . 603 603 . 96.183  95.669  23.319  1.00 34.11
1 . .
ATOM 3323 C1    C1    . 2PG 2PG 2PG A . 603 603 . 97.113  95.774  24.513  1.00 33.28
1 . .
ATOM 3324 O2    O2    . 2PG 2PG 2PG A . 603 603 . 96.696  96.299  25.533  1.00 35.28
1 . .
ATOM 3325 O1    O1    . 2PG 2PG 2PG A . 603 603 . 98.272  95.292  24.496  1.00 32.71
1 . .
ATOM 3326 C3    C3    . 2PG 2PG 2PG A . 603 603 . 94.854  96.442  23.310  1.00 35.35
1 . .
ATOM 3327 O3    O3    . 2PG 2PG 2PG A . 603 603 . 95.112  97.862  23.398  1.00 41.35
1 . .
ATOM 3328 O     O     . HOH HOH HOH A . 604 604 . 100.343 95.505  26.930  1.00 25.66
1 . .
ATOM 3329 O     O     . HOH HOH HOH A . 605 605 . 100.861 93.827  24.765  1.00 27.75
1 . .
ATOM 3330 O     O     . HOH HOH HOH A . 606 606 . 98.375  92.556  24.764  1.00 24.85
1 . .
ATOM 3331 N     N     . SER SER SER B B 1   1   . 52.223  103.145 11.698  1.00 46.81
1 . .
ATOM 3332 CA    CA    . SER SER SER B B 1   1   . 52.682  104.562 11.805  1.00 47.63
1 . .
ATOM 3333 CB    CB    . SER SER SER B B 1   1   . 51.608  105.450 12.492  1.00 47.87
1 . .
ATOM 3334 OG    OG    . SER SER SER B B 1   1   . 50.926  104.768 13.555  1.00 49.47
1 . .
ATOM 3335 C     C     . SER SER SER B B 1   1   . 54.015  104.607 12.570  1.00 47.05
1 . .
ATOM 3336 O     O     . SER SER SER B B 1   1   . 54.540  103.550 12.987  1.00 47.90
1 . .
ATOM 3337 N     N     . ILE ILE ILE B B 2   2   . 54.543  105.805 12.784  1.00 45.72
1 . .
ATOM 3338 CA    CA    . ILE ILE ILE B B 2   2   . 55.697  105.942 13.668  1.00 45.11
1 . .
ATOM 3339 CB    CB    . ILE ILE ILE B B 2   2   . 56.615  107.142 13.291  1.00 44.45
1 . .
ATOM 3340 CG1   CG1   . ILE ILE ILE B B 2   2   . 57.151  106.981 11.881  1.00 44.15
1 . .
ATOM 3341 CD1   CD1   . ILE ILE ILE B B 2   2   . 57.575  108.298 11.241  1.00 42.56
1 . .
ATOM 3342 CG2   CG2   . ILE ILE ILE B B 2   2   . 57.802  107.217 14.232  1.00 44.12
1 . .
ATOM 3343 C     C     . ILE ILE ILE B B 2   2   . 55.246  106.032 15.118  1.00 44.28
1 . .
ATOM 3344 O     O     . ILE ILE ILE B B 2   2   . 54.431  106.853 15.435  1.00 44.26
1 . .
ATOM 3345 N     N     . GLN GLN GLN B B 3   3   . 55.788  105.194 15.998  1.00 43.85
1 . .
ATOM 3346 CA    CA    . GLN GLN GLN B B 3   3   . 55.427  105.254 17.406  1.00 43.64
1 . .
ATOM 3347 CB    CB    . GLN GLN GLN B B 3   3   . 55.536  103.882 18.030  1.00 44.74
1 . .
ATOM 3348 CG    CG    . GLN GLN GLN B B 3   3   . 54.341  102.968 17.831  1.00 49.20
1 . .
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ATOM 3349 CD    CD    . GLN GLN GLN B B 3   3   . 54.444  101.751 18.765  1.00 54.77
1 . .
ATOM 3350 OE1   OE1   . GLN GLN GLN B B 3   3   . 55.410  100.978 18.706  1.00 56.95
1 . .
ATOM 3351 NE2   NE2   . GLN GLN GLN B B 3   3   . 53.478  101.621 19.675  1.00 57.39
1 . .
ATOM 3352 C     C     . GLN GLN GLN B B 3   3   . 56.304  106.211 18.189  1.00 42.60
1 . .
ATOM 3353 O     O     . GLN GLN GLN B B 3   3   . 55.827  106.859 19.118  1.00 41.28
1 . .
ATOM 3354 N     N     . LYS LYS LYS B B 4   4   . 57.593  106.293 17.818  1.00 41.95
1 . .
ATOM 3355 CA    CA    . LYS LYS LYS B B 4   4   . 58.548  107.121 18.551  1.00 41.04
1 . .
ATOM 3356 CB    CB    . LYS LYS LYS B B 4   4   . 58.833  106.509 19.927  1.00 41.46
1 . .
ATOM 3357 CG    CG    . LYS LYS LYS B B 4   4   . 59.542  107.409 20.911  1.00 43.67
1 . .
ATOM 3358 CD    CD    . LYS LYS LYS B B 4   4   . 60.088  106.583 22.047  1.00 51.75
1 . .
ATOM 3359 CE    CE    . LYS LYS LYS B B 4   4   . 59.907  107.279 23.389  1.00 57.57
1 . .
ATOM 3360 NZ    NZ    . LYS LYS LYS B B 4   4   . 60.843  108.444 23.654  1.00 60.72
1 . .
ATOM 3361 C     C     . LYS LYS LYS B B 4   4   . 59.868  107.346 17.822  1.00 40.50
1 . .
ATOM 3362 O     O     . LYS LYS LYS B B 4   4   . 60.409  106.451 17.152  1.00 39.53
1 . .
ATOM 3363 N     N     . ILE ILE ILE B B 5   5   . 60.388  108.564 17.984  1.00 40.15
1 . .
ATOM 3364 CA    CA    . ILE ILE ILE B B 5   5   . 61.659  108.935 17.436  1.00 39.28
1 . .
ATOM 3365 CB    CB    . ILE ILE ILE B B 5   5   . 61.507  109.894 16.220  1.00 39.11
1 . .
ATOM 3366 CG1   CG1   . ILE ILE ILE B B 5   5   . 60.733  109.217 15.087  1.00 38.43
1 . .
ATOM 3367 CD1   CD1   . ILE ILE ILE B B 5   5   . 60.267  110.179 14.050  1.00 40.89
1 . .
ATOM 3368 CG2   CG2   . ILE ILE ILE B B 5   5   . 62.871  110.347 15.682  1.00 39.74
1 . .
ATOM 3369 C     C     . ILE ILE ILE B B 5   5   . 62.472  109.514 18.598  1.00 39.77
1 . .
ATOM 3370 O     O     . ILE ILE ILE B B 5   5   . 61.967  110.221 19.464  1.00 40.01
1 . .
ATOM 3371 N     N     . TRP TRP TRP B B 6   6   . 63.743  109.190 18.624  1.00 38.87
1 . .
ATOM 3372 CA    CA    . TRP TRP TRP B B 6   6   . 64.589  109.688 19.664  1.00 39.52
1 . .
ATOM 3373 CB    CB    . TRP TRP TRP B B 6   6   . 64.688  108.629 20.788  1.00 41.74
1 . .
ATOM 3374 CG    CG    . TRP TRP TRP B B 6   6   . 65.185  109.171 22.089  1.00 52.03
1 . .
ATOM 3375 CD1   CD1   . TRP TRP TRP B B 6   6   . 66.229  108.691 22.844  1.00 57.78
1 . .
ATOM 3376 NE1   NE1   . TRP TRP TRP B B 6   6   . 66.387  109.468 23.981  1.00 63.39
1 . .
ATOM 3377 CE2   CE2   . TRP TRP TRP B B 6   6   . 65.443  110.467 23.981  1.00 64.19
1 . .
ATOM 3378 CD2   CD2   . TRP TRP TRP B B 6   6   . 64.654  110.308 22.808  1.00 60.91
1 . .
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ATOM 3379 CE3   CE3   . TRP TRP TRP B B 6   6   . 63.590  111.209 22.569  1.00 63.28
1 . .
ATOM 3380 CZ3   CZ3   . TRP TRP TRP B B 6   6   . 63.346  112.234 23.499  1.00 67.12
1 . .
ATOM 3381 CH2   CH2   . TRP TRP TRP B B 6   6   . 64.156  112.369 24.663  1.00 68.35
1 . .
ATOM 3382 CZ2   CZ2   . TRP TRP TRP B B 6   6   . 65.200  111.496 24.921  1.00 67.21
1 . .
ATOM 3383 C     C     . TRP TRP TRP B B 6   6   . 65.959  109.980 19.008  1.00 36.38
1 . .
ATOM 3384 O     O     . TRP TRP TRP B B 6   6   . 66.604  109.083 18.535  1.00 35.59
1 . .
ATOM 3385 N     N     . ALA ALA ALA B B 7   7   . 66.376  111.233 18.974  1.00 33.37
1 . .
ATOM 3386 CA    CA    . ALA ALA ALA B B 7   7   . 67.655  111.588 18.394  1.00 32.19
1 . .
ATOM 3387 CB    CB    . ALA ALA ALA B B 7   7   . 67.545  112.794 17.470  1.00 30.59
1 . .
ATOM 3388 C     C     . ALA ALA ALA B B 7   7   . 68.637  111.886 19.462  1.00 31.30
1 . .
ATOM 3389 O     O     . ALA ALA ALA B B 7   7   . 68.240  112.318 20.529  1.00 32.15
1 . .
ATOM 3390 N     N     . ARG ARG ARG B B 8   8   . 69.922  111.669 19.174  1.00 29.11
1 . .
ATOM 3391 CA    CA    . ARG ARG ARG B B 8   8   . 70.941  111.921 20.157  1.00 27.92
1 . .
ATOM 3392 CB    CB    . ARG ARG ARG B B 8   8   . 71.223  110.663 21.041  1.00 28.77
1 . .
ATOM 3393 CG    CG    . ARG ARG ARG B B 8   8   . 72.041  109.464 20.286  1.00 26.56
1 . .
ATOM 3394 CD    CD    . ARG ARG ARG B B 8   8   . 72.342  108.210 21.171  1.00 29.28
1 . .
ATOM 3395 NE    NE    . ARG ARG ARG B B 8   8   . 71.113  107.643 21.735  1.00 29.85
1 . .
ATOM 3396 CZ    CZ    . ARG ARG ARG B B 8   8   . 70.281  106.833 21.087  1.00 31.73
1 . .
ATOM 3397 NH1   NH1   . ARG ARG ARG B B 8   8   . 70.525  106.428 19.821  1.00 32.20
1 . .
ATOM 3398 NH2   NH2   . ARG ARG ARG B B 8   8   . 69.196  106.410 21.717  1.00 35.17
1 . .
ATOM 3399 C     C     . ARG ARG ARG B B 8   8   . 72.228  112.256 19.407  1.00 28.36
1 . .
ATOM 3400 O     O     . ARG ARG ARG B B 8   8   . 72.388  112.015 18.193  1.00 28.08
1 . .
ATOM 3401 N     N     . GLU GLU GLU B B 9   9   . 73.167  112.737 20.163  1.00 28.07
1 . .
ATOM 3402 CA    CA    . GLU GLU GLU B B 9   9   . 74.483  113.096 19.644  1.00 29.40
1 . .
ATOM 3403 CB    CB    . GLU GLU GLU B B 9   9   . 74.949  114.229 20.524  1.00 29.30
1 . .
ATOM 3404 CG    CG    . GLU GLU GLU B B 9   9   . 76.085  115.074 20.014  1.00 32.33
1 . .
ATOM 3405 CD    CD    . GLU GLU GLU B B 9   9   . 76.394  116.219 20.980  1.00 33.76
1 . .
ATOM 3406 OE1   OE1   . GLU GLU GLU B B 9   9   . 76.507  117.344 20.468  1.00 34.21
1 . .
ATOM 3407 OE2   OE2   . GLU GLU GLU B B 9   9   . 76.512  116.000 22.233  1.00 33.33
1 . .
ATOM 3408 C     C     . GLU GLU GLU B B 9   9   . 75.429  111.913 19.845  1.00 28.67
1 . .
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ATOM 3409 O     O     . GLU GLU GLU B B 9   9   . 75.493  111.425 20.946  1.00 28.65
1 . .
ATOM 3410 N     N     . ILE ILE ILE B B 10  10  . 76.143  111.447 18.815  1.00 27.00
1 . .
ATOM 3411 CA    CA    . ILE ILE ILE B B 10  10  . 77.141  110.391 19.003  1.00 24.47
1 . .
ATOM 3412 CB    CB    . ILE ILE ILE B B 10  10  . 76.830  109.035 18.241  1.00 24.56
1 . .
ATOM 3413 CG1   CG1   . ILE ILE ILE B B 10  10  . 76.687  109.311 16.702  1.00 21.66
1 . .
ATOM 3414 CD1   CD1   . ILE ILE ILE B B 10  10  . 76.714  108.053 15.830  1.00 21.01
1 . .
ATOM 3415 CG2   CG2   . ILE ILE ILE B B 10  10  . 75.638  108.200 18.883  1.00 25.22
1 . .
ATOM 3416 C     C     . ILE ILE ILE B B 10  10  . 78.439  110.978 18.457  1.00 23.84
1 . .
ATOM 3417 O     O     . ILE ILE ILE B B 10  10  . 78.420  112.091 17.916  1.00 25.41
1 . .
ATOM 3418 N     N     . LEU LEU LEU B B 11  11  . 79.537  110.243 18.544  1.00 21.42
1 . .
ATOM 3419 CA    CA    . LEU LEU LEU B B 11  11  . 80.846  110.689 17.914  1.00 20.13
1 . .
ATOM 3420 CB    CB    . LEU LEU LEU B B 11  11  . 81.997  110.494 18.892  1.00 19.93
1 . .
ATOM 3421 CG    CG    . LEU LEU LEU B B 11  11  . 82.041  111.299 20.192  1.00 20.13
1 . .
ATOM 3422 CD1   CD1   . LEU LEU LEU B B 11  11  . 83.487  111.248 20.794  1.00 20.61
1 . .
ATOM 3423 CD2   CD2   . LEU LEU LEU B B 11  11  . 81.619  112.796 19.848  1.00 15.98
1 . .
ATOM 3424 C     C     . LEU LEU LEU B B 11  11  . 81.156  109.963 16.579  1.00 19.25
1 . .
ATOM 3425 O     O     . LEU LEU LEU B B 11  11  . 81.049  108.741 16.470  1.00 19.43
1 . .
ATOM 3426 N     N     . ASP ASP ASP B B 12  12  . 81.493  110.691 15.541  1.00 18.71
1 . .
ATOM 3427 CA    CA    . ASP ASP ASP B B 12  12  . 81.858  110.055 14.276  1.00 19.31
1 . .
ATOM 3428 CB    CB    . ASP ASP ASP B B 12  12  . 81.571  111.032 13.142  1.00 19.69
1 . .
ATOM 3429 CG    CG    . ASP ASP ASP B B 12  12  . 82.658  112.155 12.992  1.00 22.04
1 . .
ATOM 3430 OD1   OD1   . ASP ASP ASP B B 12  12  . 83.777  112.098 13.566  1.00 26.02
1 . .
ATOM 3431 OD2   OD2   . ASP ASP ASP B B 12  12  . 82.408  113.077 12.212  1.00 26.42
1 . .
ATOM 3432 C     C     . ASP ASP ASP B B 12  12  . 83.339  109.658 14.312  1.00 20.84
1 . .
ATOM 3433 O     O     . ASP ASP ASP B B 12  12  . 83.928  109.720 15.385  1.00 21.10
1 . .
ATOM 3434 N     N     . SER SER SER B B 13  13  . 83.930  109.262 13.165  1.00 21.19
1 . .
ATOM 3435 CA    CA    . SER SER SER B B 13  13  . 85.181  108.500 13.127  1.00 22.64
1 . .
ATOM 3436 CB    CB    . SER SER SER B B 13  13  . 85.339  107.803 11.765  1.00 22.36
1 . .
ATOM 3437 OG    OG    . SER SER SER B B 13  13  . 85.200  108.715 10.653  1.00 23.07
1 . .
ATOM 3438 C     C     . SER SER SER B B 13  13  . 86.416  109.347 13.342  1.00 23.35
1 . .
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ATOM 3439 O     O     . SER SER SER B B 13  13  . 87.499  108.830 13.498  1.00 25.01
1 . .
ATOM 3440 N     N     . ARG ARG ARG B B 14  14  . 86.241  110.646 13.273  1.00 24.79
1 . .
ATOM 3441 CA    CA    . ARG ARG ARG B B 14  14  . 87.271  111.621 13.587  1.00 26.14
1 . .
ATOM 3442 CB    CB    . ARG ARG ARG B B 14  14  . 87.161  112.766 12.593  1.00 26.03
1 . .
ATOM 3443 CG    CG    . ARG ARG ARG B B 14  14  . 88.118  112.701 11.458  1.00 27.36
1 . .
ATOM 3444 CD    CD    . ARG ARG ARG B B 14  14  . 88.081  114.146 10.740  1.00 30.65
1 . .
ATOM 3445 NE    NE    . ARG ARG ARG B B 14  14  . 86.789  114.376 10.099  1.00 29.25
1 . .
ATOM 3446 CZ    CZ    . ARG ARG ARG B B 14  14  . 86.605  114.441 8.778   1.00 27.85
1 . .
ATOM 3447 NH1   NH1   . ARG ARG ARG B B 14  14  . 87.673  114.331 7.954   1.00 25.75
1 . .
ATOM 3448 NH2   NH2   . ARG ARG ARG B B 14  14  . 85.368  114.641 8.293   1.00 22.95
1 . .
ATOM 3449 C     C     . ARG ARG ARG B B 14  14  . 87.082  112.183 14.998  1.00 26.15
1 . .
ATOM 3450 O     O     . ARG ARG ARG B B 14  14  . 87.893  112.980 15.451  1.00 25.54
1 . .
ATOM 3451 N     N     . GLY GLY GLY B B 15  15  . 85.981  111.812 15.684  1.00 26.30
1 . .
ATOM 3452 CA    CA    . GLY GLY GLY B B 15  15  . 85.789  112.282 17.066  1.00 24.74
1 . .
ATOM 3453 C     C     . GLY GLY GLY B B 15  15  . 84.964  113.544 17.179  1.00 25.81
1 . .
ATOM 3454 O     O     . GLY GLY GLY B B 15  15  . 85.014  114.207 18.227  1.00 24.59
1 . .
ATOM 3455 N     N     . ASN ASN ASN B B 16  16  . 84.189  113.869 16.130  1.00 25.16
1 . .
ATOM 3456 CA    CA    . ASN ASN ASN B B 16  16  . 83.217  114.940 16.207  1.00 25.18
1 . .
ATOM 3457 CB    CB    . ASN ASN ASN B B 16  16  . 83.306  115.890 14.981  1.00 25.40
1 . .
ATOM 3458 CG    CG    . ASN ASN ASN B B 16  16  . 84.686  116.458 14.800  1.00 25.70
1 . .
ATOM 3459 OD1   OD1   . ASN ASN ASN B B 16  16  . 85.253  116.972 15.752  1.00 27.12
1 . .
ATOM 3460 ND2   ND2   . ASN ASN ASN B B 16  16  . 85.259  116.341 13.592  1.00 24.47
1 . .
ATOM 3461 C     C     . ASN ASN ASN B B 16  16  . 81.761  114.473 16.369  1.00 24.45
1 . .
ATOM 3462 O     O     . ASN ASN ASN B B 16  16  . 81.354  113.406 15.929  1.00 23.35
1 . .
ATOM 3463 N     N     . PRO PRO PRO B B 17  17  . 80.964  115.298 17.019  1.00 23.82
1 . .
ATOM 3464 CA    CA    . PRO PRO PRO B B 17  17  . 79.584  114.913 17.228  1.00 24.09
1 . .
ATOM 3465 CB    CB    . PRO PRO PRO B B 17  17  . 78.990  116.146 17.935  1.00 23.68
1 . .
ATOM 3466 CG    CG    . PRO PRO PRO B B 17  17  . 80.183  116.702 18.692  1.00 23.19
1 . .
ATOM 3467 CD    CD    . PRO PRO PRO B B 17  17  . 81.337  116.524 17.747  1.00 23.73
1 . .
ATOM 3468 C     C     . PRO PRO PRO B B 17  17  . 78.902  114.716 15.899  1.00 24.08
1 . .
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ATOM 3469 O     O     . PRO PRO PRO B B 17  17  . 79.170  115.493 14.953  1.00 24.29
1 . .
ATOM 3470 N     N     . THR THR THR B B 18  18  . 78.034  113.708 15.790  1.00 23.92
1 . .
ATOM 3471 CA    CA    . THR THR THR B B 18  18  . 77.057  113.773 14.703  1.00 22.87
1 . .
ATOM 3472 CB    CB    . THR THR THR B B 18  18  . 77.508  112.972 13.572  1.00 22.56
1 . .
ATOM 3473 OG1   OG1   . THR THR THR B B 18  18  . 76.701  113.291 12.443  1.00 24.98
1 . .
ATOM 3474 CG2   CG2   . THR THR THR B B 18  18  . 77.404  111.485 13.887  1.00 22.96
1 . .
ATOM 3475 C     C     . THR THR THR B B 18  18  . 75.687  113.334 15.180  1.00 23.56
1 . .
ATOM 3476 O     O     . THR THR THR B B 18  18  . 75.584  112.972 16.337  1.00 24.06
1 . .
ATOM 3477 N     N     . VAL VAL VAL B B 19  19  . 74.661  113.369 14.319  1.00 23.77
1 . .
ATOM 3478 CA    CA    . VAL VAL VAL B B 19  19  . 73.264  112.978 14.697  1.00 25.58
1 . .
ATOM 3479 CB    CB    . VAL VAL VAL B B 19  19  . 72.251  113.673 13.756  1.00 24.98
1 . .
ATOM 3480 CG1   CG1   . VAL VAL VAL B B 19  19  . 70.860  113.148 13.927  1.00 26.65
1 . .
ATOM 3481 CG2   CG2   . VAL VAL VAL B B 19  19  . 72.266  115.136 14.020  1.00 26.22
1 . .
ATOM 3482 C     C     . VAL VAL VAL B B 19  19  . 73.025  111.459 14.550  1.00 25.34
1 . .
ATOM 3483 O     O     . VAL VAL VAL B B 19  19  . 73.383  110.866 13.533  1.00 26.31
1 . .
ATOM 3484 N     N     . GLU GLU GLU B B 20  20  . 72.450  110.820 15.558  1.00 24.34
1 . .
ATOM 3485 CA    CA    . GLU GLU GLU B B 20  20  . 71.987  109.461 15.390  1.00 24.73
1 . .
ATOM 3486 CB    CB    . GLU GLU GLU B B 20  20  . 72.650  108.580 16.426  1.00 24.09
1 . .
ATOM 3487 CG    CG    . GLU GLU GLU B B 20  20  . 72.090  107.200 16.527  1.00 26.01
1 . .
ATOM 3488 CD    CD    . GLU GLU GLU B B 20  20  . 72.996  106.312 17.246  1.00 30.98
1 . .
ATOM 3489 OE1   OE1   . GLU GLU GLU B B 20  20  . 73.877  105.739 16.547  1.00 36.53
1 . .
ATOM 3490 OE2   OE2   . GLU GLU GLU B B 20  20  . 72.858  106.177 18.491  1.00 32.11
1 . .
ATOM 3491 C     C     . GLU GLU GLU B B 20  20  . 70.493  109.472 15.718  1.00 25.08
1 . .
ATOM 3492 O     O     . GLU GLU GLU B B 20  20  . 70.062  110.200 16.569  1.00 24.54
1 . .
ATOM 3493 N     N     . VAL VAL VAL B B 21  21  . 69.736  108.596 15.109  1.00 26.95
1 . .
ATOM 3494 CA    CA    . VAL VAL VAL B B 21  21  . 68.294  108.603 15.287  1.00 27.84
1 . .
ATOM 3495 CB    CB    . VAL VAL VAL B B 21  21  . 67.605  109.110 14.025  1.00 28.45
1 . .
ATOM 3496 CG1   CG1   . VAL VAL VAL B B 21  21  . 66.029  108.950 14.089  1.00 26.29
1 . .
ATOM 3497 CG2   CG2   . VAL VAL VAL B B 21  21  . 67.932  110.551 13.780  1.00 28.91
1 . .
ATOM 3498 C     C     . VAL VAL VAL B B 21  21  . 67.824  107.200 15.604  1.00 29.54
1 . .
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ATOM 3499 O     O     . VAL VAL VAL B B 21  21  . 68.210  106.263 14.908  1.00 30.41
1 . .
ATOM 3500 N     N     . ASP ASP ASP B B 22  22  . 67.027  107.052 16.669  1.00 31.17
1 . .
ATOM 3501 CA    CA    . ASP ASP ASP B B 22  22  . 66.208  105.836 16.888  1.00 32.01
1 . .
ATOM 3502 CB    CB    . ASP ASP ASP B B 22  22  . 66.239  105.381 18.351  1.00 31.56
1 . .
ATOM 3503 CG    CG    . ASP ASP ASP B B 22  22  . 67.648  105.052 18.860  1.00 33.97
1 . .
ATOM 3504 OD1   OD1   . ASP ASP ASP B B 22  22  . 67.774  104.861 20.099  1.00 36.19
1 . .
ATOM 3505 OD2   OD2   . ASP ASP ASP B B 22  22  . 68.614  104.969 18.052  1.00 34.69
1 . .
ATOM 3506 C     C     . ASP ASP ASP B B 22  22  . 64.732  106.037 16.522  1.00 33.18
1 . .
ATOM 3507 O     O     . ASP ASP ASP B B 22  22  . 64.032  106.874 17.101  1.00 33.09
1 . .
ATOM 3508 N     N     . LEU LEU LEU B B 23  23  . 64.236  105.203 15.624  1.00 34.60
1 . .
ATOM 3509 CA    CA    . LEU LEU LEU B B 23  23  . 62.845  105.249 15.193  1.00 35.97
1 . .
ATOM 3510 CB    CB    . LEU LEU LEU B B 23  23  . 62.764  105.489 13.672  1.00 35.66
1 . .
ATOM 3511 CG    CG    . LEU LEU LEU B B 23  23  . 61.390  105.889 13.152  1.00 35.33
1 . .
ATOM 3512 CD1   CD1   . LEU LEU LEU B B 23  23  . 61.544  106.830 12.005  1.00 33.79
1 . .
ATOM 3513 CD2   CD2   . LEU LEU LEU B B 23  23  . 60.553  104.699 12.741  1.00 36.31
1 . .
ATOM 3514 C     C     . LEU LEU LEU B B 23  23  . 62.210  103.893 15.517  1.00 37.10
1 . .
ATOM 3515 O     O     . LEU LEU LEU B B 23  23  . 62.763  102.845 15.148  1.00 37.54
1 . .
ATOM 3516 N     N     . TYR TYR TYR B B 24  24  . 61.043  103.919 16.170  1.00 37.43
1 . .
ATOM 3517 CA    CA    . TYR TYR TYR B B 24  24  . 60.385  102.727 16.657  1.00 38.63
1 . .
ATOM 3518 CB    CB    . TYR TYR TYR B B 24  24  . 60.052  102.884 18.154  1.00 39.26
1 . .
ATOM 3519 CG    CG    . TYR TYR TYR B B 24  24  . 61.217  102.833 19.108  1.00 41.56
1 . .
ATOM 3520 CD1   CD1   . TYR TYR TYR B B 24  24  . 61.985  103.973 19.363  1.00 43.25
1 . .
ATOM 3521 CE1   CE1   . TYR TYR TYR B B 24  24  . 63.056  103.931 20.252  1.00 44.73
1 . .
ATOM 3522 CZ    CZ    . TYR TYR TYR B B 24  24  . 63.375  102.762 20.893  1.00 44.40
1 . .
ATOM 3523 OH    OH    . TYR TYR TYR B B 24  24  . 64.446  102.766 21.749  1.00 47.07
1 . .
ATOM 3524 CE2   CE2   . TYR TYR TYR B B 24  24  . 62.635  101.607 20.669  1.00 44.34
1 . .
ATOM 3525 CD2   CD2   . TYR TYR TYR B B 24  24  . 61.555  101.644 19.777  1.00 43.67
1 . .
ATOM 3526 C     C     . TYR TYR TYR B B 24  24  . 59.072  102.535 15.927  1.00 39.61
1 . .
ATOM 3527 O     O     . TYR TYR TYR B B 24  24  . 58.301  103.492 15.807  1.00 38.49
1 . .
ATOM 3528 N     N     . THR THR THR B B 25  25  . 58.818  101.316 15.444  1.00 40.65
1 . .
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ATOM 3529 CA    CA    . THR THR THR B B 25  25  . 57.476  100.929 14.986  1.00 42.02
1 . .
ATOM 3530 CB    CB    . THR THR THR B B 25  25  . 57.434  100.585 13.450  1.00 42.07
1 . .
ATOM 3531 OG1   OG1   . THR THR THR B B 25  25  . 58.396  99.558  13.126  1.00 42.01
1 . .
ATOM 3532 CG2   CG2   . THR THR THR B B 25  25  . 57.722  101.827 12.620  1.00 42.49
1 . .
ATOM 3533 C     C     . THR THR THR B B 25  25  . 57.096  99.716  15.824  1.00 42.69
1 . .
ATOM 3534 O     O     . THR THR THR B B 25  25  . 57.879  99.300  16.680  1.00 43.07
1 . .
ATOM 3535 N     N     . ALA ALA ALA B B 26  26  . 55.910  99.156  15.570  1.00 43.50
1 . .
ATOM 3536 CA    CA    . ALA ALA ALA B B 26  26  . 55.493  97.820  16.073  1.00 43.37
1 . .
ATOM 3537 CB    CB    . ALA ALA ALA B B 26  26  . 54.006  97.492  15.599  1.00 41.97
1 . .
ATOM 3538 C     C     . ALA ALA ALA B B 26  26  . 56.438  96.690  15.656  1.00 43.44
1 . .
ATOM 3539 O     O     . ALA ALA ALA B B 26  26  . 56.378  95.591  16.191  1.00 44.13
1 . .
ATOM 3540 N     N     . LYS LYS LYS B B 27  27  . 57.281  96.944  14.666  1.00 44.32
1 . .
ATOM 3541 CA    CA    . LYS LYS LYS B B 27  27  . 58.329  96.005  14.259  1.00 44.47
1 . .
ATOM 3542 CB    CB    . LYS LYS LYS B B 27  27  . 58.626  96.195  12.763  1.00 45.57
1 . .
ATOM 3543 CG    CG    . LYS LYS LYS B B 27  27  . 57.428  95.938  11.796  1.00 48.66
1 . .
ATOM 3544 CD    CD    . LYS LYS LYS B B 27  27  . 57.135  94.467  11.547  1.00 52.47
1 . .
ATOM 3545 CE    CE    . LYS LYS LYS B B 27  27  . 55.690  94.292  11.038  1.00 56.45
1 . .
ATOM 3546 NZ    NZ    . LYS LYS LYS B B 27  27  . 54.626  94.445  12.147  1.00 59.04
1 . .
ATOM 3547 C     C     . LYS LYS LYS B B 27  27  . 59.635  96.142  15.080  1.00 43.71
1 . .
ATOM 3548 O     O     . LYS LYS LYS B B 27  27  . 60.551  95.295  15.007  1.00 43.47
1 . .
ATOM 3549 N     N     . GLY GLY GLY B B 28  28  . 59.727  97.219  15.846  1.00 42.56
1 . .
ATOM 3550 CA    CA    . GLY GLY GLY B B 28  28  . 60.867  97.398  16.723  1.00 41.39
1 . .
ATOM 3551 C     C     . GLY GLY GLY B B 28  28  . 61.597  98.685  16.458  1.00 40.28
1 . .
ATOM 3552 O     O     . GLY GLY GLY B B 28  28  . 60.993  99.683  16.047  1.00 38.98
1 . .
ATOM 3553 N     N     . LEU LEU LEU B B 29  29  . 62.906  98.630  16.696  1.00 39.36
1 . .
ATOM 3554 CA    CA    . LEU LEU LEU B B 29  29  . 63.759  99.791  16.707  1.00 38.29
1 . .
ATOM 3555 CB    CB    . LEU LEU LEU B B 29  29  . 64.546  99.851  18.005  1.00 38.74
1 . .
ATOM 3556 CG    CG    . LEU LEU LEU B B 29  29  . 65.967  100.421 17.887  1.00 39.13
1 . .
ATOM 3557 CD1   CD1   . LEU LEU LEU B B 29  29  . 65.881  101.915 17.693  1.00 37.54
1 . .
ATOM 3558 CD2   CD2   . LEU LEU LEU B B 29  29  . 66.808  100.089 19.131  1.00 39.52
1 . .
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ATOM 3559 C     C     . LEU LEU LEU B B 29  29  . 64.708  99.790  15.519  1.00 37.51
1 . .
ATOM 3560 O     O     . LEU LEU LEU B B 29  29  . 65.260  98.758  15.151  1.00 37.71
1 . .
ATOM 3561 N     N     . PHE PHE PHE B B 30  30  . 64.881  100.969 14.930  1.00 35.62
1 . .
ATOM 3562 CA    CA    . PHE PHE PHE B B 30  30  . 65.683  101.169 13.755  1.00 34.39
1 . .
ATOM 3563 CB    CB    . PHE PHE PHE B B 30  30  . 64.796  101.320 12.542  1.00 34.35
1 . .
ATOM 3564 CG    CG    . PHE PHE PHE B B 30  30  . 63.820  100.219 12.408  1.00 35.19
1 . .
ATOM 3565 CD1   CD1   . PHE PHE PHE B B 30  30  . 64.191  99.022  11.823  1.00 32.43
1 . .
ATOM 3566 CE1   CE1   . PHE PHE PHE B B 30  30  . 63.290  97.987  11.725  1.00 35.04
1 . .
ATOM 3567 CZ    CZ    . PHE PHE PHE B B 30  30  . 61.929  98.176  12.235  1.00 34.75
1 . .
ATOM 3568 CE2   CE2   . PHE PHE PHE B B 30  30  . 61.565  99.370  12.812  1.00 33.15
1 . .
ATOM 3569 CD2   CD2   . PHE PHE PHE B B 30  30  . 62.506  100.379 12.921  1.00 36.88
1 . .
ATOM 3570 C     C     . PHE PHE PHE B B 30  30  . 66.493  102.418 13.958  1.00 33.82
1 . .
ATOM 3571 O     O     . PHE PHE PHE B B 30  30  . 65.944  103.485 14.289  1.00 34.19
1 . .
ATOM 3572 N     N     . ARG ARG ARG B B 31  31  . 67.799  102.269 13.752  1.00 31.78
1 . .
ATOM 3573 CA    CA    . ARG ARG ARG B B 31  31  . 68.778  103.287 14.101  1.00 30.43
1 . .
ATOM 3574 CB    CB    . ARG ARG ARG B B 31  31  . 69.653  102.757 15.226  1.00 30.16
1 . .
ATOM 3575 CG    CG    . ARG ARG ARG B B 31  31  . 70.834  103.622 15.710  1.00 29.24
1 . .
ATOM 3576 CD    CD    . ARG ARG ARG B B 31  31  . 71.459  102.898 16.895  1.00 30.87
1 . .
ATOM 3577 NE    NE    . ARG ARG ARG B B 31  31  . 70.602  102.993 18.085  1.00 31.14
1 . .
ATOM 3578 CZ    CZ    . ARG ARG ARG B B 31  31  . 70.588  102.128 19.093  1.00 32.23
1 . .
ATOM 3579 NH1   NH1   . ARG ARG ARG B B 31  31  . 69.789  102.335 20.139  1.00 33.21
1 . .
ATOM 3580 NH2   NH2   . ARG ARG ARG B B 31  31  . 71.396  101.081 19.070  1.00 32.64
1 . .
ATOM 3581 C     C     . ARG ARG ARG B B 31  31  . 69.648  103.582 12.897  1.00 29.54
1 . .
ATOM 3582 O     O     . ARG ARG ARG B B 31  31  . 70.060  102.675 12.172  1.00 29.31
1 . .
ATOM 3583 N     N     . ALA ALA ALA B B 32  32  . 69.929  104.854 12.712  1.00 29.77
1 . .
ATOM 3584 CA    CA    . ALA ALA ALA B B 32  32  . 70.774  105.342 11.651  1.00 30.18
1 . .
ATOM 3585 CB    CB    . ALA ALA ALA B B 32  32  . 69.882  105.702 10.411  1.00 31.42
1 . .
ATOM 3586 C     C     . ALA ALA ALA B B 32  32  . 71.548  106.574 12.147  1.00 29.59
1 . .
ATOM 3587 O     O     . ALA ALA ALA B B 32  32  . 71.082  107.265 13.054  1.00 28.89
1 . .
ATOM 3588 N     N     . ALA ALA ALA B B 33  33  . 72.722  106.847 11.546  1.00 28.73
1 . .
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ATOM 3589 CA    CA    . ALA ALA ALA B B 33  33  . 73.531  108.024 11.885  1.00 27.32
1 . .
ATOM 3590 CB    CB    . ALA ALA ALA B B 33  33  . 74.739  107.628 12.767  1.00 27.72
1 . .
ATOM 3591 C     C     . ALA ALA ALA B B 33  33  . 74.013  108.788 10.636  1.00 26.64
1 . .
ATOM 3592 O     O     . ALA ALA ALA B B 33  33  . 74.016  108.256 9.546   1.00 25.57
1 . .
ATOM 3593 N     N     . VAL VAL VAL B B 34  34  . 74.417  110.051 10.833  1.00 25.44
1 . .
ATOM 3594 CA    CA    . VAL VAL VAL B B 34  34  . 74.664  110.954 9.747   1.00 22.73
1 . .
ATOM 3595 CB    CB    . VAL VAL VAL B B 34  34  . 73.847  112.258 9.922   1.00 21.46
1 . .
ATOM 3596 CG1   CG1   . VAL VAL VAL B B 34  34  . 74.115  113.161 8.828   1.00 20.15
1 . .
ATOM 3597 CG2   CG2   . VAL VAL VAL B B 34  34  . 72.230  111.972 9.930   1.00 19.35
1 . .
ATOM 3598 C     C     . VAL VAL VAL B B 34  34  . 76.203  111.145 9.692   1.00 23.09
1 . .
ATOM 3599 O     O     . VAL VAL VAL B B 34  34  . 76.813  111.273 10.738  1.00 23.40
1 . .
ATOM 3600 N     N     . PRO PRO PRO B B 35  35  . 76.827  111.054 8.475   1.00 22.52
1 . .
ATOM 3601 CA    CA    . PRO PRO PRO B B 35  35  . 78.326  111.283 8.267   1.00 22.20
1 . .
ATOM 3602 CB    CB    . PRO PRO PRO B B 35  35  . 78.605  110.547 6.975   1.00 21.46
1 . .
ATOM 3603 CG    CG    . PRO PRO PRO B B 35  35  . 77.323  110.677 6.192   1.00 22.85
1 . .
ATOM 3604 CD    CD    . PRO PRO PRO B B 35  35  . 76.172  110.542 7.253   1.00 21.61
1 . .
ATOM 3605 C     C     . PRO PRO PRO B B 35  35  . 78.639  112.775 8.072   1.00 23.44
1 . .
ATOM 3606 O     O     . PRO PRO PRO B B 35  35  . 77.680  113.584 8.023   1.00 26.55
1 . .
ATOM 3607 N     N     . SER SER SER B B 36  36  . 79.902  113.164 7.925   1.00 23.41
1 . .
ATOM 3608 CA    CA    . SER SER SER B B 36  36  . 80.221  114.593 7.776   1.00 23.70
1 . .
ATOM 3609 CB    CB    . SER SER SER B B 36  36  . 80.468  115.192 9.186   1.00 25.64
1 . .
ATOM 3610 OG    OG    . SER SER SER B B 36  36  . 80.790  116.609 9.212   1.00 26.12
1 . .
ATOM 3611 C     C     . SER SER SER B B 36  36  . 81.468  114.717 6.995   1.00 24.36
1 . .
ATOM 3612 O     O     . SER SER SER B B 36  36  . 82.494  114.053 7.314   1.00 24.40
1 . .
ATOM 3613 N     N     . GLY GLY GLY B B 37  37  . 81.466  115.610 5.999   1.00 25.39
1 . .
ATOM 3614 CA    CA    . GLY GLY GLY B B 37  37  . 82.694  115.839 5.214   1.00 25.08
1 . .
ATOM 3615 C     C     . GLY GLY GLY B B 37  37  . 83.687  116.831 5.771   1.00 25.01
1 . .
ATOM 3616 O     O     . GLY GLY GLY B B 37  37  . 83.371  117.655 6.609   1.00 27.06
1 . .
ATOM 3617 N     N     . ALA ALA ALA B B 38  38  . 84.890  116.784 5.275   1.00 24.83
1 . .
ATOM 3618 CA    CA    . ALA ALA ALA B B 38  38  . 85.851  117.812 5.546   1.00 24.79
1 . .
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ATOM 3619 CB    CB    . ALA ALA ALA B B 38  38  . 87.156  117.190 5.894   1.00 24.64
1 . .
ATOM 3620 C     C     . ALA ALA ALA B B 38  38  . 85.992  118.708 4.292   1.00 25.00
1 . .
ATOM 3621 O     O     . ALA ALA ALA B B 38  38  . 86.040  119.926 4.418   1.00 26.45
1 . .
ATOM 3622 N     N     . SER SER SER B B 39  39  . 86.101  118.112 3.098   1.00 24.37
1 . .
ATOM 3623 CA    CA    . SER SER SER B B 39  39  . 86.168  118.883 1.820   1.00 24.19
1 . .
ATOM 3624 CB    CB    . SER SER SER B B 39  39  . 87.147  118.191 0.819   1.00 24.38
1 . .
ATOM 3625 OG    OG    . SER SER SER B B 39  39  . 86.692  116.903 0.397   1.00 22.26
1 . .
ATOM 3626 C     C     . SER SER SER B B 39  39  . 84.754  118.935 1.245   1.00 24.25
1 . .
ATOM 3627 O     O     . SER SER SER B B 39  39  . 84.424  118.232 0.284   1.00 23.90
1 . .
ATOM 3628 N     N     . THR THR THR B B 40  40  . 83.924  119.715 1.923   1.00 25.34
1 . .
ATOM 3629 CA    CA    . THR THR THR B B 40  40  . 82.516  119.938 1.603   1.00 26.10
1 . .
ATOM 3630 CB    CB    . THR THR THR B B 40  40  . 81.726  120.396 2.870   1.00 26.47
1 . .
ATOM 3631 OG1   OG1   . THR THR THR B B 40  40  . 82.397  121.511 3.493   1.00 25.73
1 . .
ATOM 3632 CG2   CG2   . THR THR THR B B 40  40  . 81.580  119.247 3.910   1.00 28.44
1 . .
ATOM 3633 C     C     . THR THR THR B B 40  40  . 82.365  121.034 0.521   1.00 26.11
1 . .
ATOM 3634 O     O     . THR THR THR B B 40  40  . 82.898  122.150 0.670   1.00 25.89
1 . .
ATOM 3635 N     N     . GLY GLY GLY B B 41  41  . 81.668  120.709 -0.575  1.00 25.30
1 . .
ATOM 3636 CA    CA    . GLY GLY GLY B B 41  41  . 81.420  121.731 -1.643  1.00 25.35
1 . .
ATOM 3637 C     C     . GLY GLY GLY B B 41  41  . 80.527  122.821 -1.097  1.00 24.94
1 . .
ATOM 3638 O     O     . GLY GLY GLY B B 41  41  . 79.861  122.570 -0.122  1.00 26.46
1 . .
ATOM 3639 N     N     . ILE ILE ILE B B 42  42  . 80.547  124.014 -1.686  1.00 25.07
1 . .
ATOM 3640 CA    CA    . ILE ILE ILE B B 42  42  . 79.826  125.179 -1.206  1.00 24.94
1 . .
ATOM 3641 CB    CB    . ILE ILE ILE B B 42  42  . 80.306  126.500 -1.876  1.00 25.39
1 . .
ATOM 3642 CG1   CG1   . ILE ILE ILE B B 42  42  . 80.198  126.455 -3.441  1.00 25.74
1 . .
ATOM 3643 CD1   CD1   . ILE ILE ILE B B 42  42  . 80.518  127.858 -4.159  1.00 25.69
1 . .
ATOM 3644 CG2   CG2   . ILE ILE ILE B B 42  42  . 81.785  126.908 -1.386  1.00 26.96
1 . .
ATOM 3645 C     C     . ILE ILE ILE B B 42  42  . 78.341  125.019 -1.483  1.00 25.88
1 . .
ATOM 3646 O     O     . ILE ILE ILE B B 42  42  . 77.521  125.763 -0.923  1.00 26.20
1 . .
ATOM 3647 N     N     . TYR TYR TYR B B 43  43  . 77.997  124.054 -2.349  1.00 26.06
1 . .
ATOM 3648 CA    CA    . TYR TYR TYR B B 43  43  . 76.593  123.843 -2.739  1.00 26.84
1 . .
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ATOM 3649 CB    CB    . TYR TYR TYR B B 43  43  . 76.411  123.667 -4.293  1.00 26.99
1 . .
ATOM 3650 CG    CG    . TYR TYR TYR B B 43  43  . 76.906  124.852 -5.088  1.00 29.66
1 . .
ATOM 3651 CD1   CD1   . TYR TYR TYR B B 43  43  . 78.045  124.743 -5.875  1.00 34.15
1 . .
ATOM 3652 CE1   CE1   . TYR TYR TYR B B 43  43  . 78.541  125.839 -6.620  1.00 35.36
1 . .
ATOM 3653 CZ    CZ    . TYR TYR TYR B B 43  43  . 77.893  127.076 -6.557  1.00 35.99
1 . .
ATOM 3654 OH    OH    . TYR TYR TYR B B 43  43  . 78.396  128.136 -7.308  1.00 34.71
1 . .
ATOM 3655 CE2   CE2   . TYR TYR TYR B B 43  43  . 76.744  127.213 -5.770  1.00 35.30
1 . .
ATOM 3656 CD2   CD2   . TYR TYR TYR B B 43  43  . 76.274  126.098 -5.012  1.00 33.00
1 . .
ATOM 3657 C     C     . TYR TYR TYR B B 43  43  . 75.853  122.768 -1.937  1.00 26.06
1 . .
ATOM 3658 O     O     . TYR TYR TYR B B 43  43  . 74.640  122.663 -2.066  1.00 26.44
1 . .
ATOM 3659 N     N     . GLU GLU GLU B B 44  44  . 76.560  122.052 -1.058  1.00 26.90
1 . .
ATOM 3660 CA    CA    . GLU GLU GLU B B 44  44  . 75.948  121.008 -0.189  1.00 26.84
1 . .
ATOM 3661 CB    CB    . GLU GLU GLU B B 44  44  . 76.997  120.313 0.720   1.00 26.80
1 . .
ATOM 3662 CG    CG    . GLU GLU GLU B B 44  44  . 78.097  119.599 -0.100  1.00 26.05
1 . .
ATOM 3663 CD    CD    . GLU GLU GLU B B 44  44  . 79.036  118.793 0.712   1.00 28.07
1 . .
ATOM 3664 OE1   OE1   . GLU GLU GLU B B 44  44  . 78.749  118.490 1.895   1.00 33.12
1 . .
ATOM 3665 OE2   OE2   . GLU GLU GLU B B 44  44  . 80.079  118.440 0.171   1.00 31.48
1 . .
ATOM 3666 C     C     . GLU GLU GLU B B 44  44  . 74.867  121.616 0.701   1.00 27.03
1 . .
ATOM 3667 O     O     . GLU GLU GLU B B 44  44  . 75.001  122.727 1.185   1.00 26.46
1 . .
ATOM 3668 N     N     . ALA ALA ALA B B 45  45  . 73.795  120.878 0.905   1.00 27.84
1 . .
ATOM 3669 CA    CA    . ALA ALA ALA B B 45  45  . 72.817  121.226 1.951   1.00 27.71
1 . .
ATOM 3670 CB    CB    . ALA ALA ALA B B 45  45  . 71.887  120.117 2.090   1.00 27.18
1 . .
ATOM 3671 C     C     . ALA ALA ALA B B 45  45  . 73.544  121.478 3.290   1.00 28.93
1 . .
ATOM 3672 O     O     . ALA ALA ALA B B 45  45  . 74.601  120.908 3.538   1.00 28.59
1 . .
ATOM 3673 N     N     . LEU LEU LEU B B 46  46  . 72.979  122.344 4.139   1.00 30.23
1 . .
ATOM 3674 CA    CA    . LEU LEU LEU B B 46  46  . 73.619  122.784 5.380   1.00 30.76
1 . .
ATOM 3675 CB    CB    . LEU LEU LEU B B 46  46  . 72.870  124.016 5.966   1.00 31.98
1 . .
ATOM 3676 CG    CG    . LEU LEU LEU B B 46  46  . 73.361  124.607 7.326   1.00 33.88
1 . .
ATOM 3677 CD1   CD1   . LEU LEU LEU B B 46  46  . 74.535  125.563 7.189   1.00 33.98
1 . .
ATOM 3678 CD2   CD2   . LEU LEU LEU B B 46  46  . 72.221  125.317 8.081   1.00 36.13
1 . .
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ATOM 3679 C     C     . LEU LEU LEU B B 46  46  . 73.757  121.692 6.483   1.00 30.41
1 . .
ATOM 3680 O     O     . LEU LEU LEU B B 46  46  . 72.761  121.125 6.929   1.00 28.61
1 . .
ATOM 3681 N     N     . GLU GLU GLU B B 47  47  . 75.011  121.451 6.932   1.00 29.49
1 . .
ATOM 3682 CA    CA    . GLU GLU GLU B B 47  47  . 75.265  120.697 8.110   1.00 29.29
1 . .
ATOM 3683 CB    CB    . GLU GLU GLU B B 47  47  . 76.695  120.116 8.008   1.00 29.96
1 . .
ATOM 3684 CG    CG    . GLU GLU GLU B B 47  47  . 77.184  119.456 9.265   1.00 31.23
1 . .
ATOM 3685 CD    CD    . GLU GLU GLU B B 47  47  . 78.517  118.768 9.064   1.00 35.88
1 . .
ATOM 3686 OE1   OE1   . GLU GLU GLU B B 47  47  . 78.517  117.564 8.661   1.00 37.16
1 . .
ATOM 3687 OE2   OE2   . GLU GLU GLU B B 47  47  . 79.575  119.421 9.315   1.00 35.57
1 . .
ATOM 3688 C     C     . GLU GLU GLU B B 47  47  . 75.124  121.671 9.298   1.00 29.10
1 . .
ATOM 3689 O     O     . GLU GLU GLU B B 47  47  . 76.056  122.439 9.574   1.00 29.92
1 . .
ATOM 3690 N     N     . LEU LEU LEU B B 48  48  . 73.990  121.627 10.023  1.00 27.89
1 . .
ATOM 3691 CA    CA    . LEU LEU LEU B B 48  48  . 73.822  122.464 11.207  1.00 28.06
1 . .
ATOM 3692 CB    CB    . LEU LEU LEU B B 48  48  . 72.355  122.544 11.634  1.00 29.03
1 . .
ATOM 3693 CG    CG    . LEU LEU LEU B B 48  48  . 72.067  123.370 12.879  1.00 27.88
1 . .
ATOM 3694 CD1   CD1   . LEU LEU LEU B B 48  48  . 72.381  124.848 12.592  1.00 29.74
1 . .
ATOM 3695 CD2   CD2   . LEU LEU LEU B B 48  48  . 70.573  123.211 13.334  1.00 25.03
1 . .
ATOM 3696 C     C     . LEU LEU LEU B B 48  48  . 74.686  122.008 12.400  1.00 29.27
1 . .
ATOM 3697 O     O     . LEU LEU LEU B B 48  48  . 74.555  120.867 12.904  1.00 28.30
1 . .
ATOM 3698 N     N     . ARG ARG ARG B B 49  49  . 75.595  122.890 12.787  1.00 29.43
1 . .
ATOM 3699 CA    CA    . ARG ARG ARG B B 49  49  . 76.446  122.760 13.962  1.00 31.64
1 . .
ATOM 3700 CB    CB    . ARG ARG ARG B B 49  49  . 77.908  123.005 13.556  1.00 31.47
1 . .
ATOM 3701 CG    CG    . ARG ARG ARG B B 49  49  . 78.380  122.027 12.514  1.00 31.92
1 . .
ATOM 3702 CD    CD    . ARG ARG ARG B B 49  49  . 78.843  120.778 13.193  1.00 30.17
1 . .
ATOM 3703 NE    NE    . ARG ARG ARG B B 49  49  . 79.413  119.791 12.261  1.00 31.51
1 . .
ATOM 3704 CZ    CZ    . ARG ARG ARG B B 49  49  . 79.790  118.565 12.627  1.00 29.79
1 . .
ATOM 3705 NH1   NH1   . ARG ARG ARG B B 49  49  . 79.719  118.210 13.920  1.00 25.08
1 . .
ATOM 3706 NH2   NH2   . ARG ARG ARG B B 49  49  . 80.253  117.700 11.718  1.00 29.60
1 . .
ATOM 3707 C     C     . ARG ARG ARG B B 49  49  . 76.084  123.825 15.017  1.00 32.31
1 . .
ATOM 3708 O     O     . ARG ARG ARG B B 49  49  . 75.643  124.878 14.635  1.00 32.36
1 . .
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ATOM 3709 N     N     . ASP ASP ASP B B 50  50  . 76.341  123.574 16.308  1.00 33.30
1 . .
ATOM 3710 CA    CA    . ASP ASP ASP B B 50  50  . 75.928  124.483 17.394  1.00 35.10
1 . .
ATOM 3711 CB    CB    . ASP ASP ASP B B 50  50  . 75.919  123.745 18.751  1.00 35.28
1 . .
ATOM 3712 CG    CG    . ASP ASP ASP B B 50  50  . 74.972  122.533 18.769  1.00 35.99
1 . .
ATOM 3713 OD1   OD1   . ASP ASP ASP B B 50  50  . 73.989  122.455 17.971  1.00 34.43
1 . .
ATOM 3714 OD2   OD2   . ASP ASP ASP B B 50  50  . 75.236  121.630 19.599  1.00 40.35
1 . .
ATOM 3715 C     C     . ASP ASP ASP B B 50  50  . 76.812  125.740 17.507  1.00 35.97
1 . .
ATOM 3716 O     O     . ASP ASP ASP B B 50  50  . 76.338  126.813 17.835  1.00 34.94
1 . .
ATOM 3717 N     N     . GLY GLY GLY B B 51  51  . 78.112  125.592 17.246  1.00 37.46
1 . .
ATOM 3718 CA    CA    . GLY GLY GLY B B 51  51  . 79.003  126.739 17.285  1.00 38.28
1 . .
ATOM 3719 C     C     . GLY GLY GLY B B 51  51  . 79.263  127.299 18.668  1.00 40.31
1 . .
ATOM 3720 O     O     . GLY GLY GLY B B 51  51  . 79.683  128.466 18.816  1.00 41.01
1 . .
ATOM 3721 N     N     . ASP ASP ASP B B 52  52  . 79.027  126.495 19.700  1.00 41.45
1 . .
ATOM 3722 CA    CA    . ASP ASP ASP B B 52  52  . 79.446  126.871 21.043  1.00 42.02
1 . .
ATOM 3723 CB    CB    . ASP ASP ASP B B 52  52  . 78.568  126.140 22.058  1.00 41.55
1 . .
ATOM 3724 CG    CG    . ASP ASP ASP B B 52  52  . 79.034  126.325 23.499  1.00 41.69
1 . .
ATOM 3725 OD1   OD1   . ASP ASP ASP B B 52  52  . 80.125  126.923 23.715  1.00 40.86
1 . .
ATOM 3726 OD2   OD2   . ASP ASP ASP B B 52  52  . 78.316  125.832 24.412  1.00 39.83
1 . .
ATOM 3727 C     C     . ASP ASP ASP B B 52  52  . 80.940  126.527 21.184  1.00 42.88
1 . .
ATOM 3728 O     O     . ASP ASP ASP B B 52  52  . 81.319  125.388 21.429  1.00 43.52
1 . .
ATOM 3729 N     N     . LYS LYS LYS B B 53  53  . 81.790  127.516 20.982  1.00 44.03
1 . .
ATOM 3730 CA    CA    . LYS LYS LYS B B 53  53  . 83.239  127.310 20.907  1.00 45.72
1 . .
ATOM 3731 CB    CB    . LYS LYS LYS B B 53  53  . 83.974  128.623 20.552  1.00 46.34
1 . .
ATOM 3732 CG    CG    . LYS LYS LYS B B 53  53  . 84.223  128.788 19.035  1.00 50.69
1 . .
ATOM 3733 CD    CD    . LYS LYS LYS B B 53  53  . 85.055  130.052 18.698  1.00 55.85
1 . .
ATOM 3734 CE    CE    . LYS LYS LYS B B 53  53  . 84.831  130.485 17.227  1.00 59.51
1 . .
ATOM 3735 NZ    NZ    . LYS LYS LYS B B 53  53  . 83.352  130.547 16.871  1.00 59.54
1 . .
ATOM 3736 C     C     . LYS LYS LYS B B 53  53  . 83.846  126.652 22.139  1.00 45.11
1 . .
ATOM 3737 O     O     . LYS LYS LYS B B 53  53  . 84.971  126.162 22.102  1.00 45.52
1 . .
ATOM 3738 N     N     . GLN GLN GLN B B 54  54  . 83.078  126.639 23.216  1.00 45.01
1 . .
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ATOM 3739 CA    CA    . GLN GLN GLN B B 54  54  . 83.508  126.026 24.444  1.00 45.11
1 . .
ATOM 3740 CB    CB    . GLN GLN GLN B B 54  54  . 82.901  126.775 25.662  1.00 46.60
1 . .
ATOM 3741 CG    CG    . GLN GLN GLN B B 54  54  . 83.400  128.253 25.907  1.00 49.52
1 . .
ATOM 3742 CD    CD    . GLN GLN GLN B B 54  54  . 84.893  128.455 25.568  1.00 54.88
1 . .
ATOM 3743 OE1   OE1   . GLN GLN GLN B B 54  54  . 85.776  127.727 26.082  1.00 57.86
1 . .
ATOM 3744 NE2   NE2   . GLN GLN GLN B B 54  54  . 85.182  129.448 24.691  1.00 54.82
1 . .
ATOM 3745 C     C     . GLN GLN GLN B B 54  54  . 83.142  124.542 24.516  1.00 44.18
1 . .
ATOM 3746 O     O     . GLN GLN GLN B B 54  54  . 83.398  123.910 25.534  1.00 45.49
1 . .
ATOM 3747 N     N     . ARG ARG ARG B B 55  55  . 82.513  123.991 23.476  1.00 41.50
1 . .
ATOM 3748 CA    CA    . ARG ARG ARG B B 55  55  . 81.971  122.648 23.542  1.00 38.19
1 . .
ATOM 3749 CB    CB    . ARG ARG ARG B B 55  55  . 80.508  122.681 23.949  1.00 37.51
1 . .
ATOM 3750 CG    CG    . ARG ARG ARG B B 55  55  . 79.871  121.341 24.045  1.00 35.47
1 . .
ATOM 3751 CD    CD    . ARG ARG ARG B B 55  55  . 78.403  121.368 24.552  1.00 34.27
1 . .
ATOM 3752 NE    NE    . ARG ARG ARG B B 55  55  . 77.935  119.974 24.733  1.00 32.84
1 . .
ATOM 3753 CZ    CZ    . ARG ARG ARG B B 55  55  . 77.551  119.146 23.738  1.00 31.94
1 . .
ATOM 3754 NH1   NH1   . ARG ARG ARG B B 55  55  . 77.474  119.571 22.449  1.00 27.14
1 . .
ATOM 3755 NH2   NH2   . ARG ARG ARG B B 55  55  . 77.237  117.881 24.029  1.00 31.07
1 . .
ATOM 3756 C     C     . ARG ARG ARG B B 55  55  . 82.191  121.950 22.199  1.00 36.59
1 . .
ATOM 3757 O     O     . ARG ARG ARG B B 55  55  . 81.670  122.346 21.129  1.00 34.49
1 . .
ATOM 3758 N     N     . TYR TYR TYR B B 56  56  . 83.001  120.902 22.293  1.00 35.68
1 . .
ATOM 3759 CA    CA    . TYR TYR TYR B B 56  56  . 83.511  120.173 21.148  1.00 33.89
1 . .
ATOM 3760 CB    CB    . TYR TYR TYR B B 56  56  . 82.342  119.397 20.546  1.00 33.45
1 . .
ATOM 3761 CG    CG    . TYR TYR TYR B B 56  56  . 82.050  118.129 21.285  1.00 32.32
1 . .
ATOM 3762 CD1   CD1   . TYR TYR TYR B B 56  56  . 80.803  117.921 21.932  1.00 30.73
1 . .
ATOM 3763 CE1   CE1   . TYR TYR TYR B B 56  56  . 80.544  116.713 22.598  1.00 27.89
1 . .
ATOM 3764 CZ    CZ    . TYR TYR TYR B B 56  56  . 81.502  115.725 22.632  1.00 28.49
1 . .
ATOM 3765 OH    OH    . TYR TYR TYR B B 56  56  . 81.249  114.496 23.296  1.00 24.25
1 . .
ATOM 3766 CE2   CE2   . TYR TYR TYR B B 56  56  . 82.743  115.927 22.005  1.00 28.97
1 . .
ATOM 3767 CD2   CD2   . TYR TYR TYR B B 56  56  . 83.005  117.115 21.341  1.00 29.46
1 . .
ATOM 3768 C     C     . TYR TYR TYR B B 56  56  . 84.066  121.171 20.149  1.00 33.55
1 . .
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ATOM 3769 O     O     . TYR TYR TYR B B 56  56  . 83.905  121.006 18.962  1.00 32.78
1 . .
ATOM 3770 N     N     . LEU LEU LEU B B 57  57  . 84.634  122.270 20.634  1.00 34.20
1 . .
ATOM 3771 CA    CA    . LEU LEU LEU B B 57  57  . 85.125  123.326 19.757  1.00 34.58
1 . .
ATOM 3772 CB    CB    . LEU LEU LEU B B 57  57  . 86.411  122.870 19.041  1.00 35.48
1 . .
ATOM 3773 CG    CG    . LEU LEU LEU B B 57  57  . 87.569  122.350 19.954  1.00 38.14
1 . .
ATOM 3774 CD1   CD1   . LEU LEU LEU B B 57  57  . 87.309  120.898 20.419  1.00 38.08
1 . .
ATOM 3775 CD2   CD2   . LEU LEU LEU B B 57  57  . 88.988  122.406 19.277  1.00 39.18
1 . .
ATOM 3776 C     C     . LEU LEU LEU B B 57  57  . 84.104  123.845 18.743  1.00 34.60
1 . .
ATOM 3777 O     O     . LEU LEU LEU B B 57  57  . 84.458  124.179 17.619  1.00 34.86
1 . .
ATOM 3778 N     N     . GLY GLY GLY B B 58  58  . 82.837  123.960 19.117  1.00 34.26
1 . .
ATOM 3779 CA    CA    . GLY GLY GLY B B 58  58  . 81.918  124.616 18.219  1.00 33.32
1 . .
ATOM 3780 C     C     . GLY GLY GLY B B 58  58  . 81.192  123.632 17.345  1.00 33.98
1 . .
ATOM 3781 O     O     . GLY GLY GLY B B 58  58  . 80.251  124.022 16.625  1.00 34.89
1 . .
ATOM 3782 N     N     . LYS LYS LYS B B 59  59  . 81.570  122.346 17.466  1.00 33.10
1 . .
ATOM 3783 CA    CA    . LYS LYS LYS B B 59  59  . 81.129  121.280 16.551  1.00 31.48
1 . .
ATOM 3784 CB    CB    . LYS LYS LYS B B 59  59  . 82.349  120.429 16.117  1.00 32.02
1 . .
ATOM 3785 CG    CG    . LYS LYS LYS B B 59  59  . 83.249  121.226 15.119  1.00 34.98
1 . .
ATOM 3786 CD    CD    . LYS LYS LYS B B 59  59  . 84.609  120.544 14.834  1.00 38.94
1 . .
ATOM 3787 CE    CE    . LYS LYS LYS B B 59  59  . 85.080  120.856 13.395  1.00 40.40
1 . .
ATOM 3788 NZ    NZ    . LYS LYS LYS B B 59  59  . 86.511  120.423 13.071  1.00 36.61
1 . .
ATOM 3789 C     C     . LYS LYS LYS B B 59  59  . 79.954  120.419 17.075  1.00 29.40
1 . .
ATOM 3790 O     O     . LYS LYS LYS B B 59  59  . 79.574  119.463 16.437  1.00 27.62
1 . .
ATOM 3791 N     N     . GLY GLY GLY B B 60  60  . 79.384  120.742 18.239  1.00 27.92
1 . .
ATOM 3792 CA    CA    . GLY GLY GLY B B 60  60  . 78.285  119.939 18.759  1.00 26.43
1 . .
ATOM 3793 C     C     . GLY GLY GLY B B 60  60  . 77.076  119.984 17.823  1.00 26.84
1 . .
ATOM 3794 O     O     . GLY GLY GLY B B 60  60  . 76.952  120.885 16.989  1.00 25.91
1 . .
ATOM 3795 N     N     . VAL VAL VAL B B 61  61  . 76.173  119.025 17.944  1.00 27.38
1 . .
ATOM 3796 CA    CA    . VAL VAL VAL B B 61  61  . 74.963  119.040 17.131  1.00 27.62
1 . .
ATOM 3797 CB    CB    . VAL VAL VAL B B 61  61  . 75.011  117.944 15.991  1.00 29.51
1 . .
ATOM 3798 CG1   CG1   . VAL VAL VAL B B 61  61  . 76.213  118.172 14.965  1.00 26.60
1 . .
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ATOM 3799 CG2   CG2   . VAL VAL VAL B B 61  61  . 75.057  116.522 16.593  1.00 29.42
1 . .
ATOM 3800 C     C     . VAL VAL VAL B B 61  61  . 73.671  118.930 17.950  1.00 27.96
1 . .
ATOM 3801 O     O     . VAL VAL VAL B B 61  61  . 72.709  118.332 17.531  1.00 27.01
1 . .
ATOM 3802 N     N     . LEU LEU LEU B B 62  62  . 73.645  119.582 19.115  1.00 30.02
1 . .
ATOM 3803 CA    CA    . LEU LEU LEU B B 62  62  . 72.460  119.659 19.949  1.00 29.87
1 . .
ATOM 3804 CB    CB    . LEU LEU LEU B B 62  62  . 72.780  120.347 21.310  1.00 31.36
1 . .
ATOM 3805 CG    CG    . LEU LEU LEU B B 62  62  . 73.765  119.637 22.259  1.00 33.74
1 . .
ATOM 3806 CD1   CD1   . LEU LEU LEU B B 62  62  . 73.983  120.428 23.496  1.00 37.52
1 . .
ATOM 3807 CD2   CD2   . LEU LEU LEU B B 62  62  . 73.315  118.190 22.629  1.00 34.94
1 . .
ATOM 3808 C     C     . LEU LEU LEU B B 62  62  . 71.280  120.351 19.227  1.00 28.93
1 . .
ATOM 3809 O     O     . LEU LEU LEU B B 62  62  . 70.137  119.977 19.432  1.00 26.58
1 . .
ATOM 3810 N     N     . LYS LYS LYS B B 63  63  . 71.559  121.357 18.393  1.00 28.76
1 . .
ATOM 3811 CA    CA    . LYS LYS LYS B B 63  63  . 70.447  122.065 17.740  1.00 29.59
1 . .
ATOM 3812 CB    CB    . LYS LYS LYS B B 63  63  . 70.857  123.392 17.105  1.00 29.56
1 . .
ATOM 3813 CG    CG    . LYS LYS LYS B B 63  63  . 71.142  124.499 18.105  1.00 34.93
1 . .
ATOM 3814 CD    CD    . LYS LYS LYS B B 63  63  . 72.023  125.612 17.463  1.00 36.70
1 . .
ATOM 3815 CE    CE    . LYS LYS LYS B B 63  63  . 72.698  126.526 18.490  1.00 36.34
1 . .
ATOM 3816 NZ    NZ    . LYS LYS LYS B B 63  63  . 73.324  127.705 17.770  1.00 35.52
1 . .
ATOM 3817 C     C     . LYS LYS LYS B B 63  63  . 69.722  121.160 16.747  1.00 29.60
1 . .
ATOM 3818 O     O     . LYS LYS LYS B B 63  63  . 68.466  121.033 16.791  1.00 29.39
1 . .
ATOM 3819 N     N     . ALA ALA ALA B B 64  64  . 70.497  120.500 15.885  1.00 29.06
1 . .
ATOM 3820 CA    CA    . ALA ALA ALA B B 64  64  . 69.956  119.463 14.961  1.00 29.30
1 . .
ATOM 3821 CB    CB    . ALA ALA ALA B B 64  64  . 71.074  118.816 14.195  1.00 29.76
1 . .
ATOM 3822 C     C     . ALA ALA ALA B B 64  64  . 69.159  118.410 15.714  1.00 29.79
1 . .
ATOM 3823 O     O     . ALA ALA ALA B B 64  64  . 67.989  118.088 15.353  1.00 29.87
1 . .
ATOM 3824 N     N     . VAL VAL VAL B B 65  65  . 69.754  117.898 16.796  1.00 30.04
1 . .
ATOM 3825 CA    CA    . VAL VAL VAL B B 65  65  . 69.098  116.824 17.585  1.00 30.35
1 . .
ATOM 3826 CB    CB    . VAL VAL VAL B B 65  65  . 69.983  116.389 18.744  1.00 30.36
1 . .
ATOM 3827 CG1   CG1   . VAL VAL VAL B B 65  65  . 69.181  115.663 19.799  1.00 26.83
1 . .
ATOM 3828 CG2   CG2   . VAL VAL VAL B B 65  65  . 71.211  115.550 18.228  1.00 29.20
1 . .
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ATOM 3829 C     C     . VAL VAL VAL B B 65  65  . 67.739  117.321 18.152  1.00 31.62
1 . .
ATOM 3830 O     O     . VAL VAL VAL B B 65  65  . 66.721  116.615 18.111  1.00 30.64
1 . .
ATOM 3831 N     N     . ASP ASP ASP B B 66  66  . 67.774  118.546 18.663  1.00 32.59
1 . .
ATOM 3832 CA    CA    . ASP ASP ASP B B 66  66  . 66.606  119.148 19.263  1.00 34.77
1 . .
ATOM 3833 CB    CB    . ASP ASP ASP B B 66  66  . 66.946  120.392 20.089  1.00 35.01
1 . .
ATOM 3834 CG    CG    . ASP ASP ASP B B 66  66  . 65.668  121.155 20.525  1.00 39.89
1 . .
ATOM 3835 OD1   OD1   . ASP ASP ASP B B 66  66  . 65.484  122.300 20.053  1.00 43.27
1 . .
ATOM 3836 OD2   OD2   . ASP ASP ASP B B 66  66  . 64.803  120.612 21.268  1.00 42.59
1 . .
ATOM 3837 C     C     . ASP ASP ASP B B 66  66  . 65.511  119.394 18.212  1.00 34.30
1 . .
ATOM 3838 O     O     . ASP ASP ASP B B 66  66  . 64.365  119.162 18.512  1.00 34.70
1 . .
ATOM 3839 N     N     . HIS HIS HIS B B 67  67  . 65.878  119.775 16.982  1.00 34.61
1 . .
ATOM 3840 CA    CA    . HIS HIS HIS B B 67  67  . 64.902  119.939 15.914  1.00 35.39
1 . .
ATOM 3841 CB    CB    . HIS HIS HIS B B 67  67  . 65.524  120.505 14.609  1.00 35.78
1 . .
ATOM 3842 CG    CG    . HIS HIS HIS B B 67  67  . 66.032  121.925 14.729  1.00 38.53
1 . .
ATOM 3843 ND1   ND1   . HIS HIS HIS B B 67  67  . 65.227  122.980 15.109  1.00 38.80
1 . .
ATOM 3844 CE1   CE1   . HIS HIS HIS B B 67  67  . 65.937  124.100 15.118  1.00 39.33
1 . .
ATOM 3845 NE2   NE2   . HIS HIS HIS B B 67  67  . 67.174  123.818 14.738  1.00 39.21
1 . .
ATOM 3846 CD2   CD2   . HIS HIS HIS B B 67  67  . 67.261  122.467 14.476  1.00 40.08
1 . .
ATOM 3847 C     C     . HIS HIS HIS B B 67  67  . 64.226  118.609 15.658  1.00 35.08
1 . .
ATOM 3848 O     O     . HIS HIS HIS B B 67  67  . 62.973  118.525 15.425  1.00 34.72
1 . .
ATOM 3849 N     N     . ILE ILE ILE B B 68  68  . 65.033  117.545 15.680  1.00 33.54
1 . .
ATOM 3850 CA    CA    . ILE ILE ILE B B 68  68  . 64.427  116.207 15.588  1.00 32.90
1 . .
ATOM 3851 CB    CB    . ILE ILE ILE B B 68  68  . 65.468  115.075 15.480  1.00 32.28
1 . .
ATOM 3852 CG1   CG1   . ILE ILE ILE B B 68  68  . 66.344  115.250 14.223  1.00 33.41
1 . .
ATOM 3853 CD1   CD1   . ILE ILE ILE B B 68  68  . 67.573  114.394 14.188  1.00 27.84
1 . .
ATOM 3854 CG2   CG2   . ILE ILE ILE B B 68  68  . 64.788  113.755 15.428  1.00 28.33
1 . .
ATOM 3855 C     C     . ILE ILE ILE B B 68  68  . 63.445  115.926 16.762  1.00 33.33
1 . .
ATOM 3856 O     O     . ILE ILE ILE B B 68  68  . 62.253  115.579 16.549  1.00 33.16
1 . .
ATOM 3857 N     N     . ASN ASN ASN B B 69  69  . 63.942  116.062 17.982  1.00 33.72
1 . .
ATOM 3858 CA    CA    . ASN ASN ASN B B 69  69  . 63.150  115.681 19.189  1.00 36.02
1 . .
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ATOM 3859 CB    CB    . ASN ASN ASN B B 69  69  . 64.055  115.575 20.443  1.00 34.83
1 . .
ATOM 3860 CG    CG    . ASN ASN ASN B B 69  69  . 65.043  114.404 20.353  1.00 35.38
1 . .
ATOM 3861 OD1   OD1   . ASN ASN ASN B B 69  69  . 64.720  113.347 19.766  1.00 34.11
1 . .
ATOM 3862 ND2   ND2   . ASN ASN ASN B B 69  69  . 66.253  114.589 20.894  1.00 34.11
1 . .
ATOM 3863 C     C     . ASN ASN ASN B B 69  69  . 61.901  116.593 19.442  1.00 37.64
1 . .
ATOM 3864 O     O     . ASN ASN ASN B B 69  69  . 60.844  116.122 19.849  1.00 38.77
1 . .
ATOM 3865 N     N     . SER SER SER B B 70  70  . 62.053  117.878 19.125  1.00 39.37
1 . .
ATOM 3866 CA    CA    . SER SER SER B B 70  70  . 61.045  118.906 19.357  1.00 40.68
1 . .
ATOM 3867 CB    CB    . SER SER SER B B 70  70  . 61.735  120.207 19.733  1.00 40.04
1 . .
ATOM 3868 OG    OG    . SER SER SER B B 70  70  . 62.209  120.095 21.056  1.00 42.03
1 . .
ATOM 3869 C     C     . SER SER SER B B 70  70  . 60.056  119.168 18.222  1.00 40.92
1 . .
ATOM 3870 O     O     . SER SER SER B B 70  70  . 58.894  119.545 18.486  1.00 41.71
1 . .
ATOM 3871 N     N     . THR THR THR B B 71  71  . 60.494  118.977 16.982  1.00 39.93
1 . .
ATOM 3872 CA    CA    . THR THR THR B B 71  71  . 59.721  119.432 15.852  1.00 39.33
1 . .
ATOM 3873 CB    CB    . THR THR THR B B 71  71  . 60.430  120.631 15.222  1.00 40.18
1 . .
ATOM 3874 OG1   OG1   . THR THR THR B B 71  71  . 60.663  121.599 16.260  1.00 41.73
1 . .
ATOM 3875 CG2   CG2   . THR THR THR B B 71  71  . 59.593  121.279 14.072  1.00 39.54
1 . .
ATOM 3876 C     C     . THR THR THR B B 71  71  . 59.396  118.341 14.850  1.00 38.28
1 . .
ATOM 3877 O     O     . THR THR THR B B 71  71  . 58.200  118.079 14.560  1.00 37.46
1 . .
ATOM 3878 N     N     . ILE ILE ILE B B 72  72  . 60.429  117.662 14.347  1.00 37.08
1 . .
ATOM 3879 CA    CA    . ILE ILE ILE B B 72  72  . 60.236  116.636 13.319  1.00 35.90
1 . .
ATOM 3880 CB    CB    . ILE ILE ILE B B 72  72  . 61.543  116.042 12.747  1.00 36.77
1 . .
ATOM 3881 CG1   CG1   . ILE ILE ILE B B 72  72  . 62.542  117.146 12.403  1.00 36.26
1 . .
ATOM 3882 CD1   CD1   . ILE ILE ILE B B 72  72  . 62.962  117.110 11.056  1.00 38.69
1 . .
ATOM 3883 CG2   CG2   . ILE ILE ILE B B 72  72  . 61.198  115.080 11.572  1.00 34.90
1 . .
ATOM 3884 C     C     . ILE ILE ILE B B 72  72  . 59.470  115.457 13.847  1.00 36.10
1 . .
ATOM 3885 O     O     . ILE ILE ILE B B 72  72  . 58.482  114.999 13.217  1.00 36.34
1 . .
ATOM 3886 N     N     . ALA ALA ALA B B 73  73  . 59.932  114.965 14.992  1.00 35.20
1 . .
ATOM 3887 CA    CA    . ALA ALA ALA B B 73  73  . 59.380  113.767 15.566  1.00 34.91
1 . .
ATOM 3888 CB    CB    . ALA ALA ALA B B 73  73  . 60.118  113.382 16.844  1.00 34.63
1 . .
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ATOM 3889 C     C     . ALA ALA ALA B B 73  73  . 57.873  113.900 15.827  1.00 35.44
1 . .
ATOM 3890 O     O     . ALA ALA ALA B B 73  73  . 57.120  113.045 15.389  1.00 35.48
1 . .
ATOM 3891 N     N     . PRO PRO PRO B B 74  74  . 57.447  114.949 16.562  1.00 36.19
1 . .
ATOM 3892 CA    CA    . PRO PRO PRO B B 74  74  . 55.994  115.062 16.908  1.00 36.42
1 . .
ATOM 3893 CB    CB    . PRO PRO PRO B B 74  74  . 55.890  116.384 17.676  1.00 36.25
1 . .
ATOM 3894 CG    CG    . PRO PRO PRO B B 74  74  . 57.301  116.750 18.085  1.00 37.60
1 . .
ATOM 3895 CD    CD    . PRO PRO PRO B B 74  74  . 58.307  115.881 17.331  1.00 35.51
1 . .
ATOM 3896 C     C     . PRO PRO PRO B B 74  74  . 55.163  115.126 15.640  1.00 36.31
1 . .
ATOM 3897 O     O     . PRO PRO PRO B B 74  74  . 54.165  114.460 15.525  1.00 36.23
1 . .
ATOM 3898 N     N     . ALA ALA ALA B B 75  75  . 55.663  115.862 14.659  1.00 36.67
1 . .
ATOM 3899 CA    CA    . ALA ALA ALA B B 75  75  . 54.992  116.042 13.390  1.00 36.14
1 . .
ATOM 3900 CB    CB    . ALA ALA ALA B B 75  75  . 55.715  117.079 12.574  1.00 36.49
1 . .
ATOM 3901 C     C     . ALA ALA ALA B B 75  75  . 54.808  114.765 12.591  1.00 36.48
1 . .
ATOM 3902 O     O     . ALA ALA ALA B B 75  75  . 53.676  114.466 12.091  1.00 35.65
1 . .
ATOM 3903 N     N     . LEU LEU LEU B B 76  76  . 55.902  114.006 12.446  1.00 36.26
1 . .
ATOM 3904 CA    CA    . LEU LEU LEU B B 76  76  . 55.825  112.796 11.672  1.00 36.04
1 . .
ATOM 3905 CB    CB    . LEU LEU LEU B B 76  76  . 57.203  112.166 11.423  1.00 36.54
1 . .
ATOM 3906 CG    CG    . LEU LEU LEU B B 76  76  . 58.153  112.996 10.558  1.00 37.28
1 . .
ATOM 3907 CD1   CD1   . LEU LEU LEU B B 76  76  . 59.394  112.173 10.144  1.00 33.84
1 . .
ATOM 3908 CD2   CD2   . LEU LEU LEU B B 76  76  . 57.353  113.448 9.354   1.00 34.16
1 . .
ATOM 3909 C     C     . LEU LEU LEU B B 76  76  . 54.929  111.810 12.358  1.00 36.25
1 . .
ATOM 3910 O     O     . LEU LEU LEU B B 76  76  . 54.234  111.043 11.684  1.00 36.15
1 . .
ATOM 3911 N     N     . ILE ILE ILE B B 77  77  . 54.975  111.787 13.689  1.00 37.17
1 . .
ATOM 3912 CA    CA    . ILE ILE ILE B B 77  77  . 54.179  110.813 14.442  1.00 38.88
1 . .
ATOM 3913 CB    CB    . ILE ILE ILE B B 77  77  . 54.614  110.745 15.962  1.00 38.35
1 . .
ATOM 3914 CG1   CG1   . ILE ILE ILE B B 77  77  . 56.035  110.116 16.022  1.00 37.69
1 . .
ATOM 3915 CD1   CD1   . ILE ILE ILE B B 77  77  . 56.744  110.089 17.392  1.00 32.19
1 . .
ATOM 3916 CG2   CG2   . ILE ILE ILE B B 77  77  . 53.567  109.915 16.820  1.00 36.33
1 . .
ATOM 3917 C     C     . ILE ILE ILE B B 77  77  . 52.650  111.047 14.217  1.00 40.16
1 . .
ATOM 3918 O     O     . ILE ILE ILE B B 77  77  . 51.881  110.117 13.886  1.00 41.65
1 . .
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ATOM 3919 N     N     . SER SER SER B B 78  78  . 52.243  112.299 14.321  1.00 40.84
1 . .
ATOM 3920 CA    CA    . SER SER SER B B 78  78  . 50.818  112.657 14.280  1.00 41.59
1 . .
ATOM 3921 CB    CB    . SER SER SER B B 78  78  . 50.682  114.046 14.821  1.00 41.43
1 . .
ATOM 3922 OG    OG    . SER SER SER B B 78  78  . 51.591  114.170 15.898  1.00 44.92
1 . .
ATOM 3923 C     C     . SER SER SER B B 78  78  . 50.262  112.601 12.866  1.00 41.55
1 . .
ATOM 3924 O     O     . SER SER SER B B 78  78  . 49.040  112.570 12.659  1.00 41.47
1 . .
ATOM 3925 N     N     . SER SER SER B B 79  79  . 51.173  112.579 11.897  1.00 41.63
1 . .
ATOM 3926 CA    CA    . SER SER SER B B 79  79  . 50.788  112.427 10.513  1.00 41.62
1 . .
ATOM 3927 CB    CB    . SER SER SER B B 79  79  . 52.015  112.578 9.615   1.00 41.26
1 . .
ATOM 3928 OG    OG    . SER SER SER B B 79  79  . 52.687  111.340 9.573   1.00 39.63
1 . .
ATOM 3929 C     C     . SER SER SER B B 79  79  . 50.161  111.050 10.306  1.00 42.33
1 . .
ATOM 3930 O     O     . SER SER SER B B 79  79  . 49.238  110.911 9.492   1.00 43.31
1 . .
ATOM 3931 N     N     . GLY GLY GLY B B 80  80  . 50.670  110.033 11.022  1.00 42.68
1 . .
ATOM 3932 CA    CA    . GLY GLY GLY B B 80  80  . 50.178  108.661 10.900  1.00 42.60
1 . .
ATOM 3933 C     C     . GLY GLY GLY B B 80  80  . 50.606  107.986 9.623   1.00 43.35
1 . .
ATOM 3934 O     O     . GLY GLY GLY B B 80  80  . 50.134  106.885 9.277   1.00 44.53
1 . .
ATOM 3935 N     N     . LEU LEU LEU B B 81  81  . 51.521  108.616 8.890   1.00 43.42
1 . .
ATOM 3936 CA    CA    . LEU LEU LEU B B 81  81  . 52.044  107.979 7.678   1.00 43.09
1 . .
ATOM 3937 CB    CB    . LEU LEU LEU B B 81  81  . 52.916  108.948 6.889   1.00 43.04
1 . .
ATOM 3938 CG    CG    . LEU LEU LEU B B 81  81  . 52.153  110.180 6.405   1.00 42.95
1 . .
ATOM 3939 CD1   CD1   . LEU LEU LEU B B 81  81  . 53.116  111.141 5.795   1.00 42.45
1 . .
ATOM 3940 CD2   CD2   . LEU LEU LEU B B 81  81  . 50.979  109.837 5.420   1.00 41.23
1 . .
ATOM 3941 C     C     . LEU LEU LEU B B 81  81  . 52.786  106.686 8.013   1.00 43.36
1 . .
ATOM 3942 O     O     . LEU LEU LEU B B 81  81  . 53.462  106.587 9.070   1.00 43.31
1 . .
ATOM 3943 N     N     . SER SER SER B B 82  82  . 52.606  105.685 7.153   1.00 42.48
1 . .
ATOM 3944 CA    CA    . SER SER SER B B 82  82  . 53.414  104.486 7.237   1.00 42.11
1 . .
ATOM 3945 CB    CB    . SER SER SER B B 82  82  . 52.836  103.400 6.339   1.00 41.76
1 . .
ATOM 3946 OG    OG    . SER SER SER B B 82  82  . 53.669  102.241 6.335   1.00 43.17
1 . .
ATOM 3947 C     C     . SER SER SER B B 82  82  . 54.881  104.779 6.820   1.00 41.29
1 . .
ATOM 3948 O     O     . SER SER SER B B 82  82  . 55.132  105.541 5.883   1.00 40.71
1 . .
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ATOM 3949 N     N     . VAL VAL VAL B B 83  83  . 55.816  104.100 7.469   1.00 40.81
1 . .
ATOM 3950 CA    CA    . VAL VAL VAL B B 83  83  . 57.232  104.250 7.179   1.00 39.57
1 . .
ATOM 3951 CB    CB    . VAL VAL VAL B B 83  83  . 58.104  103.594 8.272   1.00 39.76
1 . .
ATOM 3952 CG1   CG1   . VAL VAL VAL B B 83  83  . 58.090  104.419 9.567   1.00 38.43
1 . .
ATOM 3953 CG2   CG2   . VAL VAL VAL B B 83  83  . 57.680  102.129 8.555   1.00 37.83
1 . .
ATOM 3954 C     C     . VAL VAL VAL B B 83  83  . 57.593  103.724 5.792   1.00 40.81
1 . .
ATOM 3955 O     O     . VAL VAL VAL B B 83  83  . 58.731  103.943 5.310   1.00 41.05
1 . .
ATOM 3956 N     N     . VAL VAL VAL B B 84  84  . 56.638  103.054 5.131   1.00 40.97
1 . .
ATOM 3957 CA    CA    . VAL VAL VAL B B 84  84  . 56.840  102.643 3.722   1.00 41.39
1 . .
ATOM 3958 CB    CB    . VAL VAL VAL B B 84  84  . 55.923  101.458 3.190   1.00 41.30
1 . .
ATOM 3959 CG1   CG1   . VAL VAL VAL B B 84  84  . 56.063  100.148 4.063   1.00 41.11
1 . .
ATOM 3960 CG2   CG2   . VAL VAL VAL B B 84  84  . 54.475  101.862 3.030   1.00 41.30
1 . .
ATOM 3961 C     C     . VAL VAL VAL B B 84  84  . 56.773  103.823 2.762   1.00 41.60
1 . .
ATOM 3962 O     O     . VAL VAL VAL B B 84  84  . 57.337  103.760 1.631   1.00 42.42
1 . .
ATOM 3963 N     N     . GLU GLU GLU B B 85  85  . 56.093  104.887 3.185   1.00 41.76
1 . .
ATOM 3964 CA    CA    . GLU GLU GLU B B 85  85  . 55.921  106.064 2.331   1.00 41.71
1 . .
ATOM 3965 CB    CB    . GLU GLU GLU B B 85  85  . 54.622  106.760 2.703   1.00 42.77
1 . .
ATOM 3966 CG    CG    . GLU GLU GLU B B 85  85  . 53.412  106.096 2.046   1.00 46.77
1 . .
ATOM 3967 CD    CD    . GLU GLU GLU B B 85  85  . 52.274  105.918 3.020   1.00 52.14
1 . .
ATOM 3968 OE1   OE1   . GLU GLU GLU B B 85  85  . 52.583  105.752 4.232   1.00 54.58
1 . .
ATOM 3969 OE2   OE2   . GLU GLU GLU B B 85  85  . 51.084  105.940 2.585   1.00 54.16
1 . .
ATOM 3970 C     C     . GLU GLU GLU B B 85  85  . 57.135  106.961 2.483   1.00 40.69
1 . .
ATOM 3971 O     O     . GLU GLU GLU B B 85  85  . 57.059  108.028 3.064   1.00 39.88
1 . .
ATOM 3972 N     N     . GLN GLN GLN B B 86  86  . 58.277  106.482 1.981   1.00 40.21
1 . .
ATOM 3973 CA    CA    . GLN GLN GLN B B 86  86  . 59.552  107.221 2.046   1.00 39.03
1 . .
ATOM 3974 CB    CB    . GLN GLN GLN B B 86  86  . 60.612  106.527 1.190   1.00 38.46
1 . .
ATOM 3975 CG    CG    . GLN GLN GLN B B 86  86  . 62.022  107.141 1.348   1.00 37.40
1 . .
ATOM 3976 CD    CD    . GLN GLN GLN B B 86  86  . 62.519  106.896 2.725   1.00 34.38
1 . .
ATOM 3977 OE1   OE1   . GLN GLN GLN B B 86  86  . 62.464  105.791 3.181   1.00 33.74
1 . .
ATOM 3978 NE2   NE2   . GLN GLN GLN B B 86  86  . 62.972  107.923 3.407   1.00 36.64
1 . .
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ATOM 3979 C     C     . GLN GLN GLN B B 86  86  . 59.387  108.625 1.504   1.00 39.51
1 . .
ATOM 3980 O     O     . GLN GLN GLN B B 86  86  . 59.714  109.624 2.172   1.00 39.75
1 . .
ATOM 3981 N     N     . GLU GLU GLU B B 87  87  . 58.882  108.696 0.277   1.00 39.53
1 . .
ATOM 3982 CA    CA    . GLU GLU GLU B B 87  87  . 58.660  109.973 -0.365  1.00 40.01
1 . .
ATOM 3983 CB    CB    . GLU GLU GLU B B 87  87  . 58.200  109.803 -1.827  1.00 41.05
1 . .
ATOM 3984 CG    CG    . GLU GLU GLU B B 87  87  . 58.019  111.162 -2.570  1.00 46.05
1 . .
ATOM 3985 CD    CD    . GLU GLU GLU B B 87  87  . 57.626  111.024 -4.051  1.00 53.48
1 . .
ATOM 3986 OE1   OE1   . GLU GLU GLU B B 87  87  . 57.699  112.061 -4.786  1.00 54.50
1 . .
ATOM 3987 OE2   OE2   . GLU GLU GLU B B 87  87  . 57.260  109.881 -4.481  1.00 56.77
1 . .
ATOM 3988 C     C     . GLU GLU GLU B B 87  87  . 57.725  110.903 0.408   1.00 39.37
1 . .
ATOM 3989 O     O     . GLU GLU GLU B B 87  87  . 58.075  112.064 0.588   1.00 39.48
1 . .
ATOM 3990 N     N     . LYS LYS LYS B B 88  88  . 56.560  110.444 0.882   1.00 38.04
1 . .
ATOM 3991 CA    CA    . LYS LYS LYS B B 88  88  . 55.676  111.408 1.551   1.00 38.03
1 . .
ATOM 3992 CB    CB    . LYS LYS LYS B B 88  88  . 54.242  110.874 1.763   1.00 38.42
1 . .
ATOM 3993 CG    CG    . LYS LYS LYS B B 88  88  . 53.660  110.174 0.571   1.00 41.34
1 . .
ATOM 3994 CD    CD    . LYS LYS LYS B B 88  88  . 52.269  109.608 0.881   1.00 45.61
1 . .
ATOM 3995 CE    CE    . LYS LYS LYS B B 88  88  . 51.274  110.722 1.076   1.00 47.10
1 . .
ATOM 3996 NZ    NZ    . LYS LYS LYS B B 88  88  . 50.128  110.469 0.147   1.00 50.42
1 . .
ATOM 3997 C     C     . LYS LYS LYS B B 88  88  . 56.259  111.910 2.883   1.00 36.96
1 . .
ATOM 3998 O     O     . LYS LYS LYS B B 88  88  . 56.076  113.057 3.260   1.00 37.06
1 . .
ATOM 3999 N     N     . LEU LEU LEU B B 89  89  . 56.952  111.041 3.604   1.00 36.09
1 . .
ATOM 4000 CA    CA    . LEU LEU LEU B B 89  89  . 57.555  111.463 4.862   1.00 34.77
1 . .
ATOM 4001 CB    CB    . LEU LEU LEU B B 89  89  . 57.967  110.248 5.694   1.00 34.28
1 . .
ATOM 4002 CG    CG    . LEU LEU LEU B B 89  89  . 56.859  109.500 6.458   1.00 33.70
1 . .
ATOM 4003 CD1   CD1   . LEU LEU LEU B B 89  89  . 57.266  107.985 6.777   1.00 30.43
1 . .
ATOM 4004 CD2   CD2   . LEU LEU LEU B B 89  89  . 56.428  110.281 7.723   1.00 28.00
1 . .
ATOM 4005 C     C     . LEU LEU LEU B B 89  89  . 58.738  112.391 4.611   1.00 33.98
1 . .
ATOM 4006 O     O     . LEU LEU LEU B B 89  89  . 58.936  113.353 5.356   1.00 33.10
1 . .
ATOM 4007 N     N     . ASP ASP ASP B B 90  90  . 59.499  112.136 3.546   1.00 33.96
1 . .
ATOM 4008 CA    CA    . ASP ASP ASP B B 90  90  . 60.642  112.980 3.242   1.00 34.31
1 . .
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ATOM 4009 CB    CB    . ASP ASP ASP B B 90  90  . 61.532  112.333 2.168   1.00 34.94
1 . .
ATOM 4010 CG    CG    . ASP ASP ASP B B 90  90  . 62.536  111.347 2.735   1.00 36.38
1 . .
ATOM 4011 OD1   OD1   . ASP ASP ASP B B 90  90  . 62.793  111.358 3.955   1.00 37.73
1 . .
ATOM 4012 OD2   OD2   . ASP ASP ASP B B 90  90  . 63.075  110.544 1.950   1.00 38.13
1 . .
ATOM 4013 C     C     . ASP ASP ASP B B 90  90  . 60.156  114.384 2.808   1.00 34.14
1 . .
ATOM 4014 O     O     . ASP ASP ASP B B 90  90  . 60.595  115.381 3.351   1.00 32.89
1 . .
ATOM 4015 N     N     . ASN ASN ASN B B 91  91  . 59.220  114.452 1.859   1.00 35.45
1 . .
ATOM 4016 CA    CA    . ASN ASN ASN B B 91  91  . 58.559  115.741 1.484   1.00 36.16
1 . .
ATOM 4017 CB    CB    . ASN ASN ASN B B 91  91  . 57.408  115.529 0.519   1.00 37.93
1 . .
ATOM 4018 CG    CG    . ASN ASN ASN B B 91  91  . 57.872  115.103 -0.859  1.00 43.71
1 . .
ATOM 4019 OD1   OD1   . ASN ASN ASN B B 91  91  . 57.131  114.426 -1.587  1.00 50.49
1 . .
ATOM 4020 ND2   ND2   . ASN ASN ASN B B 91  91  . 59.100  115.491 -1.237  1.00 47.88
1 . .
ATOM 4021 C     C     . ASN ASN ASN B B 91  91  . 58.020  116.540 2.650   1.00 35.23
1 . .
ATOM 4022 O     O     . ASN ASN ASN B B 91  91  . 58.155  117.761 2.665   1.00 34.99
1 . .
ATOM 4023 N     N     . LEU LEU LEU B B 92  92  . 57.463  115.853 3.643   1.00 34.91
1 . .
ATOM 4024 CA    CA    . LEU LEU LEU B B 92  92  . 56.877  116.505 4.820   1.00 34.74
1 . .
ATOM 4025 CB    CB    . LEU LEU LEU B B 92  92  . 56.197  115.463 5.728   1.00 33.40
1 . .
ATOM 4026 CG    CG    . LEU LEU LEU B B 92  92  . 55.580  115.970 7.043   1.00 33.07
1 . .
ATOM 4027 CD1   CD1   . LEU LEU LEU B B 92  92  . 54.674  117.208 6.831   1.00 32.66
1 . .
ATOM 4028 CD2   CD2   . LEU LEU LEU B B 92  92  . 54.889  114.879 7.894   1.00 26.88
1 . .
ATOM 4029 C     C     . LEU LEU LEU B B 92  92  . 58.008  117.191 5.554   1.00 35.42
1 . .
ATOM 4030 O     O     . LEU LEU LEU B B 92  92  . 57.940  118.379 5.902   1.00 35.91
1 . .
ATOM 4031 N     N     . MET MET MET B B 93  93  . 59.089  116.450 5.751   1.00 36.21
1 . .
ATOM 4032 CA    CA    . MET MET MET B B 93  93  . 60.267  117.011 6.457   1.00 35.68
1 . .
ATOM 4033 CB    CB    . MET MET MET B B 93  93  . 61.328  115.942 6.644   1.00 35.48
1 . .
ATOM 4034 CG    CG    . MET MET MET B B 93  93  . 61.033  115.030 7.775   1.00 34.18
1 . .
ATOM 4035 SD    SD    . MET MET MET B B 93  93  . 62.562  114.095 8.228   1.00 37.66
1 . .
ATOM 4036 CE    CE    . MET MET MET B B 93  93  . 62.457  112.755 7.019   1.00 35.02
1 . .
ATOM 4037 C     C     . MET MET MET B B 93  93  . 60.819  118.203 5.712   1.00 35.56
1 . .
ATOM 4038 O     O     . MET MET MET B B 93  93  . 61.201  119.210 6.332   1.00 34.88
1 . .
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ATOM 4039 N     N     . LEU LEU LEU B B 94  94  . 60.801  118.100 4.379   1.00 36.27
1 . .
ATOM 4040 CA    CA    . LEU LEU LEU B B 94  94  . 61.285  119.180 3.506   1.00 38.06
1 . .
ATOM 4041 CB    CB    . LEU LEU LEU B B 94  94  . 61.408  118.690 2.029   1.00 37.88
1 . .
ATOM 4042 CG    CG    . LEU LEU LEU B B 94  94  . 62.424  117.619 1.569   1.00 39.73
1 . .
ATOM 4043 CD1   CD1   . LEU LEU LEU B B 94  94  . 62.549  117.604 0.056   1.00 42.20
1 . .
ATOM 4044 CD2   CD2   . LEU LEU LEU B B 94  94  . 63.799  117.765 2.155   1.00 37.58
1 . .
ATOM 4045 C     C     . LEU LEU LEU B B 94  94  . 60.382  120.464 3.621   1.00 38.54
1 . .
ATOM 4046 O     O     . LEU LEU LEU B B 94  94  . 60.889  121.598 3.700   1.00 37.97
1 . .
ATOM 4047 N     N     . GLU GLU GLU B B 95  95  . 59.060  120.271 3.630   1.00 39.49
1 . .
ATOM 4048 CA    CA    . GLU GLU GLU B B 95  95  . 58.130  121.393 3.787   1.00 40.80
1 . .
ATOM 4049 CB    CB    . GLU GLU GLU B B 95  95  . 56.694  120.968 3.523   1.00 42.15
1 . .
ATOM 4050 CG    CG    . GLU GLU GLU B B 95  95  . 56.399  120.767 2.073   1.00 47.92
1 . .
ATOM 4051 CD    CD    . GLU GLU GLU B B 95  95  . 56.490  122.073 1.287   1.00 56.60
1 . .
ATOM 4052 OE1   OE1   . GLU GLU GLU B B 95  95  . 57.451  122.190 0.468   1.00 60.59
1 . .
ATOM 4053 OE2   OE2   . GLU GLU GLU B B 95  95  . 55.630  122.981 1.510   1.00 59.80
1 . .
ATOM 4054 C     C     . GLU GLU GLU B B 95  95  . 58.224  122.015 5.159   1.00 39.99
1 . .
ATOM 4055 O     O     . GLU GLU GLU B B 95  95  . 58.194  123.228 5.266   1.00 40.12
1 . .
ATOM 4056 N     N     . LEU LEU LEU B B 96  96  . 58.351  121.183 6.201   1.00 40.00
1 . .
ATOM 4057 CA    CA    . LEU LEU LEU B B 96  96  . 58.526  121.641 7.591   1.00 39.63
1 . .
ATOM 4058 CB    CB    . LEU LEU LEU B B 96  96  . 58.721  120.474 8.541   1.00 40.41
1 . .
ATOM 4059 CG    CG    . LEU LEU LEU B B 96  96  . 57.558  119.786 9.223   1.00 42.24
1 . .
ATOM 4060 CD1   CD1   . LEU LEU LEU B B 96  96  . 58.175  118.837 10.257  1.00 43.42
1 . .
ATOM 4061 CD2   CD2   . LEU LEU LEU B B 96  96  . 56.610  120.806 9.874   1.00 42.36
1 . .
ATOM 4062 C     C     . LEU LEU LEU B B 96  96  . 59.705  122.550 7.802   1.00 39.03
1 . .
ATOM 4063 O     O     . LEU LEU LEU B B 96  96  . 59.572  123.547 8.486   1.00 38.17
1 . .
ATOM 4064 N     N     . ASP ASP ASP B B 97  97  . 60.868  122.175 7.252   1.00 39.19
1 . .
ATOM 4065 CA    CA    . ASP ASP ASP B B 97  97  . 62.078  122.997 7.330   1.00 38.95
1 . .
ATOM 4066 CB    CB    . ASP ASP ASP B B 97  97  . 63.324  122.213 6.868   1.00 38.79
1 . .
ATOM 4067 CG    CG    . ASP ASP ASP B B 97  97  . 64.487  123.127 6.421   1.00 39.84
1 . .
ATOM 4068 OD1   OD1   . ASP ASP ASP B B 97  97  . 65.524  123.256 7.133   1.00 37.79
1 . .
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ATOM 4069 OD2   OD2   . ASP ASP ASP B B 97  97  . 64.370  123.710 5.312   1.00 43.75
1 . .
ATOM 4070 C     C     . ASP ASP ASP B B 97  97  . 61.877  124.258 6.502   1.00 39.75
1 . .
ATOM 4071 O     O     . ASP ASP ASP B B 97  97  . 62.326  125.325 6.895   1.00 40.73
1 . .
ATOM 4072 N     N     . GLY GLY GLY B B 98  98  . 61.242  124.126 5.337   1.00 40.57
1 . .
ATOM 4073 CA    CA    . GLY GLY GLY B B 98  98  . 60.790  125.271 4.549   1.00 40.71
1 . .
ATOM 4074 C     C     . GLY GLY GLY B B 98  98  . 61.872  126.072 3.855   1.00 41.41
1 . .
ATOM 4075 O     O     . GLY GLY GLY B B 98  98  . 61.585  127.120 3.294   1.00 42.04
1 . .
ATOM 4076 N     N     . THR THR THR B B 99  99  . 63.110  125.590 3.867   1.00 41.49
1 . .
ATOM 4077 CA    CA    . THR THR THR B B 99  99  . 64.211  126.270 3.144   1.00 41.66
1 . .
ATOM 4078 CB    CB    . THR THR THR B B 99  99  . 65.326  126.655 4.101   1.00 41.69
1 . .
ATOM 4079 OG1   OG1   . THR THR THR B B 99  99  . 65.933  125.450 4.551   1.00 40.86
1 . .
ATOM 4080 CG2   CG2   . THR THR THR B B 99  99  . 64.735  127.386 5.338   1.00 40.86
1 . .
ATOM 4081 C     C     . THR THR THR B B 99  99  . 64.792  125.385 2.013   1.00 41.77
1 . .
ATOM 4082 O     O     . THR THR THR B B 99  99  . 64.578  124.180 1.993   1.00 41.57
1 . .
ATOM 4083 N     N     . GLU GLU GLU B B 100 100 . 65.530  125.988 1.088   1.00 41.47
1 . .
ATOM 4084 CA    CA    . GLU GLU GLU B B 100 100 . 66.081  125.264 -0.052  1.00 41.88
1 . .
ATOM 4085 CB    CB    . GLU GLU GLU B B 100 100 . 66.478  126.242 -1.180  1.00 43.14
1 . .
ATOM 4086 CG    CG    . GLU GLU GLU B B 100 100 . 66.569  125.582 -2.579  1.00 47.64
1 . .
ATOM 4087 CD    CD    . GLU GLU GLU B B 100 100 . 65.276  124.787 -2.955  1.00 55.12
1 . .
ATOM 4088 OE1   OE1   . GLU GLU GLU B B 100 100 . 64.177  125.422 -3.069  1.00 54.91
1 . .
ATOM 4089 OE2   OE2   . GLU GLU GLU B B 100 100 . 65.372  123.518 -3.118  1.00 59.01
1 . .
ATOM 4090 C     C     . GLU GLU GLU B B 100 100 . 67.310  124.407 0.293   1.00 40.39
1 . .
ATOM 4091 O     O     . GLU GLU GLU B B 100 100 . 67.477  123.327 -0.284  1.00 40.54
1 . .
ATOM 4092 N     N     . ASN ASN ASN B B 101 101 . 68.157  124.910 1.196   1.00 38.38
1 . .
ATOM 4093 CA    CA    . ASN ASN ASN B B 101 101 . 69.411  124.248 1.579   1.00 36.97
1 . .
ATOM 4094 CB    CB    . ASN ASN ASN B B 101 101 . 70.611  125.234 1.451   1.00 37.20
1 . .
ATOM 4095 CG    CG    . ASN ASN ASN B B 101 101 . 70.594  126.348 2.518   1.00 40.68
1 . .
ATOM 4096 OD1   OD1   . ASN ASN ASN B B 101 101 . 71.682  126.840 2.950   1.00 43.51
1 . .
ATOM 4097 ND2   ND2   . ASN ASN ASN B B 101 101 . 69.360  126.751 2.974   1.00 42.24
1 . .
ATOM 4098 C     C     . ASN ASN ASN B B 101 101 . 69.315  123.575 2.981   1.00 34.91
1 . .
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ATOM 4099 O     O     . ASN ASN ASN B B 101 101 . 70.339  123.280 3.636   1.00 33.62
1 . .
ATOM 4100 N     N     . LYS LYS LYS B B 102 102 . 68.065  123.363 3.414   1.00 32.93
1 . .
ATOM 4101 CA    CA    . LYS LYS LYS B B 102 102 . 67.730  122.777 4.707   1.00 32.31
1 . .
ATOM 4102 CB    CB    . LYS LYS LYS B B 102 102 . 68.086  121.270 4.734   1.00 31.29
1 . .
ATOM 4103 CG    CG    . LYS LYS LYS B B 102 102 . 67.350  120.525 3.612   1.00 29.33
1 . .
ATOM 4104 CD    CD    . LYS LYS LYS B B 102 102 . 67.771  119.100 3.485   1.00 30.66
1 . .
ATOM 4105 CE    CE    . LYS LYS LYS B B 102 102 . 66.780  118.330 2.567   1.00 29.67
1 . .
ATOM 4106 NZ    NZ    . LYS LYS LYS B B 102 102 . 66.885  118.683 1.104   1.00 29.36
1 . .
ATOM 4107 C     C     . LYS LYS LYS B B 102 102 . 68.407  123.462 5.851   1.00 32.41
1 . .
ATOM 4108 O     O     . LYS LYS LYS B B 102 102 . 68.854  122.775 6.750   1.00 32.61
1 . .
ATOM 4109 N     N     . SER SER SER B B 103 103 . 68.475  124.796 5.806   1.00 33.12
1 . .
ATOM 4110 CA    CA    . SER SER SER B B 103 103 . 69.262  125.605 6.781   1.00 34.15
1 . .
ATOM 4111 CB    CB    . SER SER SER B B 103 103 . 69.712  126.951 6.193   1.00 34.75
1 . .
ATOM 4112 OG    OG    . SER SER SER B B 103 103 . 68.646  127.568 5.489   1.00 37.94
1 . .
ATOM 4113 C     C     . SER SER SER B B 103 103 . 68.499  125.865 8.055   1.00 33.91
1 . .
ATOM 4114 O     O     . SER SER SER B B 103 103 . 69.078  126.301 9.037   1.00 33.78
1 . .
ATOM 4115 N     N     . LYS LYS LYS B B 104 104 . 67.195  125.564 8.031   1.00 32.53
1 . .
ATOM 4116 CA    CA    . LYS LYS LYS B B 104 104 . 66.363  125.679 9.185   1.00 31.17
1 . .
ATOM 4117 CB    CB    . LYS LYS LYS B B 104 104 . 64.886  125.687 8.748   1.00 32.24
1 . .
ATOM 4118 CG    CG    . LYS LYS LYS B B 104 104 . 63.912  125.765 9.920   1.00 36.08
1 . .
ATOM 4119 CD    CD    . LYS LYS LYS B B 104 104 . 63.934  127.116 10.634  1.00 41.88
1 . .
ATOM 4120 CE    CE    . LYS LYS LYS B B 104 104 . 63.166  127.034 11.963  1.00 44.52
1 . .
ATOM 4121 NZ    NZ    . LYS LYS LYS B B 104 104 . 63.529  128.144 12.862  1.00 45.57
1 . .
ATOM 4122 C     C     . LYS LYS LYS B B 104 104 . 66.620  124.567 10.219  1.00 29.64
1 . .
ATOM 4123 O     O     . LYS LYS LYS B B 104 104 . 66.911  124.875 11.371  1.00 30.00
1 . .
ATOM 4124 N     N     . PHE PHE PHE B B 105 105 . 66.506  123.294 9.842   1.00 28.43
1 . .
ATOM 4125 CA    CA    . PHE PHE PHE B B 105 105 . 66.733  122.183 10.781  1.00 28.24
1 . .
ATOM 4126 CB    CB    . PHE PHE PHE B B 105 105 . 65.712  121.078 10.531  1.00 28.89
1 . .
ATOM 4127 CG    CG    . PHE PHE PHE B B 105 105 . 64.290  121.499 10.807  1.00 30.88
1 . .
ATOM 4128 CD1   CD1   . PHE PHE PHE B B 105 105 . 63.229  120.877 10.163  1.00 33.95
1 . .
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ATOM 4129 CE1   CE1   . PHE PHE PHE B B 105 105 . 61.905  121.276 10.416  1.00 36.75
1 . .
ATOM 4130 CZ    CZ    . PHE PHE PHE B B 105 105 . 61.657  122.293 11.330  1.00 37.87
1 . .
ATOM 4131 CE2   CE2   . PHE PHE PHE B B 105 105 . 62.724  122.901 12.000  1.00 36.43
1 . .
ATOM 4132 CD2   CD2   . PHE PHE PHE B B 105 105 . 64.022  122.502 11.728  1.00 30.86
1 . .
ATOM 4133 C     C     . PHE PHE PHE B B 105 105 . 68.188  121.625 10.718  1.00 28.74
1 . .
ATOM 4134 O     O     . PHE PHE PHE B B 105 105 . 68.677  121.038 11.679  1.00 28.33
1 . .
ATOM 4135 N     N     . GLY GLY GLY B B 106 106 . 68.862  121.873 9.593   1.00 28.65
1 . .
ATOM 4136 CA    CA    . GLY GLY GLY B B 106 106 . 70.122  121.233 9.251   1.00 28.29
1 . .
ATOM 4137 C     C     . GLY GLY GLY B B 106 106 . 69.753  120.017 8.400   1.00 27.44
1 . .
ATOM 4138 O     O     . GLY GLY GLY B B 106 106 . 68.740  119.361 8.639   1.00 26.78
1 . .
ATOM 4139 N     N     . ALA ALA ALA B B 107 107 . 70.541  119.734 7.380   1.00 27.17
1 . .
ATOM 4140 CA    CA    . ALA ALA ALA B B 107 107 . 70.340  118.506 6.592   1.00 26.85
1 . .
ATOM 4141 CB    CB    . ALA ALA ALA B B 107 107 . 71.173  118.555 5.335   1.00 26.74
1 . .
ATOM 4142 C     C     . ALA ALA ALA B B 107 107 . 70.745  117.293 7.432   1.00 27.45
1 . .
ATOM 4143 O     O     . ALA ALA ALA B B 107 107 . 70.209  116.175 7.272   1.00 26.89
1 . .
ATOM 4144 N     N     . ASN ASN ASN B B 108 108 . 71.678  117.489 8.352   1.00 28.76
1 . .
ATOM 4145 CA    CA    . ASN ASN ASN B B 108 108 . 71.986  116.373 9.260   1.00 29.48
1 . .
ATOM 4146 CB    CB    . ASN ASN ASN B B 108 108 . 73.236  116.643 10.091  1.00 28.44
1 . .
ATOM 4147 CG    CG    . ASN ASN ASN B B 108 108 . 73.218  118.024 10.731  1.00 28.35
1 . .
ATOM 4148 OD1   OD1   . ASN ASN ASN B B 108 108 . 72.495  118.914 10.278  1.00 32.44
1 . .
ATOM 4149 ND2   ND2   . ASN ASN ASN B B 108 108 . 74.015  118.211 11.791  1.00 23.15
1 . .
ATOM 4150 C     C     . ASN ASN ASN B B 108 108 . 70.777  115.977 10.136  1.00 30.44
1 . .
ATOM 4151 O     O     . ASN ASN ASN B B 108 108 . 70.623  114.815 10.503  1.00 31.35
1 . .
ATOM 4152 N     N     . ALA ALA ALA B B 109 109 . 69.908  116.916 10.458  1.00 30.88
1 . .
ATOM 4153 CA    CA    . ALA ALA ALA B B 109 109 . 68.679  116.546 11.162  1.00 31.18
1 . .
ATOM 4154 CB    CB    . ALA ALA ALA B B 109 109 . 67.955  117.790 11.766  1.00 31.36
1 . .
ATOM 4155 C     C     . ALA ALA ALA B B 109 109 . 67.693  115.787 10.278  1.00 30.71
1 . .
ATOM 4156 O     O     . ALA ALA ALA B B 109 109 . 67.120  114.800 10.694  1.00 30.04
1 . .
ATOM 4157 N     N     . ILE ILE ILE B B 110 110 . 67.474  116.257 9.064   1.00 30.44
1 . .
ATOM 4158 CA    CA    . ILE ILE ILE B B 110 110 . 66.464  115.615 8.202   1.00 30.40
1 . .
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ATOM 4159 CB    CB    . ILE ILE ILE B B 110 110 . 66.083  116.537 7.002   1.00 30.32
1 . .
ATOM 4160 CG1   CG1   . ILE ILE ILE B B 110 110 . 65.304  117.769 7.525   1.00 30.89
1 . .
ATOM 4161 CD1   CD1   . ILE ILE ILE B B 110 110 . 65.159  118.934 6.469   1.00 33.79
1 . .
ATOM 4162 CG2   CG2   . ILE ILE ILE B B 110 110 . 65.293  115.757 5.934   1.00 28.61
1 . .
ATOM 4163 C     C     . ILE ILE ILE B B 110 110 . 66.881  114.201 7.752   1.00 29.81
1 . .
ATOM 4164 O     O     . ILE ILE ILE B B 110 110 . 66.065  113.289 7.674   1.00 28.94
1 . .
ATOM 4165 N     N     . LEU LEU LEU B B 111 111 . 68.165  114.052 7.459   1.00 28.58
1 . .
ATOM 4166 CA    CA    . LEU LEU LEU B B 111 111 . 68.647  112.832 6.914   1.00 28.06
1 . .
ATOM 4167 CB    CB    . LEU LEU LEU B B 111 111 . 70.043  113.083 6.303   1.00 27.94
1 . .
ATOM 4168 CG    CG    . LEU LEU LEU B B 111 111 . 70.677  111.825 5.750   1.00 27.32
1 . .
ATOM 4169 CD1   CD1   . LEU LEU LEU B B 111 111 . 69.885  111.277 4.554   1.00 24.07
1 . .
ATOM 4170 CD2   CD2   . LEU LEU LEU B B 111 111 . 72.138  112.073 5.436   1.00 26.57
1 . .
ATOM 4171 C     C     . LEU LEU LEU B B 111 111 . 68.649  111.718 7.961   1.00 28.28
1 . .
ATOM 4172 O     O     . LEU LEU LEU B B 111 111 . 68.340  110.533 7.649   1.00 29.06
1 . .
ATOM 4173 N     N     . GLY GLY GLY B B 112 112 . 68.977  112.085 9.209   1.00 28.04
1 . .
ATOM 4174 CA    CA    . GLY GLY GLY B B 112 112 . 69.025  111.115 10.287  1.00 28.00
1 . .
ATOM 4175 C     C     . GLY GLY GLY B B 112 112 . 67.636  110.455 10.367  1.00 27.82
1 . .
ATOM 4176 O     O     . GLY GLY GLY B B 112 112 . 67.535  109.243 10.422  1.00 27.99
1 . .
ATOM 4177 N     N     . VAL VAL VAL B B 113 113 . 66.572  111.246 10.389  1.00 27.03
1 . .
ATOM 4178 CA    CA    . VAL VAL VAL B B 113 113 . 65.207  110.661 10.300  1.00 27.18
1 . .
ATOM 4179 CB    CB    . VAL VAL VAL B B 113 113 . 64.152  111.740 10.522  1.00 25.74
1 . .
ATOM 4180 CG1   CG1   . VAL VAL VAL B B 113 113 . 62.744  111.143 10.528  1.00 26.50
1 . .
ATOM 4181 CG2   CG2   . VAL VAL VAL B B 113 113 . 64.384  112.298 11.827  1.00 26.92
1 . .
ATOM 4182 C     C     . VAL VAL VAL B B 113 113 . 64.937  109.856 9.007   1.00 27.31
1 . .
ATOM 4183 O     O     . VAL VAL VAL B B 113 113 . 64.382  108.728 9.036   1.00 27.66
1 . .
ATOM 4184 N     N     . SER SER SER B B 114 114 . 65.350  110.416 7.870   1.00 27.92
1 . .
ATOM 4185 CA    CA    . SER SER SER B B 114 114 . 64.990  109.868 6.541   1.00 27.96
1 . .
ATOM 4186 CB    CB    . SER SER SER B B 114 114 . 65.430  110.848 5.442   1.00 28.12
1 . .
ATOM 4187 OG    OG    . SER SER SER B B 114 114 . 65.184  110.395 4.117   1.00 27.17
1 . .
ATOM 4188 C     C     . SER SER SER B B 114 114 . 65.569  108.456 6.354   1.00 29.08
1 . .
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ATOM 4189 O     O     . SER SER SER B B 114 114 . 64.921  107.573 5.799   1.00 29.38
1 . .
ATOM 4190 N     N     . LEU LEU LEU B B 115 115 . 66.785  108.253 6.865   1.00 29.35
1 . .
ATOM 4191 CA    CA    . LEU LEU LEU B B 115 115 . 67.452  106.963 6.856   1.00 29.22
1 . .
ATOM 4192 CB    CB    . LEU LEU LEU B B 115 115 . 68.938  107.138 7.273   1.00 29.08
1 . .
ATOM 4193 CG    CG    . LEU LEU LEU B B 115 115 . 69.945  107.997 6.492   1.00 30.42
1 . .
ATOM 4194 CD1   CD1   . LEU LEU LEU B B 115 115 . 71.189  108.233 7.389   1.00 28.61
1 . .
ATOM 4195 CD2   CD2   . LEU LEU LEU B B 115 115 . 70.377  107.368 5.115   1.00 28.95
1 . .
ATOM 4196 C     C     . LEU LEU LEU B B 115 115 . 66.799  105.931 7.795   1.00 28.68
1 . .
ATOM 4197 O     O     . LEU LEU LEU B B 115 115 . 66.602  104.730 7.420   1.00 28.78
1 . .
ATOM 4198 N     N     . ALA ALA ALA B B 116 116 . 66.556  106.352 9.028   1.00 28.26
1 . .
ATOM 4199 CA    CA    . ALA ALA ALA B B 116 116 . 65.868  105.505 9.983   1.00 29.14
1 . .
ATOM 4200 CB    CB    . ALA ALA ALA B B 116 116 . 65.798  106.151 11.278  1.00 27.44
1 . .
ATOM 4201 C     C     . ALA ALA ALA B B 116 116 . 64.457  105.135 9.460   1.00 29.82
1 . .
ATOM 4202 O     O     . ALA ALA ALA B B 116 116 . 64.022  103.977 9.590   1.00 30.77
1 . .
ATOM 4203 N     N     . VAL VAL VAL B B 117 117 . 63.775  106.055 8.805   1.00 30.34
1 . .
ATOM 4204 CA    CA    . VAL VAL VAL B B 117 117 . 62.446  105.707 8.226   1.00 30.68
1 . .
ATOM 4205 CB    CB    . VAL VAL VAL B B 117 117 . 61.795  106.936 7.534   1.00 30.01
1 . .
ATOM 4206 CG1   CG1   . VAL VAL VAL B B 117 117 . 60.810  106.512 6.466   1.00 30.31
1 . .
ATOM 4207 CG2   CG2   . VAL VAL VAL B B 117 117 . 61.177  107.848 8.576   1.00 29.44
1 . .
ATOM 4208 C     C     . VAL VAL VAL B B 117 117 . 62.631  104.647 7.160   1.00 31.78
1 . .
ATOM 4209 O     O     . VAL VAL VAL B B 117 117 . 61.781  103.748 6.987   1.00 32.79
1 . .
ATOM 4210 N     N     . CYS CYS CYS B B 118 118 . 63.745  104.742 6.422   1.00 31.69
1 . .
ATOM 4211 CA    CA    . CYS CYS CYS B B 118 118 . 63.909  103.835 5.320   1.00 32.34
1 . .
ATOM 4212 CB    CB    . CYS CYS CYS B B 118 118 . 65.099  104.263 4.430   1.00 33.07
1 . .
ATOM 4213 SG    SG    . CYS CYS CYS B B 118 118 . 65.256  103.416 2.775   1.00 33.70
1 . .
ATOM 4214 C     C     . CYS CYS CYS B B 118 118 . 64.095  102.431 5.934   1.00 32.35
1 . .
ATOM 4215 O     O     . CYS CYS CYS B B 118 118 . 63.537  101.456 5.464   1.00 30.98
1 . .
ATOM 4216 N     N     . LYS LYS LYS B B 119 119 . 64.913  102.339 6.978   1.00 32.96
1 . .
ATOM 4217 CA    CA    . LYS LYS LYS B B 119 119 . 65.158  101.041 7.613   1.00 33.11
1 . .
ATOM 4218 CB    CB    . LYS LYS LYS B B 119 119 . 66.237  101.150 8.700   1.00 32.74
1 . .
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ATOM 4219 CG    CG    . LYS LYS LYS B B 119 119 . 67.623  101.536 8.080   1.00 32.18
1 . .
ATOM 4220 CD    CD    . LYS LYS LYS B B 119 119 . 68.707  101.441 9.081   1.00 33.78
1 . .
ATOM 4221 CE    CE    . LYS LYS LYS B B 119 119 . 69.962  102.157 8.522   1.00 38.19
1 . .
ATOM 4222 NZ    NZ    . LYS LYS LYS B B 119 119 . 71.111  102.136 9.492   1.00 37.14
1 . .
ATOM 4223 C     C     . LYS LYS LYS B B 119 119 . 63.836  100.525 8.158   1.00 32.85
1 . .
ATOM 4224 O     O     . LYS LYS LYS B B 119 119 . 63.514  99.344  8.002   1.00 32.98
1 . .
ATOM 4225 N     N     . ALA ALA ALA B B 120 120 . 63.057  101.397 8.774   1.00 32.78
1 . .
ATOM 4226 CA    CA    . ALA ALA ALA B B 120 120 . 61.721  100.958 9.242   1.00 33.61
1 . .
ATOM 4227 CB    CB    . ALA ALA ALA B B 120 120 . 61.034  102.024 10.015  1.00 32.37
1 . .
ATOM 4228 C     C     . ALA ALA ALA B B 120 120 . 60.874  100.477 8.057   1.00 33.97
1 . .
ATOM 4229 O     O     . ALA ALA ALA B B 120 120 . 60.231  99.435  8.125   1.00 34.97
1 . .
ATOM 4230 N     N     . GLY GLY GLY B B 121 121 . 60.935  101.186 6.943   1.00 34.35
1 . .
ATOM 4231 CA    CA    . GLY GLY GLY B B 121 121 . 60.134  100.801 5.779   1.00 35.05
1 . .
ATOM 4232 C     C     . GLY GLY GLY B B 121 121 . 60.417  99.417  5.240   1.00 35.85
1 . .
ATOM 4233 O     O     . GLY GLY GLY B B 121 121 . 59.483  98.700  4.859   1.00 35.35
1 . .
ATOM 4234 N     N     . ALA ALA ALA B B 122 122 . 61.709  99.072  5.162   1.00 35.42
1 . .
ATOM 4235 CA    CA    . ALA ALA ALA B B 122 122 . 62.176  97.742  4.791   1.00 36.98
1 . .
ATOM 4236 CB    CB    . ALA ALA ALA B B 122 122 . 63.746  97.622  4.948   1.00 36.27
1 . .
ATOM 4237 C     C     . ALA ALA ALA B B 122 122 . 61.510  96.631  5.588   1.00 37.39
1 . .
ATOM 4238 O     O     . ALA ALA ALA B B 122 122 . 61.018  95.625  5.014   1.00 38.08
1 . .
ATOM 4239 N     N     . ALA ALA ALA B B 123 123 . 61.563  96.788  6.900   1.00 36.93
1 . .
ATOM 4240 CA    CA    . ALA ALA ALA B B 123 123 . 61.044  95.804  7.772   1.00 38.09
1 . .
ATOM 4241 CB    CB    . ALA ALA ALA B B 123 123 . 61.504  96.059  9.151   1.00 37.42
1 . .
ATOM 4242 C     C     . ALA ALA ALA B B 123 123 . 59.476  95.828  7.663   1.00 39.19
1 . .
ATOM 4243 O     O     . ALA ALA ALA B B 123 123 . 58.852  94.787  7.649   1.00 39.41
1 . .
ATOM 4244 N     N     . GLU GLU GLU B B 124 124 . 58.844  96.982  7.537   1.00 40.42
1 . .
ATOM 4245 CA    CA    . GLU GLU GLU B B 124 124 . 57.382  96.946  7.287   1.00 41.98
1 . .
ATOM 4246 CB    CB    . GLU GLU GLU B B 124 124 . 56.772  98.345  7.246   1.00 42.59
1 . .
ATOM 4247 CG    CG    . GLU GLU GLU B B 124 124 . 55.261  98.328  7.036   1.00 46.77
1 . .
ATOM 4248 CD    CD    . GLU GLU GLU B B 124 124 . 54.494  97.604  8.150   1.00 53.32
1 . .
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ATOM 4249 OE1   OE1   . GLU GLU GLU B B 124 124 . 53.571  96.809  7.804   1.00 55.64
1 . .
ATOM 4250 OE2   OE2   . GLU GLU GLU B B 124 124 . 54.815  97.842  9.362   1.00 55.87
1 . .
ATOM 4251 C     C     . GLU GLU GLU B B 124 124 . 57.053  96.141  6.023   1.00 41.80
1 . .
ATOM 4252 O     O     . GLU GLU GLU B B 124 124 . 56.062  95.436  5.964   1.00 42.73
1 . .
ATOM 4253 N     N     . ARG ARG ARG B B 125 125 . 57.908  96.188  5.028   1.00 42.12
1 . .
ATOM 4254 CA    CA    . ARG ARG ARG B B 125 125 . 57.665  95.400  3.817   1.00 43.10
1 . .
ATOM 4255 CB    CB    . ARG ARG ARG B B 125 125 . 58.307  96.057  2.573   1.00 43.07
1 . .
ATOM 4256 CG    CG    . ARG ARG ARG B B 125 125 . 57.749  97.403  2.203   1.00 45.74
1 . .
ATOM 4257 CD    CD    . ARG ARG ARG B B 125 125 . 56.444  97.305  1.373   1.00 50.62
1 . .
ATOM 4258 NE    NE    . ARG ARG ARG B B 125 125 . 56.267  98.553  0.611   1.00 54.47
1 . .
ATOM 4259 CZ    CZ    . ARG ARG ARG B B 125 125 . 55.110  99.200  0.442   1.00 56.46
1 . .
ATOM 4260 NH1   NH1   . ARG ARG ARG B B 125 125 . 53.984  98.736  0.982   1.00 58.31
1 . .
ATOM 4261 NH2   NH2   . ARG ARG ARG B B 125 125 . 55.077  100.323 -0.272  1.00 57.61
1 . .
ATOM 4262 C     C     . ARG ARG ARG B B 125 125 . 58.183  93.973  3.958   1.00 42.43
1 . .
ATOM 4263 O     O     . ARG ARG ARG B B 125 125 . 58.096  93.180  3.017   1.00 42.93
1 . .
ATOM 4264 N     N     . GLU GLU GLU B B 126 126 . 58.738  93.646  5.115   1.00 42.55
1 . .
ATOM 4265 CA    CA    . GLU GLU GLU B B 126 126 . 59.471  92.378  5.265   1.00 42.88
1 . .
ATOM 4266 CB    CB    . GLU GLU GLU B B 126 126 . 58.488  91.195  5.337   1.00 43.85
1 . .
ATOM 4267 CG    CG    . GLU GLU GLU B B 126 126 . 58.028  90.896  6.760   1.00 48.65
1 . .
ATOM 4268 CD    CD    . GLU GLU GLU B B 126 126 . 56.564  90.449  6.854   1.00 54.72
1 . .
ATOM 4269 OE1   OE1   . GLU GLU GLU B B 126 126 . 56.042  90.403  8.003   1.00 58.91
1 . .
ATOM 4270 OE2   OE2   . GLU GLU GLU B B 126 126 . 55.934  90.154  5.799   1.00 55.45
1 . .
ATOM 4271 C     C     . GLU GLU GLU B B 126 126 . 60.520  92.172  4.149   1.00 41.35
1 . .
ATOM 4272 O     O     . GLU GLU GLU B B 126 126 . 60.709  91.071  3.621   1.00 41.56
1 . .
ATOM 4273 N     N     . LEU LEU LEU B B 127 127 . 61.200  93.230  3.762   1.00 39.10
1 . .
ATOM 4274 CA    CA    . LEU LEU LEU B B 127 127 . 62.307  93.024  2.835   1.00 37.25
1 . .
ATOM 4275 CB    CB    . LEU LEU LEU B B 127 127 . 62.145  93.906  1.603   1.00 37.40
1 . .
ATOM 4276 CG    CG    . LEU LEU LEU B B 127 127 . 60.823  93.754  0.824   1.00 38.41
1 . .
ATOM 4277 CD1   CD1   . LEU LEU LEU B B 127 127 . 60.550  95.017  0.062   1.00 39.18
1 . .
ATOM 4278 CD2   CD2   . LEU LEU LEU B B 127 127 . 60.899  92.578  -0.122  1.00 38.70
1 . .
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ATOM 4279 C     C     . LEU LEU LEU B B 127 127 . 63.590  93.389  3.542   1.00 36.07
1 . .
ATOM 4280 O     O     . LEU LEU LEU B B 127 127 . 63.571  94.196  4.460   1.00 34.90
1 . .
ATOM 4281 N     N     . PRO PRO PRO B B 128 128 . 64.723  92.824  3.109   1.00 35.51
1 . .
ATOM 4282 CA    CA    . PRO PRO PRO B B 128 128 . 65.930  93.471  3.634   1.00 35.55
1 . .
ATOM 4283 CB    CB    . PRO PRO PRO B B 128 128 . 67.053  92.491  3.257   1.00 36.10
1 . .
ATOM 4284 CG    CG    . PRO PRO PRO B B 128 128 . 66.523  91.786  2.048   1.00 36.33
1 . .
ATOM 4285 CD    CD    . PRO PRO PRO B B 128 128 . 65.019  91.756  2.143   1.00 35.12
1 . .
ATOM 4286 C     C     . PRO PRO PRO B B 128 128 . 66.104  94.880  2.991   1.00 35.50
1 . .
ATOM 4287 O     O     . PRO PRO PRO B B 128 128 . 65.431  95.220  1.965   1.00 34.80
1 . .
ATOM 4288 N     N     . LEU LEU LEU B B 129 129 . 66.958  95.696  3.606   1.00 34.51
1 . .
ATOM 4289 CA    CA    . LEU LEU LEU B B 129 129 . 67.147  97.076  3.190   1.00 34.37
1 . .
ATOM 4290 CB    CB    . LEU LEU LEU B B 129 129 . 68.240  97.760  4.034   1.00 35.07
1 . .
ATOM 4291 CG    CG    . LEU LEU LEU B B 129 129 . 68.443  99.273  3.792   1.00 33.52
1 . .
ATOM 4292 CD1   CD1   . LEU LEU LEU B B 129 129 . 67.059  100.004 3.857   1.00 32.08
1 . .
ATOM 4293 CD2   CD2   . LEU LEU LEU B B 129 129 . 69.483  99.889  4.763   1.00 26.50
1 . .
ATOM 4294 C     C     . LEU LEU LEU B B 129 129 . 67.447  97.252  1.687   1.00 34.43
1 . .
ATOM 4295 O     O     . LEU LEU LEU B B 129 129 . 66.822  98.099  1.005   1.00 33.56
1 . .
ATOM 4296 N     N     . TYR TYR TYR B B 130 130 . 68.384  96.469  1.167   1.00 34.23
1 . .
ATOM 4297 CA    CA    . TYR TYR TYR B B 130 130 . 68.817  96.710  -0.214  1.00 34.55
1 . .
ATOM 4298 CB    CB    . TYR TYR TYR B B 130 130 . 70.078  95.949  -0.533  1.00 33.17
1 . .
ATOM 4299 CG    CG    . TYR TYR TYR B B 130 130 . 69.918  94.452  -0.423  1.00 35.83
1 . .
ATOM 4300 CD1   CD1   . TYR TYR TYR B B 130 130 . 69.446  93.703  -1.508  1.00 37.77
1 . .
ATOM 4301 CE1   CE1   . TYR TYR TYR B B 130 130 . 69.337  92.322  -1.445  1.00 38.25
1 . .
ATOM 4302 CZ    CZ    . TYR TYR TYR B B 130 130 . 69.683  91.658  -0.279  1.00 39.73
1 . .
ATOM 4303 OH    OH    . TYR TYR TYR B B 130 130 . 69.546  90.276  -0.254  1.00 42.56
1 . .
ATOM 4304 CE2   CE2   . TYR TYR TYR B B 130 130 . 70.179  92.371  0.822   1.00 37.96
1 . .
ATOM 4305 CD2   CD2   . TYR TYR TYR B B 130 130 . 70.276  93.761  0.746   1.00 36.51
1 . .
ATOM 4306 C     C     . TYR TYR TYR B B 130 130 . 67.703  96.441  -1.245  1.00 34.60
1 . .
ATOM 4307 O     O     . TYR TYR TYR B B 130 130 . 67.725  96.972  -2.336  1.00 33.92
1 . .
ATOM 4308 N     N     . ARG ARG ARG B B 131 131 . 66.730  95.632  -0.876  1.00 36.73
1 . .
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ATOM 4309 CA    CA    . ARG ARG ARG B B 131 131 . 65.593  95.251  -1.776  1.00 37.70
1 . .
ATOM 4310 CB    CB    . ARG ARG ARG B B 131 131 . 65.084  93.835  -1.483  1.00 38.36
1 . .
ATOM 4311 CG    CG    . ARG ARG ARG B B 131 131 . 65.882  92.719  -2.133  1.00 42.45
1 . .
ATOM 4312 CD    CD    . ARG ARG ARG B B 131 131 . 65.020  91.433  -2.415  1.00 49.41
1 . .
ATOM 4313 NE    NE    . ARG ARG ARG B B 131 131 . 65.864  90.237  -2.505  1.00 54.42
1 . .
ATOM 4314 CZ    CZ    . ARG ARG ARG B B 131 131 . 66.273  89.665  -3.645  1.00 56.72
1 . .
ATOM 4315 NH1   NH1   . ARG ARG ARG B B 131 131 . 67.058  88.597  -3.611  1.00 56.43
1 . .
ATOM 4316 NH2   NH2   . ARG ARG ARG B B 131 131 . 65.879  90.132  -4.818  1.00 58.82
1 . .
ATOM 4317 C     C     . ARG ARG ARG B B 131 131 . 64.442  96.221  -1.674  1.00 37.17
1 . .
ATOM 4318 O     O     . ARG ARG ARG B B 131 131 . 63.724  96.445  -2.649  1.00 38.05
1 . .
ATOM 4319 N     N     . HIS HIS HIS B B 132 132 . 64.284  96.815  -0.503  1.00 36.70
1 . .
ATOM 4320 CA    CA    . HIS HIS HIS B B 132 132 . 63.343  97.919  -0.285  1.00 35.76
1 . .
ATOM 4321 CB    CB    . HIS HIS HIS B B 132 132 . 63.358  98.299  1.187   1.00 36.07
1 . .
ATOM 4322 CG    CG    . HIS HIS HIS B B 132 132 . 62.409  99.415  1.532   1.00 38.06
1 . .
ATOM 4323 ND1   ND1   . HIS HIS HIS B B 132 132 . 61.100  99.438  1.096   1.00 37.79
1 . .
ATOM 4324 CE1   CE1   . HIS HIS HIS B B 132 132 . 60.511  100.535 1.551   1.00 39.56
1 . .
ATOM 4325 NE2   NE2   . HIS HIS HIS B B 132 132 . 61.394  101.234 2.247   1.00 37.23
1 . .
ATOM 4326 CD2   CD2   . HIS HIS HIS B B 132 132 . 62.592  100.559 2.242   1.00 38.26
1 . .
ATOM 4327 C     C     . HIS HIS HIS B B 132 132 . 63.721  99.150  -1.097  1.00 35.08
1 . .
ATOM 4328 O     O     . HIS HIS HIS B B 132 132 . 62.880  99.761  -1.780  1.00 34.91
1 . .
ATOM 4329 N     N     . ILE ILE ILE B B 133 133 . 64.995  99.517  -0.989  1.00 35.32
1 . .
ATOM 4330 CA    CA    . ILE ILE ILE B B 133 133 . 65.616  100.584 -1.756  1.00 34.81
1 . .
ATOM 4331 CB    CB    . ILE ILE ILE B B 133 133 . 67.115  100.721 -1.392  1.00 33.95
1 . .
ATOM 4332 CG1   CG1   . ILE ILE ILE B B 133 133 . 67.263  101.448 -0.058  1.00 33.34
1 . .
ATOM 4333 CD1   CD1   . ILE ILE ILE B B 133 133 . 68.751  101.416 0.457   1.00 29.55
1 . .
ATOM 4334 CG2   CG2   . ILE ILE ILE B B 133 133 . 67.881  101.540 -2.433  1.00 32.70
1 . .
ATOM 4335 C     C     . ILE ILE ILE B B 133 133 . 65.439  100.357 -3.264  1.00 35.96
1 . .
ATOM 4336 O     O     . ILE ILE ILE B B 133 133 . 64.941  101.250 -3.968  1.00 36.25
1 . .
ATOM 4337 N     N     . ALA ALA ALA B B 134 134 . 65.830  99.173  -3.748  1.00 36.41
1 . .
ATOM 4338 CA    CA    . ALA ALA ALA B B 134 134 . 65.597  98.790  -5.143  1.00 37.82
1 . .
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ATOM 4339 CB    CB    . ALA ALA ALA B B 134 134 . 66.037  97.394  -5.388  1.00 37.94
1 . .
ATOM 4340 C     C     . ALA ALA ALA B B 134 134 . 64.131  98.946  -5.567  1.00 39.43
1 . .
ATOM 4341 O     O     . ALA ALA ALA B B 134 134 . 63.869  99.335  -6.718  1.00 40.09
1 . .
ATOM 4342 N     N     . GLN GLN GLN B B 135 135 . 63.187  98.658  -4.664  1.00 40.13
1 . .
ATOM 4343 CA    CA    . GLN GLN GLN B B 135 135 . 61.734  98.908  -4.937  1.00 41.74
1 . .
ATOM 4344 CB    CB    . GLN GLN GLN B B 135 135 . 60.821  98.170  -3.936  1.00 42.08
1 . .
ATOM 4345 CG    CG    . GLN GLN GLN B B 135 135 . 60.702  96.659  -4.171  1.00 43.93
1 . .
ATOM 4346 CD    CD    . GLN GLN GLN B B 135 135 . 59.650  95.980  -3.272  1.00 47.05
1 . .
ATOM 4347 OE1   OE1   . GLN GLN GLN B B 135 135 . 58.990  96.628  -2.438  1.00 48.68
1 . .
ATOM 4348 NE2   NE2   . GLN GLN GLN B B 135 135 . 59.496  94.662  -3.439  1.00 47.58
1 . .
ATOM 4349 C     C     . GLN GLN GLN B B 135 135 . 61.374  100.406 -4.965  1.00 41.92
1 . .
ATOM 4350 O     O     . GLN GLN GLN B B 135 135 . 60.631  100.846 -5.860  1.00 42.21
1 . .
ATOM 4351 N     N     . LEU LEU LEU B B 136 136 . 61.894  101.173 -3.995  1.00 41.24
1 . .
ATOM 4352 CA    CA    . LEU LEU LEU B B 136 136 . 61.798  102.610 -4.038  1.00 41.76
1 . .
ATOM 4353 CB    CB    . LEU LEU LEU B B 136 136 . 62.487  103.274 -2.834  1.00 41.46
1 . .
ATOM 4354 CG    CG    . LEU LEU LEU B B 136 136 . 61.901  103.118 -1.419  1.00 40.56
1 . .
ATOM 4355 CD1   CD1   . LEU LEU LEU B B 136 136 . 62.747  103.798 -0.334  1.00 38.46
1 . .
ATOM 4356 CD2   CD2   . LEU LEU LEU B B 136 136 . 60.414  103.535 -1.283  1.00 40.10
1 . .
ATOM 4357 C     C     . LEU LEU LEU B B 136 136 . 62.387  103.161 -5.333  1.00 42.85
1 . .
ATOM 4358 O     O     . LEU LEU LEU B B 136 136 . 61.954  104.200 -5.817  1.00 42.80
1 . .
ATOM 4359 N     N     . ALA ALA ALA B B 137 137 . 63.347  102.453 -5.916  1.00 44.58
1 . .
ATOM 4360 CA    CA    . ALA ALA ALA B B 137 137 . 64.074  102.977 -7.069  1.00 46.45
1 . .
ATOM 4361 CB    CB    . ALA ALA ALA B B 137 137 . 65.545  102.757 -6.891  1.00 45.89
1 . .
ATOM 4362 C     C     . ALA ALA ALA B B 137 137 . 63.611  102.424 -8.428  1.00 48.60
1 . .
ATOM 4363 O     O     . ALA ALA ALA B B 137 137 . 64.106  102.873 -9.460  1.00 48.72
1 . .
ATOM 4364 N     N     . GLY GLY GLY B B 138 138 . 62.673  101.461 -8.423  1.00 50.55
1 . .
ATOM 4365 CA    CA    . GLY GLY GLY B B 138 138 . 62.354  100.649 -9.613  1.00 52.82
1 . .
ATOM 4366 C     C     . GLY GLY GLY B B 138 138 . 63.534  99.884  -10.255 1.00 54.80
1 . .
ATOM 4367 O     O     . GLY GLY GLY B B 138 138 . 63.718  99.939  -11.487 1.00 55.37
1 . .
ATOM 4368 N     N     . ASN ASN ASN B B 139 139 . 64.347  99.198  -9.437  1.00 55.55
1 . .
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ATOM 4369 CA    CA    . ASN ASN ASN B B 139 139 . 65.391  98.279  -9.920  1.00 56.75
1 . .
ATOM 4370 CB    CB    . ASN ASN ASN B B 139 139 . 66.737  98.529  -9.224  1.00 56.54
1 . .
ATOM 4371 CG    CG    . ASN ASN ASN B B 139 139 . 67.424  99.793  -9.664  1.00 58.29
1 . .
ATOM 4372 OD1   OD1   . ASN ASN ASN B B 139 139 . 68.420  100.196 -9.040  1.00 59.57
1 . .
ATOM 4373 ND2   ND2   . ASN ASN ASN B B 139 139 . 66.932  100.427 -10.736 1.00 57.07
1 . .
ATOM 4374 C     C     . ASN ASN ASN B B 139 139 . 65.024  96.822  -9.641  1.00 57.14
1 . .
ATOM 4375 O     O     . ASN ASN ASN B B 139 139 . 64.109  96.543  -8.886  1.00 57.56
1 . .
ATOM 4376 N     N     . SER SER SER B B 140 140 . 65.785  95.886  -10.186 1.00 58.00
1 . .
ATOM 4377 CA    CA    . SER SER SER B B 140 140 . 65.651  94.496  -9.740  1.00 58.53
1 . .
ATOM 4378 CB    CB    . SER SER SER B B 140 140 . 64.458  93.807  -10.413 1.00 58.92
1 . .
ATOM 4379 OG    OG    . SER SER SER B B 140 140 . 64.354  94.174  -11.774 1.00 59.87
1 . .
ATOM 4380 C     C     . SER SER SER B B 140 140 . 66.920  93.669  -9.916  1.00 58.59
1 . .
ATOM 4381 O     O     . SER SER SER B B 140 140 . 66.987  92.519  -9.452  1.00 59.48
1 . .
ATOM 4382 N     N     . ASP ASP ASP B B 141 141 . 67.918  94.256  -10.565 1.00 57.92
1 . .
ATOM 4383 CA    CA    . ASP ASP ASP B B 141 141 . 69.154  93.566  -10.917 1.00 57.47
1 . .
ATOM 4384 CB    CB    . ASP ASP ASP B B 141 141 . 69.497  93.795  -12.417 1.00 59.45
1 . .
ATOM 4385 CG    CG    . ASP ASP ASP B B 141 141 . 69.151  95.250  -12.929 1.00 64.61
1 . .
ATOM 4386 OD1   OD1   . ASP ASP ASP B B 141 141 . 68.213  95.923  -12.365 1.00 69.18
1 . .
ATOM 4387 OD2   OD2   . ASP ASP ASP B B 141 141 . 69.834  95.718  -13.912 1.00 68.38
1 . .
ATOM 4388 C     C     . ASP ASP ASP B B 141 141 . 70.275  94.012  -9.941  1.00 55.64
1 . .
ATOM 4389 O     O     . ASP ASP ASP B B 141 141 . 71.118  94.931  -10.240 1.00 56.80
1 . .
ATOM 4390 N     N     . LEU LEU LEU B B 142 142 . 70.298  93.357  -8.781  1.00 50.62
1 . .
ATOM 4391 CA    CA    . LEU LEU LEU B B 142 142 . 70.928  93.927  -7.601  1.00 45.78
1 . .
ATOM 4392 CB    CB    . LEU LEU LEU B B 142 142 . 70.291  93.335  -6.344  1.00 43.95
1 . .
ATOM 4393 CG    CG    . LEU LEU LEU B B 142 142 . 68.750  93.430  -6.190  1.00 41.55
1 . .
ATOM 4394 CD1   CD1   . LEU LEU LEU B B 142 142 . 68.217  92.370  -5.259  1.00 38.34
1 . .
ATOM 4395 CD2   CD2   . LEU LEU LEU B B 142 142 . 68.306  94.758  -5.689  1.00 35.57
1 . .
ATOM 4396 C     C     . LEU LEU LEU B B 142 142 . 72.425  93.673  -7.629  1.00 44.18
1 . .
ATOM 4397 O     O     . LEU LEU LEU B B 142 142 . 72.943  92.940  -6.795  1.00 44.36
1 . .
ATOM 4398 N     N     . ILE ILE ILE B B 143 143 . 73.119  94.268  -8.583  1.00 41.63
1 . .
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ATOM 4399 CA    CA    . ILE ILE ILE B B 143 143 . 74.530  93.931  -8.796  1.00 40.54
1 . .
ATOM 4400 CB    CB    . ILE ILE ILE B B 143 143 . 74.983  94.405  -10.207 1.00 40.82
1 . .
ATOM 4401 CG1   CG1   . ILE ILE ILE B B 143 143 . 76.388  93.901  -10.522 1.00 42.20
1 . .
ATOM 4402 CD1   CD1   . ILE ILE ILE B B 143 143 . 76.548  93.512  -11.959 1.00 47.63
1 . .
ATOM 4403 CG2   CG2   . ILE ILE ILE B B 143 143 . 74.975  95.914  -10.281 1.00 40.86
1 . .
ATOM 4404 C     C     . ILE ILE ILE B B 143 143 . 75.473  94.439  -7.671  1.00 38.17
1 . .
ATOM 4405 O     O     . ILE ILE ILE B B 143 143 . 75.258  95.461  -7.090  1.00 38.72
1 . .
ATOM 4406 N     N     . LEU LEU LEU B B 144 144 . 76.472  93.665  -7.316  1.00 36.88
1 . .
ATOM 4407 CA    CA    . LEU LEU LEU B B 144 144 . 77.504  94.118  -6.367  1.00 34.26
1 . .
ATOM 4408 CB    CB    . LEU LEU LEU B B 144 144 . 78.248  92.942  -5.750  1.00 34.14
1 . .
ATOM 4409 CG    CG    . LEU LEU LEU B B 144 144 . 77.696  92.144  -4.548  1.00 34.64
1 . .
ATOM 4410 CD1   CD1   . LEU LEU LEU B B 144 144 . 77.514  93.054  -3.293  1.00 32.77
1 . .
ATOM 4411 CD2   CD2   . LEU LEU LEU B B 144 144 . 76.434  91.347  -4.832  1.00 33.36
1 . .
ATOM 4412 C     C     . LEU LEU LEU B B 144 144 . 78.446  95.003  -7.148  1.00 31.47
1 . .
ATOM 4413 O     O     . LEU LEU LEU B B 144 144 . 78.710  94.715  -8.306  1.00 33.27
1 . .
ATOM 4414 N     N     . PRO PRO PRO B B 145 145 . 78.906  96.093  -6.542  1.00 28.61
1 . .
ATOM 4415 CA    CA    . PRO PRO PRO B B 145 145 . 79.624  97.143  -7.169  1.00 26.95
1 . .
ATOM 4416 CB    CB    . PRO PRO PRO B B 145 145 . 79.236  98.321  -6.282  1.00 26.40
1 . .
ATOM 4417 CG    CG    . PRO PRO PRO B B 145 145 . 79.290  97.750  -4.920  1.00 27.82
1 . .
ATOM 4418 CD    CD    . PRO PRO PRO B B 145 145 . 78.657  96.418  -5.115  1.00 29.30
1 . .
ATOM 4419 C     C     . PRO PRO PRO B B 145 145 . 81.101  96.815  -7.045  1.00 25.70
1 . .
ATOM 4420 O     O     . PRO PRO PRO B B 145 145 . 81.418  96.014  -6.207  1.00 24.87
1 . .
ATOM 4421 N     N     . VAL VAL VAL B B 146 146 . 81.971  97.340  -7.910  1.00 25.25
1 . .
ATOM 4422 CA    CA    . VAL VAL VAL B B 146 146 . 83.418  97.301  -7.633  1.00 25.13
1 . .
ATOM 4423 CB    CB    . VAL VAL VAL B B 146 146 . 84.208  97.568  -8.867  1.00 25.28
1 . .
ATOM 4424 CG1   CG1   . VAL VAL VAL B B 146 146 . 85.762  97.554  -8.589  1.00 25.93
1 . .
ATOM 4425 CG2   CG2   . VAL VAL VAL B B 146 146 . 83.839  96.535  -9.970  1.00 25.61
1 . .
ATOM 4426 C     C     . VAL VAL VAL B B 146 146 . 83.730  98.382  -6.546  1.00 26.86
1 . .
ATOM 4427 O     O     . VAL VAL VAL B B 146 146 . 83.388  99.559  -6.673  1.00 26.69
1 . .
ATOM 4428 N     N     . PRO PRO PRO B B 147 147 . 84.374  97.968  -5.468  1.00 27.39
1 . .
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ATOM 4429 CA    CA    . PRO PRO PRO B B 147 147 . 84.815  98.882  -4.437  1.00 27.81
1 . .
ATOM 4430 CB    CB    . PRO PRO PRO B B 147 147 . 85.241  97.945  -3.308  1.00 27.28
1 . .
ATOM 4431 CG    CG    . PRO PRO PRO B B 147 147 . 85.586  96.653  -4.006  1.00 28.37
1 . .
ATOM 4432 CD    CD    . PRO PRO PRO B B 147 147 . 84.755  96.561  -5.208  1.00 27.73
1 . .
ATOM 4433 C     C     . PRO PRO PRO B B 147 147 . 86.023  99.642  -4.950  1.00 28.23
1 . .
ATOM 4434 O     O     . PRO PRO PRO B B 147 147 . 86.823  99.045  -5.666  1.00 29.27
1 . .
ATOM 4435 N     N     . ALA ALA ALA B B 148 148 . 86.083  100.938 -4.643  1.00 28.55
1 . .
ATOM 4436 CA    CA    . ALA ALA ALA B B 148 148 . 87.237  101.818 -4.912  1.00 29.46
1 . .
ATOM 4437 CB    CB    . ALA ALA ALA B B 148 148 . 86.741  103.116 -5.709  1.00 28.76
1 . .
ATOM 4438 C     C     . ALA ALA ALA B B 148 148 . 87.850  102.226 -3.561  1.00 29.27
1 . .
ATOM 4439 O     O     . ALA ALA ALA B B 148 148 . 87.259  103.017 -2.823  1.00 30.37
1 . .
ATOM 4440 N     N     . PHE PHE PHE B B 149 149 . 89.036  101.698 -3.267  1.00 30.16
1 . .
ATOM 4441 CA    CA    . PHE PHE PHE B B 149 149 . 89.760  101.896 -2.031  1.00 29.72
1 . .
ATOM 4442 CB    CB    . PHE PHE PHE B B 149 149 . 90.573  100.631 -1.693  1.00 30.36
1 . .
ATOM 4443 CG    CG    . PHE PHE PHE B B 149 149 . 89.743  99.353  -1.618  1.00 29.65
1 . .
ATOM 4444 CD1   CD1   . PHE PHE PHE B B 149 149 . 88.851  99.155  -0.577  1.00 28.12
1 . .
ATOM 4445 CE1   CE1   . PHE PHE PHE B B 149 149 . 88.102  98.018  -0.469  1.00 26.91
1 . .
ATOM 4446 CZ    CZ    . PHE PHE PHE B B 149 149 . 88.258  97.009  -1.424  1.00 31.00
1 . .
ATOM 4447 CE2   CE2   . PHE PHE PHE B B 149 149 . 89.160  97.188  -2.517  1.00 29.97
1 . .
ATOM 4448 CD2   CD2   . PHE PHE PHE B B 149 149 . 89.891  98.352  -2.593  1.00 29.60
1 . .
ATOM 4449 C     C     . PHE PHE PHE B B 149 149 . 90.747  103.047 -2.030  1.00 31.09
1 . .
ATOM 4450 O     O     . PHE PHE PHE B B 149 149 . 91.760  103.039 -2.755  1.00 31.19
1 . .
ATOM 4451 N     N     . ASN ASN ASN B B 150 150 . 90.535  103.990 -1.124  1.00 30.88
1 . .
ATOM 4452 CA    CA    . ASN ASN ASN B B 150 150 . 91.343  105.151 -1.089  1.00 31.96
1 . .
ATOM 4453 CB    CB    . ASN ASN ASN B B 150 150 . 90.556  106.270 -0.345  1.00 33.39
1 . .
ATOM 4454 CG    CG    . ASN ASN ASN B B 150 150 . 91.328  107.601 -0.270  1.00 34.33
1 . .
ATOM 4455 OD1   OD1   . ASN ASN ASN B B 150 150 . 90.975  108.507 0.510   1.00 34.34
1 . .
ATOM 4456 ND2   ND2   . ASN ASN ASN B B 150 150 . 92.399  107.711 -1.062  1.00 36.04
1 . .
ATOM 4457 C     C     . ASN ASN ASN B B 150 150 . 92.598  104.805 -0.355  1.00 32.19
1 . .
ATOM 4458 O     O     . ASN ASN ASN B B 150 150 . 92.533  104.781 0.852   1.00 32.48
1 . .
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ATOM 4459 N     N     . VAL VAL VAL B B 151 151 . 93.728  104.601 -1.050  1.00 31.89
1 . .
ATOM 4460 CA    CA    . VAL VAL VAL B B 151 151 . 94.944  104.047 -0.415  1.00 32.96
1 . .
ATOM 4461 CB    CB    . VAL VAL VAL B B 151 151 . 95.615  102.834 -1.168  1.00 32.53
1 . .
ATOM 4462 CG1   CG1   . VAL VAL VAL B B 151 151 . 94.716  101.627 -1.095  1.00 33.91
1 . .
ATOM 4463 CG2   CG2   . VAL VAL VAL B B 151 151 . 96.022  103.167 -2.613  1.00 32.65
1 . .
ATOM 4464 C     C     . VAL VAL VAL B B 151 151 . 96.051  104.984 -0.070  1.00 33.45
1 . .
ATOM 4465 O     O     . VAL VAL VAL B B 151 151 . 96.841  104.712 0.863   1.00 34.07
1 . .
ATOM 4466 N     N     . ILE ILE ILE B B 152 152 . 96.154  106.045 -0.843  1.00 33.08
1 . .
ATOM 4467 CA    CA    . ILE ILE ILE B B 152 152 . 97.009  107.118 -0.528  1.00 34.33
1 . .
ATOM 4468 CB    CB    . ILE ILE ILE B B 152 152 . 98.133  107.218 -1.568  1.00 33.99
1 . .
ATOM 4469 CG1   CG1   . ILE ILE ILE B B 152 152 . 99.015  105.963 -1.462  1.00 34.98
1 . .
ATOM 4470 CD1   CD1   . ILE ILE ILE B B 152 152 . 100.266 105.967 -2.305  1.00 40.48
1 . .
ATOM 4471 CG2   CG2   . ILE ILE ILE B B 152 152 . 98.831  108.531 -1.416  1.00 30.80
1 . .
ATOM 4472 C     C     . ILE ILE ILE B B 152 152 . 96.205  108.430 -0.492  1.00 36.50
1 . .
ATOM 4473 O     O     . ILE ILE ILE B B 152 152 . 95.478  108.736 -1.427  1.00 35.87
1 . .
ATOM 4474 N     N     . ASN ASN ASN B B 153 153 . 96.377  109.214 0.582   1.00 39.08
1 . .
ATOM 4475 CA    CA    . ASN ASN ASN B B 153 153 . 95.570  110.428 0.849   1.00 40.14
1 . .
ATOM 4476 CB    CB    . ASN ASN ASN B B 153 153 . 94.922  110.346 2.251   1.00 41.61
1 . .
ATOM 4477 CG    CG    . ASN ASN ASN B B 153 153 . 94.222  109.011 2.490   1.00 45.22
1 . .
ATOM 4478 OD1   OD1   . ASN ASN ASN B B 153 153 . 94.105  108.218 1.544   1.00 48.98
1 . .
ATOM 4479 ND2   ND2   . ASN ASN ASN B B 153 153 . 93.708  108.761 3.744   1.00 46.68
1 . .
ATOM 4480 C     C     . ASN ASN ASN B B 153 153 . 96.470  111.624 0.755   1.00 40.58
1 . .
ATOM 4481 O     O     . ASN ASN ASN B B 153 153 . 97.629  111.592 1.258   1.00 40.21
1 . .
ATOM 4482 N     N     . GLY GLY GLY B B 154 154 . 95.978  112.673 0.079   1.00 39.40
1 . .
ATOM 4483 CA    CA    . GLY GLY GLY B B 154 154 . 96.680  113.945 0.092   1.00 38.88
1 . .
ATOM 4484 C     C     . GLY GLY GLY B B 154 154 . 95.783  115.154 0.323   1.00 37.41
1 . .
ATOM 4485 O     O     . GLY GLY GLY B B 154 154 . 94.678  115.034 0.853   1.00 36.86
1 . .
ATOM 4486 N     N     . ASN ASN ASN B B 160 160 . 101.012 116.302 4.566   1.00 49.19
1 . .
ATOM 4487 CA    CA    . ASN ASN ASN B B 160 160 . 102.011 116.184 3.516   1.00 48.30
1 . .
ATOM 4488 CB    CB    . ASN ASN ASN B B 160 160 . 101.983 114.774 2.862   1.00 48.70
1 . .
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ATOM 4489 CG    CG    . ASN ASN ASN B B 160 160 . 100.584 114.369 2.303   1.00 51.08
1 . .
ATOM 4490 OD1   OD1   . ASN ASN ASN B B 160 160 . 99.634  115.156 2.307   1.00 52.64
1 . .
ATOM 4491 ND2   ND2   . ASN ASN ASN B B 160 160 . 100.476 113.128 1.811   1.00 52.34
1 . .
ATOM 4492 C     C     . ASN ASN ASN B B 160 160 . 101.658 117.274 2.546   1.00 47.28
1 . .
ATOM 4493 O     O     . ASN ASN ASN B B 160 160 . 100.592 117.884 2.679   1.00 47.55
1 . .
ATOM 4494 N     N     . LYS LYS LYS B B 161 161 . 102.528 117.524 1.583   1.00 45.54
1 . .
ATOM 4495 CA    CA    . LYS LYS LYS B B 161 161 . 102.287 118.528 0.573   1.00 44.90
1 . .
ATOM 4496 CB    CB    . LYS LYS LYS B B 161 161 . 103.633 119.008 0.044   1.00 45.48
1 . .
ATOM 4497 CG    CG    . LYS LYS LYS B B 161 161 . 104.528 119.592 1.138   1.00 46.73
1 . .
ATOM 4498 CD    CD    . LYS LYS LYS B B 161 161 . 105.824 120.015 0.543   1.00 49.43
1 . .
ATOM 4499 CE    CE    . LYS LYS LYS B B 161 161 . 107.003 119.762 1.510   1.00 51.88
1 . .
ATOM 4500 NZ    NZ    . LYS LYS LYS B B 161 161 . 108.265 120.392 0.950   1.00 51.78
1 . .
ATOM 4501 C     C     . LYS LYS LYS B B 161 161 . 101.393 118.080 -0.617  1.00 43.44
1 . .
ATOM 4502 O     O     . LYS LYS LYS B B 161 161 . 101.175 118.847 -1.562  1.00 43.34
1 . .
ATOM 4503 N     N     . LEU LEU LEU B B 162 162 . 100.908 116.841 -0.565  1.00 40.40
1 . .
ATOM 4504 CA    CA    . LEU LEU LEU B B 162 162 . 100.327 116.217 -1.704  1.00 37.82
1 . .
ATOM 4505 CB    CB    . LEU LEU LEU B B 162 162 . 100.247 114.704 -1.466  1.00 37.87
1 . .
ATOM 4506 CG    CG    . LEU LEU LEU B B 162 162 . 99.715  113.865 -2.642  1.00 36.67
1 . .
ATOM 4507 CD1   CD1   . LEU LEU LEU B B 162 162 . 100.641 114.008 -3.820  1.00 35.18
1 . .
ATOM 4508 CD2   CD2   . LEU LEU LEU B B 162 162 . 99.623  112.444 -2.220  1.00 35.01
1 . .
ATOM 4509 C     C     . LEU LEU LEU B B 162 162 . 98.922  116.816 -1.897  1.00 36.19
1 . .
ATOM 4510 O     O     . LEU LEU LEU B B 162 162 . 98.065  116.712 -1.012  1.00 34.60
1 . .
ATOM 4511 N     N     . ALA ALA ALA B B 163 163 . 98.733  117.451 -3.041  1.00 34.38
1 . .
ATOM 4512 CA    CA    . ALA ALA ALA B B 163 163 . 97.603  118.338 -3.260  1.00 33.77
1 . .
ATOM 4513 CB    CB    . ALA ALA ALA B B 163 163 . 97.919  119.185 -4.380  1.00 32.92
1 . .
ATOM 4514 C     C     . ALA ALA ALA B B 163 163 . 96.290  117.573 -3.515  1.00 33.33
1 . .
ATOM 4515 O     O     . ALA ALA ALA B B 163 163 . 95.185  117.929 -3.017  1.00 34.06
1 . .
ATOM 4516 N     N     . MET MET MET B B 164 164 . 96.437  116.527 -4.305  1.00 32.66
1 . .
ATOM 4517 CA    CA    . MET MET MET B B 164 164 . 95.334  115.759 -4.818  1.00 32.57
1 . .
ATOM 4518 CB    CB    . MET MET MET B B 164 164 . 95.756  115.012 -6.083  1.00 32.44
1 . .
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ATOM 4519 CG    CG    . MET MET MET B B 164 164 . 95.961  115.952 -7.237  1.00 33.85
1 . .
ATOM 4520 SD    SD    . MET MET MET B B 164 164 . 96.331  115.183 -8.828  1.00 37.50
1 . .
ATOM 4521 CE    CE    . MET MET MET B B 164 164 . 96.646  116.638 -9.854  1.00 33.69
1 . .
ATOM 4522 C     C     . MET MET MET B B 164 164 . 94.914  114.844 -3.678  1.00 31.47
1 . .
ATOM 4523 O     O     . MET MET MET B B 164 164 . 95.758  114.373 -2.942  1.00 31.00
1 . .
ATOM 4524 N     N     . GLN GLN GLN B B 165 165 . 93.601  114.700 -3.518  1.00 29.46
1 . .
ATOM 4525 CA    CA    . GLN GLN GLN B B 165 165 . 93.022  114.239 -2.296  1.00 29.60
1 . .
ATOM 4526 CB    CB    . GLN GLN GLN B B 165 165 . 91.548  114.711 -2.187  1.00 28.67
1 . .
ATOM 4527 CG    CG    . GLN GLN GLN B B 165 165 . 90.862  114.395 -0.818  1.00 30.40
1 . .
ATOM 4528 CD    CD    . GLN GLN GLN B B 165 165 . 89.406  114.901 -0.731  1.00 29.29
1 . .
ATOM 4529 OE1   OE1   . GLN GLN GLN B B 165 165 . 89.184  116.054 -0.397  1.00 30.36
1 . .
ATOM 4530 NE2   NE2   . GLN GLN GLN B B 165 165 . 88.433  114.059 -1.062  1.00 28.57
1 . .
ATOM 4531 C     C     . GLN GLN GLN B B 165 165 . 93.138  112.718 -2.096  1.00 29.51
1 . .
ATOM 4532 O     O     . GLN GLN GLN B B 165 165 . 93.460  112.313 -1.018  1.00 28.81
1 . .
ATOM 4533 N     N     . GLU GLU GLU B B 166 166 . 92.851  111.900 -3.127  1.00 29.21
1 . .
ATOM 4534 CA    CA    . GLU GLU GLU B B 166 166 . 92.687  110.448 -2.974  1.00 29.18
1 . .
ATOM 4535 CB    CB    . GLU GLU GLU B B 166 166 . 91.206  110.086 -2.839  1.00 28.81
1 . .
ATOM 4536 CG    CG    . GLU GLU GLU B B 166 166 . 90.426  110.858 -1.806  1.00 30.12
1 . .
ATOM 4537 CD    CD    . GLU GLU GLU B B 166 166 . 88.908  110.629 -1.965  1.00 31.30
1 . .
ATOM 4538 OE1   OE1   . GLU GLU GLU B B 166 166 . 88.427  109.713 -2.706  1.00 30.01
1 . .
ATOM 4539 OE2   OE2   . GLU GLU GLU B B 166 166 . 88.172  111.378 -1.342  1.00 34.48
1 . .
ATOM 4540 C     C     . GLU GLU GLU B B 166 166 . 93.171  109.705 -4.205  1.00 28.97
1 . .
ATOM 4541 O     O     . GLU GLU GLU B B 166 166 . 92.874  110.084 -5.336  1.00 28.78
1 . .
ATOM 4542 N     N     . PHE PHE PHE B B 167 167 . 93.873  108.613 -3.979  1.00 28.49
1 . .
ATOM 4543 CA    CA    . PHE PHE PHE B B 167 167 . 94.347  107.760 -5.046  1.00 28.65
1 . .
ATOM 4544 CB    CB    . PHE PHE PHE B B 167 167 . 95.896  107.737 -5.086  1.00 28.52
1 . .
ATOM 4545 CG    CG    . PHE PHE PHE B B 167 167 . 96.508  109.078 -5.409  1.00 29.92
1 . .
ATOM 4546 CD1   CD1   . PHE PHE PHE B B 167 167 . 96.613  110.047 -4.438  1.00 32.12
1 . .
ATOM 4547 CE1   CE1   . PHE PHE PHE B B 167 167 . 97.173  111.324 -4.742  1.00 32.54
1 . .
ATOM 4548 CZ    CZ    . PHE PHE PHE B B 167 167 . 97.612  111.604 -6.007  1.00 32.67
1 . .
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ATOM 4549 CE2   CE2   . PHE PHE PHE B B 167 167 . 97.506  110.622 -6.995  1.00 33.70
1 . .
ATOM 4550 CD2   CD2   . PHE PHE PHE B B 167 167 . 96.959  109.367 -6.679  1.00 32.32
1 . .
ATOM 4551 C     C     . PHE PHE PHE B B 167 167 . 93.792  106.418 -4.626  1.00 28.17
1 . .
ATOM 4552 O     O     . PHE PHE PHE B B 167 167 . 94.141  105.944 -3.563  1.00 29.46
1 . .
ATOM 4553 N     N     . MET MET MET B B 168 168 . 92.926  105.837 -5.453  1.00 26.76
1 . .
ATOM 4554 CA    CA    . MET MET MET B B 168 168 . 92.172  104.656 -5.152  1.00 25.77
1 . .
ATOM 4555 CB    CB    . MET MET MET B B 168 168 . 90.663  104.959 -5.356  1.00 25.44
1 . .
ATOM 4556 CG    CG    . MET MET MET B B 168 168 . 90.078  105.902 -4.304  1.00 28.07
1 . .
ATOM 4557 SD    SD    . MET MET MET B B 168 168 . 88.400  106.329 -4.809  1.00 35.64
1 . .
ATOM 4558 CE    CE    . MET MET MET B B 168 168 . 88.907  107.689 -5.884  1.00 34.78
1 . .
ATOM 4559 C     C     . MET MET MET B B 168 168 . 92.521  103.468 -6.033  1.00 25.65
1 . .
ATOM 4560 O     O     . MET MET MET B B 168 168 . 92.957  103.647 -7.172  1.00 24.78
1 . .
ATOM 4561 N     N     . ILE ILE ILE B B 169 169 . 92.258  102.248 -5.540  1.00 24.73
1 . .
ATOM 4562 CA    CA    . ILE ILE ILE B B 169 169 . 92.383  101.082 -6.370  1.00 24.59
1 . .
ATOM 4563 CB    CB    . ILE ILE ILE B B 169 169 . 93.388  100.092 -5.828  1.00 24.72
1 . .
ATOM 4564 CG1   CG1   . ILE ILE ILE B B 169 169 . 92.966  99.561  -4.438  1.00 23.90
1 . .
ATOM 4565 CD1   CD1   . ILE ILE ILE B B 169 169 . 93.990  98.704  -3.755  1.00 25.08
1 . .
ATOM 4566 CG2   CG2   . ILE ILE ILE B B 169 169 . 94.856  100.732 -5.861  1.00 23.53
1 . .
ATOM 4567 C     C     . ILE ILE ILE B B 169 169 . 91.022  100.464 -6.530  1.00 26.57
1 . .
ATOM 4568 O     O     . ILE ILE ILE B B 169 169 . 90.219  100.515 -5.605  1.00 27.80
1 . .
ATOM 4569 N     N     . LEU LEU LEU B B 170 170 . 90.743  99.973  -7.739  1.00 27.49
1 . .
ATOM 4570 CA    CA    . LEU LEU LEU B B 170 170 . 89.487  99.306  -8.062  1.00 29.46
1 . .
ATOM 4571 CB    CB    . LEU LEU LEU B B 170 170 . 88.690  100.117 -9.081  1.00 29.63
1 . .
ATOM 4572 CG    CG    . LEU LEU LEU B B 170 170 . 88.140  101.483 -8.686  1.00 29.83
1 . .
ATOM 4573 CD1   CD1   . LEU LEU LEU B B 170 170 . 89.184  102.555 -8.820  1.00 30.73
1 . .
ATOM 4574 CD2   CD2   . LEU LEU LEU B B 170 170 . 86.914  101.827 -9.520  1.00 34.74
1 . .
ATOM 4575 C     C     . LEU LEU LEU B B 170 170 . 89.771  97.918  -8.648  1.00 31.12
1 . .
ATOM 4576 O     O     . LEU LEU LEU B B 170 170 . 90.351  97.788  -9.770  1.00 31.91
1 . .
ATOM 4577 N     N     . PRO PRO PRO B B 171 171 . 89.346  96.869  -7.921  1.00 31.96
1 . .
ATOM 4578 CA    CA    . PRO PRO PRO B B 171 171 . 89.637  95.493  -8.386  1.00 31.67
1 . .
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ATOM 4579 CB    CB    . PRO PRO PRO B B 171 171 . 89.550  94.667  -7.096  1.00 30.31
1 . .
ATOM 4580 CG    CG    . PRO PRO PRO B B 171 171 . 89.900  95.692  -6.006  1.00 31.10
1 . .
ATOM 4581 CD    CD    . PRO PRO PRO B B 171 171 . 89.031  96.862  -6.476  1.00 31.47
1 . .
ATOM 4582 C     C     . PRO PRO PRO B B 171 171 . 88.630  95.081  -9.431  1.00 31.93
1 . .
ATOM 4583 O     O     . PRO PRO PRO B B 171 171 . 87.738  94.226  -9.183  1.00 31.13
1 . .
ATOM 4584 N     N     . VAL VAL VAL B B 172 172 . 88.755  95.706  -10.598 1.00 32.22
1 . .
ATOM 4585 CA    CA    . VAL VAL VAL B B 172 172 . 87.768  95.451  -11.658 1.00 32.80
1 . .
ATOM 4586 CB    CB    . VAL VAL VAL B B 172 172 . 87.919  96.407  -12.829 1.00 33.09
1 . .
ATOM 4587 CG1   CG1   . VAL VAL VAL B B 172 172 . 87.541  97.784  -12.327 1.00 34.23
1 . .
ATOM 4588 CG2   CG2   . VAL VAL VAL B B 172 172 . 89.372  96.404  -13.401 1.00 33.99
1 . .
ATOM 4589 C     C     . VAL VAL VAL B B 172 172 . 87.778  94.022  -12.148 1.00 32.30
1 . .
ATOM 4590 O     O     . VAL VAL VAL B B 172 172 . 86.741  93.512  -12.554 1.00 31.15
1 . .
ATOM 4591 N     N     . GLY GLY GLY B B 173 173 . 88.935  93.373  -12.059 1.00 32.95
1 . .
ATOM 4592 CA    CA    . GLY GLY GLY B B 173 173 . 89.060  91.985  -12.517 1.00 34.97
1 . .
ATOM 4593 C     C     . GLY GLY GLY B B 173 173 . 88.880  90.876  -11.488 1.00 36.52
1 . .
ATOM 4594 O     O     . GLY GLY GLY B B 173 173 . 89.192  89.706  -11.786 1.00 37.81
1 . .
ATOM 4595 N     N     . ALA ALA ALA B B 174 174 . 88.385  91.209  -10.287 1.00 36.27
1 . .
ATOM 4596 CA    CA    . ALA ALA ALA B B 174 174 . 88.119  90.202  -9.254  1.00 37.30
1 . .
ATOM 4597 CB    CB    . ALA ALA ALA B B 174 174 . 87.798  90.873  -7.933  1.00 37.65
1 . .
ATOM 4598 C     C     . ALA ALA ALA B B 174 174 . 86.947  89.332  -9.636  1.00 37.70
1 . .
ATOM 4599 O     O     . ALA ALA ALA B B 174 174 . 86.135  89.717  -10.470 1.00 38.56
1 . .
ATOM 4600 N     N     . GLU GLU GLU B B 175 175 . 86.793  88.189  -8.978  1.00 37.85
1 . .
ATOM 4601 CA    CA    . GLU GLU GLU B B 175 175 . 85.734  87.272  -9.395  1.00 38.02
1 . .
ATOM 4602 CB    CB    . GLU GLU GLU B B 175 175 . 86.143  85.845  -9.059  1.00 39.71
1 . .
ATOM 4603 CG    CG    . GLU GLU GLU B B 175 175 . 87.592  85.468  -9.438  1.00 47.01
1 . .
ATOM 4604 CD    CD    . GLU GLU GLU B B 175 175 . 87.765  85.168  -10.932 1.00 55.14
1 . .
ATOM 4605 OE1   OE1   . GLU GLU GLU B B 175 175 . 88.895  85.405  -11.450 1.00 59.49
1 . .
ATOM 4606 OE2   OE2   . GLU GLU GLU B B 175 175 . 86.783  84.702  -11.590 1.00 57.92
1 . .
ATOM 4607 C     C     . GLU GLU GLU B B 175 175 . 84.402  87.599  -8.737  1.00 36.36
1 . .
ATOM 4608 O     O     . GLU GLU GLU B B 175 175 . 83.363  87.178  -9.199  1.00 35.55
1 . .
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ATOM 4609 N     N     . SER SER SER B B 176 176 . 84.431  88.324  -7.624  1.00 34.84
1 . .
ATOM 4610 CA    CA    . SER SER SER B B 176 176 . 83.196  88.565  -6.880  1.00 34.32
1 . .
ATOM 4611 CB    CB    . SER SER SER B B 176 176 . 82.825  87.326  -6.044  1.00 33.70
1 . .
ATOM 4612 OG    OG    . SER SER SER B B 176 176 . 83.981  87.018  -5.259  1.00 35.58
1 . .
ATOM 4613 C     C     . SER SER SER B B 176 176 . 83.499  89.701  -5.900  1.00 32.67
1 . .
ATOM 4614 O     O     . SER SER SER B B 176 176 . 84.658  90.076  -5.706  1.00 32.28
1 . .
ATOM 4615 N     N     . PHE PHE PHE B B 177 177 . 82.482  90.186  -5.222  1.00 31.41
1 . .
ATOM 4616 CA    CA    . PHE PHE PHE B B 177 177 . 82.792  91.191  -4.231  1.00 31.15
1 . .
ATOM 4617 CB    CB    . PHE PHE PHE B B 177 177 . 81.560  91.758  -3.547  1.00 31.32
1 . .
ATOM 4618 CG    CG    . PHE PHE PHE B B 177 177 . 81.871  93.008  -2.799  1.00 30.72
1 . .
ATOM 4619 CD1   CD1   . PHE PHE PHE B B 177 177 . 81.781  94.239  -3.444  1.00 30.39
1 . .
ATOM 4620 CE1   CE1   . PHE PHE PHE B B 177 177 . 82.111  95.407  -2.772  1.00 32.87
1 . .
ATOM 4621 CZ    CZ    . PHE PHE PHE B B 177 177 . 82.586  95.352  -1.437  1.00 30.20
1 . .
ATOM 4622 CE2   CE2   . PHE PHE PHE B B 177 177 . 82.670  94.131  -0.785  1.00 29.26
1 . .
ATOM 4623 CD2   CD2   . PHE PHE PHE B B 177 177 . 82.335  92.951  -1.476  1.00 28.27
1 . .
ATOM 4624 C     C     . PHE PHE PHE B B 177 177 . 83.808  90.745  -3.172  1.00 30.65
1 . .
ATOM 4625 O     O     . PHE PHE PHE B B 177 177 . 84.759  91.467  -2.900  1.00 31.25
1 . .
ATOM 4626 N     N     . ARG ARG ARG B B 178 178 . 83.602  89.552  -2.622  1.00 29.44
1 . .
ATOM 4627 CA    CA    . ARG ARG ARG B B 178 178 . 84.429  89.011  -1.591  1.00 29.55
1 . .
ATOM 4628 CB    CB    . ARG ARG ARG B B 178 178 . 83.989  87.554  -1.361  1.00 30.96
1 . .
ATOM 4629 CG    CG    . ARG ARG ARG B B 178 178 . 83.660  87.179  0.089   1.00 38.75
1 . .
ATOM 4630 CD    CD    . ARG ARG ARG B B 178 178 . 82.049  87.301  0.381   1.00 44.76
1 . .
ATOM 4631 NE    NE    . ARG ARG ARG B B 178 178 . 81.219  86.845  -0.757  1.00 51.53
1 . .
ATOM 4632 CZ    CZ    . ARG ARG ARG B B 178 178 . 80.398  85.768  -0.805  1.00 54.94
1 . .
ATOM 4633 NH1   NH1   . ARG ARG ARG B B 178 178 . 80.186  84.963  0.228   1.00 56.88
1 . .
ATOM 4634 NH2   NH2   . ARG ARG ARG B B 178 178 . 79.753  85.482  -1.923  1.00 56.86
1 . .
ATOM 4635 C     C     . ARG ARG ARG B B 178 178 . 85.863  88.981  -2.075  1.00 27.75
1 . .
ATOM 4636 O     O     . ARG ARG ARG B B 178 178 . 86.804  89.202  -1.301  1.00 26.88
1 . .
ATOM 4637 N     N     . ASP ASP ASP B B 179 179 . 86.015  88.671  -3.367  1.00 28.15
1 . .
ATOM 4638 CA    CA    . ASP ASP ASP B B 179 179 . 87.342  88.505  -4.033  1.00 28.48
1 . .
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ATOM 4639 CB    CB    . ASP ASP ASP B B 179 179 . 87.242  87.701  -5.372  1.00 29.39
1 . .
ATOM 4640 CG    CG    . ASP ASP ASP B B 179 179 . 88.624  87.362  -5.949  1.00 32.86
1 . .
ATOM 4641 OD1   OD1   . ASP ASP ASP B B 179 179 . 88.909  87.608  -7.170  1.00 37.71
1 . .
ATOM 4642 OD2   OD2   . ASP ASP ASP B B 179 179 . 89.457  86.875  -5.149  1.00 37.18
1 . .
ATOM 4643 C     C     . ASP ASP ASP B B 179 179 . 88.010  89.861  -4.189  1.00 27.25
1 . .
ATOM 4644 O     O     . ASP ASP ASP B B 179 179 . 89.248  90.046  -3.947  1.00 26.07
1 . .
ATOM 4645 N     N     . ALA ALA ALA B B 180 180 . 87.167  90.839  -4.496  1.00 27.11
1 . .
ATOM 4646 CA    CA    . ALA ALA ALA B B 180 180 . 87.625  92.246  -4.605  1.00 26.90
1 . .
ATOM 4647 CB    CB    . ALA ALA ALA B B 180 180 . 86.459  93.137  -5.056  1.00 27.77
1 . .
ATOM 4648 C     C     . ALA ALA ALA B B 180 180 . 88.197  92.750  -3.283  1.00 26.84
1 . .
ATOM 4649 O     O     . ALA ALA ALA B B 180 180 . 89.254  93.424  -3.247  1.00 25.47
1 . .
ATOM 4650 N     N     . MET MET MET B B 181 181 . 87.511  92.393  -2.188  1.00 26.22
1 . .
ATOM 4651 CA    CA    . MET MET MET B B 181 181 . 88.000  92.786  -0.876  1.00 26.02
1 . .
ATOM 4652 CB    CB    . MET MET MET B B 181 181 . 87.066  92.329  0.232   1.00 26.03
1 . .
ATOM 4653 CG    CG    . MET MET MET B B 181 181 . 85.629  92.985  0.135   1.00 24.30
1 . .
ATOM 4654 SD    SD    . MET MET MET B B 181 181 . 85.783  94.799  0.383   1.00 32.77
1 . .
ATOM 4655 CE    CE    . MET MET MET B B 181 181 . 87.123  95.084  1.615   1.00 25.00
1 . .
ATOM 4656 C     C     . MET MET MET B B 181 181 . 89.373  92.203  -0.633  1.00 26.91
1 . .
ATOM 4657 O     O     . MET MET MET B B 181 181 . 90.241  92.884  -0.090  1.00 27.85
1 . .
ATOM 4658 N     N     . ARG ARG ARG B B 182 182 . 89.548  90.922  -0.974  1.00 28.06
1 . .
ATOM 4659 CA    CA    . ARG ARG ARG B B 182 182 . 90.820  90.268  -0.752  1.00 28.69
1 . .
ATOM 4660 CB    CB    . ARG ARG ARG B B 182 182 . 90.745  88.766  -1.085  1.00 29.14
1 . .
ATOM 4661 CG    CG    . ARG ARG ARG B B 182 182 . 92.101  88.028  -0.926  1.00 32.74
1 . .
ATOM 4662 CD    CD    . ARG ARG ARG B B 182 182 . 92.026  86.560  -1.227  1.00 40.08
1 . .
ATOM 4663 NE    NE    . ARG ARG ARG B B 182 182 . 91.666  86.304  -2.618  1.00 45.08
1 . .
ATOM 4664 CZ    CZ    . ARG ARG ARG B B 182 182 . 92.527  86.428  -3.625  1.00 50.26
1 . .
ATOM 4665 NH1   NH1   . ARG ARG ARG B B 182 182 . 93.787  86.811  -3.360  1.00 52.07
1 . .
ATOM 4666 NH2   NH2   . ARG ARG ARG B B 182 182 . 92.136  86.185  -4.893  1.00 51.10
1 . .
ATOM 4667 C     C     . ARG ARG ARG B B 182 182 . 91.909  90.941  -1.559  1.00 28.75
1 . .
ATOM 4668 O     O     . ARG ARG ARG B B 182 182 . 93.009  91.153  -1.066  1.00 29.72
1 . .
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ATOM 4669 N     N     . LEU LEU LEU B B 183 183 . 91.620  91.259  -2.827  1.00 29.58
1 . .
ATOM 4670 CA    CA    . LEU LEU LEU B B 183 183 . 92.619  91.943  -3.657  1.00 28.40
1 . .
ATOM 4671 CB    CB    . LEU LEU LEU B B 183 183 . 92.162  92.090  -5.119  1.00 28.06
1 . .
ATOM 4672 CG    CG    . LEU LEU LEU B B 183 183 . 91.770  90.932  -6.053  1.00 29.89
1 . .
ATOM 4673 CD1   CD1   . LEU LEU LEU B B 183 183 . 91.973  91.335  -7.507  1.00 29.00
1 . .
ATOM 4674 CD2   CD2   . LEU LEU LEU B B 183 183 . 92.369  89.584  -5.754  1.00 30.83
1 . .
ATOM 4675 C     C     . LEU LEU LEU B B 183 183 . 92.918  93.312  -3.071  1.00 27.65
1 . .
ATOM 4676 O     O     . LEU LEU LEU B B 183 183 . 94.085  93.696  -2.934  1.00 26.95
1 . .
ATOM 4677 N     N     . GLY GLY GLY B B 184 184 . 91.883  94.056  -2.676  1.00 25.95
1 . .
ATOM 4678 CA    CA    . GLY GLY GLY B B 184 184 . 92.175  95.386  -2.126  1.00 25.98
1 . .
ATOM 4679 C     C     . GLY GLY GLY B B 184 184 . 93.048  95.294  -0.858  1.00 26.98
1 . .
ATOM 4680 O     O     . GLY GLY GLY B B 184 184 . 94.009  96.081  -0.678  1.00 26.08
1 . .
ATOM 4681 N     N     . ALA ALA ALA B B 185 185 . 92.717  94.334  0.025   1.00 27.07
1 . .
ATOM 4682 CA    CA    . ALA ALA ALA B B 185 185 . 93.440  94.205  1.252   1.00 27.82
1 . .
ATOM 4683 CB    CB    . ALA ALA ALA B B 185 185 . 92.787  93.156  2.152   1.00 27.83
1 . .
ATOM 4684 C     C     . ALA ALA ALA B B 185 185 . 94.915  93.874  0.984   1.00 29.07
1 . .
ATOM 4685 O     O     . ALA ALA ALA B B 185 185 . 95.775  94.471  1.624   1.00 29.89
1 . .
ATOM 4686 N     N     . GLU GLU GLU B B 186 186 . 95.194  92.956  0.037   1.00 29.10
1 . .
ATOM 4687 CA    CA    . GLU GLU GLU B B 186 186 . 96.570  92.495  -0.221  1.00 29.63
1 . .
ATOM 4688 CB    CB    . GLU GLU GLU B B 186 186 . 96.651  91.239  -1.130  1.00 30.68
1 . .
ATOM 4689 CG    CG    . GLU GLU GLU B B 186 186 . 96.112  89.966  -0.452  1.00 34.11
1 . .
ATOM 4690 CD    CD    . GLU GLU GLU B B 186 186 . 95.951  88.741  -1.363  1.00 38.25
1 . .
ATOM 4691 OE1   OE1   . GLU GLU GLU B B 186 186 . 96.482  88.714  -2.492  1.00 40.22
1 . .
ATOM 4692 OE2   OE2   . GLU GLU GLU B B 186 186 . 95.262  87.777  -0.934  1.00 39.61
1 . .
ATOM 4693 C     C     . GLU GLU GLU B B 186 186 . 97.395  93.602  -0.820  1.00 28.68
1 . .
ATOM 4694 O     O     . GLU GLU GLU B B 186 186 . 98.557  93.783  -0.464  1.00 27.71
1 . .
ATOM 4695 N     N     . VAL VAL VAL B B 187 187 . 96.771  94.355  -1.724  1.00 28.06
1 . .
ATOM 4696 CA    CA    . VAL VAL VAL B B 187 187 . 97.452  95.495  -2.297  1.00 27.00
1 . .
ATOM 4697 CB    CB    . VAL VAL VAL B B 187 187 . 96.638  96.092  -3.417  1.00 26.92
1 . .
ATOM 4698 CG1   CG1   . VAL VAL VAL B B 187 187 . 97.298  97.356  -3.920  1.00 25.95
1 . .
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ATOM 4699 CG2   CG2   . VAL VAL VAL B B 187 187 . 96.488  95.032  -4.523  1.00 25.36
1 . .
ATOM 4700 C     C     . VAL VAL VAL B B 187 187 . 97.750  96.538  -1.241  1.00 27.73
1 . .
ATOM 4701 O     O     . VAL VAL VAL B B 187 187 . 98.881  97.056  -1.181  1.00 27.60
1 . .
ATOM 4702 N     N     . TYR TYR TYR B B 188 188 . 96.740  96.836  -0.409  1.00 26.66
1 . .
ATOM 4703 CA    CA    . TYR TYR TYR B B 188 188 . 96.923  97.711  0.725   1.00 27.18
1 . .
ATOM 4704 CB    CB    . TYR TYR TYR B B 188 188 . 95.626  97.797  1.541   1.00 26.69
1 . .
ATOM 4705 CG    CG    . TYR TYR TYR B B 188 188 . 95.676  98.750  2.695   1.00 24.72
1 . .
ATOM 4706 CD1   CD1   . TYR TYR TYR B B 188 188 . 95.643  100.126 2.500   1.00 25.27
1 . .
ATOM 4707 CE1   CE1   . TYR TYR TYR B B 188 188 . 95.684  101.041 3.623   1.00 25.72
1 . .
ATOM 4708 CZ    CZ    . TYR TYR TYR B B 188 188 . 95.761  100.504 4.899   1.00 25.63
1 . .
ATOM 4709 OH    OH    . TYR TYR TYR B B 188 188 . 95.813  101.274 6.044   1.00 27.76
1 . .
ATOM 4710 CE2   CE2   . TYR TYR TYR B B 188 188 . 95.789  99.128  5.085   1.00 25.08
1 . .
ATOM 4711 CD2   CD2   . TYR TYR TYR B B 188 188 . 95.762  98.268  4.000   1.00 23.79
1 . .
ATOM 4712 C     C     . TYR TYR TYR B B 188 188 . 98.096  97.340  1.639   1.00 27.92
1 . .
ATOM 4713 O     O     . TYR TYR TYR B B 188 188 . 98.999  98.164  1.877   1.00 29.31
1 . .
ATOM 4714 N     N     . HIS HIS HIS B B 189 189 . 98.090  96.125  2.157   1.00 27.58
1 . .
ATOM 4715 CA    CA    . HIS HIS HIS B B 189 189 . 99.191  95.710  3.017   1.00 29.01
1 . .
ATOM 4716 CB    CB    . HIS HIS HIS B B 189 189 . 98.904  94.339  3.642   1.00 29.65
1 . .
ATOM 4717 CG    CG    . HIS HIS HIS B B 189 189 . 97.728  94.344  4.540   1.00 32.65
1 . .
ATOM 4718 ND1   ND1   . HIS HIS HIS B B 189 189 . 97.803  94.735  5.857   1.00 37.64
1 . .
ATOM 4719 CE1   CE1   . HIS HIS HIS B B 189 189 . 96.591  94.681  6.392   1.00 37.47
1 . .
ATOM 4720 NE2   NE2   . HIS HIS HIS B B 189 189 . 95.740  94.266  5.469   1.00 36.04
1 . .
ATOM 4721 CD2   CD2   . HIS HIS HIS B B 189 189 . 96.425  94.053  4.301   1.00 33.82
1 . .
ATOM 4722 C     C     . HIS HIS HIS B B 189 189 . 100.519 95.671  2.230   1.00 28.90
1 . .
ATOM 4723 O     O     . HIS HIS HIS B B 189 189 . 101.536 95.922  2.788   1.00 29.34
1 . .
ATOM 4724 N     N     . THR THR THR B B 190 190 . 100.496 95.340  0.933   1.00 29.96
1 . .
ATOM 4725 CA    CA    . THR THR THR B B 190 190 . 101.717 95.399  0.119   1.00 29.93
1 . .
ATOM 4726 CB    CB    . THR THR THR B B 190 190 . 101.473 94.840  -1.273  1.00 30.03
1 . .
ATOM 4727 OG1   OG1   . THR THR THR B B 190 190 . 100.981 93.499  -1.151  1.00 32.32
1 . .
ATOM 4728 CG2   CG2   . THR THR THR B B 190 190 . 102.779 94.825  -2.097  1.00 28.17
1 . .
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ATOM 4729 C     C     . THR THR THR B B 190 190 . 102.249 96.840  0.030   1.00 30.01
1 . .
ATOM 4730 O     O     . THR THR THR B B 190 190 . 103.452 97.067  0.224   1.00 29.79
1 . .
ATOM 4731 N     N     . LEU LEU LEU B B 191 191 . 101.339 97.793  -0.236  1.00 28.23
1 . .
ATOM 4732 CA    CA    . LEU LEU LEU B B 191 191 . 101.673 99.224  -0.326  1.00 29.20
1 . .
ATOM 4733 CB    CB    . LEU LEU LEU B B 191 191 . 100.391 100.043 -0.567  1.00 28.86
1 . .
ATOM 4734 CG    CG    . LEU LEU LEU B B 191 191 . 100.483 101.570 -0.568  1.00 27.91
1 . .
ATOM 4735 CD1   CD1   . LEU LEU LEU B B 191 191 . 101.534 102.093 -1.530  1.00 26.42
1 . .
ATOM 4736 CD2   CD2   . LEU LEU LEU B B 191 191 . 99.080  102.199 -0.846  1.00 24.54
1 . .
ATOM 4737 C     C     . LEU LEU LEU B B 191 191 . 102.361 99.758  0.925   1.00 30.27
1 . .
ATOM 4738 O     O     . LEU LEU LEU B B 191 191 . 103.418 100.465 0.856   1.00 28.93
1 . .
ATOM 4739 N     N     . LYS LYS LYS B B 192 192 . 101.758 99.398  2.074   1.00 30.80
1 . .
ATOM 4740 CA    CA    . LYS LYS LYS B B 192 192 . 102.371 99.729  3.349   1.00 31.40
1 . .
ATOM 4741 CB    CB    . LYS LYS LYS B B 192 192 . 101.752 98.946  4.492   1.00 30.88
1 . .
ATOM 4742 CG    CG    . LYS LYS LYS B B 192 192 . 102.121 99.507  5.867   1.00 34.14
1 . .
ATOM 4743 CD    CD    . LYS LYS LYS B B 192 192 . 101.373 98.778  7.019   1.00 41.17
1 . .
ATOM 4744 CE    CE    . LYS LYS LYS B B 192 192 . 101.597 99.486  8.390   1.00 44.72
1 . .
ATOM 4745 NZ    NZ    . LYS LYS LYS B B 192 192 . 100.485 99.192  9.416   1.00 47.77
1 . .
ATOM 4746 C     C     . LYS LYS LYS B B 192 192 . 103.874 99.421  3.303   1.00 31.57
1 . .
ATOM 4747 O     O     . LYS LYS LYS B B 192 192 . 104.670 100.234 3.711   1.00 30.98
1 . .
ATOM 4748 N     N     . GLY GLY GLY B B 193 193 . 104.232 98.221  2.882   1.00 32.83
1 . .
ATOM 4749 CA    CA    . GLY GLY GLY B B 193 193 . 105.646 97.831  2.836   1.00 35.26
1 . .
ATOM 4750 C     C     . GLY GLY GLY B B 193 193 . 106.444 98.625  1.829   1.00 36.09
1 . .
ATOM 4751 O     O     . GLY GLY GLY B B 193 193 . 107.575 99.039  2.084   1.00 37.36
1 . .
ATOM 4752 N     N     . VAL VAL VAL B B 194 194 . 105.862 98.829  0.660   1.00 37.40
1 . .
ATOM 4753 CA    CA    . VAL VAL VAL B B 194 194 . 106.523 99.649  -0.368  1.00 38.05
1 . .
ATOM 4754 CB    CB    . VAL VAL VAL B B 194 194 . 105.662 99.777  -1.586  1.00 38.41
1 . .
ATOM 4755 CG1   CG1   . VAL VAL VAL B B 194 194 . 106.190 100.900 -2.509  1.00 38.83
1 . .
ATOM 4756 CG2   CG2   . VAL VAL VAL B B 194 194 . 105.594 98.434  -2.290  1.00 38.52
1 . .
ATOM 4757 C     C     . VAL VAL VAL B B 194 194 . 106.810 101.030 0.160   1.00 38.32
1 . .
ATOM 4758 O     O     . VAL VAL VAL B B 194 194 . 107.892 101.614 -0.097  1.00 39.75
1 . .
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ATOM 4759 N     N     . ILE ILE ILE B B 195 195 . 105.864 101.553 0.930   1.00 37.09
1 . .
ATOM 4760 CA    CA    . ILE ILE ILE B B 195 195 . 106.101 102.830 1.569   1.00 35.61
1 . .
ATOM 4761 CB    CB    . ILE ILE ILE B B 195 195 . 104.825 103.484 2.169   1.00 34.92
1 . .
ATOM 4762 CG1   CG1   . ILE ILE ILE B B 195 195 . 103.918 103.959 1.053   1.00 34.04
1 . .
ATOM 4763 CD1   CD1   . ILE ILE ILE B B 195 195 . 102.425 104.134 1.509   1.00 31.41
1 . .
ATOM 4764 CG2   CG2   . ILE ILE ILE B B 195 195 . 105.214 104.678 3.001   1.00 30.77
1 . .
ATOM 4765 C     C     . ILE ILE ILE B B 195 195 . 107.169 102.731 2.638   1.00 36.39
1 . .
ATOM 4766 O     O     . ILE ILE ILE B B 195 195 . 108.085 103.547 2.655   1.00 36.62
1 . .
ATOM 4767 N     N     . LYS LYS LYS B B 196 196 . 107.063 101.750 3.532   1.00 36.64
1 . .
ATOM 4768 CA    CA    . LYS LYS LYS B B 196 196 . 108.036 101.647 4.614   1.00 37.90
1 . .
ATOM 4769 CB    CB    . LYS LYS LYS B B 196 196 . 107.665 100.516 5.593   1.00 37.88
1 . .
ATOM 4770 CG    CG    . LYS LYS LYS B B 196 196 . 108.709 100.256 6.697   1.00 41.23
1 . .
ATOM 4771 CD    CD    . LYS LYS LYS B B 196 196 . 108.475 98.954  7.446   1.00 47.82
1 . .
ATOM 4772 CE    CE    . LYS LYS LYS B B 196 196 . 107.572 99.136  8.676   1.00 53.21
1 . .
ATOM 4773 NZ    NZ    . LYS LYS LYS B B 196 196 . 107.849 98.086  9.772   1.00 56.43
1 . .
ATOM 4774 C     C     . LYS LYS LYS B B 196 196 . 109.476 101.511 4.029   1.00 39.01
1 . .
ATOM 4775 O     O     . LYS LYS LYS B B 196 196 . 110.387 102.202 4.488   1.00 37.84
1 . .
ATOM 4776 N     N     . ASP ASP ASP B B 197 197 . 109.638 100.668 2.993   1.00 40.80
1 . .
ATOM 4777 CA    CA    . ASP ASP ASP B B 197 197 . 110.933 100.450 2.345   1.00 42.80
1 . .
ATOM 4778 CB    CB    . ASP ASP ASP B B 197 197 . 110.891 99.333  1.265   1.00 44.32
1 . .
ATOM 4779 CG    CG    . ASP ASP ASP B B 197 197 . 110.514 97.926  1.840   1.00 47.16
1 . .
ATOM 4780 OD1   OD1   . ASP ASP ASP B B 197 197 . 110.235 96.966  1.044   1.00 47.38
1 . .
ATOM 4781 OD2   OD2   . ASP ASP ASP B B 197 197 . 110.474 97.785  3.092   1.00 52.93
1 . .
ATOM 4782 C     C     . ASP ASP ASP B B 197 197 . 111.471 101.759 1.743   1.00 42.84
1 . .
ATOM 4783 O     O     . ASP ASP ASP B B 197 197 . 112.682 102.008 1.814   1.00 42.14
1 . .
ATOM 4784 N     N     . LYS LYS LYS B B 198 198 . 110.581 102.606 1.204   1.00 42.82
1 . .
ATOM 4785 CA    CA    . LYS LYS LYS B B 198 198 . 111.027 103.814 0.466   1.00 42.42
1 . .
ATOM 4786 CB    CB    . LYS LYS LYS B B 198 198 . 110.104 104.125 -0.712  1.00 42.75
1 . .
ATOM 4787 CG    CG    . LYS LYS LYS B B 198 198 . 110.620 105.202 -1.694  1.00 42.32
1 . .
ATOM 4788 CD    CD    . LYS LYS LYS B B 198 198 . 109.977 105.018 -3.072  1.00 42.66
1 . .
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ATOM 4789 CE    CE    . LYS LYS LYS B B 198 198 . 110.577 105.895 -4.192  1.00 43.63
1 . .
ATOM 4790 NZ    NZ    . LYS LYS LYS B B 198 198 . 110.343 107.367 -4.066  1.00 44.90
1 . .
ATOM 4791 C     C     . LYS LYS LYS B B 198 198 . 111.166 105.051 1.316   1.00 42.49
1 . .
ATOM 4792 O     O     . LYS LYS LYS B B 198 198 . 112.058 105.876 1.064   1.00 42.56
1 . .
ATOM 4793 N     N     . TYR TYR TYR B B 199 199 . 110.284 105.166 2.311   1.00 41.63
1 . .
ATOM 4794 CA    CA    . TYR TYR TYR B B 199 199 . 110.135 106.385 3.092   1.00 41.98
1 . .
ATOM 4795 CB    CB    . TYR TYR TYR B B 199 199 . 108.725 107.029 2.854   1.00 42.04
1 . .
ATOM 4796 CG    CG    . TYR TYR TYR B B 199 199 . 108.540 107.497 1.409   1.00 42.65
1 . .
ATOM 4797 CD1   CD1   . TYR TYR TYR B B 199 199 . 107.724 106.786 0.502   1.00 43.34
1 . .
ATOM 4798 CE1   CE1   . TYR TYR TYR B B 199 199 . 107.607 107.215 -0.841  1.00 41.59
1 . .
ATOM 4799 CZ    CZ    . TYR TYR TYR B B 199 199 . 108.317 108.348 -1.269  1.00 40.41
1 . .
ATOM 4800 OH    OH    . TYR TYR TYR B B 199 199 . 108.222 108.794 -2.556  1.00 40.63
1 . .
ATOM 4801 CE2   CE2   . TYR TYR TYR B B 199 199 . 109.121 109.049 -0.409  1.00 40.47
1 . .
ATOM 4802 CD2   CD2   . TYR TYR TYR B B 199 199 . 109.232 108.630 0.922   1.00 43.19
1 . .
ATOM 4803 C     C     . TYR TYR TYR B B 199 199 . 110.426 106.240 4.589   1.00 41.44
1 . .
ATOM 4804 O     O     . TYR TYR TYR B B 199 199 . 110.648 107.225 5.253   1.00 40.86
1 . .
ATOM 4805 N     N     . GLY GLY GLY B B 200 200 . 110.467 105.017 5.105   1.00 41.56
1 . .
ATOM 4806 CA    CA    . GLY GLY GLY B B 200 200 . 110.570 104.835 6.538   1.00 42.37
1 . .
ATOM 4807 C     C     . GLY GLY GLY B B 200 200 . 109.252 104.450 7.186   1.00 43.32
1 . .
ATOM 4808 O     O     . GLY GLY GLY B B 200 200 . 108.156 104.630 6.605   1.00 43.72
1 . .
ATOM 4809 N     N     . LYS LYS LYS B B 201 201 . 109.350 103.920 8.393   1.00 43.70
1 . .
ATOM 4810 CA    CA    . LYS LYS LYS B B 201 201 . 108.190 103.443 9.091   1.00 44.72
1 . .
ATOM 4811 CB    CB    . LYS LYS LYS B B 201 201 . 108.598 102.622 10.319  1.00 45.03
1 . .
ATOM 4812 CG    CG    . LYS LYS LYS B B 201 201 . 108.951 103.436 11.516  1.00 47.43
1 . .
ATOM 4813 CD    CD    . LYS LYS LYS B B 201 201 . 110.044 102.781 12.357  1.00 48.51
1 . .
ATOM 4814 CE    CE    . LYS LYS LYS B B 201 201 . 110.822 103.870 13.128  1.00 49.43
1 . .
ATOM 4815 NZ    NZ    . LYS LYS LYS B B 201 201 . 112.324 103.773 13.003  1.00 48.17
1 . .
ATOM 4816 C     C     . LYS LYS LYS B B 201 201 . 107.250 104.612 9.392   1.00 44.47
1 . .
ATOM 4817 O     O     . LYS LYS LYS B B 201 201 . 106.036 104.463 9.284   1.00 45.25
1 . .
ATOM 4818 N     N     . ASP ASP ASP B B 202 202 . 107.819 105.792 9.647   1.00 44.25
1 . .
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ATOM 4819 CA    CA    . ASP ASP ASP B B 202 202 . 107.047 107.027 9.995   1.00 43.51
1 . .
ATOM 4820 CB    CB    . ASP ASP ASP B B 202 202 . 107.980 108.229 10.173  1.00 44.82
1 . .
ATOM 4821 CG    CG    . ASP ASP ASP B B 202 202 . 108.878 108.110 11.405  1.00 48.72
1 . .
ATOM 4822 OD1   OD1   . ASP ASP ASP B B 202 202 . 108.849 107.063 12.116  1.00 53.63
1 . .
ATOM 4823 OD2   OD2   . ASP ASP ASP B B 202 202 . 109.632 109.079 11.666  1.00 53.34
1 . .
ATOM 4824 C     C     . ASP ASP ASP B B 202 202 . 105.977 107.428 8.991   1.00 41.46
1 . .
ATOM 4825 O     O     . ASP ASP ASP B B 202 202 . 105.053 108.204 9.317   1.00 41.23
1 . .
ATOM 4826 N     N     . ALA ALA ALA B B 203 203 . 106.128 106.918 7.771   1.00 38.26
1 . .
ATOM 4827 CA    CA    . ALA ALA ALA B B 203 203 . 105.339 107.333 6.646   1.00 35.75
1 . .
ATOM 4828 CB    CB    . ALA ALA ALA B B 203 203 . 106.172 107.239 5.368   1.00 35.30
1 . .
ATOM 4829 C     C     . ALA ALA ALA B B 203 203 . 104.148 106.435 6.497   1.00 34.60
1 . .
ATOM 4830 O     O     . ALA ALA ALA B B 203 203 . 103.415 106.589 5.539   1.00 33.95
1 . .
ATOM 4831 N     N     . THR THR THR B B 204 204 . 103.978 105.477 7.416   1.00 33.33
1 . .
ATOM 4832 CA    CA    . THR THR THR B B 204 204 . 103.017 104.409 7.205   1.00 32.08
1 . .
ATOM 4833 CB    CB    . THR THR THR B B 204 204 . 103.658 103.048 7.419   1.00 31.73
1 . .
ATOM 4834 OG1   OG1   . THR THR THR B B 204 204 . 104.121 102.984 8.761   1.00 29.89
1 . .
ATOM 4835 CG2   CG2   . THR THR THR B B 204 204 . 104.864 102.808 6.450   1.00 33.35
1 . .
ATOM 4836 C     C     . THR THR THR B B 204 204 . 101.801 104.486 8.134   1.00 30.99
1 . .
ATOM 4837 O     O     . THR THR THR B B 204 204 . 101.140 103.486 8.288   1.00 29.22
1 . .
ATOM 4838 N     N     . ASN ASN ASN B B 205 205 . 101.573 105.640 8.776   1.00 30.82
1 . .
ATOM 4839 CA    CA    . ASN ASN ASN B B 205 205 . 100.433 105.858 9.679   1.00 30.90
1 . .
ATOM 4840 CB    CB    . ASN ASN ASN B B 205 205 . 100.751 106.900 10.708  1.00 29.69
1 . .
ATOM 4841 CG    CG    . ASN ASN ASN B B 205 205 . 101.921 106.468 11.570  1.00 32.02
1 . .
ATOM 4842 OD1   OD1   . ASN ASN ASN B B 205 205 . 101.864 105.428 12.216  1.00 35.17
1 . .
ATOM 4843 ND2   ND2   . ASN ASN ASN B B 205 205 . 102.999 107.239 11.550  1.00 28.74
1 . .
ATOM 4844 C     C     . ASN ASN ASN B B 205 205 . 99.207  106.210 8.847   1.00 30.81
1 . .
ATOM 4845 O     O     . ASN ASN ASN B B 205 205 . 99.341  106.388 7.656   1.00 30.39
1 . .
ATOM 4846 N     N     . VAL VAL VAL B B 206 206 . 98.002  106.263 9.405   1.00 30.70
1 . .
ATOM 4847 CA    CA    . VAL VAL VAL B B 206 206 . 96.910  106.513 8.447   1.00 30.01
1 . .
ATOM 4848 CB    CB    . VAL VAL VAL B B 206 206 . 95.914  105.361 8.357   1.00 30.74
1 . .
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ATOM 4849 CG1   CG1   . VAL VAL VAL B B 206 206 . 96.607  104.090 7.934   1.00 29.20
1 . .
ATOM 4850 CG2   CG2   . VAL VAL VAL B B 206 206 . 95.102  105.197 9.654   1.00 29.05
1 . .
ATOM 4851 C     C     . VAL VAL VAL B B 206 206 . 96.215  107.854 8.560   1.00 30.75
1 . .
ATOM 4852 O     O     . VAL VAL VAL B B 206 206 . 96.243  108.504 9.610   1.00 31.36
1 . .
ATOM 4853 N     N     . GLY GLY GLY B B 207 207 . 95.624  108.291 7.464   1.00 30.34
1 . .
ATOM 4854 CA    CA    . GLY GLY GLY B B 207 207 . 94.777  109.470 7.509   1.00 29.77
1 . .
ATOM 4855 C     C     . GLY GLY GLY B B 207 207 . 93.307  109.081 7.802   1.00 29.50
1 . .
ATOM 4856 O     O     . GLY GLY GLY B B 207 207 . 92.966  107.954 8.184   1.00 27.92
1 . .
ATOM 4857 N     N     . ASP ASP ASP B B 208 208 . 92.448  110.056 7.584   1.00 29.44
1 . .
ATOM 4858 CA    CA    . ASP ASP ASP B B 208 208 . 91.019  109.998 7.909   1.00 28.81
1 . .
ATOM 4859 CB    CB    . ASP ASP ASP B B 208 208 . 90.365  111.310 7.437   1.00 28.67
1 . .
ATOM 4860 CG    CG    . ASP ASP ASP B B 208 208 . 90.665  112.506 8.391   1.00 30.54
1 . .
ATOM 4861 OD1   OD1   . ASP ASP ASP B B 208 208 . 91.143  112.310 9.559   1.00 30.76
1 . .
ATOM 4862 OD2   OD2   . ASP ASP ASP B B 208 208 . 90.377  113.643 7.974   1.00 32.39
1 . .
ATOM 4863 C     C     . ASP ASP ASP B B 208 208 . 90.275  108.806 7.342   1.00 28.24
1 . .
ATOM 4864 O     O     . ASP ASP ASP B B 208 208 . 89.391  108.279 7.993   1.00 27.63
1 . .
ATOM 4865 N     N     . GLU GLU GLU B B 209 209 . 90.641  108.395 6.134   1.00 28.25
1 . .
ATOM 4866 CA    CA    . GLU GLU GLU B B 209 209 . 90.000  107.285 5.403   1.00 28.71
1 . .
ATOM 4867 CB    CB    . GLU GLU GLU B B 209 209 . 89.750  107.731 3.970   1.00 29.39
1 . .
ATOM 4868 CG    CG    . GLU GLU GLU B B 209 209 . 88.743  108.930 3.891   1.00 32.44
1 . .
ATOM 4869 CD    CD    . GLU GLU GLU B B 209 209 . 88.119  109.172 2.495   1.00 38.52
1 . .
ATOM 4870 OE1   OE1   . GLU GLU GLU B B 209 209 . 88.663  108.764 1.401   1.00 34.47
1 . .
ATOM 4871 OE2   OE2   . GLU GLU GLU B B 209 209 . 87.008  109.782 2.525   1.00 43.63
1 . .
ATOM 4872 C     C     . GLU GLU GLU B B 209 209 . 90.748  105.958 5.436   1.00 29.09
1 . .
ATOM 4873 O     O     . GLU GLU GLU B B 209 209 . 90.355  104.972 4.790   1.00 30.70
1 . .
ATOM 4874 N     N     . GLY GLY GLY B B 210 210 . 91.835  105.907 6.185   1.00 28.41
1 . .
ATOM 4875 CA    CA    . GLY GLY GLY B B 210 210 . 92.523  104.659 6.325   1.00 28.80
1 . .
ATOM 4876 C     C     . GLY GLY GLY B B 210 210 . 93.705  104.519 5.375   1.00 30.41
1 . .
ATOM 4877 O     O     . GLY GLY GLY B B 210 210 . 94.455  103.511 5.486   1.00 30.26
1 . .
ATOM 4878 N     N     . GLY GLY GLY B B 211 211 . 93.872  105.482 4.445   1.00 29.48
1 . .
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ATOM 4879 CA    CA    . GLY GLY GLY B B 211 211 . 94.958  105.407 3.477   1.00 29.98
1 . .
ATOM 4880 C     C     . GLY GLY GLY B B 211 211 . 96.256  105.887 4.097   1.00 29.13
1 . .
ATOM 4881 O     O     . GLY GLY GLY B B 211 211 . 96.242  106.503 5.144   1.00 28.26
1 . .
ATOM 4882 N     N     . PHE PHE PHE B B 212 212 . 97.382  105.686 3.439   1.00 29.17
1 . .
ATOM 4883 CA    CA    . PHE PHE PHE B B 212 212 . 98.616  106.312 3.954   1.00 30.37
1 . .
ATOM 4884 CB    CB    . PHE PHE PHE B B 212 212 . 99.833  105.424 3.698   1.00 30.06
1 . .
ATOM 4885 CG    CG    . PHE PHE PHE B B 212 212 . 99.582  103.970 3.980   1.00 30.79
1 . .
ATOM 4886 CD1   CD1   . PHE PHE PHE B B 212 212 . 99.244  103.093 2.945   1.00 29.23
1 . .
ATOM 4887 CE1   CE1   . PHE PHE PHE B B 212 212 . 99.034  101.703 3.191   1.00 26.97
1 . .
ATOM 4888 CZ    CZ    . PHE PHE PHE B B 212 212 . 99.123  101.215 4.505   1.00 27.59
1 . .
ATOM 4889 CE2   CE2   . PHE PHE PHE B B 212 212 . 99.459  102.074 5.545   1.00 28.30
1 . .
ATOM 4890 CD2   CD2   . PHE PHE PHE B B 212 212 . 99.692  103.461 5.278   1.00 31.23
1 . .
ATOM 4891 C     C     . PHE PHE PHE B B 212 212 . 98.896  107.733 3.479   1.00 31.44
1 . .
ATOM 4892 O     O     . PHE PHE PHE B B 212 212 . 98.518  108.142 2.414   1.00 31.59
1 . .
ATOM 4893 N     N     . ALA ALA ALA B B 213 213 . 99.621  108.498 4.270   1.00 34.26
1 . .
ATOM 4894 CA    CA    . ALA ALA ALA B B 213 213 . 99.966  109.826 3.836   1.00 36.49
1 . .
ATOM 4895 CB    CB    . ALA ALA ALA B B 213 213 . 99.300  110.828 4.723   1.00 36.10
1 . .
ATOM 4896 C     C     . ALA ALA ALA B B 213 213 . 101.475 110.001 3.886   1.00 39.22
1 . .
ATOM 4897 O     O     . ALA ALA ALA B B 213 213 . 101.992 110.626 4.804   1.00 39.82
1 . .
ATOM 4898 N     N     . PRO PRO PRO B B 214 214 . 102.190 109.455 2.897   1.00 41.44
1 . .
ATOM 4899 CA    CA    . PRO PRO PRO B B 214 214 . 103.630 109.684 2.857   1.00 42.76
1 . .
ATOM 4900 CB    CB    . PRO PRO PRO B B 214 214 . 104.082 108.855 1.658   1.00 42.82
1 . .
ATOM 4901 CG    CG    . PRO PRO PRO B B 214 214 . 102.868 108.732 0.814   1.00 41.55
1 . .
ATOM 4902 CD    CD    . PRO PRO PRO B B 214 214 . 101.719 108.651 1.748   1.00 41.32
1 . .
ATOM 4903 C     C     . PRO PRO PRO B B 214 214 . 103.945 111.146 2.616   1.00 44.79
1 . .
ATOM 4904 O     O     . PRO PRO PRO B B 214 214 . 103.120 111.890 2.083   1.00 45.55
1 . .
ATOM 4905 N     N     . ASN ASN ASN B B 215 215 . 105.144 111.540 3.008   1.00 46.19
1 . .
ATOM 4906 CA    CA    . ASN ASN ASN B B 215 215 . 105.669 112.861 2.764   1.00 47.67
1 . .
ATOM 4907 CB    CB    . ASN ASN ASN B B 215 215 . 106.835 113.110 3.735   1.00 49.18
1 . .
ATOM 4908 CG    CG    . ASN ASN ASN B B 215 215 . 107.629 111.797 4.074   1.00 50.89
1 . .
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ATOM 4909 OD1   OD1   . ASN ASN ASN B B 215 215 . 108.737 111.586 3.567   1.00 53.28
1 . .
ATOM 4910 ND2   ND2   . ASN ASN ASN B B 215 215 . 107.054 110.935 4.924   1.00 51.55
1 . .
ATOM 4911 C     C     . ASN ASN ASN B B 215 215 . 106.099 113.075 1.327   1.00 47.56
1 . .
ATOM 4912 O     O     . ASN ASN ASN B B 215 215 . 107.272 113.068 1.007   1.00 48.98
1 . .
ATOM 4913 N     N     . ILE ILE ILE B B 216 216 . 105.131 113.252 0.434   1.00 47.76
1 . .
ATOM 4914 CA    CA    . ILE ILE ILE B B 216 216 . 105.436 113.492 -0.986  1.00 46.95
1 . .
ATOM 4915 CB    CB    . ILE ILE ILE B B 216 216 . 105.158 112.217 -1.886  1.00 46.74
1 . .
ATOM 4916 CG1   CG1   . ILE ILE ILE B B 216 216 . 103.688 111.849 -1.886  1.00 46.60
1 . .
ATOM 4917 CD1   CD1   . ILE ILE ILE B B 216 216 . 103.296 110.976 -3.059  1.00 46.66
1 . .
ATOM 4918 CG2   CG2   . ILE ILE ILE B B 216 216 . 105.918 110.987 -1.384  1.00 44.97
1 . .
ATOM 4919 C     C     . ILE ILE ILE B B 216 216 . 104.700 114.735 -1.525  1.00 46.28
1 . .
ATOM 4920 O     O     . ILE ILE ILE B B 216 216 . 103.672 115.160 -0.970  1.00 46.35
1 . .
ATOM 4921 N     N     . LEU LEU LEU B B 217 217 . 105.231 115.306 -2.601  1.00 45.72
1 . .
ATOM 4922 CA    CA    . LEU LEU LEU B B 217 217 . 104.578 116.405 -3.279  1.00 45.55
1 . .
ATOM 4923 CB    CB    . LEU LEU LEU B B 217 217 . 105.538 117.583 -3.441  1.00 46.07
1 . .
ATOM 4924 CG    CG    . LEU LEU LEU B B 217 217 . 105.084 118.782 -4.290  1.00 47.26
1 . .
ATOM 4925 CD1   CD1   . LEU LEU LEU B B 217 217 . 103.823 119.456 -3.725  1.00 48.37
1 . .
ATOM 4926 CD2   CD2   . LEU LEU LEU B B 217 217 . 106.266 119.765 -4.450  1.00 48.26
1 . .
ATOM 4927 C     C     . LEU LEU LEU B B 217 217 . 103.975 116.030 -4.657  1.00 45.51
1 . .
ATOM 4928 O     O     . LEU LEU LEU B B 217 217 . 102.860 116.471 -4.999  1.00 44.48
1 . .
ATOM 4929 N     N     . GLU GLU GLU B B 218 218 . 104.739 115.273 -5.456  1.00 45.07
1 . .
ATOM 4930 CA    CA    . GLU GLU GLU B B 218 218 . 104.361 114.991 -6.847  1.00 44.21
1 . .
ATOM 4931 CB    CB    . GLU GLU GLU B B 218 218 . 105.557 114.416 -7.611  1.00 45.06
1 . .
ATOM 4932 CG    CG    . GLU GLU GLU B B 218 218 . 106.761 115.341 -7.586  1.00 49.87
1 . .
ATOM 4933 CD    CD    . GLU GLU GLU B B 218 218 . 106.680 116.476 -8.627  1.00 56.33
1 . .
ATOM 4934 OE1   OE1   . GLU GLU GLU B B 218 218 . 106.534 116.192 -9.836  1.00 59.43
1 . .
ATOM 4935 OE2   OE2   . GLU GLU GLU B B 218 218 . 106.800 117.666 -8.249  1.00 60.76
1 . .
ATOM 4936 C     C     . GLU GLU GLU B B 218 218 . 103.166 114.033 -6.843  1.00 42.00
1 . .
ATOM 4937 O     O     . GLU GLU GLU B B 218 218 . 103.190 113.044 -6.140  1.00 41.44
1 . .
ATOM 4938 N     N     . ASN ASN ASN B B 219 219 . 102.080 114.392 -7.528  1.00 40.45
1 . .
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ATOM 4939 CA    CA    . ASN ASN ASN B B 219 219 . 100.953 113.462 -7.675  1.00 38.41
1 . .
ATOM 4940 CB    CB    . ASN ASN ASN B B 219 219 . 99.670  114.182 -8.176  1.00 37.59
1 . .
ATOM 4941 CG    CG    . ASN ASN ASN B B 219 219 . 99.249  115.297 -7.228  1.00 35.77
1 . .
ATOM 4942 OD1   OD1   . ASN ASN ASN B B 219 219 . 98.745  115.043 -6.126  1.00 30.94
1 . .
ATOM 4943 ND2   ND2   . ASN ASN ASN B B 219 219 . 99.503  116.548 -7.630  1.00 33.49
1 . .
ATOM 4944 C     C     . ASN ASN ASN B B 219 219 . 101.355 112.289 -8.555  1.00 37.47
1 . .
ATOM 4945 O     O     . ASN ASN ASN B B 219 219 . 100.919 111.196 -8.322  1.00 36.38
1 . .
ATOM 4946 N     N     . SER SER SER B B 220 220 . 102.243 112.519 -9.529  1.00 37.69
1 . .
ATOM 4947 CA    CA    . SER SER SER B B 220 220 . 102.835 111.411 -10.291 1.00 37.65
1 . .
ATOM 4948 CB    CB    . SER SER SER B B 220 220 . 103.813 111.934 -11.358 1.00 37.91
1 . .
ATOM 4949 OG    OG    . SER SER SER B B 220 220 . 104.947 112.516 -10.748 1.00 37.39
1 . .
ATOM 4950 C     C     . SER SER SER B B 220 220 . 103.526 110.323 -9.409  1.00 37.51
1 . .
ATOM 4951 O     O     . SER SER SER B B 220 220 . 103.545 109.150 -9.798  1.00 36.90
1 . .
ATOM 4952 N     N     . GLU GLU GLU B B 221 221 . 104.097 110.715 -8.259  1.00 36.85
1 . .
ATOM 4953 CA    CA    . GLU GLU GLU B B 221 221 . 104.758 109.777 -7.328  1.00 37.13
1 . .
ATOM 4954 CB    CB    . GLU GLU GLU B B 221 221 . 105.698 110.532 -6.391  1.00 38.25
1 . .
ATOM 4955 CG    CG    . GLU GLU GLU B B 221 221 . 106.155 109.651 -5.237  1.00 42.29
1 . .
ATOM 4956 CD    CD    . GLU GLU GLU B B 221 221 . 107.369 108.798 -5.610  1.00 50.69
1 . .
ATOM 4957 OE1   OE1   . GLU GLU GLU B B 221 221 . 108.501 109.373 -5.588  1.00 56.11
1 . .
ATOM 4958 OE2   OE2   . GLU GLU GLU B B 221 221 . 107.208 107.581 -5.911  1.00 50.75
1 . .
ATOM 4959 C     C     . GLU GLU GLU B B 221 221 . 103.800 108.912 -6.485  1.00 36.29
1 . .
ATOM 4960 O     O     . GLU GLU GLU B B 221 221 . 104.091 107.741 -6.193  1.00 35.36
1 . .
ATOM 4961 N     N     . ALA ALA ALA B B 222 222 . 102.659 109.492 -6.082  1.00 35.45
1 . .
ATOM 4962 CA    CA    . ALA ALA ALA B B 222 222 . 101.584 108.699 -5.494  1.00 33.61
1 . .
ATOM 4963 CB    CB    . ALA ALA ALA B B 222 222 . 100.374 109.586 -5.197  1.00 34.86
1 . .
ATOM 4964 C     C     . ALA ALA ALA B B 222 222 . 101.166 107.575 -6.422  1.00 33.18
1 . .
ATOM 4965 O     O     . ALA ALA ALA B B 222 222 . 101.030 106.403 -6.012  1.00 32.75
1 . .
ATOM 4966 N     N     . LEU LEU LEU B B 223 223 . 100.939 107.932 -7.684  1.00 32.77
1 . .
ATOM 4967 CA    CA    . LEU LEU LEU B B 223 223 . 100.402 106.981 -8.657  1.00 32.30
1 . .
ATOM 4968 CB    CB    . LEU LEU LEU B B 223 223 . 100.088 107.677 -9.972  1.00 31.52
1 . .
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ATOM 4969 CG    CG    . LEU LEU LEU B B 223 223 . 98.785  108.451 -9.947  1.00 30.88
1 . .
ATOM 4970 CD1   CD1   . LEU LEU LEU B B 223 223 . 98.726  109.312 -11.180 1.00 33.45
1 . .
ATOM 4971 CD2   CD2   . LEU LEU LEU B B 223 223 . 97.563  107.553 -9.852  1.00 24.96
1 . .
ATOM 4972 C     C     . LEU LEU LEU B B 223 223 . 101.438 105.882 -8.883  1.00 32.13
1 . .
ATOM 4973 O     O     . LEU LEU LEU B B 223 223 . 101.082 104.720 -9.012  1.00 31.70
1 . .
ATOM 4974 N     N     . GLU GLU GLU B B 224 224 . 102.710 106.292 -8.925  1.00 32.38
1 . .
ATOM 4975 CA    CA    . GLU GLU GLU B B 224 224 . 103.860 105.414 -9.008  1.00 32.54
1 . .
ATOM 4976 CB    CB    . GLU GLU GLU B B 224 224 . 105.143 106.263 -8.973  1.00 34.21
1 . .
ATOM 4977 CG    CG    . GLU GLU GLU B B 224 224 . 106.327 105.641 -9.610  1.00 38.71
1 . .
ATOM 4978 CD    CD    . GLU GLU GLU B B 224 224 . 106.126 105.368 -11.082 1.00 47.34
1 . .
ATOM 4979 OE1   OE1   . GLU GLU GLU B B 224 224 . 105.980 104.175 -11.422 1.00 52.55
1 . .
ATOM 4980 OE2   OE2   . GLU GLU GLU B B 224 224 . 106.087 106.323 -11.903 1.00 52.39
1 . .
ATOM 4981 C     C     . GLU GLU GLU B B 224 224 . 103.900 104.411 -7.874  1.00 31.99
1 . .
ATOM 4982 O     O     . GLU GLU GLU B B 224 224 . 104.129 103.220 -8.126  1.00 32.69
1 . .
ATOM 4983 N     N     . LEU LEU LEU B B 225 225 . 103.702 104.875 -6.628  1.00 31.08
1 . .
ATOM 4984 CA    CA    . LEU LEU LEU B B 225 225 . 103.611 103.967 -5.461  1.00 30.02
1 . .
ATOM 4985 CB    CB    . LEU LEU LEU B B 225 225 . 103.425 104.749 -4.148  1.00 29.08
1 . .
ATOM 4986 CG    CG    . LEU LEU LEU B B 225 225 . 104.608 105.590 -3.750  1.00 30.97
1 . .
ATOM 4987 CD1   CD1   . LEU LEU LEU B B 225 225 . 104.266 106.548 -2.621  1.00 33.25
1 . .
ATOM 4988 CD2   CD2   . LEU LEU LEU B B 225 225 . 105.804 104.714 -3.395  1.00 32.11
1 . .
ATOM 4989 C     C     . LEU LEU LEU B B 225 225 . 102.463 103.004 -5.621  1.00 30.45
1 . .
ATOM 4990 O     O     . LEU LEU LEU B B 225 225 . 102.638 101.803 -5.454  1.00 30.53
1 . .
ATOM 4991 N     N     . VAL VAL VAL B B 226 226 . 101.270 103.517 -5.938  1.00 31.15
1 . .
ATOM 4992 CA    CA    . VAL VAL VAL B B 226 226 . 100.095 102.642 -6.119  1.00 31.47
1 . .
ATOM 4993 CB    CB    . VAL VAL VAL B B 226 226 . 98.831  103.472 -6.461  1.00 31.15
1 . .
ATOM 4994 CG1   CG1   . VAL VAL VAL B B 226 226 . 97.620  102.536 -6.797  1.00 29.17
1 . .
ATOM 4995 CG2   CG2   . VAL VAL VAL B B 226 226 . 98.526  104.381 -5.325  1.00 29.50
1 . .
ATOM 4996 C     C     . VAL VAL VAL B B 226 226 . 100.309 101.530 -7.176  1.00 33.15
1 . .
ATOM 4997 O     O     . VAL VAL VAL B B 226 226 . 100.147 100.340 -6.891  1.00 34.03
1 . .
ATOM 4998 N     N     . LYS LYS LYS B B 227 227 . 100.733 101.901 -8.378  1.00 34.27
1 . .
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ATOM 4999 CA    CA    . LYS LYS LYS B B 227 227 . 101.030 100.903 -9.438  1.00 35.19
1 . .
ATOM 5000 CB    CB    . LYS LYS LYS B B 227 227 . 101.448 101.607 -10.768 1.00 36.04
1 . .
ATOM 5001 CG    CG    . LYS LYS LYS B B 227 227 . 101.510 100.662 -12.051 1.00 39.60
1 . .
ATOM 5002 CD    CD    . LYS LYS LYS B B 227 227 . 102.698 101.026 -12.994 1.00 44.63
1 . .
ATOM 5003 CE    CE    . LYS LYS LYS B B 227 227 . 102.952 99.947  -14.110 1.00 50.32
1 . .
ATOM 5004 NZ    NZ    . LYS LYS LYS B B 227 227 . 103.356 98.480  -13.706 1.00 52.16
1 . .
ATOM 5005 C     C     . LYS LYS LYS B B 227 227 . 102.083 99.847  -9.046  1.00 34.76
1 . .
ATOM 5006 O     O     . LYS LYS LYS B B 227 227 . 101.900 98.648  -9.332  1.00 35.68
1 . .
ATOM 5007 N     N     . GLU GLU GLU B B 228 228 . 103.174 100.279 -8.406  1.00 34.44
1 . .
ATOM 5008 CA    CA    . GLU GLU GLU B B 228 228 . 104.183 99.358  -7.840  1.00 33.91
1 . .
ATOM 5009 CB    CB    . GLU GLU GLU B B 228 228 . 105.280 100.106 -7.060  1.00 34.28
1 . .
ATOM 5010 CG    CG    . GLU GLU GLU B B 228 228 . 106.513 99.225  -6.855  1.00 40.88
1 . .
ATOM 5011 CD    CD    . GLU GLU GLU B B 228 228 . 107.621 99.829  -5.947  1.00 47.75
1 . .
ATOM 5012 OE1   OE1   . GLU GLU GLU B B 228 228 . 108.215 99.017  -5.206  1.00 52.13
1 . .
ATOM 5013 OE2   OE2   . GLU GLU GLU B B 228 228 . 107.909 101.073 -5.944  1.00 51.41
1 . .
ATOM 5014 C     C     . GLU GLU GLU B B 228 228 . 103.519 98.353  -6.917  1.00 33.41
1 . .
ATOM 5015 O     O     . GLU GLU GLU B B 228 228 . 103.654 97.138  -7.108  1.00 34.73
1 . .
ATOM 5016 N     N     . ALA ALA ALA B B 229 229 . 102.745 98.833  -5.947  1.00 31.96
1 . .
ATOM 5017 CA    CA    . ALA ALA ALA B B 229 229 . 102.076 97.899  -5.028  1.00 31.76
1 . .
ATOM 5018 CB    CB    . ALA ALA ALA B B 229 229 . 101.344 98.644  -3.886  1.00 30.39
1 . .
ATOM 5019 C     C     . ALA ALA ALA B B 229 229 . 101.142 96.936  -5.756  1.00 31.09
1 . .
ATOM 5020 O     O     . ALA ALA ALA B B 229 229 . 101.006 95.747  -5.380  1.00 29.20
1 . .
ATOM 5021 N     N     . ILE ILE ILE B B 230 230 . 100.519 97.417  -6.817  1.00 31.86
1 . .
ATOM 5022 CA    CA    . ILE ILE ILE B B 230 230 . 99.636  96.514  -7.557  1.00 34.26
1 . .
ATOM 5023 CB    CB    . ILE ILE ILE B B 230 230 . 98.777  97.240  -8.596  1.00 34.11
1 . .
ATOM 5024 CG1   CG1   . ILE ILE ILE B B 230 230 . 97.663  98.068  -7.945  1.00 32.96
1 . .
ATOM 5025 CD1   CD1   . ILE ILE ILE B B 230 230 . 97.228  99.242  -8.814  1.00 29.22
1 . .
ATOM 5026 CG2   CG2   . ILE ILE ILE B B 230 230 . 98.181  96.204  -9.569  1.00 34.04
1 . .
ATOM 5027 C     C     . ILE ILE ILE B B 230 230 . 100.487 95.444  -8.276  1.00 36.23
1 . .
ATOM 5028 O     O     . ILE ILE ILE B B 230 230 . 100.097 94.290  -8.371  1.00 36.69
1 . .
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ATOM 5029 N     N     . ASP ASP ASP B B 231 231 . 101.664 95.823  -8.750  1.00 38.90
1 . .
ATOM 5030 CA    CA    . ASP ASP ASP B B 231 231 . 102.536 94.843  -9.367  1.00 41.76
1 . .
ATOM 5031 CB    CB    . ASP ASP ASP B B 231 231 . 103.736 95.475  -10.101 1.00 42.71
1 . .
ATOM 5032 CG    CG    . ASP ASP ASP B B 231 231 . 104.571 94.408  -10.845 1.00 47.69
1 . .
ATOM 5033 OD1   OD1   . ASP ASP ASP B B 231 231 . 105.783 94.182  -10.483 1.00 52.22
1 . .
ATOM 5034 OD2   OD2   . ASP ASP ASP B B 231 231 . 103.963 93.767  -11.765 1.00 49.76
1 . .
ATOM 5035 C     C     . ASP ASP ASP B B 231 231 . 103.056 93.837  -8.363  1.00 42.08
1 . .
ATOM 5036 O     O     . ASP ASP ASP B B 231 231 . 102.910 92.634  -8.556  1.00 41.97
1 . .
ATOM 5037 N     N     . LYS LYS LYS B B 232 232 . 103.677 94.349  -7.301  1.00 43.06
1 . .
ATOM 5038 CA    CA    . LYS LYS LYS B B 232 232 . 104.338 93.536  -6.312  1.00 43.80
1 . .
ATOM 5039 CB    CB    . LYS LYS LYS B B 232 232 . 105.029 94.474  -5.320  1.00 44.25
1 . .
ATOM 5040 CG    CG    . LYS LYS LYS B B 232 232 . 106.040 93.847  -4.440  1.00 47.80
1 . .
ATOM 5041 CD    CD    . LYS LYS LYS B B 232 232 . 106.282 94.713  -3.194  1.00 53.30
1 . .
ATOM 5042 CE    CE    . LYS LYS LYS B B 232 232 . 106.691 93.857  -1.966  1.00 57.51
1 . .
ATOM 5043 NZ    NZ    . LYS LYS LYS B B 232 232 . 108.165 93.472  -1.878  1.00 59.40
1 . .
ATOM 5044 C     C     . LYS LYS LYS B B 232 232 . 103.313 92.544  -5.668  1.00 43.84
1 . .
ATOM 5045 O     O     . LYS LYS LYS B B 232 232 . 103.660 91.398  -5.329  1.00 44.52
1 . .
ATOM 5046 N     N     . ALA ALA ALA B B 233 233 . 102.046 92.966  -5.541  1.00 43.07
1 . .
ATOM 5047 CA    CA    . ALA ALA ALA B B 233 233 . 100.936 92.053  -5.195  1.00 41.04
1 . .
ATOM 5048 CB    CB    . ALA ALA ALA B B 233 233 . 99.645  92.832  -4.861  1.00 41.11
1 . .
ATOM 5049 C     C     . ALA ALA ALA B B 233 233 . 100.638 91.063  -6.287  1.00 39.95
1 . .
ATOM 5050 O     O     . ALA ALA ALA B B 233 233 . 100.022 90.049  -6.008  1.00 39.09
1 . .
ATOM 5051 N     N     . GLY GLY GLY B B 234 234 . 100.988 91.409  -7.534  1.00 39.23
1 . .
ATOM 5052 CA    CA    . GLY GLY GLY B B 234 234 . 100.750 90.573  -8.693  1.00 38.46
1 . .
ATOM 5053 C     C     . GLY GLY GLY B B 234 234 . 99.346  90.721  -9.273  1.00 39.10
1 . .
ATOM 5054 O     O     . GLY GLY GLY B B 234 234 . 98.806  89.775  -9.856  1.00 39.79
1 . .
ATOM 5055 N     N     . TYR TYR TYR B B 235 235 . 98.731  91.889  -9.141  1.00 37.32
1 . .
ATOM 5056 CA    CA    . TYR TYR TYR B B 235 235 . 97.397  92.032  -9.745  1.00 35.97
1 . .
ATOM 5057 CB    CB    . TYR TYR TYR B B 235 235 . 96.382  92.348  -8.658  1.00 36.21
1 . .
ATOM 5058 CG    CG    . TYR TYR TYR B B 235 235 . 96.260  91.260  -7.613  1.00 36.47
1 . .
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ATOM 5059 CD1   CD1   . TYR TYR TYR B B 235 235 . 96.642  91.470  -6.286  1.00 36.06
1 . .
ATOM 5060 CE1   CE1   . TYR TYR TYR B B 235 235 . 96.488  90.460  -5.334  1.00 36.79
1 . .
ATOM 5061 CZ    CZ    . TYR TYR TYR B B 235 235 . 95.971  89.227  -5.720  1.00 37.01
1 . .
ATOM 5062 OH    OH    . TYR TYR TYR B B 235 235 . 95.794  88.185  -4.843  1.00 37.58
1 . .
ATOM 5063 CE2   CE2   . TYR TYR TYR B B 235 235 . 95.591  89.007  -7.010  1.00 38.16
1 . .
ATOM 5064 CD2   CD2   . TYR TYR TYR B B 235 235 . 95.742  90.018  -7.955  1.00 36.98
1 . .
ATOM 5065 C     C     . TYR TYR TYR B B 235 235 . 97.294  93.075  -10.871 1.00 35.33
1 . .
ATOM 5066 O     O     . TYR TYR TYR B B 235 235 . 96.181  93.544  -11.177 1.00 33.24
1 . .
ATOM 5067 N     N     . THR THR THR B B 236 236 . 98.438  93.419  -11.483 1.00 34.98
1 . .
ATOM 5068 CA    CA    . THR THR THR B B 236 236 . 98.474  94.341  -12.628 1.00 36.39
1 . .
ATOM 5069 CB    CB    . THR THR THR B B 236 236 . 99.751  94.217  -13.410 1.00 36.64
1 . .
ATOM 5070 OG1   OG1   . THR THR THR B B 236 236 . 100.865 94.340  -12.520 1.00 38.38
1 . .
ATOM 5071 CG2   CG2   . THR THR THR B B 236 236 . 99.852  95.303  -14.457 1.00 37.34
1 . .
ATOM 5072 C     C     . THR THR THR B B 236 236 . 97.318  94.119  -13.586 1.00 37.72
1 . .
ATOM 5073 O     O     . THR THR THR B B 236 236 . 96.727  95.078  -14.075 1.00 37.78
1 . .
ATOM 5074 N     N     . GLU GLU GLU B B 237 237 . 96.951  92.871  -13.830 1.00 39.27
1 . .
ATOM 5075 CA    CA    . GLU GLU GLU B B 237 237 . 95.887  92.599  -14.815 1.00 41.49
1 . .
ATOM 5076 CB    CB    . GLU GLU GLU B B 237 237 . 96.065  91.199  -15.464 1.00 43.13
1 . .
ATOM 5077 CG    CG    . GLU GLU GLU B B 237 237 . 97.448  90.976  -16.169 1.00 48.55
1 . .
ATOM 5078 CD    CD    . GLU GLU GLU B B 237 237 . 98.640  90.890  -15.167 1.00 56.26
1 . .
ATOM 5079 OE1   OE1   . GLU GLU GLU B B 237 237 . 98.449  90.407  -13.999 1.00 60.21
1 . .
ATOM 5080 OE2   OE2   . GLU GLU GLU B B 237 237 . 99.772  91.308  -15.540 1.00 58.54
1 . .
ATOM 5081 C     C     . GLU GLU GLU B B 237 237 . 94.435  92.796  -14.298 1.00 41.01
1 . .
ATOM 5082 O     O     . GLU GLU GLU B B 237 237 . 93.451  92.597  -15.062 1.00 41.79
1 . .
ATOM 5083 N     N     . LYS LYS LYS B B 238 238 . 94.295  93.172  -13.028 1.00 39.00
1 . .
ATOM 5084 CA    CA    . LYS LYS LYS B B 238 238 . 93.009  93.078  -12.337 1.00 37.42
1 . .
ATOM 5085 CB    CB    . LYS LYS LYS B B 238 238 . 93.081  91.922  -11.352 1.00 38.63
1 . .
ATOM 5086 CG    CG    . LYS LYS LYS B B 238 238 . 92.854  90.529  -11.963 1.00 42.51
1 . .
ATOM 5087 CD    CD    . LYS LYS LYS B B 238 238 . 93.620  89.434  -11.172 1.00 46.06
1 . .
ATOM 5088 CE    CE    . LYS LYS LYS B B 238 238 . 92.937  88.051  -11.149 1.00 48.33
1 . .
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ATOM 5089 NZ    NZ    . LYS LYS LYS B B 238 238 . 92.901  87.422  -12.492 1.00 49.60
1 . .
ATOM 5090 C     C     . LYS LYS LYS B B 238 238 . 92.588  94.349  -11.591 1.00 34.89
1 . .
ATOM 5091 O     O     . LYS LYS LYS B B 238 238 . 91.381  94.581  -11.268 1.00 35.29
1 . .
ATOM 5092 N     N     . ILE ILE ILE B B 239 239 . 93.564  95.179  -11.332 1.00 31.99
1 . .
ATOM 5093 CA    CA    . ILE ILE ILE B B 239 239 . 93.345  96.372  -10.543 1.00 31.44
1 . .
ATOM 5094 CB    CB    . ILE ILE ILE B B 239 239 . 94.079  96.257  -9.190  1.00 30.79
1 . .
ATOM 5095 CG1   CG1   . ILE ILE ILE B B 239 239 . 93.573  95.023  -8.465  1.00 31.98
1 . .
ATOM 5096 CD1   CD1   . ILE ILE ILE B B 239 239 . 94.375  94.612  -7.306  1.00 33.48
1 . .
ATOM 5097 CG2   CG2   . ILE ILE ILE B B 239 239 . 93.802  97.463  -8.310  1.00 28.79
1 . .
ATOM 5098 C     C     . ILE ILE ILE B B 239 239 . 93.739  97.645  -11.292 1.00 30.49
1 . .
ATOM 5099 O     O     . ILE ILE ILE B B 239 239 . 94.900  97.793  -11.780 1.00 31.42
1 . .
ATOM 5100 N     N     . VAL VAL VAL B B 240 240 . 92.769  98.553  -11.371 1.00 28.43
1 . .
ATOM 5101 CA    CA    . VAL VAL VAL B B 240 240 . 93.006  99.896  -11.916 1.00 26.26
1 . .
ATOM 5102 CB    CB    . VAL VAL VAL B B 240 240 . 92.081  100.172 -13.136 1.00 25.54
1 . .
ATOM 5103 CG1   CG1   . VAL VAL VAL B B 240 240 . 92.405  99.157  -14.281 1.00 27.54
1 . .
ATOM 5104 CG2   CG2   . VAL VAL VAL B B 240 240 . 90.613  100.143 -12.702 1.00 23.19
1 . .
ATOM 5105 C     C     . VAL VAL VAL B B 240 240 . 92.958  101.028 -10.863 1.00 25.69
1 . .
ATOM 5106 O     O     . VAL VAL VAL B B 240 240 . 92.764  100.790 -9.633  1.00 25.76
1 . .
ATOM 5107 N     N     . ILE ILE ILE B B 241 241 . 93.174  102.253 -11.334 1.00 24.22
1 . .
ATOM 5108 CA    CA    . ILE ILE ILE B B 241 241 . 93.339  103.356 -10.447 1.00 24.11
1 . .
ATOM 5109 CB    CB    . ILE ILE ILE B B 241 241 . 94.731  103.965 -10.638 1.00 23.81
1 . .
ATOM 5110 CG1   CG1   . ILE ILE ILE B B 241 241 . 95.819  103.004 -10.205 1.00 22.43
1 . .
ATOM 5111 CD1   CD1   . ILE ILE ILE B B 241 241 . 97.211  103.670 -10.372 1.00 23.42
1 . .
ATOM 5112 CG2   CG2   . ILE ILE ILE B B 241 241 . 94.853  105.214 -9.857  1.00 22.07
1 . .
ATOM 5113 C     C     . ILE ILE ILE B B 241 241 . 92.241  104.430 -10.680 1.00 25.54
1 . .
ATOM 5114 O     O     . ILE ILE ILE B B 241 241 . 91.843  104.705 -11.819 1.00 25.80
1 . .
ATOM 5115 N     N     . GLY GLY GLY B B 242 242 . 91.745  105.008 -9.593  1.00 26.10
1 . .
ATOM 5116 CA    CA    . GLY GLY GLY B B 242 242 . 90.788  106.134 -9.632  1.00 25.53
1 . .
ATOM 5117 C     C     . GLY GLY GLY B B 242 242 . 91.322  107.275 -8.781  1.00 25.90
1 . .
ATOM 5118 O     O     . GLY GLY GLY B B 242 242 . 92.095  107.041 -7.856  1.00 27.29
1 . .
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ATOM 5119 N     N     . MET MET MET B B 243 243 . 90.968  108.516 -9.100  1.00 27.05
1 . .
ATOM 5120 CA    CA    . MET MET MET B B 243 243 . 91.511  109.705 -8.381  1.00 27.37
1 . .
ATOM 5121 CB    CB    . MET MET MET B B 243 243 . 92.454  110.485 -9.262  1.00 28.56
1 . .
ATOM 5122 CG    CG    . MET MET MET B B 243 243 . 93.741  109.739 -9.540  1.00 30.90
1 . .
ATOM 5123 SD    SD    . MET MET MET B B 243 243 . 94.593  110.636 -10.860 1.00 35.58
1 . .
ATOM 5124 CE    CE    . MET MET MET B B 243 243 . 95.561  111.743 -9.918  1.00 36.43
1 . .
ATOM 5125 C     C     . MET MET MET B B 243 243 . 90.392  110.626 -7.925  1.00 27.01
1 . .
ATOM 5126 O     O     . MET MET MET B B 243 243 . 89.335  110.683 -8.573  1.00 27.52
1 . .
ATOM 5127 N     N     . ASP ASP ASP B B 244 244 . 90.566  111.257 -6.769  1.00 25.78
1 . .
ATOM 5128 CA    CA    . ASP ASP ASP B B 244 244 . 89.684  112.344 -6.408  1.00 26.24
1 . .
ATOM 5129 CB    CB    . ASP ASP ASP B B 244 244 . 88.836  112.157 -5.120  1.00 26.74
1 . .
ATOM 5130 CG    CG    . ASP ASP ASP B B 244 244 . 87.857  113.315 -4.902  1.00 24.91
1 . .
ATOM 5131 OD1   OD1   . ASP ASP ASP B B 244 244 . 87.115  113.363 -3.914  1.00 21.91
1 . .
ATOM 5132 OD2   OD2   . ASP ASP ASP B B 244 244 . 87.815  114.218 -5.737  1.00 24.81
1 . .
ATOM 5133 C     C     . ASP ASP ASP B B 244 244 . 90.656  113.433 -6.205  1.00 26.26
1 . .
ATOM 5134 O     O     . ASP ASP ASP B B 244 244 . 91.484  113.375 -5.313  1.00 26.22
1 . .
ATOM 5135 N     N     . VAL VAL VAL B B 245 245 . 90.576  114.410 -7.082  1.00 25.31
1 . .
ATOM 5136 CA    CA    . VAL VAL VAL B B 245 245 . 91.503  115.522 -7.050  1.00 25.08
1 . .
ATOM 5137 CB    CB    . VAL VAL VAL B B 245 245 . 91.529  116.149 -8.459  1.00 25.05
1 . .
ATOM 5138 CG1   CG1   . VAL VAL VAL B B 245 245 . 92.438  117.322 -8.505  1.00 24.86
1 . .
ATOM 5139 CG2   CG2   . VAL VAL VAL B B 245 245 . 91.940  115.043 -9.474  1.00 24.36
1 . .
ATOM 5140 C     C     . VAL VAL VAL B B 245 245 . 91.042  116.524 -5.982  1.00 24.26
1 . .
ATOM 5141 O     O     . VAL VAL VAL B B 245 245 . 91.864  117.169 -5.284  1.00 22.70
1 . .
ATOM 5142 N     N     . ALA ALA ALA B B 246 246 . 89.710  116.649 -5.901  1.00 23.31
1 . .
ATOM 5143 CA    CA    . ALA ALA ALA B B 246 246 . 89.040  117.590 -5.076  1.00 24.53
1 . .
ATOM 5144 CB    CB    . ALA ALA ALA B B 246 246 . 89.194  117.209 -3.551  1.00 24.26
1 . .
ATOM 5145 C     C     . ALA ALA ALA B B 246 246 . 89.576  118.966 -5.388  1.00 25.70
1 . .
ATOM 5146 O     O     . ALA ALA ALA B B 246 246 . 90.061  119.633 -4.495  1.00 27.01
1 . .
ATOM 5147 N     N     . ALA ALA ALA B B 247 247 . 89.505  119.385 -6.669  1.00 26.98
1 . .
ATOM 5148 CA    CA    . ALA ALA ALA B B 247 247 . 90.215  120.569 -7.137  1.00 27.20
1 . .
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ATOM 5149 CB    CB    . ALA ALA ALA B B 247 247 . 90.225  120.624 -8.665  1.00 27.83
1 . .
ATOM 5150 C     C     . ALA ALA ALA B B 247 247 . 89.732  121.914 -6.543  1.00 27.58
1 . .
ATOM 5151 O     O     . ALA ALA ALA B B 247 247 . 90.535  122.866 -6.469  1.00 28.26
1 . .
ATOM 5152 N     N     . SER SER SER B B 248 248 . 88.454  121.991 -6.141  1.00 26.00
1 . .
ATOM 5153 CA    CA    . SER SER SER B B 248 248 . 87.933  123.141 -5.453  1.00 26.54
1 . .
ATOM 5154 CB    CB    . SER SER SER B B 248 248 . 86.494  122.885 -4.970  1.00 26.81
1 . .
ATOM 5155 OG    OG    . SER SER SER B B 248 248 . 85.657  122.549 -6.044  1.00 25.24
1 . .
ATOM 5156 C     C     . SER SER SER B B 248 248 . 88.760  123.478 -4.214  1.00 28.04
1 . .
ATOM 5157 O     O     . SER SER SER B B 248 248 . 88.898  124.629 -3.851  1.00 27.92
1 . .
ATOM 5158 N     N     . GLU GLU GLU B B 249 249 . 89.348  122.478 -3.580  1.00 29.96
1 . .
ATOM 5159 CA    CA    . GLU GLU GLU B B 249 249 . 90.181  122.735 -2.421  1.00 31.41
1 . .
ATOM 5160 CB    CB    . GLU GLU GLU B B 249 249 . 90.479  121.431 -1.683  1.00 32.18
1 . .
ATOM 5161 CG    CG    . GLU GLU GLU B B 249 249 . 89.178  120.688 -1.195  1.00 32.18
1 . .
ATOM 5162 CD    CD    . GLU GLU GLU B B 249 249 . 88.516  121.411 -0.026  1.00 35.94
1 . .
ATOM 5163 OE1   OE1   . GLU GLU GLU B B 249 249 . 89.289  121.954 0.773   1.00 34.07
1 . .
ATOM 5164 OE2   OE2   . GLU GLU GLU B B 249 249 . 87.250  121.455 0.093   1.00 38.47
1 . .
ATOM 5165 C     C     . GLU GLU GLU B B 249 249 . 91.464  123.463 -2.747  1.00 32.41
1 . .
ATOM 5166 O     O     . GLU GLU GLU B B 249 249 . 92.045  124.026 -1.828  1.00 35.22
1 . .
ATOM 5167 N     N     . PHE PHE PHE B B 250 250 . 91.925  123.472 -4.004  1.00 32.04
1 . .
ATOM 5168 CA    CA    . PHE PHE PHE B B 250 250 . 93.151  124.242 -4.342  1.00 33.42
1 . .
ATOM 5169 CB    CB    . PHE PHE PHE B B 250 250 . 94.400  123.375 -4.592  1.00 32.42
1 . .
ATOM 5170 CG    CG    . PHE PHE PHE B B 250 250 . 94.227  122.288 -5.618  1.00 33.06
1 . .
ATOM 5171 CD1   CD1   . PHE PHE PHE B B 250 250 . 93.908  120.999 -5.238  1.00 34.96
1 . .
ATOM 5172 CE1   CE1   . PHE PHE PHE B B 250 250 . 93.786  119.956 -6.217  1.00 34.00
1 . .
ATOM 5173 CZ    CZ    . PHE PHE PHE B B 250 250 . 94.014  120.246 -7.567  1.00 32.59
1 . .
ATOM 5174 CE2   CE2   . PHE PHE PHE B B 250 250 . 94.350  121.506 -7.935  1.00 31.11
1 . .
ATOM 5175 CD2   CD2   . PHE PHE PHE B B 250 250 . 94.453  122.526 -6.966  1.00 32.82
1 . .
ATOM 5176 C     C     . PHE PHE PHE B B 250 250 . 92.993  125.283 -5.439  1.00 33.84
1 . .
ATOM 5177 O     O     . PHE PHE PHE B B 250 250 . 93.992  125.794 -5.969  1.00 35.00
1 . .
ATOM 5178 N     N     . TYR TYR TYR B B 251 251 . 91.732  125.573 -5.752  1.00 34.12
1 . .
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ATOM 5179 CA    CA    . TYR TYR TYR B B 251 251 . 91.356  126.618 -6.667  1.00 33.94
1 . .
ATOM 5180 CB    CB    . TYR TYR TYR B B 251 251 . 89.850  126.516 -6.971  1.00 32.63
1 . .
ATOM 5181 CG    CG    . TYR TYR TYR B B 251 251 . 89.354  127.639 -7.843  1.00 33.60
1 . .
ATOM 5182 CD1   CD1   . TYR TYR TYR B B 251 251 . 89.500  127.583 -9.240  1.00 32.45
1 . .
ATOM 5183 CE1   CE1   . TYR TYR TYR B B 251 251 . 89.064  128.604 -10.063 1.00 30.37
1 . .
ATOM 5184 CZ    CZ    . TYR TYR TYR B B 251 251 . 88.506  129.739 -9.515  1.00 32.04
1 . .
ATOM 5185 OH    OH    . TYR TYR TYR B B 251 251 . 88.138  130.777 -10.370 1.00 34.62
1 . .
ATOM 5186 CE2   CE2   . TYR TYR TYR B B 251 251 . 88.356  129.846 -8.123  1.00 34.29
1 . .
ATOM 5187 CD2   CD2   . TYR TYR TYR B B 251 251 . 88.796  128.796 -7.285  1.00 33.58
1 . .
ATOM 5188 C     C     . TYR TYR TYR B B 251 251 . 91.732  127.968 -6.016  1.00 34.06
1 . .
ATOM 5189 O     O     . TYR TYR TYR B B 251 251 . 91.369  128.262 -4.856  1.00 33.55
1 . .
ATOM 5190 N     N     . ARG ARG ARG B B 252 252 . 92.473  128.774 -6.750  1.00 34.64
1 . .
ATOM 5191 CA    CA    . ARG ARG ARG B B 252 252 . 92.953  130.042 -6.205  1.00 36.63
1 . .
ATOM 5192 CB    CB    . ARG ARG ARG B B 252 252 . 94.443  129.930 -5.789  1.00 37.18
1 . .
ATOM 5193 CG    CG    . ARG ARG ARG B B 252 252 . 94.730  128.919 -4.639  1.00 37.33
1 . .
ATOM 5194 CD    CD    . ARG ARG ARG B B 252 252 . 94.316  129.434 -3.252  1.00 40.65
1 . .
ATOM 5195 NE    NE    . ARG ARG ARG B B 252 252 . 94.511  128.423 -2.203  1.00 43.83
1 . .
ATOM 5196 CZ    CZ    . ARG ARG ARG B B 252 252 . 93.577  127.583 -1.746  1.00 44.37
1 . .
ATOM 5197 NH1   NH1   . ARG ARG ARG B B 252 252 . 92.323  127.587 -2.213  1.00 44.41
1 . .
ATOM 5198 NH2   NH2   . ARG ARG ARG B B 252 252 . 93.899  126.727 -0.797  1.00 45.85
1 . .
ATOM 5199 C     C     . ARG ARG ARG B B 252 252 . 92.837  131.108 -7.265  1.00 37.42
1 . .
ATOM 5200 O     O     . ARG ARG ARG B B 252 252 . 93.605  131.087 -8.222  1.00 38.08
1 . .
ATOM 5201 N     N     . ASP ASP ASP B B 253 253 . 91.883  132.028 -7.131  1.00 39.13
1 . .
ATOM 5202 CA    CA    . ASP ASP ASP B B 253 253 . 91.766  133.166 -8.095  1.00 40.08
1 . .
ATOM 5203 CB    CB    . ASP ASP ASP B B 253 253 . 92.963  134.148 -7.982  1.00 41.13
1 . .
ATOM 5204 CG    CG    . ASP ASP ASP B B 253 253 . 93.182  134.686 -6.560  1.00 44.92
1 . .
ATOM 5205 OD1   OD1   . ASP ASP ASP B B 253 253 . 94.329  135.172 -6.304  1.00 48.22
1 . .
ATOM 5206 OD2   OD2   . ASP ASP ASP B B 253 253 . 92.237  134.628 -5.717  1.00 46.74
1 . .
ATOM 5207 C     C     . ASP ASP ASP B B 253 253 . 91.702  132.734 -9.566  1.00 39.11
1 . .
ATOM 5208 O     O     . ASP ASP ASP B B 253 253 . 92.294  133.398 -10.424 1.00 38.67
1 . .
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ATOM 5209 N     N     . GLY GLY GLY B B 254 254 . 91.013  131.641 -9.880  1.00 38.20
1 . .
ATOM 5210 CA    CA    . GLY GLY GLY B B 254 254 . 90.830  131.301 -11.295 1.00 37.26
1 . .
ATOM 5211 C     C     . GLY GLY GLY B B 254 254 . 91.975  130.483 -11.882 1.00 37.09
1 . .
ATOM 5212 O     O     . GLY GLY GLY B B 254 254 . 91.910  130.079 -13.038 1.00 36.49
1 . .
ATOM 5213 N     N     . LYS LYS LYS B B 255 255 . 93.005  130.242 -11.080 1.00 35.91
1 . .
ATOM 5214 CA    CA    . LYS LYS LYS B B 255 255 . 93.995  129.254 -11.371 1.00 36.21
1 . .
ATOM 5215 CB    CB    . LYS LYS LYS B B 255 255 . 95.369  129.934 -11.433 1.00 36.74
1 . .
ATOM 5216 CG    CG    . LYS LYS LYS B B 255 255 . 95.470  130.896 -12.578 1.00 37.65
1 . .
ATOM 5217 CD    CD    . LYS LYS LYS B B 255 255 . 96.867  131.542 -12.627 1.00 43.30
1 . .
ATOM 5218 CE    CE    . LYS LYS LYS B B 255 255 . 96.972  132.461 -13.830 1.00 45.70
1 . .
ATOM 5219 NZ    NZ    . LYS LYS LYS B B 255 255 . 98.395  132.898 -14.047 1.00 50.22
1 . .
ATOM 5220 C     C     . LYS LYS LYS B B 255 255 . 93.977  128.125 -10.314 1.00 36.03
1 . .
ATOM 5221 O     O     . LYS LYS LYS B B 255 255 . 93.033  128.024 -9.520  1.00 36.75
1 . .
ATOM 5222 N     N     . TYR TYR TYR B B 256 256 . 95.036  127.306 -10.267 1.00 34.98
1 . .
ATOM 5223 CA    CA    . TYR TYR TYR B B 256 256 . 95.038  126.116 -9.417  1.00 33.98
1 . .
ATOM 5224 CB    CB    . TYR TYR TYR B B 256 256 . 94.678  124.879 -10.248 1.00 32.38
1 . .
ATOM 5225 CG    CG    . TYR TYR TYR B B 256 256 . 93.204  124.823 -10.643 1.00 27.74
1 . .
ATOM 5226 CD1   CD1   . TYR TYR TYR B B 256 256 . 92.242  124.346 -9.756  1.00 26.11
1 . .
ATOM 5227 CE1   CE1   . TYR TYR TYR B B 256 256 . 90.865  124.276 -10.115 1.00 23.65
1 . .
ATOM 5228 CZ    CZ    . TYR TYR TYR B B 256 256 . 90.519  124.681 -11.366 1.00 23.06
1 . .
ATOM 5229 OH    OH    . TYR TYR TYR B B 256 256 . 89.225  124.651 -11.724 1.00 26.51
1 . .
ATOM 5230 CE2   CE2   . TYR TYR TYR B B 256 256 . 91.467  125.162 -12.261 1.00 21.90
1 . .
ATOM 5231 CD2   CD2   . TYR TYR TYR B B 256 256 . 92.784  125.230 -11.891 1.00 24.49
1 . .
ATOM 5232 C     C     . TYR TYR TYR B B 256 256 . 96.379  125.925 -8.707  1.00 35.90
1 . .
ATOM 5233 O     O     . TYR TYR TYR B B 256 256 . 97.467  126.046 -9.318  1.00 34.61
1 . .
ATOM 5234 N     N     . ASP ASP ASP B B 257 257 . 96.300  125.633 -7.410  1.00 37.76
1 . .
ATOM 5235 CA    CA    . ASP ASP ASP B B 257 257 . 97.518  125.526 -6.621  1.00 39.75
1 . .
ATOM 5236 CB    CB    . ASP ASP ASP B B 257 257 . 97.514  126.492 -5.416  1.00 40.03
1 . .
ATOM 5237 CG    CG    . ASP ASP ASP B B 257 257 . 98.903  126.571 -4.744  1.00 42.87
1 . .
ATOM 5238 OD1   OD1   . ASP ASP ASP B B 257 257 . 99.946  126.531 -5.482  1.00 40.79
1 . .
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ATOM 5239 OD2   OD2   . ASP ASP ASP B B 257 257 . 98.921  126.628 -3.491  1.00 44.11
1 . .
ATOM 5240 C     C     . ASP ASP ASP B B 257 257 . 97.896  124.133 -6.139  1.00 40.23
1 . .
ATOM 5241 O     O     . ASP ASP ASP B B 257 257 . 97.354  123.622 -5.141  1.00 38.94
1 . .
ATOM 5242 N     N     . LEU LEU LEU B B 258 258 . 98.903  123.567 -6.807  1.00 42.43
1 . .
ATOM 5243 CA    CA    . LEU LEU LEU B B 258 258 . 99.337  122.200 -6.509  1.00 44.08
1 . .
ATOM 5244 CB    CB    . LEU LEU LEU B B 258 258 . 99.845  121.456 -7.781  1.00 43.36
1 . .
ATOM 5245 CG    CG    . LEU LEU LEU B B 258 258 . 98.882  121.149 -8.961  1.00 41.65
1 . .
ATOM 5246 CD1   CD1   . LEU LEU LEU B B 258 258 . 99.436  120.129 -9.995  1.00 39.26
1 . .
ATOM 5247 CD2   CD2   . LEU LEU LEU B B 258 258 . 97.487  120.687 -8.520  1.00 37.39
1 . .
ATOM 5248 C     C     . LEU LEU LEU B B 258 258 . 100.293 122.094 -5.290  1.00 46.23
1 . .
ATOM 5249 O     O     . LEU LEU LEU B B 258 258 . 101.002 121.082 -5.131  1.00 46.33
1 . .
ATOM 5250 N     N     . ASP ASP ASP B B 259 259 . 100.260 123.113 -4.411  1.00 48.86
1 . .
ATOM 5251 CA    CA    . ASP ASP ASP B B 259 259 . 101.102 123.143 -3.199  1.00 51.15
1 . .
ATOM 5252 CB    CB    . ASP ASP ASP B B 259 259 . 102.483 123.755 -3.537  1.00 51.83
1 . .
ATOM 5253 CG    CG    . ASP ASP ASP B B 259 259 . 103.585 123.298 -2.585  1.00 52.46
1 . .
ATOM 5254 OD1   OD1   . ASP ASP ASP B B 259 259 . 103.222 122.695 -1.546  1.00 54.47
1 . .
ATOM 5255 OD2   OD2   . ASP ASP ASP B B 259 259 . 104.791 123.534 -2.868  1.00 52.23
1 . .
ATOM 5256 C     C     . ASP ASP ASP B B 259 259 . 100.394 123.867 -2.034  1.00 52.71
1 . .
ATOM 5257 O     O     . ASP ASP ASP B B 259 259 . 100.968 124.205 -0.995  1.00 53.37
1 . .
ATOM 5258 N     N     . PHE PHE PHE B B 260 260 . 99.104  124.049 -2.192  1.00 53.66
1 . .
ATOM 5259 CA    CA    . PHE PHE PHE B B 260 260 . 98.354  124.901 -1.317  1.00 54.54
1 . .
ATOM 5260 CB    CB    . PHE PHE PHE B B 260 260 . 96.894  124.800 -1.727  1.00 53.60
1 . .
ATOM 5261 CG    CG    . PHE PHE PHE B B 260 260 . 96.238  123.582 -1.265  1.00 51.88
1 . .
ATOM 5262 CD1   CD1   . PHE PHE PHE B B 260 260 . 95.387  123.615 -0.170  1.00 51.72
1 . .
ATOM 5263 CE1   CE1   . PHE PHE PHE B B 260 260 . 94.734  122.475 0.264   1.00 52.39
1 . .
ATOM 5264 CZ    CZ    . PHE PHE PHE B B 260 260 . 94.940  121.252 -0.429  1.00 52.15
1 . .
ATOM 5265 CE2   CE2   . PHE PHE PHE B B 260 260 . 95.795  121.213 -1.512  1.00 51.66
1 . .
ATOM 5266 CD2   CD2   . PHE PHE PHE B B 260 260 . 96.445  122.389 -1.927  1.00 52.15
1 . .
ATOM 5267 C     C     . PHE PHE PHE B B 260 260 . 98.502  124.655 0.195   1.00 56.29
1 . .
ATOM 5268 O     O     . PHE PHE PHE B B 260 260 . 98.031  125.459 0.999   1.00 57.37
1 . .
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ATOM 5269 N     N     . LYS LYS LYS B B 261 261 . 99.098  123.533 0.591   1.00 57.57
1 . .
ATOM 5270 CA    CA    . LYS LYS LYS B B 261 261 . 99.317  123.245 2.007   1.00 58.18
1 . .
ATOM 5271 CB    CB    . LYS LYS LYS B B 261 261 . 99.272  121.749 2.269   1.00 57.70
1 . .
ATOM 5272 CG    CG    . LYS LYS LYS B B 261 261 . 97.850  121.217 2.440   1.00 56.60
1 . .
ATOM 5273 CD    CD    . LYS LYS LYS B B 261 261 . 97.824  119.725 2.696   1.00 53.88
1 . .
ATOM 5274 CE    CE    . LYS LYS LYS B B 261 261 . 98.207  118.928 1.462   1.00 49.22
1 . .
ATOM 5275 NZ    NZ    . LYS LYS LYS B B 261 261 . 98.062  117.523 1.879   1.00 43.81
1 . .
ATOM 5276 C     C     . LYS LYS LYS B B 261 261 . 100.613 123.887 2.533   1.00 59.71
1 . .
ATOM 5277 O     O     . LYS LYS LYS B B 261 261 . 100.797 124.069 3.750   1.00 60.20
1 . .
ATOM 5278 N     N     . SER SER SER B B 262 262 . 101.499 124.238 1.609   1.00 60.65
1 . .
ATOM 5279 CA    CA    . SER SER SER B B 262 262 . 102.498 125.234 1.881   1.00 62.24
1 . .
ATOM 5280 CB    CB    . SER SER SER B B 262 262 . 103.369 125.423 0.646   1.00 61.89
1 . .
ATOM 5281 OG    OG    . SER SER SER B B 262 262 . 104.170 124.283 0.450   1.00 63.28
1 . .
ATOM 5282 C     C     . SER SER SER B B 262 262 . 101.823 126.591 2.261   1.00 63.43
1 . .
ATOM 5283 O     O     . SER SER SER B B 262 262 . 100.675 126.882 1.822   1.00 63.47
1 . .
ATOM 5284 N     N     . PRO PRO PRO B B 263 263 . 102.524 127.427 3.080   1.00 63.95
1 . .
ATOM 5285 CA    CA    . PRO PRO PRO B B 263 263 . 102.030 128.815 3.213   1.00 63.75
1 . .
ATOM 5286 CB    CB    . PRO PRO PRO B B 263 263 . 102.952 129.460 4.278   1.00 64.03
1 . .
ATOM 5287 CG    CG    . PRO PRO PRO B B 263 263 . 104.072 128.475 4.559   1.00 64.26
1 . .
ATOM 5288 CD    CD    . PRO PRO PRO B B 263 263 . 103.761 127.152 3.855   1.00 64.17
1 . .
ATOM 5289 C     C     . PRO PRO PRO B B 263 263 . 102.137 129.518 1.837   1.00 63.36
1 . .
ATOM 5290 O     O     . PRO PRO PRO B B 263 263 . 103.113 129.244 1.093   1.00 62.84
1 . .
ATOM 5291 N     N     . THR THR THR B B 264 264 . 101.156 130.403 1.545   1.00 62.57
1 . .
ATOM 5292 CA    CA    . THR THR THR B B 264 264 . 100.844 130.956 0.185   1.00 61.93
1 . .
ATOM 5293 CB    CB    . THR THR THR B B 264 264 . 99.782  132.100 0.224   1.00 61.64
1 . .
ATOM 5294 OG1   OG1   . THR THR THR B B 264 264 . 98.664  131.671 1.003   1.00 60.82
1 . .
ATOM 5295 CG2   CG2   . THR THR THR B B 264 264 . 99.277  132.438 -1.181  1.00 61.31
1 . .
ATOM 5296 C     C     . THR THR THR B B 264 264 . 102.021 131.340 -0.715  1.00 61.68
1 . .
ATOM 5297 O     O     . THR THR THR B B 264 264 . 103.126 131.505 -0.235  1.00 61.71
1 . .
ATOM 5298 N     N     . ASP ASP ASP B B 265 265 . 101.752 131.427 -2.022  1.00 61.81
1 . .
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ATOM 5299 CA    CA    . ASP ASP ASP B B 265 265 . 102.676 131.917 -3.056  1.00 62.03
1 . .
ATOM 5300 CB    CB    . ASP ASP ASP B B 265 265 . 104.073 131.324 -2.935  1.00 61.96
1 . .
ATOM 5301 CG    CG    . ASP ASP ASP B B 265 265 . 104.882 131.492 -4.218  1.00 61.54
1 . .
ATOM 5302 OD1   OD1   . ASP ASP ASP B B 265 265 . 104.630 132.449 -4.984  1.00 60.10
1 . .
ATOM 5303 OD2   OD2   . ASP ASP ASP B B 265 265 . 105.764 130.657 -4.470  1.00 61.58
1 . .
ATOM 5304 C     C     . ASP ASP ASP B B 265 265 . 102.152 131.662 -4.482  1.00 62.55
1 . .
ATOM 5305 O     O     . ASP ASP ASP B B 265 265 . 102.225 130.534 -4.967  1.00 62.95
1 . .
ATOM 5306 N     N     . PRO PRO PRO B B 266 266 . 101.671 132.722 -5.179  1.00 62.69
1 . .
ATOM 5307 CA    CA    . PRO PRO PRO B B 266 266 . 100.981 132.563 -6.467  1.00 62.02
1 . .
ATOM 5308 CB    CB    . PRO PRO PRO B B 266 266 . 100.211 133.886 -6.614  1.00 62.59
1 . .
ATOM 5309 CG    CG    . PRO PRO PRO B B 266 266 . 100.078 134.409 -5.176  1.00 62.85
1 . .
ATOM 5310 CD    CD    . PRO PRO PRO B B 266 266 . 101.447 134.074 -4.632  1.00 62.82
1 . .
ATOM 5311 C     C     . PRO PRO PRO B B 266 266 . 101.844 132.335 -7.694  1.00 61.25
1 . .
ATOM 5312 O     O     . PRO PRO PRO B B 266 266 . 101.299 132.221 -8.806  1.00 61.53
1 . .
ATOM 5313 N     N     . SER SER SER B B 267 267 . 103.160 132.274 -7.539  1.00 59.95
1 . .
ATOM 5314 CA    CA    . SER SER SER B B 267 267 . 104.015 132.136 -8.737  1.00 58.93
1 . .
ATOM 5315 CB    CB    . SER SER SER B B 267 267 . 105.512 132.512 -8.476  1.00 58.84
1 . .
ATOM 5316 OG    OG    . SER SER SER B B 267 267 . 105.923 132.236 -7.148  1.00 55.93
1 . .
ATOM 5317 C     C     . SER SER SER B B 267 267 . 103.874 130.734 -9.346  1.00 58.11
1 . .
ATOM 5318 O     O     . SER SER SER B B 267 267 . 104.033 130.549 -10.558 1.00 58.12
1 . .
ATOM 5319 N     N     . ARG ARG ARG B B 268 268 . 103.562 129.778 -8.473  1.00 56.94
1 . .
ATOM 5320 CA    CA    . ARG ARG ARG B B 268 268 . 103.427 128.351 -8.798  1.00 56.14
1 . .
ATOM 5321 CB    CB    . ARG ARG ARG B B 268 268 . 103.687 127.499 -7.530  1.00 56.13
1 . .
ATOM 5322 CG    CG    . ARG ARG ARG B B 268 268 . 102.700 127.756 -6.351  1.00 57.23
1 . .
ATOM 5323 CD    CD    . ARG ARG ARG B B 268 268 . 103.168 127.232 -4.978  1.00 56.28
1 . .
ATOM 5324 NE    NE    . ARG ARG ARG B B 268 268 . 102.087 127.292 -3.986  1.00 54.78
1 . .
ATOM 5325 CZ    CZ    . ARG ARG ARG B B 268 268 . 102.259 127.451 -2.664  1.00 54.71
1 . .
ATOM 5326 NH1   NH1   . ARG ARG ARG B B 268 268 . 103.484 127.569 -2.138  1.00 55.22
1 . .
ATOM 5327 NH2   NH2   . ARG ARG ARG B B 268 268 . 101.204 127.481 -1.839  1.00 52.20
1 . .
ATOM 5328 C     C     . ARG ARG ARG B B 268 268 . 102.061 128.017 -9.477  1.00 55.03
1 . .
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ATOM 5329 O     O     . ARG ARG ARG B B 268 268 . 102.047 127.285 -10.481 1.00 55.03
1 . .
ATOM 5330 N     N     . TYR TYR TYR B B 269 269 . 100.951 128.578 -8.960  1.00 53.03
1 . .
ATOM 5331 CA    CA    . TYR TYR TYR B B 269 269 . 99.575  128.441 -9.550  1.00 50.54
1 . .
ATOM 5332 CB    CB    . TYR TYR TYR B B 269 269 . 98.814  129.771 -9.458  1.00 50.74
1 . .
ATOM 5333 CG    CG    . TYR TYR TYR B B 269 269 . 98.438  130.239 -8.073  1.00 50.55
1 . .
ATOM 5334 CD1   CD1   . TYR TYR TYR B B 269 269 . 97.603  131.351 -7.894  1.00 49.93
1 . .
ATOM 5335 CE1   CE1   . TYR TYR TYR B B 269 269 . 97.265  131.795 -6.630  1.00 49.38
1 . .
ATOM 5336 CZ    CZ    . TYR TYR TYR B B 269 269 . 97.753  131.107 -5.549  1.00 49.91
1 . .
ATOM 5337 OH    OH    . TYR TYR TYR B B 269 269 . 97.458  131.475 -4.270  1.00 52.39
1 . .
ATOM 5338 CE2   CE2   . TYR TYR TYR B B 269 269 . 98.581  130.024 -5.708  1.00 50.04
1 . .
ATOM 5339 CD2   CD2   . TYR TYR TYR B B 269 269 . 98.930  129.605 -6.949  1.00 49.58
1 . .
ATOM 5340 C     C     . TYR TYR TYR B B 269 269 . 99.592  128.110 -11.021 1.00 48.32
1 . .
ATOM 5341 O     O     . TYR TYR TYR B B 269 269 . 100.312 128.750 -11.749 1.00 48.20
1 . .
ATOM 5342 N     N     . ILE ILE ILE B B 270 270 . 98.784  127.150 -11.479 1.00 46.21
1 . .
ATOM 5343 CA    CA    . ILE ILE ILE B B 270 270 . 98.704  126.833 -12.930 1.00 44.17
1 . .
ATOM 5344 CB    CB    . ILE ILE ILE B B 270 270 . 99.160  125.375 -13.217 1.00 44.46
1 . .
ATOM 5345 CG1   CG1   . ILE ILE ILE B B 270 270 . 98.192  124.360 -12.530 1.00 43.75
1 . .
ATOM 5346 CD1   CD1   . ILE ILE ILE B B 270 270 . 98.586  122.867 -12.549 1.00 40.11
1 . .
ATOM 5347 CG2   CG2   . ILE ILE ILE B B 270 270 . 100.703 125.164 -12.858 1.00 43.98
1 . .
ATOM 5348 C     C     . ILE ILE ILE B B 270 270 . 97.270  126.985 -13.453 1.00 43.63
1 . .
ATOM 5349 O     O     . ILE ILE ILE B B 270 270 . 96.343  127.041 -12.656 1.00 43.10
1 . .
ATOM 5350 N     N     . THR THR THR B B 271 271 . 97.074  127.033 -14.771 1.00 42.75
1 . .
ATOM 5351 CA    CA    . THR THR THR B B 271 271 . 95.720  127.140 -15.319 1.00 42.35
1 . .
ATOM 5352 CB    CB    . THR THR THR B B 271 271 . 95.746  127.757 -16.719 1.00 42.57
1 . .
ATOM 5353 OG1   OG1   . THR THR THR B B 271 271 . 96.279  126.797 -17.640 1.00 43.02
1 . .
ATOM 5354 CG2   CG2   . THR THR THR B B 271 271 . 96.594  129.037 -16.761 1.00 43.34
1 . .
ATOM 5355 C     C     . THR THR THR B B 271 271 . 95.025  125.775 -15.461 1.00 41.83
1 . .
ATOM 5356 O     O     . THR THR THR B B 271 271 . 95.668  124.747 -15.359 1.00 41.58
1 . .
ATOM 5357 N     N     . GLY GLY GLY B B 272 272 . 93.720  125.778 -15.739 1.00 40.86
1 . .
ATOM 5358 CA    CA    . GLY GLY GLY B B 272 272 . 92.973  124.555 -16.016 1.00 39.84
1 . .
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ATOM 5359 C     C     . GLY GLY GLY B B 272 272 . 93.461  123.774 -17.232 1.00 40.11
1 . .
ATOM 5360 O     O     . GLY GLY GLY B B 272 272 . 93.414  122.526 -17.231 1.00 38.42
1 . .
ATOM 5361 N     N     . ASP ASP ASP B B 273 273 . 93.902  124.497 -18.281 1.00 39.83
1 . .
ATOM 5362 CA    CA    . ASP ASP ASP B B 273 273 . 94.526  123.836 -19.418 1.00 40.39
1 . .
ATOM 5363 CB    CB    . ASP ASP ASP B B 273 273 . 94.870  124.792 -20.576 1.00 41.32
1 . .
ATOM 5364 CG    CG    . ASP ASP ASP B B 273 273 . 93.996  124.578 -21.811 1.00 46.46
1 . .
ATOM 5365 OD1   OD1   . ASP ASP ASP B B 273 273 . 92.726  124.588 -21.725 1.00 51.51
1 . .
ATOM 5366 OD2   OD2   . ASP ASP ASP B B 273 273 . 94.587  124.437 -22.911 1.00 53.33
1 . .
ATOM 5367 C     C     . ASP ASP ASP B B 273 273 . 95.794  123.124 -18.954 1.00 39.35
1 . .
ATOM 5368 O     O     . ASP ASP ASP B B 273 273 . 95.973  121.986 -19.282 1.00 39.85
1 . .
ATOM 5369 N     N     . GLN GLN GLN B B 274 274 . 96.678  123.783 -18.220 1.00 38.22
1 . .
ATOM 5370 CA    CA    . GLN GLN GLN B B 274 274 . 97.844  123.056 -17.706 1.00 38.27
1 . .
ATOM 5371 CB    CB    . GLN GLN GLN B B 274 274 . 98.801  123.982 -16.971 1.00 37.64
1 . .
ATOM 5372 CG    CG    . GLN GLN GLN B B 274 274 . 99.114  125.220 -17.753 1.00 39.43
1 . .
ATOM 5373 CD    CD    . GLN GLN GLN B B 274 274 . 99.861  126.175 -16.923 1.00 42.30
1 . .
ATOM 5374 OE1   OE1   . GLN GLN GLN B B 274 274 . 99.266  126.962 -16.223 1.00 47.39
1 . .
ATOM 5375 NE2   NE2   . GLN GLN GLN B B 274 274 . 101.185 126.088 -16.943 1.00 43.30
1 . .
ATOM 5376 C     C     . GLN GLN GLN B B 274 274 . 97.441  121.860 -16.804 1.00 37.25
1 . .
ATOM 5377 O     O     . GLN GLN GLN B B 274 274 . 98.021  120.807 -16.894 1.00 38.23
1 . .
ATOM 5378 N     N     . LEU LEU LEU B B 275 275 . 96.463  122.037 -15.941 1.00 35.41
1 . .
ATOM 5379 CA    CA    . LEU LEU LEU B B 275 275 . 96.024  120.961 -15.075 1.00 35.04
1 . .
ATOM 5380 CB    CB    . LEU LEU LEU B B 275 275 . 95.015  121.515 -14.050 1.00 35.26
1 . .
ATOM 5381 CG    CG    . LEU LEU LEU B B 275 275 . 94.388  120.605 -12.990 1.00 34.26
1 . .
ATOM 5382 CD1   CD1   . LEU LEU LEU B B 275 275 . 95.478  119.878 -12.152 1.00 34.34
1 . .
ATOM 5383 CD2   CD2   . LEU LEU LEU B B 275 275 . 93.434  121.336 -12.054 1.00 27.47
1 . .
ATOM 5384 C     C     . LEU LEU LEU B B 275 275 . 95.429  119.783 -15.894 1.00 35.52
1 . .
ATOM 5385 O     O     . LEU LEU LEU B B 275 275 . 95.688  118.598 -15.588 1.00 36.18
1 . .
ATOM 5386 N     N     . GLY GLY GLY B B 276 276 . 94.619  120.088 -16.911 1.00 34.78
1 . .
ATOM 5387 CA    CA    . GLY GLY GLY B B 276 276 . 94.093  119.056 -17.815 1.00 34.85
1 . .
ATOM 5388 C     C     . GLY GLY GLY B B 276 276 . 95.143  118.250 -18.556 1.00 35.30
1 . .
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ATOM 5389 O     O     . GLY GLY GLY B B 276 276 . 94.994  117.040 -18.670 1.00 35.26
1 . .
ATOM 5390 N     N     . ALA ALA ALA B B 277 277 . 96.204  118.915 -19.066 1.00 35.47
1 . .
ATOM 5391 CA    CA    . ALA ALA ALA B B 277 277 . 97.358  118.227 -19.653 1.00 35.40
1 . .
ATOM 5392 CB    CB    . ALA ALA ALA B B 277 277 . 98.356  119.226 -20.289 1.00 35.59
1 . .
ATOM 5393 C     C     . ALA ALA ALA B B 277 277 . 98.068  117.296 -18.666 1.00 35.40
1 . .
ATOM 5394 O     O     . ALA ALA ALA B B 277 277 . 98.580  116.253 -19.072 1.00 36.34
1 . .
ATOM 5395 N     N     . LEU LEU LEU B B 278 278 . 98.081  117.630 -17.373 1.00 34.40
1 . .
ATOM 5396 CA    CA    . LEU LEU LEU B B 278 278 . 98.657  116.717 -16.382 1.00 33.42
1 . .
ATOM 5397 CB    CB    . LEU LEU LEU B B 278 278 . 98.737  117.378 -15.000 1.00 33.20
1 . .
ATOM 5398 CG    CG    . LEU LEU LEU B B 278 278 . 99.658  116.775 -13.946 1.00 32.80
1 . .
ATOM 5399 CD1   CD1   . LEU LEU LEU B B 278 278 . 101.099 116.353 -14.502 1.00 34.67
1 . .
ATOM 5400 CD2   CD2   . LEU LEU LEU B B 278 278 . 99.836  117.751 -12.765 1.00 33.26
1 . .
ATOM 5401 C     C     . LEU LEU LEU B B 278 278 . 97.845  115.425 -16.284 1.00 32.47
1 . .
ATOM 5402 O     O     . LEU LEU LEU B B 278 278 . 98.371  114.312 -16.285 1.00 32.63
1 . .
ATOM 5403 N     N     . TYR TYR TYR B B 279 279 . 96.542  115.570 -16.206 1.00 31.61
1 . .
ATOM 5404 CA    CA    . TYR TYR TYR B B 279 279 . 95.725  114.413 -16.133 1.00 30.11
1 . .
ATOM 5405 CB    CB    . TYR TYR TYR B B 279 279 . 94.287  114.823 -16.090 1.00 29.58
1 . .
ATOM 5406 CG    CG    . TYR TYR TYR B B 279 279 . 93.890  115.673 -14.919 1.00 30.84
1 . .
ATOM 5407 CD1   CD1   . TYR TYR TYR B B 279 279 . 94.554  115.601 -13.671 1.00 32.11
1 . .
ATOM 5408 CE1   CE1   . TYR TYR TYR B B 279 279 . 94.138  116.398 -12.577 1.00 30.01
1 . .
ATOM 5409 CZ    CZ    . TYR TYR TYR B B 279 279 . 93.032  117.245 -12.739 1.00 30.84
1 . .
ATOM 5410 OH    OH    . TYR TYR TYR B B 279 279 . 92.552  118.069 -11.700 1.00 28.99
1 . .
ATOM 5411 CE2   CE2   . TYR TYR TYR B B 279 279 . 92.385  117.318 -13.968 1.00 30.92
1 . .
ATOM 5412 CD2   CD2   . TYR TYR TYR B B 279 279 . 92.783  116.525 -15.028 1.00 30.97
1 . .
ATOM 5413 C     C     . TYR TYR TYR B B 279 279 . 95.920  113.531 -17.372 1.00 29.44
1 . .
ATOM 5414 O     O     . TYR TYR TYR B B 279 279 . 95.889  112.308 -17.245 1.00 28.39
1 . .
ATOM 5415 N     N     . GLN GLN GLN B B 280 280 . 96.035  114.146 -18.556 1.00 28.41
1 . .
ATOM 5416 CA    CA    . GLN GLN GLN B B 280 280 . 96.229  113.377 -19.809 1.00 30.54
1 . .
ATOM 5417 CB    CB    . GLN GLN GLN B B 280 280 . 96.262  114.270 -21.097 1.00 30.29
1 . .
ATOM 5418 CG    CG    . GLN GLN GLN B B 280 280 . 95.023  115.121 -21.331 1.00 32.99
1 . .
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ATOM 5419 CD    CD    . GLN GLN GLN B B 280 280 . 93.857  114.356 -21.938 1.00 38.16
1 . .
ATOM 5420 OE1   OE1   . GLN GLN GLN B B 280 280 . 93.895  113.127 -22.094 1.00 42.36
1 . .
ATOM 5421 NE2   NE2   . GLN GLN GLN B B 280 280 . 92.831  115.081 -22.330 1.00 38.95
1 . .
ATOM 5422 C     C     . GLN GLN GLN B B 280 280 . 97.527  112.586 -19.763 1.00 30.86
1 . .
ATOM 5423 O     O     . GLN GLN GLN B B 280 280 . 97.556  111.452 -20.220 1.00 31.84
1 . .
ATOM 5424 N     N     . ASP ASP ASP B B 281 281 . 98.596  113.166 -19.219 1.00 31.25
1 . .
ATOM 5425 CA    CA    . ASP ASP ASP B B 281 281 . 99.798  112.363 -18.946 1.00 32.69
1 . .
ATOM 5426 CB    CB    . ASP ASP ASP B B 281 281 . 100.953 113.232 -18.414 1.00 33.25
1 . .
ATOM 5427 CG    CG    . ASP ASP ASP B B 281 281 . 101.409 114.287 -19.399 1.00 37.29
1 . .
ATOM 5428 OD1   OD1   . ASP ASP ASP B B 281 281 . 101.433 114.026 -20.642 1.00 43.31
1 . .
ATOM 5429 OD2   OD2   . ASP ASP ASP B B 281 281 . 101.780 115.392 -18.930 1.00 41.36
1 . .
ATOM 5430 C     C     . ASP ASP ASP B B 281 281 . 99.507  111.263 -17.920 1.00 33.07
1 . .
ATOM 5431 O     O     . ASP ASP ASP B B 281 281 . 100.083 110.124 -18.019 1.00 33.23
1 . .
ATOM 5432 N     N     . PHE PHE PHE B B 282 282 . 98.673  111.571 -16.908 1.00 31.63
1 . .
ATOM 5433 CA    CA    . PHE PHE PHE B B 282 282 . 98.471  110.555 -15.881 1.00 32.03
1 . .
ATOM 5434 CB    CB    . PHE PHE PHE B B 282 282 . 97.679  111.039 -14.624 1.00 32.04
1 . .
ATOM 5435 CG    CG    . PHE PHE PHE B B 282 282 . 98.446  111.991 -13.683 1.00 32.30
1 . .
ATOM 5436 CD1   CD1   . PHE PHE PHE B B 282 282 . 97.734  112.863 -12.833 1.00 32.70
1 . .
ATOM 5437 CE1   CE1   . PHE PHE PHE B B 282 282 . 98.390  113.729 -11.971 1.00 29.42
1 . .
ATOM 5438 CZ    CZ    . PHE PHE PHE B B 282 282 . 99.808  113.751 -11.932 1.00 33.39
1 . .
ATOM 5439 CE2   CE2   . PHE PHE PHE B B 282 282 . 100.527 112.901 -12.762 1.00 34.22
1 . .
ATOM 5440 CD2   CD2   . PHE PHE PHE B B 282 282 . 99.834  112.031 -13.648 1.00 34.68
1 . .
ATOM 5441 C     C     . PHE PHE PHE B B 282 282 . 97.737  109.399 -16.541 1.00 32.81
1 . .
ATOM 5442 O     O     . PHE PHE PHE B B 282 282 . 98.013  108.224 -16.248 1.00 33.43
1 . .
ATOM 5443 N     N     . VAL VAL VAL B B 283 283 . 96.757  109.719 -17.397 1.00 32.38
1 . .
ATOM 5444 CA    CA    . VAL VAL VAL B B 283 283 . 95.939  108.694 -18.035 1.00 32.57
1 . .
ATOM 5445 CB    CB    . VAL VAL VAL B B 283 283 . 94.714  109.328 -18.736 1.00 32.63
1 . .
ATOM 5446 CG1   CG1   . VAL VAL VAL B B 283 283 . 93.962  108.327 -19.537 1.00 33.29
1 . .
ATOM 5447 CG2   CG2   . VAL VAL VAL B B 283 283 . 93.830  110.024 -17.658 1.00 31.21
1 . .
ATOM 5448 C     C     . VAL VAL VAL B B 283 283 . 96.773  107.895 -19.013 1.00 33.22
1 . .
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ATOM 5449 O     O     . VAL VAL VAL B B 283 283 . 96.551  106.718 -19.213 1.00 32.65
1 . .
ATOM 5450 N     N     . ARG ARG ARG B B 284 284 . 97.770  108.539 -19.593 1.00 34.29
1 . .
ATOM 5451 CA    CA    . ARG ARG ARG B B 284 284 . 98.646  107.840 -20.524 1.00 34.57
1 . .
ATOM 5452 CB    CB    . ARG ARG ARG B B 284 284 . 99.418  108.839 -21.431 1.00 35.60
1 . .
ATOM 5453 CG    CG    . ARG ARG ARG B B 284 284 . 100.451 108.228 -22.427 1.00 36.10
1 . .
ATOM 5454 CD    CD    . ARG ARG ARG B B 284 284 . 99.814  107.448 -23.612 1.00 39.40
1 . .
ATOM 5455 NE    NE    . ARG ARG ARG B B 284 284 . 99.099  108.270 -24.620 1.00 42.02
1 . .
ATOM 5456 CZ    CZ    . ARG ARG ARG B B 284 284 . 99.685  108.878 -25.659 1.00 43.34
1 . .
ATOM 5457 NH1   NH1   . ARG ARG ARG B B 284 284 . 100.992 108.804 -25.839 1.00 42.46
1 . .
ATOM 5458 NH2   NH2   . ARG ARG ARG B B 284 284 . 98.962  109.582 -26.517 1.00 45.67
1 . .
ATOM 5459 C     C     . ARG ARG ARG B B 284 284 . 99.592  106.935 -19.740 1.00 34.74
1 . .
ATOM 5460 O     O     . ARG ARG ARG B B 284 284 . 99.806  105.804 -20.151 1.00 35.76
1 . .
ATOM 5461 N     N     . ASP ASP ASP B B 285 285 . 100.148 107.412 -18.626 1.00 34.07
1 . .
ATOM 5462 CA    CA    . ASP ASP ASP B B 285 285 . 101.264 106.696 -17.987 1.00 33.08
1 . .
ATOM 5463 CB    CB    . ASP ASP ASP B B 285 285 . 102.334 107.653 -17.437 1.00 34.17
1 . .
ATOM 5464 CG    CG    . ASP ASP ASP B B 285 285 . 102.854 108.593 -18.486 1.00 34.16
1 . .
ATOM 5465 OD1   OD1   . ASP ASP ASP B B 285 285 . 103.014 108.182 -19.628 1.00 34.08
1 . .
ATOM 5466 OD2   OD2   . ASP ASP ASP B B 285 285 . 103.071 109.769 -18.188 1.00 39.07
1 . .
ATOM 5467 C     C     . ASP ASP ASP B B 285 285 . 100.902 105.708 -16.894 1.00 31.61
1 . .
ATOM 5468 O     O     . ASP ASP ASP B B 285 285 . 101.769 104.966 -16.468 1.00 30.77
1 . .
ATOM 5469 N     N     . TYR TYR TYR B B 286 286 . 99.638  105.721 -16.440 1.00 29.83
1 . .
ATOM 5470 CA    CA    . TYR TYR TYR B B 286 286 . 99.213  104.915 -15.341 1.00 28.60
1 . .
ATOM 5471 CB    CB    . TYR TYR TYR B B 286 286 . 99.213  105.717 -14.029 1.00 29.27
1 . .
ATOM 5472 CG    CG    . TYR TYR TYR B B 286 286 . 100.537 106.335 -13.699 1.00 30.44
1 . .
ATOM 5473 CD1   CD1   . TYR TYR TYR B B 286 286 . 101.531 105.586 -13.081 1.00 32.90
1 . .
ATOM 5474 CE1   CE1   . TYR TYR TYR B B 286 286 . 102.781 106.155 -12.779 1.00 36.37
1 . .
ATOM 5475 CZ    CZ    . TYR TYR TYR B B 286 286 . 103.012 107.462 -13.118 1.00 37.62
1 . .
ATOM 5476 OH    OH    . TYR TYR TYR B B 286 286 . 104.242 108.029 -12.848 1.00 43.65
1 . .
ATOM 5477 CE2   CE2   . TYR TYR TYR B B 286 286 . 102.012 108.232 -13.726 1.00 35.40
1 . .
ATOM 5478 CD2   CD2   . TYR TYR TYR B B 286 286 . 100.800 107.667 -14.021 1.00 28.44
1 . .
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ATOM 5479 C     C     . TYR TYR TYR B B 286 286 . 97.804  104.439 -15.654 1.00 28.67
1 . .
ATOM 5480 O     O     . TYR TYR TYR B B 286 286 . 97.104  105.000 -16.528 1.00 27.53
1 . .
ATOM 5481 N     N     . PRO PRO PRO B B 287 287 . 97.388  103.369 -14.983 1.00 28.23
1 . .
ATOM 5482 CA    CA    . PRO PRO PRO B B 287 287 . 96.141  102.792 -15.393 1.00 28.16
1 . .
ATOM 5483 CB    CB    . PRO PRO PRO B B 287 287 . 96.246  101.365 -14.865 1.00 27.68
1 . .
ATOM 5484 CG    CG    . PRO PRO PRO B B 287 287 . 97.140  101.533 -13.638 1.00 28.21
1 . .
ATOM 5485 CD    CD    . PRO PRO PRO B B 287 287 . 98.186  102.447 -14.160 1.00 27.53
1 . .
ATOM 5486 C     C     . PRO PRO PRO B B 287 287 . 94.995  103.547 -14.725 1.00 27.59
1 . .
ATOM 5487 O     O     . PRO PRO PRO B B 287 287 . 94.263  102.968 -13.997 1.00 29.86
1 . .
ATOM 5488 N     N     . VAL VAL VAL B B 288 288 . 94.821  104.825 -15.004 1.00 27.21
1 . .
ATOM 5489 CA    CA    . VAL VAL VAL B B 288 288 . 93.788  105.614 -14.341 1.00 26.72
1 . .
ATOM 5490 CB    CB    . VAL VAL VAL B B 288 288 . 94.293  107.061 -14.215 1.00 27.13
1 . .
ATOM 5491 CG1   CG1   . VAL VAL VAL B B 288 288 . 93.192  108.002 -13.752 1.00 26.39
1 . .
ATOM 5492 CG2   CG2   . VAL VAL VAL B B 288 288 . 95.514  107.136 -13.301 1.00 25.73
1 . .
ATOM 5493 C     C     . VAL VAL VAL B B 288 288 . 92.519  105.576 -15.162 1.00 27.15
1 . .
ATOM 5494 O     O     . VAL VAL VAL B B 288 288 . 92.567  105.870 -16.341 1.00 28.55
1 . .
ATOM 5495 N     N     . VAL VAL VAL B B 289 289 . 91.373  105.280 -14.574 1.00 26.36
1 . .
ATOM 5496 CA    CA    . VAL VAL VAL B B 289 289 . 90.178  105.074 -15.374 1.00 25.70
1 . .
ATOM 5497 CB    CB    . VAL VAL VAL B B 289 289 . 89.674  103.582 -15.236 1.00 26.43
1 . .
ATOM 5498 CG1   CG1   . VAL VAL VAL B B 289 289 . 90.620  102.563 -15.986 1.00 25.00
1 . .
ATOM 5499 CG2   CG2   . VAL VAL VAL B B 289 289 . 89.515  103.204 -13.749 1.00 28.00
1 . .
ATOM 5500 C     C     . VAL VAL VAL B B 289 289 . 89.056  105.937 -14.922 1.00 26.32
1 . .
ATOM 5501 O     O     . VAL VAL VAL B B 289 289 . 87.960  105.951 -15.544 1.00 26.38
1 . .
ATOM 5502 N     N     . SER SER SER B B 290 290 . 89.312  106.607 -13.781 1.00 25.98
1 . .
ATOM 5503 CA    CA    . SER SER SER B B 290 290 . 88.370  107.482 -13.162 1.00 25.63
1 . .
ATOM 5504 CB    CB    . SER SER SER B B 290 290 . 87.488  106.713 -12.196 1.00 26.28
1 . .
ATOM 5505 OG    OG    . SER SER SER B B 290 290 . 86.374  107.494 -11.815 1.00 25.72
1 . .
ATOM 5506 C     C     . SER SER SER B B 290 290 . 89.040  108.669 -12.478 1.00 25.48
1 . .
ATOM 5507 O     O     . SER SER SER B B 290 290 . 90.085  108.530 -11.794 1.00 27.24
1 . .
ATOM 5508 N     N     . ILE ILE ILE B B 291 291 . 88.483  109.839 -12.728 1.00 22.85
1 . .
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ATOM 5509 CA    CA    . ILE ILE ILE B B 291 291 . 88.917  111.052 -12.071 1.00 22.89
1 . .
ATOM 5510 CB    CB    . ILE ILE ILE B B 291 291 . 89.775  111.953 -12.909 1.00 22.02
1 . .
ATOM 5511 CG1   CG1   . ILE ILE ILE B B 291 291 . 91.159  111.308 -13.177 1.00 22.09
1 . .
ATOM 5512 CD1   CD1   . ILE ILE ILE B B 291 291 . 91.908  111.983 -14.371 1.00 18.46
1 . .
ATOM 5513 CG2   CG2   . ILE ILE ILE B B 291 291 . 90.078  113.210 -12.088 1.00 20.80
1 . .
ATOM 5514 C     C     . ILE ILE ILE B B 291 291 . 87.746  111.885 -11.611 1.00 22.73
1 . .
ATOM 5515 O     O     . ILE ILE ILE B B 291 291 . 86.915  112.282 -12.400 1.00 22.49
1 . .
ATOM 5516 N     N     . GLU GLU GLU B B 292 292 . 87.741  112.147 -10.305 1.00 23.41
1 . .
ATOM 5517 CA    CA    . GLU GLU GLU B B 292 292 . 86.694  112.884 -9.628  1.00 23.38
1 . .
ATOM 5518 CB    CB    . GLU GLU GLU B B 292 292 . 86.283  112.128 -8.369  1.00 22.45
1 . .
ATOM 5519 CG    CG    . GLU GLU GLU B B 292 292 . 85.093  112.736 -7.576  1.00 23.44
1 . .
ATOM 5520 CD    CD    . GLU GLU GLU B B 292 292 . 85.029  112.181 -6.138  1.00 25.59
1 . .
ATOM 5521 OE1   OE1   . GLU GLU GLU B B 292 292 . 84.895  113.004 -5.174  1.00 27.29
1 . .
ATOM 5522 OE2   OE2   . GLU GLU GLU B B 292 292 . 85.192  110.921 -5.970  1.00 22.60
1 . .
ATOM 5523 C     C     . GLU GLU GLU B B 292 292 . 87.173  114.298 -9.305  1.00 22.89
1 . .
ATOM 5524 O     O     . GLU GLU GLU B B 292 292 . 88.392  114.540 -9.018  1.00 24.03
1 . .
ATOM 5525 N     N     . ASP ASP ASP B B 293 293 . 86.247  115.236 -9.405  1.00 22.01
1 . .
ATOM 5526 CA    CA    . ASP ASP ASP B B 293 293 . 86.526  116.705 -9.246  1.00 21.63
1 . .
ATOM 5527 CB    CB    . ASP ASP ASP B B 293 293 . 86.372  117.122 -7.786  1.00 21.59
1 . .
ATOM 5528 CG    CG    . ASP ASP ASP B B 293 293 . 84.917  117.208 -7.354  1.00 21.44
1 . .
ATOM 5529 OD1   OD1   . ASP ASP ASP B B 293 293 . 84.043  117.242 -8.195  1.00 24.42
1 . .
ATOM 5530 OD2   OD2   . ASP ASP ASP B B 293 293 . 84.616  117.241 -6.155  1.00 26.87
1 . .
ATOM 5531 C     C     . ASP ASP ASP B B 293 293 . 87.868  117.149 -9.788  1.00 21.49
1 . .
ATOM 5532 O     O     . ASP ASP ASP B B 293 293 . 88.683  117.648 -9.035  1.00 22.84
1 . .
ATOM 5533 N     N     . PRO PRO PRO B B 294 294 . 88.093  116.982 -11.112 1.00 21.73
1 . .
ATOM 5534 CA    CA    . PRO PRO PRO B B 294 294 . 89.350  117.420 -11.759 1.00 21.82
1 . .
ATOM 5535 CB    CB    . PRO PRO PRO B B 294 294 . 89.209  116.934 -13.210 1.00 21.35
1 . .
ATOM 5536 CG    CG    . PRO PRO PRO B B 294 294 . 87.677  116.726 -13.413 1.00 21.53
1 . .
ATOM 5537 CD    CD    . PRO PRO PRO B B 294 294 . 87.101  116.442 -12.073 1.00 20.92
1 . .
ATOM 5538 C     C     . PRO PRO PRO B B 294 294 . 89.470  118.937 -11.767 1.00 22.31
1 . .
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ATOM 5539 O     O     . PRO PRO PRO B B 294 294 . 90.590  119.425 -11.838 1.00 23.91
1 . .
ATOM 5540 N     N     . PHE PHE PHE B B 295 295 . 88.337  119.654 -11.692 1.00 21.32
1 . .
ATOM 5541 CA    CA    . PHE PHE PHE B B 295 295 . 88.282  121.118 -11.661 1.00 22.43
1 . .
ATOM 5542 CB    CB    . PHE PHE PHE B B 295 295 . 87.808  121.668 -13.102 1.00 22.90
1 . .
ATOM 5543 CG    CG    . PHE PHE PHE B B 295 295 . 88.681  121.136 -14.205 1.00 22.23
1 . .
ATOM 5544 CD1   CD1   . PHE PHE PHE B B 295 295 . 90.001  121.595 -14.335 1.00 23.39
1 . .
ATOM 5545 CE1   CE1   . PHE PHE PHE B B 295 295 . 90.854  121.060 -15.288 1.00 22.85
1 . .
ATOM 5546 CZ    CZ    . PHE PHE PHE B B 295 295 . 90.401  120.029 -16.093 1.00 22.71
1 . .
ATOM 5547 CE2   CE2   . PHE PHE PHE B B 295 295 . 89.097  119.547 -15.934 1.00 22.24
1 . .
ATOM 5548 CD2   CD2   . PHE PHE PHE B B 295 295 . 88.260  120.076 -14.988 1.00 20.80
1 . .
ATOM 5549 C     C     . PHE PHE PHE B B 295 295 . 87.398  121.671 -10.521 1.00 23.00
1 . .
ATOM 5550 O     O     . PHE PHE PHE B B 295 295 . 86.570  120.943 -9.957  1.00 24.08
1 . .
ATOM 5551 N     N     . ASP ASP ASP B B 296 296 . 87.487  122.980 -10.269 1.00 23.78
1 . .
ATOM 5552 CA    CA    . ASP ASP ASP B B 296 296 . 86.653  123.649 -9.271  1.00 24.40
1 . .
ATOM 5553 CB    CB    . ASP ASP ASP B B 296 296 . 86.968  125.144 -9.273  1.00 24.41
1 . .
ATOM 5554 CG    CG    . ASP ASP ASP B B 296 296 . 86.236  125.889 -8.176  1.00 25.98
1 . .
ATOM 5555 OD1   OD1   . ASP ASP ASP B B 296 296 . 86.707  125.853 -7.030  1.00 27.71
1 . .
ATOM 5556 OD2   OD2   . ASP ASP ASP B B 296 296 . 85.158  126.470 -8.437  1.00 29.36
1 . .
ATOM 5557 C     C     . ASP ASP ASP B B 296 296 . 85.142  123.434 -9.534  1.00 24.61
1 . .
ATOM 5558 O     O     . ASP ASP ASP B B 296 296 . 84.744  123.225 -10.647 1.00 26.72
1 . .
ATOM 5559 N     N     . GLN GLN GLN B B 297 297 . 84.307  123.508 -8.514  1.00 25.03
1 . .
ATOM 5560 CA    CA    . GLN GLN GLN B B 297 297 . 82.865  123.237 -8.625  1.00 25.21
1 . .
ATOM 5561 CB    CB    . GLN GLN GLN B B 297 297 . 82.253  123.240 -7.230  1.00 25.43
1 . .
ATOM 5562 CG    CG    . GLN GLN GLN B B 297 297 . 82.639  124.518 -6.426  1.00 24.17
1 . .
ATOM 5563 CD    CD    . GLN GLN GLN B B 297 297 . 82.765  124.326 -4.898  1.00 26.03
1 . .
ATOM 5564 OE1   OE1   . GLN GLN GLN B B 297 297 . 82.008  123.536 -4.245  1.00 22.98
1 . .
ATOM 5565 NE2   NE2   . GLN GLN GLN B B 297 297 . 83.677  125.123 -4.302  1.00 24.86
1 . .
ATOM 5566 C     C     . GLN GLN GLN B B 297 297 . 82.121  124.262 -9.481  1.00 24.63
1 . .
ATOM 5567 O     O     . GLN GLN GLN B B 297 297 . 80.961  124.097 -9.790  1.00 25.23
1 . .
ATOM 5568 N     N     . ASP ASP ASP B B 298 298 . 82.768  125.380 -9.732  1.00 24.83
1 . .
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ATOM 5569 CA    CA    . ASP ASP ASP B B 298 298 . 82.233  126.430 -10.628 1.00 24.72
1 . .
ATOM 5570 CB    CB    . ASP ASP ASP B B 298 298 . 82.327  127.798 -9.913  1.00 24.53
1 . .
ATOM 5571 CG    CG    . ASP ASP ASP B B 298 298 . 81.261  127.976 -8.789  1.00 26.82
1 . .
ATOM 5572 OD1   OD1   . ASP ASP ASP B B 298 298 . 80.031  127.801 -9.064  1.00 27.58
1 . .
ATOM 5573 OD2   OD2   . ASP ASP ASP B B 298 298 . 81.666  128.324 -7.650  1.00 27.79
1 . .
ATOM 5574 C     C     . ASP ASP ASP B B 298 298 . 82.929  126.513 -12.003 1.00 24.47
1 . .
ATOM 5575 O     O     . ASP ASP ASP B B 298 298 . 82.424  127.184 -12.910 1.00 25.16
1 . .
ATOM 5576 N     N     . ASP ASP ASP B B 299 299 . 84.079  125.853 -12.190 1.00 23.13
1 . .
ATOM 5577 CA    CA    . ASP ASP ASP B B 299 299 . 84.848  126.037 -13.425 1.00 24.14
1 . .
ATOM 5578 CB    CB    . ASP ASP ASP B B 299 299 . 86.335  125.709 -13.162 1.00 24.15
1 . .
ATOM 5579 CG    CG    . ASP ASP ASP B B 299 299 . 87.229  126.042 -14.319 1.00 24.80
1 . .
ATOM 5580 OD1   OD1   . ASP ASP ASP B B 299 299 . 86.802  126.597 -15.354 1.00 23.56
1 . .
ATOM 5581 OD2   OD2   . ASP ASP ASP B B 299 299 . 88.429  125.810 -14.153 1.00 28.51
1 . .
ATOM 5582 C     C     . ASP ASP ASP B B 299 299 . 84.255  125.165 -14.534 1.00 25.03
1 . .
ATOM 5583 O     O     . ASP ASP ASP B B 299 299 . 84.973  124.296 -15.127 1.00 25.32
1 . .
ATOM 5584 N     N     . TRP TRP TRP B B 300 300 . 82.938  125.347 -14.786 1.00 24.07
1 . .
ATOM 5585 CA    CA    . TRP TRP TRP B B 300 300 . 82.270  124.573 -15.795 1.00 23.79
1 . .
ATOM 5586 CB    CB    . TRP TRP TRP B B 300 300 . 80.952  125.258 -16.117 1.00 24.55
1 . .
ATOM 5587 CG    CG    . TRP TRP TRP B B 300 300 . 80.007  125.140 -14.976 1.00 25.73
1 . .
ATOM 5588 CD1   CD1   . TRP TRP TRP B B 300 300 . 79.759  126.071 -14.034 1.00 26.05
1 . .
ATOM 5589 NE1   NE1   . TRP TRP TRP B B 300 300 . 78.841  125.589 -13.121 1.00 28.35
1 . .
ATOM 5590 CE2   CE2   . TRP TRP TRP B B 300 300 . 78.475  124.319 -13.482 1.00 28.11
1 . .
ATOM 5591 CD2   CD2   . TRP TRP TRP B B 300 300 . 79.196  123.997 -14.648 1.00 26.95
1 . .
ATOM 5592 CE3   CE3   . TRP TRP TRP B B 300 300 . 78.986  122.743 -15.245 1.00 27.89
1 . .
ATOM 5593 CZ3   CZ3   . TRP TRP TRP B B 300 300 . 78.076  121.864 -14.655 1.00 28.83
1 . .
ATOM 5594 CH2   CH2   . TRP TRP TRP B B 300 300 . 77.375  122.210 -13.483 1.00 25.70
1 . .
ATOM 5595 CZ2   CZ2   . TRP TRP TRP B B 300 300 . 77.551  123.426 -12.889 1.00 28.09
1 . .
ATOM 5596 C     C     . TRP TRP TRP B B 300 300 . 83.001  124.434 -17.126 1.00 24.30
1 . .
ATOM 5597 O     O     . TRP TRP TRP B B 300 300 . 83.054  123.363 -17.717 1.00 22.81
1 . .
ATOM 5598 N     N     . ALA ALA ALA B B 301 301 . 83.471  125.524 -17.694 1.00 25.46
1 . .
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ATOM 5599 CA    CA    . ALA ALA ALA B B 301 301 . 84.178  125.384 -18.989 1.00 26.72
1 . .
ATOM 5600 CB    CB    . ALA ALA ALA B B 301 301 . 84.837  126.688 -19.383 1.00 24.03
1 . .
ATOM 5601 C     C     . ALA ALA ALA B B 301 301 . 85.240  124.259 -18.953 1.00 27.19
1 . .
ATOM 5602 O     O     . ALA ALA ALA B B 301 301 . 85.386  123.504 -19.926 1.00 28.82
1 . .
ATOM 5603 N     N     . ALA ALA ALA B B 302 302 . 85.950  124.107 -17.850 1.00 26.77
1 . .
ATOM 5604 CA    CA    . ALA ALA ALA B B 302 302 . 87.165  123.231 -17.897 1.00 27.41
1 . .
ATOM 5605 CB    CB    . ALA ALA ALA B B 302 302 . 88.094  123.531 -16.789 1.00 25.93
1 . .
ATOM 5606 C     C     . ALA ALA ALA B B 302 302 . 86.700  121.806 -17.815 1.00 28.10
1 . .
ATOM 5607 O     O     . ALA ALA ALA B B 302 302 . 87.330  120.896 -18.374 1.00 29.38
1 . .
ATOM 5608 N     N     . TRP TRP TRP B B 303 303 . 85.545  121.632 -17.179 1.00 27.27
1 . .
ATOM 5609 CA    CA    . TRP TRP TRP B B 303 303 . 84.968  120.318 -17.044 1.00 26.28
1 . .
ATOM 5610 CB    CB    . TRP TRP TRP B B 303 303 . 83.791  120.291 -16.081 1.00 24.41
1 . .
ATOM 5611 CG    CG    . TRP TRP TRP B B 303 303 . 84.065  120.285 -14.572 1.00 23.04
1 . .
ATOM 5612 CD1   CD1   . TRP TRP TRP B B 303 303 . 84.285  121.369 -13.777 1.00 21.44
1 . .
ATOM 5613 NE1   NE1   . TRP TRP TRP B B 303 303 . 84.406  120.985 -12.461 1.00 24.61
1 . .
ATOM 5614 CE2   CE2   . TRP TRP TRP B B 303 303 . 84.248  119.620 -12.376 1.00 23.04
1 . .
ATOM 5615 CD2   CD2   . TRP TRP TRP B B 303 303 . 84.027  119.142 -13.681 1.00 21.82
1 . .
ATOM 5616 CE3   CE3   . TRP TRP TRP B B 303 303 . 83.786  117.770 -13.862 1.00 23.83
1 . .
ATOM 5617 CZ3   CZ3   . TRP TRP TRP B B 303 303 . 83.838  116.895 -12.706 1.00 20.97
1 . .
ATOM 5618 CH2   CH2   . TRP TRP TRP B B 303 303 . 84.064  117.413 -11.431 1.00 19.54
1 . .
ATOM 5619 CZ2   CZ2   . TRP TRP TRP B B 303 303 . 84.290  118.764 -11.250 1.00 22.46
1 . .
ATOM 5620 C     C     . TRP TRP TRP B B 303 303 . 84.484  119.835 -18.408 1.00 26.35
1 . .
ATOM 5621 O     O     . TRP TRP TRP B B 303 303 . 84.915  118.767 -18.839 1.00 25.96
1 . .
ATOM 5622 N     N     . SER SER SER B B 304 304 . 83.572  120.579 -19.059 1.00 26.84
1 . .
ATOM 5623 CA    CA    . SER SER SER B B 304 304 . 83.043  120.179 -20.392 1.00 28.34
1 . .
ATOM 5624 CB    CB    . SER SER SER B B 304 304 . 82.106  121.243 -21.001 1.00 27.98
1 . .
ATOM 5625 OG    OG    . SER SER SER B B 304 304 . 81.026  121.413 -20.130 1.00 29.95
1 . .
ATOM 5626 C     C     . SER SER SER B B 304 304 . 84.190  119.932 -21.360 1.00 28.79
1 . .
ATOM 5627 O     O     . SER SER SER B B 304 304 . 84.169  118.986 -22.104 1.00 29.33
1 . .
ATOM 5628 N     N     . LYS LYS LYS B B 305 305 . 85.213  120.772 -21.321 1.00 29.60
1 . .
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ATOM 5629 CA    CA    . LYS LYS LYS B B 305 305 . 86.237  120.670 -22.305 1.00 30.61
1 . .
ATOM 5630 CB    CB    . LYS LYS LYS B B 305 305 . 87.083  121.937 -22.288 1.00 32.33
1 . .
ATOM 5631 CG    CG    . LYS LYS LYS B B 305 305 . 88.512  121.813 -22.865 1.00 35.32
1 . .
ATOM 5632 CD    CD    . LYS LYS LYS B B 305 305 . 89.143  123.199 -23.043 1.00 40.23
1 . .
ATOM 5633 CE    CE    . LYS LYS LYS B B 305 305 . 90.237  123.126 -24.087 1.00 44.43
1 . .
ATOM 5634 NZ    NZ    . LYS LYS LYS B B 305 305 . 90.807  124.471 -24.210 1.00 51.84
1 . .
ATOM 5635 C     C     . LYS LYS LYS B B 305 305 . 87.040  119.387 -22.067 1.00 30.54
1 . .
ATOM 5636 O     O     . LYS LYS LYS B B 305 305 . 87.287  118.643 -22.995 1.00 30.09
1 . .
ATOM 5637 N     N     . PHE PHE PHE B B 306 306 . 87.417  119.112 -20.813 1.00 30.23
1 . .
ATOM 5638 CA    CA    . PHE PHE PHE B B 306 306 . 88.097  117.873 -20.462 1.00 28.94
1 . .
ATOM 5639 CB    CB    . PHE PHE PHE B B 306 306 . 88.422  117.886 -18.971 1.00 28.97
1 . .
ATOM 5640 CG    CG    . PHE PHE PHE B B 306 306 . 89.382  116.819 -18.551 1.00 29.09
1 . .
ATOM 5641 CD1   CD1   . PHE PHE PHE B B 306 306 . 90.704  116.816 -19.039 1.00 30.90
1 . .
ATOM 5642 CE1   CE1   . PHE PHE PHE B B 306 306 . 91.607  115.836 -18.642 1.00 30.51
1 . .
ATOM 5643 CZ    CZ    . PHE PHE PHE B B 306 306 . 91.223  114.868 -17.726 1.00 32.81
1 . .
ATOM 5644 CE2   CE2   . PHE PHE PHE B B 306 306 . 89.892  114.877 -17.197 1.00 33.21
1 . .
ATOM 5645 CD2   CD2   . PHE PHE PHE B B 306 306 . 88.992  115.861 -17.628 1.00 29.90
1 . .
ATOM 5646 C     C     . PHE PHE PHE B B 306 306 . 87.337  116.580 -20.823 1.00 28.24
1 . .
ATOM 5647 O     O     . PHE PHE PHE B B 306 306 . 87.854  115.734 -21.499 1.00 28.61
1 . .
ATOM 5648 N     N     . THR THR THR B B 307 307 . 86.133  116.438 -20.317 1.00 27.08
1 . .
ATOM 5649 CA    CA    . THR THR THR B B 307 307 . 85.243  115.383 -20.657 1.00 28.15
1 . .
ATOM 5650 CB    CB    . THR THR THR B B 307 307 . 83.849  115.662 -20.047 1.00 28.20
1 . .
ATOM 5651 OG1   OG1   . THR THR THR B B 307 307 . 84.007  115.765 -18.632 1.00 27.52
1 . .
ATOM 5652 CG2   CG2   . THR THR THR B B 307 307 . 82.840  114.512 -20.352 1.00 29.13
1 . .
ATOM 5653 C     C     . THR THR THR B B 307 307 . 85.124  115.073 -22.151 1.00 28.96
1 . .
ATOM 5654 O     O     . THR THR THR B B 307 307 . 85.152  113.900 -22.546 1.00 28.77
1 . .
ATOM 5655 N     N     . ALA ALA ALA B B 308 308 . 85.031  116.115 -22.975 1.00 28.99
1 . .
ATOM 5656 CA    CA    . ALA ALA ALA B B 308 308 . 84.908  115.899 -24.389 1.00 29.23
1 . .
ATOM 5657 CB    CB    . ALA ALA ALA B B 308 308 . 84.361  117.163 -25.100 1.00 30.44
1 . .
ATOM 5658 C     C     . ALA ALA ALA B B 308 308 . 86.260  115.500 -24.969 1.00 30.06
1 . .
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ATOM 5659 O     O     . ALA ALA ALA B B 308 308 . 86.308  115.125 -26.151 1.00 31.30
1 . .
ATOM 5660 N     N     . ASN ASN ASN B B 309 309 . 87.326  115.533 -24.175 1.00 28.57
1 . .
ATOM 5661 CA    CA    . ASN ASN ASN B B 309 309 . 88.614  115.150 -24.689 1.00 30.17
1 . .
ATOM 5662 CB    CB    . ASN ASN ASN B B 309 309 . 89.616  116.267 -24.446 1.00 32.47
1 . .
ATOM 5663 CG    CG    . ASN ASN ASN B B 309 309 . 90.031  116.951 -25.718 1.00 40.02
1 . .
ATOM 5664 OD1   OD1   . ASN ASN ASN B B 309 309 . 91.126  116.661 -26.250 1.00 50.06
1 . .
ATOM 5665 ND2   ND2   . ASN ASN ASN B B 309 309 . 89.168  117.837 -26.249 1.00 42.89
1 . .
ATOM 5666 C     C     . ASN ASN ASN B B 309 309 . 89.222  113.877 -24.137 1.00 28.85
1 . .
ATOM 5667 O     O     . ASN ASN ASN B B 309 309 . 90.405  113.636 -24.356 1.00 28.67
1 . .
ATOM 5668 N     N     . VAL VAL VAL B B 310 310 . 88.451  113.095 -23.380 1.00 28.74
1 . .
ATOM 5669 CA    CA    . VAL VAL VAL B B 310 310 . 88.948  111.849 -22.734 1.00 27.70
1 . .
ATOM 5670 CB    CB    . VAL VAL VAL B B 310 310 . 89.243  112.014 -21.185 1.00 28.05
1 . .
ATOM 5671 CG1   CG1   . VAL VAL VAL B B 310 310 . 90.345  112.946 -20.924 1.00 29.48
1 . .
ATOM 5672 CG2   CG2   . VAL VAL VAL B B 310 310 . 87.996  112.465 -20.442 1.00 27.27
1 . .
ATOM 5673 C     C     . VAL VAL VAL B B 310 310 . 87.911  110.757 -22.818 1.00 27.43
1 . .
ATOM 5674 O     O     . VAL VAL VAL B B 310 310 . 86.668  111.035 -22.922 1.00 26.96
1 . .
ATOM 5675 N     N     . GLY GLY GLY B B 311 311 . 88.415  109.530 -22.672 1.00 26.61
1 . .
ATOM 5676 CA    CA    . GLY GLY GLY B B 311 311 . 87.587  108.336 -22.660 1.00 27.61
1 . .
ATOM 5677 C     C     . GLY GLY GLY B B 311 311 . 87.226  107.839 -21.260 1.00 27.63
1 . .
ATOM 5678 O     O     . GLY GLY GLY B B 311 311 . 86.267  107.089 -21.086 1.00 28.31
1 . .
ATOM 5679 N     N     . ILE ILE ILE B B 312 312 . 87.980  108.280 -20.265 1.00 26.93
1 . .
ATOM 5680 CA    CA    . ILE ILE ILE B B 312 312 . 87.805  107.836 -18.877 1.00 26.24
1 . .
ATOM 5681 CB    CB    . ILE ILE ILE B B 312 312 . 89.062  108.174 -18.053 1.00 25.86
1 . .
ATOM 5682 CG1   CG1   . ILE ILE ILE B B 312 312 . 89.310  109.652 -18.109 1.00 26.88
1 . .
ATOM 5683 CD1   CD1   . ILE ILE ILE B B 312 312 . 89.939  110.196 -16.831 1.00 26.08
1 . .
ATOM 5684 CG2   CG2   . ILE ILE ILE B B 312 312 . 90.265  107.496 -18.667 1.00 24.80
1 . .
ATOM 5685 C     C     . ILE ILE ILE B B 312 312 . 86.533  108.335 -18.193 1.00 26.33
1 . .
ATOM 5686 O     O     . ILE ILE ILE B B 312 312 . 85.806  109.240 -18.712 1.00 27.77
1 . .
ATOM 5687 N     N     . GLN GLN GLN B B 313 313 . 86.207  107.709 -17.061 1.00 25.38
1 . .
ATOM 5688 CA    CA    . GLN GLN GLN B B 313 313 . 85.114  108.215 -16.229 1.00 23.86
1 . .
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ATOM 5689 CB    CB    . GLN GLN GLN B B 313 313 . 84.793  107.181 -15.163 1.00 25.02
1 . .
ATOM 5690 CG    CG    . GLN GLN GLN B B 313 313 . 83.685  107.642 -14.243 1.00 23.26
1 . .
ATOM 5691 CD    CD    . GLN GLN GLN B B 313 313 . 83.213  106.549 -13.360 1.00 24.42
1 . .
ATOM 5692 OE1   OE1   . GLN GLN GLN B B 313 313 . 82.174  105.942 -13.647 1.00 23.79
1 . .
ATOM 5693 NE2   NE2   . GLN GLN GLN B B 313 313 . 83.975  106.249 -12.269 1.00 20.84
1 . .
ATOM 5694 C     C     . GLN GLN GLN B B 313 313 . 85.501  109.579 -15.592 1.00 22.97
1 . .
ATOM 5695 O     O     . GLN GLN GLN B B 313 313 . 86.657  109.795 -15.141 1.00 22.15
1 . .
ATOM 5696 N     N     . ILE ILE ILE B B 314 314 . 84.570  110.520 -15.650 1.00 22.64
1 . .
ATOM 5697 CA    CA    . ILE ILE ILE B B 314 314 . 84.739  111.853 -15.021 1.00 22.63
1 . .
ATOM 5698 CB    CB    . ILE ILE ILE B B 314 314 . 84.733  113.034 -16.037 1.00 22.87
1 . .
ATOM 5699 CG1   CG1   . ILE ILE ILE B B 314 314 . 85.819  112.877 -17.113 1.00 20.19
1 . .
ATOM 5700 CD1   CD1   . ILE ILE ILE B B 314 314 . 87.362  112.834 -16.489 1.00 13.72
1 . .
ATOM 5701 CG2   CG2   . ILE ILE ILE B B 314 314 . 84.853  114.408 -15.278 1.00 23.70
1 . .
ATOM 5702 C     C     . ILE ILE ILE B B 314 314 . 83.629  112.089 -14.023 1.00 23.47
1 . .
ATOM 5703 O     O     . ILE ILE ILE B B 314 314 . 82.414  112.058 -14.367 1.00 24.90
1 . .
ATOM 5704 N     N     . VAL VAL VAL B B 315 315 . 84.014  112.285 -12.773 1.00 23.79
1 . .
ATOM 5705 CA    CA    . VAL VAL VAL B B 315 315 . 83.000  112.214 -11.712 1.00 24.17
1 . .
ATOM 5706 CB    CB    . VAL VAL VAL B B 315 315 . 83.385  111.160 -10.595 1.00 24.58
1 . .
ATOM 5707 CG1   CG1   . VAL VAL VAL B B 315 315 . 82.233  110.984 -9.553  1.00 25.58
1 . .
ATOM 5708 CG2   CG2   . VAL VAL VAL B B 315 315 . 83.770  109.814 -11.191 1.00 24.77
1 . .
ATOM 5709 C     C     . VAL VAL VAL B B 315 315 . 82.827  113.555 -11.061 1.00 23.80
1 . .
ATOM 5710 O     O     . VAL VAL VAL B B 315 315 . 83.796  114.171 -10.541 1.00 24.62
1 . .
ATOM 5711 N     N     . GLY GLY GLY B B 316 316 . 81.599  114.010 -11.092 1.00 23.06
1 . .
ATOM 5712 CA    CA    . GLY GLY GLY B B 316 316 . 81.200  115.126 -10.303 1.00 23.16
1 . .
ATOM 5713 C     C     . GLY GLY GLY B B 316 316 . 80.821  114.738 -8.877  1.00 24.29
1 . .
ATOM 5714 O     O     . GLY GLY GLY B B 316 316 . 79.992  113.792 -8.628  1.00 23.68
1 . .
ATOM 5715 N     N     . ASP ASP ASP B B 317 317 . 81.395  115.515 -7.956  1.00 23.55
1 . .
ATOM 5716 CA    CA    . ASP ASP ASP B B 317 317 . 81.132  115.427 -6.526  1.00 22.69
1 . .
ATOM 5717 CB    CB    . ASP ASP ASP B B 317 317 . 82.418  114.879 -5.832  1.00 22.79
1 . .
ATOM 5718 CG    CG    . ASP ASP ASP B B 317 317 . 82.329  114.943 -4.351  1.00 20.30
1 . .
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ATOM 5719 OD1   OD1   . ASP ASP ASP B B 317 317 . 83.391  114.853 -3.702  1.00 14.84
1 . .
ATOM 5720 OD2   OD2   . ASP ASP ASP B B 317 317 . 81.163  115.122 -3.886  1.00 14.57
1 . .
ATOM 5721 C     C     . ASP ASP ASP B B 317 317 . 80.717  116.829 -6.048  1.00 22.32
1 . .
ATOM 5722 O     O     . ASP ASP ASP B B 317 317 . 79.507  117.153 -5.965  1.00 23.28
1 . .
ATOM 5723 N     N     . ASP ASP ASP B B 318 318 . 81.703  117.682 -5.813  1.00 22.36
1 . .
ATOM 5724 CA    CA    . ASP ASP ASP B B 318 318 . 81.497  119.102 -5.423  1.00 23.47
1 . .
ATOM 5725 CB    CB    . ASP ASP ASP B B 318 318 . 82.836  119.737 -5.001  1.00 22.78
1 . .
ATOM 5726 CG    CG    . ASP ASP ASP B B 318 318 . 83.348  119.207 -3.633  1.00 25.47
1 . .
ATOM 5727 OD1   OD1   . ASP ASP ASP B B 318 318 . 82.544  118.647 -2.822  1.00 23.11
1 . .
ATOM 5728 OD2   OD2   . ASP ASP ASP B B 318 318 . 84.589  119.369 -3.348  1.00 29.61
1 . .
ATOM 5729 C     C     . ASP ASP ASP B B 318 318 . 80.831  119.875 -6.548  1.00 24.67
1 . .
ATOM 5730 O     O     . ASP ASP ASP B B 318 318 . 79.998  120.766 -6.290  1.00 27.17
1 . .
ATOM 5731 N     N     . LEU LEU LEU B B 319 319 . 81.131  119.521 -7.797  1.00 25.41
1 . .
ATOM 5732 CA    CA    . LEU LEU LEU B B 319 319 . 80.363  120.007 -8.966  1.00 25.81
1 . .
ATOM 5733 CB    CB    . LEU LEU LEU B B 319 319 . 80.857  119.358 -10.246 1.00 25.80
1 . .
ATOM 5734 CG    CG    . LEU LEU LEU B B 319 319 . 80.201  119.974 -11.496 1.00 25.84
1 . .
ATOM 5735 CD1   CD1   . LEU LEU LEU B B 319 319 . 80.915  121.237 -11.856 1.00 22.07
1 . .
ATOM 5736 CD2   CD2   . LEU LEU LEU B B 319 319 . 80.268  118.992 -12.665 1.00 25.51
1 . .
ATOM 5737 C     C     . LEU LEU LEU B B 319 319 . 78.837  119.768 -8.864  1.00 26.54
1 . .
ATOM 5738 O     O     . LEU LEU LEU B B 319 319 . 78.041  120.667 -9.119  1.00 27.53
1 . .
ATOM 5739 N     N     . THR THR THR B B 320 320 . 78.425  118.576 -8.486  1.00 27.45
1 . .
ATOM 5740 CA    CA    . THR THR THR B B 320 320 . 76.979  118.165 -8.550  1.00 27.16
1 . .
ATOM 5741 CB    CB    . THR THR THR B B 320 320 . 76.897  116.762 -9.182  1.00 27.28
1 . .
ATOM 5742 OG1   OG1   . THR THR THR B B 320 320 . 78.086  116.059 -8.834  1.00 29.87
1 . .
ATOM 5743 CG2   CG2   . THR THR THR B B 320 320 . 76.851  116.911 -10.733 1.00 26.54
1 . .
ATOM 5744 C     C     . THR THR THR B B 320 320 . 76.181  118.130 -7.231  1.00 26.41
1 . .
ATOM 5745 O     O     . THR THR THR B B 320 320 . 74.875  118.209 -7.197  1.00 28.11
1 . .
ATOM 5746 N     N     . VAL VAL VAL B B 321 321 . 76.962  117.974 -6.169  1.00 23.75
1 . .
ATOM 5747 CA    CA    . VAL VAL VAL B B 321 321 . 76.508  117.746 -4.812  1.00 22.63
1 . .
ATOM 5748 CB    CB    . VAL VAL VAL B B 321 321 . 76.432  119.084 -3.978  1.00 22.29
1 . .
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ATOM 5749 CG1   CG1   . VAL VAL VAL B B 321 321 . 77.850  119.658 -3.741  1.00 21.17
1 . .
ATOM 5750 CG2   CG2   . VAL VAL VAL B B 321 321 . 75.615  120.155 -4.647  1.00 23.05
1 . .
ATOM 5751 C     C     . VAL VAL VAL B B 321 321 . 75.164  117.023 -4.750  1.00 24.57
1 . .
ATOM 5752 O     O     . VAL VAL VAL B B 321 321 . 74.272  117.466 -4.050  1.00 24.57
1 . .
ATOM 5753 N     N     . THR THR THR B B 322 322 . 75.042  115.912 -5.462  1.00 24.66
1 . .
ATOM 5754 CA    CA    . THR THR THR B B 322 322 . 73.910  115.055 -5.367  1.00 26.16
1 . .
ATOM 5755 CB    CB    . THR THR THR B B 322 322 . 73.964  114.248 -4.016  1.00 25.69
1 . .
ATOM 5756 OG1   OG1   . THR THR THR B B 322 322 . 75.231  113.606 -3.878  1.00 27.52
1 . .
ATOM 5757 CG2   CG2   . THR THR THR B B 322 322 . 72.972  113.147 -3.995  1.00 24.56
1 . .
ATOM 5758 C     C     . THR THR THR B B 322 322 . 72.561  115.849 -5.485  1.00 27.19
1 . .
ATOM 5759 O     O     . THR THR THR B B 322 322 . 71.600  115.502 -4.859  1.00 26.72
1 . .
ATOM 5760 N     N     . ASN ASN ASN B B 323 323 . 72.542  116.909 -6.280  1.00 29.22
1 . .
ATOM 5761 CA    CA    . ASN ASN ASN B B 323 323 . 71.463  117.845 -6.339  1.00 30.61
1 . .
ATOM 5762 CB    CB    . ASN ASN ASN B B 323 323 . 71.962  119.235 -5.937  1.00 31.25
1 . .
ATOM 5763 CG    CG    . ASN ASN ASN B B 323 323 . 70.820  120.235 -5.727  1.00 32.05
1 . .
ATOM 5764 OD1   OD1   . ASN ASN ASN B B 323 323 . 69.930  120.374 -6.560  1.00 34.70
1 . .
ATOM 5765 ND2   ND2   . ASN ASN ASN B B 323 323 . 70.857  120.944 -4.604  1.00 33.41
1 . .
ATOM 5766 C     C     . ASN ASN ASN B B 323 323 . 70.941  117.862 -7.748  1.00 31.83
1 . .
ATOM 5767 O     O     . ASN ASN ASN B B 323 323 . 71.678  118.121 -8.662  1.00 31.63
1 . .
ATOM 5768 N     N     . PRO PRO PRO B B 324 324 . 69.662  117.512 -7.932  1.00 33.47
1 . .
ATOM 5769 CA    CA    . PRO PRO PRO B B 324 324 . 68.979  117.390 -9.224  1.00 34.11
1 . .
ATOM 5770 CB    CB    . PRO PRO PRO B B 324 324 . 67.510  117.269 -8.826  1.00 33.65
1 . .
ATOM 5771 CG    CG    . PRO PRO PRO B B 324 324 . 67.598  116.511 -7.519  1.00 35.72
1 . .
ATOM 5772 CD    CD    . PRO PRO PRO B B 324 324 . 68.840  117.007 -6.818  1.00 34.17
1 . .
ATOM 5773 C     C     . PRO PRO PRO B B 324 324 . 69.128  118.583 -10.109 1.00 34.72
1 . .
ATOM 5774 O     O     . PRO PRO PRO B B 324 324 . 69.372  118.441 -11.324 1.00 34.15
1 . .
ATOM 5775 N     N     . LYS LYS LYS B B 325 325 . 68.967  119.758 -9.497  1.00 36.31
1 . .
ATOM 5776 CA    CA    . LYS LYS LYS B B 325 325 . 69.138  121.030 -10.202 1.00 37.52
1 . .
ATOM 5777 CB    CB    . LYS LYS LYS B B 325 325 . 68.769  122.209 -9.309  1.00 38.46
1 . .
ATOM 5778 CG    CG    . LYS LYS LYS B B 325 325 . 67.218  122.314 -9.113  1.00 43.92
1 . .
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ATOM 5779 CD    CD    . LYS LYS LYS B B 325 325 . 66.804  123.588 -8.404  1.00 47.21
1 . .
ATOM 5780 CE    CE    . LYS LYS LYS B B 325 325 . 66.327  123.305 -6.990  1.00 50.11
1 . .
ATOM 5781 NZ    NZ    . LYS LYS LYS B B 325 325 . 64.822  123.308 -6.948  1.00 51.78
1 . .
ATOM 5782 C     C     . LYS LYS LYS B B 325 325 . 70.553  121.150 -10.710 1.00 36.68
1 . .
ATOM 5783 O     O     . LYS LYS LYS B B 325 325 . 70.727  121.593 -11.832 1.00 38.01
1 . .
ATOM 5784 N     N     . ARG ARG ARG B B 326 326 . 71.563  120.767 -9.928  1.00 34.43
1 . .
ATOM 5785 CA    CA    . ARG ARG ARG B B 326 326 . 72.948  120.926 -10.454 1.00 33.41
1 . .
ATOM 5786 CB    CB    . ARG ARG ARG B B 326 326 . 73.994  121.060 -9.359  1.00 32.45
1 . .
ATOM 5787 CG    CG    . ARG ARG ARG B B 326 326 . 73.605  122.254 -8.512  1.00 31.85
1 . .
ATOM 5788 CD    CD    . ARG ARG ARG B B 326 326 . 74.697  123.166 -8.100  1.00 31.27
1 . .
ATOM 5789 NE    NE    . ARG ARG ARG B B 326 326 . 76.049  122.789 -8.488  1.00 30.07
1 . .
ATOM 5790 CZ    CZ    . ARG ARG ARG B B 326 326 . 76.900  123.681 -8.991  1.00 30.04
1 . .
ATOM 5791 NH1   NH1   . ARG ARG ARG B B 326 326 . 76.494  124.923 -9.163  1.00 28.15
1 . .
ATOM 5792 NH2   NH2   . ARG ARG ARG B B 326 326 . 78.143  123.369 -9.322  1.00 28.40
1 . .
ATOM 5793 C     C     . ARG ARG ARG B B 326 326 . 73.293  119.854 -11.463 1.00 32.29
1 . .
ATOM 5794 O     O     . ARG ARG ARG B B 326 326 . 74.059  120.088 -12.371 1.00 32.65
1 . .
ATOM 5795 N     N     . ILE ILE ILE B B 327 327 . 72.650  118.704 -11.347 1.00 31.14
1 . .
ATOM 5796 CA    CA    . ILE ILE ILE B B 327 327 . 72.946  117.592 -12.195 1.00 31.14
1 . .
ATOM 5797 CB    CB    . ILE ILE ILE B B 327 327 . 72.372  116.266 -11.601 1.00 29.99
1 . .
ATOM 5798 CG1   CG1   . ILE ILE ILE B B 327 327 . 73.063  115.917 -10.290 1.00 30.07
1 . .
ATOM 5799 CD1   CD1   . ILE ILE ILE B B 327 327 . 72.350  114.769 -9.441  1.00 25.96
1 . .
ATOM 5800 CG2   CG2   . ILE ILE ILE B B 327 327 . 72.422  115.109 -12.621 1.00 31.02
1 . .
ATOM 5801 C     C     . ILE ILE ILE B B 327 327 . 72.387  117.886 -13.611 1.00 31.44
1 . .
ATOM 5802 O     O     . ILE ILE ILE B B 327 327 . 73.045  117.574 -14.590 1.00 30.69
1 . .
ATOM 5803 N     N     . GLU GLU GLU B B 328 328 . 71.208  118.508 -13.688 1.00 32.92
1 . .
ATOM 5804 CA    CA    . GLU GLU GLU B B 328 328 . 70.567  118.848 -14.961 1.00 34.93
1 . .
ATOM 5805 CB    CB    . GLU GLU GLU B B 328 328 . 69.231  119.555 -14.754 1.00 36.64
1 . .
ATOM 5806 CG    CG    . GLU GLU GLU B B 328 328 . 68.128  118.640 -14.254 1.00 43.63
1 . .
ATOM 5807 CD    CD    . GLU GLU GLU B B 328 328 . 67.233  118.074 -15.378 1.00 50.94
1 . .
ATOM 5808 OE1   OE1   . GLU GLU GLU B B 328 328 . 67.734  117.851 -16.520 1.00 58.14
1 . .
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ATOM 5809 OE2   OE2   . GLU GLU GLU B B 328 328 . 66.026  117.850 -15.114 1.00 52.01
1 . .
ATOM 5810 C     C     . GLU GLU GLU B B 328 328 . 71.455  119.780 -15.744 1.00 33.92
1 . .
ATOM 5811 O     O     . GLU GLU GLU B B 328 328 . 71.567  119.626 -16.964 1.00 33.29
1 . .
ATOM 5812 N     N     . ARG ARG ARG B B 329 329 . 72.081  120.738 -15.041 1.00 33.00
1 . .
ATOM 5813 CA    CA    . ARG ARG ARG B B 329 329 . 73.021  121.633 -15.672 1.00 33.08
1 . .
ATOM 5814 CB    CB    . ARG ARG ARG B B 329 329 . 73.491  122.707 -14.706 1.00 34.19
1 . .
ATOM 5815 CG    CG    . ARG ARG ARG B B 329 329 . 74.659  123.569 -15.273 1.00 33.35
1 . .
ATOM 5816 CD    CD    . ARG ARG ARG B B 329 329 . 74.695  124.952 -14.604 1.00 34.42
1 . .
ATOM 5817 NE    NE    . ARG ARG ARG B B 329 329 . 75.638  125.865 -15.259 1.00 35.75
1 . .
ATOM 5818 CZ    CZ    . ARG ARG ARG B B 329 329 . 76.117  126.958 -14.687 1.00 33.83
1 . .
ATOM 5819 NH1   NH1   . ARG ARG ARG B B 329 329 . 75.728  127.295 -13.477 1.00 33.68
1 . .
ATOM 5820 NH2   NH2   . ARG ARG ARG B B 329 329 . 76.943  127.735 -15.331 1.00 31.40
1 . .
ATOM 5821 C     C     . ARG ARG ARG B B 329 329 . 74.247  120.893 -16.205 1.00 33.40
1 . .
ATOM 5822 O     O     . ARG ARG ARG B B 329 329 . 74.721  121.204 -17.315 1.00 33.03
1 . .
ATOM 5823 N     N     . ALA ALA ALA B B 330 330 . 74.758  119.930 -15.429 1.00 32.72
1 . .
ATOM 5824 CA    CA    . ALA ALA ALA B B 330 330 . 75.952  119.135 -15.839 1.00 32.30
1 . .
ATOM 5825 CB    CB    . ALA ALA ALA B B 330 330 . 76.418  118.241 -14.672 1.00 31.07
1 . .
ATOM 5826 C     C     . ALA ALA ALA B B 330 330 . 75.599  118.265 -17.044 1.00 32.53
1 . .
ATOM 5827 O     O     . ALA ALA ALA B B 330 330 . 76.440  118.008 -17.911 1.00 31.29
1 . .
ATOM 5828 N     N     . VAL VAL VAL B B 331 331 . 74.350  117.775 -17.046 1.00 33.39
1 . .
ATOM 5829 CA    CA    . VAL VAL VAL B B 331 331 . 73.813  117.038 -18.180 1.00 34.58
1 . .
ATOM 5830 CB    CB    . VAL VAL VAL B B 331 331 . 72.423  116.418 -17.863 1.00 34.96
1 . .
ATOM 5831 CG1   CG1   . VAL VAL VAL B B 331 331 . 71.719  116.003 -19.123 1.00 36.29
1 . .
ATOM 5832 CG2   CG2   . VAL VAL VAL B B 331 331 . 72.597  115.176 -16.918 1.00 35.24
1 . .
ATOM 5833 C     C     . VAL VAL VAL B B 331 331 . 73.819  117.925 -19.450 1.00 35.14
1 . .
ATOM 5834 O     O     . VAL VAL VAL B B 331 331 . 74.504  117.580 -20.439 1.00 36.41
1 . .
ATOM 5835 N     N     . GLU GLU GLU B B 332 332 . 73.131  119.068 -19.395 1.00 34.67
1 . .
ATOM 5836 CA    CA    . GLU GLU GLU B B 332 332 . 73.032  120.017 -20.511 1.00 35.16
1 . .
ATOM 5837 CB    CB    . GLU GLU GLU B B 332 332 . 72.335  121.330 -20.046 1.00 35.94
1 . .
ATOM 5838 CG    CG    . GLU GLU GLU B B 332 332 . 71.958  122.403 -21.141 1.00 43.84
1 . .
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ATOM 5839 CD    CD    . GLU GLU GLU B B 332 332 . 73.174  123.292 -21.613 1.00 52.11
1 . .
ATOM 5840 OE1   OE1   . GLU GLU GLU B B 332 332 . 74.205  123.366 -20.881 1.00 57.98
1 . .
ATOM 5841 OE2   OE2   . GLU GLU GLU B B 332 332 . 73.127  123.902 -22.730 1.00 54.93
1 . .
ATOM 5842 C     C     . GLU GLU GLU B B 332 332 . 74.427  120.307 -21.039 1.00 33.85
1 . .
ATOM 5843 O     O     . GLU GLU GLU B B 332 332 . 74.643  120.312 -22.248 1.00 34.73
1 . .
ATOM 5844 N     N     . GLU GLU GLU B B 333 333 . 75.375  120.532 -20.141 1.00 32.22
1 . .
ATOM 5845 CA    CA    . GLU GLU GLU B B 333 333 . 76.673  121.012 -20.542 1.00 31.49
1 . .
ATOM 5846 CB    CB    . GLU GLU GLU B B 333 333 . 77.240  122.011 -19.497 1.00 32.46
1 . .
ATOM 5847 CG    CG    . GLU GLU GLU B B 333 333 . 76.421  123.307 -19.535 1.00 34.87
1 . .
ATOM 5848 CD    CD    . GLU GLU GLU B B 333 333 . 76.943  124.412 -18.630 1.00 36.09
1 . .
ATOM 5849 OE1   OE1   . GLU GLU GLU B B 333 333 . 76.081  125.109 -18.013 1.00 35.46
1 . .
ATOM 5850 OE2   OE2   . GLU GLU GLU B B 333 333 . 78.184  124.587 -18.558 1.00 37.34
1 . .
ATOM 5851 C     C     . GLU GLU GLU B B 333 333 . 77.667  119.939 -20.767 1.00 30.18
1 . .
ATOM 5852 O     O     . GLU GLU GLU B B 333 333 . 78.818  120.248 -21.049 1.00 30.30
1 . .
ATOM 5853 N     N     . LYS LYS LYS B B 334 334 . 77.241  118.690 -20.578 1.00 29.97
1 . .
ATOM 5854 CA    CA    . LYS LYS LYS B B 334 334 . 78.135  117.533 -20.654 1.00 29.95
1 . .
ATOM 5855 CB    CB    . LYS LYS LYS B B 334 334 . 78.514  117.197 -22.117 1.00 30.26
1 . .
ATOM 5856 CG    CG    . LYS LYS LYS B B 334 334 . 77.333  116.994 -23.049 1.00 34.48
1 . .
ATOM 5857 CD    CD    . LYS LYS LYS B B 334 334 . 77.805  116.736 -24.525 1.00 40.13
1 . .
ATOM 5858 CE    CE    . LYS LYS LYS B B 334 334 . 76.696  116.122 -25.399 1.00 44.24
1 . .
ATOM 5859 NZ    NZ    . LYS LYS LYS B B 334 334 . 75.333  116.610 -24.981 1.00 45.40
1 . .
ATOM 5860 C     C     . LYS LYS LYS B B 334 334 . 79.401  117.761 -19.822 1.00 28.88
1 . .
ATOM 5861 O     O     . LYS LYS LYS B B 334 334 . 80.526  117.525 -20.292 1.00 28.25
1 . .
ATOM 5862 N     N     . ALA ALA ALA B B 335 335 . 79.206  118.196 -18.578 1.00 28.71
1 . .
ATOM 5863 CA    CA    . ALA ALA ALA B B 335 335 . 80.315  118.460 -17.677 1.00 28.69
1 . .
ATOM 5864 CB    CB    . ALA ALA ALA B B 335 335 . 79.801  119.197 -16.465 1.00 29.79
1 . .
ATOM 5865 C     C     . ALA ALA ALA B B 335 335 . 81.081  117.191 -17.248 1.00 28.00
1 . .
ATOM 5866 O     O     . ALA ALA ALA B B 335 335 . 82.314  117.211 -17.081 1.00 26.65
1 . .
ATOM 5867 N     N     . CYS CYS CYS B B 336 336 . 80.364  116.080 -17.077 1.00 28.10
1 . .
ATOM 5868 CA    CA    . CYS CYS CYS B B 336 336 . 80.987  114.844 -16.562 1.00 28.53
1 . .
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ATOM 5869 CB    CB    . CYS CYS CYS B B 336 336 . 81.099  114.944 -15.012 1.00 27.46
1 . .
ATOM 5870 SG    SG    . CYS CYS CYS B B 336 336 . 79.448  115.269 -14.210 1.00 31.79
1 . .
ATOM 5871 C     C     . CYS CYS CYS B B 336 336 . 80.113  113.675 -17.001 1.00 28.51
1 . .
ATOM 5872 O     O     . CYS CYS CYS B B 336 336 . 79.051  113.893 -17.558 1.00 31.89
1 . .
ATOM 5873 N     N     . ASN ASN ASN B B 337 337 . 80.494  112.445 -16.695 1.00 27.56
1 . .
ATOM 5874 CA    CA    . ASN ASN ASN B B 337 337 . 79.758  111.250 -17.163 1.00 26.66
1 . .
ATOM 5875 CB    CB    . ASN ASN ASN B B 337 337 . 80.566  110.562 -18.296 1.00 24.63
1 . .
ATOM 5876 CG    CG    . ASN ASN ASN B B 337 337 . 81.927  110.223 -17.853 1.00 25.39
1 . .
ATOM 5877 OD1   OD1   . ASN ASN ASN B B 337 337 . 82.102  109.879 -16.677 1.00 23.50
1 . .
ATOM 5878 ND2   ND2   . ASN ASN ASN B B 337 337 . 82.936  110.358 -18.747 1.00 24.69
1 . .
ATOM 5879 C     C     . ASN ASN ASN B B 337 337 . 79.443  110.277 -15.975 1.00 25.92
1 . .
ATOM 5880 O     O     . ASN ASN ASN B B 337 337 . 79.124  109.116 -16.174 1.00 25.22
1 . .
ATOM 5881 N     N     . CYS CYS CYS B B 338 338 . 79.527  110.802 -14.744 1.00 26.80
1 . .
ATOM 5882 CA    CA    . CYS CYS CYS B B 338 338 . 79.349  110.038 -13.507 1.00 27.69
1 . .
ATOM 5883 CB    CB    . CYS CYS CYS B B 338 338 . 80.558  109.130 -13.206 1.00 27.91
1 . .
ATOM 5884 SG    SG    . CYS CYS CYS B B 338 338 . 80.334  107.976 -11.809 1.00 31.62
1 . .
ATOM 5885 C     C     . CYS CYS CYS B B 338 338 . 79.065  111.008 -12.332 1.00 27.52
1 . .
ATOM 5886 O     O     . CYS CYS CYS B B 338 338 . 79.754  111.994 -12.147 1.00 27.49
1 . .
ATOM 5887 N     N     . LEU LEU LEU B B 339 339 . 78.001  110.691 -11.595 1.00 26.18
1 . .
ATOM 5888 CA    CA    . LEU LEU LEU B B 339 339 . 77.629  111.301 -10.358 1.00 26.00
1 . .
ATOM 5889 CB    CB    . LEU LEU LEU B B 339 339 . 76.070  111.224 -10.264 1.00 25.96
1 . .
ATOM 5890 CG    CG    . LEU LEU LEU B B 339 339 . 75.397  111.684 -8.985  1.00 24.49
1 . .
ATOM 5891 CD1   CD1   . LEU LEU LEU B B 339 339 . 75.663  113.166 -8.826  1.00 24.35
1 . .
ATOM 5892 CD2   CD2   . LEU LEU LEU B B 339 339 . 73.845  111.409 -9.060  1.00 22.06
1 . .
ATOM 5893 C     C     . LEU LEU LEU B B 339 339 . 78.263  110.590 -9.108  1.00 26.71
1 . .
ATOM 5894 O     O     . LEU LEU LEU B B 339 339 . 78.136  109.361 -8.907  1.00 26.20
1 . .
ATOM 5895 N     N     . LEU LEU LEU B B 340 340 . 78.923  111.350 -8.239  1.00 27.51
1 . .
ATOM 5896 CA    CA    . LEU LEU LEU B B 340 340 . 79.298  110.793 -6.911  1.00 27.14
1 . .
ATOM 5897 CB    CB    . LEU LEU LEU B B 340 340 . 80.411  111.585 -6.264  1.00 25.63
1 . .
ATOM 5898 CG    CG    . LEU LEU LEU B B 340 340 . 81.035  110.721 -5.174  1.00 27.19
1 . .
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ATOM 5899 CD1   CD1   . LEU LEU LEU B B 340 340 . 81.896  109.709 -5.835  1.00 26.43
1 . .
ATOM 5900 CD2   CD2   . LEU LEU LEU B B 340 340 . 81.908  111.502 -4.183  1.00 24.82
1 . .
ATOM 5901 C     C     . LEU LEU LEU B B 340 340 . 78.046  110.929 -6.015  1.00 26.56
1 . .
ATOM 5902 O     O     . LEU LEU LEU B B 340 340 . 77.556  111.994 -5.848  1.00 27.03
1 . .
ATOM 5903 N     N     . LEU LEU LEU B B 341 341 . 77.515  109.873 -5.454  1.00 26.64
1 . .
ATOM 5904 CA    CA    . LEU LEU LEU B B 341 341 . 76.226  110.011 -4.747  1.00 26.29
1 . .
ATOM 5905 CB    CB    . LEU LEU LEU B B 341 341 . 75.339  108.849 -5.102  1.00 27.03
1 . .
ATOM 5906 CG    CG    . LEU LEU LEU B B 341 341 . 73.871  108.899 -4.598  1.00 28.69
1 . .
ATOM 5907 CD1   CD1   . LEU LEU LEU B B 341 341 . 72.999  109.889 -5.333  1.00 36.10
1 . .
ATOM 5908 CD2   CD2   . LEU LEU LEU B B 341 341 . 73.211  107.592 -4.796  1.00 28.70
1 . .
ATOM 5909 C     C     . LEU LEU LEU B B 341 341 . 76.383  110.049 -3.214  1.00 25.90
1 . .
ATOM 5910 O     O     . LEU LEU LEU B B 341 341 . 76.638  109.019 -2.600  1.00 25.89
1 . .
ATOM 5911 N     N     . LYS LYS LYS B B 342 342 . 76.214  111.225 -2.599  1.00 25.67
1 . .
ATOM 5912 CA    CA    . LYS LYS LYS B B 342 342 . 76.363  111.406 -1.125  1.00 24.88
1 . .
ATOM 5913 CB    CB    . LYS LYS LYS B B 342 342 . 77.399  112.465 -0.797  1.00 22.34
1 . .
ATOM 5914 CG    CG    . LYS LYS LYS B B 342 342 . 78.820  112.004 -1.083  1.00 22.61
1 . .
ATOM 5915 CD    CD    . LYS LYS LYS B B 342 342 . 79.802  113.164 -1.061  1.00 20.51
1 . .
ATOM 5916 CE    CE    . LYS LYS LYS B B 342 342 . 81.205  112.625 -1.000  1.00 23.58
1 . .
ATOM 5917 NZ    NZ    . LYS LYS LYS B B 342 342 . 82.218  113.697 -1.092  1.00 25.79
1 . .
ATOM 5918 C     C     . LYS LYS LYS B B 342 342 . 75.049  111.822 -0.523  1.00 25.99
1 . .
ATOM 5919 O     O     . LYS LYS LYS B B 342 342 . 74.685  112.978 -0.645  1.00 26.43
1 . .
ATOM 5920 N     N     . VAL VAL VAL B B 343 343 . 74.342  110.922 0.166   1.00 27.18
1 . .
ATOM 5921 CA    CA    . VAL VAL VAL B B 343 343 . 73.011  111.285 0.736   1.00 27.65
1 . .
ATOM 5922 CB    CB    . VAL VAL VAL B B 343 343 . 72.466  110.170 1.598   1.00 28.71
1 . .
ATOM 5923 CG1   CG1   . VAL VAL VAL B B 343 343 . 72.042  109.016 0.670   1.00 30.10
1 . .
ATOM 5924 CG2   CG2   . VAL VAL VAL B B 343 343 . 73.562  109.671 2.639   1.00 29.76
1 . .
ATOM 5925 C     C     . VAL VAL VAL B B 343 343 . 73.007  112.584 1.543   1.00 27.13
1 . .
ATOM 5926 O     O     . VAL VAL VAL B B 343 343 . 71.987  113.300 1.585   1.00 26.66
1 . .
ATOM 5927 N     N     . ASN ASN ASN B B 344 344 . 74.158  112.918 2.150   1.00 25.89
1 . .
ATOM 5928 CA    CA    . ASN ASN ASN B B 344 344 . 74.169  114.077 3.036   1.00 25.14
1 . .
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ATOM 5929 CB    CB    . ASN ASN ASN B B 344 344 . 75.013  113.874 4.302   1.00 24.56
1 . .
ATOM 5930 CG    CG    . ASN ASN ASN B B 344 344 . 76.403  114.394 4.149   1.00 24.82
1 . .
ATOM 5931 OD1   OD1   . ASN ASN ASN B B 344 344 . 77.099  114.054 3.199   1.00 26.86
1 . .
ATOM 5932 ND2   ND2   . ASN ASN ASN B B 344 344 . 76.811  115.271 5.064   1.00 25.15
1 . .
ATOM 5933 C     C     . ASN ASN ASN B B 344 344 . 74.508  115.366 2.353   1.00 25.52
1 . .
ATOM 5934 O     O     . ASN ASN ASN B B 344 344 . 74.489  116.414 3.008   1.00 25.49
1 . .
ATOM 5935 N     N     . GLN GLN GLN B B 345 345 . 74.795  115.308 1.041   1.00 26.15
1 . .
ATOM 5936 CA    CA    . GLN GLN GLN B B 345 345 . 74.957  116.535 0.221   1.00 25.37
1 . .
ATOM 5937 CB    CB    . GLN GLN GLN B B 345 345 . 75.704  116.240 -1.108  1.00 25.74
1 . .
ATOM 5938 CG    CG    . GLN GLN GLN B B 345 345 . 77.215  116.352 -0.867  1.00 23.53
1 . .
ATOM 5939 CD    CD    . GLN GLN GLN B B 345 345 . 78.123  115.967 -2.033  1.00 27.67
1 . .
ATOM 5940 OE1   OE1   . GLN GLN GLN B B 345 345 . 79.358  116.297 -2.019  1.00 29.59
1 . .
ATOM 5941 NE2   NE2   . GLN GLN GLN B B 345 345 . 77.574  115.239 -3.019  1.00 23.09
1 . .
ATOM 5942 C     C     . GLN GLN GLN B B 345 345 . 73.627  117.157 -0.056  1.00 26.48
1 . .
ATOM 5943 O     O     . GLN GLN GLN B B 345 345 . 73.553  118.398 -0.164  1.00 27.93
1 . .
ATOM 5944 N     N     . ILE ILE ILE B B 346 346 . 72.597  116.308 -0.171  1.00 25.97
1 . .
ATOM 5945 CA    CA    . ILE ILE ILE B B 346 346 . 71.213  116.711 -0.456  1.00 27.51
1 . .
ATOM 5946 CB    CB    . ILE ILE ILE B B 346 346 . 70.669  116.045 -1.773  1.00 27.01
1 . .
ATOM 5947 CG1   CG1   . ILE ILE ILE B B 346 346 . 69.574  116.906 -2.382  1.00 27.31
1 . .
ATOM 5948 CD1   CD1   . ILE ILE ILE B B 346 346 . 69.981  118.334 -2.515  1.00 24.99
1 . .
ATOM 5949 CG2   CG2   . ILE ILE ILE B B 346 346 . 70.295  114.526 -1.588  1.00 25.49
1 . .
ATOM 5950 C     C     . ILE ILE ILE B B 346 346 . 70.244  116.567 0.752   1.00 28.59
1 . .
ATOM 5951 O     O     . ILE ILE ILE B B 346 346 . 69.472  117.469 1.015   1.00 29.40
1 . .
ATOM 5952 N     N     . GLY GLY GLY B B 347 347 . 70.333  115.489 1.537   1.00 29.30
1 . .
ATOM 5953 CA    CA    . GLY GLY GLY B B 347 347 . 69.778  115.532 2.895   1.00 29.00
1 . .
ATOM 5954 C     C     . GLY GLY GLY B B 347 347 . 68.538  114.679 3.139   1.00 29.19
1 . .
ATOM 5955 O     O     . GLY GLY GLY B B 347 347 . 68.030  114.630 4.267   1.00 29.15
1 . .
ATOM 5956 N     N     . SER SER SER B B 348 348 . 68.052  114.001 2.096   1.00 28.52
1 . .
ATOM 5957 CA    CA    . SER SER SER B B 348 348 . 67.093  112.929 2.288   1.00 29.00
1 . .
ATOM 5958 CB    CB    . SER SER SER B B 348 348 . 65.631  113.420 2.082   1.00 28.82
1 . .
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ATOM 5959 OG    OG    . SER SER SER B B 348 348 . 65.451  113.835 0.739   1.00 28.11
1 . .
ATOM 5960 C     C     . SER SER SER B B 348 348 . 67.391  111.769 1.383   1.00 28.21
1 . .
ATOM 5961 O     O     . SER SER SER B B 348 348 . 67.948  111.941 0.342   1.00 29.15
1 . .
ATOM 5962 N     N     . VAL VAL VAL B B 349 349 . 66.951  110.588 1.768   1.00 28.72
1 . .
ATOM 5963 CA    CA    . VAL VAL VAL B B 349 349 . 67.007  109.428 0.888   1.00 29.82
1 . .
ATOM 5964 CB    CB    . VAL VAL VAL B B 349 349 . 66.401  108.218 1.600   1.00 30.79
1 . .
ATOM 5965 CG1   CG1   . VAL VAL VAL B B 349 349 . 66.310  106.998 0.657   1.00 29.90
1 . .
ATOM 5966 CG2   CG2   . VAL VAL VAL B B 349 349 . 67.194  107.888 2.885   1.00 28.90
1 . .
ATOM 5967 C     C     . VAL VAL VAL B B 349 349 . 66.279  109.637 -0.465  1.00 31.88
1 . .
ATOM 5968 O     O     . VAL VAL VAL B B 349 349 . 66.880  109.392 -1.528  1.00 31.73
1 . .
ATOM 5969 N     N     . THR THR THR B B 350 350 . 64.980  110.026 -0.426  1.00 32.00
1 . .
ATOM 5970 CA    CA    . THR THR THR B B 350 350 . 64.216  110.304 -1.640  1.00 32.77
1 . .
ATOM 5971 CB    CB    . THR THR THR B B 350 350 . 62.865  110.986 -1.298  1.00 32.97
1 . .
ATOM 5972 OG1   OG1   . THR THR THR B B 350 350 . 62.070  110.103 -0.500  1.00 34.98
1 . .
ATOM 5973 CG2   CG2   . THR THR THR B B 350 350 . 62.084  111.414 -2.571  1.00 34.22
1 . .
ATOM 5974 C     C     . THR THR THR B B 350 350 . 64.963  111.255 -2.600  1.00 33.24
1 . .
ATOM 5975 O     O     . THR THR THR B B 350 350 . 65.056  110.987 -3.787  1.00 33.87
1 . .
ATOM 5976 N     N     . GLU GLU GLU B B 351 351 . 65.467  112.383 -2.144  1.00 33.13
1 . .
ATOM 5977 CA    CA    . GLU GLU GLU B B 351 351 . 66.151  113.190 -3.143  1.00 34.66
1 . .
ATOM 5978 CB    CB    . GLU GLU GLU B B 351 351 . 66.478  114.601 -2.680  1.00 34.90
1 . .
ATOM 5979 CG    CG    . GLU GLU GLU B B 351 351 . 65.338  115.476 -2.261  1.00 36.83
1 . .
ATOM 5980 CD    CD    . GLU GLU GLU B B 351 351 . 65.810  116.535 -1.245  1.00 38.35
1 . .
ATOM 5981 OE1   OE1   . GLU GLU GLU B B 351 351 . 66.115  116.153 -0.075  1.00 39.36
1 . .
ATOM 5982 OE2   OE2   . GLU GLU GLU B B 351 351 . 65.887  117.737 -1.608  1.00 38.83
1 . .
ATOM 5983 C     C     . GLU GLU GLU B B 351 351 . 67.433  112.503 -3.640  1.00 34.53
1 . .
ATOM 5984 O     O     . GLU GLU GLU B B 351 351 . 67.775  112.656 -4.793  1.00 35.90
1 . .
ATOM 5985 N     N     . ALA ALA ALA B B 352 352 . 68.128  111.746 -2.805  1.00 33.66
1 . .
ATOM 5986 CA    CA    . ALA ALA ALA B B 352 352 . 69.314  111.011 -3.317  1.00 34.01
1 . .
ATOM 5987 CB    CB    . ALA ALA ALA B B 352 352 . 70.082  110.381 -2.216  1.00 33.25
1 . .
ATOM 5988 C     C     . ALA ALA ALA B B 352 352 . 68.949  109.988 -4.407  1.00 34.09
1 . .
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ATOM 5989 O     O     . ALA ALA ALA B B 352 352 . 69.609  109.880 -5.463  1.00 33.98
1 . .
ATOM 5990 N     N     . ILE ILE ILE B B 353 353 . 67.853  109.272 -4.177  1.00 34.45
1 . .
ATOM 5991 CA    CA    . ILE ILE ILE B B 353 353 . 67.360  108.300 -5.152  1.00 33.49
1 . .
ATOM 5992 CB    CB    . ILE ILE ILE B B 353 353 . 66.173  107.498 -4.585  1.00 33.94
1 . .
ATOM 5993 CG1   CG1   . ILE ILE ILE B B 353 353 . 66.712  106.515 -3.497  1.00 33.60
1 . .
ATOM 5994 CD1   CD1   . ILE ILE ILE B B 353 353 . 65.672  105.646 -2.832  1.00 31.94
1 . .
ATOM 5995 CG2   CG2   . ILE ILE ILE B B 353 353 . 65.345  106.846 -5.764  1.00 32.52
1 . .
ATOM 5996 C     C     . ILE ILE ILE B B 353 353 . 66.971  109.008 -6.452  1.00 33.40
1 . .
ATOM 5997 O     O     . ILE ILE ILE B B 353 353 . 67.297  108.549 -7.537  1.00 32.75
1 . .
ATOM 5998 N     N     . GLN GLN GLN B B 354 354 . 66.332  110.160 -6.342  1.00 33.67
1 . .
ATOM 5999 CA    CA    . GLN GLN GLN B B 354 354 . 65.999  110.908 -7.562  1.00 34.28
1 . .
ATOM 6000 CB    CB    . GLN GLN GLN B B 354 354 . 64.981  111.996 -7.256  1.00 35.65
1 . .
ATOM 6001 CG    CG    . GLN GLN GLN B B 354 354 . 65.381  113.392 -7.797  1.00 42.34
1 . .
ATOM 6002 CD    CD    . GLN GLN GLN B B 354 354 . 64.338  114.530 -7.523  1.00 49.23
1 . .
ATOM 6003 OE1   OE1   . GLN GLN GLN B B 354 354 . 64.149  114.964 -6.369  1.00 49.55
1 . .
ATOM 6004 NE2   NE2   . GLN GLN GLN B B 354 354 . 63.707  115.041 -8.610  1.00 52.13
1 . .
ATOM 6005 C     C     . GLN GLN GLN B B 354 354 . 67.272  111.435 -8.253  1.00 33.10
1 . .
ATOM 6006 O     O     . GLN GLN GLN B B 354 354 . 67.359  111.364 -9.513  1.00 33.84
1 . .
ATOM 6007 N     N     . ALA ALA ALA B B 355 355 . 68.256  111.940 -7.481  1.00 30.18
1 . .
ATOM 6008 CA    CA    . ALA ALA ALA B B 355 355 . 69.514  112.326 -8.095  1.00 29.56
1 . .
ATOM 6009 CB    CB    . ALA ALA ALA B B 355 355 . 70.515  112.869 -7.073  1.00 29.75
1 . .
ATOM 6010 C     C     . ALA ALA ALA B B 355 355 . 70.121  111.143 -8.841  1.00 29.56
1 . .
ATOM 6011 O     O     . ALA ALA ALA B B 355 355 . 70.549  111.286 -9.984  1.00 28.50
1 . .
ATOM 6012 N     N     . CYS CYS CYS B B 356 356 . 70.111  109.959 -8.222  1.00 29.93
1 . .
ATOM 6013 CA    CA    . CYS CYS CYS B B 356 356 . 70.570  108.747 -8.890  1.00 31.13
1 . .
ATOM 6014 CB    CB    . CYS CYS CYS B B 356 356 . 70.486  107.530 -7.970  1.00 31.74
1 . .
ATOM 6015 SG    SG    . CYS CYS CYS B B 356 356 . 71.190  106.002 -8.761  1.00 35.17
1 . .
ATOM 6016 C     C     . CYS CYS CYS B B 356 356 . 69.853  108.459 -10.218 1.00 32.31
1 . .
ATOM 6017 O     O     . CYS CYS CYS B B 356 356 . 70.513  108.258 -11.262 1.00 30.45
1 . .
ATOM 6018 N     N     . LYS LYS LYS B B 357 357 . 68.512  108.458 -10.201 1.00 33.94
1 . .
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ATOM 6019 CA    CA    . LYS LYS LYS B B 357 357 . 67.789  108.073 -11.382 1.00 35.52
1 . .
ATOM 6020 CB    CB    . LYS LYS LYS B B 357 357 . 66.317  107.843 -11.051 1.00 37.15
1 . .
ATOM 6021 CG    CG    . LYS LYS LYS B B 357 357 . 66.059  106.451 -10.428 1.00 39.71
1 . .
ATOM 6022 CD    CD    . LYS LYS LYS B B 357 357 . 64.835  106.468 -9.573  1.00 45.81
1 . .
ATOM 6023 CE    CE    . LYS LYS LYS B B 357 357 . 63.551  106.575 -10.414 1.00 49.70
1 . .
ATOM 6024 NZ    NZ    . LYS LYS LYS B B 357 357 . 62.457  106.600 -9.414  1.00 53.93
1 . .
ATOM 6025 C     C     . LYS LYS LYS B B 357 357 . 67.975  109.071 -12.522 1.00 36.65
1 . .
ATOM 6026 O     O     . LYS LYS LYS B B 357 357 . 68.081  108.672 -13.701 1.00 38.13
1 . .
ATOM 6027 N     N     . LEU LEU LEU B B 358 358 . 68.082  110.359 -12.192 1.00 36.23
1 . .
ATOM 6028 CA    CA    . LEU LEU LEU B B 358 358 . 68.383  111.357 -13.202 1.00 35.93
1 . .
ATOM 6029 CB    CB    . LEU LEU LEU B B 358 358 . 68.236  112.753 -12.609 1.00 36.78
1 . .
ATOM 6030 CG    CG    . LEU LEU LEU B B 358 358 . 68.353  113.918 -13.593 1.00 38.14
1 . .
ATOM 6031 CD1   CD1   . LEU LEU LEU B B 358 358 . 67.056  114.167 -14.423 1.00 39.51
1 . .
ATOM 6032 CD2   CD2   . LEU LEU LEU B B 358 358 . 68.661  115.116 -12.792 1.00 37.57
1 . .
ATOM 6033 C     C     . LEU LEU LEU B B 358 358 . 69.749  111.160 -13.859 1.00 35.80
1 . .
ATOM 6034 O     O     . LEU LEU LEU B B 358 358 . 69.856  111.185 -15.096 1.00 36.47
1 . .
ATOM 6035 N     N     . ALA ALA ALA B B 359 359 . 70.801  110.960 -13.076 1.00 34.49
1 . .
ATOM 6036 CA    CA    . ALA ALA ALA B B 359 359 . 72.116  110.604 -13.668 1.00 34.04
1 . .
ATOM 6037 CB    CB    . ALA ALA ALA B B 359 359 . 73.133  110.334 -12.595 1.00 32.47
1 . .
ATOM 6038 C     C     . ALA ALA ALA B B 359 359 . 71.984  109.383 -14.618 1.00 33.83
1 . .
ATOM 6039 O     O     . ALA ALA ALA B B 359 359 . 72.355  109.458 -15.770 1.00 33.67
1 . .
ATOM 6040 N     N     . GLN GLN GLN B B 360 360 . 71.441  108.282 -14.118 1.00 34.62
1 . .
ATOM 6041 CA    CA    . GLN GLN GLN B B 360 360 . 71.316  107.022 -14.879 1.00 36.62
1 . .
ATOM 6042 CB    CB    . GLN GLN GLN B B 360 360 . 70.747  105.901 -13.980 1.00 36.26
1 . .
ATOM 6043 CG    CG    . GLN GLN GLN B B 360 360 . 71.777  105.367 -12.979 1.00 37.52
1 . .
ATOM 6044 CD    CD    . GLN GLN GLN B B 360 360 . 71.186  104.437 -11.929 1.00 35.07
1 . .
ATOM 6045 OE1   OE1   . GLN GLN GLN B B 360 360 . 69.984  104.486 -11.610 1.00 35.56
1 . .
ATOM 6046 NE2   NE2   . GLN GLN GLN B B 360 360 . 72.030  103.585 -11.389 1.00 33.46
1 . .
ATOM 6047 C     C     . GLN GLN GLN B B 360 360 . 70.418  107.175 -16.125 1.00 37.01
1 . .
ATOM 6048 O     O     . GLN GLN GLN B B 360 360 . 70.677  106.586 -17.173 1.00 36.58
1 . .
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ATOM 6049 N     N     . GLU GLU GLU B B 361 361 . 69.385  107.984 -15.982 1.00 38.61
1 . .
ATOM 6050 CA    CA    . GLU GLU GLU B B 361 361 . 68.419  108.274 -17.040 1.00 40.76
1 . .
ATOM 6051 CB    CB    . GLU GLU GLU B B 361 361 . 67.464  109.296 -16.470 1.00 42.42
1 . .
ATOM 6052 CG    CG    . GLU GLU GLU B B 361 361 . 66.080  109.331 -16.987 1.00 48.75
1 . .
ATOM 6053 CD    CD    . GLU GLU GLU B B 361 361 . 65.109  109.796 -15.896 1.00 56.10
1 . .
ATOM 6054 OE1   OE1   . GLU GLU GLU B B 361 361 . 64.579  110.938 -16.010 1.00 59.39
1 . .
ATOM 6055 OE2   OE2   . GLU GLU GLU B B 361 361 . 64.903  109.020 -14.910 1.00 59.51
1 . .
ATOM 6056 C     C     . GLU GLU GLU B B 361 361 . 69.140  108.942 -18.217 1.00 40.53
1 . .
ATOM 6057 O     O     . GLU GLU GLU B B 361 361 . 68.629  108.968 -19.339 1.00 40.78
1 . .
ATOM 6058 N     N     . ASN ASN ASN B B 362 362 . 70.320  109.506 -17.953 1.00 39.34
1 . .
ATOM 6059 CA    CA    . ASN ASN ASN B B 362 362 . 70.991  110.327 -18.927 1.00 38.32
1 . .
ATOM 6060 CB    CB    . ASN ASN ASN B B 362 362 . 71.187  111.770 -18.416 1.00 39.19
1 . .
ATOM 6061 CG    CG    . ASN ASN ASN B B 362 362 . 69.974  112.659 -18.641 1.00 39.47
1 . .
ATOM 6062 OD1   OD1   . ASN ASN ASN B B 362 362 . 69.719  113.089 -19.757 1.00 41.02
1 . .
ATOM 6063 ND2   ND2   . ASN ASN ASN B B 362 362 . 69.265  112.993 -17.572 1.00 38.05
1 . .
ATOM 6064 C     C     . ASN ASN ASN B B 362 362 . 72.325  109.721 -19.250 1.00 37.43
1 . .
ATOM 6065 O     O     . ASN ASN ASN B B 362 362 . 73.176  110.391 -19.838 1.00 37.25
1 . .
ATOM 6066 N     N     . GLY GLY GLY B B 363 363 . 72.500  108.454 -18.891 1.00 37.26
1 . .
ATOM 6067 CA    CA    . GLY GLY GLY B B 363 363 . 73.651  107.653 -19.376 1.00 36.95
1 . .
ATOM 6068 C     C     . GLY GLY GLY B B 363 363 . 74.888  107.841 -18.509 1.00 36.64
1 . .
ATOM 6069 O     O     . GLY GLY GLY B B 363 363 . 76.003  107.412 -18.865 1.00 36.78
1 . .
ATOM 6070 N     N     . TRP TRP TRP B B 364 364 . 74.694  108.461 -17.349 1.00 35.64
1 . .
ATOM 6071 CA    CA    . TRP TRP TRP B B 364 364 . 75.799  108.646 -16.409 1.00 34.87
1 . .
ATOM 6072 CB    CB    . TRP TRP TRP B B 364 364 . 75.438  109.765 -15.449 1.00 34.69
1 . .
ATOM 6073 CG    CG    . TRP TRP TRP B B 364 364 . 75.711  111.124 -15.989 1.00 38.47
1 . .
ATOM 6074 CD1   CD1   . TRP TRP TRP B B 364 364 . 75.783  111.503 -17.324 1.00 40.44
1 . .
ATOM 6075 NE1   NE1   . TRP TRP TRP B B 364 364 . 76.015  112.867 -17.410 1.00 42.98
1 . .
ATOM 6076 CE2   CE2   . TRP TRP TRP B B 364 364 . 76.072  113.392 -16.140 1.00 41.89
1 . .
ATOM 6077 CD2   CD2   . TRP TRP TRP B B 364 364 . 75.884  112.327 -15.222 1.00 40.12
1 . .
ATOM 6078 CE3   CE3   . TRP TRP TRP B B 364 364 . 75.906  112.607 -13.852 1.00 40.02
1 . .
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ATOM 6079 CZ3   CZ3   . TRP TRP TRP B B 364 364 . 76.124  113.904 -13.437 1.00 40.15
1 . .
ATOM 6080 CH2   CH2   . TRP TRP TRP B B 364 364 . 76.306  114.943 -14.367 1.00 41.34
1 . .
ATOM 6081 CZ2   CZ2   . TRP TRP TRP B B 364 364 . 76.276  114.708 -15.719 1.00 40.70
1 . .
ATOM 6082 C     C     . TRP TRP TRP B B 364 364 . 76.090  107.373 -15.605 1.00 33.34
1 . .
ATOM 6083 O     O     . TRP TRP TRP B B 364 364 . 75.185  106.627 -15.275 1.00 31.75
1 . .
ATOM 6084 N     N     . GLY GLY GLY B B 365 365 . 77.355  107.172 -15.227 1.00 32.44
1 . .
ATOM 6085 CA    CA    . GLY GLY GLY B B 365 365 . 77.642  106.257 -14.128 1.00 30.68
1 . .
ATOM 6086 C     C     . GLY GLY GLY B B 365 365 . 77.220  106.933 -12.829 1.00 30.50
1 . .
ATOM 6087 O     O     . GLY GLY GLY B B 365 365 . 76.859  108.126 -12.804 1.00 30.66
1 . .
ATOM 6088 N     N     . VAL VAL VAL B B 366 366 . 77.233  106.171 -11.744 1.00 29.71
1 . .
ATOM 6089 CA    CA    . VAL VAL VAL B B 366 366 . 76.890  106.692 -10.404 1.00 27.93
1 . .
ATOM 6090 CB    CB    . VAL VAL VAL B B 366 366 . 75.395  106.488 -10.013 1.00 28.01
1 . .
ATOM 6091 CG1   CG1   . VAL VAL VAL B B 366 366 . 75.149  106.944 -8.620  1.00 23.31
1 . .
ATOM 6092 CG2   CG2   . VAL VAL VAL B B 366 366 . 74.426  107.239 -10.969 1.00 29.51
1 . .
ATOM 6093 C     C     . VAL VAL VAL B B 366 366 . 77.772  105.923 -9.443  1.00 27.38
1 . .
ATOM 6094 O     O     . VAL VAL VAL B B 366 366 . 77.800  104.680 -9.465  1.00 29.03
1 . .
ATOM 6095 N     N     . MET MET MET B B 367 367 . 78.496  106.634 -8.599  1.00 26.37
1 . .
ATOM 6096 CA    CA    . MET MET MET B B 367 367 . 79.341  105.984 -7.606  1.00 25.35
1 . .
ATOM 6097 CB    CB    . MET MET MET B B 367 367 . 80.835  106.319 -7.813  1.00 23.73
1 . .
ATOM 6098 CG    CG    . MET MET MET B B 367 367 . 81.675  105.920 -6.636  1.00 24.61
1 . .
ATOM 6099 SD    SD    . MET MET MET B B 367 367 . 83.476  106.200 -6.796  1.00 28.10
1 . .
ATOM 6100 CE    CE    . MET MET MET B B 367 367 . 84.072  104.892 -7.840  1.00 26.46
1 . .
ATOM 6101 C     C     . MET MET MET B B 367 367 . 78.856  106.377 -6.216  1.00 24.99
1 . .
ATOM 6102 O     O     . MET MET MET B B 367 367 . 78.844  107.559 -5.851  1.00 23.98
1 . .
ATOM 6103 N     N     . VAL VAL VAL B B 368 368 . 78.444  105.403 -5.417  1.00 25.36
1 . .
ATOM 6104 CA    CA    . VAL VAL VAL B B 368 368 . 78.064  105.749 -4.041  1.00 25.75
1 . .
ATOM 6105 CB    CB    . VAL VAL VAL B B 368 368 . 77.096  104.708 -3.443  1.00 26.36
1 . .
ATOM 6106 CG1   CG1   . VAL VAL VAL B B 368 368 . 76.813  104.964 -1.960  1.00 24.35
1 . .
ATOM 6107 CG2   CG2   . VAL VAL VAL B B 368 368 . 75.810  104.670 -4.266  1.00 23.02
1 . .
ATOM 6108 C     C     . VAL VAL VAL B B 368 368 . 79.304  105.955 -3.210  1.00 26.41
1 . .
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ATOM 6109 O     O     . VAL VAL VAL B B 368 368 . 80.357  105.347 -3.451  1.00 28.10
1 . .
ATOM 6110 N     N     . SER SER SER B B 369 369 . 79.180  106.884 -2.273  1.00 27.39
1 . .
ATOM 6111 CA    CA    . SER SER SER B B 369 369 . 80.296  107.421 -1.492  1.00 26.25
1 . .
ATOM 6112 CB    CB    . SER SER SER B B 369 369 . 80.740  108.774 -2.048  1.00 26.12
1 . .
ATOM 6113 OG    OG    . SER SER SER B B 369 369 . 81.983  109.209 -1.462  1.00 24.55
1 . .
ATOM 6114 C     C     . SER SER SER B B 369 369 . 79.953  107.655 -0.042  1.00 25.87
1 . .
ATOM 6115 O     O     . SER SER SER B B 369 369 . 78.854  108.150 0.298   1.00 27.65
1 . .
ATOM 6116 N     N     . HIS HIS HIS B B 370 370 . 80.941  107.336 0.800   1.00 24.81
1 . .
ATOM 6117 CA    CA    . HIS HIS HIS B B 370 370 . 81.017  107.730 2.211   1.00 21.99
1 . .
ATOM 6118 CB    CB    . HIS HIS HIS B B 370 370 . 82.101  106.888 2.854   1.00 20.86
1 . .
ATOM 6119 CG    CG    . HIS HIS HIS B B 370 370 . 83.480  107.174 2.327   1.00 19.34
1 . .
ATOM 6120 ND1   ND1   . HIS HIS HIS B B 370 370 . 84.614  106.824 3.014   1.00 22.72
1 . .
ATOM 6121 CE1   CE1   . HIS HIS HIS B B 370 370 . 85.697  107.240 2.368   1.00 23.72
1 . .
ATOM 6122 NE2   NE2   . HIS HIS HIS B B 370 370 . 85.301  107.842 1.260   1.00 24.39
1 . .
ATOM 6123 CD2   CD2   . HIS HIS HIS B B 370 370 . 83.910  107.831 1.220   1.00 20.89
1 . .
ATOM 6124 C     C     . HIS HIS HIS B B 370 370 . 81.400  109.233 2.328   1.00 22.20
1 . .
ATOM 6125 O     O     . HIS HIS HIS B B 370 370 . 81.712  109.879 1.320   1.00 22.80
1 . .
ATOM 6126 N     N     . ARG ARG ARG B B 371 371 . 81.420  109.770 3.550   1.00 21.17
1 . .
ATOM 6127 CA    CA    . ARG ARG ARG B B 371 371 . 82.154  111.031 3.857   1.00 19.72
1 . .
ATOM 6128 CB    CB    . ARG ARG ARG B B 371 371 . 81.376  112.033 4.689   1.00 18.32
1 . .
ATOM 6129 CG    CG    . ARG ARG ARG B B 371 371 . 79.991  112.440 4.135   1.00 19.23
1 . .
ATOM 6130 CD    CD    . ARG ARG ARG B B 371 371 . 80.060  112.809 2.653   1.00 19.85
1 . .
ATOM 6131 NE    NE    . ARG ARG ARG B B 371 371 . 80.971  113.919 2.315   1.00 19.00
1 . .
ATOM 6132 CZ    CZ    . ARG ARG ARG B B 371 371 . 80.552  115.164 2.083   1.00 17.33
1 . .
ATOM 6133 NH1   NH1   . ARG ARG ARG B B 371 371 . 79.221  115.492 2.187   1.00 15.61
1 . .
ATOM 6134 NH2   NH2   . ARG ARG ARG B B 371 371 . 81.438  116.078 1.751   1.00 12.41
1 . .
ATOM 6135 C     C     . ARG ARG ARG B B 371 371 . 83.422  110.689 4.607   1.00 19.11
1 . .
ATOM 6136 O     O     . ARG ARG ARG B B 371 371 . 83.573  109.561 5.121   1.00 18.30
1 . .
ATOM 6137 N     N     . SER SER SER B B 372 372 . 84.349  111.632 4.660   1.00 18.39
1 . .
ATOM 6138 CA    CA    . SER SER SER B B 372 372 . 85.616  111.284 5.320   1.00 20.10
1 . .
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ATOM 6139 CB    CB    . SER SER SER B B 372 372 . 86.709  112.289 4.925   1.00 18.03
1 . .
ATOM 6140 OG    OG    . SER SER SER B B 372 372 . 86.210  113.604 5.224   1.00 22.07
1 . .
ATOM 6141 C     C     . SER SER SER B B 372 372 . 85.387  111.116 6.860   1.00 20.59
1 . .
ATOM 6142 O     O     . SER SER SER B B 372 372 . 86.246  110.631 7.542   1.00 22.38
1 . .
ATOM 6143 N     N     . GLY GLY GLY B B 373 373 . 84.189  111.496 7.362   1.00 21.75
1 . .
ATOM 6144 CA    CA    . GLY GLY GLY B B 373 373 . 83.765  111.461 8.754   1.00 21.37
1 . .
ATOM 6145 C     C     . GLY GLY GLY B B 373 373 . 82.572  110.503 8.697   1.00 23.01
1 . .
ATOM 6146 O     O     . GLY GLY GLY B B 373 373 . 81.467  110.860 8.277   1.00 23.05
1 . .
ATOM 6147 N     N     . GLU GLU GLU B B 374 374 . 82.800  109.257 9.087   1.00 22.74
1 . .
ATOM 6148 CA    CA    . GLU GLU GLU B B 374 374 . 81.781  108.268 8.916   1.00 22.70
1 . .
ATOM 6149 CB    CB    . GLU GLU GLU B B 374 374 . 82.292  107.118 8.016   1.00 22.28
1 . .
ATOM 6150 CG    CG    . GLU GLU GLU B B 374 374 . 81.987  107.290 6.560   1.00 20.56
1 . .
ATOM 6151 CD    CD    . GLU GLU GLU B B 374 374 . 80.472  107.294 6.335   1.00 22.47
1 . .
ATOM 6152 OE1   OE1   . GLU GLU GLU B B 374 374 . 79.743  106.715 7.177   1.00 23.17
1 . .
ATOM 6153 OE2   OE2   . GLU GLU GLU B B 374 374 . 80.007  107.908 5.354   1.00 22.99
1 . .
ATOM 6154 C     C     . GLU GLU GLU B B 374 374 . 81.438  107.780 10.287  1.00 23.92
1 . .
ATOM 6155 O     O     . GLU GLU GLU B B 374 374 . 82.089  108.162 11.278  1.00 23.27
1 . .
ATOM 6156 N     N     . THR THR THR B B 375 375 . 80.401  106.941 10.349  1.00 24.69
1 . .
ATOM 6157 CA    CA    . THR THR THR B B 375 375 . 80.064  106.327 11.577  1.00 24.60
1 . .
ATOM 6158 CB    CB    . THR THR THR B B 375 375 . 78.655  106.797 12.073  1.00 24.58
1 . .
ATOM 6159 OG1   OG1   . THR THR THR B B 375 375 . 77.675  106.314 11.191  1.00 23.69
1 . .
ATOM 6160 CG2   CG2   . THR THR THR B B 375 375 . 78.544  108.306 12.112  1.00 25.13
1 . .
ATOM 6161 C     C     . THR THR THR B B 375 375 . 80.082  104.829 11.292  1.00 25.85
1 . .
ATOM 6162 O     O     . THR THR THR B B 375 375 . 80.337  104.381 10.188  1.00 25.79
1 . .
ATOM 6163 N     N     . GLU GLU GLU B B 376 376 . 79.860  104.051 12.323  1.00 27.03
1 . .
ATOM 6164 CA    CA    . GLU GLU GLU B B 376 376 . 79.615  102.633 12.183  1.00 28.31
1 . .
ATOM 6165 CB    CB    . GLU GLU GLU B B 376 376 . 79.524  102.001 13.609  1.00 28.89
1 . .
ATOM 6166 CG    CG    . GLU GLU GLU B B 376 376 . 78.380  102.559 14.599  1.00 30.85
1 . .
ATOM 6167 CD    CD    . GLU GLU GLU B B 376 376 . 78.823  103.780 15.513  1.00 32.89
1 . .
ATOM 6168 OE1   OE1   . GLU GLU GLU B B 376 376 . 79.637  104.647 15.062  1.00 34.01
1 . .
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ATOM 6169 OE2   OE2   . GLU GLU GLU B B 376 376 . 78.326  103.892 16.673  1.00 31.11
1 . .
ATOM 6170 C     C     . GLU GLU GLU B B 376 376 . 78.330  102.357 11.351  1.00 28.95
1 . .
ATOM 6171 O     O     . GLU GLU GLU B B 376 376 . 78.050  101.218 11.054  1.00 29.99
1 . .
ATOM 6172 N     N     . ASP ASP ASP B B 377 377 . 77.532  103.366 10.985  1.00 29.39
1 . .
ATOM 6173 CA    CA    . ASP ASP ASP B B 377 377 . 76.301  103.091 10.152  1.00 28.98
1 . .
ATOM 6174 CB    CB    . ASP ASP ASP B B 377 377 . 75.633  104.428 9.851   1.00 28.56
1 . .
ATOM 6175 CG    CG    . ASP ASP ASP B B 377 377 . 74.330  104.300 9.106   1.00 32.91
1 . .
ATOM 6176 OD1   OD1   . ASP ASP ASP B B 377 377 . 74.381  104.140 7.876   1.00 43.17
1 . .
ATOM 6177 OD2   OD2   . ASP ASP ASP B B 377 377 . 73.247  104.436 9.698   1.00 33.65
1 . .
ATOM 6178 C     C     . ASP ASP ASP B B 377 377 . 76.722  102.364 8.854   1.00 28.36
1 . .
ATOM 6179 O     O     . ASP ASP ASP B B 377 377 . 77.857  102.528 8.366   1.00 28.92
1 . .
ATOM 6180 N     N     . THR THR THR B B 378 378 . 75.873  101.518 8.303   1.00 28.74
1 . .
ATOM 6181 CA    CA    . THR THR THR B B 378 378 . 76.226  100.809 7.048   1.00 28.24
1 . .
ATOM 6182 CB    CB    . THR THR THR B B 378 378 . 76.389  99.274  7.224   1.00 27.74
1 . .
ATOM 6183 OG1   OG1   . THR THR THR B B 378 378 . 75.143  98.718  7.619   1.00 27.48
1 . .
ATOM 6184 CG2   CG2   . THR THR THR B B 378 378 . 77.488  98.901  8.275   1.00 29.07
1 . .
ATOM 6185 C     C     . THR THR THR B B 378 378 . 75.173  100.979 5.957   1.00 27.52
1 . .
ATOM 6186 O     O     . THR THR THR B B 378 378 . 75.186  100.230 4.962   1.00 27.41
1 . .
ATOM 6187 N     N     . PHE PHE PHE B B 379 379 . 74.275  101.952 6.115   1.00 27.82
1 . .
ATOM 6188 CA    CA    . PHE PHE PHE B B 379 379 . 73.199  102.188 5.129   1.00 27.44
1 . .
ATOM 6189 CB    CB    . PHE PHE PHE B B 379 379 . 72.497  103.533 5.423   1.00 27.30
1 . .
ATOM 6190 CG    CG    . PHE PHE PHE B B 379 379 . 71.300  103.842 4.503   1.00 30.62
1 . .
ATOM 6191 CD1   CD1   . PHE PHE PHE B B 379 379 . 71.505  104.431 3.259   1.00 31.19
1 . .
ATOM 6192 CE1   CE1   . PHE PHE PHE B B 379 379 . 70.429  104.736 2.430   1.00 32.38
1 . .
ATOM 6193 CZ    CZ    . PHE PHE PHE B B 379 379 . 69.084  104.429 2.846   1.00 32.56
1 . .
ATOM 6194 CE2   CE2   . PHE PHE PHE B B 379 379 . 68.865  103.864 4.092   1.00 30.47
1 . .
ATOM 6195 CD2   CD2   . PHE PHE PHE B B 379 379 . 69.972  103.562 4.913   1.00 30.83
1 . .
ATOM 6196 C     C     . PHE PHE PHE B B 379 379 . 73.731  102.213 3.682   1.00 27.63
1 . .
ATOM 6197 O     O     . PHE PHE PHE B B 379 379 . 73.072  101.696 2.794   1.00 26.91
1 . .
ATOM 6198 N     N     . ILE ILE ILE B B 380 380 . 74.910  102.817 3.421   1.00 27.49
1 . .
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ATOM 6199 CA    CA    . ILE ILE ILE B B 380 380 . 75.310  102.998 2.025   1.00 27.42
1 . .
ATOM 6200 CB    CB    . ILE ILE ILE B B 380 380 . 76.434  104.095 1.746   1.00 26.52
1 . .
ATOM 6201 CG1   CG1   . ILE ILE ILE B B 380 380 . 77.747  103.736 2.434   1.00 25.30
1 . .
ATOM 6202 CD1   CD1   . ILE ILE ILE B B 380 380 . 78.904  104.633 2.105   1.00 24.25
1 . .
ATOM 6203 CG2   CG2   . ILE ILE ILE B B 380 380 . 75.934  105.443 2.098   1.00 24.08
1 . .
ATOM 6204 C     C     . ILE ILE ILE B B 380 380 . 75.600  101.691 1.305   1.00 27.59
1 . .
ATOM 6205 O     O     . ILE ILE ILE B B 380 380 . 75.425  101.621 0.061   1.00 29.17
1 . .
ATOM 6206 N     N     . ALA ALA ALA B B 381 381 . 76.020  100.664 2.051   1.00 26.21
1 . .
ATOM 6207 CA    CA    . ALA ALA ALA B B 381 381 . 76.222  99.311  1.427   1.00 25.57
1 . .
ATOM 6208 CB    CB    . ALA ALA ALA B B 381 381 . 76.688  98.353  2.420   1.00 25.06
1 . .
ATOM 6209 C     C     . ALA ALA ALA B B 381 381 . 74.880  98.835  0.890   1.00 25.90
1 . .
ATOM 6210 O     O     . ALA ALA ALA B B 381 381 . 74.773  98.415  -0.248  1.00 27.41
1 . .
ATOM 6211 N     N     . ASP ASP ASP B B 382 382 . 73.829  98.936  1.680   1.00 25.10
1 . .
ATOM 6212 CA    CA    . ASP ASP ASP B B 382 382 . 72.520  98.591  1.077   1.00 27.56
1 . .
ATOM 6213 CB    CB    . ASP ASP ASP B B 382 382 . 71.429  98.439  2.134   1.00 27.13
1 . .
ATOM 6214 CG    CG    . ASP ASP ASP B B 382 382 . 71.677  97.205  3.019   1.00 30.67
1 . .
ATOM 6215 OD1   OD1   . ASP ASP ASP B B 382 382 . 72.684  97.205  3.787   1.00 32.26
1 . .
ATOM 6216 OD2   OD2   . ASP ASP ASP B B 382 382 . 70.883  96.225  2.928   1.00 34.21
1 . .
ATOM 6217 C     C     . ASP ASP ASP B B 382 382 . 72.089  99.482  -0.082  1.00 27.28
1 . .
ATOM 6218 O     O     . ASP ASP ASP B B 382 382 . 71.547  98.984  -1.060  1.00 28.83
1 . .
ATOM 6219 N     N     . LEU LEU LEU B B 383 383 . 72.357  100.791 0.032   1.00 27.42
1 . .
ATOM 6220 CA    CA    . LEU LEU LEU B B 383 383 . 72.038  101.789 -0.986  1.00 26.29
1 . .
ATOM 6221 CB    CB    . LEU LEU LEU B B 383 383 . 72.447  103.189 -0.486  1.00 26.51
1 . .
ATOM 6222 CG    CG    . LEU LEU LEU B B 383 383 . 72.109  104.390 -1.368  1.00 25.13
1 . .
ATOM 6223 CD1   CD1   . LEU LEU LEU B B 383 383 . 70.561  104.752 -1.295  1.00 22.90
1 . .
ATOM 6224 CD2   CD2   . LEU LEU LEU B B 383 383 . 72.930  105.557 -0.954  1.00 22.41
1 . .
ATOM 6225 C     C     . LEU LEU LEU B B 383 383 . 72.676  101.511 -2.367  1.00 26.26
1 . .
ATOM 6226 O     O     . LEU LEU LEU B B 383 383 . 71.945  101.525 -3.338  1.00 25.17
1 . .
ATOM 6227 N     N     . VAL VAL VAL B B 384 384 . 74.000  101.238 -2.441  1.00 25.60
1 . .
ATOM 6228 CA    CA    . VAL VAL VAL B B 384 384 . 74.651  100.967 -3.729  1.00 25.34
1 . .
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ATOM 6229 CB    CB    . VAL VAL VAL B B 384 384 . 76.174  100.904 -3.634  1.00 25.29
1 . .
ATOM 6230 CG1   CG1   . VAL VAL VAL B B 384 384 . 76.652  99.606  -2.875  1.00 25.59
1 . .
ATOM 6231 CG2   CG2   . VAL VAL VAL B B 384 384 . 76.736  100.913 -5.042  1.00 23.52
1 . .
ATOM 6232 C     C     . VAL VAL VAL B B 384 384 . 74.117  99.728  -4.475  1.00 26.20
1 . .
ATOM 6233 O     O     . VAL VAL VAL B B 384 384 . 73.959  99.717  -5.727  1.00 25.93
1 . .
ATOM 6234 N     N     . VAL VAL VAL B B 385 385 . 73.832  98.685  -3.714  1.00 26.68
1 . .
ATOM 6235 CA    CA    . VAL VAL VAL B B 385 385 . 73.277  97.483  -4.272  1.00 28.11
1 . .
ATOM 6236 CB    CB    . VAL VAL VAL B B 385 385 . 73.303  96.305  -3.218  1.00 28.63
1 . .
ATOM 6237 CG1   CG1   . VAL VAL VAL B B 385 385 . 72.302  95.173  -3.600  1.00 28.86
1 . .
ATOM 6238 CG2   CG2   . VAL VAL VAL B B 385 385 . 74.746  95.694  -3.049  1.00 27.46
1 . .
ATOM 6239 C     C     . VAL VAL VAL B B 385 385 . 71.832  97.799  -4.748  1.00 29.81
1 . .
ATOM 6240 O     O     . VAL VAL VAL B B 385 385 . 71.462  97.485  -5.916  1.00 30.25
1 . .
ATOM 6241 N     N     . GLY GLY GLY B B 386 386 . 71.033  98.441  -3.889  1.00 30.01
1 . .
ATOM 6242 CA    CA    . GLY GLY GLY B B 386 386 . 69.603  98.677  -4.191  1.00 31.44
1 . .
ATOM 6243 C     C     . GLY GLY GLY B B 386 386 . 69.444  99.599  -5.391  1.00 33.36
1 . .
ATOM 6244 O     O     . GLY GLY GLY B B 386 386 . 68.411  99.549  -6.146  1.00 31.68
1 . .
ATOM 6245 N     N     . LEU LEU LEU B B 387 387 . 70.492  100.409 -5.609  1.00 34.03
1 . .
ATOM 6246 CA    CA    . LEU LEU LEU B B 387 387 . 70.438  101.388 -6.693  1.00 35.42
1 . .
ATOM 6247 CB    CB    . LEU LEU LEU B B 387 387 . 71.017  102.763 -6.298  1.00 35.44
1 . .
ATOM 6248 CG    CG    . LEU LEU LEU B B 387 387 . 70.213  103.521 -5.241  1.00 35.35
1 . .
ATOM 6249 CD1   CD1   . LEU LEU LEU B B 387 387 . 70.798  104.853 -5.035  1.00 36.08
1 . .
ATOM 6250 CD2   CD2   . LEU LEU LEU B B 387 387 . 68.717  103.653 -5.585  1.00 36.95
1 . .
ATOM 6251 C     C     . LEU LEU LEU B B 387 387 . 71.169  100.845 -7.894  1.00 35.62
1 . .
ATOM 6252 O     O     . LEU LEU LEU B B 387 387 . 71.312  101.535 -8.880  1.00 36.71
1 . .
ATOM 6253 N     N     . CYS CYS CYS B B 388 388 . 71.643  99.617  -7.813  1.00 35.18
1 . .
ATOM 6254 CA    CA    . CYS CYS CYS B B 388 388 . 72.254  99.015  -8.973  1.00 36.38
1 . .
ATOM 6255 CB    CB    . CYS CYS CYS B B 388 388 . 71.153  98.685  -10.015 1.00 37.47
1 . .
ATOM 6256 SG    SG    . CYS CYS CYS B B 388 388 . 71.372  97.089  -10.905 1.00 46.16
1 . .
ATOM 6257 C     C     . CYS CYS CYS B B 388 388 . 73.327  99.901  -9.614  1.00 34.58
1 . .
ATOM 6258 O     O     . CYS CYS CYS B B 388 388 . 73.355  100.005 -10.838 1.00 34.83
1 . .
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ATOM 6259 N     N     . THR THR THR B B 389 389 . 74.197  100.549 -8.839  1.00 32.08
1 . .
ATOM 6260 CA    CA    . THR THR THR B B 389 389 . 75.094  101.549 -9.482  1.00 30.80
1 . .
ATOM 6261 CB    CB    . THR THR THR B B 389 389 . 75.375  102.819 -8.624  1.00 30.53
1 . .
ATOM 6262 OG1   OG1   . THR THR THR B B 389 389 . 76.620  102.689 -7.876  1.00 29.89
1 . .
ATOM 6263 CG2   CG2   . THR THR THR B B 389 389 . 74.191  103.165 -7.717  1.00 28.23
1 . .
ATOM 6264 C     C     . THR THR THR B B 389 389 . 76.409  100.912 -9.900  1.00 30.37
1 . .
ATOM 6265 O     O     . THR THR THR B B 389 389 . 77.094  101.347 -10.857 1.00 31.64
1 . .
ATOM 6266 N     N     . GLY GLY GLY B B 390 390 . 76.797  99.883  -9.192  1.00 28.38
1 . .
ATOM 6267 CA    CA    . GLY GLY GLY B B 390 390 . 77.864  99.087  -9.727  1.00 26.65
1 . .
ATOM 6268 C     C     . GLY GLY GLY B B 390 390 . 79.193  99.631  -9.278  1.00 26.74
1 . .
ATOM 6269 O     O     . GLY GLY GLY B B 390 390 . 80.215  99.077  -9.611  1.00 25.29
1 . .
ATOM 6270 N     N     . GLN GLN GLN B B 391 391 . 79.193  100.704 -8.482  1.00 27.12
1 . .
ATOM 6271 CA    CA    . GLN GLN GLN B B 391 391 . 80.482  101.243 -7.944  1.00 27.34
1 . .
ATOM 6272 CB    CB    . GLN GLN GLN B B 391 391 . 81.286  102.074 -8.967  1.00 27.52
1 . .
ATOM 6273 CG    CG    . GLN GLN GLN B B 391 391 . 80.435  102.898 -9.840  1.00 26.60
1 . .
ATOM 6274 CD    CD    . GLN GLN GLN B B 391 391 . 81.184  103.843 -10.808 1.00 28.53
1 . .
ATOM 6275 OE1   OE1   . GLN GLN GLN B B 391 391 . 82.393  104.207 -10.634 1.00 26.69
1 . .
ATOM 6276 NE2   NE2   . GLN GLN GLN B B 391 391 . 80.437  104.277 -11.832 1.00 27.73
1 . .
ATOM 6277 C     C     . GLN GLN GLN B B 391 391 . 80.291  102.032 -6.625  1.00 27.38
1 . .
ATOM 6278 O     O     . GLN GLN GLN B B 391 391 . 79.265  102.710 -6.433  1.00 27.31
1 . .
ATOM 6279 N     N     . ILE ILE ILE B B 392 392 . 81.256  101.855 -5.709  1.00 26.23
1 . .
ATOM 6280 CA    CA    . ILE ILE ILE B B 392 392 . 81.226  102.482 -4.399  1.00 25.43
1 . .
ATOM 6281 CB    CB    . ILE ILE ILE B B 392 392 . 80.447  101.654 -3.362  1.00 25.31
1 . .
ATOM 6282 CG1   CG1   . ILE ILE ILE B B 392 392 . 80.334  102.454 -2.040  1.00 25.76
1 . .
ATOM 6283 CD1   CD1   . ILE ILE ILE B B 392 392 . 79.401  101.916 -1.047  1.00 22.14
1 . .
ATOM 6284 CG2   CG2   . ILE ILE ILE B B 392 392 . 81.108  100.245 -3.148  1.00 24.35
1 . .
ATOM 6285 C     C     . ILE ILE ILE B B 392 392 . 82.609  102.800 -3.909  1.00 24.80
1 . .
ATOM 6286 O     O     . ILE ILE ILE B B 392 392 . 83.511  102.016 -4.123  1.00 26.02
1 . .
ATOM 6287 N     N     . LYS LYS LYS B B 393 393 . 82.788  103.997 -3.330  1.00 25.47
1 . .
ATOM 6288 CA    CA    . LYS LYS LYS B B 393 393 . 84.002  104.290 -2.595  1.00 25.68
1 . .
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ATOM 6289 CB    CB    . LYS LYS LYS B B 393 393 . 84.785  105.456 -3.197  1.00 25.81
1 . .
ATOM 6290 CG    CG    . LYS LYS LYS B B 393 393 . 84.158  106.812 -3.055  1.00 27.84
1 . .
ATOM 6291 CD    CD    . LYS LYS LYS B B 393 393 . 85.213  107.905 -3.365  1.00 27.51
1 . .
ATOM 6292 CE    CE    . LYS LYS LYS B B 393 393 . 84.818  109.277 -2.806  1.00 25.74
1 . .
ATOM 6293 NZ    NZ    . LYS LYS LYS B B 393 393 . 85.721  110.279 -3.299  1.00 24.04
1 . .
ATOM 6294 C     C     . LYS LYS LYS B B 393 393 . 83.631  104.535 -1.122  1.00 25.82
1 . .
ATOM 6295 O     O     . LYS LYS LYS B B 393 393 . 82.774  105.363 -0.790  1.00 27.84
1 . .
ATOM 6296 N     N     . THR THR THR B B 394 394 . 84.253  103.793 -0.239  1.00 24.78
1 . .
ATOM 6297 CA    CA    . THR THR THR B B 394 394 . 83.936  103.937 1.162   1.00 24.02
1 . .
ATOM 6298 CB    CB    . THR THR THR B B 394 394 . 82.680  103.181 1.571   1.00 23.93
1 . .
ATOM 6299 OG1   OG1   . THR THR THR B B 394 394 . 82.485  103.360 2.975   1.00 25.34
1 . .
ATOM 6300 CG2   CG2   . THR THR THR B B 394 394 . 82.800  101.680 1.224   1.00 24.53
1 . .
ATOM 6301 C     C     . THR THR THR B B 394 394 . 85.100  103.655 2.078   1.00 22.67
1 . .
ATOM 6302 O     O     . THR THR THR B B 394 394 . 84.914  103.253 3.223   1.00 22.61
1 . .
ATOM 6303 N     N     . GLY GLY GLY B B 395 395 . 86.286  103.936 1.566   1.00 22.00
1 . .
ATOM 6304 CA    CA    . GLY GLY GLY B B 395 395 . 87.473  103.982 2.365   1.00 21.36
1 . .
ATOM 6305 C     C     . GLY GLY GLY B B 395 395 . 88.523  103.017 1.952   1.00 23.29
1 . .
ATOM 6306 O     O     . GLY GLY GLY B B 395 395 . 88.266  102.100 1.133   1.00 25.07
1 . .
ATOM 6307 N     N     . ALA ALA ALA B B 396 396 . 89.731  103.205 2.487   1.00 23.06
1 . .
ATOM 6308 CA    CA    . ALA ALA ALA B B 396 396 . 90.726  102.169 2.451   1.00 24.17
1 . .
ATOM 6309 CB    CB    . ALA ALA ALA B B 396 396 . 91.980  102.620 3.207   1.00 22.82
1 . .
ATOM 6310 C     C     . ALA ALA ALA B B 396 396 . 90.143  100.904 3.144   1.00 25.10
1 . .
ATOM 6311 O     O     . ALA ALA ALA B B 396 396 . 89.103  100.968 3.807   1.00 25.46
1 . .
ATOM 6312 N     N     . PRO PRO PRO B B 397 397 . 90.799  99.734  2.980   1.00 26.11
1 . .
ATOM 6313 CA    CA    . PRO PRO PRO B B 397 397 . 90.314  98.584  3.763   1.00 26.22
1 . .
ATOM 6314 CB    CB    . PRO PRO PRO B B 397 397 . 90.815  97.406  2.958   1.00 26.32
1 . .
ATOM 6315 CG    CG    . PRO PRO PRO B B 397 397 . 92.165  97.939  2.375   1.00 27.31
1 . .
ATOM 6316 CD    CD    . PRO PRO PRO B B 397 397 . 91.843  99.351  1.998   1.00 26.64
1 . .
ATOM 6317 C     C     . PRO PRO PRO B B 397 397 . 90.917  98.615  5.203   1.00 27.30
1 . .
ATOM 6318 O     O     . PRO PRO PRO B B 397 397 . 91.617  97.691  5.636   1.00 27.96
1 . .
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ATOM 6319 N     N     . CYS CYS CYS B B 398 398 . 90.643  99.705  5.921   1.00 26.97
1 . .
ATOM 6320 CA    CA    . CYS CYS CYS B B 398 398 . 91.333  100.019 7.164   1.00 26.82
1 . .
ATOM 6321 CB    CB    . CYS CYS CYS B B 398 398 . 92.752  100.562 6.846   1.00 26.60
1 . .
ATOM 6322 SG    SG    . CYS CYS CYS B B 398 398 . 93.486  101.113 8.391   1.00 29.04
1 . .
ATOM 6323 C     C     . CYS CYS CYS B B 398 398 . 90.526  101.090 7.871   1.00 26.02
1 . .
ATOM 6324 O     O     . CYS CYS CYS B B 398 398 . 90.067  101.994 7.216   1.00 26.92
1 . .
ATOM 6325 N     N     . ARG ARG ARG B B 399 399 . 90.347  100.966 9.187   1.00 26.06
1 . .
ATOM 6326 CA    CA    . ARG ARG ARG B B 399 399 . 89.344  101.655 10.030  1.00 23.92
1 . .
ATOM 6327 CB    CB    . ARG ARG ARG B B 399 399 . 89.361  103.195 9.831   1.00 24.73
1 . .
ATOM 6328 CG    CG    . ARG ARG ARG B B 399 399 . 90.755  103.829 9.830   1.00 25.33
1 . .
ATOM 6329 CD    CD    . ARG ARG ARG B B 399 399 . 90.775  105.354 9.504   1.00 25.00
1 . .
ATOM 6330 NE    NE    . ARG ARG ARG B B 399 399 . 89.819  106.209 10.244  1.00 21.31
1 . .
ATOM 6331 CZ    CZ    . ARG ARG ARG B B 399 399 . 90.157  107.327 10.918  1.00 23.22
1 . .
ATOM 6332 NH1   NH1   . ARG ARG ARG B B 399 399 . 91.449  107.729 10.959  1.00 22.91
1 . .
ATOM 6333 NH2   NH2   . ARG ARG ARG B B 399 399 . 89.194  108.064 11.539  1.00 23.07
1 . .
ATOM 6334 C     C     . ARG ARG ARG B B 399 399 . 87.945  101.150 9.784   1.00 24.29
1 . .
ATOM 6335 O     O     . ARG ARG ARG B B 399 399 . 87.487  101.170 8.636   1.00 24.64
1 . .
ATOM 6336 N     N     . SER SER SER B B 400 400 . 87.244  100.779 10.856  1.00 23.33
1 . .
ATOM 6337 CA    CA    . SER SER SER B B 400 400 . 86.010  100.012 10.717  1.00 24.47
1 . .
ATOM 6338 CB    CB    . SER SER SER B B 400 400 . 85.685  99.182  11.975  1.00 24.83
1 . .
ATOM 6339 OG    OG    . SER SER SER B B 400 400 . 86.656  98.192  12.224  1.00 27.22
1 . .
ATOM 6340 C     C     . SER SER SER B B 400 400 . 84.776  100.814 10.353  1.00 24.24
1 . .
ATOM 6341 O     O     . SER SER SER B B 400 400 . 83.811  100.212 9.980   1.00 26.31
1 . .
ATOM 6342 N     N     . GLU GLU GLU B B 401 401 . 84.766  102.140 10.498  1.00 23.99
1 . .
ATOM 6343 CA    CA    . GLU GLU GLU B B 401 401 . 83.755  102.957 9.771   1.00 23.51
1 . .
ATOM 6344 CB    CB    . GLU GLU GLU B B 401 401 . 83.835  104.439 10.197  1.00 23.68
1 . .
ATOM 6345 CG    CG    . GLU GLU GLU B B 401 401 . 84.968  105.265 9.593   1.00 21.36
1 . .
ATOM 6346 CD    CD    . GLU GLU GLU B B 401 401 . 86.356  105.139 10.269  1.00 22.72
1 . .
ATOM 6347 OE1   OE1   . GLU GLU GLU B B 401 401 . 86.529  104.445 11.306  1.00 23.79
1 . .
ATOM 6348 OE2   OE2   . GLU GLU GLU B B 401 401 . 87.305  105.785 9.752   1.00 23.82
1 . .
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ATOM 6349 C     C     . GLU GLU GLU B B 401 401 . 83.779  102.755 8.191   1.00 23.20
1 . .
ATOM 6350 O     O     . GLU GLU GLU B B 401 401 . 82.726  102.961 7.488   1.00 19.83
1 . .
ATOM 6351 N     N     . ARG ARG ARG B B 402 402 . 84.958  102.345 7.660   1.00 21.05
1 . .
ATOM 6352 CA    CA    . ARG ARG ARG B B 402 402 . 85.079  101.875 6.241   1.00 20.98
1 . .
ATOM 6353 CB    CB    . ARG ARG ARG B B 402 402 . 86.523  102.142 5.714   1.00 20.11
1 . .
ATOM 6354 CG    CG    . ARG ARG ARG B B 402 402 . 87.167  103.427 6.273   1.00 20.08
1 . .
ATOM 6355 CD    CD    . ARG ARG ARG B B 402 402 . 86.480  104.718 5.753   1.00 20.61
1 . .
ATOM 6356 NE    NE    . ARG ARG ARG B B 402 402 . 86.780  105.842 6.629   1.00 23.31
1 . .
ATOM 6357 CZ    CZ    . ARG ARG ARG B B 402 402 . 86.180  107.027 6.655   1.00 24.23
1 . .
ATOM 6358 NH1   NH1   . ARG ARG ARG B B 402 402 . 85.223  107.336 5.793   1.00 24.15
1 . .
ATOM 6359 NH2   NH2   . ARG ARG ARG B B 402 402 . 86.592  107.927 7.551   1.00 23.45
1 . .
ATOM 6360 C     C     . ARG ARG ARG B B 402 402 . 84.750  100.353 6.078   1.00 21.69
1 . .
ATOM 6361 O     O     . ARG ARG ARG B B 402 402 . 83.822  99.953  5.300   1.00 24.09
1 . .
ATOM 6362 N     N     . LEU LEU LEU B B 403 403 . 85.430  99.502  6.848   1.00 20.54
1 . .
ATOM 6363 CA    CA    . LEU LEU LEU B B 403 403 . 85.129  98.101  6.782   1.00 21.30
1 . .
ATOM 6364 CB    CB    . LEU LEU LEU B B 403 403 . 85.972  97.311  7.677   1.00 20.79
1 . .
ATOM 6365 CG    CG    . LEU LEU LEU B B 403 403 . 87.357  96.835  7.251   1.00 22.58
1 . .
ATOM 6366 CD1   CD1   . LEU LEU LEU B B 403 403 . 87.442  96.642  5.730   1.00 20.74
1 . .
ATOM 6367 CD2   CD2   . LEU LEU LEU B B 403 403 . 88.299  97.884  7.743   1.00 21.57
1 . .
ATOM 6368 C     C     . LEU LEU LEU B B 403 403 . 83.695  97.786  7.150   1.00 21.74
1 . .
ATOM 6369 O     O     . LEU LEU LEU B B 403 403 . 83.194  96.787  6.676   1.00 23.39
1 . .
ATOM 6370 N     N     . ALA ALA ALA B B 404 404 . 83.042  98.552  8.014   1.00 20.02
1 . .
ATOM 6371 CA    CA    . ALA ALA ALA B B 404 404 . 81.652  98.178  8.307   1.00 18.38
1 . .
ATOM 6372 CB    CB    . ALA ALA ALA B B 404 404 . 81.010  99.122  9.229   1.00 17.65
1 . .
ATOM 6373 C     C     . ALA ALA ALA B B 404 404 . 80.902  98.046  7.032   1.00 18.83
1 . .
ATOM 6374 O     O     . ALA ALA ALA B B 404 404 . 80.278  97.051  6.835   1.00 20.31
1 . .
ATOM 6375 N     N     . LYS LYS LYS B B 405 405 . 81.049  98.987  6.102   1.00 21.52
1 . .
ATOM 6376 CA    CA    . LYS LYS LYS B B 405 405 . 80.382  98.938  4.774   1.00 21.74
1 . .
ATOM 6377 CB    CB    . LYS LYS LYS B B 405 405 . 80.618  100.228 4.002   1.00 22.27
1 . .
ATOM 6378 CG    CG    . LYS LYS LYS B B 405 405 . 79.820  101.448 4.471   1.00 22.19
1 . .
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ATOM 6379 CD    CD    . LYS LYS LYS B B 405 405 . 80.254  101.933 5.839   1.00 23.25
1 . .
ATOM 6380 CE    CE    . LYS LYS LYS B B 405 405 . 79.786  103.369 6.079   1.00 23.98
1 . .
ATOM 6381 NZ    NZ    . LYS LYS LYS B B 405 405 . 80.177  103.802 7.541   1.00 26.14
1 . .
ATOM 6382 C     C     . LYS LYS LYS B B 405 405 . 80.817  97.814  3.869   1.00 22.81
1 . .
ATOM 6383 O     O     . LYS LYS LYS B B 405 405 . 79.978  97.111  3.362   1.00 23.97
1 . .
ATOM 6384 N     N     . TYR TYR TYR B B 406 406 . 82.135  97.646  3.643   1.00 23.86
1 . .
ATOM 6385 CA    CA    . TYR TYR TYR B B 406 406 . 82.654  96.461  2.954   1.00 23.17
1 . .
ATOM 6386 CB    CB    . TYR TYR TYR B B 406 406 . 84.201  96.503  2.908   1.00 23.53
1 . .
ATOM 6387 CG    CG    . TYR TYR TYR B B 406 406 . 84.692  97.743  2.180   1.00 24.30
1 . .
ATOM 6388 CD1   CD1   . TYR TYR TYR B B 406 406 . 84.176  98.077  0.890   1.00 23.09
1 . .
ATOM 6389 CE1   CE1   . TYR TYR TYR B B 406 406 . 84.618  99.220  0.194   1.00 23.70
1 . .
ATOM 6390 CZ    CZ    . TYR TYR TYR B B 406 406 . 85.584  100.042 0.775   1.00 25.99
1 . .
ATOM 6391 OH    OH    . TYR TYR TYR B B 406 406 . 85.986  101.170 0.085   1.00 24.70
1 . .
ATOM 6392 CE2   CE2   . TYR TYR TYR B B 406 406 . 86.132  99.732  2.046   1.00 25.60
1 . .
ATOM 6393 CD2   CD2   . TYR TYR TYR B B 406 406 . 85.669  98.587  2.749   1.00 23.43
1 . .
ATOM 6394 C     C     . TYR TYR TYR B B 406 406 . 82.171  95.103  3.502   1.00 23.43
1 . .
ATOM 6395 O     O     . TYR TYR TYR B B 406 406 . 81.820  94.222  2.698   1.00 25.45
1 . .
ATOM 6396 N     N     . ASN ASN ASN B B 407 407 . 82.200  94.904  4.830   1.00 21.74
1 . .
ATOM 6397 CA    CA    . ASN ASN ASN B B 407 407 . 81.752  93.659  5.440   1.00 21.54
1 . .
ATOM 6398 CB    CB    . ASN ASN ASN B B 407 407 . 81.956  93.790  6.980   1.00 21.91
1 . .
ATOM 6399 CG    CG    . ASN ASN ASN B B 407 407 . 83.435  93.663  7.358   1.00 20.71
1 . .
ATOM 6400 OD1   OD1   . ASN ASN ASN B B 407 407 . 84.196  93.157  6.547   1.00 22.25
1 . .
ATOM 6401 ND2   ND2   . ASN ASN ASN B B 407 407 . 83.843  94.100  8.568   1.00 19.22
1 . .
ATOM 6402 C     C     . ASN ASN ASN B B 407 407 . 80.266  93.445  5.113   1.00 22.65
1 . .
ATOM 6403 O     O     . ASN ASN ASN B B 407 407 . 79.813  92.310  4.917   1.00 22.85
1 . .
ATOM 6404 N     N     . GLN GLN GLN B B 408 408 . 79.502  94.530  5.095   1.00 22.97
1 . .
ATOM 6405 CA    CA    . GLN GLN GLN B B 408 408 . 78.040  94.397  4.858   1.00 24.94
1 . .
ATOM 6406 CB    CB    . GLN GLN GLN B B 408 408 . 77.377  95.688  5.269   1.00 24.24
1 . .
ATOM 6407 CG    CG    . GLN GLN GLN B B 408 408 . 75.888  95.800  4.938   1.00 26.08
1 . .
ATOM 6408 CD    CD    . GLN GLN GLN B B 408 408 . 74.992  94.932  5.777   1.00 27.74
1 . .
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ATOM 6409 OE1   OE1   . GLN GLN GLN B B 408 408 . 75.439  94.150  6.636   1.00 28.73
1 . .
ATOM 6410 NE2   NE2   . GLN GLN GLN B B 408 408 . 73.698  95.100  5.573   1.00 27.45
1 . .
ATOM 6411 C     C     . GLN GLN GLN B B 408 408 . 77.803  94.074  3.362   1.00 26.12
1 . .
ATOM 6412 O     O     . GLN GLN GLN B B 408 408 . 76.808  93.406  2.989   1.00 25.85
1 . .
ATOM 6413 N     N     . LEU LEU LEU B B 409 409 . 78.756  94.482  2.501   1.00 26.13
1 . .
ATOM 6414 CA    CA    . LEU LEU LEU B B 409 409 . 78.579  94.137  1.080   1.00 26.85
1 . .
ATOM 6415 CB    CB    . LEU LEU LEU B B 409 409 . 79.434  95.006  0.135   1.00 26.40
1 . .
ATOM 6416 CG    CG    . LEU LEU LEU B B 409 409 . 78.831  96.398  -0.036  1.00 25.92
1 . .
ATOM 6417 CD1   CD1   . LEU LEU LEU B B 409 409 . 79.895  97.363  -0.507  1.00 24.80
1 . .
ATOM 6418 CD2   CD2   . LEU LEU LEU B B 409 409 . 77.614  96.391  -1.004  1.00 24.06
1 . .
ATOM 6419 C     C     . LEU LEU LEU B B 409 409 . 78.822  92.653  0.919   1.00 26.97
1 . .
ATOM 6420 O     O     . LEU LEU LEU B B 409 409 . 78.091  91.961  0.198   1.00 28.58
1 . .
ATOM 6421 N     N     . MET MET MET B B 410 410 . 79.807  92.148  1.637   1.00 27.33
1 . .
ATOM 6422 CA    CA    . MET MET MET B B 410 410 . 80.054  90.713  1.657   1.00 27.16
1 . .
ATOM 6423 CB    CB    . MET MET MET B B 410 410 . 81.266  90.370  2.487   1.00 25.79
1 . .
ATOM 6424 CG    CG    . MET MET MET B B 410 410 . 82.511  91.056  1.955   1.00 27.88
1 . .
ATOM 6425 SD    SD    . MET MET MET B B 410 410 . 84.045  90.141  2.376   1.00 35.98
1 . .
ATOM 6426 CE    CE    . MET MET MET B B 410 410 . 84.569  90.914  3.890   1.00 31.32
1 . .
ATOM 6427 C     C     . MET MET MET B B 410 410 . 78.812  89.955  2.139   1.00 26.69
1 . .
ATOM 6428 O     O     . MET MET MET B B 410 410 . 78.464  88.969  1.560   1.00 27.47
1 . .
ATOM 6429 N     N     . ARG ARG ARG B B 411 411 . 78.146  90.429  3.179   1.00 27.12
1 . .
ATOM 6430 CA    CA    . ARG ARG ARG B B 411 411 . 76.925  89.769  3.658   1.00 27.78
1 . .
ATOM 6431 CB    CB    . ARG ARG ARG B B 411 411 . 76.386  90.454  4.916   1.00 27.62
1 . .
ATOM 6432 CG    CG    . ARG ARG ARG B B 411 411 . 77.326  90.276  6.111   1.00 29.10
1 . .
ATOM 6433 CD    CD    . ARG ARG ARG B B 411 411 . 76.767  90.761  7.453   1.00 30.03
1 . .
ATOM 6434 NE    NE    . ARG ARG ARG B B 411 411 . 77.921  91.070  8.308   1.00 28.28
1 . .
ATOM 6435 CZ    CZ    . ARG ARG ARG B B 411 411 . 78.357  92.295  8.601   1.00 27.26
1 . .
ATOM 6436 NH1   NH1   . ARG ARG ARG B B 411 411 . 77.720  93.363  8.153   1.00 28.21
1 . .
ATOM 6437 NH2   NH2   . ARG ARG ARG B B 411 411 . 79.437  92.443  9.372   1.00 26.69
1 . .
ATOM 6438 C     C     . ARG ARG ARG B B 411 411 . 75.841  89.813  2.622   1.00 29.23
1 . .
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ATOM 6439 O     O     . ARG ARG ARG B B 411 411 . 75.007  88.892  2.567   1.00 31.01
1 . .
ATOM 6440 N     N     . ILE ILE ILE B B 412 412 . 75.798  90.890  1.840   1.00 29.37
1 . .
ATOM 6441 CA    CA    . ILE ILE ILE B B 412 412 . 74.729  91.028  0.862   1.00 30.35
1 . .
ATOM 6442 CB    CB    . ILE ILE ILE B B 412 412 . 74.538  92.490  0.350   1.00 29.91
1 . .
ATOM 6443 CG1   CG1   . ILE ILE ILE B B 412 412 . 73.929  93.357  1.464   1.00 30.46
1 . .
ATOM 6444 CD1   CD1   . ILE ILE ILE B B 412 412 . 74.213  94.886  1.298   1.00 29.08
1 . .
ATOM 6445 CG2   CG2   . ILE ILE ILE B B 412 412 . 73.517  92.541  -0.768  1.00 30.41
1 . .
ATOM 6446 C     C     . ILE ILE ILE B B 412 412 . 75.003  90.016  -0.255  1.00 30.85
1 . .
ATOM 6447 O     O     . ILE ILE ILE B B 412 412 . 74.099  89.289  -0.678  1.00 30.84
1 . .
ATOM 6448 N     N     . GLU GLU GLU B B 413 413 . 76.270  89.894  -0.633  1.00 31.57
1 . .
ATOM 6449 CA    CA    . GLU GLU GLU B B 413 413 . 76.657  89.022  -1.718  1.00 33.25
1 . .
ATOM 6450 CB    CB    . GLU GLU GLU B B 413 413 . 78.178  89.082  -1.943  1.00 32.53
1 . .
ATOM 6451 CG    CG    . GLU GLU GLU B B 413 413 . 78.511  88.420  -3.222  1.00 33.32
1 . .
ATOM 6452 CD    CD    . GLU GLU GLU B B 413 413 . 79.950  88.551  -3.591  1.00 34.20
1 . .
ATOM 6453 OE1   OE1   . GLU GLU GLU B B 413 413 . 80.822  88.308  -2.714  1.00 32.59
1 . .
ATOM 6454 OE2   OE2   . GLU GLU GLU B B 413 413 . 80.198  88.906  -4.764  1.00 37.79
1 . .
ATOM 6455 C     C     . GLU GLU GLU B B 413 413 . 76.272  87.608  -1.341  1.00 35.03
1 . .
ATOM 6456 O     O     . GLU GLU GLU B B 413 413 . 75.575  86.929  -2.080  1.00 35.65
1 . .
ATOM 6457 N     N     . GLU GLU GLU B B 414 414 . 76.744  87.182  -0.173  1.00 36.42
1 . .
ATOM 6458 CA    CA    . GLU GLU GLU B B 414 414 . 76.374  85.933  0.417   1.00 38.15
1 . .
ATOM 6459 CB    CB    . GLU GLU GLU B B 414 414 . 77.045  85.858  1.774   1.00 38.77
1 . .
ATOM 6460 CG    CG    . GLU GLU GLU B B 414 414 . 76.638  84.687  2.650   1.00 41.00
1 . .
ATOM 6461 CD    CD    . GLU GLU GLU B B 414 414 . 77.112  84.860  4.075   1.00 43.99
1 . .
ATOM 6462 OE1   OE1   . GLU GLU GLU B B 414 414 . 78.327  85.114  4.273   1.00 42.18
1 . .
ATOM 6463 OE2   OE2   . GLU GLU GLU B B 414 414 . 76.245  84.771  4.982   1.00 47.14
1 . .
ATOM 6464 C     C     . GLU GLU GLU B B 414 414 . 74.830  85.793  0.526   1.00 39.58
1 . .
ATOM 6465 O     O     . GLU GLU GLU B B 414 414 . 74.287  84.705  0.361   1.00 40.21
1 . .
ATOM 6466 N     N     . GLU GLU GLU B B 415 415 . 74.119  86.874  0.778   1.00 40.33
1 . .
ATOM 6467 CA    CA    . GLU GLU GLU B B 415 415 . 72.692  86.758  0.931   1.00 42.25
1 . .
ATOM 6468 CB    CB    . GLU GLU GLU B B 415 415 . 72.140  88.014  1.541   1.00 41.97
1 . .
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ATOM 6469 CG    CG    . GLU GLU GLU B B 415 415 . 71.580  87.763  2.904   1.00 46.30
1 . .
ATOM 6470 CD    CD    . GLU GLU GLU B B 415 415 . 70.074  87.756  2.854   1.00 51.06
1 . .
ATOM 6471 OE1   OE1   . GLU GLU GLU B B 415 415 . 69.435  87.195  3.791   1.00 56.97
1 . .
ATOM 6472 OE2   OE2   . GLU GLU GLU B B 415 415 . 69.536  88.331  1.875   1.00 49.20
1 . .
ATOM 6473 C     C     . GLU GLU GLU B B 415 415 . 71.996  86.462  -0.377  1.00 43.47
1 . .
ATOM 6474 O     O     . GLU GLU GLU B B 415 415 . 71.036  85.684  -0.420  1.00 44.76
1 . .
ATOM 6475 N     N     . LEU LEU LEU B B 416 416 . 72.496  87.059  -1.443  1.00 43.96
1 . .
ATOM 6476 CA    CA    . LEU LEU LEU B B 416 416 . 71.984  86.806  -2.779  1.00 44.36
1 . .
ATOM 6477 CB    CB    . LEU LEU LEU B B 416 416 . 72.547  87.864  -3.736  1.00 43.64
1 . .
ATOM 6478 CG    CG    . LEU LEU LEU B B 416 416 . 71.990  89.263  -3.490  1.00 44.19
1 . .
ATOM 6479 CD1   CD1   . LEU LEU LEU B B 416 416 . 72.803  90.275  -4.259  1.00 44.19
1 . .
ATOM 6480 CD2   CD2   . LEU LEU LEU B B 416 416 . 70.463  89.377  -3.807  1.00 43.86
1 . .
ATOM 6481 C     C     . LEU LEU LEU B B 416 416 . 72.280  85.379  -3.309  1.00 44.89
1 . .
ATOM 6482 O     O     . LEU LEU LEU B B 416 416 . 71.568  84.844  -4.185  1.00 44.13
1 . .
ATOM 6483 N     N     . GLY GLY GLY B B 417 417 . 73.360  84.795  -2.803  1.00 45.88
1 . .
ATOM 6484 CA    CA    . GLY GLY GLY B B 417 417 . 73.696  83.406  -3.095  1.00 47.08
1 . .
ATOM 6485 C     C     . GLY GLY GLY B B 417 417 . 74.039  83.282  -4.553  1.00 48.54
1 . .
ATOM 6486 O     O     . GLY GLY GLY B B 417 417 . 74.834  84.087  -5.083  1.00 47.32
1 . .
ATOM 6487 N     N     . ASP ASP ASP B B 418 418 . 73.406  82.295  -5.194  1.00 50.29
1 . .
ATOM 6488 CA    CA    . ASP ASP ASP B B 418 418 . 73.622  81.962  -6.619  1.00 53.14
1 . .
ATOM 6489 CB    CB    . ASP ASP ASP B B 418 418 . 72.988  80.560  -6.915  1.00 54.90
1 . .
ATOM 6490 CG    CG    . ASP ASP ASP B B 418 418 . 72.471  80.377  -8.380  1.00 59.81
1 . .
ATOM 6491 OD1   OD1   . ASP ASP ASP B B 418 418 . 71.233  80.075  -8.565  1.00 64.19
1 . .
ATOM 6492 OD2   OD2   . ASP ASP ASP B B 418 418 . 73.305  80.467  -9.335  1.00 64.33
1 . .
ATOM 6493 C     C     . ASP ASP ASP B B 418 418 . 73.202  83.086  -7.593  1.00 52.69
1 . .
ATOM 6494 O     O     . ASP ASP ASP B B 418 418 . 73.814  83.253  -8.664  1.00 52.86
1 . .
ATOM 6495 N     N     . GLU GLU GLU B B 419 419 . 72.192  83.873  -7.213  1.00 52.30
1 . .
ATOM 6496 CA    CA    . GLU GLU GLU B B 419 419 . 71.721  84.952  -8.077  1.00 52.16
1 . .
ATOM 6497 CB    CB    . GLU GLU GLU B B 419 419 . 70.206  85.161  -7.912  1.00 53.08
1 . .
ATOM 6498 CG    CG    . GLU GLU GLU B B 419 419 . 69.804  86.129  -6.820  1.00 57.15
1 . .
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ATOM 6499 CD    CD    . GLU GLU GLU B B 419 419 . 68.278  86.224  -6.608  1.00 61.67
1 . .
ATOM 6500 OE1   OE1   . GLU GLU GLU B B 419 419 . 67.866  87.037  -5.742  1.00 62.99
1 . .
ATOM 6501 OE2   OE2   . GLU GLU GLU B B 419 419 . 67.495  85.506  -7.294  1.00 63.15
1 . .
ATOM 6502 C     C     . GLU GLU GLU B B 419 419 . 72.539  86.268  -7.961  1.00 51.10
1 . .
ATOM 6503 O     O     . GLU GLU GLU B B 419 419 . 72.101  87.312  -8.427  1.00 51.97
1 . .
ATOM 6504 N     N     . ALA ALA ALA B B 420 420 . 73.752  86.209  -7.397  1.00 49.05
1 . .
ATOM 6505 CA    CA    . ALA ALA ALA B B 420 420 . 74.541  87.424  -7.180  1.00 46.29
1 . .
ATOM 6506 CB    CB    . ALA ALA ALA B B 420 420 . 75.238  87.383  -5.819  1.00 46.17
1 . .
ATOM 6507 C     C     . ALA ALA ALA B B 420 420 . 75.550  87.633  -8.277  1.00 44.22
1 . .
ATOM 6508 O     O     . ALA ALA ALA B B 420 420 . 76.259  86.699  -8.639  1.00 43.78
1 . .
ATOM 6509 N     N     . ARG ARG ARG B B 421 421 . 75.605  88.861  -8.801  1.00 42.47
1 . .
ATOM 6510 CA    CA    . ARG ARG ARG B B 421 421 . 76.550  89.251  -9.863  1.00 41.71
1 . .
ATOM 6511 CB    CB    . ARG ARG ARG B B 421 421 . 75.819  89.529  -11.216 1.00 42.95
1 . .
ATOM 6512 CG    CG    . ARG ARG ARG B B 421 421 . 74.690  88.502  -11.576 1.00 47.81
1 . .
ATOM 6513 CD    CD    . ARG ARG ARG B B 421 421 . 73.828  88.879  -12.827 1.00 57.24
1 . .
ATOM 6514 NE    NE    . ARG ARG ARG B B 421 421 . 72.367  88.760  -12.591 1.00 64.82
1 . .
ATOM 6515 CZ    CZ    . ARG ARG ARG B B 421 421 . 71.514  87.988  -13.289 1.00 68.24
1 . .
ATOM 6516 NH1   NH1   . ARG ARG ARG B B 421 421 . 70.217  87.953  -12.976 1.00 68.80
1 . .
ATOM 6517 NH2   NH2   . ARG ARG ARG B B 421 421 . 71.937  87.252  -14.319 1.00 71.05
1 . .
ATOM 6518 C     C     . ARG ARG ARG B B 421 421 . 77.419  90.438  -9.395  1.00 39.81
1 . .
ATOM 6519 O     O     . ARG ARG ARG B B 421 421 . 76.981  91.240  -8.579  1.00 40.58
1 . .
ATOM 6520 N     N     . PHE PHE PHE B B 422 422 . 78.646  90.522  -9.902  1.00 37.45
1 . .
ATOM 6521 CA    CA    . PHE PHE PHE B B 422 422 . 79.633  91.532  -9.553  1.00 35.85
1 . .
ATOM 6522 CB    CB    . PHE PHE PHE B B 422 422 . 80.959  90.816  -9.239  1.00 34.73
1 . .
ATOM 6523 CG    CG    . PHE PHE PHE B B 422 422 . 82.145  91.738  -8.933  1.00 31.29
1 . .
ATOM 6524 CD1   CD1   . PHE PHE PHE B B 422 422 . 82.094  92.625  -7.888  1.00 28.59
1 . .
ATOM 6525 CE1   CE1   . PHE PHE PHE B B 422 422 . 83.181  93.442  -7.578  1.00 26.16
1 . .
ATOM 6526 CZ    CZ    . PHE PHE PHE B B 422 422 . 84.366  93.355  -8.296  1.00 28.32
1 . .
ATOM 6527 CE2   CE2   . PHE PHE PHE B B 422 422 . 84.444  92.443  -9.349  1.00 29.16
1 . .
ATOM 6528 CD2   CD2   . PHE PHE PHE B B 422 422 . 83.330  91.633  -9.646  1.00 30.35
1 . .
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ATOM 6529 C     C     . PHE PHE PHE B B 422 422 . 79.755  92.395  -10.818 1.00 36.62
1 . .
ATOM 6530 O     O     . PHE PHE PHE B B 422 422 . 79.745  91.845  -11.933 1.00 36.94
1 . .
ATOM 6531 N     N     . ALA ALA ALA B B 423 423 . 79.825  93.728  -10.697 1.00 36.41
1 . .
ATOM 6532 CA    CA    . ALA ALA ALA B B 423 423 . 79.959  94.567  -11.912 1.00 36.10
1 . .
ATOM 6533 CB    CB    . ALA ALA ALA B B 423 423 . 79.651  96.030  -11.615 1.00 35.58
1 . .
ATOM 6534 C     C     . ALA ALA ALA B B 423 423 . 81.316  94.435  -12.641 1.00 36.06
1 . .
ATOM 6535 O     O     . ALA ALA ALA B B 423 423 . 81.386  94.630  -13.872 1.00 36.95
1 . .
ATOM 6536 N     N     . GLY GLY GLY B B 424 424 . 82.385  94.130  -11.907 1.00 35.00
1 . .
ATOM 6537 CA    CA    . GLY GLY GLY B B 424 424 . 83.713  93.939  -12.507 1.00 34.13
1 . .
ATOM 6538 C     C     . GLY GLY GLY B B 424 424 . 83.979  95.010  -13.537 1.00 35.28
1 . .
ATOM 6539 O     O     . GLY GLY GLY B B 424 424 . 83.856  96.195  -13.226 1.00 35.93
1 . .
ATOM 6540 N     N     . HIS HIS HIS B B 425 425 . 84.293  94.627  -14.777 1.00 34.85
1 . .
ATOM 6541 CA    CA    . HIS HIS HIS B B 425 425 . 84.713  95.616  -15.797 1.00 35.02
1 . .
ATOM 6542 CB    CB    . HIS HIS HIS B B 425 425 . 85.432  94.917  -16.963 1.00 35.72
1 . .
ATOM 6543 CG    CG    . HIS HIS HIS B B 425 425 . 86.717  94.254  -16.562 1.00 34.09
1 . .
ATOM 6544 ND1   ND1   . HIS HIS HIS B B 425 425 . 86.812  92.895  -16.343 1.00 34.52
1 . .
ATOM 6545 CE1   CE1   . HIS HIS HIS B B 425 425 . 88.060  92.585  -16.015 1.00 33.64
1 . .
ATOM 6546 NE2   NE2   . HIS HIS HIS B B 425 425 . 88.775  93.697  -16.015 1.00 30.99
1 . .
ATOM 6547 CD2   CD2   . HIS HIS HIS B B 425 425 . 87.957  94.755  -16.352 1.00 34.03
1 . .
ATOM 6548 C     C     . HIS HIS HIS B B 425 425 . 83.578  96.506  -16.321 1.00 35.35
1 . .
ATOM 6549 O     O     . HIS HIS HIS B B 425 425 . 83.828  97.501  -17.033 1.00 35.30
1 . .
ATOM 6550 N     N     . ASN ASN ASN B B 426 426 . 82.340  96.171  -15.953 1.00 35.23
1 . .
ATOM 6551 CA    CA    . ASN ASN ASN B B 426 426 . 81.191  97.016  -16.248 1.00 35.30
1 . .
ATOM 6552 CB    CB    . ASN ASN ASN B B 426 426 . 80.038  96.155  -16.775 1.00 36.77
1 . .
ATOM 6553 CG    CG    . ASN ASN ASN B B 426 426 . 80.338  95.631  -18.163 1.00 41.85
1 . .
ATOM 6554 OD1   OD1   . ASN ASN ASN B B 426 426 . 80.235  96.365  -19.172 1.00 45.33
1 . .
ATOM 6555 ND2   ND2   . ASN ASN ASN B B 426 426 . 80.756  94.374  -18.231 1.00 47.09
1 . .
ATOM 6556 C     C     . ASN ASN ASN B B 426 426 . 80.754  97.947  -15.107 1.00 34.02
1 . .
ATOM 6557 O     O     . ASN ASN ASN B B 426 426 . 79.574  98.299  -14.965 1.00 32.58
1 . .
ATOM 6558 N     N     . PHE PHE PHE B B 427 427 . 81.725  98.375  -14.307 1.00 33.12
1 . .
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ATOM 6559 CA    CA    . PHE PHE PHE B B 427 427 . 81.427  99.268  -13.198 1.00 33.01
1 . .
ATOM 6560 CB    CB    . PHE PHE PHE B B 427 427 . 82.633  99.526  -12.286 1.00 32.89
1 . .
ATOM 6561 CG    CG    . PHE PHE PHE B B 427 427 . 83.726  100.337 -12.902 1.00 30.43
1 . .
ATOM 6562 CD1   CD1   . PHE PHE PHE B B 427 427 . 84.664  99.747  -13.693 1.00 32.53
1 . .
ATOM 6563 CE1   CE1   . PHE PHE PHE B B 427 427 . 85.739  100.503 -14.241 1.00 34.14
1 . .
ATOM 6564 CZ    CZ    . PHE PHE PHE B B 427 427 . 85.845  101.874 -13.975 1.00 33.71
1 . .
ATOM 6565 CE2   CE2   . PHE PHE PHE B B 427 427 . 84.896  102.471 -13.149 1.00 32.27
1 . .
ATOM 6566 CD2   CD2   . PHE PHE PHE B B 427 427 . 83.843  101.690 -12.620 1.00 32.63
1 . .
ATOM 6567 C     C     . PHE PHE PHE B B 427 427 . 80.800  100.579 -13.645 1.00 33.93
1 . .
ATOM 6568 O     O     . PHE PHE PHE B B 427 427 . 79.909  101.075 -12.954 1.00 33.35
1 . .
ATOM 6569 N     N     . ARG ARG ARG B B 428 428 . 81.225  101.105 -14.806 1.00 34.33
1 . .
ATOM 6570 CA    CA    . ARG ARG ARG B B 428 428 . 80.713  102.397 -15.259 1.00 35.12
1 . .
ATOM 6571 CB    CB    . ARG ARG ARG B B 428 428 . 81.571  103.009 -16.366 1.00 34.46
1 . .
ATOM 6572 CG    CG    . ARG ARG ARG B B 428 428 . 83.048  103.185 -15.951 1.00 34.07
1 . .
ATOM 6573 CD    CD    . ARG ARG ARG B B 428 428 . 83.869  103.979 -16.946 1.00 32.96
1 . .
ATOM 6574 NE    NE    . ARG ARG ARG B B 428 428 . 83.103  105.029 -17.624 1.00 32.00
1 . .
ATOM 6575 CZ    CZ    . ARG ARG ARG B B 428 428 . 83.552  105.723 -18.666 1.00 30.63
1 . .
ATOM 6576 NH1   NH1   . ARG ARG ARG B B 428 428 . 84.798  105.522 -19.143 1.00 29.65
1 . .
ATOM 6577 NH2   NH2   . ARG ARG ARG B B 428 428 . 82.764  106.638 -19.208 1.00 30.54
1 . .
ATOM 6578 C     C     . ARG ARG ARG B B 428 428 . 79.270  102.261 -15.677 1.00 36.98
1 . .
ATOM 6579 O     O     . ARG ARG ARG B B 428 428 . 78.472  103.174 -15.453 1.00 36.85
1 . .
ATOM 6580 N     N     . ASN ASN ASN B B 429 429 . 78.931  101.101 -16.245 1.00 39.50
1 . .
ATOM 6581 CA    CA    . ASN ASN ASN B B 429 429 . 77.553  100.798 -16.718 1.00 41.66
1 . .
ATOM 6582 CB    CB    . ASN ASN ASN B B 429 429 . 77.358  101.131 -18.221 1.00 43.01
1 . .
ATOM 6583 CG    CG    . ASN ASN ASN B B 429 429 . 78.256  100.249 -19.169 1.00 46.20
1 . .
ATOM 6584 OD1   OD1   . ASN ASN ASN B B 429 429 . 77.847  99.927  -20.314 1.00 48.54
1 . .
ATOM 6585 ND2   ND2   . ASN ASN ASN B B 429 429 . 79.457  99.838  -18.674 1.00 47.42
1 . .
ATOM 6586 C     C     . ASN ASN ASN B B 429 429 . 77.152  99.348  -16.454 1.00 42.38
1 . .
ATOM 6587 O     O     . ASN ASN ASN B B 429 429 . 77.106  98.541  -17.380 1.00 41.64
1 . .
ATOM 6588 N     N     . PRO PRO PRO B B 430 430 . 76.845  99.014  -15.189 1.00 43.92
1 . .
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ATOM 6589 CA    CA    . PRO PRO PRO B B 430 430 . 76.451  97.668  -14.891 1.00 45.45
1 . .
ATOM 6590 CB    CB    . PRO PRO PRO B B 430 430 . 76.267  97.704  -13.371 1.00 45.72
1 . .
ATOM 6591 CG    CG    . PRO PRO PRO B B 430 430 . 75.810  99.119  -13.082 1.00 45.06
1 . .
ATOM 6592 CD    CD    . PRO PRO PRO B B 430 430 . 76.748  99.889  -13.998 1.00 44.64
1 . .
ATOM 6593 C     C     . PRO PRO PRO B B 430 430 . 75.112  97.322  -15.575 1.00 47.46
1 . .
ATOM 6594 O     O     . PRO PRO PRO B B 430 430 . 74.745  96.159  -15.579 1.00 47.07
1 . .
ATOM 6595 N     N     . SER SER SER B B 431 431 . 74.409  98.300  -16.159 1.00 50.05
1 . .
ATOM 6596 CA    CA    . SER SER SER B B 431 431 . 73.040  98.029  -16.685 1.00 53.44
1 . .
ATOM 6597 CB    CB    . SER SER SER B B 431 431 . 72.261  99.324  -17.042 1.00 53.87
1 . .
ATOM 6598 OG    OG    . SER SER SER B B 431 431 . 72.608  99.885  -18.319 1.00 55.75
1 . .
ATOM 6599 C     C     . SER SER SER B B 431 431 . 73.006  96.980  -17.827 1.00 55.00
1 . .
ATOM 6600 O     O     . SER SER SER B B 431 431 . 71.937  96.455  -18.157 1.00 55.77
1 . .
ATOM 6601 N     N     . VAL VAL VAL B B 432 432 . 74.185  96.681  -18.395 1.00 56.53
1 . .
ATOM 6602 CA    CA    . VAL VAL VAL B B 432 432 . 74.362  95.632  -19.417 1.00 58.11
1 . .
ATOM 6603 CB    CB    . VAL VAL VAL B B 432 432 . 75.829  95.636  -20.039 1.00 58.39
1 . .
ATOM 6604 CG1   CG1   . VAL VAL VAL B B 432 432 . 76.090  96.913  -20.850 1.00 58.94
1 . .
ATOM 6605 CG2   CG2   . VAL VAL VAL B B 432 432 . 76.937  95.452  -18.981 1.00 58.73
1 . .
ATOM 6606 C     C     . VAL VAL VAL B B 432 432 . 74.005  94.228  -18.898 1.00 58.82
1 . .
ATOM 6607 O     O     . VAL VAL VAL B B 432 432 . 74.262  93.890  -17.719 1.00 59.92
1 . .
ATOM 6608 G+2   G+2   . MG2 MG2 MG2 B B 1   1   . 85.272  113.970 -3.681  1.00 5.45
1 . .
ATOM 6609 G+2   G+2   . MG2 MG2 MG2 B B 2   2   . 84.847  116.560 -0.527  1.00 10.44
1 . .
ATOM 6610 O3P   O3P   . PEP PEP PEP B B 3   3   . 84.074  115.542 1.234   1.00 30.31
1 . .
ATOM 6611 P     P     . PEP PEP PEP B B 3   3   . 84.706  114.560 2.199   1.00 26.04
1 . .
ATOM 6612 O1P   O1P   . PEP PEP PEP B B 3   3   . 83.655  113.662 2.807   1.00 25.74
1 . .
ATOM 6613 O2P   O2P   . PEP PEP PEP B B 3   3   . 85.747  115.176 3.110   1.00 25.74
1 . .
ATOM 6614 O2    O2    . PEP PEP PEP B B 3   3   . 85.554  113.521 1.267   1.00 29.18
1 . .
ATOM 6615 C2    C2    . PEP PEP PEP B B 3   3   . 84.825  112.788 0.252   1.00 28.49
1 . .
ATOM 6616 C3    C3    . PEP PEP PEP B B 3   3   . 85.001  111.267 0.427   1.00 24.81
1 . .
ATOM 6617 C1    C1    . PEP PEP PEP B B 3   3   . 85.105  113.392 -1.130  1.00 26.35
1 . .
ATOM 6618 O1    O1    . PEP PEP PEP B B 3   3   . 85.553  114.539 -1.253  1.00 29.20
1 . .
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ATOM 6619 "O2'" "O2'" . PEP PEP PEP B B 3   3   . 84.817  112.804 -2.147  1.00 23.26
1 . .
ATOM 6620 O     O     . HOH HOH HOH B B 4   4   . 85.839  115.465 -4.306  1.00 17.99
1 . .
ATOM 6621 O     O     . HOH HOH HOH B B 5   5   . 85.762  117.576 -2.166  1.00 27.07
1 . .
ATOM 6622 O     O     . HOH HOH HOH B B 6   6   . 82.842  116.363 -1.263  1.00 26.55
1 . .
ATOM 6623 N     N     . GLY GLY GLY B B 155 155 . 95.535  116.923 -0.447  0.69 40.86
1 . .
ATOM 6624 CA    CA    . GLY GLY GLY B B 155 155 . 94.259  117.238 0.218   0.69 41.25
1 . .
ATOM 6625 C     C     . GLY GLY GLY B B 155 155 . 94.516  118.292 1.254   0.69 42.25
1 . .
ATOM 6626 O     O     . GLY GLY GLY B B 155 155 . 95.627  118.422 1.776   0.69 41.41
1 . .
ATOM 6627 N     N     . SER SER SER B B 156 156 . 93.454  119.053 1.504   0.69 43.02
1 . .
ATOM 6628 CA    CA    . SER SER SER B B 156 156 . 93.359  120.183 2.431   0.69 43.03
1 . .
ATOM 6629 CB    CB    . SER SER SER B B 156 156 . 91.911  120.698 2.386   0.69 42.69
1 . .
ATOM 6630 OG    OG    . SER SER SER B B 156 156 . 91.621  121.299 1.141   0.69 41.46
1 . .
ATOM 6631 C     C     . SER SER SER B B 156 156 . 93.650  119.769 3.862   0.69 43.64
1 . .
ATOM 6632 O     O     . SER SER SER B B 156 156 . 94.100  120.584 4.701   0.69 43.21
1 . .
ATOM 6633 N     N     . HIS HIS HIS B B 157 157 . 93.355  118.500 4.127   0.69 44.11
1 . .
ATOM 6634 CA    CA    . HIS HIS HIS B B 157 157 . 93.294  117.971 5.475   0.69 44.83
1 . .
ATOM 6635 CB    CB    . HIS HIS HIS B B 157 157 . 91.863  117.478 5.759   0.69 45.09
1 . .
ATOM 6636 CG    CG    . HIS HIS HIS B B 157 157 . 90.873  118.600 5.903   0.69 46.26
1 . .
ATOM 6637 ND1   ND1   . HIS HIS HIS B B 157 157 . 90.323  119.250 4.819   0.69 46.70
1 . .
ATOM 6638 CE1   CE1   . HIS HIS HIS B B 157 157 . 89.503  120.196 5.242   0.69 47.82
1 . .
ATOM 6639 NE2   NE2   . HIS HIS HIS B B 157 157 . 89.527  120.204 6.563   0.69 48.59
1 . .
ATOM 6640 CD2   CD2   . HIS HIS HIS B B 157 157 . 90.378  119.218 7.002   0.69 47.39
1 . .
ATOM 6641 C     C     . HIS HIS HIS B B 157 157 . 94.315  116.861 5.684   0.69 44.94
1 . .
ATOM 6642 O     O     . HIS HIS HIS B B 157 157 . 94.086  115.949 6.494   0.69 45.86
1 . .
ATOM 6643 N     N     . ALA ALA ALA B B 158 158 . 95.442  116.934 4.968   0.69 44.09
1 . .
ATOM 6644 CA    CA    . ALA ALA ALA B B 158 158 . 96.401  115.816 4.956   0.69 43.08
1 . .
ATOM 6645 CB    CB    . ALA ALA ALA B B 158 158 . 96.661  115.332 3.553   0.69 43.41
1 . .
ATOM 6646 C     C     . ALA ALA ALA B B 158 158 . 97.700  116.178 5.576   0.69 42.66
1 . .
ATOM 6647 O     O     . ALA ALA ALA B B 158 158 . 98.326  117.164 5.193   0.69 41.77
1 . .
ATOM 6648 N     N     . GLY GLY GLY B B 159 159 . 98.135  115.352 6.518   0.69 42.51
1 . .
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ATOM 6649 CA    CA    . GLY GLY GLY B B 159 159 . 99.476  115.544 7.011   0.69 42.45
1 . .
ATOM 6650 C     C     . GLY GLY GLY B B 159 159 . 100.405 114.638 6.253   0.69 41.59
1 . .
ATOM 6651 O     O     . GLY GLY GLY B B 159 159 . 100.680 113.523 6.679   0.69 40.85
1 . .
ATOM 6652 O     O     . HOH HOH HOH S . 1   1   . 85.645  123.079 23.382  1.00 36.00
1 . .
ATOM 6653 O     O     . HOH HOH HOH S . 2   2   . 81.507  106.244 14.810  1.00 17.90
1 . .
ATOM 6654 O     O     . HOH HOH HOH S . 3   3   . 90.264  126.689 -15.634 1.00 30.85
1 . .
ATOM 6655 O     O     . HOH HOH HOH S . 4   4   . 76.661  111.687 2.524   1.00 30.32
1 . .
ATOM 6656 O     O     . HOH HOH HOH S . 5   5   . 75.624  67.216  17.269  1.00 24.25
1 . .
ATOM 6657 O     O     . HOH HOH HOH S . 6   6   . 83.907  127.929 -6.579  1.00 31.01
1 . .
ATOM 6658 O     O     . HOH HOH HOH S . 7   7   . 95.501  82.512  4.762   1.00 24.51
1 . .
ATOM 6659 O     O     . HOH HOH HOH S . 8   8   . 79.688  118.114 25.260  1.00 265.39
1 . .
ATOM 6660 O     O     . HOH HOH HOH S . 9   9   . 91.362  66.352  30.023  1.00 75.49
1 . .
ATOM 6661 O     O     . HOH HOH HOH S . 10  10  . 85.373  129.855 -7.917  1.00 56.60
1 . .
ATOM 6662 O     O     . HOH HOH HOH S . 11  11  . 79.742  122.519 -4.201  1.00 24.31
1 . .
ATOM 6663 O     O     . HOH HOH HOH S . 12  12  . 79.035  82.203  31.676  1.00 45.25
1 . .
ATOM 6664 O     O     . HOH HOH HOH S . 13  13  . 85.993  91.065  -12.809 1.00 37.12
1 . .
ATOM 6665 O     O     . HOH HOH HOH S . 14  14  . 77.725  103.542 -12.555 1.00 30.14
1 . .
ATOM 6666 O     O     . HOH HOH HOH S . 15  15  . 87.787  109.726 9.747   1.00 22.00
1 . .
ATOM 6667 O     O     . HOH HOH HOH S . 16  16  . 70.231  129.771 16.508  1.00 49.60
1 . .
ATOM 6668 O     O     . HOH HOH HOH S . 17  17  . 90.500  87.316  -10.917 1.00 48.78
1 . .
ATOM 6669 O     O     . HOH HOH HOH S . 18  18  . 93.433  112.883 5.747   1.00 43.41
1 . .
ATOM 6670 O     O     . HOH HOH HOH S . 19  19  . 80.894  87.176  -9.092  1.00 41.54
1 . .
ATOM 6671 O     O     . HOH HOH HOH S . 20  20  . 84.393  109.828 42.096  1.00 55.49
1 . .
ATOM 6672 O     O     . HOH HOH HOH S . 21  21  . 77.826  102.040 18.458  1.00 27.30
1 . .
ATOM 6673 O     O     . HOH HOH HOH S . 22  22  . 83.832  107.949 46.721  1.00 24.30
1 . .
ATOM 6674 O     O     . HOH HOH HOH S . 23  23  . 105.233 88.848  23.345  1.00 34.52
1 . .
ATOM 6675 O     O     . HOH HOH HOH S . 24  24  . 111.639 113.880 15.889  1.00 45.95
1 . .
ATOM 6676 O     O     . HOH HOH HOH S . 25  25  . 84.398  114.888 11.289  1.00 27.01
1 . .
ATOM 6677 O     O     . HOH HOH HOH S . 26  26  . 63.605  121.876 3.339   1.00 37.56
1 . .
ATOM 6678 O     O     . HOH HOH HOH S . 27  27  . 111.952 108.089 27.635  1.00 39.92
1 . .
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ATOM 6679 O     O     . HOH HOH HOH S . 28  28  . 92.177  89.439  12.424  1.00 46.34
1 . .
ATOM 6680 O     O     . HOH HOH HOH S . 29  29  . 103.914 97.403  21.328  1.00 28.44
1 . .
ATOM 6681 O     O     . HOH HOH HOH S . 30  30  . 100.797 91.670  -11.919 1.00 46.23
1 . .
ATOM 6682 O     O     . HOH HOH HOH S . 31  31  . 109.667 100.733 -1.759  1.00 40.06
1 . .
ATOM 6683 O     O     . HOH HOH HOH S . 32  32  . 123.311 103.320 30.736  1.00 74.04
1 . .
ATOM 6684 O     O     . HOH HOH HOH S . 33  33  . 78.406  116.391 26.621  1.00 28.41
1 . .
ATOM 6685 O     O     . HOH HOH HOH S . 34  34  . 89.940  85.973  14.516  1.00 25.72
1 . .
ATOM 6686 O     O     . HOH HOH HOH S . 35  35  . 77.658  109.444 39.388  1.00 31.36
1 . .
ATOM 6687 O     O     . HOH HOH HOH S . 36  36  . 73.071  108.860 -23.496 1.00 50.27
1 . .
ATOM 6688 O     O     . HOH HOH HOH S . 37  37  . 88.268  117.127 13.178  1.00 32.58
1 . .
ATOM 6689 O     O     . HOH HOH HOH S . 38  38  . 63.894  92.780  -5.877  1.00 62.22
1 . .
ATOM 6690 O     O     . HOH HOH HOH S . 39  39  . 105.058 97.255  6.737   1.00 39.33
1 . .
ATOM 6691 O     O     . HOH HOH HOH S . 40  40  . 88.318  98.207  38.357  1.00 28.26
1 . .
ATOM 6692 O     O     . HOH HOH HOH S . 41  41  . 87.551  107.506 -0.887  1.00 46.80
1 . .
ATOM 6693 O     O     . HOH HOH HOH S . 42  42  . 83.245  94.391  21.432  1.00 22.09
1 . .
ATOM 6694 O     O     . HOH HOH HOH S . 43  43  . 87.483  108.374 -9.350  1.00 33.51
1 . .
ATOM 6695 O     O     . HOH HOH HOH S . 44  44  . 74.699  97.221  9.869   1.00 51.09
1 . .
ATOM 6696 O     O     . HOH HOH HOH S . 45  45  . 55.142  124.337 -1.147  1.00 41.05
1 . .
ATOM 6697 O     O     . HOH HOH HOH S . 46  46  . 92.747  79.285  21.724  1.00 250.05
1 . .
ATOM 6698 O     O     . HOH HOH HOH S . 47  47  . 99.389  114.090 9.003   1.00 95.15
1 . .
ATOM 6699 O     O     . HOH HOH HOH S . 48  48  . 83.234  117.092 10.006  1.00 48.08
1 . .
ATOM 6700 O     O     . HOH HOH HOH S . 49  49  . 84.940  121.486 -1.510  1.00 41.34
1 . .
ATOM 6701 O     O     . HOH HOH HOH S . 50  50  . 74.627  77.675  32.100  1.00 30.97
1 . .
ATOM 6702 O     O     . HOH HOH HOH S . 51  51  . 110.372 99.631  -5.255  1.00 53.25
1 . .
ATOM 6703 O     O     . HOH HOH HOH S . 52  52  . 85.038  124.310 -1.597  1.00 31.86
1 . .
ATOM 6704 O     O     . HOH HOH HOH S . 53  53  . 86.132  119.687 -5.264  1.00 21.80
1 . .
ATOM 6705 O     O     . HOH HOH HOH S . 54  54  . 72.344  81.234  32.480  1.00 34.09
1 . .
ATOM 6706 O     O     . HOH HOH HOH S . 55  55  . 87.978  123.027 23.332  1.00 32.83
1 . .
ATOM 6707 O     O     . HOH HOH HOH S . 56  56  . 90.700  123.389 23.098  1.00 45.80
1 . .
ATOM 6708 O     O     . HOH HOH HOH S . 57  57  . 89.142  125.346 17.389  1.00 60.48
1 . .
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ATOM 6709 O     O     . HOH HOH HOH S . 58  58  . 92.520  128.489 -15.056 1.00 33.02
1 . .
ATOM 6710 O     O     . HOH HOH HOH S . 59  59  . 88.466  125.797 -19.790 1.00 39.50
1 . .
ATOM 6711 O     O     . HOH HOH HOH S . 60  60  . 90.021  122.186 -19.575 1.00 39.36
1 . .
ATOM 6712 O     O     . HOH HOH HOH S . 61  61  . 79.389  114.175 24.923  1.00 32.20
1 . .
ATOM 6713 O     O     . HOH HOH HOH S . 62  62  . 75.809  115.859 11.655  1.00 26.97
1 . .
ATOM 6714 O     O     . HOH HOH HOH S . 63  63  . 80.388  114.815 12.585  1.00 32.65
1 . .
ATOM 6715 O     O     . HOH HOH HOH S . 64  64  . 78.967  116.986 5.739   1.00 29.96
1 . .
ATOM 6716 O     O     . HOH HOH HOH S . 65  65  . 76.418  116.106 8.799   1.00 30.09
1 . .
ATOM 6717 O     O     . HOH HOH HOH S . 66  66  . 92.390  118.369 -2.984  1.00 29.00
1 . .
ATOM 6718 O     O     . HOH HOH HOH S . 67  67  . 91.108  117.827 -0.394  1.00 27.27
1 . .
ATOM 6719 O     O     . HOH HOH HOH S . 68  68  . 75.579  108.264 -0.092  1.00 28.49
1 . .
ATOM 6720 O     O     . HOH HOH HOH S . 69  69  . 77.616  107.385 5.025   1.00 29.30
1 . .
ATOM 6721 O     O     . HOH HOH HOH S . 70  70  . 74.634  116.762 7.007   1.00 22.61
1 . .
ATOM 6722 O     O     . HOH HOH HOH S . 71  71  . 95.358  99.745  31.388  1.00 38.52
1 . .
ATOM 6723 O     O     . HOH HOH HOH S . 72  72  . 86.228  95.966  39.474  1.00 41.80
1 . .
ATOM 6724 O     O     . HOH HOH HOH S . 73  73  . 59.152  88.136  30.371  1.00 88.03
1 . .
ATOM 6725 O     O     . HOH HOH HOH S . 74  74  . 102.903 95.419  46.693  1.00 53.52
1 . .
ATOM 6726 O     O     . HOH HOH HOH S . 75  75  . 80.015  68.115  16.205  1.00 28.10
1 . .
ATOM 6727 O     O     . HOH HOH HOH S . 76  76  . 79.324  88.205  -11.673 1.00 36.77
1 . .
ATOM 6728 O     O     . HOH HOH HOH S . 77  77  . 91.051  108.650 45.685  1.00 38.48
1 . .
ATOM 6729 O     O     . HOH HOH HOH S . 78  78  . 89.937  104.416 42.012  1.00 29.62
1 . .
ATOM 6730 O     O     . HOH HOH HOH S . 79  79  . 87.021  126.752 -4.679  1.00 40.59
1 . .
ATOM 6731 O     O     . HOH HOH HOH S . 80  80  . 85.768  130.348 -4.521  1.00 54.91
1 . .
ATOM 6732 O     O     . HOH HOH HOH S . 81  81  . 82.748  130.711 -5.117  1.00 36.14
1 . .
ATOM 6733 O     O     . HOH HOH HOH S . 82  82  . 77.145  122.129 21.360  1.00 21.25
1 . .
ATOM 6734 O     O     . HOH HOH HOH S . 83  83  . 79.329  123.060 20.183  1.00 28.56
1 . .
ATOM 6735 O     O     . HOH HOH HOH S . 84  84  . 88.250  135.193 -10.317 1.00 28.77
1 . .
ATOM 6736 O     O     . HOH HOH HOH S . 85  85  . 87.940  133.036 -8.520  1.00 49.99
1 . .
ATOM 6737 O     O     . HOH HOH HOH S . 86  86  . 90.838  135.316 -11.842 1.00 35.44
1 . .
ATOM 6738 O     O     . HOH HOH HOH S . 87  87  . 84.006  91.729  -15.529 1.00 48.54
1 . .
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ATOM 6739 O     O     . HOH HOH HOH S . 88  88  . 82.948  99.957  -16.956 1.00 43.76
1 . .
ATOM 6740 O     O     . HOH HOH HOH S . 89  89  . 93.217  98.661  13.959  1.00 23.23
1 . .
ATOM 6741 O     O     . HOH HOH HOH S . 90  90  . 95.666  100.719 11.172  1.00 24.33
1 . .
ATOM 6742 O     O     . HOH HOH HOH S . 91  91  . 92.456  111.885 13.813  1.00 32.67
1 . .
ATOM 6743 O     O     . HOH HOH HOH S . 92  92  . 84.712  110.325 47.124  1.00 26.72
1 . .
ATOM 6744 O     O     . HOH HOH HOH S . 93  93  . 81.658  111.260 46.842  1.00 30.18
1 . .
ATOM 6745 O     O     . HOH HOH HOH S . 94  94  . 84.045  114.108 40.593  1.00 33.73
1 . .
ATOM 6746 O     O     . HOH HOH HOH S . 95  95  . 83.985  112.324 38.421  1.00 31.02
1 . .
ATOM 6747 O     O     . HOH HOH HOH S . 96  96  . 76.601  99.712  16.796  1.00 27.98
1 . .
ATOM 6748 O     O     . HOH HOH HOH S . 97  97  . 75.459  98.240  19.216  1.00 52.29
1 . .
ATOM 6749 O     O     . HOH HOH HOH S . 98  98  . 91.539  86.349  16.793  1.00 27.04
1 . .
ATOM 6750 O     O     . HOH HOH HOH S . 99  99  . 94.692  92.511  12.760  1.00 22.26
1 . .
ATOM 6751 O     O     . HOH HOH HOH S . 100 100 . 105.678 98.397  23.237  1.00 28.74
1 . .
ATOM 6752 O     O     . HOH HOH HOH S . 101 101 . 79.175  117.396 29.261  1.00 37.09
1 . .
ATOM 6753 O     O     . HOH HOH HOH S . 102 102 . 78.195  119.335 27.763  1.00 46.61
1 . .
ATOM 6754 O     O     . HOH HOH HOH S . 103 103 . 76.871  110.245 -21.705 1.00 53.81
1 . .
ATOM 6755 O     O     . HOH HOH HOH S . 104 104 . 70.572  107.681 -21.973 1.00 39.66
1 . .
ATOM 6756 O     O     . HOH HOH HOH S . 105 105 . 90.312  113.490 14.360  1.00 31.12
1 . .
ATOM 6757 O     O     . HOH HOH HOH S . 106 106 . 87.699  104.823 -0.723  1.00 26.57
1 . .
ATOM 6758 O     O     . HOH HOH HOH S . 107 107 . 86.187  93.194  21.461  1.00 29.46
1 . .
ATOM 6759 O     O     . HOH HOH HOH S . 108 108 . 76.820  95.576  22.556  1.00 22.54
1 . .
ATOM 6760 O     O     . HOH HOH HOH S . 109 109 . 88.197  92.493  23.613  1.00 31.88
1 . .
ATOM 6761 O     O     . HOH HOH HOH S . 110 110 . 87.258  92.003  26.456  1.00 23.94
1 . .
ATOM 6762 O     O     . HOH HOH HOH S . 111 111 . 85.372  92.595  17.482  1.00 28.29
1 . .
ATOM 6763 O     O     . HOH HOH HOH S . 112 112 . 54.417  102.243 9.886   1.00 35.04
1 . .
ATOM 6764 O     O     . HOH HOH HOH S . 113 113 . 49.581  105.851 6.617   1.00 50.22
1 . .
ATOM 6765 O     O     . HOH HOH HOH S . 114 114 . 54.196  100.914 14.205  1.00 37.58
1 . .
ATOM 6766 O     O     . HOH HOH HOH S . 115 115 . 73.873  83.553  27.385  1.00 31.24
1 . .
ATOM 6767 O     O     . HOH HOH HOH S . 116 116 . 66.048  80.204  32.454  1.00 40.36
1 . .
ATOM 6768 O     O     . HOH HOH HOH S . 117 117 . 73.622  100.333 10.159  1.00 39.36
1 . .
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ATOM 6769 O     O     . HOH HOH HOH S . 118 118 . 68.520  99.530  13.083  1.00 45.97
1 . .
ATOM 6770 O     O     . HOH HOH HOH S . 119 119 . 69.704  98.772  15.892  1.00 68.59
1 . .
ATOM 6771 O     O     . HOH HOH HOH S . 120 120 . 101.353 110.269 39.608  1.00 31.22
1 . .
ATOM 6772 O     O     . HOH HOH HOH S . 121 121 . 100.023 114.295 40.284  1.00 46.06
1 . .
ATOM 6773 O     O     . HOH HOH HOH S . 122 122 . 85.646  118.382 9.685   1.00 43.76
1 . .
ATOM 6774 O     O     . HOH HOH HOH S . 123 123 . 82.122  124.317 3.098   1.00 32.16
1 . .
ATOM 6775 O     O     . HOH HOH HOH S . 124 124 . 93.118  123.534 20.119  1.00 53.65
1 . .
ATOM 6776 O     O     . HOH HOH HOH S . 125 125 . 87.760  125.048 15.118  1.00 57.91
1 . .
ATOM 6777 O     O     . HOH HOH HOH S . 126 126 . 87.883  127.874 -21.792 1.00 36.55
1 . .
ATOM 6778 O     O     . HOH HOH HOH S . 127 127 . 89.447  127.553 -23.958 1.00 43.26
1 . .
ATOM 6779 O     O     . HOH HOH HOH S . 128 128 . 91.358  119.274 -22.357 1.00 44.63
1 . .
ATOM 6780 O     O     . HOH HOH HOH S . 129 129 . 75.211  118.525 4.553   1.00 21.54
1 . .
ATOM 6781 O     O     . HOH HOH HOH S . 130 130 . 77.805  119.029 4.183   1.00 23.67
1 . .
ATOM 6782 O     O     . HOH HOH HOH S . 131 131 . 76.378  104.384 5.520   1.00 25.10
1 . .
ATOM 6783 O     O     . HOH HOH HOH S . 132 132 . 77.321  108.878 2.452   1.00 33.52
1 . .
ATOM 6784 O     O     . HOH HOH HOH S . 133 133 . 96.989  101.707 32.358  1.00 28.95
1 . .
ATOM 6785 O     O     . HOH HOH HOH S . 134 134 . 92.241  111.714 44.217  1.00 65.05
1 . .
ATOM 6786 O     O     . HOH HOH HOH S . 135 135 . 89.900  105.651 46.424  1.00 37.42
1 . .
ATOM 6787 O     O     . HOH HOH HOH S . 136 136 . 92.584  105.363 42.563  1.00 48.33
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ATOM 6788 O     O     . HOH HOH HOH S . 137 137 . 80.452  130.639 -6.025  1.00 37.59
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ATOM 6789 O     O     . HOH HOH HOH S . 138 138 . 76.372  124.173 23.431  1.00 36.00
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ATOM 6790 O     O     . HOH HOH HOH S . 139 139 . 89.868  90.144  23.671  1.00 26.42
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ATOM 6791 O     O     . HOH HOH HOH S . 140 140 . 65.591  78.129  30.249  1.00 43.89
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ATOM 6792 O     O     . HOH HOH HOH S . 141 141 . 95.588  122.834 20.110  1.00 35.24
1 . .
ATOM 6793 O     O     . HOH HOH HOH S . 142 142 . 85.740  127.269 -22.893 1.00 47.94
1 . .
ATOM 6794 O     O     . HOH HOH HOH S . 143 143 . 75.115  123.115 25.962  1.00 57.54
1 . .
ATOM 6795 O     O     . HOH HOH HOH S . 144 144 . 78.842  96.795  43.407  1.00 83.83
1 . .
ATOM 6796 O     O     . HOH HOH HOH S . 145 145 . 82.672  76.789  34.497  1.00 43.27
1 . .
ATOM 6797 O     O     . HOH HOH HOH S . 146 146 . 83.017  65.605  22.664  1.00 43.06
1 . .
ATOM 6798 O     O     . HOH HOH HOH S . 147 147 . 103.513 120.248 -8.035  1.00 48.69
1 . .
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ATOM 6799 O     O     . HOH HOH HOH S . 148 148 . 74.743  102.625 37.106  1.00 49.04
1 . .
ATOM 6800 O     O     . HOH HOH HOH S . 149 149 . 111.558 110.174 15.916  1.00 54.85
1 . .
ATOM 6801 O     O     . HOH HOH HOH S . 150 150 . 90.926  92.305  -15.704 1.00 54.43
1 . .
ATOM 6802 O     O     . HOH HOH HOH S . 151 151 . 93.970  107.490 40.956  1.00 58.11
1 . .
ATOM 6803 O     O     . HOH HOH HOH S . 152 152 . 103.985 91.762  30.178  1.00 38.13
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ATOM 6804 O     O     . HOH HOH HOH S . 153 153 . 103.287 106.042 43.815  1.00 21.69
1 . .
ATOM 6805 O     O     . HOH HOH HOH S . 154 154 . 103.060 111.293 -15.512 1.00 41.19
1 . .
ATOM 6806 O     O     . HOH HOH HOH S . 155 155 . 89.199  104.039 48.486  1.00 53.60
1 . .
ATOM 6807 O     O     . HOH HOH HOH S . 156 156 . 76.954  93.958  42.214  1.00 54.54
1 . .
ATOM 6808 O     O     . HOH HOH HOH S . 157 157 . 84.422  124.643 -22.414 1.00 38.91
1 . .
ATOM 6809 O     O     . HOH HOH HOH S . 158 158 . 75.358  77.001  35.215  1.00 51.11
1 . .
ATOM 6810 O     O     . HOH HOH HOH S . 159 159 . 82.782  77.157  6.486   1.00 32.54
1 . .
ATOM 6811 O     O     . HOH HOH HOH S . 160 160 . 68.038  74.529  28.462  1.00 33.44
1 . .
ATOM 6812 O     O     . HOH HOH HOH S . 161 161 . 84.219  120.267 -8.038  1.00 38.42
1 . .
ATOM 6813 O     O     . HOH HOH HOH S . 162 162 . 88.555  85.615  -2.890  1.00 44.13
1 . .
ATOM 6814 O     O     . HOH HOH HOH S . 163 163 . 92.673  68.808  27.961  1.00 63.85
1 . .
ATOM 6815 O     O     . HOH HOH HOH S . 164 164 . 61.972  85.236  29.127  1.00 48.44
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ATOM 6816 O     O     . HOH HOH HOH S . 165 165 . 94.404  79.665  27.182  1.00 33.92
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ATOM 6817 O     O     . HOH HOH HOH S . 166 166 . 113.504 106.745 25.157  1.00 51.13
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ATOM 6818 O     O     . HOH HOH HOH S . 167 167 . 89.354  126.326 28.222  1.00 54.28
1 . .
ATOM 6819 O     O     . HOH HOH HOH S . 168 168 . 74.460  84.049  -16.802 1.00 58.18
1 . .
ATOM 6820 O     O     . HOH HOH HOH S . 169 169 . 66.889  79.334  23.192  1.00 41.17
1 . .
ATOM 6821 O     O     . HOH HOH HOH S . 170 170 . 111.841 87.471  37.164  1.00 65.63
1 . .
ATOM 6822 O     O     . HOH HOH HOH S . 171 171 . 73.864  86.529  5.007   1.00 54.75
1 . .
ATOM 6823 O     O     . HOH HOH HOH S . 172 172 . 92.777  102.814 45.446  1.00 56.79
1 . .
ATOM 6824 O     O     . HOH HOH HOH S . 173 173 . 85.743  95.852  11.096  1.00 26.95
1 . .
ATOM 6825 O     O     . HOH HOH HOH S . 174 174 . 102.596 123.035 20.550  1.00 29.74
1 . .
ATOM 6826 O     O     . HOH HOH HOH S . 175 175 . 83.575  125.844 15.366  1.00 65.61
1 . .
ATOM 6827 O     O     . HOH HOH HOH S . 176 176 . 64.733  79.354  19.983  1.00 48.90
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ATOM 6828 O     O     . HOH HOH HOH S . 177 177 . 74.104  113.453 -24.053 1.00 47.66
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ATOM 6829 O     O     . HOH HOH HOH S . 178 178 . 89.663  130.678 15.839  1.00 58.92
1 . .
ATOM 6830 O     O     . HOH HOH HOH S . 179 179 . 75.287  110.914 40.859  1.00 59.36
1 . .
ATOM 6831 O     O     . HOH HOH HOH S . 180 180 . 75.290  80.301  32.779  1.00 39.05
1 . .
ATOM 6832 O     O     . HOH HOH HOH S . 181 181 . 68.612  89.175  -7.179  1.00 57.03
1 . .
ATOM 6833 O     O     . HOH HOH HOH S . 182 182 . 94.301  101.198 24.400  1.00 27.62
1 . .
ATOM 6834 O     O     . HOH HOH HOH S . 183 183 . 81.900  119.630 7.650   1.00 35.24
1 . .
ATOM 6835 O     O     . HOH HOH HOH S . 184 184 . 76.681  84.680  -3.582  1.00 42.74
1 . .
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1    N     N     . SER SER SER A A 1   1   . 0.5592 0.5684 0.5599 0.0072  0.0150
0.0120  1 .
2    CA    CA    . SER SER SER A A 1   1   . 0.5542 0.5687 0.5547 -0.0041 0.0099
0.0049  1 .
3    CB    CB    . SER SER SER A A 1   1   . 0.5704 0.5740 0.5567 0.0027  0.0051
0.0026  1 .
4    OG    OG    . SER SER SER A A 1   1   . 0.5715 0.6586 0.5888 -0.0128 -0.0068
0.0050  1 .
5    C     C     . SER SER SER A A 1   1   . 0.5404 0.5472 0.5418 0.0029  0.0089
0.0020  1 .
6    O     O     . SER SER SER A A 1   1   . 0.5334 0.5526 0.5494 0.0035  0.0098
0.0093  1 .
7    N     N     . ILE ILE ILE A A 2   2   . 0.5133 0.5156 0.5237 -0.0014 0.0091  -
0.0014 1 .
8    CA    CA    . ILE ILE ILE A A 2   2   . 0.4907 0.4807 0.5055 0.0056  0.0183  -
0.0088 1 .
9    CB    CB    . ILE ILE ILE A A 2   2   . 0.4816 0.4629 0.4924 0.0006  0.0105  -
0.0098 1 .
10   CG1   CG1   . ILE ILE ILE A A 2   2   . 0.4643 0.4251 0.4584 0.0201  0.0311  -
0.0224 1 .
11   CD1   CD1   . ILE ILE ILE A A 2   2   . 0.4541 0.3747 0.4921 0.0403  0.0473  -
0.0399 1 .
12   CG2   CG2   . ILE ILE ILE A A 2   2   . 0.4802 0.4033 0.4967 0.0088  0.0412  -
0.0451 1 .
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13   C     C     . ILE ILE ILE A A 2   2   . 0.4824 0.4875 0.5050 -0.0018 0.0094  -
0.0060 1 .
14   O     O     . ILE ILE ILE A A 2   2   . 0.4757 0.4898 0.5129 -0.0050 0.0252  -
0.0018 1 .
15   N     N     . GLN GLN GLN A A 3   3   . 0.4843 0.4916 0.5142 0.0030  0.0036  -
0.0097 1 .
16   CA    CA    . GLN GLN GLN A A 3   3   . 0.4965 0.5070 0.5185 0.0020  0.0036  -
0.0101 1 .
17   CB    CB    . GLN GLN GLN A A 3   3   . 0.4968 0.4976 0.5199 0.0078  -0.0018
0.0019  1 .
18   CG    CG    . GLN GLN GLN A A 3   3   . 0.5064 0.5596 0.5392 -0.0018 0.0164  -
0.0063 1 .
19   CD    CD    . GLN GLN GLN A A 3   3   . 0.5522 0.6229 0.6081 -0.0081 0.0211
0.0039  1 .
20   OE1   OE1   . GLN GLN GLN A A 3   3   . 0.5690 0.6047 0.6519 -0.0089 0.0150  -
0.0012 1 .
21   NE2   NE2   . GLN GLN GLN A A 3   3   . 0.5772 0.6906 0.6528 -0.0486 0.0235
0.0051  1 .
22   C     C     . GLN GLN GLN A A 3   3   . 0.4941 0.4971 0.5229 -0.0012 0.0021  -
0.0111 1 .
23   O     O     . GLN GLN GLN A A 3   3   . 0.5010 0.5089 0.5334 -0.0095 -0.0060 -
0.0254 1 .
24   N     N     . LYS LYS LYS A A 4   4   . 0.4971 0.4865 0.5263 0.0004  0.0033  -
0.0116 1 .
25   CA    CA    . LYS LYS LYS A A 4   4   . 0.4879 0.4883 0.5133 -0.0064 0.0056  -
0.0065 1 .
26   CB    CB    . LYS LYS LYS A A 4   4   . 0.4967 0.4976 0.5244 -0.0101 0.0012  -
0.0075 1 .
27   CG    CG    . LYS LYS LYS A A 4   4   . 0.5560 0.5344 0.5827 -0.0235 0.0068
0.0034  1 .
28   CD    CD    . LYS LYS LYS A A 4   4   . 0.6748 0.6268 0.5892 -0.0599 -0.0140 -
0.0029 1 .
29   CE    CE    . LYS LYS LYS A A 4   4   . 0.7300 0.6474 0.6348 -0.0688 -0.0240 -
0.0100 1 .
30   NZ    NZ    . LYS LYS LYS A A 4   4   . 0.7835 0.5672 0.6488 -0.0776 -0.0214
0.0248  1 .
31   C     C     . LYS LYS LYS A A 4   4   . 0.4646 0.4724 0.4931 -0.0052 0.0036  -
0.0077 1 .
32   O     O     . LYS LYS LYS A A 4   4   . 0.4448 0.4884 0.4938 -0.0109 -0.0001 -
0.0069 1 .
33   N     N     . ILE ILE ILE A A 5   5   . 0.4534 0.4495 0.4817 -0.0024 -0.0044 -
0.0067 1 .
34   CA    CA    . ILE ILE ILE A A 5   5   . 0.4429 0.4378 0.4680 -0.0043 0.0001  -
0.0077 1 .
35   CB    CB    . ILE ILE ILE A A 5   5   . 0.4358 0.4207 0.4599 -0.0129 0.0005  -
0.0081 1 .
36   CG1   CG1   . ILE ILE ILE A A 5   5   . 0.3872 0.3932 0.4383 -0.0311 0.0066  -
0.0054 1 .
37   CD1   CD1   . ILE ILE ILE A A 5   5   . 0.2613 0.3607 0.4372 -0.0405 0.0016  -
0.0316 1 .
38   CG2   CG2   . ILE ILE ILE A A 5   5   . 0.4393 0.4368 0.4478 -0.0017 0.0191  -
0.0176 1 .
39   C     C     . ILE ILE ILE A A 5   5   . 0.4506 0.4471 0.4728 -0.0048 0.0010  -
0.0051 1 .
40   O     O     . ILE ILE ILE A A 5   5   . 0.4546 0.4657 0.4813 -0.0101 0.0006  -
0.0175 1 .
41   N     N     . TRP TRP TRP A A 6   6   . 0.4539 0.4545 0.4733 -0.0074 -0.0019 -
0.0083 1 .
42   CA    CA    . TRP TRP TRP A A 6   6   . 0.4626 0.4632 0.4660 -0.0110 0.0105  -
0.0076 1 .
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43   CB    CB    . TRP TRP TRP A A 6   6   . 0.4923 0.4744 0.4950 0.0021  0.0103
0.0087  1 .
44   CG    CG    . TRP TRP TRP A A 6   6   . 0.6484 0.6093 0.5748 0.0073  0.0232
0.0048  1 .
45   CD1   CD1   . TRP TRP TRP A A 6   6   . 0.7434 0.5999 0.6534 0.0004  0.0216
0.0336  1 .
46   NE1   NE1   . TRP TRP TRP A A 6   6   . 0.7828 0.6671 0.7094 0.0212  0.0463
0.0248  1 .
47   CE2   CE2   . TRP TRP TRP A A 6   6   . 0.8042 0.6925 0.7196 0.0061  0.0360  -
0.0065 1 .
48   CD2   CD2   . TRP TRP TRP A A 6   6   . 0.7847 0.6664 0.6791 0.0238  0.0173  -
0.0164 1 .
49   CE3   CE3   . TRP TRP TRP A A 6   6   . 0.8309 0.7039 0.7143 0.0221  0.0094  -
0.0078 1 .
50   CZ3   CZ3   . TRP TRP TRP A A 6   6   . 0.8339 0.7549 0.7373 0.0456  0.0084  -
0.0211 1 .
51   CH2   CH2   . TRP TRP TRP A A 6   6   . 0.8482 0.7554 0.7674 0.0300  0.0086
0.0103  1 .
52   CZ2   CZ2   . TRP TRP TRP A A 6   6   . 0.8308 0.7359 0.7548 0.0173  0.0333  -
0.0151 1 .
53   C     C     . TRP TRP TRP A A 6   6   . 0.4329 0.4382 0.4481 -0.0054 0.0150  -
0.0014 1 .
54   O     O     . TRP TRP TRP A A 6   6   . 0.4311 0.4489 0.4719 -0.0326 0.0152  -
0.0118 1 .
55   N     N     . ALA ALA ALA A A 7   7   . 0.3942 0.4030 0.4017 -0.0051 0.0138
0.0020  1 .
56   CA    CA    . ALA ALA ALA A A 7   7   . 0.3642 0.3758 0.3577 -0.0023 0.0099
0.0070  1 .
57   CB    CB    . ALA ALA ALA A A 7   7   . 0.3574 0.3758 0.3502 -0.0077 0.0156
0.0001  1 .
58   C     C     . ALA ALA ALA A A 7   7   . 0.3514 0.3623 0.3549 -0.0070 0.0049
0.0043  1 .
59   O     O     . ALA ALA ALA A A 7   7   . 0.3408 0.3728 0.3290 -0.0119 0.0080
0.0163  1 .
60   N     N     . ARG ARG ARG A A 8   8   . 0.3276 0.3614 0.3380 -0.0060 0.0023
0.0026  1 .
61   CA    CA    . ARG ARG ARG A A 8   8   . 0.3196 0.3447 0.3287 -0.0020 -0.0015 -
0.0025 1 .
62   CB    CB    . ARG ARG ARG A A 8   8   . 0.3080 0.3154 0.3239 0.0036  0.0023  -
0.0024 1 .
63   CG    CG    . ARG ARG ARG A A 8   8   . 0.3518 0.3262 0.3393 0.0060  -0.0065 -
0.0154 1 .
64   CD    CD    . ARG ARG ARG A A 8   8   . 0.2377 0.3173 0.3091 0.0119  -0.0597 -
0.0282 1 .
65   NE    NE    . ARG ARG ARG A A 8   8   . 0.3363 0.3821 0.3735 -0.0216 -0.0181 -
0.0273 1 .
66   CZ    CZ    . ARG ARG ARG A A 8   8   . 0.3398 0.3954 0.3648 -0.0260 -0.0060 -
0.0368 1 .
67   NH1   NH1   . ARG ARG ARG A A 8   8   . 0.2509 0.4038 0.4185 -0.0334 -0.0561 -
0.0551 1 .
68   NH2   NH2   . ARG ARG ARG A A 8   8   . 0.3557 0.3865 0.4384 -0.0255 -0.0213 -
0.0366 1 .
69   C     C     . ARG ARG ARG A A 8   8   . 0.3035 0.3331 0.3222 -0.0014 -0.0102 -
0.0097 1 .
70   O     O     . ARG ARG ARG A A 8   8   . 0.2671 0.3358 0.3248 0.0179  -0.0185 -
0.0216 1 .
71   N     N     . GLU GLU GLU A A 9   9   . 0.2953 0.3179 0.3164 -0.0001 -0.0083 -
0.0224 1 .
72   CA    CA    . GLU GLU GLU A A 9   9   . 0.3376 0.3488 0.3404 0.0049  0.0027  -
0.0075 1 .
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73   CB    CB    . GLU GLU GLU A A 9   9   . 0.3286 0.3573 0.3403 0.0098  0.0028  -
0.0100 1 .
74   CG    CG    . GLU GLU GLU A A 9   9   . 0.3690 0.4126 0.3648 0.0089  0.0004  -
0.0200 1 .
75   CD    CD    . GLU GLU GLU A A 9   9   . 0.4075 0.3837 0.3654 0.0557  -0.0344 -
0.0397 1 .
76   OE1   OE1   . GLU GLU GLU A A 9   9   . 0.3852 0.2985 0.4187 0.0157  -0.0507 -
0.0403 1 .
77   OE2   OE2   . GLU GLU GLU A A 9   9   . 0.3193 0.3314 0.3674 0.0932  -0.0774
0.0161  1 .
78   C     C     . GLU GLU GLU A A 9   9   . 0.3321 0.3503 0.3272 0.0010  -0.0034
0.0016  1 .
79   O     O     . GLU GLU GLU A A 9   9   . 0.3516 0.3681 0.3332 0.0216  -0.0180
0.0206  1 .
80   N     N     . ILE ILE ILE A A 10  10  . 0.3202 0.3391 0.3187 -0.0039 0.0125
0.0076  1 .
81   CA    CA    . ILE ILE ILE A A 10  10  . 0.2878 0.3170 0.3121 -0.0016 0.0016
0.0012  1 .
82   CB    CB    . ILE ILE ILE A A 10  10  . 0.2955 0.3236 0.3053 -0.0172 -0.0019 -
0.0044 1 .
83   CG1   CG1   . ILE ILE ILE A A 10  10  . 0.2973 0.3101 0.3082 0.0068  -0.0130
0.0165  1 .
84   CD1   CD1   . ILE ILE ILE A A 10  10  . 0.4214 0.3395 0.2876 0.0106  0.0016
0.0201  1 .
85   CG2   CG2   . ILE ILE ILE A A 10  10  . 0.2456 0.3017 0.3298 -0.0278 0.0062
0.0210  1 .
86   C     C     . ILE ILE ILE A A 10  10  . 0.2989 0.3021 0.3093 -0.0069 -0.0077 -
0.0116 1 .
87   O     O     . ILE ILE ILE A A 10  10  . 0.2950 0.3224 0.3265 0.0013  0.0013  -
0.0371 1 .
88   N     N     . LEU LEU LEU A A 11  11  . 0.2952 0.3163 0.3041 -0.0118 0.0011
0.0029  1 .
89   CA    CA    . LEU LEU LEU A A 11  11  . 0.2847 0.2946 0.2820 -0.0043 0.0107
0.0031  1 .
90   CB    CB    . LEU LEU LEU A A 11  11  . 0.2950 0.2728 0.2626 0.0070  0.0152
0.0083  1 .
91   CG    CG    . LEU LEU LEU A A 11  11  . 0.3246 0.2497 0.2676 0.0408  0.0290
0.0048  1 .
92   CD1   CD1   . LEU LEU LEU A A 11  11  . 0.3184 0.2666 0.2680 0.0716  0.0862  -
0.0040 1 .
93   CD2   CD2   . LEU LEU LEU A A 11  11  . 0.3200 0.2306 0.2100 0.0814  -0.0135 -
0.0112 1 .
94   C     C     . LEU LEU LEU A A 11  11  . 0.2732 0.2901 0.2750 0.0000  0.0069
0.0068  1 .
95   O     O     . LEU LEU LEU A A 11  11  . 0.2791 0.2685 0.2855 0.0143  -0.0046
0.0138  1 .
96   N     N     . ASP ASP ASP A A 12  12  . 0.2560 0.2934 0.2704 0.0159  0.0074
0.0038  1 .
97   CA    CA    . ASP ASP ASP A A 12  12  . 0.2639 0.3077 0.2930 0.0180  -0.0014
0.0060  1 .
98   CB    CB    . ASP ASP ASP A A 12  12  . 0.2762 0.3011 0.2759 0.0196  -0.0031
0.0130  1 .
99   CG    CG    . ASP ASP ASP A A 12  12  . 0.3011 0.3172 0.3074 0.0309  0.0052  -
0.0086 1 .
100  OD1   OD1   . ASP ASP ASP A A 12  12  . 0.3528 0.3711 0.3447 0.0626  0.0135
0.0243  1 .
101  OD2   OD2   . ASP ASP ASP A A 12  12  . 0.3398 0.3940 0.3120 0.0659  0.0376  -
0.0551 1 .
102  C     C     . ASP ASP ASP A A 12  12  . 0.2490 0.3120 0.2945 0.0162  0.0003
0.0079  1 .
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103  O     O     . ASP ASP ASP A A 12  12  . 0.1993 0.3413 0.2845 0.0348  -0.0097
0.0038  1 .
104  N     N     . SER SER SER A A 13  13  . 0.2621 0.3151 0.2929 0.0125  0.0040  -
0.0026 1 .
105  CA    CA    . SER SER SER A A 13  13  . 0.3028 0.3300 0.3104 -0.0052 0.0077  -
0.0081 1 .
106  CB    CB    . SER SER SER A A 13  13  . 0.3168 0.3250 0.3224 0.0068  0.0044  -
0.0084 1 .
107  OG    OG    . SER SER SER A A 13  13  . 0.3443 0.3907 0.3041 0.0046  0.0159  -
0.0362 1 .
108  C     C     . SER SER SER A A 13  13  . 0.3275 0.3318 0.3080 -0.0133 0.0039  -
0.0005 1 .
109  O     O     . SER SER SER A A 13  13  . 0.3534 0.3559 0.3307 -0.0305 0.0090  -
0.0138 1 .
110  N     N     . ARG ARG ARG A A 14  14  . 0.3067 0.3366 0.3005 -0.0067 0.0019  -
0.0020 1 .
111  CA    CA    . ARG ARG ARG A A 14  14  . 0.3346 0.3504 0.3552 -0.0182 -0.0070
0.0047  1 .
112  CB    CB    . ARG ARG ARG A A 14  14  . 0.3256 0.3545 0.3787 -0.0093 -0.0147
0.0144  1 .
113  CG    CG    . ARG ARG ARG A A 14  14  . 0.4146 0.4222 0.4223 -0.0293 -0.0177
0.0075  1 .
114  CD    CD    . ARG ARG ARG A A 14  14  . 0.4656 0.4642 0.4428 -0.0282 -0.0289
0.0036  1 .
115  NE    NE    . ARG ARG ARG A A 14  14  . 0.4566 0.4551 0.4785 -0.0104 -0.0167
0.0194  1 .
116  CZ    CZ    . ARG ARG ARG A A 14  14  . 0.4436 0.4689 0.4759 -0.0110 -0.0071
0.0129  1 .
117  NH1   NH1   . ARG ARG ARG A A 14  14  . 0.5211 0.4196 0.4688 -0.0048 0.0273
0.0126  1 .
118  NH2   NH2   . ARG ARG ARG A A 14  14  . 0.3449 0.4936 0.5272 -0.0492 0.0222
0.0092  1 .
119  C     C     . ARG ARG ARG A A 14  14  . 0.3204 0.3479 0.3638 -0.0152 0.0107
0.0007  1 .
120  O     O     . ARG ARG ARG A A 14  14  . 0.2600 0.3357 0.4114 -0.0175 0.0130
0.0028  1 .
121  N     N     . GLY GLY GLY A A 15  15  . 0.2920 0.3534 0.3636 -0.0215 0.0069  -
0.0042 1 .
122  CA    CA    . GLY GLY GLY A A 15  15  . 0.2987 0.3614 0.3766 -0.0146 0.0112  -
0.0059 1 .
123  C     C     . GLY GLY GLY A A 15  15  . 0.3222 0.3690 0.3774 -0.0204 0.0116  -
0.0076 1 .
124  O     O     . GLY GLY GLY A A 15  15  . 0.3462 0.3876 0.4066 -0.0144 0.0162  -
0.0222 1 .
125  N     N     . ASN ASN ASN A A 16  16  . 0.3067 0.3660 0.3691 -0.0184 0.0049
0.0007  1 .
126  CA    CA    . ASN ASN ASN A A 16  16  . 0.3120 0.3616 0.3579 -0.0114 -0.0002 -
0.0046 1 .
127  CB    CB    . ASN ASN ASN A A 16  16  . 0.3214 0.3785 0.3535 -0.0213 -0.0068
0.0122  1 .
128  CG    CG    . ASN ASN ASN A A 16  16  . 0.3498 0.4167 0.3926 -0.0173 0.0104
0.0000  1 .
129  OD1   OD1   . ASN ASN ASN A A 16  16  . 0.4187 0.4233 0.3877 -0.0242 0.0698
0.0266  1 .
130  ND2   ND2   . ASN ASN ASN A A 16  16  . 0.3498 0.4369 0.4432 -0.0346 0.0018  -
0.0363 1 .
131  C     C     . ASN ASN ASN A A 16  16  . 0.3084 0.3416 0.3311 -0.0150 -0.0058 -
0.0103 1 .
132  O     O     . ASN ASN ASN A A 16  16  . 0.2816 0.3489 0.3157 -0.0040 -0.0185 -
0.0328 1 .
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133  N     N     . PRO PRO PRO A A 17  17  . 0.3098 0.3284 0.3301 -0.0150 0.0029  -
0.0098 1 .
134  CA    CA    . PRO PRO PRO A A 17  17  . 0.2844 0.3214 0.3158 -0.0216 0.0197  -
0.0116 1 .
135  CB    CB    . PRO PRO PRO A A 17  17  . 0.3031 0.3291 0.3347 -0.0254 0.0257  -
0.0084 1 .
136  CG    CG    . PRO PRO PRO A A 17  17  . 0.3143 0.3664 0.3443 -0.0268 0.0256  -
0.0172 1 .
137  CD    CD    . PRO PRO PRO A A 17  17  . 0.2828 0.3190 0.3117 -0.0335 0.0132  -
0.0117 1 .
138  C     C     . PRO PRO PRO A A 17  17  . 0.2734 0.3170 0.3268 -0.0129 0.0145  -
0.0095 1 .
139  O     O     . PRO PRO PRO A A 17  17  . 0.1970 0.2825 0.3047 -0.0135 0.0323  -
0.0154 1 .
140  N     N     . THR THR THR A A 18  18  . 0.2660 0.3099 0.3211 -0.0103 0.0139  -
0.0088 1 .
141  CA    CA    . THR THR THR A A 18  18  . 0.2818 0.3085 0.3160 0.0061  0.0014
0.0042  1 .
142  CB    CB    . THR THR THR A A 18  18  . 0.3150 0.3000 0.3177 0.0088  -0.0108
0.0139  1 .
143  OG1   OG1   . THR THR THR A A 18  18  . 0.4045 0.3011 0.3551 0.0242  -0.0040
0.0240  1 .
144  CG2   CG2   . THR THR THR A A 18  18  . 0.3015 0.3099 0.3238 0.0404  -0.0117
0.0004  1 .
145  C     C     . THR THR THR A A 18  18  . 0.3059 0.3278 0.3248 0.0026  -0.0034
0.0034  1 .
146  O     O     . THR THR THR A A 18  18  . 0.2468 0.3571 0.3308 -0.0063 -0.0239 -
0.0090 1 .
147  N     N     . VAL VAL VAL A A 19  19  . 0.2951 0.3207 0.3220 0.0005  0.0158  -
0.0012 1 .
148  CA    CA    . VAL VAL VAL A A 19  19  . 0.3057 0.3069 0.3073 0.0020  0.0070  -
0.0111 1 .
149  CB    CB    . VAL VAL VAL A A 19  19  . 0.3060 0.3010 0.3045 0.0130  0.0069  -
0.0072 1 .
150  CG1   CG1   . VAL VAL VAL A A 19  19  . 0.2795 0.2678 0.3139 0.0119  -0.0014 -
0.0381 1 .
151  CG2   CG2   . VAL VAL VAL A A 19  19  . 0.3276 0.3391 0.2969 0.0059  0.0155  -
0.0264 1 .
152  C     C     . VAL VAL VAL A A 19  19  . 0.2942 0.2990 0.3114 0.0038  0.0070  -
0.0024 1 .
153  O     O     . VAL VAL VAL A A 19  19  . 0.3108 0.3058 0.3283 0.0010  0.0099
0.0094  1 .
154  N     N     . GLU GLU GLU A A 20  20  . 0.3200 0.3161 0.3048 0.0179  0.0040
0.0011  1 .
155  CA    CA    . GLU GLU GLU A A 20  20  . 0.2900 0.3233 0.3196 0.0193  0.0148
0.0048  1 .
156  CB    CB    . GLU GLU GLU A A 20  20  . 0.3027 0.3355 0.3191 0.0131  0.0225
0.0150  1 .
157  CG    CG    . GLU GLU GLU A A 20  20  . 0.3558 0.3750 0.3969 0.0245  -0.0133
0.0051  1 .
158  CD    CD    . GLU GLU GLU A A 20  20  . 0.4510 0.4284 0.4504 0.0233  -0.0668
0.0050  1 .
159  OE1   OE1   . GLU GLU GLU A A 20  20  . 0.5345 0.4779 0.4468 -0.0119 -0.0481 -
0.0459 1 .
160  OE2   OE2   . GLU GLU GLU A A 20  20  . 0.4877 0.4401 0.4858 -0.0019 -0.1122
0.0143  1 .
161  C     C     . GLU GLU GLU A A 20  20  . 0.3012 0.3049 0.3072 0.0216  0.0040
0.0000  1 .
162  O     O     . GLU GLU GLU A A 20  20  . 0.3074 0.3288 0.2882 0.0427  -0.0023
0.0016  1 .
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163  N     N     . VAL VAL VAL A A 21  21  . 0.2540 0.3008 0.2980 0.0072  0.0026
0.0120  1 .
164  CA    CA    . VAL VAL VAL A A 21  21  . 0.2681 0.3043 0.3091 0.0032  -0.0003
0.0092  1 .
165  CB    CB    . VAL VAL VAL A A 21  21  . 0.2644 0.3005 0.3162 -0.0025 -0.0123
0.0080  1 .
166  CG1   CG1   . VAL VAL VAL A A 21  21  . 0.2392 0.3161 0.2940 -0.0330 -0.0281
0.0432  1 .
167  CG2   CG2   . VAL VAL VAL A A 21  21  . 0.2356 0.3031 0.2986 0.0036  0.0019  -
0.0057 1 .
168  C     C     . VAL VAL VAL A A 21  21  . 0.2594 0.3110 0.3228 0.0041  0.0002
0.0092  1 .
169  O     O     . VAL VAL VAL A A 21  21  . 0.2175 0.3442 0.3271 0.0110  0.0262
0.0198  1 .
170  N     N     . ASP ASP ASP A A 22  22  . 0.2864 0.3453 0.3371 0.0010  -0.0007
0.0118  1 .
171  CA    CA    . ASP ASP ASP A A 22  22  . 0.3206 0.3528 0.3714 0.0033  -0.0071
0.0126  1 .
172  CB    CB    . ASP ASP ASP A A 22  22  . 0.3262 0.3699 0.3670 0.0084  -0.0173
0.0207  1 .
173  CG    CG    . ASP ASP ASP A A 22  22  . 0.3630 0.3812 0.4152 -0.0035 -0.0318
0.0178  1 .
174  OD1   OD1   . ASP ASP ASP A A 22  22  . 0.3831 0.3899 0.4125 0.0086  -0.0331
0.0554  1 .
175  OD2   OD2   . ASP ASP ASP A A 22  22  . 0.5101 0.3667 0.4550 -0.0016 -0.0614 -
0.0312 1 .
176  C     C     . ASP ASP ASP A A 22  22  . 0.3391 0.3815 0.3775 0.0000  -0.0006
0.0036  1 .
177  O     O     . ASP ASP ASP A A 22  22  . 0.3596 0.3754 0.3873 -0.0240 -0.0005 -
0.0012 1 .
178  N     N     . LEU LEU LEU A A 23  23  . 0.3222 0.3868 0.3851 0.0088  -0.0011 -
0.0056 1 .
179  CA    CA    . LEU LEU LEU A A 23  23  . 0.3288 0.3890 0.4048 0.0046  0.0051
0.0009  1 .
180  CB    CB    . LEU LEU LEU A A 23  23  . 0.3199 0.3954 0.3992 0.0023  0.0217
0.0076  1 .
181  CG    CG    . LEU LEU LEU A A 23  23  . 0.3278 0.3740 0.4341 0.0085  0.0078
0.0273  1 .
182  CD1   CD1   . LEU LEU LEU A A 23  23  . 0.3812 0.3401 0.4040 -0.0226 -0.0272
0.0209  1 .
183  CD2   CD2   . LEU LEU LEU A A 23  23  . 0.2724 0.3267 0.4116 -0.0679 0.0539
0.0489  1 .
184  C     C     . LEU LEU LEU A A 23  23  . 0.3518 0.4070 0.4334 -0.0002 0.0071  -
0.0045 1 .
185  O     O     . LEU LEU LEU A A 23  23  . 0.3208 0.3766 0.4193 -0.0035 0.0151  -
0.0036 1 .
186  N     N     . TYR TYR TYR A A 24  24  . 0.3717 0.4226 0.4278 -0.0108 -0.0056 -
0.0115 1 .
187  CA    CA    . TYR TYR TYR A A 24  24  . 0.3839 0.4412 0.4394 -0.0060 -0.0086 -
0.0013 1 .
188  CB    CB    . TYR TYR TYR A A 24  24  . 0.3680 0.4513 0.4428 -0.0178 -0.0056
0.0002  1 .
189  CG    CG    . TYR TYR TYR A A 24  24  . 0.4287 0.4758 0.4595 -0.0112 -0.0276
0.0236  1 .
190  CD1   CD1   . TYR TYR TYR A A 24  24  . 0.4278 0.4946 0.4873 -0.0074 -0.0178
0.0442  1 .
191  CE1   CE1   . TYR TYR TYR A A 24  24  . 0.4474 0.5013 0.4950 -0.0333 -0.0278
0.0583  1 .
192  CZ    CZ    . TYR TYR TYR A A 24  24  . 0.4524 0.5198 0.5121 -0.0218 -0.0231
0.0632  1 .
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193  OH    OH    . TYR TYR TYR A A 24  24  . 0.4315 0.5909 0.5061 -0.0260 -0.0721
0.0791  1 .
194  CE2   CE2   . TYR TYR TYR A A 24  24  . 0.4473 0.5179 0.5205 -0.0374 -0.0368
0.0434  1 .
195  CD2   CD2   . TYR TYR TYR A A 24  24  . 0.4371 0.4911 0.5099 -0.0050 -0.0477
0.0289  1 .
196  C     C     . TYR TYR TYR A A 24  24  . 0.3976 0.4473 0.4537 -0.0037 -0.0086
0.0034  1 .
197  O     O     . TYR TYR TYR A A 24  24  . 0.4000 0.4666 0.4778 0.0093  -0.0155
0.0126  1 .
198  N     N     . THR THR THR A A 25  25  . 0.4103 0.4607 0.4685 0.0033  -0.0013
0.0029  1 .
199  CA    CA    . THR THR THR A A 25  25  . 0.4160 0.4748 0.4815 -0.0046 -0.0038
0.0107  1 .
200  CB    CB    . THR THR THR A A 25  25  . 0.3978 0.4545 0.4712 -0.0022 -0.0011 -
0.0006 1 .
201  OG1   OG1   . THR THR THR A A 25  25  . 0.2821 0.4657 0.4614 -0.0089 -0.0050
0.0071  1 .
202  CG2   CG2   . THR THR THR A A 25  25  . 0.4101 0.4251 0.5013 -0.0101 -0.0175
0.0012  1 .
203  C     C     . THR THR THR A A 25  25  . 0.4373 0.5000 0.5041 -0.0005 0.0020
0.0132  1 .
204  O     O     . THR THR THR A A 25  25  . 0.4200 0.5166 0.4972 -0.0079 -0.0037
0.0190  1 .
205  N     N     . ALA ALA ALA A A 26  26  . 0.4791 0.5262 0.5365 -0.0009 0.0036
0.0165  1 .
206  CA    CA    . ALA ALA ALA A A 26  26  . 0.5015 0.5380 0.5580 0.0006  0.0077
0.0152  1 .
207  CB    CB    . ALA ALA ALA A A 26  26  . 0.5000 0.5350 0.5628 -0.0069 0.0131
0.0126  1 .
208  C     C     . ALA ALA ALA A A 26  26  . 0.5187 0.5427 0.5601 0.0009  0.0057
0.0217  1 .
209  O     O     . ALA ALA ALA A A 26  26  . 0.5076 0.5691 0.5654 -0.0072 0.0013
0.0363  1 .
210  N     N     . LYS LYS LYS A A 27  27  . 0.5230 0.5488 0.5547 -0.0048 0.0050
0.0165  1 .
211  CA    CA    . LYS LYS LYS A A 27  27  . 0.5415 0.5472 0.5617 0.0037  0.0072
0.0090  1 .
212  CB    CB    . LYS LYS LYS A A 27  27  . 0.5609 0.5542 0.5775 0.0051  0.0050
0.0073  1 .
213  CG    CG    . LYS LYS LYS A A 27  27  . 0.5939 0.6047 0.6107 0.0019  0.0301
0.0108  1 .
214  CD    CD    . LYS LYS LYS A A 27  27  . 0.6550 0.6978 0.6982 0.0237  0.0575
0.0203  1 .
215  CE    CE    . LYS LYS LYS A A 27  27  . 0.6966 0.7729 0.6915 0.0369  0.0538
0.0134  1 .
216  NZ    NZ    . LYS LYS LYS A A 27  27  . 0.6863 0.8149 0.7493 0.0426  0.0616
0.0086  1 .
217  C     C     . LYS LYS LYS A A 27  27  . 0.5364 0.5357 0.5672 0.0017  0.0077
0.0090  1 .
218  O     O     . LYS LYS LYS A A 27  27  . 0.5441 0.5557 0.5844 0.0003  0.0078
0.0150  1 .
219  N     N     . GLY GLY GLY A A 28  28  . 0.5216 0.5387 0.5496 -0.0029 0.0143
0.0171  1 .
220  CA    CA    . GLY GLY GLY A A 28  28  . 0.4936 0.5181 0.5298 -0.0023 0.0084
0.0131  1 .
221  C     C     . GLY GLY GLY A A 28  28  . 0.4807 0.5075 0.5094 -0.0031 0.0193
0.0123  1 .
222  O     O     . GLY GLY GLY A A 28  28  . 0.4435 0.5106 0.4933 -0.0150 0.0223
0.0199  1 .
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223  N     N     . LEU LEU LEU A A 29  29  . 0.4708 0.4862 0.5031 0.0015  0.0177
0.0125  1 .
224  CA    CA    . LEU LEU LEU A A 29  29  . 0.4755 0.4766 0.4836 0.0030  0.0153
0.0122  1 .
225  CB    CB    . LEU LEU LEU A A 29  29  . 0.4870 0.4835 0.4918 0.0059  0.0198
0.0220  1 .
226  CG    CG    . LEU LEU LEU A A 29  29  . 0.5179 0.5391 0.4965 -0.0040 0.0186
0.0385  1 .
227  CD1   CD1   . LEU LEU LEU A A 29  29  . 0.5977 0.5838 0.5566 0.0132  0.0195
0.0890  1 .
228  CD2   CD2   . LEU LEU LEU A A 29  29  . 0.5151 0.5640 0.4896 0.0078  0.0112
0.0891  1 .
229  C     C     . LEU LEU LEU A A 29  29  . 0.4420 0.4504 0.4621 0.0073  0.0142
0.0081  1 .
230  O     O     . LEU LEU LEU A A 29  29  . 0.4531 0.4492 0.4820 0.0141  0.0034
0.0051  1 .
231  N     N     . PHE PHE PHE A A 30  30  . 0.4176 0.4106 0.4159 0.0149  0.0212
0.0083  1 .
232  CA    CA    . PHE PHE PHE A A 30  30  . 0.3848 0.3774 0.4040 0.0011  0.0198  -
0.0026 1 .
233  CB    CB    . PHE PHE PHE A A 30  30  . 0.3709 0.3744 0.3823 0.0106  0.0089  -
0.0080 1 .
234  CG    CG    . PHE PHE PHE A A 30  30  . 0.4081 0.3947 0.4113 -0.0044 0.0149
0.0089  1 .
235  CD1   CD1   . PHE PHE PHE A A 30  30  . 0.3978 0.3812 0.4148 0.0051  0.0386
0.0011  1 .
236  CE1   CE1   . PHE PHE PHE A A 30  30  . 0.4179 0.3894 0.4609 -0.0233 0.0294
0.0046  1 .
237  CZ    CZ    . PHE PHE PHE A A 30  30  . 0.3620 0.4304 0.4406 -0.0084 0.0083  -
0.0146 1 .
238  CE2   CE2   . PHE PHE PHE A A 30  30  . 0.4015 0.4075 0.4556 -0.0054 0.0151
0.0204  1 .
239  CD2   CD2   . PHE PHE PHE A A 30  30  . 0.3786 0.3920 0.4123 -0.0101 0.0203
0.0335  1 .
240  C     C     . PHE PHE PHE A A 30  30  . 0.3841 0.3676 0.3951 0.0013  0.0202  -
0.0030 1 .
241  O     O     . PHE PHE PHE A A 30  30  . 0.3863 0.3518 0.4168 0.0122  0.0196
0.0071  1 .
242  N     N     . ARG ARG ARG A A 31  31  . 0.3491 0.3518 0.3587 -0.0087 0.0210
0.0020  1 .
243  CA    CA    . ARG ARG ARG A A 31  31  . 0.3089 0.3401 0.3390 -0.0021 0.0134  -
0.0007 1 .
244  CB    CB    . ARG ARG ARG A A 31  31  . 0.3193 0.3404 0.3569 0.0071  0.0220
0.0175  1 .
245  CG    CG    . ARG ARG ARG A A 31  31  . 0.3386 0.3688 0.3735 0.0102  0.0152
0.0356  1 .
246  CD    CD    . ARG ARG ARG A A 31  31  . 0.3510 0.3519 0.4033 0.0331  0.0037
0.0289  1 .
247  NE    NE    . ARG ARG ARG A A 31  31  . 0.4464 0.3749 0.4512 0.0207  -0.0081
0.0358  1 .
248  CZ    CZ    . ARG ARG ARG A A 31  31  . 0.4117 0.4583 0.5090 0.0120  0.0041
0.0121  1 .
249  NH1   NH1   . ARG ARG ARG A A 31  31  . 0.4060 0.4955 0.5757 0.0633  0.0774
0.0578  1 .
250  NH2   NH2   . ARG ARG ARG A A 31  31  . 0.3986 0.4852 0.5124 -0.0201 -0.0024
0.0145  1 .
251  C     C     . ARG ARG ARG A A 31  31  . 0.2967 0.3276 0.3265 0.0007  0.0186  -
0.0031 1 .
252  O     O     . ARG ARG ARG A A 31  31  . 0.2399 0.3040 0.3259 0.0020  0.0280  -
0.0118 1 .
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253  N     N     . ALA ALA ALA A A 32  32  . 0.2849 0.2985 0.3139 0.0101  0.0031
0.0095  1 .
254  CA    CA    . ALA ALA ALA A A 32  32  . 0.2879 0.2850 0.2941 -0.0045 0.0104
0.0100  1 .
255  CB    CB    . ALA ALA ALA A A 32  32  . 0.3068 0.2924 0.3160 -0.0151 0.0105
0.0154  1 .
256  C     C     . ALA ALA ALA A A 32  32  . 0.2962 0.2909 0.2883 -0.0047 0.0152
0.0026  1 .
257  O     O     . ALA ALA ALA A A 32  32  . 0.3213 0.3094 0.3167 -0.0158 0.0409
0.0080  1 .
258  N     N     . ALA ALA ALA A A 33  33  . 0.2888 0.2852 0.2812 0.0011  0.0220  -
0.0013 1 .
259  CA    CA    . ALA ALA ALA A A 33  33  . 0.2671 0.2973 0.2846 0.0087  0.0083
0.0040  1 .
260  CB    CB    . ALA ALA ALA A A 33  33  . 0.2463 0.2988 0.2915 0.0100  0.0120  -
0.0049 1 .
261  C     C     . ALA ALA ALA A A 33  33  . 0.2984 0.3078 0.2872 0.0179  0.0073  -
0.0009 1 .
262  O     O     . ALA ALA ALA A A 33  33  . 0.3315 0.3057 0.3002 0.0330  0.0246  -
0.0118 1 .
263  N     N     . VAL VAL VAL A A 34  34  . 0.2790 0.3206 0.2951 0.0141  0.0018  -
0.0087 1 .
264  CA    CA    . VAL VAL VAL A A 34  34  . 0.3018 0.3182 0.3135 -0.0023 0.0046  -
0.0034 1 .
265  CB    CB    . VAL VAL VAL A A 34  34  . 0.3039 0.3094 0.3099 -0.0001 0.0000  -
0.0059 1 .
266  CG1   CG1   . VAL VAL VAL A A 34  34  . 0.3243 0.3213 0.2989 -0.0059 -0.0051 -
0.0261 1 .
267  CG2   CG2   . VAL VAL VAL A A 34  34  . 0.3115 0.3387 0.2849 -0.0054 0.0114  -
0.0035 1 .
268  C     C     . VAL VAL VAL A A 34  34  . 0.2743 0.3174 0.3150 -0.0078 0.0091  -
0.0076 1 .
269  O     O     . VAL VAL VAL A A 34  34  . 0.2589 0.3211 0.3171 -0.0138 0.0102  -
0.0006 1 .
270  N     N     . PRO PRO PRO A A 35  35  . 0.2705 0.3117 0.3123 -0.0058 0.0073  -
0.0100 1 .
271  CA    CA    . PRO PRO PRO A A 35  35  . 0.2653 0.3067 0.3176 -0.0116 0.0178  -
0.0112 1 .
272  CB    CB    . PRO PRO PRO A A 35  35  . 0.2574 0.2925 0.3162 -0.0177 0.0103  -
0.0176 1 .
273  CG    CG    . PRO PRO PRO A A 35  35  . 0.2329 0.2671 0.3287 0.0070  0.0279  -
0.0233 1 .
274  CD    CD    . PRO PRO PRO A A 35  35  . 0.2753 0.3103 0.3274 -0.0048 0.0087  -
0.0101 1 .
275  C     C     . PRO PRO PRO A A 35  35  . 0.2845 0.3090 0.3302 -0.0047 0.0232  -
0.0137 1 .
276  O     O     . PRO PRO PRO A A 35  35  . 0.2907 0.3461 0.3020 -0.0140 0.0516  -
0.0191 1 .
277  N     N     . SER SER SER A A 36  36  . 0.2914 0.3297 0.3363 -0.0028 0.0202  -
0.0148 1 .
278  CA    CA    . SER SER SER A A 36  36  . 0.2936 0.3323 0.3387 0.0005  0.0060  -
0.0151 1 .
279  CB    CB    . SER SER SER A A 36  36  . 0.2937 0.3359 0.3544 -0.0005 0.0041  -
0.0050 1 .
280  OG    OG    . SER SER SER A A 36  36  . 0.3436 0.3824 0.4052 0.0276  0.0332  -
0.0385 1 .
281  C     C     . SER SER SER A A 36  36  . 0.3098 0.3405 0.3359 -0.0049 -0.0054 -
0.0057 1 .
282  O     O     . SER SER SER A A 36  36  . 0.2841 0.3503 0.3201 -0.0170 -0.0060 -
0.0143 1 .
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283  N     N     . GLY GLY GLY A A 37  37  . 0.3470 0.3727 0.3632 -0.0113 -0.0086 -
0.0052 1 .
284  CA    CA    . GLY GLY GLY A A 37  37  . 0.3508 0.3773 0.3595 -0.0032 -0.0171 -
0.0119 1 .
285  C     C     . GLY GLY GLY A A 37  37  . 0.3714 0.3914 0.3766 0.0038  -0.0161 -
0.0094 1 .
286  O     O     . GLY GLY GLY A A 37  37  . 0.3887 0.4139 0.3536 0.0021  -0.0326 -
0.0224 1 .
287  N     N     . ALA ALA ALA A A 38  38  . 0.3879 0.3833 0.3946 0.0067  -0.0135 -
0.0055 1 .
288  CA    CA    . ALA ALA ALA A A 38  38  . 0.3836 0.3929 0.4083 0.0138  -0.0028 -
0.0026 1 .
289  CB    CB    . ALA ALA ALA A A 38  38  . 0.3896 0.4122 0.4240 0.0127  0.0046  -
0.0097 1 .
290  C     C     . ALA ALA ALA A A 38  38  . 0.3925 0.4104 0.4201 0.0131  -0.0020 -
0.0173 1 .
291  O     O     . ALA ALA ALA A A 38  38  . 0.3718 0.3975 0.4255 0.0299  0.0123  -
0.0406 1 .
292  N     N     . SER SER SER A A 39  39  . 0.3910 0.4142 0.4127 0.0074  -0.0032 -
0.0153 1 .
293  CA    CA    . SER SER SER A A 39  39  . 0.3841 0.4108 0.3942 0.0066  -0.0065 -
0.0042 1 .
294  CB    CB    . SER SER SER A A 39  39  . 0.3709 0.4070 0.4087 -0.0014 -0.0008 -
0.0066 1 .
295  OG    OG    . SER SER SER A A 39  39  . 0.3566 0.4078 0.3945 0.0331  0.0128
0.0159  1 .
296  C     C     . SER SER SER A A 39  39  . 0.3784 0.4150 0.4005 0.0050  -0.0210 -
0.0058 1 .
297  O     O     . SER SER SER A A 39  39  . 0.3311 0.4132 0.3735 -0.0035 -0.0240
0.0020  1 .
298  N     N     . THR THR THR A A 40  40  . 0.3913 0.4175 0.4127 0.0216  -0.0238 -
0.0010 1 .
299  CA    CA    . THR THR THR A A 40  40  . 0.4028 0.4295 0.4224 0.0269  -0.0097 -
0.0045 1 .
300  CB    CB    . THR THR THR A A 40  40  . 0.4054 0.4397 0.4345 0.0252  -0.0050 -
0.0080 1 .
301  OG1   OG1   . THR THR THR A A 40  40  . 0.4213 0.4623 0.4551 0.0276  0.0236  -
0.0059 1 .
302  CG2   CG2   . THR THR THR A A 40  40  . 0.4251 0.4103 0.3749 0.0550  -0.0079 -
0.0274 1 .
303  C     C     . THR THR THR A A 40  40  . 0.4325 0.4377 0.4403 0.0254  -0.0034
0.0040  1 .
304  O     O     . THR THR THR A A 40  40  . 0.3776 0.4292 0.4413 0.0528  0.0034
0.0156  1 .
305  N     N     . GLY GLY GLY A A 41  41  . 0.4350 0.4354 0.4325 0.0244  0.0048
0.0015  1 .
306  CA    CA    . GLY GLY GLY A A 41  41  . 0.4606 0.4411 0.4491 0.0204  -0.0183 -
0.0093 1 .
307  C     C     . GLY GLY GLY A A 41  41  . 0.4533 0.4468 0.4601 0.0164  -0.0233 -
0.0067 1 .
308  O     O     . GLY GLY GLY A A 41  41  . 0.4320 0.4227 0.4594 0.0129  -0.0456 -
0.0083 1 .
309  N     N     . ILE ILE ILE A A 42  42  . 0.4284 0.4579 0.4588 0.0140  -0.0202 -
0.0080 1 .
310  CA    CA    . ILE ILE ILE A A 42  42  . 0.4261 0.4469 0.4645 0.0081  -0.0165 -
0.0016 1 .
311  CB    CB    . ILE ILE ILE A A 42  42  . 0.4194 0.4608 0.4649 0.0081  -0.0245
0.0015  1 .
312  CG1   CG1   . ILE ILE ILE A A 42  42  . 0.3985 0.4589 0.4706 0.0253  -0.0191 -
0.0149 1 .
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313  CD1   CD1   . ILE ILE ILE A A 42  42  . 0.4425 0.4887 0.5090 0.0290  -0.0687 -
0.0418 1 .
314  CG2   CG2   . ILE ILE ILE A A 42  42  . 0.4732 0.4583 0.4862 -0.0111 -0.0151
0.0054  1 .
315  C     C     . ILE ILE ILE A A 42  42  . 0.4193 0.4405 0.4503 0.0103  -0.0177
0.0002  1 .
316  O     O     . ILE ILE ILE A A 42  42  . 0.4301 0.4364 0.4658 0.0035  -0.0188 -
0.0022 1 .
317  N     N     . TYR TYR TYR A A 43  43  . 0.3995 0.4149 0.4189 0.0213  -0.0188 -
0.0069 1 .
318  CA    CA    . TYR TYR TYR A A 43  43  . 0.4051 0.4112 0.4136 0.0248  -0.0159 -
0.0044 1 .
319  CB    CB    . TYR TYR TYR A A 43  43  . 0.4180 0.4258 0.4273 0.0323  -0.0147 -
0.0166 1 .
320  CG    CG    . TYR TYR TYR A A 43  43  . 0.4614 0.4647 0.4847 0.0321  -0.0340 -
0.0131 1 .
321  CD1   CD1   . TYR TYR TYR A A 43  43  . 0.5170 0.4616 0.5107 0.0413  -0.0492 -
0.0213 1 .
322  CE1   CE1   . TYR TYR TYR A A 43  43  . 0.5179 0.5125 0.5888 0.0318  -0.0442 -
0.0141 1 .
323  CZ    CZ    . TYR TYR TYR A A 43  43  . 0.5181 0.5064 0.6066 0.0296  -0.0465
0.0057  1 .
324  OH    OH    . TYR TYR TYR A A 43  43  . 0.5565 0.5120 0.6209 0.0757  -0.0465
0.0225  1 .
325  CE2   CE2   . TYR TYR TYR A A 43  43  . 0.5452 0.4992 0.6187 0.0334  -0.0571
0.0110  1 .
326  CD2   CD2   . TYR TYR TYR A A 43  43  . 0.5302 0.4679 0.5614 0.0347  -0.0671
0.0054  1 .
327  C     C     . TYR TYR TYR A A 43  43  . 0.4045 0.3955 0.3959 0.0123  -0.0160 -
0.0034 1 .
328  O     O     . TYR TYR TYR A A 43  43  . 0.4260 0.3912 0.3866 0.0173  -0.0062
0.0076  1 .
329  N     N     . GLU GLU GLU A A 44  44  . 0.3863 0.3833 0.3914 0.0140  -0.0200
0.0039  1 .
330  CA    CA    . GLU GLU GLU A A 44  44  . 0.3715 0.3726 0.3815 0.0081  -0.0298
0.0012  1 .
331  CB    CB    . GLU GLU GLU A A 44  44  . 0.3676 0.3647 0.3726 0.0096  -0.0382
0.0040  1 .
332  CG    CG    . GLU GLU GLU A A 44  44  . 0.3602 0.3609 0.4006 0.0014  -0.0462
0.0062  1 .
333  CD    CD    . GLU GLU GLU A A 44  44  . 0.3784 0.3449 0.4284 -0.0147 -0.0664
0.0165  1 .
334  OE1   OE1   . GLU GLU GLU A A 44  44  . 0.4209 0.3471 0.4523 0.0275  -0.0919
0.0649  1 .
335  OE2   OE2   . GLU GLU GLU A A 44  44  . 0.2745 0.3551 0.4757 -0.0518 -0.0849
0.0263  1 .
336  C     C     . GLU GLU GLU A A 44  44  . 0.3482 0.3789 0.3808 0.0106  -0.0195
0.0081  1 .
337  O     O     . GLU GLU GLU A A 44  44  . 0.3078 0.3800 0.3885 0.0291  -0.0159
0.0071  1 .
338  N     N     . ALA ALA ALA A A 45  45  . 0.3287 0.3753 0.3689 0.0023  -0.0005
0.0114  1 .
339  CA    CA    . ALA ALA ALA A A 45  45  . 0.3178 0.3603 0.3747 0.0035  0.0032  -
0.0039 1 .
340  CB    CB    . ALA ALA ALA A A 45  45  . 0.3113 0.3461 0.3699 0.0205  0.0045  -
0.0169 1 .
341  C     C     . ALA ALA ALA A A 45  45  . 0.3090 0.3627 0.3884 0.0098  0.0030  -
0.0014 1 .
342  O     O     . ALA ALA ALA A A 45  45  . 0.2954 0.3449 0.4064 0.0299  0.0202  -
0.0133 1 .
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343  N     N     . LEU LEU LEU A A 46  46  . 0.3298 0.3709 0.3931 0.0027  -0.0009 -
0.0021 1 .
344  CA    CA    . LEU LEU LEU A A 46  46  . 0.3689 0.4084 0.4072 0.0008  -0.0091
0.0005  1 .
345  CB    CB    . LEU LEU LEU A A 46  46  . 0.3948 0.4127 0.4292 -0.0068 0.0083
0.0060  1 .
346  CG    CG    . LEU LEU LEU A A 46  46  . 0.4143 0.4571 0.4340 -0.0356 -0.0045
0.0158  1 .
347  CD1   CD1   . LEU LEU LEU A A 46  46  . 0.3386 0.4007 0.4638 -0.0757 -0.0427
0.0270  1 .
348  CD2   CD2   . LEU LEU LEU A A 46  46  . 0.3540 0.4894 0.5152 -0.0428 0.0242
0.0489  1 .
349  C     C     . LEU LEU LEU A A 46  46  . 0.3830 0.4137 0.4069 0.0007  -0.0109
0.0070  1 .
350  O     O     . LEU LEU LEU A A 46  46  . 0.3447 0.4369 0.3871 0.0031  -0.0416 -
0.0092 1 .
351  N     N     . GLU GLU GLU A A 47  47  . 0.3955 0.4009 0.4108 0.0017  -0.0138
0.0041  1 .
352  CA    CA    . GLU GLU GLU A A 47  47  . 0.4020 0.3978 0.4005 -0.0007 -0.0100 -
0.0038 1 .
353  CB    CB    . GLU GLU GLU A A 47  47  . 0.3988 0.3843 0.4089 -0.0032 -0.0016
0.0118  1 .
354  CG    CG    . GLU GLU GLU A A 47  47  . 0.3855 0.4012 0.4162 -0.0216 -0.0091 -
0.0164 1 .
355  CD    CD    . GLU GLU GLU A A 47  47  . 0.4045 0.4306 0.4702 -0.0161 0.0206
0.0041  1 .
356  OE1   OE1   . GLU GLU GLU A A 47  47  . 0.3037 0.4439 0.4556 -0.0243 -0.0324 -
0.0331 1 .
357  OE2   OE2   . GLU GLU GLU A A 47  47  . 0.3566 0.4396 0.4778 -0.0412 0.0347
0.0097  1 .
358  C     C     . GLU GLU GLU A A 47  47  . 0.3963 0.3907 0.3988 0.0050  -0.0014 -
0.0003 1 .
359  O     O     . GLU GLU GLU A A 47  47  . 0.3742 0.3858 0.3824 0.0109  0.0274
0.0000  1 .
360  N     N     . LEU LEU LEU A A 48  48  . 0.3857 0.3772 0.3824 0.0058  -0.0209 -
0.0109 1 .
361  CA    CA    . LEU LEU LEU A A 48  48  . 0.3785 0.3726 0.3950 0.0096  -0.0038 -
0.0101 1 .
362  CB    CB    . LEU LEU LEU A A 48  48  . 0.3716 0.3837 0.4158 -0.0007 -0.0063 -
0.0186 1 .
363  CG    CG    . LEU LEU LEU A A 48  48  . 0.3715 0.4034 0.4360 -0.0038 0.0017  -
0.0329 1 .
364  CD1   CD1   . LEU LEU LEU A A 48  48  . 0.4076 0.4139 0.4734 0.0198  -0.0559 -
0.0156 1 .
365  CD2   CD2   . LEU LEU LEU A A 48  48  . 0.3415 0.4144 0.3974 -0.0069 -0.0083 -
0.0332 1 .
366  C     C     . LEU LEU LEU A A 48  48  . 0.3762 0.3684 0.3864 0.0092  -0.0005 -
0.0124 1 .
367  O     O     . LEU LEU LEU A A 48  48  . 0.3229 0.3153 0.3460 0.0199  0.0075  -
0.0190 1 .
368  N     N     . ARG ARG ARG A A 49  49  . 0.3796 0.3752 0.4035 0.0187  0.0060  -
0.0082 1 .
369  CA    CA    . ARG ARG ARG A A 49  49  . 0.4183 0.4074 0.4216 0.0170  0.0057  -
0.0023 1 .
370  CB    CB    . ARG ARG ARG A A 49  49  . 0.4350 0.4153 0.4343 0.0092  0.0051  -
0.0115 1 .
371  CG    CG    . ARG ARG ARG A A 49  49  . 0.4801 0.4220 0.4305 0.0281  0.0236  -
0.0134 1 .
372  CD    CD    . ARG ARG ARG A A 49  49  . 0.4926 0.4369 0.4302 0.0323  0.0091  -
0.0008 1 .
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373  NE    NE    . ARG ARG ARG A A 49  49  . 0.5296 0.4548 0.4129 0.0536  0.0186
0.0115  1 .
374  CZ    CZ    . ARG ARG ARG A A 49  49  . 0.4508 0.4116 0.3736 0.0384  -0.0016
0.0020  1 .
375  NH1   NH1   . ARG ARG ARG A A 49  49  . 0.2811 0.3834 0.3783 0.0464  -0.0676 -
0.0435 1 .
376  NH2   NH2   . ARG ARG ARG A A 49  49  . 0.4328 0.4114 0.3543 0.0145  0.0130  -
0.0029 1 .
377  C     C     . ARG ARG ARG A A 49  49  . 0.4337 0.4208 0.4268 0.0135  -0.0037
0.0002  1 .
378  O     O     . ARG ARG ARG A A 49  49  . 0.4332 0.4425 0.4300 0.0276  -0.0151
0.0035  1 .
379  N     N     . ASP ASP ASP A A 50  50  . 0.4399 0.4386 0.4313 0.0116  0.0025
0.0103  1 .
380  CA    CA    . ASP ASP ASP A A 50  50  . 0.4372 0.4396 0.4225 0.0159  0.0043
0.0079  1 .
381  CB    CB    . ASP ASP ASP A A 50  50  . 0.3972 0.4226 0.3951 0.0194  0.0063
0.0142  1 .
382  CG    CG    . ASP ASP ASP A A 50  50  . 0.3891 0.4206 0.3794 0.0275  -0.0007
0.0442  1 .
383  OD1   OD1   . ASP ASP ASP A A 50  50  . 0.2475 0.3914 0.3259 0.0524  0.0251
0.0384  1 .
384  OD2   OD2   . ASP ASP ASP A A 50  50  . 0.2447 0.3955 0.4453 0.0702  -0.0278
0.0251  1 .
385  C     C     . ASP ASP ASP A A 50  50  . 0.4631 0.4591 0.4354 0.0182  0.0065
0.0074  1 .
386  O     O     . ASP ASP ASP A A 50  50  . 0.5000 0.4564 0.4249 0.0300  -0.0006
0.0061  1 .
387  N     N     . GLY GLY GLY A A 51  51  . 0.4762 0.4656 0.4553 0.0118  0.0072
0.0080  1 .
388  CA    CA    . GLY GLY GLY A A 51  51  . 0.5000 0.4977 0.4877 0.0161  0.0121
0.0085  1 .
389  C     C     . GLY GLY GLY A A 51  51  . 0.5104 0.5099 0.5164 0.0156  0.0150
0.0070  1 .
390  O     O     . GLY GLY GLY A A 51  51  . 0.5304 0.5275 0.5347 0.0224  0.0194
0.0117  1 .
391  N     N     . ASP ASP ASP A A 52  52  . 0.5105 0.5093 0.5215 0.0118  -0.0021
0.0077  1 .
392  CA    CA    . ASP ASP ASP A A 52  52  . 0.5260 0.5260 0.5432 0.0117  0.0061
0.0071  1 .
393  CB    CB    . ASP ASP ASP A A 52  52  . 0.5315 0.5197 0.5288 0.0152  -0.0131
0.0027  1 .
394  CG    CG    . ASP ASP ASP A A 52  52  . 0.5446 0.5598 0.5573 0.0159  -0.0064
0.0240  1 .
395  OD1   OD1   . ASP ASP ASP A A 52  52  . 0.5723 0.5119 0.5443 0.0100  -0.0662
0.0082  1 .
396  OD2   OD2   . ASP ASP ASP A A 52  52  . 0.5511 0.5816 0.5617 0.0597  0.0261
0.0535  1 .
397  C     C     . ASP ASP ASP A A 52  52  . 0.5339 0.5419 0.5649 0.0127  0.0102
0.0131  1 .
398  O     O     . ASP ASP ASP A A 52  52  . 0.5315 0.5421 0.5681 0.0212  0.0152
0.0137  1 .
399  N     N     . LYS LYS LYS A A 53  53  . 0.5471 0.5591 0.5878 0.0219  0.0206
0.0153  1 .
400  CA    CA    . LYS LYS LYS A A 53  53  . 0.5578 0.5758 0.6085 0.0118  0.0186
0.0146  1 .
401  CB    CB    . LYS LYS LYS A A 53  53  . 0.5618 0.5770 0.6228 0.0108  0.0110
0.0192  1 .
402  CG    CG    . LYS LYS LYS A A 53  53  . 0.5900 0.6294 0.6464 -0.0014 -0.0036
0.0262  1 .
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403  CD    CD    . LYS LYS LYS A A 53  53  . 0.6399 0.6629 0.7260 -0.0105 -0.0289
0.0000  1 .
404  CE    CE    . LYS LYS LYS A A 53  53  . 0.6785 0.6961 0.7731 0.0053  -0.0687
0.0293  1 .
405  NZ    NZ    . LYS LYS LYS A A 53  53  . 0.6951 0.7083 0.8301 0.0235  -0.0828 -
0.0044 1 .
406  C     C     . LYS LYS LYS A A 53  53  . 0.5590 0.5861 0.6051 0.0145  0.0229
0.0068  1 .
407  O     O     . LYS LYS LYS A A 53  53  . 0.5650 0.5983 0.6306 0.0232  0.0424
0.0193  1 .
408  N     N     . GLN GLN GLN A A 54  54  . 0.5651 0.5956 0.5923 0.0239  0.0220  -
0.0050 1 .
409  CA    CA    . GLN GLN GLN A A 54  54  . 0.5711 0.6034 0.5824 0.0272  0.0185  -
0.0032 1 .
410  CB    CB    . GLN GLN GLN A A 54  54  . 0.5873 0.6191 0.6053 0.0239  0.0205  -
0.0041 1 .
411  CG    CG    . GLN GLN GLN A A 54  54  . 0.6565 0.7004 0.6344 0.0191  0.0247
0.0213  1 .
412  CD    CD    . GLN GLN GLN A A 54  54  . 0.6900 0.7728 0.7145 0.0188  0.0311
0.0372  1 .
413  OE1   OE1   . GLN GLN GLN A A 54  54  . 0.7595 0.7859 0.7390 -0.0120 0.0457
0.0461  1 .
414  NE2   NE2   . GLN GLN GLN A A 54  54  . 0.6624 0.7632 0.7087 0.0775  0.0349
0.0166  1 .
415  C     C     . GLN GLN GLN A A 54  54  . 0.5596 0.5773 0.5537 0.0298  0.0152  -
0.0094 1 .
416  O     O     . GLN GLN GLN A A 54  54  . 0.5579 0.5755 0.5661 0.0345  0.0183  -
0.0096 1 .
417  N     N     . ARG ARG ARG A A 55  55  . 0.5134 0.5323 0.5204 0.0306  0.0212  -
0.0084 1 .
418  CA    CA    . ARG ARG ARG A A 55  55  . 0.4683 0.4924 0.4784 0.0200  0.0152  -
0.0037 1 .
419  CB    CB    . ARG ARG ARG A A 55  55  . 0.4506 0.4893 0.4748 0.0247  0.0147  -
0.0131 1 .
420  CG    CG    . ARG ARG ARG A A 55  55  . 0.4186 0.4732 0.4571 0.0053  0.0152  -
0.0094 1 .
421  CD    CD    . ARG ARG ARG A A 55  55  . 0.4145 0.4264 0.4435 0.0316  0.0124  -
0.0152 1 .
422  NE    NE    . ARG ARG ARG A A 55  55  . 0.3796 0.4354 0.4579 0.0126  0.0030  -
0.0063 1 .
423  CZ    CZ    . ARG ARG ARG A A 55  55  . 0.3056 0.3839 0.3966 0.0317  -0.0051
0.0054  1 .
424  NH1   NH1   . ARG ARG ARG A A 55  55  . 0.1722 0.4072 0.4039 0.0112  -0.0151 -
0.0108 1 .
425  NH2   NH2   . ARG ARG ARG A A 55  55  . 0.2376 0.3637 0.4082 -0.0379 -0.0411
0.0461  1 .
426  C     C     . ARG ARG ARG A A 55  55  . 0.4439 0.4680 0.4699 0.0272  0.0256  -
0.0051 1 .
427  O     O     . ARG ARG ARG A A 55  55  . 0.4315 0.4700 0.4677 0.0540  0.0172  -
0.0138 1 .
428  N     N     . TYR TYR TYR A A 56  56  . 0.4190 0.4551 0.4483 0.0180  0.0237  -
0.0014 1 .
429  CA    CA    . TYR TYR TYR A A 56  56  . 0.4210 0.4370 0.4361 0.0071  0.0106  -
0.0002 1 .
430  CB    CB    . TYR TYR TYR A A 56  56  . 0.4040 0.4192 0.4128 0.0186  0.0158  -
0.0064 1 .
431  CG    CG    . TYR TYR TYR A A 56  56  . 0.3864 0.3836 0.3698 -0.0050 -0.0013
0.0000  1 .
432  CD1   CD1   . TYR TYR TYR A A 56  56  . 0.3966 0.4022 0.3247 0.0083  -0.0516 -
0.0213 1 .
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433  CE1   CE1   . TYR TYR TYR A A 56  56  . 0.3148 0.3564 0.3305 0.0445  0.0134
0.0028  1 .
434  CZ    CZ    . TYR TYR TYR A A 56  56  . 0.3000 0.3451 0.3035 0.0385  -0.0007 -
0.0114 1 .
435  OH    OH    . TYR TYR TYR A A 56  56  . 0.3195 0.3524 0.2784 0.1307  0.0828
0.0673  1 .
436  CE2   CE2   . TYR TYR TYR A A 56  56  . 0.3059 0.3452 0.3361 0.0221  0.0306  -
0.0222 1 .
437  CD2   CD2   . TYR TYR TYR A A 56  56  . 0.4030 0.3815 0.3366 0.0194  -0.0173
0.0200  1 .
438  C     C     . TYR TYR TYR A A 56  56  . 0.4275 0.4505 0.4422 0.0091  0.0065  -
0.0015 1 .
439  O     O     . TYR TYR TYR A A 56  56  . 0.4145 0.4533 0.4443 0.0164  0.0200  -
0.0100 1 .
440  N     N     . LEU LEU LEU A A 57  57  . 0.4521 0.4714 0.4603 0.0082  0.0065  -
0.0020 1 .
441  CA    CA    . LEU LEU LEU A A 57  57  . 0.4620 0.4904 0.4940 0.0060  0.0128  -
0.0050 1 .
442  CB    CB    . LEU LEU LEU A A 57  57  . 0.4629 0.5076 0.5197 0.0055  0.0129  -
0.0062 1 .
443  CG    CG    . LEU LEU LEU A A 57  57  . 0.5110 0.5356 0.6107 0.0097  0.0204
0.0192  1 .
444  CD1   CD1   . LEU LEU LEU A A 57  57  . 0.5231 0.5687 0.7241 0.0385  0.0410
0.0014  1 .
445  CD2   CD2   . LEU LEU LEU A A 57  57  . 0.5165 0.5833 0.7052 0.0193  0.0411
0.0046  1 .
446  C     C     . LEU LEU LEU A A 57  57  . 0.4654 0.4941 0.4830 0.0083  0.0057  -
0.0090 1 .
447  O     O     . LEU LEU LEU A A 57  57  . 0.4753 0.5276 0.5104 0.0086  -0.0044 -
0.0188 1 .
448  N     N     . GLY GLY GLY A A 58  58  . 0.4680 0.4923 0.4735 0.0027  0.0159  -
0.0034 1 .
449  CA    CA    . GLY GLY GLY A A 58  58  . 0.4477 0.4704 0.4746 0.0070  0.0147
0.0058  1 .
450  C     C     . GLY GLY GLY A A 58  58  . 0.4548 0.4609 0.4629 -0.0040 0.0068
0.0079  1 .
451  O     O     . GLY GLY GLY A A 58  58  . 0.4411 0.4565 0.4786 -0.0125 0.0060
0.0128  1 .
452  N     N     . LYS LYS LYS A A 59  59  . 0.4178 0.4450 0.4524 0.0029  0.0016
0.0065  1 .
453  CA    CA    . LYS LYS LYS A A 59  59  . 0.4158 0.4438 0.4515 0.0023  -0.0081
0.0050  1 .
454  CB    CB    . LYS LYS LYS A A 59  59  . 0.4279 0.4509 0.4545 0.0013  -0.0135
0.0089  1 .
455  CG    CG    . LYS LYS LYS A A 59  59  . 0.4656 0.5089 0.5095 -0.0034 -0.0066 -
0.0002 1 .
456  CD    CD    . LYS LYS LYS A A 59  59  . 0.5608 0.5820 0.5898 -0.0211 -0.0244 -
0.0385 1 .
457  CE    CE    . LYS LYS LYS A A 59  59  . 0.5855 0.6648 0.7026 -0.0085 -0.0062 -
0.0445 1 .
458  NZ    NZ    . LYS LYS LYS A A 59  59  . 0.5802 0.7021 0.7764 0.0132  0.0011  -
0.0385 1 .
459  C     C     . LYS LYS LYS A A 59  59  . 0.4037 0.4329 0.4332 0.0020  -0.0079 -
0.0013 1 .
460  O     O     . LYS LYS LYS A A 59  59  . 0.4187 0.4657 0.4458 0.0036  -0.0186
0.0001  1 .
461  N     N     . GLY GLY GLY A A 60  60  . 0.3704 0.4070 0.4045 0.0016  -0.0093 -
0.0054 1 .
462  CA    CA    . GLY GLY GLY A A 60  60  . 0.3482 0.3835 0.3700 0.0030  -0.0120 -
0.0057 1 .
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463  C     C     . GLY GLY GLY A A 60  60  . 0.3192 0.3704 0.3617 0.0034  -0.0077 -
0.0125 1 .
464  O     O     . GLY GLY GLY A A 60  60  . 0.2992 0.3826 0.3292 0.0104  -0.0328 -
0.0265 1 .
465  N     N     . VAL VAL VAL A A 61  61  . 0.2993 0.3440 0.3464 0.0064  -0.0101 -
0.0210 1 .
466  CA    CA    . VAL VAL VAL A A 61  61  . 0.2743 0.3366 0.3230 0.0022  -0.0041 -
0.0183 1 .
467  CB    CB    . VAL VAL VAL A A 61  61  . 0.2712 0.3490 0.3129 0.0056  -0.0164 -
0.0189 1 .
468  CG1   CG1   . VAL VAL VAL A A 61  61  . 0.3340 0.3108 0.3488 -0.0435 0.0225
0.0083  1 .
469  CG2   CG2   . VAL VAL VAL A A 61  61  . 0.3258 0.2841 0.2871 0.0353  0.0174  -
0.0303 1 .
470  C     C     . VAL VAL VAL A A 61  61  . 0.3128 0.3402 0.3300 -0.0085 0.0086  -
0.0197 1 .
471  O     O     . VAL VAL VAL A A 61  61  . 0.2812 0.3328 0.2945 -0.0299 0.0009  -
0.0432 1 .
472  N     N     . LEU LEU LEU A A 62  62  . 0.3119 0.3456 0.3314 -0.0126 0.0072  -
0.0194 1 .
473  CA    CA    . LEU LEU LEU A A 62  62  . 0.3435 0.3656 0.3415 -0.0035 0.0048  -
0.0055 1 .
474  CB    CB    . LEU LEU LEU A A 62  62  . 0.3303 0.3814 0.3449 0.0111  0.0070
0.0047  1 .
475  CG    CG    . LEU LEU LEU A A 62  62  . 0.3596 0.3870 0.3604 0.0131  0.0107
0.0132  1 .
476  CD1   CD1   . LEU LEU LEU A A 62  62  . 0.4331 0.4589 0.3854 -0.0010 0.0423
0.0252  1 .
477  CD2   CD2   . LEU LEU LEU A A 62  62  . 0.3222 0.3214 0.4341 0.0113  -0.0152
0.0560  1 .
478  C     C     . LEU LEU LEU A A 62  62  . 0.3350 0.3539 0.3500 0.0007  0.0066  -
0.0038 1 .
479  O     O     . LEU LEU LEU A A 62  62  . 0.2916 0.3426 0.3670 -0.0138 -0.0085 -
0.0257 1 .
480  N     N     . LYS LYS LYS A A 63  63  . 0.3201 0.3499 0.3157 -0.0007 -0.0083 -
0.0085 1 .
481  CA    CA    . LYS LYS LYS A A 63  63  . 0.3371 0.3488 0.3418 0.0074  0.0035
0.0004  1 .
482  CB    CB    . LYS LYS LYS A A 63  63  . 0.3227 0.3491 0.3504 0.0107  0.0034  -
0.0024 1 .
483  CG    CG    . LYS LYS LYS A A 63  63  . 0.3645 0.3668 0.3670 0.0185  0.0135  -
0.0009 1 .
484  CD    CD    . LYS LYS LYS A A 63  63  . 0.3315 0.4179 0.3778 0.0308  -0.0019 -
0.0094 1 .
485  CE    CE    . LYS LYS LYS A A 63  63  . 0.4021 0.4502 0.4150 0.0450  -0.0198 -
0.0412 1 .
486  NZ    NZ    . LYS LYS LYS A A 63  63  . 0.4268 0.5529 0.4766 0.0356  -0.0034 -
0.0549 1 .
487  C     C     . LYS LYS LYS A A 63  63  . 0.3342 0.3436 0.3345 0.0083  0.0011  -
0.0005 1 .
488  O     O     . LYS LYS LYS A A 63  63  . 0.3271 0.3553 0.3314 0.0117  -0.0023
0.0148  1 .
489  N     N     . ALA ALA ALA A A 64  64  . 0.3290 0.3518 0.3226 0.0125  -0.0087
0.0050  1 .
490  CA    CA    . ALA ALA ALA A A 64  64  . 0.3094 0.3494 0.3240 0.0283  -0.0172
0.0036  1 .
491  CB    CB    . ALA ALA ALA A A 64  64  . 0.2684 0.3340 0.2896 0.0363  -0.0352 -
0.0004 1 .
492  C     C     . ALA ALA ALA A A 64  64  . 0.3115 0.3577 0.3296 0.0188  -0.0227
0.0155  1 .
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493  O     O     . ALA ALA ALA A A 64  64  . 0.3282 0.3707 0.3317 0.0365  -0.0446
0.0329  1 .
494  N     N     . VAL VAL VAL A A 65  65  . 0.3275 0.3614 0.3296 0.0194  -0.0204
0.0069  1 .
495  CA    CA    . VAL VAL VAL A A 65  65  . 0.3113 0.3437 0.3339 0.0229  -0.0160
0.0067  1 .
496  CB    CB    . VAL VAL VAL A A 65  65  . 0.2937 0.3419 0.3402 0.0180  -0.0069
0.0080  1 .
497  CG1   CG1   . VAL VAL VAL A A 65  65  . 0.3400 0.3495 0.3140 0.0468  -0.0375
0.0267  1 .
498  CG2   CG2   . VAL VAL VAL A A 65  65  . 0.2320 0.3153 0.2742 0.0309  -0.0119
0.0162  1 .
499  C     C     . VAL VAL VAL A A 65  65  . 0.3352 0.3516 0.3563 0.0128  -0.0039 -
0.0025 1 .
500  O     O     . VAL VAL VAL A A 65  65  . 0.3329 0.3676 0.3796 0.0297  0.0206  -
0.0221 1 .
501  N     N     . ASP ASP ASP A A 66  66  . 0.3353 0.3503 0.3601 0.0128  -0.0069 -
0.0031 1 .
502  CA    CA    . ASP ASP ASP A A 66  66  . 0.3612 0.3591 0.3563 0.0050  -0.0136 -
0.0025 1 .
503  CB    CB    . ASP ASP ASP A A 66  66  . 0.3634 0.3779 0.3812 0.0068  -0.0031 -
0.0039 1 .
504  CG    CG    . ASP ASP ASP A A 66  66  . 0.4234 0.4536 0.4657 0.0029  -0.0056 -
0.0351 1 .
505  OD1   OD1   . ASP ASP ASP A A 66  66  . 0.4379 0.5908 0.4681 -0.0191 -0.0161 -
0.1002 1 .
506  OD2   OD2   . ASP ASP ASP A A 66  66  . 0.4363 0.5659 0.6394 0.0224  0.0550  -
0.0686 1 .
507  C     C     . ASP ASP ASP A A 66  66  . 0.3388 0.3495 0.3400 -0.0023 -0.0181
0.0006  1 .
508  O     O     . ASP ASP ASP A A 66  66  . 0.3230 0.3561 0.3208 0.0090  -0.0393
0.0028  1 .
509  N     N     . HIS HIS HIS A A 67  67  . 0.3164 0.3267 0.3194 -0.0009 -0.0252
0.0056  1 .
510  CA    CA    . HIS HIS HIS A A 67  67  . 0.3077 0.3227 0.3168 -0.0089 -0.0226
0.0008  1 .
511  CB    CB    . HIS HIS HIS A A 67  67  . 0.3005 0.3169 0.3002 -0.0021 -0.0269
0.0146  1 .
512  CG    CG    . HIS HIS HIS A A 67  67  . 0.2773 0.3087 0.2913 -0.0040 -0.0255
0.0157  1 .
513  ND1   ND1   . HIS HIS HIS A A 67  67  . 0.2956 0.3727 0.3642 -0.0531 -0.0275 -
0.0173 1 .
514  CE1   CE1   . HIS HIS HIS A A 67  67  . 0.3484 0.3854 0.3731 -0.0291 -0.0114 -
0.0069 1 .
515  NE2   NE2   . HIS HIS HIS A A 67  67  . 0.2895 0.3802 0.3776 -0.0232 -0.0426 -
0.0107 1 .
516  CD2   CD2   . HIS HIS HIS A A 67  67  . 0.3181 0.3239 0.3468 -0.0105 -0.0110
0.0360  1 .
517  C     C     . HIS HIS HIS A A 67  67  . 0.3058 0.3116 0.3143 -0.0061 -0.0236
0.0031  1 .
518  O     O     . HIS HIS HIS A A 67  67  . 0.3115 0.3402 0.3388 -0.0151 -0.0410
0.0012  1 .
519  N     N     . ILE ILE ILE A A 68  68  . 0.3137 0.3249 0.3205 -0.0013 -0.0191
0.0012  1 .
520  CA    CA    . ILE ILE ILE A A 68  68  . 0.3060 0.3060 0.3139 -0.0017 -0.0008 -
0.0022 1 .
521  CB    CB    . ILE ILE ILE A A 68  68  . 0.3087 0.3169 0.3154 0.0042  -0.0001
0.0049  1 .
522  CG1   CG1   . ILE ILE ILE A A 68  68  . 0.2608 0.3022 0.3295 -0.0045 -0.0161
0.0009  1 .
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523  CD1   CD1   . ILE ILE ILE A A 68  68  . 0.2526 0.2959 0.2833 0.0354  -0.0276
0.0130  1 .
524  CG2   CG2   . ILE ILE ILE A A 68  68  . 0.2202 0.2393 0.2716 0.0077  -0.0032 -
0.0089 1 .
525  C     C     . ILE ILE ILE A A 68  68  . 0.3158 0.3205 0.3214 -0.0019 -0.0026 -
0.0034 1 .
526  O     O     . ILE ILE ILE A A 68  68  . 0.3617 0.3069 0.3344 -0.0078 -0.0096 -
0.0192 1 .
527  N     N     . ASN ASN ASN A A 69  69  . 0.3175 0.3353 0.3392 -0.0015 -0.0007
0.0065  1 .
528  CA    CA    . ASN ASN ASN A A 69  69  . 0.3572 0.3465 0.3542 -0.0106 -0.0056
0.0073  1 .
529  CB    CB    . ASN ASN ASN A A 69  69  . 0.3480 0.3517 0.3637 0.0027  -0.0008
0.0122  1 .
530  CG    CG    . ASN ASN ASN A A 69  69  . 0.3693 0.3456 0.3861 -0.0024 0.0071  -
0.0055 1 .
531  OD1   OD1   . ASN ASN ASN A A 69  69  . 0.3810 0.3892 0.4511 -0.0033 0.0157  -
0.0054 1 .
532  ND2   ND2   . ASN ASN ASN A A 69  69  . 0.2635 0.3909 0.4351 0.0281  0.0188
0.0000  1 .
533  C     C     . ASN ASN ASN A A 69  69  . 0.3540 0.3621 0.3590 -0.0093 -0.0049
0.0051  1 .
534  O     O     . ASN ASN ASN A A 69  69  . 0.3203 0.3604 0.3584 -0.0295 -0.0132
0.0097  1 .
535  N     N     . SER SER SER A A 70  70  . 0.3491 0.3581 0.3627 0.0066  -0.0028
0.0035  1 .
536  CA    CA    . SER SER SER A A 70  70  . 0.3505 0.3668 0.3858 0.0022  -0.0039 -
0.0006 1 .
537  CB    CB    . SER SER SER A A 70  70  . 0.3871 0.3735 0.3773 0.0044  0.0048
0.0007  1 .
538  OG    OG    . SER SER SER A A 70  70  . 0.3212 0.4353 0.4553 0.0261  -0.0405 -
0.0215 1 .
539  C     C     . SER SER SER A A 70  70  . 0.3530 0.3590 0.3818 -0.0038 -0.0005 -
0.0047 1 .
540  O     O     . SER SER SER A A 70  70  . 0.3754 0.3544 0.4260 0.0010  0.0003  -
0.0014 1 .
541  N     N     . THR THR THR A A 71  71  . 0.3336 0.3435 0.3711 -0.0049 -0.0073 -
0.0100 1 .
542  CA    CA    . THR THR THR A A 71  71  . 0.3085 0.3386 0.3515 -0.0046 -0.0034 -
0.0014 1 .
543  CB    CB    . THR THR THR A A 71  71  . 0.3085 0.3555 0.3433 -0.0019 -0.0073 -
0.0033 1 .
544  OG1   OG1   . THR THR THR A A 71  71  . 0.1970 0.3623 0.3253 -0.0244 -0.0034
0.0106  1 .
545  CG2   CG2   . THR THR THR A A 71  71  . 0.2512 0.3345 0.3005 -0.0141 -0.0183 -
0.0066 1 .
546  C     C     . THR THR THR A A 71  71  . 0.3262 0.3411 0.3675 -0.0012 0.0000
0.0000  1 .
547  O     O     . THR THR THR A A 71  71  . 0.3473 0.3400 0.3838 -0.0113 -0.0063
0.0031  1 .
548  N     N     . ILE ILE ILE A A 72  72  . 0.3227 0.3585 0.3640 -0.0053 -0.0036 -
0.0054 1 .
549  CA    CA    . ILE ILE ILE A A 72  72  . 0.3195 0.3532 0.3659 -0.0045 0.0038  -
0.0060 1 .
550  CB    CB    . ILE ILE ILE A A 72  72  . 0.3037 0.3397 0.3681 -0.0036 -0.0040 -
0.0044 1 .
551  CG1   CG1   . ILE ILE ILE A A 72  72  . 0.3140 0.3594 0.4205 -0.0240 -0.0232 -
0.0001 1 .
552  CD1   CD1   . ILE ILE ILE A A 72  72  . 0.2227 0.3869 0.4513 -0.0148 -0.0697
0.0063  1 .
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553  CG2   CG2   . ILE ILE ILE A A 72  72  . 0.3350 0.2772 0.3278 -0.0290 0.0211
0.0131  1 .
554  C     C     . ILE ILE ILE A A 72  72  . 0.3270 0.3660 0.3678 0.0000  0.0048  -
0.0069 1 .
555  O     O     . ILE ILE ILE A A 72  72  . 0.3420 0.3981 0.3973 -0.0030 0.0267  -
0.0074 1 .
556  N     N     . ALA ALA ALA A A 73  73  . 0.3193 0.3308 0.3485 0.0050  -0.0015 -
0.0048 1 .
557  CA    CA    . ALA ALA ALA A A 73  73  . 0.3475 0.3422 0.3645 -0.0100 -0.0022 -
0.0082 1 .
558  CB    CB    . ALA ALA ALA A A 73  73  . 0.3308 0.3044 0.3573 -0.0028 -0.0064 -
0.0044 1 .
559  C     C     . ALA ALA ALA A A 73  73  . 0.3668 0.3505 0.3739 -0.0081 0.0104
0.0038  1 .
560  O     O     . ALA ALA ALA A A 73  73  . 0.3770 0.3642 0.3822 -0.0092 0.0167  -
0.0079 1 .
561  N     N     . PRO PRO PRO A A 74  74  . 0.3783 0.3488 0.3795 -0.0111 0.0090  -
0.0008 1 .
562  CA    CA    . PRO PRO PRO A A 74  74  . 0.3874 0.3636 0.3888 -0.0179 0.0087
0.0024  1 .
563  CB    CB    . PRO PRO PRO A A 74  74  . 0.3710 0.3259 0.3767 -0.0111 0.0088
0.0050  1 .
564  CG    CG    . PRO PRO PRO A A 74  74  . 0.3829 0.3332 0.3904 -0.0154 0.0075
0.0000  1 .
565  CD    CD    . PRO PRO PRO A A 74  74  . 0.3769 0.3534 0.3853 -0.0220 0.0193
0.0083  1 .
566  C     C     . PRO PRO PRO A A 74  74  . 0.3955 0.3797 0.3995 -0.0158 0.0089  -
0.0020 1 .
567  O     O     . PRO PRO PRO A A 74  74  . 0.4159 0.3933 0.4233 -0.0240 0.0243  -
0.0116 1 .
568  N     N     . ALA ALA ALA A A 75  75  . 0.3890 0.3836 0.3993 -0.0111 -0.0004 -
0.0001 1 .
569  CA    CA    . ALA ALA ALA A A 75  75  . 0.4093 0.3920 0.4116 -0.0107 0.0036  -
0.0036 1 .
570  CB    CB    . ALA ALA ALA A A 75  75  . 0.4174 0.3857 0.4115 -0.0072 -0.0054
0.0015  1 .
571  C     C     . ALA ALA ALA A A 75  75  . 0.4157 0.4089 0.4183 -0.0148 0.0068
0.0049  1 .
572  O     O     . ALA ALA ALA A A 75  75  . 0.4523 0.4099 0.4122 -0.0277 0.0085
0.0072  1 .
573  N     N     . LEU LEU LEU A A 76  76  . 0.4090 0.4020 0.4181 -0.0056 0.0077
0.0065  1 .
574  CA    CA    . LEU LEU LEU A A 76  76  . 0.4162 0.4194 0.4193 -0.0049 0.0082
0.0061  1 .
575  CB    CB    . LEU LEU LEU A A 76  76  . 0.4105 0.4086 0.4022 -0.0115 0.0050
0.0006  1 .
576  CG    CG    . LEU LEU LEU A A 76  76  . 0.3964 0.3937 0.3855 -0.0008 0.0291
0.0024  1 .
577  CD1   CD1   . LEU LEU LEU A A 76  76  . 0.3941 0.3718 0.3751 0.0033  0.0544
0.0012  1 .
578  CD2   CD2   . LEU LEU LEU A A 76  76  . 0.3414 0.3558 0.3804 -0.0132 -0.0042 -
0.0219 1 .
579  C     C     . LEU LEU LEU A A 76  76  . 0.4204 0.4347 0.4330 -0.0104 0.0070
0.0041  1 .
580  O     O     . LEU LEU LEU A A 76  76  . 0.4204 0.4307 0.4411 -0.0123 0.0223
0.0106  1 .
581  N     N     . ILE ILE ILE A A 77  77  . 0.4382 0.4466 0.4484 -0.0092 0.0036
0.0044  1 .
582  CA    CA    . ILE ILE ILE A A 77  77  . 0.4452 0.4582 0.4683 -0.0075 0.0065
0.0137  1 .
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583  CB    CB    . ILE ILE ILE A A 77  77  . 0.4364 0.4413 0.4700 -0.0105 0.0008
0.0199  1 .
584  CG1   CG1   . ILE ILE ILE A A 77  77  . 0.4026 0.4523 0.4744 -0.0157 0.0151
0.0303  1 .
585  CD1   CD1   . ILE ILE ILE A A 77  77  . 0.4046 0.4373 0.4389 -0.0917 0.0724
0.0272  1 .
586  CG2   CG2   . ILE ILE ILE A A 77  77  . 0.4174 0.4007 0.4839 0.0008  -0.0123
0.0490  1 .
587  C     C     . ILE ILE ILE A A 77  77  . 0.4676 0.4629 0.4813 -0.0041 0.0092
0.0109  1 .
588  O     O     . ILE ILE ILE A A 77  77  . 0.4675 0.4721 0.4821 0.0029  0.0134
0.0132  1 .
589  N     N     . SER SER SER A A 78  78  . 0.4812 0.4767 0.4823 0.0026  0.0164
0.0018  1 .
590  CA    CA    . SER SER SER A A 78  78  . 0.4888 0.4815 0.4817 -0.0042 0.0147
0.0004  1 .
591  CB    CB    . SER SER SER A A 78  78  . 0.4989 0.4748 0.4844 -0.0036 0.0103
0.0012  1 .
592  OG    OG    . SER SER SER A A 78  78  . 0.4616 0.4324 0.5137 -0.0053 0.0224
0.0042  1 .
593  C     C     . SER SER SER A A 78  78  . 0.4978 0.4960 0.4840 -0.0110 0.0106  -
0.0004 1 .
594  O     O     . SER SER SER A A 78  78  . 0.5153 0.5055 0.4914 -0.0270 0.0126
0.0017  1 .
595  N     N     . SER SER SER A A 79  79  . 0.4985 0.4959 0.4746 -0.0160 0.0027  -
0.0117 1 .
596  CA    CA    . SER SER SER A A 79  79  . 0.4964 0.4977 0.4762 -0.0150 0.0088  -
0.0061 1 .
597  CB    CB    . SER SER SER A A 79  79  . 0.4902 0.4854 0.4673 -0.0132 0.0106  -
0.0107 1 .
598  OG    OG    . SER SER SER A A 79  79  . 0.4866 0.4861 0.4489 -0.0373 0.0503  -
0.0122 1 .
599  C     C     . SER SER SER A A 79  79  . 0.4960 0.5016 0.4734 -0.0109 0.0034  -
0.0052 1 .
600  O     O     . SER SER SER A A 79  79  . 0.5089 0.5129 0.4728 -0.0225 0.0024
0.0037  1 .
601  N     N     . GLY GLY GLY A A 80  80  . 0.5053 0.4929 0.4695 -0.0048 0.0042  -
0.0040 1 .
602  CA    CA    . GLY GLY GLY A A 80  80  . 0.4907 0.4903 0.4776 -0.0069 0.0075  -
0.0080 1 .
603  C     C     . GLY GLY GLY A A 80  80  . 0.4863 0.5002 0.4870 0.0024  0.0098  -
0.0027 1 .
604  O     O     . GLY GLY GLY A A 80  80  . 0.4727 0.5146 0.4974 -0.0019 0.0128
0.0002  1 .
605  N     N     . LEU LEU LEU A A 81  81  . 0.4836 0.4946 0.4849 -0.0001 0.0061  -
0.0032 1 .
606  CA    CA    . LEU LEU LEU A A 81  81  . 0.4817 0.4840 0.4895 0.0068  0.0118  -
0.0011 1 .
607  CB    CB    . LEU LEU LEU A A 81  81  . 0.4757 0.4860 0.4817 0.0124  0.0137
0.0052  1 .
608  CG    CG    . LEU LEU LEU A A 81  81  . 0.4918 0.4878 0.4923 -0.0025 0.0234
0.0209  1 .
609  CD1   CD1   . LEU LEU LEU A A 81  81  . 0.4572 0.4070 0.4772 -0.0257 0.0037
0.0479  1 .
610  CD2   CD2   . LEU LEU LEU A A 81  81  . 0.5028 0.4760 0.5040 -0.0392 0.0736
0.0162  1 .
611  C     C     . LEU LEU LEU A A 81  81  . 0.4841 0.4849 0.4880 0.0084  0.0149
0.0009  1 .
612  O     O     . LEU LEU LEU A A 81  81  . 0.4884 0.4768 0.4952 0.0129  0.0231  -
0.0073 1 .
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613  N     N     . SER SER SER A A 82  82  . 0.4669 0.4701 0.4807 0.0093  0.0259  -
0.0001 1 .
614  CA    CA    . SER SER SER A A 82  82  . 0.4591 0.4701 0.4845 0.0009  0.0275
0.0079  1 .
615  CB    CB    . SER SER SER A A 82  82  . 0.4737 0.4709 0.4902 0.0096  0.0336
0.0019  1 .
616  OG    OG    . SER SER SER A A 82  82  . 0.4846 0.4894 0.5416 -0.0019 0.0487
0.0355  1 .
617  C     C     . SER SER SER A A 82  82  . 0.4551 0.4585 0.4643 -0.0026 0.0163
0.0009  1 .
618  O     O     . SER SER SER A A 82  82  . 0.4161 0.4467 0.4588 -0.0048 0.0123  -
0.0054 1 .
619  N     N     . VAL VAL VAL A A 83  83  . 0.4492 0.4404 0.4659 -0.0075 0.0256  -
0.0034 1 .
620  CA    CA    . VAL VAL VAL A A 83  83  . 0.4227 0.4506 0.4387 -0.0073 0.0282
0.0050  1 .
621  CB    CB    . VAL VAL VAL A A 83  83  . 0.4271 0.4258 0.4384 0.0005  0.0287
0.0073  1 .
622  CG1   CG1   . VAL VAL VAL A A 83  83  . 0.4173 0.4623 0.4456 -0.0024 0.0104
0.0041  1 .
623  CG2   CG2   . VAL VAL VAL A A 83  83  . 0.3444 0.4125 0.3861 -0.0311 0.0417
0.0215  1 .
624  C     C     . VAL VAL VAL A A 83  83  . 0.4200 0.4562 0.4444 -0.0161 0.0213
0.0094  1 .
625  O     O     . VAL VAL VAL A A 83  83  . 0.4153 0.4796 0.4460 -0.0383 0.0562
0.0416  1 .
626  N     N     . VAL VAL VAL A A 84  84  . 0.4024 0.4442 0.4268 -0.0142 0.0270
0.0025  1 .
627  CA    CA    . VAL VAL VAL A A 84  84  . 0.3951 0.4376 0.4188 -0.0107 0.0282  -
0.0007 1 .
628  CB    CB    . VAL VAL VAL A A 84  84  . 0.4092 0.4335 0.4204 -0.0071 0.0343  -
0.0016 1 .
629  CG1   CG1   . VAL VAL VAL A A 84  84  . 0.3528 0.4038 0.3692 0.0251  0.0643  -
0.0313 1 .
630  CG2   CG2   . VAL VAL VAL A A 84  84  . 0.3509 0.4285 0.3705 -0.0179 0.0528  -
0.0019 1 .
631  C     C     . VAL VAL VAL A A 84  84  . 0.4226 0.4333 0.4260 -0.0156 0.0212
0.0066  1 .
632  O     O     . VAL VAL VAL A A 84  84  . 0.4126 0.4368 0.4257 -0.0324 0.0077
0.0088  1 .
633  N     N     . GLU GLU GLU A A 85  85  . 0.4321 0.4513 0.4381 -0.0154 0.0219  -
0.0020 1 .
634  CA    CA    . GLU GLU GLU A A 85  85  . 0.4191 0.4575 0.4577 -0.0098 0.0216
0.0007  1 .
635  CB    CB    . GLU GLU GLU A A 85  85  . 0.4346 0.4647 0.4703 -0.0182 0.0248  -
0.0078 1 .
636  CG    CG    . GLU GLU GLU A A 85  85  . 0.4701 0.5131 0.4982 -0.0010 0.0510  -
0.0100 1 .
637  CD    CD    . GLU GLU GLU A A 85  85  . 0.5480 0.5769 0.5367 0.0108  0.0470
0.0096  1 .
638  OE1   OE1   . GLU GLU GLU A A 85  85  . 0.5399 0.5120 0.5161 0.0178  0.0224
0.0242  1 .
639  OE2   OE2   . GLU GLU GLU A A 85  85  . 0.5721 0.6560 0.6101 0.0392  0.0972  -
0.0014 1 .
640  C     C     . GLU GLU GLU A A 85  85  . 0.4198 0.4500 0.4576 -0.0123 0.0250  -
0.0006 1 .
641  O     O     . GLU GLU GLU A A 85  85  . 0.3700 0.4702 0.4649 -0.0101 0.0437  -
0.0018 1 .
642  N     N     . GLN GLN GLN A A 86  86  . 0.4074 0.4400 0.4439 -0.0223 0.0145
0.0024  1 .
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643  CA    CA    . GLN GLN GLN A A 86  86  . 0.4302 0.4323 0.4347 -0.0189 0.0145
0.0021  1 .
644  CB    CB    . GLN GLN GLN A A 86  86  . 0.4286 0.4230 0.4267 -0.0235 0.0246
0.0011  1 .
645  CG    CG    . GLN GLN GLN A A 86  86  . 0.4501 0.3921 0.3901 -0.0213 0.0248
0.0046  1 .
646  CD    CD    . GLN GLN GLN A A 86  86  . 0.3904 0.3536 0.3771 -0.0079 0.0121
0.0163  1 .
647  OE1   OE1   . GLN GLN GLN A A 86  86  . 0.3812 0.3415 0.3597 -0.0217 0.0230
0.0127  1 .
648  NE2   NE2   . GLN GLN GLN A A 86  86  . 0.4313 0.3577 0.2884 -0.0245 0.0344
0.0929  1 .
649  C     C     . GLN GLN GLN A A 86  86  . 0.4278 0.4348 0.4416 -0.0194 0.0150
0.0013  1 .
650  O     O     . GLN GLN GLN A A 86  86  . 0.4547 0.4291 0.4290 -0.0358 0.0199
0.0066  1 .
651  N     N     . GLU GLU GLU A A 87  87  . 0.4337 0.4576 0.4416 -0.0109 0.0104  -
0.0052 1 .
652  CA    CA    . GLU GLU GLU A A 87  87  . 0.4548 0.4670 0.4670 -0.0063 0.0068
0.0045  1 .
653  CB    CB    . GLU GLU GLU A A 87  87  . 0.4527 0.4702 0.4583 -0.0084 0.0064
0.0059  1 .
654  CG    CG    . GLU GLU GLU A A 87  87  . 0.4927 0.5087 0.5157 0.0127  0.0079
0.0084  1 .
655  CD    CD    . GLU GLU GLU A A 87  87  . 0.5566 0.6269 0.5646 0.0511  0.0049  -
0.0137 1 .
656  OE1   OE1   . GLU GLU GLU A A 87  87  . 0.5588 0.7136 0.6318 0.0974  0.0215  -
0.0204 1 .
657  OE2   OE2   . GLU GLU GLU A A 87  87  . 0.5285 0.6247 0.6047 0.0749  0.0038  -
0.0207 1 .
658  C     C     . GLU GLU GLU A A 87  87  . 0.4558 0.4734 0.4696 -0.0098 0.0065
0.0072  1 .
659  O     O     . GLU GLU GLU A A 87  87  . 0.4364 0.5001 0.4911 -0.0077 0.0046
0.0140  1 .
660  N     N     . LYS LYS LYS A A 88  88  . 0.4563 0.4743 0.4688 -0.0137 0.0051
0.0082  1 .
661  CA    CA    . LYS LYS LYS A A 88  88  . 0.4627 0.4512 0.4530 -0.0063 0.0142  -
0.0021 1 .
662  CB    CB    . LYS LYS LYS A A 88  88  . 0.4612 0.4530 0.4660 -0.0100 0.0109  -
0.0104 1 .
663  CG    CG    . LYS LYS LYS A A 88  88  . 0.5421 0.4935 0.5021 -0.0125 0.0161  -
0.0008 1 .
664  CD    CD    . LYS LYS LYS A A 88  88  . 0.6081 0.5593 0.5737 -0.0173 0.0128  -
0.0115 1 .
665  CE    CE    . LYS LYS LYS A A 88  88  . 0.7241 0.5794 0.5896 -0.0254 -0.0003
0.0059  1 .
666  NZ    NZ    . LYS LYS LYS A A 88  88  . 0.7662 0.6376 0.6070 -0.0257 -0.0406
0.0250  1 .
667  C     C     . LYS LYS LYS A A 88  88  . 0.4465 0.4449 0.4429 0.0001  0.0134
0.0069  1 .
668  O     O     . LYS LYS LYS A A 88  88  . 0.4604 0.4563 0.4267 0.0045  0.0175
0.0208  1 .
669  N     N     . LEU LEU LEU A A 89  89  . 0.4211 0.4239 0.4281 0.0041  0.0185  -
0.0005 1 .
670  CA    CA    . LEU LEU LEU A A 89  89  . 0.4037 0.4073 0.4151 -0.0024 0.0219
0.0118  1 .
671  CB    CB    . LEU LEU LEU A A 89  89  . 0.3848 0.4051 0.3913 -0.0124 0.0245
0.0064  1 .
672  CG    CG    . LEU LEU LEU A A 89  89  . 0.4000 0.3677 0.3992 -0.0071 0.0059  -
0.0160 1 .
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673  CD1   CD1   . LEU LEU LEU A A 89  89  . 0.2896 0.3264 0.3721 -0.0259 -0.0063 -
0.0675 1 .
674  CD2   CD2   . LEU LEU LEU A A 89  89  . 0.3713 0.3350 0.3593 0.0196  0.0208
0.0042  1 .
675  C     C     . LEU LEU LEU A A 89  89  . 0.4244 0.4144 0.4150 -0.0069 0.0280
0.0166  1 .
676  O     O     . LEU LEU LEU A A 89  89  . 0.4135 0.4107 0.4399 0.0032  0.0383
0.0249  1 .
677  N     N     . ASP ASP ASP A A 90  90  . 0.4297 0.4210 0.3928 -0.0127 0.0188
0.0157  1 .
678  CA    CA    . ASP ASP ASP A A 90  90  . 0.4684 0.4324 0.4122 -0.0095 0.0165
0.0162  1 .
679  CB    CB    . ASP ASP ASP A A 90  90  . 0.4865 0.4273 0.4073 -0.0192 0.0145
0.0139  1 .
680  CG    CG    . ASP ASP ASP A A 90  90  . 0.5319 0.4567 0.4325 -0.0249 0.0083
0.0123  1 .
681  OD1   OD1   . ASP ASP ASP A A 90  90  . 0.5706 0.4670 0.4191 -0.0562 0.0200
0.0517  1 .
682  OD2   OD2   . ASP ASP ASP A A 90  90  . 0.6269 0.4407 0.4370 -0.0704 0.0138
0.0067  1 .
683  C     C     . ASP ASP ASP A A 90  90  . 0.4746 0.4184 0.4250 -0.0051 0.0239
0.0139  1 .
684  O     O     . ASP ASP ASP A A 90  90  . 0.4978 0.4157 0.4342 -0.0118 0.0353
0.0281  1 .
685  N     N     . ASN ASN ASN A A 91  91  . 0.4896 0.4306 0.4254 0.0034  0.0194
0.0111  1 .
686  CA    CA    . ASN ASN ASN A A 91  91  . 0.4715 0.4253 0.4376 0.0028  0.0151
0.0145  1 .
687  CB    CB    . ASN ASN ASN A A 91  91  . 0.4929 0.4361 0.4406 -0.0032 0.0221
0.0105  1 .
688  CG    CG    . ASN ASN ASN A A 91  91  . 0.5059 0.4679 0.4765 -0.0253 0.0167
0.0035  1 .
689  OD1   OD1   . ASN ASN ASN A A 91  91  . 0.5484 0.5104 0.5079 -0.0815 -0.0105
0.0013  1 .
690  ND2   ND2   . ASN ASN ASN A A 91  91  . 0.5750 0.4811 0.5050 -0.0260 0.0647  -
0.0003 1 .
691  C     C     . ASN ASN ASN A A 91  91  . 0.4530 0.4119 0.4371 0.0039  0.0083
0.0275  1 .
692  O     O     . ASN ASN ASN A A 91  91  . 0.4279 0.3992 0.4593 0.0078  0.0075
0.0382  1 .
693  N     N     . LEU LEU LEU A A 92  92  . 0.4219 0.3965 0.4425 -0.0023 0.0029
0.0302  1 .
694  CA    CA    . LEU LEU LEU A A 92  92  . 0.4298 0.4148 0.4597 0.0053  -0.0031
0.0227  1 .
695  CB    CB    . LEU LEU LEU A A 92  92  . 0.4238 0.4097 0.4778 0.0091  -0.0135
0.0250  1 .
696  CG    CG    . LEU LEU LEU A A 92  92  . 0.4289 0.4475 0.4977 0.0158  -0.0361
0.0269  1 .
697  CD1   CD1   . LEU LEU LEU A A 92  92  . 0.4330 0.4803 0.4873 -0.0109 -0.0369
0.0494  1 .
698  CD2   CD2   . LEU LEU LEU A A 92  92  . 0.4109 0.4634 0.5016 0.0292  0.0290  -
0.0035 1 .
699  C     C     . LEU LEU LEU A A 92  92  . 0.4347 0.4144 0.4494 0.0069  0.0024
0.0163  1 .
700  O     O     . LEU LEU LEU A A 92  92  . 0.4480 0.4195 0.4495 0.0039  0.0011
0.0170  1 .
701  N     N     . MET MET MET A A 93  93  . 0.4315 0.4136 0.4461 0.0074  0.0034
0.0083  1 .
702  CA    CA    . MET MET MET A A 93  93  . 0.4229 0.4122 0.4179 0.0055  0.0010
0.0015  1 .
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703  CB    CB    . MET MET MET A A 93  93  . 0.4205 0.4183 0.4128 0.0086  0.0035  -
0.0033 1 .
704  CG    CG    . MET MET MET A A 93  93  . 0.4694 0.4052 0.4232 0.0041  -0.0045
0.0063  1 .
705  SD    SD    . MET MET MET A A 93  93  . 0.4597 0.4018 0.4124 -0.0352 0.0006
0.0447  1 .
706  CE    CE    . MET MET MET A A 93  93  . 0.4964 0.3195 0.3902 -0.0579 0.0594
0.0769  1 .
707  C     C     . MET MET MET A A 93  93  . 0.4253 0.4155 0.4160 0.0056  -0.0032 -
0.0022 1 .
708  O     O     . MET MET MET A A 93  93  . 0.3948 0.4090 0.4127 -0.0005 -0.0139
0.0042  1 .
709  N     N     . LEU LEU LEU A A 94  94  . 0.4365 0.4365 0.4128 0.0094  -0.0005
0.0028  1 .
710  CA    CA    . LEU LEU LEU A A 94  94  . 0.4338 0.4417 0.4236 0.0061  0.0054  -
0.0051 1 .
711  CB    CB    . LEU LEU LEU A A 94  94  . 0.4558 0.4536 0.4420 0.0081  0.0038  -
0.0096 1 .
712  CG    CG    . LEU LEU LEU A A 94  94  . 0.4959 0.4469 0.4604 0.0087  0.0087  -
0.0129 1 .
713  CD1   CD1   . LEU LEU LEU A A 94  94  . 0.5014 0.4840 0.5060 -0.0039 -0.0121 -
0.0065 1 .
714  CD2   CD2   . LEU LEU LEU A A 94  94  . 0.4572 0.4553 0.4615 -0.0292 0.0222  -
0.0510 1 .
715  C     C     . LEU LEU LEU A A 94  94  . 0.4336 0.4349 0.4191 0.0053  0.0030
0.0018  1 .
716  O     O     . LEU LEU LEU A A 94  94  . 0.4062 0.4412 0.3983 0.0025  0.0036
0.0141  1 .
717  N     N     . GLU GLU GLU A A 95  95  . 0.4284 0.4392 0.4223 -0.0025 0.0147  -
0.0005 1 .
718  CA    CA    . GLU GLU GLU A A 95  95  . 0.4568 0.4508 0.4452 0.0073  0.0087  -
0.0104 1 .
719  CB    CB    . GLU GLU GLU A A 95  95  . 0.5027 0.4480 0.4614 -0.0001 0.0050
0.0042  1 .
720  CG    CG    . GLU GLU GLU A A 95  95  . 0.6121 0.5416 0.5171 0.0216  -0.0019 -
0.0431 1 .
721  CD    CD    . GLU GLU GLU A A 95  95  . 0.6861 0.6172 0.6082 0.0653  -0.0218 -
0.0689 1 .
722  OE1   OE1   . GLU GLU GLU A A 95  95  . 0.7583 0.6494 0.6121 0.0848  0.0465  -
0.1215 1 .
723  OE2   OE2   . GLU GLU GLU A A 95  95  . 0.8010 0.6481 0.6251 0.0573  -0.0118 -
0.1012 1 .
724  C     C     . GLU GLU GLU A A 95  95  . 0.4435 0.4370 0.4397 0.0083  0.0006  -
0.0102 1 .
725  O     O     . GLU GLU GLU A A 95  95  . 0.4238 0.4253 0.4346 0.0275  0.0049  -
0.0181 1 .
726  N     N     . LEU LEU LEU A A 96  96  . 0.4199 0.4250 0.4300 0.0006  -0.0010 -
0.0083 1 .
727  CA    CA    . LEU LEU LEU A A 96  96  . 0.4085 0.4174 0.4169 -0.0016 0.0029
0.0003  1 .
728  CB    CB    . LEU LEU LEU A A 96  96  . 0.4031 0.3946 0.4058 -0.0113 0.0040
0.0011  1 .
729  CG    CG    . LEU LEU LEU A A 96  96  . 0.4295 0.4032 0.4070 0.0005  -0.0021 -
0.0013 1 .
730  CD1   CD1   . LEU LEU LEU A A 96  96  . 0.4371 0.4029 0.3844 -0.0037 0.0241  -
0.0354 1 .
731  CD2   CD2   . LEU LEU LEU A A 96  96  . 0.3796 0.4331 0.3810 -0.0165 0.0253  -
0.0374 1 .
732  C     C     . LEU LEU LEU A A 96  96  . 0.4089 0.4211 0.4286 0.0042  -0.0027
0.0008  1 .
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733  O     O     . LEU LEU LEU A A 96  96  . 0.3772 0.4223 0.4157 0.0150  0.0044  -
0.0007 1 .
734  N     N     . ASP ASP ASP A A 97  97  . 0.4088 0.4252 0.4386 -0.0015 -0.0083
0.0001  1 .
735  CA    CA    . ASP ASP ASP A A 97  97  . 0.4253 0.4416 0.4470 0.0068  -0.0022
0.0066  1 .
736  CB    CB    . ASP ASP ASP A A 97  97  . 0.4168 0.4404 0.4523 -0.0063 -0.0070
0.0037  1 .
737  CG    CG    . ASP ASP ASP A A 97  97  . 0.4416 0.4693 0.4740 -0.0164 -0.0091
0.0126  1 .
738  OD1   OD1   . ASP ASP ASP A A 97  97  . 0.4679 0.5079 0.5107 -0.0355 -0.0224
0.0228  1 .
739  OD2   OD2   . ASP ASP ASP A A 97  97  . 0.4611 0.4501 0.4482 -0.0559 -0.0270
0.0259  1 .
740  C     C     . ASP ASP ASP A A 97  97  . 0.4316 0.4437 0.4527 0.0138  -0.0030
0.0092  1 .
741  O     O     . ASP ASP ASP A A 97  97  . 0.4631 0.4235 0.4410 0.0305  -0.0016
0.0092  1 .
742  N     N     . GLY GLY GLY A A 98  98  . 0.4291 0.4506 0.4455 0.0138  -0.0024
0.0096  1 .
743  CA    CA    . GLY GLY GLY A A 98  98  . 0.4322 0.4704 0.4699 0.0118  -0.0123
0.0108  1 .
744  C     C     . GLY GLY GLY A A 98  98  . 0.4548 0.4793 0.4838 0.0053  -0.0217
0.0108  1 .
745  O     O     . GLY GLY GLY A A 98  98  . 0.4430 0.4806 0.5016 0.0004  -0.0305
0.0078  1 .
746  N     N     . THR THR THR A A 99  99  . 0.4677 0.4662 0.4804 0.0054  -0.0226
0.0117  1 .
747  CA    CA    . THR THR THR A A 99  99  . 0.4911 0.4752 0.4858 0.0110  -0.0150
0.0066  1 .
748  CB    CB    . THR THR THR A A 99  99  . 0.5022 0.4711 0.5025 0.0172  -0.0136
0.0031  1 .
749  OG1   OG1   . THR THR THR A A 99  99  . 0.5155 0.4449 0.5112 0.0435  -0.0269 -
0.0004 1 .
750  CG2   CG2   . THR THR THR A A 99  99  . 0.4971 0.5042 0.4975 0.0250  -0.0320 -
0.0005 1 .
751  C     C     . THR THR THR A A 99  99  . 0.5012 0.4787 0.4993 0.0025  -0.0127
0.0077  1 .
752  O     O     . THR THR THR A A 99  99  . 0.4876 0.4712 0.4907 0.0074  -0.0218 -
0.0017 1 .
753  N     N     . GLU GLU GLU A A 100 100 . 0.5081 0.4962 0.5116 0.0066  -0.0175
0.0101  1 .
754  CA    CA    . GLU GLU GLU A A 100 100 . 0.5389 0.5221 0.5287 0.0058  -0.0155
0.0127  1 .
755  CB    CB    . GLU GLU GLU A A 100 100 . 0.5722 0.5563 0.5560 0.0041  -0.0216
0.0157  1 .
756  CG    CG    . GLU GLU GLU A A 100 100 . 0.6637 0.5890 0.6063 0.0172  -0.0275
0.0040  1 .
757  CD    CD    . GLU GLU GLU A A 100 100 . 0.7276 0.7166 0.6777 0.0399  -0.0026
0.0344  1 .
758  OE1   OE1   . GLU GLU GLU A A 100 100 . 0.8177 0.7851 0.7537 0.0626  -0.0381
0.0594  1 .
759  OE2   OE2   . GLU GLU GLU A A 100 100 . 0.7278 0.7585 0.7054 0.0734  -0.0218
0.0468  1 .
760  C     C     . GLU GLU GLU A A 100 100 . 0.5213 0.5194 0.5191 0.0065  -0.0083
0.0063  1 .
761  O     O     . GLU GLU GLU A A 100 100 . 0.5578 0.5243 0.5073 0.0133  -0.0074
0.0033  1 .
762  N     N     . ASN ASN ASN A A 101 101 . 0.4879 0.4999 0.4958 -0.0025 -0.0108
0.0163  1 .
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763  CA    CA    . ASN ASN ASN A A 101 101 . 0.4686 0.4922 0.4863 -0.0110 -0.0074
0.0131  1 .
764  CB    CB    . ASN ASN ASN A A 101 101 . 0.4741 0.5092 0.5227 -0.0064 0.0010
0.0220  1 .
765  CG    CG    . ASN ASN ASN A A 101 101 . 0.5477 0.5805 0.5899 -0.0159 0.0045
0.0099  1 .
766  OD1   OD1   . ASN ASN ASN A A 101 101 . 0.6949 0.6542 0.6806 -0.0683 0.0265
0.0698  1 .
767  ND2   ND2   . ASN ASN ASN A A 101 101 . 0.5463 0.6569 0.6773 -0.0566 -0.0198
0.0173  1 .
768  C     C     . ASN ASN ASN A A 101 101 . 0.4288 0.4562 0.4569 -0.0100 -0.0079
0.0253  1 .
769  O     O     . ASN ASN ASN A A 101 101 . 0.3837 0.4490 0.4173 -0.0176 -0.0146
0.0238  1 .
770  N     N     . LYS LYS LYS A A 102 102 . 0.4385 0.4409 0.4370 -0.0009 -0.0196
0.0240  1 .
771  CA    CA    . LYS LYS LYS A A 102 102 . 0.4165 0.4309 0.4229 -0.0015 -0.0147
0.0112  1 .
772  CB    CB    . LYS LYS LYS A A 102 102 . 0.3999 0.4477 0.4256 0.0003  -0.0267 -
0.0019 1 .
773  CG    CG    . LYS LYS LYS A A 102 102 . 0.4327 0.4799 0.4018 -0.0056 -0.0035
0.0237  1 .
774  CD    CD    . LYS LYS LYS A A 102 102 . 0.5135 0.5113 0.4241 0.0637  -0.0061
0.0105  1 .
775  CE    CE    . LYS LYS LYS A A 102 102 . 0.5932 0.5025 0.4813 0.0848  -0.0261 -
0.0144 1 .
776  NZ    NZ    . LYS LYS LYS A A 102 102 . 0.6436 0.4962 0.4238 0.0960  -0.0033 -
0.0481 1 .
777  C     C     . LYS LYS LYS A A 102 102 . 0.4200 0.4355 0.4223 0.0044  -0.0200
0.0118  1 .
778  O     O     . LYS LYS LYS A A 102 102 . 0.4042 0.4261 0.4122 0.0157  -0.0308
0.0227  1 .
779  N     N     . SER SER SER A A 103 103 . 0.4094 0.4301 0.4148 0.0127  -0.0121
0.0064  1 .
780  CA    CA    . SER SER SER A A 103 103 . 0.4064 0.4274 0.4308 0.0011  -0.0079
0.0115  1 .
781  CB    CB    . SER SER SER A A 103 103 . 0.4116 0.4201 0.4406 0.0014  -0.0060
0.0159  1 .
782  OG    OG    . SER SER SER A A 103 103 . 0.4114 0.4106 0.4938 0.0022  -0.0253
0.0134  1 .
783  C     C     . SER SER SER A A 103 103 . 0.4040 0.4143 0.4207 -0.0048 0.0051
0.0008  1 .
784  O     O     . SER SER SER A A 103 103 . 0.4029 0.4258 0.4438 -0.0033 0.0186  -
0.0142 1 .
785  N     N     . LYS LYS LYS A A 104 104 . 0.4080 0.4073 0.4060 -0.0066 -0.0016
0.0048  1 .
786  CA    CA    . LYS LYS LYS A A 104 104 . 0.3926 0.3952 0.3886 -0.0002 -0.0024 -
0.0041 1 .
787  CB    CB    . LYS LYS LYS A A 104 104 . 0.4045 0.3865 0.3774 -0.0045 -0.0093 -
0.0006 1 .
788  CG    CG    . LYS LYS LYS A A 104 104 . 0.4315 0.3824 0.3753 0.0006  -0.0061 -
0.0101 1 .
789  CD    CD    . LYS LYS LYS A A 104 104 . 0.4924 0.4066 0.3874 -0.0107 -0.0557
0.0087  1 .
790  CE    CE    . LYS LYS LYS A A 104 104 . 0.5586 0.3412 0.4101 -0.0041 0.0008
0.0304  1 .
791  NZ    NZ    . LYS LYS LYS A A 104 104 . 0.5153 0.3852 0.5217 -0.0544 -0.0011
0.0357  1 .
792  C     C     . LYS LYS LYS A A 104 104 . 0.3761 0.3833 0.3834 0.0068  -0.0019
0.0009  1 .
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793  O     O     . LYS LYS LYS A A 104 104 . 0.3490 0.3814 0.4071 0.0209  -0.0027 -
0.0122 1 .
794  N     N     . PHE PHE PHE A A 105 105 . 0.3827 0.3896 0.3847 0.0085  -0.0031
0.0046  1 .
795  CA    CA    . PHE PHE PHE A A 105 105 . 0.3816 0.3904 0.3791 0.0007  -0.0044
0.0062  1 .
796  CB    CB    . PHE PHE PHE A A 105 105 . 0.3723 0.4149 0.3964 -0.0037 -0.0117
0.0091  1 .
797  CG    CG    . PHE PHE PHE A A 105 105 . 0.4457 0.4130 0.4300 -0.0097 -0.0124
0.0081  1 .
798  CD1   CD1   . PHE PHE PHE A A 105 105 . 0.4709 0.4651 0.4757 -0.0274 0.0055  -
0.0079 1 .
799  CE1   CE1   . PHE PHE PHE A A 105 105 . 0.5388 0.4664 0.4816 -0.0206 0.0088  -
0.0052 1 .
800  CZ    CZ    . PHE PHE PHE A A 105 105 . 0.5270 0.4224 0.4993 -0.0017 0.0188  -
0.0107 1 .
801  CE2   CE2   . PHE PHE PHE A A 105 105 . 0.4890 0.4379 0.4630 0.0126  0.0026  -
0.0044 1 .
802  CD2   CD2   . PHE PHE PHE A A 105 105 . 0.4346 0.4267 0.4418 0.0262  -0.0260
0.0001  1 .
803  C     C     . PHE PHE PHE A A 105 105 . 0.3777 0.3865 0.3647 -0.0016 -0.0042
0.0062  1 .
804  O     O     . PHE PHE PHE A A 105 105 . 0.3718 0.3722 0.3484 0.0017  -0.0131
0.0170  1 .
805  N     N     . GLY GLY GLY A A 106 106 . 0.3402 0.3866 0.3683 -0.0131 -0.0148
0.0042  1 .
806  CA    CA    . GLY GLY GLY A A 106 106 . 0.3440 0.3780 0.3539 -0.0141 -0.0067
0.0124  1 .
807  C     C     . GLY GLY GLY A A 106 106 . 0.3520 0.3746 0.3674 -0.0090 -0.0116 -
0.0020 1 .
808  O     O     . GLY GLY GLY A A 106 106 . 0.3773 0.3999 0.3630 -0.0429 0.0178  -
0.0025 1 .
809  N     N     . ALA ALA ALA A A 107 107 . 0.3326 0.3704 0.3561 -0.0062 -0.0197
0.0046  1 .
810  CA    CA    . ALA ALA ALA A A 107 107 . 0.3529 0.3736 0.3714 -0.0005 -0.0130 -
0.0106 1 .
811  CB    CB    . ALA ALA ALA A A 107 107 . 0.3641 0.3814 0.3704 -0.0001 -0.0191 -
0.0216 1 .
812  C     C     . ALA ALA ALA A A 107 107 . 0.3510 0.3719 0.3681 0.0017  -0.0111 -
0.0102 1 .
813  O     O     . ALA ALA ALA A A 107 107 . 0.3420 0.3594 0.3812 -0.0027 -0.0156 -
0.0158 1 .
814  N     N     . ASN ASN ASN A A 108 108 . 0.3461 0.3483 0.3697 -0.0103 -0.0045 -
0.0089 1 .
815  CA    CA    . ASN ASN ASN A A 108 108 . 0.3309 0.3542 0.3656 -0.0008 -0.0093 -
0.0079 1 .
816  CB    CB    . ASN ASN ASN A A 108 108 . 0.3333 0.3541 0.3562 0.0025  -0.0145 -
0.0169 1 .
817  CG    CG    . ASN ASN ASN A A 108 108 . 0.3082 0.3845 0.3730 -0.0010 -0.0120
0.0039  1 .
818  OD1   OD1   . ASN ASN ASN A A 108 108 . 0.2723 0.3931 0.3883 -0.0186 -0.0172
0.0422  1 .
819  ND2   ND2   . ASN ASN ASN A A 108 108 . 0.2262 0.4093 0.3076 -0.0093 -0.0184 -
0.0375 1 .
820  C     C     . ASN ASN ASN A A 108 108 . 0.3613 0.3660 0.3683 0.0056  -0.0137 -
0.0127 1 .
821  O     O     . ASN ASN ASN A A 108 108 . 0.3478 0.3976 0.3848 0.0093  -0.0189 -
0.0268 1 .
822  N     N     . ALA ALA ALA A A 109 109 . 0.3704 0.3737 0.3635 0.0000  -0.0060 -
0.0091 1 .
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823  CA    CA    . ALA ALA ALA A A 109 109 . 0.3671 0.3713 0.3530 -0.0006 -0.0036
0.0007  1 .
824  CB    CB    . ALA ALA ALA A A 109 109 . 0.3801 0.3784 0.3416 -0.0074 -0.0066
0.0026  1 .
825  C     C     . ALA ALA ALA A A 109 109 . 0.3674 0.3752 0.3570 0.0089  -0.0063 -
0.0004 1 .
826  O     O     . ALA ALA ALA A A 109 109 . 0.3589 0.3564 0.3685 0.0237  -0.0096 -
0.0030 1 .
827  N     N     . ILE ILE ILE A A 110 110 . 0.3803 0.3800 0.3449 -0.0020 0.0005
0.0030  1 .
828  CA    CA    . ILE ILE ILE A A 110 110 . 0.3869 0.3729 0.3502 0.0025  -0.0031
0.0067  1 .
829  CB    CB    . ILE ILE ILE A A 110 110 . 0.3998 0.3809 0.3623 0.0113  -0.0002
0.0088  1 .
830  CG1   CG1   . ILE ILE ILE A A 110 110 . 0.3774 0.3741 0.3756 0.0061  -0.0031
0.0135  1 .
831  CD1   CD1   . ILE ILE ILE A A 110 110 . 0.3959 0.3650 0.3948 0.0034  -0.0195
0.0658  1 .
832  CG2   CG2   . ILE ILE ILE A A 110 110 . 0.4192 0.3510 0.3503 -0.0078 0.0224  -
0.0088 1 .
833  C     C     . ILE ILE ILE A A 110 110 . 0.3562 0.3478 0.3394 0.0033  -0.0040
0.0144  1 .
834  O     O     . ILE ILE ILE A A 110 110 . 0.3546 0.3697 0.3476 -0.0218 -0.0157
0.0270  1 .
835  N     N     . LEU LEU LEU A A 111 111 . 0.3550 0.3386 0.3304 0.0022  0.0020
0.0178  1 .
836  CA    CA    . LEU LEU LEU A A 111 111 . 0.3488 0.3347 0.3278 0.0058  0.0085
0.0026  1 .
837  CB    CB    . LEU LEU LEU A A 111 111 . 0.3362 0.3090 0.3290 0.0008  0.0226  -
0.0016 1 .
838  CG    CG    . LEU LEU LEU A A 111 111 . 0.3510 0.3446 0.3337 0.0028  0.0355
0.0025  1 .
839  CD1   CD1   . LEU LEU LEU A A 111 111 . 0.2824 0.2713 0.3226 -0.0026 0.0164  -
0.0094 1 .
840  CD2   CD2   . LEU LEU LEU A A 111 111 . 0.3363 0.3948 0.3058 0.0128  0.0781  -
0.0027 1 .
841  C     C     . LEU LEU LEU A A 111 111 . 0.3497 0.3190 0.3325 0.0053  0.0106
0.0061  1 .
842  O     O     . LEU LEU LEU A A 111 111 . 0.3443 0.3350 0.3396 0.0115  0.0255
0.0088  1 .
843  N     N     . GLY GLY GLY A A 112 112 . 0.3559 0.3016 0.3204 -0.0162 0.0017
0.0194  1 .
844  CA    CA    . GLY GLY GLY A A 112 112 . 0.3371 0.3163 0.3203 -0.0117 -0.0027
0.0183  1 .
845  C     C     . GLY GLY GLY A A 112 112 . 0.3399 0.3263 0.3282 -0.0044 0.0044
0.0153  1 .
846  O     O     . GLY GLY GLY A A 112 112 . 0.3536 0.3253 0.3529 -0.0008 0.0085
0.0009  1 .
847  N     N     . VAL VAL VAL A A 113 113 . 0.3389 0.3425 0.3200 -0.0191 -0.0005
0.0066  1 .
848  CA    CA    . VAL VAL VAL A A 113 113 . 0.3150 0.3333 0.3273 -0.0134 -0.0052
0.0103  1 .
849  CB    CB    . VAL VAL VAL A A 113 113 . 0.3211 0.3339 0.3313 -0.0064 -0.0024
0.0062  1 .
850  CG1   CG1   . VAL VAL VAL A A 113 113 . 0.2924 0.3192 0.3390 -0.0089 0.0107  -
0.0012 1 .
851  CG2   CG2   . VAL VAL VAL A A 113 113 . 0.2459 0.2988 0.3195 0.0159  0.0106
0.0363  1 .
852  C     C     . VAL VAL VAL A A 113 113 . 0.3142 0.3402 0.3335 -0.0044 -0.0013
0.0052  1 .
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853  O     O     . VAL VAL VAL A A 113 113 . 0.2973 0.3683 0.3488 -0.0171 -0.0253
0.0311  1 .
854  N     N     . SER SER SER A A 114 114 . 0.3009 0.3460 0.3199 -0.0066 -0.0037
0.0028  1 .
855  CA    CA    . SER SER SER A A 114 114 . 0.3345 0.3358 0.3454 -0.0019 0.0150
0.0011  1 .
856  CB    CB    . SER SER SER A A 114 114 . 0.3498 0.3339 0.3122 -0.0086 0.0069  -
0.0080 1 .
857  OG    OG    . SER SER SER A A 114 114 . 0.4545 0.2883 0.3794 -0.0133 0.0399
0.0150  1 .
858  C     C     . SER SER SER A A 114 114 . 0.3440 0.3394 0.3507 -0.0137 0.0174  -
0.0123 1 .
859  O     O     . SER SER SER A A 114 114 . 0.3133 0.3470 0.3242 -0.0272 0.0661  -
0.0233 1 .
860  N     N     . LEU LEU LEU A A 115 115 . 0.3290 0.3414 0.3535 -0.0211 0.0171
0.0055  1 .
861  CA    CA    . LEU LEU LEU A A 115 115 . 0.3232 0.3571 0.3582 -0.0138 -0.0019
0.0105  1 .
862  CB    CB    . LEU LEU LEU A A 115 115 . 0.3108 0.3461 0.3517 -0.0132 -0.0091
0.0168  1 .
863  CG    CG    . LEU LEU LEU A A 115 115 . 0.3436 0.4018 0.3596 -0.0291 -0.0139
0.0073  1 .
864  CD1   CD1   . LEU LEU LEU A A 115 115 . 0.2994 0.3891 0.3680 0.0100  -0.0137
0.0313  1 .
865  CD2   CD2   . LEU LEU LEU A A 115 115 . 0.3535 0.3757 0.3373 -0.0333 -0.0412
0.0292  1 .
866  C     C     . LEU LEU LEU A A 115 115 . 0.3167 0.3520 0.3527 -0.0171 0.0015
0.0077  1 .
867  O     O     . LEU LEU LEU A A 115 115 . 0.2804 0.3323 0.3581 -0.0273 0.0028
0.0224  1 .
868  N     N     . ALA ALA ALA A A 116 116 . 0.3257 0.3631 0.3534 -0.0298 0.0047
0.0061  1 .
869  CA    CA    . ALA ALA ALA A A 116 116 . 0.3598 0.3600 0.3585 -0.0132 0.0034
0.0030  1 .
870  CB    CB    . ALA ALA ALA A A 116 116 . 0.3622 0.3554 0.3377 -0.0274 0.0121
0.0049  1 .
871  C     C     . ALA ALA ALA A A 116 116 . 0.3557 0.3708 0.3617 -0.0075 0.0107  -
0.0021 1 .
872  O     O     . ALA ALA ALA A A 116 116 . 0.4177 0.3552 0.3716 0.0279  0.0217  -
0.0113 1 .
873  N     N     . VAL VAL VAL A A 117 117 . 0.3763 0.3926 0.3725 -0.0120 0.0101  -
0.0022 1 .
874  CA    CA    . VAL VAL VAL A A 117 117 . 0.3957 0.4054 0.3925 -0.0183 0.0180  -
0.0040 1 .
875  CB    CB    . VAL VAL VAL A A 117 117 . 0.3891 0.4112 0.3952 -0.0197 0.0173  -
0.0082 1 .
876  CG1   CG1   . VAL VAL VAL A A 117 117 . 0.4549 0.4247 0.3672 -0.0392 0.0386  -
0.0242 1 .
877  CG2   CG2   . VAL VAL VAL A A 117 117 . 0.3467 0.4145 0.3847 -0.0094 0.0455  -
0.0110 1 .
878  C     C     . VAL VAL VAL A A 117 117 . 0.4081 0.4174 0.3967 -0.0168 0.0125  -
0.0004 1 .
879  O     O     . VAL VAL VAL A A 117 117 . 0.4013 0.4351 0.4047 -0.0178 0.0136  -
0.0008 1 .
880  N     N     . CYS CYS CYS A A 118 118 . 0.4128 0.4067 0.3910 -0.0261 0.0115
0.0126  1 .
881  CA    CA    . CYS CYS CYS A A 118 118 . 0.4239 0.4042 0.4026 -0.0224 0.0222
0.0155  1 .
882  CB    CB    . CYS CYS CYS A A 118 118 . 0.4362 0.4030 0.4052 -0.0356 0.0256
0.0097  1 .
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883  SG    SG    . CYS CYS CYS A A 118 118 . 0.4942 0.4014 0.4357 -0.0320 0.0666
0.0175  1 .
884  C     C     . CYS CYS CYS A A 118 118 . 0.4170 0.4091 0.4148 -0.0160 0.0219
0.0105  1 .
885  O     O     . CYS CYS CYS A A 118 118 . 0.4284 0.4135 0.4164 -0.0353 0.0386
0.0197  1 .
886  N     N     . LYS LYS LYS A A 119 119 . 0.3997 0.4089 0.4169 -0.0077 0.0216
0.0074  1 .
887  CA    CA    . LYS LYS LYS A A 119 119 . 0.3888 0.3988 0.4179 -0.0151 0.0145  -
0.0039 1 .
888  CB    CB    . LYS LYS LYS A A 119 119 . 0.3686 0.3692 0.4053 -0.0194 0.0228  -
0.0111 1 .
889  CG    CG    . LYS LYS LYS A A 119 119 . 0.3871 0.4130 0.4177 -0.0244 0.0318
0.0001  1 .
890  CD    CD    . LYS LYS LYS A A 119 119 . 0.3296 0.4466 0.4281 -0.0850 0.0961  -
0.0332 1 .
891  CE    CE    . LYS LYS LYS A A 119 119 . 0.3621 0.5310 0.4221 -0.0813 0.0931
0.0273  1 .
892  NZ    NZ    . LYS LYS LYS A A 119 119 . 0.2349 0.5010 0.4538 -0.0577 0.1330
0.0075  1 .
893  C     C     . LYS LYS LYS A A 119 119 . 0.3866 0.3957 0.4291 -0.0157 0.0163  -
0.0111 1 .
894  O     O     . LYS LYS LYS A A 119 119 . 0.4063 0.3946 0.4459 -0.0230 0.0309  -
0.0200 1 .
895  N     N     . ALA ALA ALA A A 120 120 . 0.3828 0.3841 0.4172 -0.0137 0.0207  -
0.0082 1 .
896  CA    CA    . ALA ALA ALA A A 120 120 . 0.3692 0.3788 0.3991 -0.0143 0.0125  -
0.0096 1 .
897  CB    CB    . ALA ALA ALA A A 120 120 . 0.3433 0.3778 0.3792 -0.0129 0.0250  -
0.0098 1 .
898  C     C     . ALA ALA ALA A A 120 120 . 0.3798 0.3863 0.4143 -0.0128 0.0130  -
0.0062 1 .
899  O     O     . ALA ALA ALA A A 120 120 . 0.3564 0.3717 0.4304 -0.0002 0.0147  -
0.0095 1 .
900  N     N     . GLY GLY GLY A A 121 121 . 0.3984 0.4092 0.4155 -0.0095 0.0052
0.0086  1 .
901  CA    CA    . GLY GLY GLY A A 121 121 . 0.4291 0.4301 0.4476 -0.0121 0.0149
0.0103  1 .
902  C     C     . GLY GLY GLY A A 121 121 . 0.4409 0.4481 0.4683 -0.0098 0.0184
0.0085  1 .
903  O     O     . GLY GLY GLY A A 121 121 . 0.4634 0.4698 0.4647 -0.0195 0.0351
0.0163  1 .
904  N     N     . ALA ALA ALA A A 122 122 . 0.4482 0.4544 0.4837 -0.0080 0.0174
0.0131  1 .
905  CA    CA    . ALA ALA ALA A A 122 122 . 0.4492 0.4536 0.4799 0.0017  0.0188
0.0003  1 .
906  CB    CB    . ALA ALA ALA A A 122 122 . 0.4233 0.4326 0.4749 0.0033  0.0129  -
0.0075 1 .
907  C     C     . ALA ALA ALA A A 122 122 . 0.4548 0.4674 0.4917 0.0002  0.0155  -
0.0014 1 .
908  O     O     . ALA ALA ALA A A 122 122 . 0.4680 0.4669 0.5068 -0.0043 0.0224  -
0.0048 1 .
909  N     N     . ALA ALA ALA A A 123 123 . 0.4697 0.4776 0.5029 0.0006  0.0139  -
0.0018 1 .
910  CA    CA    . ALA ALA ALA A A 123 123 . 0.4961 0.4986 0.5168 -0.0023 0.0100
0.0057  1 .
911  CB    CB    . ALA ALA ALA A A 123 123 . 0.4941 0.4894 0.5156 0.0011  0.0100  -
0.0029 1 .
912  C     C     . ALA ALA ALA A A 123 123 . 0.5211 0.5190 0.5396 -0.0018 0.0075
0.0058  1 .
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913  O     O     . ALA ALA ALA A A 123 123 . 0.5234 0.5087 0.5442 0.0006  0.0260
0.0058  1 .
914  N     N     . GLU GLU GLU A A 124 124 . 0.5437 0.5316 0.5567 0.0045  0.0097
0.0058  1 .
915  CA    CA    . GLU GLU GLU A A 124 124 . 0.5568 0.5553 0.5774 -0.0025 0.0050
0.0097  1 .
916  CB    CB    . GLU GLU GLU A A 124 124 . 0.5667 0.5606 0.5845 -0.0020 0.0027
0.0052  1 .
917  CG    CG    . GLU GLU GLU A A 124 124 . 0.6244 0.6065 0.6486 -0.0112 -0.0008
0.0012  1 .
918  CD    CD    . GLU GLU GLU A A 124 124 . 0.6642 0.6563 0.6753 -0.0256 -0.0161 -
0.0161 1 .
919  OE1   OE1   . GLU GLU GLU A A 124 124 . 0.6968 0.6261 0.6691 -0.0549 -0.0095
0.0315  1 .
920  OE2   OE2   . GLU GLU GLU A A 124 124 . 0.6833 0.6588 0.7289 -0.0239 0.0139  -
0.0220 1 .
921  C     C     . GLU GLU GLU A A 124 124 . 0.5598 0.5598 0.5713 -0.0048 0.0034
0.0136  1 .
922  O     O     . GLU GLU GLU A A 124 124 . 0.5629 0.5641 0.5798 -0.0037 0.0118
0.0253  1 .
923  N     N     . ARG ARG ARG A A 125 125 . 0.5595 0.5567 0.5749 -0.0116 0.0036
0.0098  1 .
924  CA    CA    . ARG ARG ARG A A 125 125 . 0.5558 0.5594 0.5727 -0.0118 0.0058
0.0034  1 .
925  CB    CB    . ARG ARG ARG A A 125 125 . 0.5617 0.5704 0.5725 -0.0075 0.0020
0.0085  1 .
926  CG    CG    . ARG ARG ARG A A 125 125 . 0.6253 0.5591 0.5910 0.0035  0.0079  -
0.0047 1 .
927  CD    CD    . ARG ARG ARG A A 125 125 . 0.6471 0.5835 0.6261 -0.0219 0.0246
0.0108  1 .
928  NE    NE    . ARG ARG ARG A A 125 125 . 0.6364 0.6204 0.6669 -0.0056 0.0283
0.0002  1 .
929  CZ    CZ    . ARG ARG ARG A A 125 125 . 0.6448 0.6257 0.6549 0.0127  0.0291  -
0.0151 1 .
930  NH1   NH1   . ARG ARG ARG A A 125 125 . 0.5941 0.6593 0.6110 0.0496  0.0389  -
0.0344 1 .
931  NH2   NH2   . ARG ARG ARG A A 125 125 . 0.6226 0.6181 0.6684 0.0106  0.0412  -
0.0419 1 .
932  C     C     . ARG ARG ARG A A 125 125 . 0.5407 0.5630 0.5752 -0.0182 0.0054  -
0.0033 1 .
933  O     O     . ARG ARG ARG A A 125 125 . 0.5210 0.5382 0.5752 -0.0278 0.0038  -
0.0190 1 .
934  N     N     . GLU GLU GLU A A 126 126 . 0.5470 0.5739 0.5850 -0.0111 0.0010  -
0.0016 1 .
935  CA    CA    . GLU GLU GLU A A 126 126 . 0.5715 0.5838 0.5895 0.0002  0.0007  -
0.0112 1 .
936  CB    CB    . GLU GLU GLU A A 126 126 . 0.5892 0.6104 0.6137 0.0073  0.0064  -
0.0065 1 .
937  CG    CG    . GLU GLU GLU A A 126 126 . 0.6742 0.6822 0.6467 0.0000  -0.0009 -
0.0092 1 .
938  CD    CD    . GLU GLU GLU A A 126 126 . 0.7259 0.7824 0.7309 0.0342  0.0090
0.0319  1 .
939  OE1   OE1   . GLU GLU GLU A A 126 126 . 0.8083 0.8132 0.7301 0.0432  0.0178
0.0348  1 .
940  OE2   OE2   . GLU GLU GLU A A 126 126 . 0.7978 0.8180 0.7556 0.0339  0.0515
0.0559  1 .
941  C     C     . GLU GLU GLU A A 126 126 . 0.5627 0.5732 0.5702 0.0088  0.0062  -
0.0089 1 .
942  O     O     . GLU GLU GLU A A 126 126 . 0.5828 0.5755 0.5710 0.0177  0.0062  -
0.0118 1 .
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943  N     N     . LEU LEU LEU A A 127 127 . 0.5278 0.5403 0.5358 0.0031  0.0102  -
0.0131 1 .
944  CA    CA    . LEU LEU LEU A A 127 127 . 0.5107 0.5125 0.5184 0.0003  0.0154  -
0.0122 1 .
945  CB    CB    . LEU LEU LEU A A 127 127 . 0.5043 0.5096 0.5131 0.0079  0.0127  -
0.0245 1 .
946  CG    CG    . LEU LEU LEU A A 127 127 . 0.5111 0.5162 0.5306 0.0015  0.0133  -
0.0116 1 .
947  CD1   CD1   . LEU LEU LEU A A 127 127 . 0.5826 0.5013 0.5422 0.0311  0.0190
0.0051  1 .
948  CD2   CD2   . LEU LEU LEU A A 127 127 . 0.5037 0.5388 0.5393 0.0027  0.0240  -
0.0169 1 .
949  C     C     . LEU LEU LEU A A 127 127 . 0.4803 0.4915 0.5144 -0.0059 0.0139  -
0.0148 1 .
950  O     O     . LEU LEU LEU A A 127 127 . 0.4673 0.5003 0.5325 -0.0245 0.0189  -
0.0079 1 .
951  N     N     . PRO PRO PRO A A 128 128 . 0.4609 0.4834 0.5000 -0.0058 0.0204  -
0.0097 1 .
952  CA    CA    . PRO PRO PRO A A 128 128 . 0.4518 0.4631 0.4823 0.0029  0.0124  -
0.0053 1 .
953  CB    CB    . PRO PRO PRO A A 128 128 . 0.4619 0.4625 0.4914 -0.0060 0.0059  -
0.0133 1 .
954  CG    CG    . PRO PRO PRO A A 128 128 . 0.4444 0.4682 0.4840 -0.0087 0.0303  -
0.0129 1 .
955  CD    CD    . PRO PRO PRO A A 128 128 . 0.4729 0.4776 0.4927 -0.0027 0.0171  -
0.0163 1 .
956  C     C     . PRO PRO PRO A A 128 128 . 0.4172 0.4446 0.4497 0.0081  0.0220
0.0020  1 .
957  O     O     . PRO PRO PRO A A 128 128 . 0.3860 0.4440 0.4038 0.0249  0.0335
0.0003  1 .
958  N     N     . LEU LEU LEU A A 129 129 . 0.4099 0.4214 0.4190 0.0102  0.0201
0.0117  1 .
959  CA    CA    . LEU LEU LEU A A 129 129 . 0.3865 0.4099 0.4062 -0.0016 0.0218
0.0134  1 .
960  CB    CB    . LEU LEU LEU A A 129 129 . 0.3995 0.4061 0.4026 0.0060  0.0206
0.0249  1 .
961  CG    CG    . LEU LEU LEU A A 129 129 . 0.3792 0.3914 0.4059 -0.0270 0.0154
0.0198  1 .
962  CD1   CD1   . LEU LEU LEU A A 129 129 . 0.4211 0.4197 0.4071 -0.0542 -0.0025
0.0416  1 .
963  CD2   CD2   . LEU LEU LEU A A 129 129 . 0.3881 0.3413 0.3762 -0.0908 -0.0114
0.0405  1 .
964  C     C     . LEU LEU LEU A A 129 129 . 0.3694 0.4024 0.3948 -0.0013 0.0255
0.0087  1 .
965  O     O     . LEU LEU LEU A A 129 129 . 0.3289 0.4160 0.3544 -0.0205 0.0498
0.0166  1 .
966  N     N     . TYR TYR TYR A A 130 130 . 0.3748 0.4160 0.4002 0.0051  0.0257
0.0022  1 .
967  CA    CA    . TYR TYR TYR A A 130 130 . 0.3784 0.4171 0.3854 0.0101  0.0226
0.0053  1 .
968  CB    CB    . TYR TYR TYR A A 130 130 . 0.4013 0.4209 0.3837 0.0106  0.0235
0.0006  1 .
969  CG    CG    . TYR TYR TYR A A 130 130 . 0.3887 0.4473 0.4114 0.0104  0.0235
0.0045  1 .
970  CD1   CD1   . TYR TYR TYR A A 130 130 . 0.4491 0.4773 0.4512 0.0323  0.0222  -
0.0100 1 .
971  CE1   CE1   . TYR TYR TYR A A 130 130 . 0.4925 0.4022 0.4641 0.0401  0.0086  -
0.0462 1 .
972  CZ    CZ    . TYR TYR TYR A A 130 130 . 0.4929 0.4344 0.5143 0.0370  0.0001  -
0.0365 1 .
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973  OH    OH    . TYR TYR TYR A A 130 130 . 0.4863 0.4261 0.6470 0.0133  -0.0225 -
0.0331 1 .
974  CE2   CE2   . TYR TYR TYR A A 130 130 . 0.4802 0.4454 0.4758 0.0150  0.0169  -
0.0092 1 .
975  CD2   CD2   . TYR TYR TYR A A 130 130 . 0.3789 0.4715 0.4205 -0.0082 0.0308
0.0103  1 .
976  C     C     . TYR TYR TYR A A 130 130 . 0.3840 0.4198 0.3945 0.0080  0.0200
0.0132  1 .
977  O     O     . TYR TYR TYR A A 130 130 . 0.3342 0.4106 0.3739 0.0261  0.0347
0.0159  1 .
978  N     N     . ARG ARG ARG A A 131 131 . 0.3809 0.4190 0.4031 0.0077  0.0239
0.0157  1 .
979  CA    CA    . ARG ARG ARG A A 131 131 . 0.4036 0.4314 0.4327 -0.0011 0.0203
0.0118  1 .
980  CB    CB    . ARG ARG ARG A A 131 131 . 0.4135 0.4437 0.4456 0.0082  0.0293
0.0146  1 .
981  CG    CG    . ARG ARG ARG A A 131 131 . 0.4741 0.4872 0.4931 0.0036  0.0395  -
0.0039 1 .
982  CD    CD    . ARG ARG ARG A A 131 131 . 0.5453 0.6271 0.6168 0.0230  0.0184  -
0.0455 1 .
983  NE    NE    . ARG ARG ARG A A 131 131 . 0.6160 0.6671 0.6779 0.0229  0.0172  -
0.0478 1 .
984  CZ    CZ    . ARG ARG ARG A A 131 131 . 0.6881 0.7092 0.6743 0.0134  0.0299  -
0.0445 1 .
985  NH1   NH1   . ARG ARG ARG A A 131 131 . 0.7021 0.6923 0.6943 -0.0090 0.0389  -
0.0496 1 .
986  NH2   NH2   . ARG ARG ARG A A 131 131 . 0.6571 0.7675 0.6494 0.0085  0.0214  -
0.0478 1 .
987  C     C     . ARG ARG ARG A A 131 131 . 0.4002 0.4318 0.4170 -0.0066 0.0180
0.0110  1 .
988  O     O     . ARG ARG ARG A A 131 131 . 0.4321 0.4452 0.4073 -0.0219 0.0347
0.0179  1 .
989  N     N     . HIS HIS HIS A A 132 132 . 0.3932 0.4204 0.4091 -0.0167 0.0200
0.0099  1 .
990  CA    CA    . HIS HIS HIS A A 132 132 . 0.3759 0.4086 0.4051 0.0044  0.0158
0.0109  1 .
991  CB    CB    . HIS HIS HIS A A 132 132 . 0.3883 0.4007 0.4191 -0.0023 0.0152
0.0117  1 .
992  CG    CG    . HIS HIS HIS A A 132 132 . 0.3942 0.4408 0.4385 0.0006  0.0095
0.0103  1 .
993  ND1   ND1   . HIS HIS HIS A A 132 132 . 0.4031 0.4300 0.4261 -0.0017 0.0047
0.0262  1 .
994  CE1   CE1   . HIS HIS HIS A A 132 132 . 0.3502 0.4534 0.4595 0.0210  0.0094  -
0.0122 1 .
995  NE2   NE2   . HIS HIS HIS A A 132 132 . 0.4161 0.4037 0.4436 -0.0023 0.0346
0.0315  1 .
996  CD2   CD2   . HIS HIS HIS A A 132 132 . 0.4655 0.4286 0.4727 0.0157  0.0333
0.0084  1 .
997  C     C     . HIS HIS HIS A A 132 132 . 0.3858 0.3989 0.4042 -0.0064 0.0204
0.0125  1 .
998  O     O     . HIS HIS HIS A A 132 132 . 0.3676 0.4171 0.4152 0.0018  0.0276
0.0301  1 .
999  N     N     . ILE ILE ILE A A 133 133 . 0.3652 0.3760 0.3880 -0.0064 0.0248
0.0142  1 .
1000 CA    CA    . ILE ILE ILE A A 133 133 . 0.3599 0.3793 0.3740 -0.0159 0.0265
0.0142  1 .
1001 CB    CB    . ILE ILE ILE A A 133 133 . 0.3457 0.3602 0.3551 -0.0167 0.0259
0.0208  1 .
1002 CG1   CG1   . ILE ILE ILE A A 133 133 . 0.3424 0.3715 0.3219 -0.0400 0.0341
0.0235  1 .
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1003 CD1   CD1   . ILE ILE ILE A A 133 133 . 0.3989 0.3005 0.3798 -0.0704 0.0024
0.0389  1 .
1004 CG2   CG2   . ILE ILE ILE A A 133 133 . 0.2551 0.3347 0.2947 -0.0625 0.0412
0.0074  1 .
1005 C     C     . ILE ILE ILE A A 133 133 . 0.3870 0.4013 0.3918 -0.0098 0.0334
0.0239  1 .
1006 O     O     . ILE ILE ILE A A 133 133 . 0.3688 0.4049 0.3920 -0.0085 0.0363
0.0405  1 .
1007 N     N     . ALA ALA ALA A A 134 134 . 0.4476 0.4234 0.4242 -0.0145 0.0319
0.0159  1 .
1008 CA    CA    . ALA ALA ALA A A 134 134 . 0.4755 0.4577 0.4486 -0.0085 0.0208
0.0054  1 .
1009 CB    CB    . ALA ALA ALA A A 134 134 . 0.4942 0.4627 0.4527 -0.0014 0.0337
0.0065  1 .
1010 C     C     . ALA ALA ALA A A 134 134 . 0.4912 0.4885 0.4584 0.0002  0.0141
0.0063  1 .
1011 O     O     . ALA ALA ALA A A 134 134 . 0.4943 0.5193 0.4858 0.0190  0.0095
0.0064  1 .
1012 N     N     . GLN GLN GLN A A 135 135 . 0.4723 0.4962 0.4726 -0.0048 0.0086
0.0074  1 .
1013 CA    CA    . GLN GLN GLN A A 135 135 . 0.4873 0.4994 0.4663 0.0001  0.0099
0.0133  1 .
1014 CB    CB    . GLN GLN GLN A A 135 135 . 0.4515 0.4909 0.4633 -0.0017 0.0079
0.0210  1 .
1015 CG    CG    . GLN GLN GLN A A 135 135 . 0.4779 0.5174 0.4558 -0.0001 0.0166
0.0133  1 .
1016 CD    CD    . GLN GLN GLN A A 135 135 . 0.4681 0.5222 0.5063 0.0226  0.0394
0.0146  1 .
1017 OE1   OE1   . GLN GLN GLN A A 135 135 . 0.5061 0.5865 0.5357 0.0480  0.1124  -
0.0165 1 .
1018 NE2   NE2   . GLN GLN GLN A A 135 135 . 0.4276 0.4610 0.5286 0.0062  0.0102
0.0402  1 .
1019 C     C     . GLN GLN GLN A A 135 135 . 0.4886 0.5104 0.4738 0.0042  0.0112
0.0148  1 .
1020 O     O     . GLN GLN GLN A A 135 135 . 0.5075 0.5234 0.4530 -0.0002 0.0082
0.0163  1 .
1021 N     N     . LEU LEU LEU A A 136 136 . 0.4933 0.5128 0.4728 0.0000  0.0177
0.0082  1 .
1022 CA    CA    . LEU LEU LEU A A 136 136 . 0.5089 0.5048 0.4841 0.0009  0.0099
0.0028  1 .
1023 CB    CB    . LEU LEU LEU A A 136 136 . 0.4996 0.5003 0.4631 -0.0046 0.0135  -
0.0051 1 .
1024 CG    CG    . LEU LEU LEU A A 136 136 . 0.5204 0.5125 0.4754 -0.0166 0.0205  -
0.0071 1 .
1025 CD1   CD1   . LEU LEU LEU A A 136 136 . 0.4817 0.5430 0.4229 -0.0097 0.0238  -
0.0241 1 .
1026 CD2   CD2   . LEU LEU LEU A A 136 136 . 0.4566 0.5183 0.4464 -0.0647 0.0042  -
0.0112 1 .
1027 C     C     . LEU LEU LEU A A 136 136 . 0.5150 0.5098 0.4810 -0.0016 0.0060
0.0012  1 .
1028 O     O     . LEU LEU LEU A A 136 136 . 0.5291 0.5123 0.4802 -0.0083 0.0160
0.0046  1 .
1029 N     N     . ALA ALA ALA A A 137 137 . 0.5143 0.5093 0.4860 -0.0038 0.0059
0.0035  1 .
1030 CA    CA    . ALA ALA ALA A A 137 137 . 0.5368 0.5285 0.5078 -0.0066 0.0002
0.0039  1 .
1031 CB    CB    . ALA ALA ALA A A 137 137 . 0.5190 0.5299 0.4975 -0.0102 -0.0029
0.0006  1 .
1032 C     C     . ALA ALA ALA A A 137 137 . 0.5512 0.5417 0.5260 -0.0036 -0.0009
0.0032  1 .
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1033 O     O     . ALA ALA ALA A A 137 137 . 0.5580 0.5521 0.5248 -0.0058 -0.0046
0.0041  1 .
1034 N     N     . GLY GLY GLY A A 138 138 . 0.5606 0.5521 0.5493 -0.0022 0.0025
0.0052  1 .
1035 CA    CA    . GLY GLY GLY A A 138 138 . 0.5949 0.5874 0.5790 0.0010  0.0004
0.0075  1 .
1036 C     C     . GLY GLY GLY A A 138 138 . 0.6280 0.6149 0.6043 0.0058  -0.0009
0.0027  1 .
1037 O     O     . GLY GLY GLY A A 138 138 . 0.6203 0.6189 0.5943 0.0105  -0.0075
0.0118  1 .
1038 N     N     . ASN ASN ASN A A 139 139 . 0.6450 0.6373 0.6208 0.0103  0.0014
0.0073  1 .
1039 CA    CA    . ASN ASN ASN A A 139 139 . 0.6619 0.6569 0.6404 0.0054  0.0029
0.0005  1 .
1040 CB    CB    . ASN ASN ASN A A 139 139 . 0.6544 0.6574 0.6367 0.0044  0.0012
0.0002  1 .
1041 CG    CG    . ASN ASN ASN A A 139 139 . 0.6847 0.6753 0.6441 0.0063  0.0087
0.0010  1 .
1042 OD1   OD1   . ASN ASN ASN A A 139 139 . 0.6928 0.7143 0.6156 0.0135  -0.0139
0.0010  1 .
1043 ND2   ND2   . ASN ASN ASN A A 139 139 . 0.6957 0.7056 0.6646 0.0047  0.0433  -
0.0081 1 .
1044 C     C     . ASN ASN ASN A A 139 139 . 0.6750 0.6763 0.6607 0.0049  0.0034
0.0011  1 .
1045 O     O     . ASN ASN ASN A A 139 139 . 0.6638 0.6747 0.6434 -0.0021 0.0051  -
0.0093 1 .
1046 N     N     . SER SER SER A A 140 140 . 0.7007 0.6930 0.6857 0.0048  0.0073  -
0.0029 1 .
1047 CA    CA    . SER SER SER A A 140 140 . 0.7181 0.7137 0.7073 0.0057  0.0040
0.0003  1 .
1048 CB    CB    . SER SER SER A A 140 140 . 0.7325 0.7243 0.7048 0.0062  0.0098  -
0.0015 1 .
1049 OG    OG    . SER SER SER A A 140 140 . 0.7656 0.7769 0.7072 0.0073  -0.0011 -
0.0232 1 .
1050 C     C     . SER SER SER A A 140 140 . 0.7185 0.7198 0.7189 0.0032  0.0027
0.0017  1 .
1051 O     O     . SER SER SER A A 140 140 . 0.7283 0.7290 0.7347 0.0175  0.0048
0.0051  1 .
1052 N     N     . ASP ASP ASP A A 141 141 . 0.7109 0.7150 0.7130 -0.0063 0.0024
0.0029  1 .
1053 CA    CA    . ASP ASP ASP A A 141 141 . 0.7116 0.7103 0.6937 -0.0125 0.0036
0.0021  1 .
1054 CB    CB    . ASP ASP ASP A A 141 141 . 0.7249 0.7219 0.7061 -0.0175 -0.0008 -
0.0005 1 .
1055 CG    CG    . ASP ASP ASP A A 141 141 . 0.7523 0.7671 0.7296 -0.0213 0.0092  -
0.0263 1 .
1056 OD1   OD1   . ASP ASP ASP A A 141 141 . 0.7335 0.8169 0.7664 -0.0633 -0.0144 -
0.0071 1 .
1057 OD2   OD2   . ASP ASP ASP A A 141 141 . 0.7660 0.7798 0.7729 -0.0448 -0.0004 -
0.0497 1 .
1058 C     C     . ASP ASP ASP A A 141 141 . 0.6873 0.6833 0.6728 -0.0110 0.0007
0.0103  1 .
1059 O     O     . ASP ASP ASP A A 141 141 . 0.6970 0.6805 0.6775 -0.0132 0.0093
0.0102  1 .
1060 N     N     . LEU LEU LEU A A 142 142 . 0.6415 0.6513 0.6259 -0.0149 -0.0017
0.0153  1 .
1061 CA    CA    . LEU LEU LEU A A 142 142 . 0.5995 0.6010 0.5911 -0.0100 -0.0016
0.0125  1 .
1062 CB    CB    . LEU LEU LEU A A 142 142 . 0.5913 0.5931 0.5686 -0.0102 0.0028
0.0127  1 .
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1063 CG    CG    . LEU LEU LEU A A 142 142 . 0.5971 0.5706 0.5502 0.0000  0.0037
0.0098  1 .
1064 CD1   CD1   . LEU LEU LEU A A 142 142 . 0.5795 0.5815 0.5562 -0.0317 0.0172
0.0078  1 .
1065 CD2   CD2   . LEU LEU LEU A A 142 142 . 0.6268 0.5101 0.5247 -0.0090 0.0129
0.0226  1 .
1066 C     C     . LEU LEU LEU A A 142 142 . 0.5720 0.5903 0.5652 -0.0068 -0.0056
0.0151  1 .
1067 O     O     . LEU LEU LEU A A 142 142 . 0.5693 0.5971 0.5677 -0.0038 -0.0228
0.0222  1 .
1068 N     N     . ILE ILE ILE A A 143 143 . 0.5327 0.5480 0.5187 -0.0082 0.0025
0.0146  1 .
1069 CA    CA    . ILE ILE ILE A A 143 143 . 0.4824 0.5159 0.4809 -0.0058 0.0084
0.0162  1 .
1070 CB    CB    . ILE ILE ILE A A 143 143 . 0.4986 0.5298 0.4896 0.0102  0.0092
0.0257  1 .
1071 CG1   CG1   . ILE ILE ILE A A 143 143 . 0.4750 0.5361 0.4993 0.0113  0.0265
0.0362  1 .
1072 CD1   CD1   . ILE ILE ILE A A 143 143 . 0.4916 0.5386 0.5580 -0.0001 0.0156
0.0725  1 .
1073 CG2   CG2   . ILE ILE ILE A A 143 143 . 0.4844 0.5220 0.5125 -0.0024 0.0189
0.0328  1 .
1074 C     C     . ILE ILE ILE A A 143 143 . 0.4353 0.4751 0.4574 -0.0047 0.0100
0.0093  1 .
1075 O     O     . ILE ILE ILE A A 143 143 . 0.4073 0.4604 0.4309 -0.0198 0.0264
0.0207  1 .
1076 N     N     . LEU LEU LEU A A 144 144 . 0.3817 0.4500 0.4246 -0.0084 0.0164
0.0034  1 .
1077 CA    CA    . LEU LEU LEU A A 144 144 . 0.3547 0.4155 0.3905 -0.0079 0.0012  -
0.0095 1 .
1078 CB    CB    . LEU LEU LEU A A 144 144 . 0.3328 0.4096 0.3569 0.0004  0.0006  -
0.0126 1 .
1079 CG    CG    . LEU LEU LEU A A 144 144 . 0.3910 0.4048 0.3662 -0.0332 0.0315  -
0.0187 1 .
1080 CD1   CD1   . LEU LEU LEU A A 144 144 . 0.3833 0.3794 0.3703 0.0113  0.0264  -
0.0467 1 .
1081 CD2   CD2   . LEU LEU LEU A A 144 144 . 0.3603 0.4863 0.3185 -0.0042 0.0917  -
0.0829 1 .
1082 C     C     . LEU LEU LEU A A 144 144 . 0.3320 0.4131 0.3819 0.0007  -0.0086 -
0.0185 1 .
1083 O     O     . LEU LEU LEU A A 144 144 . 0.3022 0.4239 0.3850 0.0110  -0.0286 -
0.0246 1 .
1084 N     N     . PRO PRO PRO A A 145 145 . 0.3250 0.4028 0.3450 0.0022  -0.0030 -
0.0169 1 .
1085 CA    CA    . PRO PRO PRO A A 145 145 . 0.3341 0.3794 0.3414 0.0044  -0.0091 -
0.0125 1 .
1086 CB    CB    . PRO PRO PRO A A 145 145 . 0.3452 0.3946 0.3489 0.0054  -0.0076 -
0.0123 1 .
1087 CG    CG    . PRO PRO PRO A A 145 145 . 0.3246 0.3884 0.3352 0.0326  -0.0143 -
0.0241 1 .
1088 CD    CD    . PRO PRO PRO A A 145 145 . 0.3068 0.3969 0.3671 -0.0186 -0.0063 -
0.0283 1 .
1089 C     C     . PRO PRO PRO A A 145 145 . 0.3446 0.3724 0.3469 0.0089  -0.0073 -
0.0110 1 .
1090 O     O     . PRO PRO PRO A A 145 145 . 0.3592 0.3808 0.3392 0.0022  -0.0095 -
0.0008 1 .
1091 N     N     . VAL VAL VAL A A 146 146 . 0.3551 0.3559 0.3450 0.0019  0.0041  -
0.0166 1 .
1092 CA    CA    . VAL VAL VAL A A 146 146 . 0.3789 0.3558 0.3272 0.0010  0.0184  -
0.0035 1 .
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1093 CB    CB    . VAL VAL VAL A A 146 146 . 0.3728 0.3600 0.3307 -0.0123 0.0199  -
0.0107 1 .
1094 CG1   CG1   . VAL VAL VAL A A 146 146 . 0.4101 0.3795 0.3247 -0.0055 0.0327  -
0.0240 1 .
1095 CG2   CG2   . VAL VAL VAL A A 146 146 . 0.4237 0.3136 0.3393 -0.0187 0.0212
0.0072  1 .
1096 C     C     . VAL VAL VAL A A 146 146 . 0.3736 0.3411 0.3196 0.0152  0.0118  -
0.0036 1 .
1097 O     O     . VAL VAL VAL A A 146 146 . 0.3734 0.3589 0.3023 0.0232  0.0218  -
0.0099 1 .
1098 N     N     . PRO PRO PRO A A 147 147 . 0.3719 0.3588 0.3171 0.0182  0.0142  -
0.0052 1 .
1099 CA    CA    . PRO PRO PRO A A 147 147 . 0.3568 0.3476 0.3089 0.0099  0.0090  -
0.0040 1 .
1100 CB    CB    . PRO PRO PRO A A 147 147 . 0.3577 0.3259 0.2831 0.0203  0.0134  -
0.0076 1 .
1101 CG    CG    . PRO PRO PRO A A 147 147 . 0.3655 0.3548 0.3257 0.0200  0.0100  -
0.0058 1 .
1102 CD    CD    . PRO PRO PRO A A 147 147 . 0.3635 0.3151 0.3003 0.0268  0.0058
0.0179  1 .
1103 C     C     . PRO PRO PRO A A 147 147 . 0.3496 0.3397 0.3088 -0.0034 0.0077  -
0.0046 1 .
1104 O     O     . PRO PRO PRO A A 147 147 . 0.3830 0.3400 0.3161 -0.0218 0.0089
0.0008  1 .
1105 N     N     . ALA ALA ALA A A 148 148 . 0.3163 0.3274 0.3102 0.0005  -0.0050 -
0.0055 1 .
1106 CA    CA    . ALA ALA ALA A A 148 148 . 0.3094 0.3304 0.3137 -0.0001 -0.0051
0.0009  1 .
1107 CB    CB    . ALA ALA ALA A A 148 148 . 0.2870 0.3344 0.3015 0.0089  -0.0223 -
0.0125 1 .
1108 C     C     . ALA ALA ALA A A 148 148 . 0.2968 0.3218 0.3077 0.0010  -0.0013 -
0.0029 1 .
1109 O     O     . ALA ALA ALA A A 148 148 . 0.2652 0.3202 0.3209 0.0081  0.0115  -
0.0004 1 .
1110 N     N     . PHE PHE PHE A A 149 149 . 0.2917 0.3185 0.3092 -0.0101 0.0043  -
0.0011 1 .
1111 CA    CA    . PHE PHE PHE A A 149 149 . 0.2895 0.3201 0.3040 -0.0111 0.0001  -
0.0042 1 .
1112 CB    CB    . PHE PHE PHE A A 149 149 . 0.2582 0.2937 0.2900 -0.0202 0.0084  -
0.0011 1 .
1113 CG    CG    . PHE PHE PHE A A 149 149 . 0.2676 0.3313 0.3127 -0.0220 0.0057  -
0.0263 1 .
1114 CD1   CD1   . PHE PHE PHE A A 149 149 . 0.2403 0.3233 0.2804 -0.0220 0.0076
0.0149  1 .
1115 CE1   CE1   . PHE PHE PHE A A 149 149 . 0.2681 0.3234 0.2848 0.0178  0.0060  -
0.0126 1 .
1116 CZ    CZ    . PHE PHE PHE A A 149 149 . 0.2327 0.2820 0.2272 0.0063  0.0412
0.0252  1 .
1117 CE2   CE2   . PHE PHE PHE A A 149 149 . 0.2538 0.2820 0.2780 0.0036  0.0377
0.0059  1 .
1118 CD2   CD2   . PHE PHE PHE A A 149 149 . 0.2156 0.3485 0.3190 -0.0102 0.0131  -
0.0029 1 .
1119 C     C     . PHE PHE PHE A A 149 149 . 0.3012 0.3233 0.3184 -0.0137 -0.0027
0.0038  1 .
1120 O     O     . PHE PHE PHE A A 149 149 . 0.3426 0.3502 0.3179 0.0030  -0.0113 -
0.0050 1 .
1121 N     N     . ASN ASN ASN A A 150 150 . 0.3168 0.3309 0.3398 -0.0121 0.0015
0.0043  1 .
1122 CA    CA    . ASN ASN ASN A A 150 150 . 0.3402 0.3631 0.3662 -0.0017 0.0052  -
0.0070 1 .
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1123 CB    CB    . ASN ASN ASN A A 150 150 . 0.3415 0.3659 0.3871 0.0019  0.0133  -
0.0107 1 .
1124 CG    CG    . ASN ASN ASN A A 150 150 . 0.3895 0.4008 0.4628 0.0144  -0.0134 -
0.0288 1 .
1125 OD1   OD1   . ASN ASN ASN A A 150 150 . 0.4834 0.5037 0.4956 0.0631  -0.0380 -
0.0620 1 .
1126 ND2   ND2   . ASN ASN ASN A A 150 150 . 0.3313 0.3619 0.5408 0.0175  0.0305  -
0.0393 1 .
1127 C     C     . ASN ASN ASN A A 150 150 . 0.3429 0.3655 0.3596 -0.0084 0.0087  -
0.0079 1 .
1128 O     O     . ASN ASN ASN A A 150 150 . 0.3888 0.3891 0.3782 -0.0152 0.0285  -
0.0218 1 .
1129 N     N     . VAL VAL VAL A A 151 151 . 0.3276 0.3554 0.3463 -0.0017 0.0053  -
0.0099 1 .
1130 CA    CA    . VAL VAL VAL A A 151 151 . 0.3074 0.3418 0.3519 0.0118  0.0076  -
0.0109 1 .
1131 CB    CB    . VAL VAL VAL A A 151 151 . 0.3074 0.3295 0.3603 0.0128  0.0061  -
0.0054 1 .
1132 CG1   CG1   . VAL VAL VAL A A 151 151 . 0.3313 0.3436 0.3784 0.0223  0.0197
0.0125  1 .
1133 CG2   CG2   . VAL VAL VAL A A 151 151 . 0.3116 0.3189 0.3928 0.0505  -0.0130 -
0.0243 1 .
1134 C     C     . VAL VAL VAL A A 151 151 . 0.3025 0.3332 0.3373 0.0207  0.0154  -
0.0088 1 .
1135 O     O     . VAL VAL VAL A A 151 151 . 0.2755 0.3330 0.3193 0.0319  0.0345  -
0.0270 1 .
1136 N     N     . ILE ILE ILE A A 152 152 . 0.2794 0.3546 0.3380 0.0207  0.0011  -
0.0137 1 .
1137 CA    CA    . ILE ILE ILE A A 152 152 . 0.2741 0.3315 0.3238 0.0131  0.0000  -
0.0248 1 .
1138 CB    CB    . ILE ILE ILE A A 152 152 . 0.2796 0.3371 0.3516 0.0067  0.0038  -
0.0203 1 .
1139 CG1   CG1   . ILE ILE ILE A A 152 152 . 0.2689 0.3418 0.3716 0.0177  -0.0349 -
0.0246 1 .
1140 CD1   CD1   . ILE ILE ILE A A 152 152 . 0.1681 0.3788 0.4035 0.0056  0.0024  -
0.0347 1 .
1141 CG2   CG2   . ILE ILE ILE A A 152 152 . 0.2563 0.3299 0.2899 0.0024  -0.0016 -
0.0571 1 .
1142 C     C     . ILE ILE ILE A A 152 152 . 0.2806 0.3531 0.3245 0.0182  0.0028  -
0.0176 1 .
1143 O     O     . ILE ILE ILE A A 152 152 . 0.2800 0.3587 0.2963 0.0191  0.0170  -
0.0361 1 .
1144 N     N     . ASN ASN ASN A A 153 153 . 0.2586 0.3518 0.3321 0.0255  0.0023  -
0.0215 1 .
1145 CA    CA    . ASN ASN ASN A A 153 153 . 0.2702 0.3442 0.3397 0.0168  0.0034  -
0.0102 1 .
1146 CB    CB    . ASN ASN ASN A A 153 153 . 0.2247 0.3343 0.3441 0.0150  0.0084
0.0049  1 .
1147 CG    CG    . ASN ASN ASN A A 153 153 . 0.2613 0.4112 0.3686 0.0177  0.0098  -
0.0129 1 .
1148 OD1   OD1   . ASN ASN ASN A A 153 153 . 0.1645 0.5246 0.5004 0.0265  0.0755  -
0.0500 1 .
1149 ND2   ND2   . ASN ASN ASN A A 153 153 . 0.0275 0.4177 0.3773 0.0158  0.0241
0.0176  1 .
1150 C     C     . ASN ASN ASN A A 153 153 . 0.2722 0.3540 0.3548 0.0195  0.0056  -
0.0048 1 .
1151 O     O     . ASN ASN ASN A A 153 153 . 0.2475 0.3618 0.3854 0.0223  0.0102  -
0.0098 1 .
1152 N     N     . GLY GLY GLY A A 154 154 . 0.3096 0.3705 0.3718 0.0212  0.0078  -
0.0188 1 .
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1153 CA    CA    . GLY GLY GLY A A 154 154 . 0.3323 0.3816 0.4035 0.0147  0.0000  -
0.0148 1 .
1154 C     C     . GLY GLY GLY A A 154 154 . 0.3567 0.4033 0.4316 0.0147  -0.0051 -
0.0127 1 .
1155 O     O     . GLY GLY GLY A A 154 154 . 0.3715 0.4180 0.4574 0.0039  0.0101  -
0.0085 1 .
1156 N     N     . GLY GLY GLY A A 155 155 . 0.3707 0.4164 0.4393 0.0074  -0.0017 -
0.0156 1 .
1157 CA    CA    . GLY GLY GLY A A 155 155 . 0.3608 0.3971 0.4262 0.0091  -0.0063 -
0.0156 1 .
1158 C     C     . GLY GLY GLY A A 155 155 . 0.3656 0.4089 0.4251 0.0120  -0.0086 -
0.0102 1 .
1159 O     O     . GLY GLY GLY A A 155 155 . 0.3222 0.3988 0.4236 0.0101  -0.0067 -
0.0068 1 .
1160 N     N     . SER SER SER A A 156 156 . 0.3966 0.4182 0.4342 0.0124  -0.0144 -
0.0134 1 .
1161 CA    CA    . SER SER SER A A 156 156 . 0.4171 0.4272 0.4449 0.0258  -0.0210 -
0.0173 1 .
1162 CB    CB    . SER SER SER A A 156 156 . 0.4362 0.4314 0.4433 0.0279  -0.0194 -
0.0151 1 .
1163 OG    OG    . SER SER SER A A 156 156 . 0.4347 0.4541 0.4583 0.0366  -0.0127 -
0.0585 1 .
1164 C     C     . SER SER SER A A 156 156 . 0.4080 0.4365 0.4493 0.0225  -0.0188 -
0.0168 1 .
1165 O     O     . SER SER SER A A 156 156 . 0.3932 0.4364 0.4539 0.0389  -0.0302 -
0.0217 1 .
1166 N     N     . HIS HIS HIS A A 157 157 . 0.3956 0.4280 0.4433 0.0269  -0.0114 -
0.0158 1 .
1167 CA    CA    . HIS HIS HIS A A 157 157 . 0.3962 0.4265 0.4366 0.0016  -0.0075 -
0.0189 1 .
1168 CB    CB    . HIS HIS HIS A A 157 157 . 0.3792 0.4259 0.4384 0.0008  -0.0078 -
0.0148 1 .
1169 CG    CG    . HIS HIS HIS A A 157 157 . 0.3757 0.4246 0.4405 -0.0081 -0.0283 -
0.0151 1 .
1170 ND1   ND1   . HIS HIS HIS A A 157 157 . 0.3452 0.3844 0.4120 -0.0064 -0.0468 -
0.0562 1 .
1171 CE1   CE1   . HIS HIS HIS A A 157 157 . 0.2804 0.4223 0.4525 -0.0423 -0.0531 -
0.0372 1 .
1172 NE2   NE2   . HIS HIS HIS A A 157 157 . 0.3173 0.4230 0.4473 -0.0485 -0.0481 -
0.0450 1 .
1173 CD2   CD2   . HIS HIS HIS A A 157 157 . 0.3610 0.4227 0.4542 -0.0088 -0.0186 -
0.0401 1 .
1174 C     C     . HIS HIS HIS A A 157 157 . 0.3968 0.4266 0.4273 -0.0021 -0.0070 -
0.0185 1 .
1175 O     O     . HIS HIS HIS A A 157 157 . 0.3362 0.4224 0.4491 -0.0203 -0.0082 -
0.0419 1 .
1176 N     N     . ALA ALA ALA A A 158 158 . 0.3893 0.4184 0.4118 -0.0128 0.0055  -
0.0242 1 .
1177 CA    CA    . ALA ALA ALA A A 158 158 . 0.3960 0.4191 0.4123 -0.0004 -0.0021 -
0.0123 1 .
1178 CB    CB    . ALA ALA ALA A A 158 158 . 0.3998 0.4120 0.4082 0.0141  0.0034  -
0.0065 1 .
1179 C     C     . ALA ALA ALA A A 158 158 . 0.4013 0.4217 0.4235 -0.0034 -0.0064 -
0.0075 1 .
1180 O     O     . ALA ALA ALA A A 158 158 . 0.3780 0.4125 0.4267 0.0119  -0.0158 -
0.0115 1 .
1181 N     N     . GLY GLY GLY A A 159 159 . 0.4064 0.4393 0.4306 -0.0105 -0.0134 -
0.0032 1 .
1182 CA    CA    . GLY GLY GLY A A 159 159 . 0.4213 0.4440 0.4460 -0.0065 -0.0098 -
0.0053 1 .
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1183 C     C     . GLY GLY GLY A A 159 159 . 0.4299 0.4535 0.4625 -0.0108 -0.0109 -
0.0026 1 .
1184 O     O     . GLY GLY GLY A A 159 159 . 0.4087 0.4454 0.4918 -0.0099 -0.0148 -
0.0234 1 .
1185 N     N     . ASN ASN ASN A A 160 160 . 0.4240 0.4620 0.4693 -0.0021 -0.0119 -
0.0078 1 .
1186 CA    CA    . ASN ASN ASN A A 160 160 . 0.4172 0.4542 0.4626 0.0050  -0.0038 -
0.0052 1 .
1187 CB    CB    . ASN ASN ASN A A 160 160 . 0.4135 0.4469 0.4649 0.0077  -0.0033 -
0.0079 1 .
1188 CG    CG    . ASN ASN ASN A A 160 160 . 0.4043 0.4327 0.4222 0.0165  -0.0164
0.0030  1 .
1189 OD1   OD1   . ASN ASN ASN A A 160 160 . 0.2734 0.4404 0.4046 -0.0012 -0.0515 -
0.0283 1 .
1190 ND2   ND2   . ASN ASN ASN A A 160 160 . 0.3939 0.4282 0.4266 0.0215  -0.0155
0.0351  1 .
1191 C     C     . ASN ASN ASN A A 160 160 . 0.4117 0.4535 0.4654 0.0136  -0.0019 -
0.0065 1 .
1192 O     O     . ASN ASN ASN A A 160 160 . 0.3881 0.4738 0.4779 0.0376  0.0102  -
0.0172 1 .
1193 N     N     . LYS LYS LYS A A 161 161 . 0.4080 0.4690 0.4804 0.0152  -0.0001
0.0038  1 .
1194 CA    CA    . LYS LYS LYS A A 161 161 . 0.4255 0.4812 0.4794 0.0056  0.0056  -
0.0004 1 .
1195 CB    CB    . LYS LYS LYS A A 161 161 . 0.4194 0.4925 0.4840 -0.0053 -0.0055
0.0048  1 .
1196 CG    CG    . LYS LYS LYS A A 161 161 . 0.4291 0.5078 0.5260 0.0097  0.0171  -
0.0051 1 .
1197 CD    CD    . LYS LYS LYS A A 161 161 . 0.4899 0.5612 0.6017 -0.0238 0.0125  -
0.0124 1 .
1198 CE    CE    . LYS LYS LYS A A 161 161 . 0.5621 0.5956 0.6620 -0.0591 0.0201
0.0177  1 .
1199 NZ    NZ    . LYS LYS LYS A A 161 161 . 0.6040 0.6799 0.7306 -0.0380 -0.0118
0.0332  1 .
1200 C     C     . LYS LYS LYS A A 161 161 . 0.4180 0.4688 0.4789 0.0059  0.0108  -
0.0007 1 .
1201 O     O     . LYS LYS LYS A A 161 161 . 0.3693 0.4529 0.4924 0.0158  0.0179  -
0.0077 1 .
1202 N     N     . LEU LEU LEU A A 162 162 . 0.4235 0.4658 0.4774 0.0051  0.0178  -
0.0084 1 .
1203 CA    CA    . LEU LEU LEU A A 162 162 . 0.4225 0.4543 0.4576 0.0119  0.0096  -
0.0076 1 .
1204 CB    CB    . LEU LEU LEU A A 162 162 . 0.3989 0.4518 0.4622 0.0106  0.0023  -
0.0114 1 .
1205 CG    CG    . LEU LEU LEU A A 162 162 . 0.3610 0.4439 0.4675 0.0058  -0.0123 -
0.0121 1 .
1206 CD1   CD1   . LEU LEU LEU A A 162 162 . 0.3098 0.4974 0.4908 0.0068  -0.0299 -
0.0232 1 .
1207 CD2   CD2   . LEU LEU LEU A A 162 162 . 0.2492 0.4787 0.5213 -0.0160 -0.0137 -
0.0187 1 .
1208 C     C     . LEU LEU LEU A A 162 162 . 0.4155 0.4402 0.4499 0.0128  0.0089  -
0.0141 1 .
1209 O     O     . LEU LEU LEU A A 162 162 . 0.3814 0.4293 0.4327 0.0199  0.0000  -
0.0324 1 .
1210 N     N     . ALA ALA ALA A A 163 163 . 0.4211 0.4375 0.4491 0.0115  0.0097  -
0.0069 1 .
1211 CA    CA    . ALA ALA ALA A A 163 163 . 0.4236 0.4401 0.4428 0.0024  0.0064
0.0011  1 .
1212 CB    CB    . ALA ALA ALA A A 163 163 . 0.4048 0.4462 0.4492 0.0011  -0.0008 -
0.0041 1 .
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1213 C     C     . ALA ALA ALA A A 163 163 . 0.4210 0.4416 0.4458 0.0037  0.0024  -
0.0044 1 .
1214 O     O     . ALA ALA ALA A A 163 163 . 0.4116 0.4440 0.4340 0.0005  -0.0009
0.0017  1 .
1215 N     N     . MET MET MET A A 164 164 . 0.4206 0.4389 0.4416 -0.0009 0.0010  -
0.0077 1 .
1216 CA    CA    . MET MET MET A A 164 164 . 0.4102 0.4311 0.4353 -0.0018 -0.0129 -
0.0021 1 .
1217 CB    CB    . MET MET MET A A 164 164 . 0.4185 0.4534 0.4238 0.0005  -0.0125
0.0062  1 .
1218 CG    CG    . MET MET MET A A 164 164 . 0.3853 0.4673 0.4764 -0.0051 -0.0238
0.0061  1 .
1219 SD    SD    . MET MET MET A A 164 164 . 0.3850 0.5666 0.5151 -0.0191 -0.0657
0.0008  1 .
1220 CE    CE    . MET MET MET A A 164 164 . 0.2511 0.4518 0.3450 -0.0044 -0.0669
0.0143  1 .
1221 C     C     . MET MET MET A A 164 164 . 0.3868 0.4136 0.4278 -0.0052 -0.0148 -
0.0011 1 .
1222 O     O     . MET MET MET A A 164 164 . 0.3761 0.4095 0.4374 -0.0056 -0.0360
0.0014  1 .
1223 N     N     . GLN GLN GLN A A 165 165 . 0.3612 0.4077 0.4080 -0.0041 -0.0103
0.0036  1 .
1224 CA    CA    . GLN GLN GLN A A 165 165 . 0.3619 0.3892 0.4038 -0.0064 -0.0091
0.0064  1 .
1225 CB    CB    . GLN GLN GLN A A 165 165 . 0.3758 0.4062 0.3988 -0.0267 -0.0157
0.0042  1 .
1226 CG    CG    . GLN GLN GLN A A 165 165 . 0.3614 0.4263 0.4339 -0.0202 -0.0086 -
0.0056 1 .
1227 CD    CD    . GLN GLN GLN A A 165 165 . 0.3695 0.4213 0.4324 -0.0228 -0.0143 -
0.0258 1 .
1228 OE1   OE1   . GLN GLN GLN A A 165 165 . 0.3049 0.4923 0.4648 -0.0020 -0.0125 -
0.0293 1 .
1229 NE2   NE2   . GLN GLN GLN A A 165 165 . 0.3856 0.4246 0.4517 -0.0257 0.0361  -
0.0344 1 .
1230 C     C     . GLN GLN GLN A A 165 165 . 0.3169 0.3888 0.3948 -0.0064 -0.0032
0.0069  1 .
1231 O     O     . GLN GLN GLN A A 165 165 . 0.2878 0.3637 0.4115 -0.0004 -0.0134
0.0068  1 .
1232 N     N     . GLU GLU GLU A A 166 166 . 0.3012 0.3751 0.3905 -0.0068 -0.0065
0.0000  1 .
1233 CA    CA    . GLU GLU GLU A A 166 166 . 0.3263 0.3831 0.4059 -0.0143 0.0014  -
0.0028 1 .
1234 CB    CB    . GLU GLU GLU A A 166 166 . 0.3197 0.3902 0.4173 -0.0213 -0.0112 -
0.0092 1 .
1235 CG    CG    . GLU GLU GLU A A 166 166 . 0.3288 0.4263 0.4288 -0.0142 -0.0072 -
0.0349 1 .
1236 CD    CD    . GLU GLU GLU A A 166 166 . 0.4335 0.4333 0.4556 -0.0350 0.0044  -
0.0224 1 .
1237 OE1   OE1   . GLU GLU GLU A A 166 166 . 0.3664 0.4450 0.4747 -0.0366 0.0178  -
0.0509 1 .
1238 OE2   OE2   . GLU GLU GLU A A 166 166 . 0.5298 0.4146 0.5025 0.0149  0.0078  -
0.0435 1 .
1239 C     C     . GLU GLU GLU A A 166 166 . 0.3083 0.3677 0.3912 -0.0196 -0.0014 -
0.0019 1 .
1240 O     O     . GLU GLU GLU A A 166 166 . 0.2763 0.3715 0.4117 -0.0318 -0.0028 -
0.0090 1 .
1241 N     N     . PHE PHE PHE A A 167 167 . 0.3191 0.3797 0.3934 -0.0009 -0.0060 -
0.0071 1 .
1242 CA    CA    . PHE PHE PHE A A 167 167 . 0.3282 0.3788 0.3924 0.0073  -0.0029 -
0.0084 1 .
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1243 CB    CB    . PHE PHE PHE A A 167 167 . 0.3136 0.3596 0.3988 0.0074  0.0021
0.0025  1 .
1244 CG    CG    . PHE PHE PHE A A 167 167 . 0.3459 0.4145 0.4207 0.0113  -0.0046 -
0.0223 1 .
1245 CD1   CD1   . PHE PHE PHE A A 167 167 . 0.3338 0.4494 0.4169 0.0055  0.0113  -
0.0265 1 .
1246 CE1   CE1   . PHE PHE PHE A A 167 167 . 0.3912 0.4629 0.4380 0.0313  -0.0144 -
0.0454 1 .
1247 CZ    CZ    . PHE PHE PHE A A 167 167 . 0.3318 0.4632 0.3878 0.0087  -0.0017 -
0.0304 1 .
1248 CE2   CE2   . PHE PHE PHE A A 167 167 . 0.3649 0.4327 0.4386 0.0363  -0.0201 -
0.0705 1 .
1249 CD2   CD2   . PHE PHE PHE A A 167 167 . 0.3250 0.4340 0.4032 0.0016  -0.0084 -
0.0586 1 .
1250 C     C     . PHE PHE PHE A A 167 167 . 0.3226 0.3758 0.3849 -0.0003 0.0025  -
0.0089 1 .
1251 O     O     . PHE PHE PHE A A 167 167 . 0.2979 0.3826 0.3870 0.0075  -0.0023 -
0.0081 1 .
1252 N     N     . MET MET MET A A 168 168 . 0.3443 0.3776 0.3836 -0.0096 0.0045  -
0.0162 1 .
1253 CA    CA    . MET MET MET A A 168 168 . 0.3618 0.3845 0.3864 0.0004  0.0050  -
0.0189 1 .
1254 CB    CB    . MET MET MET A A 168 168 . 0.3527 0.3936 0.3916 -0.0120 0.0035  -
0.0214 1 .
1255 CG    CG    . MET MET MET A A 168 168 . 0.4189 0.4068 0.4113 0.0219  0.0301  -
0.0223 1 .
1256 SD    SD    . MET MET MET A A 168 168 . 0.3942 0.4290 0.5121 0.0073  -0.0233 -
0.0298 1 .
1257 CE    CE    . MET MET MET A A 168 168 . 0.3619 0.3417 0.4061 0.0121  -0.0359 -
0.0281 1 .
1258 C     C     . MET MET MET A A 168 168 . 0.3643 0.3983 0.3894 0.0018  -0.0005 -
0.0144 1 .
1259 O     O     . MET MET MET A A 168 168 . 0.3901 0.3999 0.3954 0.0057  -0.0007 -
0.0332 1 .
1260 N     N     . ILE ILE ILE A A 169 169 . 0.3726 0.4048 0.3851 -0.0030 -0.0046 -
0.0115 1 .
1261 CA    CA    . ILE ILE ILE A A 169 169 . 0.3508 0.3982 0.3854 -0.0042 -0.0021 -
0.0104 1 .
1262 CB    CB    . ILE ILE ILE A A 169 169 . 0.3556 0.4056 0.3931 -0.0150 -0.0014 -
0.0115 1 .
1263 CG1   CG1   . ILE ILE ILE A A 169 169 . 0.3044 0.3937 0.4017 -0.0280 0.0033  -
0.0103 1 .
1264 CD1   CD1   . ILE ILE ILE A A 169 169 . 0.1588 0.3785 0.4701 -0.1122 -0.0232
0.0098  1 .
1265 CG2   CG2   . ILE ILE ILE A A 169 169 . 0.3279 0.4110 0.4060 0.0086  0.0006  -
0.0215 1 .
1266 C     C     . ILE ILE ILE A A 169 169 . 0.3676 0.3997 0.3786 -0.0107 0.0006  -
0.0062 1 .
1267 O     O     . ILE ILE ILE A A 169 169 . 0.3428 0.4018 0.3740 0.0034  -0.0034 -
0.0070 1 .
1268 N     N     . LEU LEU LEU A A 170 170 . 0.3623 0.3987 0.3795 -0.0133 -0.0019 -
0.0004 1 .
1269 CA    CA    . LEU LEU LEU A A 170 170 . 0.3414 0.3804 0.3587 -0.0194 0.0040
0.0081  1 .
1270 CB    CB    . LEU LEU LEU A A 170 170 . 0.3197 0.3826 0.3702 -0.0168 0.0045
0.0070  1 .
1271 CG    CG    . LEU LEU LEU A A 170 170 . 0.3295 0.3894 0.3515 -0.0331 0.0160  -
0.0029 1 .
1272 CD1   CD1   . LEU LEU LEU A A 170 170 . 0.3826 0.4164 0.3384 -0.0069 0.0593
0.0184  1 .
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1273 CD2   CD2   . LEU LEU LEU A A 170 170 . 0.3659 0.4360 0.3484 -0.0080 0.0598  -
0.0136 1 .
1274 C     C     . LEU LEU LEU A A 170 170 . 0.3496 0.3639 0.3533 -0.0167 -0.0048
0.0079  1 .
1275 O     O     . LEU LEU LEU A A 170 170 . 0.3696 0.3777 0.3354 -0.0360 -0.0203
0.0160  1 .
1276 N     N     . PRO PRO PRO A A 171 171 . 0.3388 0.3539 0.3493 -0.0007 -0.0003
0.0019  1 .
1277 CA    CA    . PRO PRO PRO A A 171 171 . 0.3322 0.3404 0.3416 -0.0022 0.0005  -
0.0101 1 .
1278 CB    CB    . PRO PRO PRO A A 171 171 . 0.3385 0.3316 0.3386 0.0258  0.0064
0.0078  1 .
1279 CG    CG    . PRO PRO PRO A A 171 171 . 0.3506 0.3141 0.3344 0.0123  0.0071  -
0.0124 1 .
1280 CD    CD    . PRO PRO PRO A A 171 171 . 0.3329 0.3496 0.3450 -0.0024 -0.0087 -
0.0134 1 .
1281 C     C     . PRO PRO PRO A A 171 171 . 0.3266 0.3361 0.3357 0.0013  0.0001  -
0.0104 1 .
1282 O     O     . PRO PRO PRO A A 171 171 . 0.2736 0.3235 0.3249 0.0061  -0.0089 -
0.0151 1 .
1283 N     N     . VAL VAL VAL A A 172 172 . 0.3266 0.3358 0.3460 0.0076  -0.0016 -
0.0084 1 .
1284 CA    CA    . VAL VAL VAL A A 172 172 . 0.3547 0.3590 0.3546 0.0042  0.0072
0.0049  1 .
1285 CB    CB    . VAL VAL VAL A A 172 172 . 0.3631 0.3605 0.3587 -0.0026 0.0147
0.0050  1 .
1286 CG1   CG1   . VAL VAL VAL A A 172 172 . 0.3833 0.3454 0.3317 0.0091  0.0066
0.0132  1 .
1287 CG2   CG2   . VAL VAL VAL A A 172 172 . 0.3973 0.3795 0.3671 -0.0123 0.0247  -
0.0099 1 .
1288 C     C     . VAL VAL VAL A A 172 172 . 0.3762 0.3831 0.3660 0.0057  0.0110
0.0018  1 .
1289 O     O     . VAL VAL VAL A A 172 172 . 0.3472 0.3928 0.3639 0.0089  0.0059
0.0037  1 .
1290 N     N     . GLY GLY GLY A A 173 173 . 0.3920 0.3991 0.3807 0.0051  0.0090  -
0.0041 1 .
1291 CA    CA    . GLY GLY GLY A A 173 173 . 0.4061 0.4262 0.3968 0.0194  0.0005  -
0.0146 1 .
1292 C     C     . GLY GLY GLY A A 173 173 . 0.4259 0.4393 0.4194 0.0173  0.0002  -
0.0169 1 .
1293 O     O     . GLY GLY GLY A A 173 173 . 0.4258 0.4551 0.4236 0.0230  0.0090  -
0.0184 1 .
1294 N     N     . ALA ALA ALA A A 174 174 . 0.4212 0.4352 0.4119 0.0121  -0.0033 -
0.0237 1 .
1295 CA    CA    . ALA ALA ALA A A 174 174 . 0.4281 0.4382 0.4206 0.0184  -0.0027 -
0.0168 1 .
1296 CB    CB    . ALA ALA ALA A A 174 174 . 0.4144 0.4342 0.3966 0.0307  0.0038  -
0.0268 1 .
1297 C     C     . ALA ALA ALA A A 174 174 . 0.4246 0.4391 0.4142 0.0215  0.0059  -
0.0167 1 .
1298 O     O     . ALA ALA ALA A A 174 174 . 0.4195 0.4431 0.4155 0.0308  0.0001  -
0.0288 1 .
1299 N     N     . GLU GLU GLU A A 175 175 . 0.4475 0.4619 0.4342 0.0206  0.0075  -
0.0111 1 .
1300 CA    CA    . GLU GLU GLU A A 175 175 . 0.4574 0.4675 0.4451 0.0081  0.0150  -
0.0070 1 .
1301 CB    CB    . GLU GLU GLU A A 175 175 . 0.4710 0.4942 0.4639 0.0150  0.0201  -
0.0076 1 .
1302 CG    CG    . GLU GLU GLU A A 175 175 . 0.5855 0.5825 0.5439 -0.0165 0.0135  -
0.0333 1 .
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1303 CD    CD    . GLU GLU GLU A A 175 175 . 0.6684 0.7348 0.6063 -0.0429 0.0112  -
0.0147 1 .
1304 OE1   OE1   . GLU GLU GLU A A 175 175 . 0.7551 0.7910 0.6483 -0.0333 -0.0709
0.0016  1 .
1305 OE2   OE2   . GLU GLU GLU A A 175 175 . 0.6653 0.7539 0.6470 -0.0796 0.0095  -
0.0348 1 .
1306 C     C     . GLU GLU GLU A A 175 175 . 0.4469 0.4460 0.4263 0.0183  0.0148
0.0035  1 .
1307 O     O     . GLU GLU GLU A A 175 175 . 0.4759 0.4577 0.4172 0.0147  0.0211  -
0.0033 1 .
1308 N     N     . SER SER SER A A 176 176 . 0.4248 0.4080 0.4044 0.0249  0.0123
0.0148  1 .
1309 CA    CA    . SER SER SER A A 176 176 . 0.4008 0.3983 0.3952 0.0227  0.0038
0.0115  1 .
1310 CB    CB    . SER SER SER A A 176 176 . 0.4273 0.4041 0.4039 0.0345  0.0065
0.0132  1 .
1311 OG    OG    . SER SER SER A A 176 176 . 0.4321 0.4012 0.4480 0.0162  0.0293
0.0371  1 .
1312 C     C     . SER SER SER A A 176 176 . 0.3835 0.3848 0.3825 0.0195  -0.0029
0.0098  1 .
1313 O     O     . SER SER SER A A 176 176 . 0.3500 0.3669 0.3788 0.0223  -0.0229
0.0018  1 .
1314 N     N     . PHE PHE PHE A A 177 177 . 0.3740 0.3701 0.3703 0.0235  0.0017
0.0042  1 .
1315 CA    CA    . PHE PHE PHE A A 177 177 . 0.3763 0.3751 0.3642 0.0181  -0.0065
0.0075  1 .
1316 CB    CB    . PHE PHE PHE A A 177 177 . 0.3699 0.3637 0.3541 0.0221  -0.0019 -
0.0015 1 .
1317 CG    CG    . PHE PHE PHE A A 177 177 . 0.3393 0.3983 0.3488 0.0129  0.0233
0.0250  1 .
1318 CD1   CD1   . PHE PHE PHE A A 177 177 . 0.2917 0.3567 0.3119 0.0230  0.0184
0.0077  1 .
1319 CE1   CE1   . PHE PHE PHE A A 177 177 . 0.2600 0.3817 0.3220 -0.0073 0.0039  -
0.0153 1 .
1320 CZ    CZ    . PHE PHE PHE A A 177 177 . 0.2607 0.3838 0.2907 0.0194  0.0217  -
0.0028 1 .
1321 CE2   CE2   . PHE PHE PHE A A 177 177 . 0.3629 0.4165 0.3664 0.0522  0.0367
0.0117  1 .
1322 CD2   CD2   . PHE PHE PHE A A 177 177 . 0.2965 0.3898 0.3295 0.0166  0.0203  -
0.0208 1 .
1323 C     C     . PHE PHE PHE A A 177 177 . 0.3713 0.3803 0.3667 0.0181  -0.0094
0.0026  1 .
1324 O     O     . PHE PHE PHE A A 177 177 . 0.3358 0.3634 0.3601 0.0337  -0.0145
0.0063  1 .
1325 N     N     . ARG ARG ARG A A 178 178 . 0.3681 0.3745 0.3839 0.0277  -0.0052 -
0.0045 1 .
1326 CA    CA    . ARG ARG ARG A A 178 178 . 0.3758 0.3902 0.3883 0.0189  -0.0009
0.0017  1 .
1327 CB    CB    . ARG ARG ARG A A 178 178 . 0.3759 0.4130 0.4164 0.0161  -0.0144
0.0071  1 .
1328 CG    CG    . ARG ARG ARG A A 178 178 . 0.4797 0.4923 0.4588 0.0175  0.0003
0.0346  1 .
1329 CD    CD    . ARG ARG ARG A A 178 178 . 0.5479 0.5934 0.6207 0.0614  -0.0102
0.0344  1 .
1330 NE    NE    . ARG ARG ARG A A 178 178 . 0.6880 0.6894 0.6447 0.0447  -0.0291
0.0475  1 .
1331 CZ    CZ    . ARG ARG ARG A A 178 178 . 0.7952 0.7173 0.7246 0.0194  -0.0376
0.0242  1 .
1332 NH1   NH1   . ARG ARG ARG A A 178 178 . 0.7780 0.7277 0.7182 0.0302  -0.0434
0.0290  1 .
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1333 NH2   NH2   . ARG ARG ARG A A 178 178 . 0.8251 0.7592 0.6901 0.0060  -0.0467
0.0098  1 .
1334 C     C     . ARG ARG ARG A A 178 178 . 0.3566 0.3987 0.3856 0.0159  0.0019
0.0013  1 .
1335 O     O     . ARG ARG ARG A A 178 178 . 0.3419 0.4051 0.3822 0.0260  0.0087  -
0.0048 1 .
1336 N     N     . ASP ASP ASP A A 179 179 . 0.3345 0.3785 0.3570 0.0149  -0.0028 -
0.0039 1 .
1337 CA    CA    . ASP ASP ASP A A 179 179 . 0.3409 0.3755 0.3565 0.0178  -0.0038 -
0.0095 1 .
1338 CB    CB    . ASP ASP ASP A A 179 179 . 0.3660 0.4004 0.3689 0.0080  -0.0031
0.0040  1 .
1339 CG    CG    . ASP ASP ASP A A 179 179 . 0.4207 0.4270 0.4093 0.0173  -0.0118 -
0.0038 1 .
1340 OD1   OD1   . ASP ASP ASP A A 179 179 . 0.4798 0.5167 0.4205 0.0122  -0.0291
0.0427  1 .
1341 OD2   OD2   . ASP ASP ASP A A 179 179 . 0.4746 0.4864 0.4595 0.0684  -0.0116
0.0109  1 .
1342 C     C     . ASP ASP ASP A A 179 179 . 0.3265 0.3605 0.3359 0.0130  0.0055  -
0.0028 1 .
1343 O     O     . ASP ASP ASP A A 179 179 . 0.3089 0.3700 0.3243 0.0210  -0.0075 -
0.0210 1 .
1344 N     N     . ALA ALA ALA A A 180 180 . 0.3183 0.3603 0.3405 0.0283  0.0113  -
0.0161 1 .
1345 CA    CA    . ALA ALA ALA A A 180 180 . 0.3388 0.3515 0.3318 0.0225  0.0014
0.0011  1 .
1346 CB    CB    . ALA ALA ALA A A 180 180 . 0.3181 0.3263 0.3484 0.0160  0.0044
0.0043  1 .
1347 C     C     . ALA ALA ALA A A 180 180 . 0.3341 0.3464 0.3299 0.0167  0.0073  -
0.0052 1 .
1348 O     O     . ALA ALA ALA A A 180 180 . 0.3337 0.3226 0.3290 0.0176  -0.0028 -
0.0177 1 .
1349 N     N     . MET MET MET A A 181 181 . 0.3433 0.3462 0.3229 -0.0044 0.0030  -
0.0182 1 .
1350 CA    CA    . MET MET MET A A 181 181 . 0.3457 0.3541 0.3383 0.0039  0.0092  -
0.0076 1 .
1351 CB    CB    . MET MET MET A A 181 181 . 0.3588 0.3620 0.3419 0.0033  0.0084  -
0.0044 1 .
1352 CG    CG    . MET MET MET A A 181 181 . 0.3752 0.3424 0.3216 0.0128  0.0334  -
0.0097 1 .
1353 SD    SD    . MET MET MET A A 181 181 . 0.4095 0.3529 0.3315 0.0041  -0.0073
0.0285  1 .
1354 CE    CE    . MET MET MET A A 181 181 . 0.3859 0.3083 0.2822 -0.0003 0.0201
0.0182  1 .
1355 C     C     . MET MET MET A A 181 181 . 0.3478 0.3644 0.3451 0.0068  0.0127  -
0.0099 1 .
1356 O     O     . MET MET MET A A 181 181 . 0.3084 0.3808 0.3549 0.0315  0.0293  -
0.0237 1 .
1357 N     N     . ARG ARG ARG A A 182 182 . 0.3093 0.3567 0.3311 0.0235  0.0172  -
0.0083 1 .
1358 CA    CA    . ARG ARG ARG A A 182 182 . 0.3276 0.3454 0.3355 0.0018  0.0072  -
0.0138 1 .
1359 CB    CB    . ARG ARG ARG A A 182 182 . 0.3465 0.3441 0.3436 0.0109  -0.0063 -
0.0024 1 .
1360 CG    CG    . ARG ARG ARG A A 182 182 . 0.3545 0.3775 0.3662 -0.0408 -0.0252 -
0.0198 1 .
1361 CD    CD    . ARG ARG ARG A A 182 182 . 0.4160 0.4339 0.5370 0.0644  -0.0006 -
0.0164 1 .
1362 NE    NE    . ARG ARG ARG A A 182 182 . 0.5332 0.4912 0.6000 0.0506  0.0326  -
0.0215 1 .
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1363 CZ    CZ    . ARG ARG ARG A A 182 182 . 0.5764 0.5322 0.5953 0.0211  0.0404  -
0.0618 1 .
1364 NH1   NH1   . ARG ARG ARG A A 182 182 . 0.6376 0.5139 0.5526 -0.0006 0.0374  -
0.0742 1 .
1365 NH2   NH2   . ARG ARG ARG A A 182 182 . 0.5817 0.5827 0.5425 0.0405  0.0867  -
0.0582 1 .
1366 C     C     . ARG ARG ARG A A 182 182 . 0.3376 0.3433 0.3293 0.0096  0.0124  -
0.0063 1 .
1367 O     O     . ARG ARG ARG A A 182 182 . 0.3262 0.3556 0.3701 0.0054  0.0138  -
0.0271 1 .
1368 N     N     . LEU LEU LEU A A 183 183 . 0.3388 0.3326 0.3413 0.0165  0.0001  -
0.0067 1 .
1369 CA    CA    . LEU LEU LEU A A 183 183 . 0.3382 0.3204 0.3216 0.0137  -0.0001 -
0.0048 1 .
1370 CB    CB    . LEU LEU LEU A A 183 183 . 0.3695 0.3287 0.3278 0.0122  -0.0003
0.0009  1 .
1371 CG    CG    . LEU LEU LEU A A 183 183 . 0.3623 0.3222 0.2918 0.0246  0.0037
0.0078  1 .
1372 CD1   CD1   . LEU LEU LEU A A 183 183 . 0.3744 0.3413 0.3250 0.0534  -0.0263
0.0316  1 .
1373 CD2   CD2   . LEU LEU LEU A A 183 183 . 0.3398 0.2562 0.2901 0.0358  -0.0389 -
0.0245 1 .
1374 C     C     . LEU LEU LEU A A 183 183 . 0.3344 0.3314 0.3379 0.0048  -0.0065
0.0099  1 .
1375 O     O     . LEU LEU LEU A A 183 183 . 0.3223 0.3391 0.3674 0.0034  -0.0067
0.0193  1 .
1376 N     N     . GLY GLY GLY A A 184 184 . 0.3235 0.3244 0.3370 0.0160  -0.0106 -
0.0007 1 .
1377 CA    CA    . GLY GLY GLY A A 184 184 . 0.3143 0.3168 0.3301 0.0014  0.0085
0.0048  1 .
1378 C     C     . GLY GLY GLY A A 184 184 . 0.2997 0.3207 0.3284 0.0010  0.0043  -
0.0089 1 .
1379 O     O     . GLY GLY GLY A A 184 184 . 0.2720 0.3109 0.3324 0.0033  0.0212  -
0.0200 1 .
1380 N     N     . ALA ALA ALA A A 185 185 . 0.2572 0.3004 0.3143 -0.0061 -0.0095 -
0.0109 1 .
1381 CA    CA    . ALA ALA ALA A A 185 185 . 0.2734 0.2986 0.3186 -0.0193 -0.0054 -
0.0027 1 .
1382 CB    CB    . ALA ALA ALA A A 185 185 . 0.2517 0.2805 0.3056 -0.0194 -0.0137 -
0.0054 1 .
1383 C     C     . ALA ALA ALA A A 185 185 . 0.2877 0.3151 0.3302 -0.0263 -0.0069 -
0.0128 1 .
1384 O     O     . ALA ALA ALA A A 185 185 . 0.2834 0.3058 0.3443 -0.0621 0.0010  -
0.0086 1 .
1385 N     N     . GLU GLU GLU A A 186 186 . 0.2984 0.3350 0.3460 -0.0211 -0.0002 -
0.0069 1 .
1386 CA    CA    . GLU GLU GLU A A 186 186 . 0.3188 0.3459 0.3600 -0.0124 0.0077  -
0.0041 1 .
1387 CB    CB    . GLU GLU GLU A A 186 186 . 0.3291 0.3575 0.3559 -0.0116 0.0075  -
0.0017 1 .
1388 CG    CG    . GLU GLU GLU A A 186 186 . 0.3653 0.3598 0.3842 0.0002  0.0032
0.0111  1 .
1389 CD    CD    . GLU GLU GLU A A 186 186 . 0.4170 0.3939 0.4287 -0.0082 0.0071
0.0061  1 .
1390 OE1   OE1   . GLU GLU GLU A A 186 186 . 0.5342 0.4587 0.4429 -0.0120 -0.0549
0.0111  1 .
1391 OE2   OE2   . GLU GLU GLU A A 186 186 . 0.3502 0.3725 0.4499 -0.0125 0.0584  -
0.0103 1 .
1392 C     C     . GLU GLU GLU A A 186 186 . 0.3157 0.3488 0.3521 -0.0140 0.0045  -
0.0046 1 .
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1393 O    O    . GLU GLU GLU A A 186 186 . 0.2865 0.3593 0.3658 -0.0077 0.0297  -
0.0051 1 .
1394 N    N    . VAL VAL VAL A A 187 187 . 0.3220 0.3286 0.3481 -0.0017 0.0128  -
0.0159 1 .
1395 CA   CA   . VAL VAL VAL A A 187 187 . 0.3211 0.3196 0.3313 -0.0068 0.0064  -
0.0254 1 .
1396 CB   CB   . VAL VAL VAL A A 187 187 . 0.3132 0.3159 0.3309 -0.0018 0.0117  -
0.0227 1 .
1397 CG1  CG1  . VAL VAL VAL A A 187 187 . 0.3399 0.2940 0.3118 -0.0085 0.0060  -
0.0504 1 .
1398 CG2  CG2  . VAL VAL VAL A A 187 187 . 0.3618 0.3065 0.3265 0.0021  0.0058  -
0.0048 1 .
1399 C    C    . VAL VAL VAL A A 187 187 . 0.3228 0.3413 0.3738 -0.0087 0.0155  -
0.0142 1 .
1400 O    O    . VAL VAL VAL A A 187 187 . 0.3163 0.3306 0.4102 -0.0106 0.0183  -
0.0188 1 .
1401 N    N    . TYR TYR TYR A A 188 188 . 0.3370 0.3559 0.3674 -0.0151 0.0193  -
0.0232 1 .
1402 CA   CA   . TYR TYR TYR A A 188 188 . 0.3515 0.3680 0.3584 -0.0146 0.0083  -
0.0121 1 .
1403 CB   CB   . TYR TYR TYR A A 188 188 . 0.3797 0.3693 0.3510 -0.0202 0.0125  -
0.0035 1 .
1404 CG   CG   . TYR TYR TYR A A 188 188 . 0.3754 0.3385 0.3424 -0.0192 0.0157  -
0.0018 1 .
1405 CD1  CD1  . TYR TYR TYR A A 188 188 . 0.3160 0.3607 0.3332 -0.0277 -0.0175
0.0133  1 .
1406 CE1  CE1  . TYR TYR TYR A A 188 188 . 0.3779 0.3987 0.3680 -0.0438 -0.0002
0.0088  1 .
1407 CZ   CZ   . TYR TYR TYR A A 188 188 . 0.3506 0.3857 0.3972 -0.0426 -0.0058 -
0.0161 1 .
1408 OH   OH   . TYR TYR TYR A A 188 188 . 0.3576 0.4466 0.4366 -0.0312 0.0354  -
0.0065 1 .
1409 CE2  CE2  . TYR TYR TYR A A 188 188 . 0.3984 0.3852 0.4112 -0.0138 0.0000  -
0.0285 1 .
1410 CD2  CD2  . TYR TYR TYR A A 188 188 . 0.3547 0.3620 0.3163 -0.0413 -0.0124 -
0.0254 1 .
1411 C    C    . TYR TYR TYR A A 188 188 . 0.3656 0.3718 0.3712 -0.0094 0.0008  -
0.0154 1 .
1412 O    O    . TYR TYR TYR A A 188 188 . 0.3754 0.3795 0.3610 -0.0175 0.0127  -
0.0191 1 .
1413 N    N    . HIS HIS HIS A A 189 189 . 0.3624 0.3759 0.3770 0.0025  0.0038  -
0.0228 1 .
1414 CA   CA   . HIS HIS HIS A A 189 189 . 0.3596 0.3816 0.3885 -0.0015 -0.0055 -
0.0117 1 .
1415 CB   CB   . HIS HIS HIS A A 189 189 . 0.3473 0.3955 0.3976 -0.0063 -0.0069 -
0.0158 1 .
1416 CG   CG   . HIS HIS HIS A A 189 189 . 0.4007 0.4135 0.4226 -0.0191 -0.0116 -
0.0253 1 .
1417 ND1  ND1  . HIS HIS HIS A A 189 189 . 0.4600 0.4577 0.4211 -0.0722 0.0072  -
0.0038 1 .
1418 CE1  CE1  . HIS HIS HIS A A 189 189 . 0.4552 0.4849 0.3521 -0.0533 -0.0354 -
0.0360 1 .
1419 NE2  NE2  . HIS HIS HIS A A 189 189 . 0.3702 0.4427 0.4194 -0.0127 -0.0775 -
0.0764 1 .
1420 CD2  CD2  . HIS HIS HIS A A 189 189 . 0.4037 0.4077 0.4347 -0.0012 -0.0141 -
0.0316 1 .
1421 C    C    . HIS HIS HIS A A 189 189 . 0.3382 0.3843 0.3861 0.0012  -0.0044 -
0.0082 1 .
1422 O    O    . HIS HIS HIS A A 189 189 . 0.3401 0.3747 0.3956 -0.0015 -0.0219
0.0042  1 .
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1423 N     N     . THR THR THR A A 190 190 . 0.3318 0.3945 0.3906 0.0002  0.0033  -
0.0065 1 .
1424 CA    CA    . THR THR THR A A 190 190 . 0.3559 0.3902 0.3867 0.0018  0.0075  -
0.0096 1 .
1425 CB    CB    . THR THR THR A A 190 190 . 0.3493 0.3935 0.3764 -0.0012 0.0090
0.0018  1 .
1426 OG1   OG1   . THR THR THR A A 190 190 . 0.3570 0.4116 0.3941 -0.0062 0.0389
0.0058  1 .
1427 CG2   CG2   . THR THR THR A A 190 190 . 0.3518 0.3910 0.3258 -0.0098 0.0024
0.0253  1 .
1428 C     C     . THR THR THR A A 190 190 . 0.3515 0.3994 0.3974 -0.0056 0.0025  -
0.0025 1 .
1429 O     O     . THR THR THR A A 190 190 . 0.3640 0.4012 0.4033 -0.0030 -0.0028 -
0.0127 1 .
1430 N     N     . LEU LEU LEU A A 191 191 . 0.3585 0.3828 0.4010 0.0003  0.0025  -
0.0149 1 .
1431 CA    CA    . LEU LEU LEU A A 191 191 . 0.3706 0.3923 0.4043 -0.0139 -0.0098 -
0.0133 1 .
1432 CB    CB    . LEU LEU LEU A A 191 191 . 0.3631 0.3887 0.4042 -0.0163 -0.0138 -
0.0073 1 .
1433 CG    CG    . LEU LEU LEU A A 191 191 . 0.3304 0.3682 0.3699 -0.0324 -0.0288 -
0.0067 1 .
1434 CD1   CD1   . LEU LEU LEU A A 191 191 . 0.3051 0.3936 0.3394 -0.0524 -0.0002
0.0185  1 .
1435 CD2   CD2   . LEU LEU LEU A A 191 191 . 0.2792 0.3736 0.3345 -0.0432 -0.0369 -
0.0130 1 .
1436 C     C     . LEU LEU LEU A A 191 191 . 0.3871 0.4029 0.4178 -0.0104 -0.0052 -
0.0248 1 .
1437 O     O     . LEU LEU LEU A A 191 191 . 0.3933 0.4053 0.4386 -0.0303 0.0020  -
0.0498 1 .
1438 N     N     . LYS LYS LYS A A 192 192 . 0.3896 0.4053 0.4107 -0.0165 -0.0138 -
0.0235 1 .
1439 CA    CA    . LYS LYS LYS A A 192 192 . 0.3901 0.4124 0.4108 -0.0151 0.0015  -
0.0117 1 .
1440 CB    CB    . LYS LYS LYS A A 192 192 . 0.3857 0.4135 0.3914 -0.0217 -0.0045 -
0.0185 1 .
1441 CG    CG    . LYS LYS LYS A A 192 192 . 0.3934 0.4433 0.3676 -0.0284 -0.0080 -
0.0097 1 .
1442 CD    CD    . LYS LYS LYS A A 192 192 . 0.3784 0.4638 0.3090 0.0151  -0.0331
0.0043  1 .
1443 CE    CE    . LYS LYS LYS A A 192 192 . 0.4633 0.5167 0.3936 0.0046  -0.0725 -
0.0227 1 .
1444 NZ    NZ    . LYS LYS LYS A A 192 192 . 0.4059 0.5298 0.4551 0.0054  -0.0765 -
0.0198 1 .
1445 C     C     . LYS LYS LYS A A 192 192 . 0.3910 0.4221 0.4335 -0.0223 0.0011  -
0.0209 1 .
1446 O     O     . LYS LYS LYS A A 192 192 . 0.3659 0.4325 0.4491 -0.0314 0.0071  -
0.0199 1 .
1447 N     N     . GLY GLY GLY A A 193 193 . 0.3889 0.4239 0.4290 -0.0141 -0.0070 -
0.0191 1 .
1448 CA    CA    . GLY GLY GLY A A 193 193 . 0.3896 0.4186 0.4195 -0.0210 -0.0022 -
0.0042 1 .
1449 C     C     . GLY GLY GLY A A 193 193 . 0.4108 0.4245 0.4243 -0.0237 0.0008  -
0.0112 1 .
1450 O     O     . GLY GLY GLY A A 193 193 . 0.4027 0.4474 0.4382 -0.0437 -0.0077 -
0.0159 1 .
1451 N     N     . VAL VAL VAL A A 194 194 . 0.4105 0.4182 0.4073 -0.0085 -0.0034 -
0.0204 1 .
1452 CA    CA    . VAL VAL VAL A A 194 194 . 0.4034 0.4142 0.4181 -0.0067 0.0091  -
0.0174 1 .
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1453 CB    CB    . VAL VAL VAL A A 194 194 . 0.4069 0.4071 0.4159 -0.0130 0.0028  -
0.0185 1 .
1454 CG1   CG1   . VAL VAL VAL A A 194 194 . 0.3943 0.4027 0.4048 0.0045  0.0353  -
0.0044 1 .
1455 CG2   CG2   . VAL VAL VAL A A 194 194 . 0.3966 0.3698 0.4005 -0.0042 0.0014  -
0.0188 1 .
1456 C     C     . VAL VAL VAL A A 194 194 . 0.4150 0.4372 0.4429 -0.0121 0.0047  -
0.0145 1 .
1457 O     O     . VAL VAL VAL A A 194 194 . 0.4081 0.4582 0.4586 -0.0146 0.0101  -
0.0221 1 .
1458 N     N     . ILE ILE ILE A A 195 195 . 0.4009 0.4363 0.4395 -0.0104 0.0049  -
0.0116 1 .
1459 CA    CA    . ILE ILE ILE A A 195 195 . 0.3821 0.4370 0.4354 -0.0041 0.0001  -
0.0127 1 .
1460 CB    CB    . ILE ILE ILE A A 195 195 . 0.3604 0.4306 0.4313 -0.0063 -0.0035 -
0.0069 1 .
1461 CG1   CG1   . ILE ILE ILE A A 195 195 . 0.3405 0.4314 0.4472 0.0022  -0.0145 -
0.0048 1 .
1462 CD1   CD1   . ILE ILE ILE A A 195 195 . 0.3620 0.3980 0.4822 -0.0115 -0.0267 -
0.0126 1 .
1463 CG2   CG2   . ILE ILE ILE A A 195 195 . 0.3332 0.4614 0.4253 -0.0152 0.0023  -
0.0113 1 .
1464 C     C     . ILE ILE ILE A A 195 195 . 0.4116 0.4424 0.4363 -0.0033 0.0034  -
0.0109 1 .
1465 O     O     . ILE ILE ILE A A 195 195 . 0.4261 0.4493 0.4254 0.0007  0.0180  -
0.0317 1 .
1466 N     N     . LYS LYS LYS A A 196 196 . 0.4269 0.4501 0.4509 -0.0105 0.0047  -
0.0080 1 .
1467 CA    CA    . LYS LYS LYS A A 196 196 . 0.4689 0.4798 0.4795 -0.0023 -0.0031 -
0.0054 1 .
1468 CB    CB    . LYS LYS LYS A A 196 196 . 0.4751 0.4842 0.4760 -0.0056 -0.0185 -
0.0045 1 .
1469 CG    CG    . LYS LYS LYS A A 196 196 . 0.5473 0.5169 0.5231 0.0083  -0.0090
0.0049  1 .
1470 CD    CD    . LYS LYS LYS A A 196 196 . 0.6056 0.5847 0.6080 0.0334  -0.0503
0.0325  1 .
1471 CE    CE    . LYS LYS LYS A A 196 196 . 0.6618 0.6108 0.6965 0.0178  -0.0448
0.0081  1 .
1472 NZ    NZ    . LYS LYS LYS A A 196 196 . 0.6532 0.6058 0.6905 0.0445  -0.0708
0.0187  1 .
1473 C     C     . LYS LYS LYS A A 196 196 . 0.4648 0.4901 0.4884 -0.0070 -0.0050 -
0.0043 1 .
1474 O     O     . LYS LYS LYS A A 196 196 . 0.4585 0.5112 0.5031 -0.0111 -0.0082 -
0.0019 1 .
1475 N     N     . ASP ASP ASP A A 197 197 . 0.4712 0.4966 0.5018 -0.0013 -0.0103 -
0.0031 1 .
1476 CA    CA    . ASP ASP ASP A A 197 197 . 0.4761 0.5047 0.5113 -0.0048 -0.0129 -
0.0070 1 .
1477 CB    CB    . ASP ASP ASP A A 197 197 . 0.4656 0.5176 0.5183 0.0000  -0.0093 -
0.0134 1 .
1478 CG    CG    . ASP ASP ASP A A 197 197 . 0.5219 0.5656 0.5474 0.0050  -0.0041 -
0.0202 1 .
1479 OD1   OD1   . ASP ASP ASP A A 197 197 . 0.4616 0.5576 0.5811 -0.0060 0.0324  -
0.0438 1 .
1480 OD2   OD2   . ASP ASP ASP A A 197 197 . 0.5870 0.6262 0.5691 -0.0045 -0.0213 -
0.0392 1 .
1481 C     C     . ASP ASP ASP A A 197 197 . 0.4851 0.4963 0.5157 -0.0047 -0.0077 -
0.0042 1 .
1482 O     O     . ASP ASP ASP A A 197 197 . 0.4896 0.5107 0.5338 -0.0032 -0.0127
0.0063  1 .
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1483 N     N     . LYS LYS LYS A A 198 198 . 0.4907 0.4881 0.5087 -0.0076 -0.0094 -
0.0120 1 .
1484 CA    CA    . LYS LYS LYS A A 198 198 . 0.5056 0.4902 0.5088 -0.0040 -0.0104 -
0.0179 1 .
1485 CB    CB    . LYS LYS LYS A A 198 198 . 0.5044 0.4743 0.4978 -0.0083 -0.0116 -
0.0123 1 .
1486 CG    CG    . LYS LYS LYS A A 198 198 . 0.5550 0.5255 0.5246 0.0005  -0.0308 -
0.0113 1 .
1487 CD    CD    . LYS LYS LYS A A 198 198 . 0.5636 0.5416 0.5183 -0.0058 -0.0574
0.0092  1 .
1488 CE    CE    . LYS LYS LYS A A 198 198 . 0.5926 0.5719 0.5563 -0.0247 -0.0736
0.0152  1 .
1489 NZ    NZ    . LYS LYS LYS A A 198 198 . 0.6113 0.6013 0.5240 -0.0376 -0.1389 -
0.0028 1 .
1490 C     C     . LYS LYS LYS A A 198 198 . 0.5032 0.5123 0.5139 -0.0135 -0.0054 -
0.0133 1 .
1491 O     O     . LYS LYS LYS A A 198 198 . 0.5202 0.5137 0.5415 -0.0327 0.0006  -
0.0169 1 .
1492 N     N     . TYR TYR TYR A A 199 199 . 0.4952 0.5246 0.5037 -0.0059 -0.0054 -
0.0147 1 .
1493 CA    CA    . TYR TYR TYR A A 199 199 . 0.4813 0.5113 0.4951 0.0016  -0.0110 -
0.0063 1 .
1494 CB    CB    . TYR TYR TYR A A 199 199 . 0.4607 0.5141 0.4991 -0.0009 -0.0117 -
0.0020 1 .
1495 CG    CG    . TYR TYR TYR A A 199 199 . 0.4501 0.5083 0.4879 -0.0009 -0.0007 -
0.0093 1 .
1496 CD1   CD1   . TYR TYR TYR A A 199 199 . 0.3434 0.4895 0.5088 0.0113  0.0180
0.0003  1 .
1497 CE1   CE1   . TYR TYR TYR A A 199 199 . 0.3984 0.4941 0.5139 -0.0155 -0.0086 -
0.0049 1 .
1498 CZ    CZ    . TYR TYR TYR A A 199 199 . 0.4113 0.5182 0.5032 0.0271  -0.0060 -
0.0083 1 .
1499 OH    OH    . TYR TYR TYR A A 199 199 . 0.4149 0.5444 0.5467 0.0173  -0.0357 -
0.0507 1 .
1500 CE2   CE2   . TYR TYR TYR A A 199 199 . 0.4096 0.5316 0.5325 0.0044  -0.0051 -
0.0094 1 .
1501 CD2   CD2   . TYR TYR TYR A A 199 199 . 0.4111 0.4662 0.4975 -0.0002 -0.0168 -
0.0043 1 .
1502 C     C     . TYR TYR TYR A A 199 199 . 0.4824 0.5127 0.4831 0.0066  -0.0054 -
0.0018 1 .
1503 O     O     . TYR TYR TYR A A 199 199 . 0.4882 0.5297 0.4711 0.0171  -0.0118 -
0.0026 1 .
1504 N     N     . GLY GLY GLY A A 200 200 . 0.4793 0.5050 0.4732 0.0007  -0.0058
0.0082  1 .
1505 CA    CA    . GLY GLY GLY A A 200 200 . 0.4675 0.4866 0.4685 -0.0006 -0.0124
0.0008  1 .
1506 C     C     . GLY GLY GLY A A 200 200 . 0.4590 0.4782 0.4648 -0.0037 -0.0114
0.0022  1 .
1507 O     O     . GLY GLY GLY A A 200 200 . 0.4128 0.4580 0.4219 -0.0051 -0.0299
0.0006  1 .
1508 N     N     . LYS LYS LYS A A 201 201 . 0.4782 0.4868 0.4711 -0.0051 -0.0107
0.0119  1 .
1509 CA    CA    . LYS LYS LYS A A 201 201 . 0.4959 0.5211 0.4962 -0.0015 -0.0098
0.0143  1 .
1510 CB    CB    . LYS LYS LYS A A 201 201 . 0.5267 0.5503 0.4961 0.0000  -0.0097
0.0199  1 .
1511 CG    CG    . LYS LYS LYS A A 201 201 . 0.5837 0.6335 0.5619 -0.0065 0.0107
0.0320  1 .
1512 CD    CD    . LYS LYS LYS A A 201 201 . 0.6362 0.6939 0.6035 0.0005  0.0126
0.0550  1 .
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1513 CE    CE    . LYS LYS LYS A A 201 201 . 0.6159 0.6746 0.5929 -0.0313 0.0093
0.0453  1 .
1514 NZ    NZ    . LYS LYS LYS A A 201 201 . 0.6062 0.5946 0.6331 -0.0766 0.0378
0.0433  1 .
1515 C     C     . LYS LYS LYS A A 201 201 . 0.4808 0.5163 0.4912 -0.0089 -0.0101
0.0098  1 .
1516 O     O     . LYS LYS LYS A A 201 201 . 0.4460 0.5182 0.4975 -0.0185 -0.0195
0.0231  1 .
1517 N     N     . ASP ASP ASP A A 202 202 . 0.4575 0.5038 0.4847 -0.0083 0.0031
0.0025  1 .
1518 CA    CA    . ASP ASP ASP A A 202 202 . 0.4504 0.4933 0.4920 -0.0063 -0.0003
0.0065  1 .
1519 CB    CB    . ASP ASP ASP A A 202 202 . 0.4722 0.5133 0.5125 -0.0054 -0.0056
0.0084  1 .
1520 CG    CG    . ASP ASP ASP A A 202 202 . 0.5048 0.5760 0.6073 -0.0252 -0.0204
0.0227  1 .
1521 OD1   OD1   . ASP ASP ASP A A 202 202 . 0.4960 0.6041 0.6391 -0.0695 -0.0081
0.0839  1 .
1522 OD2   OD2   . ASP ASP ASP A A 202 202 . 0.5352 0.6747 0.6834 0.0208  -0.0279
0.0250  1 .
1523 C     C     . ASP ASP ASP A A 202 202 . 0.4182 0.4797 0.4687 0.0001  0.0031  -
0.0060 1 .
1524 O     O     . ASP ASP ASP A A 202 202 . 0.4022 0.4655 0.4679 0.0100  0.0054  -
0.0170 1 .
1525 N     N     . ALA ALA ALA A A 203 203 . 0.3741 0.4521 0.4389 0.0063  0.0132  -
0.0114 1 .
1526 CA    CA    . ALA ALA ALA A A 203 203 . 0.3686 0.4352 0.4165 0.0017  0.0119  -
0.0047 1 .
1527 CB    CB    . ALA ALA ALA A A 203 203 . 0.3365 0.4339 0.4105 -0.0022 0.0093
0.0032  1 .
1528 C     C     . ALA ALA ALA A A 203 203 . 0.3819 0.4315 0.4163 -0.0080 0.0086  -
0.0030 1 .
1529 O     O     . ALA ALA ALA A A 203 203 . 0.3786 0.4439 0.3966 -0.0110 0.0181  -
0.0077 1 .
1530 N     N     . THR THR THR A A 204 204 . 0.3665 0.4281 0.4217 0.0008  0.0062  -
0.0101 1 .
1531 CA    CA    . THR THR THR A A 204 204 . 0.3909 0.4236 0.4357 -0.0018 0.0086  -
0.0203 1 .
1532 CB    CB    . THR THR THR A A 204 204 . 0.3840 0.4231 0.4339 0.0046  0.0075  -
0.0219 1 .
1533 OG1   OG1   . THR THR THR A A 204 204 . 0.3422 0.4517 0.4504 0.0122  0.0229  -
0.0045 1 .
1534 CG2   CG2   . THR THR THR A A 204 204 . 0.4221 0.4451 0.4754 0.0070  0.0149  -
0.0437 1 .
1535 C     C     . THR THR THR A A 204 204 . 0.3931 0.4255 0.4264 -0.0013 0.0043  -
0.0240 1 .
1536 O     O     . THR THR THR A A 204 204 . 0.3743 0.4286 0.4271 -0.0109 0.0206  -
0.0411 1 .
1537 N     N     . ASN ASN ASN A A 205 205 . 0.3870 0.4068 0.4132 0.0088  -0.0034 -
0.0203 1 .
1538 CA    CA    . ASN ASN ASN A A 205 205 . 0.3711 0.4127 0.4083 -0.0076 -0.0004 -
0.0070 1 .
1539 CB    CB    . ASN ASN ASN A A 205 205 . 0.3523 0.4129 0.4079 -0.0076 -0.0059
0.0002  1 .
1540 CG    CG    . ASN ASN ASN A A 205 205 . 0.3418 0.5146 0.4139 0.0141  -0.0057
0.0259  1 .
1541 OD1   OD1   . ASN ASN ASN A A 205 205 . 0.1483 0.6132 0.4098 0.0031  0.0037  -
0.0176 1 .
1542 ND2   ND2   . ASN ASN ASN A A 205 205 . 0.2947 0.5624 0.3931 0.0380  -0.0088
0.0016  1 .
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1543 C     C     . ASN ASN ASN A A 205 205 . 0.3668 0.4023 0.3997 -0.0079 0.0008  -
0.0120 1 .
1544 O     O     . ASN ASN ASN A A 205 205 . 0.3964 0.4197 0.4199 -0.0223 0.0052  -
0.0219 1 .
1545 N     N     . VAL VAL VAL A A 206 206 . 0.3680 0.3817 0.3879 -0.0082 0.0133  -
0.0108 1 .
1546 CA    CA    . VAL VAL VAL A A 206 206 . 0.3389 0.3638 0.3809 -0.0088 0.0085  -
0.0096 1 .
1547 CB    CB    . VAL VAL VAL A A 206 206 . 0.3412 0.3552 0.3828 -0.0132 0.0029  -
0.0060 1 .
1548 CG1   CG1   . VAL VAL VAL A A 206 206 . 0.3193 0.3732 0.3789 0.0207  0.0019  -
0.0561 1 .
1549 CG2   CG2   . VAL VAL VAL A A 206 206 . 0.2717 0.3489 0.3646 -0.0369 -0.0068
0.0147  1 .
1550 C     C     . VAL VAL VAL A A 206 206 . 0.3300 0.3737 0.3741 -0.0147 0.0106
0.0017  1 .
1551 O     O     . VAL VAL VAL A A 206 206 . 0.3163 0.3716 0.3884 -0.0224 0.0208  -
0.0012 1 .
1552 N     N     . GLY GLY GLY A A 207 207 . 0.3291 0.3832 0.3652 -0.0062 0.0066
0.0022  1 .
1553 CA    CA    . GLY GLY GLY A A 207 207 . 0.3294 0.3607 0.3385 -0.0112 0.0146
0.0023  1 .
1554 C     C     . GLY GLY GLY A A 207 207 . 0.3311 0.3671 0.3350 -0.0022 0.0043  -
0.0021 1 .
1555 O     O     . GLY GLY GLY A A 207 207 . 0.3281 0.3622 0.3127 0.0124  0.0236
0.0029  1 .
1556 N     N     . ASP ASP ASP A A 208 208 . 0.3184 0.3527 0.3228 -0.0011 0.0058  -
0.0066 1 .
1557 CA    CA    . ASP ASP ASP A A 208 208 . 0.3493 0.3595 0.3446 0.0088  0.0152  -
0.0103 1 .
1558 CB    CB    . ASP ASP ASP A A 208 208 . 0.3463 0.3718 0.3505 0.0314  0.0198  -
0.0109 1 .
1559 CG    CG    . ASP ASP ASP A A 208 208 . 0.3324 0.3936 0.4037 0.0054  0.0379  -
0.0052 1 .
1560 OD1   OD1   . ASP ASP ASP A A 208 208 . 0.2567 0.4208 0.4289 0.0161  0.0458  -
0.0129 1 .
1561 OD2   OD2   . ASP ASP ASP A A 208 208 . 0.2599 0.3979 0.4724 -0.0162 0.0701
0.0086  1 .
1562 C     C     . ASP ASP ASP A A 208 208 . 0.3299 0.3493 0.3432 0.0110  0.0118  -
0.0161 1 .
1563 O     O     . ASP ASP ASP A A 208 208 . 0.3442 0.3361 0.3361 0.0184  0.0300  -
0.0170 1 .
1564 N     N     . GLU GLU GLU A A 209 209 . 0.3449 0.3661 0.3433 0.0064  0.0067  -
0.0151 1 .
1565 CA    CA    . GLU GLU GLU A A 209 209 . 0.3707 0.3738 0.3533 0.0047  0.0002  -
0.0087 1 .
1566 CB    CB    . GLU GLU GLU A A 209 209 . 0.3878 0.3721 0.3500 0.0059  0.0005  -
0.0110 1 .
1567 CG    CG    . GLU GLU GLU A A 209 209 . 0.4437 0.3600 0.3717 0.0375  -0.0087 -
0.0195 1 .
1568 CD    CD    . GLU GLU GLU A A 209 209 . 0.5330 0.3875 0.4087 0.0349  -0.0149 -
0.0163 1 .
1569 OE1   OE1   . GLU GLU GLU A A 209 209 . 0.5695 0.3896 0.3866 0.0547  -0.0546 -
0.0488 1 .
1570 OE2   OE2   . GLU GLU GLU A A 209 209 . 0.6010 0.3530 0.4162 0.0065  -0.0459 -
0.0212 1 .
1571 C     C     . GLU GLU GLU A A 209 209 . 0.3721 0.3774 0.3532 0.0042  0.0004  -
0.0022 1 .
1572 O     O     . GLU GLU GLU A A 209 209 . 0.3638 0.4104 0.3578 -0.0019 0.0110  -
0.0025 1 .
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1573 N     N     . GLY GLY GLY A A 210 210 . 0.3670 0.3816 0.3494 -0.0012 0.0123  -
0.0013 1 .
1574 CA    CA    . GLY GLY GLY A A 210 210 . 0.3765 0.3646 0.3375 -0.0012 0.0029
0.0054  1 .
1575 C     C     . GLY GLY GLY A A 210 210 . 0.3505 0.3632 0.3465 -0.0125 0.0160
0.0110  1 .
1576 O     O     . GLY GLY GLY A A 210 210 . 0.3277 0.3837 0.3507 -0.0035 0.0294  -
0.0089 1 .
1577 N     N     . GLY GLY GLY A A 211 211 . 0.3532 0.3748 0.3520 -0.0176 0.0110
0.0096  1 .
1578 CA    CA    . GLY GLY GLY A A 211 211 . 0.3680 0.3750 0.3635 -0.0121 0.0092  -
0.0026 1 .
1579 C     C     . GLY GLY GLY A A 211 211 . 0.3561 0.3861 0.3763 -0.0091 0.0033  -
0.0099 1 .
1580 O     O     . GLY GLY GLY A A 211 211 . 0.3668 0.4163 0.3954 -0.0014 -0.0021 -
0.0141 1 .
1581 N     N     . PHE PHE PHE A A 212 212 . 0.3659 0.3683 0.3749 -0.0004 0.0017
0.0005  1 .
1582 CA    CA    . PHE PHE PHE A A 212 212 . 0.3520 0.3685 0.3844 -0.0011 0.0066  -
0.0051 1 .
1583 CB    CB    . PHE PHE PHE A A 212 212 . 0.3400 0.3542 0.3705 -0.0065 0.0121  -
0.0048 1 .
1584 CG    CG    . PHE PHE PHE A A 212 212 . 0.3268 0.3085 0.3654 -0.0180 0.0047  -
0.0070 1 .
1585 CD1   CD1   . PHE PHE PHE A A 212 212 . 0.2851 0.2799 0.3528 -0.0342 0.0142
0.0044  1 .
1586 CE1   CE1   . PHE PHE PHE A A 212 212 . 0.3296 0.3431 0.3732 -0.0014 -0.0170
0.0306  1 .
1587 CZ    CZ    . PHE PHE PHE A A 212 212 . 0.2168 0.3902 0.3544 -0.0322 -0.0021 -
0.0423 1 .
1588 CE2   CE2   . PHE PHE PHE A A 212 212 . 0.3435 0.3682 0.3829 0.0103  -0.0139 -
0.0497 1 .
1589 CD2   CD2   . PHE PHE PHE A A 212 212 . 0.3035 0.3068 0.3715 -0.0022 -0.0010 -
0.0440 1 .
1590 C     C     . PHE PHE PHE A A 212 212 . 0.3621 0.3841 0.3930 -0.0007 -0.0070 -
0.0010 1 .
1591 O     O     . PHE PHE PHE A A 212 212 . 0.3613 0.4131 0.3961 0.0039  -0.0257 -
0.0108 1 .
1592 N     N     . ALA ALA ALA A A 213 213 . 0.3419 0.3889 0.4017 -0.0052 0.0014  -
0.0099 1 .
1593 CA    CA    . ALA ALA ALA A A 213 213 . 0.3859 0.4094 0.4192 -0.0040 0.0028  -
0.0024 1 .
1594 CB    CB    . ALA ALA ALA A A 213 213 . 0.3909 0.4265 0.4265 -0.0106 -0.0065 -
0.0149 1 .
1595 C     C     . ALA ALA ALA A A 213 213 . 0.3598 0.4189 0.4221 -0.0032 -0.0007 -
0.0008 1 .
1596 O     O     . ALA ALA ALA A A 213 213 . 0.3461 0.4456 0.4259 0.0019  0.0019
0.0084  1 .
1597 N     N     . PRO PRO PRO A A 214 214 . 0.3631 0.4115 0.4141 0.0018  -0.0005 -
0.0004 1 .
1598 CA    CA    . PRO PRO PRO A A 214 214 . 0.3846 0.4273 0.4316 0.0034  0.0032
0.0065  1 .
1599 CB    CB    . PRO PRO PRO A A 214 214 . 0.3462 0.4075 0.4209 0.0103  -0.0043
0.0028  1 .
1600 CG    CG    . PRO PRO PRO A A 214 214 . 0.3507 0.4252 0.4130 0.0013  -0.0032
0.0032  1 .
1601 CD    CD    . PRO PRO PRO A A 214 214 . 0.3766 0.4065 0.4156 -0.0030 0.0116
0.0077  1 .
1602 C     C     . PRO PRO PRO A A 214 214 . 0.4041 0.4377 0.4557 0.0061  0.0071
0.0096  1 .
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1603 O     O     . PRO PRO PRO A A 214 214 . 0.3758 0.4299 0.4688 0.0014  0.0162
0.0219  1 .
1604 N     N     . ASN ASN ASN A A 215 215 . 0.4603 0.4803 0.4839 0.0007  0.0078
0.0122  1 .
1605 CA    CA    . ASN ASN ASN A A 215 215 . 0.4961 0.5099 0.5208 -0.0004 0.0017
0.0075  1 .
1606 CB    CB    . ASN ASN ASN A A 215 215 . 0.5226 0.5418 0.5274 0.0002  -0.0063
0.0134  1 .
1607 CG    CG    . ASN ASN ASN A A 215 215 . 0.5970 0.5673 0.6069 -0.0112 -0.0384
0.0213  1 .
1608 OD1   OD1   . ASN ASN ASN A A 215 215 . 0.6872 0.6457 0.6377 -0.0538 -0.1119
0.0005  1 .
1609 ND2   ND2   . ASN ASN ASN A A 215 215 . 0.6193 0.6231 0.6510 0.0039  -0.0466
0.0449  1 .
1610 C     C     . ASN ASN ASN A A 215 215 . 0.5037 0.5184 0.5193 -0.0035 0.0070
0.0020  1 .
1611 O     O     . ASN ASN ASN A A 215 215 . 0.5131 0.5193 0.5411 -0.0053 0.0160  -
0.0035 1 .
1612 N     N     . ILE ILE ILE A A 216 216 . 0.5052 0.5218 0.5203 -0.0082 0.0070
0.0010  1 .
1613 CA    CA    . ILE ILE ILE A A 216 216 . 0.4913 0.5234 0.5267 -0.0080 0.0046  -
0.0031 1 .
1614 CB    CB    . ILE ILE ILE A A 216 216 . 0.4811 0.5103 0.5119 -0.0143 0.0013  -
0.0107 1 .
1615 CG1   CG1   . ILE ILE ILE A A 216 216 . 0.4930 0.5081 0.5136 -0.0092 0.0224  -
0.0079 1 .
1616 CD1   CD1   . ILE ILE ILE A A 216 216 . 0.4988 0.5149 0.5152 -0.0443 0.0006  -
0.0283 1 .
1617 CG2   CG2   . ILE ILE ILE A A 216 216 . 0.4164 0.5135 0.5210 -0.0223 -0.0255 -
0.0208 1 .
1618 C     C     . ILE ILE ILE A A 216 216 . 0.5029 0.5313 0.5279 -0.0036 0.0082
0.0016  1 .
1619 O     O     . ILE ILE ILE A A 216 216 . 0.5036 0.5346 0.5441 -0.0009 0.0182
0.0046  1 .
1620 N     N     . LEU LEU LEU A A 217 217 . 0.5162 0.5443 0.5306 -0.0003 0.0080
0.0023  1 .
1621 CA    CA    . LEU LEU LEU A A 217 217 . 0.5204 0.5370 0.5348 0.0005  0.0076
0.0050  1 .
1622 CB    CB    . LEU LEU LEU A A 217 217 . 0.5189 0.5357 0.5364 -0.0028 0.0087
0.0035  1 .
1623 CG    CG    . LEU LEU LEU A A 217 217 . 0.5416 0.5688 0.5736 0.0000  0.0030
0.0214  1 .
1624 CD1   CD1   . LEU LEU LEU A A 217 217 . 0.5932 0.5502 0.5830 0.0113  0.0056
0.0474  1 .
1625 CD2   CD2   . LEU LEU LEU A A 217 217 . 0.5362 0.6350 0.6328 0.0072  -0.0044
0.0297  1 .
1626 C     C     . LEU LEU LEU A A 217 217 . 0.5130 0.5340 0.5270 -0.0042 0.0118
0.0012  1 .
1627 O     O     . LEU LEU LEU A A 217 217 . 0.5366 0.5460 0.5349 -0.0001 0.0065
0.0016  1 .
1628 N     N     . GLU GLU GLU A A 218 218 . 0.4941 0.5312 0.5267 -0.0050 0.0158  -
0.0013 1 .
1629 CA    CA    . GLU GLU GLU A A 218 218 . 0.4915 0.5335 0.5160 -0.0107 0.0151
0.0099  1 .
1630 CB    CB    . GLU GLU GLU A A 218 218 . 0.4957 0.5437 0.5171 -0.0158 0.0135
0.0044  1 .
1631 CG    CG    . GLU GLU GLU A A 218 218 . 0.5572 0.6346 0.5943 -0.0239 0.0160
0.0340  1 .
1632 CD    CD    . GLU GLU GLU A A 218 218 . 0.6319 0.7233 0.6686 -0.0228 -0.0052
0.0593  1 .
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1633 OE1   OE1   . GLU GLU GLU A A 218 218 . 0.6606 0.7379 0.7168 -0.0508 0.0234
0.0505  1 .
1634 OE2   OE2   . GLU GLU GLU A A 218 218 . 0.7182 0.7636 0.7064 -0.0398 0.0092
0.0869  1 .
1635 C     C     . GLU GLU GLU A A 218 218 . 0.4802 0.5163 0.5018 -0.0106 0.0083
0.0031  1 .
1636 O     O     . GLU GLU GLU A A 218 218 . 0.4312 0.4995 0.4702 -0.0227 0.0090
0.0011  1 .
1637 N     N     . ASN ASN ASN A A 219 219 . 0.4825 0.5121 0.5127 -0.0133 0.0097
0.0008  1 .
1638 CA    CA    . ASN ASN ASN A A 219 219 . 0.4932 0.5130 0.5085 -0.0064 -0.0027 -
0.0055 1 .
1639 CB    CB    . ASN ASN ASN A A 219 219 . 0.4794 0.5091 0.5025 0.0010  0.0012  -
0.0103 1 .
1640 CG    CG    . ASN ASN ASN A A 219 219 . 0.4593 0.4874 0.4859 -0.0135 -0.0243 -
0.0203 1 .
1641 OD1   OD1   . ASN ASN ASN A A 219 219 . 0.4750 0.4786 0.4596 0.0131  -0.0352 -
0.0690 1 .
1642 ND2   ND2   . ASN ASN ASN A A 219 219 . 0.3593 0.4395 0.4331 0.0153  -0.0104 -
0.0052 1 .
1643 C     C     . ASN ASN ASN A A 219 219 . 0.5082 0.5193 0.5181 -0.0082 -0.0090 -
0.0079 1 .
1644 O     O     . ASN ASN ASN A A 219 219 . 0.4985 0.5282 0.5161 -0.0115 -0.0326 -
0.0120 1 .
1645 N     N     . SER SER SER A A 220 220 . 0.5110 0.5334 0.5250 -0.0070 -0.0249 -
0.0053 1 .
1646 CA    CA    . SER SER SER A A 220 220 . 0.5187 0.5359 0.5280 -0.0034 -0.0262 -
0.0072 1 .
1647 CB    CB    . SER SER SER A A 220 220 . 0.5109 0.5443 0.5363 -0.0056 -0.0252 -
0.0022 1 .
1648 OG    OG    . SER SER SER A A 220 220 . 0.5168 0.5774 0.5274 -0.0040 -0.0503 -
0.0073 1 .
1649 C     C     . SER SER SER A A 220 220 . 0.5160 0.5382 0.5288 -0.0030 -0.0230 -
0.0095 1 .
1650 O     O     . SER SER SER A A 220 220 . 0.5035 0.5437 0.5425 0.0100  -0.0369 -
0.0152 1 .
1651 N     N     . GLU GLU GLU A A 221 221 . 0.5099 0.5293 0.5242 -0.0107 -0.0189 -
0.0037 1 .
1652 CA    CA    . GLU GLU GLU A A 221 221 . 0.5056 0.5295 0.5219 -0.0146 -0.0104 -
0.0081 1 .
1653 CB    CB    . GLU GLU GLU A A 221 221 . 0.5042 0.5278 0.5335 -0.0179 0.0019  -
0.0095 1 .
1654 CG    CG    . GLU GLU GLU A A 221 221 . 0.5059 0.5546 0.5357 -0.0078 -0.0022 -
0.0099 1 .
1655 CD    CD    . GLU GLU GLU A A 221 221 . 0.5355 0.5767 0.5716 -0.0151 0.0029  -
0.0197 1 .
1656 OE1   OE1   . GLU GLU GLU A A 221 221 . 0.5608 0.6182 0.5960 -0.0109 0.0166  -
0.0720 1 .
1657 OE2   OE2   . GLU GLU GLU A A 221 221 . 0.5509 0.5731 0.5410 -0.0487 0.0239
0.0323  1 .
1658 C     C     . GLU GLU GLU A A 221 221 . 0.4868 0.5145 0.5120 -0.0136 -0.0055 -
0.0082 1 .
1659 O     O     . GLU GLU GLU A A 221 221 . 0.4752 0.5183 0.5143 -0.0095 -0.0063 -
0.0293 1 .
1660 N     N     . ALA ALA ALA A A 222 222 . 0.4688 0.5079 0.4929 -0.0279 -0.0081 -
0.0012 1 .
1661 CA    CA    . ALA ALA ALA A A 222 222 . 0.4595 0.4987 0.4761 -0.0133 -0.0128
0.0021  1 .
1662 CB    CB    . ALA ALA ALA A A 222 222 . 0.4148 0.4885 0.4599 -0.0320 -0.0172
0.0005  1 .
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1663 C     C     . ALA ALA ALA A A 222 222 . 0.4607 0.4920 0.4747 -0.0137 -0.0102
0.0052  1 .
1664 O     O     . ALA ALA ALA A A 222 222 . 0.4610 0.5007 0.4711 -0.0115 -0.0246
0.0153  1 .
1665 N     N     . LEU LEU LEU A A 223 223 . 0.4765 0.4875 0.4715 -0.0087 -0.0062
0.0042  1 .
1666 CA    CA    . LEU LEU LEU A A 223 223 . 0.4806 0.4790 0.4732 -0.0035 0.0012  -
0.0050 1 .
1667 CB    CB    . LEU LEU LEU A A 223 223 . 0.4831 0.4745 0.4627 0.0000  0.0016  -
0.0034 1 .
1668 CG    CG    . LEU LEU LEU A A 223 223 . 0.4785 0.4870 0.4739 -0.0122 -0.0140
0.0048  1 .
1669 CD1   CD1   . LEU LEU LEU A A 223 223 . 0.4606 0.4755 0.5267 0.0119  -0.0022
0.0133  1 .
1670 CD2   CD2   . LEU LEU LEU A A 223 223 . 0.4917 0.4778 0.4838 0.0248  0.0208
0.0326  1 .
1671 C     C     . LEU LEU LEU A A 223 223 . 0.4804 0.4774 0.4808 -0.0013 0.0053  -
0.0058 1 .
1672 O     O     . LEU LEU LEU A A 223 223 . 0.4971 0.4796 0.4726 -0.0090 0.0215  -
0.0204 1 .
1673 N     N     . GLU GLU GLU A A 224 224 . 0.4666 0.4784 0.4875 -0.0035 0.0056  -
0.0111 1 .
1674 CA    CA    . GLU GLU GLU A A 224 224 . 0.4677 0.4875 0.4953 0.0069  -0.0074 -
0.0006 1 .
1675 CB    CB    . GLU GLU GLU A A 224 224 . 0.4926 0.4984 0.4931 0.0053  0.0012  -
0.0009 1 .
1676 CG    CG    . GLU GLU GLU A A 224 224 . 0.5670 0.5323 0.5607 0.0077  -0.0126 -
0.0137 1 .
1677 CD    CD    . GLU GLU GLU A A 224 224 . 0.6548 0.6233 0.6152 0.0424  -0.0304 -
0.0524 1 .
1678 OE1   OE1   . GLU GLU GLU A A 224 224 . 0.7212 0.5978 0.6866 0.0831  -0.0591 -
0.0510 1 .
1679 OE2   OE2   . GLU GLU GLU A A 224 224 . 0.6660 0.6908 0.6308 0.0433  -0.0677 -
0.0748 1 .
1680 C     C     . GLU GLU GLU A A 224 224 . 0.4543 0.4903 0.4892 -0.0002 -0.0071 -
0.0036 1 .
1681 O     O     . GLU GLU GLU A A 224 224 . 0.4001 0.4971 0.5094 0.0204  -0.0176
0.0167  1 .
1682 N     N     . LEU LEU LEU A A 225 225 . 0.4371 0.4874 0.4681 -0.0018 -0.0013
0.0012  1 .
1683 CA    CA    . LEU LEU LEU A A 225 225 . 0.4491 0.4709 0.4613 -0.0103 0.0044  -
0.0078 1 .
1684 CB    CB    . LEU LEU LEU A A 225 225 . 0.4390 0.4694 0.4494 -0.0025 0.0171  -
0.0076 1 .
1685 CG    CG    . LEU LEU LEU A A 225 225 . 0.4604 0.4571 0.4617 0.0010  0.0271  -
0.0090 1 .
1686 CD1   CD1   . LEU LEU LEU A A 225 225 . 0.4018 0.4695 0.4467 0.0466  0.0775  -
0.0126 1 .
1687 CD2   CD2   . LEU LEU LEU A A 225 225 . 0.3964 0.4680 0.4527 -0.0224 0.0241
0.0102  1 .
1688 C     C     . LEU LEU LEU A A 225 225 . 0.4359 0.4551 0.4498 -0.0073 0.0044  -
0.0136 1 .
1689 O     O     . LEU LEU LEU A A 225 225 . 0.4559 0.4450 0.4555 -0.0169 0.0041  -
0.0290 1 .
1690 N     N     . VAL VAL VAL A A 226 226 . 0.4336 0.4553 0.4454 -0.0101 0.0057  -
0.0131 1 .
1691 CA    CA    . VAL VAL VAL A A 226 226 . 0.4335 0.4520 0.4497 -0.0123 0.0006  -
0.0150 1 .
1692 CB    CB    . VAL VAL VAL A A 226 226 . 0.4335 0.4465 0.4517 -0.0111 0.0056  -
0.0168 1 .
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1693 CG1   CG1   . VAL VAL VAL A A 226 226 . 0.4331 0.3984 0.4272 -0.0069 0.0373  -
0.0468 1 .
1694 CG2   CG2   . VAL VAL VAL A A 226 226 . 0.4099 0.4555 0.4438 -0.0243 0.0276  -
0.0096 1 .
1695 C     C     . VAL VAL VAL A A 226 226 . 0.4427 0.4616 0.4572 -0.0085 -0.0137 -
0.0174 1 .
1696 O     O     . VAL VAL VAL A A 226 226 . 0.4103 0.4597 0.4521 -0.0259 -0.0388 -
0.0141 1 .
1697 N     N     . LYS LYS LYS A A 227 227 . 0.4445 0.4745 0.4614 -0.0111 -0.0246 -
0.0180 1 .
1698 CA    CA    . LYS LYS LYS A A 227 227 . 0.4587 0.4806 0.4612 -0.0005 -0.0282 -
0.0225 1 .
1699 CB    CB    . LYS LYS LYS A A 227 227 . 0.4601 0.4959 0.4828 0.0087  -0.0363 -
0.0169 1 .
1700 CG    CG    . LYS LYS LYS A A 227 227 . 0.5364 0.5400 0.5193 0.0239  -0.0577 -
0.0303 1 .
1701 CD    CD    . LYS LYS LYS A A 227 227 . 0.6101 0.6405 0.5658 0.0014  -0.0721 -
0.0134 1 .
1702 CE    CE    . LYS LYS LYS A A 227 227 . 0.6645 0.6677 0.5896 -0.0095 -0.0476 -
0.0092 1 .
1703 NZ    NZ    . LYS LYS LYS A A 227 227 . 0.6327 0.6404 0.5893 0.0088  -0.0490 -
0.0450 1 .
1704 C     C     . LYS LYS LYS A A 227 227 . 0.4387 0.4729 0.4509 -0.0046 -0.0253 -
0.0248 1 .
1705 O     O     . LYS LYS LYS A A 227 227 . 0.4356 0.4882 0.4603 -0.0110 -0.0076 -
0.0372 1 .
1706 N     N     . GLU GLU GLU A A 228 228 . 0.3998 0.4573 0.4389 -0.0096 -0.0197 -
0.0230 1 .
1707 CA    CA    . GLU GLU GLU A A 228 228 . 0.4184 0.4556 0.4466 -0.0111 -0.0224 -
0.0172 1 .
1708 CB    CB    . GLU GLU GLU A A 228 228 . 0.4415 0.4798 0.4622 -0.0171 -0.0236 -
0.0210 1 .
1709 CG    CG    . GLU GLU GLU A A 228 228 . 0.5407 0.5303 0.5508 -0.0285 -0.0118 -
0.0063 1 .
1710 CD    CD    . GLU GLU GLU A A 228 228 . 0.6492 0.6445 0.6784 -0.0530 0.0081  -
0.0672 1 .
1711 OE1   OE1   . GLU GLU GLU A A 228 228 . 0.6664 0.7113 0.7194 -0.0466 0.0335  -
0.0852 1 .
1712 OE2   OE2   . GLU GLU GLU A A 228 228 . 0.6434 0.7307 0.7644 -0.0735 0.0264  -
0.0554 1 .
1713 C     C     . GLU GLU GLU A A 228 228 . 0.4074 0.4344 0.4385 -0.0053 -0.0232 -
0.0151 1 .
1714 O     O     . GLU GLU GLU A A 228 228 . 0.3972 0.4281 0.4462 -0.0066 -0.0441 -
0.0015 1 .
1715 N     N     . ALA ALA ALA A A 229 229 . 0.3862 0.4145 0.4247 -0.0061 -0.0251 -
0.0017 1 .
1716 CA    CA    . ALA ALA ALA A A 229 229 . 0.3874 0.3917 0.3880 -0.0081 -0.0154
0.0067  1 .
1717 CB    CB    . ALA ALA ALA A A 229 229 . 0.3512 0.3730 0.3772 -0.0077 -0.0158
0.0131  1 .
1718 C     C     . ALA ALA ALA A A 229 229 . 0.3911 0.3846 0.3770 -0.0020 -0.0138 -
0.0032 1 .
1719 O     O     . ALA ALA ALA A A 229 229 . 0.4265 0.3787 0.3589 -0.0031 -0.0136
0.0029  1 .
1720 N     N     . ILE ILE ILE A A 230 230 . 0.4054 0.3974 0.3764 -0.0030 -0.0092 -
0.0077 1 .
1721 CA    CA    . ILE ILE ILE A A 230 230 . 0.3887 0.4019 0.3926 -0.0059 -0.0048 -
0.0004 1 .
1722 CB    CB    . ILE ILE ILE A A 230 230 . 0.3794 0.3956 0.3871 0.0013  0.0020  -
0.0037 1 .
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1723 CG1   CG1   . ILE ILE ILE A A 230 230 . 0.3562 0.3741 0.3836 -0.0039 -0.0283 -
0.0174 1 .
1724 CD1   CD1   . ILE ILE ILE A A 230 230 . 0.2815 0.4072 0.3690 -0.0276 -0.0083 -
0.0240 1 .
1725 CG2   CG2   . ILE ILE ILE A A 230 230 . 0.4105 0.3965 0.4034 -0.0140 0.0025
0.0113  1 .
1726 C     C     . ILE ILE ILE A A 230 230 . 0.3983 0.4155 0.4043 -0.0064 -0.0071 -
0.0065 1 .
1727 O     O     . ILE ILE ILE A A 230 230 . 0.3737 0.4170 0.4024 -0.0092 -0.0175 -
0.0089 1 .
1728 N     N     . ASP ASP ASP A A 231 231 . 0.4066 0.4375 0.4330 -0.0179 -0.0151 -
0.0086 1 .
1729 CA    CA    . ASP ASP ASP A A 231 231 . 0.4325 0.4539 0.4567 -0.0107 -0.0113 -
0.0107 1 .
1730 CB    CB    . ASP ASP ASP A A 231 231 . 0.4320 0.4720 0.4813 -0.0225 -0.0173 -
0.0131 1 .
1731 CG    CG    . ASP ASP ASP A A 231 231 . 0.4907 0.5147 0.5516 -0.0274 -0.0110
0.0068  1 .
1732 OD1   OD1   . ASP ASP ASP A A 231 231 . 0.4592 0.5448 0.6177 -0.0427 0.0197  -
0.0138 1 .
1733 OD2   OD2   . ASP ASP ASP A A 231 231 . 0.5301 0.6054 0.6497 -0.0571 0.0092
0.0159  1 .
1734 C     C     . ASP ASP ASP A A 231 231 . 0.4272 0.4533 0.4538 -0.0137 -0.0083 -
0.0122 1 .
1735 O     O     . ASP ASP ASP A A 231 231 . 0.4500 0.4547 0.4505 -0.0104 -0.0056 -
0.0186 1 .
1736 N     N     . LYS LYS LYS A A 232 232 . 0.4237 0.4499 0.4458 -0.0217 -0.0087 -
0.0123 1 .
1737 CA    CA    . LYS LYS LYS A A 232 232 . 0.4319 0.4550 0.4553 -0.0169 -0.0105 -
0.0047 1 .
1738 CB    CB    . LYS LYS LYS A A 232 232 . 0.4488 0.4526 0.4626 -0.0083 -0.0117 -
0.0153 1 .
1739 CG    CG    . LYS LYS LYS A A 232 232 . 0.5512 0.5294 0.4976 -0.0262 -0.0068 -
0.0008 1 .
1740 CD    CD    . LYS LYS LYS A A 232 232 . 0.6544 0.6467 0.5820 -0.0409 0.0320
0.0225  1 .
1741 CE    CE    . LYS LYS LYS A A 232 232 . 0.7313 0.7040 0.6241 -0.0543 -0.0046
0.0375  1 .
1742 NZ    NZ    . LYS LYS LYS A A 232 232 . 0.7690 0.7617 0.6469 -0.0727 -0.0023
0.0441  1 .
1743 C     C     . LYS LYS LYS A A 232 232 . 0.4399 0.4503 0.4625 -0.0091 -0.0045 -
0.0049 1 .
1744 O     O     . LYS LYS LYS A A 232 232 . 0.4134 0.4549 0.4561 -0.0054 -0.0127 -
0.0011 1 .
1745 N     N     . ALA ALA ALA A A 233 233 . 0.4299 0.4459 0.4576 -0.0163 -0.0074 -
0.0049 1 .
1746 CA    CA    . ALA ALA ALA A A 233 233 . 0.4418 0.4368 0.4468 -0.0109 -0.0017 -
0.0116 1 .
1747 CB    CB    . ALA ALA ALA A A 233 233 . 0.4348 0.4332 0.4548 -0.0121 0.0212  -
0.0068 1 .
1748 C     C     . ALA ALA ALA A A 233 233 . 0.4388 0.4236 0.4374 -0.0039 -0.0103 -
0.0192 1 .
1749 O     O     . ALA ALA ALA A A 233 233 . 0.4494 0.4171 0.4274 -0.0036 -0.0333 -
0.0262 1 .
1750 N     N     . GLY GLY GLY A A 234 234 . 0.4523 0.4276 0.4387 0.0093  -0.0170 -
0.0080 1 .
1751 CA    CA    . GLY GLY GLY A A 234 234 . 0.4211 0.4247 0.4255 0.0068  -0.0174 -
0.0114 1 .
1752 C     C     . GLY GLY GLY A A 234 234 . 0.4171 0.4321 0.4372 0.0046  -0.0107 -
0.0130 1 .
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1753 O     O     . GLY GLY GLY A A 234 234 . 0.4208 0.4217 0.4427 0.0176  -0.0089 -
0.0204 1 .
1754 N     N     . TYR TYR TYR A A 235 235 . 0.4229 0.4310 0.4429 0.0021  -0.0037 -
0.0092 1 .
1755 CA    CA    . TYR TYR TYR A A 235 235 . 0.4284 0.4307 0.4350 -0.0008 -0.0103 -
0.0080 1 .
1756 CB    CB    . TYR TYR TYR A A 235 235 . 0.4427 0.4218 0.4285 0.0040  -0.0224 -
0.0059 1 .
1757 CG    CG    . TYR TYR TYR A A 235 235 . 0.4163 0.4139 0.4204 -0.0202 -0.0257 -
0.0102 1 .
1758 CD1   CD1   . TYR TYR TYR A A 235 235 . 0.4528 0.4393 0.4247 -0.0079 -0.0376 -
0.0189 1 .
1759 CE1   CE1   . TYR TYR TYR A A 235 235 . 0.4639 0.4325 0.4032 0.0029  -0.0186 -
0.0122 1 .
1760 CZ    CZ    . TYR TYR TYR A A 235 235 . 0.4596 0.3893 0.3940 0.0104  -0.0049 -
0.0106 1 .
1761 OH    OH    . TYR TYR TYR A A 235 235 . 0.5098 0.4203 0.3262 0.0059  0.0357
0.0330  1 .
1762 CE2   CE2   . TYR TYR TYR A A 235 235 . 0.5035 0.3600 0.3984 0.0126  -0.0434 -
0.0137 1 .
1763 CD2   CD2   . TYR TYR TYR A A 235 235 . 0.4307 0.3515 0.3826 0.0000  -0.0295 -
0.0509 1 .
1764 C     C     . TYR TYR TYR A A 235 235 . 0.4366 0.4496 0.4380 0.0014  -0.0015 -
0.0132 1 .
1765 O     O     . TYR TYR TYR A A 235 235 . 0.4030 0.4515 0.4138 -0.0013 0.0056  -
0.0193 1 .
1766 N     N     . THR THR THR A A 236 236 . 0.4610 0.4715 0.4711 -0.0052 -0.0024 -
0.0102 1 .
1767 CA    CA    . THR THR THR A A 236 236 . 0.4999 0.5075 0.5108 -0.0106 -0.0090
0.0040  1 .
1768 CB    CB    . THR THR THR A A 236 236 . 0.5024 0.5033 0.5166 -0.0119 -0.0052
0.0068  1 .
1769 OG1   OG1   . THR THR THR A A 236 236 . 0.5484 0.5194 0.5287 -0.0303 0.0191
0.0229  1 .
1770 CG2   CG2   . THR THR THR A A 236 236 . 0.4795 0.5304 0.5260 -0.0190 -0.0198
0.0167  1 .
1771 C     C     . THR THR THR A A 236 236 . 0.5161 0.5205 0.5091 -0.0086 -0.0091 -
0.0005 1 .
1772 O     O     . THR THR THR A A 236 236 . 0.5274 0.5243 0.5268 -0.0149 -0.0185
0.0064  1 .
1773 N     N     . GLU GLU GLU A A 237 237 . 0.5311 0.5464 0.5204 -0.0111 -0.0058 -
0.0079 1 .
1774 CA    CA    . GLU GLU GLU A A 237 237 . 0.5605 0.5573 0.5455 -0.0195 0.0030  -
0.0032 1 .
1775 CB    CB    . GLU GLU GLU A A 237 237 . 0.5846 0.5846 0.5676 -0.0168 0.0090  -
0.0066 1 .
1776 CG    CG    . GLU GLU GLU A A 237 237 . 0.6468 0.6441 0.6411 -0.0429 0.0219  -
0.0052 1 .
1777 CD    CD    . GLU GLU GLU A A 237 237 . 0.7329 0.8087 0.6925 -0.0567 0.0156  -
0.0128 1 .
1778 OE1   OE1   . GLU GLU GLU A A 237 237 . 0.7525 0.8407 0.7308 -0.0446 0.0640  -
0.0179 1 .
1779 OE2   OE2   . GLU GLU GLU A A 237 237 . 0.7992 0.8711 0.7174 -0.0923 0.0774
0.0078  1 .
1780 C     C     . GLU GLU GLU A A 237 237 . 0.5665 0.5440 0.5265 -0.0121 -0.0004 -
0.0028 1 .
1781 O     O     . GLU GLU GLU A A 237 237 . 0.5908 0.5609 0.5266 -0.0206 -0.0025
0.0088  1 .
1782 N     N     . LYS LYS LYS A A 238 238 . 0.5323 0.5147 0.4985 -0.0095 0.0047  -
0.0092 1 .
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1783 CA    CA    . LYS LYS LYS A A 238 238 . 0.4738 0.4890 0.4742 -0.0026 0.0099  -
0.0128 1 .
1784 CB    CB    . LYS LYS LYS A A 238 238 . 0.4868 0.4869 0.4687 -0.0047 0.0052  -
0.0123 1 .
1785 CG    CG    . LYS LYS LYS A A 238 238 . 0.4754 0.5102 0.5035 0.0043  0.0224  -
0.0120 1 .
1786 CD    CD    . LYS LYS LYS A A 238 238 . 0.5885 0.5094 0.5681 0.0705  0.0124  -
0.0212 1 .
1787 CE    CE    . LYS LYS LYS A A 238 238 . 0.6312 0.5134 0.5539 0.0788  0.0287  -
0.0604 1 .
1788 NZ    NZ    . LYS LYS LYS A A 238 238 . 0.7145 0.4661 0.5851 0.1049  0.0192  -
0.0781 1 .
1789 C     C     . LYS LYS LYS A A 238 238 . 0.4600 0.4749 0.4565 -0.0109 0.0049  -
0.0084 1 .
1790 O     O     . LYS LYS LYS A A 238 238 . 0.4517 0.4765 0.4443 -0.0070 0.0176  -
0.0286 1 .
1791 N     N     . ILE ILE ILE A A 239 239 . 0.4475 0.4608 0.4285 -0.0010 0.0052  -
0.0114 1 .
1792 CA    CA    . ILE ILE ILE A A 239 239 . 0.4280 0.4457 0.4307 0.0012  -0.0075
0.0042  1 .
1793 CB    CB    . ILE ILE ILE A A 239 239 . 0.4251 0.4556 0.4319 0.0008  -0.0085 -
0.0020 1 .
1794 CG1   CG1   . ILE ILE ILE A A 239 239 . 0.4588 0.4791 0.4743 0.0140  -0.0265
0.0114  1 .
1795 CD1   CD1   . ILE ILE ILE A A 239 239 . 0.4900 0.3618 0.5791 0.0008  0.0287
0.0244  1 .
1796 CG2   CG2   . ILE ILE ILE A A 239 239 . 0.4175 0.4373 0.3786 -0.0068 -0.0021
0.0019  1 .
1797 C     C     . ILE ILE ILE A A 239 239 . 0.4283 0.4321 0.4165 -0.0008 -0.0176
0.0073  1 .
1798 O     O     . ILE ILE ILE A A 239 239 . 0.4315 0.4175 0.4297 -0.0210 -0.0314
0.0165  1 .
1799 N     N     . VAL VAL VAL A A 240 240 . 0.4057 0.4096 0.3976 0.0097  -0.0147
0.0056  1 .
1800 CA    CA    . VAL VAL VAL A A 240 240 . 0.3986 0.4078 0.3800 0.0097  -0.0027 -
0.0050 1 .
1801 CB    CB    . VAL VAL VAL A A 240 240 . 0.3980 0.3916 0.3629 0.0069  -0.0095 -
0.0002 1 .
1802 CG1   CG1   . VAL VAL VAL A A 240 240 . 0.4027 0.4159 0.3631 0.0146  -0.0017 -
0.0065 1 .
1803 CG2   CG2   . VAL VAL VAL A A 240 240 . 0.3723 0.3971 0.3112 0.0030  0.0026  -
0.0263 1 .
1804 C     C     . VAL VAL VAL A A 240 240 . 0.3791 0.4013 0.3794 0.0107  0.0021  -
0.0065 1 .
1805 O     O     . VAL VAL VAL A A 240 240 . 0.3597 0.3931 0.3536 0.0136  0.0001  -
0.0110 1 .
1806 N     N     . ILE ILE ILE A A 241 241 . 0.4061 0.4183 0.3999 0.0100  0.0032  -
0.0052 1 .
1807 CA    CA    . ILE ILE ILE A A 241 241 . 0.3951 0.4104 0.3969 0.0001  0.0089  -
0.0105 1 .
1808 CB    CB    . ILE ILE ILE A A 241 241 . 0.4048 0.4095 0.4016 -0.0022 0.0089  -
0.0067 1 .
1809 CG1   CG1   . ILE ILE ILE A A 241 241 . 0.4392 0.4218 0.4034 -0.0216 0.0110
0.0007  1 .
1810 CD1   CD1   . ILE ILE ILE A A 241 241 . 0.3490 0.4597 0.4309 -0.0231 -0.0005
0.0117  1 .
1811 CG2   CG2   . ILE ILE ILE A A 241 241 . 0.3584 0.3930 0.3996 -0.0066 0.0184  -
0.0160 1 .
1812 C     C     . ILE ILE ILE A A 241 241 . 0.4007 0.4137 0.4025 -0.0018 0.0067  -
0.0074 1 .
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1813 O     O     . ILE ILE ILE A A 241 241 . 0.4158 0.4182 0.4177 -0.0100 0.0070  -
0.0138 1 .
1814 N     N     . GLY GLY GLY A A 242 242 . 0.3991 0.4207 0.4130 -0.0002 0.0077  -
0.0089 1 .
1815 CA    CA    . GLY GLY GLY A A 242 242 . 0.3858 0.3996 0.4072 0.0020  0.0065  -
0.0048 1 .
1816 C     C     . GLY GLY GLY A A 242 242 . 0.3956 0.4107 0.4183 -0.0073 0.0037  -
0.0050 1 .
1817 O     O     . GLY GLY GLY A A 242 242 . 0.3836 0.4015 0.4195 -0.0210 0.0200  -
0.0052 1 .
1818 N     N     . MET MET MET A A 243 243 . 0.3662 0.4229 0.4280 -0.0055 -0.0004 -
0.0142 1 .
1819 CA    CA    . MET MET MET A A 243 243 . 0.3734 0.4264 0.4356 -0.0097 -0.0065 -
0.0157 1 .
1820 CB    CB    . MET MET MET A A 243 243 . 0.3525 0.4384 0.4303 -0.0147 -0.0162 -
0.0188 1 .
1821 CG    CG    . MET MET MET A A 243 243 . 0.3288 0.4444 0.4657 -0.0395 -0.0204 -
0.0435 1 .
1822 SD    SD    . MET MET MET A A 243 243 . 0.3918 0.5931 0.5816 -0.0826 -0.0233 -
0.0944 1 .
1823 CE    CE    . MET MET MET A A 243 243 . 0.1819 0.5640 0.6222 -0.0803 -0.0014 -
0.0652 1 .
1824 C     C     . MET MET MET A A 243 243 . 0.3792 0.4255 0.4335 -0.0009 -0.0060 -
0.0043 1 .
1825 O     O     . MET MET MET A A 243 243 . 0.3967 0.4279 0.4463 0.0017  -0.0041
0.0090  1 .
1826 N     N     . ASP ASP ASP A A 244 244 . 0.3661 0.4192 0.4180 0.0015  -0.0140 -
0.0111 1 .
1827 CA    CA    . ASP ASP ASP A A 244 244 . 0.3784 0.4135 0.4145 0.0059  -0.0130 -
0.0019 1 .
1828 CB    CB    . ASP ASP ASP A A 244 244 . 0.3590 0.4067 0.4167 0.0070  -0.0156 -
0.0016 1 .
1829 CG    CG    . ASP ASP ASP A A 244 244 . 0.3811 0.4441 0.4348 -0.0008 -0.0379
0.0078  1 .
1830 OD1   OD1   . ASP ASP ASP A A 244 244 . 0.3365 0.4653 0.4580 -0.0368 -0.0405
0.0421  1 .
1831 OD2   OD2   . ASP ASP ASP A A 244 244 . 0.3084 0.4854 0.4452 -0.0269 -0.0750
0.0016  1 .
1832 C     C     . ASP ASP ASP A A 244 244 . 0.3743 0.4060 0.4072 0.0108  -0.0052 -
0.0019 1 .
1833 O     O     . ASP ASP ASP A A 244 244 . 0.3709 0.4246 0.4248 0.0231  0.0030  -
0.0175 1 .
1834 N     N     . VAL VAL VAL A A 245 245 . 0.3641 0.4067 0.4100 -0.0006 -0.0011 -
0.0021 1 .
1835 CA    CA    . VAL VAL VAL A A 245 245 . 0.3732 0.4024 0.4032 0.0052  -0.0116
0.0000  1 .
1836 CB    CB    . VAL VAL VAL A A 245 245 . 0.3625 0.3980 0.3898 -0.0048 -0.0119 -
0.0042 1 .
1837 CG1   CG1   . VAL VAL VAL A A 245 245 . 0.3948 0.4113 0.3978 0.0083  -0.0101 -
0.0082 1 .
1838 CG2   CG2   . VAL VAL VAL A A 245 245 . 0.3532 0.3551 0.4071 0.0017  0.0032
0.0169  1 .
1839 C     C     . VAL VAL VAL A A 245 245 . 0.3718 0.4156 0.3960 -0.0039 -0.0196
0.0026  1 .
1840 O     O     . VAL VAL VAL A A 245 245 . 0.3519 0.4243 0.3929 -0.0215 -0.0321
0.0160  1 .
1841 N     N     . ALA ALA ALA A A 246 246 . 0.3619 0.4253 0.4015 -0.0005 -0.0202
0.0008  1 .
1842 CA    CA    . ALA ALA ALA A A 246 246 . 0.3721 0.4177 0.4148 0.0068  -0.0146 -
0.0089 1 .
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1843 CB    CB    . ALA ALA ALA A A 246 246 . 0.3379 0.4195 0.4154 0.0202  -0.0232 -
0.0224 1 .
1844 C     C     . ALA ALA ALA A A 246 246 . 0.3699 0.4417 0.4309 -0.0070 -0.0098 -
0.0133 1 .
1845 O     O     . ALA ALA ALA A A 246 246 . 0.3384 0.4388 0.4214 -0.0296 -0.0157 -
0.0174 1 .
1846 N     N     . ALA ALA ALA A A 247 247 . 0.4028 0.4531 0.4586 -0.0040 -0.0043 -
0.0198 1 .
1847 CA    CA    . ALA ALA ALA A A 247 247 . 0.4212 0.4560 0.4738 -0.0001 -0.0064 -
0.0215 1 .
1848 CB    CB    . ALA ALA ALA A A 247 247 . 0.4314 0.4548 0.4732 -0.0026 0.0003  -
0.0198 1 .
1849 C     C     . ALA ALA ALA A A 247 247 . 0.4381 0.4654 0.4840 -0.0028 0.0026  -
0.0192 1 .
1850 O     O     . ALA ALA ALA A A 247 247 . 0.4214 0.4580 0.5108 -0.0177 0.0030  -
0.0245 1 .
1851 N     N     . SER SER SER A A 248 248 . 0.4475 0.4728 0.4854 -0.0060 0.0087  -
0.0119 1 .
1852 CA    CA    . SER SER SER A A 248 248 . 0.4620 0.4767 0.4767 0.0059  0.0055  -
0.0065 1 .
1853 CB    CB    . SER SER SER A A 248 248 . 0.4543 0.4612 0.4718 0.0103  -0.0003 -
0.0103 1 .
1854 OG    OG    . SER SER SER A A 248 248 . 0.4773 0.4609 0.4888 -0.0075 -0.0090
0.0083  1 .
1855 C     C     . SER SER SER A A 248 248 . 0.4827 0.5044 0.4897 0.0109  0.0000  -
0.0086 1 .
1856 O     O     . SER SER SER A A 248 248 . 0.4702 0.5307 0.4681 0.0220  0.0121  -
0.0194 1 .
1857 N     N     . GLU GLU GLU A A 249 249 . 0.4861 0.5102 0.5050 0.0010  -0.0033 -
0.0014 1 .
1858 CA    CA    . GLU GLU GLU A A 249 249 . 0.4871 0.5192 0.5224 -0.0001 -0.0055 -
0.0001 1 .
1859 CB    CB    . GLU GLU GLU A A 249 249 . 0.4833 0.5251 0.5334 -0.0018 -0.0110 -
0.0006 1 .
1860 CG    CG    . GLU GLU GLU A A 249 249 . 0.4964 0.5511 0.5676 -0.0022 -0.0101 -
0.0105 1 .
1861 CD    CD    . GLU GLU GLU A A 249 249 . 0.4999 0.5914 0.6047 0.0113  -0.0126 -
0.0191 1 .
1862 OE1   OE1   . GLU GLU GLU A A 249 249 . 0.4046 0.6749 0.6265 0.0166  -0.0211 -
0.0182 1 .
1863 OE2   OE2   . GLU GLU GLU A A 249 249 . 0.5302 0.5905 0.6719 0.0318  0.0140  -
0.0192 1 .
1864 C     C     . GLU GLU GLU A A 249 249 . 0.4881 0.5266 0.5332 0.0050  -0.0064 -
0.0040 1 .
1865 O     O     . GLU GLU GLU A A 249 249 . 0.4655 0.5354 0.5372 0.0029  -0.0236 -
0.0004 1 .
1866 N     N     . PHE PHE PHE A A 250 250 . 0.4901 0.5356 0.5349 0.0102  -0.0111 -
0.0079 1 .
1867 CA    CA    . PHE PHE PHE A A 250 250 . 0.5192 0.5487 0.5483 0.0113  -0.0074 -
0.0038 1 .
1868 CB    CB    . PHE PHE PHE A A 250 250 . 0.5014 0.5490 0.5344 0.0177  -0.0037 -
0.0080 1 .
1869 CG    CG    . PHE PHE PHE A A 250 250 . 0.4934 0.5366 0.5369 0.0235  -0.0131 -
0.0122 1 .
1870 CD1   CD1   . PHE PHE PHE A A 250 250 . 0.5021 0.5083 0.5456 0.0426  -0.0132 -
0.0121 1 .
1871 CE1   CE1   . PHE PHE PHE A A 250 250 . 0.5100 0.4848 0.5230 0.0411  -0.0308 -
0.0075 1 .
1872 CZ    CZ    . PHE PHE PHE A A 250 250 . 0.4806 0.4743 0.5076 0.0381  -0.0139
0.0180  1 .
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1873 CE2   CE2   . PHE PHE PHE A A 250 250 . 0.4873 0.5107 0.4875 0.0404  -0.0429
0.0035  1 .
1874 CD2   CD2   . PHE PHE PHE A A 250 250 . 0.4292 0.5019 0.5139 0.0623  -0.0159
0.0058  1 .
1875 C     C     . PHE PHE PHE A A 250 250 . 0.5447 0.5649 0.5643 0.0117  -0.0105 -
0.0006 1 .
1876 O     O     . PHE PHE PHE A A 250 250 . 0.5426 0.5542 0.5670 0.0246  -0.0272 -
0.0022 1 .
1877 N     N     . TYR TYR TYR A A 251 251 . 0.5858 0.5893 0.5866 0.0080  -0.0011
0.0020  1 .
1878 CA    CA    . TYR TYR TYR A A 251 251 . 0.6120 0.6166 0.6153 0.0047  -0.0040 -
0.0012 1 .
1879 CB    CB    . TYR TYR TYR A A 251 251 . 0.6252 0.6192 0.6129 0.0009  -0.0025
0.0014  1 .
1880 CG    CG    . TYR TYR TYR A A 251 251 . 0.6672 0.6663 0.6682 0.0124  -0.0197 -
0.0027 1 .
1881 CD1   CD1   . TYR TYR TYR A A 251 251 . 0.6967 0.7030 0.6787 0.0124  -0.0247 -
0.0090 1 .
1882 CE1   CE1   . TYR TYR TYR A A 251 251 . 0.6656 0.7055 0.6873 0.0221  -0.0387 -
0.0136 1 .
1883 CZ    CZ    . TYR TYR TYR A A 251 251 . 0.6860 0.7091 0.7008 0.0087  -0.0416
0.0069  1 .
1884 OH    OH    . TYR TYR TYR A A 251 251 . 0.7280 0.7421 0.7142 -0.0176 -0.0827
0.0134  1 .
1885 CE2   CE2   . TYR TYR TYR A A 251 251 . 0.6997 0.7110 0.6973 0.0125  -0.0365
0.0056  1 .
1886 CD2   CD2   . TYR TYR TYR A A 251 251 . 0.7006 0.6775 0.7016 0.0105  -0.0239
0.0001  1 .
1887 C     C     . TYR TYR TYR A A 251 251 . 0.6300 0.6298 0.6292 -0.0001 0.0004  -
0.0018 1 .
1888 O     O     . TYR TYR TYR A A 251 251 . 0.6312 0.6300 0.6261 -0.0097 -0.0020
0.0034  1 .
1889 N     N     . ARG ARG ARG A A 252 252 . 0.6359 0.6499 0.6489 -0.0030 -0.0037 -
0.0046 1 .
1890 CA    CA    . ARG ARG ARG A A 252 252 . 0.6554 0.6692 0.6631 0.0030  -0.0025 -
0.0063 1 .
1891 CB    CB    . ARG ARG ARG A A 252 252 . 0.6600 0.6701 0.6599 0.0064  -0.0028 -
0.0083 1 .
1892 CG    CG    . ARG ARG ARG A A 252 252 . 0.6746 0.6728 0.6655 0.0136  -0.0134 -
0.0105 1 .
1893 CD    CD    . ARG ARG ARG A A 252 252 . 0.6457 0.6753 0.6884 0.0148  -0.0316 -
0.0233 1 .
1894 NE    NE    . ARG ARG ARG A A 252 252 . 0.6632 0.6730 0.7079 0.0272  -0.0334 -
0.0104 1 .
1895 CZ    CZ    . ARG ARG ARG A A 252 252 . 0.6459 0.6776 0.7170 0.0298  -0.0261
0.0051  1 .
1896 NH1   NH1   . ARG ARG ARG A A 252 252 . 0.5795 0.6612 0.7225 0.0313  -0.0216 -
0.0084 1 .
1897 NH2   NH2   . ARG ARG ARG A A 252 252 . 0.6000 0.7019 0.7422 0.0261  -0.0537 -
0.0037 1 .
1898 C     C     . ARG ARG ARG A A 252 252 . 0.6634 0.6850 0.6780 0.0057  0.0000  -
0.0028 1 .
1899 O     O     . ARG ARG ARG A A 252 252 . 0.6426 0.6953 0.6736 0.0121  0.0042  -
0.0044 1 .
1900 N     N     . ASP ASP ASP A A 253 253 . 0.6894 0.7026 0.7015 0.0015  0.0009
0.0000  1 .
1901 CA    CA    . ASP ASP ASP A A 253 253 . 0.7071 0.7241 0.7183 -0.0002 0.0008  -
0.0002 1 .
1902 CB    CB    . ASP ASP ASP A A 253 253 . 0.7310 0.7384 0.7303 -0.0071 0.0096
0.0041  1 .
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1903 CG    CG    . ASP ASP ASP A A 253 253 . 0.7720 0.7471 0.7675 -0.0220 0.0050
0.0040  1 .
1904 OD1   OD1   . ASP ASP ASP A A 253 253 . 0.8307 0.7482 0.7772 -0.0290 -0.0007
0.0081  1 .
1905 OD2   OD2   . ASP ASP ASP A A 253 253 . 0.8024 0.7872 0.7682 -0.0242 -0.0045
0.0008  1 .
1906 C     C     . ASP ASP ASP A A 253 253 . 0.6967 0.7218 0.7117 -0.0007 0.0041  -
0.0020 1 .
1907 O     O     . ASP ASP ASP A A 253 253 . 0.6993 0.7380 0.7332 -0.0004 0.0073  -
0.0006 1 .
1908 N     N     . GLY GLY GLY A A 254 254 . 0.6620 0.7004 0.6904 -0.0011 0.0020  -
0.0011 1 .
1909 CA    CA    . GLY GLY GLY A A 254 254 . 0.6290 0.6678 0.6651 0.0036  0.0059  -
0.0005 1 .
1910 C     C     . GLY GLY GLY A A 254 254 . 0.6089 0.6514 0.6451 0.0042  -0.0006
0.0023  1 .
1911 O     O     . GLY GLY GLY A A 254 254 . 0.5890 0.6496 0.6438 0.0112  -0.0042
0.0034  1 .
1912 N     N     . LYS LYS LYS A A 255 255 . 0.5982 0.6333 0.6295 -0.0011 0.0036  -
0.0045 1 .
1913 CA    CA    . LYS LYS LYS A A 255 255 . 0.5925 0.6215 0.6236 -0.0012 0.0031  -
0.0009 1 .
1914 CB    CB    . LYS LYS LYS A A 255 255 . 0.6000 0.6249 0.6258 -0.0018 0.0113
0.0063  1 .
1915 CG    CG    . LYS LYS LYS A A 255 255 . 0.6174 0.6580 0.6555 -0.0219 0.0010  -
0.0090 1 .
1916 CD    CD    . LYS LYS LYS A A 255 255 . 0.6391 0.7192 0.7303 -0.0472 -0.0071
0.0117  1 .
1917 CE    CE    . LYS LYS LYS A A 255 255 . 0.6840 0.7715 0.7561 -0.0604 -0.0142
0.0099  1 .
1918 NZ    NZ    . LYS LYS LYS A A 255 255 . 0.6806 0.7987 0.7927 -0.0578 -0.0099
0.0297  1 .
1919 C     C     . LYS LYS LYS A A 255 255 . 0.5833 0.6005 0.6101 -0.0009 0.0052  -
0.0009 1 .
1920 O     O     . LYS LYS LYS A A 255 255 . 0.5699 0.5965 0.6227 0.0054  0.0109  -
0.0047 1 .
1921 N     N     . TYR TYR TYR A A 256 256 . 0.5643 0.5899 0.5933 0.0038  0.0018  -
0.0057 1 .
1922 CA    CA    . TYR TYR TYR A A 256 256 . 0.5581 0.5762 0.5789 0.0020  -0.0018 -
0.0056 1 .
1923 CB    CB    . TYR TYR TYR A A 256 256 . 0.5442 0.5728 0.5722 -0.0014 0.0009  -
0.0025 1 .
1924 CG    CG    . TYR TYR TYR A A 256 256 . 0.5310 0.5644 0.5556 -0.0216 -0.0156
0.0044  1 .
1925 CD1   CD1   . TYR TYR TYR A A 256 256 . 0.5568 0.5530 0.5414 -0.0353 -0.0305
0.0103  1 .
1926 CE1   CE1   . TYR TYR TYR A A 256 256 . 0.5433 0.5730 0.5432 -0.0506 -0.0575
0.0160  1 .
1927 CZ    CZ    . TYR TYR TYR A A 256 256 . 0.5428 0.5704 0.5164 -0.0612 -0.0307
0.0179  1 .
1928 OH    OH    . TYR TYR TYR A A 256 256 . 0.5091 0.5767 0.4660 -0.0536 -0.0289
0.0374  1 .
1929 CE2   CE2   . TYR TYR TYR A A 256 256 . 0.5377 0.5973 0.5131 -0.0476 -0.0404
0.0072  1 .
1930 CD2   CD2   . TYR TYR TYR A A 256 256 . 0.5092 0.5437 0.5469 -0.0593 -0.0379 -
0.0025 1 .
1931 C     C     . TYR TYR TYR A A 256 256 . 0.5470 0.5699 0.5740 0.0063  -0.0071 -
0.0090 1 .
1932 O     O     . TYR TYR TYR A A 256 256 . 0.5314 0.5749 0.5860 0.0174  -0.0158 -
0.0223 1 .
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1933 N     N     . ASP ASP ASP A A 257 257 . 0.5382 0.5621 0.5682 0.0051  -0.0097 -
0.0103 1 .
1934 CA    CA    . ASP ASP ASP A A 257 257 . 0.5046 0.5511 0.5528 0.0076  -0.0115 -
0.0064 1 .
1935 CB    CB    . ASP ASP ASP A A 257 257 . 0.4567 0.5446 0.5584 0.0097  -0.0151 -
0.0070 1 .
1936 CG    CG    . ASP ASP ASP A A 257 257 . 0.3594 0.5506 0.5767 0.0302  -0.0335 -
0.0183 1 .
1937 OD1   OD1   . ASP ASP ASP A A 257 257 . 0.1279 0.5608 0.6108 0.1273  -0.0357 -
0.0823 1 .
1938 OD2   OD2   . ASP ASP ASP A A 257 257 . 0.2750 0.5506 0.6113 0.0036  -0.0969 -
0.0470 1 .
1939 C     C     . ASP ASP ASP A A 257 257 . 0.5127 0.5657 0.5567 0.0033  -0.0035 -
0.0099 1 .
1940 O     O     . ASP ASP ASP A A 257 257 . 0.5021 0.5857 0.5655 0.0125  -0.0083 -
0.0103 1 .
1941 N     N     . LEU LEU LEU A A 258 258 . 0.5203 0.5549 0.5544 0.0032  0.0011  -
0.0130 1 .
1942 CA    CA    . LEU LEU LEU A A 258 258 . 0.5359 0.5626 0.5486 0.0010  -0.0005 -
0.0097 1 .
1943 CB    CB    . LEU LEU LEU A A 258 258 . 0.5310 0.5683 0.5518 -0.0060 0.0025  -
0.0130 1 .
1944 CG    CG    . LEU LEU LEU A A 258 258 . 0.5191 0.5721 0.5412 -0.0177 0.0031  -
0.0054 1 .
1945 CD1   CD1   . LEU LEU LEU A A 258 258 . 0.4750 0.6028 0.5375 -0.0311 0.0255
0.0005  1 .
1946 CD2   CD2   . LEU LEU LEU A A 258 258 . 0.5124 0.5480 0.5560 -0.0534 0.0261  -
0.0032 1 .
1947 C     C     . LEU LEU LEU A A 258 258 . 0.5451 0.5623 0.5542 0.0039  -0.0007 -
0.0106 1 .
1948 O     O     . LEU LEU LEU A A 258 258 . 0.5562 0.5518 0.5543 0.0126  -0.0097 -
0.0151 1 .
1949 N     N     . ASP ASP ASP A A 259 259 . 0.5367 0.5692 0.5612 0.0024  0.0012  -
0.0045 1 .
1950 CA    CA    . ASP ASP ASP A A 259 259 . 0.5226 0.5630 0.5538 0.0038  0.0001
0.0044  1 .
1951 CB    CB    . ASP ASP ASP A A 259 259 . 0.5359 0.5687 0.5683 -0.0013 0.0120
0.0023  1 .
1952 CG    CG    . ASP ASP ASP A A 259 259 . 0.5820 0.6037 0.6237 -0.0047 0.0173
0.0053  1 .
1953 OD1   OD1   . ASP ASP ASP A A 259 259 . 0.5471 0.6638 0.6865 -0.0500 0.0430  -
0.0012 1 .
1954 OD2   OD2   . ASP ASP ASP A A 259 259 . 0.5987 0.6468 0.7012 -0.0169 0.0295  -
0.0139 1 .
1955 C     C     . ASP ASP ASP A A 259 259 . 0.4996 0.5511 0.5437 0.0041  -0.0023
0.0075  1 .
1956 O     O     . ASP ASP ASP A A 259 259 . 0.4565 0.5596 0.5531 0.0043  -0.0060
0.0089  1 .
1957 N     N     . PHE PHE PHE A A 260 260 . 0.5164 0.5531 0.5501 0.0088  -0.0011 -
0.0007 1 .
1958 CA    CA    . PHE PHE PHE A A 260 260 . 0.5085 0.5433 0.5492 0.0003  -0.0022 -
0.0033 1 .
1959 CB    CB    . PHE PHE PHE A A 260 260 . 0.5164 0.5379 0.5418 0.0040  -0.0001 -
0.0087 1 .
1960 CG    CG    . PHE PHE PHE A A 260 260 . 0.4831 0.5293 0.5409 0.0084  -0.0020 -
0.0211 1 .
1961 CD1   CD1   . PHE PHE PHE A A 260 260 . 0.4829 0.4951 0.5539 -0.0130 -0.0217 -
0.0342 1 .
1962 CE1   CE1   . PHE PHE PHE A A 260 260 . 0.5305 0.4968 0.5591 0.0288  -0.0297 -
0.0319 1 .
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1963 CZ    CZ    . PHE PHE PHE A A 260 260 . 0.5048 0.5123 0.5515 0.0168  -0.0271 -
0.0143 1 .
1964 CE2   CE2   . PHE PHE PHE A A 260 260 . 0.5026 0.5425 0.5468 0.0157  -0.0168 -
0.0265 1 .
1965 CD2   CD2   . PHE PHE PHE A A 260 260 . 0.4998 0.5650 0.5301 0.0339  0.0033  -
0.0334 1 .
1966 C     C     . PHE PHE PHE A A 260 260 . 0.5213 0.5544 0.5656 0.0003  0.0039
0.0001  1 .
1967 O     O     . PHE PHE PHE A A 260 260 . 0.4837 0.5284 0.5709 -0.0036 -0.0005 -
0.0004 1 .
1968 N     N     . LYS LYS LYS A A 261 261 . 0.5407 0.5743 0.5791 -0.0024 0.0072
0.0072  1 .
1969 CA    CA    . LYS LYS LYS A A 261 261 . 0.5674 0.5900 0.5921 0.0051  0.0102
0.0125  1 .
1970 CB    CB    . LYS LYS LYS A A 261 261 . 0.5566 0.5941 0.5986 0.0029  0.0186
0.0154  1 .
1971 CG    CG    . LYS LYS LYS A A 261 261 . 0.5597 0.5885 0.6058 0.0028  0.0247
0.0178  1 .
1972 CD    CD    . LYS LYS LYS A A 261 261 . 0.5756 0.5641 0.5693 0.0054  0.0662
0.0322  1 .
1973 CE    CE    . LYS LYS LYS A A 261 261 . 0.5479 0.5224 0.5618 -0.0137 0.0964
0.0356  1 .
1974 NZ    NZ    . LYS LYS LYS A A 261 261 . 0.5760 0.5355 0.4675 -0.0130 0.1081
0.0604  1 .
1975 C     C     . LYS LYS LYS A A 261 261 . 0.5791 0.6052 0.5984 0.0078  0.0130
0.0087  1 .
1976 O     O     . LYS LYS LYS A A 261 261 . 0.5837 0.6216 0.5943 0.0094  0.0232
0.0034  1 .
1977 N     N     . SER SER SER A A 262 262 . 0.5992 0.6119 0.6180 0.0064  0.0107
0.0046  1 .
1978 CA    CA    . SER SER SER A A 262 262 . 0.6258 0.6302 0.6345 0.0051  0.0085
0.0020  1 .
1979 CB    CB    . SER SER SER A A 262 262 . 0.6242 0.6279 0.6287 0.0008  0.0133  -
0.0032 1 .
1980 OG    OG    . SER SER SER A A 262 262 . 0.6262 0.5947 0.6201 0.0024  -0.0224
0.0073  1 .
1981 C     C     . SER SER SER A A 262 262 . 0.6372 0.6477 0.6553 0.0123  0.0088
0.0008  1 .
1982 O     O     . SER SER SER A A 262 262 . 0.6136 0.6383 0.6510 0.0227  0.0035  -
0.0109 1 .
1983 N     N     . PRO PRO PRO A A 263 263 . 0.6547 0.6702 0.6748 0.0066  0.0084
0.0046  1 .
1984 CA    CA    . PRO PRO PRO A A 263 263 . 0.6748 0.6896 0.6914 0.0055  0.0061
0.0072  1 .
1985 CB    CB    . PRO PRO PRO A A 263 263 . 0.6676 0.6912 0.6907 0.0042  0.0050
0.0065  1 .
1986 CG    CG    . PRO PRO PRO A A 263 263 . 0.6710 0.6939 0.6942 0.0041  0.0109
0.0122  1 .
1987 CD    CD    . PRO PRO PRO A A 263 263 . 0.6592 0.6802 0.6763 0.0093  0.0076
0.0049  1 .
1988 C     C     . PRO PRO PRO A A 263 263 . 0.6794 0.7067 0.6969 0.0010  -0.0034
0.0030  1 .
1989 O     O     . PRO PRO PRO A A 263 263 . 0.6694 0.7030 0.6924 -0.0014 -0.0051
0.0091  1 .
1990 N     N     . THR THR THR A A 264 264 . 0.7037 0.7220 0.7215 0.0004  -0.0052
0.0019  1 .
1991 CA    CA    . THR THR THR A A 264 264 . 0.7363 0.7492 0.7445 -0.0023 -0.0097 -
0.0029 1 .
1992 CB    CB    . THR THR THR A A 264 264 . 0.7452 0.7536 0.7535 -0.0006 -0.0087 -
0.0010 1 .
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1993 OG1   OG1   . THR THR THR A A 264 264 . 0.7615 0.7654 0.7657 0.0009  -0.0213 -
0.0080 1 .
1994 CG2   CG2   . THR THR THR A A 264 264 . 0.7638 0.7804 0.7407 -0.0044 -0.0131 -
0.0028 1 .
1995 C     C     . THR THR THR A A 264 264 . 0.7456 0.7642 0.7567 -0.0030 -0.0073 -
0.0048 1 .
1996 O     O     . THR THR THR A A 264 264 . 0.7203 0.7708 0.7478 -0.0024 -0.0021 -
0.0114 1 .
1997 N     N     . ASP ASP ASP A A 265 265 . 0.7653 0.7755 0.7669 -0.0004 -0.0098 -
0.0021 1 .
1998 CA    CA    . ASP ASP ASP A A 265 265 . 0.7770 0.7888 0.7820 -0.0044 -0.0059
0.0002  1 .
1999 CB    CB    . ASP ASP ASP A A 265 265 . 0.7743 0.7908 0.7893 -0.0092 -0.0110
0.0015  1 .
2000 CG    CG    . ASP ASP ASP A A 265 265 . 0.7392 0.8100 0.8305 -0.0166 -0.0033
0.0110  1 .
2001 OD1   OD1   . ASP ASP ASP A A 265 265 . 0.6170 0.8297 0.8566 -0.0009 -0.0037
0.0031  1 .
2002 OD2   OD2   . ASP ASP ASP A A 265 265 . 0.6930 0.8175 0.8554 -0.0543 0.0081
0.0341  1 .
2003 C     C     . ASP ASP ASP A A 265 265 . 0.7888 0.7888 0.7822 0.0013  -0.0004
0.0007  1 .
2004 O     O     . ASP ASP ASP A A 265 265 . 0.7796 0.7940 0.7796 0.0064  0.0044  -
0.0031 1 .
2005 N     N     . PRO PRO PRO A A 266 266 . 0.7925 0.7861 0.7801 0.0068  0.0017
0.0009  1 .
2006 CA    CA    . PRO PRO PRO A A 266 266 . 0.7859 0.7797 0.7743 0.0051  0.0012  -
0.0004 1 .
2007 CB    CB    . PRO PRO PRO A A 266 266 . 0.7910 0.7798 0.7728 0.0061  0.0026
0.0007  1 .
2008 CG    CG    . PRO PRO PRO A A 266 266 . 0.8014 0.7882 0.7804 0.0068  0.0032  -
0.0001 1 .
2009 CD    CD    . PRO PRO PRO A A 266 266 . 0.7961 0.7870 0.7845 0.0052  0.0029  -
0.0007 1 .
2010 C     C     . PRO PRO PRO A A 266 266 . 0.7659 0.7665 0.7664 0.0008  0.0002  -
0.0008 1 .
2011 O     O     . PRO PRO PRO A A 266 266 . 0.7657 0.7728 0.7682 0.0055  0.0048  -
0.0081 1 .
2012 N     N     . SER SER SER A A 267 267 . 0.7453 0.7482 0.7510 0.0010  -0.0031 -
0.0038 1 .
2013 CA    CA    . SER SER SER A A 267 267 . 0.7222 0.7277 0.7254 0.0017  0.0038  -
0.0031 1 .
2014 CB    CB    . SER SER SER A A 267 267 . 0.7179 0.7253 0.7227 -0.0012 0.0025  -
0.0029 1 .
2015 OG    OG    . SER SER SER A A 267 267 . 0.7006 0.7147 0.7074 -0.0156 0.0273
0.0040  1 .
2016 C     C     . SER SER SER A A 267 267 . 0.7015 0.7164 0.7114 0.0058  -0.0016 -
0.0019 1 .
2017 O     O     . SER SER SER A A 267 267 . 0.6921 0.7151 0.7070 0.0088  -0.0077 -
0.0001 1 .
2018 N     N     . ARG ARG ARG A A 268 268 . 0.6792 0.6952 0.6882 -0.0012 0.0004  -
0.0056 1 .
2019 CA    CA    . ARG ARG ARG A A 268 268 . 0.6589 0.6777 0.6707 -0.0036 -0.0006
0.0013  1 .
2020 CB    CB    . ARG ARG ARG A A 268 268 . 0.6652 0.6758 0.6656 -0.0065 0.0038  -
0.0014 1 .
2021 CG    CG    . ARG ARG ARG A A 268 268 . 0.6619 0.6776 0.6655 -0.0029 -0.0082
0.0048  1 .
2022 CD    CD    . ARG ARG ARG A A 268 268 . 0.6812 0.6693 0.6506 -0.0191 0.0011  -
0.0084 1 .
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2023 NE    NE    . ARG ARG ARG A A 268 268 . 0.6826 0.6642 0.6387 -0.0132 0.0093
0.0090  1 .
2024 CZ    CZ    . ARG ARG ARG A A 268 268 . 0.6454 0.6258 0.6292 0.0092  -0.0046 -
0.0093 1 .
2025 NH1   NH1   . ARG ARG ARG A A 268 268 . 0.6416 0.5471 0.6088 0.0330  0.0220  -
0.0021 1 .
2026 NH2   NH2   . ARG ARG ARG A A 268 268 . 0.6250 0.6002 0.6069 0.0428  -0.0194
0.0001  1 .
2027 C     C     . ARG ARG ARG A A 268 268 . 0.6490 0.6645 0.6639 -0.0005 0.0011  -
0.0020 1 .
2028 O     O     . ARG ARG ARG A A 268 268 . 0.6450 0.6735 0.6659 -0.0021 0.0055
0.0013  1 .
2029 N     N     . TYR TYR TYR A A 269 269 . 0.6243 0.6460 0.6509 -0.0011 0.0041  -
0.0022 1 .
2030 CA    CA    . TYR TYR TYR A A 269 269 . 0.6120 0.6326 0.6297 0.0029  0.0047  -
0.0063 1 .
2031 CB    CB    . TYR TYR TYR A A 269 269 . 0.6187 0.6348 0.6301 0.0026  0.0057  -
0.0047 1 .
2032 CG    CG    . TYR TYR TYR A A 269 269 . 0.6063 0.6397 0.6460 -0.0018 0.0010  -
0.0179 1 .
2033 CD1   CD1   . TYR TYR TYR A A 269 269 . 0.5761 0.6641 0.6361 -0.0118 0.0056  -
0.0325 1 .
2034 CE1   CE1   . TYR TYR TYR A A 269 269 . 0.5062 0.6695 0.6470 -0.0185 -0.0177 -
0.0386 1 .
2035 CZ    CZ    . TYR TYR TYR A A 269 269 . 0.4824 0.6704 0.6553 0.0029  -0.0130 -
0.0216 1 .
2036 OH    OH    . TYR TYR TYR A A 269 269 . 0.4185 0.6812 0.6820 0.0461  -0.0080 -
0.0407 1 .
2037 CE2   CE2   . TYR TYR TYR A A 269 269 . 0.4899 0.6619 0.6489 0.0104  0.0035  -
0.0171 1 .
2038 CD2   CD2   . TYR TYR TYR A A 269 269 . 0.5466 0.6499 0.6603 -0.0024 0.0079  -
0.0293 1 .
2039 C     C     . TYR TYR TYR A A 269 269 . 0.5873 0.6205 0.6180 0.0012  0.0015  -
0.0059 1 .
2040 O     O     . TYR TYR TYR A A 269 269 . 0.5482 0.6132 0.6224 0.0091  0.0115  -
0.0040 1 .
2041 N     N     . ILE ILE ILE A A 270 270 . 0.5512 0.6064 0.5980 0.0011  0.0003  -
0.0082 1 .
2042 CA    CA    . ILE ILE ILE A A 270 270 . 0.5370 0.5939 0.5956 -0.0002 -0.0014 -
0.0069 1 .
2043 CB    CB    . ILE ILE ILE A A 270 270 . 0.5371 0.5869 0.5915 -0.0013 -0.0096 -
0.0086 1 .
2044 CG1   CG1   . ILE ILE ILE A A 270 270 . 0.5165 0.5708 0.5697 0.0141  -0.0009 -
0.0130 1 .
2045 CD1   CD1   . ILE ILE ILE A A 270 270 . 0.5112 0.5394 0.4838 0.0119  -0.0496 -
0.0092 1 .
2046 CG2   CG2   . ILE ILE ILE A A 270 270 . 0.4739 0.5948 0.5835 0.0106  0.0031
0.0006  1 .
2047 C     C     . ILE ILE ILE A A 270 270 . 0.5447 0.5937 0.5961 -0.0018 -0.0040 -
0.0105 1 .
2048 O     O     . ILE ILE ILE A A 270 270 . 0.5811 0.6145 0.6314 -0.0098 0.0070  -
0.0157 1 .
2049 N     N     . THR THR THR A A 271 271 . 0.5166 0.5917 0.5860 0.0021  -0.0047 -
0.0061 1 .
2050 CA    CA    . THR THR THR A A 271 271 . 0.4985 0.5793 0.5766 0.0162  -0.0126 -
0.0116 1 .
2051 CB    CB    . THR THR THR A A 271 271 . 0.4926 0.5827 0.5791 0.0139  -0.0084 -
0.0133 1 .
2052 OG1   OG1   . THR THR THR A A 271 271 . 0.3208 0.6027 0.6269 0.0857  -0.0242 -
0.0339 1 .
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2053 CG2   CG2   . THR THR THR A A 271 271 . 0.4754 0.5718 0.5649 0.0443  -0.0157 -
0.0203 1 .
2054 C     C     . THR THR THR A A 271 271 . 0.5225 0.5803 0.5725 0.0063  -0.0154 -
0.0144 1 .
2055 O     O     . THR THR THR A A 271 271 . 0.4972 0.5731 0.5618 0.0094  -0.0316 -
0.0184 1 .
2056 N     N     . GLY GLY GLY A A 272 272 . 0.5428 0.5807 0.5614 0.0067  -0.0136 -
0.0137 1 .
2057 CA    CA    . GLY GLY GLY A A 272 272 . 0.5752 0.6081 0.5944 0.0050  -0.0184 -
0.0152 1 .
2058 C     C     . GLY GLY GLY A A 272 272 . 0.6014 0.6195 0.6197 0.0058  -0.0196 -
0.0191 1 .
2059 O     O     . GLY GLY GLY A A 272 272 . 0.5923 0.6257 0.6315 0.0031  -0.0284 -
0.0182 1 .
2060 N     N     . ASP ASP ASP A A 273 273 . 0.6090 0.6269 0.6305 0.0055  -0.0263 -
0.0124 1 .
2061 CA    CA    . ASP ASP ASP A A 273 273 . 0.6228 0.6376 0.6406 0.0001  -0.0274 -
0.0040 1 .
2062 CB    CB    . ASP ASP ASP A A 273 273 . 0.6251 0.6397 0.6520 -0.0124 -0.0318 -
0.0002 1 .
2063 CG    CG    . ASP ASP ASP A A 273 273 . 0.6186 0.6655 0.6580 -0.0238 -0.0442
0.0128  1 .
2064 OD1   OD1   . ASP ASP ASP A A 273 273 . 0.5604 0.6704 0.6422 -0.0674 -0.0880 -
0.0102 1 .
2065 OD2   OD2   . ASP ASP ASP A A 273 273 . 0.5719 0.6766 0.7224 -0.0720 -0.0568
0.0134  1 .
2066 C     C     . ASP ASP ASP A A 273 273 . 0.6208 0.6354 0.6404 0.0022  -0.0204 -
0.0034 1 .
2067 O     O     . ASP ASP ASP A A 273 273 . 0.6166 0.6549 0.6511 0.0070  -0.0237 -
0.0064 1 .
2068 N     N     . GLN GLN GLN A A 274 274 . 0.6151 0.6358 0.6374 0.0098  -0.0168 -
0.0031 1 .
2069 CA    CA    . GLN GLN GLN A A 274 274 . 0.6150 0.6371 0.6429 0.0089  -0.0121 -
0.0026 1 .
2070 CB    CB    . GLN GLN GLN A A 274 274 . 0.6216 0.6473 0.6497 0.0104  -0.0025 -
0.0068 1 .
2071 CG    CG    . GLN GLN GLN A A 274 274 . 0.6712 0.6998 0.6833 0.0077  -0.0250 -
0.0109 1 .
2072 CD    CD    . GLN GLN GLN A A 274 274 . 0.7029 0.7126 0.7094 0.0027  -0.0185 -
0.0197 1 .
2073 OE1   OE1   . GLN GLN GLN A A 274 274 . 0.7695 0.6977 0.7436 -0.0053 -0.0574 -
0.0354 1 .
2074 NE2   NE2   . GLN GLN GLN A A 274 274 . 0.7240 0.7279 0.7331 -0.0053 -0.0393 -
0.0110 1 .
2075 C     C     . GLN GLN GLN A A 274 274 . 0.5961 0.6169 0.6311 0.0057  -0.0137 -
0.0045 1 .
2076 O     O     . GLN GLN GLN A A 274 274 . 0.5734 0.6186 0.6276 0.0185  -0.0164 -
0.0099 1 .
2077 N     N     . LEU LEU LEU A A 275 275 . 0.5808 0.5987 0.6099 0.0016  -0.0164 -
0.0016 1 .
2078 CA    CA    . LEU LEU LEU A A 275 275 . 0.5788 0.5848 0.5875 -0.0080 -0.0094 -
0.0074 1 .
2079 CB    CB    . LEU LEU LEU A A 275 275 . 0.5752 0.5894 0.5800 -0.0138 -0.0106 -
0.0059 1 .
2080 CG    CG    . LEU LEU LEU A A 275 275 . 0.5615 0.5787 0.5710 -0.0272 -0.0061 -
0.0041 1 .
2081 CD1   CD1   . LEU LEU LEU A A 275 275 . 0.5495 0.5778 0.5561 -0.0463 -0.0082 -
0.0041 1 .
2082 CD2   CD2   . LEU LEU LEU A A 275 275 . 0.5290 0.5848 0.5235 -0.0079 0.0086  -
0.0159 1 .
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2083 C     C     . LEU LEU LEU A A 275 275 . 0.5728 0.5777 0.5759 -0.0084 -0.0119 -
0.0113 1 .
2084 O     O     . LEU LEU LEU A A 275 275 . 0.5861 0.5805 0.5647 -0.0037 -0.0168 -
0.0205 1 .
2085 N     N     . GLY GLY GLY A A 276 276 . 0.5605 0.5726 0.5680 -0.0088 -0.0153 -
0.0176 1 .
2086 CA    CA    . GLY GLY GLY A A 276 276 . 0.5504 0.5633 0.5689 -0.0065 -0.0072 -
0.0112 1 .
2087 C     C     . GLY GLY GLY A A 276 276 . 0.5462 0.5666 0.5713 0.0026  -0.0073 -
0.0142 1 .
2088 O     O     . GLY GLY GLY A A 276 276 . 0.5274 0.5688 0.5875 0.0144  -0.0065 -
0.0146 1 .
2089 N     N     . ALA ALA ALA A A 277 277 . 0.5191 0.5557 0.5633 0.0007  -0.0108 -
0.0124 1 .
2090 CA    CA    . ALA ALA ALA A A 277 277 . 0.5153 0.5492 0.5575 0.0014  -0.0137 -
0.0084 1 .
2091 CB    CB    . ALA ALA ALA A A 277 277 . 0.5034 0.5451 0.5546 0.0011  -0.0127 -
0.0079 1 .
2092 C     C     . ALA ALA ALA A A 277 277 . 0.5014 0.5559 0.5504 0.0008  -0.0168 -
0.0128 1 .
2093 O     O     . ALA ALA ALA A A 277 277 . 0.5001 0.5719 0.5604 -0.0052 -0.0336 -
0.0188 1 .
2094 N     N     . LEU LEU LEU A A 278 278 . 0.4958 0.5583 0.5513 0.0030  -0.0137 -
0.0097 1 .
2095 CA    CA    . LEU LEU LEU A A 278 278 . 0.5183 0.5469 0.5340 -0.0019 -0.0063 -
0.0028 1 .
2096 CB    CB    . LEU LEU LEU A A 278 278 . 0.5313 0.5489 0.5443 -0.0106 -0.0026 -
0.0039 1 .
2097 CG    CG    . LEU LEU LEU A A 278 278 . 0.6135 0.5527 0.5493 -0.0301 -0.0025
0.0093  1 .
2098 CD1   CD1   . LEU LEU LEU A A 278 278 . 0.6808 0.5773 0.6014 -0.0597 -0.0013
0.0096  1 .
2099 CD2   CD2   . LEU LEU LEU A A 278 278 . 0.6689 0.5190 0.5606 -0.0340 -0.0025 -
0.0037 1 .
2100 C     C     . LEU LEU LEU A A 278 278 . 0.5003 0.5350 0.5274 -0.0040 -0.0160 -
0.0032 1 .
2101 O     O     . LEU LEU LEU A A 278 278 . 0.4771 0.5316 0.5166 -0.0041 -0.0267 -
0.0012 1 .
2102 N     N     . TYR TYR TYR A A 279 279 . 0.4859 0.5176 0.5151 -0.0051 -0.0116 -
0.0061 1 .
2103 CA    CA    . TYR TYR TYR A A 279 279 . 0.4910 0.5126 0.5111 0.0029  -0.0102 -
0.0082 1 .
2104 CB    CB    . TYR TYR TYR A A 279 279 . 0.4769 0.4986 0.5016 0.0010  -0.0083 -
0.0049 1 .
2105 CG    CG    . TYR TYR TYR A A 279 279 . 0.4353 0.5073 0.4863 -0.0025 -0.0216
0.0070  1 .
2106 CD1   CD1   . TYR TYR TYR A A 279 279 . 0.3428 0.5064 0.4651 -0.0194 -0.0049
0.0064  1 .
2107 CE1   CE1   . TYR TYR TYR A A 279 279 . 0.3191 0.4985 0.4825 0.0001  0.0159
0.0122  1 .
2108 CZ    CZ    . TYR TYR TYR A A 279 279 . 0.3697 0.5055 0.4906 -0.0147 0.0092
0.0030  1 .
2109 OH    OH    . TYR TYR TYR A A 279 279 . 0.2484 0.5443 0.4835 -0.0366 -0.0048 -
0.0180 1 .
2110 CE2   CE2   . TYR TYR TYR A A 279 279 . 0.3885 0.5155 0.4648 -0.0145 -0.0109 -
0.0061 1 .
2111 CD2   CD2   . TYR TYR TYR A A 279 279 . 0.4028 0.4891 0.4738 -0.0212 -0.0197 -
0.0189 1 .
2112 C     C     . TYR TYR TYR A A 279 279 . 0.4982 0.5194 0.5149 0.0095  -0.0141 -
0.0101 1 .
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2113 O    O    . TYR TYR TYR A A 279 279 . 0.4769 0.5409 0.5150 0.0076  -0.0222 -
0.0123 1 .
2114 N    N    . GLN GLN GLN A A 280 280 . 0.4941 0.5173 0.5114 0.0200  -0.0226 -
0.0083 1 .
2115 CA   CA   . GLN GLN GLN A A 280 280 . 0.5074 0.5171 0.5227 0.0132  -0.0207 -
0.0088 1 .
2116 CB   CB   . GLN GLN GLN A A 280 280 . 0.5106 0.5245 0.5168 0.0078  -0.0257 -
0.0092 1 .
2117 CG   CG   . GLN GLN GLN A A 280 280 . 0.5376 0.5455 0.5603 0.0093  -0.0150 -
0.0089 1 .
2118 CD   CD   . GLN GLN GLN A A 280 280 . 0.5439 0.5880 0.6147 0.0046  -0.0168 -
0.0146 1 .
2119 OE1  OE1  . GLN GLN GLN A A 280 280 . 0.5790 0.5949 0.6514 0.0064  -0.0102 -
0.0497 1 .
2120 NE2  NE2  . GLN GLN GLN A A 280 280 . 0.5017 0.5779 0.6413 0.0297  -0.0540 -
0.0035 1 .
2121 C    C    . GLN GLN GLN A A 280 280 . 0.5013 0.5135 0.5114 0.0038  -0.0241 -
0.0093 1 .
2122 O    O    . GLN GLN GLN A A 280 280 . 0.4980 0.4834 0.5081 0.0093  -0.0339 -
0.0271 1 .
2123 N    N    . ASP ASP ASP A A 281 281 . 0.4963 0.5281 0.5238 0.0047  -0.0269 -
0.0087 1 .
2124 CA   CA   . ASP ASP ASP A A 281 281 . 0.4998 0.5250 0.5359 0.0018  -0.0185 -
0.0132 1 .
2125 CB   CB   . ASP ASP ASP A A 281 281 . 0.5138 0.5335 0.5333 -0.0005 -0.0071 -
0.0158 1 .
2126 CG   CG   . ASP ASP ASP A A 281 281 . 0.5349 0.5745 0.5548 -0.0102 -0.0001 -
0.0137 1 .
2127 OD1  OD1  . ASP ASP ASP A A 281 281 . 0.6150 0.6604 0.5785 -0.0401 -0.0038 -
0.0441 1 .
2128 OD2  OD2  . ASP ASP ASP A A 281 281 . 0.5194 0.5538 0.5993 -0.0272 0.0401  -
0.0311 1 .
2129 C    C    . ASP ASP ASP A A 281 281 . 0.5034 0.5258 0.5398 0.0080  -0.0207 -
0.0170 1 .
2130 O    O    . ASP ASP ASP A A 281 281 . 0.4816 0.5273 0.5629 0.0174  -0.0245 -
0.0143 1 .
2131 N    N    . PHE PHE PHE A A 282 282 . 0.4903 0.5361 0.5227 0.0046  -0.0269 -
0.0217 1 .
2132 CA   CA   . PHE PHE PHE A A 282 282 . 0.5054 0.5257 0.5180 -0.0020 -0.0198 -
0.0194 1 .
2133 CB   CB   . PHE PHE PHE A A 282 282 . 0.5118 0.5297 0.5120 0.0010  -0.0221 -
0.0181 1 .
2134 CG   CG   . PHE PHE PHE A A 282 282 . 0.5213 0.5294 0.5236 0.0005  -0.0212 -
0.0020 1 .
2135 CD1  CD1  . PHE PHE PHE A A 282 282 . 0.5366 0.5181 0.5311 0.0034  -0.0189 -
0.0002 1 .
2136 CE1  CE1  . PHE PHE PHE A A 282 282 . 0.5202 0.5361 0.5450 -0.0103 -0.0256 -
0.0180 1 .
2137 CZ   CZ   . PHE PHE PHE A A 282 282 . 0.5972 0.5128 0.5790 0.0001  0.0002
0.0110  1 .
2138 CE2  CE2  . PHE PHE PHE A A 282 282 . 0.5879 0.5210 0.5493 -0.0214 -0.0030 -
0.0088 1 .
2139 CD2  CD2  . PHE PHE PHE A A 282 282 . 0.5393 0.5217 0.5502 -0.0054 -0.0126
0.0281  1 .
2140 C    C    . PHE PHE PHE A A 282 282 . 0.4857 0.5092 0.5073 -0.0099 -0.0219 -
0.0265 1 .
2141 O    O    . PHE PHE PHE A A 282 282 . 0.4795 0.5199 0.5144 -0.0233 -0.0311 -
0.0303 1 .
2142 N    N    . VAL VAL VAL A A 283 283 . 0.4858 0.5085 0.5030 -0.0212 -0.0132 -
0.0331 1 .
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2143 CA    CA    . VAL VAL VAL A A 283 283 . 0.5020 0.5209 0.5153 -0.0123 -0.0017 -
0.0281 1 .
2144 CB    CB    . VAL VAL VAL A A 283 283 . 0.5143 0.5272 0.5093 -0.0126 -0.0007 -
0.0281 1 .
2145 CG1   CG1   . VAL VAL VAL A A 283 283 . 0.5195 0.5589 0.5435 -0.0235 0.0039  -
0.0447 1 .
2146 CG2   CG2   . VAL VAL VAL A A 283 283 . 0.5250 0.5468 0.5345 -0.0277 0.0054  -
0.0261 1 .
2147 C     C     . VAL VAL VAL A A 283 283 . 0.4998 0.5290 0.5088 -0.0096 -0.0031 -
0.0275 1 .
2148 O     O     . VAL VAL VAL A A 283 283 . 0.4546 0.5213 0.4788 0.0012  0.0003  -
0.0343 1 .
2149 N     N     . ARG ARG ARG A A 284 284 . 0.5109 0.5446 0.5241 0.0020  -0.0043 -
0.0186 1 .
2150 CA    CA    . ARG ARG ARG A A 284 284 . 0.5283 0.5445 0.5379 -0.0057 -0.0036 -
0.0103 1 .
2151 CB    CB    . ARG ARG ARG A A 284 284 . 0.5321 0.5662 0.5554 0.0022  -0.0029 -
0.0050 1 .
2152 CG    CG    . ARG ARG ARG A A 284 284 . 0.5551 0.6085 0.5997 -0.0172 0.0158
0.0013  1 .
2153 CD    CD    . ARG ARG ARG A A 284 284 . 0.6028 0.6456 0.6436 -0.0418 -0.0036 -
0.0147 1 .
2154 NE    NE    . ARG ARG ARG A A 284 284 . 0.6359 0.6396 0.6717 -0.0143 0.0245
0.0162  1 .
2155 CZ    CZ    . ARG ARG ARG A A 284 284 . 0.6539 0.6479 0.6890 -0.0036 0.0441
0.0074  1 .
2156 NH1   NH1   . ARG ARG ARG A A 284 284 . 0.6457 0.6702 0.6981 0.0191  0.0431
0.0090  1 .
2157 NH2   NH2   . ARG ARG ARG A A 284 284 . 0.6841 0.6771 0.7295 0.0249  0.0576
0.0034  1 .
2158 C     C     . ARG ARG ARG A A 284 284 . 0.5238 0.5479 0.5355 0.0016  -0.0061 -
0.0106 1 .
2159 O     O     . ARG ARG ARG A A 284 284 . 0.5266 0.5495 0.5347 0.0034  -0.0038 -
0.0186 1 .
2160 N     N     . ASP ASP ASP A A 285 285 . 0.5060 0.5414 0.5293 0.0011  -0.0044 -
0.0063 1 .
2161 CA    CA    . ASP ASP ASP A A 285 285 . 0.4900 0.5355 0.5321 -0.0012 -0.0083 -
0.0022 1 .
2162 CB    CB    . ASP ASP ASP A A 285 285 . 0.4950 0.5448 0.5456 -0.0023 -0.0055 -
0.0023 1 .
2163 CG    CG    . ASP ASP ASP A A 285 285 . 0.4921 0.5997 0.5869 -0.0019 -0.0127 -
0.0199 1 .
2164 OD1   OD1   . ASP ASP ASP A A 285 285 . 0.3985 0.6244 0.5990 0.0109  -0.0363 -
0.0534 1 .
2165 OD2   OD2   . ASP ASP ASP A A 285 285 . 0.5189 0.6616 0.6657 -0.0347 0.0156  -
0.0159 1 .
2166 C     C     . ASP ASP ASP A A 285 285 . 0.4917 0.5124 0.5223 -0.0007 -0.0077
0.0002  1 .
2167 O     O     . ASP ASP ASP A A 285 285 . 0.4891 0.5318 0.5219 -0.0014 -0.0104
0.0090  1 .
2168 N     N     . TYR TYR TYR A A 286 286 . 0.4693 0.4889 0.5014 0.0019  -0.0139 -
0.0062 1 .
2169 CA    CA    . TYR TYR TYR A A 286 286 . 0.4557 0.4527 0.4646 -0.0001 -0.0122 -
0.0059 1 .
2170 CB    CB    . TYR TYR TYR A A 286 286 . 0.4626 0.4456 0.4618 0.0008  -0.0185 -
0.0051 1 .
2171 CG    CG    . TYR TYR TYR A A 286 286 . 0.4667 0.4694 0.4745 -0.0011 -0.0079 -
0.0124 1 .
2172 CD1   CD1   . TYR TYR TYR A A 286 286 . 0.4904 0.4936 0.4907 -0.0253 0.0013  -
0.0089 1 .
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2173 CE1   CE1   . TYR TYR TYR A A 286 286 . 0.5085 0.5369 0.5193 -0.0229 0.0176  -
0.0258 1 .
2174 CZ    CZ    . TYR TYR TYR A A 286 286 . 0.5042 0.5538 0.5286 -0.0258 0.0000  -
0.0054 1 .
2175 OH    OH    . TYR TYR TYR A A 286 286 . 0.5120 0.6519 0.6030 -0.0621 -0.0038 -
0.0008 1 .
2176 CE2   CE2   . TYR TYR TYR A A 286 286 . 0.4914 0.5169 0.5005 -0.0257 -0.0091 -
0.0256 1 .
2177 CD2   CD2   . TYR TYR TYR A A 286 286 . 0.4877 0.4731 0.4824 -0.0117 -0.0009 -
0.0365 1 .
2178 C     C     . TYR TYR TYR A A 286 286 . 0.4276 0.4398 0.4449 -0.0038 -0.0147 -
0.0086 1 .
2179 O     O     . TYR TYR TYR A A 286 286 . 0.4041 0.4364 0.4165 -0.0149 -0.0275 -
0.0159 1 .
2180 N     N     . PRO PRO PRO A A 287 287 . 0.4338 0.4310 0.4357 0.0027  -0.0121 -
0.0030 1 .
2181 CA    CA    . PRO PRO PRO A A 287 287 . 0.4144 0.4220 0.4236 -0.0035 -0.0056 -
0.0023 1 .
2182 CB    CB    . PRO PRO PRO A A 287 287 . 0.4192 0.4200 0.4129 -0.0077 -0.0081 -
0.0079 1 .
2183 CG    CG    . PRO PRO PRO A A 287 287 . 0.4143 0.4267 0.4257 -0.0127 -0.0076
0.0106  1 .
2184 CD    CD    . PRO PRO PRO A A 287 287 . 0.4323 0.4330 0.4428 0.0057  -0.0173
0.0012  1 .
2185 C     C     . PRO PRO PRO A A 287 287 . 0.4172 0.4324 0.4189 -0.0032 -0.0071 -
0.0107 1 .
2186 O     O     . PRO PRO PRO A A 287 287 . 0.4335 0.4259 0.4267 -0.0058 -0.0165 -
0.0205 1 .
2187 N     N     . VAL VAL VAL A A 288 288 . 0.4198 0.4303 0.4161 -0.0097 -0.0128 -
0.0132 1 .
2188 CA    CA    . VAL VAL VAL A A 288 288 . 0.4138 0.4354 0.4170 -0.0130 -0.0120 -
0.0056 1 .
2189 CB    CB    . VAL VAL VAL A A 288 288 . 0.4044 0.4290 0.4164 -0.0123 -0.0099 -
0.0023 1 .
2190 CG1   CG1   . VAL VAL VAL A A 288 288 . 0.2798 0.4189 0.3619 -0.0487 -0.0311 -
0.0212 1 .
2191 CG2   CG2   . VAL VAL VAL A A 288 288 . 0.4415 0.4422 0.3949 -0.0409 -0.0021 -
0.0155 1 .
2192 C     C     . VAL VAL VAL A A 288 288 . 0.4279 0.4512 0.4192 -0.0041 -0.0151 -
0.0026 1 .
2193 O     O     . VAL VAL VAL A A 288 288 . 0.4446 0.4792 0.4202 -0.0021 -0.0255 -
0.0046 1 .
2194 N     N     . VAL VAL VAL A A 289 289 . 0.3909 0.4360 0.4163 0.0000  -0.0200 -
0.0064 1 .
2195 CA    CA    . VAL VAL VAL A A 289 289 . 0.3822 0.4334 0.3962 0.0026  -0.0177 -
0.0040 1 .
2196 CB    CB    . VAL VAL VAL A A 289 289 . 0.3919 0.4303 0.4073 0.0008  -0.0308 -
0.0048 1 .
2197 CG1   CG1   . VAL VAL VAL A A 289 289 . 0.3401 0.4281 0.4421 -0.0028 -0.0377
0.0030  1 .
2198 CG2   CG2   . VAL VAL VAL A A 289 289 . 0.4036 0.4736 0.4171 0.0145  -0.0384
0.0072  1 .
2199 C     C     . VAL VAL VAL A A 289 289 . 0.3832 0.4513 0.4014 0.0022  -0.0128
0.0033  1 .
2200 O     O     . VAL VAL VAL A A 289 289 . 0.3958 0.4886 0.3988 0.0123  -0.0021
0.0026  1 .
2201 N     N     . SER SER SER A A 290 290 . 0.3830 0.4491 0.4088 -0.0094 -0.0191
0.0014  1 .
2202 CA    CA    . SER SER SER A A 290 290 . 0.3730 0.4256 0.4049 -0.0138 -0.0204
0.0011  1 .
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2203 CB    CB    . SER SER SER A A 290 290 . 0.3688 0.4283 0.4048 -0.0246 -0.0161 -
0.0076 1 .
2204 OG    OG    . SER SER SER A A 290 290 . 0.3227 0.4439 0.4016 -0.0343 -0.0629
0.0109  1 .
2205 C     C     . SER SER SER A A 290 290 . 0.3713 0.4211 0.4059 -0.0066 -0.0141 -
0.0018 1 .
2206 O     O     . SER SER SER A A 290 290 . 0.3663 0.4284 0.4359 -0.0164 -0.0105 -
0.0047 1 .
2207 N     N     . ILE ILE ILE A A 291 291 . 0.3913 0.4235 0.4066 0.0012  -0.0128 -
0.0067 1 .
2208 CA    CA    . ILE ILE ILE A A 291 291 . 0.3911 0.4287 0.4105 -0.0016 -0.0108 -
0.0011 1 .
2209 CB    CB    . ILE ILE ILE A A 291 291 . 0.3888 0.4308 0.4094 0.0013  -0.0168 -
0.0007 1 .
2210 CG1   CG1   . ILE ILE ILE A A 291 291 . 0.4100 0.4306 0.3956 0.0000  -0.0193
0.0051  1 .
2211 CD1   CD1   . ILE ILE ILE A A 291 291 . 0.4287 0.4911 0.3797 -0.0077 -0.0267
0.0075  1 .
2212 CG2   CG2   . ILE ILE ILE A A 291 291 . 0.2972 0.4458 0.3842 -0.0127 -0.0081
0.0307  1 .
2213 C     C     . ILE ILE ILE A A 291 291 . 0.4061 0.4223 0.4087 0.0043  -0.0119 -
0.0034 1 .
2214 O     O     . ILE ILE ILE A A 291 291 . 0.4390 0.4363 0.4204 -0.0023 -0.0099 -
0.0019 1 .
2215 N     N     . GLU GLU GLU A A 292 292 . 0.3913 0.4118 0.4069 0.0066  -0.0142 -
0.0021 1 .
2216 CA    CA    . GLU GLU GLU A A 292 292 . 0.3904 0.3988 0.3928 0.0098  -0.0215 -
0.0099 1 .
2217 CB    CB    . GLU GLU GLU A A 292 292 . 0.3657 0.3857 0.3932 0.0119  -0.0258
0.0053  1 .
2218 CG    CG    . GLU GLU GLU A A 292 292 . 0.4089 0.4108 0.4183 0.0277  -0.0457 -
0.0194 1 .
2219 CD    CD    . GLU GLU GLU A A 292 292 . 0.4776 0.4530 0.4543 0.0347  -0.0820 -
0.0416 1 .
2220 OE1   OE1   . GLU GLU GLU A A 292 292 . 0.4862 0.4494 0.4155 0.0889  -0.0935 -
0.0161 1 .
2221 OE2   OE2   . GLU GLU GLU A A 292 292 . 0.4765 0.5002 0.4909 0.0348  -0.1132 -
0.0643 1 .
2222 C     C     . GLU GLU GLU A A 292 292 . 0.3708 0.4026 0.3874 0.0061  -0.0242 -
0.0076 1 .
2223 O     O     . GLU GLU GLU A A 292 292 . 0.3702 0.3996 0.3814 0.0106  -0.0384 -
0.0225 1 .
2224 N     N     . ASP ASP ASP A A 293 293 . 0.3767 0.4152 0.3957 0.0112  -0.0227 -
0.0155 1 .
2225 CA    CA    . ASP ASP ASP A A 293 293 . 0.3916 0.4171 0.4130 0.0120  -0.0136 -
0.0116 1 .
2226 CB    CB    . ASP ASP ASP A A 293 293 . 0.3899 0.4227 0.4010 0.0184  -0.0254 -
0.0100 1 .
2227 CG    CG    . ASP ASP ASP A A 293 293 . 0.4044 0.4398 0.4216 0.0123  -0.0150 -
0.0181 1 .
2228 OD1   OD1   . ASP ASP ASP A A 293 293 . 0.4375 0.4794 0.3983 0.0197  -0.0286 -
0.0301 1 .
2229 OD2   OD2   . ASP ASP ASP A A 293 293 . 0.3996 0.4737 0.4181 0.0268  -0.0069 -
0.0445 1 .
2230 C     C     . ASP ASP ASP A A 293 293 . 0.3855 0.4123 0.4102 0.0079  -0.0115 -
0.0045 1 .
2231 O     O     . ASP ASP ASP A A 293 293 . 0.3985 0.4197 0.4315 0.0161  -0.0041
0.0146  1 .
2232 N     N     . PRO PRO PRO A A 294 294 . 0.3779 0.4077 0.4089 0.0061  -0.0143
0.0021  1 .
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2233 CA    CA    . PRO PRO PRO A A 294 294 . 0.3704 0.4162 0.4138 0.0039  -0.0113 -
0.0036 1 .
2234 CB    CB    . PRO PRO PRO A A 294 294 . 0.3310 0.4194 0.3860 0.0100  -0.0098
0.0039  1 .
2235 CG    CG    . PRO PRO PRO A A 294 294 . 0.3717 0.3923 0.4129 -0.0028 -0.0206 -
0.0003 1 .
2236 CD    CD    . PRO PRO PRO A A 294 294 . 0.3620 0.4058 0.3956 0.0026  -0.0139
0.0018  1 .
2237 C     C     . PRO PRO PRO A A 294 294 . 0.3875 0.4288 0.4165 0.0037  -0.0102 -
0.0021 1 .
2238 O     O     . PRO PRO PRO A A 294 294 . 0.4103 0.4646 0.4255 0.0243  -0.0101
0.0042  1 .
2239 N     N     . PHE PHE PHE A A 295 295 . 0.4105 0.4456 0.4358 0.0051  -0.0145 -
0.0095 1 .
2240 CA    CA    . PHE PHE PHE A A 295 295 . 0.4324 0.4626 0.4546 0.0096  -0.0152 -
0.0121 1 .
2241 CB    CB    . PHE PHE PHE A A 295 295 . 0.4308 0.4638 0.4655 0.0111  -0.0100 -
0.0145 1 .
2242 CG    CG    . PHE PHE PHE A A 295 295 . 0.4246 0.4746 0.4609 0.0114  -0.0331 -
0.0114 1 .
2243 CD1   CD1   . PHE PHE PHE A A 295 295 . 0.4333 0.4541 0.4845 0.0196  -0.0655
0.0014  1 .
2244 CE1   CE1   . PHE PHE PHE A A 295 295 . 0.3545 0.4690 0.4252 0.0525  -0.0945 -
0.0006 1 .
2245 CZ    CZ    . PHE PHE PHE A A 295 295 . 0.4141 0.4577 0.4205 0.0485  -0.0631
0.0243  1 .
2246 CE2   CE2   . PHE PHE PHE A A 295 295 . 0.4466 0.4611 0.4171 0.0255  -0.0490
0.0026  1 .
2247 CD2   CD2   . PHE PHE PHE A A 295 295 . 0.4257 0.4703 0.3996 0.0109  -0.0606 -
0.0017 1 .
2248 C     C     . PHE PHE PHE A A 295 295 . 0.4591 0.4666 0.4753 0.0150  -0.0112 -
0.0150 1 .
2249 O     O     . PHE PHE PHE A A 295 295 . 0.4690 0.4741 0.4924 0.0223  -0.0130 -
0.0273 1 .
2250 N     N     . ASP ASP ASP A A 296 296 . 0.4656 0.4855 0.4787 0.0281  -0.0115 -
0.0147 1 .
2251 CA    CA    . ASP ASP ASP A A 296 296 . 0.4874 0.4907 0.5016 0.0219  -0.0085 -
0.0195 1 .
2252 CB    CB    . ASP ASP ASP A A 296 296 . 0.4986 0.4996 0.5126 0.0320  -0.0119 -
0.0260 1 .
2253 CG    CG    . ASP ASP ASP A A 296 296 . 0.4813 0.5062 0.5337 0.0409  -0.0075 -
0.0186 1 .
2254 OD1   OD1   . ASP ASP ASP A A 296 296 . 0.3931 0.5166 0.5332 0.0815  -0.0178 -
0.0074 1 .
2255 OD2   OD2   . ASP ASP ASP A A 296 296 . 0.4424 0.5163 0.6044 0.0487  -0.0466
0.0214  1 .
2256 C     C     . ASP ASP ASP A A 296 296 . 0.5057 0.4964 0.5004 0.0232  -0.0078 -
0.0190 1 .
2257 O     O     . ASP ASP ASP A A 296 296 . 0.5130 0.4945 0.5095 0.0379  -0.0265 -
0.0183 1 .
2258 N     N     . GLN GLN GLN A A 297 297 . 0.4985 0.5011 0.5012 0.0143  -0.0138 -
0.0163 1 .
2259 CA    CA    . GLN GLN GLN A A 297 297 . 0.5256 0.4934 0.4938 0.0113  -0.0061 -
0.0145 1 .
2260 CB    CB    . GLN GLN GLN A A 297 297 . 0.5170 0.4880 0.5034 0.0090  -0.0092 -
0.0137 1 .
2261 CG    CG    . GLN GLN GLN A A 297 297 . 0.5498 0.4648 0.4940 0.0005  0.0076  -
0.0179 1 .
2262 CD    CD    . GLN GLN GLN A A 297 297 . 0.5264 0.4260 0.5213 -0.0287 0.0139  -
0.0538 1 .
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2263 OE1   OE1   . GLN GLN GLN A A 297 297 . 0.5003 0.3438 0.5823 -0.0609 0.0255  -
0.0639 1 .
2264 NE2   NE2   . GLN GLN GLN A A 297 297 . 0.5185 0.4181 0.5489 -0.0539 0.0337  -
0.0555 1 .
2265 C     C     . GLN GLN GLN A A 297 297 . 0.5290 0.5041 0.4995 0.0102  -0.0087 -
0.0164 1 .
2266 O     O     . GLN GLN GLN A A 297 297 . 0.5143 0.4726 0.4636 0.0113  0.0030  -
0.0172 1 .
2267 N     N     . ASP ASP ASP A A 298 298 . 0.5519 0.5299 0.5365 0.0086  -0.0128 -
0.0154 1 .
2268 CA    CA    . ASP ASP ASP A A 298 298 . 0.5726 0.5596 0.5719 0.0070  -0.0176 -
0.0025 1 .
2269 CB    CB    . ASP ASP ASP A A 298 298 . 0.5703 0.5620 0.5824 0.0117  -0.0191 -
0.0045 1 .
2270 CG    CG    . ASP ASP ASP A A 298 298 . 0.5983 0.5750 0.6092 0.0137  -0.0219 -
0.0092 1 .
2271 OD1   OD1   . ASP ASP ASP A A 298 298 . 0.5498 0.5641 0.6911 -0.0010 -0.0397
0.0030  1 .
2272 OD2   OD2   . ASP ASP ASP A A 298 298 . 0.6015 0.6082 0.5907 0.0659  -0.0376 -
0.0225 1 .
2273 C     C     . ASP ASP ASP A A 298 298 . 0.5859 0.5736 0.5851 0.0037  -0.0180
0.0025  1 .
2274 O     O     . ASP ASP ASP A A 298 298 . 0.5963 0.5742 0.6075 0.0088  -0.0163
0.0137  1 .
2275 N     N     . ASP ASP ASP A A 299 299 . 0.5889 0.5844 0.5915 0.0035  -0.0202
0.0047  1 .
2276 CA    CA    . ASP ASP ASP A A 299 299 . 0.5783 0.5967 0.5960 -0.0018 -0.0207
0.0003  1 .
2277 CB    CB    . ASP ASP ASP A A 299 299 . 0.5767 0.5937 0.5982 -0.0038 -0.0264
0.0118  1 .
2278 CG    CG    . ASP ASP ASP A A 299 299 . 0.5744 0.6098 0.6175 -0.0127 -0.0176
0.0162  1 .
2279 OD1   OD1   . ASP ASP ASP A A 299 299 . 0.5174 0.6147 0.6226 -0.0318 -0.0277
0.0387  1 .
2280 OD2   OD2   . ASP ASP ASP A A 299 299 . 0.6010 0.6127 0.6708 0.0032  -0.0074
0.0142  1 .
2281 C     C     . ASP ASP ASP A A 299 299 . 0.5633 0.5997 0.5897 0.0037  -0.0216 -
0.0045 1 .
2282 O     O     . ASP ASP ASP A A 299 299 . 0.5507 0.6037 0.5898 0.0116  -0.0273 -
0.0103 1 .
2283 N     N     . TRP TRP TRP A A 300 300 . 0.5676 0.6019 0.5842 0.0041  -0.0240 -
0.0042 1 .
2284 CA    CA    . TRP TRP TRP A A 300 300 . 0.5925 0.6121 0.5933 0.0015  -0.0152 -
0.0043 1 .
2285 CB    CB    . TRP TRP TRP A A 300 300 . 0.5992 0.6076 0.5963 0.0003  -0.0134 -
0.0045 1 .
2286 CG    CG    . TRP TRP TRP A A 300 300 . 0.5921 0.5892 0.5921 0.0006  -0.0093
0.0053  1 .
2287 CD1   CD1   . TRP TRP TRP A A 300 300 . 0.6017 0.5555 0.5760 -0.0019 -0.0046
0.0252  1 .
2288 NE1   NE1   . TRP TRP TRP A A 300 300 . 0.5782 0.5158 0.5953 -0.0089 0.0266
0.0421  1 .
2289 CE2   CE2   . TRP TRP TRP A A 300 300 . 0.5935 0.5296 0.6043 0.0059  0.0068
0.0264  1 .
2290 CD2   CD2   . TRP TRP TRP A A 300 300 . 0.5999 0.5718 0.5989 0.0063  0.0078
0.0127  1 .
2291 CE3   CE3   . TRP TRP TRP A A 300 300 . 0.6139 0.5987 0.6039 0.0052  0.0232
0.0082  1 .
2292 CZ3   CZ3   . TRP TRP TRP A A 300 300 . 0.6425 0.6082 0.6097 0.0151  -0.0257
0.0034  1 .
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2293 CH2   CH2   . TRP TRP TRP A A 300 300 . 0.6424 0.5551 0.5743 0.0250  -0.0043
0.0194  1 .
2294 CZ2   CZ2   . TRP TRP TRP A A 300 300 . 0.5867 0.5171 0.6071 0.0319  -0.0019
0.0360  1 .
2295 C     C     . TRP TRP TRP A A 300 300 . 0.6017 0.6264 0.5978 0.0024  -0.0150 -
0.0079 1 .
2296 O     O     . TRP TRP TRP A A 300 300 . 0.6147 0.6397 0.6029 0.0046  -0.0255 -
0.0055 1 .
2297 N     N     . ALA ALA ALA A A 301 301 . 0.6010 0.6312 0.5944 0.0104  -0.0191 -
0.0060 1 .
2298 CA    CA    . ALA ALA ALA A A 301 301 . 0.6031 0.6195 0.6078 0.0104  -0.0100 -
0.0063 1 .
2299 CB    CB    . ALA ALA ALA A A 301 301 . 0.6006 0.6218 0.6027 0.0139  -0.0172 -
0.0132 1 .
2300 C     C     . ALA ALA ALA A A 301 301 . 0.6009 0.6151 0.6007 0.0171  -0.0090
0.0020  1 .
2301 O     O     . ALA ALA ALA A A 301 301 . 0.6186 0.6275 0.6045 0.0298  -0.0093 -
0.0063 1 .
2302 N     N     . ALA ALA ALA A A 302 302 . 0.5892 0.6065 0.5991 0.0165  -0.0071
0.0051  1 .
2303 CA    CA    . ALA ALA ALA A A 302 302 . 0.5727 0.5895 0.5889 0.0101  -0.0028
0.0054  1 .
2304 CB    CB    . ALA ALA ALA A A 302 302 . 0.5569 0.5803 0.5795 0.0136  -0.0010
0.0081  1 .
2305 C     C     . ALA ALA ALA A A 302 302 . 0.5562 0.5766 0.5744 0.0071  -0.0031
0.0017  1 .
2306 O     O     . ALA ALA ALA A A 302 302 . 0.5444 0.5845 0.5652 0.0019  -0.0061
0.0084  1 .
2307 N     N     . TRP TRP TRP A A 303 303 . 0.5551 0.5785 0.5667 0.0088  -0.0067 -
0.0072 1 .
2308 CA    CA    . TRP TRP TRP A A 303 303 . 0.5506 0.5737 0.5575 0.0096  -0.0124 -
0.0103 1 .
2309 CB    CB    . TRP TRP TRP A A 303 303 . 0.5484 0.5745 0.5486 0.0171  -0.0155 -
0.0085 1 .
2310 CG    CG    . TRP TRP TRP A A 303 303 . 0.5196 0.5638 0.5285 0.0202  -0.0106 -
0.0225 1 .
2311 CD1   CD1   . TRP TRP TRP A A 303 303 . 0.4752 0.5539 0.4976 0.0261  -0.0126 -
0.0252 1 .
2312 NE1   NE1   . TRP TRP TRP A A 303 303 . 0.5146 0.5858 0.5283 0.0390  -0.0083 -
0.0285 1 .
2313 CE2   CE2   . TRP TRP TRP A A 303 303 . 0.4951 0.5436 0.5068 0.0276  -0.0203 -
0.0157 1 .
2314 CD2   CD2   . TRP TRP TRP A A 303 303 . 0.4959 0.5493 0.4938 0.0122  -0.0126 -
0.0151 1 .
2315 CE3   CE3   . TRP TRP TRP A A 303 303 . 0.4939 0.5563 0.5110 0.0065  -0.0385 -
0.0065 1 .
2316 CZ3   CZ3   . TRP TRP TRP A A 303 303 . 0.4998 0.5511 0.4929 -0.0111 -0.0106
0.0201  1 .
2317 CH2   CH2   . TRP TRP TRP A A 303 303 . 0.4698 0.5345 0.4723 -0.0213 -0.0359 -
0.0105 1 .
2318 CZ2   CZ2   . TRP TRP TRP A A 303 303 . 0.4998 0.5134 0.5048 0.0122  -0.0280 -
0.0264 1 .
2319 C     C     . TRP TRP TRP A A 303 303 . 0.5575 0.5780 0.5564 0.0082  -0.0181 -
0.0057 1 .
2320 O     O     . TRP TRP TRP A A 303 303 . 0.5604 0.5817 0.5585 0.0179  -0.0369 -
0.0096 1 .
2321 N     N     . SER SER SER A A 304 304 . 0.5510 0.5740 0.5551 0.0051  -0.0212
0.0011  1 .
2322 CA    CA    . SER SER SER A A 304 304 . 0.5538 0.5752 0.5619 0.0064  -0.0107
0.0057  1 .
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2323 CB    CB    . SER SER SER A A 304 304 . 0.5490 0.5743 0.5583 0.0067  -0.0095
0.0066  1 .
2324 OG    OG    . SER SER SER A A 304 304 . 0.5237 0.5572 0.6080 -0.0022 -0.0218 -
0.0028 1 .
2325 C     C     . SER SER SER A A 304 304 . 0.5598 0.5819 0.5514 0.0101  -0.0147
0.0050  1 .
2326 O     O     . SER SER SER A A 304 304 . 0.5627 0.5960 0.5497 0.0207  -0.0256
0.0079  1 .
2327 N     N     . LYS LYS LYS A A 305 305 . 0.5679 0.5865 0.5604 0.0111  -0.0172
0.0041  1 .
2328 CA    CA    . LYS LYS LYS A A 305 305 . 0.5835 0.5882 0.5819 0.0032  -0.0114 -
0.0007 1 .
2329 CB    CB    . LYS LYS LYS A A 305 305 . 0.5851 0.5936 0.5981 0.0033  -0.0049 -
0.0077 1 .
2330 CG    CG    . LYS LYS LYS A A 305 305 . 0.5939 0.6063 0.6130 -0.0108 -0.0105 -
0.0186 1 .
2331 CD    CD    . LYS LYS LYS A A 305 305 . 0.6216 0.6315 0.6101 0.0082  0.0095  -
0.0293 1 .
2332 CE    CE    . LYS LYS LYS A A 305 305 . 0.6464 0.6823 0.6352 0.0212  0.0068  -
0.0180 1 .
2333 NZ    NZ    . LYS LYS LYS A A 305 305 . 0.7064 0.7269 0.7139 -0.0110 0.0181  -
0.0006 1 .
2334 C     C     . LYS LYS LYS A A 305 305 . 0.5882 0.5970 0.5779 0.0091  -0.0138 -
0.0061 1 .
2335 O     O     . LYS LYS LYS A A 305 305 . 0.5988 0.6152 0.5604 0.0224  -0.0159 -
0.0087 1 .
2336 N     N     . PHE PHE PHE A A 306 306 . 0.5868 0.5883 0.5756 0.0042  -0.0144 -
0.0018 1 .
2337 CA    CA    . PHE PHE PHE A A 306 306 . 0.5891 0.5925 0.5712 0.0073  -0.0122 -
0.0034 1 .
2338 CB    CB    . PHE PHE PHE A A 306 306 . 0.5992 0.5932 0.5746 0.0075  -0.0054 -
0.0057 1 .
2339 CG    CG    . PHE PHE PHE A A 306 306 . 0.6031 0.5943 0.5778 0.0064  -0.0056
0.0041  1 .
2340 CD1   CD1   . PHE PHE PHE A A 306 306 . 0.6099 0.5930 0.5849 -0.0045 -0.0331 -
0.0152 1 .
2341 CE1   CE1   . PHE PHE PHE A A 306 306 . 0.6180 0.5910 0.6003 0.0021  -0.0361 -
0.0409 1 .
2342 CZ    CZ    . PHE PHE PHE A A 306 306 . 0.5899 0.5844 0.6063 0.0127  -0.0208 -
0.0365 1 .
2343 CE2   CE2   . PHE PHE PHE A A 306 306 . 0.6003 0.6091 0.6242 0.0116  -0.0160 -
0.0026 1 .
2344 CD2   CD2   . PHE PHE PHE A A 306 306 . 0.5964 0.6085 0.5740 0.0078  -0.0190
0.0112  1 .
2345 C     C     . PHE PHE PHE A A 306 306 . 0.5846 0.5891 0.5654 0.0067  -0.0141 -
0.0046 1 .
2346 O     O     . PHE PHE PHE A A 306 306 . 0.5918 0.6047 0.5683 0.0108  -0.0296 -
0.0102 1 .
2347 N     N     . THR THR THR A A 307 307 . 0.5791 0.5765 0.5627 0.0027  -0.0118 -
0.0016 1 .
2348 CA    CA    . THR THR THR A A 307 307 . 0.5725 0.5834 0.5672 -0.0003 -0.0166 -
0.0005 1 .
2349 CB    CB    . THR THR THR A A 307 307 . 0.5819 0.5878 0.5665 0.0004  -0.0138 -
0.0076 1 .
2350 OG1   OG1   . THR THR THR A A 307 307 . 0.5671 0.6049 0.5575 0.0022  -0.0515
0.0298  1 .
2351 CG2   CG2   . THR THR THR A A 307 307 . 0.5525 0.5863 0.5293 -0.0073 -0.0257 -
0.0131 1 .
2352 C     C     . THR THR THR A A 307 307 . 0.5762 0.5811 0.5700 0.0020  -0.0188 -
0.0008 1 .
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2353 O     O     . THR THR THR A A 307 307 . 0.5802 0.5795 0.5706 0.0062  -0.0297
0.0012  1 .
2354 N     N     . ALA ALA ALA A A 308 308 . 0.5807 0.5799 0.5772 0.0030  -0.0146
0.0002  1 .
2355 CA    CA    . ALA ALA ALA A A 308 308 . 0.5821 0.5788 0.5799 0.0039  -0.0159 -
0.0015 1 .
2356 CB    CB    . ALA ALA ALA A A 308 308 . 0.5872 0.5745 0.5789 0.0040  -0.0080
0.0013  1 .
2357 C     C     . ALA ALA ALA A A 308 308 . 0.5779 0.5762 0.5821 0.0057  -0.0130
0.0019  1 .
2358 O     O     . ALA ALA ALA A A 308 308 . 0.5588 0.5576 0.5746 0.0152  -0.0220 -
0.0029 1 .
2359 N     N     . ASN ASN ASN A A 309 309 . 0.5660 0.5861 0.5841 -0.0028 -0.0082
0.0047  1 .
2360 CA    CA    . ASN ASN ASN A A 309 309 . 0.5723 0.6012 0.5881 -0.0047 -0.0074 -
0.0049 1 .
2361 CB    CB    . ASN ASN ASN A A 309 309 . 0.5840 0.6316 0.6021 -0.0136 0.0000  -
0.0040 1 .
2362 CG    CG    . ASN ASN ASN A A 309 309 . 0.6017 0.7215 0.6294 -0.0287 -0.0028 -
0.0166 1 .
2363 OD1   OD1   . ASN ASN ASN A A 309 309 . 0.6411 0.8386 0.6593 -0.0234 0.0157  -
0.0360 1 .
2364 ND2   ND2   . ASN ASN ASN A A 309 309 . 0.6174 0.8222 0.6101 -0.0286 0.0185
0.0122  1 .
2365 C     C     . ASN ASN ASN A A 309 309 . 0.5577 0.5799 0.5744 -0.0031 -0.0051 -
0.0081 1 .
2366 O     O     . ASN ASN ASN A A 309 309 . 0.5592 0.5911 0.5785 -0.0010 -0.0085 -
0.0139 1 .
2367 N     N     . VAL VAL VAL A A 310 310 . 0.5549 0.5587 0.5538 -0.0024 -0.0132 -
0.0092 1 .
2368 CA    CA    . VAL VAL VAL A A 310 310 . 0.5394 0.5510 0.5260 -0.0061 -0.0104 -
0.0103 1 .
2369 CB    CB    . VAL VAL VAL A A 310 310 . 0.5482 0.5555 0.5270 -0.0048 -0.0109 -
0.0066 1 .
2370 CG1   CG1   . VAL VAL VAL A A 310 310 . 0.5637 0.5747 0.5418 0.0033  0.0044
0.0000  1 .
2371 CG2   CG2   . VAL VAL VAL A A 310 310 . 0.5740 0.5471 0.4934 -0.0156 -0.0440 -
0.0125 1 .
2372 C     C     . VAL VAL VAL A A 310 310 . 0.5115 0.5317 0.4977 -0.0062 -0.0046 -
0.0133 1 .
2373 O     O     . VAL VAL VAL A A 310 310 . 0.5025 0.5290 0.4838 -0.0135 -0.0042 -
0.0147 1 .
2374 N     N     . GLY GLY GLY A A 311 311 . 0.4856 0.5249 0.4746 -0.0075 -0.0126 -
0.0153 1 .
2375 CA    CA    . GLY GLY GLY A A 311 311 . 0.4926 0.5146 0.4618 0.0023  -0.0017 -
0.0142 1 .
2376 C     C     . GLY GLY GLY A A 311 311 . 0.4771 0.5093 0.4715 0.0038  0.0016  -
0.0098 1 .
2377 O     O     . GLY GLY GLY A A 311 311 . 0.4887 0.5072 0.4507 0.0084  0.0360  -
0.0160 1 .
2378 N     N     . ILE ILE ILE A A 312 312 . 0.4671 0.4968 0.4644 0.0069  -0.0012 -
0.0089 1 .
2379 CA    CA    . ILE ILE ILE A A 312 312 . 0.4745 0.4792 0.4715 0.0061  -0.0006 -
0.0018 1 .
2380 CB    CB    . ILE ILE ILE A A 312 312 . 0.4642 0.4815 0.4736 0.0085  0.0076  -
0.0014 1 .
2381 CG1   CG1   . ILE ILE ILE A A 312 312 . 0.4563 0.4899 0.5168 0.0028  0.0006  -
0.0124 1 .
2382 CD1   CD1   . ILE ILE ILE A A 312 312 . 0.4328 0.5032 0.5429 0.0079  -0.0285
0.0362  1 .
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2383 CG2   CG2   . ILE ILE ILE A A 312 312 . 0.4180 0.4727 0.4559 -0.0020 0.0047  -
0.0022 1 .
2384 C     C     . ILE ILE ILE A A 312 312 . 0.4689 0.4682 0.4550 0.0044  -0.0134 -
0.0064 1 .
2385 O     O     . ILE ILE ILE A A 312 312 . 0.4964 0.4742 0.4554 -0.0015 -0.0099 -
0.0006 1 .
2386 N     N     . GLN GLN GLN A A 313 313 . 0.4418 0.4516 0.4433 0.0130  -0.0100 -
0.0082 1 .
2387 CA    CA    . GLN GLN GLN A A 313 313 . 0.4100 0.4272 0.4039 0.0120  -0.0170 -
0.0112 1 .
2388 CB    CB    . GLN GLN GLN A A 313 313 . 0.3920 0.4397 0.4020 0.0001  -0.0033 -
0.0140 1 .
2389 CG    CG    . GLN GLN GLN A A 313 313 . 0.3259 0.4202 0.3870 0.0015  -0.0333 -
0.0205 1 .
2390 CD    CD    . GLN GLN GLN A A 313 313 . 0.3384 0.4108 0.3685 0.0306  -0.0079 -
0.0003 1 .
2391 OE1   OE1   . GLN GLN GLN A A 313 313 . 0.2803 0.3541 0.3592 0.0138  -0.0237
0.0115  1 .
2392 NE2   NE2   . GLN GLN GLN A A 313 313 . 0.2303 0.3757 0.3662 0.0784  -0.0713 -
0.0096 1 .
2393 C     C     . GLN GLN GLN A A 313 313 . 0.4099 0.4130 0.3940 0.0100  -0.0168 -
0.0091 1 .
2394 O     O     . GLN GLN GLN A A 313 313 . 0.3935 0.3783 0.3919 0.0142  -0.0181 -
0.0298 1 .
2395 N     N     . ILE ILE ILE A A 314 314 . 0.4073 0.4207 0.3898 0.0147  -0.0193 -
0.0151 1 .
2396 CA    CA    . ILE ILE ILE A A 314 314 . 0.4055 0.4155 0.3959 0.0188  -0.0240 -
0.0037 1 .
2397 CB    CB    . ILE ILE ILE A A 314 314 . 0.4156 0.4196 0.4074 0.0197  -0.0196
0.0014  1 .
2398 CG1   CG1   . ILE ILE ILE A A 314 314 . 0.3832 0.4238 0.3923 0.0231  -0.0471
0.0190  1 .
2399 CD1   CD1   . ILE ILE ILE A A 314 314 . 0.4107 0.4542 0.4249 -0.0006 -0.0630
0.0260  1 .
2400 CG2   CG2   . ILE ILE ILE A A 314 314 . 0.4185 0.3992 0.3877 0.0432  -0.0283
0.0062  1 .
2401 C     C     . ILE ILE ILE A A 314 314 . 0.4069 0.4164 0.4043 0.0122  -0.0168 -
0.0045 1 .
2402 O     O     . ILE ILE ILE A A 314 314 . 0.4153 0.4217 0.3858 0.0183  -0.0227 -
0.0016 1 .
2403 N     N     . VAL VAL VAL A A 315 315 . 0.3934 0.4105 0.4019 0.0132  -0.0120 -
0.0164 1 .
2404 CA    CA    . VAL VAL VAL A A 315 315 . 0.3956 0.4113 0.4093 0.0148  -0.0139 -
0.0212 1 .
2405 CB    CB    . VAL VAL VAL A A 315 315 . 0.3778 0.3873 0.3992 0.0141  -0.0116 -
0.0162 1 .
2406 CG1   CG1   . VAL VAL VAL A A 315 315 . 0.3791 0.4073 0.3915 0.0301  -0.0049 -
0.0210 1 .
2407 CG2   CG2   . VAL VAL VAL A A 315 315 . 0.3408 0.3822 0.3971 0.0228  -0.0131 -
0.0016 1 .
2408 C     C     . VAL VAL VAL A A 315 315 . 0.3891 0.4177 0.4167 0.0143  -0.0126 -
0.0186 1 .
2409 O     O     . VAL VAL VAL A A 315 315 . 0.4006 0.4382 0.3963 0.0141  -0.0029 -
0.0317 1 .
2410 N     N     . GLY GLY GLY A A 316 316 . 0.3842 0.4043 0.4178 0.0133  -0.0210 -
0.0173 1 .
2411 CA    CA    . GLY GLY GLY A A 316 316 . 0.3999 0.4270 0.4111 0.0101  -0.0211 -
0.0215 1 .
2412 C     C     . GLY GLY GLY A A 316 316 . 0.4012 0.4320 0.3954 0.0097  -0.0094 -
0.0184 1 .
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2413 O     O     . GLY GLY GLY A A 316 316 . 0.3765 0.4248 0.3774 0.0089  -0.0182 -
0.0335 1 .
2414 N     N     . ASP ASP ASP A A 317 317 . 0.3981 0.4192 0.3906 0.0074  0.0073  -
0.0095 1 .
2415 CA    CA    . ASP ASP ASP A A 317 317 . 0.3972 0.4224 0.3935 0.0097  0.0068  -
0.0026 1 .
2416 CB    CB    . ASP ASP ASP A A 317 317 . 0.3832 0.4196 0.4066 0.0094  0.0083  -
0.0023 1 .
2417 CG    CG    . ASP ASP ASP A A 317 317 . 0.3692 0.4394 0.4119 0.0101  -0.0016 -
0.0010 1 .
2418 OD1   OD1   . ASP ASP ASP A A 317 317 . 0.2635 0.4186 0.4340 0.0425  -0.0393
0.0170  1 .
2419 OD2   OD2   . ASP ASP ASP A A 317 317 . 0.4366 0.4806 0.4818 0.0009  -0.0313 -
0.0415 1 .
2420 C     C     . ASP ASP ASP A A 317 317 . 0.4076 0.4158 0.4015 0.0038  0.0045  -
0.0032 1 .
2421 O     O     . ASP ASP ASP A A 317 317 . 0.4084 0.4116 0.3698 -0.0002 0.0059  -
0.0036 1 .
2422 N     N     . ASP ASP ASP A A 318 318 . 0.4161 0.4303 0.4063 0.0143  0.0060  -
0.0059 1 .
2423 CA    CA    . ASP ASP ASP A A 318 318 . 0.4291 0.4331 0.4258 0.0108  0.0013  -
0.0036 1 .
2424 CB    CB    . ASP ASP ASP A A 318 318 . 0.4296 0.4476 0.4313 0.0185  0.0070  -
0.0068 1 .
2425 CG    CG    . ASP ASP ASP A A 318 318 . 0.4830 0.4860 0.4726 0.0168  0.0124
0.0047  1 .
2426 OD1   OD1   . ASP ASP ASP A A 318 318 . 0.5252 0.5413 0.5148 0.0424  -0.0247 -
0.0189 1 .
2427 OD2   OD2   . ASP ASP ASP A A 318 318 . 0.5144 0.5197 0.4999 0.0189  0.0480
0.0219  1 .
2428 C     C     . ASP ASP ASP A A 318 318 . 0.4198 0.4340 0.4210 0.0120  -0.0101 -
0.0075 1 .
2429 O     O     . ASP ASP ASP A A 318 318 . 0.4116 0.4416 0.4345 -0.0021 -0.0246 -
0.0028 1 .
2430 N     N     . LEU LEU LEU A A 319 319 . 0.4068 0.4316 0.4219 0.0170  -0.0098 -
0.0041 1 .
2431 CA    CA    . LEU LEU LEU A A 319 319 . 0.4012 0.4237 0.4111 0.0072  -0.0062
0.0022  1 .
2432 CB    CB    . LEU LEU LEU A A 319 319 . 0.3749 0.4027 0.4126 0.0091  -0.0088
0.0063  1 .
2433 CG    CG    . LEU LEU LEU A A 319 319 . 0.3157 0.3998 0.4074 0.0059  -0.0085 -
0.0010 1 .
2434 CD1   CD1   . LEU LEU LEU A A 319 319 . 0.2688 0.3656 0.4088 0.0074  -0.0014
0.0431  1 .
2435 CD2   CD2   . LEU LEU LEU A A 319 319 . 0.1877 0.4427 0.4281 0.0381  0.0169
0.0266  1 .
2436 C     C     . LEU LEU LEU A A 319 319 . 0.4265 0.4247 0.4255 0.0120  -0.0136
0.0007  1 .
2437 O     O     . LEU LEU LEU A A 319 319 . 0.4484 0.4216 0.4253 0.0343  -0.0258
0.0169  1 .
2438 N     N     . THR THR THR A A 320 320 . 0.4164 0.4283 0.4200 0.0135  -0.0153
0.0042  1 .
2439 CA    CA    . THR THR THR A A 320 320 . 0.4110 0.4205 0.3995 0.0039  -0.0098 -
0.0014 1 .
2440 CB    CB    . THR THR THR A A 320 320 . 0.4214 0.4233 0.4006 0.0066  -0.0189 -
0.0013 1 .
2441 OG1   OG1   . THR THR THR A A 320 320 . 0.4214 0.4447 0.3765 -0.0072 -0.0431
0.0062  1 .
2442 CG2   CG2   . THR THR THR A A 320 320 . 0.4254 0.4182 0.3831 0.0193  0.0079  -
0.0056 1 .
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2443 C     C     . THR THR THR A A 320 320 . 0.4120 0.4123 0.4051 0.0043  -0.0028
0.0001  1 .
2444 O     O     . THR THR THR A A 320 320 . 0.4205 0.4311 0.4129 -0.0037 -0.0012 -
0.0059 1 .
2445 N     N     . VAL VAL VAL A A 321 321 . 0.3964 0.4004 0.3961 0.0020  0.0034  -
0.0009 1 .
2446 CA    CA    . VAL VAL VAL A A 321 321 . 0.3905 0.3944 0.3840 0.0029  -0.0018
0.0063  1 .
2447 CB    CB    . VAL VAL VAL A A 321 321 . 0.3950 0.3855 0.3913 0.0014  -0.0040
0.0071  1 .
2448 CG1   CG1   . VAL VAL VAL A A 321 321 . 0.4046 0.3755 0.3914 -0.0023 0.0066
0.0187  1 .
2449 CG2   CG2   . VAL VAL VAL A A 321 321 . 0.4399 0.4134 0.3784 -0.0204 -0.0133
0.0177  1 .
2450 C     C     . VAL VAL VAL A A 321 321 . 0.3891 0.3904 0.3804 0.0007  -0.0047
0.0023  1 .
2451 O     O     . VAL VAL VAL A A 321 321 . 0.3848 0.4074 0.3755 0.0047  -0.0059
0.0004  1 .
2452 N     N     . THR THR THR A A 322 322 . 0.3815 0.3895 0.3854 0.0065  -0.0004 -
0.0017 1 .
2453 CA    CA    . THR THR THR A A 322 322 . 0.3786 0.4016 0.3840 0.0030  -0.0135 -
0.0080 1 .
2454 CB    CB    . THR THR THR A A 322 322 . 0.3746 0.4024 0.3777 0.0005  -0.0107 -
0.0056 1 .
2455 OG1   OG1   . THR THR THR A A 322 322 . 0.3388 0.4334 0.3357 0.0055  -0.0635 -
0.0241 1 .
2456 CG2   CG2   . THR THR THR A A 322 322 . 0.3677 0.4062 0.3438 0.0350  -0.0169 -
0.0174 1 .
2457 C     C     . THR THR THR A A 322 322 . 0.4059 0.4220 0.4024 0.0016  -0.0081 -
0.0076 1 .
2458 O     O     . THR THR THR A A 322 322 . 0.4038 0.4224 0.4096 -0.0038 -0.0070 -
0.0028 1 .
2459 N     N     . ASN ASN ASN A A 323 323 . 0.4492 0.4537 0.4317 0.0043  -0.0147 -
0.0067 1 .
2460 CA    CA    . ASN ASN ASN A A 323 323 . 0.4874 0.4663 0.4523 0.0018  -0.0109 -
0.0039 1 .
2461 CB    CB    . ASN ASN ASN A A 323 323 . 0.5152 0.4796 0.4522 0.0092  -0.0075 -
0.0076 1 .
2462 CG    CG    . ASN ASN ASN A A 323 323 . 0.6054 0.4936 0.4775 0.0183  -0.0038
0.0144  1 .
2463 OD1   OD1   . ASN ASN ASN A A 323 323 . 0.6964 0.5779 0.4724 -0.0139 0.0643
0.0142  1 .
2464 ND2   ND2   . ASN ASN ASN A A 323 323 . 0.6437 0.4953 0.4327 0.0305  -0.0387
0.0403  1 .
2465 C     C     . ASN ASN ASN A A 323 323 . 0.4930 0.4787 0.4685 0.0011  -0.0040 -
0.0003 1 .
2466 O     O     . ASN ASN ASN A A 323 323 . 0.5120 0.4654 0.4435 0.0063  -0.0056
0.0011  1 .
2467 N     N     . PRO PRO PRO A A 324 324 . 0.5140 0.4956 0.4907 -0.0020 -0.0049
0.0015  1 .
2468 CA    CA    . PRO PRO PRO A A 324 324 . 0.5291 0.5191 0.5108 -0.0039 -0.0048
0.0013  1 .
2469 CB    CB    . PRO PRO PRO A A 324 324 . 0.5300 0.5225 0.5147 -0.0050 -0.0042 -
0.0004 1 .
2470 CG    CG    . PRO PRO PRO A A 324 324 . 0.5357 0.5213 0.5076 0.0055  -0.0012
0.0021  1 .
2471 CD    CD    . PRO PRO PRO A A 324 324 . 0.5013 0.4952 0.4995 -0.0006 -0.0069
0.0093  1 .
2472 C     C     . PRO PRO PRO A A 324 324 . 0.5414 0.5312 0.5274 0.0036  -0.0031
0.0039  1 .
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2473 O     O     . PRO PRO PRO A A 324 324 . 0.5584 0.5395 0.5320 -0.0079 -0.0088
0.0013  1 .
2474 N     N     . LYS LYS LYS A A 325 325 . 0.5568 0.5435 0.5331 0.0090  0.0045
0.0037  1 .
2475 CA    CA    . LYS LYS LYS A A 325 325 . 0.5580 0.5609 0.5475 0.0087  -0.0017
0.0124  1 .
2476 CB    CB    . LYS LYS LYS A A 325 325 . 0.5689 0.5650 0.5626 0.0140  0.0081
0.0192  1 .
2477 CG    CG    . LYS LYS LYS A A 325 325 . 0.6101 0.6333 0.6252 0.0067  -0.0149
0.0449  1 .
2478 CD    CD    . LYS LYS LYS A A 325 325 . 0.6711 0.6896 0.6952 -0.0412 -0.0158
0.0666  1 .
2479 CE    CE    . LYS LYS LYS A A 325 325 . 0.7307 0.7072 0.7085 -0.0522 -0.0545
0.0399  1 .
2480 NZ    NZ    . LYS LYS LYS A A 325 325 . 0.7674 0.7410 0.6720 -0.0856 -0.0958
0.0203  1 .
2481 C     C     . LYS LYS LYS A A 325 325 . 0.5576 0.5546 0.5323 0.0081  0.0004
0.0111  1 .
2482 O     O     . LYS LYS LYS A A 325 325 . 0.5679 0.5683 0.5264 0.0258  -0.0016
0.0210  1 .
2483 N     N     . ARG ARG ARG A A 326 326 . 0.5476 0.5441 0.5147 0.0032  -0.0024
0.0104  1 .
2484 CA    CA    . ARG ARG ARG A A 326 326 . 0.5272 0.5176 0.5043 -0.0019 0.0014
0.0077  1 .
2485 CB    CB    . ARG ARG ARG A A 326 326 . 0.5318 0.5184 0.5104 -0.0096 0.0015
0.0059  1 .
2486 CG    CG    . ARG ARG ARG A A 326 326 . 0.5512 0.5265 0.5186 0.0026  -0.0049 -
0.0109 1 .
2487 CD    CD    . ARG ARG ARG A A 326 326 . 0.5803 0.5886 0.5530 0.0278  0.0066
0.0024  1 .
2488 NE    NE    . ARG ARG ARG A A 326 326 . 0.6267 0.6543 0.5980 0.0507  -0.0370 -
0.0063 1 .
2489 CZ    CZ    . ARG ARG ARG A A 326 326 . 0.6371 0.6207 0.5806 0.0365  -0.0511 -
0.0087 1 .
2490 NH1   NH1   . ARG ARG ARG A A 326 326 . 0.6051 0.6026 0.4762 0.1061  -0.1000
0.0176  1 .
2491 NH2   NH2   . ARG ARG ARG A A 326 326 . 0.6957 0.6580 0.6158 0.0836  -0.0187 -
0.0461 1 .
2492 C     C     . ARG ARG ARG A A 326 326 . 0.5125 0.5117 0.4983 -0.0032 0.0009
0.0156  1 .
2493 O     O     . ARG ARG ARG A A 326 326 . 0.4989 0.4996 0.4740 -0.0035 -0.0072
0.0213  1 .
2494 N     N     . ILE ILE ILE A A 327 327 . 0.4930 0.5043 0.4974 0.0045  -0.0021
0.0154  1 .
2495 CA    CA    . ILE ILE ILE A A 327 327 . 0.4927 0.5004 0.4979 0.0062  -0.0053
0.0034  1 .
2496 CB    CB    . ILE ILE ILE A A 327 327 . 0.4858 0.4933 0.4836 0.0189  -0.0175
0.0015  1 .
2497 CG1   CG1   . ILE ILE ILE A A 327 327 . 0.4601 0.4729 0.4966 0.0256  -0.0247 -
0.0157 1 .
2498 CD1   CD1   . ILE ILE ILE A A 327 327 . 0.4719 0.4193 0.4451 0.0533  -0.0892
0.0088  1 .
2499 CG2   CG2   . ILE ILE ILE A A 327 327 . 0.4453 0.4501 0.4726 0.0117  -0.0112
0.0055  1 .
2500 C     C     . ILE ILE ILE A A 327 327 . 0.5133 0.5172 0.5173 0.0068  -0.0069
0.0048  1 .
2501 O     O     . ILE ILE ILE A A 327 327 . 0.5219 0.5190 0.5210 0.0005  0.0029
0.0005  1 .
2502 N     N     . GLU GLU GLU A A 328 328 . 0.5318 0.5288 0.5370 0.0029  -0.0016
0.0041  1 .
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2503 CA    CA    . GLU GLU GLU A A 328 328 . 0.5531 0.5462 0.5402 0.0047  -0.0022
0.0086  1 .
2504 CB    CB    . GLU GLU GLU A A 328 328 . 0.5644 0.5391 0.5447 0.0072  -0.0002
0.0003  1 .
2505 CG    CG    . GLU GLU GLU A A 328 328 . 0.6085 0.6007 0.6370 -0.0040 -0.0044
0.0117  1 .
2506 CD    CD    . GLU GLU GLU A A 328 328 . 0.6770 0.6891 0.7194 -0.0085 0.0145
0.0090  1 .
2507 OE1   OE1   . GLU GLU GLU A A 328 328 . 0.6878 0.7135 0.7930 -0.0333 -0.0074
0.0270  1 .
2508 OE2   OE2   . GLU GLU GLU A A 328 328 . 0.7129 0.6901 0.7716 -0.0200 -0.0128
0.0118  1 .
2509 C     C     . GLU GLU GLU A A 328 328 . 0.5582 0.5464 0.5386 0.0133  -0.0053
0.0088  1 .
2510 O     O     . GLU GLU GLU A A 328 328 . 0.5915 0.5400 0.5279 0.0211  -0.0039
0.0165  1 .
2511 N     N     . ARG ARG ARG A A 329 329 . 0.5520 0.5600 0.5384 0.0154  -0.0057
0.0065  1 .
2512 CA    CA    . ARG ARG ARG A A 329 329 . 0.5519 0.5601 0.5505 0.0078  -0.0050
0.0054  1 .
2513 CB    CB    . ARG ARG ARG A A 329 329 . 0.5426 0.5650 0.5581 0.0167  -0.0061
0.0016  1 .
2514 CG    CG    . ARG ARG ARG A A 329 329 . 0.5575 0.5701 0.6093 0.0072  0.0164  -
0.0036 1 .
2515 CD    CD    . ARG ARG ARG A A 329 329 . 0.5614 0.5949 0.6493 0.0088  0.0477  -
0.0189 1 .
2516 NE    NE    . ARG ARG ARG A A 329 329 . 0.5317 0.5958 0.6438 0.0298  0.0213  -
0.0215 1 .
2517 CZ    CZ    . ARG ARG ARG A A 329 329 . 0.5115 0.5989 0.6595 0.0424  0.0035  -
0.0331 1 .
2518 NH1   NH1   . ARG ARG ARG A A 329 329 . 0.3774 0.5529 0.6535 0.0511  0.0274  -
0.0746 1 .
2519 NH2   NH2   . ARG ARG ARG A A 329 329 . 0.5019 0.5579 0.7183 0.0496  -0.0433 -
0.0032 1 .
2520 C     C     . ARG ARG ARG A A 329 329 . 0.5522 0.5635 0.5495 0.0117  -0.0110 -
0.0014 1 .
2521 O     O     . ARG ARG ARG A A 329 329 . 0.5589 0.5831 0.5393 0.0148  -0.0161 -
0.0064 1 .
2522 N     N     . ALA ALA ALA A A 330 330 . 0.5492 0.5518 0.5415 0.0096  -0.0148
0.0044  1 .
2523 CA    CA    . ALA ALA ALA A A 330 330 . 0.5499 0.5389 0.5335 0.0016  -0.0151
0.0077  1 .
2524 CB    CB    . ALA ALA ALA A A 330 330 . 0.5257 0.5352 0.5275 0.0017  -0.0187
0.0001  1 .
2525 C     C     . ALA ALA ALA A A 330 330 . 0.5489 0.5362 0.5286 0.0054  -0.0146
0.0166  1 .
2526 O     O     . ALA ALA ALA A A 330 330 . 0.5671 0.5408 0.5014 0.0152  -0.0315
0.0293  1 .
2527 N     N     . VAL VAL VAL A A 331 331 . 0.5361 0.5343 0.5315 0.0077  -0.0151
0.0162  1 .
2528 CA    CA    . VAL VAL VAL A A 331 331 . 0.5486 0.5429 0.5398 0.0039  -0.0104
0.0042  1 .
2529 CB    CB    . VAL VAL VAL A A 331 331 . 0.5336 0.5318 0.5325 0.0005  -0.0085
0.0012  1 .
2530 CG1   CG1   . VAL VAL VAL A A 331 331 . 0.5454 0.5245 0.5360 -0.0043 0.0137  -
0.0025 1 .
2531 CG2   CG2   . VAL VAL VAL A A 331 331 . 0.5284 0.4843 0.5060 -0.0155 0.0149  -
0.0182 1 .
2532 C     C     . VAL VAL VAL A A 331 331 . 0.5605 0.5685 0.5639 0.0035  -0.0212
0.0019  1 .
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2533 O     O     . VAL VAL VAL A A 331 331 . 0.5735 0.5807 0.5527 0.0114  -0.0414
0.0084  1 .
2534 N     N     . GLU GLU GLU A A 332 332 . 0.5810 0.5798 0.5887 0.0031  -0.0193
0.0081  1 .
2535 CA    CA    . GLU GLU GLU A A 332 332 . 0.6113 0.6035 0.6095 -0.0019 -0.0194
0.0077  1 .
2536 CB    CB    . GLU GLU GLU A A 332 332 . 0.6418 0.6189 0.6169 -0.0058 -0.0247
0.0094  1 .
2537 CG    CG    . GLU GLU GLU A A 332 332 . 0.6877 0.6743 0.7045 0.0226  -0.0259
0.0196  1 .
2538 CD    CD    . GLU GLU GLU A A 332 332 . 0.7992 0.7494 0.7498 0.0169  -0.0066
0.0235  1 .
2539 OE1   OE1   . GLU GLU GLU A A 332 332 . 0.8288 0.7399 0.8252 0.0172  -0.0222
0.0248  1 .
2540 OE2   OE2   . GLU GLU GLU A A 332 332 . 0.8432 0.7637 0.8001 0.0392  0.0186
0.0153  1 .
2541 C     C     . GLU GLU GLU A A 332 332 . 0.6076 0.6004 0.6044 -0.0105 -0.0123
0.0058  1 .
2542 O     O     . GLU GLU GLU A A 332 332 . 0.6113 0.5996 0.6105 -0.0236 -0.0100
0.0100  1 .
2543 N     N     . GLU GLU GLU A A 333 333 . 0.5997 0.5944 0.5978 -0.0115 -0.0064
0.0022  1 .
2544 CA    CA    . GLU GLU GLU A A 333 333 . 0.5959 0.6038 0.6054 -0.0044 -0.0089 -
0.0028 1 .
2545 CB    CB    . GLU GLU GLU A A 333 333 . 0.5890 0.6193 0.6170 -0.0084 -0.0030 -
0.0016 1 .
2546 CG    CG    . GLU GLU GLU A A 333 333 . 0.6334 0.6497 0.6879 -0.0231 -0.0113
0.0031  1 .
2547 CD    CD    . GLU GLU GLU A A 333 333 . 0.6911 0.7299 0.7287 -0.0329 0.0007  -
0.0010 1 .
2548 OE1   OE1   . GLU GLU GLU A A 333 333 . 0.6933 0.7428 0.7595 -0.0492 -0.0352 -
0.0041 1 .
2549 OE2   OE2   . GLU GLU GLU A A 333 333 . 0.7097 0.7543 0.8043 -0.0654 -0.0263
0.0328  1 .
2550 C     C     . GLU GLU GLU A A 333 333 . 0.5910 0.6018 0.5934 -0.0024 -0.0106 -
0.0010 1 .
2551 O     O     . GLU GLU GLU A A 333 333 . 0.5768 0.6082 0.5901 -0.0013 -0.0149
0.0000  1 .
2552 N     N     . LYS LYS LYS A A 334 334 . 0.5910 0.5850 0.5759 0.0024  -0.0070 -
0.0100 1 .
2553 CA    CA    . LYS LYS LYS A A 334 334 . 0.5887 0.5860 0.5677 0.0011  -0.0066 -
0.0030 1 .
2554 CB    CB    . LYS LYS LYS A A 334 334 . 0.5922 0.5910 0.5842 0.0007  -0.0062 -
0.0122 1 .
2555 CG    CG    . LYS LYS LYS A A 334 334 . 0.6145 0.6311 0.6015 0.0068  -0.0114
0.0078  1 .
2556 CD    CD    . LYS LYS LYS A A 334 334 . 0.6554 0.7161 0.6877 0.0242  -0.0647
0.0006  1 .
2557 CE    CE    . LYS LYS LYS A A 334 334 . 0.6995 0.7648 0.7083 0.0268  -0.0939
0.0049  1 .
2558 NZ    NZ    . LYS LYS LYS A A 334 334 . 0.6972 0.8104 0.6161 0.0789  -0.1303
0.0214  1 .
2559 C     C     . LYS LYS LYS A A 334 334 . 0.5798 0.5661 0.5478 0.0042  -0.0165 -
0.0046 1 .
2560 O     O     . LYS LYS LYS A A 334 334 . 0.6047 0.5626 0.5440 -0.0084 -0.0284 -
0.0043 1 .
2561 N     N     . ALA ALA ALA A A 335 335 . 0.5510 0.5427 0.5250 0.0135  -0.0122 -
0.0042 1 .
2562 CA    CA    . ALA ALA ALA A A 335 335 . 0.5228 0.5163 0.5008 0.0138  -0.0132 -
0.0029 1 .
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2563 CB    CB    . ALA ALA ALA A A 335 335 . 0.5185 0.5205 0.4981 0.0215  -0.0117 -
0.0093 1 .
2564 C     C     . ALA ALA ALA A A 335 335 . 0.4957 0.5052 0.4803 0.0080  -0.0143 -
0.0019 1 .
2565 O     O     . ALA ALA ALA A A 335 335 . 0.4848 0.5063 0.4853 0.0099  -0.0186
0.0025  1 .
2566 N     N     . CYS CYS CYS A A 336 336 . 0.4708 0.4811 0.4511 0.0089  -0.0172
0.0005  1 .
2567 CA    CA    . CYS CYS CYS A A 336 336 . 0.4604 0.4747 0.4485 0.0053  -0.0174 -
0.0009 1 .
2568 CB    CB    . CYS CYS CYS A A 336 336 . 0.4515 0.4739 0.4588 0.0118  -0.0235
0.0062  1 .
2569 SG    SG    . CYS CYS CYS A A 336 336 . 0.5180 0.5099 0.4595 0.0198  -0.0986
0.0188  1 .
2570 C     C     . CYS CYS CYS A A 336 336 . 0.4633 0.4580 0.4397 0.0045  -0.0125 -
0.0037 1 .
2571 O     O     . CYS CYS CYS A A 336 336 . 0.4768 0.4453 0.4141 -0.0020 -0.0129 -
0.0003 1 .
2572 N     N     . ASN ASN ASN A A 337 337 . 0.4509 0.4361 0.4268 0.0063  -0.0131 -
0.0014 1 .
2573 CA    CA    . ASN ASN ASN A A 337 337 . 0.4371 0.4307 0.4256 0.0138  -0.0180 -
0.0007 1 .
2574 CB    CB    . ASN ASN ASN A A 337 337 . 0.4312 0.4355 0.4263 0.0119  -0.0219 -
0.0013 1 .
2575 CG    CG    . ASN ASN ASN A A 337 337 . 0.4566 0.4595 0.4469 0.0115  -0.0550
0.0071  1 .
2576 OD1   OD1   . ASN ASN ASN A A 337 337 . 0.4339 0.5234 0.4590 0.0278  -0.1149
0.0207  1 .
2577 ND2   ND2   . ASN ASN ASN A A 337 337 . 0.4522 0.5216 0.3809 0.0334  -0.0813 -
0.0001 1 .
2578 C     C     . ASN ASN ASN A A 337 337 . 0.4432 0.4250 0.4095 0.0223  -0.0166
0.0040  1 .
2579 O     O     . ASN ASN ASN A A 337 337 . 0.4607 0.4087 0.3976 0.0374  -0.0213
0.0127  1 .
2580 N     N     . CYS CYS CYS A A 338 338 . 0.4404 0.4132 0.4109 0.0243  -0.0153
0.0117  1 .
2581 CA    CA    . CYS CYS CYS A A 338 338 . 0.4242 0.4144 0.4070 0.0237  -0.0175
0.0011  1 .
2582 CB    CB    . CYS CYS CYS A A 338 338 . 0.4305 0.4207 0.4075 0.0339  -0.0324
0.0055  1 .
2583 SG    SG    . CYS CYS CYS A A 338 338 . 0.3983 0.4441 0.4879 0.0905  -0.0120
0.0068  1 .
2584 C     C     . CYS CYS CYS A A 338 338 . 0.4110 0.4094 0.3952 0.0131  -0.0113
0.0005  1 .
2585 O     O     . CYS CYS CYS A A 338 338 . 0.3935 0.4198 0.4251 0.0261  -0.0208 -
0.0026 1 .
2586 N     N     . LEU LEU LEU A A 339 339 . 0.3921 0.4115 0.3663 0.0142  -0.0084 -
0.0032 1 .
2587 CA    CA    . LEU LEU LEU A A 339 339 . 0.4009 0.4144 0.3729 0.0119  -0.0101
0.0029  1 .
2588 CB    CB    . LEU LEU LEU A A 339 339 . 0.4156 0.4021 0.3725 0.0155  -0.0142
0.0030  1 .
2589 CG    CG    . LEU LEU LEU A A 339 339 . 0.4160 0.4205 0.3396 0.0260  -0.0126 -
0.0030 1 .
2590 CD1   CD1   . LEU LEU LEU A A 339 339 . 0.4251 0.4050 0.2796 0.0845  -0.0687
0.0133  1 .
2591 CD2   CD2   . LEU LEU LEU A A 339 339 . 0.3870 0.4332 0.3475 0.0293  -0.0033 -
0.0383 1 .
2592 C     C     . LEU LEU LEU A A 339 339 . 0.3963 0.4160 0.3540 0.0150  -0.0112 -
0.0004 1 .
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2593 O    O    . LEU LEU LEU A A 339 339 . 0.3846 0.4159 0.3164 0.0271  -0.0225 -
0.0102 1 .
2594 N    N    . LEU LEU LEU A A 340 340 . 0.3889 0.4136 0.3719 0.0089  -0.0072
0.0076  1 .
2595 CA   CA   . LEU LEU LEU A A 340 340 . 0.3859 0.4055 0.3669 0.0045  -0.0039
0.0064  1 .
2596 CB   CB   . LEU LEU LEU A A 340 340 . 0.3791 0.4190 0.3835 0.0053  -0.0033
0.0098  1 .
2597 CG   CG   . LEU LEU LEU A A 340 340 . 0.3629 0.3984 0.4147 0.0174  -0.0063
0.0006  1 .
2598 CD1  CD1  . LEU LEU LEU A A 340 340 . 0.3483 0.4147 0.3919 0.0416  -0.0463 -
0.0500 1 .
2599 CD2  CD2  . LEU LEU LEU A A 340 340 . 0.4427 0.3719 0.3624 0.0034  -0.0223 -
0.0753 1 .
2600 C    C    . LEU LEU LEU A A 340 340 . 0.3912 0.3865 0.3662 0.0058  0.0037
0.0051  1 .
2601 O    O    . LEU LEU LEU A A 340 340 . 0.4134 0.3696 0.3540 0.0173  0.0178  -
0.0078 1 .
2602 N    N    . LEU LEU LEU A A 341 341 . 0.3616 0.3845 0.3635 0.0028  0.0016
0.0056  1 .
2603 CA   CA   . LEU LEU LEU A A 341 341 . 0.3684 0.3827 0.3625 0.0050  0.0052  -
0.0044 1 .
2604 CB   CB   . LEU LEU LEU A A 341 341 . 0.3593 0.3779 0.3539 0.0007  0.0067
0.0089  1 .
2605 CG   CG   . LEU LEU LEU A A 341 341 . 0.3795 0.4336 0.3843 0.0146  0.0010
0.0077  1 .
2606 CD1  CD1  . LEU LEU LEU A A 341 341 . 0.3570 0.4001 0.4633 0.0206  0.0120
0.0397  1 .
2607 CD2  CD2  . LEU LEU LEU A A 341 341 . 0.3822 0.5134 0.4262 0.0301  -0.0368
0.0036  1 .
2608 C    C    . LEU LEU LEU A A 341 341 . 0.3560 0.3782 0.3617 0.0074  0.0044  -
0.0022 1 .
2609 O    O    . LEU LEU LEU A A 341 341 . 0.3482 0.3654 0.3619 0.0193  0.0141  -
0.0076 1 .
2610 N    N    . LYS LYS LYS A A 342 342 . 0.3405 0.3845 0.3569 0.0049  0.0009  -
0.0152 1 .
2611 CA   CA   . LYS LYS LYS A A 342 342 . 0.3417 0.3857 0.3489 -0.0024 0.0070
0.0051  1 .
2612 CB   CB   . LYS LYS LYS A A 342 342 . 0.3217 0.3845 0.3391 -0.0054 0.0093  -
0.0001 1 .
2613 CG   CG   . LYS LYS LYS A A 342 342 . 0.3007 0.3822 0.3163 -0.0112 -0.0058
0.0047  1 .
2614 CD   CD   . LYS LYS LYS A A 342 342 . 0.2826 0.3570 0.2744 -0.0219 0.0087
0.0039  1 .
2615 CE   CE   . LYS LYS LYS A A 342 342 . 0.2753 0.3242 0.3439 -0.0134 -0.0019 -
0.0143 1 .
2616 NZ   NZ   . LYS LYS LYS A A 342 342 . 0.2652 0.3577 0.3670 0.0422  -0.0053 -
0.0550 1 .
2617 C    C    . LYS LYS LYS A A 342 342 . 0.3508 0.3781 0.3522 0.0113  0.0011  -
0.0056 1 .
2618 O    O    . LYS LYS LYS A A 342 342 . 0.3693 0.3905 0.3419 0.0267  -0.0020
0.0195  1 .
2619 N    N    . VAL VAL VAL A A 343 343 . 0.3677 0.3828 0.3498 0.0047  -0.0067
0.0023  1 .
2620 CA   CA   . VAL VAL VAL A A 343 343 . 0.3646 0.3718 0.3581 0.0066  -0.0005
0.0089  1 .
2621 CB   CB   . VAL VAL VAL A A 343 343 . 0.3687 0.3918 0.3478 0.0004  -0.0061
0.0081  1 .
2622 CG1  CG1  . VAL VAL VAL A A 343 343 . 0.3213 0.3670 0.3275 0.0279  -0.0108
0.0062  1 .
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2623 CG2   CG2   . VAL VAL VAL A A 343 343 . 0.3944 0.3687 0.3658 0.0084  -0.0275
0.0049  1 .
2624 C     C     . VAL VAL VAL A A 343 343 . 0.3857 0.3840 0.3621 -0.0006 0.0036
0.0073  1 .
2625 O     O     . VAL VAL VAL A A 343 343 . 0.3813 0.3924 0.3685 -0.0190 0.0096
0.0059  1 .
2626 N     N     . ASN ASN ASN A A 344 344 . 0.3747 0.3749 0.3645 0.0006  0.0030
0.0139  1 .
2627 CA    CA    . ASN ASN ASN A A 344 344 . 0.3764 0.3778 0.3740 0.0139  0.0024
0.0080  1 .
2628 CB    CB    . ASN ASN ASN A A 344 344 . 0.3787 0.3814 0.3817 0.0024  0.0014
0.0096  1 .
2629 CG    CG    . ASN ASN ASN A A 344 344 . 0.3608 0.4054 0.3800 0.0288  0.0026  -
0.0084 1 .
2630 OD1   OD1   . ASN ASN ASN A A 344 344 . 0.3628 0.3420 0.4608 0.0147  -0.0230 -
0.0185 1 .
2631 ND2   ND2   . ASN ASN ASN A A 344 344 . 0.2898 0.3612 0.3130 0.0479  0.0086  -
0.0190 1 .
2632 C     C     . ASN ASN ASN A A 344 344 . 0.3704 0.3791 0.3705 0.0128  -0.0036
0.0052  1 .
2633 O     O     . ASN ASN ASN A A 344 344 . 0.3737 0.3881 0.3626 0.0329  -0.0044 -
0.0121 1 .
2634 N     N     . GLN GLN GLN A A 345 345 . 0.3670 0.3630 0.3593 0.0148  -0.0077 -
0.0036 1 .
2635 CA    CA    . GLN GLN GLN A A 345 345 . 0.3648 0.3738 0.3658 -0.0021 -0.0114
0.0037  1 .
2636 CB    CB    . GLN GLN GLN A A 345 345 . 0.3681 0.3660 0.3554 -0.0071 -0.0094
0.0082  1 .
2637 CG    CG    . GLN GLN GLN A A 345 345 . 0.3078 0.3962 0.3531 -0.0096 -0.0151
0.0116  1 .
2638 CD    CD    . GLN GLN GLN A A 345 345 . 0.3272 0.3654 0.4097 -0.0135 0.0299  -
0.0067 1 .
2639 OE1   OE1   . GLN GLN GLN A A 345 345 . 0.2047 0.3507 0.4084 0.0277  0.0175  -
0.0049 1 .
2640 NE2   NE2   . GLN GLN GLN A A 345 345 . 0.3622 0.3592 0.4342 -0.0315 0.0939
0.0250  1 .
2641 C     C     . GLN GLN GLN A A 345 345 . 0.3718 0.3748 0.3640 0.0094  -0.0089 -
0.0007 1 .
2642 O     O     . GLN GLN GLN A A 345 345 . 0.3779 0.3849 0.3668 0.0207  -0.0099 -
0.0033 1 .
2643 N     N     . ILE ILE ILE A A 346 346 . 0.3472 0.3742 0.3613 0.0033  -0.0064
0.0010  1 .
2644 CA    CA    . ILE ILE ILE A A 346 346 . 0.3516 0.3635 0.3666 0.0205  -0.0114
0.0057  1 .
2645 CB    CB    . ILE ILE ILE A A 346 346 . 0.3599 0.3714 0.3582 0.0194  -0.0147
0.0074  1 .
2646 CG1   CG1   . ILE ILE ILE A A 346 346 . 0.3502 0.3756 0.3922 0.0423  -0.0274
0.0032  1 .
2647 CD1   CD1   . ILE ILE ILE A A 346 346 . 0.3655 0.4075 0.3885 0.0660  -0.0360 -
0.0314 1 .
2648 CG2   CG2   . ILE ILE ILE A A 346 346 . 0.3448 0.3268 0.3270 0.0452  0.0002
0.0111  1 .
2649 C     C     . ILE ILE ILE A A 346 346 . 0.3683 0.3648 0.3658 0.0211  -0.0116
0.0087  1 .
2650 O     O     . ILE ILE ILE A A 346 346 . 0.3681 0.3333 0.3822 0.0516  -0.0117
0.0120  1 .
2651 N     N     . GLY GLY GLY A A 347 347 . 0.3241 0.3565 0.3612 0.0270  -0.0136
0.0124  1 .
2652 CA    CA    . GLY GLY GLY A A 347 347 . 0.3262 0.3345 0.3496 0.0105  -0.0174
0.0096  1 .
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2653 C     C     . GLY GLY GLY A A 347 347 . 0.3491 0.3349 0.3499 0.0015  -0.0165
0.0098  1 .
2654 O     O     . GLY GLY GLY A A 347 347 . 0.3637 0.3172 0.3663 -0.0010 -0.0190
0.0149  1 .
2655 N     N     . SER SER SER A A 348 348 . 0.3538 0.3507 0.3416 -0.0032 -0.0098
0.0090  1 .
2656 CA    CA    . SER SER SER A A 348 348 . 0.3750 0.3666 0.3597 0.0080  -0.0021
0.0088  1 .
2657 CB    CB    . SER SER SER A A 348 348 . 0.4023 0.3755 0.3575 0.0136  0.0014
0.0150  1 .
2658 OG    OG    . SER SER SER A A 348 348 . 0.4372 0.4211 0.3658 0.0379  -0.0023
0.0068  1 .
2659 C     C     . SER SER SER A A 348 348 . 0.3712 0.3722 0.3613 0.0003  -0.0027
0.0134  1 .
2660 O     O     . SER SER SER A A 348 348 . 0.3592 0.3790 0.3521 0.0075  -0.0187
0.0081  1 .
2661 N     N     . VAL VAL VAL A A 349 349 . 0.3479 0.3648 0.3625 0.0104  0.0021
0.0288  1 .
2662 CA    CA    . VAL VAL VAL A A 349 349 . 0.3659 0.3863 0.3631 0.0061  0.0004
0.0070  1 .
2663 CB    CB    . VAL VAL VAL A A 349 349 . 0.3729 0.3973 0.3696 0.0131  0.0071
0.0070  1 .
2664 CG1   CG1   . VAL VAL VAL A A 349 349 . 0.3531 0.4195 0.3275 0.0147  0.0299  -
0.0223 1 .
2665 CG2   CG2   . VAL VAL VAL A A 349 349 . 0.3594 0.3974 0.3505 0.0162  -0.0007
0.0051  1 .
2666 C     C     . VAL VAL VAL A A 349 349 . 0.3921 0.4051 0.3909 0.0018  0.0001
0.0063  1 .
2667 O     O     . VAL VAL VAL A A 349 349 . 0.3948 0.4385 0.3850 0.0109  0.0040
0.0019  1 .
2668 N     N     . THR THR THR A A 350 350 . 0.4130 0.4189 0.3968 -0.0057 -0.0005
0.0078  1 .
2669 CA    CA    . THR THR THR A A 350 350 . 0.4392 0.4286 0.4108 -0.0011 -0.0183
0.0164  1 .
2670 CB    CB    . THR THR THR A A 350 350 . 0.4328 0.4319 0.4055 -0.0108 -0.0135
0.0160  1 .
2671 OG1   OG1   . THR THR THR A A 350 350 . 0.5005 0.4889 0.4115 -0.0066 -0.0203
0.0113  1 .
2672 CG2   CG2   . THR THR THR A A 350 350 . 0.4693 0.4576 0.4264 -0.0112 -0.0233
0.0286  1 .
2673 C     C     . THR THR THR A A 350 350 . 0.4220 0.4189 0.4111 -0.0065 -0.0094
0.0081  1 .
2674 O     O     . THR THR THR A A 350 350 . 0.4323 0.4117 0.4120 0.0001  -0.0201
0.0220  1 .
2675 N     N     . GLU GLU GLU A A 351 351 . 0.4282 0.4184 0.4185 0.0016  -0.0099
0.0084  1 .
2676 CA    CA    . GLU GLU GLU A A 351 351 . 0.4323 0.4193 0.4200 0.0062  -0.0088
0.0048  1 .
2677 CB    CB    . GLU GLU GLU A A 351 351 . 0.4421 0.4297 0.4322 0.0021  -0.0133 -
0.0072 1 .
2678 CG    CG    . GLU GLU GLU A A 351 351 . 0.4909 0.4388 0.4498 0.0144  -0.0209 -
0.0020 1 .
2679 CD    CD    . GLU GLU GLU A A 351 351 . 0.4940 0.4523 0.4966 -0.0007 0.0013  -
0.0189 1 .
2680 OE1   OE1   . GLU GLU GLU A A 351 351 . 0.5256 0.4603 0.4694 -0.0766 0.0258
0.0045  1 .
2681 OE2   OE2   . GLU GLU GLU A A 351 351 . 0.4969 0.4670 0.5291 0.0075  -0.0215
0.0028  1 .
2682 C     C     . GLU GLU GLU A A 351 351 . 0.4332 0.4339 0.4155 0.0042  -0.0105
0.0035  1 .
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2683 O    O    . GLU GLU GLU A A 351 351 . 0.4315 0.4638 0.4136 0.0169  -0.0228
0.0224  1 .
2684 N    N    . ALA ALA ALA A A 352 352 . 0.4270 0.4172 0.3999 0.0004  -0.0036
0.0041  1 .
2685 CA   CA   . ALA ALA ALA A A 352 352 . 0.4245 0.4127 0.3929 -0.0044 0.0038
0.0011  1 .
2686 CB   CB   . ALA ALA ALA A A 352 352 . 0.4297 0.4080 0.3746 -0.0055 -0.0098 -
0.0024 1 .
2687 C    C    . ALA ALA ALA A A 352 352 . 0.4195 0.4130 0.3915 -0.0120 0.0044  -
0.0008 1 .
2688 O    O    . ALA ALA ALA A A 352 352 . 0.4325 0.4060 0.3650 -0.0234 0.0107  -
0.0127 1 .
2689 N    N    . ILE ILE ILE A A 353 353 . 0.4135 0.4108 0.4041 -0.0141 0.0118
0.0028  1 .
2690 CA   CA   . ILE ILE ILE A A 353 353 . 0.4029 0.4109 0.4141 -0.0095 0.0129
0.0000  1 .
2691 CB   CB   . ILE ILE ILE A A 353 353 . 0.4013 0.3982 0.4151 -0.0056 0.0097  -
0.0069 1 .
2692 CG1  CG1  . ILE ILE ILE A A 353 353 . 0.3998 0.4229 0.4078 -0.0241 -0.0035 -
0.0210 1 .
2693 CD1  CD1  . ILE ILE ILE A A 353 353 . 0.3811 0.4172 0.4637 -0.0307 0.0178  -
0.0171 1 .
2694 CG2  CG2  . ILE ILE ILE A A 353 353 . 0.3772 0.3922 0.4010 -0.0460 0.0572
0.0083  1 .
2695 C    C    . ILE ILE ILE A A 353 353 . 0.4281 0.4393 0.4381 -0.0101 0.0034  -
0.0060 1 .
2696 O    O    . ILE ILE ILE A A 353 353 . 0.4134 0.4561 0.4348 -0.0111 0.0100
0.0003  1 .
2697 N    N    . GLN GLN GLN A A 354 354 . 0.4395 0.4598 0.4616 0.0002  0.0029  -
0.0041 1 .
2698 CA   CA   . GLN GLN GLN A A 354 354 . 0.4719 0.4824 0.4586 -0.0132 -0.0060 -
0.0033 1 .
2699 CB   CB   . GLN GLN GLN A A 354 354 . 0.4993 0.4913 0.4666 -0.0240 -0.0032 -
0.0047 1 .
2700 CG   CG   . GLN GLN GLN A A 354 354 . 0.5729 0.5615 0.5384 -0.0400 -0.0093
0.0196  1 .
2701 CD   CD   . GLN GLN GLN A A 354 354 . 0.6674 0.6136 0.6138 -0.0346 0.0043
0.0095  1 .
2702 OE1  OE1  . GLN GLN GLN A A 354 354 . 0.7180 0.6932 0.6327 -0.0859 -0.0172
0.0235  1 .
2703 NE2  NE2  . GLN GLN GLN A A 354 354 . 0.6961 0.6605 0.6174 -0.0377 0.0422
0.0516  1 .
2704 C    C    . GLN GLN GLN A A 354 354 . 0.4615 0.4772 0.4554 -0.0187 -0.0021 -
0.0116 1 .
2705 O    O    . GLN GLN GLN A A 354 354 . 0.4501 0.4892 0.4638 -0.0188 0.0014  -
0.0262 1 .
2706 N    N    . ALA ALA ALA A A 355 355 . 0.4659 0.4694 0.4473 -0.0197 -0.0070 -
0.0100 1 .
2707 CA   CA   . ALA ALA ALA A A 355 355 . 0.4481 0.4673 0.4434 -0.0022 -0.0109 -
0.0040 1 .
2708 CB   CB   . ALA ALA ALA A A 355 355 . 0.4451 0.4612 0.4445 -0.0010 -0.0108 -
0.0156 1 .
2709 C    C    . ALA ALA ALA A A 355 355 . 0.4547 0.4735 0.4450 0.0029  -0.0153 -
0.0019 1 .
2710 O    O    . ALA ALA ALA A A 355 355 . 0.4349 0.4715 0.4334 -0.0029 -0.0355
0.0022  1 .
2711 N    N    . CYS CYS CYS A A 356 356 . 0.4711 0.4814 0.4488 0.0205  -0.0114 -
0.0025 1 .
2712 CA   CA   . CYS CYS CYS A A 356 356 . 0.4796 0.4733 0.4435 0.0255  -0.0068 -
0.0031 1 .
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2713 CB    CB    . CYS CYS CYS A A 356 356 . 0.4760 0.4746 0.4237 0.0344  -0.0038 -
0.0005 1 .
2714 SG    SG    . CYS CYS CYS A A 356 356 . 0.5657 0.5022 0.4201 0.0565  -0.0262 -
0.0054 1 .
2715 C     C     . CYS CYS CYS A A 356 356 . 0.4677 0.4739 0.4514 0.0203  -0.0042
0.0032  1 .
2716 O     O     . CYS CYS CYS A A 356 356 . 0.4495 0.4610 0.4508 0.0311  -0.0075 -
0.0043 1 .
2717 N     N     . LYS LYS LYS A A 357 357 . 0.4861 0.4764 0.4674 0.0069  0.0022
0.0096  1 .
2718 CA    CA    . LYS LYS LYS A A 357 357 . 0.5041 0.5003 0.4798 0.0001  0.0057
0.0056  1 .
2719 CB    CB    . LYS LYS LYS A A 357 357 . 0.4941 0.5226 0.4978 -0.0076 0.0149
0.0160  1 .
2720 CG    CG    . LYS LYS LYS A A 357 357 . 0.5756 0.5973 0.5297 0.0033  -0.0068
0.0224  1 .
2721 CD    CD    . LYS LYS LYS A A 357 357 . 0.6232 0.6862 0.6617 -0.0376 -0.0114
0.0406  1 .
2722 CE    CE    . LYS LYS LYS A A 357 357 . 0.7350 0.7151 0.7067 -0.0369 -0.0298
0.0353  1 .
2723 NZ    NZ    . LYS LYS LYS A A 357 357 . 0.8001 0.8011 0.7041 -0.0324 -0.0167
0.0540  1 .
2724 C     C     . LYS LYS LYS A A 357 357 . 0.4919 0.4821 0.4616 0.0031  0.0076
0.0067  1 .
2725 O     O     . LYS LYS LYS A A 357 357 . 0.5077 0.4745 0.4645 0.0065  0.0144  -
0.0020 1 .
2726 N     N     . LEU LEU LEU A A 358 358 . 0.4921 0.4768 0.4554 0.0006  0.0011
0.0093  1 .
2727 CA    CA    . LEU LEU LEU A A 358 358 . 0.4870 0.4888 0.4541 0.0080  -0.0031
0.0129  1 .
2728 CB    CB    . LEU LEU LEU A A 358 358 . 0.4965 0.5029 0.4571 0.0255  -0.0102
0.0156  1 .
2729 CG    CG    . LEU LEU LEU A A 358 358 . 0.4705 0.5545 0.4645 0.0235  -0.0063
0.0056  1 .
2730 CD1   CD1   . LEU LEU LEU A A 358 358 . 0.4574 0.5764 0.4660 0.0642  -0.0397
0.0013  1 .
2731 CD2   CD2   . LEU LEU LEU A A 358 358 . 0.4675 0.5807 0.4467 0.0290  -0.0082
0.0163  1 .
2732 C     C     . LEU LEU LEU A A 358 358 . 0.4946 0.4825 0.4514 0.0057  -0.0091
0.0145  1 .
2733 O     O     . LEU LEU LEU A A 358 358 . 0.5140 0.4923 0.4479 0.0099  -0.0127
0.0358  1 .
2734 N     N     . ALA ALA ALA A A 359 359 . 0.4754 0.4723 0.4346 0.0017  -0.0056
0.0115  1 .
2735 CA    CA    . ALA ALA ALA A A 359 359 . 0.4684 0.4486 0.4313 0.0095  -0.0026
0.0080  1 .
2736 CB    CB    . ALA ALA ALA A A 359 359 . 0.4629 0.4473 0.4319 0.0151  0.0085
0.0019  1 .
2737 C     C     . ALA ALA ALA A A 359 359 . 0.4638 0.4430 0.4340 0.0051  -0.0080
0.0121  1 .
2738 O     O     . ALA ALA ALA A A 359 359 . 0.4701 0.4388 0.4268 0.0141  -0.0235
0.0065  1 .
2739 N     N     . GLN GLN GLN A A 360 360 . 0.4483 0.4460 0.4351 0.0087  -0.0141
0.0178  1 .
2740 CA    CA    . GLN GLN GLN A A 360 360 . 0.4581 0.4662 0.4467 0.0032  -0.0134
0.0136  1 .
2741 CB    CB    . GLN GLN GLN A A 360 360 . 0.4671 0.4649 0.4468 0.0212  -0.0189
0.0210  1 .
2742 CG    CG    . GLN GLN GLN A A 360 360 . 0.4970 0.4930 0.4396 0.0223  0.0001
0.0189  1 .
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2743 CD    CD    . GLN GLN GLN A A 360 360 . 0.5037 0.5056 0.4534 -0.0036 -0.0151
0.0392  1 .
2744 OE1   OE1   . GLN GLN GLN A A 360 360 . 0.5166 0.5130 0.4924 0.0118  0.0144
0.0089  1 .
2745 NE2   NE2   . GLN GLN GLN A A 360 360 . 0.5428 0.4777 0.5040 -0.0109 -0.0676
0.0359  1 .
2746 C     C     . GLN GLN GLN A A 360 360 . 0.4628 0.4715 0.4630 0.0023  -0.0235
0.0143  1 .
2747 O     O     . GLN GLN GLN A A 360 360 . 0.4674 0.4736 0.4681 0.0030  -0.0203
0.0227  1 .
2748 N     N     . GLU GLU GLU A A 361 361 . 0.4652 0.4933 0.4801 -0.0076 -0.0280
0.0127  1 .
2749 CA    CA    . GLU GLU GLU A A 361 361 . 0.4907 0.5149 0.4992 -0.0139 -0.0140
0.0148  1 .
2750 CB    CB    . GLU GLU GLU A A 361 361 . 0.5080 0.5237 0.5082 -0.0184 -0.0211
0.0186  1 .
2751 CG    CG    . GLU GLU GLU A A 361 361 . 0.5580 0.5875 0.5907 -0.0256 -0.0083
0.0172  1 .
2752 CD    CD    . GLU GLU GLU A A 361 361 . 0.6842 0.6281 0.6870 -0.0069 0.0032  -
0.0105 1 .
2753 OE1   OE1   . GLU GLU GLU A A 361 361 . 0.7047 0.6524 0.7295 0.0228  0.0286  -
0.0010 1 .
2754 OE2   OE2   . GLU GLU GLU A A 361 361 . 0.6862 0.6961 0.7141 -0.0178 0.0212
0.0092  1 .
2755 C     C     . GLU GLU GLU A A 361 361 . 0.4949 0.5207 0.4843 -0.0186 -0.0131
0.0106  1 .
2756 O     O     . GLU GLU GLU A A 361 361 . 0.5065 0.5376 0.4979 -0.0325 0.0019
0.0070  1 .
2757 N     N     . ASN ASN ASN A A 362 362 . 0.4916 0.5262 0.4823 -0.0136 -0.0167
0.0048  1 .
2758 CA    CA    . ASN ASN ASN A A 362 362 . 0.5052 0.5160 0.4838 -0.0043 -0.0104
0.0083  1 .
2759 CB    CB    . ASN ASN ASN A A 362 362 . 0.4951 0.5119 0.4858 0.0049  -0.0190
0.0109  1 .
2760 CG    CG    . ASN ASN ASN A A 362 362 . 0.5353 0.5195 0.5179 0.0042  -0.0320
0.0162  1 .
2761 OD1   OD1   . ASN ASN ASN A A 362 362 . 0.6327 0.5151 0.5399 0.0781  -0.0546
0.0445  1 .
2762 ND2   ND2   . ASN ASN ASN A A 362 362 . 0.4662 0.5122 0.5410 0.0179  -0.0335
0.0273  1 .
2763 C     C     . ASN ASN ASN A A 362 362 . 0.5096 0.5150 0.4654 -0.0068 -0.0031
0.0135  1 .
2764 O     O     . ASN ASN ASN A A 362 362 . 0.5308 0.5313 0.4519 0.0031  -0.0240
0.0179  1 .
2765 N     N     . GLY GLY GLY A A 363 363 . 0.5066 0.5020 0.4513 -0.0013 0.0119
0.0110  1 .
2766 CA    CA    . GLY GLY GLY A A 363 363 . 0.5319 0.5055 0.4675 -0.0069 0.0169
0.0060  1 .
2767 C     C     . GLY GLY GLY A A 363 363 . 0.5400 0.5044 0.4795 -0.0065 0.0123
0.0008  1 .
2768 O     O     . GLY GLY GLY A A 363 363 . 0.5441 0.4890 0.4702 -0.0152 0.0176  -
0.0043 1 .
2769 N     N     . TRP TRP TRP A A 364 364 . 0.5345 0.5057 0.4699 -0.0044 -0.0009
0.0023  1 .
2770 CA    CA    . TRP TRP TRP A A 364 364 . 0.5117 0.5137 0.4715 -0.0003 -0.0040 -
0.0095 1 .
2771 CB    CB    . TRP TRP TRP A A 364 364 . 0.5205 0.5275 0.4801 0.0064  -0.0051 -
0.0120 1 .
2772 CG    CG    . TRP TRP TRP A A 364 364 . 0.5473 0.5641 0.5303 0.0199  -0.0180 -
0.0084 1 .
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2773 CD1   CD1   . TRP TRP TRP A A 364 364 . 0.5865 0.5858 0.5422 0.0278  -0.0346 -
0.0214 1 .
2774 NE1   NE1   . TRP TRP TRP A A 364 364 . 0.5854 0.5695 0.5499 0.0334  -0.0288 -
0.0168 1 .
2775 CE2   CE2   . TRP TRP TRP A A 364 364 . 0.5622 0.5671 0.5578 0.0322  -0.0006 -
0.0186 1 .
2776 CD2   CD2   . TRP TRP TRP A A 364 364 . 0.5806 0.5452 0.5401 0.0411  -0.0134 -
0.0169 1 .
2777 CE3   CE3   . TRP TRP TRP A A 364 364 . 0.5955 0.5059 0.5321 0.0401  -0.0212 -
0.0087 1 .
2778 CZ3   CZ3   . TRP TRP TRP A A 364 364 . 0.5509 0.5149 0.5393 0.0142  -0.0225 -
0.0107 1 .
2779 CH2   CH2   . TRP TRP TRP A A 364 364 . 0.5274 0.5426 0.5593 0.0207  -0.0161 -
0.0126 1 .
2780 CZ2   CZ2   . TRP TRP TRP A A 364 364 . 0.5515 0.5709 0.5783 0.0297  -0.0035 -
0.0216 1 .
2781 C     C     . TRP TRP TRP A A 364 364 . 0.5073 0.4989 0.4427 -0.0044 -0.0001 -
0.0073 1 .
2782 O     O     . TRP TRP TRP A A 364 364 . 0.5083 0.5240 0.4352 -0.0016 -0.0072 -
0.0123 1 .
2783 N     N     . GLY GLY GLY A A 365 365 . 0.4968 0.4760 0.4338 -0.0027 -0.0055 -
0.0181 1 .
2784 CA    CA    . GLY GLY GLY A A 365 365 . 0.4564 0.4414 0.4158 0.0135  -0.0006 -
0.0115 1 .
2785 C     C     . GLY GLY GLY A A 365 365 . 0.4429 0.4225 0.4067 0.0094  -0.0132 -
0.0043 1 .
2786 O     O     . GLY GLY GLY A A 365 365 . 0.4370 0.4172 0.3686 0.0292  0.0079  -
0.0059 1 .
2787 N     N     . VAL VAL VAL A A 366 366 . 0.4180 0.4059 0.4013 0.0068  -0.0286 -
0.0061 1 .
2788 CA    CA    . VAL VAL VAL A A 366 366 . 0.3940 0.3999 0.3947 0.0067  -0.0150
0.0078  1 .
2789 CB    CB    . VAL VAL VAL A A 366 366 . 0.3735 0.4011 0.3934 -0.0026 -0.0258
0.0003  1 .
2790 CG1   CG1   . VAL VAL VAL A A 366 366 . 0.3539 0.4023 0.3765 0.0249  0.0089
0.0026  1 .
2791 CG2   CG2   . VAL VAL VAL A A 366 366 . 0.3231 0.4141 0.4211 -0.0223 -0.0211
0.0218  1 .
2792 C     C     . VAL VAL VAL A A 366 366 . 0.3949 0.3993 0.3803 0.0035  -0.0129
0.0015  1 .
2793 O     O     . VAL VAL VAL A A 366 366 . 0.3962 0.3874 0.3785 0.0239  -0.0323
0.0128  1 .
2794 N     N     . MET MET MET A A 367 367 . 0.3731 0.3762 0.3660 -0.0117 -0.0072
0.0000  1 .
2795 CA    CA    . MET MET MET A A 367 367 . 0.3646 0.3573 0.3481 -0.0239 -0.0023 -
0.0091 1 .
2796 CB    CB    . MET MET MET A A 367 367 . 0.3609 0.3518 0.3430 -0.0223 0.0176  -
0.0117 1 .
2797 CG    CG    . MET MET MET A A 367 367 . 0.3414 0.3918 0.3396 -0.0490 0.0251  -
0.0144 1 .
2798 SD    SD    . MET MET MET A A 367 367 . 0.3083 0.4024 0.4099 -0.0491 -0.0147 -
0.0205 1 .
2799 CE    CE    . MET MET MET A A 367 367 . 0.2987 0.3987 0.4295 -0.0452 0.0074  -
0.0446 1 .
2800 C     C     . MET MET MET A A 367 367 . 0.3478 0.3494 0.3464 -0.0196 -0.0019 -
0.0031 1 .
2801 O     O     . MET MET MET A A 367 367 . 0.3333 0.3080 0.3371 -0.0195 -0.0233 -
0.0206 1 .
2802 N     N     . VAL VAL VAL A A 368 368 . 0.3116 0.3452 0.3271 -0.0271 -0.0065
0.0071  1 .
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2803 CA    CA    . VAL VAL VAL A A 368 368 . 0.3029 0.3389 0.3340 -0.0124 0.0054
0.0036  1 .
2804 CB    CB    . VAL VAL VAL A A 368 368 . 0.3161 0.3523 0.3325 -0.0115 -0.0014
0.0126  1 .
2805 CG1   CG1   . VAL VAL VAL A A 368 368 . 0.3055 0.3047 0.3266 0.0058  0.0106
0.0155  1 .
2806 CG2   CG2   . VAL VAL VAL A A 368 368 . 0.2706 0.3061 0.3727 -0.0249 0.0261
0.0085  1 .
2807 C     C     . VAL VAL VAL A A 368 368 . 0.2971 0.3451 0.3287 -0.0062 0.0019
0.0019  1 .
2808 O     O     . VAL VAL VAL A A 368 368 . 0.2910 0.3686 0.3213 -0.0065 0.0085  -
0.0072 1 .
2809 N     N     . SER SER SER A A 369 369 . 0.2821 0.3402 0.3299 0.0013  -0.0003
0.0028  1 .
2810 CA    CA    . SER SER SER A A 369 369 . 0.2887 0.3455 0.3417 -0.0042 0.0042
0.0045  1 .
2811 CB    CB    . SER SER SER A A 369 369 . 0.2682 0.3361 0.3464 0.0118  0.0080
0.0119  1 .
2812 OG    OG    . SER SER SER A A 369 369 . 0.3217 0.3452 0.3175 -0.0037 -0.0038
0.0131  1 .
2813 C     C     . SER SER SER A A 369 369 . 0.2794 0.3416 0.3332 0.0030  0.0040
0.0051  1 .
2814 O     O     . SER SER SER A A 369 369 . 0.2742 0.3745 0.3667 0.0083  -0.0004
0.0035  1 .
2815 N     N     . HIS HIS HIS A A 370 370 . 0.2801 0.3474 0.3324 0.0070  0.0050
0.0028  1 .
2816 CA    CA    . HIS HIS HIS A A 370 370 . 0.2951 0.3521 0.3204 0.0159  0.0054  -
0.0027 1 .
2817 CB    CB    . HIS HIS HIS A A 370 370 . 0.2960 0.3527 0.3023 0.0203  0.0057  -
0.0016 1 .
2818 CG    CG    . HIS HIS HIS A A 370 370 . 0.3265 0.3601 0.2898 -0.0148 -0.0058
0.0041  1 .
2819 ND1   ND1   . HIS HIS HIS A A 370 370 . 0.3703 0.3493 0.3290 0.0129  -0.0430 -
0.0053 1 .
2820 CE1   CE1   . HIS HIS HIS A A 370 370 . 0.2494 0.3666 0.3060 0.0303  0.0018  -
0.0040 1 .
2821 NE2   NE2   . HIS HIS HIS A A 370 370 . 0.2076 0.3496 0.3451 0.0177  -0.0185
0.0044  1 .
2822 CD2   CD2   . HIS HIS HIS A A 370 370 . 0.2716 0.3806 0.3241 -0.0088 -0.0059
0.0262  1 .
2823 C     C     . HIS HIS HIS A A 370 370 . 0.3163 0.3623 0.3288 0.0164  0.0022  -
0.0020 1 .
2824 O     O     . HIS HIS HIS A A 370 370 . 0.2675 0.3526 0.3181 0.0213  -0.0143
0.0192  1 .
2825 N     N     . ARG ARG ARG A A 371 371 . 0.3345 0.3611 0.3393 0.0154  0.0166  -
0.0065 1 .
2826 CA    CA    . ARG ARG ARG A A 371 371 . 0.3454 0.3527 0.3199 0.0070  0.0095  -
0.0111 1 .
2827 CB    CB    . ARG ARG ARG A A 371 371 . 0.3552 0.3384 0.3084 0.0226  0.0092
0.0012  1 .
2828 CG    CG    . ARG ARG ARG A A 371 371 . 0.3427 0.3648 0.3505 0.0047  0.0030  -
0.0071 1 .
2829 CD    CD    . ARG ARG ARG A A 371 371 . 0.3498 0.3491 0.2918 0.0169  -0.0166 -
0.0299 1 .
2830 NE    NE    . ARG ARG ARG A A 371 371 . 0.3225 0.4047 0.3427 0.0407  -0.0411 -
0.0063 1 .
2831 CZ    CZ    . ARG ARG ARG A A 371 371 . 0.3325 0.3691 0.3492 0.0267  0.0407  -
0.0336 1 .
2832 NH1   NH1   . ARG ARG ARG A A 371 371 . 0.2898 0.3981 0.3716 0.0479  0.0204
0.0098  1 .
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2833 NH2   NH2   . ARG ARG ARG A A 371 371 . 0.3364 0.3690 0.3231 0.0151  -0.0389 -
0.0255 1 .
2834 C     C     . ARG ARG ARG A A 371 371 . 0.3461 0.3498 0.3181 0.0017  -0.0005 -
0.0196 1 .
2835 O     O     . ARG ARG ARG A A 371 371 . 0.3769 0.3263 0.2840 0.0189  -0.0133 -
0.0375 1 .
2836 N     N     . SER SER SER A A 372 372 . 0.3431 0.3712 0.3181 -0.0093 0.0141  -
0.0172 1 .
2837 CA    CA    . SER SER SER A A 372 372 . 0.3249 0.3765 0.3387 -0.0106 0.0018  -
0.0001 1 .
2838 CB    CB    . SER SER SER A A 372 372 . 0.3180 0.3874 0.3461 -0.0364 0.0004
0.0158  1 .
2839 OG    OG    . SER SER SER A A 372 372 . 0.3652 0.5565 0.4110 -0.0643 0.0308
0.0128  1 .
2840 C     C     . SER SER SER A A 372 372 . 0.2983 0.3642 0.3470 0.0048  0.0066
0.0145  1 .
2841 O     O     . SER SER SER A A 372 372 . 0.2720 0.3838 0.3317 0.0007  0.0303
0.0172  1 .
2842 N     N     . GLY GLY GLY A A 373 373 . 0.2525 0.3481 0.3420 -0.0007 -0.0077
0.0153  1 .
2843 CA    CA    . GLY GLY GLY A A 373 373 . 0.2930 0.3436 0.3451 -0.0109 0.0124
0.0127  1 .
2844 C     C     . GLY GLY GLY A A 373 373 . 0.2750 0.3372 0.3473 -0.0147 0.0150
0.0210  1 .
2845 O     O     . GLY GLY GLY A A 373 373 . 0.2762 0.3608 0.3656 -0.0373 0.0156
0.0133  1 .
2846 N     N     . GLU GLU GLU A A 374 374 . 0.2780 0.3193 0.3272 -0.0084 0.0299
0.0076  1 .
2847 CA    CA    . GLU GLU GLU A A 374 374 . 0.2820 0.3061 0.3169 -0.0089 0.0164  -
0.0001 1 .
2848 CB    CB    . GLU GLU GLU A A 374 374 . 0.2650 0.3004 0.3250 0.0000  0.0316
0.0073  1 .
2849 CG    CG    . GLU GLU GLU A A 374 374 . 0.2950 0.3121 0.2816 0.0112  0.0454  -
0.0101 1 .
2850 CD    CD    . GLU GLU GLU A A 374 374 . 0.3119 0.3492 0.3096 0.0093  0.0080  -
0.0019 1 .
2851 OE1   OE1   . GLU GLU GLU A A 374 374 . 0.3007 0.3999 0.2720 0.0085  -0.0079 -
0.0192 1 .
2852 OE2   OE2   . GLU GLU GLU A A 374 374 . 0.3113 0.3862 0.3170 0.0636  -0.0217 -
0.0430 1 .
2853 C     C     . GLU GLU GLU A A 374 374 . 0.2926 0.3013 0.3201 -0.0069 0.0154
0.0040  1 .
2854 O     O     . GLU GLU GLU A A 374 374 . 0.2771 0.2832 0.3061 -0.0047 0.0197  -
0.0090 1 .
2855 N     N     . THR THR THR A A 375 375 . 0.3128 0.3193 0.3389 -0.0067 0.0040  -
0.0022 1 .
2856 CA    CA    . THR THR THR A A 375 375 . 0.3132 0.3327 0.3480 -0.0072 0.0041  -
0.0037 1 .
2857 CB    CB    . THR THR THR A A 375 375 . 0.3248 0.3364 0.3505 -0.0022 0.0159  -
0.0038 1 .
2858 OG1   OG1   . THR THR THR A A 375 375 . 0.2416 0.3535 0.3423 -0.0100 0.0211
0.0005  1 .
2859 CG2   CG2   . THR THR THR A A 375 375 . 0.2799 0.3259 0.3875 0.0058  0.0151  -
0.0063 1 .
2860 C     C     . THR THR THR A A 375 375 . 0.3365 0.3371 0.3438 -0.0064 0.0001  -
0.0121 1 .
2861 O     O     . THR THR THR A A 375 375 . 0.3507 0.3705 0.3306 -0.0141 0.0023  -
0.0171 1 .
2862 N     N     . GLU GLU GLU A A 376 376 . 0.3379 0.3305 0.3542 -0.0093 0.0023
0.0035  1 .
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2863 CA    CA    . GLU GLU GLU A A 376 376 . 0.3302 0.3450 0.3501 -0.0065 0.0069
0.0012  1 .
2864 CB    CB    . GLU GLU GLU A A 376 376 . 0.3240 0.3701 0.3587 -0.0114 0.0155
0.0017  1 .
2865 CG    CG    . GLU GLU GLU A A 376 376 . 0.3273 0.3589 0.3619 0.0055  0.0088  -
0.0040 1 .
2866 CD    CD    . GLU GLU GLU A A 376 376 . 0.3802 0.4436 0.3750 -0.0174 -0.0091 -
0.0196 1 .
2867 OE1   OE1   . GLU GLU GLU A A 376 376 . 0.3383 0.4503 0.3913 -0.0471 -0.0005 -
0.0440 1 .
2868 OE2   OE2   . GLU GLU GLU A A 376 376 . 0.4133 0.4251 0.4169 -0.0282 -0.0870
0.0159  1 .
2869 C     C     . GLU GLU GLU A A 376 376 . 0.3490 0.3447 0.3387 0.0015  -0.0013 -
0.0028 1 .
2870 O     O     . GLU GLU GLU A A 376 376 . 0.3642 0.3509 0.3451 0.0072  0.0122  -
0.0216 1 .
2871 N     N     . ASP ASP ASP A A 377 377 . 0.3542 0.3599 0.3353 0.0025  -0.0077 -
0.0053 1 .
2872 CA    CA    . ASP ASP ASP A A 377 377 . 0.3338 0.3564 0.3516 -0.0152 -0.0074
0.0079  1 .
2873 CB    CB    . ASP ASP ASP A A 377 377 . 0.3479 0.3498 0.3535 -0.0234 0.0062
0.0034  1 .
2874 CG    CG    . ASP ASP ASP A A 377 377 . 0.3678 0.3858 0.4296 -0.0540 -0.0249
0.0293  1 .
2875 OD1   OD1   . ASP ASP ASP A A 377 377 . 0.4143 0.3856 0.4714 -0.0414 -0.0504
0.0354  1 .
2876 OD2   OD2   . ASP ASP ASP A A 377 377 . 0.1955 0.3661 0.4831 -0.0783 -0.0417
0.0616  1 .
2877 C     C     . ASP ASP ASP A A 377 377 . 0.3366 0.3481 0.3494 -0.0052 -0.0026
0.0108  1 .
2878 O     O     . ASP ASP ASP A A 377 377 . 0.3651 0.3525 0.3530 -0.0113 -0.0225
0.0106  1 .
2879 N     N     . THR THR THR A A 378 378 . 0.3268 0.3415 0.3353 -0.0162 0.0011
0.0141  1 .
2880 CA    CA    . THR THR THR A A 378 378 . 0.3161 0.3396 0.3274 -0.0146 0.0000
0.0086  1 .
2881 CB    CB    . THR THR THR A A 378 378 . 0.3174 0.3297 0.3298 -0.0195 0.0026
0.0175  1 .
2882 OG1   OG1   . THR THR THR A A 378 378 . 0.3466 0.3671 0.3065 -0.0401 0.0027
0.0158  1 .
2883 CG2   CG2   . THR THR THR A A 378 378 . 0.2766 0.3571 0.3188 -0.0308 0.0266
0.0125  1 .
2884 C     C     . THR THR THR A A 378 378 . 0.3342 0.3422 0.3383 0.0019  0.0066
0.0022  1 .
2885 O     O     . THR THR THR A A 378 378 . 0.3514 0.3489 0.3645 0.0174  0.0154  -
0.0119 1 .
2886 N     N     . PHE PHE PHE A A 379 379 . 0.3334 0.3188 0.3252 0.0052  0.0138  -
0.0109 1 .
2887 CA    CA    . PHE PHE PHE A A 379 379 . 0.3284 0.3329 0.3398 0.0033  0.0066  -
0.0103 1 .
2888 CB    CB    . PHE PHE PHE A A 379 379 . 0.3505 0.3280 0.3470 0.0037  0.0024  -
0.0091 1 .
2889 CG    CG    . PHE PHE PHE A A 379 379 . 0.3705 0.3487 0.3716 0.0055  0.0179  -
0.0119 1 .
2890 CD1   CD1   . PHE PHE PHE A A 379 379 . 0.3927 0.3567 0.3931 0.0479  0.0116  -
0.0231 1 .
2891 CE1   CE1   . PHE PHE PHE A A 379 379 . 0.3581 0.3902 0.4634 0.0560  0.0276
0.0073  1 .
2892 CZ    CZ    . PHE PHE PHE A A 379 379 . 0.4130 0.4320 0.4766 0.0228  -0.0018
0.0071  1 .
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2893 CE2   CE2   . PHE PHE PHE A A 379 379 . 0.3571 0.4375 0.4286 0.0141  0.0271  -
0.0006 1 .
2894 CD2   CD2   . PHE PHE PHE A A 379 379 . 0.3741 0.3858 0.4329 0.0236  0.0412  -
0.0123 1 .
2895 C     C     . PHE PHE PHE A A 379 379 . 0.3116 0.3425 0.3277 0.0025  0.0139  -
0.0047 1 .
2896 O     O     . PHE PHE PHE A A 379 379 . 0.2377 0.3307 0.3262 0.0111  0.0440  -
0.0088 1 .
2897 N     N     . ILE ILE ILE A A 380 380 . 0.2646 0.3350 0.3263 -0.0068 0.0136  -
0.0006 1 .
2898 CA    CA    . ILE ILE ILE A A 380 380 . 0.2686 0.3377 0.3105 0.0014  0.0002  -
0.0024 1 .
2899 CB    CB    . ILE ILE ILE A A 380 380 . 0.2671 0.3456 0.3222 -0.0059 0.0146
0.0031  1 .
2900 CG1   CG1   . ILE ILE ILE A A 380 380 . 0.2150 0.3165 0.3007 -0.0029 -0.0047
0.0099  1 .
2901 CD1   CD1   . ILE ILE ILE A A 380 380 . 0.2189 0.3025 0.2597 -0.0173 0.0509  -
0.0267 1 .
2902 CG2   CG2   . ILE ILE ILE A A 380 380 . 0.2564 0.3707 0.3182 0.0192  -0.0263 -
0.0270 1 .
2903 C     C     . ILE ILE ILE A A 380 380 . 0.2865 0.3495 0.3179 -0.0019 0.0044
0.0012  1 .
2904 O     O     . ILE ILE ILE A A 380 380 . 0.3005 0.3630 0.3194 -0.0011 -0.0016 -
0.0252 1 .
2905 N     N     . ALA ALA ALA A A 381 381 . 0.2993 0.3451 0.3207 -0.0025 0.0027
0.0063  1 .
2906 CA    CA    . ALA ALA ALA A A 381 381 . 0.3266 0.3439 0.3160 -0.0071 0.0082
0.0009  1 .
2907 CB    CB    . ALA ALA ALA A A 381 381 . 0.3249 0.3526 0.3275 -0.0095 -0.0028
0.0152  1 .
2908 C     C     . ALA ALA ALA A A 381 381 . 0.3213 0.3483 0.3261 -0.0119 0.0167
0.0030  1 .
2909 O     O     . ALA ALA ALA A A 381 381 . 0.3143 0.3713 0.3179 -0.0085 0.0357
0.0155  1 .
2910 N     N     . ASP ASP ASP A A 382 382 . 0.3160 0.3260 0.3088 -0.0133 0.0102  -
0.0122 1 .
2911 CA    CA    . ASP ASP ASP A A 382 382 . 0.3334 0.3450 0.3319 -0.0059 0.0178  -
0.0036 1 .
2912 CB    CB    . ASP ASP ASP A A 382 382 . 0.3364 0.3516 0.3416 -0.0270 0.0154  -
0.0035 1 .
2913 CG    CG    . ASP ASP ASP A A 382 382 . 0.3914 0.3484 0.4289 0.0034  0.0481
0.0093  1 .
2914 OD1   OD1   . ASP ASP ASP A A 382 382 . 0.4129 0.3931 0.4787 -0.0042 0.1020
0.0305  1 .
2915 OD2   OD2   . ASP ASP ASP A A 382 382 . 0.4184 0.3800 0.5244 -0.0373 0.1061  -
0.0475 1 .
2916 C     C     . ASP ASP ASP A A 382 382 . 0.3298 0.3525 0.3318 -0.0024 0.0171  -
0.0035 1 .
2917 O     O     . ASP ASP ASP A A 382 382 . 0.3131 0.3593 0.3274 0.0021  0.0280
0.0053  1 .
2918 N     N     . LEU LEU LEU A A 383 383 . 0.3352 0.3560 0.3192 0.0043  0.0257  -
0.0022 1 .
2919 CA    CA    . LEU LEU LEU A A 383 383 . 0.3348 0.3490 0.3124 0.0080  0.0133
0.0109  1 .
2920 CB    CB    . LEU LEU LEU A A 383 383 . 0.3607 0.3504 0.3198 0.0101  0.0031
0.0221  1 .
2921 CG    CG    . LEU LEU LEU A A 383 383 . 0.3496 0.3613 0.3106 0.0223  -0.0087
0.0444  1 .
2922 CD1   CD1   . LEU LEU LEU A A 383 383 . 0.3715 0.3247 0.3049 0.0047  -0.0643
0.0684  1 .
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2923 CD2   CD2   . LEU LEU LEU A A 383 383 . 0.3705 0.3841 0.2920 0.0230  -0.0163
0.0886  1 .
2924 C     C     . LEU LEU LEU A A 383 383 . 0.3454 0.3500 0.3331 0.0007  0.0079
0.0061  1 .
2925 O     O     . LEU LEU LEU A A 383 383 . 0.3592 0.3606 0.3296 0.0031  -0.0029 -
0.0025 1 .
2926 N     N     . VAL VAL VAL A A 384 384 . 0.3572 0.3483 0.3376 0.0082  0.0030
0.0092  1 .
2927 CA    CA    . VAL VAL VAL A A 384 384 . 0.3528 0.3497 0.3410 0.0099  0.0021
0.0107  1 .
2928 CB    CB    . VAL VAL VAL A A 384 384 . 0.3446 0.3525 0.3347 0.0057  0.0017
0.0077  1 .
2929 CG1   CG1   . VAL VAL VAL A A 384 384 . 0.3170 0.3243 0.3254 0.0116  0.0186  -
0.0021 1 .
2930 CG2   CG2   . VAL VAL VAL A A 384 384 . 0.3619 0.3587 0.3494 0.0241  -0.0136
0.0113  1 .
2931 C     C     . VAL VAL VAL A A 384 384 . 0.3520 0.3599 0.3399 0.0118  0.0054
0.0091  1 .
2932 O     O     . VAL VAL VAL A A 384 384 . 0.3578 0.3648 0.3497 0.0106  0.0175
0.0097  1 .
2933 N     N     . VAL VAL VAL A A 385 385 . 0.3464 0.3704 0.3516 0.0082  0.0133
0.0056  1 .
2934 CA    CA    . VAL VAL VAL A A 385 385 . 0.3552 0.3623 0.3427 0.0128  0.0226
0.0049  1 .
2935 CB    CB    . VAL VAL VAL A A 385 385 . 0.3389 0.3686 0.3313 0.0047  0.0157
0.0058  1 .
2936 CG1   CG1   . VAL VAL VAL A A 385 385 . 0.3690 0.3794 0.3584 0.0053  0.0536
0.0293  1 .
2937 CG2   CG2   . VAL VAL VAL A A 385 385 . 0.3267 0.3738 0.3413 0.0129  0.0485
0.0044  1 .
2938 C     C     . VAL VAL VAL A A 385 385 . 0.3700 0.3638 0.3501 0.0211  0.0108
0.0070  1 .
2939 O     O     . VAL VAL VAL A A 385 385 . 0.3943 0.3712 0.3484 0.0269  0.0105
0.0172  1 .
2940 N     N     . GLY GLY GLY A A 386 386 . 0.3675 0.3746 0.3498 0.0112  0.0033
0.0120  1 .
2941 CA    CA    . GLY GLY GLY A A 386 386 . 0.3740 0.3799 0.3597 0.0079  0.0079
0.0135  1 .
2942 C     C     . GLY GLY GLY A A 386 386 . 0.3809 0.3915 0.3500 -0.0068 0.0064
0.0109  1 .
2943 O     O     . GLY GLY GLY A A 386 386 . 0.3730 0.3983 0.3596 -0.0329 0.0108
0.0191  1 .
2944 N     N     . LEU LEU LEU A A 387 387 . 0.3722 0.3796 0.3480 -0.0110 0.0128
0.0087  1 .
2945 CA    CA    . LEU LEU LEU A A 387 387 . 0.3850 0.3883 0.3708 0.0009  0.0161
0.0076  1 .
2946 CB    CB    . LEU LEU LEU A A 387 387 . 0.4133 0.3927 0.3794 0.0065  0.0103
0.0099  1 .
2947 CG    CG    . LEU LEU LEU A A 387 387 . 0.4149 0.3922 0.3884 0.0088  0.0323  -
0.0089 1 .
2948 CD1   CD1   . LEU LEU LEU A A 387 387 . 0.3520 0.4117 0.4550 0.0324  -0.0248 -
0.0287 1 .
2949 CD2   CD2   . LEU LEU LEU A A 387 387 . 0.4127 0.4096 0.4176 -0.0187 0.0779  -
0.0245 1 .
2950 C     C     . LEU LEU LEU A A 387 387 . 0.4056 0.4152 0.3954 -0.0027 0.0061
0.0157  1 .
2951 O     O     . LEU LEU LEU A A 387 387 . 0.4179 0.4322 0.3843 -0.0007 0.0009
0.0247  1 .
2952 N     N     . CYS CYS CYS A A 388 388 . 0.4139 0.4148 0.4114 0.0025  0.0167
0.0089  1 .
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2953 CA    CA    . CYS CYS CYS A A 388 388 . 0.4473 0.4303 0.4286 0.0106  0.0146
0.0027  1 .
2954 CB    CB    . CYS CYS CYS A A 388 388 . 0.4786 0.4405 0.4531 0.0111  0.0166  -
0.0022 1 .
2955 SG    SG    . CYS CYS CYS A A 388 388 . 0.6087 0.5673 0.5787 0.0890  0.0747  -
0.0387 1 .
2956 C     C     . CYS CYS CYS A A 388 388 . 0.4488 0.4258 0.4139 0.0068  0.0022
0.0025  1 .
2957 O     O     . CYS CYS CYS A A 388 388 . 0.4864 0.4143 0.4103 0.0105  -0.0075
0.0078  1 .
2958 N     N     . THR THR THR A A 389 389 . 0.4220 0.4079 0.3896 0.0054  0.0062
0.0087  1 .
2959 CA    CA    . THR THR THR A A 389 389 . 0.4102 0.3993 0.3787 -0.0095 0.0111  -
0.0020 1 .
2960 CB    CB    . THR THR THR A A 389 389 . 0.4155 0.3917 0.3924 -0.0036 0.0107  -
0.0063 1 .
2961 OG1   OG1   . THR THR THR A A 389 389 . 0.4333 0.4176 0.3443 -0.0046 0.0205  -
0.0446 1 .
2962 CG2   CG2   . THR THR THR A A 389 389 . 0.4200 0.3846 0.3670 -0.0261 0.0219  -
0.0132 1 .
2963 C     C     . THR THR THR A A 389 389 . 0.4036 0.4054 0.3869 -0.0020 0.0086  -
0.0062 1 .
2964 O     O     . THR THR THR A A 389 389 . 0.4009 0.4333 0.4015 -0.0181 0.0166  -
0.0101 1 .
2965 N     N     . GLY GLY GLY A A 390 390 . 0.3844 0.3922 0.3867 -0.0087 0.0172  -
0.0081 1 .
2966 CA    CA    . GLY GLY GLY A A 390 390 . 0.3743 0.3784 0.3664 -0.0231 0.0262  -
0.0075 1 .
2967 C     C     . GLY GLY GLY A A 390 390 . 0.3486 0.3618 0.3584 -0.0170 0.0185  -
0.0116 1 .
2968 O     O     . GLY GLY GLY A A 390 390 . 0.3360 0.3587 0.3217 -0.0126 0.0250  -
0.0140 1 .
2969 N     N     . GLN GLN GLN A A 391 391 . 0.3322 0.3482 0.3404 -0.0179 0.0109  -
0.0134 1 .
2970 CA    CA    . GLN GLN GLN A A 391 391 . 0.3190 0.3386 0.3317 -0.0077 0.0006  -
0.0130 1 .
2971 CB    CB    . GLN GLN GLN A A 391 391 . 0.3261 0.3397 0.3328 -0.0133 0.0046  -
0.0088 1 .
2972 CG    CG    . GLN GLN GLN A A 391 391 . 0.2937 0.3011 0.3460 0.0108  -0.0178 -
0.0197 1 .
2973 CD    CD    . GLN GLN GLN A A 391 391 . 0.3007 0.3408 0.3727 -0.0035 -0.0066 -
0.0170 1 .
2974 OE1   OE1   . GLN GLN GLN A A 391 391 . 0.3007 0.3344 0.3907 -0.0019 0.0036  -
0.0376 1 .
2975 NE2   NE2   . GLN GLN GLN A A 391 391 . 0.1717 0.3514 0.3804 0.0639  -0.0435 -
0.0033 1 .
2976 C     C     . GLN GLN GLN A A 391 391 . 0.3095 0.3373 0.3265 -0.0053 -0.0050 -
0.0063 1 .
2977 O     O     . GLN GLN GLN A A 391 391 . 0.3292 0.3447 0.3301 -0.0159 -0.0193 -
0.0202 1 .
2978 N     N     . ILE ILE ILE A A 392 392 . 0.2992 0.3547 0.3257 0.0005  -0.0101 -
0.0202 1 .
2979 CA    CA    . ILE ILE ILE A A 392 392 . 0.2714 0.3349 0.2999 0.0014  -0.0170 -
0.0173 1 .
2980 CB    CB    . ILE ILE ILE A A 392 392 . 0.2832 0.3244 0.2848 0.0042  -0.0160 -
0.0235 1 .
2981 CG1   CG1   . ILE ILE ILE A A 392 392 . 0.2512 0.3652 0.2938 -0.0016 -0.0193 -
0.0378 1 .
2982 CD1   CD1   . ILE ILE ILE A A 392 392 . 0.2368 0.2970 0.2460 -0.0310 0.0438  -
0.1345 1 .
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2983 CG2   CG2   . ILE ILE ILE A A 392 392 . 0.1454 0.3251 0.2664 -0.0108 -0.0134 -
0.0566 1 .
2984 C     C     . ILE ILE ILE A A 392 392 . 0.2989 0.3356 0.3073 0.0103  -0.0172 -
0.0055 1 .
2985 O     O     . ILE ILE ILE A A 392 392 . 0.2963 0.3473 0.3119 -0.0020 -0.0265 -
0.0224 1 .
2986 N     N     . LYS LYS LYS A A 393 393 . 0.3083 0.3484 0.3112 0.0168  -0.0125
0.0017  1 .
2987 CA    CA    . LYS LYS LYS A A 393 393 . 0.2814 0.3375 0.3235 -0.0034 -0.0107 -
0.0024 1 .
2988 CB    CB    . LYS LYS LYS A A 393 393 . 0.2765 0.3234 0.3231 0.0057  -0.0273 -
0.0023 1 .
2989 CG    CG    . LYS LYS LYS A A 393 393 . 0.2021 0.3610 0.3493 -0.0201 -0.0235 -
0.0117 1 .
2990 CD    CD    . LYS LYS LYS A A 393 393 . 0.2519 0.3882 0.3798 0.0233  -0.0239 -
0.0302 1 .
2991 CE    CE    . LYS LYS LYS A A 393 393 . 0.1792 0.3043 0.3838 0.0029  -0.0079 -
0.0298 1 .
2992 NZ    NZ    . LYS LYS LYS A A 393 393 . 0.2837 0.3130 0.3636 0.0738  -0.0840 -
0.0054 1 .
2993 C     C     . LYS LYS LYS A A 393 393 . 0.2867 0.3363 0.3238 -0.0023 -0.0119 -
0.0021 1 .
2994 O     O     . LYS LYS LYS A A 393 393 . 0.2740 0.3635 0.3159 0.0025  -0.0264 -
0.0179 1 .
2995 N     N     . THR THR THR A A 394 394 . 0.2700 0.3317 0.3175 0.0001  -0.0039 -
0.0099 1 .
2996 CA    CA    . THR THR THR A A 394 394 . 0.2880 0.3345 0.3237 -0.0035 -0.0030
0.0017  1 .
2997 CB    CB    . THR THR THR A A 394 394 . 0.3048 0.3361 0.3323 -0.0126 0.0031  -
0.0018 1 .
2998 OG1   OG1   . THR THR THR A A 394 394 . 0.3545 0.3657 0.3696 -0.0455 -0.0154 -
0.0104 1 .
2999 CG2   CG2   . THR THR THR A A 394 394 . 0.1912 0.3320 0.2836 -0.0057 0.0257
0.0216  1 .
3000 C     C     . THR THR THR A A 394 394 . 0.2943 0.3292 0.3268 0.0007  -0.0002 -
0.0064 1 .
3001 O     O     . THR THR THR A A 394 394 . 0.2984 0.3445 0.3187 0.0079  -0.0082 -
0.0264 1 .
3002 N     N     . GLY GLY GLY A A 395 395 . 0.2772 0.3012 0.3166 -0.0046 -0.0042 -
0.0135 1 .
3003 CA    CA    . GLY GLY GLY A A 395 395 . 0.2683 0.2873 0.2905 0.0055  0.0022  -
0.0060 1 .
3004 C     C     . GLY GLY GLY A A 395 395 . 0.2652 0.2931 0.2981 -0.0041 0.0007  -
0.0030 1 .
3005 O     O     . GLY GLY GLY A A 395 395 . 0.2486 0.2668 0.2915 -0.0114 -0.0023 -
0.0017 1 .
3006 N     N     . ALA ALA ALA A A 396 396 . 0.2637 0.3021 0.3165 0.0081  0.0043  -
0.0103 1 .
3007 CA    CA    . ALA ALA ALA A A 396 396 . 0.2562 0.2908 0.3180 0.0047  -0.0006 -
0.0084 1 .
3008 CB    CB    . ALA ALA ALA A A 396 396 . 0.2544 0.3098 0.3263 0.0113  0.0117  -
0.0239 1 .
3009 C     C     . ALA ALA ALA A A 396 396 . 0.2786 0.3043 0.3213 -0.0001 -0.0025 -
0.0116 1 .
3010 O     O     . ALA ALA ALA A A 396 396 . 0.2488 0.2939 0.3419 -0.0174 -0.0265 -
0.0314 1 .
3011 N     N     . PRO PRO PRO A A 397 397 . 0.2804 0.2907 0.3116 0.0142  -0.0019
0.0039  1 .
3012 CA    CA    . PRO PRO PRO A A 397 397 . 0.2938 0.3050 0.3073 0.0094  -0.0080
0.0047  1 .
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3013 CB    CB    . PRO PRO PRO A A 397 397 . 0.2835 0.2899 0.3025 0.0223  -0.0166 -
0.0037 1 .
3014 CG    CG    . PRO PRO PRO A A 397 397 . 0.2885 0.2835 0.3143 0.0178  0.0059
0.0142  1 .
3015 CD    CD    . PRO PRO PRO A A 397 397 . 0.2632 0.2703 0.2949 0.0060  -0.0006 -
0.0007 1 .
3016 C     C     . PRO PRO PRO A A 397 397 . 0.3052 0.3160 0.3190 0.0048  -0.0007
0.0069  1 .
3017 O     O     . PRO PRO PRO A A 397 397 . 0.3070 0.3166 0.3072 0.0138  -0.0031
0.0127  1 .
3018 N     N     . CYS CYS CYS A A 398 398 . 0.3044 0.3376 0.3276 0.0004  0.0174
0.0006  1 .
3019 CA    CA    . CYS CYS CYS A A 398 398 . 0.3115 0.3382 0.3320 -0.0147 0.0162
0.0102  1 .
3020 CB    CB    . CYS CYS CYS A A 398 398 . 0.3097 0.3563 0.3470 -0.0142 0.0224
0.0090  1 .
3021 SG    SG    . CYS CYS CYS A A 398 398 . 0.3404 0.4075 0.3704 -0.0485 0.0452
0.0238  1 .
3022 C     C     . CYS CYS CYS A A 398 398 . 0.3031 0.3330 0.3158 -0.0144 0.0047
0.0042  1 .
3023 O     O     . CYS CYS CYS A A 398 398 . 0.3343 0.3442 0.3273 -0.0171 -0.0003
0.0062  1 .
3024 N     N     . ARG ARG ARG A A 399 399 . 0.2775 0.3242 0.3044 -0.0169 0.0127
0.0118  1 .
3025 CA    CA    . ARG ARG ARG A A 399 399 . 0.2608 0.2952 0.2804 -0.0077 0.0065
0.0074  1 .
3026 CB    CB    . ARG ARG ARG A A 399 399 . 0.2482 0.2879 0.2839 -0.0116 0.0123
0.0111  1 .
3027 CG    CG    . ARG ARG ARG A A 399 399 . 0.2594 0.2771 0.3004 -0.0155 0.0142
0.0172  1 .
3028 CD    CD    . ARG ARG ARG A A 399 399 . 0.2278 0.2506 0.2976 -0.0033 0.0059
0.0121  1 .
3029 NE    NE    . ARG ARG ARG A A 399 399 . 0.2326 0.2901 0.2627 -0.0059 0.0367  -
0.0280 1 .
3030 CZ    CZ    . ARG ARG ARG A A 399 399 . 0.2684 0.2740 0.3022 0.0022  0.0136  -
0.0175 1 .
3031 NH1   NH1   . ARG ARG ARG A A 399 399 . 0.2643 0.2733 0.2727 -0.0142 0.0254  -
0.0031 1 .
3032 NH2   NH2   . ARG ARG ARG A A 399 399 . 0.2863 0.2831 0.2605 -0.0364 0.0147  -
0.0358 1 .
3033 C     C     . ARG ARG ARG A A 399 399 . 0.2694 0.2941 0.2858 -0.0001 0.0075
0.0029  1 .
3034 O     O     . ARG ARG ARG A A 399 399 . 0.2617 0.3269 0.2842 -0.0057 0.0033  -
0.0018 1 .
3035 N     N     . SER SER SER A A 400 400 . 0.2814 0.2905 0.2795 -0.0123 0.0045  -
0.0057 1 .
3036 CA    CA    . SER SER SER A A 400 400 . 0.2856 0.3229 0.2942 0.0033  0.0102
0.0052  1 .
3037 CB    CB    . SER SER SER A A 400 400 . 0.3105 0.3229 0.2957 0.0039  0.0154
0.0070  1 .
3038 OG    OG    . SER SER SER A A 400 400 . 0.3306 0.2794 0.2850 0.0188  0.0341
0.0389  1 .
3039 C     C     . SER SER SER A A 400 400 . 0.2865 0.3346 0.3056 -0.0047 0.0115
0.0066  1 .
3040 O     O     . SER SER SER A A 400 400 . 0.2797 0.3950 0.3072 0.0017  0.0152
0.0066  1 .
3041 N     N     . GLU GLU GLU A A 401 401 . 0.2810 0.3280 0.2876 0.0020  0.0130
0.0051  1 .
3042 CA    CA    . GLU GLU GLU A A 401 401 . 0.2617 0.3134 0.2861 -0.0068 0.0038  -
0.0073 1 .
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3043 CB    CB    . GLU GLU GLU A A 401 401 . 0.2795 0.3054 0.2791 -0.0149 0.0007  -
0.0215 1 .
3044 CG    CG    . GLU GLU GLU A A 401 401 . 0.2615 0.3303 0.3209 -0.0171 -0.0012
0.0002  1 .
3045 CD    CD    . GLU GLU GLU A A 401 401 . 0.2835 0.3053 0.3374 -0.0005 -0.0080 -
0.0006 1 .
3046 OE1   OE1   . GLU GLU GLU A A 401 401 . 0.3143 0.2166 0.3443 0.0332  -0.0142 -
0.0020 1 .
3047 OE2   OE2   . GLU GLU GLU A A 401 401 . 0.3096 0.2684 0.3885 -0.0233 0.0242  -
0.0418 1 .
3048 C     C     . GLU GLU GLU A A 401 401 . 0.2742 0.3089 0.2897 -0.0007 0.0106  -
0.0095 1 .
3049 O     O     . GLU GLU GLU A A 401 401 . 0.2381 0.3094 0.2569 0.0254  -0.0039
0.0024  1 .
3050 N     N     . ARG ARG ARG A A 402 402 . 0.2817 0.3278 0.3010 -0.0028 0.0137  -
0.0259 1 .
3051 CA    CA    . ARG ARG ARG A A 402 402 . 0.2735 0.3234 0.2802 -0.0025 0.0132  -
0.0211 1 .
3052 CB    CB    . ARG ARG ARG A A 402 402 . 0.2837 0.3208 0.2809 -0.0172 0.0213  -
0.0191 1 .
3053 CG    CG    . ARG ARG ARG A A 402 402 . 0.3009 0.3278 0.2949 -0.0036 0.0276  -
0.0071 1 .
3054 CD    CD    . ARG ARG ARG A A 402 402 . 0.3947 0.3622 0.2887 -0.0035 0.0191
0.0349  1 .
3055 NE    NE    . ARG ARG ARG A A 402 402 . 0.3852 0.3896 0.3397 0.0072  0.0062
0.0432  1 .
3056 CZ    CZ    . ARG ARG ARG A A 402 402 . 0.3272 0.3692 0.3582 -0.0091 0.0152
0.0338  1 .
3057 NH1   NH1   . ARG ARG ARG A A 402 402 . 0.3103 0.4104 0.3781 -0.0213 0.0049
0.0427  1 .
3058 NH2   NH2   . ARG ARG ARG A A 402 402 . 0.3778 0.3330 0.3298 -0.0188 0.0206
0.0051  1 .
3059 C     C     . ARG ARG ARG A A 402 402 . 0.2598 0.3098 0.2725 -0.0015 0.0119  -
0.0088 1 .
3060 O     O     . ARG ARG ARG A A 402 402 . 0.2166 0.3000 0.2630 0.0049  0.0237
0.0047  1 .
3061 N     N     . LEU LEU LEU A A 403 403 . 0.2618 0.2849 0.2695 -0.0024 0.0167  -
0.0049 1 .
3062 CA    CA    . LEU LEU LEU A A 403 403 . 0.2408 0.2707 0.2552 -0.0019 0.0234  -
0.0058 1 .
3063 CB    CB    . LEU LEU LEU A A 403 403 . 0.2561 0.2780 0.2581 0.0015  0.0295  -
0.0305 1 .
3064 CG    CG    . LEU LEU LEU A A 403 403 . 0.2252 0.2616 0.2498 0.0011  0.0406  -
0.0175 1 .
3065 CD1   CD1   . LEU LEU LEU A A 403 403 . 0.2025 0.2804 0.2805 0.0220  -0.0314 -
0.0059 1 .
3066 CD2   CD2   . LEU LEU LEU A A 403 403 . 0.2140 0.3943 0.2379 -0.0087 0.0120
0.0073  1 .
3067 C     C     . LEU LEU LEU A A 403 403 . 0.2450 0.2735 0.2635 -0.0077 0.0095  -
0.0099 1 .
3068 O     O     . LEU LEU LEU A A 403 403 . 0.2636 0.2987 0.2753 -0.0373 0.0122
0.0090  1 .
3069 N     N     . ALA ALA ALA A A 404 404 . 0.2294 0.2761 0.2817 -0.0072 0.0121  -
0.0021 1 .
3070 CA    CA    . ALA ALA ALA A A 404 404 . 0.2401 0.2766 0.2618 -0.0142 0.0127
0.0019  1 .
3071 CB    CB    . ALA ALA ALA A A 404 404 . 0.1791 0.2557 0.2692 -0.0189 0.0358  -
0.0015 1 .
3072 C     C     . ALA ALA ALA A A 404 404 . 0.2440 0.2876 0.2827 -0.0089 0.0144
0.0030  1 .
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3073 O     O     . ALA ALA ALA A A 404 404 . 0.1728 0.2781 0.2687 -0.0027 0.0306  -
0.0030 1 .
3074 N     N     . LYS LYS LYS A A 405 405 . 0.2317 0.2795 0.2453 0.0039  -0.0162 -
0.0031 1 .
3075 CA    CA    . LYS LYS LYS A A 405 405 . 0.2637 0.3045 0.2835 0.0018  -0.0018 -
0.0029 1 .
3076 CB    CB    . LYS LYS LYS A A 405 405 . 0.2579 0.2952 0.2643 0.0186  -0.0083
0.0106  1 .
3077 CG    CG    . LYS LYS LYS A A 405 405 . 0.3263 0.3080 0.2861 0.0118  -0.0016
0.0029  1 .
3078 CD    CD    . LYS LYS LYS A A 405 405 . 0.3760 0.3446 0.2921 0.0335  0.0010
0.0012  1 .
3079 CE    CE    . LYS LYS LYS A A 405 405 . 0.3045 0.3578 0.3120 0.0105  0.0281  -
0.0368 1 .
3080 NZ    NZ    . LYS LYS LYS A A 405 405 . 0.3662 0.3924 0.2605 0.0443  0.0030  -
0.0353 1 .
3081 C     C     . LYS LYS LYS A A 405 405 . 0.2581 0.3081 0.2823 0.0004  0.0106  -
0.0035 1 .
3082 O     O     . LYS LYS LYS A A 405 405 . 0.2162 0.3466 0.2647 -0.0116 0.0171  -
0.0013 1 .
3083 N     N     . TYR TYR TYR A A 406 406 . 0.2487 0.3049 0.2827 -0.0009 0.0053  -
0.0118 1 .
3084 CA    CA    . TYR TYR TYR A A 406 406 . 0.2306 0.2966 0.2990 0.0023  0.0015  -
0.0051 1 .
3085 CB    CB    . TYR TYR TYR A A 406 406 . 0.2230 0.2831 0.2912 -0.0100 -0.0064
0.0073  1 .
3086 CG    CG    . TYR TYR TYR A A 406 406 . 0.1787 0.2377 0.2693 0.0082  -0.0194 -
0.0014 1 .
3087 CD1   CD1   . TYR TYR TYR A A 406 406 . 0.1120 0.1545 0.2793 -0.0175 -0.0157
0.0319  1 .
3088 CE1   CE1   . TYR TYR TYR A A 406 406 . 0.1924 0.1979 0.3201 0.0158  0.0000
0.0004  1 .
3089 CZ    CZ    . TYR TYR TYR A A 406 406 . 0.1537 0.2278 0.2511 0.0008  -0.0196 -
0.0154 1 .
3090 OH    OH    . TYR TYR TYR A A 406 406 . 0.2448 0.2891 0.2825 -0.0086 -0.0099 -
0.0109 1 .
3091 CE2   CE2   . TYR TYR TYR A A 406 406 . 0.1671 0.1678 0.2527 0.0206  -0.0224
0.0101  1 .
3092 CD2   CD2   . TYR TYR TYR A A 406 406 . 0.1449 0.1963 0.2582 0.0015  -0.0419 -
0.0193 1 .
3093 C     C     . TYR TYR TYR A A 406 406 . 0.2257 0.3149 0.2913 0.0073  0.0073  -
0.0052 1 .
3094 O     O     . TYR TYR TYR A A 406 406 . 0.1852 0.3365 0.3295 0.0133  0.0133  -
0.0128 1 .
3095 N     N     . ASN ASN ASN A A 407 407 . 0.2162 0.2928 0.2795 -0.0023 -0.0020 -
0.0105 1 .
3096 CA    CA    . ASN ASN ASN A A 407 407 . 0.2557 0.2908 0.2853 0.0159  0.0145
0.0014  1 .
3097 CB    CB    . ASN ASN ASN A A 407 407 . 0.2417 0.2848 0.2715 0.0235  0.0239  -
0.0069 1 .
3098 CG    CG    . ASN ASN ASN A A 407 407 . 0.2764 0.3058 0.2725 0.0174  0.0296  -
0.0094 1 .
3099 OD1   OD1   . ASN ASN ASN A A 407 407 . 0.2018 0.3262 0.3511 0.0178  0.0681
0.0014  1 .
3100 ND2   ND2   . ASN ASN ASN A A 407 407 . 0.2636 0.3056 0.2504 0.0347  0.0072  -
0.0469 1 .
3101 C     C     . ASN ASN ASN A A 407 407 . 0.2565 0.2920 0.2803 0.0176  0.0141
0.0074  1 .
3102 O     O     . ASN ASN ASN A A 407 407 . 0.3119 0.2792 0.2941 0.0332  0.0567  -
0.0066 1 .
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3103 N     N     . GLN GLN GLN A A 408 408 . 0.2481 0.2806 0.2948 0.0116  0.0155  -
0.0186 1 .
3104 CA    CA    . GLN GLN GLN A A 408 408 . 0.2843 0.2967 0.2827 0.0038  0.0095  -
0.0061 1 .
3105 CB    CB    . GLN GLN GLN A A 408 408 . 0.2887 0.2819 0.2395 0.0113  0.0060  -
0.0192 1 .
3106 CG    CG    . GLN GLN GLN A A 408 408 . 0.2293 0.2719 0.2635 -0.0385 0.0033  -
0.0373 1 .
3107 CD    CD    . GLN GLN GLN A A 408 408 . 0.3058 0.3226 0.3270 -0.0303 -0.0114
0.0356  1 .
3108 OE1   OE1   . GLN GLN GLN A A 408 408 . 0.3792 0.3782 0.3316 0.0026  -0.0518
0.0557  1 .
3109 NE2   NE2   . GLN GLN GLN A A 408 408 . 0.1654 0.3387 0.3782 -0.1090 0.0574
0.0310  1 .
3110 C     C     . GLN GLN GLN A A 408 408 . 0.2903 0.3111 0.2907 -0.0006 0.0022  -
0.0143 1 .
3111 O     O     . GLN GLN GLN A A 408 408 . 0.2544 0.3395 0.3092 0.0026  0.0007  -
0.0156 1 .
3112 N     N     . LEU LEU LEU A A 409 409 . 0.2653 0.3152 0.3017 -0.0095 0.0099  -
0.0049 1 .
3113 CA    CA    . LEU LEU LEU A A 409 409 . 0.2980 0.3326 0.3204 -0.0110 0.0073
0.0067  1 .
3114 CB    CB    . LEU LEU LEU A A 409 409 . 0.2710 0.3281 0.2968 0.0038  -0.0064
0.0104  1 .
3115 CG    CG    . LEU LEU LEU A A 409 409 . 0.2964 0.3149 0.3037 -0.0115 -0.0065 -
0.0092 1 .
3116 CD1   CD1   . LEU LEU LEU A A 409 409 . 0.2756 0.2999 0.3461 0.0617  0.0307  -
0.0231 1 .
3117 CD2   CD2   . LEU LEU LEU A A 409 409 . 0.1388 0.3008 0.2681 0.0062  -0.0307
0.0106  1 .
3118 C     C     . LEU LEU LEU A A 409 409 . 0.3026 0.3424 0.3334 0.0001  0.0087
0.0099  1 .
3119 O     O     . LEU LEU LEU A A 409 409 . 0.3147 0.3530 0.3332 0.0038  0.0108
0.0088  1 .
3120 N     N     . MET MET MET A A 410 410 . 0.3021 0.3505 0.3621 -0.0133 0.0016
0.0103  1 .
3121 CA    CA    . MET MET MET A A 410 410 . 0.3220 0.3452 0.3637 -0.0120 0.0092
0.0003  1 .
3122 CB    CB    . MET MET MET A A 410 410 . 0.3472 0.3729 0.3645 -0.0232 0.0023  -
0.0099 1 .
3123 CG    CG    . MET MET MET A A 410 410 . 0.3323 0.3711 0.4190 -0.0053 0.0337
0.0187  1 .
3124 SD    SD    . MET MET MET A A 410 410 . 0.3856 0.3975 0.4581 0.0350  0.0376
0.0477  1 .
3125 CE    CE    . MET MET MET A A 410 410 . 0.3766 0.3167 0.3645 -0.0077 0.0513
0.1067  1 .
3126 C     C     . MET MET MET A A 410 410 . 0.3227 0.3621 0.3658 -0.0027 0.0120  -
0.0038 1 .
3127 O     O     . MET MET MET A A 410 410 . 0.3188 0.3722 0.3837 -0.0132 0.0115
0.0180  1 .
3128 N     N     . ARG ARG ARG A A 411 411 . 0.3190 0.3769 0.3653 0.0010  0.0129  -
0.0012 1 .
3129 CA    CA    . ARG ARG ARG A A 411 411 . 0.3173 0.3744 0.3614 -0.0010 0.0166
0.0067  1 .
3130 CB    CB    . ARG ARG ARG A A 411 411 . 0.2999 0.3775 0.3563 0.0020  0.0227
0.0063  1 .
3131 CG    CG    . ARG ARG ARG A A 411 411 . 0.2891 0.3457 0.3517 -0.0046 0.0275
0.0384  1 .
3132 CD    CD    . ARG ARG ARG A A 411 411 . 0.2192 0.3405 0.3317 0.0227  0.0139
0.0418  1 .
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3133 NE    NE    . ARG ARG ARG A A 411 411 . 0.3139 0.3991 0.4159 0.0483  0.0349
0.0270  1 .
3134 CZ    CZ    . ARG ARG ARG A A 411 411 . 0.3492 0.4159 0.4335 0.0706  0.0406
0.0091  1 .
3135 NH1   NH1   . ARG ARG ARG A A 411 411 . 0.3001 0.4458 0.4674 0.0774  0.0223
0.0211  1 .
3136 NH2   NH2   . ARG ARG ARG A A 411 411 . 0.3321 0.4319 0.4870 0.0602  0.0383  -
0.0089 1 .
3137 C     C     . ARG ARG ARG A A 411 411 . 0.3382 0.3897 0.3836 0.0078  0.0125
0.0078  1 .
3138 O     O     . ARG ARG ARG A A 411 411 . 0.2895 0.3756 0.3835 0.0198  0.0292  -
0.0035 1 .
3139 N     N     . ILE ILE ILE A A 412 412 . 0.3391 0.3905 0.3875 0.0203  0.0043
0.0095  1 .
3140 CA    CA    . ILE ILE ILE A A 412 412 . 0.3520 0.3976 0.3860 0.0073  0.0122
0.0085  1 .
3141 CB    CB    . ILE ILE ILE A A 412 412 . 0.3444 0.3863 0.3716 0.0100  0.0160
0.0081  1 .
3142 CG1   CG1   . ILE ILE ILE A A 412 412 . 0.3299 0.3666 0.3566 0.0200  0.0133
0.0151  1 .
3143 CD1   CD1   . ILE ILE ILE A A 412 412 . 0.3752 0.3741 0.3056 0.0741  0.0775  -
0.0068 1 .
3144 CG2   CG2   . ILE ILE ILE A A 412 412 . 0.3121 0.3955 0.3822 -0.0087 0.0059
0.0264  1 .
3145 C     C     . ILE ILE ILE A A 412 412 . 0.3759 0.4132 0.4133 0.0048  0.0155
0.0002  1 .
3146 O     O     . ILE ILE ILE A A 412 412 . 0.3973 0.4372 0.4381 -0.0026 0.0211
0.0019  1 .
3147 N     N     . GLU GLU GLU A A 413 413 . 0.3862 0.4246 0.4223 0.0093  0.0150
0.0057  1 .
3148 CA    CA    . GLU GLU GLU A A 413 413 . 0.3978 0.4367 0.4286 0.0075  0.0060
0.0016  1 .
3149 CB    CB    . GLU GLU GLU A A 413 413 . 0.4072 0.4343 0.4191 0.0085  0.0012
0.0113  1 .
3150 CG    CG    . GLU GLU GLU A A 413 413 . 0.3972 0.4299 0.3919 0.0195  -0.0175
0.0120  1 .
3151 CD    CD    . GLU GLU GLU A A 413 413 . 0.4112 0.4480 0.3931 0.0013  -0.0102
0.0269  1 .
3152 OE1   OE1   . GLU GLU GLU A A 413 413 . 0.4168 0.4049 0.3952 -0.0014 0.0318
0.0175  1 .
3153 OE2   OE2   . GLU GLU GLU A A 413 413 . 0.3746 0.4891 0.3703 -0.0080 -0.0142
0.0004  1 .
3154 C     C     . GLU GLU GLU A A 413 413 . 0.4038 0.4543 0.4418 0.0085  0.0088  -
0.0016 1 .
3155 O     O     . GLU GLU GLU A A 413 413 . 0.3679 0.4793 0.4623 0.0012  0.0108  -
0.0055 1 .
3156 N     N     . GLU GLU GLU A A 414 414 . 0.4177 0.4653 0.4327 0.0096  0.0097  -
0.0088 1 .
3157 CA    CA    . GLU GLU GLU A A 414 414 . 0.4581 0.4893 0.4647 0.0145  0.0096  -
0.0066 1 .
3158 CB    CB    . GLU GLU GLU A A 414 414 . 0.4608 0.4972 0.4577 0.0202  0.0078  -
0.0143 1 .
3159 CG    CG    . GLU GLU GLU A A 414 414 . 0.5068 0.5522 0.4829 0.0295  -0.0012 -
0.0065 1 .
3160 CD    CD    . GLU GLU GLU A A 414 414 . 0.5277 0.5940 0.5038 0.0291  0.0143
0.0136  1 .
3161 OE1   OE1   . GLU GLU GLU A A 414 414 . 0.4687 0.5973 0.4891 0.0850  0.0773  -
0.0028 1 .
3162 OE2   OE2   . GLU GLU GLU A A 414 414 . 0.5939 0.7097 0.4796 0.0243  -0.0116
0.0181  1 .
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3163 C     C     . GLU GLU GLU A A 414 414 . 0.4678 0.5067 0.4785 0.0143  0.0105  -
0.0089 1 .
3164 O     O     . GLU GLU GLU A A 414 414 . 0.4613 0.5242 0.4949 0.0255  0.0203  -
0.0111 1 .
3165 N     N     . GLU GLU GLU A A 415 415 . 0.4876 0.5064 0.4797 0.0091  0.0109  -
0.0022 1 .
3166 CA    CA    . GLU GLU GLU A A 415 415 . 0.4975 0.5266 0.4976 -0.0022 0.0086
0.0017  1 .
3167 CB    CB    . GLU GLU GLU A A 415 415 . 0.5038 0.5450 0.5054 0.0106  0.0123
0.0005  1 .
3168 CG    CG    . GLU GLU GLU A A 415 415 . 0.5645 0.6162 0.5499 -0.0188 0.0083
0.0237  1 .
3169 CD    CD    . GLU GLU GLU A A 415 415 . 0.6538 0.7516 0.6319 -0.0048 -0.0222
0.0397  1 .
3170 OE1   OE1   . GLU GLU GLU A A 415 415 . 0.7041 0.7895 0.6483 -0.0150 -0.0210
0.0519  1 .
3171 OE2   OE2   . GLU GLU GLU A A 415 415 . 0.7266 0.8239 0.6609 -0.0067 0.0049
0.0588  1 .
3172 C     C     . GLU GLU GLU A A 415 415 . 0.4996 0.5242 0.5041 -0.0009 0.0100  -
0.0047 1 .
3173 O     O     . GLU GLU GLU A A 415 415 . 0.5022 0.5361 0.5106 -0.0087 0.0211  -
0.0055 1 .
3174 N     N     . LEU LEU LEU A A 416 416 . 0.4929 0.5124 0.4907 -0.0052 0.0045  -
0.0019 1 .
3175 CA    CA    . LEU LEU LEU A A 416 416 . 0.4998 0.5240 0.4977 0.0014  0.0100
0.0015  1 .
3176 CB    CB    . LEU LEU LEU A A 416 416 . 0.4899 0.5006 0.4680 0.0035  0.0168  -
0.0035 1 .
3177 CG    CG    . LEU LEU LEU A A 416 416 . 0.4559 0.4867 0.4206 -0.0004 0.0291
0.0207  1 .
3178 CD1   CD1   . LEU LEU LEU A A 416 416 . 0.4153 0.4788 0.3090 0.0042  0.0744
0.0264  1 .
3179 CD2   CD2   . LEU LEU LEU A A 416 416 . 0.4431 0.4316 0.4075 -0.0145 0.0961  -
0.0630 1 .
3180 C     C     . LEU LEU LEU A A 416 416 . 0.5213 0.5423 0.5166 0.0014  0.0056  -
0.0022 1 .
3181 O     O     . LEU LEU LEU A A 416 416 . 0.5138 0.5655 0.5014 0.0028  0.0076  -
0.0001 1 .
3182 N     N     . GLY GLY GLY A A 417 417 . 0.5475 0.5630 0.5395 0.0018  -0.0007 -
0.0027 1 .
3183 CA    CA    . GLY GLY GLY A A 417 417 . 0.5659 0.5883 0.5634 0.0059  0.0002  -
0.0074 1 .
3184 C     C     . GLY GLY GLY A A 417 417 . 0.5896 0.6165 0.5751 0.0039  -0.0005 -
0.0091 1 .
3185 O     O     . GLY GLY GLY A A 417 417 . 0.5941 0.6311 0.5573 0.0027  -0.0005 -
0.0065 1 .
3186 N     N     . ASP ASP ASP A A 418 418 . 0.6036 0.6285 0.6018 0.0051  0.0031  -
0.0091 1 .
3187 CA    CA    . ASP ASP ASP A A 418 418 . 0.6234 0.6328 0.6198 0.0102  -0.0005 -
0.0082 1 .
3188 CB    CB    . ASP ASP ASP A A 418 418 . 0.6572 0.6528 0.6496 0.0145  -0.0033 -
0.0118 1 .
3189 CG    CG    . ASP ASP ASP A A 418 418 . 0.7168 0.7036 0.7289 0.0272  -0.0334 -
0.0206 1 .
3190 OD1   OD1   . ASP ASP ASP A A 418 418 . 0.7292 0.7986 0.8103 0.0467  -0.0681 -
0.0031 1 .
3191 OD2   OD2   . ASP ASP ASP A A 418 418 . 0.7688 0.7535 0.8244 0.0890  -0.0561 -
0.0090 1 .
3192 C     C     . ASP ASP ASP A A 418 418 . 0.6150 0.6214 0.6074 0.0031  0.0079  -
0.0048 1 .
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3193 O     O     . ASP ASP ASP A A 418 418 . 0.6196 0.6164 0.6055 0.0005  0.0106  -
0.0068 1 .
3194 N     N     . GLU GLU GLU A A 419 419 . 0.5917 0.6077 0.5888 -0.0015 0.0104  -
0.0021 1 .
3195 CA    CA    . GLU GLU GLU A A 419 419 . 0.5792 0.5953 0.5736 -0.0050 0.0092
0.0032  1 .
3196 CB    CB    . GLU GLU GLU A A 419 419 . 0.6054 0.6137 0.5876 -0.0055 0.0006
0.0025  1 .
3197 CG    CG    . GLU GLU GLU A A 419 419 . 0.6567 0.6926 0.6844 -0.0044 -0.0006
0.0105  1 .
3198 CD    CD    . GLU GLU GLU A A 419 419 . 0.7658 0.7509 0.7813 -0.0067 -0.0175 -
0.0138 1 .
3199 OE1   OE1   . GLU GLU GLU A A 419 419 . 0.7802 0.7899 0.7964 0.0140  -0.0344
0.0092  1 .
3200 OE2   OE2   . GLU GLU GLU A A 419 419 . 0.8382 0.7785 0.8527 0.0153  0.0269
0.0091  1 .
3201 C     C     . GLU GLU GLU A A 419 419 . 0.5561 0.5676 0.5449 0.0002  0.0076
0.0035  1 .
3202 O     O     . GLU GLU GLU A A 419 419 . 0.5347 0.5661 0.5224 -0.0024 0.0125
0.0103  1 .
3203 N     N     . ALA ALA ALA A A 420 420 . 0.5177 0.5354 0.5228 -0.0060 0.0140
0.0006  1 .
3204 CA    CA    . ALA ALA ALA A A 420 420 . 0.5146 0.5009 0.4964 0.0004  0.0117  -
0.0047 1 .
3205 CB    CB    . ALA ALA ALA A A 420 420 . 0.5073 0.4857 0.4882 0.0057  0.0197  -
0.0092 1 .
3206 C     C     . ALA ALA ALA A A 420 420 . 0.4951 0.4888 0.4846 -0.0067 0.0134  -
0.0043 1 .
3207 O     O     . ALA ALA ALA A A 420 420 . 0.5233 0.5133 0.4958 -0.0138 0.0110
0.0002  1 .
3208 N     N     . ARG ARG ARG A A 421 421 . 0.4768 0.4675 0.4584 -0.0017 0.0117  -
0.0031 1 .
3209 CA    CA    . ARG ARG ARG A A 421 421 . 0.4726 0.4800 0.4488 -0.0060 0.0122  -
0.0041 1 .
3210 CB    CB    . ARG ARG ARG A A 421 421 . 0.4841 0.4913 0.4707 -0.0094 0.0108  -
0.0023 1 .
3211 CG    CG    . ARG ARG ARG A A 421 421 . 0.5371 0.5729 0.5178 0.0045  0.0215  -
0.0015 1 .
3212 CD    CD    . ARG ARG ARG A A 421 421 . 0.6243 0.6284 0.5970 0.0281  0.0127  -
0.0342 1 .
3213 NE    NE    . ARG ARG ARG A A 421 421 . 0.6780 0.7252 0.6012 0.0243  0.0403  -
0.0203 1 .
3214 CZ    CZ    . ARG ARG ARG A A 421 421 . 0.6911 0.7647 0.6583 0.0268  0.0312  -
0.0214 1 .
3215 NH1   NH1   . ARG ARG ARG A A 421 421 . 0.7303 0.7692 0.7009 0.0210  0.0229  -
0.0042 1 .
3216 NH2   NH2   . ARG ARG ARG A A 421 421 . 0.6916 0.7877 0.6282 0.0208  0.0588  -
0.0443 1 .
3217 C     C     . ARG ARG ARG A A 421 421 . 0.4654 0.4562 0.4208 -0.0149 0.0099  -
0.0028 1 .
3218 O     O     . ARG ARG ARG A A 421 421 . 0.4874 0.4783 0.4316 -0.0115 0.0258
0.0124  1 .
3219 N     N     . PHE PHE PHE A A 422 422 . 0.4258 0.4336 0.3991 -0.0140 0.0142  -
0.0057 1 .
3220 CA    CA    . PHE PHE PHE A A 422 422 . 0.3954 0.4072 0.3772 0.0058  0.0134  -
0.0234 1 .
3221 CB    CB    . PHE PHE PHE A A 422 422 . 0.3774 0.3833 0.3738 0.0131  0.0253  -
0.0229 1 .
3222 CG    CG    . PHE PHE PHE A A 422 422 . 0.3774 0.3757 0.3706 -0.0012 0.0241  -
0.0255 1 .
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3223 CD1   CD1   . PHE PHE PHE A A 422 422 . 0.3037 0.3169 0.3251 0.0158  0.0233  -
0.0076 1 .
3224 CE1   CE1   . PHE PHE PHE A A 422 422 . 0.3450 0.2621 0.3383 -0.0166 0.0417  -
0.0028 1 .
3225 CZ    CZ    . PHE PHE PHE A A 422 422 . 0.2885 0.4026 0.2926 0.0147  0.0096  -
0.0139 1 .
3226 CE2   CE2   . PHE PHE PHE A A 422 422 . 0.3412 0.3983 0.3647 0.0400  0.0338  -
0.0334 1 .
3227 CD2   CD2   . PHE PHE PHE A A 422 422 . 0.3350 0.3940 0.3212 0.0118  0.0353  -
0.0318 1 .
3228 C     C     . PHE PHE PHE A A 422 422 . 0.3755 0.3954 0.3743 0.0120  0.0088  -
0.0244 1 .
3229 O     O     . PHE PHE PHE A A 422 422 . 0.3673 0.4091 0.3911 0.0204  0.0176  -
0.0374 1 .
3230 N     N     . ALA ALA ALA A A 423 423 . 0.3499 0.3896 0.3619 0.0012  -0.0006 -
0.0182 1 .
3231 CA    CA    . ALA ALA ALA A A 423 423 . 0.3485 0.3752 0.3434 0.0030  -0.0001 -
0.0166 1 .
3232 CB    CB    . ALA ALA ALA A A 423 423 . 0.3245 0.3742 0.3336 -0.0007 0.0195  -
0.0138 1 .
3233 C     C     . ALA ALA ALA A A 423 423 . 0.3170 0.3582 0.3419 -0.0085 0.0032  -
0.0087 1 .
3234 O     O     . ALA ALA ALA A A 423 423 . 0.2895 0.3386 0.3508 -0.0089 -0.0053 -
0.0207 1 .
3235 N     N     . GLY GLY GLY A A 424 424 . 0.3409 0.3736 0.3278 0.0059  -0.0106 -
0.0141 1 .
3236 CA    CA    . GLY GLY GLY A A 424 424 . 0.3545 0.3661 0.3305 -0.0051 -0.0142 -
0.0166 1 .
3237 C     C     . GLY GLY GLY A A 424 424 . 0.3759 0.3818 0.3379 0.0102  -0.0240 -
0.0266 1 .
3238 O     O     . GLY GLY GLY A A 424 424 . 0.4015 0.3710 0.3055 0.0123  -0.0255 -
0.0516 1 .
3239 N     N     . HIS HIS HIS A A 425 425 . 0.3856 0.3894 0.3412 0.0057  -0.0283 -
0.0319 1 .
3240 CA    CA    . HIS HIS HIS A A 425 425 . 0.3899 0.3771 0.3445 0.0024  -0.0213 -
0.0250 1 .
3241 CB    CB    . HIS HIS HIS A A 425 425 . 0.4130 0.3738 0.3287 -0.0074 -0.0217 -
0.0250 1 .
3242 CG    CG    . HIS HIS HIS A A 425 425 . 0.4310 0.3702 0.3562 -0.0129 -0.0037 -
0.0415 1 .
3243 ND1   ND1   . HIS HIS HIS A A 425 425 . 0.4354 0.4170 0.3893 0.0067  0.0092  -
0.0368 1 .
3244 CE1   CE1   . HIS HIS HIS A A 425 425 . 0.4509 0.4101 0.3608 -0.0044 0.0114  -
0.0207 1 .
3245 NE2   NE2   . HIS HIS HIS A A 425 425 . 0.4933 0.3925 0.3283 0.0078  0.0167  -
0.0347 1 .
3246 CD2   CD2   . HIS HIS HIS A A 425 425 . 0.4284 0.4081 0.3226 -0.0032 0.0180  -
0.0512 1 .
3247 C     C     . HIS HIS HIS A A 425 425 . 0.3675 0.3749 0.3254 0.0062  -0.0126 -
0.0227 1 .
3248 O     O     . HIS HIS HIS A A 425 425 . 0.2938 0.3868 0.3157 0.0241  -0.0139 -
0.0201 1 .
3249 N     N     . ASN ASN ASN A A 426 426 . 0.3484 0.3871 0.3400 -0.0068 -0.0080 -
0.0150 1 .
3250 CA    CA    . ASN ASN ASN A A 426 426 . 0.4013 0.4036 0.3681 -0.0022 -0.0021 -
0.0064 1 .
3251 CB    CB    . ASN ASN ASN A A 426 426 . 0.4133 0.4081 0.3697 -0.0126 0.0015  -
0.0076 1 .
3252 CG    CG    . ASN ASN ASN A A 426 426 . 0.4525 0.4277 0.3885 0.0177  -0.0107 -
0.0207 1 .
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3253 OD1   OD1   . ASN ASN ASN A A 426 426 . 0.5338 0.4633 0.3698 -0.0150 -0.0588 -
0.0432 1 .
3254 ND2   ND2   . ASN ASN ASN A A 426 426 . 0.4773 0.3950 0.3801 0.0579  -0.0634
0.0127  1 .
3255 C     C     . ASN ASN ASN A A 426 426 . 0.4050 0.4108 0.3969 -0.0029 -0.0059
0.0016  1 .
3256 O     O     . ASN ASN ASN A A 426 426 . 0.4465 0.4179 0.4105 -0.0016 -0.0165 -
0.0029 1 .
3257 N     N     . PHE PHE PHE A A 427 427 . 0.4070 0.4335 0.4100 0.0080  -0.0064 -
0.0096 1 .
3258 CA    CA    . PHE PHE PHE A A 427 427 . 0.4184 0.4357 0.4290 0.0006  -0.0067 -
0.0136 1 .
3259 CB    CB    . PHE PHE PHE A A 427 427 . 0.4200 0.4245 0.3905 0.0052  -0.0141 -
0.0159 1 .
3260 CG    CG    . PHE PHE PHE A A 427 427 . 0.4053 0.4352 0.4063 0.0098  0.0029  -
0.0176 1 .
3261 CD1   CD1   . PHE PHE PHE A A 427 427 . 0.3899 0.4049 0.3886 0.0040  -0.0182 -
0.0024 1 .
3262 CE1   CE1   . PHE PHE PHE A A 427 427 . 0.4143 0.3977 0.4284 -0.0054 0.0042
0.0150  1 .
3263 CZ    CZ    . PHE PHE PHE A A 427 427 . 0.4028 0.4282 0.4566 0.0047  -0.0081 -
0.0159 1 .
3264 CE2   CE2   . PHE PHE PHE A A 427 427 . 0.3935 0.4178 0.4285 0.0116  -0.0014 -
0.0306 1 .
3265 CD2   CD2   . PHE PHE PHE A A 427 427 . 0.4247 0.4496 0.4161 0.0154  -0.0297 -
0.0330 1 .
3266 C     C     . PHE PHE PHE A A 427 427 . 0.4556 0.4453 0.4560 -0.0032 0.0001  -
0.0136 1 .
3267 O     O     . PHE PHE PHE A A 427 427 . 0.4621 0.4704 0.4755 -0.0011 0.0113  -
0.0149 1 .
3268 N     N     . ARG ARG ARG A A 428 428 . 0.4775 0.4621 0.4645 0.0039  -0.0029 -
0.0055 1 .
3269 CA    CA    . ARG ARG ARG A A 428 428 . 0.5042 0.4808 0.4906 0.0033  0.0005  -
0.0087 1 .
3270 CB    CB    . ARG ARG ARG A A 428 428 . 0.4941 0.4726 0.4857 -0.0009 0.0005  -
0.0159 1 .
3271 CG    CG    . ARG ARG ARG A A 428 428 . 0.5137 0.4500 0.4805 0.0127  0.0030  -
0.0258 1 .
3272 CD    CD    . ARG ARG ARG A A 428 428 . 0.5494 0.4669 0.4813 0.0351  -0.0445 -
0.0174 1 .
3273 NE    NE    . ARG ARG ARG A A 428 428 . 0.5749 0.4612 0.5205 0.0455  -0.0266 -
0.0273 1 .
3274 CZ    CZ    . ARG ARG ARG A A 428 428 . 0.5393 0.5049 0.5696 0.0402  -0.0022
0.0003  1 .
3275 NH1   NH1   . ARG ARG ARG A A 428 428 . 0.5704 0.4937 0.6098 0.0614  0.0200
0.0582  1 .
3276 NH2   NH2   . ARG ARG ARG A A 428 428 . 0.5679 0.5522 0.5471 0.0420  0.0106
0.0139  1 .
3277 C     C     . ARG ARG ARG A A 428 428 . 0.5214 0.5043 0.5112 0.0011  -0.0018 -
0.0049 1 .
3278 O     O     . ARG ARG ARG A A 428 428 . 0.5394 0.5029 0.5363 0.0026  -0.0144 -
0.0051 1 .
3279 N     N     . ASN ASN ASN A A 429 429 . 0.5315 0.5191 0.5080 0.0090  0.0004  -
0.0068 1 .
3280 CA    CA    . ASN ASN ASN A A 429 429 . 0.5341 0.5342 0.5332 -0.0039 0.0068  -
0.0055 1 .
3281 CB    CB    . ASN ASN ASN A A 429 429 . 0.5477 0.5505 0.5249 -0.0011 0.0112  -
0.0062 1 .
3282 CG    CG    . ASN ASN ASN A A 429 429 . 0.5916 0.5812 0.5579 0.0148  0.0323  -
0.0136 1 .
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3283 OD1   OD1   . ASN ASN ASN A A 429 429 . 0.7086 0.5422 0.5292 0.0755  0.0202
0.0388  1 .
3284 ND2   ND2   . ASN ASN ASN A A 429 429 . 0.6513 0.6639 0.6079 0.0435  0.0418  -
0.0611 1 .
3285 C     C     . ASN ASN ASN A A 429 429 . 0.5234 0.5220 0.5293 -0.0088 0.0010  -
0.0030 1 .
3286 O     O     . ASN ASN ASN A A 429 429 . 0.5129 0.5272 0.5535 -0.0216 -0.0057 -
0.0021 1 .
3287 N     N     . PRO PRO PRO A A 430 430 . 0.5372 0.5233 0.5258 -0.0054 0.0017  -
0.0021 1 .
3288 CA    CA    . PRO PRO PRO A A 430 430 . 0.5390 0.5465 0.5354 -0.0020 0.0031  -
0.0091 1 .
3289 CB    CB    . PRO PRO PRO A A 430 430 . 0.5261 0.5501 0.5395 -0.0051 0.0046  -
0.0123 1 .
3290 CG    CG    . PRO PRO PRO A A 430 430 . 0.5310 0.5197 0.5104 -0.0058 0.0030  -
0.0221 1 .
3291 CD    CD    . PRO PRO PRO A A 430 430 . 0.5365 0.5186 0.5321 -0.0029 0.0037  -
0.0062 1 .
3292 C     C     . PRO PRO PRO A A 430 430 . 0.5665 0.5680 0.5461 -0.0004 0.0015  -
0.0081 1 .
3293 O     O     . PRO PRO PRO A A 430 430 . 0.5599 0.5708 0.5200 -0.0064 0.0094  -
0.0232 1 .
3294 N     N     . SER SER SER A A 431 431 . 0.5948 0.5982 0.5748 0.0002  0.0019  -
0.0067 1 .
3295 CA    CA    . SER SER SER A A 431 431 . 0.6154 0.6276 0.6098 -0.0043 0.0000
0.0005  1 .
3296 CB    CB    . SER SER SER A A 431 431 . 0.6205 0.6359 0.6184 -0.0090 -0.0087
0.0057  1 .
3297 OG    OG    . SER SER SER A A 431 431 . 0.6183 0.6872 0.6384 0.0158  -0.0134
0.0345  1 .
3298 C     C     . SER SER SER A A 431 431 . 0.6277 0.6400 0.6197 -0.0070 0.0048  -
0.0014 1 .
3299 O     O     . SER SER SER A A 431 431 . 0.6382 0.6588 0.6258 -0.0146 0.0110
0.0089  1 .
3300 N     N     . VAL VAL VAL A A 432 432 . 0.6366 0.6355 0.6146 -0.0102 0.0012  -
0.0093 1 .
3301 CA    CA    . VAL VAL VAL A A 432 432 . 0.6363 0.6284 0.6131 -0.0028 0.0008  -
0.0106 1 .
3302 CB    CB    . VAL VAL VAL A A 432 432 . 0.6396 0.6241 0.6053 -0.0052 0.0011  -
0.0187 1 .
3303 CG1   CG1   . VAL VAL VAL A A 432 432 . 0.6377 0.6458 0.6198 -0.0024 -0.0181 -
0.0230 1 .
3304 CG2   CG2   . VAL VAL VAL A A 432 432 . 0.6599 0.6083 0.5759 -0.0089 -0.0191 -
0.0251 1 .
3305 C     C     . VAL VAL VAL A A 432 432 . 0.6398 0.6236 0.6103 -0.0025 0.0069  -
0.0057 1 .
3306 O     O     . VAL VAL VAL A A 432 432 . 0.6556 0.6339 0.6096 0.0036  0.0081
0.0018  1 .
3307 N     N     . LEU LEU LEU A A 433 433 . 0.6285 0.6075 0.6025 -0.0084 0.0083  -
0.0117 1 .
3308 CA    CA    . LEU LEU LEU A A 433 433 . 0.6246 0.6044 0.6076 -0.0138 0.0100  -
0.0127 1 .
3309 CB    CB    . LEU LEU LEU A A 433 433 . 0.6233 0.6011 0.6022 -0.0125 0.0127  -
0.0195 1 .
3310 CG    CG    . LEU LEU LEU A A 433 433 . 0.6361 0.5644 0.5889 -0.0149 0.0156  -
0.0264 1 .
3311 CD1   CD1   . LEU LEU LEU A A 433 433 . 0.6672 0.5005 0.5603 -0.0077 0.0101  -
0.0626 1 .
3312 CD2   CD2   . LEU LEU LEU A A 433 433 . 0.6269 0.5487 0.5181 -0.0362 -0.0268 -
0.0422 1 .
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3313 C     C     . LEU LEU LEU A A 433 433 . 0.6239 0.6020 0.6113 -0.0250 0.0175  -
0.0090 1 .
3314 O     O     . LEU LEU LEU A A 433 433 . 0.6312 0.6134 0.6088 -0.0365 0.0227  -
0.0111 1 .
3315 G+2   G+2   . MG2 MG2 MG2 A . 601 601 . 0.0580 0.1607 0.2070 0.0464  0.0250  -
0.0064 1 .
3316 G+2   G+2   . MG2 MG2 MG2 A . 602 602 . 0.1428 0.1863 0.1711 -0.0481 -0.0831 -
0.0174 1 .
3317 O4P   O4P   . 2PG 2PG 2PG A . 603 603 . 0.2655 0.4248 0.3520 -0.0129 -0.0225 -
0.0608 1 .
3318 P     P     . 2PG 2PG 2PG A . 603 603 . 0.2974 0.3903 0.3824 0.0002  0.0123
0.0257  1 .
3319 O2P   O2P   . 2PG 2PG 2PG A . 603 603 . 0.2773 0.4011 0.3739 0.0705  0.0291
0.0127  1 .
3320 O3P   O3P   . 2PG 2PG 2PG A . 603 603 . 0.2382 0.4436 0.3787 0.0140  -0.0299
0.0194  1 .
3321 O1P   O1P   . 2PG 2PG 2PG A . 603 603 . 0.3311 0.4246 0.3904 -0.0496 -0.0032 -
0.0117 1 .
3322 C2    C2    . 2PG 2PG 2PG A . 603 603 . 0.4344 0.4547 0.4069 -0.0132 -0.0013 -
0.0167 1 .
3323 C1    C1    . 2PG 2PG 2PG A . 603 603 . 0.4003 0.4565 0.4074 -0.0235 0.0067  -
0.0408 1 .
3324 O2    O2    . 2PG 2PG 2PG A . 603 603 . 0.3627 0.5377 0.4399 -0.0185 0.0105  -
0.0484 1 .
3325 O1    O1    . 2PG 2PG 2PG A . 603 603 . 0.4031 0.4367 0.4029 -0.0032 -0.0061 -
0.0295 1 .
3326 C3    C3    . 2PG 2PG 2PG A . 603 603 . 0.4614 0.4657 0.4158 0.0086  -0.0110 -
0.0182 1 .
3327 O3    O3    . 2PG 2PG 2PG A . 603 603 . 0.6114 0.5209 0.4388 -0.0267 -0.0444
0.0632  1 .
3328 O     O     . HOH HOH HOH A . 604 604 . 0.1859 0.4411 0.3479 0.0420  0.0390  -
0.0710 1 .
3329 O     O     . HOH HOH HOH A . 605 605 . 0.2705 0.5031 0.2805 -0.0139 -0.1250
0.0251  1 .
3330 O     O     . HOH HOH HOH A . 606 606 . 0.2397 0.3674 0.3369 -0.0688 -0.0967
0.0391  1 .
3331 N     N     . SER SER SER B B 1   1   . 0.5638 0.6008 0.6138 -0.0089 -0.0181 -
0.0031 1 .
3332 CA    CA    . SER SER SER B B 1   1   . 0.5774 0.6153 0.6170 0.0019  -0.0142
0.0031  1 .
3333 CB    CB    . SER SER SER B B 1   1   . 0.5759 0.6252 0.6176 0.0033  -0.0131
0.0051  1 .
3334 OG    OG    . SER SER SER B B 1   1   . 0.5873 0.6676 0.6247 -0.0063 -0.0131
0.0163  1 .
3335 C     C     . SER SER SER B B 1   1   . 0.5664 0.6013 0.6199 0.0041  -0.0120
0.0036  1 .
3336 O     O     . SER SER SER B B 1   1   . 0.5682 0.6159 0.6357 0.0119  -0.0060
0.0035  1 .
3337 N     N     . ILE ILE ILE B B 2   2   . 0.5500 0.5793 0.6076 0.0065  -0.0108
0.0075  1 .
3338 CA    CA    . ILE ILE ILE B B 2   2   . 0.5590 0.5669 0.5879 0.0018  -0.0043
0.0035  1 .
3339 CB    CB    . ILE ILE ILE B B 2   2   . 0.5549 0.5521 0.5816 -0.0015 -0.0043
0.0032  1 .
3340 CG1   CG1   . ILE ILE ILE B B 2   2   . 0.5443 0.5566 0.5763 -0.0044 -0.0060
0.0159  1 .
3341 CD1   CD1   . ILE ILE ILE B B 2   2   . 0.5131 0.5224 0.5816 -0.0091 -0.0155 -
0.0066 1 .
3342 CG2   CG2   . ILE ILE ILE B B 2   2   . 0.5460 0.5465 0.5838 0.0025  -0.0097
0.0067  1 .
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3343 C     C     . ILE ILE ILE B B 2   2   . 0.5438 0.5568 0.5816 0.0027  0.0048
0.0046  1 .
3344 O     O     . ILE ILE ILE B B 2   2   . 0.5336 0.5513 0.5965 0.0040  0.0000
0.0092  1 .
3345 N     N     . GLN GLN GLN B B 3   3   . 0.5394 0.5571 0.5694 0.0036  0.0090
0.0059  1 .
3346 CA    CA    . GLN GLN GLN B B 3   3   . 0.5395 0.5574 0.5613 0.0049  0.0082
0.0079  1 .
3347 CB    CB    . GLN GLN GLN B B 3   3   . 0.5543 0.5721 0.5733 0.0083  0.0143
0.0113  1 .
3348 CG    CG    . GLN GLN GLN B B 3   3   . 0.6142 0.6129 0.6422 -0.0029 0.0218  -
0.0003 1 .
3349 CD    CD    . GLN GLN GLN B B 3   3   . 0.6846 0.6566 0.7396 0.0426  0.0513
0.0258  1 .
3350 OE1   OE1   . GLN GLN GLN B B 3   3   . 0.7140 0.6614 0.7882 0.0916  0.0784  -
0.0188 1 .
3351 NE2   NE2   . GLN GLN GLN B B 3   3   . 0.6810 0.7014 0.7981 0.0260  0.0689
0.0292  1 .
3352 C     C     . GLN GLN GLN B B 3   3   . 0.5293 0.5482 0.5411 0.0129  0.0090
0.0113  1 .
3353 O     O     . GLN GLN GLN B B 3   3   . 0.5031 0.5473 0.5180 0.0229  0.0205
0.0152  1 .
3354 N     N     . LYS LYS LYS B B 4   4   . 0.5257 0.5380 0.5299 0.0093  0.0111
0.0096  1 .
3355 CA    CA    . LYS LYS LYS B B 4   4   . 0.5094 0.5242 0.5257 0.0033  0.0098
0.0075  1 .
3356 CB    CB    . LYS LYS LYS B B 4   4   . 0.5115 0.5298 0.5338 0.0139  0.0146
0.0062  1 .
3357 CG    CG    . LYS LYS LYS B B 4   4   . 0.5266 0.5510 0.5817 -0.0080 0.0143  -
0.0074 1 .
3358 CD    CD    . LYS LYS LYS B B 4   4   . 0.6457 0.6798 0.6406 -0.0100 -0.0074
0.0108  1 .
3359 CE    CE    . LYS LYS LYS B B 4   4   . 0.7353 0.7424 0.7095 -0.0320 0.0064  -
0.0232 1 .
3360 NZ    NZ    . LYS LYS LYS B B 4   4   . 0.7661 0.7678 0.7731 -0.0758 0.0002
0.0154  1 .
3361 C     C     . LYS LYS LYS B B 4   4   . 0.5199 0.5098 0.5090 0.0035  0.0067
0.0096  1 .
3362 O     O     . LYS LYS LYS B B 4   4   . 0.5028 0.4921 0.5067 0.0049  0.0080
0.0208  1 .
3363 N     N     . ILE ILE ILE B B 5   5   . 0.5097 0.5113 0.5044 0.0016  0.0054  -
0.0001 1 .
3364 CA    CA    . ILE ILE ILE B B 5   5   . 0.4880 0.5013 0.5031 0.0033  0.0018  -
0.0030 1 .
3365 CB    CB    . ILE ILE ILE B B 5   5   . 0.4845 0.4962 0.5050 0.0061  0.0047  -
0.0125 1 .
3366 CG1   CG1   . ILE ILE ILE B B 5   5   . 0.4853 0.4999 0.4749 0.0248  0.0107
0.0050  1 .
3367 CD1   CD1   . ILE ILE ILE B B 5   5   . 0.5586 0.5240 0.4710 0.0411  -0.0084 -
0.0236 1 .
3368 CG2   CG2   . ILE ILE ILE B B 5   5   . 0.5057 0.4964 0.5079 0.0009  0.0248  -
0.0071 1 .
3369 C     C     . ILE ILE ILE B B 5   5   . 0.4895 0.5100 0.5115 0.0077  0.0062  -
0.0087 1 .
3370 O     O     . ILE ILE ILE B B 5   5   . 0.4679 0.5359 0.5163 0.0109  0.0084  -
0.0147 1 .
3371 N     N     . TRP TRP TRP B B 6   6   . 0.4649 0.5035 0.5083 0.0087  0.0017  -
0.0010 1 .
3372 CA    CA    . TRP TRP TRP B B 6   6   . 0.4854 0.5112 0.5047 0.0058  0.0111  -
0.0063 1 .
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3373 CB    CB    . TRP TRP TRP B B 6   6   . 0.5151 0.5412 0.5292 0.0134  0.0139  -
0.0057 1 .
3374 CG    CG    . TRP TRP TRP B B 6   6   . 0.6559 0.6873 0.6334 0.0217  -0.0246 -
0.0384 1 .
3375 CD1   CD1   . TRP TRP TRP B B 6   6   . 0.6977 0.7757 0.7219 0.0547  -0.0462 -
0.0498 1 .
3376 NE1   NE1   . TRP TRP TRP B B 6   6   . 0.7888 0.8526 0.7668 0.0686  -0.0518 -
0.0755 1 .
3377 CE2   CE2   . TRP TRP TRP B B 6   6   . 0.8020 0.8470 0.7899 0.0671  -0.0460 -
0.0683 1 .
3378 CD2   CD2   . TRP TRP TRP B B 6   6   . 0.7870 0.7865 0.7405 0.0579  -0.0208 -
0.0697 1 .
3379 CE3   CE3   . TRP TRP TRP B B 6   6   . 0.8249 0.8143 0.7651 0.0644  -0.0408 -
0.0431 1 .
3380 CZ3   CZ3   . TRP TRP TRP B B 6   6   . 0.8872 0.8432 0.8197 0.0701  -0.0350 -
0.0542 1 .
3381 CH2   CH2   . TRP TRP TRP B B 6   6   . 0.8945 0.8620 0.8402 0.0747  -0.0467 -
0.0677 1 .
3382 CZ2   CZ2   . TRP TRP TRP B B 6   6   . 0.8519 0.8747 0.8271 0.0587  -0.0540 -
0.0842 1 .
3383 C     C     . TRP TRP TRP B B 6   6   . 0.4462 0.4669 0.4689 0.0079  0.0141  -
0.0004 1 .
3384 O     O     . TRP TRP TRP B B 6   6   . 0.4233 0.4725 0.4564 0.0060  0.0270
0.0049  1 .
3385 N     N     . ALA ALA ALA B B 7   7   . 0.4040 0.4373 0.4264 0.0154  0.0224
0.0209  1 .
3386 CA    CA    . ALA ALA ALA B B 7   7   . 0.3860 0.4231 0.4137 0.0223  0.0195
0.0069  1 .
3387 CB    CB    . ALA ALA ALA B B 7   7   . 0.3606 0.3939 0.4078 0.0241  0.0346
0.0124  1 .
3388 C     C     . ALA ALA ALA B B 7   7   . 0.3802 0.4136 0.3953 0.0175  0.0191
0.0026  1 .
3389 O     O     . ALA ALA ALA B B 7   7   . 0.3826 0.4267 0.4123 0.0247  0.0289  -
0.0088 1 .
3390 N     N     . ARG ARG ARG B B 8   8   . 0.3414 0.3785 0.3859 0.0143  0.0158
0.0118  1 .
3391 CA    CA    . ARG ARG ARG B B 8   8   . 0.3338 0.3625 0.3645 0.0071  0.0158
0.0032  1 .
3392 CB    CB    . ARG ARG ARG B B 8   8   . 0.3461 0.3744 0.3726 0.0015  0.0186
0.0018  1 .
3393 CG    CG    . ARG ARG ARG B B 8   8   . 0.2665 0.3517 0.3907 0.0154  -0.0084
0.0179  1 .
3394 CD    CD    . ARG ARG ARG B B 8   8   . 0.3144 0.3943 0.4036 -0.0237 0.0021
0.0440  1 .
3395 NE    NE    . ARG ARG ARG B B 8   8   . 0.3920 0.3709 0.3712 -0.0099 0.0097
0.0497  1 .
3396 CZ    CZ    . ARG ARG ARG B B 8   8   . 0.3868 0.3969 0.4218 -0.0092 0.0114
0.0523  1 .
3397 NH1   NH1   . ARG ARG ARG B B 8   8   . 0.3855 0.3957 0.4422 0.0067  0.0445
0.0592  1 .
3398 NH2   NH2   . ARG ARG ARG B B 8   8   . 0.4837 0.4595 0.3927 -0.0248 0.0736
0.0386  1 .
3399 C     C     . ARG ARG ARG B B 8   8   . 0.3424 0.3700 0.3651 0.0012  0.0155
0.0059  1 .
3400 O     O     . ARG ARG ARG B B 8   8   . 0.3263 0.3744 0.3662 0.0203  0.0323
0.0114  1 .
3401 N     N     . GLU GLU GLU B B 9   9   . 0.3313 0.3845 0.3504 0.0013  0.0162  -
0.0052 1 .
3402 CA    CA    . GLU GLU GLU B B 9   9   . 0.3631 0.3905 0.3634 -0.0056 0.0148
0.0080  1 .
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3403 CB    CB    . GLU GLU GLU B B 9   9   . 0.3624 0.3978 0.3528 -0.0227 0.0229  -
0.0169 1 .
3404 CG    CG    . GLU GLU GLU B B 9   9   . 0.4255 0.4159 0.3866 -0.0248 -0.0005 -
0.0110 1 .
3405 CD    CD    . GLU GLU GLU B B 9   9   . 0.4626 0.3710 0.4492 -0.0090 0.0106  -
0.0173 1 .
3406 OE1   OE1   . GLU GLU GLU B B 9   9   . 0.4772 0.3830 0.4393 0.0326  -0.0024
0.0060  1 .
3407 OE2   OE2   . GLU GLU GLU B B 9   9   . 0.4336 0.3645 0.4681 0.0048  0.0072  -
0.0424 1 .
3408 C     C     . GLU GLU GLU B B 9   9   . 0.3515 0.3900 0.3478 0.0048  0.0150
0.0068  1 .
3409 O     O     . GLU GLU GLU B B 9   9   . 0.3635 0.4124 0.3124 0.0115  0.0061
0.0287  1 .
3410 N     N     . ILE ILE ILE B B 10  10  . 0.3343 0.3604 0.3310 -0.0045 0.0097  -
0.0004 1 .
3411 CA    CA    . ILE ILE ILE B B 10  10  . 0.2807 0.3360 0.3129 -0.0084 0.0145  -
0.0060 1 .
3412 CB    CB    . ILE ILE ILE B B 10  10  . 0.2664 0.3577 0.3091 -0.0137 0.0210  -
0.0097 1 .
3413 CG1   CG1   . ILE ILE ILE B B 10  10  . 0.2095 0.3193 0.2942 0.0202  -0.0178
0.0187  1 .
3414 CD1   CD1   . ILE ILE ILE B B 10  10  . 0.1654 0.3805 0.2521 0.0557  0.0079
0.0205  1 .
3415 CG2   CG2   . ILE ILE ILE B B 10  10  . 0.3450 0.3334 0.2797 -0.0299 0.0339  -
0.0036 1 .
3416 C     C     . ILE ILE ILE B B 10  10  . 0.2773 0.3111 0.3172 -0.0100 0.0184  -
0.0019 1 .
3417 O     O     . ILE ILE ILE B B 10  10  . 0.2839 0.3430 0.3383 -0.0010 0.0170  -
0.0213 1 .
3418 N     N     . LEU LEU LEU B B 11  11  . 0.2312 0.2840 0.2984 -0.0079 0.0156
0.0077  1 .
3419 CA    CA    . LEU LEU LEU B B 11  11  . 0.2156 0.2650 0.2839 -0.0007 0.0039  -
0.0001 1 .
3420 CB    CB    . LEU LEU LEU B B 11  11  . 0.2242 0.2574 0.2756 0.0000  0.0057
0.0048  1 .
3421 CG    CG    . LEU LEU LEU B B 11  11  . 0.2051 0.2431 0.3164 0.0156  0.0086  -
0.0076 1 .
3422 CD1   CD1   . LEU LEU LEU B B 11  11  . 0.2639 0.2867 0.2323 0.0738  -0.0126 -
0.0196 1 .
3423 CD2   CD2   . LEU LEU LEU B B 11  11  . 0.0473 0.2559 0.3037 0.0061  0.0781
0.0016  1 .
3424 C     C     . LEU LEU LEU B B 11  11  . 0.1916 0.2680 0.2716 -0.0029 0.0029
0.0075  1 .
3425 O     O     . LEU LEU LEU B B 11  11  . 0.1955 0.2718 0.2709 0.0279  0.0086  -
0.0161 1 .
3426 N     N     . ASP ASP ASP B B 12  12  . 0.1785 0.2734 0.2590 -0.0098 -0.0222
0.0103  1 .
3427 CA    CA    . ASP ASP ASP B B 12  12  . 0.2020 0.2682 0.2632 -0.0043 -0.0110 -
0.0027 1 .
3428 CB    CB    . ASP ASP ASP B B 12  12  . 0.1825 0.3130 0.2527 -0.0103 -0.0258
0.0012  1 .
3429 CG    CG    . ASP ASP ASP B B 12  12  . 0.2755 0.2824 0.2795 -0.0048 -0.0110 -
0.0153 1 .
3430 OD1   OD1   . ASP ASP ASP B B 12  12  . 0.3026 0.3948 0.2912 -0.0021 -0.0403 -
0.0427 1 .
3431 OD2   OD2   . ASP ASP ASP B B 12  12  . 0.3314 0.3374 0.3350 0.0045  0.0028  -
0.0147 1 .
3432 C     C     . ASP ASP ASP B B 12  12  . 0.2373 0.2878 0.2666 -0.0094 -0.0194 -
0.0044 1 .
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3433 O     O     . ASP ASP ASP B B 12  12  . 0.2539 0.2663 0.2815 -0.0269 -0.0256 -
0.0280 1 .
3434 N     N     . SER SER SER B B 13  13  . 0.2322 0.2949 0.2780 -0.0046 0.0014  -
0.0112 1 .
3435 CA    CA    . SER SER SER B B 13  13  . 0.2816 0.2927 0.2857 -0.0052 0.0041  -
0.0031 1 .
3436 CB    CB    . SER SER SER B B 13  13  . 0.2783 0.2852 0.2860 0.0028  0.0143  -
0.0040 1 .
3437 OG    OG    . SER SER SER B B 13  13  . 0.2910 0.2811 0.3044 0.0169  0.0183  -
0.0111 1 .
3438 C     C     . SER SER SER B B 13  13  . 0.2842 0.3093 0.2937 -0.0054 -0.0032 -
0.0041 1 .
3439 O     O     . SER SER SER B B 13  13  . 0.3026 0.3294 0.3183 -0.0161 0.0153  -
0.0135 1 .
3440 N     N     . ARG ARG ARG B B 14  14  . 0.3038 0.3218 0.3160 -0.0152 0.0023  -
0.0144 1 .
3441 CA    CA    . ARG ARG ARG B B 14  14  . 0.3196 0.3425 0.3310 -0.0163 0.0091  -
0.0040 1 .
3442 CB    CB    . ARG ARG ARG B B 14  14  . 0.3227 0.3255 0.3408 -0.0174 0.0073
0.0081  1 .
3443 CG    CG    . ARG ARG ARG B B 14  14  . 0.3701 0.3238 0.3456 -0.0417 0.0002
0.0073  1 .
3444 CD    CD    . ARG ARG ARG B B 14  14  . 0.4289 0.3404 0.3952 0.0073  -0.0577
0.0238  1 .
3445 NE    NE    . ARG ARG ARG B B 14  14  . 0.4127 0.3059 0.3927 0.0366  -0.0083
0.0382  1 .
3446 CZ    CZ    . ARG ARG ARG B B 14  14  . 0.3576 0.3056 0.3949 0.0063  -0.0061
0.0212  1 .
3447 NH1   NH1   . ARG ARG ARG B B 14  14  . 0.3289 0.2790 0.3702 -0.0718 0.0445
0.0440  1 .
3448 NH2   NH2   . ARG ARG ARG B B 14  14  . 0.2530 0.2171 0.4019 -0.0521 -0.0161
0.0710  1 .
3449 C     C     . ARG ARG ARG B B 14  14  . 0.3101 0.3505 0.3330 -0.0156 0.0115  -
0.0057 1 .
3450 O     O     . ARG ARG ARG B B 14  14  . 0.2822 0.3436 0.3445 -0.0124 0.0170  -
0.0056 1 .
3451 N     N     . GLY GLY GLY B B 15  15  . 0.2977 0.3707 0.3309 -0.0100 0.0099  -
0.0036 1 .
3452 CA    CA    . GLY GLY GLY B B 15  15  . 0.2866 0.3358 0.3174 -0.0002 0.0117  -
0.0071 1 .
3453 C     C     . GLY GLY GLY B B 15  15  . 0.3167 0.3431 0.3208 -0.0004 0.0017  -
0.0068 1 .
3454 O     O     . GLY GLY GLY B B 15  15  . 0.3003 0.3298 0.3041 0.0095  -0.0089 -
0.0088 1 .
3455 N     N     . ASN ASN ASN B B 16  16  . 0.3158 0.3338 0.3061 0.0063  -0.0024 -
0.0019 1 .
3456 CA    CA    . ASN ASN ASN B B 16  16  . 0.3175 0.3267 0.3125 0.0026  0.0103  -
0.0023 1 .
3457 CB    CB    . ASN ASN ASN B B 16  16  . 0.3378 0.3247 0.3025 -0.0021 0.0166  -
0.0081 1 .
3458 CG    CG    . ASN ASN ASN B B 16  16  . 0.3458 0.3235 0.3069 -0.0171 0.0051  -
0.0214 1 .
3459 OD1   OD1   . ASN ASN ASN B B 16  16  . 0.3387 0.4165 0.2750 -0.0400 -0.0102 -
0.0218 1 .
3460 ND2   ND2   . ASN ASN ASN B B 16  16  . 0.3788 0.2653 0.2854 -0.0170 0.0127
0.0173  1 .
3461 C     C     . ASN ASN ASN B B 16  16  . 0.3088 0.3164 0.3035 0.0007  0.0188  -
0.0063 1 .
3462 O     O     . ASN ASN ASN B B 16  16  . 0.2834 0.3214 0.2825 0.0142  0.0353  -
0.0053 1 .
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3463 N     N     . PRO PRO PRO B B 17  17  . 0.2916 0.3018 0.3115 0.0080  0.0102  -
0.0046 1 .
3464 CA    CA    . PRO PRO PRO B B 17  17  . 0.2990 0.3082 0.3078 0.0067  0.0076  -
0.0066 1 .
3465 CB    CB    . PRO PRO PRO B B 17  17  . 0.3017 0.2813 0.3166 0.0082  0.0023  -
0.0074 1 .
3466 CG    CG    . PRO PRO PRO B B 17  17  . 0.2844 0.2937 0.3027 0.0119  0.0071  -
0.0135 1 .
3467 CD    CD    . PRO PRO PRO B B 17  17  . 0.3053 0.3090 0.2873 0.0102  -0.0027
0.0028  1 .
3468 C     C     . PRO PRO PRO B B 17  17  . 0.2880 0.3147 0.3121 -0.0036 0.0058  -
0.0070 1 .
3469 O     O     . PRO PRO PRO B B 17  17  . 0.2796 0.3272 0.3158 -0.0044 0.0041  -
0.0138 1 .
3470 N     N     . THR THR THR B B 18  18  . 0.2868 0.3068 0.3152 -0.0023 0.0163  -
0.0014 1 .
3471 CA    CA    . THR THR THR B B 18  18  . 0.2652 0.3016 0.3022 -0.0047 0.0068
0.0050  1 .
3472 CB    CB    . THR THR THR B B 18  18  . 0.2516 0.3042 0.3013 -0.0036 0.0115
0.0127  1 .
3473 OG1   OG1   . THR THR THR B B 18  18  . 0.2690 0.3361 0.3438 -0.0224 0.0154
0.0327  1 .
3474 CG2   CG2   . THR THR THR B B 18  18  . 0.2873 0.3037 0.2810 -0.0061 0.0417
0.0132  1 .
3475 C     C     . THR THR THR B B 18  18  . 0.2737 0.3115 0.3097 0.0116  0.0095
0.0096  1 .
3476 O     O     . THR THR THR B B 18  18  . 0.2548 0.3421 0.3172 0.0367  0.0062  -
0.0008 1 .
3477 N     N     . VAL VAL VAL B B 19  19  . 0.2646 0.3179 0.3204 0.0007  -0.0036
0.0073  1 .
3478 CA    CA    . VAL VAL VAL B B 19  19  . 0.3038 0.3206 0.3473 0.0140  -0.0102
0.0152  1 .
3479 CB    CB    . VAL VAL VAL B B 19  19  . 0.2933 0.3064 0.3494 0.0097  -0.0115
0.0171  1 .
3480 CG1   CG1   . VAL VAL VAL B B 19  19  . 0.3225 0.3076 0.3821 0.0062  -0.0015
0.0125  1 .
3481 CG2   CG2   . VAL VAL VAL B B 19  19  . 0.3365 0.3099 0.3496 0.0170  0.0155  -
0.0106 1 .
3482 C     C     . VAL VAL VAL B B 19  19  . 0.2940 0.3269 0.3420 0.0151  -0.0112
0.0157  1 .
3483 O     O     . VAL VAL VAL B B 19  19  . 0.3332 0.3304 0.3359 0.0296  -0.0158
0.0247  1 .
3484 N     N     . GLU GLU GLU B B 20  20  . 0.2354 0.3376 0.3516 0.0183  -0.0047
0.0142  1 .
3485 CA    CA    . GLU GLU GLU B B 20  20  . 0.2392 0.3429 0.3573 0.0066  -0.0025
0.0031  1 .
3486 CB    CB    . GLU GLU GLU B B 20  20  . 0.1983 0.3507 0.3662 0.0040  -0.0035
0.0072  1 .
3487 CG    CG    . GLU GLU GLU B B 20  20  . 0.2955 0.3302 0.3625 0.0259  0.0287  -
0.0174 1 .
3488 CD    CD    . GLU GLU GLU B B 20  20  . 0.4333 0.3222 0.4216 0.0254  0.0557
0.0013  1 .
3489 OE1   OE1   . GLU GLU GLU B B 20  20  . 0.4616 0.4275 0.4987 0.0118  0.1292
0.0226  1 .
3490 OE2   OE2   . GLU GLU GLU B B 20  20  . 0.5280 0.2912 0.4008 0.0472  0.0964  -
0.0433 1 .
3491 C     C     . GLU GLU GLU B B 20  20  . 0.2340 0.3589 0.3597 0.0072  -0.0105 -
0.0147 1 .
3492 O     O     . GLU GLU GLU B B 20  20  . 0.1698 0.3930 0.3695 0.0102  -0.0211 -
0.0143 1 .
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3493 N     N     . VAL VAL VAL B B 21  21  . 0.2878 0.3729 0.3632 -0.0049 0.0014  -
0.0188 1 .
3494 CA    CA    . VAL VAL VAL B B 21  21  . 0.3008 0.3813 0.3756 -0.0056 -0.0107 -
0.0163 1 .
3495 CB    CB    . VAL VAL VAL B B 21  21  . 0.3144 0.3888 0.3777 -0.0217 -0.0062 -
0.0105 1 .
3496 CG1   CG1   . VAL VAL VAL B B 21  21  . 0.2238 0.4026 0.3724 -0.0189 -0.0324 -
0.0247 1 .
3497 CG2   CG2   . VAL VAL VAL B B 21  21  . 0.2930 0.3926 0.4126 -0.0485 -0.0370 -
0.0374 1 .
3498 C     C     . VAL VAL VAL B B 21  21  . 0.3439 0.3901 0.3882 -0.0031 -0.0037 -
0.0077 1 .
3499 O     O     . VAL VAL VAL B B 21  21  . 0.3624 0.4052 0.3876 -0.0019 -0.0037 -
0.0057 1 .
3500 N     N     . ASP ASP ASP B B 22  22  . 0.3832 0.4108 0.3902 0.0047  0.0000  -
0.0056 1 .
3501 CA    CA    . ASP ASP ASP B B 22  22  . 0.3991 0.4092 0.4078 0.0017  -0.0030 -
0.0009 1 .
3502 CB    CB    . ASP ASP ASP B B 22  22  . 0.3897 0.4083 0.4012 0.0126  -0.0044 -
0.0051 1 .
3503 CG    CG    . ASP ASP ASP B B 22  22  . 0.4064 0.4615 0.4225 -0.0051 -0.0031
0.0127  1 .
3504 OD1   OD1   . ASP ASP ASP B B 22  22  . 0.3986 0.5459 0.4303 -0.0305 -0.0577
0.0614  1 .
3505 OD2   OD2   . ASP ASP ASP B B 22  22  . 0.3794 0.4912 0.4474 0.0105  0.0232
0.0366  1 .
3506 C     C     . ASP ASP ASP B B 22  22  . 0.4195 0.4257 0.4153 0.0071  -0.0057 -
0.0010 1 .
3507 O     O     . ASP ASP ASP B B 22  22  . 0.4077 0.4387 0.4107 0.0081  -0.0030
0.0010  1 .
3508 N     N     . LEU LEU LEU B B 23  23  . 0.4386 0.4531 0.4227 0.0023  -0.0085 -
0.0006 1 .
3509 CA    CA    . LEU LEU LEU B B 23  23  . 0.4456 0.4695 0.4515 0.0030  0.0015
0.0064  1 .
3510 CB    CB    . LEU LEU LEU B B 23  23  . 0.4492 0.4630 0.4426 0.0017  -0.0006
0.0103  1 .
3511 CG    CG    . LEU LEU LEU B B 23  23  . 0.4538 0.4498 0.4385 -0.0240 -0.0035 -
0.0112 1 .
3512 CD1   CD1   . LEU LEU LEU B B 23  23  . 0.4494 0.4588 0.3756 -0.0389 0.0035  -
0.0527 1 .
3513 CD2   CD2   . LEU LEU LEU B B 23  23  . 0.4268 0.4856 0.4673 -0.0416 0.0150  -
0.0215 1 .
3514 C     C     . LEU LEU LEU B B 23  23  . 0.4615 0.4795 0.4684 0.0077  0.0015
0.0130  1 .
3515 O     O     . LEU LEU LEU B B 23  23  . 0.4441 0.4936 0.4885 0.0172  0.0089
0.0244  1 .
3516 N     N     . TYR TYR TYR B B 24  24  . 0.4523 0.4970 0.4728 0.0114  -0.0069
0.0164  1 .
3517 CA    CA    . TYR TYR TYR B B 24  24  . 0.4708 0.5068 0.4900 0.0004  -0.0076
0.0106  1 .
3518 CB    CB    . TYR TYR TYR B B 24  24  . 0.4753 0.5172 0.4990 0.0000  -0.0019
0.0127  1 .
3519 CG    CG    . TYR TYR TYR B B 24  24  . 0.5198 0.5529 0.5062 -0.0072 -0.0104
0.0120  1 .
3520 CD1   CD1   . TYR TYR TYR B B 24  24  . 0.5381 0.5801 0.5249 -0.0191 -0.0027 -
0.0005 1 .
3521 CE1   CE1   . TYR TYR TYR B B 24  24  . 0.5425 0.6042 0.5525 -0.0222 -0.0034
0.0040  1 .
3522 CZ    CZ    . TYR TYR TYR B B 24  24  . 0.5536 0.5911 0.5420 -0.0073 -0.0161
0.0067  1 .
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3523 OH    OH    . TYR TYR TYR B B 24  24  . 0.5653 0.6658 0.5570 -0.0120 -0.0307
0.0037  1 .
3524 CE2   CE2   . TYR TYR TYR B B 24  24  . 0.5307 0.6109 0.5429 -0.0053 -0.0089
0.0332  1 .
3525 CD2   CD2   . TYR TYR TYR B B 24  24  . 0.5470 0.5806 0.5315 -0.0115 -0.0089
0.0258  1 .
3526 C     C     . TYR TYR TYR B B 24  24  . 0.4896 0.5145 0.5007 -0.0005 -0.0066
0.0098  1 .
3527 O     O     . TYR TYR TYR B B 24  24  . 0.4611 0.5057 0.4954 -0.0014 -0.0130
0.0221  1 .
3528 N     N     . THR THR THR B B 25  25  . 0.5103 0.5180 0.5160 -0.0126 -0.0070
0.0077  1 .
3529 CA    CA    . THR THR THR B B 25  25  . 0.5292 0.5424 0.5248 -0.0108 -0.0042
0.0067  1 .
3530 CB    CB    . THR THR THR B B 25  25  . 0.5356 0.5383 0.5245 -0.0102 -0.0083
0.0059  1 .
3531 OG1   OG1   . THR THR THR B B 25  25  . 0.5047 0.5817 0.5097 0.0141  -0.0111 -
0.0053 1 .
3532 CG2   CG2   . THR THR THR B B 25  25  . 0.5531 0.5593 0.5020 -0.0052 -0.0027
0.0086  1 .
3533 C     C     . THR THR THR B B 25  25  . 0.5318 0.5510 0.5391 -0.0206 -0.0040
0.0149  1 .
3534 O     O     . THR THR THR B B 25  25  . 0.5292 0.5691 0.5381 -0.0306 -0.0013
0.0286  1 .
3535 N     N     . ALA ALA ALA B B 26  26  . 0.5304 0.5646 0.5576 -0.0202 -0.0054
0.0159  1 .
3536 CA    CA    . ALA ALA ALA B B 26  26  . 0.5316 0.5550 0.5611 -0.0185 -0.0093
0.0182  1 .
3537 CB    CB    . ALA ALA ALA B B 26  26  . 0.5080 0.5374 0.5491 -0.0235 -0.0141
0.0277  1 .
3538 C     C     . ALA ALA ALA B B 26  26  . 0.5295 0.5618 0.5589 -0.0154 -0.0162
0.0126  1 .
3539 O     O     . ALA ALA ALA B B 26  26  . 0.5326 0.5851 0.5589 -0.0058 -0.0331
0.0104  1 .
3540 N     N     . LYS LYS LYS B B 27  27  . 0.5459 0.5739 0.5640 -0.0108 -0.0178
0.0010  1 .
3541 CA    CA    . LYS LYS LYS B B 27  27  . 0.5541 0.5724 0.5629 -0.0041 -0.0175
0.0004  1 .
3542 CB    CB    . LYS LYS LYS B B 27  27  . 0.5666 0.5955 0.5692 -0.0096 -0.0105
0.0079  1 .
3543 CG    CG    . LYS LYS LYS B B 27  27  . 0.6109 0.6353 0.6026 -0.0162 -0.0205 -
0.0032 1 .
3544 CD    CD    . LYS LYS LYS B B 27  27  . 0.6872 0.6573 0.6489 -0.0334 -0.0085 -
0.0402 1 .
3545 CE    CE    . LYS LYS LYS B B 27  27  . 0.6976 0.7255 0.7217 -0.0288 -0.0041 -
0.0500 1 .
3546 NZ    NZ    . LYS LYS LYS B B 27  27  . 0.7488 0.7442 0.7502 -0.0383 0.0013  -
0.0902 1 .
3547 C     C     . LYS LYS LYS B B 27  27  . 0.5523 0.5602 0.5483 0.0002  -0.0192
0.0031  1 .
3548 O     O     . LYS LYS LYS B B 27  27  . 0.5315 0.5735 0.5463 0.0080  -0.0222
0.0116  1 .
3549 N     N     . GLY GLY GLY B B 28  28  . 0.5414 0.5428 0.5328 -0.0064 -0.0272
0.0150  1 .
3550 CA    CA    . GLY GLY GLY B B 28  28  . 0.5204 0.5210 0.5310 -0.0181 -0.0182
0.0130  1 .
3551 C     C     . GLY GLY GLY B B 28  28  . 0.5085 0.5060 0.5159 -0.0160 -0.0175
0.0133  1 .
3552 O     O     . GLY GLY GLY B B 28  28  . 0.4963 0.4886 0.4960 -0.0309 -0.0200
0.0079  1 .
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3553 N     N     . LEU LEU LEU B B 29  29  . 0.4935 0.4928 0.5092 -0.0127 -0.0103
0.0181  1 .
3554 CA    CA    . LEU LEU LEU B B 29  29  . 0.4797 0.4774 0.4976 -0.0096 -0.0100
0.0164  1 .
3555 CB    CB    . LEU LEU LEU B B 29  29  . 0.4841 0.4839 0.5039 -0.0105 -0.0231
0.0270  1 .
3556 CG    CG    . LEU LEU LEU B B 29  29  . 0.4851 0.4955 0.5059 -0.0190 -0.0400
0.0416  1 .
3557 CD1   CD1   . LEU LEU LEU B B 29  29  . 0.4662 0.5078 0.4524 -0.0042 -0.0675
0.0387  1 .
3558 CD2   CD2   . LEU LEU LEU B B 29  29  . 0.4256 0.5441 0.5317 -0.0370 -0.0739
0.0398  1 .
3559 C     C     . LEU LEU LEU B B 29  29  . 0.4636 0.4650 0.4964 -0.0042 0.0001
0.0071  1 .
3560 O     O     . LEU LEU LEU B B 29  29  . 0.4558 0.4618 0.5152 -0.0104 0.0036
0.0132  1 .
3561 N     N     . PHE PHE PHE B B 30  30  . 0.4382 0.4509 0.4642 0.0017  0.0070
0.0030  1 .
3562 CA    CA    . PHE PHE PHE B B 30  30  . 0.4158 0.4444 0.4462 -0.0032 0.0039
0.0055  1 .
3563 CB    CB    . PHE PHE PHE B B 30  30  . 0.4059 0.4593 0.4398 -0.0165 0.0160
0.0127  1 .
3564 CG    CG    . PHE PHE PHE B B 30  30  . 0.3991 0.4739 0.4638 -0.0112 -0.0001
0.0019  1 .
3565 CD1   CD1   . PHE PHE PHE B B 30  30  . 0.3097 0.4674 0.4550 0.0083  -0.0101
0.0352  1 .
3566 CE1   CE1   . PHE PHE PHE B B 30  30  . 0.3820 0.4924 0.4568 -0.0286 -0.0259
0.0110  1 .
3567 CZ    CZ    . PHE PHE PHE B B 30  30  . 0.4016 0.4694 0.4493 -0.0132 -0.0031
0.0069  1 .
3568 CE2   CE2   . PHE PHE PHE B B 30  30  . 0.3706 0.4769 0.4117 -0.0095 0.0005
0.0116  1 .
3569 CD2   CD2   . PHE PHE PHE B B 30  30  . 0.4234 0.4990 0.4789 -0.0311 0.0255
0.0360  1 .
3570 C     C     . PHE PHE PHE B B 30  30  . 0.4168 0.4350 0.4332 0.0026  0.0024
0.0016  1 .
3571 O     O     . PHE PHE PHE B B 30  30  . 0.4209 0.4378 0.4402 0.0142  0.0020
0.0061  1 .
3572 N     N     . ARG ARG ARG B B 31  31  . 0.3783 0.4172 0.4119 -0.0037 0.0064
0.0027  1 .
3573 CA    CA    . ARG ARG ARG B B 31  31  . 0.3664 0.4042 0.3854 -0.0040 -0.0041
0.0056  1 .
3574 CB    CB    . ARG ARG ARG B B 31  31  . 0.3775 0.3873 0.3810 -0.0053 -0.0092
0.0246  1 .
3575 CG    CG    . ARG ARG ARG B B 31  31  . 0.3541 0.3969 0.3600 0.0031  -0.0230
0.0421  1 .
3576 CD    CD    . ARG ARG ARG B B 31  31  . 0.3632 0.4095 0.4002 0.0171  -0.0157
0.0322  1 .
3577 NE    NE    . ARG ARG ARG B B 31  31  . 0.3955 0.3871 0.4004 0.0383  -0.0091
0.0296  1 .
3578 CZ    CZ    . ARG ARG ARG B B 31  31  . 0.4023 0.4007 0.4214 0.0420  -0.0382
0.0460  1 .
3579 NH1   NH1   . ARG ARG ARG B B 31  31  . 0.3735 0.4657 0.4226 0.0095  -0.0520
0.1042  1 .
3580 NH2   NH2   . ARG ARG ARG B B 31  31  . 0.4951 0.3221 0.4228 0.0456  -0.0877
0.0564  1 .
3581 C     C     . ARG ARG ARG B B 31  31  . 0.3464 0.3952 0.3805 -0.0087 -0.0093
0.0042  1 .
3582 O     O     . ARG ARG ARG B B 31  31  . 0.3050 0.4303 0.3780 -0.0187 -0.0033
0.0114  1 .
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3583 N     N     . ALA ALA ALA B B 32  32  . 0.3560 0.3970 0.3779 0.0030  -0.0080
0.0127  1 .
3584 CA    CA    . ALA ALA ALA B B 32  32  . 0.3650 0.3963 0.3853 0.0048  -0.0042
0.0054  1 .
3585 CB    CB    . ALA ALA ALA B B 32  32  . 0.3921 0.4028 0.3989 0.0036  -0.0091
0.0164  1 .
3586 C     C     . ALA ALA ALA B B 32  32  . 0.3529 0.3907 0.3807 0.0080  -0.0015
0.0051  1 .
3587 O     O     . ALA ALA ALA B B 32  32  . 0.3145 0.4038 0.3791 0.0219  0.0023
0.0005  1 .
3588 N     N     . ALA ALA ALA B B 33  33  . 0.3339 0.3736 0.3841 0.0133  -0.0057
0.0088  1 .
3589 CA    CA    . ALA ALA ALA B B 33  33  . 0.3296 0.3517 0.3567 0.0068  -0.0051
0.0055  1 .
3590 CB    CB    . ALA ALA ALA B B 33  33  . 0.3399 0.3667 0.3464 0.0157  -0.0178
0.0132  1 .
3591 C     C     . ALA ALA ALA B B 33  33  . 0.3247 0.3422 0.3452 0.0017  -0.0037
0.0000  1 .
3592 O     O     . ALA ALA ALA B B 33  33  . 0.3009 0.3203 0.3501 -0.0016 0.0004  -
0.0094 1 .
3593 N     N     . VAL VAL VAL B B 34  34  . 0.2937 0.3410 0.3318 -0.0056 0.0019
0.0131  1 .
3594 CA    CA    . VAL VAL VAL B B 34  34  . 0.2419 0.3218 0.3000 -0.0108 0.0151
0.0023  1 .
3595 CB    CB    . VAL VAL VAL B B 34  34  . 0.2146 0.3044 0.2963 -0.0147 0.0210
0.0081  1 .
3596 CG1   CG1   . VAL VAL VAL B B 34  34  . 0.1257 0.3296 0.3103 0.0091  0.0296
0.0030  1 .
3597 CG2   CG2   . VAL VAL VAL B B 34  34  . 0.2135 0.2794 0.2420 -0.0344 0.0185  -
0.0021 1 .
3598 C     C     . VAL VAL VAL B B 34  34  . 0.2544 0.3297 0.2930 -0.0043 0.0081  -
0.0045 1 .
3599 O     O     . VAL VAL VAL B B 34  34  . 0.2426 0.3662 0.2803 -0.0133 -0.0105 -
0.0209 1 .
3600 N     N     . PRO PRO PRO B B 35  35  . 0.2611 0.3098 0.2846 -0.0004 0.0169  -
0.0014 1 .
3601 CA    CA    . PRO PRO PRO B B 35  35  . 0.2727 0.2891 0.2815 0.0057  0.0181  -
0.0020 1 .
3602 CB    CB    . PRO PRO PRO B B 35  35  . 0.2504 0.2850 0.2799 0.0082  0.0208
0.0062  1 .
3603 CG    CG    . PRO PRO PRO B B 35  35  . 0.2763 0.3011 0.2907 0.0068  0.0212  -
0.0215 1 .
3604 CD    CD    . PRO PRO PRO B B 35  35  . 0.2464 0.2991 0.2755 -0.0077 0.0378  -
0.0095 1 .
3605 C     C     . PRO PRO PRO B B 35  35  . 0.2937 0.3047 0.2923 0.0048  0.0136
0.0007  1 .
3606 O     O     . PRO PRO PRO B B 35  35  . 0.3692 0.3107 0.3289 0.0307  0.0148
0.0071  1 .
3607 N     N     . SER SER SER B B 36  36  . 0.2909 0.3054 0.2929 0.0064  0.0055  -
0.0118 1 .
3608 CA    CA    . SER SER SER B B 36  36  . 0.3000 0.2999 0.3004 -0.0037 0.0041  -
0.0072 1 .
3609 CB    CB    . SER SER SER B B 36  36  . 0.3268 0.3144 0.3328 -0.0011 0.0079  -
0.0090 1 .
3610 OG    OG    . SER SER SER B B 36  36  . 0.3093 0.3311 0.3519 -0.0311 0.0314  -
0.0032 1 .
3611 C     C     . SER SER SER B B 36  36  . 0.3254 0.3009 0.2990 -0.0042 0.0009
0.0019  1 .
3612 O     O     . SER SER SER B B 36  36  . 0.3262 0.3096 0.2912 -0.0183 0.0095
0.0059  1 .
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3613 N     N     . GLY GLY GLY B B 37  37  . 0.3348 0.3281 0.3017 0.0049  -0.0131 -
0.0104 1 .
3614 CA    CA    . GLY GLY GLY B B 37  37  . 0.3402 0.3137 0.2986 0.0047  -0.0101 -
0.0110 1 .
3615 C     C     . GLY GLY GLY B B 37  37  . 0.3320 0.3201 0.2981 0.0163  -0.0133 -
0.0042 1 .
3616 O     O     . GLY GLY GLY B B 37  37  . 0.3901 0.3384 0.2997 0.0159  -0.0371
0.0015  1 .
3617 N     N     . ALA ALA ALA B B 38  38  . 0.3325 0.3143 0.2966 0.0068  -0.0099
0.0064  1 .
3618 CA    CA    . ALA ALA ALA B B 38  38  . 0.3248 0.3130 0.3039 0.0040  -0.0120 -
0.0040 1 .
3619 CB    CB    . ALA ALA ALA B B 38  38  . 0.3229 0.3186 0.2945 0.0045  -0.0154 -
0.0019 1 .
3620 C     C     . ALA ALA ALA B B 38  38  . 0.3212 0.3167 0.3119 0.0012  -0.0031 -
0.0041 1 .
3621 O     O     . ALA ALA ALA B B 38  38  . 0.3393 0.3280 0.3376 0.0119  -0.0123 -
0.0069 1 .
3622 N     N     . SER SER SER B B 39  39  . 0.2985 0.3302 0.2970 -0.0102 -0.0049 -
0.0041 1 .
3623 CA    CA    . SER SER SER B B 39  39  . 0.2930 0.3227 0.3031 0.0014  0.0045  -
0.0067 1 .
3624 CB    CB    . SER SER SER B B 39  39  . 0.2995 0.3236 0.3030 -0.0072 0.0245  -
0.0017 1 .
3625 OG    OG    . SER SER SER B B 39  39  . 0.2754 0.3070 0.2632 0.0216  0.0223  -
0.0344 1 .
3626 C     C     . SER SER SER B B 39  39  . 0.2852 0.3268 0.3093 0.0086  -0.0015 -
0.0006 1 .
3627 O     O     . SER SER SER B B 39  39  . 0.2481 0.3447 0.3152 0.0068  -0.0040
0.0040  1 .
3628 N     N     . THR THR THR B B 40  40  . 0.3050 0.3345 0.3230 0.0067  -0.0113 -
0.0075 1 .
3629 CA    CA    . THR THR THR B B 40  40  . 0.3196 0.3425 0.3294 0.0052  0.0020
0.0000  1 .
3630 CB    CB    . THR THR THR B B 40  40  . 0.3399 0.3415 0.3240 0.0052  0.0070  -
0.0051 1 .
3631 OG1   OG1   . THR THR THR B B 40  40  . 0.2876 0.3528 0.3369 -0.0066 0.0268  -
0.0048 1 .
3632 CG2   CG2   . THR THR THR B B 40  40  . 0.3804 0.3395 0.3608 0.0187  0.0156  -
0.0063 1 .
3633 C     C     . THR THR THR B B 40  40  . 0.3244 0.3466 0.3209 -0.0040 -0.0012
0.0028  1 .
3634 O     O     . THR THR THR B B 40  40  . 0.3572 0.3120 0.3143 -0.0139 -0.0228
0.0024  1 .
3635 N     N     . GLY GLY GLY B B 41  41  . 0.2945 0.3570 0.3098 -0.0073 -0.0031 -
0.0047 1 .
3636 CA    CA    . GLY GLY GLY B B 41  41  . 0.2983 0.3463 0.3187 -0.0058 0.0093  -
0.0054 1 .
3637 C     C     . GLY GLY GLY B B 41  41  . 0.2887 0.3393 0.3194 -0.0005 0.0106  -
0.0020 1 .
3638 O     O     . GLY GLY GLY B B 41  41  . 0.3095 0.3687 0.3272 0.0270  0.0186  -
0.0145 1 .
3639 N     N     . ILE ILE ILE B B 42  42  . 0.2933 0.3527 0.3065 0.0021  0.0056
0.0031  1 .
3640 CA    CA    . ILE ILE ILE B B 42  42  . 0.2915 0.3424 0.3136 -0.0090 -0.0141
0.0016  1 .
3641 CB    CB    . ILE ILE ILE B B 42  42  . 0.2904 0.3588 0.3155 -0.0097 -0.0151
0.0008  1 .
3642 CG1   CG1   . ILE ILE ILE B B 42  42  . 0.2760 0.3596 0.3422 -0.0187 -0.0384
0.0231  1 .
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3643 CD1   CD1   . ILE ILE ILE B B 42  42  . 0.2158 0.4001 0.3599 0.0154  -0.0207
0.0454  1 .
3644 CG2   CG2   . ILE ILE ILE B B 42  42  . 0.3010 0.3759 0.3473 -0.0179 -0.0426
0.0191  1 .
3645 C     C     . ILE ILE ILE B B 42  42  . 0.3151 0.3458 0.3223 -0.0049 -0.0091 -
0.0005 1 .
3646 O     O     . ILE ILE ILE B B 42  42  . 0.3255 0.3559 0.3141 -0.0110 -0.0088 -
0.0015 1 .
3647 N     N     . TYR TYR TYR B B 43  43  . 0.3259 0.3568 0.3074 -0.0059 -0.0159
0.0013  1 .
3648 CA    CA    . TYR TYR TYR B B 43  43  . 0.3386 0.3621 0.3191 -0.0072 -0.0072 -
0.0028 1 .
3649 CB    CB    . TYR TYR TYR B B 43  43  . 0.3560 0.3530 0.3165 -0.0053 -0.0105 -
0.0123 1 .
3650 CG    CG    . TYR TYR TYR B B 43  43  . 0.3743 0.3964 0.3560 -0.0204 -0.0135
0.0013  1 .
3651 CD1   CD1   . TYR TYR TYR B B 43  43  . 0.4383 0.4382 0.4209 -0.0218 0.0039  -
0.0203 1 .
3652 CE1   CE1   . TYR TYR TYR B B 43  43  . 0.4492 0.4433 0.4510 -0.0232 0.0038
0.0168  1 .
3653 CZ    CZ    . TYR TYR TYR B B 43  43  . 0.4514 0.4449 0.4708 -0.0114 0.0110
0.0011  1 .
3654 OH    OH    . TYR TYR TYR B B 43  43  . 0.4068 0.4037 0.5083 -0.0194 -0.0192
0.0015  1 .
3655 CE2   CE2   . TYR TYR TYR B B 43  43  . 0.4434 0.4302 0.4674 -0.0196 0.0272
0.0024  1 .
3656 CD2   CD2   . TYR TYR TYR B B 43  43  . 0.4097 0.3972 0.4468 -0.0111 -0.0084
0.0041  1 .
3657 C     C     . TYR TYR TYR B B 43  43  . 0.3285 0.3453 0.3161 -0.0002 -0.0020
0.0033  1 .
3658 O     O     . TYR TYR TYR B B 43  43  . 0.3450 0.3497 0.3098 -0.0201 -0.0207 -
0.0048 1 .
3659 N     N     . GLU GLU GLU B B 44  44  . 0.3282 0.3530 0.3407 0.0169  0.0103
0.0083  1 .
3660 CA    CA    . GLU GLU GLU B B 44  44  . 0.3199 0.3500 0.3496 0.0234  0.0036
0.0083  1 .
3661 CB    CB    . GLU GLU GLU B B 44  44  . 0.3158 0.3629 0.3396 0.0267  -0.0018
0.0123  1 .
3662 CG    CG    . GLU GLU GLU B B 44  44  . 0.3458 0.3532 0.2907 0.0524  -0.0195
0.0033  1 .
3663 CD    CD    . GLU GLU GLU B B 44  44  . 0.3400 0.3624 0.3640 0.0241  -0.0192 -
0.0096 1 .
3664 OE1   OE1   . GLU GLU GLU B B 44  44  . 0.4321 0.4493 0.3769 0.0490  -0.0864
0.0416  1 .
3665 OE2   OE2   . GLU GLU GLU B B 44  44  . 0.4704 0.3536 0.3719 0.0922  0.0182  -
0.0343 1 .
3666 C     C     . GLU GLU GLU B B 44  44  . 0.3210 0.3526 0.3533 0.0142  0.0091
0.0021  1 .
3667 O     O     . GLU GLU GLU B B 44  44  . 0.3023 0.3382 0.3648 0.0309  0.0015  -
0.0071 1 .
3668 N     N     . ALA ALA ALA B B 45  45  . 0.3310 0.3625 0.3643 0.0064  0.0079
0.0097  1 .
3669 CA    CA    . ALA ALA ALA B B 45  45  . 0.3327 0.3526 0.3674 0.0101  0.0150  -
0.0027 1 .
3670 CB    CB    . ALA ALA ALA B B 45  45  . 0.3085 0.3501 0.3741 0.0110  0.0200
0.0028  1 .
3671 C     C     . ALA ALA ALA B B 45  45  . 0.3562 0.3665 0.3762 0.0136  0.0106  -
0.0019 1 .
3672 O     O     . ALA ALA ALA B B 45  45  . 0.3356 0.3706 0.3797 0.0083  0.0199  -
0.0072 1 .
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3673 N     N     . LEU LEU LEU B B 46  46  . 0.3792 0.3936 0.3757 0.0095  0.0119  -
0.0084 1 .
3674 CA    CA    . LEU LEU LEU B B 46  46  . 0.3811 0.3965 0.3909 0.0073  -0.0048 -
0.0139 1 .
3675 CB    CB    . LEU LEU LEU B B 46  46  . 0.3963 0.4022 0.4164 0.0074  -0.0005 -
0.0293 1 .
3676 CG    CG    . LEU LEU LEU B B 46  46  . 0.4094 0.4323 0.4454 0.0092  0.0079  -
0.0332 1 .
3677 CD1   CD1   . LEU LEU LEU B B 46  46  . 0.3946 0.4040 0.4924 -0.0360 -0.0382 -
0.0654 1 .
3678 CD2   CD2   . LEU LEU LEU B B 46  46  . 0.4780 0.4496 0.4451 0.0060  0.0221  -
0.0834 1 .
3679 C     C     . LEU LEU LEU B B 46  46  . 0.3759 0.3951 0.3842 -0.0020 -0.0033 -
0.0133 1 .
3680 O     O     . LEU LEU LEU B B 46  46  . 0.3477 0.3971 0.3421 -0.0100 -0.0027 -
0.0167 1 .
3681 N     N     . GLU GLU GLU B B 47  47  . 0.3618 0.3777 0.3809 0.0215  0.0011  -
0.0092 1 .
3682 CA    CA    . GLU GLU GLU B B 47  47  . 0.3560 0.3796 0.3771 0.0179  -0.0036 -
0.0104 1 .
3683 CB    CB    . GLU GLU GLU B B 47  47  . 0.3756 0.3723 0.3902 0.0159  -0.0114 -
0.0229 1 .
3684 CG    CG    . GLU GLU GLU B B 47  47  . 0.3863 0.3781 0.4222 0.0089  -0.0056
0.0188  1 .
3685 CD    CD    . GLU GLU GLU B B 47  47  . 0.4158 0.4222 0.5250 -0.0114 -0.0241
0.0108  1 .
3686 OE1   OE1   . GLU GLU GLU B B 47  47  . 0.4276 0.4553 0.5287 -0.0310 -0.0224 -
0.0136 1 .
3687 OE2   OE2   . GLU GLU GLU B B 47  47  . 0.4493 0.3165 0.5854 -0.0334 -0.0515
0.0330  1 .
3688 C     C     . GLU GLU GLU B B 47  47  . 0.3543 0.3686 0.3826 0.0123  0.0000  -
0.0086 1 .
3689 O     O     . GLU GLU GLU B B 47  47  . 0.3562 0.3765 0.4039 0.0092  0.0210  -
0.0127 1 .
3690 N     N     . LEU LEU LEU B B 48  48  . 0.3338 0.3645 0.3614 0.0136  -0.0012 -
0.0036 1 .
3691 CA    CA    . LEU LEU LEU B B 48  48  . 0.3429 0.3612 0.3618 0.0103  0.0082
0.0040  1 .
3692 CB    CB    . LEU LEU LEU B B 48  48  . 0.3587 0.3636 0.3804 0.0135  0.0227  -
0.0014 1 .
3693 CG    CG    . LEU LEU LEU B B 48  48  . 0.3544 0.3481 0.3567 -0.0163 0.0332
0.0091  1 .
3694 CD1   CD1   . LEU LEU LEU B B 48  48  . 0.3572 0.3691 0.4035 -0.0292 0.0854
0.0240  1 .
3695 CD2   CD2   . LEU LEU LEU B B 48  48  . 0.3291 0.2923 0.3297 -0.0245 0.0275
0.0441  1 .
3696 C     C     . LEU LEU LEU B B 48  48  . 0.3711 0.3776 0.3632 0.0076  0.0141
0.0000  1 .
3697 O     O     . LEU LEU LEU B B 48  48  . 0.3466 0.3987 0.3297 0.0082  0.0237
0.0041  1 .
3698 N     N     . ARG ARG ARG B B 49  49  . 0.3754 0.3751 0.3676 -0.0029 0.0065  -
0.0007 1 .
3699 CA    CA    . ARG ARG ARG B B 49  49  . 0.4089 0.3997 0.3934 0.0126  0.0113  -
0.0004 1 .
3700 CB    CB    . ARG ARG ARG B B 49  49  . 0.4066 0.4033 0.3859 0.0090  0.0267  -
0.0050 1 .
3701 CG    CG    . ARG ARG ARG B B 49  49  . 0.3986 0.3991 0.4150 0.0191  0.0013  -
0.0242 1 .
3702 CD    CD    . ARG ARG ARG B B 49  49  . 0.4367 0.3691 0.3403 -0.0019 -0.0195
0.0003  1 .
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3703 NE    NE    . ARG ARG ARG B B 49  49  . 0.4099 0.3924 0.3947 0.0231  0.0118
0.0193  1 .
3704 CZ    CZ    . ARG ARG ARG B B 49  49  . 0.3954 0.3901 0.3462 0.0597  0.0191
0.0092  1 .
3705 NH1   NH1   . ARG ARG ARG B B 49  49  . 0.3394 0.3466 0.2666 0.0486  0.0139  -
0.0693 1 .
3706 NH2   NH2   . ARG ARG ARG B B 49  49  . 0.4656 0.4140 0.2448 0.0202  -0.0208
0.0049  1 .
3707 C     C     . ARG ARG ARG B B 49  49  . 0.4254 0.3988 0.4032 0.0206  0.0180  -
0.0018 1 .
3708 O     O     . ARG ARG ARG B B 49  49  . 0.4380 0.3898 0.4013 0.0261  0.0244
0.0021  1 .
3709 N     N     . ASP ASP ASP B B 50  50  . 0.4469 0.4114 0.4070 0.0187  0.0231
0.0007  1 .
3710 CA    CA    . ASP ASP ASP B B 50  50  . 0.4609 0.4455 0.4269 0.0100  0.0227
0.0049  1 .
3711 CB    CB    . ASP ASP ASP B B 50  50  . 0.4723 0.4449 0.4233 0.0148  0.0312
0.0012  1 .
3712 CG    CG    . ASP ASP ASP B B 50  50  . 0.4623 0.4722 0.4330 0.0267  0.0424
0.0035  1 .
3713 OD1   OD1   . ASP ASP ASP B B 50  50  . 0.4332 0.4524 0.4224 0.0739  0.0450  -
0.0397 1 .
3714 OD2   OD2   . ASP ASP ASP B B 50  50  . 0.5121 0.5240 0.4968 0.0390  0.0310
0.0525  1 .
3715 C     C     . ASP ASP ASP B B 50  50  . 0.4660 0.4595 0.4408 0.0100  0.0174
0.0078  1 .
3716 O     O     . ASP ASP ASP B B 50  50  . 0.4542 0.4447 0.4284 0.0187  0.0334
0.0024  1 .
3717 N     N     . GLY GLY GLY B B 51  51  . 0.4755 0.4927 0.4550 0.0051  0.0157
0.0155  1 .
3718 CA    CA    . GLY GLY GLY B B 51  51  . 0.4803 0.4892 0.4846 -0.0025 0.0053
0.0062  1 .
3719 C     C     . GLY GLY GLY B B 51  51  . 0.5048 0.5113 0.5153 0.0022  0.0044
0.0062  1 .
3720 O     O     . GLY GLY GLY B B 51  51  . 0.5051 0.5170 0.5360 -0.0016 -0.0024 -
0.0006 1 .
3721 N     N     . ASP ASP ASP B B 52  52  . 0.5231 0.5231 0.5285 0.0002  0.0007
0.0065  1 .
3722 CA    CA    . ASP ASP ASP B B 52  52  . 0.5348 0.5315 0.5300 0.0013  -0.0009 -
0.0018 1 .
3723 CB    CB    . ASP ASP ASP B B 52  52  . 0.5356 0.5155 0.5274 -0.0001 -0.0015
0.0024  1 .
3724 CG    CG    . ASP ASP ASP B B 52  52  . 0.5328 0.5140 0.5372 -0.0172 -0.0010 -
0.0183 1 .
3725 OD1   OD1   . ASP ASP ASP B B 52  52  . 0.5469 0.4270 0.5783 -0.0186 -0.0014 -
0.0289 1 .
3726 OD2   OD2   . ASP ASP ASP B B 52  52  . 0.4954 0.5179 0.4999 -0.0440 -0.0046 -
0.0342 1 .
3727 C     C     . ASP ASP ASP B B 52  52  . 0.5476 0.5401 0.5415 0.0006  -0.0059
0.0003  1 .
3728 O     O     . ASP ASP ASP B B 52  52  . 0.5437 0.5609 0.5489 0.0042  -0.0131
0.0091  1 .
3729 N     N     . LYS LYS LYS B B 53  53  . 0.5628 0.5537 0.5562 0.0018  -0.0039 -
0.0038 1 .
3730 CA    CA    . LYS LYS LYS B B 53  53  . 0.5862 0.5767 0.5739 -0.0003 -0.0077 -
0.0034 1 .
3731 CB    CB    . LYS LYS LYS B B 53  53  . 0.5904 0.5843 0.5858 -0.0019 -0.0070
0.0049  1 .
3732 CG    CG    . LYS LYS LYS B B 53  53  . 0.6484 0.6542 0.6234 0.0000  -0.0060
0.0244  1 .
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3733 CD    CD    . LYS LYS LYS B B 53  53  . 0.7209 0.7107 0.6902 -0.0241 -0.0137
0.0600  1 .
3734 CE    CE    . LYS LYS LYS B B 53  53  . 0.7533 0.8145 0.6931 -0.0078 -0.0283
0.0595  1 .
3735 NZ    NZ    . LYS LYS LYS B B 53  53  . 0.7508 0.8292 0.6821 -0.0045 -0.0262
0.0734  1 .
3736 C     C     . LYS LYS LYS B B 53  53  . 0.5844 0.5619 0.5677 -0.0056 -0.0093 -
0.0051 1 .
3737 O     O     . LYS LYS LYS B B 53  53  . 0.5978 0.5657 0.5657 -0.0040 -0.0192 -
0.0133 1 .
3738 N     N     . GLN GLN GLN B B 54  54  . 0.5881 0.5552 0.5669 -0.0130 -0.0126 -
0.0084 1 .
3739 CA    CA    . GLN GLN GLN B B 54  54  . 0.5878 0.5555 0.5706 -0.0116 -0.0157 -
0.0014 1 .
3740 CB    CB    . GLN GLN GLN B B 54  54  . 0.6006 0.5818 0.5880 -0.0055 -0.0098
0.0011  1 .
3741 CG    CG    . GLN GLN GLN B B 54  54  . 0.6383 0.6085 0.6347 -0.0168 -0.0104
0.0041  1 .
3742 CD    CD    . GLN GLN GLN B B 54  54  . 0.6872 0.6977 0.7001 -0.0112 -0.0145
0.0120  1 .
3743 OE1   OE1   . GLN GLN GLN B B 54  54  . 0.7691 0.7156 0.7135 0.0356  -0.0214
0.0232  1 .
3744 NE2   NE2   . GLN GLN GLN B B 54  54  . 0.7221 0.6974 0.6634 -0.0121 -0.0030
0.0021  1 .
3745 C     C     . GLN GLN GLN B B 54  54  . 0.5741 0.5509 0.5535 -0.0056 -0.0217 -
0.0002 1 .
3746 O     O     . GLN GLN GLN B B 54  54  . 0.5903 0.5574 0.5805 -0.0041 -0.0318
0.0057  1 .
3747 N     N     . ARG ARG ARG B B 55  55  . 0.5459 0.5113 0.5193 -0.0084 -0.0105 -
0.0023 1 .
3748 CA    CA    . ARG ARG ARG B B 55  55  . 0.4864 0.4806 0.4840 0.0000  -0.0037 -
0.0133 1 .
3749 CB    CB    . ARG ARG ARG B B 55  55  . 0.4761 0.4687 0.4804 0.0018  0.0098  -
0.0038 1 .
3750 CG    CG    . ARG ARG ARG B B 55  55  . 0.4551 0.4277 0.4649 0.0105  0.0028  -
0.0243 1 .
3751 CD    CD    . ARG ARG ARG B B 55  55  . 0.4317 0.3940 0.4761 0.0066  -0.0113 -
0.0280 1 .
3752 NE    NE    . ARG ARG ARG B B 55  55  . 0.3862 0.4279 0.4334 0.0165  -0.0349
0.0043  1 .
3753 CZ    CZ    . ARG ARG ARG B B 55  55  . 0.3568 0.4220 0.4344 -0.0234 -0.0079
0.0090  1 .
3754 NH1   NH1   . ARG ARG ARG B B 55  55  . 0.2365 0.4228 0.3719 0.0099  -0.0026 -
0.0413 1 .
3755 NH2   NH2   . ARG ARG ARG B B 55  55  . 0.3638 0.4104 0.4061 -0.0270 -0.0121
0.0442  1 .
3756 C     C     . ARG ARG ARG B B 55  55  . 0.4575 0.4580 0.4747 -0.0002 0.0045  -
0.0122 1 .
3757 O     O     . ARG ARG ARG B B 55  55  . 0.4121 0.4441 0.4541 -0.0152 0.0060  -
0.0393 1 .
3758 N     N     . TYR TYR TYR B B 56  56  . 0.4295 0.4646 0.4613 -0.0032 0.0077  -
0.0185 1 .
3759 CA    CA    . TYR TYR TYR B B 56  56  . 0.4160 0.4372 0.4345 -0.0029 0.0127  -
0.0231 1 .
3760 CB    CB    . TYR TYR TYR B B 56  56  . 0.4138 0.4303 0.4268 -0.0076 0.0294  -
0.0238 1 .
3761 CG    CG    . TYR TYR TYR B B 56  56  . 0.3933 0.4084 0.4262 -0.0243 0.0179  -
0.0281 1 .
3762 CD1   CD1   . TYR TYR TYR B B 56  56  . 0.4079 0.3988 0.3608 -0.0672 0.0290  -
0.0284 1 .
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3763 CE1   CE1   . TYR TYR TYR B B 56  56  . 0.3704 0.3657 0.3234 -0.0095 0.0195  -
0.0102 1 .
3764 CZ    CZ    . TYR TYR TYR B B 56  56  . 0.3534 0.3896 0.3391 -0.0218 -0.0038
0.0227  1 .
3765 OH    OH    . TYR TYR TYR B B 56  56  . 0.3227 0.3396 0.2588 -0.0298 -0.0095 -
0.0054 1 .
3766 CE2   CE2   . TYR TYR TYR B B 56  56  . 0.3594 0.4033 0.3379 -0.0278 -0.0044
0.0255  1 .
3767 CD2   CD2   . TYR TYR TYR B B 56  56  . 0.3385 0.3835 0.3973 -0.0455 -0.0193 -
0.0105 1 .
3768 C     C     . TYR TYR TYR B B 56  56  . 0.3940 0.4436 0.4372 0.0036  0.0241  -
0.0264 1 .
3769 O     O     . TYR TYR TYR B B 56  56  . 0.3614 0.4444 0.4395 0.0165  0.0412  -
0.0416 1 .
3770 N     N     . LEU LEU LEU B B 57  57  . 0.4051 0.4460 0.4482 0.0002  0.0230  -
0.0214 1 .
3771 CA    CA    . LEU LEU LEU B B 57  57  . 0.4235 0.4416 0.4486 0.0000  0.0136  -
0.0072 1 .
3772 CB    CB    . LEU LEU LEU B B 57  57  . 0.4203 0.4618 0.4656 -0.0027 0.0158
0.0023  1 .
3773 CG    CG    . LEU LEU LEU B B 57  57  . 0.4568 0.5130 0.4793 0.0016  0.0156
0.0320  1 .
3774 CD1   CD1   . LEU LEU LEU B B 57  57  . 0.4709 0.5283 0.4475 0.0200  0.0332
0.0433  1 .
3775 CD2   CD2   . LEU LEU LEU B B 57  57  . 0.4437 0.5549 0.4901 -0.0367 0.0057
0.0190  1 .
3776 C     C     . LEU LEU LEU B B 57  57  . 0.4280 0.4385 0.4481 -0.0036 0.0125  -
0.0139 1 .
3777 O     O     . LEU LEU LEU B B 57  57  . 0.4388 0.4362 0.4493 -0.0086 0.0103  -
0.0225 1 .
3778 N     N     . GLY GLY GLY B B 58  58  . 0.4329 0.4216 0.4471 -0.0068 0.0006  -
0.0126 1 .
3779 CA    CA    . GLY GLY GLY B B 58  58  . 0.4152 0.4168 0.4341 -0.0006 -0.0061 -
0.0144 1 .
3780 C     C     . GLY GLY GLY B B 58  58  . 0.4291 0.4237 0.4383 0.0085  -0.0080 -
0.0091 1 .
3781 O     O     . GLY GLY GLY B B 58  58  . 0.4567 0.4350 0.4340 0.0160  -0.0292 -
0.0036 1 .
3782 N     N     . LYS LYS LYS B B 59  59  . 0.4025 0.4249 0.4302 0.0109  -0.0040 -
0.0149 1 .
3783 CA    CA    . LYS LYS LYS B B 59  59  . 0.3801 0.4015 0.4141 0.0081  0.0114  -
0.0151 1 .
3784 CB    CB    . LYS LYS LYS B B 59  59  . 0.3915 0.4144 0.4104 0.0057  0.0136  -
0.0147 1 .
3785 CG    CG    . LYS LYS LYS B B 59  59  . 0.4147 0.4485 0.4658 -0.0089 0.0562  -
0.0144 1 .
3786 CD    CD    . LYS LYS LYS B B 59  59  . 0.4739 0.4804 0.5251 0.0205  0.0864
0.0145  1 .
3787 CE    CE    . LYS LYS LYS B B 59  59  . 0.4646 0.4940 0.5762 0.0079  0.1253
0.0277  1 .
3788 NZ    NZ    . LYS LYS LYS B B 59  59  . 0.3616 0.4222 0.6072 -0.0633 0.0775
0.0262  1 .
3789 C     C     . LYS LYS LYS B B 59  59  . 0.3623 0.3772 0.3773 0.0119  0.0037  -
0.0119 1 .
3790 O     O     . LYS LYS LYS B B 59  59  . 0.3205 0.3743 0.3544 0.0113  -0.0025 -
0.0208 1 .
3791 N     N     . GLY GLY GLY B B 60  60  . 0.3390 0.3580 0.3639 0.0178  0.0031  -
0.0069 1 .
3792 CA    CA    . GLY GLY GLY B B 60  60  . 0.3332 0.3450 0.3260 0.0183  0.0108
0.0047  1 .
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3793 C     C     . GLY GLY GLY B B 60  60  . 0.3393 0.3478 0.3326 0.0121  0.0095
0.0071  1 .
3794 O     O     . GLY GLY GLY B B 60  60  . 0.3197 0.3416 0.3228 0.0254  0.0079
0.0174  1 .
3795 N     N     . VAL VAL VAL B B 61  61  . 0.3592 0.3466 0.3341 0.0071  0.0030
0.0044  1 .
3796 CA    CA    . VAL VAL VAL B B 61  61  . 0.3648 0.3481 0.3363 0.0187  0.0001  -
0.0046 1 .
3797 CB    CB    . VAL VAL VAL B B 61  61  . 0.3924 0.3671 0.3614 0.0094  0.0093
0.0007  1 .
3798 CG1   CG1   . VAL VAL VAL B B 61  61  . 0.3475 0.3604 0.3026 0.0122  0.0055
0.0052  1 .
3799 CG2   CG2   . VAL VAL VAL B B 61  61  . 0.4262 0.3471 0.3443 0.0354  0.0067  -
0.0082 1 .
3800 C     C     . VAL VAL VAL B B 61  61  . 0.3699 0.3454 0.3467 0.0146  -0.0051 -
0.0043 1 .
3801 O     O     . VAL VAL VAL B B 61  61  . 0.3584 0.3176 0.3503 0.0238  -0.0040 -
0.0141 1 .
3802 N     N     . LEU LEU LEU B B 62  62  . 0.3852 0.3850 0.3702 0.0166  -0.0018 -
0.0017 1 .
3803 CA    CA    . LEU LEU LEU B B 62  62  . 0.3792 0.3849 0.3707 0.0144  0.0045  -
0.0006 1 .
3804 CB    CB    . LEU LEU LEU B B 62  62  . 0.3952 0.4036 0.3924 0.0187  0.0007  -
0.0054 1 .
3805 CG    CG    . LEU LEU LEU B B 62  62  . 0.4414 0.4280 0.4125 0.0134  0.0050
0.0011  1 .
3806 CD1   CD1   . LEU LEU LEU B B 62  62  . 0.4985 0.4518 0.4751 -0.0113 0.0303  -
0.0210 1 .
3807 CD2   CD2   . LEU LEU LEU B B 62  62  . 0.4143 0.4729 0.4404 -0.0118 0.0634
0.0232  1 .
3808 C     C     . LEU LEU LEU B B 62  62  . 0.3709 0.3702 0.3578 0.0113  0.0033  -
0.0006 1 .
3809 O     O     . LEU LEU LEU B B 62  62  . 0.3406 0.3451 0.3242 0.0124  0.0112
0.0111  1 .
3810 N     N     . LYS LYS LYS B B 63  63  . 0.3684 0.3709 0.3534 0.0146  0.0200
0.0017  1 .
3811 CA    CA    . LYS LYS LYS B B 63  63  . 0.3607 0.3861 0.3775 0.0089  0.0145
0.0006  1 .
3812 CB    CB    . LYS LYS LYS B B 63  63  . 0.3634 0.3808 0.3790 0.0038  0.0154  -
0.0092 1 .
3813 CG    CG    . LYS LYS LYS B B 63  63  . 0.4524 0.4322 0.4423 -0.0243 0.0161  -
0.0079 1 .
3814 CD    CD    . LYS LYS LYS B B 63  63  . 0.4624 0.4708 0.4609 -0.0806 0.0570  -
0.0056 1 .
3815 CE    CE    . LYS LYS LYS B B 63  63  . 0.4615 0.4473 0.4717 -0.0713 0.0451
0.0211  1 .
3816 NZ    NZ    . LYS LYS LYS B B 63  63  . 0.4641 0.4192 0.4663 -0.0939 0.0866
0.0058  1 .
3817 C     C     . LYS LYS LYS B B 63  63  . 0.3595 0.3787 0.3861 0.0159  0.0149  -
0.0013 1 .
3818 O     O     . LYS LYS LYS B B 63  63  . 0.3141 0.3881 0.4143 0.0346  0.0327
0.0085  1 .
3819 N     N     . ALA ALA ALA B B 64  64  . 0.3353 0.3879 0.3807 0.0239  0.0193  -
0.0059 1 .
3820 CA    CA    . ALA ALA ALA B B 64  64  . 0.3532 0.3804 0.3796 0.0189  0.0126  -
0.0148 1 .
3821 CB    CB    . ALA ALA ALA B B 64  64  . 0.3769 0.3758 0.3780 0.0182  -0.0010 -
0.0284 1 .
3822 C     C     . ALA ALA ALA B B 64  64  . 0.3676 0.3818 0.3825 0.0240  0.0093  -
0.0123 1 .
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3823 O     O     . ALA ALA ALA B B 64  64  . 0.3674 0.3905 0.3770 0.0344  0.0084  -
0.0229 1 .
3824 N     N     . VAL VAL VAL B B 65  65  . 0.3529 0.3912 0.3971 0.0354  0.0176  -
0.0077 1 .
3825 CA    CA    . VAL VAL VAL B B 65  65  . 0.3481 0.4007 0.4043 0.0411  0.0193
0.0009  1 .
3826 CB    CB    . VAL VAL VAL B B 65  65  . 0.3598 0.3981 0.3953 0.0463  0.0237
0.0010  1 .
3827 CG1   CG1   . VAL VAL VAL B B 65  65  . 0.2665 0.3465 0.4062 0.0609  0.0380  -
0.0192 1 .
3828 CG2   CG2   . VAL VAL VAL B B 65  65  . 0.3076 0.4074 0.3945 0.0730  0.0118
0.0345  1 .
3829 C     C     . VAL VAL VAL B B 65  65  . 0.3699 0.4165 0.4151 0.0277  0.0212
0.0017  1 .
3830 O     O     . VAL VAL VAL B B 65  65  . 0.3308 0.4219 0.4112 0.0372  0.0244
0.0045  1 .
3831 N     N     . ASP ASP ASP B B 66  66  . 0.3939 0.4218 0.4225 0.0298  0.0155
0.0000  1 .
3832 CA    CA    . ASP ASP ASP B B 66  66  . 0.4278 0.4438 0.4495 0.0204  0.0146
0.0059  1 .
3833 CB    CB    . ASP ASP ASP B B 66  66  . 0.4444 0.4247 0.4608 0.0193  0.0191
0.0014  1 .
3834 CG    CG    . ASP ASP ASP B B 66  66  . 0.5066 0.4828 0.5263 0.0104  0.0456
0.0058  1 .
3835 OD1   OD1   . ASP ASP ASP B B 66  66  . 0.5572 0.5052 0.5814 0.0264  0.0328  -
0.0127 1 .
3836 OD2   OD2   . ASP ASP ASP B B 66  66  . 0.5596 0.5213 0.5372 -0.0157 0.0907
0.0188  1 .
3837 C     C     . ASP ASP ASP B B 66  66  . 0.4156 0.4396 0.4477 0.0197  0.0083
0.0124  1 .
3838 O     O     . ASP ASP ASP B B 66  66  . 0.4153 0.4498 0.4533 0.0151  0.0132
0.0200  1 .
3839 N     N     . HIS HIS HIS B B 67  67  . 0.4154 0.4517 0.4479 0.0197  0.0070
0.0157  1 .
3840 CA    CA    . HIS HIS HIS B B 67  67  . 0.4269 0.4618 0.4557 0.0100  0.0071
0.0148  1 .
3841 CB    CB    . HIS HIS HIS B B 67  67  . 0.4307 0.4660 0.4628 0.0077  0.0141
0.0135  1 .
3842 CG    CG    . HIS HIS HIS B B 67  67  . 0.4826 0.4825 0.4988 0.0065  -0.0018
0.0142  1 .
3843 ND1   ND1   . HIS HIS HIS B B 67  67  . 0.4877 0.5140 0.4723 0.0188  0.0312  -
0.0029 1 .
3844 CE1   CE1   . HIS HIS HIS B B 67  67  . 0.5021 0.4818 0.5104 0.0076  0.0043  -
0.0097 1 .
3845 NE2   NE2   . HIS HIS HIS B B 67  67  . 0.4825 0.5034 0.5039 -0.0152 -0.0012
0.0139  1 .
3846 CD2   CD2   . HIS HIS HIS B B 67  67  . 0.4968 0.5032 0.5228 -0.0059 -0.0024
0.0155  1 .
3847 C     C     . HIS HIS HIS B B 67  67  . 0.4217 0.4562 0.4548 0.0152  0.0113
0.0201  1 .
3848 O     O     . HIS HIS HIS B B 67  67  . 0.3570 0.4883 0.4738 0.0323  0.0343
0.0379  1 .
3849 N     N     . ILE ILE ILE B B 68  68  . 0.3952 0.4500 0.4291 0.0211  0.0188
0.0172  1 .
3850 CA    CA    . ILE ILE ILE B B 68  68  . 0.4003 0.4271 0.4224 0.0108  0.0153
0.0034  1 .
3851 CB    CB    . ILE ILE ILE B B 68  68  . 0.3975 0.4197 0.4092 0.0026  0.0172
0.0079  1 .
3852 CG1   CG1   . ILE ILE ILE B B 68  68  . 0.4166 0.4283 0.4244 0.0127  0.0109  -
0.0188 1 .
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3853 CD1   CD1   . ILE ILE ILE B B 68  68  . 0.2884 0.4412 0.3280 -0.0069 -0.0541
0.0001  1 .
3854 CG2   CG2   . ILE ILE ILE B B 68  68  . 0.3270 0.3954 0.3540 0.0032  0.0011  -
0.0234 1 .
3855 C     C     . ILE ILE ILE B B 68  68  . 0.4178 0.4327 0.4157 0.0154  0.0168
0.0088  1 .
3856 O     O     . ILE ILE ILE B B 68  68  . 0.4144 0.4518 0.3934 0.0139  0.0176
0.0220  1 .
3857 N     N     . ASN ASN ASN B B 69  69  . 0.4116 0.4350 0.4343 0.0303  0.0076
0.0055  1 .
3858 CA    CA    . ASN ASN ASN B B 69  69  . 0.4408 0.4604 0.4674 0.0194  0.0089
0.0062  1 .
3859 CB    CB    . ASN ASN ASN B B 69  69  . 0.4323 0.4434 0.4473 0.0173  0.0137
0.0016  1 .
3860 CG    CG    . ASN ASN ASN B B 69  69  . 0.4410 0.4446 0.4584 0.0003  0.0065
0.0013  1 .
3861 OD1   OD1   . ASN ASN ASN B B 69  69  . 0.4224 0.3977 0.4758 -0.0549 0.0987
0.0295  1 .
3862 ND2   ND2   . ASN ASN ASN B B 69  69  . 0.4168 0.4169 0.4622 0.0160  -0.0092 -
0.0517 1 .
3863 C     C     . ASN ASN ASN B B 69  69  . 0.4560 0.4785 0.4955 0.0208  0.0151
0.0016  1 .
3864 O     O     . ASN ASN ASN B B 69  69  . 0.4596 0.4987 0.5145 0.0288  0.0062  -
0.0006 1 .
3865 N     N     . SER SER SER B B 70  70  . 0.4828 0.4958 0.5173 0.0258  0.0089  -
0.0030 1 .
3866 CA    CA    . SER SER SER B B 70  70  . 0.5029 0.5129 0.5299 0.0197  0.0001  -
0.0034 1 .
3867 CB    CB    . SER SER SER B B 70  70  . 0.4985 0.4967 0.5258 0.0144  -0.0072 -
0.0039 1 .
3868 OG    OG    . SER SER SER B B 70  70  . 0.5319 0.5281 0.5368 0.0204  -0.0043 -
0.0018 1 .
3869 C     C     . SER SER SER B B 70  70  . 0.5044 0.5188 0.5313 0.0160  0.0000  -
0.0065 1 .
3870 O     O     . SER SER SER B B 70  70  . 0.5027 0.5259 0.5558 0.0210  0.0069  -
0.0169 1 .
3871 N     N     . THR THR THR B B 71  71  . 0.4903 0.5098 0.5170 0.0175  0.0096
0.0003  1 .
3872 CA    CA    . THR THR THR B B 71  71  . 0.4845 0.5076 0.5020 0.0121  0.0030
0.0059  1 .
3873 CB    CB    . THR THR THR B B 71  71  . 0.5005 0.5195 0.5066 0.0097  -0.0039 -
0.0002 1 .
3874 OG1   OG1   . THR THR THR B B 71  71  . 0.5418 0.5230 0.5204 0.0417  -0.0019 -
0.0298 1 .
3875 CG2   CG2   . THR THR THR B B 71  71  . 0.4684 0.5255 0.5084 0.0050  0.0068
0.0099  1 .
3876 C     C     . THR THR THR B B 71  71  . 0.4668 0.4958 0.4917 0.0166  0.0095
0.0121  1 .
3877 O     O     . THR THR THR B B 71  71  . 0.4369 0.5030 0.4834 0.0398  0.0146
0.0259  1 .
3878 N     N     . ILE ILE ILE B B 72  72  . 0.4370 0.4952 0.4764 0.0065  0.0120
0.0200  1 .
3879 CA    CA    . ILE ILE ILE B B 72  72  . 0.4181 0.4774 0.4684 0.0094  0.0074
0.0074  1 .
3880 CB    CB    . ILE ILE ILE B B 72  72  . 0.4401 0.4814 0.4753 0.0096  0.0050
0.0022  1 .
3881 CG1   CG1   . ILE ILE ILE B B 72  72  . 0.4147 0.4964 0.4663 0.0173  0.0180
0.0189  1 .
3882 CD1   CD1   . ILE ILE ILE B B 72  72  . 0.5232 0.4659 0.4808 0.0346  0.0440  -
0.0200 1 .
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3883 CG2   CG2   . ILE ILE ILE B B 72  72  . 0.3553 0.4969 0.4739 0.0502  0.0279  -
0.0061 1 .
3884 C     C     . ILE ILE ILE B B 72  72  . 0.4309 0.4767 0.4637 0.0071  0.0075
0.0082  1 .
3885 O     O     . ILE ILE ILE B B 72  72  . 0.4202 0.4778 0.4828 -0.0010 0.0047
0.0200  1 .
3886 N     N     . ALA ALA ALA B B 73  73  . 0.4020 0.4682 0.4669 0.0167  0.0034
0.0096  1 .
3887 CA    CA    . ALA ALA ALA B B 73  73  . 0.4077 0.4616 0.4568 0.0106  0.0052
0.0014  1 .
3888 CB    CB    . ALA ALA ALA B B 73  73  . 0.4045 0.4586 0.4526 0.0147  0.0081  -
0.0081 1 .
3889 C     C     . ALA ALA ALA B B 73  73  . 0.4216 0.4666 0.4583 0.0082  0.0058  -
0.0035 1 .
3890 O     O     . ALA ALA ALA B B 73  73  . 0.3882 0.4974 0.4624 0.0115  0.0105
0.0116  1 .
3891 N     N     . PRO PRO PRO B B 74  74  . 0.4361 0.4649 0.4737 0.0108  0.0091  -
0.0049 1 .
3892 CA    CA    . PRO PRO PRO B B 74  74  . 0.4409 0.4653 0.4773 0.0059  0.0033  -
0.0018 1 .
3893 CB    CB    . PRO PRO PRO B B 74  74  . 0.4304 0.4671 0.4796 0.0160  0.0067  -
0.0129 1 .
3894 CG    CG    . PRO PRO PRO B B 74  74  . 0.4695 0.4752 0.4836 0.0016  0.0044  -
0.0163 1 .
3895 CD    CD    . PRO PRO PRO B B 74  74  . 0.4282 0.4574 0.4636 0.0064  0.0016  -
0.0079 1 .
3896 C     C     . PRO PRO PRO B B 74  74  . 0.4328 0.4659 0.4809 0.0048  0.0066
0.0024  1 .
3897 O     O     . PRO PRO PRO B B 74  74  . 0.4045 0.4734 0.4985 0.0006  0.0186
0.0164  1 .
3898 N     N     . ALA ALA ALA B B 75  75  . 0.4436 0.4665 0.4832 0.0058  0.0043
0.0155  1 .
3899 CA    CA    . ALA ALA ALA B B 75  75  . 0.4325 0.4704 0.4700 0.0096  0.0032
0.0050  1 .
3900 CB    CB    . ALA ALA ALA B B 75  75  . 0.4388 0.4778 0.4698 0.0137  -0.0010
0.0126  1 .
3901 C     C     . ALA ALA ALA B B 75  75  . 0.4392 0.4721 0.4747 0.0203  0.0097
0.0054  1 .
3902 O     O     . ALA ALA ALA B B 75  75  . 0.4172 0.4707 0.4666 0.0415  0.0148  -
0.0031 1 .
3903 N     N     . LEU LEU LEU B B 76  76  . 0.4245 0.4802 0.4728 0.0161  0.0081
0.0131  1 .
3904 CA    CA    . LEU LEU LEU B B 76  76  . 0.4226 0.4706 0.4759 0.0209  0.0127
0.0097  1 .
3905 CB    CB    . LEU LEU LEU B B 76  76  . 0.4121 0.4852 0.4907 0.0055  0.0210
0.0225  1 .
3906 CG    CG    . LEU LEU LEU B B 76  76  . 0.4074 0.5345 0.4745 0.0271  0.0286
0.0442  1 .
3907 CD1   CD1   . LEU LEU LEU B B 76  76  . 0.2828 0.5212 0.4816 -0.0310 0.0173
0.0577  1 .
3908 CD2   CD2   . LEU LEU LEU B B 76  76  . 0.1839 0.5967 0.5172 0.0543  0.0298
0.0442  1 .
3909 C     C     . LEU LEU LEU B B 76  76  . 0.4166 0.4766 0.4838 0.0260  0.0151
0.0038  1 .
3910 O     O     . LEU LEU LEU B B 76  76  . 0.4004 0.4838 0.4891 0.0324  0.0207
0.0025  1 .
3911 N     N     . ILE ILE ILE B B 77  77  . 0.4309 0.4841 0.4973 0.0213  0.0171  -
0.0041 1 .
3912 CA    CA    . ILE ILE ILE B B 77  77  . 0.4556 0.5092 0.5125 0.0191  0.0113  -
0.0017 1 .
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3913 CB    CB    . ILE ILE ILE B B 77  77  . 0.4441 0.4986 0.5144 0.0239  0.0072  -
0.0007 1 .
3914 CG1   CG1   . ILE ILE ILE B B 77  77  . 0.4159 0.5232 0.4929 0.0107  0.0138  -
0.0125 1 .
3915 CD1   CD1   . ILE ILE ILE B B 77  77  . 0.2607 0.4879 0.4744 0.0208  0.0362  -
0.0114 1 .
3916 CG2   CG2   . ILE ILE ILE B B 77  77  . 0.3947 0.5056 0.4798 0.0565  0.0491  -
0.0216 1 .
3917 C     C     . ILE ILE ILE B B 77  77  . 0.4707 0.5170 0.5382 0.0152  0.0083  -
0.0070 1 .
3918 O     O     . ILE ILE ILE B B 77  77  . 0.4695 0.5421 0.5707 0.0142  0.0140  -
0.0091 1 .
3919 N     N     . SER SER SER B B 78  78  . 0.4897 0.5201 0.5418 0.0197  0.0045  -
0.0029 1 .
3920 CA    CA    . SER SER SER B B 78  78  . 0.5083 0.5329 0.5390 0.0191  0.0063  -
0.0037 1 .
3921 CB    CB    . SER SER SER B B 78  78  . 0.4987 0.5344 0.5407 0.0254  0.0072  -
0.0129 1 .
3922 OG    OG    . SER SER SER B B 78  78  . 0.5285 0.6028 0.5752 0.0453  0.0279  -
0.0058 1 .
3923 C     C     . SER SER SER B B 78  78  . 0.5165 0.5259 0.5360 0.0161  0.0059
0.0014  1 .
3924 O     O     . SER SER SER B B 78  78  . 0.5238 0.5172 0.5346 0.0225  0.0072
0.0029  1 .
3925 N     N     . SER SER SER B B 79  79  . 0.5231 0.5282 0.5305 0.0193  0.0145
0.0012  1 .
3926 CA    CA    . SER SER SER B B 79  79  . 0.5141 0.5325 0.5345 0.0153  0.0173
0.0039  1 .
3927 CB    CB    . SER SER SER B B 79  79  . 0.5005 0.5300 0.5369 0.0162  0.0244
0.0013  1 .
3928 OG    OG    . SER SER SER B B 79  79  . 0.4397 0.5307 0.5352 0.0213  0.0512
0.0266  1 .
3929 C     C     . SER SER SER B B 79  79  . 0.5220 0.5428 0.5434 0.0124  0.0148
0.0012  1 .
3930 O     O     . SER SER SER B B 79  79  . 0.5382 0.5552 0.5520 0.0266  0.0111
0.0001  1 .
3931 N     N     . GLY GLY GLY B B 80  80  . 0.5234 0.5505 0.5477 0.0081  0.0162
0.0080  1 .
3932 CA    CA    . GLY GLY GLY B B 80  80  . 0.5214 0.5403 0.5567 -0.0012 0.0159
0.0089  1 .
3933 C     C     . GLY GLY GLY B B 80  80  . 0.5277 0.5517 0.5677 -0.0013 0.0085
0.0134  1 .
3934 O     O     . GLY GLY GLY B B 80  80  . 0.5264 0.5759 0.5894 -0.0158 0.0097
0.0181  1 .
3935 N     N     . LEU LEU LEU B B 81  81  . 0.5291 0.5498 0.5707 0.0101  -0.0038
0.0117  1 .
3936 CA    CA    . LEU LEU LEU B B 81  81  . 0.5237 0.5515 0.5618 0.0155  -0.0037
0.0143  1 .
3937 CB    CB    . LEU LEU LEU B B 81  81  . 0.5150 0.5483 0.5718 0.0167  -0.0098
0.0095  1 .
3938 CG    CG    . LEU LEU LEU B B 81  81  . 0.5273 0.5350 0.5693 0.0105  -0.0217
0.0191  1 .
3939 CD1   CD1   . LEU LEU LEU B B 81  81  . 0.4705 0.5737 0.5688 0.0068  -0.0424
0.0131  1 .
3940 CD2   CD2   . LEU LEU LEU B B 81  81  . 0.4920 0.4900 0.5845 0.0374  -0.0336
0.0396  1 .
3941 C     C     . LEU LEU LEU B B 81  81  . 0.5245 0.5564 0.5663 0.0142  0.0014
0.0047  1 .
3942 O     O     . LEU LEU LEU B B 81  81  . 0.5102 0.5595 0.5758 0.0329  -0.0061
0.0101  1 .
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3943 N     N     . SER SER SER B B 82  82  . 0.5042 0.5476 0.5621 -0.0010 0.0019
0.0033  1 .
3944 CA    CA    . SER SER SER B B 82  82  . 0.4984 0.5391 0.5623 -0.0156 0.0013
0.0103  1 .
3945 CB    CB    . SER SER SER B B 82  82  . 0.4891 0.5393 0.5580 -0.0270 0.0001
0.0081  1 .
3946 OG    OG    . SER SER SER B B 82  82  . 0.4733 0.5572 0.6098 -0.0348 -0.0129
0.0099  1 .
3947 C     C     . SER SER SER B B 82  82  . 0.4819 0.5328 0.5539 -0.0200 -0.0055
0.0171  1 .
3948 O     O     . SER SER SER B B 82  82  . 0.4422 0.5275 0.5769 -0.0396 -0.0059
0.0266  1 .
3949 N     N     . VAL VAL VAL B B 83  83  . 0.4878 0.5211 0.5415 -0.0191 -0.0098
0.0174  1 .
3950 CA    CA    . VAL VAL VAL B B 83  83  . 0.4788 0.5017 0.5227 -0.0083 -0.0100
0.0067  1 .
3951 CB    CB    . VAL VAL VAL B B 83  83  . 0.4840 0.5003 0.5265 -0.0069 -0.0069
0.0057  1 .
3952 CG1   CG1   . VAL VAL VAL B B 83  83  . 0.4599 0.4767 0.5235 -0.0084 -0.0235
0.0161  1 .
3953 CG2   CG2   . VAL VAL VAL B B 83  83  . 0.4246 0.4911 0.5217 -0.0324 -0.0415 -
0.0059 1 .
3954 C     C     . VAL VAL VAL B B 83  83  . 0.5001 0.5165 0.5338 -0.0082 -0.0096
0.0097  1 .
3955 O     O     . VAL VAL VAL B B 83  83  . 0.5006 0.5075 0.5513 -0.0065 -0.0142
0.0156  1 .
3956 N     N     . VAL VAL VAL B B 84  84  . 0.5000 0.5178 0.5385 -0.0190 -0.0042
0.0011  1 .
3957 CA    CA    . VAL VAL VAL B B 84  84  . 0.5119 0.5259 0.5347 -0.0150 -0.0081
0.0079  1 .
3958 CB    CB    . VAL VAL VAL B B 84  84  . 0.5201 0.5187 0.5301 -0.0119 -0.0076
0.0062  1 .
3959 CG1   CG1   . VAL VAL VAL B B 84  84  . 0.5368 0.5206 0.5044 -0.0137 -0.0223 -
0.0022 1 .
3960 CG2   CG2   . VAL VAL VAL B B 84  84  . 0.5266 0.4979 0.5445 -0.0077 -0.0212
0.0241  1 .
3961 C     C     . VAL VAL VAL B B 84  84  . 0.5037 0.5327 0.5439 -0.0055 -0.0119
0.0061  1 .
3962 O     O     . VAL VAL VAL B B 84  84  . 0.4885 0.5614 0.5617 -0.0036 -0.0174
0.0113  1 .
3963 N     N     . GLU GLU GLU B B 85  85  . 0.5059 0.5343 0.5461 -0.0097 -0.0031 -
0.0007 1 .
3964 CA    CA    . GLU GLU GLU B B 85  85  . 0.5102 0.5262 0.5481 0.0025  -0.0043
0.0008  1 .
3965 CB    CB    . GLU GLU GLU B B 85  85  . 0.5324 0.5345 0.5581 0.0032  -0.0040 -
0.0006 1 .
3966 CG    CG    . GLU GLU GLU B B 85  85  . 0.5709 0.5773 0.6287 -0.0057 -0.0098 -
0.0008 1 .
3967 CD    CD    . GLU GLU GLU B B 85  85  . 0.6539 0.6564 0.6707 -0.0184 -0.0147
0.0173  1 .
3968 OE1   OE1   . GLU GLU GLU B B 85  85  . 0.7369 0.6520 0.6847 -0.0182 -0.0673
0.0077  1 .
3969 OE2   OE2   . GLU GLU GLU B B 85  85  . 0.6515 0.6822 0.7239 0.0140  -0.0588
0.0225  1 .
3970 C     C     . GLU GLU GLU B B 85  85  . 0.5035 0.5129 0.5295 0.0045  0.0064
0.0050  1 .
3971 O     O     . GLU GLU GLU B B 85  85  . 0.4909 0.5200 0.5043 0.0094  0.0040
0.0001  1 .
3972 N     N     . GLN GLN GLN B B 86  86  . 0.4930 0.5112 0.5235 0.0032  0.0081
0.0055  1 .
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3973 CA    CA    . GLN GLN GLN B B 86  86  . 0.4715 0.5023 0.5092 0.0040  0.0041
0.0025  1 .
3974 CB    CB    . GLN GLN GLN B B 86  86  . 0.4663 0.4879 0.5068 -0.0035 0.0044  -
0.0004 1 .
3975 CG    CG    . GLN GLN GLN B B 86  86  . 0.4330 0.4917 0.4964 0.0350  -0.0027 -
0.0053 1 .
3976 CD    CD    . GLN GLN GLN B B 86  86  . 0.3898 0.4537 0.4625 0.0181  0.0311
0.0019  1 .
3977 OE1   OE1   . GLN GLN GLN B B 86  86  . 0.3576 0.4778 0.4464 0.0025  0.0406
0.0301  1 .
3978 NE2   NE2   . GLN GLN GLN B B 86  86  . 0.3781 0.5210 0.4929 -0.0182 0.0344  -
0.0073 1 .
3979 C     C     . GLN GLN GLN B B 86  86  . 0.4747 0.5148 0.5116 -0.0014 0.0031  -
0.0013 1 .
3980 O     O     . GLN GLN GLN B B 86  86  . 0.4568 0.5352 0.5180 0.0003  0.0035  -
0.0074 1 .
3981 N     N     . GLU GLU GLU B B 87  87  . 0.4856 0.5198 0.4963 -0.0054 0.0007
0.0051  1 .
3982 CA    CA    . GLU GLU GLU B B 87  87  . 0.5017 0.5174 0.5008 -0.0050 -0.0016
0.0080  1 .
3983 CB    CB    . GLU GLU GLU B B 87  87  . 0.5208 0.5325 0.5063 -0.0117 -0.0084
0.0082  1 .
3984 CG    CG    . GLU GLU GLU B B 87  87  . 0.6236 0.5668 0.5593 -0.0010 -0.0098
0.0106  1 .
3985 CD    CD    . GLU GLU GLU B B 87  87  . 0.7623 0.6545 0.6151 -0.0165 -0.0404
0.0230  1 .
3986 OE1   OE1   . GLU GLU GLU B B 87  87  . 0.7830 0.6049 0.6829 0.0098  -0.0379
0.0302  1 .
3987 OE2   OE2   . GLU GLU GLU B B 87  87  . 0.8034 0.6955 0.6579 -0.0627 -0.0458
0.0266  1 .
3988 C     C     . GLU GLU GLU B B 87  87  . 0.4976 0.5098 0.4881 -0.0106 -0.0069
0.0108  1 .
3989 O     O     . GLU GLU GLU B B 87  87  . 0.4951 0.5096 0.4952 -0.0151 -0.0094
0.0212  1 .
3990 N     N     . LYS LYS LYS B B 88  88  . 0.4673 0.4991 0.4787 -0.0074 -0.0077
0.0118  1 .
3991 CA    CA    . LYS LYS LYS B B 88  88  . 0.4730 0.4947 0.4770 -0.0077 -0.0049
0.0108  1 .
3992 CB    CB    . LYS LYS LYS B B 88  88  . 0.4672 0.5016 0.4909 -0.0061 -0.0077
0.0118  1 .
3993 CG    CG    . LYS LYS LYS B B 88  88  . 0.4916 0.5338 0.5450 -0.0119 -0.0192
0.0155  1 .
3994 CD    CD    . LYS LYS LYS B B 88  88  . 0.5194 0.6013 0.6122 -0.0052 0.0122
0.0510  1 .
3995 CE    CE    . LYS LYS LYS B B 88  88  . 0.5358 0.6161 0.6374 0.0022  -0.0063
0.0276  1 .
3996 NZ    NZ    . LYS LYS LYS B B 88  88  . 0.6062 0.6716 0.6377 -0.0079 -0.0539
0.0112  1 .
3997 C     C     . LYS LYS LYS B B 88  88  . 0.4574 0.4744 0.4725 -0.0042 -0.0033
0.0100  1 .
3998 O     O     . LYS LYS LYS B B 88  88  . 0.4613 0.4773 0.4694 -0.0038 0.0110
0.0108  1 .
3999 N     N     . LEU LEU LEU B B 89  89  . 0.4450 0.4730 0.4530 -0.0048 0.0009
0.0080  1 .
4000 CA    CA    . LEU LEU LEU B B 89  89  . 0.4326 0.4477 0.4408 0.0021  0.0015
0.0094  1 .
4001 CB    CB    . LEU LEU LEU B B 89  89  . 0.4286 0.4315 0.4421 0.0092  0.0057
0.0122  1 .
4002 CG    CG    . LEU LEU LEU B B 89  89  . 0.4272 0.4054 0.4477 0.0026  0.0025
0.0127  1 .
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4003 CD1   CD1   . LEU LEU LEU B B 89  89  . 0.3282 0.3593 0.4687 -0.0208 -0.0034
0.0093  1 .
4004 CD2   CD2   . LEU LEU LEU B B 89  89  . 0.3829 0.2626 0.4180 0.0385  -0.0154
0.0203  1 .
4005 C     C     . LEU LEU LEU B B 89  89  . 0.4144 0.4422 0.4345 0.0074  0.0019
0.0053  1 .
4006 O     O     . LEU LEU LEU B B 89  89  . 0.3807 0.4659 0.4110 0.0197  0.0068
0.0086  1 .
4007 N     N     . ASP ASP ASP B B 90  90  . 0.4219 0.4407 0.4274 0.0061  0.0006
0.0075  1 .
4008 CA    CA    . ASP ASP ASP B B 90  90  . 0.4133 0.4560 0.4340 0.0152  -0.0012
0.0042  1 .
4009 CB    CB    . ASP ASP ASP B B 90  90  . 0.4279 0.4640 0.4353 0.0289  -0.0111
0.0010  1 .
4010 CG    CG    . ASP ASP ASP B B 90  90  . 0.4193 0.5019 0.4611 0.0342  -0.0119 -
0.0091 1 .
4011 OD1   OD1   . ASP ASP ASP B B 90  90  . 0.3835 0.5601 0.4897 0.0555  -0.0675 -
0.0021 1 .
4012 OD2   OD2   . ASP ASP ASP B B 90  90  . 0.4191 0.4884 0.5411 0.0784  -0.0265 -
0.0181 1 .
4013 C     C     . ASP ASP ASP B B 90  90  . 0.4071 0.4506 0.4392 0.0162  -0.0039
0.0028  1 .
4014 O     O     . ASP ASP ASP B B 90  90  . 0.3628 0.4530 0.4337 0.0249  -0.0093
0.0072  1 .
4015 N     N     . ASN ASN ASN B B 91  91  . 0.4240 0.4683 0.4544 0.0123  -0.0065
0.0011  1 .
4016 CA    CA    . ASN ASN ASN B B 91  91  . 0.4405 0.4642 0.4692 0.0111  -0.0098
0.0021  1 .
4017 CB    CB    . ASN ASN ASN B B 91  91  . 0.4614 0.4872 0.4925 0.0085  -0.0091
0.0061  1 .
4018 CG    CG    . ASN ASN ASN B B 91  91  . 0.5506 0.5820 0.5280 -0.0243 -0.0081
0.0168  1 .
4019 OD1   OD1   . ASN ASN ASN B B 91  91  . 0.6667 0.6149 0.6367 -0.0908 -0.0308
0.0066  1 .
4020 ND2   ND2   . ASN ASN ASN B B 91  91  . 0.5591 0.6572 0.6029 -0.0325 0.0027
0.0499  1 .
4021 C     C     . ASN ASN ASN B B 91  91  . 0.4042 0.4591 0.4752 0.0204  -0.0079
0.0042  1 .
4022 O     O     . ASN ASN ASN B B 91  91  . 0.3785 0.4549 0.4959 0.0531  -0.0064
0.0022  1 .
4023 N     N     . LEU LEU LEU B B 92  92  . 0.4012 0.4600 0.4653 0.0180  -0.0085 -
0.0003 1 .
4024 CA    CA    . LEU LEU LEU B B 92  92  . 0.4124 0.4513 0.4562 0.0177  -0.0065 -
0.0050 1 .
4025 CB    CB    . LEU LEU LEU B B 92  92  . 0.3796 0.4428 0.4465 0.0249  -0.0014 -
0.0085 1 .
4026 CG    CG    . LEU LEU LEU B B 92  92  . 0.3519 0.4475 0.4569 0.0297  -0.0232
0.0106  1 .
4027 CD1   CD1   . LEU LEU LEU B B 92  92  . 0.3778 0.4303 0.4328 0.0675  0.0196  -
0.0243 1 .
4028 CD2   CD2   . LEU LEU LEU B B 92  92  . 0.1066 0.4604 0.4540 0.1107  0.0054
0.0090  1 .
4029 C     C     . LEU LEU LEU B B 92  92  . 0.4220 0.4577 0.4657 0.0170  -0.0033 -
0.0055 1 .
4030 O     O     . LEU LEU LEU B B 92  92  . 0.4324 0.4624 0.4693 0.0252  0.0111  -
0.0129 1 .
4031 N     N     . MET MET MET B B 93  93  . 0.4387 0.4709 0.4660 0.0171  -0.0089
0.0007  1 .
4032 CA    CA    . MET MET MET B B 93  93  . 0.4271 0.4654 0.4630 0.0182  -0.0050
0.0050  1 .
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4033 CB    CB    . MET MET MET B B 93  93  . 0.4307 0.4610 0.4564 0.0286  -0.0177
0.0069  1 .
4034 CG    CG    . MET MET MET B B 93  93  . 0.4204 0.4350 0.4430 0.0404  0.0076
0.0093  1 .
4035 SD    SD    . MET MET MET B B 93  93  . 0.4538 0.5247 0.4521 0.0528  -0.0380
0.0407  1 .
4036 CE    CE    . MET MET MET B B 93  93  . 0.4100 0.4869 0.4335 0.0979  0.0254
0.0112  1 .
4037 C     C     . MET MET MET B B 93  93  . 0.4207 0.4671 0.4632 0.0203  -0.0026
0.0083  1 .
4038 O     O     . MET MET MET B B 93  93  . 0.4017 0.4741 0.4495 0.0245  0.0005
0.0222  1 .
4039 N     N     . LEU LEU LEU B B 94  94  . 0.4302 0.4744 0.4734 0.0278  0.0020
0.0056  1 .
4040 CA    CA    . LEU LEU LEU B B 94  94  . 0.4716 0.4886 0.4859 0.0247  0.0012  -
0.0006 1 .
4041 CB    CB    . LEU LEU LEU B B 94  94  . 0.4668 0.4841 0.4884 0.0354  0.0064  -
0.0186 1 .
4042 CG    CG    . LEU LEU LEU B B 94  94  . 0.5039 0.5090 0.4965 0.0348  -0.0004 -
0.0442 1 .
4043 CD1   CD1   . LEU LEU LEU B B 94  94  . 0.5600 0.5415 0.5019 0.0555  0.0420  -
0.0658 1 .
4044 CD2   CD2   . LEU LEU LEU B B 94  94  . 0.4180 0.4830 0.5268 0.1072  0.0185  -
0.0919 1 .
4045 C     C     . LEU LEU LEU B B 94  94  . 0.4783 0.4892 0.4967 0.0175  0.0023  -
0.0033 1 .
4046 O     O     . LEU LEU LEU B B 94  94  . 0.4714 0.4847 0.4863 0.0109  0.0024
0.0125  1 .
4047 N     N     . GLU GLU GLU B B 95  95  . 0.4786 0.5064 0.5153 0.0095  0.0061
0.0018  1 .
4048 CA    CA    . GLU GLU GLU B B 95  95  . 0.4963 0.5226 0.5313 0.0083  0.0036
0.0083  1 .
4049 CB    CB    . GLU GLU GLU B B 95  95  . 0.5080 0.5404 0.5529 0.0079  0.0005
0.0089  1 .
4050 CG    CG    . GLU GLU GLU B B 95  95  . 0.6008 0.6228 0.5970 0.0107  0.0146
0.0162  1 .
4051 CD    CD    . GLU GLU GLU B B 95  95  . 0.7285 0.7004 0.7214 0.0151  0.0333
0.0478  1 .
4052 OE1   OE1   . GLU GLU GLU B B 95  95  . 0.7991 0.7732 0.7298 0.0136  0.0642
0.0478  1 .
4053 OE2   OE2   . GLU GLU GLU B B 95  95  . 0.7437 0.7631 0.7651 0.0505  0.0436
0.0389  1 .
4054 C     C     . GLU GLU GLU B B 95  95  . 0.4787 0.5138 0.5269 0.0087  0.0023
0.0056  1 .
4055 O     O     . GLU GLU GLU B B 95  95  . 0.4626 0.5255 0.5363 0.0207  -0.0002
0.0128  1 .
4056 N     N     . LEU LEU LEU B B 96  96  . 0.4774 0.5162 0.5262 0.0108  0.0007
0.0031  1 .
4057 CA    CA    . LEU LEU LEU B B 96  96  . 0.4800 0.5125 0.5131 0.0199  0.0047
0.0014  1 .
4058 CB    CB    . LEU LEU LEU B B 96  96  . 0.4889 0.5223 0.5239 0.0221  0.0121
0.0031  1 .
4059 CG    CG    . LEU LEU LEU B B 96  96  . 0.5197 0.5515 0.5337 0.0330  0.0264
0.0095  1 .
4060 CD1   CD1   . LEU LEU LEU B B 96  96  . 0.4848 0.5867 0.5780 0.0422  0.0100
0.0229  1 .
4061 CD2   CD2   . LEU LEU LEU B B 96  96  . 0.5208 0.5502 0.5382 0.0709  0.0213  -
0.0016 1 .
4062 C     C     . LEU LEU LEU B B 96  96  . 0.4691 0.5072 0.5063 0.0176  -0.0032 -
0.0023 1 .
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4063 O     O     . LEU LEU LEU B B 96  96  . 0.4292 0.5231 0.4976 0.0257  -0.0161 -
0.0057 1 .
4064 N     N     . ASP ASP ASP B B 97  97  . 0.4786 0.5087 0.5017 0.0194  -0.0008
0.0006  1 .
4065 CA    CA    . ASP ASP ASP B B 97  97  . 0.4815 0.4974 0.5010 0.0148  -0.0031 -
0.0036 1 .
4066 CB    CB    . ASP ASP ASP B B 97  97  . 0.4804 0.5032 0.4899 0.0157  -0.0033 -
0.0021 1 .
4067 CG    CG    . ASP ASP ASP B B 97  97  . 0.5110 0.5103 0.4925 0.0405  -0.0134
0.0007  1 .
4068 OD1   OD1   . ASP ASP ASP B B 97  97  . 0.4580 0.5078 0.4699 0.0548  -0.0545
0.0290  1 .
4069 OD2   OD2   . ASP ASP ASP B B 97  97  . 0.5952 0.5543 0.5125 0.1157  0.0083
0.0173  1 .
4070 C     C     . ASP ASP ASP B B 97  97  . 0.4885 0.5067 0.5152 0.0165  0.0029  -
0.0083 1 .
4071 O     O     . ASP ASP ASP B B 97  97  . 0.4910 0.5094 0.5472 0.0236  0.0047
0.0019  1 .
4072 N     N     . GLY GLY GLY B B 98  98  . 0.4929 0.5186 0.5297 0.0202  0.0063  -
0.0016 1 .
4073 CA    CA    . GLY GLY GLY B B 98  98  . 0.5078 0.5156 0.5232 0.0177  0.0119  -
0.0005 1 .
4074 C     C     . GLY GLY GLY B B 98  98  . 0.5177 0.5233 0.5323 0.0168  0.0092  -
0.0009 1 .
4075 O     O     . GLY GLY GLY B B 98  98  . 0.5196 0.5337 0.5440 0.0265  0.0151  -
0.0009 1 .
4076 N     N     . THR THR THR B B 99  99  . 0.5136 0.5273 0.5356 0.0188  0.0003
0.0020  1 .
4077 CA    CA    . THR THR THR B B 99  99  . 0.5206 0.5293 0.5330 0.0188  -0.0040 -
0.0010 1 .
4078 CB    CB    . THR THR THR B B 99  99  . 0.5235 0.5263 0.5342 0.0232  -0.0098 -
0.0049 1 .
4079 OG1   OG1   . THR THR THR B B 99  99  . 0.4788 0.5333 0.5401 0.0433  -0.0133 -
0.0211 1 .
4080 CG2   CG2   . THR THR THR B B 99  99  . 0.5167 0.5187 0.5168 0.0305  -0.0076
0.0021  1 .
4081 C     C     . THR THR THR B B 99  99  . 0.5224 0.5228 0.5417 0.0181  -0.0001
0.0009  1 .
4082 O     O     . THR THR THR B B 99  99  . 0.5150 0.5166 0.5477 0.0131  0.0003  -
0.0135 1 .
4083 N     N     . GLU GLU GLU B B 100 100 . 0.5162 0.5246 0.5346 0.0227  0.0024
0.0071  1 .
4084 CA    CA    . GLU GLU GLU B B 100 100 . 0.5294 0.5275 0.5343 0.0213  -0.0067
0.0094  1 .
4085 CB    CB    . GLU GLU GLU B B 100 100 . 0.5514 0.5361 0.5516 0.0167  -0.0088
0.0197  1 .
4086 CG    CG    . GLU GLU GLU B B 100 100 . 0.6154 0.5914 0.6033 0.0267  -0.0077
0.0002  1 .
4087 CD    CD    . GLU GLU GLU B B 100 100 . 0.6814 0.6946 0.7182 0.0262  -0.0428 -
0.0191 1 .
4088 OE1   OE1   . GLU GLU GLU B B 100 100 . 0.6317 0.7247 0.7296 0.0575  -0.0470 -
0.0115 1 .
4089 OE2   OE2   . GLU GLU GLU B B 100 100 . 0.7965 0.7150 0.7304 0.0343  -0.0187 -
0.0369 1 .
4090 C     C     . GLU GLU GLU B B 100 100 . 0.5105 0.5063 0.5176 0.0176  -0.0048
0.0125  1 .
4091 O     O     . GLU GLU GLU B B 100 100 . 0.5022 0.5147 0.5233 0.0232  -0.0014
0.0235  1 .
4092 N     N     . ASN ASN ASN B B 101 101 . 0.4736 0.4815 0.5028 0.0137  -0.0049
0.0186  1 .
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4093 CA    CA    . ASN ASN ASN B B 101 101 . 0.4664 0.4629 0.4751 0.0008  -0.0004
0.0186  1 .
4094 CB    CB    . ASN ASN ASN B B 101 101 . 0.4604 0.4650 0.4877 0.0009  -0.0062
0.0198  1 .
4095 CG    CG    . ASN ASN ASN B B 101 101 . 0.5062 0.5231 0.5160 0.0034  0.0119
0.0333  1 .
4096 OD1   OD1   . ASN ASN ASN B B 101 101 . 0.4861 0.5839 0.5830 -0.0524 0.0772
0.0449  1 .
4097 ND2   ND2   . ASN ASN ASN B B 101 101 . 0.4955 0.5497 0.5595 0.0274  0.0359
0.0532  1 .
4098 C     C     . ASN ASN ASN B B 101 101 . 0.4420 0.4299 0.4542 -0.0021 0.0025
0.0091  1 .
4099 O     O     . ASN ASN ASN B B 101 101 . 0.4509 0.3892 0.4372 -0.0050 0.0091
0.0172  1 .
4100 N     N     . LYS LYS LYS B B 102 102 . 0.4224 0.4023 0.4263 -0.0082 0.0057
0.0059  1 .
4101 CA    CA    . LYS LYS LYS B B 102 102 . 0.4006 0.4068 0.4202 -0.0081 0.0057  -
0.0080 1 .
4102 CB    CB    . LYS LYS LYS B B 102 102 . 0.3890 0.3949 0.4049 -0.0126 0.0175
0.0003  1 .
4103 CG    CG    . LYS LYS LYS B B 102 102 . 0.3390 0.3758 0.3994 -0.0176 0.0459  -
0.0190 1 .
4104 CD    CD    . LYS LYS LYS B B 102 102 . 0.3791 0.3793 0.4066 -0.0027 0.0191  -
0.0250 1 .
4105 CE    CE    . LYS LYS LYS B B 102 102 . 0.3672 0.3837 0.3764 0.0142  0.0266  -
0.0022 1 .
4106 NZ    NZ    . LYS LYS LYS B B 102 102 . 0.3829 0.3861 0.3464 0.0717  0.0306  -
0.0306 1 .
4107 C     C     . LYS LYS LYS B B 102 102 . 0.4023 0.4185 0.4103 -0.0062 0.0025  -
0.0062 1 .
4108 O     O     . LYS LYS LYS B B 102 102 . 0.4079 0.4212 0.4097 -0.0073 -0.0128 -
0.0080 1 .
4109 N     N     . SER SER SER B B 103 103 . 0.4030 0.4330 0.4222 -0.0080 0.0006  -
0.0087 1 .
4110 CA    CA    . SER SER SER B B 103 103 . 0.4026 0.4532 0.4416 -0.0041 0.0001
0.0036  1 .
4111 CB    CB    . SER SER SER B B 103 103 . 0.4157 0.4424 0.4623 -0.0015 -0.0074
0.0073  1 .
4112 OG    OG    . SER SER SER B B 103 103 . 0.4211 0.5155 0.5049 0.0183  -0.0053
0.0531  1 .
4113 C     C     . SER SER SER B B 103 103 . 0.3980 0.4538 0.4365 -0.0062 -0.0057 -
0.0099 1 .
4114 O     O     . SER SER SER B B 103 103 . 0.3649 0.4702 0.4484 -0.0195 -0.0147 -
0.0234 1 .
4115 N     N     . LYS LYS LYS B B 104 104 . 0.3688 0.4389 0.4283 0.0014  -0.0031 -
0.0019 1 .
4116 CA    CA    . LYS LYS LYS B B 104 104 . 0.3549 0.4194 0.4099 0.0047  0.0090
0.0009  1 .
4117 CB    CB    . LYS LYS LYS B B 104 104 . 0.3744 0.4311 0.4194 0.0081  0.0071  -
0.0031 1 .
4118 CG    CG    . LYS LYS LYS B B 104 104 . 0.4232 0.4587 0.4888 -0.0219 0.0291  -
0.0073 1 .
4119 CD    CD    . LYS LYS LYS B B 104 104 . 0.5279 0.5124 0.5506 0.0064  0.0394  -
0.0542 1 .
4120 CE    CE    . LYS LYS LYS B B 104 104 . 0.5880 0.5477 0.5556 0.0156  0.0341  -
0.0562 1 .
4121 NZ    NZ    . LYS LYS LYS B B 104 104 . 0.5894 0.5865 0.5553 0.0132  0.0292  -
0.1082 1 .
4122 C     C     . LYS LYS LYS B B 104 104 . 0.3236 0.4054 0.3970 0.0097  0.0091  -
0.0029 1 .
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4123 O     O     . LYS LYS LYS B B 104 104 . 0.3194 0.4134 0.4070 0.0125  0.0254
0.0114  1 .
4124 N     N     . PHE PHE PHE B B 105 105 . 0.3031 0.3949 0.3820 0.0160  0.0114
0.0034  1 .
4125 CA    CA    . PHE PHE PHE B B 105 105 . 0.3103 0.3796 0.3828 0.0154  0.0013
0.0017  1 .
4126 CB    CB    . PHE PHE PHE B B 105 105 . 0.3357 0.3829 0.3788 0.0199  0.0065
0.0045  1 .
4127 CG    CG    . PHE PHE PHE B B 105 105 . 0.3461 0.4176 0.4093 0.0047  -0.0089
0.0094  1 .
4128 CD1   CD1   . PHE PHE PHE B B 105 105 . 0.4016 0.4443 0.4439 0.0000  -0.0066
0.0162  1 .
4129 CE1   CE1   . PHE PHE PHE B B 105 105 . 0.4493 0.4781 0.4686 0.0023  0.0161  -
0.0051 1 .
4130 CZ    CZ    . PHE PHE PHE B B 105 105 . 0.4378 0.4932 0.5077 0.0002  -0.0005 -
0.0137 1 .
4131 CE2   CE2   . PHE PHE PHE B B 105 105 . 0.4298 0.4754 0.4788 -0.0024 -0.0068
0.0082  1 .
4132 CD2   CD2   . PHE PHE PHE B B 105 105 . 0.3574 0.3963 0.4188 0.0043  -0.0077
0.0297  1 .
4133 C     C     . PHE PHE PHE B B 105 105 . 0.3364 0.3784 0.3771 0.0235  -0.0001
0.0082  1 .
4134 O     O     . PHE PHE PHE B B 105 105 . 0.2925 0.3917 0.3921 0.0392  -0.0204
0.0047  1 .
4135 N     N     . GLY GLY GLY B B 106 106 . 0.3268 0.3794 0.3824 0.0283  0.0097
0.0031  1 .
4136 CA    CA    . GLY GLY GLY B B 106 106 . 0.3450 0.3598 0.3700 0.0268  0.0045
0.0134  1 .
4137 C     C     . GLY GLY GLY B B 106 106 . 0.3340 0.3527 0.3557 0.0198  -0.0007
0.0139  1 .
4138 O     O     . GLY GLY GLY B B 106 106 . 0.3067 0.3483 0.3624 0.0180  0.0040
0.0260  1 .
4139 N     N     . ALA ALA ALA B B 107 107 . 0.3259 0.3539 0.3523 0.0239  0.0058
0.0090  1 .
4140 CA    CA    . ALA ALA ALA B B 107 107 . 0.3294 0.3454 0.3450 0.0215  0.0006
0.0108  1 .
4141 CB    CB    . ALA ALA ALA B B 107 107 . 0.3332 0.3370 0.3455 0.0303  -0.0044
0.0149  1 .
4142 C     C     . ALA ALA ALA B B 107 107 . 0.3328 0.3588 0.3514 0.0228  0.0014
0.0077  1 .
4143 O     O     . ALA ALA ALA B B 107 107 . 0.2992 0.3687 0.3537 0.0554  0.0140
0.0118  1 .
4144 N     N     . ASN ASN ASN B B 108 108 . 0.3504 0.3781 0.3640 0.0169  -0.0069
0.0092  1 .
4145 CA    CA    . ASN ASN ASN B B 108 108 . 0.3765 0.3770 0.3663 -0.0015 -0.0049
0.0175  1 .
4146 CB    CB    . ASN ASN ASN B B 108 108 . 0.3552 0.3696 0.3556 -0.0028 -0.0091
0.0067  1 .
4147 CG    CG    . ASN ASN ASN B B 108 108 . 0.3584 0.3813 0.3372 0.0214  0.0023
0.0043  1 .
4148 OD1   OD1   . ASN ASN ASN B B 108 108 . 0.4397 0.4300 0.3628 0.0524  -0.0523 -
0.0247 1 .
4149 ND2   ND2   . ASN ASN ASN B B 108 108 . 0.2587 0.3310 0.2895 0.0334  0.0344
0.0161  1 .
4150 C     C     . ASN ASN ASN B B 108 108 . 0.3953 0.3841 0.3769 -0.0004 -0.0014
0.0107  1 .
4151 O     O     . ASN ASN ASN B B 108 108 . 0.4305 0.3834 0.3771 -0.0265 -0.0011
0.0294  1 .
4152 N     N     . ALA ALA ALA B B 109 109 . 0.3958 0.3903 0.3871 0.0026  -0.0020
0.0092  1 .
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4153 CA    CA    . ALA ALA ALA B B 109 109 . 0.3980 0.3932 0.3935 -0.0085 -0.0006
0.0067  1 .
4154 CB    CB    . ALA ALA ALA B B 109 109 . 0.4074 0.3952 0.3888 -0.0083 -0.0097 -
0.0026 1 .
4155 C     C     . ALA ALA ALA B B 109 109 . 0.3888 0.3881 0.3896 -0.0067 -0.0050
0.0063  1 .
4156 O     O     . ALA ALA ALA B B 109 109 . 0.3497 0.3868 0.4047 -0.0021 0.0041
0.0178  1 .
4157 N     N     . ILE ILE ILE B B 110 110 . 0.3773 0.3873 0.3917 -0.0038 -0.0116
0.0078  1 .
4158 CA    CA    . ILE ILE ILE B B 110 110 . 0.3868 0.3821 0.3859 0.0032  -0.0098 -
0.0009 1 .
4159 CB    CB    . ILE ILE ILE B B 110 110 . 0.4000 0.3756 0.3765 0.0053  -0.0191 -
0.0043 1 .
4160 CG1   CG1   . ILE ILE ILE B B 110 110 . 0.3527 0.3946 0.4262 0.0150  -0.0183
0.0150  1 .
4161 CD1   CD1   . ILE ILE ILE B B 110 110 . 0.4455 0.4158 0.4225 0.0172  -0.0173
0.0164  1 .
4162 CG2   CG2   . ILE ILE ILE B B 110 110 . 0.3125 0.3809 0.3937 0.0165  -0.0386 -
0.0118 1 .
4163 C     C     . ILE ILE ILE B B 110 110 . 0.3766 0.3782 0.3777 -0.0058 -0.0030
0.0028  1 .
4164 O     O     . ILE ILE ILE B B 110 110 . 0.3738 0.3639 0.3617 -0.0311 0.0176
0.0058  1 .
4165 N     N     . LEU LEU LEU B B 111 111 . 0.3586 0.3762 0.3510 0.0063  0.0054
0.0054  1 .
4166 CA    CA    . LEU LEU LEU B B 111 111 . 0.3364 0.3762 0.3534 0.0003  0.0058
0.0080  1 .
4167 CB    CB    . LEU LEU LEU B B 111 111 . 0.3346 0.3768 0.3501 0.0067  0.0066
0.0219  1 .
4168 CG    CG    . LEU LEU LEU B B 111 111 . 0.3335 0.3768 0.3277 0.0026  0.0239
0.0227  1 .
4169 CD1   CD1   . LEU LEU LEU B B 111 111 . 0.2444 0.3379 0.3319 0.0383  0.0247
0.0365  1 .
4170 CD2   CD2   . LEU LEU LEU B B 111 111 . 0.3072 0.3584 0.3440 0.0112  -0.0094
0.0436  1 .
4171 C     C     . LEU LEU LEU B B 111 111 . 0.3221 0.3825 0.3699 -0.0034 0.0103
0.0023  1 .
4172 O     O     . LEU LEU LEU B B 111 111 . 0.3129 0.3957 0.3953 0.0191  0.0197  -
0.0019 1 .
4173 N     N     . GLY GLY GLY B B 112 112 . 0.3170 0.3778 0.3702 -0.0061 0.0228
0.0032  1 .
4174 CA    CA    . GLY GLY GLY B B 112 112 . 0.3198 0.3771 0.3669 -0.0171 0.0132
0.0144  1 .
4175 C     C     . GLY GLY GLY B B 112 112 . 0.3230 0.3590 0.3747 -0.0173 0.0014
0.0084  1 .
4176 O     O     . GLY GLY GLY B B 112 112 . 0.3295 0.3569 0.3770 -0.0180 0.0050
0.0007  1 .
4177 N     N     . VAL VAL VAL B B 113 113 . 0.3046 0.3549 0.3672 -0.0118 -0.0052
0.0111  1 .
4178 CA    CA    . VAL VAL VAL B B 113 113 . 0.3159 0.3595 0.3573 -0.0034 0.0002
0.0124  1 .
4179 CB    CB    . VAL VAL VAL B B 113 113 . 0.2965 0.3329 0.3485 -0.0058 -0.0091
0.0105  1 .
4180 CG1   CG1   . VAL VAL VAL B B 113 113 . 0.3213 0.3497 0.3356 -0.0005 0.0012
0.0311  1 .
4181 CG2   CG2   . VAL VAL VAL B B 113 113 . 0.3273 0.3525 0.3428 0.0146  0.0021
0.0010  1 .
4182 C     C     . VAL VAL VAL B B 113 113 . 0.3132 0.3642 0.3601 0.0009  -0.0113
0.0124  1 .
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4183 O     O     . VAL VAL VAL B B 113 113 . 0.3086 0.3711 0.3713 0.0350  -0.0082
0.0347  1 .
4184 N     N     . SER SER SER B B 114 114 . 0.3182 0.3734 0.3692 0.0017  -0.0104
0.0060  1 .
4185 CA    CA    . SER SER SER B B 114 114 . 0.3076 0.3789 0.3758 0.0099  -0.0121 -
0.0060 1 .
4186 CB    CB    . SER SER SER B B 114 114 . 0.3217 0.3733 0.3733 0.0077  -0.0170 -
0.0057 1 .
4187 OG    OG    . SER SER SER B B 114 114 . 0.2254 0.3992 0.4078 0.0190  -0.0201 -
0.0329 1 .
4188 C     C     . SER SER SER B B 114 114 . 0.3355 0.3806 0.3887 0.0057  -0.0208 -
0.0006 1 .
4189 O     O     . SER SER SER B B 114 114 . 0.3267 0.3896 0.3997 0.0178  -0.0290
0.0031  1 .
4190 N     N     . LEU LEU LEU B B 115 115 . 0.3240 0.3952 0.3957 0.0137  -0.0181 -
0.0002 1 .
4191 CA    CA    . LEU LEU LEU B B 115 115 . 0.3232 0.3851 0.4016 0.0024  -0.0166
0.0004  1 .
4192 CB    CB    . LEU LEU LEU B B 115 115 . 0.3052 0.4024 0.3973 -0.0080 -0.0107 -
0.0067 1 .
4193 CG    CG    . LEU LEU LEU B B 115 115 . 0.3548 0.4137 0.3871 -0.0242 -0.0108 -
0.0237 1 .
4194 CD1   CD1   . LEU LEU LEU B B 115 115 . 0.2670 0.4242 0.3957 -0.0001 0.0294  -
0.0344 1 .
4195 CD2   CD2   . LEU LEU LEU B B 115 115 . 0.2949 0.4294 0.3755 -0.0546 -0.0167
0.0089  1 .
4196 C     C     . LEU LEU LEU B B 115 115 . 0.2898 0.3942 0.4054 0.0060  -0.0125
0.0010  1 .
4197 O     O     . LEU LEU LEU B B 115 115 . 0.2441 0.4029 0.4463 0.0153  -0.0110
0.0222  1 .
4198 N     N     . ALA ALA ALA B B 116 116 . 0.2887 0.3843 0.4008 0.0127  -0.0117
0.0082  1 .
4199 CA    CA    . ALA ALA ALA B B 116 116 . 0.3233 0.3827 0.4009 -0.0034 -0.0094
0.0078  1 .
4200 CB    CB    . ALA ALA ALA B B 116 116 . 0.3230 0.3479 0.3716 0.0050  -0.0003 -
0.0022 1 .
4201 C     C     . ALA ALA ALA B B 116 116 . 0.3275 0.3960 0.4095 0.0040  -0.0028
0.0095  1 .
4202 O     O     . ALA ALA ALA B B 116 116 . 0.2998 0.4308 0.4382 -0.0129 -0.0054
0.0092  1 .
4203 N     N     . VAL VAL VAL B B 117 117 . 0.3409 0.4100 0.4019 0.0090  -0.0095
0.0132  1 .
4204 CA    CA    . VAL VAL VAL B B 117 117 . 0.3561 0.4111 0.3985 -0.0070 -0.0007
0.0092  1 .
4205 CB    CB    . VAL VAL VAL B B 117 117 . 0.3275 0.4057 0.4067 0.0031  -0.0068
0.0026  1 .
4206 CG1   CG1   . VAL VAL VAL B B 117 117 . 0.3784 0.4401 0.3330 -0.0048 0.0080
0.0004  1 .
4207 CG2   CG2   . VAL VAL VAL B B 117 117 . 0.3401 0.4424 0.3359 -0.0018 0.0089
0.0003  1 .
4208 C     C     . VAL VAL VAL B B 117 117 . 0.3758 0.4096 0.4221 -0.0038 -0.0029
0.0112  1 .
4209 O     O     . VAL VAL VAL B B 117 117 . 0.3579 0.4338 0.4538 -0.0122 -0.0070
0.0158  1 .
4210 N     N     . CYS CYS CYS B B 118 118 . 0.3769 0.4110 0.4160 0.0054  0.0001
0.0132  1 .
4211 CA    CA    . CYS CYS CYS B B 118 118 . 0.3869 0.4151 0.4264 0.0100  0.0046
0.0126  1 .
4212 CB    CB    . CYS CYS CYS B B 118 118 . 0.4140 0.4143 0.4283 -0.0031 0.0076
0.0244  1 .
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4213 SG    SG    . CYS CYS CYS B B 118 118 . 0.3920 0.4503 0.4379 0.0162  -0.0177
0.0410  1 .
4214 C     C     . CYS CYS CYS B B 118 118 . 0.3882 0.4200 0.4209 -0.0033 0.0081
0.0097  1 .
4215 O     O     . CYS CYS CYS B B 118 118 . 0.3398 0.4052 0.4319 -0.0119 0.0133
0.0088  1 .
4216 N     N     . LYS LYS LYS B B 119 119 . 0.4035 0.4317 0.4169 0.0066  0.0013
0.0129  1 .
4217 CA    CA    . LYS LYS LYS B B 119 119 . 0.3992 0.4311 0.4277 -0.0037 0.0001
0.0048  1 .
4218 CB    CB    . LYS LYS LYS B B 119 119 . 0.3789 0.4399 0.4249 0.0134  -0.0031
0.0087  1 .
4219 CG    CG    . LYS LYS LYS B B 119 119 . 0.3841 0.4171 0.4213 -0.0117 0.0056
0.0132  1 .
4220 CD    CD    . LYS LYS LYS B B 119 119 . 0.3137 0.5125 0.4570 -0.0137 0.0166  -
0.0107 1 .
4221 CE    CE    . LYS LYS LYS B B 119 119 . 0.4143 0.5530 0.4835 -0.0413 -0.0254
0.0419  1 .
4222 NZ    NZ    . LYS LYS LYS B B 119 119 . 0.2729 0.6019 0.5362 -0.0078 -0.0188
0.0383  1 .
4223 C     C     . LYS LYS LYS B B 119 119 . 0.3899 0.4338 0.4244 -0.0018 -0.0025
0.0047  1 .
4224 O     O     . LYS LYS LYS B B 119 119 . 0.3677 0.4580 0.4270 -0.0140 -0.0177
0.0089  1 .
4225 N     N     . ALA ALA ALA B B 120 120 . 0.3917 0.4304 0.4231 0.0017  -0.0013
0.0045  1 .
4226 CA    CA    . ALA ALA ALA B B 120 120 . 0.4031 0.4390 0.4346 0.0022  -0.0057
0.0008  1 .
4227 CB    CB    . ALA ALA ALA B B 120 120 . 0.3691 0.4323 0.4283 0.0049  -0.0012 -
0.0120 1 .
4228 C     C     . ALA ALA ALA B B 120 120 . 0.4104 0.4421 0.4381 0.0037  -0.0034
0.0041  1 .
4229 O     O     . ALA ALA ALA B B 120 120 . 0.4223 0.4633 0.4432 0.0039  0.0017
0.0116  1 .
4230 N     N     . GLY GLY GLY B B 121 121 . 0.4206 0.4484 0.4361 0.0079  -0.0026
0.0096  1 .
4231 CA    CA    . GLY GLY GLY B B 121 121 . 0.4267 0.4551 0.4498 -0.0026 -0.0027
0.0077  1 .
4232 C     C     . GLY GLY GLY B B 121 121 . 0.4370 0.4692 0.4559 -0.0174 -0.0075
0.0111  1 .
4233 O     O     . GLY GLY GLY B B 121 121 . 0.3959 0.4804 0.4668 -0.0413 -0.0021
0.0300  1 .
4234 N     N     . ALA ALA ALA B B 122 122 . 0.4128 0.4729 0.4598 -0.0104 -0.0100
0.0045  1 .
4235 CA    CA    . ALA ALA ALA B B 122 122 . 0.4381 0.4858 0.4811 -0.0172 -0.0086 -
0.0030 1 .
4236 CB    CB    . ALA ALA ALA B B 122 122 . 0.4175 0.4911 0.4693 -0.0077 -0.0049 -
0.0029 1 .
4237 C     C     . ALA ALA ALA B B 122 122 . 0.4383 0.4917 0.4904 -0.0190 -0.0037
0.0012  1 .
4238 O     O     . ALA ALA ALA B B 122 122 . 0.4346 0.4973 0.5147 -0.0225 -0.0052
0.0054  1 .
4239 N     N     . ALA ALA ALA B B 123 123 . 0.4212 0.4883 0.4936 -0.0186 -0.0027 -
0.0056 1 .
4240 CA    CA    . ALA ALA ALA B B 123 123 . 0.4399 0.4969 0.5101 -0.0129 -0.0059
0.0021  1 .
4241 CB    CB    . ALA ALA ALA B B 123 123 . 0.4184 0.4887 0.5146 -0.0120 -0.0178
0.0035  1 .
4242 C     C     . ALA ALA ALA B B 123 123 . 0.4540 0.5042 0.5307 -0.0059 -0.0087
0.0054  1 .
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4243 O     O     . ALA ALA ALA B B 123 123 . 0.4403 0.5173 0.5399 -0.0088 -0.0079
0.0074  1 .
4244 N     N     . GLU GLU GLU B B 124 124 . 0.4761 0.5170 0.5424 0.0033  -0.0044
0.0089  1 .
4245 CA    CA    . GLU GLU GLU B B 124 124 . 0.5130 0.5313 0.5506 0.0049  -0.0084
0.0082  1 .
4246 CB    CB    . GLU GLU GLU B B 124 124 . 0.5218 0.5425 0.5537 0.0114  -0.0021
0.0064  1 .
4247 CG    CG    . GLU GLU GLU B B 124 124 . 0.5782 0.5916 0.6072 0.0033  -0.0049
0.0116  1 .
4248 CD    CD    . GLU GLU GLU B B 124 124 . 0.6897 0.6538 0.6821 -0.0312 0.0072
0.0233  1 .
4249 OE1   OE1   . GLU GLU GLU B B 124 124 . 0.7156 0.6463 0.7522 -0.0462 -0.0189 -
0.0129 1 .
4250 OE2   OE2   . GLU GLU GLU B B 124 124 . 0.7431 0.7073 0.6723 0.0044  0.0189
0.0366  1 .
4251 C     C     . GLU GLU GLU B B 124 124 . 0.5103 0.5280 0.5498 0.0067  -0.0059
0.0086  1 .
4252 O     O     . GLU GLU GLU B B 124 124 . 0.5171 0.5357 0.5705 0.0166  -0.0100
0.0054  1 .
4253 N     N     . ARG ARG ARG B B 125 125 . 0.5193 0.5344 0.5465 -0.0001 0.0006
0.0050  1 .
4254 CA    CA    . ARG ARG ARG B B 125 125 . 0.5300 0.5465 0.5608 -0.0068 0.0004
0.0022  1 .
4255 CB    CB    . ARG ARG ARG B B 125 125 . 0.5346 0.5509 0.5507 -0.0021 0.0003
0.0088  1 .
4256 CG    CG    . ARG ARG ARG B B 125 125 . 0.5742 0.5856 0.5778 0.0118  0.0000
0.0237  1 .
4257 CD    CD    . ARG ARG ARG B B 125 125 . 0.6061 0.6741 0.6432 0.0210  -0.0147
0.0118  1 .
4258 NE    NE    . ARG ARG ARG B B 125 125 . 0.6746 0.7116 0.6834 0.0212  -0.0150
0.0230  1 .
4259 CZ    CZ    . ARG ARG ARG B B 125 125 . 0.7022 0.7129 0.7300 0.0173  0.0030
0.0236  1 .
4260 NH1   NH1   . ARG ARG ARG B B 125 125 . 0.7292 0.7480 0.7383 -0.0114 0.0238
0.0154  1 .
4261 NH2   NH2   . ARG ARG ARG B B 125 125 . 0.7353 0.7120 0.7414 0.0032  0.0088
0.0418  1 .
4262 C     C     . ARG ARG ARG B B 125 125 . 0.5204 0.5377 0.5541 -0.0148 0.0037
0.0031  1 .
4263 O     O     . ARG ARG ARG B B 125 125 . 0.5178 0.5487 0.5645 -0.0223 0.0085  -
0.0069 1 .
4264 N     N     . GLU GLU GLU B B 126 126 . 0.5247 0.5371 0.5547 -0.0184 0.0034  -
0.0004 1 .
4265 CA    CA    . GLU GLU GLU B B 126 126 . 0.5320 0.5394 0.5577 -0.0120 0.0084  -
0.0034 1 .
4266 CB    CB    . GLU GLU GLU B B 126 126 . 0.5416 0.5502 0.5741 -0.0168 0.0102  -
0.0011 1 .
4267 CG    CG    . GLU GLU GLU B B 126 126 . 0.6166 0.6270 0.6049 -0.0340 0.0236  -
0.0020 1 .
4268 CD    CD    . GLU GLU GLU B B 126 126 . 0.6611 0.7355 0.6822 -0.0553 0.0251
0.0027  1 .
4269 OE1   OE1   . GLU GLU GLU B B 126 126 . 0.7347 0.8082 0.6954 -0.0697 0.0369
0.0060  1 .
4270 OE2   OE2   . GLU GLU GLU B B 126 126 . 0.6965 0.7296 0.6805 -0.0686 0.0261
0.0217  1 .
4271 C     C     . GLU GLU GLU B B 126 126 . 0.5128 0.5198 0.5385 -0.0121 0.0039  -
0.0033 1 .
4272 O     O     . GLU GLU GLU B B 126 126 . 0.5056 0.5190 0.5544 0.0001  0.0062  -
0.0092 1 .
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4273 N     N     . LEU LEU LEU B B 127 127 . 0.4828 0.5001 0.5026 -0.0128 -0.0022 -
0.0022 1 .
4274 CA    CA    . LEU LEU LEU B B 127 127 . 0.4603 0.4788 0.4762 -0.0055 -0.0092 -
0.0056 1 .
4275 CB    CB    . LEU LEU LEU B B 127 127 . 0.4600 0.4816 0.4794 -0.0079 -0.0107 -
0.0077 1 .
4276 CG    CG    . LEU LEU LEU B B 127 127 . 0.4884 0.4866 0.4841 -0.0101 -0.0234 -
0.0045 1 .
4277 CD1   CD1   . LEU LEU LEU B B 127 127 . 0.4830 0.5141 0.4912 -0.0107 -0.0539
0.0042  1 .
4278 CD2   CD2   . LEU LEU LEU B B 127 127 . 0.5084 0.4835 0.4783 -0.0683 -0.0313 -
0.0027 1 .
4279 C     C     . LEU LEU LEU B B 127 127 . 0.4415 0.4682 0.4608 -0.0024 -0.0046
0.0000  1 .
4280 O     O     . LEU LEU LEU B B 127 127 . 0.4116 0.4749 0.4394 -0.0086 -0.0121
0.0033  1 .
4281 N     N     . PRO PRO PRO B B 128 128 . 0.4384 0.4553 0.4552 -0.0050 -0.0072
0.0005  1 .
4282 CA    CA    . PRO PRO PRO B B 128 128 . 0.4394 0.4546 0.4568 -0.0024 -0.0059
0.0046  1 .
4283 CB    CB    . PRO PRO PRO B B 128 128 . 0.4504 0.4587 0.4625 -0.0061 -0.0072 -
0.0063 1 .
4284 CG    CG    . PRO PRO PRO B B 128 128 . 0.4493 0.4764 0.4547 -0.0040 -0.0043 -
0.0061 1 .
4285 CD    CD    . PRO PRO PRO B B 128 128 . 0.4311 0.4595 0.4438 -0.0011 -0.0040
0.0023  1 .
4286 C     C     . PRO PRO PRO B B 128 128 . 0.4380 0.4542 0.4563 -0.0109 -0.0096
0.0052  1 .
4287 O     O     . PRO PRO PRO B B 128 128 . 0.4179 0.4470 0.4573 -0.0140 -0.0177
0.0112  1 .
4288 N     N     . LEU LEU LEU B B 129 129 . 0.4309 0.4437 0.4366 -0.0098 -0.0179
0.0067  1 .
4289 CA    CA    . LEU LEU LEU B B 129 129 . 0.4273 0.4408 0.4375 -0.0114 -0.0142
0.0054  1 .
4290 CB    CB    . LEU LEU LEU B B 129 129 . 0.4436 0.4420 0.4469 -0.0099 -0.0132
0.0052  1 .
4291 CG    CG    . LEU LEU LEU B B 129 129 . 0.4088 0.4313 0.4334 -0.0041 -0.0080 -
0.0013 1 .
4292 CD1   CD1   . LEU LEU LEU B B 129 129 . 0.4055 0.4297 0.3835 0.0232  -0.0073 -
0.0050 1 .
4293 CD2   CD2   . LEU LEU LEU B B 129 129 . 0.2972 0.4073 0.3024 -0.0034 0.0611  -
0.0305 1 .
4294 C     C     . LEU LEU LEU B B 129 129 . 0.4275 0.4420 0.4387 -0.0128 -0.0081
0.0077  1 .
4295 O     O     . LEU LEU LEU B B 129 129 . 0.4092 0.4259 0.4398 -0.0248 -0.0094
0.0260  1 .
4296 N     N     . TYR TYR TYR B B 130 130 . 0.4353 0.4361 0.4289 -0.0094 -0.0072 -
0.0004 1 .
4297 CA    CA    . TYR TYR TYR B B 130 130 . 0.4456 0.4404 0.4266 -0.0090 -0.0114 -
0.0045 1 .
4298 CB    CB    . TYR TYR TYR B B 130 130 . 0.4324 0.4296 0.3980 -0.0104 -0.0170 -
0.0102 1 .
4299 CG    CG    . TYR TYR TYR B B 130 130 . 0.4542 0.4655 0.4414 -0.0220 -0.0155 -
0.0025 1 .
4300 CD1   CD1   . TYR TYR TYR B B 130 130 . 0.4801 0.4873 0.4678 -0.0489 -0.0335
0.0108  1 .
4301 CE1   CE1   . TYR TYR TYR B B 130 130 . 0.4694 0.4870 0.4968 -0.0243 -0.0290
0.0045  1 .
4302 CZ    CZ    . TYR TYR TYR B B 130 130 . 0.4964 0.5000 0.5129 -0.0186 -0.0172
0.0084  1 .
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4303 OH    OH    . TYR TYR TYR B B 130 130 . 0.5094 0.5153 0.5923 0.0000  -0.0349
0.0090  1 .
4304 CE2   CE2   . TYR TYR TYR B B 130 130 . 0.4716 0.4719 0.4989 -0.0216 -0.0121
0.0129  1 .
4305 CD2   CD2   . TYR TYR TYR B B 130 130 . 0.4469 0.4780 0.4620 -0.0681 -0.0151
0.0043  1 .
4306 C     C     . TYR TYR TYR B B 130 130 . 0.4447 0.4397 0.4302 -0.0158 -0.0128 -
0.0120 1 .
4307 O     O     . TYR TYR TYR B B 130 130 . 0.4314 0.4322 0.4250 -0.0061 -0.0205 -
0.0363 1 .
4308 N     N     . ARG ARG ARG B B 131 131 . 0.4708 0.4694 0.4551 -0.0225 -0.0088 -
0.0051 1 .
4309 CA    CA    . ARG ARG ARG B B 131 131 . 0.4808 0.4764 0.4751 -0.0131 -0.0103
0.0006  1 .
4310 CB    CB    . ARG ARG ARG B B 131 131 . 0.4853 0.4867 0.4856 -0.0280 -0.0030 -
0.0061 1 .
4311 CG    CG    . ARG ARG ARG B B 131 131 . 0.5362 0.5189 0.5578 0.0141  0.0046
0.0012  1 .
4312 CD    CD    . ARG ARG ARG B B 131 131 . 0.6121 0.6104 0.6549 -0.0208 0.0111  -
0.0259 1 .
4313 NE    NE    . ARG ARG ARG B B 131 131 . 0.7061 0.6332 0.7284 0.0023  0.0124  -
0.0316 1 .
4314 CZ    CZ    . ARG ARG ARG B B 131 131 . 0.7409 0.6925 0.7217 0.0179  0.0106  -
0.0147 1 .
4315 NH1   NH1   . ARG ARG ARG B B 131 131 . 0.6953 0.7080 0.7409 0.0393  0.0403  -
0.0256 1 .
4316 NH2   NH2   . ARG ARG ARG B B 131 131 . 0.7626 0.7416 0.7304 0.0007  0.0049
0.0195  1 .
4317 C     C     . ARG ARG ARG B B 131 131 . 0.4698 0.4719 0.4706 -0.0177 -0.0062
0.0026  1 .
4318 O     O     . ARG ARG ARG B B 131 131 . 0.4720 0.4757 0.4979 -0.0342 -0.0154
0.0007  1 .
4319 N     N     . HIS HIS HIS B B 132 132 . 0.4717 0.4654 0.4573 -0.0080 -0.0082 -
0.0011 1 .
4320 CA    CA    . HIS HIS HIS B B 132 132 . 0.4499 0.4579 0.4506 0.0023  -0.0054
0.0001  1 .
4321 CB    CB    . HIS HIS HIS B B 132 132 . 0.4522 0.4567 0.4615 0.0083  -0.0018 -
0.0008 1 .
4322 CG    CG    . HIS HIS HIS B B 132 132 . 0.4698 0.4750 0.5012 0.0142  -0.0101
0.0026  1 .
4323 ND1   ND1   . HIS HIS HIS B B 132 132 . 0.4214 0.4771 0.5372 0.0142  -0.0217
0.0140  1 .
4324 CE1   CE1   . HIS HIS HIS B B 132 132 . 0.4864 0.4925 0.5239 0.0008  -0.0196
0.0006  1 .
4325 NE2   NE2   . HIS HIS HIS B B 132 132 . 0.4472 0.4828 0.4844 0.0060  -0.0208
0.0236  1 .
4326 CD2   CD2   . HIS HIS HIS B B 132 132 . 0.4926 0.4752 0.4858 0.0133  -0.0199
0.0057  1 .
4327 C     C     . HIS HIS HIS B B 132 132 . 0.4418 0.4482 0.4428 -0.0001 -0.0031 -
0.0045 1 .
4328 O     O     . HIS HIS HIS B B 132 132 . 0.4483 0.4412 0.4370 -0.0069 0.0005  -
0.0057 1 .
4329 N     N     . ILE ILE ILE B B 133 133 . 0.4507 0.4528 0.4385 0.0024  -0.0115
0.0036  1 .
4330 CA    CA    . ILE ILE ILE B B 133 133 . 0.4360 0.4436 0.4429 -0.0112 -0.0101
0.0031  1 .
4331 CB    CB    . ILE ILE ILE B B 133 133 . 0.4352 0.4302 0.4244 -0.0004 -0.0227
0.0073  1 .
4332 CG1   CG1   . ILE ILE ILE B B 133 133 . 0.4205 0.4294 0.4168 -0.0062 -0.0376
0.0207  1 .
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4333 CD1   CD1   . ILE ILE ILE B B 133 133 . 0.3891 0.3121 0.4212 0.0120  -0.0453
0.0329  1 .
4334 CG2   CG2   . ILE ILE ILE B B 133 133 . 0.4013 0.4258 0.4152 -0.0398 -0.0203 -
0.0129 1 .
4335 C     C     . ILE ILE ILE B B 133 133 . 0.4435 0.4618 0.4610 -0.0072 -0.0106
0.0050  1 .
4336 O     O     . ILE ILE ILE B B 133 133 . 0.4455 0.4617 0.4700 -0.0038 -0.0058
0.0073  1 .
4337 N     N     . ALA ALA ALA B B 134 134 . 0.4405 0.4670 0.4757 -0.0032 -0.0062
0.0019  1 .
4338 CA    CA    . ALA ALA ALA B B 134 134 . 0.4652 0.4887 0.4829 0.0019  -0.0037
0.0077  1 .
4339 CB    CB    . ALA ALA ALA B B 134 134 . 0.4684 0.4924 0.4804 -0.0046 -0.0008
0.0046  1 .
4340 C     C     . ALA ALA ALA B B 134 134 . 0.4854 0.5118 0.5006 -0.0031 -0.0067
0.0083  1 .
4341 O     O     . ALA ALA ALA B B 134 134 . 0.4962 0.5207 0.5061 -0.0029 -0.0100
0.0073  1 .
4342 N     N     . GLN GLN GLN B B 135 135 . 0.4927 0.5173 0.5148 -0.0070 -0.0004
0.0137  1 .
4343 CA    CA    . GLN GLN GLN B B 135 135 . 0.5183 0.5302 0.5371 -0.0085 -0.0050
0.0100  1 .
4344 CB    CB    . GLN GLN GLN B B 135 135 . 0.5142 0.5409 0.5438 -0.0140 -0.0006
0.0150  1 .
4345 CG    CG    . GLN GLN GLN B B 135 135 . 0.5373 0.5418 0.5900 -0.0038 0.0007
0.0060  1 .
4346 CD    CD    . GLN GLN GLN B B 135 135 . 0.5766 0.5865 0.6244 -0.0049 0.0065
0.0092  1 .
4347 OE1   OE1   . GLN GLN GLN B B 135 135 . 0.5583 0.6042 0.6870 0.0368  0.0148
0.0289  1 .
4348 NE2   NE2   . GLN GLN GLN B B 135 135 . 0.5758 0.6008 0.6311 -0.0127 -0.0267
0.0019  1 .
4349 C     C     . GLN GLN GLN B B 135 135 . 0.5240 0.5310 0.5377 -0.0066 -0.0130
0.0127  1 .
4350 O     O     . GLN GLN GLN B B 135 135 . 0.5310 0.5366 0.5361 -0.0238 -0.0311
0.0098  1 .
4351 N     N     . LEU LEU LEU B B 136 136 . 0.5239 0.5238 0.5190 -0.0059 -0.0125
0.0040  1 .
4352 CA    CA    . LEU LEU LEU B B 136 136 . 0.5291 0.5267 0.5306 -0.0007 -0.0113
0.0021  1 .
4353 CB    CB    . LEU LEU LEU B B 136 136 . 0.5200 0.5219 0.5332 0.0001  -0.0085
0.0074  1 .
4354 CG    CG    . LEU LEU LEU B B 136 136 . 0.5164 0.4953 0.5294 0.0037  -0.0224
0.0205  1 .
4355 CD1   CD1   . LEU LEU LEU B B 136 136 . 0.5177 0.4092 0.5343 0.0188  -0.0441
0.0206  1 .
4356 CD2   CD2   . LEU LEU LEU B B 136 136 . 0.4867 0.4994 0.5375 0.0247  -0.0163
0.0261  1 .
4357 C     C     . LEU LEU LEU B B 136 136 . 0.5398 0.5389 0.5493 -0.0062 -0.0097 -
0.0010 1 .
4358 O     O     . LEU LEU LEU B B 136 136 . 0.5362 0.5376 0.5524 -0.0062 -0.0116 -
0.0036 1 .
4359 N     N     . ALA ALA ALA B B 137 137 . 0.5713 0.5526 0.5698 -0.0028 -0.0119 -
0.0042 1 .
4360 CA    CA    . ALA ALA ALA B B 137 137 . 0.6009 0.5746 0.5894 -0.0057 -0.0099
0.0002  1 .
4361 CB    CB    . ALA ALA ALA B B 137 137 . 0.5938 0.5593 0.5902 -0.0101 -0.0148 -
0.0033 1 .
4362 C     C     . ALA ALA ALA B B 137 137 . 0.6330 0.6051 0.6082 -0.0070 -0.0124
0.0061  1 .
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4363 O     O     . ALA ALA ALA B B 137 137 . 0.6355 0.6074 0.6082 -0.0184 -0.0202
0.0161  1 .
4364 N     N     . GLY GLY GLY B B 138 138 . 0.6566 0.6314 0.6326 -0.0057 -0.0121
0.0103  1 .
4365 CA    CA    . GLY GLY GLY B B 138 138 . 0.6837 0.6630 0.6598 -0.0047 -0.0118
0.0069  1 .
4366 C     C     . GLY GLY GLY B B 138 138 . 0.7060 0.6953 0.6805 -0.0014 -0.0068
0.0052  1 .
4367 O     O     . GLY GLY GLY B B 138 138 . 0.7157 0.7079 0.6800 -0.0006 -0.0199
0.0061  1 .
4368 N     N     . ASN ASN ASN B B 139 139 . 0.7134 0.7070 0.6900 -0.0010 -0.0079
0.0097  1 .
4369 CA    CA    . ASN ASN ASN B B 139 139 . 0.7231 0.7254 0.7077 -0.0054 -0.0078
0.0083  1 .
4370 CB    CB    . ASN ASN ASN B B 139 139 . 0.7232 0.7228 0.7021 -0.0156 -0.0110
0.0101  1 .
4371 CG    CG    . ASN ASN ASN B B 139 139 . 0.7385 0.7477 0.7285 -0.0230 -0.0218
0.0236  1 .
4372 OD1   OD1   . ASN ASN ASN B B 139 139 . 0.7681 0.7678 0.7274 -0.0393 -0.0290
0.0338  1 .
4373 ND2   ND2   . ASN ASN ASN B B 139 139 . 0.7065 0.7526 0.7090 -0.0484 -0.0626
0.0197  1 .
4374 C     C     . ASN ASN ASN B B 139 139 . 0.7232 0.7309 0.7170 -0.0080 -0.0081
0.0021  1 .
4375 O     O     . ASN ASN ASN B B 139 139 . 0.7149 0.7409 0.7312 -0.0169 -0.0135
0.0020  1 .
4376 N     N     . SER SER SER B B 140 140 . 0.7369 0.7371 0.7295 -0.0061 -0.0107 -
0.0016 1 .
4377 CA    CA    . SER SER SER B B 140 140 . 0.7432 0.7458 0.7348 -0.0071 -0.0048
0.0032  1 .
4378 CB    CB    . SER SER SER B B 140 140 . 0.7444 0.7538 0.7404 -0.0104 -0.0036
0.0018  1 .
4379 OG    OG    . SER SER SER B B 140 140 . 0.7667 0.7699 0.7382 -0.0298 -0.0061 -
0.0007 1 .
4380 C     C     . SER SER SER B B 140 140 . 0.7415 0.7456 0.7388 -0.0042 -0.0022
0.0056  1 .
4381 O     O     . SER SER SER B B 140 140 . 0.7480 0.7588 0.7530 0.0030  -0.0030
0.0085  1 .
4382 N     N     . ASP ASP ASP B B 141 141 . 0.7331 0.7379 0.7294 -0.0062 0.0022
0.0098  1 .
4383 CA    CA    . ASP ASP ASP B B 141 141 . 0.7274 0.7329 0.7231 -0.0094 -0.0013
0.0085  1 .
4384 CB    CB    . ASP ASP ASP B B 141 141 . 0.7586 0.7577 0.7424 -0.0038 0.0104
0.0147  1 .
4385 CG    CG    . ASP ASP ASP B B 141 141 . 0.8319 0.8189 0.8038 0.0152  0.0172
0.0272  1 .
4386 OD1   OD1   . ASP ASP ASP B B 141 141 . 0.8760 0.8993 0.8532 0.0457  0.0512
0.0321  1 .
4387 OD2   OD2   . ASP ASP ASP B B 141 141 . 0.8908 0.8949 0.8121 0.0038  0.0466
0.0240  1 .
4388 C     C     . ASP ASP ASP B B 141 141 . 0.7084 0.7078 0.6976 -0.0080 0.0040
0.0110  1 .
4389 O     O     . ASP ASP ASP B B 141 141 . 0.7204 0.7181 0.7195 -0.0150 0.0039
0.0024  1 .
4390 N     N     . LEU LEU LEU B B 142 142 . 0.6413 0.6484 0.6336 -0.0131 -0.0017
0.0091  1 .
4391 CA    CA    . LEU LEU LEU B B 142 142 . 0.5756 0.5758 0.5876 -0.0040 -0.0010 -
0.0005 1 .
4392 CB    CB    . LEU LEU LEU B B 142 142 . 0.5522 0.5618 0.5557 -0.0021 -0.0069 -
0.0040 1 .
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4393 CG    CG    . LEU LEU LEU B B 142 142 . 0.5306 0.5235 0.5246 -0.0092 0.0012  -
0.0069 1 .
4394 CD1   CD1   . LEU LEU LEU B B 142 142 . 0.4798 0.5596 0.4174 0.0078  0.0285  -
0.0371 1 .
4395 CD2   CD2   . LEU LEU LEU B B 142 142 . 0.3779 0.5197 0.4536 -0.0052 -0.0108
0.0028  1 .
4396 C     C     . LEU LEU LEU B B 142 142 . 0.5620 0.5526 0.5639 -0.0018 -0.0039 -
0.0032 1 .
4397 O     O     . LEU LEU LEU B B 142 142 . 0.5581 0.5598 0.5674 -0.0012 -0.0132 -
0.0129 1 .
4398 N     N     . ILE ILE ILE B B 143 143 . 0.5237 0.5195 0.5385 0.0028  0.0013
0.0000  1 .
4399 CA    CA    . ILE ILE ILE B B 143 143 . 0.5238 0.5082 0.5084 -0.0002 0.0042
0.0039  1 .
4400 CB    CB    . ILE ILE ILE B B 143 143 . 0.5319 0.5085 0.5103 0.0064  0.0110
0.0126  1 .
4401 CG1   CG1   . ILE ILE ILE B B 143 143 . 0.5467 0.5427 0.5138 -0.0013 0.0201
0.0197  1 .
4402 CD1   CD1   . ILE ILE ILE B B 143 143 . 0.6100 0.6214 0.5782 -0.0207 0.0212
0.0248  1 .
4403 CG2   CG2   . ILE ILE ILE B B 143 143 . 0.5515 0.5136 0.4871 0.0086  0.0148
0.0075  1 .
4404 C     C     . ILE ILE ILE B B 143 143 . 0.4908 0.4744 0.4850 0.0052  -0.0018
0.0036  1 .
4405 O     O     . ILE ILE ILE B B 143 143 . 0.5134 0.4765 0.4811 -0.0170 -0.0084
0.0039  1 .
4406 N     N     . LEU LEU LEU B B 144 144 . 0.4685 0.4711 0.4615 -0.0049 -0.0045 -
0.0064 1 .
4407 CA    CA    . LEU LEU LEU B B 144 144 . 0.4339 0.4399 0.4280 0.0039  0.0025  -
0.0039 1 .
4408 CB    CB    . LEU LEU LEU B B 144 144 . 0.4254 0.4530 0.4188 0.0201  0.0000  -
0.0013 1 .
4409 CG    CG    . LEU LEU LEU B B 144 144 . 0.4372 0.4483 0.4304 0.0212  -0.0082
0.0060  1 .
4410 CD1   CD1   . LEU LEU LEU B B 144 144 . 0.4163 0.4292 0.3996 0.0881  -0.0101
0.0215  1 .
4411 CD2   CD2   . LEU LEU LEU B B 144 144 . 0.4245 0.4498 0.3932 0.0401  -0.0460
0.0394  1 .
4412 C     C     . LEU LEU LEU B B 144 144 . 0.3806 0.4150 0.4001 0.0043  0.0073  -
0.0064 1 .
4413 O     O     . LEU LEU LEU B B 144 144 . 0.3866 0.4479 0.4296 -0.0034 -0.0011 -
0.0029 1 .
4414 N     N     . PRO PRO PRO B B 145 145 . 0.3423 0.3823 0.3621 0.0055  0.0127
0.0035  1 .
4415 CA    CA    . PRO PRO PRO B B 145 145 . 0.3213 0.3551 0.3474 0.0066  0.0048  -
0.0044 1 .
4416 CB    CB    . PRO PRO PRO B B 145 145 . 0.2997 0.3578 0.3455 -0.0059 0.0026
0.0078  1 .
4417 CG    CG    . PRO PRO PRO B B 145 145 . 0.3104 0.3787 0.3678 -0.0004 0.0317  -
0.0038 1 .
4418 CD    CD    . PRO PRO PRO B B 145 145 . 0.3591 0.3693 0.3846 0.0030  0.0128
0.0024  1 .
4419 C     C     . PRO PRO PRO B B 145 145 . 0.3100 0.3362 0.3302 0.0091  0.0009  -
0.0008 1 .
4420 O     O     . PRO PRO PRO B B 145 145 . 0.2964 0.3481 0.3003 0.0139  0.0131
0.0053  1 .
4421 N     N     . VAL VAL VAL B B 146 146 . 0.3233 0.3089 0.3271 0.0089  -0.0047 -
0.0030 1 .
4422 CA    CA    . VAL VAL VAL B B 146 146 . 0.3203 0.3099 0.3243 -0.0092 -0.0004 -
0.0176 1 .
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4423 CB    CB    . VAL VAL VAL B B 146 146 . 0.3229 0.3140 0.3235 -0.0118 -0.0162 -
0.0286 1 .
4424 CG1   CG1   . VAL VAL VAL B B 146 146 . 0.3230 0.3045 0.3578 -0.0084 -0.0148
0.0042  1 .
4425 CG2   CG2   . VAL VAL VAL B B 146 146 . 0.3460 0.3099 0.3170 -0.0230 -0.0116 -
0.0183 1 .
4426 C     C     . VAL VAL VAL B B 146 146 . 0.3435 0.3348 0.3421 0.0001  0.0053  -
0.0032 1 .
4427 O     O     . VAL VAL VAL B B 146 146 . 0.3445 0.3265 0.3429 0.0102  0.0177  -
0.0227 1 .
4428 N     N     . PRO PRO PRO B B 147 147 . 0.3497 0.3448 0.3459 0.0063  -0.0033 -
0.0035 1 .
4429 CA    CA    . PRO PRO PRO B B 147 147 . 0.3577 0.3472 0.3517 0.0095  0.0089  -
0.0023 1 .
4430 CB    CB    . PRO PRO PRO B B 147 147 . 0.3565 0.3388 0.3408 0.0264  0.0036  -
0.0119 1 .
4431 CG    CG    . PRO PRO PRO B B 147 147 . 0.3724 0.3351 0.3703 0.0266  -0.0134
0.0031  1 .
4432 CD    CD    . PRO PRO PRO B B 147 147 . 0.3681 0.3353 0.3499 0.0113  -0.0019 -
0.0108 1 .
4433 C     C     . PRO PRO PRO B B 147 147 . 0.3509 0.3647 0.3570 0.0065  0.0084
0.0040  1 .
4434 O     O     . PRO PRO PRO B B 147 147 . 0.3397 0.4049 0.3675 0.0027  0.0361
0.0268  1 .
4435 N     N     . ALA ALA ALA B B 148 148 . 0.3615 0.3697 0.3533 -0.0093 -0.0060
0.0076  1 .
4436 CA    CA    . ALA ALA ALA B B 148 148 . 0.3895 0.3773 0.3525 -0.0010 -0.0019
0.0085  1 .
4437 CB    CB    . ALA ALA ALA B B 148 148 . 0.4108 0.3559 0.3260 0.0023  0.0029  -
0.0068 1 .
4438 C     C     . ALA ALA ALA B B 148 148 . 0.3776 0.3782 0.3562 0.0012  -0.0009
0.0022  1 .
4439 O     O     . ALA ALA ALA B B 148 148 . 0.3813 0.4098 0.3626 0.0004  0.0008
0.0092  1 .
4440 N     N     . PHE PHE PHE B B 149 149 . 0.3984 0.3856 0.3618 0.0135  0.0098
0.0046  1 .
4441 CA    CA    . PHE PHE PHE B B 149 149 . 0.3984 0.3783 0.3525 0.0119  0.0095  -
0.0025 1 .
4442 CB    CB    . PHE PHE PHE B B 149 149 . 0.4137 0.3792 0.3607 0.0087  0.0135  -
0.0181 1 .
4443 CG    CG    . PHE PHE PHE B B 149 149 . 0.4028 0.3653 0.3583 0.0087  0.0104  -
0.0085 1 .
4444 CD1   CD1   . PHE PHE PHE B B 149 149 . 0.3755 0.3613 0.3315 0.0023  -0.0138 -
0.0233 1 .
4445 CE1   CE1   . PHE PHE PHE B B 149 149 . 0.3921 0.3268 0.3033 -0.0059 -0.0360 -
0.0108 1 .
4446 CZ    CZ    . PHE PHE PHE B B 149 149 . 0.4136 0.4114 0.3527 -0.0048 -0.0042 -
0.0202 1 .
4447 CE2   CE2   . PHE PHE PHE B B 149 149 . 0.3925 0.3882 0.3581 -0.0171 0.0193  -
0.0322 1 .
4448 CD2   CD2   . PHE PHE PHE B B 149 149 . 0.4042 0.3742 0.3460 -0.0142 -0.0097 -
0.0171 1 .
4449 C     C     . PHE PHE PHE B B 149 149 . 0.4149 0.3939 0.3725 0.0194  0.0163
0.0076  1 .
4450 O     O     . PHE PHE PHE B B 149 149 . 0.4228 0.4031 0.3590 0.0317  0.0250
0.0059  1 .
4451 N     N     . ASN ASN ASN B B 150 150 . 0.4185 0.3869 0.3675 0.0199  0.0129
0.0063  1 .
4452 CA    CA    . ASN ASN ASN B B 150 150 . 0.4120 0.4065 0.3957 0.0068  0.0018
0.0023  1 .
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4453 CB    CB    . ASN ASN ASN B B 150 150 . 0.4341 0.4211 0.4134 0.0053  0.0049  -
0.0015 1 .
4454 CG    CG    . ASN ASN ASN B B 150 150 . 0.4370 0.4234 0.4441 0.0076  0.0057
0.0160  1 .
4455 OD1   OD1   . ASN ASN ASN B B 150 150 . 0.3951 0.4288 0.4806 0.0306  -0.0017
0.0245  1 .
4456 ND2   ND2   . ASN ASN ASN B B 150 150 . 0.4534 0.4465 0.4692 0.0401  0.0324
0.0392  1 .
4457 C     C     . ASN ASN ASN B B 150 150 . 0.4190 0.4117 0.3921 0.0116  0.0001
0.0087  1 .
4458 O     O     . ASN ASN ASN B B 150 150 . 0.4122 0.4228 0.3990 -0.0103 -0.0072
0.0006  1 .
4459 N     N     . VAL VAL VAL B B 151 151 . 0.4109 0.4119 0.3887 0.0265  0.0007
0.0044  1 .
4460 CA    CA    . VAL VAL VAL B B 151 151 . 0.4207 0.4335 0.3979 0.0190  -0.0046 -
0.0109 1 .
4461 CB    CB    . VAL VAL VAL B B 151 151 . 0.4066 0.4277 0.4018 0.0255  -0.0047
0.0022  1 .
4462 CG1   CG1   . VAL VAL VAL B B 151 151 . 0.4285 0.4391 0.4208 0.0087  -0.0375 -
0.0226 1 .
4463 CG2   CG2   . VAL VAL VAL B B 151 151 . 0.3807 0.4541 0.4054 0.0158  0.0184  -
0.0113 1 .
4464 C     C     . VAL VAL VAL B B 151 151 . 0.4244 0.4356 0.4109 0.0287  -0.0006 -
0.0152 1 .
4465 O     O     . VAL VAL VAL B B 151 151 . 0.4399 0.4431 0.4114 0.0334  -0.0113 -
0.0376 1 .
4466 N     N     . ILE ILE ILE B B 152 152 . 0.4180 0.4398 0.3991 0.0355  -0.0002 -
0.0120 1 .
4467 CA    CA    . ILE ILE ILE B B 152 152 . 0.4253 0.4529 0.4259 0.0215  -0.0089 -
0.0136 1 .
4468 CB    CB    . ILE ILE ILE B B 152 152 . 0.4183 0.4485 0.4245 0.0252  -0.0149 -
0.0068 1 .
4469 CG1   CG1   . ILE ILE ILE B B 152 152 . 0.4386 0.4371 0.4532 0.0222  0.0112  -
0.0038 1 .
4470 CD1   CD1   . ILE ILE ILE B B 152 152 . 0.4991 0.4781 0.5606 0.0149  0.0400
0.0405  1 .
4471 CG2   CG2   . ILE ILE ILE B B 152 152 . 0.3336 0.4225 0.4140 0.0168  -0.0319
0.0078  1 .
4472 C     C     . ILE ILE ILE B B 152 152 . 0.4534 0.4843 0.4489 0.0304  -0.0141 -
0.0213 1 .
4473 O     O     . ILE ILE ILE B B 152 152 . 0.4558 0.4871 0.4198 0.0268  -0.0239 -
0.0391 1 .
4474 N     N     . ASN ASN ASN B B 153 153 . 0.4924 0.5162 0.4759 0.0338  -0.0204 -
0.0314 1 .
4475 CA    CA    . ASN ASN ASN B B 153 153 . 0.5151 0.5155 0.4945 0.0253  -0.0149 -
0.0231 1 .
4476 CB    CB    . ASN ASN ASN B B 153 153 . 0.5210 0.5381 0.5218 0.0303  -0.0027 -
0.0290 1 .
4477 CG    CG    . ASN ASN ASN B B 153 153 . 0.6321 0.5353 0.5505 0.0349  0.0057  -
0.0260 1 .
4478 OD1   OD1   . ASN ASN ASN B B 153 153 . 0.7602 0.5740 0.5265 0.0577  0.0174  -
0.0568 1 .
4479 ND2   ND2   . ASN ASN ASN B B 153 153 . 0.7220 0.5554 0.4963 0.0990  -0.0244 -
0.0227 1 .
4480 C     C     . ASN ASN ASN B B 153 153 . 0.5174 0.5260 0.4985 0.0278  -0.0135 -
0.0237 1 .
4481 O     O     . ASN ASN ASN B B 153 153 . 0.5021 0.5356 0.4901 0.0480  -0.0267 -
0.0305 1 .
4482 N     N     . GLY GLY GLY B B 154 154 . 0.4990 0.5109 0.4871 0.0296  -0.0140 -
0.0232 1 .
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4483 CA    CA    . GLY GLY GLY B B 154 154 . 0.4979 0.5118 0.4673 0.0171  -0.0116 -
0.0318 1 .
4484 C     C     . GLY GLY GLY B B 154 154 . 0.4814 0.5013 0.4387 0.0152  -0.0215 -
0.0462 1 .
4485 O     O     . GLY GLY GLY B B 154 154 . 0.4784 0.4996 0.4224 0.0217  -0.0348 -
0.0658 1 .
4486 N     N     . ASN ASN ASN B B 160 160 . 0.6256 0.6130 0.6304 0.0247  -0.0163 -
0.0140 1 .
4487 CA    CA    . ASN ASN ASN B B 160 160 . 0.6066 0.6119 0.6167 0.0158  -0.0250 -
0.0175 1 .
4488 CB    CB    . ASN ASN ASN B B 160 160 . 0.6027 0.6154 0.6319 0.0222  -0.0266 -
0.0197 1 .
4489 CG    CG    . ASN ASN ASN B B 160 160 . 0.6257 0.6334 0.6817 0.0216  -0.0436 -
0.0307 1 .
4490 OD1   OD1   . ASN ASN ASN B B 160 160 . 0.6122 0.6583 0.7293 0.0284  -0.0792 -
0.0624 1 .
4491 ND2   ND2   . ASN ASN ASN B B 160 160 . 0.6305 0.6482 0.7099 0.0608  -0.0673 -
0.0381 1 .
4492 C     C     . ASN ASN ASN B B 160 160 . 0.5944 0.6033 0.5987 0.0113  -0.0255 -
0.0235 1 .
4493 O     O     . ASN ASN ASN B B 160 160 . 0.6003 0.6137 0.5926 0.0197  -0.0435 -
0.0496 1 .
4494 N     N     . LYS LYS LYS B B 161 161 . 0.5644 0.5849 0.5807 0.0080  -0.0304 -
0.0150 1 .
4495 CA    CA    . LYS LYS LYS B B 161 161 . 0.5554 0.5730 0.5776 0.0009  -0.0288 -
0.0049 1 .
4496 CB    CB    . LYS LYS LYS B B 161 161 . 0.5508 0.5858 0.5912 0.0070  -0.0219 -
0.0061 1 .
4497 CG    CG    . LYS LYS LYS B B 161 161 . 0.5665 0.5986 0.6103 0.0000  -0.0231 -
0.0108 1 .
4498 CD    CD    . LYS LYS LYS B B 161 161 . 0.5675 0.6233 0.6870 -0.0184 -0.0053 -
0.0264 1 .
4499 CE    CE    . LYS LYS LYS B B 161 161 . 0.5921 0.6879 0.6911 -0.0325 0.0062  -
0.0222 1 .
4500 NZ    NZ    . LYS LYS LYS B B 161 161 . 0.5510 0.7027 0.7135 -0.0348 0.0594  -
0.0682 1 .
4501 C     C     . LYS LYS LYS B B 161 161 . 0.5342 0.5551 0.5612 0.0078  -0.0304
0.0063  1 .
4502 O     O     . LYS LYS LYS B B 161 161 . 0.5234 0.5690 0.5542 0.0193  -0.0456
0.0249  1 .
4503 N     N     . LEU LEU LEU B B 162 162 . 0.4804 0.5258 0.5285 0.0110  -0.0380 -
0.0020 1 .
4504 CA    CA    . LEU LEU LEU B B 162 162 . 0.4435 0.4913 0.5020 0.0190  -0.0291 -
0.0135 1 .
4505 CB    CB    . LEU LEU LEU B B 162 162 . 0.4405 0.4909 0.5073 0.0265  -0.0397 -
0.0051 1 .
4506 CG    CG    . LEU LEU LEU B B 162 162 . 0.4420 0.4622 0.4890 0.0284  -0.0212 -
0.0153 1 .
4507 CD1   CD1   . LEU LEU LEU B B 162 162 . 0.3492 0.4783 0.5092 0.0417  -0.0263 -
0.0345 1 .
4508 CD2   CD2   . LEU LEU LEU B B 162 162 . 0.3779 0.4647 0.4876 0.0298  -0.0561 -
0.0294 1 .
4509 C     C     . LEU LEU LEU B B 162 162 . 0.4240 0.4732 0.4776 0.0186  -0.0257 -
0.0142 1 .
4510 O     O     . LEU LEU LEU B B 162 162 . 0.3556 0.4832 0.4757 0.0295  -0.0411 -
0.0313 1 .
4511 N     N     . ALA ALA ALA B B 163 163 . 0.4027 0.4515 0.4519 0.0128  -0.0215 -
0.0312 1 .
4512 CA    CA    . ALA ALA ALA B B 163 163 . 0.4086 0.4380 0.4365 0.0031  -0.0134 -
0.0202 1 .
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4513 CB    CB    . ALA ALA ALA B B 163 163 . 0.3952 0.4309 0.4247 -0.0020 -0.0147 -
0.0319 1 .
4514 C     C     . ALA ALA ALA B B 163 163 . 0.4058 0.4323 0.4280 0.0002  -0.0138 -
0.0249 1 .
4515 O     O     . ALA ALA ALA B B 163 163 . 0.4323 0.4447 0.4170 -0.0247 -0.0049 -
0.0282 1 .
4516 N     N     . MET MET MET B B 164 164 . 0.3911 0.4288 0.4207 0.0031  -0.0087 -
0.0202 1 .
4517 CA    CA    . MET MET MET B B 164 164 . 0.4125 0.4097 0.4152 -0.0050 0.0116  -
0.0154 1 .
4518 CB    CB    . MET MET MET B B 164 164 . 0.4042 0.4090 0.4193 -0.0016 0.0111  -
0.0196 1 .
4519 CG    CG    . MET MET MET B B 164 164 . 0.4151 0.4330 0.4380 0.0197  0.0174  -
0.0183 1 .
4520 SD    SD    . MET MET MET B B 164 164 . 0.4132 0.5067 0.5046 0.0101  -0.0150 -
0.0581 1 .
4521 CE    CE    . MET MET MET B B 164 164 . 0.3706 0.4421 0.4672 0.0309  -0.0067 -
0.0748 1 .
4522 C     C     . MET MET MET B B 164 164 . 0.4067 0.3910 0.3979 0.0079  -0.0012 -
0.0098 1 .
4523 O     O     . MET MET MET B B 164 164 . 0.3888 0.3891 0.3996 0.0144  -0.0012 -
0.0204 1 .
4524 N     N     . GLN GLN GLN B B 165 165 . 0.3843 0.3569 0.3779 -0.0092 0.0014  -
0.0070 1 .
4525 CA    CA    . GLN GLN GLN B B 165 165 . 0.3866 0.3595 0.3786 0.0058  -0.0080 -
0.0140 1 .
4526 CB    CB    . GLN GLN GLN B B 165 165 . 0.3740 0.3388 0.3765 0.0091  -0.0075 -
0.0101 1 .
4527 CG    CG    . GLN GLN GLN B B 165 165 . 0.3959 0.3764 0.3824 0.0391  -0.0080 -
0.0119 1 .
4528 CD    CD    . GLN GLN GLN B B 165 165 . 0.3875 0.3810 0.3442 0.0171  -0.0118 -
0.0068 1 .
4529 OE1   OE1   . GLN GLN GLN B B 165 165 . 0.4195 0.4117 0.3222 0.0842  -0.0451
0.0098  1 .
4530 NE2   NE2   . GLN GLN GLN B B 165 165 . 0.4058 0.3014 0.3784 -0.0327 0.0443
0.0366  1 .
4531 C     C     . GLN GLN GLN B B 165 165 . 0.3862 0.3664 0.3686 0.0192  -0.0137 -
0.0025 1 .
4532 O     O     . GLN GLN GLN B B 165 165 . 0.3744 0.3688 0.3513 0.0344  -0.0359 -
0.0037 1 .
4533 N     N     . GLU GLU GLU B B 166 166 . 0.3761 0.3621 0.3716 0.0069  -0.0172 -
0.0031 1 .
4534 CA    CA    . GLU GLU GLU B B 166 166 . 0.3657 0.3740 0.3688 0.0093  -0.0065 -
0.0068 1 .
4535 CB    CB    . GLU GLU GLU B B 166 166 . 0.3526 0.3782 0.3638 -0.0009 -0.0006
0.0011  1 .
4536 CG    CG    . GLU GLU GLU B B 166 166 . 0.3931 0.3762 0.3749 0.0122  -0.0040
0.0093  1 .
4537 CD    CD    . GLU GLU GLU B B 166 166 . 0.4134 0.3800 0.3956 0.0306  0.0319
0.0029  1 .
4538 OE1   OE1   . GLU GLU GLU B B 166 166 . 0.4090 0.3868 0.3444 0.0087  -0.0213
0.0218  1 .
4539 OE2   OE2   . GLU GLU GLU B B 166 166 . 0.5672 0.3364 0.4063 0.0598  0.0744  -
0.0210 1 .
4540 C     C     . GLU GLU GLU B B 166 166 . 0.3588 0.3771 0.3649 0.0120  -0.0088 -
0.0057 1 .
4541 O     O     . GLU GLU GLU B B 166 166 . 0.3544 0.3811 0.3580 0.0265  -0.0144 -
0.0268 1 .
4542 N     N     . PHE PHE PHE B B 167 167 . 0.3501 0.3756 0.3566 0.0124  -0.0147 -
0.0138 1 .
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4543 CA    CA    . PHE PHE PHE B B 167 167 . 0.3596 0.3771 0.3515 0.0038  -0.0129 -
0.0028 1 .
4544 CB    CB    . PHE PHE PHE B B 167 167 . 0.3525 0.3787 0.3524 0.0012  -0.0071 -
0.0175 1 .
4545 CG    CG    . PHE PHE PHE B B 167 167 . 0.3925 0.3602 0.3838 0.0128  -0.0424 -
0.0028 1 .
4546 CD1   CD1   . PHE PHE PHE B B 167 167 . 0.4196 0.3641 0.4367 0.0219  -0.0791 -
0.0091 1 .
4547 CE1   CE1   . PHE PHE PHE B B 167 167 . 0.3922 0.4078 0.4361 -0.0070 -0.0511
0.0049  1 .
4548 CZ    CZ    . PHE PHE PHE B B 167 167 . 0.4039 0.3988 0.4384 0.0167  -0.0163 -
0.0171 1 .
4549 CE2   CE2   . PHE PHE PHE B B 167 167 . 0.4027 0.4004 0.4771 -0.0100 -0.0372 -
0.0218 1 .
4550 CD2   CD2   . PHE PHE PHE B B 167 167 . 0.3924 0.3797 0.4559 -0.0024 0.0058  -
0.0093 1 .
4551 C     C     . PHE PHE PHE B B 167 167 . 0.3520 0.3766 0.3415 0.0045  -0.0070
0.0036  1 .
4552 O     O     . PHE PHE PHE B B 167 167 . 0.3655 0.4123 0.3414 -0.0034 -0.0127
0.0102  1 .
4553 N     N     . MET MET MET B B 168 168 . 0.3207 0.3686 0.3273 0.0072  -0.0047
0.0133  1 .
4554 CA    CA    . MET MET MET B B 168 168 . 0.3178 0.3459 0.3152 0.0093  0.0034
0.0121  1 .
4555 CB    CB    . MET MET MET B B 168 168 . 0.3052 0.3451 0.3163 0.0240  -0.0014
0.0163  1 .
4556 CG    CG    . MET MET MET B B 168 168 . 0.3524 0.3527 0.3615 0.0133  -0.0070 -
0.0010 1 .
4557 SD    SD    . MET MET MET B B 168 168 . 0.4742 0.4563 0.4234 0.0287  -0.0411
0.0279  1 .
4558 CE    CE    . MET MET MET B B 168 168 . 0.4945 0.4005 0.4266 -0.0071 -0.0083
0.0280  1 .
4559 C     C     . MET MET MET B B 168 168 . 0.2996 0.3535 0.3213 0.0219  0.0138
0.0252  1 .
4560 O     O     . MET MET MET B B 168 168 . 0.3427 0.3437 0.2548 0.0253  0.0122
0.0390  1 .
4561 N     N     . ILE ILE ILE B B 169 169 . 0.2989 0.3348 0.3057 0.0189  0.0101
0.0296  1 .
4562 CA    CA    . ILE ILE ILE B B 169 169 . 0.2860 0.3389 0.3093 0.0084  0.0054
0.0054  1 .
4563 CB    CB    . ILE ILE ILE B B 169 169 . 0.3019 0.3336 0.3037 -0.0015 0.0088
0.0148  1 .
4564 CG1   CG1   . ILE ILE ILE B B 169 169 . 0.2754 0.3341 0.2984 0.0322  0.0267  -
0.0166 1 .
4565 CD1   CD1   . ILE ILE ILE B B 169 169 . 0.3289 0.3873 0.2364 0.0709  0.0434  -
0.0125 1 .
4566 CG2   CG2   . ILE ILE ILE B B 169 169 . 0.2206 0.3518 0.3216 -0.0024 -0.0052
0.0181  1 .
4567 C     C     . ILE ILE ILE B B 169 169 . 0.3301 0.3503 0.3288 0.0066  0.0150
0.0121  1 .
4568 O     O     . ILE ILE ILE B B 169 169 . 0.3425 0.3867 0.3270 0.0146  0.0230
0.0065  1 .
4569 N     N     . LEU LEU LEU B B 170 170 . 0.3477 0.3539 0.3425 0.0020  0.0091  -
0.0097 1 .
4570 CA    CA    . LEU LEU LEU B B 170 170 . 0.3755 0.3728 0.3708 0.0005  0.0164  -
0.0020 1 .
4571 CB    CB    . LEU LEU LEU B B 170 170 . 0.3712 0.3764 0.3780 -0.0074 0.0110
0.0031  1 .
4572 CG    CG    . LEU LEU LEU B B 170 170 . 0.3656 0.3682 0.3993 -0.0031 -0.0003
0.0100  1 .
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4573 CD1   CD1   . LEU LEU LEU B B 170 170 . 0.3870 0.3851 0.3953 -0.0274 0.0263
0.0663  1 .
4574 CD2   CD2   . LEU LEU LEU B B 170 170 . 0.4632 0.4244 0.4321 -0.0149 -0.0679
0.0416  1 .
4575 C     C     . LEU LEU LEU B B 170 170 . 0.4139 0.3810 0.3874 0.0000  0.0210
0.0005  1 .
4576 O     O     . LEU LEU LEU B B 170 170 . 0.4211 0.3906 0.4006 -0.0011 0.0270  -
0.0102 1 .
4577 N     N     . PRO PRO PRO B B 171 171 . 0.4345 0.3923 0.3872 0.0121  0.0192
0.0056  1 .
4578 CA    CA    . PRO PRO PRO B B 171 171 . 0.4317 0.3872 0.3844 0.0041  0.0142  -
0.0039 1 .
4579 CB    CB    . PRO PRO PRO B B 171 171 . 0.4236 0.3534 0.3747 0.0039  0.0141
0.0095  1 .
4580 CG    CG    . PRO PRO PRO B B 171 171 . 0.4553 0.3834 0.3428 0.0099  0.0291
0.0339  1 .
4581 CD    CD    . PRO PRO PRO B B 171 171 . 0.4237 0.3995 0.3726 0.0219  0.0259
0.0072  1 .
4582 C     C     . PRO PRO PRO B B 171 171 . 0.4277 0.3957 0.3896 0.0046  0.0085  -
0.0053 1 .
4583 O     O     . PRO PRO PRO B B 171 171 . 0.4423 0.3634 0.3769 -0.0030 0.0040  -
0.0191 1 .
4584 N     N     . VAL VAL VAL B B 172 172 . 0.4308 0.4018 0.3917 0.0039  0.0117
0.0018  1 .
4585 CA    CA    . VAL VAL VAL B B 172 172 . 0.4336 0.4119 0.4005 0.0088  0.0155
0.0061  1 .
4586 CB    CB    . VAL VAL VAL B B 172 172 . 0.4327 0.4108 0.4137 0.0115  0.0199
0.0189  1 .
4587 CG1   CG1   . VAL VAL VAL B B 172 172 . 0.4656 0.4296 0.4053 0.0074  0.0328
0.0031  1 .
4588 CG2   CG2   . VAL VAL VAL B B 172 172 . 0.4620 0.4027 0.4266 0.0225  0.0436
0.0194  1 .
4589 C     C     . VAL VAL VAL B B 172 172 . 0.4262 0.4147 0.3863 0.0031  0.0145  -
0.0007 1 .
4590 O     O     . VAL VAL VAL B B 172 172 . 0.4134 0.4155 0.3545 0.0035  0.0307  -
0.0046 1 .
4591 N     N     . GLY GLY GLY B B 173 173 . 0.4323 0.4233 0.3964 0.0120  0.0143  -
0.0009 1 .
4592 CA    CA    . GLY GLY GLY B B 173 173 . 0.4525 0.4521 0.4238 0.0105  0.0071  -
0.0110 1 .
4593 C     C     . GLY GLY GLY B B 173 173 . 0.4760 0.4596 0.4518 0.0103  0.0030  -
0.0129 1 .
4594 O     O     . GLY GLY GLY B B 173 173 . 0.4995 0.4849 0.4521 0.0197  0.0046  -
0.0382 1 .
4595 N     N     . ALA ALA ALA B B 174 174 . 0.4807 0.4583 0.4389 0.0115  0.0110  -
0.0206 1 .
4596 CA    CA    . ALA ALA ALA B B 174 174 . 0.4938 0.4702 0.4529 0.0029  0.0071  -
0.0144 1 .
4597 CB    CB    . ALA ALA ALA B B 174 174 . 0.5036 0.4637 0.4632 -0.0016 0.0111  -
0.0167 1 .
4598 C     C     . ALA ALA ALA B B 174 174 . 0.4961 0.4760 0.4602 0.0066  0.0078  -
0.0107 1 .
4599 O     O     . ALA ALA ALA B B 174 174 . 0.5180 0.4934 0.4535 0.0169  0.0009  -
0.0046 1 .
4600 N     N     . GLU GLU GLU B B 175 175 . 0.4947 0.4715 0.4716 0.0069  0.0105  -
0.0083 1 .
4601 CA    CA    . GLU GLU GLU B B 175 175 . 0.4892 0.4774 0.4778 -0.0013 0.0183  -
0.0014 1 .
4602 CB    CB    . GLU GLU GLU B B 175 175 . 0.5111 0.4901 0.5077 -0.0055 0.0240  -
0.0050 1 .
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4603 CG    CG    . GLU GLU GLU B B 175 175 . 0.5690 0.6144 0.6027 -0.0097 0.0248  -
0.0125 1 .
4604 CD    CD    . GLU GLU GLU B B 175 175 . 0.6752 0.7521 0.6675 -0.0278 0.0240  -
0.0312 1 .
4605 OE1   OE1   . GLU GLU GLU B B 175 175 . 0.6804 0.8217 0.7581 -0.0339 0.0359  -
0.0088 1 .
4606 OE2   OE2   . GLU GLU GLU B B 175 175 . 0.6821 0.7818 0.7365 -0.0534 -0.0079 -
0.0375 1 .
4607 C     C     . GLU GLU GLU B B 175 175 . 0.4749 0.4494 0.4569 0.0019  0.0029
0.0033  1 .
4608 O     O     . GLU GLU GLU B B 175 175 . 0.4752 0.4364 0.4389 -0.0046 0.0044
0.0091  1 .
4609 N     N     . SER SER SER B B 176 176 . 0.4637 0.4143 0.4458 0.0101  0.0155
0.0066  1 .
4610 CA    CA    . SER SER SER B B 176 176 . 0.4689 0.4065 0.4284 0.0070  -0.0015
0.0129  1 .
4611 CB    CB    . SER SER SER B B 176 176 . 0.4704 0.3820 0.4279 0.0013  -0.0104
0.0017  1 .
4612 OG    OG    . SER SER SER B B 176 176 . 0.5235 0.3995 0.4286 0.0489  -0.0163
0.0475  1 .
4613 C     C     . SER SER SER B B 176 176 . 0.4388 0.3925 0.4100 0.0004  0.0000
0.0114  1 .
4614 O     O     . SER SER SER B B 176 176 . 0.4272 0.4009 0.3982 0.0013  -0.0193
0.0274  1 .
4615 N     N     . PHE PHE PHE B B 177 177 . 0.4153 0.3801 0.3979 0.0148  -0.0015
0.0037  1 .
4616 CA    CA    . PHE PHE PHE B B 177 177 . 0.3970 0.3944 0.3920 0.0159  0.0037  -
0.0066 1 .
4617 CB    CB    . PHE PHE PHE B B 177 177 . 0.3875 0.4016 0.4005 0.0062  0.0099  -
0.0126 1 .
4618 CG    CG    . PHE PHE PHE B B 177 177 . 0.3822 0.3987 0.3861 0.0185  0.0163  -
0.0218 1 .
4619 CD1   CD1   . PHE PHE PHE B B 177 177 . 0.4210 0.3933 0.3405 -0.0100 0.0290  -
0.0152 1 .
4620 CE1   CE1   . PHE PHE PHE B B 177 177 . 0.4646 0.3948 0.3894 0.0027  0.0242
0.0007  1 .
4621 CZ    CZ    . PHE PHE PHE B B 177 177 . 0.3886 0.3804 0.3784 0.0063  0.0228  -
0.0241 1 .
4622 CE2   CE2   . PHE PHE PHE B B 177 177 . 0.3470 0.3844 0.3802 0.0664  -0.0004 -
0.0114 1 .
4623 CD2   CD2   . PHE PHE PHE B B 177 177 . 0.2826 0.4150 0.3765 0.0087  -0.0009 -
0.0143 1 .
4624 C     C     . PHE PHE PHE B B 177 177 . 0.3841 0.3908 0.3896 0.0147  0.0106  -
0.0125 1 .
4625 O     O     . PHE PHE PHE B B 177 177 . 0.3850 0.4069 0.3953 0.0250  -0.0050 -
0.0214 1 .
4626 N     N     . ARG ARG ARG B B 178 178 . 0.3730 0.3864 0.3591 0.0198  0.0334  -
0.0041 1 .
4627 CA    CA    . ARG ARG ARG B B 178 178 . 0.3711 0.3846 0.3670 0.0078  0.0202  -
0.0028 1 .
4628 CB    CB    . ARG ARG ARG B B 178 178 . 0.3764 0.4131 0.3865 -0.0079 0.0408  -
0.0004 1 .
4629 CG    CG    . ARG ARG ARG B B 178 178 . 0.4901 0.5326 0.4496 -0.0305 0.0285  -
0.0085 1 .
4630 CD    CD    . ARG ARG ARG B B 178 178 . 0.5001 0.6190 0.5814 -0.0184 0.0183  -
0.0169 1 .
4631 NE    NE    . ARG ARG ARG B B 178 178 . 0.6226 0.7064 0.6289 -0.0285 -0.0748
0.0360  1 .
4632 CZ    CZ    . ARG ARG ARG B B 178 178 . 0.6426 0.7609 0.6837 -0.0453 -0.0725
0.0503  1 .
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4633 NH1   NH1   . ARG ARG ARG B B 178 178 . 0.6619 0.7551 0.7439 -0.0782 -0.0675
0.0712  1 .
4634 NH2   NH2   . ARG ARG ARG B B 178 178 . 0.6613 0.7789 0.7201 -0.0621 -0.0809
0.0136  1 .
4635 C     C     . ARG ARG ARG B B 178 178 . 0.3549 0.3541 0.3453 -0.0030 0.0196
0.0024  1 .
4636 O     O     . ARG ARG ARG B B 178 178 . 0.3664 0.3422 0.3127 0.0298  0.0115
0.0234  1 .
4637 N     N     . ASP ASP ASP B B 179 179 . 0.3440 0.3637 0.3616 0.0080  0.0090  -
0.0038 1 .
4638 CA    CA    . ASP ASP ASP B B 179 179 . 0.3538 0.3721 0.3561 0.0077  0.0102  -
0.0102 1 .
4639 CB    CB    . ASP ASP ASP B B 179 179 . 0.3627 0.3840 0.3699 0.0061  0.0070  -
0.0151 1 .
4640 CG    CG    . ASP ASP ASP B B 179 179 . 0.4191 0.4060 0.4234 0.0228  -0.0072 -
0.0149 1 .
4641 OD1   OD1   . ASP ASP ASP B B 179 179 . 0.5172 0.4379 0.4776 0.0027  -0.0513
0.0486  1 .
4642 OD2   OD2   . ASP ASP ASP B B 179 179 . 0.5277 0.4451 0.4397 0.0469  -0.0141
0.0475  1 .
4643 C     C     . ASP ASP ASP B B 179 179 . 0.3434 0.3501 0.3418 0.0150  0.0111  -
0.0062 1 .
4644 O     O     . ASP ASP ASP B B 179 179 . 0.3214 0.3544 0.3145 0.0413  0.0102  -
0.0128 1 .
4645 N     N     . ALA ALA ALA B B 180 180 . 0.3353 0.3484 0.3463 0.0165  -0.0039
0.0057  1 .
4646 CA    CA    . ALA ALA ALA B B 180 180 . 0.3427 0.3379 0.3414 0.0138  -0.0013 -
0.0057 1 .
4647 CB    CB    . ALA ALA ALA B B 180 180 . 0.3736 0.3299 0.3514 0.0173  -0.0059 -
0.0012 1 .
4648 C     C     . ALA ALA ALA B B 180 180 . 0.3371 0.3369 0.3455 0.0094  0.0074  -
0.0052 1 .
4649 O     O     . ALA ALA ALA B B 180 180 . 0.3040 0.3303 0.3335 -0.0032 0.0316  -
0.0132 1 .
4650 N     N     . MET MET MET B B 181 181 . 0.3172 0.3393 0.3397 0.0178  0.0187  -
0.0023 1 .
4651 CA    CA    . MET MET MET B B 181 181 . 0.3222 0.3317 0.3345 0.0114  0.0078  -
0.0082 1 .
4652 CB    CB    . MET MET MET B B 181 181 . 0.3096 0.3353 0.3439 0.0098  0.0166  -
0.0194 1 .
4653 CG    CG    . MET MET MET B B 181 181 . 0.3055 0.2965 0.3211 0.0294  0.0100  -
0.0100 1 .
4654 SD    SD    . MET MET MET B B 181 181 . 0.4281 0.3948 0.4220 0.0286  0.0058
0.0069  1 .
4655 CE    CE    . MET MET MET B B 181 181 . 0.3859 0.2475 0.3163 0.0849  -0.0057
0.0118  1 .
4656 C     C     . MET MET MET B B 181 181 . 0.3297 0.3500 0.3425 0.0084  0.0112  -
0.0095 1 .
4657 O     O     . MET MET MET B B 181 181 . 0.3426 0.3707 0.3447 0.0217  0.0199  -
0.0129 1 .
4658 N     N     . ARG ARG ARG B B 182 182 . 0.3568 0.3757 0.3335 0.0173  0.0068  -
0.0068 1 .
4659 CA    CA    . ARG ARG ARG B B 182 182 . 0.3756 0.3780 0.3364 0.0109  -0.0033
0.0039  1 .
4660 CB    CB    . ARG ARG ARG B B 182 182 . 0.3858 0.3834 0.3379 -0.0089 0.0020
0.0017  1 .
4661 CG    CG    . ARG ARG ARG B B 182 182 . 0.4419 0.4181 0.3836 0.0092  -0.0239
0.0072  1 .
4662 CD    CD    . ARG ARG ARG B B 182 182 . 0.5588 0.4570 0.5071 0.0071  -0.0096
0.0003  1 .
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4663 NE    NE    . ARG ARG ARG B B 182 182 . 0.6543 0.5144 0.5439 -0.0107 0.0198  -
0.0194 1 .
4664 CZ    CZ    . ARG ARG ARG B B 182 182 . 0.6578 0.6080 0.6439 -0.0105 0.0271  -
0.0399 1 .
4665 NH1   NH1   . ARG ARG ARG B B 182 182 . 0.6467 0.6224 0.7092 -0.0239 0.0002  -
0.0791 1 .
4666 NH2   NH2   . ARG ARG ARG B B 182 182 . 0.6913 0.6144 0.6356 -0.0121 -0.0056 -
0.0276 1 .
4667 C     C     . ARG ARG ARG B B 182 182 . 0.3737 0.3727 0.3458 0.0035  -0.0064
0.0083  1 .
4668 O     O     . ARG ARG ARG B B 182 182 . 0.4080 0.3885 0.3325 0.0029  -0.0272
0.0114  1 .
4669 N     N     . LEU LEU LEU B B 183 183 . 0.3741 0.3932 0.3563 0.0003  0.0031
0.0109  1 .
4670 CA    CA    . LEU LEU LEU B B 183 183 . 0.3475 0.3785 0.3527 0.0049  0.0194
0.0087  1 .
4671 CB    CB    . LEU LEU LEU B B 183 183 . 0.3328 0.3761 0.3573 -0.0098 0.0051
0.0090  1 .
4672 CG    CG    . LEU LEU LEU B B 183 183 . 0.3634 0.3969 0.3752 0.0407  0.0405
0.0065  1 .
4673 CD1   CD1   . LEU LEU LEU B B 183 183 . 0.3806 0.3914 0.3297 0.0207  0.0612
0.0083  1 .
4674 CD2   CD2   . LEU LEU LEU B B 183 183 . 0.4472 0.3455 0.3785 0.0753  0.0585
0.0078  1 .
4675 C     C     . LEU LEU LEU B B 183 183 . 0.3274 0.3811 0.3418 0.0095  0.0156
0.0026  1 .
4676 O     O     . LEU LEU LEU B B 183 183 . 0.2675 0.4011 0.3554 0.0329  0.0468
0.0071  1 .
4677 N     N     . GLY GLY GLY B B 184 184 . 0.2927 0.3651 0.3280 0.0279  0.0142  -
0.0012 1 .
4678 CA    CA    . GLY GLY GLY B B 184 184 . 0.2981 0.3558 0.3333 0.0182  0.0169  -
0.0095 1 .
4679 C     C     . GLY GLY GLY B B 184 184 . 0.3175 0.3541 0.3533 0.0164  0.0164  -
0.0151 1 .
4680 O     O     . GLY GLY GLY B B 184 184 . 0.3022 0.3429 0.3456 0.0191  0.0153  -
0.0348 1 .
4681 N     N     . ALA ALA ALA B B 185 185 . 0.3324 0.3523 0.3438 0.0208  0.0182  -
0.0098 1 .
4682 CA    CA    . ALA ALA ALA B B 185 185 . 0.3382 0.3605 0.3580 0.0147  0.0152  -
0.0064 1 .
4683 CB    CB    . ALA ALA ALA B B 185 185 . 0.3426 0.3562 0.3587 0.0119  0.0126  -
0.0072 1 .
4684 C     C     . ALA ALA ALA B B 185 185 . 0.3563 0.3756 0.3723 0.0043  0.0070  -
0.0075 1 .
4685 O     O     . ALA ALA ALA B B 185 185 . 0.3497 0.3977 0.3882 -0.0027 0.0102  -
0.0089 1 .
4686 N     N     . GLU GLU GLU B B 186 186 . 0.3672 0.3764 0.3620 0.0081  0.0117  -
0.0040 1 .
4687 CA    CA    . GLU GLU GLU B B 186 186 . 0.3814 0.3769 0.3675 0.0018  0.0000  -
0.0001 1 .
4688 CB    CB    . GLU GLU GLU B B 186 186 . 0.4130 0.3855 0.3670 -0.0018 -0.0026 -
0.0049 1 .
4689 CG    CG    . GLU GLU GLU B B 186 186 . 0.4600 0.4285 0.4074 -0.0235 -0.0018
0.0183  1 .
4690 CD    CD    . GLU GLU GLU B B 186 186 . 0.5247 0.4669 0.4616 -0.0156 0.0360
0.0012  1 .
4691 OE1   OE1   . GLU GLU GLU B B 186 186 . 0.5140 0.5175 0.4965 -0.0012 0.0586
0.0351  1 .
4692 OE2   OE2   . GLU GLU GLU B B 186 186 . 0.5167 0.4965 0.4917 -0.0091 0.0377
0.0138  1 .
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4693 C     C     . GLU GLU GLU B B 186 186 . 0.3642 0.3660 0.3595 0.0074  0.0048  -
0.0053 1 .
4694 O     O     . GLU GLU GLU B B 186 186 . 0.3344 0.3566 0.3616 0.0122  0.0074  -
0.0085 1 .
4695 N     N     . VAL VAL VAL B B 187 187 . 0.3524 0.3560 0.3577 0.0113  0.0137  -
0.0043 1 .
4696 CA    CA    . VAL VAL VAL B B 187 187 . 0.3187 0.3586 0.3485 0.0158  0.0218  -
0.0066 1 .
4697 CB    CB    . VAL VAL VAL B B 187 187 . 0.3080 0.3591 0.3555 0.0164  0.0219  -
0.0082 1 .
4698 CG1   CG1   . VAL VAL VAL B B 187 187 . 0.3099 0.3457 0.3302 0.0248  0.0128
0.0008  1 .
4699 CG2   CG2   . VAL VAL VAL B B 187 187 . 0.2333 0.3918 0.3383 0.0329  0.0395  -
0.0153 1 .
4700 C     C     . VAL VAL VAL B B 187 187 . 0.3229 0.3600 0.3705 0.0066  0.0182  -
0.0018 1 .
4701 O     O     . VAL VAL VAL B B 187 187 . 0.2850 0.3658 0.3975 0.0196  0.0311
0.0042  1 .
4702 N     N     . TYR TYR TYR B B 188 188 . 0.3091 0.3503 0.3536 0.0139  0.0234  -
0.0091 1 .
4703 CA    CA    . TYR TYR TYR B B 188 188 . 0.3174 0.3590 0.3561 0.0130  0.0149  -
0.0083 1 .
4704 CB    CB    . TYR TYR TYR B B 188 188 . 0.3005 0.3649 0.3486 -0.0043 0.0140  -
0.0146 1 .
4705 CG    CG    . TYR TYR TYR B B 188 188 . 0.2712 0.3375 0.3303 0.0021  0.0085  -
0.0127 1 .
4706 CD1   CD1   . TYR TYR TYR B B 188 188 . 0.2813 0.3571 0.3217 0.0139  0.0049  -
0.0080 1 .
4707 CE1   CE1   . TYR TYR TYR B B 188 188 . 0.2737 0.3713 0.3323 0.0198  -0.0109 -
0.0370 1 .
4708 CZ    CZ    . TYR TYR TYR B B 188 188 . 0.2733 0.3543 0.3461 0.0050  0.0029  -
0.0420 1 .
4709 OH    OH    . TYR TYR TYR B B 188 188 . 0.2459 0.4330 0.3755 0.0096  0.0262  -
0.0853 1 .
4710 CE2   CE2   . TYR TYR TYR B B 188 188 . 0.2380 0.3600 0.3548 0.0149  -0.0304 -
0.0094 1 .
4711 CD2   CD2   . TYR TYR TYR B B 188 188 . 0.2394 0.3294 0.3350 -0.0174 0.0012  -
0.0204 1 .
4712 C     C     . TYR TYR TYR B B 188 188 . 0.3297 0.3727 0.3583 0.0119  0.0162  -
0.0104 1 .
4713 O     O     . TYR TYR TYR B B 188 188 . 0.3589 0.3870 0.3675 0.0239  0.0162  -
0.0268 1 .
4714 N     N     . HIS HIS HIS B B 189 189 . 0.3265 0.3642 0.3570 0.0182  0.0197  -
0.0095 1 .
4715 CA    CA    . HIS HIS HIS B B 189 189 . 0.3497 0.3831 0.3691 0.0055  0.0062  -
0.0073 1 .
4716 CB    CB    . HIS HIS HIS B B 189 189 . 0.3432 0.3984 0.3849 -0.0025 0.0023
0.0054  1 .
4717 CG    CG    . HIS HIS HIS B B 189 189 . 0.4114 0.4382 0.3908 -0.0130 0.0090  -
0.0037 1 .
4718 ND1   ND1   . HIS HIS HIS B B 189 189 . 0.4896 0.5089 0.4313 -0.0413 -0.0075 -
0.0042 1 .
4719 CE1   CE1   . HIS HIS HIS B B 189 189 . 0.4698 0.5207 0.4330 -0.0421 -0.0162 -
0.0070 1 .
4720 NE2   NE2   . HIS HIS HIS B B 189 189 . 0.4349 0.5037 0.4306 -0.0228 -0.0275
0.0182  1 .
4721 CD2   CD2   . HIS HIS HIS B B 189 189 . 0.4066 0.4657 0.4124 -0.0267 -0.0209
0.0009  1 .
4722 C     C     . HIS HIS HIS B B 189 189 . 0.3401 0.3851 0.3727 -0.0038 0.0011  -
0.0053 1 .
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4723 O     O     . HIS HIS HIS B B 189 189 . 0.3390 0.3915 0.3842 -0.0065 -0.0101 -
0.0118 1 .
4724 N     N     . THR THR THR B B 190 190 . 0.3502 0.4007 0.3875 0.0023  0.0125
0.0024  1 .
4725 CA    CA    . THR THR THR B B 190 190 . 0.3721 0.3849 0.3801 0.0107  0.0122
0.0072  1 .
4726 CB    CB    . THR THR THR B B 190 190 . 0.3752 0.3876 0.3779 -0.0009 0.0116
0.0050  1 .
4727 OG1   OG1   . THR THR THR B B 190 190 . 0.4530 0.3800 0.3949 0.0186  0.0257
0.0229  1 .
4728 CG2   CG2   . THR THR THR B B 190 190 . 0.3000 0.3943 0.3760 0.0529  -0.0005
0.0313  1 .
4729 C     C     . THR THR THR B B 190 190 . 0.3679 0.3904 0.3816 0.0046  0.0031
0.0025  1 .
4730 O     O     . THR THR THR B B 190 190 . 0.3332 0.4074 0.3912 0.0293  0.0073
0.0119  1 .
4731 N     N     . LEU LEU LEU B B 191 191 . 0.3529 0.3649 0.3547 0.0199  0.0015  -
0.0058 1 .
4732 CA    CA    . LEU LEU LEU B B 191 191 . 0.3658 0.3818 0.3616 0.0091  0.0080
0.0076  1 .
4733 CB    CB    . LEU LEU LEU B B 191 191 . 0.3591 0.3670 0.3705 0.0121  0.0228
0.0046  1 .
4734 CG    CG    . LEU LEU LEU B B 191 191 . 0.3428 0.3806 0.3369 0.0090  0.0319
0.0048  1 .
4735 CD1   CD1   . LEU LEU LEU B B 191 191 . 0.3356 0.3654 0.3026 -0.0303 0.0131
0.0311  1 .
4736 CD2   CD2   . LEU LEU LEU B B 191 191 . 0.2897 0.3394 0.3033 0.0093  0.0205  -
0.0005 1 .
4737 C     C     . LEU LEU LEU B B 191 191 . 0.3829 0.3873 0.3800 0.0017  0.0078
0.0039  1 .
4738 O     O     . LEU LEU LEU B B 191 191 . 0.3552 0.3704 0.3736 0.0012  0.0102
0.0087  1 .
4739 N     N     . LYS LYS LYS B B 192 192 . 0.3827 0.4051 0.3821 0.0041  0.0186  -
0.0028 1 .
4740 CA    CA    . LYS LYS LYS B B 192 192 . 0.3618 0.4358 0.3953 0.0020  -0.0011
0.0119  1 .
4741 CB    CB    . LYS LYS LYS B B 192 192 . 0.3227 0.4512 0.3991 -0.0034 0.0113
0.0103  1 .
4742 CG    CG    . LYS LYS LYS B B 192 192 . 0.3747 0.4903 0.4320 -0.0045 0.0137  -
0.0189 1 .
4743 CD    CD    . LYS LYS LYS B B 192 192 . 0.5054 0.5897 0.4690 -0.0087 0.0222  -
0.0024 1 .
4744 CE    CE    . LYS LYS LYS B B 192 192 . 0.5685 0.6118 0.5187 -0.0081 0.0548  -
0.0117 1 .
4745 NZ    NZ    . LYS LYS LYS B B 192 192 . 0.5783 0.6593 0.5772 -0.0389 0.0883
0.0316  1 .
4746 C     C     . LYS LYS LYS B B 192 192 . 0.3681 0.4329 0.3984 0.0024  0.0130
0.0099  1 .
4747 O     O     . LYS LYS LYS B B 192 192 . 0.3237 0.4516 0.4015 0.0016  -0.0031
0.0241  1 .
4748 N     N     . GLY GLY GLY B B 193 193 . 0.3939 0.4471 0.4063 0.0104  0.0100
0.0092  1 .
4749 CA    CA    . GLY GLY GLY B B 193 193 . 0.4286 0.4674 0.4435 0.0146  0.0033
0.0001  1 .
4750 C     C     . GLY GLY GLY B B 193 193 . 0.4442 0.4711 0.4558 0.0105  0.0072  -
0.0019 1 .
4751 O     O     . GLY GLY GLY B B 193 193 . 0.4548 0.4890 0.4753 0.0174  -0.0058 -
0.0191 1 .
4752 N     N     . VAL VAL VAL B B 194 194 . 0.4561 0.4876 0.4771 0.0159  0.0118
0.0031  1 .
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4753 CA    CA    . VAL VAL VAL B B 194 194 . 0.4709 0.4851 0.4894 0.0095  0.0226
0.0082  1 .
4754 CB    CB    . VAL VAL VAL B B 194 194 . 0.4742 0.4881 0.4968 0.0093  0.0265
0.0119  1 .
4755 CG1   CG1   . VAL VAL VAL B B 194 194 . 0.4838 0.4975 0.4940 0.0259  0.0547
0.0275  1 .
4756 CG2   CG2   . VAL VAL VAL B B 194 194 . 0.4657 0.4903 0.5076 0.0236  0.0446
0.0012  1 .
4757 C     C     . VAL VAL VAL B B 194 194 . 0.4720 0.4834 0.5007 0.0107  0.0246
0.0065  1 .
4758 O     O     . VAL VAL VAL B B 194 194 . 0.4835 0.4974 0.5292 0.0102  0.0423
0.0186  1 .
4759 N     N     . ILE ILE ILE B B 195 195 . 0.4551 0.4707 0.4833 0.0138  0.0260
0.0053  1 .
4760 CA    CA    . ILE ILE ILE B B 195 195 . 0.4379 0.4542 0.4609 0.0194  0.0213  -
0.0081 1 .
4761 CB    CB    . ILE ILE ILE B B 195 195 . 0.4194 0.4461 0.4613 0.0163  0.0166  -
0.0116 1 .
4762 CG1   CG1   . ILE ILE ILE B B 195 195 . 0.4177 0.4407 0.4349 0.0311  0.0134  -
0.0302 1 .
4763 CD1   CD1   . ILE ILE ILE B B 195 195 . 0.3851 0.3908 0.4176 -0.0125 -0.0046 -
0.0706 1 .
4764 CG2   CG2   . ILE ILE ILE B B 195 195 . 0.3595 0.4004 0.4091 0.0805  0.0562  -
0.0262 1 .
4765 C     C     . ILE ILE ILE B B 195 195 . 0.4438 0.4644 0.4743 0.0166  0.0189  -
0.0057 1 .
4766 O     O     . ILE ILE ILE B B 195 195 . 0.4490 0.4694 0.4728 0.0148  0.0246  -
0.0131 1 .
4767 N     N     . LYS LYS LYS B B 196 196 . 0.4450 0.4756 0.4715 0.0132  0.0256  -
0.0046 1 .
4768 CA    CA    . LYS LYS LYS B B 196 196 . 0.4539 0.4917 0.4940 0.0136  0.0116
0.0011  1 .
4769 CB    CB    . LYS LYS LYS B B 196 196 . 0.4488 0.4935 0.4967 0.0105  0.0143
0.0008  1 .
4770 CG    CG    . LYS LYS LYS B B 196 196 . 0.5279 0.5287 0.5098 0.0030  0.0027  -
0.0092 1 .
4771 CD    CD    . LYS LYS LYS B B 196 196 . 0.6252 0.6195 0.5720 -0.0059 -0.0010
0.0352  1 .
4772 CE    CE    . LYS LYS LYS B B 196 196 . 0.6974 0.7032 0.6211 -0.0065 0.0167
0.0257  1 .
4773 NZ    NZ    . LYS LYS LYS B B 196 196 . 0.7379 0.7315 0.6746 -0.0007 0.0019
0.0591  1 .
4774 C     C     . LYS LYS LYS B B 196 196 . 0.4690 0.5009 0.5120 0.0056  0.0059
0.0062  1 .
4775 O     O     . LYS LYS LYS B B 196 196 . 0.4226 0.4978 0.5171 0.0138  -0.0002
0.0229  1 .
4776 N     N     . ASP ASP ASP B B 197 197 . 0.4986 0.5242 0.5272 0.0067  0.0110
0.0063  1 .
4777 CA    CA    . ASP ASP ASP B B 197 197 . 0.5295 0.5435 0.5532 0.0007  0.0024
0.0055  1 .
4778 CB    CB    . ASP ASP ASP B B 197 197 . 0.5571 0.5563 0.5704 0.0051  0.0004  -
0.0002 1 .
4779 CG    CG    . ASP ASP ASP B B 197 197 . 0.6110 0.5943 0.5864 0.0081  0.0013
0.0089  1 .
4780 OD1   OD1   . ASP ASP ASP B B 197 197 . 0.6556 0.5778 0.5667 0.0306  0.0162  -
0.0103 1 .
4781 OD2   OD2   . ASP ASP ASP B B 197 197 . 0.7150 0.7004 0.5955 0.0330  -0.0420
0.0007  1 .
4782 C     C     . ASP ASP ASP B B 197 197 . 0.5290 0.5403 0.5582 0.0003  0.0006
0.0133  1 .
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4783 O     O     . ASP ASP ASP B B 197 197 . 0.5063 0.5331 0.5615 0.0025  0.0014
0.0170  1 .
4784 N     N     . LYS LYS LYS B B 198 198 . 0.5282 0.5436 0.5551 0.0018  -0.0004
0.0109  1 .
4785 CA    CA    . LYS LYS LYS B B 198 198 . 0.5242 0.5355 0.5518 0.0044  -0.0009
0.0071  1 .
4786 CB    CB    . LYS LYS LYS B B 198 198 . 0.5275 0.5418 0.5548 0.0019  0.0001
0.0075  1 .
4787 CG    CG    . LYS LYS LYS B B 198 198 . 0.4929 0.5450 0.5700 -0.0073 0.0127
0.0114  1 .
4788 CD    CD    . LYS LYS LYS B B 198 198 . 0.4697 0.5756 0.5753 -0.0206 -0.0043
0.0069  1 .
4789 CE    CE    . LYS LYS LYS B B 198 198 . 0.4437 0.5840 0.6300 -0.0337 0.0024  -
0.0001 1 .
4790 NZ    NZ    . LYS LYS LYS B B 198 198 . 0.4493 0.6001 0.6566 -0.0398 0.0170
0.0154  1 .
4791 C     C     . LYS LYS LYS B B 198 198 . 0.5276 0.5365 0.5501 0.0047  -0.0026
0.0059  1 .
4792 O     O     . LYS LYS LYS B B 198 198 . 0.5361 0.5235 0.5575 0.0017  0.0049
0.0080  1 .
4793 N     N     . TYR TYR TYR B B 199 199 . 0.5126 0.5312 0.5380 0.0117  -0.0027
0.0051  1 .
4794 CA    CA    . TYR TYR TYR B B 199 199 . 0.5125 0.5437 0.5385 0.0086  -0.0061
0.0009  1 .
4795 CB    CB    . TYR TYR TYR B B 199 199 . 0.5088 0.5450 0.5434 0.0075  -0.0073
0.0044  1 .
4796 CG    CG    . TYR TYR TYR B B 199 199 . 0.5195 0.5591 0.5417 0.0075  -0.0081 -
0.0051 1 .
4797 CD1   CD1   . TYR TYR TYR B B 199 199 . 0.5192 0.5774 0.5501 0.0173  -0.0040 -
0.0111 1 .
4798 CE1   CE1   . TYR TYR TYR B B 199 199 . 0.5106 0.5447 0.5245 0.0232  -0.0379 -
0.0131 1 .
4799 CZ    CZ    . TYR TYR TYR B B 199 199 . 0.4823 0.5355 0.5176 0.0443  -0.0009
0.0028  1 .
4800 OH    OH    . TYR TYR TYR B B 199 199 . 0.4532 0.5233 0.5670 0.0859  -0.0294
0.0200  1 .
4801 CE2   CE2   . TYR TYR TYR B B 199 199 . 0.5042 0.5154 0.5178 0.0333  0.0030
0.0080  1 .
4802 CD2   CD2   . TYR TYR TYR B B 199 199 . 0.5423 0.5439 0.5549 0.0220  -0.0068
0.0017  1 .
4803 C     C     . TYR TYR TYR B B 199 199 . 0.4977 0.5424 0.5342 0.0066  -0.0031 -
0.0019 1 .
4804 O     O     . TYR TYR TYR B B 199 199 . 0.4910 0.5410 0.5203 0.0122  -0.0022 -
0.0173 1 .
4805 N     N     . GLY GLY GLY B B 200 200 . 0.4862 0.5577 0.5349 0.0011  0.0027
0.0013  1 .
4806 CA    CA    . GLY GLY GLY B B 200 200 . 0.4979 0.5671 0.5448 0.0052  -0.0027
0.0108  1 .
4807 C     C     . GLY GLY GLY B B 200 200 . 0.5220 0.5704 0.5532 0.0010  0.0019
0.0091  1 .
4808 O     O     . GLY GLY GLY B B 200 200 . 0.5207 0.5754 0.5650 -0.0032 0.0149
0.0102  1 .
4809 N     N     . LYS LYS LYS B B 201 201 . 0.5293 0.5745 0.5565 0.0013  0.0012
0.0076  1 .
4810 CA    CA    . LYS LYS LYS B B 201 201 . 0.5545 0.5756 0.5691 -0.0052 0.0004
0.0047  1 .
4811 CB    CB    . LYS LYS LYS B B 201 201 . 0.5604 0.5845 0.5660 -0.0059 0.0013
0.0023  1 .
4812 CG    CG    . LYS LYS LYS B B 201 201 . 0.5824 0.6101 0.6095 -0.0147 -0.0104 -
0.0057 1 .
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4813 CD    CD    . LYS LYS LYS B B 201 201 . 0.5422 0.6477 0.6532 0.0082  0.0118  -
0.0157 1 .
4814 CE    CE    . LYS LYS LYS B B 201 201 . 0.5521 0.6769 0.6488 -0.0123 0.0127  -
0.0330 1 .
4815 NZ    NZ    . LYS LYS LYS B B 201 201 . 0.5103 0.6775 0.6423 -0.0014 0.0467  -
0.0117 1 .
4816 C     C     . LYS LYS LYS B B 201 201 . 0.5563 0.5667 0.5664 -0.0042 0.0058  -
0.0001 1 .
4817 O     O     . LYS LYS LYS B B 201 201 . 0.5604 0.5788 0.5798 -0.0118 0.0064
0.0065  1 .
4818 N     N     . ASP ASP ASP B B 202 202 . 0.5518 0.5609 0.5686 -0.0047 0.0052  -
0.0050 1 .
4819 CA    CA    . ASP ASP ASP B B 202 202 . 0.5430 0.5472 0.5629 -0.0031 0.0035  -
0.0029 1 .
4820 CB    CB    . ASP ASP ASP B B 202 202 . 0.5593 0.5583 0.5850 -0.0068 0.0093  -
0.0074 1 .
4821 CG    CG    . ASP ASP ASP B B 202 202 . 0.6104 0.6032 0.6373 -0.0102 0.0005
0.0019  1 .
4822 OD1   OD1   . ASP ASP ASP B B 202 202 . 0.6837 0.6504 0.7034 -0.0539 0.0403
0.0426  1 .
4823 OD2   OD2   . ASP ASP ASP B B 202 202 . 0.6712 0.6107 0.7448 -0.0393 0.0237
0.0169  1 .
4824 C     C     . ASP ASP ASP B B 202 202 . 0.5156 0.5188 0.5408 -0.0055 0.0116  -
0.0075 1 .
4825 O     O     . ASP ASP ASP B B 202 202 . 0.5143 0.5039 0.5483 -0.0027 0.0177  -
0.0160 1 .
4826 N     N     . ALA ALA ALA B B 203 203 . 0.4708 0.4836 0.4993 -0.0062 0.0120  -
0.0089 1 .
4827 CA    CA    . ALA ALA ALA B B 203 203 . 0.4344 0.4539 0.4700 -0.0040 0.0128  -
0.0032 1 .
4828 CB    CB    . ALA ALA ALA B B 203 203 . 0.4278 0.4462 0.4673 -0.0029 0.0104  -
0.0016 1 .
4829 C     C     . ALA ALA ALA B B 203 203 . 0.4149 0.4504 0.4493 0.0068  0.0128  -
0.0050 1 .
4830 O     O     . ALA ALA ALA B B 203 203 . 0.3860 0.4544 0.4492 0.0187  0.0023  -
0.0015 1 .
4831 N     N     . THR THR THR B B 204 204 . 0.3857 0.4321 0.4487 0.0032  0.0169  -
0.0113 1 .
4832 CA    CA    . THR THR THR B B 204 204 . 0.3636 0.4226 0.4325 0.0037  0.0278  -
0.0045 1 .
4833 CB    CB    . THR THR THR B B 204 204 . 0.3569 0.4208 0.4279 -0.0034 0.0349  -
0.0032 1 .
4834 OG1   OG1   . THR THR THR B B 204 204 . 0.2746 0.4512 0.4097 -0.0106 0.0733  -
0.0007 1 .
4835 CG2   CG2   . THR THR THR B B 204 204 . 0.3838 0.4290 0.4541 0.0179  0.0493  -
0.0150 1 .
4836 C     C     . THR THR THR B B 204 204 . 0.3441 0.4110 0.4224 -0.0012 0.0158  -
0.0038 1 .
4837 O     O     . THR THR THR B B 204 204 . 0.2984 0.3860 0.4257 -0.0005 0.0201  -
0.0044 1 .
4838 N     N     . ASN ASN ASN B B 205 205 . 0.3335 0.4170 0.4205 -0.0033 0.0050  -
0.0069 1 .
4839 CA    CA    . ASN ASN ASN B B 205 205 . 0.3499 0.4229 0.4012 -0.0042 0.0012  -
0.0067 1 .
4840 CB    CB    . ASN ASN ASN B B 205 205 . 0.3186 0.4035 0.4060 -0.0097 -0.0072 -
0.0064 1 .
4841 CG    CG    . ASN ASN ASN B B 205 205 . 0.3998 0.4111 0.4055 -0.0390 -0.0158 -
0.0014 1 .
4842 OD1   OD1   . ASN ASN ASN B B 205 205 . 0.5313 0.3985 0.4064 -0.0219 -0.0453 -
0.0057 1 .
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4843 ND2   ND2   . ASN ASN ASN B B 205 205 . 0.2561 0.4304 0.4054 -0.0661 -0.0567 -
0.0809 1 .
4844 C     C     . ASN ASN ASN B B 205 205 . 0.3511 0.4228 0.3965 0.0097  0.0008
0.0005  1 .
4845 O     O     . ASN ASN ASN B B 205 205 . 0.3284 0.4321 0.3939 0.0109  0.0092
0.0053  1 .
4846 N     N     . VAL VAL VAL B B 206 206 . 0.3625 0.4079 0.3958 0.0025  -0.0021 -
0.0069 1 .
4847 CA    CA    . VAL VAL VAL B B 206 206 . 0.3560 0.3928 0.3915 -0.0023 0.0056  -
0.0095 1 .
4848 CB    CB    . VAL VAL VAL B B 206 206 . 0.3738 0.4006 0.3935 -0.0002 -0.0035 -
0.0075 1 .
4849 CG1   CG1   . VAL VAL VAL B B 206 206 . 0.3330 0.3640 0.4122 -0.0093 -0.0033 -
0.0220 1 .
4850 CG2   CG2   . VAL VAL VAL B B 206 206 . 0.3832 0.3898 0.3308 -0.0126 0.0053  -
0.0031 1 .
4851 C     C     . VAL VAL VAL B B 206 206 . 0.3681 0.4008 0.3991 -0.0055 0.0039  -
0.0059 1 .
4852 O     O     . VAL VAL VAL B B 206 206 . 0.3734 0.4018 0.4163 -0.0116 0.0236  -
0.0203 1 .
4853 N     N     . GLY GLY GLY B B 207 207 . 0.3578 0.3951 0.3998 -0.0002 0.0057  -
0.0037 1 .
4854 CA    CA    . GLY GLY GLY B B 207 207 . 0.3481 0.3799 0.4028 0.0027  0.0124
0.0005  1 .
4855 C     C     . GLY GLY GLY B B 207 207 . 0.3431 0.3707 0.4070 0.0098  0.0174
0.0105  1 .
4856 O     O     . GLY GLY GLY B B 207 207 . 0.3258 0.3349 0.4002 0.0008  0.0245
0.0094  1 .
4857 N     N     . ASP ASP ASP B B 208 208 . 0.3429 0.3692 0.4064 0.0186  0.0164
0.0158  1 .
4858 CA    CA    . ASP ASP ASP B B 208 208 . 0.3318 0.3602 0.4023 0.0020  0.0058
0.0030  1 .
4859 CB    CB    . ASP ASP ASP B B 208 208 . 0.3224 0.3671 0.3996 0.0031  -0.0072
0.0003  1 .
4860 CG    CG    . ASP ASP ASP B B 208 208 . 0.3635 0.3702 0.4265 -0.0138 -0.0251
0.0009  1 .
4861 OD1   OD1   . ASP ASP ASP B B 208 208 . 0.3623 0.3811 0.4253 -0.0100 -0.0555 -
0.0289 1 .
4862 OD2   OD2   . ASP ASP ASP B B 208 208 . 0.3952 0.3786 0.4566 -0.0365 -0.0906
0.0142  1 .
4863 C     C     . ASP ASP ASP B B 208 208 . 0.3335 0.3619 0.3773 0.0092  0.0101
0.0022  1 .
4864 O     O     . ASP ASP ASP B B 208 208 . 0.3441 0.3559 0.3496 -0.0112 0.0342  -
0.0006 1 .
4865 N     N     . GLU GLU GLU B B 209 209 . 0.3255 0.3833 0.3644 0.0075  0.0173
0.0136  1 .
4866 CA    CA    . GLU GLU GLU B B 209 209 . 0.3477 0.3835 0.3597 0.0028  0.0090
0.0053  1 .
4867 CB    CB    . GLU GLU GLU B B 209 209 . 0.3545 0.3999 0.3620 0.0050  0.0145  -
0.0013 1 .
4868 CG    CG    . GLU GLU GLU B B 209 209 . 0.3827 0.4329 0.4167 0.0378  -0.0068 -
0.0056 1 .
4869 CD    CD    . GLU GLU GLU B B 209 209 . 0.4538 0.5493 0.4603 0.0724  0.0265
0.0357  1 .
4870 OE1   OE1   . GLU GLU GLU B B 209 209 . 0.3838 0.4985 0.4272 0.0317  0.0916
0.0508  1 .
4871 OE2   OE2   . GLU GLU GLU B B 209 209 . 0.5092 0.6107 0.5375 0.1135  0.0489
0.0585  1 .
4872 C     C     . GLU GLU GLU B B 209 209 . 0.3624 0.3887 0.3541 -0.0115 0.0212
0.0108  1 .
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4873 O     O     . GLU GLU GLU B B 209 209 . 0.3880 0.4023 0.3761 -0.0241 0.0203
0.0115  1 .
4874 N     N     . GLY GLY GLY B B 210 210 . 0.3435 0.3859 0.3501 -0.0086 0.0341
0.0206  1 .
4875 CA    CA    . GLY GLY GLY B B 210 210 . 0.3549 0.3746 0.3648 0.0038  0.0446
0.0216  1 .
4876 C     C     . GLY GLY GLY B B 210 210 . 0.3768 0.3960 0.3824 0.0082  0.0368
0.0118  1 .
4877 O     O     . GLY GLY GLY B B 210 210 . 0.3699 0.3951 0.3845 0.0025  0.0534
0.0014  1 .
4878 N     N     . GLY GLY GLY B B 211 211 . 0.3596 0.3843 0.3761 -0.0034 0.0428
0.0085  1 .
4879 CA    CA    . GLY GLY GLY B B 211 211 . 0.3604 0.3952 0.3834 0.0000  0.0206  -
0.0027 1 .
4880 C     C     . GLY GLY GLY B B 211 211 . 0.3336 0.4096 0.3634 0.0059  0.0082  -
0.0082 1 .
4881 O     O     . GLY GLY GLY B B 211 211 . 0.2898 0.4229 0.3610 0.0196  0.0285  -
0.0087 1 .
4882 N     N     . PHE PHE PHE B B 212 212 . 0.3502 0.4059 0.3520 0.0276  0.0016  -
0.0174 1 .
4883 CA    CA    . PHE PHE PHE B B 212 212 . 0.3559 0.4057 0.3921 0.0228  0.0076  -
0.0198 1 .
4884 CB    CB    . PHE PHE PHE B B 212 212 . 0.3684 0.3878 0.3858 0.0315  0.0091  -
0.0180 1 .
4885 CG    CG    . PHE PHE PHE B B 212 212 . 0.3529 0.4145 0.4023 0.0298  0.0253  -
0.0008 1 .
4886 CD1   CD1   . PHE PHE PHE B B 212 212 . 0.2916 0.4302 0.3888 0.0198  -0.0124
0.0073  1 .
4887 CE1   CE1   . PHE PHE PHE B B 212 212 . 0.2168 0.4158 0.3921 0.0440  0.0135
0.0377  1 .
4888 CZ    CZ    . PHE PHE PHE B B 212 212 . 0.2185 0.4211 0.4086 0.1052  -0.0204
0.0153  1 .
4889 CE2   CE2   . PHE PHE PHE B B 212 212 . 0.2580 0.4003 0.4167 0.0700  0.0166  -
0.0097 1 .
4890 CD2   CD2   . PHE PHE PHE B B 212 212 . 0.3526 0.4338 0.3999 0.0611  0.0166
0.0105  1 .
4891 C     C     . PHE PHE PHE B B 212 212 . 0.3744 0.4162 0.4037 0.0353  -0.0006 -
0.0260 1 .
4892 O     O     . PHE PHE PHE B B 212 212 . 0.3819 0.4169 0.4012 0.0430  -0.0166 -
0.0439 1 .
4893 N     N     . ALA ALA ALA B B 213 213 . 0.4038 0.4475 0.4501 0.0284  -0.0071 -
0.0320 1 .
4894 CA    CA    . ALA ALA ALA B B 213 213 . 0.4237 0.4815 0.4812 0.0168  -0.0082 -
0.0263 1 .
4895 CB    CB    . ALA ALA ALA B B 213 213 . 0.4095 0.4797 0.4822 0.0204  -0.0179 -
0.0327 1 .
4896 C     C     . ALA ALA ALA B B 213 213 . 0.4597 0.5194 0.5110 0.0187  -0.0098 -
0.0331 1 .
4897 O     O     . ALA ALA ALA B B 213 213 . 0.4218 0.5523 0.5386 0.0246  -0.0173 -
0.0423 1 .
4898 N     N     . PRO PRO PRO B B 214 214 . 0.5070 0.5423 0.5252 0.0152  -0.0070 -
0.0252 1 .
4899 CA    CA    . PRO PRO PRO B B 214 214 . 0.5319 0.5514 0.5411 0.0113  -0.0082 -
0.0206 1 .
4900 CB    CB    . PRO PRO PRO B B 214 214 . 0.5357 0.5542 0.5371 0.0106  -0.0049 -
0.0194 1 .
4901 CG    CG    . PRO PRO PRO B B 214 214 . 0.5354 0.5321 0.5110 0.0095  -0.0068 -
0.0272 1 .
4902 CD    CD    . PRO PRO PRO B B 214 214 . 0.5172 0.5274 0.5254 0.0148  -0.0062 -
0.0290 1 .
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4903 C     C     . PRO PRO PRO B B 214 214 . 0.5615 0.5698 0.5704 0.0155  -0.0112 -
0.0168 1 .
4904 O     O     . PRO PRO PRO B B 214 214 . 0.5746 0.5802 0.5758 0.0277  -0.0236 -
0.0287 1 .
4905 N     N     . ASN ASN ASN B B 215 215 . 0.5774 0.5814 0.5962 0.0111  -0.0187 -
0.0198 1 .
4906 CA    CA    . ASN ASN ASN B B 215 215 . 0.6002 0.5925 0.6186 0.0113  -0.0160 -
0.0079 1 .
4907 CB    CB    . ASN ASN ASN B B 215 215 . 0.6087 0.6120 0.6478 0.0115  -0.0217 -
0.0068 1 .
4908 CG    CG    . ASN ASN ASN B B 215 215 . 0.6305 0.6336 0.6692 0.0160  -0.0064
0.0153  1 .
4909 OD1   OD1   . ASN ASN ASN B B 215 215 . 0.6495 0.6607 0.7141 0.0460  0.0031
0.0001  1 .
4910 ND2   ND2   . ASN ASN ASN B B 215 215 . 0.6113 0.6282 0.7189 -0.0352 0.0001
0.0211  1 .
4911 C     C     . ASN ASN ASN B B 215 215 . 0.5987 0.5888 0.6195 0.0080  -0.0154 -
0.0160 1 .
4912 O     O     . ASN ASN ASN B B 215 215 . 0.6150 0.6001 0.6458 -0.0074 -0.0162 -
0.0145 1 .
4913 N     N     . ILE ILE ILE B B 216 216 . 0.6132 0.5903 0.6111 0.0087  -0.0098 -
0.0187 1 .
4914 CA    CA    . ILE ILE ILE B B 216 216 . 0.5968 0.5882 0.5988 0.0038  -0.0073 -
0.0195 1 .
4915 CB    CB    . ILE ILE ILE B B 216 216 . 0.5943 0.5868 0.5946 0.0078  -0.0090 -
0.0255 1 .
4916 CG1   CG1   . ILE ILE ILE B B 216 216 . 0.5807 0.5846 0.6052 0.0167  -0.0071 -
0.0294 1 .
4917 CD1   CD1   . ILE ILE ILE B B 216 216 . 0.5905 0.5617 0.6204 0.0725  0.0114  -
0.0579 1 .
4918 CG2   CG2   . ILE ILE ILE B B 216 216 . 0.5527 0.5740 0.5816 0.0008  -0.0132 -
0.0335 1 .
4919 C     C     . ILE ILE ILE B B 216 216 . 0.5887 0.5851 0.5845 0.0007  -0.0119 -
0.0189 1 .
4920 O     O     . ILE ILE ILE B B 216 216 . 0.5984 0.5816 0.5809 0.0031  -0.0132 -
0.0303 1 .
4921 N     N     . LEU LEU LEU B B 217 217 . 0.5805 0.5819 0.5744 -0.0049 -0.0134 -
0.0185 1 .
4922 CA    CA    . LEU LEU LEU B B 217 217 . 0.5748 0.5804 0.5754 0.0036  -0.0143 -
0.0178 1 .
4923 CB    CB    . LEU LEU LEU B B 217 217 . 0.5848 0.5878 0.5778 0.0004  -0.0190 -
0.0137 1 .
4924 CG    CG    . LEU LEU LEU B B 217 217 . 0.6044 0.5835 0.6078 0.0016  -0.0026 -
0.0197 1 .
4925 CD1   CD1   . LEU LEU LEU B B 217 217 . 0.6153 0.5992 0.6231 0.0121  -0.0246 -
0.0278 1 .
4926 CD2   CD2   . LEU LEU LEU B B 217 217 . 0.6397 0.5535 0.6403 -0.0340 -0.0272 -
0.0536 1 .
4927 C     C     . LEU LEU LEU B B 217 217 . 0.5718 0.5829 0.5742 0.0033  -0.0138 -
0.0247 1 .
4928 O     O     . LEU LEU LEU B B 217 217 . 0.5584 0.5643 0.5672 0.0069  -0.0243 -
0.0341 1 .
4929 N     N     . GLU GLU GLU B B 218 218 . 0.5666 0.5737 0.5720 0.0029  -0.0191 -
0.0200 1 .
4930 CA    CA    . GLU GLU GLU B B 218 218 . 0.5497 0.5643 0.5656 -0.0052 -0.0101 -
0.0135 1 .
4931 CB    CB    . GLU GLU GLU B B 218 218 . 0.5622 0.5728 0.5770 -0.0003 -0.0090 -
0.0038 1 .
4932 CG    CG    . GLU GLU GLU B B 218 218 . 0.6079 0.6304 0.6563 -0.0291 -0.0142 -
0.0141 1 .
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4933 CD    CD    . GLU GLU GLU B B 218 218 . 0.7270 0.6983 0.7149 -0.0252 -0.0217 -
0.0039 1 .
4934 OE1   OE1   . GLU GLU GLU B B 218 218 . 0.7621 0.7639 0.7320 -0.0525 -0.0193 -
0.0107 1 .
4935 OE2   OE2   . GLU GLU GLU B B 218 218 . 0.7867 0.7248 0.7970 -0.0072 -0.0168 -
0.0321 1 .
4936 C     C     . GLU GLU GLU B B 218 218 . 0.5208 0.5337 0.5411 0.0002  -0.0126 -
0.0115 1 .
4937 O     O     . GLU GLU GLU B B 218 218 . 0.4983 0.5145 0.5614 -0.0043 -0.0172 -
0.0209 1 .
4938 N     N     . ASN ASN ASN B B 219 219 . 0.4934 0.5185 0.5250 -0.0066 -0.0095 -
0.0084 1 .
4939 CA    CA    . ASN ASN ASN B B 219 219 . 0.4613 0.4904 0.5077 0.0030  -0.0077
0.0020  1 .
4940 CB    CB    . ASN ASN ASN B B 219 219 . 0.4586 0.4707 0.4987 0.0031  -0.0074
0.0055  1 .
4941 CG    CG    . ASN ASN ASN B B 219 219 . 0.4128 0.4678 0.4784 0.0043  0.0103
0.0248  1 .
4942 OD1   OD1   . ASN ASN ASN B B 219 219 . 0.3242 0.4016 0.4497 -0.0693 -0.0372
0.0378  1 .
4943 ND2   ND2   . ASN ASN ASN B B 219 219 . 0.3586 0.4553 0.4585 0.0256  0.0387
0.0107  1 .
4944 C     C     . ASN ASN ASN B B 219 219 . 0.4507 0.4763 0.4964 0.0033  -0.0135
0.0049  1 .
4945 O     O     . ASN ASN ASN B B 219 219 . 0.4278 0.4585 0.4959 -0.0099 -0.0178
0.0060  1 .
4946 N     N     . SER SER SER B B 220 220 . 0.4630 0.4767 0.4924 0.0111  -0.0116
0.0021  1 .
4947 CA    CA    . SER SER SER B B 220 220 . 0.4638 0.4726 0.4940 0.0074  -0.0076
0.0000  1 .
4948 CB    CB    . SER SER SER B B 220 220 . 0.4679 0.4713 0.5012 0.0043  -0.0092
0.0071  1 .
4949 OG    OG    . SER SER SER B B 220 220 . 0.4500 0.4342 0.5366 0.0051  -0.0226 -
0.0009 1 .
4950 C     C     . SER SER SER B B 220 220 . 0.4627 0.4719 0.4904 0.0064  -0.0017 -
0.0045 1 .
4951 O     O     . SER SER SER B B 220 220 . 0.4471 0.4574 0.4973 -0.0024 -0.0036 -
0.0180 1 .
4952 N     N     . GLU GLU GLU B B 221 221 . 0.4506 0.4724 0.4770 0.0066  -0.0033 -
0.0117 1 .
4953 CA    CA    . GLU GLU GLU B B 221 221 . 0.4434 0.4892 0.4779 0.0086  0.0040  -
0.0101 1 .
4954 CB    CB    . GLU GLU GLU B B 221 221 . 0.4388 0.5148 0.4996 0.0114  0.0074  -
0.0146 1 .
4955 CG    CG    . GLU GLU GLU B B 221 221 . 0.4928 0.5395 0.5744 -0.0004 0.0152
0.0106  1 .
4956 CD    CD    . GLU GLU GLU B B 221 221 . 0.5662 0.6055 0.7540 -0.0079 0.0407  -
0.0202 1 .
4957 OE1   OE1   . GLU GLU GLU B B 221 221 . 0.5933 0.6874 0.8510 -0.0431 0.0494
0.0010  1 .
4958 OE2   OE2   . GLU GLU GLU B B 221 221 . 0.5472 0.5879 0.7928 -0.0898 0.0399  -
0.0210 1 .
4959 C     C     . GLU GLU GLU B B 221 221 . 0.4328 0.4795 0.4663 0.0139  -0.0022 -
0.0092 1 .
4960 O     O     . GLU GLU GLU B B 221 221 . 0.3978 0.4927 0.4530 0.0235  -0.0141 -
0.0099 1 .
4961 N     N     . ALA ALA ALA B B 222 222 . 0.4295 0.4748 0.4424 0.0170  0.0039  -
0.0100 1 .
4962 CA    CA    . ALA ALA ALA B B 222 222 . 0.4083 0.4474 0.4211 0.0166  0.0017  -
0.0067 1 .
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4963 CB    CB    . ALA ALA ALA B B 222 222 . 0.4369 0.4546 0.4330 0.0205  0.0007  -
0.0121 1 .
4964 C     C     . ALA ALA ALA B B 222 222 . 0.4034 0.4375 0.4195 0.0234  0.0064  -
0.0039 1 .
4965 O     O     . ALA ALA ALA B B 222 222 . 0.3750 0.4585 0.4107 0.0184  0.0053  -
0.0008 1 .
4966 N     N     . LEU LEU LEU B B 223 223 . 0.4105 0.4173 0.4172 0.0225  0.0098  -
0.0077 1 .
4967 CA    CA    . LEU LEU LEU B B 223 223 . 0.4092 0.4100 0.4079 0.0137  0.0093  -
0.0064 1 .
4968 CB    CB    . LEU LEU LEU B B 223 223 . 0.4014 0.3941 0.4018 0.0166  0.0050  -
0.0050 1 .
4969 CG    CG    . LEU LEU LEU B B 223 223 . 0.4068 0.3789 0.3877 -0.0033 -0.0053
0.0130  1 .
4970 CD1   CD1   . LEU LEU LEU B B 223 223 . 0.4956 0.3855 0.3896 -0.0207 -0.0074
0.0032  1 .
4971 CD2   CD2   . LEU LEU LEU B B 223 223 . 0.3494 0.2794 0.3194 -0.0134 -0.0672 -
0.0132 1 .
4972 C     C     . LEU LEU LEU B B 223 223 . 0.4026 0.4087 0.4093 0.0092  0.0182  -
0.0124 1 .
4973 O     O     . LEU LEU LEU B B 223 223 . 0.3916 0.4066 0.4061 0.0093  0.0430  -
0.0278 1 .
4974 N     N     . GLU GLU GLU B B 224 224 . 0.4028 0.4219 0.4056 0.0008  0.0086  -
0.0143 1 .
4975 CA    CA    . GLU GLU GLU B B 224 224 . 0.3952 0.4277 0.4133 0.0015  0.0055  -
0.0087 1 .
4976 CB    CB    . GLU GLU GLU B B 224 224 . 0.4302 0.4407 0.4288 -0.0030 0.0021  -
0.0053 1 .
4977 CG    CG    . GLU GLU GLU B B 224 224 . 0.4435 0.5048 0.5225 0.0002  0.0017  -
0.0173 1 .
4978 CD    CD    . GLU GLU GLU B B 224 224 . 0.6072 0.5946 0.5968 -0.0195 0.0192  -
0.0328 1 .
4979 OE1   OE1   . GLU GLU GLU B B 224 224 . 0.6650 0.6142 0.7174 -0.0216 0.0578  -
0.0662 1 .
4980 OE2   OE2   . GLU GLU GLU B B 224 224 . 0.6774 0.6299 0.6830 -0.0190 -0.0010
0.0013  1 .
4981 C     C     . GLU GLU GLU B B 224 224 . 0.3844 0.4207 0.4102 -0.0020 0.0076  -
0.0093 1 .
4982 O     O     . GLU GLU GLU B B 224 224 . 0.3966 0.4334 0.4119 0.0069  0.0126  -
0.0133 1 .
4983 N     N     . LEU LEU LEU B B 225 225 . 0.3737 0.4159 0.3912 0.0069  0.0026  -
0.0031 1 .
4984 CA    CA    . LEU LEU LEU B B 225 225 . 0.3664 0.3977 0.3764 0.0075  0.0040
0.0037  1 .
4985 CB    CB    . LEU LEU LEU B B 225 225 . 0.3563 0.3760 0.3723 0.0028  0.0001
0.0196  1 .
4986 CG    CG    . LEU LEU LEU B B 225 225 . 0.3932 0.3901 0.3932 0.0213  -0.0128
0.0012  1 .
4987 CD1   CD1   . LEU LEU LEU B B 225 225 . 0.4340 0.4345 0.3947 0.0314  -0.0053
0.0007  1 .
4988 CD2   CD2   . LEU LEU LEU B B 225 225 . 0.4498 0.3553 0.4149 0.0506  -0.0239
0.0192  1 .
4989 C     C     . LEU LEU LEU B B 225 225 . 0.3840 0.4032 0.3697 0.0131  0.0027  -
0.0017 1 .
4990 O     O     . LEU LEU LEU B B 225 225 . 0.3848 0.4173 0.3578 0.0353  0.0057
0.0044  1 .
4991 N     N     . VAL VAL VAL B B 226 226 . 0.3787 0.4197 0.3849 0.0131  0.0057  -
0.0087 1 .
4992 CA    CA    . VAL VAL VAL B B 226 226 . 0.3797 0.4186 0.3974 0.0007  0.0102  -
0.0052 1 .
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4993 CB    CB    . VAL VAL VAL B B 226 226 . 0.3721 0.4116 0.3997 -0.0020 0.0104  -
0.0098 1 .
4994 CG1   CG1   . VAL VAL VAL B B 226 226 . 0.3272 0.4058 0.3749 0.0039  0.0118  -
0.0044 1 .
4995 CG2   CG2   . VAL VAL VAL B B 226 226 . 0.3135 0.3963 0.4109 0.0046  0.0188  -
0.0317 1 .
4996 C     C     . VAL VAL VAL B B 226 226 . 0.4139 0.4340 0.4113 0.0002  0.0131
0.0033  1 .
4997 O     O     . VAL VAL VAL B B 226 226 . 0.4298 0.4567 0.4064 -0.0084 0.0163
0.0183  1 .
4998 N     N     . LYS LYS LYS B B 227 227 . 0.4509 0.4539 0.3973 0.0085  0.0035
0.0138  1 .
4999 CA    CA    . LYS LYS LYS B B 227 227 . 0.4650 0.4548 0.4171 0.0126  0.0067
0.0012  1 .
5000 CB    CB    . LYS LYS LYS B B 227 227 . 0.4794 0.4657 0.4239 0.0107  0.0177
0.0059  1 .
5001 CG    CG    . LYS LYS LYS B B 227 227 . 0.5461 0.5089 0.4495 0.0263  0.0171  -
0.0113 1 .
5002 CD    CD    . LYS LYS LYS B B 227 227 . 0.6145 0.5821 0.4991 0.0543  0.0536  -
0.0151 1 .
5003 CE    CE    . LYS LYS LYS B B 227 227 . 0.7496 0.6536 0.5087 0.0639  0.0459  -
0.0421 1 .
5004 NZ    NZ    . LYS LYS LYS B B 227 227 . 0.7751 0.6684 0.5380 0.0874  0.0644  -
0.0829 1 .
5005 C     C     . LYS LYS LYS B B 227 227 . 0.4573 0.4524 0.4111 0.0048  0.0007
0.0051  1 .
5006 O     O     . LYS LYS LYS B B 227 227 . 0.4751 0.4701 0.4104 0.0077  -0.0045 -
0.0026 1 .
5007 N     N     . GLU GLU GLU B B 228 228 . 0.4352 0.4546 0.4187 -0.0006 0.0110
0.0014  1 .
5008 CA    CA    . GLU GLU GLU B B 228 228 . 0.4168 0.4475 0.4239 0.0090  0.0187  -
0.0015 1 .
5009 CB    CB    . GLU GLU GLU B B 228 228 . 0.4105 0.4639 0.4281 0.0042  0.0225  -
0.0025 1 .
5010 CG    CG    . GLU GLU GLU B B 228 228 . 0.5064 0.5385 0.5083 0.0155  0.0074
0.0108  1 .
5011 CD    CD    . GLU GLU GLU B B 228 228 . 0.5629 0.6323 0.6189 -0.0035 0.0177
0.0214  1 .
5012 OE1   OE1   . GLU GLU GLU B B 228 228 . 0.6015 0.7012 0.6780 0.0388  0.0171
0.0515  1 .
5013 OE2   OE2   . GLU GLU GLU B B 228 228 . 0.6135 0.6435 0.6961 -0.0478 0.0917
0.0355  1 .
5014 C     C     . GLU GLU GLU B B 228 228 . 0.4076 0.4333 0.4284 0.0119  0.0131  -
0.0064 1 .
5015 O     O     . GLU GLU GLU B B 228 228 . 0.4005 0.4608 0.4580 0.0318  0.0178  -
0.0087 1 .
5016 N     N     . ALA ALA ALA B B 229 229 . 0.3934 0.4195 0.4012 0.0094  0.0293  -
0.0041 1 .
5017 CA    CA    . ALA ALA ALA B B 229 229 . 0.3873 0.4165 0.4026 0.0146  0.0227  -
0.0090 1 .
5018 CB    CB    . ALA ALA ALA B B 229 229 . 0.3692 0.4074 0.3778 0.0160  0.0327  -
0.0034 1 .
5019 C     C     . ALA ALA ALA B B 229 229 . 0.3635 0.4224 0.3952 0.0192  0.0279  -
0.0122 1 .
5020 O     O     . ALA ALA ALA B B 229 229 . 0.3165 0.4145 0.3783 0.0193  0.0345  -
0.0144 1 .
5021 N     N     . ILE ILE ILE B B 230 230 . 0.3868 0.4347 0.3888 0.0254  0.0227  -
0.0100 1 .
5022 CA    CA    . ILE ILE ILE B B 230 230 . 0.4298 0.4468 0.4251 0.0118  0.0104  -
0.0102 1 .
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5023 CB    CB    . ILE ILE ILE B B 230 230 . 0.4177 0.4569 0.4214 0.0187  0.0039  -
0.0209 1 .
5024 CG1   CG1   . ILE ILE ILE B B 230 230 . 0.4544 0.4193 0.3783 0.0312  0.0070  -
0.0419 1 .
5025 CD1   CD1   . ILE ILE ILE B B 230 230 . 0.4206 0.3626 0.3268 0.0479  0.0113  -
0.1049 1 .
5026 CG2   CG2   . ILE ILE ILE B B 230 230 . 0.4254 0.4357 0.4323 -0.0008 0.0165  -
0.0263 1 .
5027 C     C     . ILE ILE ILE B B 230 230 . 0.4497 0.4688 0.4581 0.0134  0.0126  -
0.0111 1 .
5028 O     O     . ILE ILE ILE B B 230 230 . 0.4438 0.4927 0.4574 0.0241  0.0121  -
0.0252 1 .
5029 N     N     . ASP ASP ASP B B 231 231 . 0.4857 0.5078 0.4845 0.0112  0.0212  -
0.0060 1 .
5030 CA    CA    . ASP ASP ASP B B 231 231 . 0.5218 0.5325 0.5321 0.0090  0.0200  -
0.0093 1 .
5031 CB    CB    . ASP ASP ASP B B 231 231 . 0.5294 0.5470 0.5464 0.0075  0.0210  -
0.0106 1 .
5032 CG    CG    . ASP ASP ASP B B 231 231 . 0.6050 0.5919 0.6152 0.0253  0.0185  -
0.0294 1 .
5033 OD1   OD1   . ASP ASP ASP B B 231 231 . 0.6107 0.6477 0.7254 0.0477  0.0073  -
0.0358 1 .
5034 OD2   OD2   . ASP ASP ASP B B 231 231 . 0.6832 0.5725 0.6349 0.0275  0.0227  -
0.0619 1 .
5035 C     C     . ASP ASP ASP B B 231 231 . 0.5206 0.5381 0.5401 0.0024  0.0226  -
0.0045 1 .
5036 O     O     . ASP ASP ASP B B 231 231 . 0.5081 0.5343 0.5519 0.0093  0.0404  -
0.0151 1 .
5037 N     N     . LYS LYS LYS B B 232 232 . 0.5398 0.5494 0.5468 0.0039  0.0222  -
0.0013 1 .
5038 CA    CA    . LYS LYS LYS B B 232 232 . 0.5515 0.5535 0.5589 0.0086  0.0122
0.0061  1 .
5039 CB    CB    . LYS LYS LYS B B 232 232 . 0.5564 0.5583 0.5663 0.0096  0.0119
0.0031  1 .
5040 CG    CG    . LYS LYS LYS B B 232 232 . 0.5924 0.6219 0.6017 0.0183  -0.0062 -
0.0007 1 .
5041 CD    CD    . LYS LYS LYS B B 232 232 . 0.6780 0.6887 0.6583 0.0318  -0.0153 -
0.0255 1 .
5042 CE    CE    . LYS LYS LYS B B 232 232 . 0.7358 0.7775 0.6717 0.0241  -0.0108
0.0052  1 .
5043 NZ    NZ    . LYS LYS LYS B B 232 232 . 0.7253 0.8182 0.7134 0.0041  -0.0088 -
0.0019 1 .
5044 C     C     . LYS LYS LYS B B 232 232 . 0.5489 0.5509 0.5657 0.0123  0.0119
0.0089  1 .
5045 O     O     . LYS LYS LYS B B 232 232 . 0.5703 0.5462 0.5750 0.0135  0.0188
0.0132  1 .
5046 N     N     . ALA ALA ALA B B 233 233 . 0.5414 0.5416 0.5533 0.0077  0.0113
0.0163  1 .
5047 CA    CA    . ALA ALA ALA B B 233 233 . 0.5169 0.5180 0.5244 0.0052  0.0077
0.0056  1 .
5048 CB    CB    . ALA ALA ALA B B 233 233 . 0.5193 0.5150 0.5277 0.0143  0.0069
0.0108  1 .
5049 C     C     . ALA ALA ALA B B 233 233 . 0.5051 0.4985 0.5143 0.0072  0.0100
0.0073  1 .
5050 O     O     . ALA ALA ALA B B 233 233 . 0.5164 0.4759 0.4927 0.0104  0.0149
0.0147  1 .
5051 N     N     . GLY GLY GLY B B 234 234 . 0.4860 0.4908 0.5137 0.0008  0.0158
0.0025  1 .
5052 CA    CA    . GLY GLY GLY B B 234 234 . 0.4681 0.4968 0.4965 0.0072  0.0086
0.0014  1 .
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5053 C     C     . GLY GLY GLY B B 234 234 . 0.4922 0.4888 0.5043 0.0076  0.0080
0.0017  1 .
5054 O     O     . GLY GLY GLY B B 234 234 . 0.5024 0.4928 0.5167 0.0018  0.0049  -
0.0123 1 .
5055 N     N     . TYR TYR TYR B B 235 235 . 0.4698 0.4650 0.4830 0.0232  0.0145
0.0046  1 .
5056 CA    CA    . TYR TYR TYR B B 235 235 . 0.4558 0.4568 0.4538 0.0124  0.0167
0.0002  1 .
5057 CB    CB    . TYR TYR TYR B B 235 235 . 0.4595 0.4602 0.4558 0.0137  0.0208
0.0075  1 .
5058 CG    CG    . TYR TYR TYR B B 235 235 . 0.4528 0.4566 0.4762 0.0261  0.0109
0.0013  1 .
5059 CD1   CD1   . TYR TYR TYR B B 235 235 . 0.4575 0.4444 0.4681 0.0421  -0.0088
0.0046  1 .
5060 CE1   CE1   . TYR TYR TYR B B 235 235 . 0.4625 0.4677 0.4676 0.0183  -0.0158
0.0195  1 .
5061 CZ    CZ    . TYR TYR TYR B B 235 235 . 0.4849 0.4662 0.4550 0.0224  -0.0028 -
0.0073 1 .
5062 OH    OH    . TYR TYR TYR B B 235 235 . 0.4898 0.4431 0.4948 0.0105  -0.0012 -
0.0211 1 .
5063 CE2   CE2   . TYR TYR TYR B B 235 235 . 0.4780 0.4919 0.4801 0.0300  -0.0120
0.0125  1 .
5064 CD2   CD2   . TYR TYR TYR B B 235 235 . 0.4416 0.4559 0.5076 0.0307  0.0028
0.0014  1 .
5065 C     C     . TYR TYR TYR B B 235 235 . 0.4448 0.4632 0.4341 0.0174  0.0139  -
0.0014 1 .
5066 O     O     . TYR TYR TYR B B 235 235 . 0.3987 0.4570 0.4073 0.0262  0.0458  -
0.0051 1 .
5067 N     N     . THR THR THR B B 236 236 . 0.4339 0.4576 0.4373 0.0129  0.0143  -
0.0048 1 .
5068 CA    CA    . THR THR THR B B 236 236 . 0.4580 0.4692 0.4553 0.0180  0.0097
0.0028  1 .
5069 CB    CB    . THR THR THR B B 236 236 . 0.4737 0.4678 0.4505 0.0177  0.0078
0.0084  1 .
5070 OG1   OG1   . THR THR THR B B 236 236 . 0.4744 0.4993 0.4844 0.0087  0.0037  -
0.0128 1 .
5071 CG2   CG2   . THR THR THR B B 236 236 . 0.4790 0.4508 0.4886 0.0319  0.0159
0.0097  1 .
5072 C     C     . THR THR THR B B 236 236 . 0.4934 0.4858 0.4537 0.0160  0.0109
0.0004  1 .
5073 O     O     . THR THR THR B B 236 236 . 0.4997 0.4837 0.4519 0.0440  0.0175  -
0.0081 1 .
5074 N     N     . GLU GLU GLU B B 237 237 . 0.5152 0.4995 0.4772 0.0157  0.0112  -
0.0033 1 .
5075 CA    CA    . GLU GLU GLU B B 237 237 . 0.5211 0.5391 0.5163 0.0080  0.0076  -
0.0013 1 .
5076 CB    CB    . GLU GLU GLU B B 237 237 . 0.5474 0.5518 0.5394 0.0100  0.0102  -
0.0015 1 .
5077 CG    CG    . GLU GLU GLU B B 237 237 . 0.5913 0.6276 0.6257 -0.0057 0.0344
0.0162  1 .
5078 CD    CD    . GLU GLU GLU B B 237 237 . 0.6817 0.7359 0.7197 -0.0329 0.0161
0.0395  1 .
5079 OE1   OE1   . GLU GLU GLU B B 237 237 . 0.7829 0.7338 0.7709 -0.0475 0.0399
0.0730  1 .
5080 OE2   OE2   . GLU GLU GLU B B 237 237 . 0.7184 0.7636 0.7420 -0.0610 0.0776
0.0595  1 .
5081 C     C     . GLU GLU GLU B B 237 237 . 0.5204 0.5356 0.5021 0.0094  0.0038  -
0.0034 1 .
5082 O     O     . GLU GLU GLU B B 237 237 . 0.5219 0.5629 0.5029 0.0135  -0.0010
0.0042  1 .
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5083 N     N     . LYS LYS LYS B B 238 238 . 0.5049 0.4983 0.4786 0.0088  -0.0011 -
0.0105 1 .
5084 CA    CA    . LYS LYS LYS B B 238 238 . 0.4902 0.4771 0.4543 0.0099  0.0020  -
0.0024 1 .
5085 CB    CB    . LYS LYS LYS B B 238 238 . 0.5055 0.4865 0.4755 0.0109  -0.0101
0.0026  1 .
5086 CG    CG    . LYS LYS LYS B B 238 238 . 0.5821 0.5317 0.5011 0.0098  -0.0236 -
0.0223 1 .
5087 CD    CD    . LYS LYS LYS B B 238 238 . 0.6265 0.5712 0.5522 -0.0083 -0.0330 -
0.0021 1 .
5088 CE    CE    . LYS LYS LYS B B 238 238 . 0.6497 0.6015 0.5849 -0.0469 -0.0269 -
0.0466 1 .
5089 NZ    NZ    . LYS LYS LYS B B 238 238 . 0.6431 0.6459 0.5955 -0.0458 -0.0060 -
0.0464 1 .
5090 C     C     . LYS LYS LYS B B 238 238 . 0.4574 0.4514 0.4167 0.0035  0.0044
0.0010  1 .
5091 O     O     . LYS LYS LYS B B 238 238 . 0.4912 0.4538 0.3958 0.0157  0.0094
0.0070  1 .
5092 N     N     . ILE ILE ILE B B 239 239 . 0.4128 0.4210 0.3816 0.0125  0.0166  -
0.0041 1 .
5093 CA    CA    . ILE ILE ILE B B 239 239 . 0.4014 0.4090 0.3841 -0.0040 0.0085
0.0005  1 .
5094 CB    CB    . ILE ILE ILE B B 239 239 . 0.3809 0.3985 0.3904 -0.0089 -0.0035 -
0.0052 1 .
5095 CG1   CG1   . ILE ILE ILE B B 239 239 . 0.4134 0.4177 0.3840 0.0097  -0.0026 -
0.0046 1 .
5096 CD1   CD1   . ILE ILE ILE B B 239 239 . 0.3740 0.4715 0.4264 -0.0259 -0.0685 -
0.0204 1 .
5097 CG2   CG2   . ILE ILE ILE B B 239 239 . 0.3307 0.3881 0.3751 -0.0067 0.0302  -
0.0160 1 .
5098 C     C     . ILE ILE ILE B B 239 239 . 0.3873 0.3952 0.3756 0.0024  0.0000  -
0.0020 1 .
5099 O     O     . ILE ILE ILE B B 239 239 . 0.4066 0.4243 0.3628 0.0054  0.0092
0.0002  1 .
5100 N     N     . VAL VAL VAL B B 240 240 . 0.3552 0.3723 0.3523 0.0070  -0.0010 -
0.0030 1 .
5101 CA    CA    . VAL VAL VAL B B 240 240 . 0.3178 0.3510 0.3290 0.0000  -0.0047 -
0.0007 1 .
5102 CB    CB    . VAL VAL VAL B B 240 240 . 0.3138 0.3384 0.3179 0.0142  -0.0004 -
0.0080 1 .
5103 CG1   CG1   . VAL VAL VAL B B 240 240 . 0.3792 0.3309 0.3360 -0.0279 -0.0013
0.0108  1 .
5104 CG2   CG2   . VAL VAL VAL B B 240 240 . 0.2642 0.3114 0.3054 -0.0699 -0.0248 -
0.0115 1 .
5105 C     C     . VAL VAL VAL B B 240 240 . 0.2988 0.3469 0.3303 0.0095  -0.0063
0.0078  1 .
5106 O     O     . VAL VAL VAL B B 240 240 . 0.2868 0.3603 0.3314 0.0129  -0.0076
0.0052  1 .
5107 N     N     . ILE ILE ILE B B 241 241 . 0.2705 0.3286 0.3208 0.0147  -0.0087
0.0116  1 .
5108 CA    CA    . ILE ILE ILE B B 241 241 . 0.2980 0.3241 0.2938 0.0113  0.0048
0.0107  1 .
5109 CB    CB    . ILE ILE ILE B B 241 241 . 0.2785 0.3157 0.3103 0.0173  -0.0029
0.0046  1 .
5110 CG1   CG1   . ILE ILE ILE B B 241 241 . 0.2763 0.3275 0.2482 -0.0002 -0.0082
0.0215  1 .
5111 CD1   CD1   . ILE ILE ILE B B 241 241 . 0.2019 0.4184 0.2695 0.0481  0.0075  -
0.0526 1 .
5112 CG2   CG2   . ILE ILE ILE B B 241 241 . 0.2964 0.3201 0.2220 -0.0159 0.0360
0.0191  1 .
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5113 C     C     . ILE ILE ILE B B 241 241 . 0.3208 0.3398 0.3095 0.0203  0.0033
0.0083  1 .
5114 O     O     . ILE ILE ILE B B 241 241 . 0.3264 0.3495 0.3043 0.0192  -0.0032
0.0147  1 .
5115 N     N     . GLY GLY GLY B B 242 242 . 0.3501 0.3364 0.3051 0.0232  0.0120
0.0061  1 .
5116 CA    CA    . GLY GLY GLY B B 242 242 . 0.3242 0.3336 0.3120 0.0161  0.0102
0.0107  1 .
5117 C     C     . GLY GLY GLY B B 242 242 . 0.3325 0.3340 0.3172 0.0068  0.0152
0.0070  1 .
5118 O     O     . GLY GLY GLY B B 242 242 . 0.3822 0.3377 0.3168 -0.0152 0.0265
0.0072  1 .
5119 N     N     . MET MET MET B B 243 243 . 0.3523 0.3444 0.3311 -0.0014 0.0139
0.0026  1 .
5120 CA    CA    . MET MET MET B B 243 243 . 0.3509 0.3551 0.3339 -0.0013 0.0041
0.0026  1 .
5121 CB    CB    . MET MET MET B B 243 243 . 0.3490 0.3657 0.3703 -0.0144 0.0003  -
0.0065 1 .
5122 CG    CG    . MET MET MET B B 243 243 . 0.3910 0.3914 0.3914 0.0133  -0.0030 -
0.0311 1 .
5123 SD    SD    . MET MET MET B B 243 243 . 0.4524 0.4326 0.4666 -0.0305 0.0046  -
0.0008 1 .
5124 CE    CE    . MET MET MET B B 243 243 . 0.5224 0.4558 0.4058 -0.0449 -0.0221 -
0.0057 1 .
5125 C     C     . MET MET MET B B 243 243 . 0.3541 0.3360 0.3359 0.0065  -0.0005
0.0088  1 .
5126 O     O     . MET MET MET B B 243 243 . 0.3586 0.3444 0.3425 0.0120  -0.0109 -
0.0002 1 .
5127 N     N     . ASP ASP ASP B B 244 244 . 0.3313 0.3188 0.3293 0.0027  -0.0017
0.0064  1 .
5128 CA    CA    . ASP ASP ASP B B 244 244 . 0.3450 0.3243 0.3275 0.0036  0.0037
0.0135  1 .
5129 CB    CB    . ASP ASP ASP B B 244 244 . 0.3527 0.3288 0.3342 0.0168  0.0164
0.0189  1 .
5130 CG    CG    . ASP ASP ASP B B 244 244 . 0.3212 0.3231 0.3020 0.0124  0.0042
0.0328  1 .
5131 OD1   OD1   . ASP ASP ASP B B 244 244 . 0.2094 0.3322 0.2907 0.0129  -0.0392
0.0563  1 .
5132 OD2   OD2   . ASP ASP ASP B B 244 244 . 0.3120 0.3153 0.3154 0.0297  -0.0419
0.0371  1 .
5133 C     C     . ASP ASP ASP B B 244 244 . 0.3394 0.3279 0.3302 0.0030  -0.0041
0.0073  1 .
5134 O     O     . ASP ASP ASP B B 244 244 . 0.3426 0.3296 0.3239 0.0159  -0.0157
0.0142  1 .
5135 N     N     . VAL VAL VAL B B 245 245 . 0.3392 0.3094 0.3131 -0.0049 0.0021
0.0084  1 .
5136 CA    CA    . VAL VAL VAL B B 245 245 . 0.3155 0.3284 0.3087 -0.0017 0.0076
0.0021  1 .
5137 CB    CB    . VAL VAL VAL B B 245 245 . 0.3298 0.3170 0.3049 -0.0094 0.0199
0.0011  1 .
5138 CG1   CG1   . VAL VAL VAL B B 245 245 . 0.3186 0.3002 0.3256 -0.0132 0.0295  -
0.0547 1 .
5139 CG2   CG2   . VAL VAL VAL B B 245 245 . 0.3313 0.3254 0.2686 0.0216  0.0263
0.0151  1 .
5140 C     C     . VAL VAL VAL B B 245 245 . 0.3059 0.3211 0.2948 -0.0109 -0.0017
0.0100  1 .
5141 O     O     . VAL VAL VAL B B 245 245 . 0.2480 0.3383 0.2761 -0.0077 -0.0171
0.0397  1 .
5142 N     N     . ALA ALA ALA B B 246 246 . 0.2723 0.3197 0.2936 -0.0094 -0.0015
0.0143  1 .
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5143 CA    CA    . ALA ALA ALA B B 246 246 . 0.3061 0.3319 0.2939 -0.0044 -0.0081
0.0082  1 .
5144 CB    CB    . ALA ALA ALA B B 246 246 . 0.2977 0.3296 0.2942 -0.0034 -0.0075
0.0179  1 .
5145 C     C     . ALA ALA ALA B B 246 246 . 0.3241 0.3420 0.3102 -0.0083 -0.0104
0.0016  1 .
5146 O     O     . ALA ALA ALA B B 246 246 . 0.3291 0.3757 0.3215 0.0042  -0.0217
0.0071  1 .
5147 N     N     . ALA ALA ALA B B 247 247 . 0.3396 0.3438 0.3415 -0.0034 -0.0154
0.0053  1 .
5148 CA    CA    . ALA ALA ALA B B 247 247 . 0.3483 0.3470 0.3381 0.0004  -0.0088 -
0.0019 1 .
5149 CB    CB    . ALA ALA ALA B B 247 247 . 0.3696 0.3420 0.3458 0.0042  -0.0268 -
0.0082 1 .
5150 C     C     . ALA ALA ALA B B 247 247 . 0.3458 0.3527 0.3491 -0.0027 -0.0140 -
0.0039 1 .
5151 O     O     . ALA ALA ALA B B 247 247 . 0.3430 0.3578 0.3727 0.0015  -0.0185 -
0.0051 1 .
5152 N     N     . SER SER SER B B 248 248 . 0.3111 0.3622 0.3145 -0.0013 -0.0127 -
0.0102 1 .
5153 CA    CA    . SER SER SER B B 248 248 . 0.3198 0.3463 0.3422 -0.0040 -0.0137 -
0.0080 1 .
5154 CB    CB    . SER SER SER B B 248 248 . 0.3301 0.3531 0.3353 -0.0076 -0.0104 -
0.0124 1 .
5155 OG    OG    . SER SER SER B B 248 248 . 0.2610 0.3612 0.3368 -0.0211 -0.0261 -
0.0070 1 .
5156 C     C     . SER SER SER B B 248 248 . 0.3507 0.3600 0.3547 0.0015  -0.0047 -
0.0096 1 .
5157 O     O     . SER SER SER B B 248 248 . 0.3569 0.3678 0.3362 0.0079  0.0010  -
0.0279 1 .
5158 N     N     . GLU GLU GLU B B 249 249 . 0.3839 0.3788 0.3754 -0.0045 -0.0083 -
0.0031 1 .
5159 CA    CA    . GLU GLU GLU B B 249 249 . 0.3986 0.3996 0.3949 0.0037  -0.0024 -
0.0099 1 .
5160 CB    CB    . GLU GLU GLU B B 249 249 . 0.4138 0.4065 0.4022 0.0093  -0.0004 -
0.0144 1 .
5161 CG    CG    . GLU GLU GLU B B 249 249 . 0.3727 0.4394 0.4105 0.0099  -0.0013 -
0.0393 1 .
5162 CD    CD    . GLU GLU GLU B B 249 249 . 0.4059 0.4753 0.4844 0.0019  -0.0046 -
0.1117 1 .
5163 OE1   OE1   . GLU GLU GLU B B 249 249 . 0.3547 0.4996 0.4399 0.0478  -0.0153 -
0.1015 1 .
5164 OE2   OE2   . GLU GLU GLU B B 249 249 . 0.4190 0.4737 0.5690 -0.0688 -0.0030 -
0.1171 1 .
5165 C     C     . GLU GLU GLU B B 249 249 . 0.4041 0.4096 0.4174 0.0052  -0.0096 -
0.0132 1 .
5166 O     O     . GLU GLU GLU B B 249 249 . 0.4499 0.4362 0.4520 0.0221  -0.0055 -
0.0154 1 .
5167 N     N     . PHE PHE PHE B B 250 250 . 0.3960 0.4096 0.4117 0.0011  -0.0073 -
0.0025 1 .
5168 CA    CA    . PHE PHE PHE B B 250 250 . 0.4223 0.4191 0.4282 -0.0006 -0.0048 -
0.0022 1 .
5169 CB    CB    . PHE PHE PHE B B 250 250 . 0.3904 0.4187 0.4227 -0.0024 -0.0072 -
0.0057 1 .
5170 CG    CG    . PHE PHE PHE B B 250 250 . 0.4211 0.4204 0.4146 -0.0155 0.0029
0.0072  1 .
5171 CD1   CD1   . PHE PHE PHE B B 250 250 . 0.4827 0.4185 0.4270 -0.0182 -0.0235
0.0077  1 .
5172 CE1   CE1   . PHE PHE PHE B B 250 250 . 0.4967 0.4337 0.3612 -0.0346 -0.0245 -
0.0075 1 .
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5173 CZ    CZ    . PHE PHE PHE B B 250 250 . 0.4687 0.3914 0.3779 -0.0562 -0.0253 -
0.0081 1 .
5174 CE2   CE2   . PHE PHE PHE B B 250 250 . 0.4130 0.3976 0.3712 -0.0428 -0.0280
0.0285  1 .
5175 CD2   CD2   . PHE PHE PHE B B 250 250 . 0.4310 0.4037 0.4123 -0.0349 -0.0129
0.0301  1 .
5176 C     C     . PHE PHE PHE B B 250 250 . 0.4281 0.4251 0.4323 -0.0061 -0.0017 -
0.0025 1 .
5177 O     O     . PHE PHE PHE B B 250 250 . 0.4540 0.4296 0.4461 -0.0182 -0.0002 -
0.0080 1 .
5178 N     N     . TYR TYR TYR B B 251 251 . 0.4353 0.4225 0.4384 0.0000  -0.0120 -
0.0017 1 .
5179 CA    CA    . TYR TYR TYR B B 251 251 . 0.4247 0.4263 0.4384 -0.0006 -0.0114 -
0.0058 1 .
5180 CB    CB    . TYR TYR TYR B B 251 251 . 0.4079 0.4052 0.4265 -0.0083 -0.0095 -
0.0095 1 .
5181 CG    CG    . TYR TYR TYR B B 251 251 . 0.4168 0.4190 0.4408 -0.0114 -0.0015 -
0.0112 1 .
5182 CD1   CD1   . TYR TYR TYR B B 251 251 . 0.4051 0.3868 0.4409 -0.0213 -0.0003 -
0.0051 1 .
5183 CE1   CE1   . TYR TYR TYR B B 251 251 . 0.3522 0.3742 0.4273 -0.0375 0.0117
0.0109  1 .
5184 CZ    CZ    . TYR TYR TYR B B 251 251 . 0.3677 0.4112 0.4382 -0.0175 -0.0175 -
0.0024 1 .
5185 OH    OH    . TYR TYR TYR B B 251 251 . 0.4054 0.3999 0.5101 0.0320  -0.0254
0.0002  1 .
5186 CE2   CE2   . TYR TYR TYR B B 251 251 . 0.4296 0.4102 0.4629 -0.0272 0.0060
0.0030  1 .
5187 CD2   CD2   . TYR TYR TYR B B 251 251 . 0.4119 0.4117 0.4522 0.0052  0.0125  -
0.0062 1 .
5188 C     C     . TYR TYR TYR B B 251 251 . 0.4117 0.4363 0.4460 -0.0041 -0.0223 -
0.0039 1 .
5189 O     O     . TYR TYR TYR B B 251 251 . 0.3871 0.4348 0.4527 -0.0030 -0.0354 -
0.0112 1 .
5190 N     N     . ARG ARG ARG B B 252 252 . 0.4204 0.4434 0.4522 -0.0061 -0.0220
0.0031  1 .
5191 CA    CA    . ARG ARG ARG B B 252 252 . 0.4594 0.4558 0.4764 -0.0025 -0.0138 -
0.0087 1 .
5192 CB    CB    . ARG ARG ARG B B 252 252 . 0.4632 0.4631 0.4861 0.0005  -0.0258 -
0.0127 1 .
5193 CG    CG    . ARG ARG ARG B B 252 252 . 0.4541 0.4759 0.4881 0.0020  -0.0230
0.0019  1 .
5194 CD    CD    . ARG ARG ARG B B 252 252 . 0.5041 0.5295 0.5106 0.0120  -0.0065 -
0.0002 1 .
5195 NE    NE    . ARG ARG ARG B B 252 252 . 0.5651 0.5814 0.5188 0.0046  -0.0068 -
0.0112 1 .
5196 CZ    CZ    . ARG ARG ARG B B 252 252 . 0.5534 0.6047 0.5276 0.0080  -0.0119 -
0.0002 1 .
5197 NH1   NH1   . ARG ARG ARG B B 252 252 . 0.5286 0.6641 0.4947 0.0297  0.0048  -
0.0470 1 .
5198 NH2   NH2   . ARG ARG ARG B B 252 252 . 0.5635 0.5988 0.5798 0.0215  -0.0348
0.0171  1 .
5199 C     C     . ARG ARG ARG B B 252 252 . 0.4794 0.4561 0.4861 -0.0080 -0.0072 -
0.0094 1 .
5200 O     O     . ARG ARG ARG B B 252 252 . 0.4895 0.4403 0.5170 -0.0235 0.0132  -
0.0122 1 .
5201 N     N     . ASP ASP ASP B B 253 253 . 0.5020 0.4828 0.5019 -0.0080 -0.0059 -
0.0059 1 .
5202 CA    CA    . ASP ASP ASP B B 253 253 . 0.5129 0.4974 0.5125 -0.0027 -0.0031 -
0.0022 1 .
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5203 CB    CB    . ASP ASP ASP B B 253 253 . 0.5289 0.5020 0.5319 -0.0042 -0.0064 -
0.0041 1 .
5204 CG    CG    . ASP ASP ASP B B 253 253 . 0.5711 0.5605 0.5752 -0.0105 -0.0007 -
0.0236 1 .
5205 OD1   OD1   . ASP ASP ASP B B 253 253 . 0.5972 0.5636 0.6711 -0.0062 -0.0304 -
0.0306 1 .
5206 OD2   OD2   . ASP ASP ASP B B 253 253 . 0.5393 0.5878 0.6485 -0.0064 0.0407  -
0.0425 1 .
5207 C     C     . ASP ASP ASP B B 253 253 . 0.4954 0.4876 0.5030 0.0020  0.0045  -
0.0003 1 .
5208 O     O     . ASP ASP ASP B B 253 253 . 0.4790 0.4807 0.5094 0.0056  0.0192
0.0052  1 .
5209 N     N     . GLY GLY GLY B B 254 254 . 0.4836 0.4754 0.4922 0.0026  0.0119  -
0.0019 1 .
5210 CA    CA    . GLY GLY GLY B B 254 254 . 0.4823 0.4566 0.4766 0.0019  0.0132  -
0.0007 1 .
5211 C     C     . GLY GLY GLY B B 254 254 . 0.4856 0.4554 0.4681 -0.0033 0.0123  -
0.0013 1 .
5212 O     O     . GLY GLY GLY B B 254 254 . 0.4967 0.4401 0.4495 -0.0068 0.0357
0.0125  1 .
5213 N     N     . LYS LYS LYS B B 255 255 . 0.4493 0.4453 0.4696 -0.0031 0.0113  -
0.0032 1 .
5214 CA    CA    . LYS LYS LYS B B 255 255 . 0.4473 0.4548 0.4736 -0.0025 0.0092  -
0.0026 1 .
5215 CB    CB    . LYS LYS LYS B B 255 255 . 0.4519 0.4549 0.4890 -0.0131 0.0215
0.0001  1 .
5216 CG    CG    . LYS LYS LYS B B 255 255 . 0.4614 0.4758 0.4931 0.0073  0.0175
0.0107  1 .
5217 CD    CD    . LYS LYS LYS B B 255 255 . 0.5345 0.5436 0.5669 -0.0449 0.0260
0.0161  1 .
5218 CE    CE    . LYS LYS LYS B B 255 255 . 0.5450 0.6041 0.5871 -0.0403 0.0489
0.0296  1 .
5219 NZ    NZ    . LYS LYS LYS B B 255 255 . 0.5483 0.6898 0.6698 -0.0350 0.0271  -
0.0043 1 .
5220 C     C     . LYS LYS LYS B B 255 255 . 0.4438 0.4516 0.4735 -0.0018 0.0110  -
0.0020 1 .
5221 O     O     . LYS LYS LYS B B 255 255 . 0.4479 0.4532 0.4953 0.0085  0.0148  -
0.0009 1 .
5222 N     N     . TYR TYR TYR B B 256 256 . 0.4410 0.4333 0.4546 0.0042  0.0011  -
0.0042 1 .
5223 CA    CA    . TYR TYR TYR B B 256 256 . 0.4246 0.4262 0.4402 0.0000  -0.0040 -
0.0116 1 .
5224 CB    CB    . TYR TYR TYR B B 256 256 . 0.3976 0.4059 0.4265 -0.0002 0.0021  -
0.0065 1 .
5225 CG    CG    . TYR TYR TYR B B 256 256 . 0.3711 0.3400 0.3428 -0.0073 0.0011  -
0.0225 1 .
5226 CD1   CD1   . TYR TYR TYR B B 256 256 . 0.3320 0.3072 0.3526 -0.0137 -0.0142 -
0.0554 1 .
5227 CE1   CE1   . TYR TYR TYR B B 256 256 . 0.3084 0.2631 0.3269 0.0313  -0.0206 -
0.0298 1 .
5228 CZ    CZ    . TYR TYR TYR B B 256 256 . 0.2878 0.2724 0.3157 -0.0071 -0.0202 -
0.0384 1 .
5229 OH    OH    . TYR TYR TYR B B 256 256 . 0.2593 0.3541 0.3936 -0.0257 0.0035  -
0.0306 1 .
5230 CE2   CE2   . TYR TYR TYR B B 256 256 . 0.2772 0.2743 0.2807 0.0222  0.0266  -
0.0739 1 .
5231 CD2   CD2   . TYR TYR TYR B B 256 256 . 0.3061 0.3029 0.3212 0.0053  0.0136  -
0.0353 1 .
5232 C     C     . TYR TYR TYR B B 256 256 . 0.4547 0.4469 0.4625 0.0035  -0.0086 -
0.0127 1 .
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5233 O     O     . TYR TYR TYR B B 256 256 . 0.4278 0.4243 0.4627 0.0102  -0.0091 -
0.0310 1 .
5234 N     N     . ASP ASP ASP B B 257 257 . 0.4858 0.4691 0.4797 0.0034  -0.0203 -
0.0206 1 .
5235 CA    CA    . ASP ASP ASP B B 257 257 . 0.4902 0.5087 0.5114 -0.0012 -0.0311 -
0.0230 1 .
5236 CB    CB    . ASP ASP ASP B B 257 257 . 0.4877 0.5158 0.5173 0.0045  -0.0397 -
0.0273 1 .
5237 CG    CG    . ASP ASP ASP B B 257 257 . 0.5067 0.6003 0.5218 -0.0115 -0.0503 -
0.0354 1 .
5238 OD1   OD1   . ASP ASP ASP B B 257 257 . 0.4588 0.5770 0.5141 -0.0549 -0.0458
0.0037  1 .
5239 OD2   OD2   . ASP ASP ASP B B 257 257 . 0.4870 0.6852 0.5037 0.0086  -0.1257 -
0.0581 1 .
5240 C     C     . ASP ASP ASP B B 257 257 . 0.5004 0.5050 0.5231 -0.0027 -0.0242 -
0.0254 1 .
5241 O     O     . ASP ASP ASP B B 257 257 . 0.4656 0.4920 0.5217 -0.0048 -0.0282 -
0.0388 1 .
5242 N     N     . LEU LEU LEU B B 258 258 . 0.5304 0.5395 0.5420 -0.0075 -0.0209 -
0.0227 1 .
5243 CA    CA    . LEU LEU LEU B B 258 258 . 0.5513 0.5630 0.5603 0.0000  -0.0149 -
0.0157 1 .
5244 CB    CB    . LEU LEU LEU B B 258 258 . 0.5363 0.5680 0.5430 -0.0048 -0.0158 -
0.0129 1 .
5245 CG    CG    . LEU LEU LEU B B 258 258 . 0.5120 0.5562 0.5143 0.0107  -0.0111 -
0.0020 1 .
5246 CD1   CD1   . LEU LEU LEU B B 258 258 . 0.4823 0.5322 0.4769 0.0255  -0.0463
0.0117  1 .
5247 CD2   CD2   . LEU LEU LEU B B 258 258 . 0.4706 0.5273 0.4224 -0.0024 -0.0429 -
0.0003 1 .
5248 C     C     . LEU LEU LEU B B 258 258 . 0.5725 0.5934 0.5905 -0.0034 -0.0196 -
0.0159 1 .
5249 O     O     . LEU LEU LEU B B 258 258 . 0.5859 0.5818 0.5926 -0.0155 -0.0248 -
0.0252 1 .
5250 N     N     . ASP ASP ASP B B 259 259 . 0.6064 0.6189 0.6310 -0.0027 -0.0194 -
0.0166 1 .
5251 CA    CA    . ASP ASP ASP B B 259 259 . 0.6454 0.6425 0.6556 0.0012  -0.0179 -
0.0066 1 .
5252 CB    CB    . ASP ASP ASP B B 259 259 . 0.6519 0.6409 0.6763 0.0004  -0.0257 -
0.0013 1 .
5253 CG    CG    . ASP ASP ASP B B 259 259 . 0.6779 0.6245 0.6907 0.0178  -0.0224
0.0127  1 .
5254 OD1   OD1   . ASP ASP ASP B B 259 259 . 0.7832 0.5899 0.6962 0.0526  -0.0256 -
0.0048 1 .
5255 OD2   OD2   . ASP ASP ASP B B 259 259 . 0.6480 0.5978 0.7385 0.0300  -0.0349
0.0453  1 .
5256 C     C     . ASP ASP ASP B B 259 259 . 0.6610 0.6671 0.6745 0.0016  -0.0172 -
0.0061 1 .
5257 O     O     . ASP ASP ASP B B 259 259 . 0.6641 0.6789 0.6847 -0.0067 -0.0240 -
0.0082 1 .
5258 N     N     . PHE PHE PHE B B 260 260 . 0.6678 0.6835 0.6874 0.0042  -0.0170 -
0.0056 1 .
5259 CA    CA    . PHE PHE PHE B B 260 260 . 0.6905 0.6871 0.6947 0.0141  -0.0128 -
0.0106 1 .
5260 CB    CB    . PHE PHE PHE B B 260 260 . 0.6786 0.6717 0.6863 0.0138  -0.0180 -
0.0130 1 .
5261 CG    CG    . PHE PHE PHE B B 260 260 . 0.6529 0.6486 0.6693 0.0197  -0.0361 -
0.0158 1 .
5262 CD1   CD1   . PHE PHE PHE B B 260 260 . 0.6805 0.6225 0.6621 0.0292  -0.0481 -
0.0182 1 .
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5263 CE1   CE1   . PHE PHE PHE B B 260 260 . 0.6709 0.6461 0.6735 0.0277  -0.0559 -
0.0027 1 .
5264 CZ    CZ    . PHE PHE PHE B B 260 260 . 0.6577 0.6618 0.6618 0.0227  -0.0430 -
0.0023 1 .
5265 CE2   CE2   . PHE PHE PHE B B 260 260 . 0.6658 0.6616 0.6354 0.0222  -0.0482 -
0.0105 1 .
5266 CD2   CD2   . PHE PHE PHE B B 260 260 . 0.6489 0.6729 0.6596 0.0333  -0.0479 -
0.0028 1 .
5267 C     C     . PHE PHE PHE B B 260 260 . 0.7179 0.7079 0.7130 0.0144  -0.0203 -
0.0130 1 .
5268 O     O     . PHE PHE PHE B B 260 260 . 0.7386 0.7201 0.7207 0.0176  -0.0259 -
0.0180 1 .
5269 N     N     . LYS LYS LYS B B 261 261 . 0.7346 0.7217 0.7307 0.0115  -0.0183 -
0.0154 1 .
5270 CA    CA    . LYS LYS LYS B B 261 261 . 0.7459 0.7328 0.7317 0.0060  -0.0117 -
0.0087 1 .
5271 CB    CB    . LYS LYS LYS B B 261 261 . 0.7334 0.7294 0.7293 0.0089  -0.0139 -
0.0101 1 .
5272 CG    CG    . LYS LYS LYS B B 261 261 . 0.7506 0.7026 0.6973 0.0101  -0.0177 -
0.0131 1 .
5273 CD    CD    . LYS LYS LYS B B 261 261 . 0.7143 0.6752 0.6574 0.0173  -0.0153 -
0.0351 1 .
5274 CE    CE    . LYS LYS LYS B B 261 261 . 0.6529 0.5995 0.6176 0.0224  -0.0410 -
0.0314 1 .
5275 NZ    NZ    . LYS LYS LYS B B 261 261 . 0.5438 0.5985 0.5221 0.0166  -0.0114 -
0.0438 1 .
5276 C     C     . LYS LYS LYS B B 261 261 . 0.7622 0.7525 0.7538 0.0060  -0.0128 -
0.0081 1 .
5277 O     O     . LYS LYS LYS B B 261 261 . 0.7708 0.7587 0.7579 0.0042  -0.0193 -
0.0109 1 .
5278 N     N     . SER SER SER B B 262 262 . 0.7742 0.7618 0.7680 0.0030  -0.0080 -
0.0094 1 .
5279 CA    CA    . SER SER SER B B 262 262 . 0.7896 0.7871 0.7879 0.0004  -0.0156 -
0.0145 1 .
5280 CB    CB    . SER SER SER B B 262 262 . 0.7836 0.7868 0.7809 0.0034  -0.0161 -
0.0222 1 .
5281 OG    OG    . SER SER SER B B 262 262 . 0.8237 0.7898 0.7907 -0.0026 -0.0506 -
0.0462 1 .
5282 C     C     . SER SER SER B B 262 262 . 0.8015 0.8067 0.8016 0.0006  -0.0120 -
0.0102 1 .
5283 O     O     . SER SER SER B B 262 262 . 0.7972 0.8144 0.7998 0.0002  -0.0137 -
0.0083 1 .
5284 N     N     . PRO PRO PRO B B 263 263 . 0.8123 0.8094 0.8079 -0.0030 -0.0157 -
0.0087 1 .
5285 CA    CA    . PRO PRO PRO B B 263 263 . 0.8108 0.8067 0.8047 0.0012  -0.0111 -
0.0036 1 .
5286 CB    CB    . PRO PRO PRO B B 263 263 . 0.8169 0.8090 0.8067 0.0022  -0.0157 -
0.0055 1 .
5287 CG    CG    . PRO PRO PRO B B 263 263 . 0.8171 0.8117 0.8126 -0.0024 -0.0169 -
0.0074 1 .
5288 CD    CD    . PRO PRO PRO B B 263 263 . 0.8079 0.8171 0.8131 -0.0033 -0.0145 -
0.0079 1 .
5289 C     C     . PRO PRO PRO B B 263 263 . 0.8080 0.8050 0.7943 0.0030  -0.0082 -
0.0012 1 .
5290 O     O     . PRO PRO PRO B B 263 263 . 0.7958 0.8079 0.7837 0.0041  -0.0044 -
0.0007 1 .
5291 N     N     . THR THR THR B B 264 264 . 0.7931 0.7968 0.7873 0.0034  -0.0049 -
0.0018 1 .
5292 CA    CA    . THR THR THR B B 264 264 . 0.7848 0.7808 0.7871 0.0029  -0.0043 -
0.0027 1 .
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5293 CB    CB    . THR THR THR B B 264 264 . 0.7854 0.7755 0.7811 0.0031  -0.0028 -
0.0032 1 .
5294 OG1   OG1   . THR THR THR B B 264 264 . 0.7556 0.7765 0.7787 0.0028  -0.0148 -
0.0048 1 .
5295 CG2   CG2   . THR THR THR B B 264 264 . 0.7839 0.7590 0.7864 0.0123  -0.0059 -
0.0020 1 .
5296 C     C     . THR THR THR B B 264 264 . 0.7827 0.7712 0.7894 -0.0065 -0.0026
0.0000  1 .
5297 O     O     . THR THR THR B B 264 264 . 0.7774 0.7724 0.7948 -0.0129 -0.0003 -
0.0014 1 .
5298 N     N     . ASP ASP ASP B B 265 265 . 0.7870 0.7694 0.7920 -0.0062 -0.0017
0.0003  1 .
5299 CA    CA    . ASP ASP ASP B B 265 265 . 0.7899 0.7721 0.7948 -0.0014 -0.0030
0.0019  1 .
5300 CB    CB    . ASP ASP ASP B B 265 265 . 0.7859 0.7741 0.7939 -0.0043 0.0008  -
0.0022 1 .
5301 CG    CG    . ASP ASP ASP B B 265 265 . 0.7841 0.7695 0.7843 -0.0021 -0.0048 -
0.0089 1 .
5302 OD1   OD1   . ASP ASP ASP B B 265 265 . 0.7584 0.7735 0.7517 0.0074  -0.0204 -
0.0238 1 .
5303 OD2   OD2   . ASP ASP ASP B B 265 265 . 0.7721 0.7797 0.7878 -0.0070 0.0078  -
0.0226 1 .
5304 C     C     . ASP ASP ASP B B 265 265 . 0.7963 0.7774 0.8028 0.0006  -0.0077 -
0.0020 1 .
5305 O     O     . ASP ASP ASP B B 265 265 . 0.7953 0.7806 0.8156 0.0056  -0.0042
0.0024  1 .
5306 N     N     . PRO PRO PRO B B 266 266 . 0.7959 0.7833 0.8024 0.0044  -0.0145 -
0.0024 1 .
5307 CA    CA    . PRO PRO PRO B B 266 266 . 0.7865 0.7797 0.7901 0.0034  -0.0105 -
0.0025 1 .
5308 CB    CB    . PRO PRO PRO B B 266 266 . 0.7926 0.7879 0.7976 0.0031  -0.0136 -
0.0027 1 .
5309 CG    CG    . PRO PRO PRO B B 266 266 . 0.7998 0.7874 0.8005 0.0083  -0.0191 -
0.0075 1 .
5310 CD    CD    . PRO PRO PRO B B 266 266 . 0.7981 0.7845 0.8042 0.0087  -0.0179 -
0.0028 1 .
5311 C     C     . PRO PRO PRO B B 266 266 . 0.7657 0.7745 0.7870 -0.0021 -0.0086 -
0.0022 1 .
5312 O     O     . PRO PRO PRO B B 266 266 . 0.7641 0.7783 0.7953 0.0014  -0.0089
0.0076  1 .
5313 N     N     . SER SER SER B B 267 267 . 0.7422 0.7651 0.7704 -0.0004 -0.0134 -
0.0039 1 .
5314 CA    CA    . SER SER SER B B 267 267 . 0.7212 0.7564 0.7614 -0.0083 -0.0159 -
0.0080 1 .
5315 CB    CB    . SER SER SER B B 267 267 . 0.7171 0.7573 0.7610 -0.0116 -0.0204 -
0.0036 1 .
5316 OG    OG    . SER SER SER B B 267 267 . 0.6351 0.7502 0.7395 -0.0322 -0.0270 -
0.0149 1 .
5317 C     C     . SER SER SER B B 267 267 . 0.7115 0.7482 0.7481 -0.0097 -0.0160 -
0.0076 1 .
5318 O     O     . SER SER SER B B 267 267 . 0.7048 0.7611 0.7423 -0.0092 -0.0196 -
0.0186 1 .
5319 N     N     . ARG ARG ARG B B 268 268 . 0.6936 0.7281 0.7417 -0.0129 -0.0155 -
0.0078 1 .
5320 CA    CA    . ARG ARG ARG B B 268 268 . 0.6941 0.7108 0.7280 -0.0084 -0.0132 -
0.0126 1 .
5321 CB    CB    . ARG ARG ARG B B 268 268 . 0.6978 0.7015 0.7332 -0.0097 -0.0049 -
0.0087 1 .
5322 CG    CG    . ARG ARG ARG B B 268 268 . 0.7441 0.6982 0.7319 -0.0040 -0.0059 -
0.0125 1 .
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5323 CD    CD    . ARG ARG ARG B B 268 268 . 0.7356 0.6794 0.7234 0.0065  -0.0020 -
0.0127 1 .
5324 NE    NE    . ARG ARG ARG B B 268 268 . 0.6863 0.6530 0.7421 -0.0243 -0.0032
0.0066  1 .
5325 CZ    CZ    . ARG ARG ARG B B 268 268 . 0.6629 0.6396 0.7761 -0.0208 -0.0088 -
0.0195 1 .
5326 NH1   NH1   . ARG ARG ARG B B 268 268 . 0.6322 0.6091 0.8566 -0.0426 -0.0271 -
0.0285 1 .
5327 NH2   NH2   . ARG ARG ARG B B 268 268 . 0.6059 0.5869 0.7906 -0.0317 -0.0044 -
0.0324 1 .
5328 C     C     . ARG ARG ARG B B 268 268 . 0.6719 0.6969 0.7220 -0.0083 -0.0064 -
0.0179 1 .
5329 O     O     . ARG ARG ARG B B 268 268 . 0.6590 0.7046 0.7271 -0.0139 -0.0083 -
0.0237 1 .
5330 N     N     . TYR TYR TYR B B 269 269 . 0.6494 0.6688 0.6967 -0.0093 -0.0074 -
0.0144 1 .
5331 CA    CA    . TYR TYR TYR B B 269 269 . 0.6266 0.6297 0.6637 0.0005  0.0001  -
0.0029 1 .
5332 CB    CB    . TYR TYR TYR B B 269 269 . 0.6327 0.6303 0.6649 -0.0035 0.0007  -
0.0048 1 .
5333 CG    CG    . TYR TYR TYR B B 269 269 . 0.6341 0.6248 0.6615 -0.0121 0.0047
0.0075  1 .
5334 CD1   CD1   . TYR TYR TYR B B 269 269 . 0.5921 0.6409 0.6641 -0.0109 0.0178
0.0053  1 .
5335 CE1   CE1   . TYR TYR TYR B B 269 269 . 0.5914 0.6319 0.6527 -0.0187 -0.0166 -
0.0211 1 .
5336 CZ    CZ    . TYR TYR TYR B B 269 269 . 0.5880 0.6460 0.6622 -0.0118 -0.0160 -
0.0251 1 .
5337 OH    OH    . TYR TYR TYR B B 269 269 . 0.5553 0.7069 0.7280 0.0278  0.0364  -
0.0644 1 .
5338 CE2   CE2   . TYR TYR TYR B B 269 269 . 0.6142 0.6236 0.6632 -0.0153 -0.0203 -
0.0272 1 .
5339 CD2   CD2   . TYR TYR TYR B B 269 269 . 0.6338 0.6070 0.6430 -0.0291 -0.0083
0.0076  1 .
5340 C     C     . TYR TYR TYR B B 269 269 . 0.5963 0.6001 0.6393 0.0050  -0.0021
0.0012  1 .
5341 O     O     . TYR TYR TYR B B 269 269 . 0.5862 0.5851 0.6597 -0.0051 0.0052
0.0026  1 .
5342 N     N     . ILE ILE ILE B B 270 270 . 0.5631 0.5750 0.6176 0.0115  -0.0009
0.0069  1 .
5343 CA    CA    . ILE ILE ILE B B 270 270 . 0.5335 0.5533 0.5913 0.0121  0.0037
0.0051  1 .
5344 CB    CB    . ILE ILE ILE B B 270 270 . 0.5339 0.5573 0.5978 0.0016  0.0038
0.0098  1 .
5345 CG1   CG1   . ILE ILE ILE B B 270 270 . 0.5178 0.5552 0.5892 0.0050  0.0177
0.0078  1 .
5346 CD1   CD1   . ILE ILE ILE B B 270 270 . 0.4797 0.4718 0.5725 -0.0957 0.0452
0.0209  1 .
5347 CG2   CG2   . ILE ILE ILE B B 270 270 . 0.5166 0.5541 0.6000 0.0140  0.0162
0.0165  1 .
5348 C     C     . ILE ILE ILE B B 270 270 . 0.5416 0.5419 0.5743 0.0162  0.0036
0.0055  1 .
5349 O     O     . ILE ILE ILE B B 270 270 . 0.5109 0.5394 0.5873 0.0265  0.0075
0.0135  1 .
5350 N     N     . THR THR THR B B 271 271 . 0.5310 0.5323 0.5610 0.0180  0.0030  -
0.0039 1 .
5351 CA    CA    . THR THR THR B B 271 271 . 0.5261 0.5319 0.5508 0.0046  0.0065  -
0.0066 1 .
5352 CB    CB    . THR THR THR B B 271 271 . 0.5312 0.5308 0.5552 0.0006  0.0105  -
0.0121 1 .
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5353 OG1   OG1   . THR THR THR B B 271 271 . 0.4828 0.5645 0.5870 0.0066  0.0374  -
0.0202 1 .
5354 CG2   CG2   . THR THR THR B B 271 271 . 0.5193 0.5521 0.5752 -0.0032 0.0271  -
0.0244 1 .
5355 C     C     . THR THR THR B B 271 271 . 0.5257 0.5283 0.5353 0.0121  0.0052
0.0012  1 .
5356 O     O     . THR THR THR B B 271 271 . 0.5161 0.5241 0.5395 0.0239  0.0076  -
0.0011 1 .
5357 N     N     . GLY GLY GLY B B 272 272 . 0.5054 0.5243 0.5225 0.0051  0.0084  -
0.0019 1 .
5358 CA    CA    . GLY GLY GLY B B 272 272 . 0.5021 0.5039 0.5075 0.0068  0.0117
0.0058  1 .
5359 C     C     . GLY GLY GLY B B 272 272 . 0.4986 0.5079 0.5173 0.0052  0.0080
0.0074  1 .
5360 O     O     . GLY GLY GLY B B 272 272 . 0.4714 0.4795 0.5086 -0.0050 0.0162  -
0.0006 1 .
5361 N     N     . ASP ASP ASP B B 273 273 . 0.4888 0.5098 0.5145 -0.0018 0.0111
0.0085  1 .
5362 CA    CA    . ASP ASP ASP B B 273 273 . 0.5084 0.5088 0.5174 0.0037  0.0042
0.0026  1 .
5363 CB    CB    . ASP ASP ASP B B 273 273 . 0.5318 0.5090 0.5289 0.0054  0.0038
0.0073  1 .
5364 CG    CG    . ASP ASP ASP B B 273 273 . 0.6031 0.5887 0.5732 0.0044  0.0191  -
0.0105 1 .
5365 OD1   OD1   . ASP ASP ASP B B 273 273 . 0.6524 0.6448 0.6600 0.0040  0.0525  -
0.0139 1 .
5366 OD2   OD2   . ASP ASP ASP B B 273 273 . 0.6884 0.6848 0.6530 0.0373  0.0809  -
0.0386 1 .
5367 C     C     . ASP ASP ASP B B 273 273 . 0.5029 0.4876 0.5044 0.0060  0.0045
0.0079  1 .
5368 O     O     . ASP ASP ASP B B 273 273 . 0.5088 0.4819 0.5234 0.0070  0.0128
0.0248  1 .
5369 N     N     . GLN GLN GLN B B 274 274 . 0.4801 0.4806 0.4914 0.0076  -0.0007
0.0094  1 .
5370 CA    CA    . GLN GLN GLN B B 274 274 . 0.4884 0.4762 0.4895 0.0022  0.0072
0.0078  1 .
5371 CB    CB    . GLN GLN GLN B B 274 274 . 0.4638 0.4784 0.4877 -0.0090 0.0117
0.0068  1 .
5372 CG    CG    . GLN GLN GLN B B 274 274 . 0.4845 0.4946 0.5190 0.0077  0.0068
0.0194  1 .
5373 CD    CD    . GLN GLN GLN B B 274 274 . 0.5585 0.4700 0.5787 0.0024  0.0302
0.0087  1 .
5374 OE1   OE1   . GLN GLN GLN B B 274 274 . 0.6312 0.5207 0.6485 0.0344  0.0511
0.0267  1 .
5375 NE2   NE2   . GLN GLN GLN B B 274 274 . 0.5633 0.4775 0.6043 -0.0211 0.0356
0.0085  1 .
5376 C     C     . GLN GLN GLN B B 274 274 . 0.4752 0.4598 0.4801 0.0055  0.0089
0.0053  1 .
5377 O     O     . GLN GLN GLN B B 274 274 . 0.5124 0.4488 0.4912 0.0140  0.0144
0.0074  1 .
5378 N     N     . LEU LEU LEU B B 275 275 . 0.4415 0.4452 0.4585 0.0031  0.0096
0.0019  1 .
5379 CA    CA    . LEU LEU LEU B B 275 275 . 0.4279 0.4393 0.4641 0.0076  0.0139
0.0031  1 .
5380 CB    CB    . LEU LEU LEU B B 275 275 . 0.4528 0.4307 0.4559 0.0025  0.0221
0.0043  1 .
5381 CG    CG    . LEU LEU LEU B B 275 275 . 0.4367 0.4045 0.4604 0.0299  0.0250
0.0048  1 .
5382 CD1   CD1   . LEU LEU LEU B B 275 275 . 0.4069 0.3950 0.5026 0.0541  0.0100  -
0.0385 1 .
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5383 CD2   CD2   . LEU LEU LEU B B 275 275 . 0.3638 0.2870 0.3929 0.0460  0.0111
0.0297  1 .
5384 C     C     . LEU LEU LEU B B 275 275 . 0.4281 0.4563 0.4651 0.0064  0.0208
0.0076  1 .
5385 O     O     . LEU LEU LEU B B 275 275 . 0.3980 0.4766 0.5000 0.0056  0.0285
0.0107  1 .
5386 N     N     . GLY GLY GLY B B 276 276 . 0.4171 0.4579 0.4464 -0.0028 0.0236
0.0083  1 .
5387 CA    CA    . GLY GLY GLY B B 276 276 . 0.4166 0.4540 0.4533 -0.0097 0.0290
0.0069  1 .
5388 C     C     . GLY GLY GLY B B 276 276 . 0.4238 0.4461 0.4711 -0.0078 0.0216
0.0037  1 .
5389 O     O     . GLY GLY GLY B B 276 276 . 0.4092 0.4650 0.4654 -0.0224 0.0406
0.0073  1 .
5390 N     N     . ALA ALA ALA B B 277 277 . 0.4381 0.4448 0.4647 0.0020  0.0311
0.0031  1 .
5391 CA    CA    . ALA ALA ALA B B 277 277 . 0.4367 0.4508 0.4573 -0.0047 0.0234  -
0.0024 1 .
5392 CB    CB    . ALA ALA ALA B B 277 277 . 0.4448 0.4460 0.4614 0.0004  0.0288  -
0.0113 1 .
5393 C     C     . ALA ALA ALA B B 277 277 . 0.4397 0.4519 0.4535 -0.0021 0.0217  -
0.0071 1 .
5394 O     O     . ALA ALA ALA B B 277 277 . 0.4396 0.4749 0.4660 -0.0125 0.0344  -
0.0107 1 .
5395 N     N     . LEU LEU LEU B B 278 278 . 0.4241 0.4409 0.4420 -0.0018 0.0109  -
0.0102 1 .
5396 CA    CA    . LEU LEU LEU B B 278 278 . 0.4114 0.4309 0.4274 0.0044  0.0066  -
0.0117 1 .
5397 CB    CB    . LEU LEU LEU B B 278 278 . 0.3930 0.4334 0.4348 0.0209  0.0109  -
0.0270 1 .
5398 CG    CG    . LEU LEU LEU B B 278 278 . 0.4141 0.4072 0.4247 0.0348  0.0440  -
0.0113 1 .
5399 CD1   CD1   . LEU LEU LEU B B 278 278 . 0.3659 0.4341 0.5173 0.0319  0.0720  -
0.0038 1 .
5400 CD2   CD2   . LEU LEU LEU B B 278 278 . 0.4021 0.3893 0.4722 0.0365  0.0609  -
0.0333 1 .
5401 C     C     . LEU LEU LEU B B 278 278 . 0.3994 0.4219 0.4121 0.0059  0.0024  -
0.0100 1 .
5402 O     O     . LEU LEU LEU B B 278 278 . 0.4103 0.4376 0.3919 0.0007  -0.0014 -
0.0091 1 .
5403 N     N     . TYR TYR TYR B B 279 279 . 0.3917 0.4039 0.4052 -0.0067 0.0017  -
0.0098 1 .
5404 CA    CA    . TYR TYR TYR B B 279 279 . 0.3744 0.3866 0.3829 -0.0021 0.0057
0.0064  1 .
5405 CB    CB    . TYR TYR TYR B B 279 279 . 0.3612 0.3772 0.3855 0.0015  0.0305
0.0159  1 .
5406 CG    CG    . TYR TYR TYR B B 279 279 . 0.4023 0.3598 0.4096 -0.0094 -0.0019
0.0123  1 .
5407 CD1   CD1   . TYR TYR TYR B B 279 279 . 0.3980 0.3929 0.4288 0.0046  -0.0079
0.0116  1 .
5408 CE1   CE1   . TYR TYR TYR B B 279 279 . 0.3849 0.3593 0.3961 0.0050  0.0095
0.0019  1 .
5409 CZ    CZ    . TYR TYR TYR B B 279 279 . 0.3666 0.3924 0.4128 -0.0149 0.0065  -
0.0123 1 .
5410 OH    OH    . TYR TYR TYR B B 279 279 . 0.3124 0.4147 0.3744 -0.0135 0.0396  -
0.0008 1 .
5411 CE2   CE2   . TYR TYR TYR B B 279 279 . 0.3690 0.4036 0.4022 0.0062  0.0037  -
0.0038 1 .
5412 CD2   CD2   . TYR TYR TYR B B 279 279 . 0.3405 0.3941 0.4420 -0.0056 0.0276
0.0140  1 .
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5413 C     C     . TYR TYR TYR B B 279 279 . 0.3506 0.3866 0.3814 0.0065  0.0088  -
0.0005 1 .
5414 O     O     . TYR TYR TYR B B 279 279 . 0.3353 0.3858 0.3575 -0.0007 0.0130  -
0.0082 1 .
5415 N     N     . GLN GLN GLN B B 280 280 . 0.3305 0.3906 0.3581 -0.0060 0.0136
0.0060  1 .
5416 CA    CA    . GLN GLN GLN B B 280 280 . 0.3700 0.4010 0.3893 0.0040  -0.0040 -
0.0078 1 .
5417 CB    CB    . GLN GLN GLN B B 280 280 . 0.3750 0.3952 0.3805 -0.0013 -0.0116 -
0.0002 1 .
5418 CG    CG    . GLN GLN GLN B B 280 280 . 0.4386 0.4201 0.3948 0.0264  -0.0129 -
0.0280 1 .
5419 CD    CD    . GLN GLN GLN B B 280 280 . 0.4724 0.4902 0.4870 0.0285  -0.0226 -
0.0081 1 .
5420 OE1   OE1   . GLN GLN GLN B B 280 280 . 0.5562 0.5332 0.5198 0.0537  -0.0234
0.0239  1 .
5421 NE2   NE2   . GLN GLN GLN B B 280 280 . 0.5451 0.4692 0.4655 0.0844  -0.0231 -
0.0089 1 .
5422 C     C     . GLN GLN GLN B B 280 280 . 0.3733 0.4012 0.3978 0.0078  -0.0022 -
0.0108 1 .
5423 O     O     . GLN GLN GLN B B 280 280 . 0.3698 0.4196 0.4205 0.0001  -0.0030 -
0.0230 1 .
5424 N     N     . ASP ASP ASP B B 281 281 . 0.3633 0.4167 0.4070 0.0029  0.0020  -
0.0181 1 .
5425 CA    CA    . ASP ASP ASP B B 281 281 . 0.3926 0.4302 0.4192 0.0056  -0.0051 -
0.0109 1 .
5426 CB    CB    . ASP ASP ASP B B 281 281 . 0.3865 0.4443 0.4326 0.0043  0.0009  -
0.0210 1 .
5427 CG    CG    . ASP ASP ASP B B 281 281 . 0.4310 0.5016 0.4842 0.0031  0.0046  -
0.0129 1 .
5428 OD1   OD1   . ASP ASP ASP B B 281 281 . 0.4838 0.6291 0.5325 0.0166  0.0161  -
0.0296 1 .
5429 OD2   OD2   . ASP ASP ASP B B 281 281 . 0.4986 0.5233 0.5495 0.0216  0.0425  -
0.0407 1 .
5430 C     C     . ASP ASP ASP B B 281 281 . 0.3998 0.4328 0.4237 0.0044  -0.0020 -
0.0150 1 .
5431 O     O     . ASP ASP ASP B B 281 281 . 0.3991 0.4384 0.4248 0.0112  -0.0059 -
0.0276 1 .
5432 N     N     . PHE PHE PHE B B 282 282 . 0.3729 0.4255 0.4031 0.0142  0.0032  -
0.0097 1 .
5433 CA    CA    . PHE PHE PHE B B 282 282 . 0.3879 0.4246 0.4043 0.0127  0.0074  -
0.0042 1 .
5434 CB    CB    . PHE PHE PHE B B 282 282 . 0.4127 0.4066 0.3979 0.0095  0.0103  -
0.0090 1 .
5435 CG    CG    . PHE PHE PHE B B 282 282 . 0.3929 0.4361 0.3981 0.0177  0.0000  -
0.0025 1 .
5436 CD1   CD1   . PHE PHE PHE B B 282 282 . 0.4949 0.3890 0.3586 -0.0146 -0.0032
0.0078  1 .
5437 CE1   CE1   . PHE PHE PHE B B 282 282 . 0.4222 0.3744 0.3212 -0.0049 -0.0096
0.0105  1 .
5438 CZ    CZ    . PHE PHE PHE B B 282 282 . 0.4655 0.4130 0.3901 -0.0012 0.0280
0.0034  1 .
5439 CE2   CE2   . PHE PHE PHE B B 282 282 . 0.4548 0.4190 0.4264 -0.0068 0.0333  -
0.0067 1 .
5440 CD2   CD2   . PHE PHE PHE B B 282 282 . 0.4495 0.4381 0.4300 -0.0141 -0.0008
0.0100  1 .
5441 C     C     . PHE PHE PHE B B 282 282 . 0.4132 0.4304 0.4028 0.0238  0.0155  -
0.0036 1 .
5442 O     O     . PHE PHE PHE B B 282 282 . 0.4139 0.4505 0.4055 0.0439  0.0229
0.0057  1 .
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5443 N     N     . VAL VAL VAL B B 283 283 . 0.4008 0.4293 0.4000 0.0204  0.0106
0.0031  1 .
5444 CA    CA    . VAL VAL VAL B B 283 283 . 0.4108 0.4128 0.4139 0.0052  0.0219
0.0019  1 .
5445 CB    CB    . VAL VAL VAL B B 283 283 . 0.4083 0.4107 0.4207 -0.0073 0.0225  -
0.0043 1 .
5446 CG1   CG1   . VAL VAL VAL B B 283 283 . 0.4337 0.4326 0.3983 -0.0113 0.0193  -
0.0128 1 .
5447 CG2   CG2   . VAL VAL VAL B B 283 283 . 0.3829 0.3842 0.4186 0.0060  0.0520
0.0363  1 .
5448 C     C     . VAL VAL VAL B B 283 283 . 0.4246 0.4210 0.4165 -0.0047 0.0223
0.0005  1 .
5449 O     O     . VAL VAL VAL B B 283 283 . 0.4239 0.4107 0.4059 -0.0110 0.0353  -
0.0117 1 .
5450 N     N     . ARG ARG ARG B B 284 284 . 0.4379 0.4353 0.4294 -0.0078 0.0207
0.0062  1 .
5451 CA    CA    . ARG ARG ARG B B 284 284 . 0.4443 0.4280 0.4411 0.0023  0.0141
0.0071  1 .
5452 CB    CB    . ARG ARG ARG B B 284 284 . 0.4608 0.4428 0.4490 0.0023  0.0242
0.0033  1 .
5453 CG    CG    . ARG ARG ARG B B 284 284 . 0.4530 0.4659 0.4526 -0.0088 0.0237
0.0163  1 .
5454 CD    CD    . ARG ARG ARG B B 284 284 . 0.5114 0.4984 0.4870 -0.0183 0.0060
0.0070  1 .
5455 NE    NE    . ARG ARG ARG B B 284 284 . 0.5297 0.5279 0.5389 0.0008  0.0033
0.0327  1 .
5456 CZ    CZ    . ARG ARG ARG B B 284 284 . 0.5610 0.5712 0.5145 0.0356  0.0160
0.0111  1 .
5457 NH1   NH1   . ARG ARG ARG B B 284 284 . 0.5306 0.5590 0.5234 0.0049  0.0456
0.0079  1 .
5458 NH2   NH2   . ARG ARG ARG B B 284 284 . 0.6399 0.5755 0.5198 0.0586  0.0127  -
0.0122 1 .
5459 C     C     . ARG ARG ARG B B 284 284 . 0.4556 0.4245 0.4399 0.0025  0.0038
0.0093  1 .
5460 O     O     . ARG ARG ARG B B 284 284 . 0.4876 0.4241 0.4468 0.0180  -0.0011
0.0249  1 .
5461 N     N     . ASP ASP ASP B B 285 285 . 0.4390 0.4229 0.4324 0.0050  0.0029
0.0177  1 .
5462 CA    CA    . ASP ASP ASP B B 285 285 . 0.4035 0.4214 0.4319 -0.0078 0.0050
0.0098  1 .
5463 CB    CB    . ASP ASP ASP B B 285 285 . 0.4294 0.4303 0.4385 -0.0090 0.0002
0.0000  1 .
5464 CG    CG    . ASP ASP ASP B B 285 285 . 0.3779 0.4621 0.4575 -0.0195 0.0237  -
0.0277 1 .
5465 OD1   OD1   . ASP ASP ASP B B 285 285 . 0.3203 0.5045 0.4698 0.0239  0.0330  -
0.0718 1 .
5466 OD2   OD2   . ASP ASP ASP B B 285 285 . 0.4134 0.4795 0.5915 -0.0253 0.0410  -
0.0523 1 .
5467 C     C     . ASP ASP ASP B B 285 285 . 0.3844 0.4098 0.4069 0.0017  0.0016
0.0091  1 .
5468 O     O     . ASP ASP ASP B B 285 285 . 0.3565 0.3973 0.4151 0.0068  0.0151
0.0121  1 .
5469 N     N     . TYR TYR TYR B B 286 286 . 0.3569 0.3885 0.3880 -0.0059 -0.0034
0.0056  1 .
5470 CA    CA    . TYR TYR TYR B B 286 286 . 0.3372 0.3755 0.3739 -0.0005 -0.0027
0.0021  1 .
5471 CB    CB    . TYR TYR TYR B B 286 286 . 0.3565 0.3649 0.3907 -0.0042 -0.0085
0.0081  1 .
5472 CG    CG    . TYR TYR TYR B B 286 286 . 0.3522 0.4034 0.4009 0.0051  -0.0120 -
0.0067 1 .
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5473 CD1   CD1   . TYR TYR TYR B B 286 286 . 0.3902 0.4137 0.4459 0.0157  -0.0066 -
0.0024 1 .
5474 CE1   CE1   . TYR TYR TYR B B 286 286 . 0.4600 0.4470 0.4748 -0.0002 -0.0261 -
0.0330 1 .
5475 CZ    CZ    . TYR TYR TYR B B 286 286 . 0.4807 0.4746 0.4739 -0.0128 -0.0401 -
0.0234 1 .
5476 OH    OH    . TYR TYR TYR B B 286 286 . 0.5199 0.6026 0.5361 -0.0103 -0.0254 -
0.0548 1 .
5477 CE2   CE2   . TYR TYR TYR B B 286 286 . 0.4350 0.4669 0.4430 -0.0090 -0.0122 -
0.0503 1 .
5478 CD2   CD2   . TYR TYR TYR B B 286 286 . 0.3044 0.3944 0.3818 0.0143  0.0040  -
0.0215 1 .
5479 C     C     . TYR TYR TYR B B 286 286 . 0.3559 0.3606 0.3726 0.0022  -0.0057
0.0037  1 .
5480 O     O     . TYR TYR TYR B B 286 286 . 0.3175 0.3848 0.3435 0.0100  0.0019  -
0.0136 1 .
5481 N     N     . PRO PRO PRO B B 287 287 . 0.3486 0.3659 0.3580 0.0027  0.0006
0.0082  1 .
5482 CA    CA    . PRO PRO PRO B B 287 287 . 0.3606 0.3500 0.3593 -0.0006 -0.0057
0.0031  1 .
5483 CB    CB    . PRO PRO PRO B B 287 287 . 0.3538 0.3419 0.3559 0.0179  -0.0207
0.0047  1 .
5484 CG    CG    . PRO PRO PRO B B 287 287 . 0.3681 0.3300 0.3738 0.0050  -0.0092 -
0.0074 1 .
5485 CD    CD    . PRO PRO PRO B B 287 287 . 0.3635 0.3388 0.3435 0.0094  0.0059
0.0000  1 .
5486 C     C     . PRO PRO PRO B B 287 287 . 0.3560 0.3458 0.3462 0.0035  0.0103
0.0033  1 .
5487 O     O     . PRO PRO PRO B B 287 287 . 0.4108 0.3581 0.3655 0.0094  0.0192
0.0051  1 .
5488 N     N     . VAL VAL VAL B B 288 288 . 0.3496 0.3501 0.3341 0.0000  0.0125
0.0007  1 .
5489 CA    CA    . VAL VAL VAL B B 288 288 . 0.3408 0.3437 0.3305 0.0039  0.0011
0.0031  1 .
5490 CB    CB    . VAL VAL VAL B B 288 288 . 0.3523 0.3527 0.3255 0.0124  0.0014
0.0150  1 .
5491 CG1   CG1   . VAL VAL VAL B B 288 288 . 0.3330 0.3409 0.3286 0.0335  0.0145
0.0134  1 .
5492 CG2   CG2   . VAL VAL VAL B B 288 288 . 0.2748 0.3249 0.3776 -0.0050 0.0010  -
0.0133 1 .
5493 C     C     . VAL VAL VAL B B 288 288 . 0.3459 0.3547 0.3308 0.0024  0.0074
0.0039  1 .
5494 O     O     . VAL VAL VAL B B 288 288 . 0.3651 0.3726 0.3470 -0.0014 0.0104  -
0.0003 1 .
5495 N     N     . VAL VAL VAL B B 289 289 . 0.3455 0.3358 0.3201 -0.0026 0.0081
0.0042  1 .
5496 CA    CA    . VAL VAL VAL B B 289 289 . 0.3425 0.3218 0.3119 0.0078  0.0077  -
0.0105 1 .
5497 CB    CB    . VAL VAL VAL B B 289 289 . 0.3494 0.3386 0.3160 0.0059  0.0202
0.0035  1 .
5498 CG1   CG1   . VAL VAL VAL B B 289 289 . 0.3432 0.2969 0.3098 0.0204  -0.0093 -
0.0007 1 .
5499 CG2   CG2   . VAL VAL VAL B B 289 289 . 0.4010 0.3325 0.3304 0.0178  0.0190
0.0129  1 .
5500 C     C     . VAL VAL VAL B B 289 289 . 0.3480 0.3268 0.3250 0.0043  -0.0062 -
0.0070 1 .
5501 O     O     . VAL VAL VAL B B 289 289 . 0.3614 0.3389 0.3018 0.0088  -0.0109 -
0.0268 1 .
5502 N     N     . SER SER SER B B 290 290 . 0.3466 0.3312 0.3093 0.0121  -0.0051
0.0051  1 .
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5503 CA    CA    . SER SER SER B B 290 290 . 0.3222 0.3305 0.3210 0.0091  -0.0027
0.0047  1 .
5504 CB    CB    . SER SER SER B B 290 290 . 0.3493 0.3321 0.3169 0.0229  0.0069
0.0191  1 .
5505 OG    OG    . SER SER SER B B 290 290 . 0.3013 0.3384 0.3373 0.0198  0.0194
0.0260  1 .
5506 C     C     . SER SER SER B B 290 290 . 0.3206 0.3343 0.3131 0.0113  -0.0098
0.0018  1 .
5507 O     O     . SER SER SER B B 290 290 . 0.3311 0.3578 0.3461 0.0079  -0.0202 -
0.0069 1 .
5508 N     N     . ILE ILE ILE B B 291 291 . 0.2863 0.2992 0.2825 0.0136  -0.0032 -
0.0020 1 .
5509 CA    CA    . ILE ILE ILE B B 291 291 . 0.2842 0.3077 0.2779 0.0157  -0.0019 -
0.0093 1 .
5510 CB    CB    . ILE ILE ILE B B 291 291 . 0.2679 0.2794 0.2891 0.0107  0.0063  -
0.0056 1 .
5511 CG1   CG1   . ILE ILE ILE B B 291 291 . 0.2386 0.3063 0.2943 0.0261  -0.0114 -
0.0056 1 .
5512 CD1   CD1   . ILE ILE ILE B B 291 291 . 0.0406 0.3071 0.3536 0.0569  -0.0309
0.0201  1 .
5513 CG2   CG2   . ILE ILE ILE B B 291 291 . 0.3185 0.2585 0.2132 0.0659  -0.0013 -
0.0344 1 .
5514 C     C     . ILE ILE ILE B B 291 291 . 0.2821 0.3004 0.2811 0.0201  -0.0032 -
0.0122 1 .
5515 O     O     . ILE ILE ILE B B 291 291 . 0.2920 0.3020 0.2602 0.0144  -0.0110 -
0.0339 1 .
5516 N     N     . GLU GLU GLU B B 292 292 . 0.2857 0.3106 0.2928 0.0176  -0.0012 -
0.0114 1 .
5517 CA    CA    . GLU GLU GLU B B 292 292 . 0.2884 0.3165 0.2833 0.0033  0.0085  -
0.0021 1 .
5518 CB    CB    . GLU GLU GLU B B 292 292 . 0.2834 0.2931 0.2766 -0.0036 0.0011
0.0116  1 .
5519 CG    CG    . GLU GLU GLU B B 292 292 . 0.3076 0.2998 0.2831 0.0257  0.0165
0.0218  1 .
5520 CD    CD    . GLU GLU GLU B B 292 292 . 0.3067 0.3427 0.3228 0.0241  0.0088  -
0.0056 1 .
5521 OE1   OE1   . GLU GLU GLU B B 292 292 . 0.3006 0.3658 0.3705 0.0670  0.0257  -
0.0289 1 .
5522 OE2   OE2   . GLU GLU GLU B B 292 292 . 0.3179 0.2919 0.2489 -0.0222 0.0213  -
0.0603 1 .
5523 C     C     . GLU GLU GLU B B 292 292 . 0.2894 0.3049 0.2752 0.0002  0.0091
0.0067  1 .
5524 O     O     . GLU GLU GLU B B 292 292 . 0.3021 0.3468 0.2639 0.0070  0.0101
0.0067  1 .
5525 N     N     . ASP ASP ASP B B 293 293 . 0.2675 0.3002 0.2684 0.0033  0.0189
0.0030  1 .
5526 CA    CA    . ASP ASP ASP B B 293 293 . 0.2676 0.2816 0.2725 -0.0127 0.0108
0.0009  1 .
5527 CB    CB    . ASP ASP ASP B B 293 293 . 0.2740 0.2688 0.2773 -0.0083 0.0088  -
0.0021 1 .
5528 CG    CG    . ASP ASP ASP B B 293 293 . 0.2672 0.2756 0.2716 -0.0112 -0.0154
0.0024  1 .
5529 OD1   OD1   . ASP ASP ASP B B 293 293 . 0.2918 0.3435 0.2925 0.0186  -0.0463
0.0102  1 .
5530 OD2   OD2   . ASP ASP ASP B B 293 293 . 0.3098 0.3970 0.3141 0.0059  -0.0123 -
0.0504 1 .
5531 C     C     . ASP ASP ASP B B 293 293 . 0.2726 0.2762 0.2676 -0.0113 0.0059  -
0.0003 1 .
5532 O     O     . ASP ASP ASP B B 293 293 . 0.2701 0.3023 0.2955 -0.0093 0.0178
0.0103  1 .
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5533 N     N     . PRO PRO PRO B B 294 294 . 0.2809 0.2765 0.2682 -0.0132 0.0088
0.0058  1 .
5534 CA    CA    . PRO PRO PRO B B 294 294 . 0.2798 0.2789 0.2704 -0.0061 0.0015
0.0001  1 .
5535 CB    CB    . PRO PRO PRO B B 294 294 . 0.2830 0.2683 0.2598 0.0000  0.0057  -
0.0027 1 .
5536 CG    CG    . PRO PRO PRO B B 294 294 . 0.3015 0.2728 0.2436 -0.0155 -0.0031 -
0.0024 1 .
5537 CD    CD    . PRO PRO PRO B B 294 294 . 0.2637 0.2710 0.2598 -0.0235 0.0035
0.0087  1 .
5538 C     C     . PRO PRO PRO B B 294 294 . 0.2823 0.2940 0.2711 -0.0132 0.0025
0.0011  1 .
5539 O     O     . PRO PRO PRO B B 294 294 . 0.2775 0.3335 0.2974 -0.0175 0.0150
0.0110  1 .
5540 N     N     . PHE PHE PHE B B 295 295 . 0.2737 0.2852 0.2511 0.0078  -0.0031
0.0080  1 .
5541 CA    CA    . PHE PHE PHE B B 295 295 . 0.2907 0.2921 0.2694 0.0038  -0.0016
0.0150  1 .
5542 CB    CB    . PHE PHE PHE B B 295 295 . 0.3138 0.2990 0.2571 0.0037  0.0088
0.0062  1 .
5543 CG    CG    . PHE PHE PHE B B 295 295 . 0.3058 0.3136 0.2250 -0.0103 0.0000
0.0148  1 .
5544 CD1   CD1   . PHE PHE PHE B B 295 295 . 0.2904 0.3448 0.2533 0.0204  -0.0163 -
0.0107 1 .
5545 CE1   CE1   . PHE PHE PHE B B 295 295 . 0.2821 0.3544 0.2315 0.0370  -0.0380
0.0180  1 .
5546 CZ    CZ    . PHE PHE PHE B B 295 295 . 0.2964 0.3052 0.2612 0.0038  -0.0138
0.0145  1 .
5547 CE2   CE2   . PHE PHE PHE B B 295 295 . 0.2881 0.3242 0.2327 0.0130  -0.0496
0.0075  1 .
5548 CD2   CD2   . PHE PHE PHE B B 295 295 . 0.2697 0.2908 0.2296 0.0067  -0.0020
0.0083  1 .
5549 C     C     . PHE PHE PHE B B 295 295 . 0.3009 0.2927 0.2802 0.0044  0.0032
0.0110  1 .
5550 O     O     . PHE PHE PHE B B 295 295 . 0.2998 0.2883 0.3267 0.0311  0.0057
0.0249  1 .
5551 N     N     . ASP ASP ASP B B 296 296 . 0.2927 0.3136 0.2969 -0.0016 -0.0051
0.0012  1 .
5552 CA    CA    . ASP ASP ASP B B 296 296 . 0.3086 0.3131 0.3051 0.0010  -0.0073 -
0.0014 1 .
5553 CB    CB    . ASP ASP ASP B B 296 296 . 0.2967 0.3236 0.3071 -0.0079 -0.0130
0.0008  1 .
5554 CG    CG    . ASP ASP ASP B B 296 296 . 0.3417 0.3144 0.3308 0.0238  -0.0205 -
0.0135 1 .
5555 OD1   OD1   . ASP ASP ASP B B 296 296 . 0.3572 0.3331 0.3624 0.0881  -0.0319 -
0.0531 1 .
5556 OD2   OD2   . ASP ASP ASP B B 296 296 . 0.3536 0.3914 0.3704 0.0181  -0.0277 -
0.0079 1 .
5557 C     C     . ASP ASP ASP B B 296 296 . 0.3125 0.3228 0.2996 -0.0159 -0.0060 -
0.0019 1 .
5558 O     O     . ASP ASP ASP B B 296 296 . 0.3368 0.3520 0.3261 -0.0197 -0.0070
0.0106  1 .
5559 N     N     . GLN GLN GLN B B 297 297 . 0.3117 0.3276 0.3114 -0.0099 -0.0039 -
0.0103 1 .
5560 CA    CA    . GLN GLN GLN B B 297 297 . 0.3330 0.3207 0.3040 -0.0169 0.0037  -
0.0130 1 .
5561 CB    CB    . GLN GLN GLN B B 297 297 . 0.3471 0.3130 0.3060 -0.0140 0.0246  -
0.0036 1 .
5562 CG    CG    . GLN GLN GLN B B 297 297 . 0.3180 0.3267 0.2736 -0.0451 0.0195  -
0.0208 1 .
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5563 CD    CD    . GLN GLN GLN B B 297 297 . 0.3213 0.3561 0.3114 -0.0423 0.0050  -
0.0071 1 .
5564 OE1   OE1   . GLN GLN GLN B B 297 297 . 0.2980 0.2804 0.2945 0.0083  0.0133  -
0.0156 1 .
5565 NE2   NE2   . GLN GLN GLN B B 297 297 . 0.2533 0.4054 0.2858 -0.0490 0.0618  -
0.0486 1 .
5566 C     C     . GLN GLN GLN B B 297 297 . 0.3205 0.3177 0.2975 -0.0088 0.0033  -
0.0100 1 .
5567 O     O     . GLN GLN GLN B B 297 297 . 0.3350 0.3324 0.2912 -0.0275 -0.0051 -
0.0210 1 .
5568 N     N     . ASP ASP ASP B B 298 298 . 0.3127 0.3257 0.3050 -0.0109 0.0140
0.0087  1 .
5569 CA    CA    . ASP ASP ASP B B 298 298 . 0.2907 0.3258 0.3225 0.0156  0.0064
0.0018  1 .
5570 CB    CB    . ASP ASP ASP B B 298 298 . 0.2809 0.3194 0.3318 -0.0016 0.0036  -
0.0061 1 .
5571 CG    CG    . ASP ASP ASP B B 298 298 . 0.3253 0.3723 0.3213 -0.0060 -0.0056 -
0.0084 1 .
5572 OD1   OD1   . ASP ASP ASP B B 298 298 . 0.2770 0.4198 0.3510 -0.0103 -0.0192
0.0187  1 .
5573 OD2   OD2   . ASP ASP ASP B B 298 298 . 0.3297 0.3682 0.3577 -0.0026 -0.0814 -
0.0108 1 .
5574 C     C     . ASP ASP ASP B B 298 298 . 0.3028 0.3193 0.3076 0.0240  -0.0059
0.0090  1 .
5575 O     O     . ASP ASP ASP B B 298 298 . 0.2909 0.3382 0.3267 0.0524  -0.0162
0.0103  1 .
5576 N     N     . ASP ASP ASP B B 299 299 . 0.2655 0.3175 0.2956 0.0219  -0.0070
0.0156  1 .
5577 CA    CA    . ASP ASP ASP B B 299 299 . 0.2859 0.3143 0.3168 0.0202  -0.0009
0.0114  1 .
5578 CB    CB    . ASP ASP ASP B B 299 299 . 0.2895 0.3000 0.3281 0.0224  0.0111
0.0149  1 .
5579 CG    CG    . ASP ASP ASP B B 299 299 . 0.2987 0.3215 0.3219 0.0388  0.0088  -
0.0186 1 .
5580 OD1   OD1   . ASP ASP ASP B B 299 299 . 0.2475 0.3270 0.3206 0.0310  -0.0182 -
0.0556 1 .
5581 OD2   OD2   . ASP ASP ASP B B 299 299 . 0.3717 0.3327 0.3786 0.0516  -0.0050 -
0.0438 1 .
5582 C     C     . ASP ASP ASP B B 299 299 . 0.3028 0.3243 0.3238 0.0162  0.0058
0.0192  1 .
5583 O     O     . ASP ASP ASP B B 299 299 . 0.3027 0.3281 0.3312 0.0224  0.0241
0.0324  1 .
5584 N     N     . TRP TRP TRP B B 300 300 . 0.2905 0.3126 0.3112 0.0071  -0.0055
0.0301  1 .
5585 CA    CA    . TRP TRP TRP B B 300 300 . 0.2728 0.3175 0.3132 0.0065  -0.0047
0.0069  1 .
5586 CB    CB    . TRP TRP TRP B B 300 300 . 0.2828 0.3059 0.3439 0.0176  0.0045
0.0092  1 .
5587 CG    CG    . TRP TRP TRP B B 300 300 . 0.3136 0.3447 0.3192 0.0058  -0.0059
0.0097  1 .
5588 CD1   CD1   . TRP TRP TRP B B 300 300 . 0.3127 0.3365 0.3405 -0.0203 -0.0060 -
0.0058 1 .
5589 NE1   NE1   . TRP TRP TRP B B 300 300 . 0.3311 0.3755 0.3704 -0.0235 -0.0033 -
0.0088 1 .
5590 CE2   CE2   . TRP TRP TRP B B 300 300 . 0.3526 0.3642 0.3511 -0.0003 0.0041  -
0.0169 1 .
5591 CD2   CD2   . TRP TRP TRP B B 300 300 . 0.3304 0.3531 0.3404 0.0078  -0.0231
0.0089  1 .
5592 CE3   CE3   . TRP TRP TRP B B 300 300 . 0.3622 0.3643 0.3331 0.0093  -0.0087 -
0.0109 1 .
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5593 CZ3   CZ3   . TRP TRP TRP B B 300 300 . 0.3745 0.3830 0.3376 -0.0282 -0.0304 -
0.0196 1 .
5594 CH2   CH2   . TRP TRP TRP B B 300 300 . 0.2828 0.3472 0.3462 0.0185  -0.0520 -
0.0228 1 .
5595 CZ2   CZ2   . TRP TRP TRP B B 300 300 . 0.3740 0.3508 0.3422 0.0062  -0.0340 -
0.0119 1 .
5596 C     C     . TRP TRP TRP B B 300 300 . 0.2658 0.3182 0.3392 0.0137  -0.0051
0.0009  1 .
5597 O     O     . TRP TRP TRP B B 300 300 . 0.2107 0.3413 0.3144 0.0399  -0.0169 -
0.0235 1 .
5598 N     N     . ALA ALA ALA B B 301 301 . 0.2872 0.3429 0.3371 0.0159  0.0053
0.0038  1 .
5599 CA    CA    . ALA ALA ALA B B 301 301 . 0.3342 0.3487 0.3323 0.0177  0.0008
0.0014  1 .
5600 CB    CB    . ALA ALA ALA B B 301 301 . 0.3148 0.3140 0.2839 -0.0079 -0.0101
0.0020  1 .
5601 C     C     . ALA ALA ALA B B 301 301 . 0.3375 0.3491 0.3465 0.0139  0.0030  -
0.0048 1 .
5602 O     O     . ALA ALA ALA B B 301 301 . 0.3662 0.3580 0.3705 0.0076  0.0160  -
0.0065 1 .
5603 N     N     . ALA ALA ALA B B 302 302 . 0.3186 0.3511 0.3474 0.0219  -0.0145 -
0.0051 1 .
5604 CA    CA    . ALA ALA ALA B B 302 302 . 0.3348 0.3477 0.3588 0.0209  -0.0024 -
0.0053 1 .
5605 CB    CB    . ALA ALA ALA B B 302 302 . 0.2975 0.3449 0.3427 0.0455  -0.0117
0.0140  1 .
5606 C     C     . ALA ALA ALA B B 302 302 . 0.3505 0.3553 0.3619 0.0288  0.0060
0.0043  1 .
5607 O     O     . ALA ALA ALA B B 302 302 . 0.3517 0.3781 0.3862 0.0594  -0.0086
0.0139  1 .
5608 N     N     . TRP TRP TRP B B 303 303 . 0.3241 0.3507 0.3611 0.0100  0.0090
0.0002  1 .
5609 CA    CA    . TRP TRP TRP B B 303 303 . 0.3307 0.3257 0.3419 0.0090  0.0065
0.0020  1 .
5610 CB    CB    . TRP TRP TRP B B 303 303 . 0.2947 0.3094 0.3232 0.0058  0.0102
0.0026  1 .
5611 CG    CG    . TRP TRP TRP B B 303 303 . 0.2419 0.2994 0.3338 -0.0084 0.0083
0.0115  1 .
5612 CD1   CD1   . TRP TRP TRP B B 303 303 . 0.2336 0.2724 0.3083 -0.0030 0.0056
0.0326  1 .
5613 NE1   NE1   . TRP TRP TRP B B 303 303 . 0.2993 0.3113 0.3241 0.0041  -0.0185
0.0349  1 .
5614 CE2   CE2   . TRP TRP TRP B B 303 303 . 0.2716 0.2927 0.3108 -0.0341 -0.0017
0.0130  1 .
5615 CD2   CD2   . TRP TRP TRP B B 303 303 . 0.2401 0.2840 0.3046 -0.0136 -0.0054
0.0142  1 .
5616 CE3   CE3   . TRP TRP TRP B B 303 303 . 0.2867 0.2944 0.3243 -0.0004 0.0172  -
0.0042 1 .
5617 CZ3   CZ3   . TRP TRP TRP B B 303 303 . 0.2204 0.2690 0.3072 -0.0840 -0.0023 -
0.0193 1 .
5618 CH2   CH2   . TRP TRP TRP B B 303 303 . 0.1787 0.2876 0.2759 -0.0595 0.0125  -
0.0009 1 .
5619 CZ2   CZ2   . TRP TRP TRP B B 303 303 . 0.2723 0.2941 0.2867 0.0023  -0.0423 -
0.0185 1 .
5620 C     C     . TRP TRP TRP B B 303 303 . 0.3377 0.3341 0.3294 0.0090  -0.0020
0.0001  1 .
5621 O     O     . TRP TRP TRP B B 303 303 . 0.3467 0.3290 0.3104 0.0106  -0.0079
0.0027  1 .
5622 N     N     . SER SER SER B B 304 304 . 0.3592 0.3231 0.3373 0.0037  0.0041
0.0114  1 .
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5623 CA    CA    . SER SER SER B B 304 304 . 0.3693 0.3500 0.3575 0.0079  -0.0010
0.0118  1 .
5624 CB    CB    . SER SER SER B B 304 304 . 0.3581 0.3368 0.3680 0.0163  0.0006
0.0186  1 .
5625 OG    OG    . SER SER SER B B 304 304 . 0.4028 0.3337 0.4013 0.0278  0.0044
0.0005  1 .
5626 C     C     . SER SER SER B B 304 304 . 0.3828 0.3570 0.3538 0.0056  0.0021
0.0080  1 .
5627 O     O     . SER SER SER B B 304 304 . 0.4128 0.3741 0.3275 0.0092  0.0055
0.0195  1 .
5628 N     N     . LYS LYS LYS B B 305 305 . 0.3826 0.3791 0.3626 0.0078  0.0036
0.0126  1 .
5629 CA    CA    . LYS LYS LYS B B 305 305 . 0.3811 0.3962 0.3856 0.0072  0.0078
0.0035  1 .
5630 CB    CB    . LYS LYS LYS B B 305 305 . 0.4029 0.4078 0.4177 0.0057  0.0134
0.0025  1 .
5631 CG    CG    . LYS LYS LYS B B 305 305 . 0.4070 0.4606 0.4744 0.0018  0.0398
0.0064  1 .
5632 CD    CD    . LYS LYS LYS B B 305 305 . 0.4785 0.5043 0.5454 -0.0458 0.0229
0.0089  1 .
5633 CE    CE    . LYS LYS LYS B B 305 305 . 0.5482 0.5384 0.6016 -0.0687 0.0461
0.0410  1 .
5634 NZ    NZ    . LYS LYS LYS B B 305 305 . 0.6600 0.5950 0.7146 -0.0836 0.0663
0.0629  1 .
5635 C     C     . LYS LYS LYS B B 305 305 . 0.4015 0.3915 0.3671 0.0034  0.0064
0.0008  1 .
5636 O     O     . LYS LYS LYS B B 305 305 . 0.4071 0.3985 0.3375 -0.0039 0.0143  -
0.0063 1 .
5637 N     N     . PHE PHE PHE B B 306 306 . 0.3936 0.3961 0.3587 0.0097  0.0020  -
0.0028 1 .
5638 CA    CA    . PHE PHE PHE B B 306 306 . 0.3721 0.3802 0.3471 0.0085  -0.0027 -
0.0040 1 .
5639 CB    CB    . PHE PHE PHE B B 306 306 . 0.3662 0.3824 0.3521 0.0017  -0.0074 -
0.0089 1 .
5640 CG    CG    . PHE PHE PHE B B 306 306 . 0.3584 0.3787 0.3680 0.0162  0.0052  -
0.0251 1 .
5641 CD1   CD1   . PHE PHE PHE B B 306 306 . 0.3675 0.4189 0.3874 0.0462  0.0153  -
0.0430 1 .
5642 CE1   CE1   . PHE PHE PHE B B 306 306 . 0.3248 0.4311 0.4034 0.0516  0.0442  -
0.0148 1 .
5643 CZ    CZ    . PHE PHE PHE B B 306 306 . 0.3781 0.4298 0.4384 0.0184  0.0405  -
0.0186 1 .
5644 CE2   CE2   . PHE PHE PHE B B 306 306 . 0.3668 0.4393 0.4554 0.0560  0.0202  -
0.0296 1 .
5645 CD2   CD2   . PHE PHE PHE B B 306 306 . 0.3717 0.3806 0.3839 0.0224  0.0069  -
0.0274 1 .
5646 C     C     . PHE PHE PHE B B 306 306 . 0.3610 0.3788 0.3331 0.0130  -0.0119 -
0.0098 1 .
5647 O     O     . PHE PHE PHE B B 306 306 . 0.3578 0.3800 0.3493 0.0237  -0.0151 -
0.0163 1 .
5648 N     N     . THR THR THR B B 307 307 . 0.3433 0.3658 0.3195 0.0019  -0.0018 -
0.0015 1 .
5649 CA    CA    . THR THR THR B B 307 307 . 0.3649 0.3623 0.3422 -0.0026 0.0044  -
0.0007 1 .
5650 CB    CB    . THR THR THR B B 307 307 . 0.3534 0.3632 0.3545 0.0015  -0.0059 -
0.0034 1 .
5651 OG1   OG1   . THR THR THR B B 307 307 . 0.3422 0.3362 0.3669 -0.0221 0.0223  -
0.0193 1 .
5652 CG2   CG2   . THR THR THR B B 307 307 . 0.3690 0.3503 0.3873 0.0002  -0.0186
0.0019  1 .
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5653 C     C     . THR THR THR B B 307 307 . 0.3681 0.3750 0.3571 -0.0005 0.0021
0.0061  1 .
5654 O     O     . THR THR THR B B 307 307 . 0.3871 0.3706 0.3351 -0.0163 0.0045
0.0000  1 .
5655 N     N     . ALA ALA ALA B B 308 308 . 0.3493 0.3855 0.3666 0.0036  0.0041
0.0143  1 .
5656 CA    CA    . ALA ALA ALA B B 308 308 . 0.3554 0.3847 0.3705 0.0150  0.0230
0.0094  1 .
5657 CB    CB    . ALA ALA ALA B B 308 308 . 0.3702 0.4062 0.3799 0.0171  0.0246
0.0113  1 .
5658 C     C     . ALA ALA ALA B B 308 308 . 0.3696 0.3924 0.3801 0.0131  0.0176
0.0080  1 .
5659 O     O     . ALA ALA ALA B B 308 308 . 0.3527 0.4362 0.4003 0.0253  0.0305
0.0097  1 .
5660 N     N     . ASN ASN ASN B B 309 309 . 0.3590 0.3719 0.3547 0.0074  0.0038
0.0099  1 .
5661 CA    CA    . ASN ASN ASN B B 309 309 . 0.3874 0.3938 0.3649 0.0073  0.0075
0.0144  1 .
5662 CB    CB    . ASN ASN ASN B B 309 309 . 0.4253 0.4187 0.3895 0.0099  0.0195
0.0162  1 .
5663 CG    CG    . ASN ASN ASN B B 309 309 . 0.5046 0.5254 0.4906 0.0366  0.0364
0.0627  1 .
5664 OD1   OD1   . ASN ASN ASN B B 309 309 . 0.5504 0.6953 0.6562 0.0619  0.0667
0.0768  1 .
5665 ND2   ND2   . ASN ASN ASN B B 309 309 . 0.5246 0.5428 0.5621 0.0730  -0.0049
0.1128  1 .
5666 C     C     . ASN ASN ASN B B 309 309 . 0.3745 0.3726 0.3491 0.0023  0.0094
0.0137  1 .
5667 O     O     . ASN ASN ASN B B 309 309 . 0.3820 0.3703 0.3369 0.0014  0.0098
0.0232  1 .
5668 N     N     . VAL VAL VAL B B 310 310 . 0.3629 0.3777 0.3513 0.0022  -0.0007
0.0090  1 .
5669 CA    CA    . VAL VAL VAL B B 310 310 . 0.3599 0.3732 0.3193 -0.0109 -0.0045
0.0058  1 .
5670 CB    CB    . VAL VAL VAL B B 310 310 . 0.3612 0.3752 0.3293 -0.0187 -0.0059
0.0154  1 .
5671 CG1   CG1   . VAL VAL VAL B B 310 310 . 0.3991 0.4063 0.3146 -0.0284 -0.0471
0.0019  1 .
5672 CG2   CG2   . VAL VAL VAL B B 310 310 . 0.3989 0.3449 0.2921 0.0190  -0.0189
0.0025  1 .
5673 C     C     . VAL VAL VAL B B 310 310 . 0.3556 0.3784 0.3079 -0.0060 -0.0070 -
0.0029 1 .
5674 O     O     . VAL VAL VAL B B 310 310 . 0.3275 0.4118 0.2850 -0.0053 -0.0247 -
0.0016 1 .
5675 N     N     . GLY GLY GLY B B 311 311 . 0.3510 0.3688 0.2910 -0.0064 0.0012  -
0.0069 1 .
5676 CA    CA    . GLY GLY GLY B B 311 311 . 0.3622 0.3777 0.3092 -0.0223 -0.0028
0.0000  1 .
5677 C     C     . GLY GLY GLY B B 311 311 . 0.3578 0.3768 0.3151 -0.0240 -0.0061
0.0034  1 .
5678 O     O     . GLY GLY GLY B B 311 311 . 0.3719 0.3867 0.3167 -0.0327 -0.0132
0.0016  1 .
5679 N     N     . ILE ILE ILE B B 312 312 . 0.3479 0.3602 0.3148 -0.0133 -0.0082
0.0027  1 .
5680 CA    CA    . ILE ILE ILE B B 312 312 . 0.3316 0.3474 0.3178 -0.0041 -0.0077
0.0000  1 .
5681 CB    CB    . ILE ILE ILE B B 312 312 . 0.3296 0.3405 0.3123 -0.0027 -0.0108 -
0.0080 1 .
5682 CG1   CG1   . ILE ILE ILE B B 312 312 . 0.3177 0.3641 0.3392 -0.0122 -0.0141 -
0.0349 1 .
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5683 CD1   CD1   . ILE ILE ILE B B 312 312 . 0.1795 0.4636 0.3476 0.0137  -0.0421 -
0.0915 1 .
5684 CG2   CG2   . ILE ILE ILE B B 312 312 . 0.3243 0.3419 0.2759 -0.0220 0.0115  -
0.0058 1 .
5685 C     C     . ILE ILE ILE B B 312 312 . 0.3473 0.3465 0.3066 0.0034  -0.0014 -
0.0034 1 .
5686 O     O     . ILE ILE ILE B B 312 312 . 0.3769 0.3585 0.3197 0.0031  -0.0071 -
0.0018 1 .
5687 N     N     . GLN GLN GLN B B 313 313 . 0.3262 0.3196 0.3185 -0.0069 -0.0060 -
0.0129 1 .
5688 CA    CA    . GLN GLN GLN B B 313 313 . 0.3042 0.3144 0.2878 -0.0184 -0.0045 -
0.0080 1 .
5689 CB    CB    . GLN GLN GLN B B 313 313 . 0.3162 0.3187 0.3157 -0.0254 -0.0059 -
0.0097 1 .
5690 CG    CG    . GLN GLN GLN B B 313 313 . 0.2920 0.3075 0.2842 -0.0122 0.0010  -
0.0258 1 .
5691 CD    CD    . GLN GLN GLN B B 313 313 . 0.2872 0.3377 0.3026 -0.0280 -0.0334 -
0.0180 1 .
5692 OE1   OE1   . GLN GLN GLN B B 313 313 . 0.2391 0.3885 0.2761 -0.0176 -0.0623 -
0.0305 1 .
5693 NE2   NE2   . GLN GLN GLN B B 313 313 . 0.1945 0.3174 0.2796 -0.0056 -0.0566 -
0.0315 1 .
5694 C     C     . GLN GLN GLN B B 313 313 . 0.2869 0.2969 0.2886 -0.0008 -0.0054 -
0.0072 1 .
5695 O     O     . GLN GLN GLN B B 313 313 . 0.2710 0.3086 0.2617 0.0063  -0.0261 -
0.0182 1 .
5696 N     N     . ILE ILE ILE B B 314 314 . 0.2606 0.3096 0.2897 0.0014  -0.0079 -
0.0043 1 .
5697 CA    CA    . ILE ILE ILE B B 314 314 . 0.2701 0.3054 0.2843 0.0066  -0.0196 -
0.0030 1 .
5698 CB    CB    . ILE ILE ILE B B 314 314 . 0.2686 0.3033 0.2970 0.0046  -0.0185 -
0.0106 1 .
5699 CG1   CG1   . ILE ILE ILE B B 314 314 . 0.1717 0.3267 0.2687 0.0218  -0.0703
0.0003  1 .
5700 CD1   CD1   . ILE ILE ILE B B 314 314 . 0.0483 0.2001 0.2726 0.0259  -0.0698 -
0.0063 1 .
5701 CG2   CG2   . ILE ILE ILE B B 314 314 . 0.3165 0.3175 0.2663 -0.0149 -0.0919 -
0.0254 1 .
5702 C     C     . ILE ILE ILE B B 314 314 . 0.2924 0.3094 0.2897 0.0119  -0.0004 -
0.0048 1 .
5703 O     O     . ILE ILE ILE B B 314 314 . 0.3250 0.3225 0.2985 0.0259  0.0002  -
0.0160 1 .
5704 N     N     . VAL VAL VAL B B 315 315 . 0.3007 0.3112 0.2917 0.0139  0.0122
0.0012  1 .
5705 CA    CA    . VAL VAL VAL B B 315 315 . 0.3144 0.3109 0.2929 -0.0075 0.0222
0.0147  1 .
5706 CB    CB    . VAL VAL VAL B B 315 315 . 0.3130 0.3152 0.3056 0.0013  0.0336
0.0185  1 .
5707 CG1   CG1   . VAL VAL VAL B B 315 315 . 0.3627 0.2993 0.3097 -0.0077 0.0393
0.0571  1 .
5708 CG2   CG2   . VAL VAL VAL B B 315 315 . 0.3280 0.3157 0.2975 -0.0334 0.0729
0.0065  1 .
5709 C     C     . VAL VAL VAL B B 315 315 . 0.3017 0.3147 0.2876 0.0059  0.0156
0.0145  1 .
5710 O     O     . VAL VAL VAL B B 315 315 . 0.2936 0.3279 0.3139 0.0090  0.0175
0.0076  1 .
5711 N     N     . GLY GLY GLY B B 316 316 . 0.2789 0.3237 0.2734 -0.0013 -0.0106
0.0158  1 .
5712 CA    CA    . GLY GLY GLY B B 316 316 . 0.3021 0.3035 0.2741 0.0026  -0.0040
0.0214  1 .
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5713 C     C     . GLY GLY GLY B B 316 316 . 0.3184 0.3161 0.2883 0.0022  -0.0126
0.0121  1 .
5714 O     O     . GLY GLY GLY B B 316 316 . 0.3313 0.3161 0.2522 0.0024  0.0021
0.0217  1 .
5715 N     N     . ASP ASP ASP B B 317 317 . 0.3046 0.3124 0.2776 0.0113  -0.0185
0.0082  1 .
5716 CA    CA    . ASP ASP ASP B B 317 317 . 0.2817 0.3055 0.2746 0.0062  -0.0099
0.0077  1 .
5717 CB    CB    . ASP ASP ASP B B 317 317 . 0.2999 0.3062 0.2595 0.0059  -0.0131
0.0029  1 .
5718 CG    CG    . ASP ASP ASP B B 317 317 . 0.2246 0.2967 0.2499 0.0096  -0.0127
0.0016  1 .
5719 OD1   OD1   . ASP ASP ASP B B 317 317 . 0.1210 0.2629 0.1797 0.0259  -0.0296 -
0.0220 1 .
5720 OD2   OD2   . ASP ASP ASP B B 317 317 . 0.1400 0.1960 0.2174 0.0067  0.0307
0.0047  1 .
5721 C     C     . ASP ASP ASP B B 317 317 . 0.2791 0.3115 0.2574 0.0044  -0.0021
0.0099  1 .
5722 O     O     . ASP ASP ASP B B 317 317 . 0.2614 0.3498 0.2730 -0.0103 0.0053
0.0217  1 .
5723 N     N     . ASP ASP ASP B B 318 318 . 0.2785 0.3078 0.2633 -0.0014 0.0041
0.0135  1 .
5724 CA    CA    . ASP ASP ASP B B 318 318 . 0.2954 0.3050 0.2913 0.0030  0.0059
0.0115  1 .
5725 CB    CB    . ASP ASP ASP B B 318 318 . 0.2942 0.2956 0.2757 -0.0156 0.0024
0.0068  1 .
5726 CG    CG    . ASP ASP ASP B B 318 318 . 0.3136 0.3054 0.3487 -0.0147 0.0050
0.0112  1 .
5727 OD1   OD1   . ASP ASP ASP B B 318 318 . 0.3067 0.3018 0.2693 -0.0522 0.0452  -
0.0644 1 .
5728 OD2   OD2   . ASP ASP ASP B B 318 318 . 0.3724 0.3412 0.4114 -0.0139 -0.0293
0.0173  1 .
5729 C     C     . ASP ASP ASP B B 318 318 . 0.3152 0.3168 0.3053 0.0132  0.0060
0.0078  1 .
5730 O     O     . ASP ASP ASP B B 318 318 . 0.3623 0.3474 0.3226 0.0139  0.0143
0.0207  1 .
5731 N     N     . LEU LEU LEU B B 319 319 . 0.3100 0.3256 0.3297 0.0162  0.0045
0.0080  1 .
5732 CA    CA    . LEU LEU LEU B B 319 319 . 0.3230 0.3304 0.3270 0.0076  -0.0074
0.0055  1 .
5733 CB    CB    . LEU LEU LEU B B 319 319 . 0.3262 0.3377 0.3163 0.0007  -0.0125
0.0239  1 .
5734 CG    CG    . LEU LEU LEU B B 319 319 . 0.3643 0.3133 0.3041 0.0013  -0.0429
0.0101  1 .
5735 CD1   CD1   . LEU LEU LEU B B 319 319 . 0.3294 0.2872 0.2218 -0.0281 -0.0684
0.0379  1 .
5736 CD2   CD2   . LEU LEU LEU B B 319 319 . 0.4138 0.2509 0.3045 0.0253  -0.1205
0.0231  1 .
5737 C     C     . LEU LEU LEU B B 319 319 . 0.3170 0.3391 0.3523 0.0004  -0.0011
0.0091  1 .
5738 O     O     . LEU LEU LEU B B 319 319 . 0.3195 0.3754 0.3511 -0.0096 -0.0038
0.0018  1 .
5739 N     N     . THR THR THR B B 320 320 . 0.3256 0.3517 0.3655 0.0038  -0.0002 -
0.0062 1 .
5740 CA    CA    . THR THR THR B B 320 320 . 0.3294 0.3562 0.3462 0.0013  -0.0055 -
0.0146 1 .
5741 CB    CB    . THR THR THR B B 320 320 . 0.3368 0.3576 0.3420 0.0114  -0.0112 -
0.0124 1 .
5742 OG1   OG1   . THR THR THR B B 320 320 . 0.4333 0.3695 0.3320 0.0341  0.0023  -
0.0224 1 .
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5743 CG2   CG2   . THR THR THR B B 320 320 . 0.3444 0.3576 0.3063 -0.0154 0.0072  -
0.0391 1 .
5744 C     C     . THR THR THR B B 320 320 . 0.3140 0.3477 0.3416 0.0005  -0.0051 -
0.0022 1 .
5745 O     O     . THR THR THR B B 320 320 . 0.3346 0.3576 0.3758 0.0066  -0.0111
0.0009  1 .
5746 N     N     . VAL VAL VAL B B 321 321 . 0.2761 0.3027 0.3235 0.0042  -0.0064 -
0.0011 1 .
5747 CA    CA    . VAL VAL VAL B B 321 321 . 0.2582 0.3055 0.2959 0.0062  -0.0015
0.0014  1 .
5748 CB    CB    . VAL VAL VAL B B 321 321 . 0.2679 0.2999 0.2789 0.0067  -0.0137
0.0154  1 .
5749 CG1   CG1   . VAL VAL VAL B B 321 321 . 0.2425 0.2747 0.2871 0.0267  0.0076  -
0.0223 1 .
5750 CG2   CG2   . VAL VAL VAL B B 321 321 . 0.2518 0.2998 0.3239 0.0018  -0.0007
0.0041  1 .
5751 C     C     . VAL VAL VAL B B 321 321 . 0.2966 0.3267 0.3101 0.0144  0.0104
0.0059  1 .
5752 O     O     . VAL VAL VAL B B 321 321 . 0.2451 0.3396 0.3488 0.0539  0.0263
0.0179  1 .
5753 N     N     . THR THR THR B B 322 322 . 0.2970 0.3243 0.3154 0.0103  0.0064  -
0.0022 1 .
5754 CA    CA    . THR THR THR B B 322 322 . 0.3144 0.3453 0.3343 -0.0042 0.0057
0.0028  1 .
5755 CB    CB    . THR THR THR B B 322 322 . 0.3077 0.3530 0.3151 -0.0050 -0.0034 -
0.0109 1 .
5756 OG1   OG1   . THR THR THR B B 322 322 . 0.3606 0.3691 0.3157 0.0045  0.0220
0.0015  1 .
5757 CG2   CG2   . THR THR THR B B 322 322 . 0.2868 0.3584 0.2878 -0.0392 0.0297
0.0284  1 .
5758 C     C     . THR THR THR B B 322 322 . 0.3242 0.3618 0.3470 -0.0049 0.0040  -
0.0092 1 .
5759 O     O     . THR THR THR B B 322 322 . 0.2937 0.3736 0.3478 -0.0110 0.0031  -
0.0374 1 .
5760 N     N     . ASN ASN ASN B B 323 323 . 0.3636 0.3798 0.3667 0.0030  0.0001  -
0.0098 1 .
5761 CA    CA    . ASN ASN ASN B B 323 323 . 0.3749 0.3962 0.3916 0.0026  0.0036  -
0.0046 1 .
5762 CB    CB    . ASN ASN ASN B B 323 323 . 0.3990 0.4024 0.3857 0.0080  -0.0040
0.0053  1 .
5763 CG    CG    . ASN ASN ASN B B 323 323 . 0.3867 0.4404 0.3907 0.0096  -0.0087 -
0.0032 1 .
5764 OD1   OD1   . ASN ASN ASN B B 323 323 . 0.4003 0.5078 0.4103 0.0019  -0.0529
0.0029  1 .
5765 ND2   ND2   . ASN ASN ASN B B 323 323 . 0.3918 0.4491 0.4283 0.0112  0.0020  -
0.0076 1 .
5766 C     C     . ASN ASN ASN B B 323 323 . 0.3984 0.4015 0.4093 -0.0059 0.0096  -
0.0009 1 .
5767 O     O     . ASN ASN ASN B B 323 323 . 0.3893 0.3895 0.4228 -0.0131 0.0260
0.0169  1 .
5768 N     N     . PRO PRO PRO B B 324 324 . 0.4064 0.4307 0.4345 -0.0063 0.0044  -
0.0039 1 .
5769 CA    CA    . PRO PRO PRO B B 324 324 . 0.4188 0.4401 0.4371 -0.0089 -0.0024 -
0.0027 1 .
5770 CB    CB    . PRO PRO PRO B B 324 324 . 0.4059 0.4392 0.4334 -0.0079 0.0105
0.0000  1 .
5771 CG    CG    . PRO PRO PRO B B 324 324 . 0.4223 0.4712 0.4635 -0.0137 -0.0138
0.0081  1 .
5772 CD    CD    . PRO PRO PRO B B 324 324 . 0.4222 0.4328 0.4433 -0.0250 0.0005
0.0020  1 .
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5773 C     C     . PRO PRO PRO B B 324 324 . 0.4206 0.4492 0.4493 -0.0085 0.0004  -
0.0022 1 .
5774 O     O     . PRO PRO PRO B B 324 324 . 0.4075 0.4554 0.4346 -0.0001 -0.0142 -
0.0101 1 .
5775 N     N     . LYS LYS LYS B B 325 325 . 0.4415 0.4736 0.4644 -0.0020 0.0034  -
0.0006 1 .
5776 CA    CA    . LYS LYS LYS B B 325 325 . 0.4495 0.4864 0.4896 -0.0006 0.0067
0.0008  1 .
5777 CB    CB    . LYS LYS LYS B B 325 325 . 0.4567 0.4920 0.5124 0.0078  0.0011  -
0.0038 1 .
5778 CG    CG    . LYS LYS LYS B B 325 325 . 0.5038 0.5728 0.5920 0.0034  0.0192  -
0.0131 1 .
5779 CD    CD    . LYS LYS LYS B B 325 325 . 0.5479 0.6125 0.6332 0.0169  0.0356  -
0.0453 1 .
5780 CE    CE    . LYS LYS LYS B B 325 325 . 0.5782 0.6704 0.6551 -0.0048 0.0415  -
0.0204 1 .
5781 NZ    NZ    . LYS LYS LYS B B 325 325 . 0.5689 0.7044 0.6940 -0.0504 0.0083  -
0.0519 1 .
5782 C     C     . LYS LYS LYS B B 325 325 . 0.4477 0.4827 0.4631 0.0001  0.0096
0.0070  1 .
5783 O     O     . LYS LYS LYS B B 325 325 . 0.4645 0.5021 0.4776 0.0095  0.0044
0.0127  1 .
5784 N     N     . ARG ARG ARG B B 326 326 . 0.4201 0.4532 0.4349 0.0033  0.0125
0.0086  1 .
5785 CA    CA    . ARG ARG ARG B B 326 326 . 0.4155 0.4382 0.4155 -0.0028 0.0052
0.0049  1 .
5786 CB    CB    . ARG ARG ARG B B 326 326 . 0.4049 0.4275 0.4004 -0.0021 0.0142
0.0036  1 .
5787 CG    CG    . ARG ARG ARG B B 326 326 . 0.3965 0.4152 0.3983 -0.0155 0.0322  -
0.0007 1 .
5788 CD    CD    . ARG ARG ARG B B 326 326 . 0.3981 0.3825 0.4075 -0.0019 0.0428  -
0.0673 1 .
5789 NE    NE    . ARG ARG ARG B B 326 326 . 0.3658 0.3840 0.3926 0.0279  0.0066  -
0.0309 1 .
5790 CZ    CZ    . ARG ARG ARG B B 326 326 . 0.3650 0.3808 0.3954 0.0533  0.0206  -
0.0371 1 .
5791 NH1   NH1   . ARG ARG ARG B B 326 326 . 0.3267 0.3857 0.3569 0.0682  -0.0117 -
0.0405 1 .
5792 NH2   NH2   . ARG ARG ARG B B 326 326 . 0.3342 0.3980 0.3469 0.0942  0.0069  -
0.0453 1 .
5793 C     C     . ARG ARG ARG B B 326 326 . 0.3967 0.4236 0.4065 0.0055  0.0048
0.0161  1 .
5794 O     O     . ARG ARG ARG B B 326 326 . 0.4046 0.4223 0.4133 0.0001  -0.0038
0.0300  1 .
5795 N     N     . ILE ILE ILE B B 327 327 . 0.3946 0.4071 0.3814 -0.0005 -0.0020
0.0149  1 .
5796 CA    CA    . ILE ILE ILE B B 327 327 . 0.3900 0.4070 0.3861 -0.0021 -0.0058
0.0180  1 .
5797 CB    CB    . ILE ILE ILE B B 327 327 . 0.3769 0.3938 0.3687 0.0098  0.0000
0.0300  1 .
5798 CG1   CG1   . ILE ILE ILE B B 327 327 . 0.3760 0.4031 0.3633 -0.0293 -0.0136
0.0172  1 .
5799 CD1   CD1   . ILE ILE ILE B B 327 327 . 0.3583 0.3432 0.2848 -0.0473 -0.0872
0.0315  1 .
5800 CG2   CG2   . ILE ILE ILE B B 327 327 . 0.4049 0.3955 0.3779 0.0026  -0.0105
0.0534  1 .
5801 C     C     . ILE ILE ILE B B 327 327 . 0.3967 0.4081 0.3897 0.0027  -0.0092
0.0199  1 .
5802 O     O     . ILE ILE ILE B B 327 327 . 0.3941 0.4108 0.3610 0.0096  -0.0439
0.0266  1 .
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5803 N     N     . GLU GLU GLU B B 328 328 . 0.4086 0.4229 0.4191 0.0053  -0.0091
0.0149  1 .
5804 CA    CA    . GLU GLU GLU B B 328 328 . 0.4266 0.4497 0.4509 0.0116  -0.0017
0.0086  1 .
5805 CB    CB    . GLU GLU GLU B B 328 328 . 0.4314 0.4799 0.4809 0.0088  -0.0009 -
0.0014 1 .
5806 CG    CG    . GLU GLU GLU B B 328 328 . 0.5422 0.5631 0.5522 -0.0137 0.0075
0.0277  1 .
5807 CD    CD    . GLU GLU GLU B B 328 328 . 0.6202 0.6777 0.6374 -0.0079 -0.0146
0.0172  1 .
5808 OE1   OE1   . GLU GLU GLU B B 328 328 . 0.7387 0.7933 0.6770 0.0233  0.0115
0.0215  1 .
5809 OE2   OE2   . GLU GLU GLU B B 328 328 . 0.5853 0.6899 0.7007 0.0230  -0.0084
0.0623  1 .
5810 C     C     . GLU GLU GLU B B 328 328 . 0.4047 0.4409 0.4430 0.0225  -0.0016
0.0051  1 .
5811 O     O     . GLU GLU GLU B B 328 328 . 0.3845 0.4412 0.4389 0.0340  -0.0086
0.0058  1 .
5812 N     N     . ARG ARG ARG B B 329 329 . 0.3897 0.4259 0.4382 0.0294  -0.0032
0.0056  1 .
5813 CA    CA    . ARG ARG ARG B B 329 329 . 0.4003 0.4221 0.4342 0.0213  -0.0023
0.0058  1 .
5814 CB    CB    . ARG ARG ARG B B 329 329 . 0.4294 0.4301 0.4393 0.0108  -0.0043
0.0085  1 .
5815 CG    CG    . ARG ARG ARG B B 329 329 . 0.3843 0.4427 0.4401 0.0001  0.0269
0.0007  1 .
5816 CD    CD    . ARG ARG ARG B B 329 329 . 0.3828 0.4538 0.4710 -0.0366 0.0278  -
0.0034 1 .
5817 NE    NE    . ARG ARG ARG B B 329 329 . 0.4763 0.4224 0.4595 -0.0182 0.0417
0.0013  1 .
5818 CZ    CZ    . ARG ARG ARG B B 329 329 . 0.4287 0.4374 0.4192 -0.0300 0.0198
0.0044  1 .
5819 NH1   NH1   . ARG ARG ARG B B 329 329 . 0.4436 0.4358 0.4003 0.0066  -0.0145
0.0297  1 .
5820 NH2   NH2   . ARG ARG ARG B B 329 329 . 0.3561 0.4551 0.3819 0.0291  0.0261
0.0109  1 .
5821 C     C     . ARG ARG ARG B B 329 329 . 0.4011 0.4377 0.4302 0.0228  -0.0046
0.0114  1 .
5822 O     O     . ARG ARG ARG B B 329 329 . 0.3757 0.4493 0.4297 0.0259  -0.0163
0.0209  1 .
5823 N     N     . ALA ALA ALA B B 330 330 . 0.4009 0.4261 0.4161 0.0298  -0.0089
0.0107  1 .
5824 CA    CA    . ALA ALA ALA B B 330 330 . 0.4012 0.4181 0.4079 0.0172  -0.0101
0.0088  1 .
5825 CB    CB    . ALA ALA ALA B B 330 330 . 0.3858 0.3972 0.3974 0.0277  -0.0182
0.0061  1 .
5826 C     C     . ALA ALA ALA B B 330 330 . 0.4097 0.4190 0.4072 0.0119  -0.0049
0.0113  1 .
5827 O     O     . ALA ALA ALA B B 330 330 . 0.3900 0.4061 0.3926 0.0031  0.0011
0.0216  1 .
5828 N     N     . VAL VAL VAL B B 331 331 . 0.4112 0.4401 0.4171 -0.0003 -0.0087
0.0091  1 .
5829 CA    CA    . VAL VAL VAL B B 331 331 . 0.4341 0.4505 0.4291 -0.0103 -0.0051
0.0055  1 .
5830 CB    CB    . VAL VAL VAL B B 331 331 . 0.4447 0.4568 0.4266 -0.0116 -0.0105
0.0059  1 .
5831 CG1   CG1   . VAL VAL VAL B B 331 331 . 0.4470 0.4765 0.4551 -0.0295 -0.0269
0.0155  1 .
5832 CG2   CG2   . VAL VAL VAL B B 331 331 . 0.4269 0.4509 0.4608 -0.0183 -0.0217
0.0062  1 .
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5833 C     C     . VAL VAL VAL B B 331 331 . 0.4411 0.4640 0.4301 -0.0019 -0.0048
0.0027  1 .
5834 O     O     . VAL VAL VAL B B 331 331 . 0.4759 0.4865 0.4208 -0.0017 -0.0060 -
0.0001 1 .
5835 N     N     . GLU GLU GLU B B 332 332 . 0.4364 0.4491 0.4315 -0.0045 -0.0024
0.0016  1 .
5836 CA    CA    . GLU GLU GLU B B 332 332 . 0.4358 0.4610 0.4389 -0.0094 0.0023
0.0088  1 .
5837 CB    CB    . GLU GLU GLU B B 332 332 . 0.4366 0.4722 0.4565 -0.0092 0.0068
0.0152  1 .
5838 CG    CG    . GLU GLU GLU B B 332 332 . 0.5433 0.5742 0.5481 0.0090  0.0058
0.0465  1 .
5839 CD    CD    . GLU GLU GLU B B 332 332 . 0.6542 0.6530 0.6728 -0.0373 -0.0189
0.0385  1 .
5840 OE1   OE1   . GLU GLU GLU B B 332 332 . 0.7140 0.7545 0.7344 -0.0280 -0.0440
0.0257  1 .
5841 OE2   OE2   . GLU GLU GLU B B 332 332 . 0.6783 0.6997 0.7088 0.0090  -0.0455
0.0653  1 .
5842 C     C     . GLU GLU GLU B B 332 332 . 0.4230 0.4444 0.4186 -0.0026 -0.0008
0.0032  1 .
5843 O     O     . GLU GLU GLU B B 332 332 . 0.4163 0.4517 0.4515 -0.0051 -0.0006 -
0.0013 1 .
5844 N     N     . GLU GLU GLU B B 333 333 . 0.4074 0.4275 0.3890 -0.0030 -0.0065
0.0066  1 .
5845 CA    CA    . GLU GLU GLU B B 333 333 . 0.4213 0.4041 0.3708 -0.0008 -0.0099
0.0098  1 .
5846 CB    CB    . GLU GLU GLU B B 333 333 . 0.4522 0.4080 0.3731 -0.0031 -0.0008
0.0091  1 .
5847 CG    CG    . GLU GLU GLU B B 333 333 . 0.4789 0.4226 0.4233 0.0144  0.0069  -
0.0076 1 .
5848 CD    CD    . GLU GLU GLU B B 333 333 . 0.4521 0.4499 0.4691 -0.0152 -0.0004 -
0.0033 1 .
5849 OE1   OE1   . GLU GLU GLU B B 333 333 . 0.4765 0.4357 0.4351 -0.0020 0.0255
0.0259  1 .
5850 OE2   OE2   . GLU GLU GLU B B 333 333 . 0.4008 0.4931 0.5247 0.0324  0.0030
0.0194  1 .
5851 C     C     . GLU GLU GLU B B 333 333 . 0.4051 0.3973 0.3442 -0.0017 -0.0110
0.0051  1 .
5852 O     O     . GLU GLU GLU B B 333 333 . 0.4089 0.4219 0.3203 0.0123  -0.0187
0.0264  1 .
5853 N     N     . LYS LYS LYS B B 334 334 . 0.4040 0.3931 0.3416 0.0025  -0.0186 -
0.0017 1 .
5854 CA    CA    . LYS LYS LYS B B 334 334 . 0.3882 0.3829 0.3665 -0.0052 -0.0136 -
0.0043 1 .
5855 CB    CB    . LYS LYS LYS B B 334 334 . 0.4013 0.3867 0.3614 -0.0100 -0.0144
0.0026  1 .
5856 CG    CG    . LYS LYS LYS B B 334 334 . 0.4449 0.4385 0.4265 -0.0039 -0.0236 -
0.0241 1 .
5857 CD    CD    . LYS LYS LYS B B 334 334 . 0.4544 0.5809 0.4892 0.0098  0.0096  -
0.0134 1 .
5858 CE    CE    . LYS LYS LYS B B 334 334 . 0.4863 0.6310 0.5635 0.0000  -0.0108 -
0.0440 1 .
5859 NZ    NZ    . LYS LYS LYS B B 334 334 . 0.4265 0.6526 0.6460 0.0161  -0.0228
0.0042  1 .
5860 C     C     . LYS LYS LYS B B 334 334 . 0.3783 0.3623 0.3564 -0.0085 -0.0107 -
0.0019 1 .
5861 O     O     . LYS LYS LYS B B 334 334 . 0.3558 0.3596 0.3578 -0.0386 -0.0114
0.0072  1 .
5862 N     N     . ALA ALA ALA B B 335 335 . 0.3720 0.3528 0.3659 -0.0103 -0.0104
0.0029  1 .
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5863 CA    CA    . ALA ALA ALA B B 335 335 . 0.3677 0.3671 0.3553 -0.0004 -0.0100 -
0.0087 1 .
5864 CB    CB    . ALA ALA ALA B B 335 335 . 0.3722 0.3775 0.3821 0.0085  -0.0039 -
0.0098 1 .
5865 C     C     . ALA ALA ALA B B 335 335 . 0.3578 0.3589 0.3471 -0.0060 -0.0043 -
0.0045 1 .
5866 O     O     . ALA ALA ALA B B 335 335 . 0.3273 0.3618 0.3233 -0.0256 -0.0009 -
0.0167 1 .
5867 N     N     . CYS CYS CYS B B 336 336 . 0.3485 0.3723 0.3468 -0.0068 -0.0048
0.0037  1 .
5868 CA    CA    . CYS CYS CYS B B 336 336 . 0.3581 0.3710 0.3549 -0.0030 -0.0027
0.0132  1 .
5869 CB    CB    . CYS CYS CYS B B 336 336 . 0.3463 0.3638 0.3332 -0.0119 0.0035
0.0218  1 .
5870 SG    SG    . CYS CYS CYS B B 336 336 . 0.4020 0.4442 0.3616 0.0399  -0.0097
0.0368  1 .
5871 C     C     . CYS CYS CYS B B 336 336 . 0.3528 0.3687 0.3618 0.0033  -0.0103
0.0036  1 .
5872 O     O     . CYS CYS CYS B B 336 336 . 0.3992 0.4124 0.3999 0.0062  -0.0192
0.0047  1 .
5873 N     N     . ASN ASN ASN B B 337 337 . 0.3276 0.3546 0.3648 0.0007  -0.0019
0.0021  1 .
5874 CA    CA    . ASN ASN ASN B B 337 337 . 0.3312 0.3445 0.3372 0.0012  -0.0037 -
0.0011 1 .
5875 CB    CB    . ASN ASN ASN B B 337 337 . 0.2943 0.3212 0.3202 -0.0001 -0.0115
0.0018  1 .
5876 CG    CG    . ASN ASN ASN B B 337 337 . 0.3216 0.3233 0.3196 0.0080  0.0024  -
0.0035 1 .
5877 OD1   OD1   . ASN ASN ASN B B 337 337 . 0.3030 0.2971 0.2926 0.0469  -0.0680 -
0.0067 1 .
5878 ND2   ND2   . ASN ASN ASN B B 337 337 . 0.2826 0.3210 0.3346 -0.0057 0.0026  -
0.0553 1 .
5879 C     C     . ASN ASN ASN B B 337 337 . 0.3236 0.3326 0.3284 0.0051  -0.0075
0.0030  1 .
5880 O     O     . ASN ASN ASN B B 337 337 . 0.3199 0.3200 0.3181 0.0264  -0.0033 -
0.0032 1 .
5881 N     N     . CYS CYS CYS B B 338 338 . 0.3406 0.3399 0.3377 0.0135  0.0026
0.0120  1 .
5882 CA    CA    . CYS CYS CYS B B 338 338 . 0.3481 0.3663 0.3374 0.0100  0.0024
0.0034  1 .
5883 CB    CB    . CYS CYS CYS B B 338 338 . 0.3695 0.3573 0.3335 0.0171  -0.0002 -
0.0002 1 .
5884 SG    SG    . CYS CYS CYS B B 338 338 . 0.3968 0.4039 0.4008 0.0342  -0.0093
0.0278  1 .
5885 C     C     . CYS CYS CYS B B 338 338 . 0.3496 0.3543 0.3416 -0.0045 -0.0036
0.0055  1 .
5886 O     O     . CYS CYS CYS B B 338 338 . 0.3683 0.3434 0.3328 -0.0236 -0.0073
0.0051  1 .
5887 N     N     . LEU LEU LEU B B 339 339 . 0.3146 0.3538 0.3261 0.0048  0.0063
0.0106  1 .
5888 CA    CA    . LEU LEU LEU B B 339 339 . 0.3088 0.3410 0.3378 -0.0056 -0.0037 -
0.0019 1 .
5889 CB    CB    . LEU LEU LEU B B 339 339 . 0.2980 0.3520 0.3362 0.0067  0.0014  -
0.0107 1 .
5890 CG    CG    . LEU LEU LEU B B 339 339 . 0.2696 0.3366 0.3242 -0.0306 0.0100
0.0054  1 .
5891 CD1   CD1   . LEU LEU LEU B B 339 339 . 0.2623 0.3279 0.3349 -0.0391 -0.0339 -
0.0123 1 .
5892 CD2   CD2   . LEU LEU LEU B B 339 339 . 0.2730 0.2901 0.2747 -0.0507 0.0441  -
0.0093 1 .
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5893 C     C     . LEU LEU LEU B B 339 339 . 0.3220 0.3542 0.3386 -0.0061 -0.0097 -
0.0037 1 .
5894 O     O     . LEU LEU LEU B B 339 339 . 0.3033 0.3508 0.3414 0.0012  -0.0260
0.0013  1 .
5895 N     N     . LEU LEU LEU B B 340 340 . 0.3397 0.3712 0.3343 -0.0156 -0.0030 -
0.0013 1 .
5896 CA    CA    . LEU LEU LEU B B 340 340 . 0.3444 0.3589 0.3277 -0.0078 0.0020
0.0062  1 .
5897 CB    CB    . LEU LEU LEU B B 340 340 . 0.3106 0.3568 0.3062 -0.0196 -0.0111
0.0094  1 .
5898 CG    CG    . LEU LEU LEU B B 340 340 . 0.3660 0.3335 0.3335 0.0137  -0.0199 -
0.0251 1 .
5899 CD1   CD1   . LEU LEU LEU B B 340 340 . 0.4511 0.3211 0.2319 0.0278  -0.0151 -
0.1158 1 .
5900 CD2   CD2   . LEU LEU LEU B B 340 340 . 0.3288 0.3292 0.2849 0.0522  -0.0812
0.0212  1 .
5901 C     C     . LEU LEU LEU B B 340 340 . 0.3328 0.3491 0.3272 -0.0031 0.0126
0.0017  1 .
5902 O     O     . LEU LEU LEU B B 340 340 . 0.3370 0.3551 0.3347 0.0093  0.0317  -
0.0025 1 .
5903 N     N     . LEU LEU LEU B B 341 341 . 0.3441 0.3505 0.3175 -0.0055 0.0152
0.0032  1 .
5904 CA    CA    . LEU LEU LEU B B 341 341 . 0.3265 0.3415 0.3309 0.0033  0.0118  -
0.0034 1 .
5905 CB    CB    . LEU LEU LEU B B 341 341 . 0.3448 0.3508 0.3313 -0.0199 0.0069  -
0.0004 1 .
5906 CG    CG    . LEU LEU LEU B B 341 341 . 0.3498 0.3451 0.3951 0.0238  0.0201
0.0263  1 .
5907 CD1   CD1   . LEU LEU LEU B B 341 341 . 0.5002 0.4627 0.4084 0.0268  -0.0365
0.0852  1 .
5908 CD2   CD2   . LEU LEU LEU B B 341 341 . 0.3686 0.3657 0.3559 -0.0275 0.0142
0.0172  1 .
5909 C     C     . LEU LEU LEU B B 341 341 . 0.3343 0.3302 0.3193 0.0018  0.0156  -
0.0026 1 .
5910 O     O     . LEU LEU LEU B B 341 341 . 0.3438 0.3211 0.3186 0.0046  0.0165  -
0.0097 1 .
5911 N     N     . LYS LYS LYS B B 342 342 . 0.3356 0.3261 0.3136 0.0035  0.0114
0.0040  1 .
5912 CA    CA    . LYS LYS LYS B B 342 342 . 0.3293 0.3235 0.2925 0.0072  0.0133
0.0053  1 .
5913 CB    CB    . LYS LYS LYS B B 342 342 . 0.3063 0.2995 0.2431 -0.0003 0.0207
0.0073  1 .
5914 CG    CG    . LYS LYS LYS B B 342 342 . 0.3166 0.2813 0.2612 0.0135  -0.0019
0.0270  1 .
5915 CD    CD    . LYS LYS LYS B B 342 342 . 0.2530 0.3351 0.1910 0.0045  0.0005
0.0074  1 .
5916 CE    CE    . LYS LYS LYS B B 342 342 . 0.3208 0.3340 0.2409 -0.0017 0.0498
0.0333  1 .
5917 NZ    NZ    . LYS LYS LYS B B 342 342 . 0.3272 0.3472 0.3055 -0.0483 0.0769  -
0.0724 1 .
5918 C     C     . LYS LYS LYS B B 342 342 . 0.3473 0.3321 0.3081 0.0084  0.0127
0.0006  1 .
5919 O     O     . LYS LYS LYS B B 342 342 . 0.3692 0.3426 0.2921 0.0239  0.0073
0.0180  1 .
5920 N     N     . VAL VAL VAL B B 343 343 . 0.3492 0.3522 0.3311 0.0013  0.0087  -
0.0076 1 .
5921 CA    CA    . VAL VAL VAL B B 343 343 . 0.3420 0.3596 0.3490 -0.0098 -0.0010 -
0.0105 1 .
5922 CB    CB    . VAL VAL VAL B B 343 343 . 0.3601 0.3674 0.3631 -0.0057 -0.0099 -
0.0116 1 .
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5923 CG1   CG1   . VAL VAL VAL B B 343 343 . 0.3425 0.3961 0.4050 -0.0278 -0.0298 -
0.0336 1 .
5924 CG2   CG2   . VAL VAL VAL B B 343 343 . 0.3680 0.3875 0.3750 -0.0197 0.0006
0.0000  1 .
5925 C     C     . VAL VAL VAL B B 343 343 . 0.3303 0.3649 0.3354 -0.0041 0.0015  -
0.0038 1 .
5926 O     O     . VAL VAL VAL B B 343 343 . 0.3236 0.3570 0.3324 -0.0092 -0.0079
0.0014  1 .
5927 N     N     . ASN ASN ASN B B 344 344 . 0.3099 0.3629 0.3106 -0.0055 -0.0054 -
0.0032 1 .
5928 CA    CA    . ASN ASN ASN B B 344 344 . 0.2870 0.3438 0.3242 0.0064  0.0007  -
0.0062 1 .
5929 CB    CB    . ASN ASN ASN B B 344 344 . 0.2811 0.3421 0.3099 0.0126  0.0031  -
0.0170 1 .
5930 CG    CG    . ASN ASN ASN B B 344 344 . 0.2795 0.3371 0.3263 0.0044  -0.0088 -
0.0208 1 .
5931 OD1   OD1   . ASN ASN ASN B B 344 344 . 0.2725 0.4014 0.3466 -0.0009 -0.0161 -
0.0521 1 .
5932 ND2   ND2   . ASN ASN ASN B B 344 344 . 0.2521 0.3940 0.3095 0.0181  0.0071  -
0.0124 1 .
5933 C     C     . ASN ASN ASN B B 344 344 . 0.2938 0.3513 0.3242 0.0036  0.0008  -
0.0015 1 .
5934 O     O     . ASN ASN ASN B B 344 344 . 0.2886 0.3573 0.3224 -0.0063 -0.0106 -
0.0049 1 .
5935 N     N     . GLN GLN GLN B B 345 345 . 0.2955 0.3611 0.3367 -0.0003 -0.0011
0.0014  1 .
5936 CA    CA    . GLN GLN GLN B B 345 345 . 0.3021 0.3328 0.3288 0.0052  0.0076
0.0143  1 .
5937 CB    CB    . GLN GLN GLN B B 345 345 . 0.3134 0.3185 0.3460 0.0025  0.0000
0.0208  1 .
5938 CG    CG    . GLN GLN GLN B B 345 345 . 0.2643 0.2813 0.3482 -0.0171 -0.0060
0.0246  1 .
5939 CD    CD    . GLN GLN GLN B B 345 345 . 0.3782 0.3351 0.3380 -0.0134 -0.0156
0.0221  1 .
5940 OE1   OE1   . GLN GLN GLN B B 345 345 . 0.3640 0.3439 0.4162 0.0278  0.0364
0.0322  1 .
5941 NE2   NE2   . GLN GLN GLN B B 345 345 . 0.3730 0.2866 0.2177 0.0013  -0.0831
0.1057  1 .
5942 C     C     . GLN GLN GLN B B 345 345 . 0.3298 0.3402 0.3359 0.0130  0.0169
0.0085  1 .
5943 O     O     . GLN GLN GLN B B 345 345 . 0.3365 0.3862 0.3384 0.0200  0.0347
0.0117  1 .
5944 N     N     . ILE ILE ILE B B 346 346 . 0.3022 0.3447 0.3397 0.0107  0.0088
0.0068  1 .
5945 CA    CA    . ILE ILE ILE B B 346 346 . 0.3418 0.3509 0.3526 0.0048  0.0021
0.0068  1 .
5946 CB    CB    . ILE ILE ILE B B 346 346 . 0.3196 0.3460 0.3606 -0.0019 -0.0028
0.0123  1 .
5947 CG1   CG1   . ILE ILE ILE B B 346 346 . 0.3657 0.3247 0.3471 -0.0025 0.0113
0.0063  1 .
5948 CD1   CD1   . ILE ILE ILE B B 346 346 . 0.2774 0.3203 0.3517 -0.0023 0.0549
0.0161  1 .
5949 CG2   CG2   . ILE ILE ILE B B 346 346 . 0.3032 0.3274 0.3376 -0.0091 -0.0195
0.0090  1 .
5950 C     C     . ILE ILE ILE B B 346 346 . 0.3364 0.3716 0.3782 0.0107  -0.0026
0.0045  1 .
5951 O     O     . ILE ILE ILE B B 346 346 . 0.3485 0.3784 0.3900 0.0120  -0.0058 -
0.0093 1 .
5952 N     N     . GLY GLY GLY B B 347 347 . 0.3464 0.3778 0.3888 -0.0049 0.0093
0.0103  1 .
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5953 CA    CA    . GLY GLY GLY B B 347 347 . 0.3446 0.3795 0.3776 0.0047  0.0020  -
0.0038 1 .
5954 C     C     . GLY GLY GLY B B 347 347 . 0.3416 0.3885 0.3789 0.0109  0.0002
0.0065  1 .
5955 O     O     . GLY GLY GLY B B 347 347 . 0.3262 0.4006 0.3807 0.0289  -0.0122 -
0.0076 1 .
5956 N     N     . SER SER SER B B 348 348 . 0.3212 0.3839 0.3784 0.0045  -0.0043
0.0107  1 .
5957 CA    CA    . SER SER SER B B 348 348 . 0.3252 0.3976 0.3790 0.0075  -0.0159
0.0108  1 .
5958 CB    CB    . SER SER SER B B 348 348 . 0.3132 0.4025 0.3791 0.0097  -0.0246
0.0153  1 .
5959 OG    OG    . SER SER SER B B 348 348 . 0.3009 0.3695 0.3976 -0.0106 -0.0473 -
0.0035 1 .
5960 C     C     . SER SER SER B B 348 348 . 0.3077 0.3963 0.3677 0.0129  -0.0168
0.0111  1 .
5961 O     O     . SER SER SER B B 348 348 . 0.3061 0.4259 0.3752 0.0010  -0.0087
0.0219  1 .
5962 N     N     . VAL VAL VAL B B 349 349 . 0.3143 0.4041 0.3726 0.0217  -0.0291
0.0134  1 .
5963 CA    CA    . VAL VAL VAL B B 349 349 . 0.3289 0.4126 0.3915 0.0230  -0.0173
0.0027  1 .
5964 CB    CB    . VAL VAL VAL B B 349 349 . 0.3689 0.4157 0.3851 0.0233  -0.0248
0.0051  1 .
5965 CG1   CG1   . VAL VAL VAL B B 349 349 . 0.3584 0.4089 0.3687 0.0286  -0.0151 -
0.0044 1 .
5966 CG2   CG2   . VAL VAL VAL B B 349 349 . 0.3139 0.4099 0.3741 0.0441  -0.0363
0.0002  1 .
5967 C     C     . VAL VAL VAL B B 349 349 . 0.3673 0.4379 0.4061 0.0186  0.0005
0.0017  1 .
5968 O     O     . VAL VAL VAL B B 349 349 . 0.3136 0.4515 0.4404 0.0215  0.0220  -
0.0122 1 .
5969 N     N     . THR THR THR B B 350 350 . 0.3584 0.4337 0.4236 0.0274  0.0001
0.0097  1 .
5970 CA    CA    . THR THR THR B B 350 350 . 0.3810 0.4382 0.4259 0.0080  -0.0004
0.0051  1 .
5971 CB    CB    . THR THR THR B B 350 350 . 0.3835 0.4451 0.4239 0.0031  -0.0007
0.0101  1 .
5972 OG1   OG1   . THR THR THR B B 350 350 . 0.4147 0.4447 0.4697 -0.0352 0.0197
0.0005  1 .
5973 CG2   CG2   . THR THR THR B B 350 350 . 0.4024 0.4541 0.4434 -0.0064 -0.0198
0.0025  1 .
5974 C     C     . THR THR THR B B 350 350 . 0.3813 0.4479 0.4336 0.0178  0.0013
0.0024  1 .
5975 O     O     . THR THR THR B B 350 350 . 0.3715 0.4629 0.4523 0.0321  0.0033
0.0140  1 .
5976 N     N     . GLU GLU GLU B B 351 351 . 0.3787 0.4368 0.4430 0.0162  0.0047
0.0049  1 .
5977 CA    CA    . GLU GLU GLU B B 351 351 . 0.4098 0.4552 0.4519 0.0172  -0.0003
0.0020  1 .
5978 CB    CB    . GLU GLU GLU B B 351 351 . 0.4146 0.4484 0.4628 0.0117  -0.0025 -
0.0035 1 .
5979 CG    CG    . GLU GLU GLU B B 351 351 . 0.4335 0.4751 0.4908 0.0335  -0.0110
0.0099  1 .
5980 CD    CD    . GLU GLU GLU B B 351 351 . 0.4477 0.4891 0.5203 0.0319  -0.0196
0.0172  1 .
5981 OE1   OE1   . GLU GLU GLU B B 351 351 . 0.4539 0.5133 0.5282 0.0598  0.0186
0.0320  1 .
5982 OE2   OE2   . GLU GLU GLU B B 351 351 . 0.4200 0.5187 0.5367 0.0268  -0.0530
0.0952  1 .
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5983 C     C     . GLU GLU GLU B B 351 351 . 0.4113 0.4578 0.4428 0.0127  0.0073
0.0035  1 .
5984 O     O     . GLU GLU GLU B B 351 351 . 0.4170 0.4870 0.4601 0.0095  0.0038
0.0098  1 .
5985 N     N     . ALA ALA ALA B B 352 352 . 0.4049 0.4465 0.4273 0.0150  0.0073
0.0163  1 .
5986 CA    CA    . ALA ALA ALA B B 352 352 . 0.4218 0.4437 0.4267 0.0039  0.0072
0.0135  1 .
5987 CB    CB    . ALA ALA ALA B B 352 352 . 0.4069 0.4327 0.4236 0.0255  0.0004
0.0135  1 .
5988 C     C     . ALA ALA ALA B B 352 352 . 0.4154 0.4421 0.4375 -0.0059 0.0052
0.0140  1 .
5989 O     O     . ALA ALA ALA B B 352 352 . 0.4057 0.4456 0.4397 -0.0056 0.0094
0.0179  1 .
5990 N     N     . ILE ILE ILE B B 353 353 . 0.4267 0.4474 0.4347 -0.0116 -0.0010
0.0207  1 .
5991 CA    CA    . ILE ILE ILE B B 353 353 . 0.4132 0.4323 0.4269 -0.0197 -0.0001
0.0126  1 .
5992 CB    CB    . ILE ILE ILE B B 353 353 . 0.4299 0.4323 0.4273 -0.0179 0.0000
0.0156  1 .
5993 CG1   CG1   . ILE ILE ILE B B 353 353 . 0.4454 0.4333 0.3977 -0.0112 0.0151
0.0116  1 .
5994 CD1   CD1   . ILE ILE ILE B B 353 353 . 0.4577 0.4208 0.3349 -0.0202 0.0105
0.0137  1 .
5995 CG2   CG2   . ILE ILE ILE B B 353 353 . 0.3772 0.4413 0.4169 -0.0232 0.0103
0.0092  1 .
5996 C     C     . ILE ILE ILE B B 353 353 . 0.4071 0.4303 0.4316 -0.0224 -0.0038
0.0091  1 .
5997 O     O     . ILE ILE ILE B B 353 353 . 0.3889 0.4250 0.4303 -0.0463 -0.0169 -
0.0073 1 .
5998 N     N     . GLN GLN GLN B B 354 354 . 0.4037 0.4331 0.4425 -0.0119 -0.0075
0.0167  1 .
5999 CA    CA    . GLN GLN GLN B B 354 354 . 0.4292 0.4393 0.4338 -0.0005 -0.0007
0.0184  1 .
6000 CB    CB    . GLN GLN GLN B B 354 354 . 0.4474 0.4532 0.4538 0.0186  -0.0133
0.0210  1 .
6001 CG    CG    . GLN GLN GLN B B 354 354 . 0.5261 0.5286 0.5539 0.0175  -0.0004 -
0.0024 1 .
6002 CD    CD    . GLN GLN GLN B B 354 354 . 0.5776 0.6704 0.6223 0.1032  -0.0279 -
0.0431 1 .
6003 OE1   OE1   . GLN GLN GLN B B 354 354 . 0.5490 0.7275 0.6058 0.1362  -0.0501 -
0.0840 1 .
6004 NE2   NE2   . GLN GLN GLN B B 354 354 . 0.6298 0.7361 0.6146 0.1051  -0.0549 -
0.0566 1 .
6005 C     C     . GLN GLN GLN B B 354 354 . 0.4214 0.4215 0.4146 0.0067  -0.0072
0.0184  1 .
6006 O     O     . GLN GLN GLN B B 354 354 . 0.4325 0.4405 0.4125 0.0135  -0.0068
0.0108  1 .
6007 N     N     . ALA ALA ALA B B 355 355 . 0.3888 0.3830 0.3748 0.0050  -0.0107
0.0249  1 .
6008 CA    CA    . ALA ALA ALA B B 355 355 . 0.3724 0.3731 0.3773 0.0008  -0.0221
0.0196  1 .
6009 CB    CB    . ALA ALA ALA B B 355 355 . 0.4058 0.3593 0.3649 0.0050  -0.0185
0.0277  1 .
6010 C     C     . ALA ALA ALA B B 355 355 . 0.3541 0.3917 0.3770 -0.0029 -0.0209
0.0185  1 .
6011 O     O     . ALA ALA ALA B B 355 355 . 0.3116 0.3951 0.3760 0.0000  -0.0308
0.0411  1 .
6012 N     N     . CYS CYS CYS B B 356 356 . 0.3530 0.4014 0.3827 0.0014  -0.0278
0.0151  1 .
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6013 CA    CA    . CYS CYS CYS B B 356 356 . 0.3780 0.4112 0.3936 0.0045  -0.0166
0.0053  1 .
6014 CB    CB    . CYS CYS CYS B B 356 356 . 0.3839 0.4172 0.4046 -0.0005 -0.0208
0.0014  1 .
6015 SG    SG    . CYS CYS CYS B B 356 356 . 0.4732 0.4543 0.4086 0.0400  -0.0316
0.0218  1 .
6016 C     C     . CYS CYS CYS B B 356 356 . 0.3882 0.4260 0.4131 0.0011  -0.0108
0.0004  1 .
6017 O     O     . CYS CYS CYS B B 356 356 . 0.3545 0.4090 0.3933 0.0067  -0.0110 -
0.0018 1 .
6018 N     N     . LYS LYS LYS B B 357 357 . 0.4038 0.4502 0.4353 -0.0069 -0.0084 -
0.0006 1 .
6019 CA    CA    . LYS LYS LYS B B 357 357 . 0.4263 0.4674 0.4557 -0.0060 -0.0136 -
0.0038 1 .
6020 CB    CB    . LYS LYS LYS B B 357 357 . 0.4511 0.4856 0.4748 -0.0093 -0.0116 -
0.0036 1 .
6021 CG    CG    . LYS LYS LYS B B 357 357 . 0.4609 0.5273 0.5203 -0.0086 -0.0185
0.0147  1 .
6022 CD    CD    . LYS LYS LYS B B 357 357 . 0.5241 0.6351 0.5811 -0.0272 0.0165
0.0330  1 .
6023 CE    CE    . LYS LYS LYS B B 357 357 . 0.5287 0.6822 0.6775 -0.0054 0.0082
0.0349  1 .
6024 NZ    NZ    . LYS LYS LYS B B 357 357 . 0.5790 0.7389 0.7311 -0.0018 0.0268
0.0144  1 .
6025 C     C     . LYS LYS LYS B B 357 357 . 0.4434 0.4807 0.4683 -0.0026 -0.0167 -
0.0083 1 .
6026 O     O     . LYS LYS LYS B B 357 357 . 0.4509 0.5149 0.4830 0.0001  -0.0260 -
0.0166 1 .
6027 N     N     . LEU LEU LEU B B 358 358 . 0.4382 0.4722 0.4661 0.0012  -0.0261 -
0.0031 1 .
6028 CA    CA    . LEU LEU LEU B B 358 358 . 0.4393 0.4667 0.4590 -0.0049 -0.0217
0.0058  1 .
6029 CB    CB    . LEU LEU LEU B B 358 358 . 0.4612 0.4754 0.4608 -0.0077 -0.0359
0.0108  1 .
6030 CG    CG    . LEU LEU LEU B B 358 358 . 0.4952 0.4762 0.4776 -0.0232 -0.0440
0.0157  1 .
6031 CD1   CD1   . LEU LEU LEU B B 358 358 . 0.5686 0.4740 0.4585 -0.0156 -0.0965
0.0106  1 .
6032 CD2   CD2   . LEU LEU LEU B B 358 358 . 0.5559 0.4866 0.3848 -0.0567 -0.0854
0.0240  1 .
6033 C     C     . LEU LEU LEU B B 358 358 . 0.4427 0.4694 0.4481 -0.0010 -0.0195
0.0065  1 .
6034 O     O     . LEU LEU LEU B B 358 358 . 0.4412 0.4778 0.4665 -0.0082 -0.0293
0.0205  1 .
6035 N     N     . ALA ALA ALA B B 359 359 . 0.4345 0.4534 0.4224 -0.0035 -0.0129
0.0018  1 .
6036 CA    CA    . ALA ALA ALA B B 359 359 . 0.4262 0.4411 0.4259 -0.0060 -0.0217 -
0.0012 1 .
6037 CB    CB    . ALA ALA ALA B B 359 359 . 0.4154 0.4130 0.4054 -0.0100 -0.0295 -
0.0021 1 .
6038 C     C     . ALA ALA ALA B B 359 359 . 0.4272 0.4393 0.4188 -0.0050 -0.0208 -
0.0028 1 .
6039 O     O     . ALA ALA ALA B B 359 359 . 0.4040 0.4459 0.4293 -0.0147 -0.0364 -
0.0045 1 .
6040 N     N     . GLN GLN GLN B B 360 360 . 0.4385 0.4516 0.4251 -0.0216 -0.0220 -
0.0044 1 .
6041 CA    CA    . GLN GLN GLN B B 360 360 . 0.4717 0.4714 0.4482 -0.0137 -0.0186
0.0043  1 .
6042 CB    CB    . GLN GLN GLN B B 360 360 . 0.4657 0.4677 0.4440 -0.0088 -0.0212
0.0091  1 .
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6043 CG    CG    . GLN GLN GLN B B 360 360 . 0.4899 0.4807 0.4549 -0.0150 -0.0180
0.0159  1 .
6044 CD    CD    . GLN GLN GLN B B 360 360 . 0.4480 0.4503 0.4339 0.0022  -0.0276
0.0135  1 .
6045 OE1   OE1   . GLN GLN GLN B B 360 360 . 0.4284 0.4806 0.4420 0.0251  -0.0458 -
0.0206 1 .
6046 NE2   NE2   . GLN GLN GLN B B 360 360 . 0.3834 0.4395 0.4482 0.0132  -0.0452
0.0187  1 .
6047 C     C     . GLN GLN GLN B B 360 360 . 0.4621 0.4859 0.4580 -0.0188 -0.0196
0.0016  1 .
6048 O     O     . GLN GLN GLN B B 360 360 . 0.4464 0.4895 0.4540 -0.0332 -0.0345 -
0.0022 1 .
6049 N     N     . GLU GLU GLU B B 361 361 . 0.4887 0.4959 0.4823 -0.0097 -0.0147
0.0039  1 .
6050 CA    CA    . GLU GLU GLU B B 361 361 . 0.5154 0.5270 0.5063 -0.0120 -0.0163 -
0.0003 1 .
6051 CB    CB    . GLU GLU GLU B B 361 361 . 0.5283 0.5511 0.5321 -0.0095 -0.0037
0.0024  1 .
6052 CG    CG    . GLU GLU GLU B B 361 361 . 0.5965 0.6391 0.6168 -0.0098 -0.0290
0.0035  1 .
6053 CD    CD    . GLU GLU GLU B B 361 361 . 0.7212 0.7180 0.6919 0.0198  0.0154
0.0045  1 .
6054 OE1   OE1   . GLU GLU GLU B B 361 361 . 0.7961 0.7151 0.7453 0.0304  0.0026
0.0335  1 .
6055 OE2   OE2   . GLU GLU GLU B B 361 361 . 0.7824 0.7407 0.7379 -0.0103 -0.0119
0.0368  1 .
6056 C     C     . GLU GLU GLU B B 361 361 . 0.5155 0.5232 0.5011 -0.0150 -0.0226 -
0.0040 1 .
6057 O     O     . GLU GLU GLU B B 361 361 . 0.5117 0.5351 0.5025 -0.0298 -0.0437 -
0.0018 1 .
6058 N     N     . ASN ASN ASN B B 362 362 . 0.4911 0.5150 0.4885 -0.0133 -0.0274 -
0.0046 1 .
6059 CA    CA    . ASN ASN ASN B B 362 362 . 0.4801 0.5053 0.4702 -0.0090 -0.0224 -
0.0114 1 .
6060 CB    CB    . ASN ASN ASN B B 362 362 . 0.4954 0.5104 0.4832 -0.0009 -0.0274 -
0.0040 1 .
6061 CG    CG    . ASN ASN ASN B B 362 362 . 0.5131 0.5089 0.4777 -0.0072 -0.0264
0.0115  1 .
6062 OD1   OD1   . ASN ASN ASN B B 362 362 . 0.5443 0.5287 0.4855 -0.0599 -0.0473
0.0264  1 .
6063 ND2   ND2   . ASN ASN ASN B B 362 362 . 0.5083 0.4755 0.4617 -0.0039 -0.0057
0.0621  1 .
6064 C     C     . ASN ASN ASN B B 362 362 . 0.4673 0.4942 0.4606 -0.0025 -0.0286 -
0.0123 1 .
6065 O     O     . ASN ASN ASN B B 362 362 . 0.4485 0.5163 0.4503 -0.0033 -0.0352 -
0.0141 1 .
6066 N     N     . GLY GLY GLY B B 363 363 . 0.4610 0.5012 0.4535 -0.0013 -0.0228
0.0012  1 .
6067 CA    CA    . GLY GLY GLY B B 363 363 . 0.4657 0.4918 0.4465 0.0098  -0.0187 -
0.0029 1 .
6068 C     C     . GLY GLY GLY B B 363 363 . 0.4587 0.4838 0.4493 0.0042  -0.0118 -
0.0063 1 .
6069 O     O     . GLY GLY GLY B B 363 363 . 0.4670 0.4857 0.4445 0.0134  -0.0060 -
0.0078 1 .
6070 N     N     . TRP TRP TRP B B 364 364 . 0.4555 0.4603 0.4381 0.0023  -0.0203 -
0.0059 1 .
6071 CA    CA    . TRP TRP TRP B B 364 364 . 0.4581 0.4460 0.4205 0.0021  -0.0247
0.0018  1 .
6072 CB    CB    . TRP TRP TRP B B 364 364 . 0.4630 0.4383 0.4167 0.0125  -0.0459
0.0049  1 .
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6073 CG    CG    . TRP TRP TRP B B 364 364 . 0.5055 0.4824 0.4736 -0.0037 -0.0262
0.0169  1 .
6074 CD1   CD1   . TRP TRP TRP B B 364 364 . 0.5332 0.5132 0.4902 -0.0021 -0.0224
0.0107  1 .
6075 NE1   NE1   . TRP TRP TRP B B 364 364 . 0.5846 0.5447 0.5036 0.0050  -0.0268
0.0418  1 .
6076 CE2   CE2   . TRP TRP TRP B B 364 364 . 0.5509 0.5159 0.5245 -0.0041 -0.0207
0.0126  1 .
6077 CD2   CD2   . TRP TRP TRP B B 364 364 . 0.5409 0.5034 0.4799 -0.0042 -0.0193
0.0119  1 .
6078 CE3   CE3   . TRP TRP TRP B B 364 364 . 0.5551 0.4965 0.4689 0.0025  -0.0171
0.0317  1 .
6079 CZ3   CZ3   . TRP TRP TRP B B 364 364 . 0.5438 0.5057 0.4758 0.0257  -0.0179
0.0315  1 .
6080 CH2   CH2   . TRP TRP TRP B B 364 364 . 0.5284 0.5159 0.5264 0.0006  0.0300
0.0238  1 .
6081 CZ2   CZ2   . TRP TRP TRP B B 364 364 . 0.5114 0.5100 0.5248 0.0109  -0.0187
0.0375  1 .
6082 C     C     . TRP TRP TRP B B 364 364 . 0.4275 0.4282 0.4111 -0.0029 -0.0207 -
0.0092 1 .
6083 O     O     . TRP TRP TRP B B 364 364 . 0.4051 0.4125 0.3884 -0.0285 -0.0241 -
0.0140 1 .
6084 N     N     . GLY GLY GLY B B 365 365 . 0.4096 0.4221 0.4009 0.0020  -0.0180 -
0.0095 1 .
6085 CA    CA    . GLY GLY GLY B B 365 365 . 0.3850 0.3920 0.3886 -0.0043 -0.0144 -
0.0100 1 .
6086 C     C     . GLY GLY GLY B B 365 365 . 0.3851 0.3890 0.3845 -0.0078 -0.0169
0.0004  1 .
6087 O     O     . GLY GLY GLY B B 365 365 . 0.3910 0.3890 0.3848 0.0105  -0.0337 -
0.0042 1 .
6088 N     N     . VAL VAL VAL B B 366 366 . 0.3798 0.3781 0.3709 -0.0096 -0.0211
0.0015  1 .
6089 CA    CA    . VAL VAL VAL B B 366 366 . 0.3538 0.3479 0.3594 -0.0053 -0.0085
0.0017  1 .
6090 CB    CB    . VAL VAL VAL B B 366 366 . 0.3562 0.3571 0.3510 -0.0047 -0.0148
0.0051  1 .
6091 CG1   CG1   . VAL VAL VAL B B 366 366 . 0.2911 0.2844 0.3100 0.0065  0.0134
0.0057  1 .
6092 CG2   CG2   . VAL VAL VAL B B 366 366 . 0.4123 0.3150 0.3936 -0.0072 -0.0325
0.0085  1 .
6093 C     C     . VAL VAL VAL B B 366 366 . 0.3411 0.3543 0.3449 -0.0082 -0.0096
0.0021  1 .
6094 O     O     . VAL VAL VAL B B 366 366 . 0.3445 0.3919 0.3664 0.0068  -0.0303 -
0.0036 1 .
6095 N     N     . MET MET MET B B 367 367 . 0.3226 0.3352 0.3439 -0.0102 -0.0037
0.0056  1 .
6096 CA    CA    . MET MET MET B B 367 367 . 0.3072 0.3246 0.3311 -0.0080 -0.0083
0.0037  1 .
6097 CB    CB    . MET MET MET B B 367 367 . 0.2887 0.3075 0.3054 -0.0188 -0.0002 -
0.0013 1 .
6098 CG    CG    . MET MET MET B B 367 367 . 0.3046 0.2917 0.3385 -0.0004 -0.0305
0.0180  1 .
6099 SD    SD    . MET MET MET B B 367 367 . 0.3754 0.3346 0.3576 0.0431  -0.0114
0.0018  1 .
6100 CE    CE    . MET MET MET B B 367 367 . 0.3272 0.3777 0.3004 0.0544  -0.0658 -
0.0431 1 .
6101 C     C     . MET MET MET B B 367 367 . 0.2869 0.3302 0.3321 -0.0029 0.0020
0.0087  1 .
6102 O     O     . MET MET MET B B 367 367 . 0.2384 0.3359 0.3367 -0.0073 -0.0045
0.0149  1 .
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6103 N     N     . VAL VAL VAL B B 368 368 . 0.3003 0.3341 0.3291 0.0064  -0.0028
0.0160  1 .
6104 CA    CA    . VAL VAL VAL B B 368 368 . 0.3276 0.3329 0.3179 0.0118  -0.0011
0.0133  1 .
6105 CB    CB    . VAL VAL VAL B B 368 368 . 0.3290 0.3511 0.3211 0.0109  0.0023
0.0098  1 .
6106 CG1   CG1   . VAL VAL VAL B B 368 368 . 0.3322 0.3121 0.2807 0.0360  -0.0143 -
0.0072 1 .
6107 CG2   CG2   . VAL VAL VAL B B 368 368 . 0.3069 0.3144 0.2533 0.0415  -0.0264
0.0288  1 .
6108 C     C     . VAL VAL VAL B B 368 368 . 0.3394 0.3453 0.3185 0.0116  -0.0048
0.0098  1 .
6109 O     O     . VAL VAL VAL B B 368 368 . 0.3764 0.3683 0.3227 0.0198  -0.0127
0.0244  1 .
6110 N     N     . SER SER SER B B 369 369 . 0.3533 0.3560 0.3311 0.0058  -0.0045
0.0199  1 .
6111 CA    CA    . SER SER SER B B 369 369 . 0.3265 0.3434 0.3273 -0.0001 -0.0111
0.0177  1 .
6112 CB    CB    . SER SER SER B B 369 369 . 0.3320 0.3441 0.3161 -0.0084 -0.0079
0.0216  1 .
6113 OG    OG    . SER SER SER B B 369 369 . 0.2940 0.3213 0.3173 0.0000  -0.0405
0.0377  1 .
6114 C     C     . SER SER SER B B 369 369 . 0.3204 0.3427 0.3197 0.0062  -0.0058
0.0171  1 .
6115 O     O     . SER SER SER B B 369 369 . 0.3556 0.3572 0.3374 0.0120  -0.0070
0.0351  1 .
6116 N     N     . HIS HIS HIS B B 370 370 . 0.3053 0.3272 0.3101 0.0163  -0.0014
0.0112  1 .
6117 CA    CA    . HIS HIS HIS B B 370 370 . 0.2582 0.2918 0.2853 0.0082  -0.0057
0.0063  1 .
6118 CB    CB    . HIS HIS HIS B B 370 370 . 0.2770 0.2568 0.2585 0.0076  0.0066
0.0012  1 .
6119 CG    CG    . HIS HIS HIS B B 370 370 . 0.2235 0.2426 0.2685 -0.0055 -0.0035
0.0046  1 .
6120 ND1   ND1   . HIS HIS HIS B B 370 370 . 0.3360 0.2639 0.2633 0.0294  -0.0034
0.1025  1 .
6121 CE1   CE1   . HIS HIS HIS B B 370 370 . 0.3104 0.3063 0.2845 0.0459  -0.0205
0.0687  1 .
6122 NE2   NE2   . HIS HIS HIS B B 370 370 . 0.3582 0.2419 0.3265 0.0278  -0.0011
0.0663  1 .
6123 CD2   CD2   . HIS HIS HIS B B 370 370 . 0.2793 0.2315 0.2829 0.0024  -0.0055
0.0155  1 .
6124 C     C     . HIS HIS HIS B B 370 370 . 0.2597 0.3010 0.2825 0.0227  -0.0054
0.0122  1 .
6125 O     O     . HIS HIS HIS B B 370 370 . 0.2440 0.3267 0.2956 0.0362  -0.0321
0.0456  1 .
6126 N     N     . ARG ARG ARG B B 371 371 . 0.2505 0.2878 0.2658 0.0175  -0.0170
0.0032  1 .
6127 CA    CA    . ARG ARG ARG B B 371 371 . 0.2333 0.2716 0.2441 0.0048  -0.0020
0.0153  1 .
6128 CB    CB    . ARG ARG ARG B B 371 371 . 0.2267 0.2529 0.2163 0.0052  0.0064  -
0.0021 1 .
6129 CG    CG    . ARG ARG ARG B B 371 371 . 0.2490 0.2917 0.1899 -0.0049 -0.0176
0.0048  1 .
6130 CD    CD    . ARG ARG ARG B B 371 371 . 0.2517 0.2848 0.2174 -0.0054 -0.0489
0.0397  1 .
6131 NE    NE    . ARG ARG ARG B B 371 371 . 0.2421 0.2565 0.2231 0.0316  -0.0054 -
0.0015 1 .
6132 CZ    CZ    . ARG ARG ARG B B 371 371 . 0.2100 0.2315 0.2170 0.0002  0.0026  -
0.0134 1 .
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6133 NH1   NH1   . ARG ARG ARG B B 371 371 . 0.1386 0.2703 0.1839 0.0196  -0.0281 -
0.0603 1 .
6134 NH2   NH2   . ARG ARG ARG B B 371 371 . 0.0600 0.2104 0.2008 -0.0177 -0.0422 -
0.0585 1 .
6135 C     C     . ARG ARG ARG B B 371 371 . 0.2297 0.2656 0.2306 0.0057  -0.0069
0.0070  1 .
6136 O     O     . ARG ARG ARG B B 371 371 . 0.2351 0.2679 0.1922 0.0356  0.0056  -
0.0072 1 .
6137 N     N     . SER SER SER B B 372 372 . 0.2210 0.2595 0.2183 0.0075  -0.0034 -
0.0009 1 .
6138 CA    CA    . SER SER SER B B 372 372 . 0.2341 0.2719 0.2575 0.0056  -0.0055
0.0039  1 .
6139 CB    CB    . SER SER SER B B 372 372 . 0.2198 0.2415 0.2235 -0.0026 -0.0020
0.0084  1 .
6140 OG    OG    . SER SER SER B B 372 372 . 0.2425 0.3051 0.2906 -0.0077 -0.0059
0.0281  1 .
6141 C     C     . SER SER SER B B 372 372 . 0.2464 0.2747 0.2611 0.0089  -0.0144
0.0146  1 .
6142 O     O     . SER SER SER B B 372 372 . 0.2496 0.2886 0.3121 0.0123  -0.0175
0.0046  1 .
6143 N     N     . GLY GLY GLY B B 373 373 . 0.2595 0.2943 0.2726 0.0017  -0.0099
0.0222  1 .
6144 CA    CA    . GLY GLY GLY B B 373 373 . 0.2615 0.2688 0.2816 -0.0068 -0.0035
0.0152  1 .
6145 C     C     . GLY GLY GLY B B 373 373 . 0.2787 0.2999 0.2956 0.0032  -0.0042
0.0101  1 .
6146 O     O     . GLY GLY GLY B B 373 373 . 0.2565 0.3229 0.2962 -0.0157 -0.0099
0.0103  1 .
6147 N     N     . GLU GLU GLU B B 374 374 . 0.2899 0.2788 0.2953 -0.0048 0.0017  -
0.0047 1 .
6148 CA    CA    . GLU GLU GLU B B 374 374 . 0.2795 0.2976 0.2852 0.0040  0.0047  -
0.0116 1 .
6149 CB    CB    . GLU GLU GLU B B 374 374 . 0.2802 0.2781 0.2880 0.0068  -0.0111 -
0.0087 1 .
6150 CG    CG    . GLU GLU GLU B B 374 374 . 0.2569 0.2841 0.2399 0.0263  0.0072  -
0.0560 1 .
6151 CD    CD    . GLU GLU GLU B B 374 374 . 0.2808 0.3117 0.2612 -0.0021 0.0109  -
0.0139 1 .
6152 OE1   OE1   . GLU GLU GLU B B 374 374 . 0.2127 0.3605 0.3070 -0.0568 0.0354  -
0.0242 1 .
6153 OE2   OE2   . GLU GLU GLU B B 374 374 . 0.2675 0.2986 0.3073 0.0994  0.0015  -
0.0115 1 .
6154 C     C     . GLU GLU GLU B B 374 374 . 0.2914 0.3133 0.3038 -0.0008 0.0071  -
0.0121 1 .
6155 O     O     . GLU GLU GLU B B 374 374 . 0.2817 0.3206 0.2818 -0.0081 0.0112  -
0.0257 1 .
6156 N     N     . THR THR THR B B 375 375 . 0.2918 0.3273 0.3191 -0.0048 0.0097  -
0.0133 1 .
6157 CA    CA    . THR THR THR B B 375 375 . 0.2940 0.3277 0.3129 -0.0065 0.0130
0.0008  1 .
6158 CB    CB    . THR THR THR B B 375 375 . 0.3010 0.3205 0.3123 0.0016  0.0024  -
0.0011 1 .
6159 OG1   OG1   . THR THR THR B B 375 375 . 0.2105 0.3624 0.3270 -0.0136 0.0105
0.0082  1 .
6160 CG2   CG2   . THR THR THR B B 375 375 . 0.3312 0.3227 0.3008 -0.0074 0.0193  -
0.0071 1 .
6161 C     C     . THR THR THR B B 375 375 . 0.3096 0.3486 0.3240 -0.0078 0.0063  -
0.0046 1 .
6162 O     O     . THR THR THR B B 375 375 . 0.3073 0.3575 0.3150 -0.0281 -0.0105 -
0.0110 1 .
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6163 N     N     . GLU GLU GLU B B 376 376 . 0.3307 0.3550 0.3412 -0.0032 -0.0065
0.0066  1 .
6164 CA    CA    . GLU GLU GLU B B 376 376 . 0.3544 0.3705 0.3505 -0.0040 -0.0103 -
0.0024 1 .
6165 CB    CB    . GLU GLU GLU B B 376 376 . 0.3615 0.3765 0.3597 0.0010  -0.0089
0.0001  1 .
6166 CG    CG    . GLU GLU GLU B B 376 376 . 0.3927 0.3945 0.3849 -0.0076 0.0146  -
0.0180 1 .
6167 CD    CD    . GLU GLU GLU B B 376 376 . 0.4407 0.4191 0.3897 -0.0279 0.0393  -
0.0144 1 .
6168 OE1   OE1   . GLU GLU GLU B B 376 376 . 0.4349 0.4628 0.3945 -0.0979 0.0633  -
0.0486 1 .
6169 OE2   OE2   . GLU GLU GLU B B 376 376 . 0.4086 0.4131 0.3603 -0.0258 0.0459
0.0415  1 .
6170 C     C     . GLU GLU GLU B B 376 376 . 0.3709 0.3759 0.3529 0.0008  -0.0134 -
0.0008 1 .
6171 O     O     . GLU GLU GLU B B 376 376 . 0.4080 0.3908 0.3407 0.0010  -0.0215 -
0.0004 1 .
6172 N     N     . ASP ASP ASP B B 377 377 . 0.3693 0.3935 0.3538 0.0072  -0.0153 -
0.0030 1 .
6173 CA    CA    . ASP ASP ASP B B 377 377 . 0.3489 0.3814 0.3705 -0.0072 0.0008  -
0.0059 1 .
6174 CB    CB    . ASP ASP ASP B B 377 377 . 0.3424 0.3765 0.3661 0.0017  -0.0010 -
0.0089 1 .
6175 CG    CG    . ASP ASP ASP B B 377 377 . 0.4071 0.4287 0.4145 -0.0085 0.0145  -
0.0227 1 .
6176 OD1   OD1   . ASP ASP ASP B B 377 377 . 0.5780 0.5973 0.4648 -0.0019 -0.0138 -
0.0203 1 .
6177 OD2   OD2   . ASP ASP ASP B B 377 377 . 0.3268 0.4714 0.4803 -0.0762 0.0425
0.0078  1 .
6178 C     C     . ASP ASP ASP B B 377 377 . 0.3511 0.3612 0.3651 -0.0109 -0.0040 -
0.0079 1 .
6179 O     O     . ASP ASP ASP B B 377 377 . 0.3604 0.3628 0.3755 -0.0057 0.0108  -
0.0213 1 .
6180 N     N     . THR THR THR B B 378 378 . 0.3500 0.3738 0.3681 -0.0086 0.0048
0.0025  1 .
6181 CA    CA    . THR THR THR B B 378 378 . 0.3519 0.3651 0.3557 -0.0074 0.0006
0.0076  1 .
6182 CB    CB    . THR THR THR B B 378 378 . 0.3364 0.3596 0.3580 0.0020  0.0035
0.0189  1 .
6183 OG1   OG1   . THR THR THR B B 378 378 . 0.3589 0.3614 0.3236 -0.0049 -0.0581
0.0228  1 .
6184 CG2   CG2   . THR THR THR B B 378 378 . 0.3748 0.3838 0.3460 -0.0207 -0.0008
0.0318  1 .
6185 C     C     . THR THR THR B B 378 378 . 0.3299 0.3586 0.3569 -0.0111 0.0039
0.0097  1 .
6186 O     O     . THR THR THR B B 378 378 . 0.3136 0.3535 0.3740 -0.0383 0.0045
0.0135  1 .
6187 N     N     . PHE PHE PHE B B 379 379 . 0.3397 0.3598 0.3572 -0.0150 0.0018
0.0090  1 .
6188 CA    CA    . PHE PHE PHE B B 379 379 . 0.3245 0.3631 0.3547 -0.0048 -0.0065
0.0154  1 .
6189 CB    CB    . PHE PHE PHE B B 379 379 . 0.3313 0.3526 0.3533 -0.0171 -0.0121
0.0039  1 .
6190 CG    CG    . PHE PHE PHE B B 379 379 . 0.3837 0.3864 0.3932 0.0087  -0.0126
0.0265  1 .
6191 CD1   CD1   . PHE PHE PHE B B 379 379 . 0.4197 0.3959 0.3693 0.0063  -0.0246 -
0.0196 1 .
6192 CE1   CE1   . PHE PHE PHE B B 379 379 . 0.3981 0.4342 0.3977 0.0358  -0.0114 -
0.0187 1 .
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6193 CZ    CZ    . PHE PHE PHE B B 379 379 . 0.4124 0.3990 0.4258 0.0403  -0.0061
0.0140  1 .
6194 CE2   CE2   . PHE PHE PHE B B 379 379 . 0.3849 0.3514 0.4211 0.0389  0.0068  -
0.0067 1 .
6195 CD2   CD2   . PHE PHE PHE B B 379 379 . 0.3847 0.3736 0.4129 0.0081  -0.0365
0.0082  1 .
6196 C     C     . PHE PHE PHE B B 379 379 . 0.3343 0.3575 0.3577 -0.0120 -0.0167
0.0021  1 .
6197 O     O     . PHE PHE PHE B B 379 379 . 0.2991 0.3344 0.3888 -0.0059 -0.0321
0.0185  1 .
6198 N     N     . ILE ILE ILE B B 380 380 . 0.3256 0.3726 0.3461 -0.0112 -0.0107
0.0111  1 .
6199 CA    CA    . ILE ILE ILE B B 380 380 . 0.3256 0.3628 0.3535 -0.0149 -0.0113
0.0026  1 .
6200 CB    CB    . ILE ILE ILE B B 380 380 . 0.3114 0.3502 0.3459 -0.0155 -0.0119
0.0057  1 .
6201 CG1   CG1   . ILE ILE ILE B B 380 380 . 0.2991 0.3328 0.3292 -0.0171 -0.0230
0.0285  1 .
6202 CD1   CD1   . ILE ILE ILE B B 380 380 . 0.2551 0.3630 0.3030 -0.0448 0.0145
0.0153  1 .
6203 CG2   CG2   . ILE ILE ILE B B 380 380 . 0.2832 0.3231 0.3085 -0.0153 -0.0609
0.0043  1 .
6204 C     C     . ILE ILE ILE B B 380 380 . 0.3318 0.3555 0.3608 -0.0154 -0.0093
0.0005  1 .
6205 O     O     . ILE ILE ILE B B 380 380 . 0.3733 0.3947 0.3401 -0.0155 -0.0079 -
0.0041 1 .
6206 N     N     . ALA ALA ALA B B 381 381 . 0.3078 0.3423 0.3458 -0.0292 -0.0131
0.0070  1 .
6207 CA    CA    . ALA ALA ALA B B 381 381 . 0.3070 0.3268 0.3374 -0.0143 -0.0023 -
0.0101 1 .
6208 CB    CB    . ALA ALA ALA B B 381 381 . 0.3029 0.3173 0.3317 0.0041  -0.0067 -
0.0157 1 .
6209 C     C     . ALA ALA ALA B B 381 381 . 0.3248 0.3244 0.3349 -0.0253 -0.0031 -
0.0153 1 .
6210 O     O     . ALA ALA ALA B B 381 381 . 0.3501 0.3385 0.3527 -0.0494 0.0014  -
0.0185 1 .
6211 N     N     . ASP ASP ASP B B 382 382 . 0.2953 0.3191 0.3391 -0.0308 0.0019  -
0.0126 1 .
6212 CA    CA    . ASP ASP ASP B B 382 382 . 0.3418 0.3439 0.3615 -0.0232 0.0071  -
0.0016 1 .
6213 CB    CB    . ASP ASP ASP B B 382 382 . 0.3245 0.3427 0.3633 -0.0323 0.0111  -
0.0039 1 .
6214 CG    CG    . ASP ASP ASP B B 382 382 . 0.3751 0.3885 0.4014 -0.0355 0.0003
0.0173  1 .
6215 OD1   OD1   . ASP ASP ASP B B 382 382 . 0.3324 0.4417 0.4514 -0.0419 0.0149
0.0514  1 .
6216 OD2   OD2   . ASP ASP ASP B B 382 382 . 0.4644 0.3680 0.4674 -0.0640 -0.0406 -
0.0094 1 .
6217 C     C     . ASP ASP ASP B B 382 382 . 0.3371 0.3512 0.3479 -0.0217 0.0068  -
0.0030 1 .
6218 O     O     . ASP ASP ASP B B 382 382 . 0.3483 0.3735 0.3734 -0.0357 0.0365  -
0.0020 1 .
6219 N     N     . LEU LEU LEU B B 383 383 . 0.3392 0.3525 0.3498 -0.0121 0.0121
0.0088  1 .
6220 CA    CA    . LEU LEU LEU B B 383 383 . 0.3138 0.3403 0.3446 0.0031  0.0019
0.0057  1 .
6221 CB    CB    . LEU LEU LEU B B 383 383 . 0.3043 0.3401 0.3627 0.0132  -0.0016
0.0051  1 .
6222 CG    CG    . LEU LEU LEU B B 383 383 . 0.2636 0.3340 0.3570 0.0011  0.0003
0.0193  1 .
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6223 CD1   CD1   . LEU LEU LEU B B 383 383 . 0.2414 0.2886 0.3397 0.0889  0.0203  -
0.0024 1 .
6224 CD2   CD2   . LEU LEU LEU B B 383 383 . 0.2948 0.2774 0.2792 -0.0035 -0.0031
0.0294  1 .
6225 C     C     . LEU LEU LEU B B 383 383 . 0.3209 0.3464 0.3303 0.0086  -0.0085
0.0117  1 .
6226 O     O     . LEU LEU LEU B B 383 383 . 0.3147 0.3187 0.3228 0.0054  -0.0254
0.0182  1 .
6227 N     N     . VAL VAL VAL B B 384 384 . 0.3026 0.3493 0.3206 0.0109  0.0011
0.0174  1 .
6228 CA    CA    . VAL VAL VAL B B 384 384 . 0.2939 0.3426 0.3261 0.0135  -0.0065
0.0186  1 .
6229 CB    CB    . VAL VAL VAL B B 384 384 . 0.2953 0.3327 0.3328 0.0224  0.0073
0.0233  1 .
6230 CG1   CG1   . VAL VAL VAL B B 384 384 . 0.2818 0.3728 0.3176 0.0096  -0.0023
0.0386  1 .
6231 CG2   CG2   . VAL VAL VAL B B 384 384 . 0.2937 0.3329 0.2669 0.0240  -0.0292
0.0262  1 .
6232 C     C     . VAL VAL VAL B B 384 384 . 0.2970 0.3556 0.3427 0.0095  -0.0046
0.0166  1 .
6233 O     O     . VAL VAL VAL B B 384 384 . 0.2719 0.3724 0.3409 -0.0015 0.0006
0.0201  1 .
6234 N     N     . VAL VAL VAL B B 385 385 . 0.3010 0.3635 0.3490 0.0008  -0.0100
0.0220  1 .
6235 CA    CA    . VAL VAL VAL B B 385 385 . 0.3330 0.3705 0.3644 -0.0050 -0.0206
0.0056  1 .
6236 CB    CB    . VAL VAL VAL B B 385 385 . 0.3380 0.3809 0.3688 -0.0118 -0.0161
0.0043  1 .
6237 CG1   CG1   . VAL VAL VAL B B 385 385 . 0.3313 0.3971 0.3681 -0.0290 -0.0294
0.0023  1 .
6238 CG2   CG2   . VAL VAL VAL B B 385 385 . 0.3170 0.3649 0.3613 -0.0127 -0.0473 -
0.0001 1 .
6239 C     C     . VAL VAL VAL B B 385 385 . 0.3571 0.3975 0.3778 -0.0082 -0.0127
0.0027  1 .
6240 O     O     . VAL VAL VAL B B 385 385 . 0.3524 0.4194 0.3774 -0.0082 -0.0130
0.0037  1 .
6241 N     N     . GLY GLY GLY B B 386 386 . 0.3670 0.3946 0.3784 -0.0035 -0.0034 -
0.0043 1 .
6242 CA    CA    . GLY GLY GLY B B 386 386 . 0.3963 0.4129 0.3851 -0.0147 -0.0207
0.0106  1 .
6243 C     C     . GLY GLY GLY B B 386 386 . 0.4237 0.4251 0.4188 -0.0222 -0.0209
0.0164  1 .
6244 O     O     . GLY GLY GLY B B 386 386 . 0.4035 0.4083 0.3917 -0.0289 -0.0337
0.0307  1 .
6245 N     N     . LEU LEU LEU B B 387 387 . 0.4358 0.4362 0.4210 -0.0281 -0.0157
0.0100  1 .
6246 CA    CA    . LEU LEU LEU B B 387 387 . 0.4510 0.4503 0.4442 -0.0185 -0.0164
0.0077  1 .
6247 CB    CB    . LEU LEU LEU B B 387 387 . 0.4491 0.4482 0.4492 -0.0097 -0.0191
0.0133  1 .
6248 CG    CG    . LEU LEU LEU B B 387 387 . 0.4596 0.4585 0.4250 -0.0079 -0.0282
0.0214  1 .
6249 CD1   CD1   . LEU LEU LEU B B 387 387 . 0.5050 0.4734 0.3923 -0.0250 -0.0289
0.0365  1 .
6250 CD2   CD2   . LEU LEU LEU B B 387 387 . 0.4463 0.4874 0.4699 0.0183  -0.0353
0.0569  1 .
6251 C     C     . LEU LEU LEU B B 387 387 . 0.4468 0.4599 0.4466 -0.0153 -0.0167
0.0039  1 .
6252 O     O     . LEU LEU LEU B B 387 387 . 0.4406 0.4785 0.4756 -0.0307 -0.0108
0.0154  1 .
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6253 N     N     . CYS CYS CYS B B 388 388 . 0.4480 0.4402 0.4483 -0.0151 -0.0227 -
0.0136 1 .
6254 CA    CA    . CYS CYS CYS B B 388 388 . 0.4782 0.4541 0.4497 -0.0113 -0.0197 -
0.0154 1 .
6255 CB    CB    . CYS CYS CYS B B 388 388 . 0.4954 0.4763 0.4520 0.0011  -0.0208 -
0.0222 1 .
6256 SG    SG    . CYS CYS CYS B B 388 388 . 0.6979 0.5173 0.5385 -0.0488 -0.0668 -
0.0914 1 .
6257 C     C     . CYS CYS CYS B B 388 388 . 0.4600 0.4291 0.4249 -0.0031 -0.0140 -
0.0067 1 .
6258 O     O     . CYS CYS CYS B B 388 388 . 0.4742 0.4326 0.4166 0.0145  -0.0181 -
0.0113 1 .
6259 N     N     . THR THR THR B B 389 389 . 0.4259 0.4039 0.3891 -0.0097 -0.0150 -
0.0007 1 .
6260 CA    CA    . THR THR THR B B 389 389 . 0.3964 0.3907 0.3831 -0.0017 -0.0098 -
0.0104 1 .
6261 CB    CB    . THR THR THR B B 389 389 . 0.3969 0.3814 0.3816 0.0060  -0.0044
0.0074  1 .
6262 OG1   OG1   . THR THR THR B B 389 389 . 0.3745 0.3906 0.3705 0.0201  -0.0247 -
0.0379 1 .
6263 CG2   CG2   . THR THR THR B B 389 389 . 0.3441 0.3374 0.3908 0.0406  -0.0083 -
0.0020 1 .
6264 C     C     . THR THR THR B B 389 389 . 0.3992 0.3781 0.3765 -0.0057 -0.0058 -
0.0077 1 .
6265 O     O     . THR THR THR B B 389 389 . 0.4202 0.3938 0.3882 -0.0131 -0.0079 -
0.0187 1 .
6266 N     N     . GLY GLY GLY B B 390 390 . 0.3785 0.3582 0.3413 -0.0022 -0.0091 -
0.0028 1 .
6267 CA    CA    . GLY GLY GLY B B 390 390 . 0.3367 0.3515 0.3242 0.0042  -0.0105
0.0016  1 .
6268 C     C     . GLY GLY GLY B B 390 390 . 0.3433 0.3424 0.3303 0.0000  0.0061
0.0028  1 .
6269 O     O     . GLY GLY GLY B B 390 390 . 0.3160 0.3289 0.3159 0.0322  0.0118
0.0068  1 .
6270 N     N     . GLN GLN GLN B B 391 391 . 0.3504 0.3549 0.3249 0.0005  0.0010
0.0032  1 .
6271 CA    CA    . GLN GLN GLN B B 391 391 . 0.3481 0.3664 0.3241 -0.0130 -0.0023
0.0008  1 .
6272 CB    CB    . GLN GLN GLN B B 391 391 . 0.3460 0.3674 0.3320 -0.0061 0.0077
0.0074  1 .
6273 CG    CG    . GLN GLN GLN B B 391 391 . 0.3176 0.3516 0.3414 -0.0183 0.0000
0.0097  1 .
6274 CD    CD    . GLN GLN GLN B B 391 391 . 0.3552 0.3998 0.3289 -0.0232 0.0057
0.0132  1 .
6275 OE1   OE1   . GLN GLN GLN B B 391 391 . 0.3510 0.3671 0.2957 -0.0080 0.0418  -
0.0293 1 .
6276 NE2   NE2   . GLN GLN GLN B B 391 391 . 0.2886 0.4020 0.3628 -0.0308 0.0170
0.0559  1 .
6277 C     C     . GLN GLN GLN B B 391 391 . 0.3467 0.3560 0.3375 0.0030  -0.0035 -
0.0098 1 .
6278 O     O     . GLN GLN GLN B B 391 391 . 0.3465 0.3531 0.3377 0.0088  -0.0217 -
0.0108 1 .
6279 N     N     . ILE ILE ILE B B 392 392 . 0.3305 0.3491 0.3170 0.0014  -0.0050 -
0.0189 1 .
6280 CA    CA    . ILE ILE ILE B B 392 392 . 0.3323 0.3337 0.3002 -0.0005 -0.0037 -
0.0067 1 .
6281 CB    CB    . ILE ILE ILE B B 392 392 . 0.3444 0.3249 0.2924 -0.0019 -0.0072 -
0.0169 1 .
6282 CG1   CG1   . ILE ILE ILE B B 392 392 . 0.3483 0.3403 0.2899 -0.0305 -0.0086 -
0.0180 1 .
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6283 CD1   CD1   . ILE ILE ILE B B 392 392 . 0.2712 0.4067 0.1632 -0.0104 -0.0188 -
0.0514 1 .
6284 CG2   CG2   . ILE ILE ILE B B 392 392 . 0.3194 0.3247 0.2808 0.0021  -0.0167 -
0.0263 1 .
6285 C     C     . ILE ILE ILE B B 392 392 . 0.3257 0.3283 0.2883 0.0068  -0.0015
0.0023  1 .
6286 O     O     . ILE ILE ILE B B 392 392 . 0.3572 0.3425 0.2888 0.0105  0.0068
0.0074  1 .
6287 N     N     . LYS LYS LYS B B 393 393 . 0.3350 0.3554 0.2770 0.0033  0.0058
0.0071  1 .
6288 CA    CA    . LYS LYS LYS B B 393 393 . 0.3408 0.3428 0.2918 -0.0045 0.0090
0.0002  1 .
6289 CB    CB    . LYS LYS LYS B B 393 393 . 0.3423 0.3380 0.3002 0.0061  0.0149
0.0005  1 .
6290 CG    CG    . LYS LYS LYS B B 393 393 . 0.3826 0.3581 0.3170 -0.0073 0.0282
0.0152  1 .
6291 CD    CD    . LYS LYS LYS B B 393 393 . 0.2807 0.4001 0.3643 -0.0179 0.0097  -
0.0220 1 .
6292 CE    CE    . LYS LYS LYS B B 393 393 . 0.3093 0.3643 0.3044 -0.0497 -0.0664
0.0093  1 .
6293 NZ    NZ    . LYS LYS LYS B B 393 393 . 0.3143 0.3295 0.2694 -0.0212 -0.0247
0.0134  1 .
6294 C     C     . LYS LYS LYS B B 393 393 . 0.3410 0.3364 0.3035 0.0062  0.0059  -
0.0009 1 .
6295 O     O     . LYS LYS LYS B B 393 393 . 0.3756 0.3760 0.3061 0.0036  0.0090  -
0.0025 1 .
6296 N     N     . THR THR THR B B 394 394 . 0.3318 0.3185 0.2910 0.0054  0.0030
0.0023  1 .
6297 CA    CA    . THR THR THR B B 394 394 . 0.3099 0.3032 0.2993 0.0035  0.0011  -
0.0104 1 .
6298 CB    CB    . THR THR THR B B 394 394 . 0.3246 0.2899 0.2944 -0.0121 0.0061
0.0024  1 .
6299 OG1   OG1   . THR THR THR B B 394 394 . 0.3337 0.3103 0.3186 -0.0043 -0.0069 -
0.0577 1 .
6300 CG2   CG2   . THR THR THR B B 394 394 . 0.3130 0.3200 0.2989 0.0128  0.0046  -
0.0105 1 .
6301 C     C     . THR THR THR B B 394 394 . 0.2887 0.2933 0.2791 0.0006  -0.0035
0.0011  1 .
6302 O     O     . THR THR THR B B 394 394 . 0.2705 0.2758 0.3126 -0.0122 -0.0071
0.0230  1 .
6303 N     N     . GLY GLY GLY B B 395 395 . 0.2906 0.2800 0.2650 -0.0065 0.0004  -
0.0087 1 .
6304 CA    CA    . GLY GLY GLY B B 395 395 . 0.2686 0.2736 0.2693 -0.0103 -0.0002 -
0.0115 1 .
6305 C     C     . GLY GLY GLY B B 395 395 . 0.3030 0.2968 0.2851 -0.0208 -0.0014 -
0.0064 1 .
6306 O     O     . GLY GLY GLY B B 395 395 . 0.3189 0.3371 0.2962 -0.0204 0.0068
0.0024  1 .
6307 N     N     . ALA ALA ALA B B 396 396 . 0.2916 0.2894 0.2950 -0.0130 0.0006
0.0028  1 .
6308 CA    CA    . ALA ALA ALA B B 396 396 . 0.2984 0.3054 0.3144 -0.0054 0.0110  -
0.0060 1 .
6309 CB    CB    . ALA ALA ALA B B 396 396 . 0.2956 0.2801 0.2910 -0.0202 0.0080  -
0.0113 1 .
6310 C     C     . ALA ALA ALA B B 396 396 . 0.3150 0.3168 0.3218 -0.0021 0.0131  -
0.0074 1 .
6311 O     O     . ALA ALA ALA B B 396 396 . 0.3094 0.3354 0.3225 0.0189  0.0255  -
0.0197 1 .
6312 N     N     . PRO PRO PRO B B 397 397 . 0.3222 0.3352 0.3347 0.0111  0.0086
0.0027  1 .
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6313 CA    CA    . PRO PRO PRO B B 397 397 . 0.3241 0.3331 0.3389 -0.0008 0.0112
0.0033  1 .
6314 CB    CB    . PRO PRO PRO B B 397 397 . 0.3231 0.3426 0.3342 0.0040  0.0140
0.0019  1 .
6315 CG    CG    . PRO PRO PRO B B 397 397 . 0.3456 0.3200 0.3718 0.0042  0.0250  -
0.0054 1 .
6316 CD    CD    . PRO PRO PRO B B 397 397 . 0.3456 0.3278 0.3385 0.0087  0.0264
0.0111  1 .
6317 C     C     . PRO PRO PRO B B 397 397 . 0.3337 0.3492 0.3541 0.0032  0.0092
0.0040  1 .
6318 O     O     . PRO PRO PRO B B 397 397 . 0.3537 0.3456 0.3630 0.0093  0.0006
0.0097  1 .
6319 N     N     . CYS CYS CYS B B 398 398 . 0.3256 0.3500 0.3489 -0.0095 0.0116  -
0.0036 1 .
6320 CA    CA    . CYS CYS CYS B B 398 398 . 0.3169 0.3585 0.3434 0.0027  -0.0015
0.0036  1 .
6321 CB    CB    . CYS CYS CYS B B 398 398 . 0.3126 0.3542 0.3439 -0.0029 -0.0012
0.0125  1 .
6322 SG    SG    . CYS CYS CYS B B 398 398 . 0.3258 0.4226 0.3550 -0.0156 0.0106  -
0.0037 1 .
6323 C     C     . CYS CYS CYS B B 398 398 . 0.3195 0.3425 0.3264 0.0050  0.0051
0.0059  1 .
6324 O     O     . CYS CYS CYS B B 398 398 . 0.3386 0.3492 0.3348 0.0107  0.0142  -
0.0034 1 .
6325 N     N     . ARG ARG ARG B B 399 399 . 0.3294 0.3426 0.3179 0.0130  -0.0262
0.0009  1 .
6326 CA    CA    . ARG ARG ARG B B 399 399 . 0.2895 0.3135 0.3058 0.0056  -0.0144 -
0.0056 1 .
6327 CB    CB    . ARG ARG ARG B B 399 399 . 0.3068 0.3374 0.2952 -0.0071 -0.0177
0.0153  1 .
6328 CG    CG    . ARG ARG ARG B B 399 399 . 0.3249 0.3261 0.3111 -0.0053 0.0106
0.0055  1 .
6329 CD    CD    . ARG ARG ARG B B 399 399 . 0.3792 0.2854 0.2851 0.0203  0.0581
0.0006  1 .
6330 NE    NE    . ARG ARG ARG B B 399 399 . 0.2281 0.2906 0.2909 0.0505  0.0273
0.0006  1 .
6331 CZ    CZ    . ARG ARG ARG B B 399 399 . 0.2774 0.3226 0.2823 0.0191  0.0271  -
0.0304 1 .
6332 NH1   NH1   . ARG ARG ARG B B 399 399 . 0.3148 0.3208 0.2349 -0.0125 0.0240  -
0.0312 1 .
6333 NH2   NH2   . ARG ARG ARG B B 399 399 . 0.3323 0.2909 0.2532 0.0208  0.0496  -
0.0288 1 .
6334 C     C     . ARG ARG ARG B B 399 399 . 0.3125 0.3027 0.3077 -0.0038 -0.0130 -
0.0055 1 .
6335 O     O     . ARG ARG ARG B B 399 399 . 0.2865 0.3155 0.3342 -0.0014 -0.0378 -
0.0196 1 .
6336 N     N     . SER SER SER B B 400 400 . 0.2888 0.2926 0.3049 -0.0025 -0.0004 -
0.0024 1 .
6337 CA    CA    . SER SER SER B B 400 400 . 0.3143 0.3130 0.3022 0.0004  0.0042
0.0070  1 .
6338 CB    CB    . SER SER SER B B 400 400 . 0.3166 0.3144 0.3123 -0.0077 0.0052
0.0048  1 .
6339 OG    OG    . SER SER SER B B 400 400 . 0.3776 0.3295 0.3269 -0.0018 0.0277
0.0270  1 .
6340 C     C     . SER SER SER B B 400 400 . 0.2999 0.3172 0.3039 -0.0049 0.0016
0.0072  1 .
6341 O     O     . SER SER SER B B 400 400 . 0.3362 0.3552 0.3081 -0.0070 0.0005
0.0089  1 .
6342 N     N     . GLU GLU GLU B B 401 401 . 0.2919 0.3216 0.2979 0.0059  0.0030
0.0103  1 .
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6343 CA    CA    . GLU GLU GLU B B 401 401 . 0.2922 0.3150 0.2857 0.0073  0.0134
0.0036  1 .
6344 CB    CB    . GLU GLU GLU B B 401 401 . 0.3065 0.2913 0.3020 -0.0044 0.0059  -
0.0008 1 .
6345 CG    CG    . GLU GLU GLU B B 401 401 . 0.2689 0.3018 0.2408 0.0092  0.0315
0.0240  1 .
6346 CD    CD    . GLU GLU GLU B B 401 401 . 0.2972 0.2630 0.3028 0.0009  0.0253
0.0182  1 .
6347 OE1   OE1   . GLU GLU GLU B B 401 401 . 0.2841 0.2948 0.3248 -0.0154 0.0051
0.0362  1 .
6348 OE2   OE2   . GLU GLU GLU B B 401 401 . 0.2249 0.3127 0.3672 0.0348  0.0598
0.0359  1 .
6349 C     C     . GLU GLU GLU B B 401 401 . 0.2774 0.3168 0.2872 0.0053  0.0082  -
0.0011 1 .
6350 O     O     . GLU GLU GLU B B 401 401 . 0.1991 0.2853 0.2689 -0.0059 0.0114
0.0206  1 .
6351 N     N     . ARG ARG ARG B B 402 402 . 0.2285 0.2961 0.2751 0.0063  0.0233  -
0.0118 1 .
6352 CA    CA    . ARG ARG ARG B B 402 402 . 0.2452 0.2843 0.2673 -0.0105 0.0174  -
0.0129 1 .
6353 CB    CB    . ARG ARG ARG B B 402 402 . 0.2264 0.2809 0.2568 -0.0180 0.0128  -
0.0176 1 .
6354 CG    CG    . ARG ARG ARG B B 402 402 . 0.2088 0.2604 0.2938 -0.0237 0.0332  -
0.0046 1 .
6355 CD    CD    . ARG ARG ARG B B 402 402 . 0.2107 0.3044 0.2678 -0.0345 -0.0416
0.0155  1 .
6356 NE    NE    . ARG ARG ARG B B 402 402 . 0.3063 0.2878 0.2916 -0.0033 -0.0182
0.0183  1 .
6357 CZ    CZ    . ARG ARG ARG B B 402 402 . 0.2785 0.3157 0.3261 0.0218  -0.0311 -
0.0012 1 .
6358 NH1   NH1   . ARG ARG ARG B B 402 402 . 0.2776 0.3231 0.3168 -0.0081 -0.0790 -
0.0336 1 .
6359 NH2   NH2   . ARG ARG ARG B B 402 402 . 0.2512 0.3334 0.3062 0.0521  -0.0176 -
0.0116 1 .
6360 C     C     . ARG ARG ARG B B 402 402 . 0.2506 0.2982 0.2750 -0.0102 0.0078  -
0.0192 1 .
6361 O     O     . ARG ARG ARG B B 402 402 . 0.3191 0.3250 0.2712 0.0105  -0.0074 -
0.0407 1 .
6362 N     N     . LEU LEU LEU B B 403 403 . 0.2264 0.2829 0.2711 -0.0112 0.0064  -
0.0197 1 .
6363 CA    CA    . LEU LEU LEU B B 403 403 . 0.2295 0.2909 0.2886 -0.0044 0.0127
0.0004  1 .
6364 CB    CB    . LEU LEU LEU B B 403 403 . 0.2313 0.2878 0.2708 0.0004  0.0273
0.0230  1 .
6365 CG    CG    . LEU LEU LEU B B 403 403 . 0.2505 0.3021 0.3052 0.0029  0.0255
0.0084  1 .
6366 CD1   CD1   . LEU LEU LEU B B 403 403 . 0.2304 0.3078 0.2496 0.0545  -0.0202
0.0244  1 .
6367 CD2   CD2   . LEU LEU LEU B B 403 403 . 0.1666 0.3066 0.3461 -0.0115 -0.0433 -
0.0073 1 .
6368 C     C     . LEU LEU LEU B B 403 403 . 0.2402 0.2881 0.2976 -0.0077 0.0163  -
0.0053 1 .
6369 O     O     . LEU LEU LEU B B 403 403 . 0.2316 0.3209 0.3361 -0.0054 -0.0053 -
0.0133 1 .
6370 N     N     . ALA ALA ALA B B 404 404 . 0.2225 0.2620 0.2758 0.0056  0.0190  -
0.0039 1 .
6371 CA    CA    . ALA ALA ALA B B 404 404 . 0.2218 0.2353 0.2409 0.0086  0.0182
0.0255  1 .
6372 CB    CB    . ALA ALA ALA B B 404 404 . 0.1987 0.2363 0.2354 0.0285  0.0181
0.0373  1 .
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6373 C     C     . ALA ALA ALA B B 404 404 . 0.2123 0.2442 0.2589 0.0098  0.0203
0.0152  1 .
6374 O     O     . ALA ALA ALA B B 404 404 . 0.2379 0.2761 0.2576 0.0197  0.0241
0.0447  1 .
6375 N     N     . LYS LYS LYS B B 405 405 . 0.2537 0.2841 0.2798 0.0069  0.0109
0.0075  1 .
6376 CA    CA    . LYS LYS LYS B B 405 405 . 0.2419 0.2915 0.2926 0.0048  0.0016
0.0040  1 .
6377 CB    CB    . LYS LYS LYS B B 405 405 . 0.2284 0.3076 0.3102 -0.0033 0.0085
0.0064  1 .
6378 CG    CG    . LYS LYS LYS B B 405 405 . 0.2407 0.2975 0.3046 -0.0072 0.0210  -
0.0257 1 .
6379 CD    CD    . LYS LYS LYS B B 405 405 . 0.2062 0.3792 0.2978 -0.0364 0.0030  -
0.0500 1 .
6380 CE    CE    . LYS LYS LYS B B 405 405 . 0.2409 0.3536 0.3164 -0.0641 0.0070  -
0.0844 1 .
6381 NZ    NZ    . LYS LYS LYS B B 405 405 . 0.2417 0.4771 0.2743 -0.0155 0.0585  -
0.0439 1 .
6382 C     C     . LYS LYS LYS B B 405 405 . 0.2526 0.3156 0.2982 -0.0014 -0.0008 -
0.0008 1 .
6383 O     O     . LYS LYS LYS B B 405 405 . 0.2642 0.3514 0.2949 0.0003  -0.0094 -
0.0059 1 .
6384 N     N     . TYR TYR TYR B B 406 406 . 0.2794 0.3224 0.3046 0.0027  0.0038
0.0043  1 .
6385 CA    CA    . TYR TYR TYR B B 406 406 . 0.2711 0.3191 0.2902 0.0008  0.0039
0.0017  1 .
6386 CB    CB    . TYR TYR TYR B B 406 406 . 0.2822 0.3257 0.2859 -0.0074 0.0165
0.0039  1 .
6387 CG    CG    . TYR TYR TYR B B 406 406 . 0.2824 0.3307 0.3100 -0.0053 0.0056  -
0.0001 1 .
6388 CD1   CD1   . TYR TYR TYR B B 406 406 . 0.2389 0.3176 0.3205 0.0104  -0.0272
0.0022  1 .
6389 CE1   CE1   . TYR TYR TYR B B 406 406 . 0.2518 0.3454 0.3029 0.0228  -0.0308
0.0336  1 .
6390 CZ    CZ    . TYR TYR TYR B B 406 406 . 0.3214 0.3325 0.3335 -0.0053 -0.0083
0.0299  1 .
6391 OH    OH    . TYR TYR TYR B B 406 406 . 0.2852 0.3223 0.3309 0.0510  -0.0102
0.0998  1 .
6392 CE2   CE2   . TYR TYR TYR B B 406 406 . 0.3324 0.3280 0.3121 0.0040  -0.0451
0.0197  1 .
6393 CD2   CD2   . TYR TYR TYR B B 406 406 . 0.2893 0.3105 0.2903 -0.0054 -0.0310 -
0.0204 1 .
6394 C     C     . TYR TYR TYR B B 406 406 . 0.2674 0.3201 0.3028 -0.0011 -0.0034 -
0.0006 1 .
6395 O     O     . TYR TYR TYR B B 406 406 . 0.3058 0.3357 0.3253 -0.0014 0.0037  -
0.0010 1 .
6396 N     N     . ASN ASN ASN B B 407 407 . 0.2316 0.3067 0.2875 0.0076  0.0070
0.0055  1 .
6397 CA    CA    . ASN ASN ASN B B 407 407 . 0.2295 0.3070 0.2816 0.0055  -0.0109
0.0055  1 .
6398 CB    CB    . ASN ASN ASN B B 407 407 . 0.2376 0.2965 0.2982 0.0161  -0.0305
0.0154  1 .
6399 CG    CG    . ASN ASN ASN B B 407 407 . 0.2340 0.2742 0.2785 -0.0167 -0.0089
0.0013  1 .
6400 OD1   OD1   . ASN ASN ASN B B 407 407 . 0.2343 0.3091 0.3018 0.0109  -0.0361 -
0.0222 1 .
6401 ND2   ND2   . ASN ASN ASN B B 407 407 . 0.2930 0.1649 0.2722 0.0102  0.0342  -
0.0219 1 .
6402 C     C     . ASN ASN ASN B B 407 407 . 0.2647 0.3095 0.2861 -0.0010 -0.0173 -
0.0006 1 .
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6403 O     O     . ASN ASN ASN B B 407 407 . 0.2568 0.3232 0.2883 -0.0048 -0.0280 -
0.0047 1 .
6404 N     N     . GLN GLN GLN B B 408 408 . 0.2525 0.3174 0.3026 0.0205  -0.0203
0.0036  1 .
6405 CA    CA    . GLN GLN GLN B B 408 408 . 0.3039 0.3392 0.3041 0.0153  -0.0138
0.0016  1 .
6406 CB    CB    . GLN GLN GLN B B 408 408 . 0.2849 0.3283 0.3076 0.0408  -0.0213 -
0.0076 1 .
6407 CG    CG    . GLN GLN GLN B B 408 408 . 0.3005 0.3822 0.3081 -0.0095 -0.0183 -
0.0039 1 .
6408 CD    CD    . GLN GLN GLN B B 408 408 . 0.3202 0.3750 0.3585 0.0028  -0.0243
0.0059  1 .
6409 OE1   OE1   . GLN GLN GLN B B 408 408 . 0.3700 0.3237 0.3977 0.0478  -0.0447 -
0.0344 1 .
6410 NE2   NE2   . GLN GLN GLN B B 408 408 . 0.2768 0.3862 0.3796 -0.0286 -0.0342
0.0237  1 .
6411 C     C     . GLN GLN GLN B B 408 408 . 0.3190 0.3452 0.3281 0.0078  -0.0159
0.0106  1 .
6412 O     O     . GLN GLN GLN B B 408 408 . 0.2987 0.3517 0.3314 -0.0026 -0.0077
0.0274  1 .
6413 N     N     . LEU LEU LEU B B 409 409 . 0.3253 0.3521 0.3150 0.0047  0.0010
0.0184  1 .
6414 CA    CA    . LEU LEU LEU B B 409 409 . 0.3325 0.3489 0.3387 -0.0029 -0.0038
0.0056  1 .
6415 CB    CB    . LEU LEU LEU B B 409 409 . 0.3324 0.3435 0.3272 -0.0005 -0.0162
0.0223  1 .
6416 CG    CG    . LEU LEU LEU B B 409 409 . 0.3120 0.3404 0.3324 -0.0115 -0.0230
0.0222  1 .
6417 CD1   CD1   . LEU LEU LEU B B 409 409 . 0.2505 0.3758 0.3159 0.0138  -0.0140
0.0579  1 .
6418 CD2   CD2   . LEU LEU LEU B B 409 409 . 0.2206 0.3284 0.3649 0.0346  -0.0091
0.0732  1 .
6419 C     C     . LEU LEU LEU B B 409 409 . 0.3408 0.3398 0.3441 -0.0103 -0.0092
0.0105  1 .
6420 O     O     . LEU LEU LEU B B 409 409 . 0.3777 0.3587 0.3495 -0.0069 -0.0011
0.0050  1 .
6421 N     N     . MET MET MET B B 410 410 . 0.3414 0.3371 0.3596 -0.0164 -0.0103
0.0093  1 .
6422 CA    CA    . MET MET MET B B 410 410 . 0.3405 0.3435 0.3479 -0.0080 -0.0052 -
0.0020 1 .
6423 CB    CB    . MET MET MET B B 410 410 . 0.3136 0.3355 0.3304 0.0070  -0.0115
0.0108  1 .
6424 CG    CG    . MET MET MET B B 410 410 . 0.3518 0.3581 0.3492 0.0006  0.0066
0.0107  1 .
6425 SD    SD    . MET MET MET B B 410 410 . 0.4423 0.4609 0.4638 0.0281  -0.0021
0.0401  1 .
6426 CE    CE    . MET MET MET B B 410 410 . 0.4360 0.3904 0.3633 0.0466  -0.0072
0.0299  1 .
6427 C     C     . MET MET MET B B 410 410 . 0.3392 0.3400 0.3348 -0.0118 -0.0088
0.0059  1 .
6428 O     O     . MET MET MET B B 410 410 . 0.3453 0.3641 0.3340 -0.0265 -0.0243
0.0104  1 .
6429 N     N     . ARG ARG ARG B B 411 411 . 0.3399 0.3540 0.3363 0.0001  -0.0104
0.0043  1 .
6430 CA    CA    . ARG ARG ARG B B 411 411 . 0.3593 0.3561 0.3401 -0.0016 -0.0155
0.0090  1 .
6431 CB    CB    . ARG ARG ARG B B 411 411 . 0.3585 0.3550 0.3360 -0.0026 -0.0120
0.0160  1 .
6432 CG    CG    . ARG ARG ARG B B 411 411 . 0.3986 0.3666 0.3403 0.0220  -0.0242 -
0.0073 1 .
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6433 CD    CD    . ARG ARG ARG B B 411 411 . 0.4130 0.3914 0.3364 -0.0010 -0.0190
0.0082  1 .
6434 NE    NE    . ARG ARG ARG B B 411 411 . 0.4033 0.3505 0.3205 -0.0227 -0.0158 -
0.0078 1 .
6435 CZ    CZ    . ARG ARG ARG B B 411 411 . 0.3823 0.3367 0.3166 -0.0207 -0.0137
0.0187  1 .
6436 NH1   NH1   . ARG ARG ARG B B 411 411 . 0.3757 0.3273 0.3687 0.0147  -0.0479 -
0.0192 1 .
6437 NH2   NH2   . ARG ARG ARG B B 411 411 . 0.3998 0.2745 0.3397 -0.0850 -0.0072
0.0561  1 .
6438 C     C     . ARG ARG ARG B B 411 411 . 0.3768 0.3762 0.3576 -0.0076 -0.0148
0.0000  1 .
6439 O     O     . ARG ARG ARG B B 411 411 . 0.4068 0.4207 0.3508 0.0036  -0.0285 -
0.0026 1 .
6440 N     N     . ILE ILE ILE B B 412 412 . 0.3836 0.3745 0.3577 -0.0016 -0.0179
0.0066  1 .
6441 CA    CA    . ILE ILE ILE B B 412 412 . 0.3915 0.3792 0.3824 -0.0054 -0.0119
0.0005  1 .
6442 CB    CB    . ILE ILE ILE B B 412 412 . 0.4025 0.3638 0.3699 -0.0008 -0.0156 -
0.0004 1 .
6443 CG1   CG1   . ILE ILE ILE B B 412 412 . 0.3838 0.3695 0.4040 0.0032  -0.0123 -
0.0047 1 .
6444 CD1   CD1   . ILE ILE ILE B B 412 412 . 0.4378 0.3436 0.3232 0.0663  -0.0182
0.0205  1 .
6445 CG2   CG2   . ILE ILE ILE B B 412 412 . 0.4302 0.3490 0.3760 -0.0186 -0.0127
0.0117  1 .
6446 C     C     . ILE ILE ILE B B 412 412 . 0.3910 0.3916 0.3893 -0.0053 -0.0045 -
0.0002 1 .
6447 O     O     . ILE ILE ILE B B 412 412 . 0.3814 0.4262 0.3641 0.0041  -0.0187
0.0032  1 .
6448 N     N     . GLU GLU GLU B B 413 413 . 0.3899 0.3980 0.4115 -0.0063 0.0078
0.0074  1 .
6449 CA    CA    . GLU GLU GLU B B 413 413 . 0.4143 0.4166 0.4322 -0.0056 0.0048
0.0081  1 .
6450 CB    CB    . GLU GLU GLU B B 413 413 . 0.4053 0.4130 0.4177 0.0008  0.0144
0.0101  1 .
6451 CG    CG    . GLU GLU GLU B B 413 413 . 0.4258 0.3833 0.4569 0.0286  0.0193
0.0039  1 .
6452 CD    CD    . GLU GLU GLU B B 413 413 . 0.4404 0.4203 0.4386 0.0308  0.0390
0.0000  1 .
6453 OE1   OE1   . GLU GLU GLU B B 413 413 . 0.4392 0.4256 0.3734 0.0691  0.0788
0.0000  1 .
6454 OE2   OE2   . GLU GLU GLU B B 413 413 . 0.5497 0.4667 0.4195 0.0470  0.0056
0.0122  1 .
6455 C     C     . GLU GLU GLU B B 413 413 . 0.4356 0.4461 0.4490 -0.0165 -0.0023
0.0044  1 .
6456 O     O     . GLU GLU GLU B B 413 413 . 0.4421 0.4640 0.4481 -0.0240 -0.0177
0.0179  1 .
6457 N     N     . GLU GLU GLU B B 414 414 . 0.4466 0.4679 0.4690 -0.0125 -0.0068
0.0020  1 .
6458 CA    CA    . GLU GLU GLU B B 414 414 . 0.4719 0.4897 0.4879 -0.0124 -0.0021
0.0035  1 .
6459 CB    CB    . GLU GLU GLU B B 414 414 . 0.4754 0.4982 0.4994 -0.0064 -0.0028
0.0000  1 .
6460 CG    CG    . GLU GLU GLU B B 414 414 . 0.4964 0.5391 0.5220 0.0057  -0.0103
0.0087  1 .
6461 CD    CD    . GLU GLU GLU B B 414 414 . 0.5394 0.6065 0.5254 0.0158  -0.0157
0.0111  1 .
6462 OE1   OE1   . GLU GLU GLU B B 414 414 . 0.4964 0.5923 0.5137 0.0686  -0.0514 -
0.0139 1 .
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6463 OE2   OE2   . GLU GLU GLU B B 414 414 . 0.5988 0.6372 0.5551 0.0166  0.0027
0.0695  1 .
6464 C     C     . GLU GLU GLU B B 414 414 . 0.4968 0.5042 0.5026 -0.0145 -0.0015
0.0000  1 .
6465 O     O     . GLU GLU GLU B B 414 414 . 0.4937 0.5154 0.5183 -0.0319 -0.0024
0.0046  1 .
6466 N     N     . GLU GLU GLU B B 415 415 . 0.5051 0.5060 0.5210 -0.0076 0.0001  -
0.0038 1 .
6467 CA    CA    . GLU GLU GLU B B 415 415 . 0.5265 0.5385 0.5401 -0.0134 -0.0007 -
0.0058 1 .
6468 CB    CB    . GLU GLU GLU B B 415 415 . 0.5110 0.5351 0.5483 -0.0112 -0.0032 -
0.0021 1 .
6469 CG    CG    . GLU GLU GLU B B 415 415 . 0.5597 0.6010 0.5983 -0.0062 0.0135
0.0095  1 .
6470 CD    CD    . GLU GLU GLU B B 415 415 . 0.6010 0.6805 0.6583 -0.0093 0.0125
0.0287  1 .
6471 OE1   OE1   . GLU GLU GLU B B 415 415 . 0.7246 0.7191 0.7208 -0.0164 0.0460
0.0479  1 .
6472 OE2   OE2   . GLU GLU GLU B B 415 415 . 0.5710 0.6970 0.6014 -0.0163 0.0152
0.0304  1 .
6473 C     C     . GLU GLU GLU B B 415 415 . 0.5469 0.5520 0.5524 -0.0124 0.0009  -
0.0070 1 .
6474 O     O     . GLU GLU GLU B B 415 415 . 0.5648 0.5704 0.5654 -0.0185 -0.0007 -
0.0229 1 .
6475 N     N     . LEU LEU LEU B B 416 416 . 0.5641 0.5529 0.5529 -0.0131 -0.0017
0.0001  1 .
6476 CA    CA    . LEU LEU LEU B B 416 416 . 0.5624 0.5599 0.5632 -0.0078 -0.0165
0.0021  1 .
6477 CB    CB    . LEU LEU LEU B B 416 416 . 0.5544 0.5491 0.5547 -0.0092 -0.0206
0.0016  1 .
6478 CG    CG    . LEU LEU LEU B B 416 416 . 0.5557 0.5737 0.5494 -0.0106 -0.0301
0.0032  1 .
6479 CD1   CD1   . LEU LEU LEU B B 416 416 . 0.5370 0.5805 0.5616 -0.0203 -0.0475
0.0067  1 .
6480 CD2   CD2   . LEU LEU LEU B B 416 416 . 0.5425 0.5817 0.5420 -0.0001 -0.0532
0.0108  1 .
6481 C     C     . LEU LEU LEU B B 416 416 . 0.5727 0.5550 0.5779 -0.0060 -0.0163
0.0090  1 .
6482 O     O     . LEU LEU LEU B B 416 416 . 0.5653 0.5307 0.5805 -0.0138 -0.0236
0.0081  1 .
6483 N     N     . GLY GLY GLY B B 417 417 . 0.5781 0.5737 0.5913 -0.0047 -0.0182
0.0103  1 .
6484 CA    CA    . GLY GLY GLY B B 417 417 . 0.5929 0.5941 0.6016 0.0024  -0.0136 -
0.0027 1 .
6485 C     C     . GLY GLY GLY B B 417 417 . 0.6140 0.6193 0.6108 0.0028  -0.0108 -
0.0004 1 .
6486 O     O     . GLY GLY GLY B B 417 417 . 0.6065 0.5921 0.5993 0.0032  -0.0205
0.0000  1 .
6487 N     N     . ASP ASP ASP B B 418 418 . 0.6415 0.6325 0.6368 -0.0029 -0.0039 -
0.0073 1 .
6488 CA    CA    . ASP ASP ASP B B 418 418 . 0.6775 0.6746 0.6670 -0.0059 -0.0059 -
0.0086 1 .
6489 CB    CB    . ASP ASP ASP B B 418 418 . 0.6896 0.7052 0.6910 -0.0127 0.0011  -
0.0131 1 .
6490 CG    CG    . ASP ASP ASP B B 418 418 . 0.7416 0.7939 0.7368 -0.0020 -0.0051 -
0.0039 1 .
6491 OD1   OD1   . ASP ASP ASP B B 418 418 . 0.7285 0.8838 0.8264 -0.0040 0.0011
0.0128  1 .
6492 OD2   OD2   . ASP ASP ASP B B 418 418 . 0.7458 0.8846 0.8137 -0.0195 0.0282
0.0113  1 .
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6493 C     C     . ASP ASP ASP B B 418 418 . 0.6716 0.6651 0.6653 -0.0091 -0.0051 -
0.0098 1 .
6494 O     O     . ASP ASP ASP B B 418 418 . 0.6768 0.6592 0.6724 -0.0174 -0.0014 -
0.0140 1 .
6495 N     N     . GLU GLU GLU B B 419 419 . 0.6686 0.6589 0.6597 -0.0080 -0.0093 -
0.0087 1 .
6496 CA    CA    . GLU GLU GLU B B 419 419 . 0.6608 0.6594 0.6616 -0.0051 -0.0142 -
0.0080 1 .
6497 CB    CB    . GLU GLU GLU B B 419 419 . 0.6666 0.6817 0.6683 -0.0001 -0.0061 -
0.0100 1 .
6498 CG    CG    . GLU GLU GLU B B 419 419 . 0.7188 0.7316 0.7208 -0.0114 -0.0066 -
0.0297 1 .
6499 CD    CD    . GLU GLU GLU B B 419 419 . 0.7595 0.7955 0.7881 -0.0216 0.0060  -
0.0521 1 .
6500 OE1   OE1   . GLU GLU GLU B B 419 419 . 0.8200 0.7947 0.7786 -0.0356 0.0258  -
0.0663 1 .
6501 OE2   OE2   . GLU GLU GLU B B 419 419 . 0.7835 0.8132 0.8027 -0.0559 -0.0190 -
0.0607 1 .
6502 C     C     . GLU GLU GLU B B 419 419 . 0.6501 0.6422 0.6493 0.0031  -0.0210 -
0.0034 1 .
6503 O     O     . GLU GLU GLU B B 419 419 . 0.6660 0.6422 0.6662 0.0059  -0.0321 -
0.0021 1 .
6504 N     N     . ALA ALA ALA B B 420 420 . 0.6301 0.6125 0.6209 -0.0068 -0.0206 -
0.0044 1 .
6505 CA    CA    . ALA ALA ALA B B 420 420 . 0.5948 0.5811 0.5829 0.0006  -0.0197 -
0.0026 1 .
6506 CB    CB    . ALA ALA ALA B B 420 420 . 0.5997 0.5710 0.5834 0.0017  -0.0205
0.0015  1 .
6507 C     C     . ALA ALA ALA B B 420 420 . 0.5749 0.5565 0.5485 0.0024  -0.0212 -
0.0035 1 .
6508 O     O     . ALA ALA ALA B B 420 420 . 0.5671 0.5546 0.5418 0.0079  -0.0408
0.0012  1 .
6509 N     N     . ARG ARG ARG B B 421 421 . 0.5534 0.5340 0.5259 0.0056  -0.0214 -
0.0141 1 .
6510 CA    CA    . ARG ARG ARG B B 421 421 . 0.5394 0.5164 0.5287 -0.0001 -0.0151 -
0.0033 1 .
6511 CB    CB    . ARG ARG ARG B B 421 421 . 0.5626 0.5351 0.5340 -0.0010 -0.0167 -
0.0055 1 .
6512 CG    CG    . ARG ARG ARG B B 421 421 . 0.5980 0.6100 0.6085 -0.0272 -0.0119
0.0026  1 .
6513 CD    CD    . ARG ARG ARG B B 421 421 . 0.7324 0.7479 0.6946 -0.0217 -0.0401
0.0059  1 .
6514 NE    NE    . ARG ARG ARG B B 421 421 . 0.7815 0.8671 0.8142 -0.0124 -0.0109 -
0.0256 1 .
6515 CZ    CZ    . ARG ARG ARG B B 421 421 . 0.8301 0.9045 0.8579 -0.0048 -0.0077 -
0.0325 1 .
6516 NH1   NH1   . ARG ARG ARG B B 421 421 . 0.8285 0.9075 0.8781 0.0015  0.0278  -
0.0155 1 .
6517 NH2   NH2   . ARG ARG ARG B B 421 421 . 0.8974 0.9359 0.8661 0.0154  -0.0005 -
0.0369 1 .
6518 C     C     . ARG ARG ARG B B 421 421 . 0.5151 0.4991 0.4982 0.0105  -0.0104 -
0.0023 1 .
6519 O     O     . ARG ARG ARG B B 421 421 . 0.5326 0.5044 0.5047 0.0021  -0.0156 -
0.0023 1 .
6520 N     N     . PHE PHE PHE B B 422 422 . 0.4877 0.4617 0.4736 0.0091  -0.0068
0.0014  1 .
6521 CA    CA    . PHE PHE PHE B B 422 422 . 0.4626 0.4473 0.4520 0.0094  -0.0006 -
0.0071 1 .
6522 CB    CB    . PHE PHE PHE B B 422 422 . 0.4523 0.4269 0.4401 0.0052  -0.0163 -
0.0075 1 .
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6523 CG    CG    . PHE PHE PHE B B 422 422 . 0.4015 0.3783 0.4089 0.0225  0.0014
0.0012  1 .
6524 CD1   CD1   . PHE PHE PHE B B 422 422 . 0.3750 0.3315 0.3798 0.0073  -0.0364
0.0309  1 .
6525 CE1   CE1   . PHE PHE PHE B B 422 422 . 0.3720 0.2490 0.3726 0.0433  0.0110
0.0224  1 .
6526 CZ    CZ    . PHE PHE PHE B B 422 422 . 0.3928 0.2943 0.3888 0.0326  0.0210
0.0208  1 .
6527 CE2   CE2   . PHE PHE PHE B B 422 422 . 0.3792 0.3557 0.3728 0.0166  0.0015  -
0.0201 1 .
6528 CD2   CD2   . PHE PHE PHE B B 422 422 . 0.4136 0.3663 0.3730 -0.0209 -0.0096
0.0231  1 .
6529 C     C     . PHE PHE PHE B B 422 422 . 0.4753 0.4540 0.4619 0.0055  -0.0004 -
0.0100 1 .
6530 O     O     . PHE PHE PHE B B 422 422 . 0.4915 0.4549 0.4569 0.0104  0.0168  -
0.0233 1 .
6531 N     N     . ALA ALA ALA B B 423 423 . 0.4705 0.4500 0.4626 0.0043  0.0023  -
0.0103 1 .
6532 CA    CA    . ALA ALA ALA B B 423 423 . 0.4766 0.4492 0.4458 0.0057  0.0028  -
0.0049 1 .
6533 CB    CB    . ALA ALA ALA B B 423 423 . 0.4624 0.4502 0.4392 0.0165  0.0028  -
0.0105 1 .
6534 C     C     . ALA ALA ALA B B 423 423 . 0.4769 0.4521 0.4410 0.0078  -0.0003 -
0.0048 1 .
6535 O     O     . ALA ALA ALA B B 423 423 . 0.5141 0.4557 0.4340 0.0069  -0.0050 -
0.0039 1 .
6536 N     N     . GLY GLY GLY B B 424 424 . 0.4704 0.4411 0.4182 0.0033  -0.0103 -
0.0035 1 .
6537 CA    CA    . GLY GLY GLY B B 424 424 . 0.4597 0.4282 0.4088 0.0036  0.0055  -
0.0094 1 .
6538 C     C     . GLY GLY GLY B B 424 424 . 0.4713 0.4393 0.4298 0.0073  0.0116  -
0.0084 1 .
6539 O     O     . GLY GLY GLY B B 424 424 . 0.4855 0.4555 0.4240 0.0079  0.0216  -
0.0110 1 .
6540 N     N     . HIS HIS HIS B B 425 425 . 0.4653 0.4398 0.4188 0.0094  0.0102  -
0.0069 1 .
6541 CA    CA    . HIS HIS HIS B B 425 425 . 0.4581 0.4448 0.4274 0.0138  0.0106  -
0.0069 1 .
6542 CB    CB    . HIS HIS HIS B B 425 425 . 0.4690 0.4509 0.4373 0.0213  0.0143  -
0.0003 1 .
6543 CG    CG    . HIS HIS HIS B B 425 425 . 0.4250 0.4563 0.4137 0.0174  0.0118  -
0.0220 1 .
6544 ND1   ND1   . HIS HIS HIS B B 425 425 . 0.4449 0.4657 0.4008 0.0118  0.0039  -
0.0175 1 .
6545 CE1   CE1   . HIS HIS HIS B B 425 425 . 0.4189 0.4778 0.3812 -0.0127 -0.0005 -
0.0376 1 .
6546 NE2   NE2   . HIS HIS HIS B B 425 425 . 0.3818 0.4386 0.3570 -0.0040 -0.0150 -
0.0425 1 .
6547 CD2   CD2   . HIS HIS HIS B B 425 425 . 0.4500 0.4502 0.3924 -0.0014 -0.0067 -
0.0548 1 .
6548 C     C     . HIS HIS HIS B B 425 425 . 0.4628 0.4498 0.4302 0.0017  0.0040  -
0.0014 1 .
6549 O     O     . HIS HIS HIS B B 425 425 . 0.4700 0.4536 0.4176 -0.0050 -0.0019 -
0.0076 1 .
6550 N     N     . ASN ASN ASN B B 426 426 . 0.4516 0.4501 0.4367 -0.0048 0.0008
0.0037  1 .
6551 CA    CA    . ASN ASN ASN B B 426 426 . 0.4550 0.4444 0.4415 -0.0043 -0.0056
0.0088  1 .
6552 CB    CB    . ASN ASN ASN B B 426 426 . 0.4864 0.4640 0.4466 -0.0023 -0.0089
0.0076  1 .
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6553 CG    CG    . ASN ASN ASN B B 426 426 . 0.5731 0.5072 0.5098 0.0039  -0.0063 -
0.0171 1 .
6554 OD1   OD1   . ASN ASN ASN B B 426 426 . 0.6474 0.5938 0.4810 -0.0263 -0.0112 -
0.0203 1 .
6555 ND2   ND2   . ASN ASN ASN B B 426 426 . 0.6398 0.5334 0.6159 0.0106  0.0007  -
0.0398 1 .
6556 C     C     . ASN ASN ASN B B 426 426 . 0.4269 0.4306 0.4349 -0.0067 -0.0077
0.0140  1 .
6557 O     O     . ASN ASN ASN B B 426 426 . 0.3887 0.4082 0.4408 -0.0073 -0.0210
0.0187  1 .
6558 N     N     . PHE PHE PHE B B 427 427 . 0.4129 0.4213 0.4242 -0.0045 -0.0098
0.0115  1 .
6559 CA    CA    . PHE PHE PHE B B 427 427 . 0.4076 0.4256 0.4207 -0.0012 -0.0068
0.0146  1 .
6560 CB    CB    . PHE PHE PHE B B 427 427 . 0.4170 0.4215 0.4112 -0.0006 -0.0148
0.0132  1 .
6561 CG    CG    . PHE PHE PHE B B 427 427 . 0.3745 0.4003 0.3811 0.0022  -0.0254
0.0146  1 .
6562 CD1   CD1   . PHE PHE PHE B B 427 427 . 0.4341 0.4209 0.3806 0.0063  -0.0087
0.0255  1 .
6563 CE1   CE1   . PHE PHE PHE B B 427 427 . 0.4328 0.4405 0.4238 -0.0114 -0.0135 -
0.0041 1 .
6564 CZ    CZ    . PHE PHE PHE B B 427 427 . 0.4286 0.4283 0.4238 0.0388  -0.0123 -
0.0074 1 .
6565 CE2   CE2   . PHE PHE PHE B B 427 427 . 0.3879 0.4320 0.4059 0.0288  0.0045
0.0039  1 .
6566 CD2   CD2   . PHE PHE PHE B B 427 427 . 0.4187 0.4092 0.4120 0.0170  -0.0251
0.0370  1 .
6567 C     C     . PHE PHE PHE B B 427 427 . 0.4231 0.4329 0.4330 0.0029  -0.0012
0.0074  1 .
6568 O     O     . PHE PHE PHE B B 427 427 . 0.4250 0.4361 0.4059 0.0049  0.0058  -
0.0048 1 .
6569 N     N     . ARG ARG ARG B B 428 428 . 0.4295 0.4430 0.4318 -0.0028 0.0026
0.0103  1 .
6570 CA    CA    . ARG ARG ARG B B 428 428 . 0.4429 0.4491 0.4421 -0.0010 -0.0041
0.0029  1 .
6571 CB    CB    . ARG ARG ARG B B 428 428 . 0.4297 0.4461 0.4333 0.0031  -0.0094
0.0029  1 .
6572 CG    CG    . ARG ARG ARG B B 428 428 . 0.4389 0.4387 0.4166 -0.0357 -0.0138 -
0.0044 1 .
6573 CD    CD    . ARG ARG ARG B B 428 428 . 0.3996 0.4460 0.4067 -0.0212 -0.0413
0.0131  1 .
6574 NE    NE    . ARG ARG ARG B B 428 428 . 0.3990 0.4076 0.4092 -0.0349 -0.0301
0.0000  1 .
6575 CZ    CZ    . ARG ARG ARG B B 428 428 . 0.3914 0.4175 0.3547 -0.0215 -0.0361 -
0.0065 1 .
6576 NH1   NH1   . ARG ARG ARG B B 428 428 . 0.3916 0.4450 0.2898 -0.0406 -0.0379 -
0.0301 1 .
6577 NH2   NH2   . ARG ARG ARG B B 428 428 . 0.3970 0.4107 0.3525 -0.0394 -0.0328 -
0.0010 1 .
6578 C     C     . ARG ARG ARG B B 428 428 . 0.4682 0.4728 0.4637 -0.0008 -0.0035 -
0.0004 1 .
6579 O     O     . ARG ARG ARG B B 428 428 . 0.4694 0.4543 0.4765 0.0048  -0.0116 -
0.0076 1 .
6580 N     N     . ASN ASN ASN B B 429 429 . 0.5089 0.4987 0.4930 -0.0047 0.0003  -
0.0031 1 .
6581 CA    CA    . ASN ASN ASN B B 429 429 . 0.5187 0.5409 0.5231 -0.0032 0.0101  -
0.0040 1 .
6582 CB    CB    . ASN ASN ASN B B 429 429 . 0.5467 0.5553 0.5322 -0.0011 0.0085  -
0.0056 1 .
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6583 CG    CG    . ASN ASN ASN B B 429 429 . 0.5820 0.6088 0.5644 0.0027  0.0273  -
0.0169 1 .
6584 OD1   OD1   . ASN ASN ASN B B 429 429 . 0.6091 0.6598 0.5753 -0.0320 0.0235  -
0.0090 1 .
6585 ND2   ND2   . ASN ASN ASN B B 429 429 . 0.5451 0.6556 0.6007 0.0121  0.0646  -
0.0350 1 .
6586 C     C     . ASN ASN ASN B B 429 429 . 0.5239 0.5470 0.5393 -0.0048 0.0050  -
0.0062 1 .
6587 O     O     . ASN ASN ASN B B 429 429 . 0.4937 0.5481 0.5402 -0.0032 0.0168  -
0.0040 1 .
6588 N     N     . PRO PRO PRO B B 430 430 . 0.5486 0.5668 0.5532 -0.0102 0.0039  -
0.0026 1 .
6589 CA    CA    . PRO PRO PRO B B 430 430 . 0.5744 0.5807 0.5715 -0.0109 -0.0006 -
0.0015 1 .
6590 CB    CB    . PRO PRO PRO B B 430 430 . 0.5780 0.5799 0.5791 -0.0123 -0.0069
0.0018  1 .
6591 CG    CG    . PRO PRO PRO B B 430 430 . 0.5753 0.5665 0.5702 -0.0191 0.0062
0.0013  1 .
6592 CD    CD    . PRO PRO PRO B B 430 430 . 0.5639 0.5731 0.5590 -0.0072 0.0110  -
0.0012 1 .
6593 C     C     . PRO PRO PRO B B 430 430 . 0.5974 0.6085 0.5972 -0.0096 -0.0058 -
0.0018 1 .
6594 O     O     . PRO PRO PRO B B 430 430 . 0.6007 0.5996 0.5882 -0.0118 -0.0159 -
0.0037 1 .
6595 N     N     . SER SER SER B B 431 431 . 0.6314 0.6380 0.6320 0.0003  -0.0057 -
0.0008 1 .
6596 CA    CA    . SER SER SER B B 431 431 . 0.6760 0.6766 0.6776 0.0002  -0.0069
0.0022  1 .
6597 CB    CB    . SER SER SER B B 431 431 . 0.6839 0.6844 0.6784 0.0026  -0.0046
0.0008  1 .
6598 OG    OG    . SER SER SER B B 431 431 . 0.7263 0.6882 0.7038 -0.0017 -0.0097
0.0183  1 .
6599 C     C     . SER SER SER B B 431 431 . 0.6957 0.6966 0.6974 -0.0035 -0.0063 -
0.0007 1 .
6600 O     O     . SER SER SER B B 431 431 . 0.6924 0.7090 0.7176 -0.0113 -0.0036
0.0079  1 .
6601 N     N     . VAL VAL VAL B B 432 432 . 0.7128 0.7166 0.7184 -0.0019 0.0010  -
0.0002 1 .
6602 CA    CA    . VAL VAL VAL B B 432 432 . 0.7420 0.7339 0.7319 -0.0050 0.0003  -
0.0009 1 .
6603 CB    CB    . VAL VAL VAL B B 432 432 . 0.7466 0.7404 0.7314 -0.0040 -0.0031
0.0011  1 .
6604 CG1   CG1   . VAL VAL VAL B B 432 432 . 0.7562 0.7432 0.7401 -0.0199 -0.0143
0.0004  1 .
6605 CG2   CG2   . VAL VAL VAL B B 432 432 . 0.7486 0.7420 0.7406 -0.0054 -0.0050
0.0014  1 .
6606 C     C     . VAL VAL VAL B B 432 432 . 0.7573 0.7338 0.7438 -0.0079 -0.0005 -
0.0002 1 .
6607 O     O     . VAL VAL VAL B B 432 432 . 0.7816 0.7409 0.7541 -0.0105 -0.0071 -
0.0072 1 .
6608 G+2   G+2   . MG2 MG2 MG2 B B 1   1   . 0.0543 0.0694 0.0832 0.0346  0.0035
0.0168  1 .
6609 G+2   G+2   . MG2 MG2 MG2 B B 2   2   . 0.0543 0.1772 0.1651 -0.0550 -0.0192 -
0.0355 1 .
6610 O3P   O3P   . PEP PEP PEP B B 3   3   . 0.3988 0.3685 0.3842 0.0196  -0.0670 -
0.0408 1 .
6611 P     P     . PEP PEP PEP B B 3   3   . 0.3534 0.3334 0.3023 -0.0094 0.0078
0.0009  1 .
6612 O1P   O1P   . PEP PEP PEP B B 3   3   . 0.3605 0.3515 0.2660 -0.0512 0.0005  -
0.1030 1 .
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6613 O2P   O2P   . PEP PEP PEP B B 3   3   . 0.3166 0.3445 0.3168 -0.0169 0.0057  -
0.0143 1 .
6614 O2    O2    . PEP PEP PEP B B 3   3   . 0.4278 0.3450 0.3358 -0.0165 -0.0312
0.0131  1 .
6615 C2    C2    . PEP PEP PEP B B 3   3   . 0.4084 0.3353 0.3385 -0.0205 0.0049
0.0031  1 .
6616 C3    C3    . PEP PEP PEP B B 3   3   . 0.3455 0.3045 0.2924 -0.0564 0.0164
0.0006  1 .
6617 C1    C1    . PEP PEP PEP B B 3   3   . 0.3568 0.3232 0.3210 -0.0134 -0.0105 -
0.0057 1 .
6618 O1    O1    . PEP PEP PEP B B 3   3   . 0.3328 0.3809 0.3954 -0.0773 0.0145
0.0517  1 .
6619 "O2'" "O2'" . PEP PEP PEP B B 3   3   . 0.2577 0.2971 0.3288 0.0450  -0.0137 -
0.0307 1 .
6620 O     O     . HOH HOH HOH B B 4   4   . 0.2328 0.2210 0.2297 -0.0082 -0.0297 -
0.0118 1 .
6621 O     O     . HOH HOH HOH B B 5   5   . 0.4350 0.2938 0.2996 0.0622  -0.0337 -
0.1246 1 .
6622 O     O     . HOH HOH HOH B B 6   6   . 0.2692 0.3693 0.3700 0.0727  0.0061  -
0.0598 1 .
6623 N     N     . GLY GLY GLY B B 155 155 . 0.5050 0.5428 0.5045 0.0004  -0.0303 -
0.0353 1 .
6624 CA    CA    . GLY GLY GLY B B 155 155 . 0.5139 0.5358 0.5172 0.0073  -0.0165 -
0.0224 1 .
6625 C     C     . GLY GLY GLY B B 155 155 . 0.5253 0.5428 0.5370 0.0139  -0.0132 -
0.0197 1 .
6626 O     O     . GLY GLY GLY B B 155 155 . 0.5110 0.5273 0.5351 0.0204  -0.0113 -
0.0216 1 .
6627 N     N     . SER SER SER B B 156 156 . 0.5252 0.5580 0.5510 0.0149  -0.0043 -
0.0150 1 .
6628 CA    CA    . SER SER SER B B 156 156 . 0.5312 0.5557 0.5477 0.0163  -0.0015 -
0.0146 1 .
6629 CB    CB    . SER SER SER B B 156 156 . 0.5283 0.5489 0.5447 0.0288  0.0004  -
0.0128 1 .
6630 OG    OG    . SER SER SER B B 156 156 . 0.4903 0.5631 0.5219 0.0523  0.0015  -
0.0686 1 .
6631 C     C     . SER SER SER B B 156 156 . 0.5366 0.5621 0.5594 0.0123  -0.0021 -
0.0015 1 .
6632 O     O     . SER SER SER B B 156 156 . 0.5293 0.5568 0.5555 0.0144  0.0060  -
0.0047 1 .
6633 N     N     . HIS HIS HIS B B 157 157 . 0.5447 0.5609 0.5705 0.0093  -0.0012
0.0077  1 .
6634 CA    CA    . HIS HIS HIS B B 157 157 . 0.5587 0.5736 0.5709 0.0076  -0.0006
0.0096  1 .
6635 CB    CB    . HIS HIS HIS B B 157 157 . 0.5608 0.5777 0.5745 0.0056  0.0000
0.0145  1 .
6636 CG    CG    . HIS HIS HIS B B 157 157 . 0.5702 0.5965 0.5907 0.0116  0.0035
0.0073  1 .
6637 ND1   ND1   . HIS HIS HIS B B 157 157 . 0.5850 0.5812 0.6080 0.0012  0.0108
0.0260  1 .
6638 CE1   CE1   . HIS HIS HIS B B 157 157 . 0.6255 0.5884 0.6029 -0.0005 0.0297
0.0155  1 .
6639 NE2   NE2   . HIS HIS HIS B B 157 157 . 0.6247 0.6057 0.6156 0.0023  0.0174
0.0047  1 .
6640 CD2   CD2   . HIS HIS HIS B B 157 157 . 0.5911 0.6082 0.6012 0.0118  0.0078  -
0.0005 1 .
6641 C     C     . HIS HIS HIS B B 157 157 . 0.5616 0.5750 0.5706 0.0052  -0.0028
0.0123  1 .
6642 O     O     . HIS HIS HIS B B 157 157 . 0.5718 0.5832 0.5872 0.0038  -0.0047
0.0272  1 .
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6643 N     N     . ALA ALA ALA B B 158 158 . 0.5524 0.5661 0.5564 0.0033  -0.0034
0.0084  1 .
6644 CA    CA    . ALA ALA ALA B B 158 158 . 0.5457 0.5508 0.5404 0.0060  -0.0075 -
0.0023 1 .
6645 CB    CB    . ALA ALA ALA B B 158 158 . 0.5527 0.5458 0.5506 0.0065  -0.0083
0.0038  1 .
6646 C     C     . ALA ALA ALA B B 158 158 . 0.5383 0.5471 0.5353 0.0086  -0.0063 -
0.0052 1 .
6647 O     O     . ALA ALA ALA B B 158 158 . 0.5235 0.5345 0.5290 0.0045  -0.0165 -
0.0164 1 .
6648 N     N     . GLY GLY GLY B B 159 159 . 0.5343 0.5527 0.5280 0.0128  -0.0118 -
0.0111 1 .
6649 CA    CA    . GLY GLY GLY B B 159 159 . 0.5368 0.5511 0.5250 0.0048  -0.0166 -
0.0063 1 .
6650 C     C     . GLY GLY GLY B B 159 159 . 0.5179 0.5515 0.5107 -0.0049 -0.0108 -
0.0047 1 .
6651 O     O     . GLY GLY GLY B B 159 159 . 0.5090 0.5461 0.4970 -0.0067 -0.0290
0.0013  1 .
6652 O     O     . HOH HOH HOH S . 1   1   . 0.0727 0.5507 0.7442 0.0159  -0.1790
0.0378  1 .
6653 O     O     . HOH HOH HOH S . 2   2   . 0.1168 0.2947 0.2684 -0.0374 0.0163  -
0.0289 1 .
6654 O     O     . HOH HOH HOH S . 3   3   . 0.4560 0.2591 0.4569 0.0138  -0.0663
0.0098  1 .
6655 O     O     . HOH HOH HOH S . 4   4   . 0.2500 0.4728 0.4289 0.0442  0.0327
0.0872  1 .
6656 O     O     . HOH HOH HOH S . 5   5   . 0.2794 0.3192 0.3226 0.0077  0.0814
0.0062  1 .
6657 O     O     . HOH HOH HOH S . 6   6   . 0.3598 0.4420 0.3764 0.1257  0.0225
0.0585  1 .
6658 O     O     . HOH HOH HOH S . 7   7   . 0.1674 0.4318 0.3321 0.0378  0.0633  -
0.0886 1 .
6659 O     O     . HOH HOH HOH S . 8   8   . 4.2620 4.5048 1.3168 -1.5697 1.1336  -
0.8145 1 .
6660 O     O     . HOH HOH HOH S . 9   9   . 1.4356 0.4136 1.0190 -0.1098 -0.1811 -
0.0091 1 .
6661 O     O     . HOH HOH HOH S . 10  10  . 0.5239 0.3250 1.3013 -0.0789 -0.4363
0.5759  1 .
6662 O     O     . HOH HOH HOH S . 11  11  . 0.2234 0.4357 0.2644 -0.0396 -0.0888
0.0010  1 .
6663 O     O     . HOH HOH HOH S . 12  12  . 0.0838 0.9983 0.6371 -0.2100 0.0512
0.1686  1 .
6664 O     O     . HOH HOH HOH S . 13  13  . 0.5789 0.3879 0.4436 0.0389  -0.0252 -
0.0056 1 .
6665 O     O     . HOH HOH HOH S . 14  14  . 0.3051 0.5304 0.3096 -0.0706 -0.0135 -
0.0019 1 .
6666 O     O     . HOH HOH HOH S . 15  15  . 0.2396 0.2603 0.3357 0.0576  0.0027  -
0.0738 1 .
6667 O     O     . HOH HOH HOH S . 16  16  . 0.5273 0.4640 0.8928 -0.0176 -0.0231 -
0.1307 1 .
6668 O     O     . HOH HOH HOH S . 17  17  . 0.4513 0.7519 0.6500 0.0244  0.1135  -
0.0705 1 .
6669 O     O     . HOH HOH HOH S . 18  18  . 0.2918 0.7050 0.6524 0.2061  -0.0088 -
0.2412 1 .
6670 O     O     . HOH HOH HOH S . 19  19  . 0.4631 0.7119 0.4031 0.0358  -0.0462 -
0.0575 1 .
6671 O     O     . HOH HOH HOH S . 20  20  . 0.1370 1.1297 0.8416 0.2775  0.0402  -
0.0377 1 .
6672 O     O     . HOH HOH HOH S . 21  21  . 0.2845 0.3656 0.3870 -0.0512 -0.1066 -
0.0010 1 .
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6673 O     O     . HOH HOH HOH S . 22  22  . 0.2442 0.3820 0.2970 0.1328  0.0106  -
0.0796 1 .
6674 O     O     . HOH HOH HOH S . 23  23  . 0.3430 0.4256 0.5428 0.2421  -0.0987 -
0.1045 1 .
6675 O     O     . HOH HOH HOH S . 24  24  . 0.5486 0.6872 0.5100 -0.2290 -0.0673
0.0767  1 .
6676 O     O     . HOH HOH HOH S . 25  25  . 0.2191 0.3853 0.4218 -0.1192 -0.0217
0.1060  1 .
6677 O     O     . HOH HOH HOH S . 26  26  . 0.4921 0.3587 0.5760 0.1874  0.0959
0.0534  1 .
6678 O     O     . HOH HOH HOH S . 27  27  . 0.1705 0.8049 0.5412 0.0181  -0.0601
0.2107  1 .
6679 O     O     . HOH HOH HOH S . 28  28  . 0.7169 0.6411 0.4024 0.1526  -0.0961 -
0.0087 1 .
6680 O     O     . HOH HOH HOH S . 29  29  . 0.2917 0.3796 0.4091 0.0411  -0.0399 -
0.1030 1 .
6681 O     O     . HOH HOH HOH S . 30  30  . 0.2816 0.6961 0.7789 0.0693  0.1408
0.0839  1 .
6682 O     O     . HOH HOH HOH S . 31  31  . 0.5007 0.4262 0.5952 0.1859  0.0472
0.0634  1 .
6683 O     O     . HOH HOH HOH S . 32  32  . 0.9128 1.0919 0.8082 0.6455  0.0325
0.0226  1 .
6684 O     O     . HOH HOH HOH S . 33  33  . 0.1580 0.3789 0.5423 0.0482  0.0861
0.0902  1 .
6685 O     O     . HOH HOH HOH S . 34  34  . 0.2794 0.3435 0.3541 -0.0370 0.0244  -
0.0270 1 .
6686 O     O     . HOH HOH HOH S . 35  35  . 0.0884 0.5214 0.5814 0.0619  -0.0270 -
0.0349 1 .
6687 O     O     . HOH HOH HOH S . 36  36  . 0.7160 0.7114 0.4826 0.0884  -0.2084 -
0.2485 1 .
6688 O     O     . HOH HOH HOH S . 37  37  . 0.2958 0.4134 0.5288 -0.0240 -0.1002 -
0.0736 1 .
6689 O     O     . HOH HOH HOH S . 38  38  . 1.0026 0.5559 0.8056 -0.2973 -0.0341 -
0.1013 1 .
6690 O     O     . HOH HOH HOH S . 39  39  . 0.4195 0.4675 0.6070 0.0241  -0.1130
0.1204  1 .
6691 O     O     . HOH HOH HOH S . 40  40  . 0.1545 0.5141 0.4052 0.0226  0.0073  -
0.1418 1 .
6692 O     O     . HOH HOH HOH S . 41  41  . 0.7480 0.4647 0.5653 -0.0374 0.0816
0.3178  1 .
6693 O     O     . HOH HOH HOH S . 42  42  . 0.2971 0.2689 0.2731 -0.0351 0.0155  -
0.0639 1 .
6694 O     O     . HOH HOH HOH S . 43  43  . 0.4990 0.4185 0.3554 0.0595  0.1339  -
0.0054 1 .
6695 O     O     . HOH HOH HOH S . 44  44  . 0.3338 0.7171 0.8900 -0.2422 -0.1588
0.3711  1 .
6696 O     O     . HOH HOH HOH S . 45  45  . 0.4580 0.5123 0.5891 -0.1552 0.0316  -
0.1117 1 .
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1.1152 1 .
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0.0332  1 .
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0.0422  1 .
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0.0845  1 .
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REMARK   3   AUTHORS     : MURSHUDOV,VAGIN,DODSON
REMARK   3
REMARK   3    REFINEMENT TARGET : MAXIMUM LIKELIHOOD
REMARK   3
REMARK   3  DATA USED IN REFINEMENT.
REMARK   3   RESOLUTION RANGE HIGH (ANGSTROMS) :   2.10
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REMARK   3
REMARK   3  FIT TO DATA USED IN REFINEMENT.
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REMARK   3   FREE R VALUE TEST SET SELECTION  : RANDOM
REMARK   3   R VALUE     (WORKING + TEST SET) : 0.19202
REMARK   3   R VALUE            (WORKING SET) :  0.18901
REMARK   3   FREE R VALUE                     :  0.24875
REMARK   3   FREE R VALUE TEST SET SIZE   (%) :  5.1
REMARK   3   FREE R VALUE TEST SET COUNT      :  2380
REMARK   3
REMARK   3  FIT IN THE HIGHEST RESOLUTION BIN.
REMARK   3   TOTAL NUMBER OF BINS USED           :      20
REMARK   3   BIN RESOLUTION RANGE HIGH           :    2.104
REMARK   3   BIN RESOLUTION RANGE LOW            :    2.159
REMARK   3   REFLECTION IN BIN     (WORKING SET) :     1517
REMARK   3   BIN COMPLETENESS (WORKING+TEST) (%) :    41.66
REMARK   3   BIN R VALUE           (WORKING SET) :    0.197
REMARK   3   BIN FREE R VALUE SET COUNT          :       84
REMARK   3   BIN FREE R VALUE                    :    0.285
REMARK   3
REMARK   3  NUMBER OF NON-HYDROGEN ATOMS USED IN REFINEMENT.
REMARK   3   ALL ATOMS                :     6840
REMARK   3
REMARK   3  B VALUES.
REMARK   3   FROM WILSON PLOT           (A**2) : NULL
REMARK   3   MEAN B VALUE      (OVERALL, A**2) :  35.284
REMARK   3   OVERALL ANISOTROPIC B VALUE.
REMARK   3    B11 (A**2) :     5.95
REMARK   3    B22 (A**2) :    -3.77
REMARK   3    B33 (A**2) :    -2.18
REMARK   3    B12 (A**2) :     0.00
REMARK   3    B13 (A**2) :     0.00
REMARK   3    B23 (A**2) :     0.00
REMARK   3
REMARK   3  ESTIMATED OVERALL COORDINATE ERROR.
REMARK   3   ESU BASED ON R VALUE                            (A): NULL
```

```
REMARK   3   ESU BASED ON FREE R VALUE                       (A):   0.217
REMARK   3   ESU BASED ON MAXIMUM LIKELIHOOD                 (A):   0.143
REMARK   3   ESU FOR B VALUES BASED ON MAXIMUM LIKELIHOOD (A**2):  11.869
REMARK   3
REMARK   3 CORRELATION COEFFICIENTS.
REMARK   3   CORRELATION COEFFICIENT FO-FC      :   0.950
REMARK   3   CORRELATION COEFFICIENT FO-FC FREE :   0.921
REMARK   3
REMARK   3  RMS DEVIATIONS FROM IDEAL VALUES        COUNT    RMS    WEIGHT
REMARK   3   BOND LENGTHS REFINED ATOMS        (A):  6751 ; 0.022 ; 0.022
REMARK   3   BOND ANGLES REFINED ATOMS   (DEGREES):  9130 ; 1.812 ; 1.970
REMARK   3   TORSION ANGLES, PERIOD 1    (DEGREES):   861 ; 6.887 ; 5.000
REMARK   3   TORSION ANGLES, PERIOD 2    (DEGREES):   308 ;39.656 ;25.000
REMARK   3   TORSION ANGLES, PERIOD 3    (DEGREES):  1162 ;16.385 ;15.000
REMARK   3   TORSION ANGLES, PERIOD 4    (DEGREES):    40 ;21.725 ;15.000
REMARK   3   CHIRAL-CENTER RESTRAINTS       (A**3):  1025 ; 0.120 ; 0.200
REMARK   3   GENERAL PLANES REFINED ATOMS      (A):  5104 ; 0.008 ; 0.021
REMARK   3
REMARK   3  ISOTROPIC THERMAL FACTOR RESTRAINTS.     COUNT   RMS    WEIGHT
REMARK   3   MAIN-CHAIN BOND REFINED ATOMS  (A**2):  4277 ; 1.494 ; 1.500
REMARK   3   MAIN-CHAIN ANGLE REFINED ATOMS (A**2):  6834 ; 2.468 ; 2.000
REMARK   3   SIDE-CHAIN BOND REFINED ATOMS  (A**2):  2474 ; 4.342 ; 3.000
REMARK   3   SIDE-CHAIN ANGLE REFINED ATOMS (A**2):  2296 ; 6.554 ; 4.500
REMARK   3
REMARK   3 ANISOTROPIC THERMAL FACTOR RESTRAINTS.    COUNT   RMS   WEIGHT
REMARK   3   RIGID-BOND RESTRAINTS          (A**2):  6751 ; 2.464 ; 3.000
REMARK   3
REMARK   3  NCS RESTRAINTS STATISTICS
REMARK   3   NUMBER OF NCS GROUPS : NULL
REMARK   3
REMARK   3  TWIN DETAILS
REMARK   3   NUMBER OF TWIN DOMAINS  : NULL
REMARK   3
REMARK   3
REMARK   3  TLS DETAILS
REMARK   3   NUMBER OF TLS GROUPS  : NULL
REMARK   3
REMARK   3
REMARK   3  BULK SOLVENT MODELLING.
REMARK   3   METHOD USED :  MASK
REMARK   3   PARAMETERS FOR MASK CALCULATION
REMARK   3   VDW PROBE RADIUS   :   1.40
REMARK   3   ION PROBE RADIUS   :   0.80
REMARK   3   SHRINKAGE RADIUS   :   0.80
REMARK   3
REMARK   3  OTHER REFINEMENT REMARKS:
REMARK   3  HYDROGENS HAVE BEEN ADDED IN THE RIDING POSITIONS
REMARK   3  U VALUES      : REFINED INDIVIDUALLY
REMARK   3
;
#
_entity_poly.entity_id                  1
_entity_poly.pdbx_seq_one_letter_code
;SIQKIWAREILDSRGNPTVEVDLYTAKGLFRAAVPSGASTGIYEALELRDGDKQRYLGKG
VLKAVDHINSTIAPALISSGLSVVEQEKLDNLMLELDGTENKSKFGANAILGVSLAVCKA
GAAERELPLYRHIAQLAGNSDLILPVPAFNVINGGSHAGNKLAMQEFMILPVGAESFRDA
MRLGAEVYHTLKGVIKDKYGKDATNVGDEGGFAPNILENSEALELVKEAIDKAGYTEKIV
IGMDVAASEFYRDGKYDLDFKSPTDPSRYITGDQLGALYQDFVRDYPVVSIEDPFDQDDW
AAWSKFTANVGIQIVGDDLTVTNPKRIERAVEEKACNCLLLKVNQIGSVTEAIQACKLAQ
ENGWGVMVSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEELGDEA
```

```
RFAGHNFRNPSVL
;
_entity_poly.pdbx_strand_id             A,B
_entity_poly.type                       'polypeptide(L)'
_entity_poly.pdbx_target_identifier     ?
#
_entry.id   UNNAMED
#
_exptl.crystals_number   1
_exptl.entry_id          UNNAMED
_exptl.method            'X-RAY DIFFRACTION'
#
_exptl_crystal.id                    1
_exptl_crystal.pdbx_mosaicity        0.786
_exptl_crystal.pdbx_mosaicity_esd    ?
_exptl_crystal.density_Matthews      ?
_exptl_crystal.density_diffrn        ?
_exptl_crystal.density_meas          ?
_exptl_crystal.density_meas_temp     ?
_exptl_crystal.density_percent_sol   ?
_exptl_crystal.size_max              ?
_exptl_crystal.size_mid              ?
_exptl_crystal.size_min              ?
_exptl_crystal.size_rad              ?
#
_refine.entry_id                                 UNNAMED
_refine.pdbx_refine_id                           'X-RAY DIFFRACTION'
_refine.ls_d_res_high                            2.1000
_refine.ls_d_res_low                             80.7200
_refine.pdbx_ls_sigma_F                          0.000
_refine.pdbx_data_cutoff_high_absF               ?
_refine.pdbx_data_cutoff_low_absF                ?
_refine.ls_percent_reflns_obs                    89.1300
_refine.ls_number_reflns_obs                     47009
_refine.ls_number_reflns_all                     ?
_refine.pdbx_ls_cross_valid_method               THROUGHOUT
_refine.ls_matrix_type                           ?
_refine.pdbx_R_Free_selection_details            RANDOM
_refine.details
' HYDROGENS HAVE BEEN ADDED IN THE RIDING POSITIONS U VALUES      : REFINED
INDIVIDUALLY '
_refine.ls_R_factor_all                          ?
_refine.ls_R_factor_obs                          0.1920
_refine.ls_R_factor_R_work                       0.1890
_refine.ls_wR_factor_R_work                      0.1882
_refine.ls_R_factor_R_free                       0.2488
_refine.ls_wR_factor_R_free                      0.2457
_refine.ls_percent_reflns_R_free                 5.1000
_refine.ls_number_reflns_R_free                  2380
_refine.ls_number_reflns_R_work                  44629
_refine.ls_R_factor_R_free_error                 ?
_refine.B_iso_mean                               35.2563
_refine.solvent_model_param_bsol                 ?
_refine.solvent_model_param_ksol                 ?
_refine.pdbx_isotropic_thermal_model             ?
_refine.aniso_B[1][1]                            5.9500
_refine.aniso_B[2][2]                            -3.7700
_refine.aniso_B[3][3]                            -2.1800
_refine.aniso_B[1][2]                            0.0000
_refine.aniso_B[1][3]                            0.0000
```

```
_refine.aniso_B[2][3]                              0.0000
_refine.correlation_coeff_Fo_to_Fc                 0.9500
_refine.correlation_coeff_Fo_to_Fc_free            0.9210
_refine.overall_SU_R_Cruickshank_DPI               ?
_refine.pdbx_overall_SU_R_free_Cruickshank_DPI     ?
_refine.pdbx_overall_SU_R_Blow_DPI                 ?
_refine.pdbx_overall_SU_R_free_Blow_DPI            ?
_refine.overall_SU_R_free                          0.2166
_refine.pdbx_overall_ESU_R                         ?
_refine.pdbx_overall_ESU_R_Free                    0.2170
_refine.overall_SU_ML                              0.1430
_refine.overall_SU_B                               11.8690
_refine.solvent_model_details                      MASK
_refine.pdbx_solvent_vdw_probe_radii               1.4000
_refine.pdbx_solvent_ion_probe_radii               0.8000
_refine.pdbx_solvent_shrinkage_radii               0.8000
_refine.ls_number_parameters                       ?
_refine.ls_number_restraints                       ?
_refine.pdbx_starting_model                        ?
_refine.pdbx_method_to_determine_struct            ?
_refine.pdbx_stereochemistry_target_values         'MAXIMUM LIKELIHOOD'
_refine.pdbx_stereochem_target_val_spec_case       ?
_refine.overall_FOM_work_R_set                     0.8220
_refine.B_iso_max                                  265.390
_refine.B_iso_min                                  5.450
_refine.pdbx_overall_phase_error                   ?
_refine.occupancy_max                              1.000
_refine.occupancy_min                              0.690
#
loop_
_refine_ls_restr.pdbx_refine_id
_refine_ls_restr.type
_refine_ls_restr.number
_refine_ls_restr.dev_ideal
_refine_ls_restr.dev_ideal_target
_refine_ls_restr.weight
_refine_ls_restr.pdbx_restraint_function
'X-RAY DIFFRACTION' r_bond_refined_d       6751 0.022  0.022  ? ?
'X-RAY DIFFRACTION' r_angle_refined_deg    9130 1.812  1.970  ? ?
'X-RAY DIFFRACTION' r_dihedral_angle_1_deg 861  6.887  5.000  ? ?
'X-RAY DIFFRACTION' r_dihedral_angle_2_deg 308  39.656 25.000 ? ?
'X-RAY DIFFRACTION' r_dihedral_angle_3_deg 1162 16.385 15.000 ? ?
'X-RAY DIFFRACTION' r_dihedral_angle_4_deg 40   21.725 15.000 ? ?
'X-RAY DIFFRACTION' r_chiral_restr         1025 0.120  0.200  ? ?
'X-RAY DIFFRACTION' r_gen_planes_refined   5104 0.008  0.021  ? ?
'X-RAY DIFFRACTION' r_mcbond_it            4277 1.494  1.500  ? ?
'X-RAY DIFFRACTION' r_mcangle_it           6834 2.468  2.000  ? ?
'X-RAY DIFFRACTION' r_scbond_it            2474 4.342  3.000  ? ?
'X-RAY DIFFRACTION' r_scangle_it           2296 6.554  4.500  ? ?
'X-RAY DIFFRACTION' r_rigid_bond_restr     6751 2.464  3.000  ? ?
#
_refine_ls_shell.d_res_high                        2.1040
_refine_ls_shell.d_res_low                         2.1590
_refine_ls_shell.pdbx_total_number_of_bins_used    20
_refine_ls_shell.percent_reflns_obs                41.6600
_refine_ls_shell.number_reflns_R_work              1517
_refine_ls_shell.R_factor_all                      ?
_refine_ls_shell.R_factor_R_work                   0.1970
_refine_ls_shell.R_factor_R_free                   0.2850
_refine_ls_shell.percent_reflns_R_free             ?
```

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_refine_ls_shell.number_reflns_R_free             84
_refine_ls_shell.R_factor_R_free_error            ?
_refine_ls_shell.number_reflns_all                1601
_refine_ls_shell.number_reflns_obs                ?
_refine_ls_shell.pdbx_refine_id                   'X-RAY DIFFRACTION'
#
_reflns.entry_id                     UNNAMED
_reflns.d_resolution_high            2.100
_reflns.d_resolution_low             50.000
_reflns.pdbx_number_measured_all     202803
_reflns.number_obs                   47176
_reflns.pdbx_Rmerge_I_obs            0.058
_reflns.pdbx_netI_over_av_sigmaI     30.231
_reflns.pdbx_netI_over_sigmaI        17.000
_reflns.pdbx_chi_squared             1.843
_reflns.pdbx_redundancy              4.300
_reflns.percent_possible_obs         89.800
_reflns.pdbx_Rmeas_mean              0.058
_reflns.pdbx_average_I_obs           9377.700
_reflns.pdbx_average_sigmaI_obs      310.200
#
loop_
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_reflns_shell.d_res_low
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_reflns_shell.number_measured_all
_reflns_shell.number_unique_obs
_reflns_shell.pdbx_rejects
_reflns_shell.Rmerge_I_obs
_reflns_shell.meanI_over_sigI_obs
_reflns_shell.pdbx_Rsym_value
_reflns_shell.pdbx_chi_squared
_reflns_shell.pdbx_redundancy
_reflns_shell.percent_possible_obs
_reflns_shell.pdbx_Rmeas_mean
_reflns_shell.pdbx_netI_over_sigmaI_obs
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_reflns_shell.pdbx_number_anomalous
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_reflns_shell.pdbx_meanI_over_sigI_anomalous
_reflns_shell.pdbx_PCV_mean
_reflns_shell.number_possible
_reflns_shell.number_unique_all
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_reflns_shell.Rmerge_F_obs
_reflns_shell.Rmerge_I_all
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_reflns_shell.pdbx_Rpim_I_all
2.100 2.180  ? ? ? ? 0.161 ? ? 0.978 2.400 ? ? ? ? ? ? ? ? ? 2441 ? ? ? ? 47.300 ? ?
2.180 2.260  ? ? ? ? 0.143 ? ? 1.153 2.600 ? ? ? ? ? ? ? ? ? 3478 ? ? ? ? 67.300 ? ?
2.260 2.370  ? ? ? ? 0.146 ? ? 1.192 3.000 ? ? ? ? ? ? ? ? ? 4610 ? ? ? ? 88.600 ? ?
2.370 2.490  ? ? ? ? 0.151 ? ? 1.201 4.400 ? ? ? ? ? ? ? ? ? 5162 ? ? ? ? 99.400 ? ?
2.490 2.650  ? ? ? ? 0.126 ? ? 1.319 4.800 ? ? ? ? ? ? ? ? ? 5190 ? ? ? ? 99.900 ? ?
2.650 2.850  ? ? ? ? 0.099 ? ? 1.489 4.900 ? ? ? ? ? ? ? ? ? 5217 ? ? ? ? 99.800 ? ?
2.850 3.140  ? ? ? ? 0.076 ? ? 1.758 4.900 ? ? ? ? ? ? ? ? ? 5227 ? ? ? ? 99.800 ? ?
3.140 3.590  ? ? ? ? 0.057 ? ? 2.098 4.900 ? ? ? ? ? ? ? ? ? 5248 ? ? ? ? 99.500 ? ?
3.590 4.520  ? ? ? ? 0.044 ? ? 2.643 4.700 ? ? ? ? ? ? ? ? ? 5244 ? ? ? ? 98.900 ? ?
4.520 50.000 ? ? ? ? 0.042 ? ? 3.015 4.600 ? ? ? ? ? ? ? ? ? 5359 ? ? ? ? 96.500 ? ?
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```
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_software.pdbx_ordinal
_software.name
_software.version
_software.date
_software.type
_software.contact_author
_software.contact_author_email
_software.classification
_software.location
_software.language
1 HKL         ?    ?               package 'Zbyszek Otwinowski' hkl@hkl-xray.com
'data reduction'  http://www.hkl-xray.com/                    ?
2 REFMAC5     ?    ?               program 'Garib N. Murshudov' garib@ysbl.york.ac.uk
refinement        http://www.ccp4.ac.uk/dist/html/refmac5.html Fortran_77
3 pdb_extract 3.10 'June 10, 2010' package PDB
deposit@deposit.rcsb.org
'data extraction' http://sw-tools.pdb.org/apps/PDB_EXTRACT/    C++
#
_struct_biol.id        1
_struct_biol.details   ?
#
_symmetry.space_group_name_H-M   'P 21 21 2'
_symmetry.entry_id               UNNAMED
_symmetry.Int_Tables_number      18
#
```

CIF File(s) (REQUIRED if paper describes X-ray crystal structures)

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data_UNNAMED
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loop_
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_atom_site.label_atom_id
_atom_site.label_alt_id
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_atom_site.label_comp_id
_atom_site.pdbx_auth_comp_id
_atom_site.auth_asym_id
_atom_site.label_asym_id
_atom_site.auth_seq_id
_atom_site.label_seq_id
_atom_site.pdbx_PDB_ins_code
_atom_site.Cartn_x
_atom_site.Cartn_y
_atom_site.Cartn_z
_atom_site.occupancy
_atom_site.B_iso_or_equiv
_atom_site.pdbx_PDB_model_num
_atom_site.label_entity_id
_atom_site.type_symbol
ATOM 1    N     N     . SER SER SER A A 1   1   . 65.922  77.069  21.744  1.00 17.83
1 . .
ATOM 2    CA    CA    . SER SER SER A A 1   1   . 67.295  76.500  21.316  1.00 18.18
1 . .
ATOM 3    CB    CB    . SER SER SER A A 1   1   . 67.252  74.978  21.025  1.00 19.26
1 . .
ATOM 4    OG    OG    . SER SER SER A A 1   1   . 66.292  74.679  20.001  1.00 26.51
1 . .
ATOM 5    C     C     . SER SER SER A A 1   1   . 67.816  77.196  20.056  1.00 16.96
1 . .
ATOM 6    O     O     . SER SER SER A A 1   1   . 67.099  77.950  19.391  1.00 17.53
1 . .
ATOM 7    N     N     . ILE ILE ILE A A 2   2   . 69.074  76.932  19.737  1.00 14.62
1 . .
ATOM 8    CA    CA    . ILE ILE ILE A A 2   2   . 69.673  77.543  18.561  1.00 12.85
1 . .
ATOM 9    CB    CB    . ILE ILE ILE A A 2   2   . 71.174  77.318  18.623  1.00 11.42
1 . .
ATOM 10   CG1   CG1   . ILE ILE ILE A A 2   2   . 71.724  78.055  19.822  1.00 11.23
1 . .
ATOM 11   CD1   CD1   . ILE ILE ILE A A 2   2   . 73.161  77.633  20.153  1.00 11.51
1 . .
ATOM 12   CG2   CG2   . ILE ILE ILE A A 2   2   . 71.783  77.838  17.339  1.00 12.06
1 . .
ATOM 13   C     C     . ILE ILE ILE A A 2   2   . 69.080  76.939  17.303  1.00 14.70
1 . .
ATOM 14   O     O     . ILE ILE ILE A A 2   2   . 68.993  75.659  17.173  1.00 14.31
1 . .
ATOM 15   N     N     . GLN GLN GLN A A 3   3   . 68.628  77.789  16.383  1.00 14.97
1 . .
ATOM 16   CA    CA    . GLN GLN GLN A A 3   3   . 68.107  77.275  15.092  1.00 17.20
1 . .
ATOM 17   CB    CB    . GLN GLN GLN A A 3   3   . 66.956  78.144  14.564  1.00 18.26
1 . .
ATOM 18   CG    CG    . GLN GLN GLN A A 3   3   . 65.778  78.259  15.482  1.00 22.37
1 . .
```

```
ATOM 19   CD    CD    . GLN GLN GLN A A 3   3   . 64.655  79.078  14.804  1.00 34.96
1 . .
ATOM 20   OE1   OE1   . GLN GLN GLN A A 3   3   . 64.915  80.010  13.998  1.00 38.94
1 . .
ATOM 21   NE2   NE2   . GLN GLN GLN A A 3   3   . 63.399  78.714  15.096  1.00 39.16
1 . .
ATOM 22   C     C     . GLN GLN GLN A A 3   3   . 69.141  77.047  13.993  1.00 15.82
1 . .
ATOM 23   O     O     . GLN GLN GLN A A 3   3   . 69.081  76.084  13.264  1.00 17.11
1 . .
ATOM 24   N     N     . LYS LYS LYS A A 4   4   . 70.092  77.976  13.839  1.00 14.19
1 . .
ATOM 25   CA    CA    . LYS LYS LYS A A 4   4   . 71.106  77.889  12.782  1.00 13.88
1 . .
ATOM 26   CB    CB    . LYS LYS LYS A A 4   4   . 70.460  78.351  11.421  1.00 14.48
1 . .
ATOM 27   CG    CG    . LYS LYS LYS A A 4   4   . 71.387  78.578  10.280  1.00 21.62
1 . .
ATOM 28   CD    CD    . LYS LYS LYS A A 4   4   . 70.651  78.610  8.850   1.00 26.48
1 . .
ATOM 29   CE    CE    . LYS LYS LYS A A 4   4   . 69.516  79.660  8.674   1.00 32.89
1 . .
ATOM 30   C     C     . LYS LYS LYS A A 4   4   . 72.234  78.806  13.199  1.00 11.86
1 . .
ATOM 31   O     O     . LYS LYS LYS A A 4   4   . 71.983  79.825  13.879  1.00 12.22
1 . .
ATOM 32   N     N     . ILE ILE ILE A A 5   5   . 73.460  78.455  12.823  1.00 10.55
1 . .
ATOM 33   CA    CA    . ILE ILE ILE A A 5   5   . 74.633  79.343  12.952  1.00 11.10
1 . .
ATOM 34   CB    CB    . ILE ILE ILE A A 5   5   . 75.590  78.764  14.015  1.00 10.74
1 . .
ATOM 35   CG1   CG1   . ILE ILE ILE A A 5   5   . 74.990  78.979  15.418  1.00 10.39
1 . .
ATOM 36   CD1   CD1   . ILE ILE ILE A A 5   5   . 75.623  78.137  16.454  1.00 10.60
1 . .
ATOM 37   CG2   CG2   . ILE ILE ILE A A 5   5   . 77.038  79.399  13.875  1.00 10.81
1 . .
ATOM 38   C     C     . ILE ILE ILE A A 5   5   . 75.329  79.467  11.600  1.00 11.16
1 . .
ATOM 39   O     O     . ILE ILE ILE A A 5   5   . 75.507  78.450  10.888  1.00 13.25
1 . .
ATOM 40   N     N     . TRP TRP TRP A A 6   6   . 75.783  80.680  11.242  1.00 10.20
1 . .
ATOM 41   CA    CA    . TRP TRP TRP A A 6   6   . 76.587  80.784  10.003  1.00 10.39
1 . .
ATOM 42   CB    CB    . TRP TRP TRP A A 6   6   . 75.783  81.229  8.789   1.00 10.83
1 . .
ATOM 43   CG    CG    . TRP TRP TRP A A 6   6   . 76.586  81.184  7.551   1.00 13.52
1 . .
ATOM 44   CD1   CD1   . TRP TRP TRP A A 6   6   . 77.007  82.224  6.807   1.00 16.47
1 . .
ATOM 45   NE1   NE1   . TRP TRP TRP A A 6   6   . 77.791  81.782  5.766   1.00 16.32
1 . .
ATOM 46   CE2   CE2   . TRP TRP TRP A A 6   6   . 77.837  80.410  5.795   1.00 18.57
1 . .
ATOM 47   CD2   CD2   . TRP TRP TRP A A 6   6   . 77.084  79.995  6.920   1.00 15.81
1 . .
ATOM 48   CE3   CE3   . TRP TRP TRP A A 6   6   . 77.018  78.629  7.236   1.00 15.28
1 . .
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ATOM 49   CZ3   CZ3   . TRP TRP TRP A A 6   6   . 77.654  77.691  6.375   1.00 15.37
1 . .
ATOM 50   CH2   CH2   . TRP TRP TRP A A 6   6   . 78.403  78.142  5.255   1.00 17.87
1 . .
ATOM 51   CZ2   CZ2   . TRP TRP TRP A A 6   6   . 78.488  79.498  4.935   1.00 14.97
1 . .
ATOM 52   C     C     . TRP TRP TRP A A 6   6   . 77.686  81.784  10.238  1.00 10.19
1 . .
ATOM 53   O     O     . TRP TRP TRP A A 6   6   . 77.396  82.913  10.562  1.00 11.28
1 . .
ATOM 54   N     N     . ALA ALA ALA A A 7   7   . 78.908  81.341  10.066  1.00 9.50
1 . .
ATOM 55   CA    CA    . ALA ALA ALA A A 7   7   . 80.104  82.178  10.260  1.00 8.84
1 . .
ATOM 56   CB    CB    . ALA ALA ALA A A 7   7   . 81.191  81.428  11.161  1.00 9.96
1 . .
ATOM 57   C     C     . ALA ALA ALA A A 7   7   . 80.670  82.574  8.921   1.00 8.79
1 . .
ATOM 58   O     O     . ALA ALA ALA A A 7   7   . 80.510  81.887  7.908   1.00 9.17
1 . .
ATOM 59   N     N     . ARG ARG ARG A A 8   8   . 81.355  83.734  8.891   1.00 8.89
1 . .
ATOM 60   CA    CA    . ARG ARG ARG A A 8   8   . 82.041  84.191  7.691   1.00 8.70
1 . .
ATOM 61   CB    CB    . ARG ARG ARG A A 8   8   . 81.079  85.108  6.858   1.00 7.03
1 . .
ATOM 62   CG    CG    . ARG ARG ARG A A 8   8   . 80.880  86.465  7.585   1.00 7.39
1 . .
ATOM 63   CD    CD    . ARG ARG ARG A A 8   8   . 79.980  87.464  6.819   1.00 8.61
1 . .
ATOM 64   NE    NE    . ARG ARG ARG A A 8   8   . 78.702  86.818  6.551   1.00 9.81
1 . .
ATOM 65   CZ    CZ    . ARG ARG ARG A A 8   8   . 77.677  86.768  7.414   1.00 10.23
1 . .
ATOM 66   NH1   NH1   . ARG ARG ARG A A 8   8   . 77.742  87.433  8.577   1.00 11.23
1 . .
ATOM 67   NH2   NH2   . ARG ARG ARG A A 8   8   . 76.564  86.037  7.123   1.00 13.44
1 . .
ATOM 68   C     C     . ARG ARG ARG A A 8   8   . 83.292  84.995  8.056   1.00 8.66
1 . .
ATOM 69   O     O     . ARG ARG ARG A A 8   8   . 83.520  85.327  9.217   1.00 8.91
1 . .
ATOM 70   N     N     . GLU GLU GLU A A 9   9   . 84.130  85.278  7.047   1.00 9.44
1 . .
ATOM 71   CA    CA    . GLU GLU GLU A A 9   9   . 85.302  86.096  7.198   1.00 9.71
1 . .
ATOM 72   CB    CB    . GLU GLU GLU A A 9   9   . 86.253  85.528  6.165   1.00 13.76
1 . .
ATOM 73   CG    CG    . GLU GLU GLU A A 9   9   . 87.665  85.944  6.225   1.00 15.25
1 . .
ATOM 74   CD    CD    . GLU GLU GLU A A 9   9   . 88.459  85.228  5.152   1.00 15.81
1 . .
ATOM 75   OE1   OE1   . GLU GLU GLU A A 9   9   . 89.476  84.571  5.476   1.00 10.61
1 . .
ATOM 76   OE2   OE2   . GLU GLU GLU A A 9   9   . 88.052  85.384  3.977   1.00 16.40
1 . .
ATOM 77   C     C     . GLU GLU GLU A A 9   9   . 84.839  87.533  6.888   1.00 10.17
1 . .
ATOM 78   O     O     . GLU GLU GLU A A 9   9   . 84.130  87.774  5.916   1.00 13.65
1 . .
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ATOM 79   N     N     . ILE ILE ILE A A 10  10  . 85.141  88.468  7.768   1.00 8.56
1 . .
ATOM 80   CA    CA    . ILE ILE ILE A A 10  10  . 85.033  89.936  7.471   1.00 7.66
1 . .
ATOM 81   CB    CB    . ILE ILE ILE A A 10  10  . 84.048  90.629  8.392   1.00 6.24
1 . .
ATOM 82   CG1   CG1   . ILE ILE ILE A A 10  10  . 84.418  90.380  9.882   1.00 6.21
1 . .
ATOM 83   CD1   CD1   . ILE ILE ILE A A 10  10  . 83.650  91.374  10.860  1.00 9.60
1 . .
ATOM 84   CG2   CG2   . ILE ILE ILE A A 10  10  . 82.542  90.140  8.081   1.00 7.27
1 . .
ATOM 85   C     C     . ILE ILE ILE A A 10  10  . 86.413  90.555  7.608   1.00 7.47
1 . .
ATOM 86   O     O     . ILE ILE ILE A A 10  10  . 87.333  89.874  7.972   1.00 9.01
1 . .
ATOM 87   N     N     . LEU LEU LEU A A 11  11  . 86.558  91.883  7.385   1.00 5.98
1 . .
ATOM 88   CA    CA    . LEU LEU LEU A A 11  11  . 87.849  92.525  7.607   1.00 6.54
1 . .
ATOM 89   CB    CB    . LEU LEU LEU A A 11  11  . 88.250  93.404  6.417   1.00 7.84
1 . .
ATOM 90   CG    CG    . LEU LEU LEU A A 11  11  . 88.441  92.595  5.124   1.00 7.20
1 . .
ATOM 91   CD1   CD1   . LEU LEU LEU A A 11  11  . 89.042  93.667  4.105   1.00 8.73
1 . .
ATOM 92   CD2   CD2   . LEU LEU LEU A A 11  11  . 89.435  91.436  5.320   1.00 9.37
1 . .
ATOM 93   C     C     . LEU LEU LEU A A 11  11  . 87.776  93.412  8.850   1.00 6.15
1 . .
ATOM 94   O     O     . LEU LEU LEU A A 11  11  . 86.747  94.081  9.067   1.00 7.48
1 . .
ATOM 95   N     N     . ASP ASP ASP A A 12  12  . 88.835  93.355  9.654   1.00 6.14
1 . .
ATOM 96   CA    CA    . ASP ASP ASP A A 12  12  . 88.974  94.172  10.888  1.00 6.38
1 . .
ATOM 97   CB    CB    . ASP ASP ASP A A 12  12  . 89.854  93.452  11.974  1.00 5.75
1 . .
ATOM 98   CG    CG    . ASP ASP ASP A A 12  12  . 91.352  93.528  11.668  1.00 7.90
1 . .
ATOM 99   OD1   OD1   . ASP ASP ASP A A 12  12  . 91.805  94.221  10.679  1.00 7.58
1 . .
ATOM 100  OD2   OD2   . ASP ASP ASP A A 12  12  . 92.100  92.918  12.426  1.00 11.16
1 . .
ATOM 101  C     C     . ASP ASP ASP A A 12  12  . 89.489  95.564  10.505  1.00 6.31
1 . .
ATOM 102  O     O     . ASP ASP ASP A A 12  12  . 89.652  95.889  9.305   1.00 7.44
1 . .
ATOM 103  N     N     . SER SER SER A A 13  13  . 89.772  96.380  11.497  1.00 5.93
1 . .
ATOM 104  CA    CA    . SER SER SER A A 13  13  . 90.067  97.781  11.268  1.00 4.49
1 . .
ATOM 105  CB    CB    . SER SER SER A A 13  13  . 89.948  98.513  12.632  1.00 5.33
1 . .
ATOM 106  OG    OG    . SER SER SER A A 13  13  . 90.909  97.953  13.605  1.00 8.83
1 . .
ATOM 107  C     C     . SER SER SER A A 13  13  . 91.447  98.038  10.639  1.00 7.21
1 . .
ATOM 108  O     O     . SER SER SER A A 13  13  . 91.707  99.175  10.272  1.00 8.77
1 . .
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ATOM 109  N     N     . ARG ARG ARG A A 14  14  . 92.285  96.996  10.524  1.00 6.99
1 . .
ATOM 110  CA    CA    . ARG ARG ARG A A 14  14  . 93.564  97.081  9.815   1.00 8.40
1 . .
ATOM 111  CB    CB    . ARG ARG ARG A A 14  14  . 94.701  96.328  10.577  1.00 8.12
1 . .
ATOM 112  CG    CG    . ARG ARG ARG A A 14  14  . 95.392  97.281  11.565  1.00 9.08
1 . .
ATOM 113  CD    CD    . ARG ARG ARG A A 14  14  . 96.629  96.556  12.277  1.00 10.23
1 . .
ATOM 114  NE    NE    . ARG ARG ARG A A 14  14  . 96.172  95.482  13.130  1.00 12.26
1 . .
ATOM 115  CZ    CZ    . ARG ARG ARG A A 14  14  . 96.320  95.457  14.462  1.00 9.08
1 . .
ATOM 116  NH1   NH1   . ARG ARG ARG A A 14  14  . 96.944  96.476  15.090  1.00 9.16
1 . .
ATOM 117  NH2   NH2   . ARG ARG ARG A A 14  14  . 95.858  94.400  15.151  1.00 9.24
1 . .
ATOM 118  C     C     . ARG ARG ARG A A 14  14  . 93.421  96.475  8.447   1.00 7.64
1 . .
ATOM 119  O     O     . ARG ARG ARG A A 14  14  . 94.392  96.448  7.708   1.00 11.33
1 . .
ATOM 120  N     N     . GLY GLY GLY A A 15  15  . 92.238  96.011  8.103   1.00 6.76
1 . .
ATOM 121  CA    CA    . GLY GLY GLY A A 15  15  . 92.062  95.338  6.748   1.00 7.41
1 . .
ATOM 122  C     C     . GLY GLY GLY A A 15  15  . 92.483  93.865  6.776   1.00 9.22
1 . .
ATOM 123  O     O     . GLY GLY GLY A A 15  15  . 92.683  93.270  5.704   1.00 9.58
1 . .
ATOM 124  N     N     . ASN ASN ASN A A 16  16  . 92.550  93.254  7.978   1.00 7.07
1 . .
ATOM 125  CA    CA    . ASN ASN ASN A A 16  16  . 92.901  91.812  8.044   1.00 9.07
1 . .
ATOM 126  CB    CB    . ASN ASN ASN A A 16  16  . 93.961  91.519  9.097   1.00 8.03
1 . .
ATOM 127  CG    CG    . ASN ASN ASN A A 16  16  . 95.256  92.260  8.825   1.00 10.90
1 . .
ATOM 128  OD1   OD1   . ASN ASN ASN A A 16  16  . 95.792  92.186  7.687   1.00 13.72
1 . .
ATOM 129  ND2   ND2   . ASN ASN ASN A A 16  16  . 95.776  92.969  9.844   1.00 11.48
1 . .
ATOM 130  C     C     . ASN ASN ASN A A 16  16  . 91.684  90.950  8.310   1.00 7.09
1 . .
ATOM 131  O     O     . ASN ASN ASN A A 16  16  . 90.744  91.400  8.967   1.00 7.66
1 . .
ATOM 132  N     N     . PRO PRO PRO A A 17  17  . 91.648  89.728  7.746   1.00 8.30
1 . .
ATOM 133  CA    CA    . PRO PRO PRO A A 17  17  . 90.445  88.920  8.044   1.00 7.50
1 . .
ATOM 134  CB    CB    . PRO PRO PRO A A 17  17  . 90.740  87.572  7.385   1.00 7.71
1 . .
ATOM 135  CG    CG    . PRO PRO PRO A A 17  17  . 91.639  87.999  6.198   1.00 8.95
1 . .
ATOM 136  CD    CD    . PRO PRO PRO A A 17  17  . 92.575  89.007  6.850   1.00 10.24
1 . .
ATOM 137  C     C     . PRO PRO PRO A A 17  17  . 90.210  88.648  9.545   1.00 7.97
1 . .
ATOM 138  O     O     . PRO PRO PRO A A 17  17  . 91.143  88.506  10.305  1.00 8.55
1 . .
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ATOM 139  N     N     . THR THR THR A A 18  18  . 88.936  88.525  9.895   1.00 7.28
1 . .
ATOM 140  CA    CA    . THR THR THR A A 18  18  . 88.596  88.007  11.222  1.00 7.39
1 . .
ATOM 141  CB    CB    . THR THR THR A A 18  18  . 88.693  89.070  12.330  1.00 7.24
1 . .
ATOM 142  OG1   OG1   . THR THR THR A A 18  18  . 88.542  88.373  13.610  1.00 6.22
1 . .
ATOM 143  CG2   CG2   . THR THR THR A A 18  18  . 87.555  90.131  12.121  1.00 6.83
1 . .
ATOM 144  C     C     . THR THR THR A A 18  18  . 87.241  87.321  11.171  1.00 8.05
1 . .
ATOM 145  O     O     . THR THR THR A A 18  18  . 86.612  87.299  10.132  1.00 8.40
1 . .
ATOM 146  N     N     . VAL VAL VAL A A 19  19  . 86.876  86.637  12.258  1.00 6.49
1 . .
ATOM 147  CA    CA    . VAL VAL VAL A A 19  19  . 85.652  85.826  12.320  1.00 6.01
1 . .
ATOM 148  CB    CB    . VAL VAL VAL A A 19  19  . 85.881  84.766  13.428  1.00 5.14
1 . .
ATOM 149  CG1   CG1   . VAL VAL VAL A A 19  19  . 84.536  83.989  13.682  1.00 6.50
1 . .
ATOM 150  CG2   CG2   . VAL VAL VAL A A 19  19  . 87.050  83.795  12.976  1.00 7.45
1 . .
ATOM 151  C     C     . VAL VAL VAL A A 19  19  . 84.412  86.625  12.663  1.00 6.61
1 . .
ATOM 152  O     O     . VAL VAL VAL A A 19  19  . 84.461  87.417  13.602  1.00 8.33
1 . .
ATOM 153  N     N     . GLU GLU GLU A A 20  20  . 83.300  86.423  11.953  1.00 5.81
1 . .
ATOM 154  CA    CA    . GLU GLU GLU A A 20  20  . 82.016  86.992  12.351  1.00 8.88
1 . .
ATOM 155  CB    CB    . GLU GLU GLU A A 20  20  . 81.597  88.069  11.339  1.00 8.04
1 . .
ATOM 156  CG    CG    . GLU GLU GLU A A 20  20  . 80.108  88.454  11.497  1.00 9.62
1 . .
ATOM 157  CD    CD    . GLU GLU GLU A A 20  20  . 79.846  89.667  10.570  1.00 9.93
1 . .
ATOM 158  OE1   OE1   . GLU GLU GLU A A 20  20  . 79.312  89.433  9.461   1.00 11.38
1 . .
ATOM 159  OE2   OE2   . GLU GLU GLU A A 20  20  . 80.133  90.805  10.998  1.00 11.66
1 . .
ATOM 160  C     C     . GLU GLU GLU A A 20  20  . 81.045  85.822  12.395  1.00 8.37
1 . .
ATOM 161  O     O     . GLU GLU GLU A A 20  20  . 81.121  84.930  11.535  1.00 8.16
1 . .
ATOM 162  N     N     . VAL VAL VAL A A 21  21  . 80.118  85.836  13.354  1.00 6.97
1 . .
ATOM 163  CA    CA    . VAL VAL VAL A A 21  21  . 79.172  84.735  13.504  1.00 7.06
1 . .
ATOM 164  CB    CB    . VAL VAL VAL A A 21  21  . 79.371  84.005  14.859  1.00 6.08
1 . .
ATOM 165  CG1   CG1   . VAL VAL VAL A A 21  21  . 78.328  82.947  15.026  1.00 8.67
1 . .
ATOM 166  CG2   CG2   . VAL VAL VAL A A 21  21  . 80.795  83.411  14.867  1.00 6.83
1 . .
ATOM 167  C     C     . VAL VAL VAL A A 21  21  . 77.753  85.337  13.506  1.00 7.18
1 . .
ATOM 168  O     O     . VAL VAL VAL A A 21  21  . 77.494  86.281  14.251  1.00 7.12
1 . .
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ATOM 169  N     N     . ASP ASP ASP A A 22  22  . 76.877  84.775  12.683  1.00 6.47
1 . .
ATOM 170  CA    CA    . ASP ASP ASP A A 22  22  . 75.415  85.035  12.739  1.00 7.87
1 . .
ATOM 171  CB    CB    . ASP ASP ASP A A 22  22  . 74.836  85.040  11.341  1.00 9.56
1 . .
ATOM 172  CG    CG    . ASP ASP ASP A A 22  22  . 75.133  86.309  10.534  1.00 11.32
1 . .
ATOM 173  OD1   OD1   . ASP ASP ASP A A 22  22  . 74.699  86.341  9.345   1.00 14.54
1 . .
ATOM 174  OD2   OD2   . ASP ASP ASP A A 22  22  . 75.738  87.250  11.073  1.00 10.82
1 . .
ATOM 175  C     C     . ASP ASP ASP A A 22  22  . 74.782  83.847  13.468  1.00 9.64
1 . .
ATOM 176  O     O     . ASP ASP ASP A A 22  22  . 75.037  82.682  13.081  1.00 11.58
1 . .
ATOM 177  N     N     . LEU LEU LEU A A 23  23  . 74.009  84.112  14.520  1.00 8.72
1 . .
ATOM 178  CA    CA    . LEU LEU LEU A A 23  23  . 73.311  83.005  15.203  1.00 7.97
1 . .
ATOM 179  CB    CB    . LEU LEU LEU A A 23  23  . 73.869  82.833  16.606  1.00 8.15
1 . .
ATOM 180  CG    CG    . LEU LEU LEU A A 23  23  . 73.339  81.665  17.475  1.00 9.11
1 . .
ATOM 181  CD1   CD1   . LEU LEU LEU A A 23  23  . 74.307  81.426  18.563  1.00 10.54
1 . .
ATOM 182  CD2   CD2   . LEU LEU LEU A A 23  23  . 71.986  82.068  18.121  1.00 10.41
1 . .
ATOM 183  C     C     . LEU LEU LEU A A 23  23  . 71.823  83.320  15.188  1.00 9.15
1 . .
ATOM 184  O     O     . LEU LEU LEU A A 23  23  . 71.404  84.452  15.564  1.00 10.37
1 . .
ATOM 185  N     N     . TYR TYR TYR A A 24  24  . 71.036  82.294  14.855  1.00 8.25
1 . .
ATOM 186  CA    CA    . TYR TYR TYR A A 24  24  . 69.586  82.520  14.668  1.00 11.08
1 . .
ATOM 187  CB    CB    . TYR TYR TYR A A 24  24  . 69.118  81.960  13.321  1.00 11.36
1 . .
ATOM 188  CG    CG    . TYR TYR TYR A A 24  24  . 69.554  82.710  12.077  1.00 13.35
1 . .
ATOM 189  CD1   CD1   . TYR TYR TYR A A 24  24  . 70.835  82.523  11.529  1.00 12.55
1 . .
ATOM 190  CE1   CE1   . TYR TYR TYR A A 24  24  . 71.270  83.194  10.355  1.00 16.59
1 . .
ATOM 191  CZ    CZ    . TYR TYR TYR A A 24  24  . 70.412  84.078  9.741   1.00 21.58
1 . .
ATOM 192  OH    OH    . TYR TYR TYR A A 24  24  . 70.819  84.767  8.602   1.00 24.06
1 . .
ATOM 193  CE2   CE2   . TYR TYR TYR A A 24  24  . 69.142  84.302  10.263  1.00 21.49
1 . .
ATOM 194  CD2   CD2   . TYR TYR TYR A A 24  24  . 68.703  83.609  11.445  1.00 20.91
1 . .
ATOM 195  C     C     . TYR TYR TYR A A 24  24  . 68.802  81.779  15.742  1.00 11.43
1 . .
ATOM 196  O     O     . TYR TYR TYR A A 24  24  . 69.079  80.599  16.049  1.00 11.88
1 . .
ATOM 197  N     N     . THR THR THR A A 25  25  . 67.782  82.442  16.292  1.00 12.98
1 . .
ATOM 198  CA    CA    . THR THR THR A A 25  25  . 66.843  81.754  17.205  1.00 13.58
1 . .
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ATOM 199  CB    CB    . THR THR THR A A 25  25  . 67.035  82.248  18.690  1.00 13.26
1 . .
ATOM 200  OG1   OG1   . THR THR THR A A 25  25  . 66.705  83.643  18.751  1.00 13.26
1 . .
ATOM 201  CG2   CG2   . THR THR THR A A 25  25  . 68.512  82.104  19.162  1.00 12.70
1 . .
ATOM 202  C     C     . THR THR THR A A 25  25  . 65.440  82.186  16.756  1.00 15.28
1 . .
ATOM 203  O     O     . THR THR THR A A 25  25  . 65.271  83.010  15.869  1.00 16.14
1 . .
ATOM 204  N     N     . ALA ALA ALA A A 26  26  . 64.433  81.711  17.447  1.00 16.88
1 . .
ATOM 205  CA    CA    . ALA ALA ALA A A 26  26  . 63.079  82.287  17.276  1.00 19.37
1 . .
ATOM 206  CB    CB    . ALA ALA ALA A A 26  26  . 62.097  81.692  18.322  1.00 19.32
1 . .
ATOM 207  C     C     . ALA ALA ALA A A 26  26  . 63.002  83.825  17.347  1.00 20.07
1 . .
ATOM 208  O     O     . ALA ALA ALA A A 26  26  . 62.067  84.358  16.804  1.00 20.76
1 . .
ATOM 209  N     N     . LYS LYS LYS A A 27  27  . 63.941  84.521  18.009  1.00 19.09
1 . .
ATOM 210  CA    CA    . LYS LYS LYS A A 27  27  . 63.886  85.974  18.175  1.00 20.04
1 . .
ATOM 211  CB    CB    . LYS LYS LYS A A 27  27  . 64.576  86.427  19.473  1.00 21.51
1 . .
ATOM 212  CG    CG    . LYS LYS LYS A A 27  27  . 63.999  85.989  20.789  1.00 24.14
1 . .
ATOM 213  CD    CD    . LYS LYS LYS A A 27  27  . 62.635  86.537  20.949  1.00 29.44
1 . .
ATOM 214  CE    CE    . LYS LYS LYS A A 27  27  . 62.373  86.756  22.423  1.00 32.12
1 . .
ATOM 215  NZ    NZ    . LYS LYS LYS A A 27  27  . 60.966  87.097  22.396  1.00 34.89
1 . .
ATOM 216  C     C     . LYS LYS LYS A A 27  27  . 64.577  86.695  17.011  1.00 20.65
1 . .
ATOM 217  O     O     . LYS LYS LYS A A 27  27  . 64.522  87.906  16.918  1.00 22.52
1 . .
ATOM 218  N     N     . GLY GLY GLY A A 28  28  . 65.237  85.973  16.121  1.00 18.39
1 . .
ATOM 219  CA    CA    . GLY GLY GLY A A 28  28  . 65.868  86.661  15.012  1.00 17.73
1 . .
ATOM 220  C     C     . GLY GLY GLY A A 28  28  . 67.335  86.305  14.859  1.00 15.86
1 . .
ATOM 221  O     O     . GLY GLY GLY A A 28  28  . 67.803  85.247  15.323  1.00 14.03
1 . .
ATOM 222  N     N     . LEU LEU LEU A A 29  29  . 68.040  87.215  14.208  1.00 14.47
1 . .
ATOM 223  CA    CA    . LEU LEU LEU A A 29  29  . 69.478  87.054  13.917  1.00 14.43
1 . .
ATOM 224  CB    CB    . LEU LEU LEU A A 29  29  . 69.760  87.567  12.484  1.00 15.72
1 . .
ATOM 225  CG    CG    . LEU LEU LEU A A 29  29  . 71.121  87.239  11.876  1.00 19.75
1 . .
ATOM 226  CD1   CD1   . LEU LEU LEU A A 29  29  . 71.067  87.454  10.329  1.00 25.82
1 . .
ATOM 227  CD2   CD2   . LEU LEU LEU A A 29  29  . 72.131  88.164  12.466  1.00 24.68
1 . .
ATOM 228  C     C     . LEU LEU LEU A A 29  29  . 70.310  87.851  14.965  1.00 11.90
1 . .
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ATOM 229  O     O     . LEU LEU LEU A A 29  29  . 70.014  89.030  15.212  1.00 12.56
1 . .
ATOM 230  N     N     . PHE PHE PHE A A 30  30  . 71.374  87.252  15.500  1.00 9.57
1 . .
ATOM 231  CA    CA    . PHE PHE PHE A A 30  30  . 72.291  87.892  16.465  1.00 9.72
1 . .
ATOM 232  CB    CB    . PHE PHE PHE A A 30  30  . 72.145  87.222  17.840  1.00 9.18
1 . .
ATOM 233  CG    CG    . PHE PHE PHE A A 30  30  . 70.752  87.335  18.321  1.00 9.28
1 . .
ATOM 234  CD1   CD1   . PHE PHE PHE A A 30  30  . 70.360  88.566  18.955  1.00 10.67
1 . .
ATOM 235  CE1   CE1   . PHE PHE PHE A A 30  30  . 69.042  88.780  19.301  1.00 13.77
1 . .
ATOM 236  CZ    CZ    . PHE PHE PHE A A 30  30  . 68.082  87.774  19.045  1.00 13.38
1 . .
ATOM 237  CE2   CE2   . PHE PHE PHE A A 30  30  . 68.434  86.553  18.345  1.00 12.33
1 . .
ATOM 238  CD2   CD2   . PHE PHE PHE A A 30  30  . 69.768  86.337  18.003  1.00 10.11
1 . .
ATOM 239  C     C     . PHE PHE PHE A A 30  30  . 73.681  87.738  15.904  1.00 10.44
1 . .
ATOM 240  O     O     . PHE PHE PHE A A 30  30  . 74.055  86.613  15.530  1.00 12.91
1 . .
ATOM 241  N     N     . ARG ARG ARG A A 31  31  . 74.441  88.832  15.831  1.00 9.15
1 . .
ATOM 242  CA    CA    . ARG ARG ARG A A 31  31  . 75.716  88.765  15.116  1.00 7.24
1 . .
ATOM 243  CB    CB    . ARG ARG ARG A A 31  31  . 75.616  89.637  13.838  1.00 7.53
1 . .
ATOM 244  CG    CG    . ARG ARG ARG A A 31  31  . 76.916  89.731  13.077  1.00 9.09
1 . .
ATOM 245  CD    CD    . ARG ARG ARG A A 31  31  . 76.738  90.672  11.874  1.00 12.81
1 . .
ATOM 246  NE    NE    . ARG ARG ARG A A 31  31  . 75.723  90.271  10.940  1.00 11.83
1 . .
ATOM 247  CZ    CZ    . ARG ARG ARG A A 31  31  . 75.032  91.192  10.242  1.00 16.09
1 . .
ATOM 248  NH1   NH1   . ARG ARG ARG A A 31  31  . 75.257  92.504  10.439  1.00 17.36
1 . .
ATOM 249  NH2   NH2   . ARG ARG ARG A A 31  31  . 74.113  90.849  9.385   1.00 17.84
1 . .
ATOM 250  C     C     . ARG ARG ARG A A 31  31  . 76.805  89.270  16.011  1.00 7.74
1 . .
ATOM 251  O     O     . ARG ARG ARG A A 31  31  . 76.616  90.296  16.732  1.00 8.92
1 . .
ATOM 252  N     N     . ALA ALA ALA A A 32  32  . 77.973  88.617  15.948  1.00 7.28
1 . .
ATOM 253  CA    CA    . ALA ALA ALA A A 32  32  . 79.118  89.179  16.661  1.00 7.92
1 . .
ATOM 254  CB    CB    . ALA ALA ALA A A 32  32  . 79.260  88.517  18.052  1.00 8.51
1 . .
ATOM 255  C     C     . ALA ALA ALA A A 32  32  . 80.406  88.966  15.876  1.00 8.01
1 . .
ATOM 256  O     O     . ALA ALA ALA A A 32  32  . 80.485  88.113  14.998  1.00 8.57
1 . .
ATOM 257  N     N     . ALA ALA ALA A A 33  33  . 81.423  89.727  16.190  1.00 6.41
1 . .
ATOM 258  CA    CA    . ALA ALA ALA A A 33  33  . 82.689  89.474  15.508  1.00 7.72
1 . .
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ATOM 259  CB    CB    . ALA ALA ALA A A 33  33  . 82.915  90.526  14.378  1.00 8.29
1 . .
ATOM 260  C     C     . ALA ALA ALA A A 33  33  . 83.815  89.577  16.506  1.00 6.36
1 . .
ATOM 261  O     O     . ALA ALA ALA A A 33  33  . 83.711  90.159  17.617  1.00 9.37
1 . .
ATOM 262  N     N     . VAL VAL VAL A A 34  34  . 84.931  89.009  16.087  1.00 6.59
1 . .
ATOM 263  CA    CA    . VAL VAL VAL A A 34  34  . 86.103  88.756  16.955  1.00 7.51
1 . .
ATOM 264  CB    CB    . VAL VAL VAL A A 34  34  . 86.592  87.281  16.734  1.00 7.25
1 . .
ATOM 265  CG1   CG1   . VAL VAL VAL A A 34  34  . 87.778  86.955  17.594  1.00 6.54
1 . .
ATOM 266  CG2   CG2   . VAL VAL VAL A A 34  34  . 85.392  86.319  17.055  1.00 8.71
1 . .
ATOM 267  C     C     . VAL VAL VAL A A 34  34  . 87.249  89.726  16.620  1.00 7.17
1 . .
ATOM 268  O     O     . VAL VAL VAL A A 34  34  . 87.587  89.945  15.435  1.00 7.81
1 . .
ATOM 269  N     N     . PRO PRO PRO A A 35  35  . 87.844  90.318  17.662  1.00 6.52
1 . .
ATOM 270  CA    CA    . PRO PRO PRO A A 35  35  . 88.946  91.282  17.433  1.00 6.28
1 . .
ATOM 271  CB    CB    . PRO PRO PRO A A 35  35  . 88.895  92.170  18.696  1.00 3.68
1 . .
ATOM 272  CG    CG    . PRO PRO PRO A A 35  35  . 88.608  91.083  19.820  1.00 4.41
1 . .
ATOM 273  CD    CD    . PRO PRO PRO A A 35  35  . 87.496  90.177  19.101  1.00 6.49
1 . .
ATOM 274  C     C     . PRO PRO PRO A A 35  35  . 90.250  90.538  17.326  1.00 6.47
1 . .
ATOM 275  O     O     . PRO PRO PRO A A 35  35  . 90.270  89.280  17.503  1.00 7.94
1 . .
ATOM 276  N     N     . SER SER SER A A 36  36  . 91.319  91.237  17.031  1.00 5.62
1 . .
ATOM 277  CA    CA    . SER SER SER A A 36  36  . 92.661  90.602  16.913  1.00 6.34
1 . .
ATOM 278  CB    CB    . SER SER SER A A 36  36  . 92.871  90.232  15.455  1.00 6.59
1 . .
ATOM 279  OG    OG    . SER SER SER A A 36  36  . 94.203  89.700  15.242  1.00 9.20
1 . .
ATOM 280  C     C     . SER SER SER A A 36  36  . 93.780  91.549  17.352  1.00 6.78
1 . .
ATOM 281  O     O     . SER SER SER A A 36  36  . 93.830  92.713  16.919  1.00 6.20
1 . .
ATOM 282  N     N     . GLY GLY GLY A A 37  37  . 94.679  91.050  18.209  1.00 6.63
1 . .
ATOM 283  CA    CA    . GLY GLY GLY A A 37  37  . 95.824  91.846  18.684  1.00 6.14
1 . .
ATOM 284  C     C     . GLY GLY GLY A A 37  37  . 96.941  91.933  17.684  1.00 7.62
1 . .
ATOM 285  O     O     . GLY GLY GLY A A 37  37  . 97.089  91.092  16.768  1.00 10.54
1 . .
ATOM 286  N     N     . ALA ALA ALA A A 38  38  . 97.772  92.959  17.895  1.00 7.41
1 . .
ATOM 287  CA    CA    . ALA ALA ALA A A 38  38  . 99.126  92.986  17.258  1.00 7.79
1 . .
ATOM 288  CB    CB    . ALA ALA ALA A A 38  38  . 99.307  94.390  16.658  1.00 9.95
1 . .
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ATOM 289  C     C     . ALA ALA ALA A A 38  38  . 100.205 92.665  18.293  1.00 9.57
1 . .
ATOM 290  O     O     . ALA ALA ALA A A 38  38  . 101.085 91.798  18.028  1.00 10.20
1 . .
ATOM 291  N     N     . SER SER SER A A 39  39  . 100.193 93.381  19.444  1.00 7.52
1 . .
ATOM 292  CA    CA    . SER SER SER A A 39  39  . 101.178 93.144  20.474  1.00 8.02
1 . .
ATOM 293  CB    CB    . SER SER SER A A 39  39  . 101.500 94.437  21.293  1.00 8.67
1 . .
ATOM 294  OG    OG    . SER SER SER A A 39  39  . 100.324 94.993  21.818  1.00 8.42
1 . .
ATOM 295  C     C     . SER SER SER A A 39  39  . 100.611 92.005  21.369  1.00 7.73
1 . .
ATOM 296  O     O     . SER SER SER A A 39  39  . 100.124 92.193  22.477  1.00 7.72
1 . .
ATOM 297  N     N     . THR THR THR A A 40  40  . 100.649 90.780  20.863  1.00 9.64
1 . .
ATOM 298  CA    CA    . THR THR THR A A 40  40  . 99.932  89.688  21.490  1.00 10.54
1 . .
ATOM 299  CB    CB    . THR THR THR A A 40  40  . 99.439  88.707  20.393  1.00 11.84
1 . .
ATOM 300  OG1   OG1   . THR THR THR A A 40  40  . 100.498 88.477  19.446  1.00 12.03
1 . .
ATOM 301  CG2   CG2   . THR THR THR A A 40  40  . 98.240  89.238  19.621  1.00 11.28
1 . .
ATOM 302  C     C     . THR THR THR A A 40  40  . 100.863 88.924  22.461  1.00 11.01
1 . .
ATOM 303  O     O     . THR THR THR A A 40  40  . 102.017 88.608  22.075  1.00 11.61
1 . .
ATOM 304  N     N     . GLY GLY GLY A A 41  41  . 100.437 88.678  23.683  1.00 9.28
1 . .
ATOM 305  CA    CA    . GLY GLY GLY A A 41  41  . 101.356 87.989  24.602  1.00 9.77
1 . .
ATOM 306  C     C     . GLY GLY GLY A A 41  41  . 101.509 86.548  24.188  1.00 10.19
1 . .
ATOM 307  O     O     . GLY GLY GLY A A 41  41  . 100.609 85.905  23.600  1.00 10.92
1 . .
ATOM 308  N     N     . ILE ILE ILE A A 42  42  . 102.659 85.978  24.543  1.00 10.36
1 . .
ATOM 309  CA    CA    . ILE ILE ILE A A 42  42  . 102.888 84.579  24.208  1.00 10.45
1 . .
ATOM 310  CB    CB    . ILE ILE ILE A A 42  42  . 104.367 84.150  24.485  1.00 9.71
1 . .
ATOM 311  CG1   CG1   . ILE ILE ILE A A 42  42  . 104.687 84.243  25.967  1.00 10.22
1 . .
ATOM 312  CD1   CD1   . ILE ILE ILE A A 42  42  . 106.251 84.029  26.289  1.00 15.97
1 . .
ATOM 313  CG2   CG2   . ILE ILE ILE A A 42  42  . 105.279 85.053  23.665  1.00 14.66
1 . .
ATOM 314  C     C     . ILE ILE ILE A A 42  42  . 101.926 83.612  24.861  1.00 10.69
1 . .
ATOM 315  O     O     . ILE ILE ILE A A 42  42  . 101.841 82.449  24.384  1.00 11.24
1 . .
ATOM 316  N     N     . TYR TYR TYR A A 43  43  . 101.250 84.020  25.946  1.00 9.62
1 . .
ATOM 317  CA    CA    . TYR TYR TYR A A 43  43  . 100.369 83.080  26.663  1.00 8.85
1 . .
ATOM 318  CB    CB    . TYR TYR TYR A A 43  43  . 100.509 83.284  28.183  1.00 7.93
1 . .
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ATOM 319  CG    CG    . TYR TYR TYR A A 43  43  . 101.938 82.948  28.644  1.00 11.40
1 . .
ATOM 320  CD1   CD1   . TYR TYR TYR A A 43  43  . 102.832 83.969  29.041  1.00 10.66
1 . .
ATOM 321  CE1   CE1   . TYR TYR TYR A A 43  43  . 104.169 83.639  29.475  1.00 14.28
1 . .
ATOM 322  CZ    CZ    . TYR TYR TYR A A 43  43  . 104.560 82.288  29.427  1.00 15.54
1 . .
ATOM 323  OH    OH    . TYR TYR TYR A A 43  43  . 105.817 81.960  29.802  1.00 18.16
1 . .
ATOM 324  CE2   CE2   . TYR TYR TYR A A 43  43  . 103.709 81.295  29.013  1.00 15.20
1 . .
ATOM 325  CD2   CD2   . TYR TYR TYR A A 43  43  . 102.391 81.629  28.624  1.00 13.19
1 . .
ATOM 326  C     C     . TYR TYR TYR A A 43  43  . 98.895  83.234  26.237  1.00 9.00
1 . .
ATOM 327  O     O     . TYR TYR TYR A A 43  43  . 97.996  82.559  26.796  1.00 11.37
1 . .
ATOM 328  N     N     . GLU GLU GLU A A 44  44  . 98.624  84.088  25.242  1.00 8.09
1 . .
ATOM 329  CA    CA    . GLU GLU GLU A A 44  44  . 97.177  84.200  24.821  1.00 8.15
1 . .
ATOM 330  CB    CB    . GLU GLU GLU A A 44  44  . 97.046  85.309  23.793  1.00 8.97
1 . .
ATOM 331  CG    CG    . GLU GLU GLU A A 44  44  . 97.389  86.630  24.392  1.00 8.35
1 . .
ATOM 332  CD    CD    . GLU GLU GLU A A 44  44  . 96.971  87.843  23.507  1.00 8.56
1 . .
ATOM 333  OE1   OE1   . GLU GLU GLU A A 44  44  . 96.140  87.659  22.564  1.00 10.84
1 . .
ATOM 334  OE2   OE2   . GLU GLU GLU A A 44  44  . 97.470  88.946  23.819  1.00 10.45
1 . .
ATOM 335  C     C     . GLU GLU GLU A A 44  44  . 96.710  82.869  24.160  1.00 8.17
1 . .
ATOM 336  O     O     . GLU GLU GLU A A 44  44  . 97.534  82.079  23.613  1.00 10.14
1 . .
ATOM 337  N     N     . ALA ALA ALA A A 45  45  . 95.418  82.614  24.258  1.00 8.90
1 . .
ATOM 338  CA    CA    . ALA ALA ALA A A 45  45  . 94.799  81.486  23.592  1.00 8.64
1 . .
ATOM 339  CB    CB    . ALA ALA ALA A A 45  45  . 93.309  81.407  23.938  1.00 7.41
1 . .
ATOM 340  C     C     . ALA ALA ALA A A 45  45  . 95.051  81.607  22.073  1.00 9.51
1 . .
ATOM 341  O     O     . ALA ALA ALA A A 45  45  . 95.231  82.688  21.520  1.00 9.33
1 . .
ATOM 342  N     N     . LEU LEU LEU A A 46  46  . 95.074  80.463  21.407  1.00 9.61
1 . .
ATOM 343  CA    CA    . LEU LEU LEU A A 46  46  . 95.401  80.386  19.988  1.00 10.14
1 . .
ATOM 344  CB    CB    . LEU LEU LEU A A 46  46  . 95.573  78.875  19.564  1.00 11.08
1 . .
ATOM 345  CG    CG    . LEU LEU LEU A A 46  46  . 96.292  78.554  18.213  1.00 17.98
1 . .
ATOM 346  CD1   CD1   . LEU LEU LEU A A 46  46  . 95.493  77.866  17.199  1.00 16.80
1 . .
ATOM 347  CD2   CD2   . LEU LEU LEU A A 46  46  . 97.291  79.517  17.720  1.00 19.05
1 . .
ATOM 348  C     C     . LEU LEU LEU A A 46  46  . 94.461  81.170  19.044  1.00 9.69
1 . .
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ATOM 349  O     O     . LEU LEU LEU A A 46  46  . 93.262  80.938  19.014  1.00 11.49
1 . .
ATOM 350  N     N     . GLU GLU GLU A A 47  47  . 94.992  82.154  18.347  1.00 9.41
1 . .
ATOM 351  CA    CA    . GLU GLU GLU A A 47  47  . 94.245  82.770  17.199  1.00 8.60
1 . .
ATOM 352  CB    CB    . GLU GLU GLU A A 47  47  . 94.689  84.228  16.987  1.00 8.85
1 . .
ATOM 353  CG    CG    . GLU GLU GLU A A 47  47  . 94.017  84.898  15.739  1.00 9.99
1 . .
ATOM 354  CD    CD    . GLU GLU GLU A A 47  47  . 94.549  86.308  15.598  1.00 8.62
1 . .
ATOM 355  OE1   OE1   . GLU GLU GLU A A 47  47  . 93.947  87.195  16.252  1.00 10.97
1 . .
ATOM 356  OE2   OE2   . GLU GLU GLU A A 47  47  . 95.617  86.468  14.997  1.00 11.75
1 . .
ATOM 357  C     C     . GLU GLU GLU A A 47  47  . 94.559  81.958  15.968  1.00 7.75
1 . .
ATOM 358  O     O     . GLU GLU GLU A A 47  47  . 95.705  81.950  15.535  1.00 8.79
1 . .
ATOM 359  N     N     . LEU LEU LEU A A 48  48  . 93.575  81.211  15.451  1.00 8.23
1 . .
ATOM 360  CA    CA    . LEU LEU LEU A A 48  48  . 93.854  80.296  14.355  1.00 8.53
1 . .
ATOM 361  CB    CB    . LEU LEU LEU A A 48  48  . 92.888  79.093  14.424  1.00 7.46
1 . .
ATOM 362  CG    CG    . LEU LEU LEU A A 48  48  . 93.057  78.116  13.214  1.00 8.34
1 . .
ATOM 363  CD1   CD1   . LEU LEU LEU A A 48  48  . 94.477  77.491  13.270  1.00 14.18
1 . .
ATOM 364  CD2   CD2   . LEU LEU LEU A A 48  48  . 91.896  77.074  13.213  1.00 12.00
1 . .
ATOM 365  C     C     . LEU LEU LEU A A 48  48  . 93.778  81.042  13.016  1.00 9.43
1 . .
ATOM 366  O     O     . LEU LEU LEU A A 48  48  . 92.687  81.587  12.687  1.00 9.97
1 . .
ATOM 367  N     N     . ARG ARG ARG A A 49  49  . 94.922  81.050  12.285  1.00 9.49
1 . .
ATOM 368  CA    CA    . ARG ARG ARG A A 49  49  . 94.998  81.675  10.948  1.00 10.95
1 . .
ATOM 369  CB    CB    . ARG ARG ARG A A 49  49  . 96.149  82.688  10.923  1.00 11.78
1 . .
ATOM 370  CG    CG    . ARG ARG ARG A A 49  49  . 96.041  83.846  11.930  1.00 14.47
1 . .
ATOM 371  CD    CD    . ARG ARG ARG A A 49  49  . 95.312  84.978  11.271  1.00 13.76
1 . .
ATOM 372  NE    NE    . ARG ARG ARG A A 49  49  . 95.121  86.146  12.163  1.00 13.88
1 . .
ATOM 373  CZ    CZ    . ARG ARG ARG A A 49  49  . 94.247  87.119  11.886  1.00 11.80
1 . .
ATOM 374  NH1   NH1   . ARG ARG ARG A A 49  49  . 93.602  87.084  10.760  1.00 12.45
1 . .
ATOM 375  NH2   NH2   . ARG ARG ARG A A 49  49  . 94.025  88.130  12.731  1.00 13.27
1 . .
ATOM 376  C     C     . ARG ARG ARG A A 49  49  . 95.290  80.590  9.937   1.00 10.58
1 . .
ATOM 377  O     O     . ARG ARG ARG A A 49  49  . 95.826  79.539  10.322  1.00 14.24
1 . .
ATOM 378  N     N     . ASP ASP ASP A A 50  50  . 94.981  80.826  8.659   1.00 10.32
1 . .
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ATOM 379  CA    CA    . ASP ASP ASP A A 50  50  . 95.049  79.696  7.648   1.00 11.76
1 . .
ATOM 380  CB    CB    . ASP ASP ASP A A 50  50  . 94.211  80.047  6.444   1.00 9.59
1 . .
ATOM 381  CG    CG    . ASP ASP ASP A A 50  50  . 92.745  80.176  6.795   1.00 11.59
1 . .
ATOM 382  OD1   OD1   . ASP ASP ASP A A 50  50  . 92.269  79.702  7.886   1.00 11.81
1 . .
ATOM 383  OD2   OD2   . ASP ASP ASP A A 50  50  . 92.064  80.829  5.977   1.00 10.45
1 . .
ATOM 384  C     C     . ASP ASP ASP A A 50  50  . 96.434  79.415  7.177   1.00 13.66
1 . .
ATOM 385  O     O     . ASP ASP ASP A A 50  50  . 96.747  78.224  6.836   1.00 14.96
1 . .
ATOM 386  N     N     . GLY GLY GLY A A 51  51  . 97.273  80.447  7.143   1.00 15.27
1 . .
ATOM 387  CA    CA    . GLY GLY GLY A A 51  51  . 98.698  80.272  6.663   1.00 17.43
1 . .
ATOM 388  C     C     . GLY GLY GLY A A 51  51  . 98.863  80.062  5.170   1.00 18.76
1 . .
ATOM 389  O     O     . GLY GLY GLY A A 51  51  . 99.908  79.555  4.719   1.00 20.95
1 . .
ATOM 390  N     N     . ASP ASP ASP A A 52  52  . 97.844  80.416  4.402   1.00 17.65
1 . .
ATOM 391  CA    CA    . ASP ASP ASP A A 52  52  . 97.889  80.292  2.933   1.00 17.80
1 . .
ATOM 392  CB    CB    . ASP ASP ASP A A 52  52  . 96.456  80.026  2.377   1.00 19.00
1 . .
ATOM 393  CG    CG    . ASP ASP ASP A A 52  52  . 96.387  80.015  0.831   1.00 17.94
1 . .
ATOM 394  OD1   OD1   . ASP ASP ASP A A 52  52  . 95.281  79.762  0.272   1.00 19.86
1 . .
ATOM 395  OD2   OD2   . ASP ASP ASP A A 52  52  . 97.437  80.236  0.198   1.00 20.57
1 . .
ATOM 396  C     C     . ASP ASP ASP A A 52  52  . 98.503  81.609  2.431   1.00 19.27
1 . .
ATOM 397  O     O     . ASP ASP ASP A A 52  52  . 97.857  82.649  2.433   1.00 16.24
1 . .
ATOM 398  N     N     . LYS LYS LYS A A 53  53  . 99.774  81.553  2.007   1.00 21.59
1 . .
ATOM 399  CA    CA    . LYS LYS LYS A A 53  53  . 100.472 82.739  1.541   1.00 24.41
1 . .
ATOM 400  CB    CB    . LYS LYS LYS A A 53  53  . 101.971 82.425  1.381   1.00 24.41
1 . .
ATOM 401  CG    CG    . LYS LYS LYS A A 53  53  . 102.681 82.294  2.737   1.00 28.89
1 . .
ATOM 402  CD    CD    . LYS LYS LYS A A 53  53  . 102.494 83.551  3.592   1.00 33.18
1 . .
ATOM 403  C     C     . LYS LYS LYS A A 53  53  . 99.868  83.433  0.309   1.00 24.36
1 . .
ATOM 404  O     O     . LYS LYS LYS A A 53  53  . 100.081 84.642  0.119   1.00 26.36
1 . .
ATOM 405  N     N     . GLN GLN GLN A A 54  54  . 99.036  82.724  -0.432  1.00 25.06
1 . .
ATOM 406  CA    CA    . GLN GLN GLN A A 54  54  . 98.431  83.240  -1.667  1.00 25.19
1 . .
ATOM 407  CB    CB    . GLN GLN GLN A A 54  54  . 98.153  82.101  -2.670  1.00 26.98
1 . .
ATOM 408  C     C     . GLN GLN GLN A A 54  54  . 97.131  84.005  -1.293  1.00 24.42
1 . .
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ATOM 409  O     O     . GLN GLN GLN A A 54  54  . 96.475  84.594  -2.158  1.00 25.75
1 . .
ATOM 410  N     N     . ARG ARG ARG A A 55  55  . 96.763  84.020  0.008   1.00 20.76
1 . .
ATOM 411  CA    CA    . ARG ARG ARG A A 55  55  . 95.487  84.631  0.387   1.00 18.33
1 . .
ATOM 412  CB    CB    . ARG ARG ARG A A 55  55  . 94.514  83.538  0.702   1.00 19.73
1 . .
ATOM 413  CG    CG    . ARG ARG ARG A A 55  55  . 93.195  83.962  0.486   1.00 18.21
1 . .
ATOM 414  CD    CD    . ARG ARG ARG A A 55  55  . 92.233  82.808  0.546   1.00 16.12
1 . .
ATOM 415  NE    NE    . ARG ARG ARG A A 55  55  . 90.957  83.499  0.596   1.00 14.37
1 . .
ATOM 416  CZ    CZ    . ARG ARG ARG A A 55  55  . 90.412  83.963  1.730   1.00 16.10
1 . .
ATOM 417  NH1   NH1   . ARG ARG ARG A A 55  55  . 90.973  83.660  2.954   1.00 14.70
1 . .
ATOM 418  NH2   NH2   . ARG ARG ARG A A 55  55  . 89.247  84.647  1.646   1.00 14.75
1 . .
ATOM 419  C     C     . ARG ARG ARG A A 55  55  . 95.686  85.507  1.642   1.00 16.34
1 . .
ATOM 420  O     O     . ARG ARG ARG A A 55  55  . 96.031  84.985  2.693   1.00 15.54
1 . .
ATOM 421  N     N     . TYR TYR TYR A A 56  56  . 95.544  86.834  1.522   1.00 13.49
1 . .
ATOM 422  CA    CA    . TYR TYR TYR A A 56  56  . 95.795  87.717  2.676   1.00 12.65
1 . .
ATOM 423  CB    CB    . TYR TYR TYR A A 56  56  . 94.612  87.568  3.679   1.00 12.49
1 . .
ATOM 424  CG    CG    . TYR TYR TYR A A 56  56  . 93.306  88.140  3.188   1.00 10.90
1 . .
ATOM 425  CD1   CD1   . TYR TYR TYR A A 56  56  . 92.237  87.342  2.788   1.00 11.00
1 . .
ATOM 426  CE1   CE1   . TYR TYR TYR A A 56  56  . 91.001  87.889  2.374   1.00 11.50
1 . .
ATOM 427  CZ    CZ    . TYR TYR TYR A A 56  56  . 90.856  89.285  2.364   1.00 10.02
1 . .
ATOM 428  OH    OH    . TYR TYR TYR A A 56  56  . 89.636  89.801  2.031   1.00 12.41
1 . .
ATOM 429  CE2   CE2   . TYR TYR TYR A A 56  56  . 91.853  90.086  2.841   1.00 11.18
1 . .
ATOM 430  CD2   CD2   . TYR TYR TYR A A 56  56  . 93.092  89.542  3.234   1.00 11.67
1 . .
ATOM 431  C     C     . TYR TYR TYR A A 56  56  . 97.090  87.497  3.407   1.00 15.04
1 . .
ATOM 432  O     O     . TYR TYR TYR A A 56  56  . 97.146  87.644  4.644   1.00 14.49
1 . .
ATOM 433  N     N     . LEU LEU LEU A A 57  57  . 98.170  87.194  2.672   1.00 15.80
1 . .
ATOM 434  CA    CA    . LEU LEU LEU A A 57  57  . 99.496  86.901  3.266   1.00 18.13
1 . .
ATOM 435  CB    CB    . LEU LEU LEU A A 57  57  . 100.273 88.181  3.698   1.00 20.91
1 . .
ATOM 436  CG    CG    . LEU LEU LEU A A 57  57  . 101.538 88.665  2.964   1.00 26.11
1 . .
ATOM 437  CD1   CD1   . LEU LEU LEU A A 57  57  . 102.544 89.071  4.095   1.00 32.79
1 . .
ATOM 438  CD2   CD2   . LEU LEU LEU A A 57  57  . 102.173 87.617  1.956   1.00 30.97
1 . .
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ATOM 439  C     C     . LEU LEU LEU A A 57  57  . 99.415  85.946  4.466   1.00 17.17
1 . .
ATOM 440  O     O     . LEU LEU LEU A A 57  57  . 100.060 86.210  5.507   1.00 16.96
1 . .
ATOM 441  N     N     . GLY GLY GLY A A 58  58  . 98.600  84.876  4.332   1.00 15.58
1 . .
ATOM 442  CA    CA    . GLY GLY GLY A A 58  58  . 98.471  83.798  5.340   1.00 13.81
1 . .
ATOM 443  C     C     . GLY GLY GLY A A 58  58  . 97.535  84.141  6.497   1.00 12.71
1 . .
ATOM 444  O     O     . GLY GLY GLY A A 58  58  . 97.438  83.356  7.471   1.00 13.46
1 . .
ATOM 445  N     N     . LYS LYS LYS A A 59  59  . 96.847  85.294  6.399   1.00 11.63
1 . .
ATOM 446  CA    CA    . LYS LYS LYS A A 59  59  . 96.016  85.755  7.523   1.00 9.84
1 . .
ATOM 447  CB    CB    . LYS LYS LYS A A 59  59  . 96.266  87.258  7.725   1.00 10.26
1 . .
ATOM 448  CG    CG    . LYS LYS LYS A A 59  59  . 97.737  87.546  8.112   1.00 14.94
1 . .
ATOM 449  CD    CD    . LYS LYS LYS A A 59  59  . 97.824  89.035  8.525   1.00 23.46
1 . .
ATOM 450  CE    CE    . LYS LYS LYS A A 59  59  . 99.155  89.321  9.248   1.00 29.41
1 . .
ATOM 451  NZ    NZ    . LYS LYS LYS A A 59  59  . 100.051 89.245  8.102   1.00 35.08
1 . .
ATOM 452  C     C     . LYS LYS LYS A A 59  59  . 94.535  85.428  7.385   1.00 8.49
1 . .
ATOM 453  O     O     . LYS LYS LYS A A 59  59  . 93.671  85.892  8.220   1.00 8.28
1 . .
ATOM 454  N     N     . GLY GLY GLY A A 60  60  . 94.180  84.580  6.397   1.00 7.78
1 . .
ATOM 455  CA    CA    . GLY GLY GLY A A 60  60  . 92.745  84.146  6.295   1.00 6.88
1 . .
ATOM 456  C     C     . GLY GLY GLY A A 60  60  . 92.264  83.423  7.563   1.00 7.78
1 . .
ATOM 457  O     O     . GLY GLY GLY A A 60  60  . 93.040  82.860  8.342   1.00 8.61
1 . .
ATOM 458  N     N     . VAL VAL VAL A A 61  61  . 90.948  83.414  7.762   1.00 8.30
1 . .
ATOM 459  CA    CA    . VAL VAL VAL A A 61  61  . 90.351  82.641  8.892   1.00 7.47
1 . .
ATOM 460  CB    CB    . VAL VAL VAL A A 61  61  . 89.842  83.618  10.061  1.00 7.91
1 . .
ATOM 461  CG1   CG1   . VAL VAL VAL A A 61  61  . 91.008  84.326  10.707  1.00 9.33
1 . .
ATOM 462  CG2   CG2   . VAL VAL VAL A A 61  61  . 88.743  84.615  9.553   1.00 7.69
1 . .
ATOM 463  C     C     . VAL VAL VAL A A 61  61  . 89.280  81.666  8.428   1.00 7.17
1 . .
ATOM 464  O     O     . VAL VAL VAL A A 61  61  . 88.377  81.301  9.194   1.00 9.13
1 . .
ATOM 465  N     N     . LEU LEU LEU A A 62  62  . 89.479  81.113  7.236   1.00 7.67
1 . .
ATOM 466  CA    CA    . LEU LEU LEU A A 62  62  . 88.590  80.114  6.712   1.00 8.55
1 . .
ATOM 467  CB    CB    . LEU LEU LEU A A 62  62  . 89.111  79.733  5.298   1.00 9.17
1 . .
ATOM 468  CG    CG    . LEU LEU LEU A A 62  62  . 89.100  80.910  4.276   1.00 11.18
1 . .
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ATOM 469  CD1   CD1   . LEU LEU LEU A A 62  62  . 89.535  80.318  2.910   1.00 15.05
1 . .
ATOM 470  CD2   CD2   . LEU LEU LEU A A 62  62  . 87.704  81.549  4.165   1.00 12.03
1 . .
ATOM 471  C     C     . LEU LEU LEU A A 62  62  . 88.562  78.848  7.568   1.00 9.29
1 . .
ATOM 472  O     O     . LEU LEU LEU A A 62  62  . 87.519  78.198  7.646   1.00 8.65
1 . .
ATOM 473  N     N     . LYS LYS LYS A A 63  63  . 89.711  78.445  8.134   1.00 9.03
1 . .
ATOM 474  CA    CA    . LYS LYS LYS A A 63  63  . 89.689  77.226  8.950   1.00 8.60
1 . .
ATOM 475  CB    CB    . LYS LYS LYS A A 63  63  . 91.118  76.831  9.325   1.00 8.72
1 . .
ATOM 476  CG    CG    . LYS LYS LYS A A 63  63  . 91.961  76.415  8.123   1.00 10.57
1 . .
ATOM 477  CD    CD    . LYS LYS LYS A A 63  63  . 93.378  76.068  8.616   1.00 11.98
1 . .
ATOM 478  CE    CE    . LYS LYS LYS A A 63  63  . 94.294  75.785  7.430   1.00 18.04
1 . .
ATOM 479  NZ    NZ    . LYS LYS LYS A A 63  63  . 95.698  75.318  7.852   1.00 18.16
1 . .
ATOM 480  C     C     . LYS LYS LYS A A 63  63  . 88.837  77.476  10.216  1.00 8.85
1 . .
ATOM 481  O     O     . LYS LYS LYS A A 63  63  . 88.006  76.628  10.558  1.00 8.90
1 . .
ATOM 482  N     N     . ALA ALA ALA A A 64  64  . 89.057  78.611  10.936  1.00 8.33
1 . .
ATOM 483  CA    CA    . ALA ALA ALA A A 64  64  . 88.221  78.914  12.137  1.00 7.07
1 . .
ATOM 484  CB    CB    . ALA ALA ALA A A 64  64  . 88.671  80.243  12.736  1.00 7.02
1 . .
ATOM 485  C     C     . ALA ALA ALA A A 64  64  . 86.740  78.942  11.724  1.00 6.74
1 . .
ATOM 486  O     O     . ALA ALA ALA A A 64  64  . 85.840  78.393  12.422  1.00 7.36
1 . .
ATOM 487  N     N     . VAL VAL VAL A A 65  65  . 86.434  79.642  10.624  1.00 7.10
1 . .
ATOM 488  CA    CA    . VAL VAL VAL A A 65  65  . 85.060  79.678  10.106  1.00 7.15
1 . .
ATOM 489  CB    CB    . VAL VAL VAL A A 65  65  . 84.990  80.578  8.820   1.00 7.20
1 . .
ATOM 490  CG1   CG1   . VAL VAL VAL A A 65  65  . 83.648  80.499  8.090   1.00 9.86
1 . .
ATOM 491  CG2   CG2   . VAL VAL VAL A A 65  65  . 85.154  82.056  9.286   1.00 8.42
1 . .
ATOM 492  C     C     . VAL VAL VAL A A 65  65  . 84.445  78.309  9.845   1.00 8.41
1 . .
ATOM 493  O     O     . VAL VAL VAL A A 65  65  . 83.278  78.065  10.243  1.00 8.26
1 . .
ATOM 494  N     N     . ASP ASP ASP A A 66  66  . 85.209  77.408  9.196   1.00 7.79
1 . .
ATOM 495  CA    CA    . ASP ASP ASP A A 66  66  . 84.628  76.085  8.933   1.00 10.00
1 . .
ATOM 496  CB    CB    . ASP ASP ASP A A 66  66  . 85.542  75.332  7.947   1.00 11.28
1 . .
ATOM 497  CG    CG    . ASP ASP ASP A A 66  66  . 85.290  73.846  7.931   1.00 22.04
1 . .
ATOM 498  OD1   OD1   . ASP ASP ASP A A 66  66  . 84.266  73.543  7.340   1.00 23.45
1 . .
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ATOM 499  OD2   OD2   . ASP ASP ASP A A 66  66  . 86.131  73.019  8.540   1.00 32.30
1 . .
ATOM 500  C     C     . ASP ASP ASP A A 66  66  . 84.463  75.276  10.243  1.00 8.67
1 . .
ATOM 501  O     O     . ASP ASP ASP A A 66  66  . 83.512  74.487  10.372  1.00 8.53
1 . .
ATOM 502  N     N     . HIS HIS HIS A A 67  67  . 85.393  75.435  11.191  1.00 9.43
1 . .
ATOM 503  CA    CA    . HIS HIS HIS A A 67  67  . 85.182  74.747  12.517  1.00 8.73
1 . .
ATOM 504  CB    CB    . HIS HIS HIS A A 67  67  . 86.305  75.039  13.528  1.00 9.31
1 . .
ATOM 505  CG    CG    . HIS HIS HIS A A 67  67  . 87.604  74.406  13.163  1.00 10.80
1 . .
ATOM 506  ND1   ND1   . HIS HIS HIS A A 67  67  . 87.711  73.042  12.916  1.00 13.15
1 . .
ATOM 507  CE1   CE1   . HIS HIS HIS A A 67  67  . 88.981  72.743  12.674  1.00 15.50
1 . .
ATOM 508  NE2   NE2   . HIS HIS HIS A A 67  67  . 89.694  73.860  12.739  1.00 12.25
1 . .
ATOM 509  CD2   CD2   . HIS HIS HIS A A 67  67  . 88.860  74.907  13.107  1.00 11.55
1 . .
ATOM 510  C     C     . HIS HIS HIS A A 67  67  . 83.845  75.187  13.126  1.00 8.29
1 . .
ATOM 511  O     O     . HIS HIS HIS A A 67  67  . 83.087  74.389  13.670  1.00 8.64
1 . .
ATOM 512  N     N     . ILE ILE ILE A A 68  68  . 83.534  76.484  13.015  1.00 8.21
1 . .
ATOM 513  CA    CA    . ILE ILE ILE A A 68  68  . 82.216  76.945  13.450  1.00 7.38
1 . .
ATOM 514  CB    CB    . ILE ILE ILE A A 68  68  . 82.106  78.528  13.441  1.00 7.19
1 . .
ATOM 515  CG1   CG1   . ILE ILE ILE A A 68  68  . 83.066  79.118  14.494  1.00 6.26
1 . .
ATOM 516  CD1   CD1   . ILE ILE ILE A A 68  68  . 83.375  80.608  14.103  1.00 7.74
1 . .
ATOM 517  CG2   CG2   . ILE ILE ILE A A 68  68  . 80.654  78.975  13.754  1.00 5.77
1 . .
ATOM 518  C     C     . ILE ILE ILE A A 68  68  . 81.069  76.324  12.650  1.00 8.38
1 . .
ATOM 519  O     O     . ILE ILE ILE A A 68  68  . 80.096  75.762  13.232  1.00 8.39
1 . .
ATOM 520  N     N     . ASN ASN ASN A A 69  69  . 81.117  76.436  11.328  1.00 8.12
1 . .
ATOM 521  CA    CA    . ASN ASN ASN A A 69  69  . 79.961  76.048  10.547  1.00 7.49
1 . .
ATOM 522  CB    CB    . ASN ASN ASN A A 69  69  . 80.140  76.581  9.142   1.00 7.81
1 . .
ATOM 523  CG    CG    . ASN ASN ASN A A 69  69  . 79.980  78.112  9.116   1.00 9.03
1 . .
ATOM 524  OD1   OD1   . ASN ASN ASN A A 69  69  . 79.261  78.650  9.925   1.00 11.10
1 . .
ATOM 525  ND2   ND2   . ASN ASN ASN A A 69  69  . 80.522  78.748  8.105   1.00 10.89
1 . .
ATOM 526  C     C     . ASN ASN ASN A A 69  69  . 79.673  74.569  10.505  1.00 9.13
1 . .
ATOM 527  O     O     . ASN ASN ASN A A 69  69  . 78.497  74.187  10.490  1.00 9.26
1 . .
ATOM 528  N     N     . SER SER SER A A 70  70  . 80.722  73.762  10.541  1.00 9.46
1 . .
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ATOM 529  CA    CA    . SER SER SER A A 70  70  . 80.587  72.303  10.246  1.00 10.57
1 . .
ATOM 530  CB    CB    . SER SER SER A A 70  70  . 81.746  71.920  9.304   1.00 11.79
1 . .
ATOM 531  OG    OG    . SER SER SER A A 70  70  . 81.537  72.694  8.081   1.00 20.22
1 . .
ATOM 532  C     C     . SER SER SER A A 70  70  . 80.689  71.498  11.541  1.00 9.58
1 . .
ATOM 533  O     O     . SER SER SER A A 70  70  . 80.251  70.340  11.544  1.00 9.59
1 . .
ATOM 534  N     N     . THR THR THR A A 71  71  . 81.223  72.073  12.642  1.00 8.42
1 . .
ATOM 535  CA    CA    . THR THR THR A A 71  71  . 81.436  71.212  13.888  1.00 6.44
1 . .
ATOM 536  CB    CB    . THR THR THR A A 71  71  . 82.962  70.973  14.117  1.00 6.72
1 . .
ATOM 537  OG1   OG1   . THR THR THR A A 71  71  . 83.473  70.240  12.968  1.00 9.42
1 . .
ATOM 538  CG2   CG2   . THR THR THR A A 71  71  . 83.132  70.139  15.461  1.00 7.38
1 . .
ATOM 539  C     C     . THR THR THR A A 71  71  . 80.805  71.884  15.077  1.00 7.94
1 . .
ATOM 540  O     O     . THR THR THR A A 71  71  . 80.027  71.259  15.842  1.00 8.21
1 . .
ATOM 541  N     N     . ILE ILE ILE A A 72  72  . 81.103  73.181  15.304  1.00 7.66
1 . .
ATOM 542  CA    CA    . ILE ILE ILE A A 72  72  . 80.524  73.760  16.572  1.00 8.21
1 . .
ATOM 543  CB    CB    . ILE ILE ILE A A 72  72  . 81.202  75.104  16.905  1.00 8.13
1 . .
ATOM 544  CG1   CG1   . ILE ILE ILE A A 72  72  . 82.671  74.837  17.335  1.00 7.46
1 . .
ATOM 545  CD1   CD1   . ILE ILE ILE A A 72  72  . 83.526  76.165  17.339  1.00 8.42
1 . .
ATOM 546  CG2   CG2   . ILE ILE ILE A A 72  72  . 80.487  75.839  18.045  1.00 8.25
1 . .
ATOM 547  C     C     . ILE ILE ILE A A 72  72  . 79.010  73.946  16.476  1.00 8.79
1 . .
ATOM 548  O     O     . ILE ILE ILE A A 72  72  . 78.260  73.593  17.391  1.00 8.66
1 . .
ATOM 549  N     N     . ALA ALA ALA A A 73  73  . 78.575  74.480  15.333  1.00 7.27
1 . .
ATOM 550  CA    CA    . ALA ALA ALA A A 73  73  . 77.138  74.740  15.125  1.00 8.52
1 . .
ATOM 551  CB    CB    . ALA ALA ALA A A 73  73  . 76.949  75.265  13.715  1.00 10.23
1 . .
ATOM 552  C     C     . ALA ALA ALA A A 73  73  . 76.241  73.468  15.344  1.00 9.30
1 . .
ATOM 553  O     O     . ALA ALA ALA A A 73  73  . 75.312  73.532  16.126  1.00 11.33
1 . .
ATOM 554  N     N     . PRO PRO PRO A A 74  74  . 76.516  72.314  14.620  1.00 10.33
1 . .
ATOM 555  CA    CA    . PRO PRO PRO A A 74  74  . 75.590  71.211  14.946  1.00 8.26
1 . .
ATOM 556  CB    CB    . PRO PRO PRO A A 74  74  . 75.979  70.095  13.876  1.00 7.54
1 . .
ATOM 557  CG    CG    . PRO PRO PRO A A 74  74  . 77.522  70.409  13.520  1.00 9.07
1 . .
ATOM 558  CD    CD    . PRO PRO PRO A A 74  74  . 77.428  71.986  13.498  1.00 8.84
1 . .
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ATOM 559  C     C     . PRO PRO PRO A A 74  74  . 75.711  70.734  16.399  1.00 10.04
1 . .
ATOM 560  O     O     . PRO PRO PRO A A 74  74  . 74.743  70.225  16.982  1.00 10.39
1 . .
ATOM 561  N     N     . ALA ALA ALA A A 75  75  . 76.896  70.843  17.004  1.00 10.25
1 . .
ATOM 562  CA    CA    . ALA ALA ALA A A 75  75  . 77.061  70.476  18.407  1.00 12.67
1 . .
ATOM 563  CB    CB    . ALA ALA ALA A A 75  75  . 78.534  70.628  18.793  1.00 11.74
1 . .
ATOM 564  C     C     . ALA ALA ALA A A 75  75  . 76.158  71.277  19.341  1.00 12.02
1 . .
ATOM 565  O     O     . ALA ALA ALA A A 75  75  . 75.497  70.728  20.278  1.00 12.65
1 . .
ATOM 566  N     N     . LEU LEU LEU A A 76  76  . 76.089  72.601  19.084  1.00 10.07
1 . .
ATOM 567  CA    CA    . LEU LEU LEU A A 76  76  . 75.235  73.419  19.959  1.00 10.78
1 . .
ATOM 568  CB    CB    . LEU LEU LEU A A 76  76  . 75.651  74.890  19.901  1.00 10.13
1 . .
ATOM 569  CG    CG    . LEU LEU LEU A A 76  76  . 77.116  75.069  20.339  1.00 10.05
1 . .
ATOM 570  CD1   CD1   . LEU LEU LEU A A 76  76  . 77.412  76.618  20.429  1.00 14.04
1 . .
ATOM 571  CD2   CD2   . LEU LEU LEU A A 76  76  . 77.524  74.387  21.612  1.00 15.12
1 . .
ATOM 572  C     C     . LEU LEU LEU A A 76  76  . 73.763  73.256  19.615  1.00 11.31
1 . .
ATOM 573  O     O     . LEU LEU LEU A A 76  76  . 72.926  73.293  20.528  1.00 13.47
1 . .
ATOM 574  N     N     . ILE ILE ILE A A 77  77  . 73.447  73.026  18.343  1.00 10.55
1 . .
ATOM 575  CA    CA    . ILE ILE ILE A A 77  77  . 72.009  72.798  17.927  1.00 11.38
1 . .
ATOM 576  CB    CB    . ILE ILE ILE A A 77  77  . 71.842  72.846  16.388  1.00 10.49
1 . .
ATOM 577  CG1   CG1   . ILE ILE ILE A A 77  77  . 72.142  74.307  15.904  1.00 9.77
1 . .
ATOM 578  CD1   CD1   . ILE ILE ILE A A 77  77  . 72.377  74.394  14.419  1.00 15.58
1 . .
ATOM 579  CG2   CG2   . ILE ILE ILE A A 77  77  . 70.380  72.303  15.906  1.00 12.05
1 . .
ATOM 580  C     C     . ILE ILE ILE A A 77  77  . 71.551  71.443  18.553  1.00 11.65
1 . .
ATOM 581  O     O     . ILE ILE ILE A A 77  77  . 70.470  71.341  19.196  1.00 13.07
1 . .
ATOM 582  N     N     . SER SER SER A A 78  78  . 72.429  70.452  18.490  1.00 10.93
1 . .
ATOM 583  CA    CA    . SER SER SER A A 78  78  . 72.090  69.130  19.057  1.00 10.53
1 . .
ATOM 584  CB    CB    . SER SER SER A A 78  78  . 73.248  68.123  18.805  1.00 9.51
1 . .
ATOM 585  OG    OG    . SER SER SER A A 78  78  . 73.333  67.775  17.443  1.00 11.80
1 . .
ATOM 586  C     C     . SER SER SER A A 78  78  . 71.855  69.205  20.562  1.00 12.09
1 . .
ATOM 587  O     O     . SER SER SER A A 78  78  . 70.984  68.486  21.082  1.00 13.63
1 . .
ATOM 588  N     N     . SER SER SER A A 79  79  . 72.556  70.119  21.270  1.00 12.69
1 . .
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ATOM 589  CA    CA    . SER SER SER A A 79  79  . 72.449  70.177  22.738  1.00 13.92
1 . .
ATOM 590  CB    CB    . SER SER SER A A 79  79  . 73.424  71.234  23.321  1.00 15.57
1 . .
ATOM 591  OG    OG    . SER SER SER A A 79  79  . 72.924  72.548  23.159  1.00 12.85
1 . .
ATOM 592  C     C     . SER SER SER A A 79  79  . 71.000  70.529  23.154  1.00 15.02
1 . .
ATOM 593  O     O     . SER SER SER A A 79  79  . 70.556  70.163  24.272  1.00 14.93
1 . .
ATOM 594  N     N     . GLY GLY GLY A A 80  80  . 70.320  71.265  22.277  1.00 13.53
1 . .
ATOM 595  CA    CA    . GLY GLY GLY A A 80  80  . 68.944  71.788  22.512  1.00 15.42
1 . .
ATOM 596  C     C     . GLY GLY GLY A A 80  80  . 68.930  72.847  23.612  1.00 14.42
1 . .
ATOM 597  O     O     . GLY GLY GLY A A 80  80  . 67.846  73.323  23.992  1.00 16.51
1 . .
ATOM 598  N     N     . LEU LEU LEU A A 81  81  . 70.101  73.270  24.124  1.00 12.78
1 . .
ATOM 599  CA    CA    . LEU LEU LEU A A 81  81  . 70.128  74.273  25.236  1.00 11.46
1 . .
ATOM 600  CB    CB    . LEU LEU LEU A A 81  81  . 71.604  74.490  25.683  1.00 13.09
1 . .
ATOM 601  CG    CG    . LEU LEU LEU A A 81  81  . 72.181  73.319  26.532  1.00 14.42
1 . .
ATOM 602  CD1   CD1   . LEU LEU LEU A A 81  81  . 73.725  73.366  26.610  1.00 15.67
1 . .
ATOM 603  CD2   CD2   . LEU LEU LEU A A 81  81  . 71.487  73.148  27.972  1.00 18.30
1 . .
ATOM 604  C     C     . LEU LEU LEU A A 81  81  . 69.578  75.589  24.773  1.00 12.21
1 . .
ATOM 605  O     O     . LEU LEU LEU A A 81  81  . 69.808  75.990  23.605  1.00 12.74
1 . .
ATOM 606  N     N     . SER SER SER A A 82  82  . 68.888  76.309  25.667  1.00 11.12
1 . .
ATOM 607  CA    CA    . SER SER SER A A 82  82  . 68.555  77.700  25.382  1.00 10.82
1 . .
ATOM 608  CB    CB    . SER SER SER A A 82  82  . 67.597  78.266  26.473  1.00 10.78
1 . .
ATOM 609  OG    OG    . SER SER SER A A 82  82  . 67.348  79.691  26.275  1.00 13.42
1 . .
ATOM 610  C     C     . SER SER SER A A 82  82  . 69.813  78.601  25.332  1.00 10.62
1 . .
ATOM 611  O     O     . SER SER SER A A 82  82  . 70.759  78.397  26.073  1.00 10.16
1 . .
ATOM 612  N     N     . VAL VAL VAL A A 83  83  . 69.745  79.639  24.490  1.00 10.50
1 . .
ATOM 613  CA    CA    . VAL VAL VAL A A 83  83  . 70.875  80.583  24.391  1.00 10.67
1 . .
ATOM 614  CB    CB    . VAL VAL VAL A A 83  83  . 70.683  81.596  23.258  1.00 10.89
1 . .
ATOM 615  CG1   CG1   . VAL VAL VAL A A 83  83  . 70.926  80.885  21.889  1.00 8.92
1 . .
ATOM 616  CG2   CG2   . VAL VAL VAL A A 83  83  . 69.305  82.204  23.324  1.00 10.21
1 . .
ATOM 617  C     C     . VAL VAL VAL A A 83  83  . 71.080  81.371  25.691  1.00 10.88
1 . .
ATOM 618  O     O     . VAL VAL VAL A A 83  83  . 72.133  81.959  25.849  1.00 11.14
1 . .
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ATOM 619  N     N     . VAL VAL VAL A A 84  84  . 70.120  81.354  26.629  1.00 10.98
1 . .
ATOM 620  CA    CA    . VAL VAL VAL A A 84  84  . 70.405  81.946  27.930  1.00 10.85
1 . .
ATOM 621  CB    CB    . VAL VAL VAL A A 84  84  . 69.128  82.110  28.784  1.00 10.52
1 . .
ATOM 622  CG1   CG1   . VAL VAL VAL A A 84  84  . 67.951  82.893  27.991  1.00 10.97
1 . .
ATOM 623  CG2   CG2   . VAL VAL VAL A A 84  84  . 68.699  80.698  29.360  1.00 10.63
1 . .
ATOM 624  C     C     . VAL VAL VAL A A 84  84  . 71.465  81.196  28.769  1.00 11.55
1 . .
ATOM 625  O     O     . VAL VAL VAL A A 84  84  . 72.037  81.775  29.680  1.00 11.66
1 . .
ATOM 626  N     N     . GLU GLU GLU A A 85  85  . 71.725  79.927  28.454  1.00 11.36
1 . .
ATOM 627  CA    CA    . GLU GLU GLU A A 85  85  . 72.674  79.108  29.219  1.00 11.06
1 . .
ATOM 628  CB    CB    . GLU GLU GLU A A 85  85  . 72.295  77.621  29.105  1.00 10.04
1 . .
ATOM 629  CG    CG    . GLU GLU GLU A A 85  85  . 70.871  77.388  29.635  1.00 10.25
1 . .
ATOM 630  CD    CD    . GLU GLU GLU A A 85  85  . 70.752  77.549  31.153  1.00 17.34
1 . .
ATOM 631  OE1   OE1   . GLU GLU GLU A A 85  85  . 71.765  77.611  31.887  1.00 18.02
1 . .
ATOM 632  OE2   OE2   . GLU GLU GLU A A 85  85  . 69.605  77.627  31.653  1.00 18.64
1 . .
ATOM 633  C     C     . GLU GLU GLU A A 85  85  . 74.104  79.313  28.738  1.00 10.95
1 . .
ATOM 634  O     O     . GLU GLU GLU A A 85  85  . 74.690  78.355  28.169  1.00 10.74
1 . .
ATOM 635  N     N     . GLN GLN GLN A A 86  86  . 74.636  80.532  28.964  1.00 8.94
1 . .
ATOM 636  CA    CA    . GLN GLN GLN A A 86  86  . 75.984  80.893  28.489  1.00 9.15
1 . .
ATOM 637  CB    CB    . GLN GLN GLN A A 86  86  . 76.375  82.295  28.988  1.00 7.66
1 . .
ATOM 638  CG    CG    . GLN GLN GLN A A 86  86  . 77.680  82.834  28.468  1.00 7.40
1 . .
ATOM 639  CD    CD    . GLN GLN GLN A A 86  86  . 77.509  83.230  26.961  1.00 9.84
1 . .
ATOM 640  OE1   OE1   . GLN GLN GLN A A 86  86  . 76.468  83.754  26.605  1.00 9.29
1 . .
ATOM 641  NE2   NE2   . GLN GLN GLN A A 86  86  . 78.493  82.902  26.100  1.00 8.44
1 . .
ATOM 642  C     C     . GLN GLN GLN A A 86  86  . 77.007  79.896  28.939  1.00 9.64
1 . .
ATOM 643  O     O     . GLN GLN GLN A A 86  86  . 77.844  79.447  28.147  1.00 9.84
1 . .
ATOM 644  N     N     . GLU GLU GLU A A 87  87  . 77.010  79.596  30.250  1.00 10.54
1 . .
ATOM 645  CA    CA    . GLU GLU GLU A A 87  87  . 78.052  78.760  30.809  1.00 11.32
1 . .
ATOM 646  CB    CB    . GLU GLU GLU A A 87  87  . 77.901  78.701  32.315  1.00 11.24
1 . .
ATOM 647  CG    CG    . GLU GLU GLU A A 87  87  . 78.917  77.821  32.978  1.00 16.48
1 . .
ATOM 648  CD    CD    . GLU GLU GLU A A 87  87  . 79.117  78.174  34.487  1.00 25.22
1 . .
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ATOM 649  OE1  OE1  . GLU GLU GLU A A 87  87  . 80.039  77.615  35.102  1.00 29.96
1 . .
ATOM 650  OE2  OE2  . GLU GLU GLU A A 87  87  . 78.395  79.033  35.028  1.00 29.86
1 . .
ATOM 651  C    C    . GLU GLU GLU A A 87  87  . 77.975  77.335  30.256  1.00 11.62
1 . .
ATOM 652  O    O    . GLU GLU GLU A A 87  87  . 79.007  76.734  29.910  1.00 11.74
1 . .
ATOM 653  N    N    . LYS LYS LYS A A 88  88  . 76.762  76.791  30.146  1.00 10.55
1 . .
ATOM 654  CA   CA   . LYS LYS LYS A A 88  88  . 76.651  75.379  29.607  1.00 10.25
1 . .
ATOM 655  CB   CB   . LYS LYS LYS A A 88  88  . 75.201  74.832  29.706  1.00 11.70
1 . .
ATOM 656  CG   CG   . LYS LYS LYS A A 88  88  . 74.859  74.512  31.241  1.00 13.95
1 . .
ATOM 657  CD   CD   . LYS LYS LYS A A 88  88  . 73.447  73.972  31.370  1.00 15.39
1 . .
ATOM 658  CE   CE   . LYS LYS LYS A A 88  88  . 73.027  73.976  32.872  1.00 23.58
1 . .
ATOM 659  NZ   NZ   . LYS LYS LYS A A 88  88  . 71.711  73.315  32.928  1.00 30.22
1 . .
ATOM 660  C    C    . LYS LYS LYS A A 88  88  . 77.104  75.355  28.172  1.00 10.67
1 . .
ATOM 661  O    O    . LYS LYS LYS A A 88  88  . 77.782  74.371  27.740  1.00 11.30
1 . .
ATOM 662  N    N    . LEU LEU LEU A A 89  89  . 76.660  76.362  27.398  1.00 9.95
1 . .
ATOM 663  CA   CA   . LEU LEU LEU A A 89  89  . 77.069  76.398  25.968  1.00 8.53
1 . .
ATOM 664  CB   CB   . LEU LEU LEU A A 89  89  . 76.280  77.471  25.155  1.00 8.59
1 . .
ATOM 665  CG   CG   . LEU LEU LEU A A 89  89  . 74.788  77.056  24.946  1.00 6.46
1 . .
ATOM 666  CD1  CD1  . LEU LEU LEU A A 89  89  . 73.969  78.291  24.613  1.00 9.10
1 . .
ATOM 667  CD2  CD2  . LEU LEU LEU A A 89  89  . 74.703  75.968  23.820  1.00 11.23
1 . .
ATOM 668  C    C    . LEU LEU LEU A A 89  89  . 78.627  76.590  25.802  1.00 10.44
1 . .
ATOM 669  O    O    . LEU LEU LEU A A 89  89  . 79.286  75.899  24.964  1.00 10.94
1 . .
ATOM 670  N    N    . ASP ASP ASP A A 90  90  . 79.212  77.517  26.555  1.00 9.89
1 . .
ATOM 671  CA   CA   . ASP ASP ASP A A 90  90  . 80.640  77.731  26.453  1.00 9.88
1 . .
ATOM 672  CB   CB   . ASP ASP ASP A A 90  90  . 81.073  78.890  27.364  1.00 9.52
1 . .
ATOM 673  CG   CG   . ASP ASP ASP A A 90  90  . 80.781  80.258  26.765  1.00 11.55
1 . .
ATOM 674  OD1  OD1  . ASP ASP ASP A A 90  90  . 80.604  80.329  25.512  1.00 11.39
1 . .
ATOM 675  OD2  OD2  . ASP ASP ASP A A 90  90  . 80.715  81.289  27.525  1.00 9.81
1 . .
ATOM 676  C    C    . ASP ASP ASP A A 90  90  . 81.369  76.465  26.884  1.00 10.55
1 . .
ATOM 677  O    O    . ASP ASP ASP A A 90  90  . 82.341  76.059  26.266  1.00 11.38
1 . .
ATOM 678  N    N    . ASN ASN ASN A A 91  91  . 80.925  75.826  27.953  1.00 11.08
1 . .
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ATOM 679  CA    CA    . ASN ASN ASN A A 91  91  . 81.599  74.575  28.409  1.00 12.18
1 . .
ATOM 680  CB    CB    . ASN ASN ASN A A 91  91  . 81.075  74.130  29.776  1.00 14.16
1 . .
ATOM 681  CG    CG    . ASN ASN ASN A A 91  91  . 81.619  74.994  30.944  1.00 18.45
1 . .
ATOM 682  OD1   OD1   . ASN ASN ASN A A 91  91  . 82.777  75.425  30.957  1.00 23.19
1 . .
ATOM 683  ND2   ND2   . ASN ASN ASN A A 91  91  . 80.798  75.166  31.962  1.00 22.88
1 . .
ATOM 684  C     C     . ASN ASN ASN A A 91  91  . 81.515  73.446  27.378  1.00 12.10
1 . .
ATOM 685  O     O     . ASN ASN ASN A A 91  91  . 82.517  72.696  27.197  1.00 11.11
1 . .
ATOM 686  N     N     . LEU LEU LEU A A 92  92  . 80.376  73.331  26.686  1.00 11.16
1 . .
ATOM 687  CA    CA    . LEU LEU LEU A A 92  92  . 80.274  72.392  25.587  1.00 12.44
1 . .
ATOM 688  CB    CB    . LEU LEU LEU A A 92  92  . 78.882  72.490  24.960  1.00 13.96
1 . .
ATOM 689  CG    CG    . LEU LEU LEU A A 92  92  . 78.036  71.265  24.754  1.00 22.11
1 . .
ATOM 690  CD1   CD1   . LEU LEU LEU A A 92  92  . 78.030  70.158  25.923  1.00 24.37
1 . .
ATOM 691  CD2   CD2   . LEU LEU LEU A A 92  92  . 76.616  71.735  24.359  1.00 17.94
1 . .
ATOM 692  C     C     . LEU LEU LEU A A 92  92  . 81.370  72.652  24.511  1.00 10.87
1 . .
ATOM 693  O     O     . LEU LEU LEU A A 92  92  . 82.048  71.707  24.055  1.00 11.14
1 . .
ATOM 694  N     N     . MET MET MET A A 93  93  . 81.572  73.908  24.145  1.00 10.67
1 . .
ATOM 695  CA    CA    . MET MET MET A A 93  93  . 82.596  74.254  23.170  1.00 10.32
1 . .
ATOM 696  CB    CB    . MET MET MET A A 93  93  . 82.522  75.734  22.744  1.00 10.11
1 . .
ATOM 697  CG    CG    . MET MET MET A A 93  93  . 81.241  76.009  21.936  1.00 8.81
1 . .
ATOM 698  SD    SD    . MET MET MET A A 93  93  . 81.295  77.641  21.151  1.00 11.32
1 . .
ATOM 699  CE    CE    . MET MET MET A A 93  93  . 80.928  78.741  22.537  1.00 11.28
1 . .
ATOM 700  C     C     . MET MET MET A A 93  93  . 84.011  73.972  23.715  1.00 10.51
1 . .
ATOM 701  O     O     . MET MET MET A A 93  93  . 84.863  73.436  22.973  1.00 11.58
1 . .
ATOM 702  N     N     . LEU LEU LEU A A 94  94  . 84.258  74.286  24.992  1.00 8.64
1 . .
ATOM 703  CA    CA    . LEU LEU LEU A A 94  94  . 85.620  74.074  25.541  1.00 9.73
1 . .
ATOM 704  CB    CB    . LEU LEU LEU A A 94  94  . 85.743  74.653  26.941  1.00 11.41
1 . .
ATOM 705  CG    CG    . LEU LEU LEU A A 94  94  . 85.417  76.145  27.093  1.00 11.67
1 . .
ATOM 706  CD1   CD1   . LEU LEU LEU A A 94  94  . 85.572  76.572  28.562  1.00 17.26
1 . .
ATOM 707  CD2   CD2   . LEU LEU LEU A A 94  94  . 86.328  76.917  26.266  1.00 14.66
1 . .
ATOM 708  C     C     . LEU LEU LEU A A 94  94  . 85.944  72.594  25.591  1.00 10.65
1 . .
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ATOM 709  O     O     . LEU LEU LEU A A 94  94  . 87.085  72.229  25.340  1.00 13.35
1 . .
ATOM 710  N     N     . GLU GLU GLU A A 95  95  . 84.972  71.786  25.941  1.00 11.39
1 . .
ATOM 711  CA    CA    . GLU GLU GLU A A 95  95  . 85.149  70.307  26.015  1.00 13.19
1 . .
ATOM 712  CB    CB    . GLU GLU GLU A A 95  95  . 83.889  69.679  26.702  1.00 14.83
1 . .
ATOM 713  CG    CG    . GLU GLU GLU A A 95  95  . 83.856  70.023  28.147  1.00 23.13
1 . .
ATOM 714  CD    CD    . GLU GLU GLU A A 95  95  . 85.009  69.332  28.883  1.00 35.70
1 . .
ATOM 715  OE1   OE1   . GLU GLU GLU A A 95  95  . 85.177  68.082  28.711  1.00 41.61
1 . .
ATOM 716  OE2   OE2   . GLU GLU GLU A A 95  95  . 85.758  70.038  29.610  1.00 39.71
1 . .
ATOM 717  C     C     . GLU GLU GLU A A 95  95  . 85.334  69.710  24.659  1.00 12.71
1 . .
ATOM 718  O     O     . GLU GLU GLU A A 95  95  . 86.177  68.804  24.487  1.00 12.73
1 . .
ATOM 719  N     N     . LEU LEU LEU A A 96  96  . 84.627  70.251  23.665  1.00 12.11
1 . .
ATOM 720  CA    CA    . LEU LEU LEU A A 96  96  . 84.684  69.729  22.269  1.00 10.67
1 . .
ATOM 721  CB    CB    . LEU LEU LEU A A 96  96  . 83.554  70.333  21.428  1.00 10.50
1 . .
ATOM 722  CG    CG    . LEU LEU LEU A A 96  96  . 83.340  69.711  20.019  1.00 10.85
1 . .
ATOM 723  CD1   CD1   . LEU LEU LEU A A 96  96  . 83.092  68.143  20.119  1.00 13.99
1 . .
ATOM 724  CD2   CD2   . LEU LEU LEU A A 96  96  . 82.121  70.380  19.407  1.00 10.25
1 . .
ATOM 725  C     C     . LEU LEU LEU A A 96  96  . 86.031  70.053  21.611  1.00 11.56
1 . .
ATOM 726  O     O     . LEU LEU LEU A A 96  96  . 86.637  69.230  20.873  1.00 12.55
1 . .
ATOM 727  N     N     . ASP ASP ASP A A 97  97  . 86.523  71.264  21.905  1.00 9.96
1 . .
ATOM 728  CA    CA    . ASP ASP ASP A A 97  97  . 87.869  71.594  21.532  1.00 9.23
1 . .
ATOM 729  CB    CB    . ASP ASP ASP A A 97  97  . 88.122  73.113  21.799  1.00 10.20
1 . .
ATOM 730  CG    CG    . ASP ASP ASP A A 97  97  . 89.586  73.477  21.621  1.00 10.15
1 . .
ATOM 731  OD1   OD1   . ASP ASP ASP A A 97  97  . 89.985  73.876  20.512  1.00 10.77
1 . .
ATOM 732  OD2   OD2   . ASP ASP ASP A A 97  97  . 90.333  73.364  22.611  1.00 12.03
1 . .
ATOM 733  C     C     . ASP ASP ASP A A 97  97  . 88.892  70.718  22.239  1.00 10.84
1 . .
ATOM 734  O     O     . ASP ASP ASP A A 97  97  . 89.806  70.143  21.604  1.00 11.13
1 . .
ATOM 735  N     N     . GLY GLY GLY A A 98  98  . 88.746  70.651  23.560  1.00 11.66
1 . .
ATOM 736  CA    CA    . GLY GLY GLY A A 98  98  . 89.457  69.702  24.414  1.00 12.88
1 . .
ATOM 737  C     C     . GLY GLY GLY A A 98  98  . 90.919  70.021  24.623  1.00 13.80
1 . .
ATOM 738  O     O     . GLY GLY GLY A A 98  98  . 91.642  69.163  25.137  1.00 16.46
1 . .
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ATOM 739  N     N     . THR THR THR A A 99  99  . 91.378  71.221  24.267  1.00 12.16
1 . .
ATOM 740  CA    CA    . THR THR THR A A 99  99  . 92.784  71.586  24.454  1.00 12.80
1 . .
ATOM 741  CB    CB    . THR THR THR A A 99  99  . 93.479  71.979  23.158  1.00 14.00
1 . .
ATOM 742  OG1   OG1   . THR THR THR A A 99  99  . 92.968  73.235  22.659  1.00 13.97
1 . .
ATOM 743  CG2   CG2   . THR THR THR A A 99  99  . 93.302  70.891  22.055  1.00 11.73
1 . .
ATOM 744  C     C     . THR THR THR A A 99  99  . 92.870  72.788  25.410  1.00 14.36
1 . .
ATOM 745  O     O     . THR THR THR A A 99  99  . 91.949  73.588  25.501  1.00 15.99
1 . .
ATOM 746  N     N     . GLU GLU GLU A A 100 100 . 94.026  72.935  26.036  1.00 14.23
1 . .
ATOM 747  CA    CA    . GLU GLU GLU A A 100 100 . 94.233  73.974  27.031  1.00 16.14
1 . .
ATOM 748  CB    CB    . GLU GLU GLU A A 100 100 . 95.614  73.829  27.673  1.00 18.19
1 . .
ATOM 749  CG    CG    . GLU GLU GLU A A 100 100 . 95.799  74.807  28.849  1.00 25.20
1 . .
ATOM 750  CD    CD    . GLU GLU GLU A A 100 100 . 94.648  74.679  29.890  1.00 35.09
1 . .
ATOM 751  OE1   OE1   . GLU GLU GLU A A 100 100 . 94.158  73.527  30.172  1.00 38.71
1 . .
ATOM 752  OE2   OE2   . GLU GLU GLU A A 100 100 . 94.234  75.734  30.442  1.00 39.68
1 . .
ATOM 753  C     C     . GLU GLU GLU A A 100 100 . 94.100  75.367  26.407  1.00 14.50
1 . .
ATOM 754  O     O     . GLU GLU GLU A A 100 100 . 93.329  76.181  26.902  1.00 14.16
1 . .
ATOM 755  N     N     . ASN ASN ASN A A 101 101 . 94.750  75.564  25.280  1.00 12.37
1 . .
ATOM 756  CA    CA    . ASN ASN ASN A A 101 101 . 94.862  76.914  24.680  1.00 12.44
1 . .
ATOM 757  CB    CB    . ASN ASN ASN A A 101 101 . 96.311  77.181  24.270  1.00 16.28
1 . .
ATOM 758  CG    CG    . ASN ASN ASN A A 101 101 . 96.742  76.275  23.117  1.00 24.55
1 . .
ATOM 759  OD1   OD1   . ASN ASN ASN A A 101 101 . 96.411  75.043  23.132  1.00 34.33
1 . .
ATOM 760  ND2   ND2   . ASN ASN ASN A A 101 101 . 97.501  76.824  22.109  1.00 34.65
1 . .
ATOM 761  C     C     . ASN ASN ASN A A 101 101 . 93.944  77.058  23.461  1.00 11.01
1 . .
ATOM 762  O     O     . ASN ASN ASN A A 101 101 . 94.179  77.976  22.624  1.00 10.80
1 . .
ATOM 763  N     N     . LYS LYS LYS A A 102 102 . 92.914  76.168  23.336  1.00 8.80
1 . .
ATOM 764  CA    CA    . LYS LYS LYS A A 102 102 . 91.965  76.208  22.220  1.00 8.95
1 . .
ATOM 765  CB    CB    . LYS LYS LYS A A 102 102 . 91.081  77.500  22.294  1.00 9.21
1 . .
ATOM 766  CG    CG    . LYS LYS LYS A A 102 102 . 90.292  77.518  23.599  1.00 7.89
1 . .
ATOM 767  CD    CD    . LYS LYS LYS A A 102 102 . 89.590  78.941  23.782  1.00 8.14
1 . .
ATOM 768  CE    CE    . LYS LYS LYS A A 102 102 . 88.673  79.011  25.030  1.00 12.65
1 . .
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ATOM 769  NZ    NZ    . LYS LYS LYS A A 102 102 . 89.410  78.800  26.318  1.00 10.85
1 . .
ATOM 770  C     C     . LYS LYS LYS A A 102 102 . 92.624  76.093  20.843  1.00 10.17
1 . .
ATOM 771  O     O     . LYS LYS LYS A A 102 102 . 92.275  76.829  19.862  1.00 9.32
1 . .
ATOM 772  N     N     . SER SER SER A A 103 103 . 93.650  75.241  20.761  1.00 10.52
1 . .
ATOM 773  CA    CA    . SER SER SER A A 103 103 . 94.339  75.062  19.521  1.00 12.76
1 . .
ATOM 774  CB    CB    . SER SER SER A A 103 103 . 95.788  74.608  19.831  1.00 14.31
1 . .
ATOM 775  OG    OG    . SER SER SER A A 103 103 . 95.698  73.440  20.586  1.00 16.72
1 . .
ATOM 776  C     C     . SER SER SER A A 103 103 . 93.702  74.135  18.508  1.00 12.38
1 . .
ATOM 777  O     O     . SER SER SER A A 103 103 . 94.236  74.074  17.414  1.00 15.20
1 . .
ATOM 778  N     N     . LYS LYS LYS A A 104 104 . 92.604  73.448  18.829  1.00 10.86
1 . .
ATOM 779  CA    CA    . LYS LYS LYS A A 104 104 . 91.897  72.638  17.815  1.00 11.98
1 . .
ATOM 780  CB    CB    . LYS LYS LYS A A 104 104 . 91.112  71.475  18.445  1.00 13.31
1 . .
ATOM 781  CG    CG    . LYS LYS LYS A A 104 104 . 90.409  70.567  17.381  1.00 13.55
1 . .
ATOM 782  CD    CD    . LYS LYS LYS A A 104 104 . 89.531  69.565  18.117  1.00 17.28
1 . .
ATOM 783  CE    CE    . LYS LYS LYS A A 104 104 . 90.249  68.395  18.789  1.00 22.41
1 . .
ATOM 784  NZ    NZ    . LYS LYS LYS A A 104 104 . 89.057  67.960  19.600  1.00 22.11
1 . .
ATOM 785  C     C     . LYS LYS LYS A A 104 104 . 91.003  73.493  16.929  1.00 12.43
1 . .
ATOM 786  O     O     . LYS LYS LYS A A 104 104 . 91.115  73.453  15.707  1.00 13.65
1 . .
ATOM 787  N     N     . PHE PHE PHE A A 105 105 . 90.168  74.333  17.549  1.00 11.43
1 . .
ATOM 788  CA    CA    . PHE PHE PHE A A 105 105 . 89.245  75.098  16.739  1.00 10.55
1 . .
ATOM 789  CB    CB    . PHE PHE PHE A A 105 105 . 87.861  75.238  17.428  1.00 10.01
1 . .
ATOM 790  CG    CG    . PHE PHE PHE A A 105 105 . 87.098  73.943  17.528  1.00 11.67
1 . .
ATOM 791  CD1   CD1   . PHE PHE PHE A A 105 105 . 86.266  73.741  18.611  1.00 13.17
1 . .
ATOM 792  CE1   CE1   . PHE PHE PHE A A 105 105 . 85.508  72.547  18.718  1.00 16.45
1 . .
ATOM 793  CZ    CZ    . PHE PHE PHE A A 105 105 . 85.677  71.518  17.776  1.00 15.52
1 . .
ATOM 794  CE2   CE2   . PHE PHE PHE A A 105 105 . 86.547  71.709  16.698  1.00 12.62
1 . .
ATOM 795  CD2   CD2   . PHE PHE PHE A A 105 105 . 87.255  72.914  16.570  1.00 11.09
1 . .
ATOM 796  C     C     . PHE PHE PHE A A 105 105 . 89.774  76.517  16.550  1.00 10.53
1 . .
ATOM 797  O     O     . PHE PHE PHE A A 105 105 . 89.333  77.210  15.619  1.00 10.88
1 . .
ATOM 798  N     N     . GLY GLY GLY A A 106 106 . 90.642  76.961  17.470  1.00 9.28
1 . .
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ATOM 799  CA    CA    . GLY GLY GLY A A 106 106 . 91.012  78.390  17.531  1.00 8.42
1 . .
ATOM 800  C     C     . GLY GLY GLY A A 106 106 . 90.158  79.106  18.580  1.00 8.46
1 . .
ATOM 801  O     O     . GLY GLY GLY A A 106 106 . 88.901  78.918  18.652  1.00 9.19
1 . .
ATOM 802  N     N     . ALA ALA ALA A A 107 107 . 90.785  79.966  19.364  1.00 9.43
1 . .
ATOM 803  CA    CA    . ALA ALA ALA A A 107 107 . 90.028  80.816  20.331  1.00 8.48
1 . .
ATOM 804  CB    CB    . ALA ALA ALA A A 107 107 . 91.008  81.644  21.201  1.00 9.55
1 . .
ATOM 805  C     C     . ALA ALA ALA A A 107 107 . 89.134  81.771  19.526  1.00 8.61
1 . .
ATOM 806  O     O     . ALA ALA ALA A A 107 107 . 88.054  82.212  20.042  1.00 8.32
1 . .
ATOM 807  N     N     . ASN ASN ASN A A 108 108 . 89.528  82.096  18.279  1.00 8.37
1 . .
ATOM 808  CA    CA    . ASN ASN ASN A A 108 108 . 88.696  82.996  17.522  1.00 8.34
1 . .
ATOM 809  CB    CB    . ASN ASN ASN A A 108 108 . 89.420  83.671  16.326  1.00 7.72
1 . .
ATOM 810  CG    CG    . ASN ASN ASN A A 108 108 . 90.339  82.744  15.542  1.00 10.15
1 . .
ATOM 811  OD1   OD1   . ASN ASN ASN A A 108 108 . 90.696  81.644  15.988  1.00 10.34
1 . .
ATOM 812  ND2   ND2   . ASN ASN ASN A A 108 108 . 90.694  83.180  14.321  1.00 9.82
1 . .
ATOM 813  C     C     . ASN ASN ASN A A 108 108 . 87.378  82.296  17.073  1.00 9.16
1 . .
ATOM 814  O     O     . ASN ASN ASN A A 108 108 . 86.348  82.960  16.806  1.00 9.73
1 . .
ATOM 815  N     N     . ALA ALA ALA A A 109 109 . 87.433  80.982  16.860  1.00 8.34
1 . .
ATOM 816  CA    CA    . ALA ALA ALA A A 109 109 . 86.203  80.249  16.445  1.00 7.51
1 . .
ATOM 817  CB    CB    . ALA ALA ALA A A 109 109 . 86.593  78.801  16.012  1.00 7.70
1 . .
ATOM 818  C     C     . ALA ALA ALA A A 109 109 . 85.258  80.204  17.667  1.00 8.32
1 . .
ATOM 819  O     O     . ALA ALA ALA A A 109 109 . 84.035  80.499  17.553  1.00 7.66
1 . .
ATOM 820  N     N     . ILE ILE ILE A A 110 110 . 85.821  79.809  18.808  1.00 6.30
1 . .
ATOM 821  CA    CA    . ILE ILE ILE A A 110 110 . 85.003  79.612  20.010  1.00 8.31
1 . .
ATOM 822  CB    CB    . ILE ILE ILE A A 110 110 . 85.816  78.899  21.132  1.00 7.50
1 . .
ATOM 823  CG1   CG1   . ILE ILE ILE A A 110 110 . 86.133  77.467  20.664  1.00 7.01
1 . .
ATOM 824  CD1   CD1   . ILE ILE ILE A A 110 110 . 87.066  76.715  21.676  1.00 11.19
1 . .
ATOM 825  CG2   CG2   . ILE ILE ILE A A 110 110 . 84.996  78.912  22.479  1.00 9.09
1 . .
ATOM 826  C     C     . ILE ILE ILE A A 110 110 . 84.404  80.915  20.490  1.00 7.89
1 . .
ATOM 827  O     O     . ILE ILE ILE A A 110 110 . 83.192  81.009  20.790  1.00 8.37
1 . .
ATOM 828  N     N     . LEU LEU LEU A A 111 111 . 85.206  81.948  20.466  1.00 7.29
1 . .
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ATOM 829  CA    CA    . LEU LEU LEU A A 111 111 . 84.684  83.232  20.957  1.00 5.66
1 . .
ATOM 830  CB    CB    . LEU LEU LEU A A 111 111 . 85.834  84.260  21.095  1.00 6.57
1 . .
ATOM 831  CG    CG    . LEU LEU LEU A A 111 111 . 85.394  85.623  21.648  1.00 6.14
1 . .
ATOM 832  CD1   CD1   . LEU LEU LEU A A 111 111 . 84.856  85.464  23.128  1.00 7.34
1 . .
ATOM 833  CD2   CD2   . LEU LEU LEU A A 111 111 . 86.627  86.593  21.626  1.00 8.24
1 . .
ATOM 834  C     C     . LEU LEU LEU A A 111 111 . 83.613  83.817  20.097  1.00 6.32
1 . .
ATOM 835  O     O     . LEU LEU LEU A A 111 111 . 82.705  84.437  20.609  1.00 7.48
1 . .
ATOM 836  N     N     . GLY GLY GLY A A 112 112 . 83.755  83.692  18.762  1.00 5.85
1 . .
ATOM 837  CA    CA    . GLY GLY GLY A A 112 112 . 82.778  84.324  17.876  1.00 6.76
1 . .
ATOM 838  C     C     . GLY GLY GLY A A 112 112 . 81.429  83.731  18.205  1.00 7.50
1 . .
ATOM 839  O     O     . GLY GLY GLY A A 112 112 . 80.423  84.415  18.252  1.00 7.59
1 . .
ATOM 840  N     N     . VAL VAL VAL A A 113 113 . 81.368  82.413  18.412  1.00 6.67
1 . .
ATOM 841  CA    CA    . VAL VAL VAL A A 113 113 . 80.055  81.781  18.800  1.00 7.31
1 . .
ATOM 842  CB    CB    . VAL VAL VAL A A 113 113 . 80.126  80.234  18.726  1.00 6.72
1 . .
ATOM 843  CG1   CG1   . VAL VAL VAL A A 113 113 . 78.800  79.630  19.196  1.00 7.72
1 . .
ATOM 844  CG2   CG2   . VAL VAL VAL A A 113 113 . 80.452  79.749  17.303  1.00 6.26
1 . .
ATOM 845  C     C     . VAL VAL VAL A A 113 113 . 79.643  82.202  20.244  1.00 6.40
1 . .
ATOM 846  O     O     . VAL VAL VAL A A 113 113 . 78.474  82.541  20.486  1.00 6.46
1 . .
ATOM 847  N     N     . SER SER SER A A 114 114 . 80.574  82.239  21.185  1.00 7.31
1 . .
ATOM 848  CA    CA    . SER SER SER A A 114 114 . 80.295  82.612  22.541  1.00 7.01
1 . .
ATOM 849  CB    CB    . SER SER SER A A 114 114 . 81.576  82.560  23.353  1.00 8.34
1 . .
ATOM 850  OG    OG    . SER SER SER A A 114 114 . 81.269  82.752  24.696  1.00 9.94
1 . .
ATOM 851  C     C     . SER SER SER A A 114 114 . 79.661  84.033  22.622  1.00 8.26
1 . .
ATOM 852  O     O     . SER SER SER A A 114 114 . 78.655  84.235  23.373  1.00 7.67
1 . .
ATOM 853  N     N     . LEU LEU LEU A A 115 115 . 80.170  84.964  21.804  1.00 9.12
1 . .
ATOM 854  CA    CA    . LEU LEU LEU A A 115 115 . 79.639  86.327  21.831  1.00 6.01
1 . .
ATOM 855  CB    CB    . LEU LEU LEU A A 115 115 . 80.545  87.231  20.986  1.00 7.31
1 . .
ATOM 856  CG    CG    . LEU LEU LEU A A 115 115 . 81.973  87.354  21.632  1.00 7.73
1 . .
ATOM 857  CD1   CD1   . LEU LEU LEU A A 115 115 . 82.798  88.114  20.493  1.00 9.75
1 . .
ATOM 858  CD2   CD2   . LEU LEU LEU A A 115 115 . 81.896  88.276  22.883  1.00 8.55
1 . .
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ATOM 859  C     C     . LEU LEU LEU A A 115 115 . 78.236  86.325  21.238  1.00 7.22
1 . .
ATOM 860  O     O     . LEU LEU LEU A A 115 115 . 77.353  87.031  21.757  1.00 7.59
1 . .
ATOM 861  N     N     . ALA ALA ALA A A 116 116 . 78.029  85.587  20.128  1.00 7.01
1 . .
ATOM 862  CA    CA    . ALA ALA ALA A A 116 116 . 76.682  85.584  19.455  1.00 8.81
1 . .
ATOM 863  CB    CB    . ALA ALA ALA A A 116 116 . 76.734  84.812  18.178  1.00 10.38
1 . .
ATOM 864  C     C     . ALA ALA ALA A A 116 116 . 75.663  84.962  20.382  1.00 9.65
1 . .
ATOM 865  O     O     . ALA ALA ALA A A 116 116 . 74.516  85.407  20.456  1.00 8.75
1 . .
ATOM 866  N     N     . VAL VAL VAL A A 117 117 . 76.054  83.871  21.043  1.00 8.91
1 . .
ATOM 867  CA    CA    . VAL VAL VAL A A 117 117 . 75.156  83.206  22.039  1.00 7.08
1 . .
ATOM 868  CB    CB    . VAL VAL VAL A A 117 117 . 75.889  81.992  22.702  1.00 6.79
1 . .
ATOM 869  CG1   CG1   . VAL VAL VAL A A 117 117 . 75.233  81.559  24.087  1.00 9.06
1 . .
ATOM 870  CG2   CG2   . VAL VAL VAL A A 117 117 . 76.003  80.839  21.706  1.00 8.84
1 . .
ATOM 871  C     C     . VAL VAL VAL A A 117 117 . 74.735  84.224  23.121  1.00 8.15
1 . .
ATOM 872  O     O     . VAL VAL VAL A A 117 117 . 73.538  84.314  23.453  1.00 9.28
1 . .
ATOM 873  N     N     . CYS CYS CYS A A 118 118 . 75.698  84.986  23.622  1.00 10.14
1 . .
ATOM 874  CA    CA    . CYS CYS CYS A A 118 118 . 75.440  85.964  24.697  1.00 8.67
1 . .
ATOM 875  CB    CB    . CYS CYS CYS A A 118 118 . 76.761  86.605  25.160  1.00 9.42
1 . .
ATOM 876  SG    SG    . CYS CYS CYS A A 118 118 . 76.534  87.484  26.715  1.00 11.14
1 . .
ATOM 877  C     C     . CYS CYS CYS A A 118 118 . 74.381  86.980  24.202  1.00 9.84
1 . .
ATOM 878  O     O     . CYS CYS CYS A A 118 118 . 73.402  87.307  24.930  1.00 8.61
1 . .
ATOM 879  N     N     . LYS LYS LYS A A 119 119 . 74.582  87.545  23.006  1.00 8.37
1 . .
ATOM 880  CA    CA    . LYS LYS LYS A A 119 119 . 73.616  88.487  22.478  1.00 8.77
1 . .
ATOM 881  CB    CB    . LYS LYS LYS A A 119 119 . 74.068  89.044  21.138  1.00 8.40
1 . .
ATOM 882  CG    CG    . LYS LYS LYS A A 119 119 . 75.395  89.897  21.284  1.00 8.15
1 . .
ATOM 883  CD    CD    . LYS LYS LYS A A 119 119 . 75.823  90.400  19.926  1.00 10.63
1 . .
ATOM 884  CE    CE    . LYS LYS LYS A A 119 119 . 77.313  90.918  20.009  1.00 13.45
1 . .
ATOM 885  NZ    NZ    . LYS LYS LYS A A 119 119 . 77.651  91.812  18.841  1.00 12.43
1 . .
ATOM 886  C     C     . LYS LYS LYS A A 119 119 . 72.205  87.888  22.276  1.00 9.65
1 . .
ATOM 887  O     O     . LYS LYS LYS A A 119 119 . 71.180  88.522  22.608  1.00 10.60
1 . .
ATOM 888  N     N     . ALA ALA ALA A A 120 120 . 72.166  86.671  21.715  1.00 9.98
1 . .
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ATOM 889  CA    CA    . ALA ALA ALA A A 120 120 . 70.880  85.958  21.590  1.00 8.70
1 . .
ATOM 890  CB    CB    . ALA ALA ALA A A 120 120 . 71.126  84.643  20.767  1.00 8.64
1 . .
ATOM 891  C     C     . ALA ALA ALA A A 120 120 . 70.244  85.699  22.967  1.00 7.88
1 . .
ATOM 892  O     O     . ALA ALA ALA A A 120 120 . 68.985  85.779  23.092  1.00 9.57
1 . .
ATOM 893  N     N     . GLY GLY GLY A A 121 121 . 71.059  85.347  23.968  1.00 7.83
1 . .
ATOM 894  CA    CA    . GLY GLY GLY A A 121 121 . 70.669  85.125  25.360  1.00 8.13
1 . .
ATOM 895  C     C     . GLY GLY GLY A A 121 121 . 69.943  86.349  25.942  1.00 10.14
1 . .
ATOM 896  O     O     . GLY GLY GLY A A 121 121 . 68.884  86.264  26.590  1.00 10.03
1 . .
ATOM 897  N     N     . ALA ALA ALA A A 122 122 . 70.541  87.510  25.754  1.00 9.61
1 . .
ATOM 898  CA    CA    . ALA ALA ALA A A 122 122 . 69.937  88.774  26.236  1.00 9.55
1 . .
ATOM 899  CB    CB    . ALA ALA ALA A A 122 122 . 70.857  89.969  25.910  1.00 8.39
1 . .
ATOM 900  C     C     . ALA ALA ALA A A 122 122 . 68.541  88.960  25.601  1.00 10.17
1 . .
ATOM 901  O     O     . ALA ALA ALA A A 122 122 . 67.594  89.334  26.319  1.00 12.32
1 . .
ATOM 902  N     N     . ALA ALA ALA A A 123 123 . 68.409  88.749  24.272  1.00 10.68
1 . .
ATOM 903  CA    CA    . ALA ALA ALA A A 123 123 . 67.104  88.873  23.622  1.00 11.21
1 . .
ATOM 904  CB    CB    . ALA ALA ALA A A 123 123 . 67.169  88.702  22.067  1.00 12.27
1 . .
ATOM 905  C     C     . ALA ALA ALA A A 123 123 . 66.091  87.896  24.175  1.00 11.49
1 . .
ATOM 906  O     O     . ALA ALA ALA A A 123 123 . 64.883  88.245  24.246  1.00 13.67
1 . .
ATOM 907  N     N     . GLU GLU GLU A A 124 124 . 66.523  86.660  24.499  1.00 11.62
1 . .
ATOM 908  CA    CA    . GLU GLU GLU A A 124 124 . 65.583  85.659  24.961  1.00 11.86
1 . .
ATOM 909  CB    CB    . GLU GLU GLU A A 124 124 . 66.288  84.292  24.997  1.00 13.49
1 . .
ATOM 910  CG    CG    . GLU GLU GLU A A 124 124 . 65.332  83.163  25.372  1.00 16.59
1 . .
ATOM 911  CD    CD    . GLU GLU GLU A A 124 124 . 64.247  82.954  24.268  1.00 24.59
1 . .
ATOM 912  OE1   OE1   . GLU GLU GLU A A 124 124 . 64.461  83.303  23.061  1.00 29.47
1 . .
ATOM 913  OE2   OE2   . GLU GLU GLU A A 124 124 . 63.183  82.433  24.634  1.00 30.35
1 . .
ATOM 914  C     C     . GLU GLU GLU A A 124 124 . 65.046  86.050  26.389  1.00 13.39
1 . .
ATOM 915  O     O     . GLU GLU GLU A A 124 124 . 63.857  85.866  26.747  1.00 13.78
1 . .
ATOM 916  N     N     . ARG ARG ARG A A 125 125 . 65.896  86.688  27.177  1.00 12.85
1 . .
ATOM 917  CA    CA    . ARG ARG ARG A A 125 125 . 65.574  87.253  28.486  1.00 13.41
1 . .
ATOM 918  CB    CB    . ARG ARG ARG A A 125 125 . 66.904  87.607  29.205  1.00 13.38
1 . .
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ATOM 919  CG   CG   . ARG ARG ARG A A 125 125 . 67.806  86.482  29.703  1.00 15.62
1 . .
ATOM 920  CD   CD   . ARG ARG ARG A A 125 125 . 67.337  85.913  31.026  1.00 16.73
1 . .
ATOM 921  NE   NE   . ARG ARG ARG A A 125 125 . 68.250  84.902  31.624  1.00 18.40
1 . .
ATOM 922  CZ   CZ   . ARG ARG ARG A A 125 125 . 67.918  83.617  31.824  1.00 16.94
1 . .
ATOM 923  NH1  NH1  . ARG ARG ARG A A 125 125 . 68.755  82.807  32.470  1.00 14.89
1 . .
ATOM 924  NH2  NH2  . ARG ARG ARG A A 125 125 . 66.696  83.140  31.406  1.00 19.31
1 . .
ATOM 925  C    C    . ARG ARG ARG A A 125 125 . 64.757  88.524  28.413  1.00 14.04
1 . .
ATOM 926  O    O    . ARG ARG ARG A A 125 125 . 64.311  88.989  29.534  1.00 12.55
1 . .
ATOM 927  N    N    . GLU GLU GLU A A 126 126 . 64.596  89.084  27.182  1.00 13.24
1 . .
ATOM 928  CA   CA   . GLU GLU GLU A A 126 126 . 64.009  90.461  26.968  1.00 14.87
1 . .
ATOM 929  CB   CB   . GLU GLU GLU A A 126 126 . 62.499  90.476  27.303  1.00 17.55
1 . .
ATOM 930  CG   CG   . GLU GLU GLU A A 126 126 . 61.830  89.321  26.622  1.00 24.15
1 . .
ATOM 931  CD   CD   . GLU GLU GLU A A 126 126 . 60.935  89.736  25.507  1.00 35.74
1 . .
ATOM 932  OE1  OE1  . GLU GLU GLU A A 126 126 . 59.948  89.035  25.179  1.00 40.17
1 . .
ATOM 933  OE2  OE2  . GLU GLU GLU A A 126 126 . 61.236  90.792  24.935  1.00 44.04
1 . .
ATOM 934  C    C    . GLU GLU GLU A A 126 126 . 64.759  91.464  27.829  1.00 15.22
1 . .
ATOM 935  O    O    . GLU GLU GLU A A 126 126 . 64.155  92.287  28.512  1.00 14.96
1 . .
ATOM 936  N    N    . LEU LEU LEU A A 127 127 . 66.111  91.380  27.812  1.00 12.76
1 . .
ATOM 937  CA   CA   . LEU LEU LEU A A 127 127 . 66.962  92.334  28.522  1.00 12.33
1 . .
ATOM 938  CB   CB   . LEU LEU LEU A A 127 127 . 67.767  91.601  29.603  1.00 11.89
1 . .
ATOM 939  CG   CG   . LEU LEU LEU A A 127 127 . 67.089  90.891  30.778  1.00 13.68
1 . .
ATOM 940  CD1  CD1  . LEU LEU LEU A A 127 127 . 68.084  90.092  31.608  1.00 14.80
1 . .
ATOM 941  CD2  CD2  . LEU LEU LEU A A 127 127 . 66.448  91.965  31.664  1.00 15.53
1 . .
ATOM 942  C    C    . LEU LEU LEU A A 127 127 . 67.964  92.981  27.571  1.00 11.54
1 . .
ATOM 943  O    O    . LEU LEU LEU A A 127 127 . 68.346  92.367  26.593  1.00 12.28
1 . .
ATOM 944  N    N    . PRO PRO PRO A A 128 128 . 68.378  94.222  27.832  1.00 10.97
1 . .
ATOM 945  CA   CA   . PRO PRO PRO A A 128 128 . 69.546  94.767  27.134  1.00 10.85
1 . .
ATOM 946  CB   CB   . PRO PRO PRO A A 128 128 . 69.752  96.117  27.821  1.00 12.24
1 . .
ATOM 947  CG   CG   . PRO PRO PRO A A 128 128 . 68.578  96.399  28.575  1.00 13.78
1 . .
ATOM 948  CD   CD   . PRO PRO PRO A A 128 128 . 67.954  95.112  28.902  1.00 10.56
1 . .
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ATOM 949  C     C     . PRO PRO PRO A A 128 128 . 70.745  93.909  27.441  1.00 10.67
1 . .
ATOM 950  O     O     . PRO PRO PRO A A 128 128 . 70.836  93.319  28.534  1.00 10.09
1 . .
ATOM 951  N     N     . LEU LEU LEU A A 129 129 . 71.683  93.855  26.502  1.00 9.83
1 . .
ATOM 952  CA    CA    . LEU LEU LEU A A 129 129 . 72.868  93.001  26.703  1.00 9.88
1 . .
ATOM 953  CB    CB    . LEU LEU LEU A A 129 129 . 73.805  93.163  25.526  1.00 7.91
1 . .
ATOM 954  CG    CG    . LEU LEU LEU A A 129 129 . 75.123  92.382  25.633  1.00 6.63
1 . .
ATOM 955  CD1   CD1   . LEU LEU LEU A A 129 129 . 74.893  90.847  25.715  1.00 9.21
1 . .
ATOM 956  CD2   CD2   . LEU LEU LEU A A 129 129 . 75.933  92.638  24.362  1.00 8.55
1 . .
ATOM 957  C     C     . LEU LEU LEU A A 129 129 . 73.569  93.288  28.038  1.00 8.67
1 . .
ATOM 958  O     O     . LEU LEU LEU A A 129 129 . 73.955  92.345  28.710  1.00 8.86
1 . .
ATOM 959  N     N     . TYR TYR TYR A A 130 130 . 73.763  94.570  28.432  1.00 8.94
1 . .
ATOM 960  CA    CA    . TYR TYR TYR A A 130 130 . 74.529  94.848  29.665  1.00 8.79
1 . .
ATOM 961  CB    CB    . TYR TYR TYR A A 130 130 . 74.776  96.379  29.862  1.00 10.36
1 . .
ATOM 962  CG    CG    . TYR TYR TYR A A 130 130 . 73.510  97.224  29.812  1.00 10.52
1 . .
ATOM 963  CD1   CD1   . TYR TYR TYR A A 130 130 . 72.728  97.451  30.956  1.00 12.53
1 . .
ATOM 964  CE1   CE1   . TYR TYR TYR A A 130 130 . 71.555  98.214  30.873  1.00 11.76
1 . .
ATOM 965  CZ    CZ    . TYR TYR TYR A A 130 130 . 71.197  98.779  29.649  1.00 10.55
1 . .
ATOM 966  OH    OH    . TYR TYR TYR A A 130 130 . 70.082  99.537  29.527  1.00 16.37
1 . .
ATOM 967  CE2   CE2   . TYR TYR TYR A A 130 130 . 71.943  98.608  28.519  1.00 11.20
1 . .
ATOM 968  CD2   CD2   . TYR TYR TYR A A 130 130 . 73.106  97.806  28.586  1.00 10.07
1 . .
ATOM 969  C     C     . TYR TYR TYR A A 130 130 . 73.848  94.271  30.886  1.00 9.12
1 . .
ATOM 970  O     O     . TYR TYR TYR A A 130 130 . 74.523  93.839  31.788  1.00 9.49
1 . .
ATOM 971  N     N     . ARG ARG ARG A A 131 131 . 72.496  94.224  30.874  1.00 9.06
1 . .
ATOM 972  CA    CA    . ARG ARG ARG A A 131 131 . 71.749  93.608  31.967  1.00 10.17
1 . .
ATOM 973  CB    CB    . ARG ARG ARG A A 131 131 . 70.263  93.985  31.830  1.00 13.23
1 . .
ATOM 974  CG    CG    . ARG ARG ARG A A 131 131 . 70.059  95.228  32.493  1.00 23.38
1 . .
ATOM 975  CD    CD    . ARG ARG ARG A A 131 131 . 69.726  94.822  33.981  1.00 32.82
1 . .
ATOM 976  NE    NE    . ARG ARG ARG A A 131 131 . 69.525  96.070  34.636  1.00 36.40
1 . .
ATOM 977  CZ    CZ    . ARG ARG ARG A A 131 131 . 70.067  96.456  35.784  1.00 37.19
1 . .
ATOM 978  NH1   NH1   . ARG ARG ARG A A 131 131 . 70.833  95.638  36.555  1.00 34.88
1 . .
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ATOM 979  NH2   NH2   . ARG ARG ARG A A 131 131 . 69.797  97.692  36.153  1.00 36.01
1 . .
ATOM 980  C     C     . ARG ARG ARG A A 131 131 . 71.839  92.091  31.991  1.00 9.73
1 . .
ATOM 981  O     O     . ARG ARG ARG A A 131 131 . 71.998  91.517  33.084  1.00 9.66
1 . .
ATOM 982  N     N     . HIS HIS HIS A A 132 132 . 71.861  91.452  30.826  1.00 8.42
1 . .
ATOM 983  CA    CA    . HIS HIS HIS A A 132 132 . 72.054  90.022  30.783  1.00 7.53
1 . .
ATOM 984  CB    CB    . HIS HIS HIS A A 132 132 . 71.844  89.564  29.367  1.00 9.55
1 . .
ATOM 985  CG    CG    . HIS HIS HIS A A 132 132 . 72.087  88.104  29.150  1.00 10.45
1 . .
ATOM 986  ND1   ND1   . HIS HIS HIS A A 132 132 . 71.482  87.130  29.905  1.00 12.33
1 . .
ATOM 987  CE1   CE1   . HIS HIS HIS A A 132 132 . 71.840  85.934  29.435  1.00 15.55
1 . .
ATOM 988  NE2   NE2   . HIS HIS HIS A A 132 132 . 72.642  86.100  28.391  1.00 12.98
1 . .
ATOM 989  CD2   CD2   . HIS HIS HIS A A 132 132 . 72.796  87.457  28.171  1.00 10.19
1 . .
ATOM 990  C     C     . HIS HIS HIS A A 132 132 . 73.427  89.690  31.308  1.00 7.97
1 . .
ATOM 991  O     O     . HIS HIS HIS A A 132 132 . 73.595  88.760  32.103  1.00 8.54
1 . .
ATOM 992  N     N     . ILE ILE ILE A A 133 133 . 74.427  90.447  30.892  1.00 7.59
1 . .
ATOM 993  CA    CA    . ILE ILE ILE A A 133 133 . 75.801  90.195  31.376  1.00 8.56
1 . .
ATOM 994  CB    CB    . ILE ILE ILE A A 133 133 . 76.808  91.079  30.608  1.00 9.07
1 . .
ATOM 995  CG1   CG1   . ILE ILE ILE A A 133 133 . 76.900  90.547  29.208  1.00 8.31
1 . .
ATOM 996  CD1   CD1   . ILE ILE ILE A A 133 133 . 77.695  91.569  28.222  1.00 6.69
1 . .
ATOM 997  CG2   CG2   . ILE ILE ILE A A 133 133 . 78.193  91.095  31.288  1.00 9.14
1 . .
ATOM 998  C     C     . ILE ILE ILE A A 133 133 . 75.872  90.368  32.902  1.00 9.02
1 . .
ATOM 999  O     O     . ILE ILE ILE A A 133 133 . 76.496  89.571  33.587  1.00 8.65
1 . .
ATOM 1000 N     N     . ALA ALA ALA A A 134 134 . 75.269  91.451  33.420  1.00 9.05
1 . .
ATOM 1001 CA    CA    . ALA ALA ALA A A 134 134 . 75.264  91.651  34.899  1.00 10.86
1 . .
ATOM 1002 CB    CB    . ALA ALA ALA A A 134 134 . 74.426  92.889  35.216  1.00 9.88
1 . .
ATOM 1003 C     C     . ALA ALA ALA A A 134 134 . 74.673  90.400  35.585  1.00 9.97
1 . .
ATOM 1004 O     O     . ALA ALA ALA A A 134 134 . 75.203  89.914  36.587  1.00 11.58
1 . .
ATOM 1005 N     N     . GLN GLN GLN A A 135 135 . 73.584  89.873  35.026  1.00 12.12
1 . .
ATOM 1006 CA    CA    . GLN GLN GLN A A 135 135 . 73.006  88.657  35.621  1.00 11.27
1 . .
ATOM 1007 CB    CB    . GLN GLN GLN A A 135 135 . 71.649  88.277  35.029  1.00 12.15
1 . .
ATOM 1008 CG    CG    . GLN GLN GLN A A 135 135 . 70.631  89.337  35.362  1.00 13.80
1 . .
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ATOM 1009 CD    CD    . GLN GLN GLN A A 135 135 . 69.202  89.012  34.927  1.00 15.07
1 . .
ATOM 1010 OE1   OE1   . GLN GLN GLN A A 135 135 . 68.252  89.742  35.324  1.00 25.47
1 . .
ATOM 1011 NE2   NE2   . GLN GLN GLN A A 135 135 . 69.023  87.985  34.110  1.00 14.59
1 . .
ATOM 1012 C     C     . GLN GLN GLN A A 135 135 . 73.948  87.471  35.573  1.00 11.41
1 . .
ATOM 1013 O     O     . GLN GLN GLN A A 135 135 . 74.043  86.711  36.563  1.00 11.91
1 . .
ATOM 1014 N     N     . LEU LEU LEU A A 136 136 . 74.555  87.256  34.409  1.00 10.91
1 . .
ATOM 1015 CA    CA    . LEU LEU LEU A A 136 136 . 75.598  86.216  34.272  1.00 12.21
1 . .
ATOM 1016 CB    CB    . LEU LEU LEU A A 136 136 . 76.210  86.165  32.846  1.00 9.31
1 . .
ATOM 1017 CG    CG    . LEU LEU LEU A A 136 136 . 75.186  85.837  31.762  1.00 10.18
1 . .
ATOM 1018 CD1   CD1   . LEU LEU LEU A A 136 136 . 75.934  85.908  30.442  1.00 8.57
1 . .
ATOM 1019 CD2   CD2   . LEU LEU LEU A A 136 136 . 74.670  84.383  31.964  1.00 11.55
1 . .
ATOM 1020 C     C     . LEU LEU LEU A A 136 136 . 76.701  86.374  35.316  1.00 13.35
1 . .
ATOM 1021 O     O     . LEU LEU LEU A A 136 136 . 77.263  85.350  35.800  1.00 14.21
1 . .
ATOM 1022 N     N     . ALA ALA ALA A A 137 137 . 77.018  87.611  35.681  1.00 11.69
1 . .
ATOM 1023 CA    CA    . ALA ALA ALA A A 137 137 . 78.172  87.889  36.556  1.00 12.82
1 . .
ATOM 1024 CB    CB    . ALA ALA ALA A A 137 137 . 78.919  89.148  36.084  1.00 12.09
1 . .
ATOM 1025 C     C     . ALA ALA ALA A A 137 137 . 77.746  88.004  38.017  1.00 13.83
1 . .
ATOM 1026 O     O     . ALA ALA ALA A A 137 137 . 78.602  88.100  38.890  1.00 16.71
1 . .
ATOM 1027 N     N     . GLY GLY GLY A A 138 138 . 76.443  87.976  38.268  1.00 13.67
1 . .
ATOM 1028 CA    CA    . GLY GLY GLY A A 138 138 . 75.912  88.115  39.620  1.00 18.82
1 . .
ATOM 1029 C     C     . GLY GLY GLY A A 138 138 . 75.958  89.550  40.118  1.00 20.63
1 . .
ATOM 1030 O     O     . GLY GLY GLY A A 138 138 . 76.034  89.782  41.347  1.00 23.33
1 . .
ATOM 1031 N     N     . ASN ASN ASN A A 139 139 . 75.903  90.529  39.205  1.00 19.50
1 . .
ATOM 1032 CA    CA    . ASN ASN ASN A A 139 139 . 75.875  91.944  39.600  1.00 19.89
1 . .
ATOM 1033 CB    CB    . ASN ASN ASN A A 139 139 . 76.803  92.757  38.706  1.00 20.86
1 . .
ATOM 1034 CG    CG    . ASN ASN ASN A A 139 139 . 78.253  92.343  38.849  1.00 19.75
1 . .
ATOM 1035 OD1   OD1   . ASN ASN ASN A A 139 139 . 78.702  91.967  39.937  1.00 22.85
1 . .
ATOM 1036 ND2   ND2   . ASN ASN ASN A A 139 139 . 79.022  92.460  37.753  1.00 15.50
1 . .
ATOM 1037 C     C     . ASN ASN ASN A A 139 139 . 74.466  92.520  39.522  1.00 22.53
1 . .
ATOM 1038 O     O     . ASN ASN ASN A A 139 139 . 73.716  92.169  38.606  1.00 22.79
1 . .
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ATOM 1039 N     N     . SER SER SER A A 140 140 . 74.085  93.367  40.485  1.00 25.31
1 . .
ATOM 1040 CA    CA    . SER SER SER A A 140 140 . 72.814  94.137  40.385  1.00 29.98
1 . .
ATOM 1041 CB    CB    . SER SER SER A A 140 140 . 72.115  94.292  41.728  1.00 29.96
1 . .
ATOM 1042 OG    OG    . SER SER SER A A 140 140 . 72.013  93.047  42.321  1.00 36.43
1 . .
ATOM 1043 C     C     . SER SER SER A A 140 140 . 73.009  95.545  39.951  1.00 31.02
1 . .
ATOM 1044 O     O     . SER SER SER A A 140 140 . 72.131  96.097  39.263  1.00 35.03
1 . .
ATOM 1045 N     N     . ASP ASP ASP A A 141 141 . 74.087  96.189  40.386  1.00 30.60
1 . .
ATOM 1046 CA    CA    . ASP ASP ASP A A 141 141 . 74.094  97.662  40.353  1.00 30.89
1 . .
ATOM 1047 CB    CB    . ASP ASP ASP A A 141 141 . 74.312  98.248  41.763  1.00 32.19
1 . .
ATOM 1048 CG    CG    . ASP ASP ASP A A 141 141 . 73.115  98.036  42.668  1.00 35.11
1 . .
ATOM 1049 OD1   OD1   . ASP ASP ASP A A 141 141 . 71.954  98.065  42.168  1.00 35.49
1 . .
ATOM 1050 OD2   OD2   . ASP ASP ASP A A 141 141 . 73.318  97.851  43.887  1.00 41.50
1 . .
ATOM 1051 C     C     . ASP ASP ASP A A 141 141 . 75.147  98.180  39.393  1.00 29.51
1 . .
ATOM 1052 O     O     . ASP ASP ASP A A 141 141 . 76.333  98.205  39.778  1.00 31.71
1 . .
ATOM 1053 N     N     . LEU LEU LEU A A 142 142 . 74.696  98.630  38.197  1.00 24.61
1 . .
ATOM 1054 CA    CA    . LEU LEU LEU A A 142 142 . 75.508  98.873  36.989  1.00 19.94
1 . .
ATOM 1055 CB    CB    . LEU LEU LEU A A 142 142 . 74.602  99.014  35.746  1.00 18.79
1 . .
ATOM 1056 CG    CG    . LEU LEU LEU A A 142 142 . 73.650  97.824  35.465  1.00 20.94
1 . .
ATOM 1057 CD1   CD1   . LEU LEU LEU A A 142 142 . 72.637  98.169  34.322  1.00 21.77
1 . .
ATOM 1058 CD2   CD2   . LEU LEU LEU A A 142 142 . 74.375  96.534  35.197  1.00 17.79
1 . .
ATOM 1059 C     C     . LEU LEU LEU A A 142 142 . 76.219  100.198 37.140  1.00 18.26
1 . .
ATOM 1060 O     O     . LEU LEU LEU A A 142 142 . 75.687  101.114 37.738  1.00 16.84
1 . .
ATOM 1061 N     N     . ILE ILE ILE A A 143 143 . 77.388  100.336 36.534  1.00 16.38
1 . .
ATOM 1062 CA    CA    . ILE ILE ILE A A 143 143 . 78.018  101.677 36.596  1.00 16.59
1 . .
ATOM 1063 CB    CB    . ILE ILE ILE A A 143 143 . 79.031  101.851 37.758  1.00 19.63
1 . .
ATOM 1064 CG1   CG1   . ILE ILE ILE A A 143 143 . 80.159  100.974 37.468  1.00 19.13
1 . .
ATOM 1065 CD1   CD1   . ILE ILE ILE A A 143 143 . 81.200  101.859 37.096  1.00 18.97
1 . .
ATOM 1066 CG2   CG2   . ILE ILE ILE A A 143 143 . 78.496  101.676 39.283  1.00 21.12
1 . .
ATOM 1067 C     C     . ILE ILE ILE A A 143 143 . 78.672  101.964 35.221  1.00 13.79
1 . .
ATOM 1068 O     O     . ILE ILE ILE A A 143 143 . 79.081  101.030 34.481  1.00 14.87
1 . .
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ATOM 1069 N     N     . LEU LEU LEU A A 144 144 . 78.639  103.232 34.783  1.00 11.40
1 . .
ATOM 1070 CA    CA    . LEU LEU LEU A A 144 144 . 79.306  103.597 33.514  1.00 9.10
1 . .
ATOM 1071 CB    CB    . LEU LEU LEU A A 144 144 . 78.757  104.931 33.010  1.00 7.50
1 . .
ATOM 1072 CG    CG    . LEU LEU LEU A A 144 144 . 77.506  104.783 32.151  1.00 9.90
1 . .
ATOM 1073 CD1   CD1   . LEU LEU LEU A A 144 144 . 77.784  104.128 30.764  1.00 11.74
1 . .
ATOM 1074 CD2   CD2   . LEU LEU LEU A A 144 144 . 76.430  104.028 32.867  1.00 16.45
1 . .
ATOM 1075 C     C     . LEU LEU LEU A A 144 144 . 80.804  103.791 33.841  1.00 8.14
1 . .
ATOM 1076 O     O     . LEU LEU LEU A A 144 144 . 81.154  104.385 34.871  1.00 9.40
1 . .
ATOM 1077 N     N     . PRO PRO PRO A A 145 145 . 81.674  103.325 32.965  1.00 7.41
1 . .
ATOM 1078 CA    CA    . PRO PRO PRO A A 145 145 . 83.161  103.342 33.257  1.00 6.60
1 . .
ATOM 1079 CB    CB    . PRO PRO PRO A A 145 145 . 83.693  102.234 32.304  1.00 7.00
1 . .
ATOM 1080 CG    CG    . PRO PRO PRO A A 145 145 . 82.721  102.292 31.107  1.00 6.83
1 . .
ATOM 1081 CD    CD    . PRO PRO PRO A A 145 145 . 81.365  102.544 31.721  1.00 6.58
1 . .
ATOM 1082 C     C     . PRO PRO PRO A A 145 145 . 83.760  104.679 32.901  1.00 8.37
1 . .
ATOM 1083 O     O     . PRO PRO PRO A A 145 145 . 83.233  105.397 32.044  1.00 8.55
1 . .
ATOM 1084 N     N     . VAL VAL VAL A A 146 146 . 84.861  105.061 33.556  1.00 7.12
1 . .
ATOM 1085 CA    CA    . VAL VAL VAL A A 146 146 . 85.730  106.085 32.968  1.00 7.40
1 . .
ATOM 1086 CB    CB    . VAL VAL VAL A A 146 146 . 86.843  106.444 33.940  1.00 7.67
1 . .
ATOM 1087 CG1   CG1   . VAL VAL VAL A A 146 146 . 87.710  107.541 33.351  1.00 9.64
1 . .
ATOM 1088 CG2   CG2   . VAL VAL VAL A A 146 146 . 86.216  106.938 35.274  1.00 7.24
1 . .
ATOM 1089 C     C     . VAL VAL VAL A A 146 146 . 86.385  105.551 31.715  1.00 6.51
1 . .
ATOM 1090 O     O     . VAL VAL VAL A A 146 146 . 86.976  104.466 31.730  1.00 7.80
1 . .
ATOM 1091 N     N     . PRO PRO PRO A A 147 147 . 86.312  106.298 30.597  1.00 6.63
1 . .
ATOM 1092 CA    CA    . PRO PRO PRO A A 147 147 . 86.952  105.850 29.366  1.00 6.63
1 . .
ATOM 1093 CB    CB    . PRO PRO PRO A A 147 147 . 86.163  106.547 28.261  1.00 6.10
1 . .
ATOM 1094 CG    CG    . PRO PRO PRO A A 147 147 . 85.770  107.962 28.956  1.00 4.09
1 . .
ATOM 1095 CD    CD    . PRO PRO PRO A A 147 147 . 85.415  107.468 30.422  1.00 7.16
1 . .
ATOM 1096 C     C     . PRO PRO PRO A A 147 147 . 88.440  106.273 29.405  1.00 6.59
1 . .
ATOM 1097 O     O     . PRO PRO PRO A A 147 147 . 88.788  107.365 29.939  1.00 7.10
1 . .
ATOM 1098 N     N     . ALA ALA ALA A A 148 148 . 89.284  105.397 28.869  1.00 5.96
1 . .
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ATOM 1099 CA    CA    . ALA ALA ALA A A 148 148 . 90.751  105.674 28.877  1.00 6.31
1 . .
ATOM 1100 CB    CB    . ALA ALA ALA A A 148 148 . 91.498  104.511 29.539  1.00 6.45
1 . .
ATOM 1101 C     C     . ALA ALA ALA A A 148 148 . 91.127  105.781 27.419  1.00 6.86
1 . .
ATOM 1102 O     O     . ALA ALA ALA A A 148 148 . 91.148  104.733 26.721  1.00 7.15
1 . .
ATOM 1103 N     N     . PHE PHE PHE A A 149 149 . 91.351  107.017 26.931  1.00 6.35
1 . .
ATOM 1104 CA    CA    . PHE PHE PHE A A 149 149 . 91.492  107.263 25.453  1.00 5.94
1 . .
ATOM 1105 CB    CB    . PHE PHE PHE A A 149 149 . 90.908  108.632 25.053  1.00 5.08
1 . .
ATOM 1106 CG    CG    . PHE PHE PHE A A 149 149 . 89.440  108.785 25.355  1.00 5.28
1 . .
ATOM 1107 CD1   CD1   . PHE PHE PHE A A 149 149 . 88.511  108.209 24.520  1.00 6.10
1 . .
ATOM 1108 CE1   CE1   . PHE PHE PHE A A 149 149 . 87.087  108.389 24.732  1.00 6.27
1 . .
ATOM 1109 CZ    CZ    . PHE PHE PHE A A 149 149 . 86.663  109.170 25.767  1.00 6.86
1 . .
ATOM 1110 CE2   CE2   . PHE PHE PHE A A 149 149 . 87.590  109.781 26.621  1.00 5.80
1 . .
ATOM 1111 CD2   CD2   . PHE PHE PHE A A 149 149 . 88.989  109.598 26.432  1.00 6.13
1 . .
ATOM 1112 C     C     . PHE PHE PHE A A 149 149 . 92.955  107.321 25.045  1.00 5.25
1 . .
ATOM 1113 O     O     . PHE PHE PHE A A 149 149 . 93.689  108.187 25.463  1.00 5.91
1 . .
ATOM 1114 N     N     . ASN ASN ASN A A 150 150 . 93.363  106.394 24.170  1.00 5.02
1 . .
ATOM 1115 CA    CA    . ASN ASN ASN A A 150 150 . 94.815  106.287 23.751  1.00 6.45
1 . .
ATOM 1116 CB    CB    . ASN ASN ASN A A 150 150 . 94.997  104.826 23.269  1.00 6.74
1 . .
ATOM 1117 CG    CG    . ASN ASN ASN A A 150 150 . 96.353  104.534 22.676  1.00 10.49
1 . .
ATOM 1118 OD1   OD1   . ASN ASN ASN A A 150 150 . 96.535  103.479 21.978  1.00 13.78
1 . .
ATOM 1119 ND2   ND2   . ASN ASN ASN A A 150 150 . 97.292  105.371 22.908  1.00 5.86
1 . .
ATOM 1120 C     C     . ASN ASN ASN A A 150 150 . 95.087  107.302 22.638  1.00 7.85
1 . .
ATOM 1121 O     O     . ASN ASN ASN A A 150 150 . 94.877  107.010 21.439  1.00 9.86
1 . .
ATOM 1122 N     N     . VAL VAL VAL A A 151 151 . 95.483  108.506 23.040  1.00 6.81
1 . .
ATOM 1123 CA    CA    . VAL VAL VAL A A 151 151 . 95.557  109.684 22.118  1.00 7.42
1 . .
ATOM 1124 CB    CB    . VAL VAL VAL A A 151 151 . 95.147  110.992 22.856  1.00 7.69
1 . .
ATOM 1125 CG1   CG1   . VAL VAL VAL A A 151 151 . 93.609  110.902 23.327  1.00 7.98
1 . .
ATOM 1126 CG2   CG2   . VAL VAL VAL A A 151 151 . 96.101  111.300 24.034  1.00 10.22
1 . .
ATOM 1127 C     C     . VAL VAL VAL A A 151 151 . 96.926  109.886 21.458  1.00 7.20
1 . .
ATOM 1128 O     O     . VAL VAL VAL A A 151 151 . 97.012  110.672 20.507  1.00 7.54
1 . .
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ATOM 1129 N     N     . ILE ILE ILE A A 152 152 . 97.979  109.232 21.954  1.00 6.85
1 . .
ATOM 1130 CA    CA    . ILE ILE ILE A A 152 152 . 99.279  109.161 21.187  1.00 7.69
1 . .
ATOM 1131 CB    CB    . ILE ILE ILE A A 152 152 . 100.392 109.988 21.801  1.00 6.78
1 . .
ATOM 1132 CG1   CG1   . ILE ILE ILE A A 152 152 . 100.032 111.480 21.787  1.00 9.30
1 . .
ATOM 1133 CD1   CD1   . ILE ILE ILE A A 152 152 . 101.223 112.391 22.319  1.00 8.51
1 . .
ATOM 1134 CG2   CG2   . ILE ILE ILE A A 152 152 . 101.777 109.688 21.086  1.00 9.19
1 . .
ATOM 1135 C     C     . ILE ILE ILE A A 152 152 . 99.684  107.670 21.101  1.00 8.55
1 . .
ATOM 1136 O     O     . ILE ILE ILE A A 152 152 . 99.742  106.984 22.145  1.00 7.89
1 . .
ATOM 1137 N     N     . ASN ASN ASN A A 153 153 . 99.840  107.195 19.868  1.00 8.01
1 . .
ATOM 1138 CA    CA    . ASN ASN ASN A A 153 153 . 100.174 105.777 19.656  1.00 9.35
1 . .
ATOM 1139 CB    CB    . ASN ASN ASN A A 153 153 . 99.375  105.174 18.506  1.00 9.55
1 . .
ATOM 1140 CG    CG    . ASN ASN ASN A A 153 153 . 97.815  105.196 18.785  1.00 11.00
1 . .
ATOM 1141 OD1   OD1   . ASN ASN ASN A A 153 153 . 97.320  105.569 19.889  1.00 15.90
1 . .
ATOM 1142 ND2   ND2   . ASN ASN ASN A A 153 153 . 97.081  104.819 17.803  1.00 6.97
1 . .
ATOM 1143 C     C     . ASN ASN ASN A A 153 153 . 101.674 105.619 19.373  1.00 9.15
1 . .
ATOM 1144 O     O     . ASN ASN ASN A A 153 153 . 102.265 106.383 18.556  1.00 11.14
1 . .
ATOM 1145 N     N     . GLY GLY GLY A A 154 154 . 102.245 104.591 19.977  1.00 8.77
1 . .
ATOM 1146 CA    CA    . GLY GLY GLY A A 154 154 . 103.637 104.207 19.665  1.00 9.20
1 . .
ATOM 1147 C     C     . GLY GLY GLY A A 154 154 . 103.745 102.685 19.600  1.00 9.42
1 . .
ATOM 1148 O     O     . GLY GLY GLY A A 154 154 . 102.776 101.965 19.285  1.00 10.86
1 . .
ATOM 1149 N     N     . GLY GLY GLY A A 155 155 . 104.964 102.180 19.890  1.00 9.40
1 . .
ATOM 1150 CA    CA    . GLY GLY GLY A A 155 155 . 105.203 100.735 19.835  1.00 10.25
1 . .
ATOM 1151 C     C     . GLY GLY GLY A A 155 155 . 104.800 100.072 18.538  1.00 11.13
1 . .
ATOM 1152 O     O     . GLY GLY GLY A A 155 155 . 104.997 100.625 17.413  1.00 11.31
1 . .
ATOM 1153 N     N     . SER SER SER A A 156 156 . 104.283 98.853  18.682  1.00 12.89
1 . .
ATOM 1154 CA    CA    . SER SER SER A A 156 156 . 103.706 98.077  17.534  1.00 14.34
1 . .
ATOM 1155 CB    CB    . SER SER SER A A 156 156 . 103.584 96.583  17.979  1.00 14.77
1 . .
ATOM 1156 OG    OG    . SER SER SER A A 156 156 . 104.869 96.116  18.457  1.00 18.60
1 . .
ATOM 1157 C     C     . SER SER SER A A 156 156 . 102.443 98.613  16.847  1.00 14.24
1 . .
ATOM 1158 O     O     . SER SER SER A A 156 156 . 101.930 97.959  15.867  1.00 15.98
1 . .
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ATOM 1159 N     N     . HIS HIS HIS A A 157 157 . 101.915 99.772  17.342  1.00 12.64
1 . .
ATOM 1160 CA    CA    . HIS HIS HIS A A 157 157 . 100.675 100.363 16.761  1.00 11.88
1 . .
ATOM 1161 CB    CB    . HIS HIS HIS A A 157 157 . 99.724  100.797 17.882  1.00 11.85
1 . .
ATOM 1162 CG    CG    . HIS HIS HIS A A 157 157 . 99.211  99.664  18.730  1.00 13.00
1 . .
ATOM 1163 ND1   ND1   . HIS HIS HIS A A 157 157 . 98.457  99.892  19.868  1.00 11.52
1 . .
ATOM 1164 CE1   CE1   . HIS HIS HIS A A 157 157 . 98.181  98.723  20.445  1.00 14.10
1 . .
ATOM 1165 NE2   NE2   . HIS HIS HIS A A 157 157 . 98.757  97.751  19.734  1.00 12.87
1 . .
ATOM 1166 CD2   CD2   . HIS HIS HIS A A 157 157 . 99.412  98.316  18.666  1.00 13.11
1 . .
ATOM 1167 C     C     . HIS HIS HIS A A 157 157 . 100.893 101.573 15.901  1.00 12.40
1 . .
ATOM 1168 O     O     . HIS HIS HIS A A 157 157 . 99.908  102.094 15.379  1.00 10.87
1 . .
ATOM 1169 N     N     . ALA ALA ALA A A 158 158 . 102.160 101.996 15.682  1.00 12.93
1 . .
ATOM 1170 CA    CA    . ALA ALA ALA A A 158 158 . 102.419 103.212 14.918  1.00 12.82
1 . .
ATOM 1171 CB    CB    . ALA ALA ALA A A 158 158 . 102.323 104.435 15.828  1.00 16.06
1 . .
ATOM 1172 C     C     . ALA ALA ALA A A 158 158 . 103.791 103.264 14.231  1.00 12.90
1 . .
ATOM 1173 O     O     . ALA ALA ALA A A 158 158 . 104.758 102.654 14.683  1.00 13.62
1 . .
ATOM 1174 N     N     . GLY GLY GLY A A 159 159 . 103.838 104.087 13.170  1.00 12.21
1 . .
ATOM 1175 CA    CA    . GLY GLY GLY A A 159 159 . 105.048 104.369 12.383  1.00 13.47
1 . .
ATOM 1176 C     C     . GLY GLY GLY A A 159 159 . 105.714 105.615 13.002  1.00 13.96
1 . .
ATOM 1177 O     O     . GLY GLY GLY A A 159 159 . 105.422 106.770 12.627  1.00 14.53
1 . .
ATOM 1178 N     N     . ASN ASN ASN A A 160 160 . 106.559 105.355 13.988  1.00 12.84
1 . .
ATOM 1179 CA    CA    . ASN ASN ASN A A 160 160 . 107.375 106.366 14.648  1.00 13.71
1 . .
ATOM 1180 CB    CB    . ASN ASN ASN A A 160 160 . 106.537 107.362 15.495  1.00 12.55
1 . .
ATOM 1181 CG    CG    . ASN ASN ASN A A 160 160 . 105.603 106.664 16.525  1.00 12.35
1 . .
ATOM 1182 OD1   OD1   . ASN ASN ASN A A 160 160 . 105.736 105.465 16.818  1.00 12.69
1 . .
ATOM 1183 ND2   ND2   . ASN ASN ASN A A 160 160 . 104.659 107.452 17.089  1.00 9.61
1 . .
ATOM 1184 C     C     . ASN ASN ASN A A 160 160 . 108.418 105.615 15.494  1.00 12.71
1 . .
ATOM 1185 O     O     . ASN ASN ASN A A 160 160 . 108.388 104.355 15.553  1.00 12.02
1 . .
ATOM 1186 N     N     . LYS LYS LYS A A 161 161 . 109.374 106.326 16.105  1.00 13.78
1 . .
ATOM 1187 CA    CA    . LYS LYS LYS A A 161 161 . 110.366 105.597 16.915  1.00 13.87
1 . .
ATOM 1188 CB    CB    . LYS LYS LYS A A 161 161 . 111.663 106.417 17.065  1.00 14.19
1 . .
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ATOM 1189 CG    CG    . LYS LYS LYS A A 161 161 . 112.563 106.420 15.810  1.00 16.06
1 . .
ATOM 1190 CD    CD    . LYS LYS LYS A A 161 161 . 113.651 107.499 16.058  1.00 18.89
1 . .
ATOM 1191 CE    CE    . LYS LYS LYS A A 161 161 . 114.220 107.833 14.741  1.00 25.25
1 . .
ATOM 1192 NZ    NZ    . LYS LYS LYS A A 161 161 . 115.664 107.876 14.914  1.00 32.17
1 . .
ATOM 1193 C     C     . LYS LYS LYS A A 161 161 . 109.806 105.282 18.310  1.00 13.59
1 . .
ATOM 1194 O     O     . LYS LYS LYS A A 161 161 . 110.229 104.336 18.947  1.00 15.07
1 . .
ATOM 1195 N     N     . LEU LEU LEU A A 162 162 . 108.842 106.103 18.771  1.00 13.05
1 . .
ATOM 1196 CA    CA    . LEU LEU LEU A A 162 162 . 108.242 106.011 20.113  1.00 11.22
1 . .
ATOM 1197 CB    CB    . LEU LEU LEU A A 162 162 . 106.886 106.717 20.072  1.00 9.84
1 . .
ATOM 1198 CG    CG    . LEU LEU LEU A A 162 162 . 106.175 106.948 21.420  1.00 7.97
1 . .
ATOM 1199 CD1   CD1   . LEU LEU LEU A A 162 162 . 106.996 107.900 22.414  1.00 11.86
1 . .
ATOM 1200 CD2   CD2   . LEU LEU LEU A A 162 162 . 104.828 107.540 21.116  1.00 11.77
1 . .
ATOM 1201 C     C     . LEU LEU LEU A A 162 162 . 108.017 104.551 20.534  1.00 12.63
1 . .
ATOM 1202 O     O     . LEU LEU LEU A A 162 162 . 107.235 103.875 19.942  1.00 12.90
1 . .
ATOM 1203 N     N     . ALA ALA ALA A A 163 163 . 108.698 104.094 21.585  1.00 10.35
1 . .
ATOM 1204 CA    CA    . ALA ALA ALA A A 163 163 . 108.662 102.613 21.918  1.00 10.44
1 . .
ATOM 1205 CB    CB    . ALA ALA ALA A A 163 163 . 109.908 102.159 22.642  1.00 11.01
1 . .
ATOM 1206 C     C     . ALA ALA ALA A A 163 163 . 107.455 102.217 22.731  1.00 10.62
1 . .
ATOM 1207 O     O     . ALA ALA ALA A A 163 163 . 106.934 101.125 22.509  1.00 10.66
1 . .
ATOM 1208 N     N     . MET MET MET A A 164 164 . 107.044 103.067 23.687  1.00 9.52
1 . .
ATOM 1209 CA    CA    . MET MET MET A A 164 164 . 105.894 102.746 24.541  1.00 9.90
1 . .
ATOM 1210 CB    CB    . MET MET MET A A 164 164 . 105.857 103.532 25.852  1.00 10.26
1 . .
ATOM 1211 CG    CG    . MET MET MET A A 164 164 . 107.239 103.215 26.648  1.00 8.16
1 . .
ATOM 1212 SD    SD    . MET MET MET A A 164 164 . 107.269 104.101 28.183  1.00 11.53
1 . .
ATOM 1213 CE    CE    . MET MET MET A A 164 164 . 109.016 103.724 28.631  1.00 11.74
1 . .
ATOM 1214 C     C     . MET MET MET A A 164 164 . 104.607 102.842 23.703  1.00 9.38
1 . .
ATOM 1215 O     O     . MET MET MET A A 164 164 . 104.505 103.678 22.806  1.00 9.53
1 . .
ATOM 1216 N     N     . GLN GLN GLN A A 165 165 . 103.693 101.896 23.963  1.00 8.45
1 . .
ATOM 1217 CA    CA    . GLN GLN GLN A A 165 165 . 102.563 101.625 23.022  1.00 7.57
1 . .
ATOM 1218 CB    CB    . GLN GLN GLN A A 165 165 . 102.006 100.243 23.280  1.00 7.97
1 . .
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ATOM 1219 CG    CG    . GLN GLN GLN A A 165 165 . 101.047 99.789  22.203  1.00 6.72
1 . .
ATOM 1220 CD    CD    . GLN GLN GLN A A 165 165 . 100.644 98.369  22.508  1.00 9.81
1 . .
ATOM 1221 OE1   OE1   . GLN GLN GLN A A 165 165 . 101.329 97.414  22.070  1.00 10.14
1 . .
ATOM 1222 NE2   NE2   . GLN GLN GLN A A 165 165 . 99.534  98.202  23.280  1.00 9.07
1 . .
ATOM 1223 C     C     . GLN GLN GLN A A 165 165 . 101.435 102.678 23.100  1.00 8.73
1 . .
ATOM 1224 O     O     . GLN GLN GLN A A 165 165 . 100.948 103.138 22.076  1.00 7.94
1 . .
ATOM 1225 N     N     . GLU GLU GLU A A 166 166 . 101.075 103.077 24.317  1.00 8.24
1 . .
ATOM 1226 CA    CA    . GLU GLU GLU A A 166 166 . 99.834  103.873 24.491  1.00 7.10
1 . .
ATOM 1227 CB    CB    . GLU GLU GLU A A 166 166 . 98.666  102.978 24.923  1.00 6.43
1 . .
ATOM 1228 CG    CG    . GLU GLU GLU A A 166 166 . 98.579  101.718 24.055  1.00 8.35
1 . .
ATOM 1229 CD    CD    . GLU GLU GLU A A 166 166 . 97.441  100.769 24.499  1.00 8.57
1 . .
ATOM 1230 OE1   OE1   . GLU GLU GLU A A 166 166 . 96.599  101.159 25.401  1.00 11.34
1 . .
ATOM 1231 OE2   OE2   . GLU GLU GLU A A 166 166 . 97.350  99.665  23.899  1.00 11.83
1 . .
ATOM 1232 C     C     . GLU GLU GLU A A 166 166 . 99.958  104.943 25.551  1.00 7.47
1 . .
ATOM 1233 O     O     . GLU GLU GLU A A 166 166 . 100.481 104.651 26.711  1.00 8.91
1 . .
ATOM 1234 N     N     . PHE PHE PHE A A 167 167 . 99.484  106.122 25.207  1.00 6.29
1 . .
ATOM 1235 CA    CA    . PHE PHE PHE A A 167 167 . 99.452  107.236 26.183  1.00 6.08
1 . .
ATOM 1236 CB    CB    . PHE PHE PHE A A 167 167 . 100.353 108.369 25.727  1.00 8.30
1 . .
ATOM 1237 CG    CG    . PHE PHE PHE A A 167 167 . 101.824 107.958 25.667  1.00 10.21
1 . .
ATOM 1238 CD1   CD1   . PHE PHE PHE A A 167 167 . 102.319 107.239 24.544  1.00 9.14
1 . .
ATOM 1239 CE1   CE1   . PHE PHE PHE A A 167 167 . 103.665 106.799 24.528  1.00 9.32
1 . .
ATOM 1240 CZ    CZ    . PHE PHE PHE A A 167 167 . 104.461 107.105 25.647  1.00 8.55
1 . .
ATOM 1241 CE2   CE2   . PHE PHE PHE A A 167 167 . 103.999 107.818 26.716  1.00 10.01
1 . .
ATOM 1242 CD2   CD2   . PHE PHE PHE A A 167 167 . 102.637 108.211 26.752  1.00 8.43
1 . .
ATOM 1243 C     C     . PHE PHE PHE A A 167 167 . 97.989  107.698 26.202  1.00 5.82
1 . .
ATOM 1244 O     O     . PHE PHE PHE A A 167 167 . 97.481  108.245 25.202  1.00 7.56
1 . .
ATOM 1245 N     N     . MET MET MET A A 168 168 . 97.336  107.444 27.345  1.00 5.88
1 . .
ATOM 1246 CA    CA    . MET MET MET A A 168 168 . 95.879  107.582 27.465  1.00 6.04
1 . .
ATOM 1247 CB    CB    . MET MET MET A A 168 168 . 95.296  106.305 28.119  1.00 7.18
1 . .
ATOM 1248 CG    CG    . MET MET MET A A 168 168 . 95.276  105.117 27.107  1.00 8.21
1 . .
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ATOM 1249 SD    SD    . MET MET MET A A 168 168 . 94.856  103.516 27.884  1.00 10.99
1 . .
ATOM 1250 CE    CE    . MET MET MET A A 168 168 . 96.537  102.906 28.399  1.00 10.13
1 . .
ATOM 1251 C     C     . MET MET MET A A 168 168 . 95.498  108.742 28.389  1.00 6.36
1 . .
ATOM 1252 O     O     . MET MET MET A A 168 168 . 96.221  109.076 29.344  1.00 8.33
1 . .
ATOM 1253 N     N     . ILE ILE ILE A A 169 169 . 94.291  109.272 28.168  1.00 6.33
1 . .
ATOM 1254 CA    CA    . ILE ILE ILE A A 169 169 . 93.745  110.289 29.087  1.00 5.37
1 . .
ATOM 1255 CB    CB    . ILE ILE ILE A A 169 169 . 93.480  111.642 28.388  1.00 6.70
1 . .
ATOM 1256 CG1   CG1   . ILE ILE ILE A A 169 169 . 92.617  111.443 27.127  1.00 6.71
1 . .
ATOM 1257 CD1   CD1   . ILE ILE ILE A A 169 169 . 92.134  112.729 26.426  1.00 6.99
1 . .
ATOM 1258 CG2   CG2   . ILE ILE ILE A A 169 169 . 94.843  112.301 28.004  1.00 7.70
1 . .
ATOM 1259 C     C     . ILE ILE ILE A A 169 169 . 92.449  109.689 29.607  1.00 7.45
1 . .
ATOM 1260 O     O     . ILE ILE ILE A A 169 169 . 91.659  109.075 28.817  1.00 7.93
1 . .
ATOM 1261 N     N     . LEU LEU LEU A A 170 170 . 92.253  109.910 30.908  1.00 6.68
1 . .
ATOM 1262 CA    CA    . LEU LEU LEU A A 170 170 . 91.099  109.387 31.651  1.00 5.76
1 . .
ATOM 1263 CB    CB    . LEU LEU LEU A A 170 170 . 91.535  108.391 32.770  1.00 8.42
1 . .
ATOM 1264 CG    CG    . LEU LEU LEU A A 170 170 . 92.045  107.033 32.384  1.00 9.44
1 . .
ATOM 1265 CD1   CD1   . LEU LEU LEU A A 170 170 . 93.462  107.125 31.830  1.00 14.24
1 . .
ATOM 1266 CD2   CD2   . LEU LEU LEU A A 170 170 . 92.082  106.191 33.626  1.00 11.15
1 . .
ATOM 1267 C     C     . LEU LEU LEU A A 170 170 . 90.353  110.543 32.308  1.00 7.41
1 . .
ATOM 1268 O     O     . LEU LEU LEU A A 170 170 . 90.871  111.154 33.258  1.00 7.13
1 . .
ATOM 1269 N     N     . PRO PRO PRO A A 171 171 . 89.118  110.831 31.841  1.00 7.79
1 . .
ATOM 1270 CA    CA    . PRO PRO PRO A A 171 171 . 88.403  111.954 32.493  1.00 8.64
1 . .
ATOM 1271 CB    CB    . PRO PRO PRO A A 171 171 . 87.424  112.465 31.409  1.00 8.85
1 . .
ATOM 1272 CG    CG    . PRO PRO PRO A A 171 171 . 87.871  111.833 30.034  1.00 8.40
1 . .
ATOM 1273 CD    CD    . PRO PRO PRO A A 171 171 . 88.529  110.491 30.494  1.00 8.49
1 . .
ATOM 1274 C     C     . PRO PRO PRO A A 171 171 . 87.684  111.577 33.817  1.00 6.87
1 . .
ATOM 1275 O     O     . PRO PRO PRO A A 171 171 . 86.421  111.532 33.880  1.00 8.76
1 . .
ATOM 1276 N     N     . VAL VAL VAL A A 172 172 . 88.515  111.287 34.830  1.00 6.91
1 . .
ATOM 1277 CA    CA    . VAL VAL VAL A A 172 172 . 88.025  110.887 36.178  1.00 7.15
1 . .
ATOM 1278 CB    CB    . VAL VAL VAL A A 172 172 . 89.169  110.565 37.125  1.00 6.76
1 . .
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ATOM 1279 CG1   CG1   . VAL VAL VAL A A 172 172 . 89.883  109.277 36.636  1.00 9.12
1 . .
ATOM 1280 CG2   CG2   . VAL VAL VAL A A 172 172 . 90.189  111.732 37.206  1.00 7.89
1 . .
ATOM 1281 C     C     . VAL VAL VAL A A 172 172 . 87.114  111.959 36.762  1.00 8.70
1 . .
ATOM 1282 O     O     . VAL VAL VAL A A 172 172 . 86.210  111.630 37.545  1.00 8.13
1 . .
ATOM 1283 N     N     . GLY GLY GLY A A 173 173 . 87.358  113.226 36.418  1.00 8.60
1 . .
ATOM 1284 CA    CA    . GLY GLY GLY A A 173 173 . 86.521  114.367 36.976  1.00 9.50
1 . .
ATOM 1285 C     C     . GLY GLY GLY A A 173 173 . 85.282  114.770 36.178  1.00 10.38
1 . .
ATOM 1286 O     O     . GLY GLY GLY A A 173 173 . 84.625  115.795 36.485  1.00 11.37
1 . .
ATOM 1287 N     N     . ALA ALA ALA A A 174 174 . 84.985  114.014 35.107  1.00 10.33
1 . .
ATOM 1288 CA    CA    . ALA ALA ALA A A 174 174 . 83.771  114.270 34.310  1.00 9.82
1 . .
ATOM 1289 CB    CB    . ALA ALA ALA A A 174 174 . 83.735  113.355 33.029  1.00 9.06
1 . .
ATOM 1290 C     C     . ALA ALA ALA A A 174 174 . 82.530  114.073 35.132  1.00 10.27
1 . .
ATOM 1291 O     O     . ALA ALA ALA A A 174 174 . 82.514  113.272 36.071  1.00 11.90
1 . .
ATOM 1292 N     N     . GLU GLU GLU A A 175 175 . 81.432  114.683 34.682  1.00 12.39
1 . .
ATOM 1293 CA    CA    . GLU GLU GLU A A 175 175 . 80.160  114.592 35.436  1.00 13.79
1 . .
ATOM 1294 CB    CB    . GLU GLU GLU A A 175 175 . 79.311  115.846 35.084  1.00 16.23
1 . .
ATOM 1295 CG    CG    . GLU GLU GLU A A 175 175 . 80.056  117.129 35.335  1.00 26.68
1 . .
ATOM 1296 CD    CD    . GLU GLU GLU A A 175 175 . 79.230  118.182 36.076  1.00 40.01
1 . .
ATOM 1297 OE1   OE1   . GLU GLU GLU A A 175 175 . 78.745  117.864 37.207  1.00 46.15
1 . .
ATOM 1298 OE2   OE2   . GLU GLU GLU A A 175 175 . 79.118  119.322 35.530  1.00 45.57
1 . .
ATOM 1299 C     C     . GLU GLU GLU A A 175 175 . 79.360  113.320 35.100  1.00 12.97
1 . .
ATOM 1300 O     O     . GLU GLU GLU A A 175 175 . 78.498  112.891 35.854  1.00 13.38
1 . .
ATOM 1301 N     N     . SER SER SER A A 176 176 . 79.653  112.692 33.965  1.00 10.14
1 . .
ATOM 1302 CA    CA    . SER SER SER A A 176 176 . 78.846  111.623 33.432  1.00 10.65
1 . .
ATOM 1303 CB    CB    . SER SER SER A A 176 176 . 77.539  112.141 32.801  1.00 12.82
1 . .
ATOM 1304 OG    OG    . SER SER SER A A 176 176 . 77.840  112.953 31.645  1.00 10.67
1 . .
ATOM 1305 C     C     . SER SER SER A A 176 176 . 79.696  110.988 32.293  1.00 10.17
1 . .
ATOM 1306 O     O     . SER SER SER A A 176 176 . 80.731  111.558 31.891  1.00 8.17
1 . .
ATOM 1307 N     N     . PHE PHE PHE A A 177 177 . 79.220  109.864 31.736  1.00 7.95
1 . .
ATOM 1308 CA    CA    . PHE PHE PHE A A 177 177 . 79.975  109.279 30.622  1.00 7.22
1 . .
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ATOM 1309 CB    CB    . PHE PHE PHE A A 177 177 . 79.432  107.889 30.255  1.00 7.34
1 . .
ATOM 1310 CG    CG    . PHE PHE PHE A A 177 177 . 80.327  107.252 29.300  1.00 7.63
1 . .
ATOM 1311 CD1   CD1   . PHE PHE PHE A A 177 177 . 81.453  106.554 29.799  1.00 8.66
1 . .
ATOM 1312 CE1   CE1   . PHE PHE PHE A A 177 177 . 82.400  106.036 28.911  1.00 7.76
1 . .
ATOM 1313 CZ    CZ    . PHE PHE PHE A A 177 177 . 82.224  106.224 27.463  1.00 8.27
1 . .
ATOM 1314 CE2   CE2   . PHE PHE PHE A A 177 177 . 81.064  106.897 26.971  1.00 9.40
1 . .
ATOM 1315 CD2   CD2   . PHE PHE PHE A A 177 177 . 80.152  107.419 27.910  1.00 9.13
1 . .
ATOM 1316 C     C     . PHE PHE PHE A A 177 177 . 79.898  110.174 29.357  1.00 7.22
1 . .
ATOM 1317 O     O     . PHE PHE PHE A A 177 177 . 80.905  110.429 28.701  1.00 7.35
1 . .
ATOM 1318 N     N     . ARG ARG ARG A A 178 178 . 78.699  110.735 29.090  1.00 7.09
1 . .
ATOM 1319 CA    CA    . ARG ARG ARG A A 178 178 . 78.598  111.719 27.958  1.00 6.39
1 . .
ATOM 1320 CB    CB    . ARG ARG ARG A A 178 178 . 77.131  112.137 27.815  1.00 7.41
1 . .
ATOM 1321 CG    CG    . ARG ARG ARG A A 178 178 . 76.859  113.184 26.752  1.00 13.64
1 . .
ATOM 1322 CD    CD    . ARG ARG ARG A A 178 178 . 75.312  113.615 26.839  1.00 23.98
1 . .
ATOM 1323 NE    NE    . ARG ARG ARG A A 178 178 . 74.817  114.221 25.588  1.00 34.09
1 . .
ATOM 1324 CZ    CZ    . ARG ARG ARG A A 178 178 . 74.691  115.542 25.302  1.00 38.93
1 . .
ATOM 1325 NH1   NH1   . ARG ARG ARG A A 178 178 . 74.194  115.900 24.098  1.00 36.82
1 . .
ATOM 1326 NH2   NH2   . ARG ARG ARG A A 178 178 . 75.051  116.517 26.171  1.00 39.31
1 . .
ATOM 1327 C     C     . ARG ARG ARG A A 178 178 . 79.531  112.904 28.141  1.00 8.48
1 . .
ATOM 1328 O     O     . ARG ARG ARG A A 178 178 . 80.133  113.373 27.149  1.00 6.90
1 . .
ATOM 1329 N     N     . ASP ASP ASP A A 179 179 . 79.678  113.398 29.392  1.00 8.39
1 . .
ATOM 1330 CA    CA    . ASP ASP ASP A A 179 179 . 80.598  114.517 29.601  1.00 8.53
1 . .
ATOM 1331 CB    CB    . ASP ASP ASP A A 179 179 . 80.425  115.016 31.041  1.00 8.93
1 . .
ATOM 1332 CG    CG    . ASP ASP ASP A A 179 179 . 81.106  116.375 31.300  1.00 16.55
1 . .
ATOM 1333 OD1   OD1   . ASP ASP ASP A A 179 179 . 81.743  116.532 32.405  1.00 20.73
1 . .
ATOM 1334 OD2   OD2   . ASP ASP ASP A A 179 179 . 81.028  117.278 30.407  1.00 17.38
1 . .
ATOM 1335 C     C     . ASP ASP ASP A A 179 179 . 82.050  114.037 29.431  1.00 7.50
1 . .
ATOM 1336 O     O     . ASP ASP ASP A A 179 179 . 82.903  114.791 28.902  1.00 7.27
1 . .
ATOM 1337 N     N     . ALA ALA ALA A A 180 180 . 82.322  112.792 29.852  1.00 7.15
1 . .
ATOM 1338 CA    CA    . ALA ALA ALA A A 180 180 . 83.707  112.277 29.703  1.00 6.85
1 . .
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ATOM 1339 CB    CB    . ALA ALA ALA A A 180 180 . 83.809  110.845 30.362  1.00 6.51
1 . .
ATOM 1340 C     C     . ALA ALA ALA A A 180 180 . 84.077  112.183 28.183  1.00 6.76
1 . .
ATOM 1341 O     O     . ALA ALA ALA A A 180 180 . 85.225  112.378 27.778  1.00 7.39
1 . .
ATOM 1342 N     N     . MET MET MET A A 181 181 . 83.087  111.870 27.367  1.00 5.71
1 . .
ATOM 1343 CA    CA    . MET MET MET A A 181 181 . 83.339  111.872 25.923  1.00 6.61
1 . .
ATOM 1344 CB    CB    . MET MET MET A A 181 181 . 82.118  111.357 25.134  1.00 6.92
1 . .
ATOM 1345 CG    CG    . MET MET MET A A 181 181 . 81.849  109.778 25.297  1.00 5.98
1 . .
ATOM 1346 SD    SD    . MET MET MET A A 181 181 . 83.281  108.766 24.962  1.00 8.26
1 . .
ATOM 1347 CE    CE    . MET MET MET A A 181 181 . 83.671  109.321 23.324  1.00 6.84
1 . .
ATOM 1348 C     C     . MET MET MET A A 181 181 . 83.684  113.245 25.382  1.00 7.57
1 . .
ATOM 1349 O     O     . MET MET MET A A 181 181 . 84.592  113.401 24.528  1.00 8.13
1 . .
ATOM 1350 N     N     . ARG ARG ARG A A 182 182 . 82.947  114.242 25.866  1.00 6.79
1 . .
ATOM 1351 CA    CA    . ARG ARG ARG A A 182 182 . 83.231  115.647 25.431  1.00 7.94
1 . .
ATOM 1352 CB    CB    . ARG ARG ARG A A 182 182 . 82.155  116.596 25.932  1.00 8.82
1 . .
ATOM 1353 CG    CG    . ARG ARG ARG A A 182 182 . 82.382  118.074 25.568  1.00 11.96
1 . .
ATOM 1354 CD    CD    . ARG ARG ARG A A 182 182 . 81.431  119.013 26.528  1.00 16.86
1 . .
ATOM 1355 NE    NE    . ARG ARG ARG A A 182 182 . 82.224  120.233 26.701  1.00 27.61
1 . .
ATOM 1356 CZ    CZ    . ARG ARG ARG A A 182 182 . 81.781  121.410 27.147  1.00 32.86
1 . .
ATOM 1357 NH1   NH1   . ARG ARG ARG A A 182 182 . 82.614  122.442 27.169  1.00 37.84
1 . .
ATOM 1358 NH2   NH2   . ARG ARG ARG A A 182 182 . 80.523  121.577 27.563  1.00 35.73
1 . .
ATOM 1359 C     C     . ARG ARG ARG A A 182 182 . 84.681  116.050 25.884  1.00 7.10
1 . .
ATOM 1360 O     O     . ARG ARG ARG A A 182 182 . 85.433  116.599 25.123  1.00 7.46
1 . .
ATOM 1361 N     N     . LEU LEU LEU A A 183 183 . 85.032  115.811 27.142  1.00 6.75
1 . .
ATOM 1362 CA    CA    . LEU LEU LEU A A 183 183 . 86.373  116.111 27.638  1.00 6.71
1 . .
ATOM 1363 CB    CB    . LEU LEU LEU A A 183 183 . 86.470  115.741 29.131  1.00 8.21
1 . .
ATOM 1364 CG    CG    . LEU LEU LEU A A 183 183 . 86.178  116.891 30.105  1.00 7.95
1 . .
ATOM 1365 CD1   CD1   . LEU LEU LEU A A 183 183 . 84.799  117.452 29.840  1.00 12.83
1 . .
ATOM 1366 CD2   CD2   . LEU LEU LEU A A 183 183 . 86.267  116.385 31.522  1.00 10.41
1 . .
ATOM 1367 C     C     . LEU LEU LEU A A 183 183 . 87.447  115.378 26.834  1.00 6.92
1 . .
ATOM 1368 O     O     . LEU LEU LEU A A 183 183 . 88.467  116.001 26.411  1.00 8.25
1 . .
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ATOM 1369 N     N     . GLY GLY GLY A A 184 184 . 87.230  114.085 26.544  1.00 6.80
1 . .
ATOM 1370 CA    CA    . GLY GLY GLY A A 184 184 . 88.245  113.300 25.768  1.00 7.12
1 . .
ATOM 1371 C     C     . GLY GLY GLY A A 184 184 . 88.393  113.843 24.358  1.00 7.24
1 . .
ATOM 1372 O     O     . GLY GLY GLY A A 184 184 . 89.487  114.002 23.869  1.00 6.18
1 . .
ATOM 1373 N     N     . ALA ALA ALA A A 185 185 . 87.275  114.119 23.689  1.00 6.77
1 . .
ATOM 1374 CA    CA    . ALA ALA ALA A A 185 185 . 87.328  114.588 22.312  1.00 7.12
1 . .
ATOM 1375 CB    CB    . ALA ALA ALA A A 185 185 . 85.892  114.652 21.757  1.00 5.40
1 . .
ATOM 1376 C     C     . ALA ALA ALA A A 185 185 . 87.952  115.995 22.299  1.00 7.52
1 . .
ATOM 1377 O     O     . ALA ALA ALA A A 185 185 . 88.762  116.253 21.442  1.00 7.41
1 . .
ATOM 1378 N     N     . GLU GLU GLU A A 186 186 . 87.578  116.888 23.247  1.00 6.84
1 . .
ATOM 1379 CA    CA    . GLU GLU GLU A A 186 186 . 88.167  118.252 23.219  1.00 6.80
1 . .
ATOM 1380 CB    CB    . GLU GLU GLU A A 186 186 . 87.507  119.140 24.272  1.00 7.43
1 . .
ATOM 1381 CG    CG    . GLU GLU GLU A A 186 186 . 86.062  119.549 23.843  1.00 6.97
1 . .
ATOM 1382 CD    CD    . GLU GLU GLU A A 186 186 . 85.365  120.502 24.858  1.00 12.63
1 . .
ATOM 1383 OE1   OE1   . GLU GLU GLU A A 186 186 . 86.036  120.916 25.809  1.00 13.32
1 . .
ATOM 1384 OE2   OE2   . GLU GLU GLU A A 186 186 . 84.143  120.803 24.680  1.00 11.10
1 . .
ATOM 1385 C     C     . GLU GLU GLU A A 186 186 . 89.652  118.215 23.461  1.00 6.78
1 . .
ATOM 1386 O     O     . GLU GLU GLU A A 186 186 . 90.390  118.894 22.764  1.00 8.06
1 . .
ATOM 1387 N     N     . VAL VAL VAL A A 187 187 . 90.119  117.354 24.386  1.00 6.29
1 . .
ATOM 1388 CA    CA    . VAL VAL VAL A A 187 187 . 91.603  117.219 24.576  1.00 7.87
1 . .
ATOM 1389 CB    CB    . VAL VAL VAL A A 187 187 . 91.941  116.353 25.796  1.00 7.10
1 . .
ATOM 1390 CG1   CG1   . VAL VAL VAL A A 187 187 . 93.496  116.107 25.928  1.00 7.55
1 . .
ATOM 1391 CG2   CG2   . VAL VAL VAL A A 187 187 . 91.388  117.084 27.082  1.00 8.77
1 . .
ATOM 1392 C     C     . VAL VAL VAL A A 187 187 . 92.280  116.613 23.338  1.00 7.99
1 . .
ATOM 1393 O     O     . VAL VAL VAL A A 187 187 . 93.343  117.048 22.900  1.00 9.31
1 . .
ATOM 1394 N     N     . TYR TYR TYR A A 188 188 . 91.654  115.616 22.742  1.00 8.89
1 . .
ATOM 1395 CA    CA    . TYR TYR TYR A A 188 188 . 92.187  115.021 21.525  1.00 7.74
1 . .
ATOM 1396 CB    CB    . TYR TYR TYR A A 188 188 . 91.291  113.855 21.091  1.00 7.69
1 . .
ATOM 1397 CG    CG    . TYR TYR TYR A A 188 188 . 91.734  113.166 19.807  1.00 5.92
1 . .
ATOM 1398 CD1   CD1   . TYR TYR TYR A A 188 188 . 92.773  112.237 19.833  1.00 6.87
1 . .
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ATOM 1399 CE1   CE1   . TYR TYR TYR A A 188 188 . 93.217  111.581 18.647  1.00 7.05
1 . .
ATOM 1400 CZ    CZ    . TYR TYR TYR A A 188 188 . 92.541  111.839 17.427  1.00 8.56
1 . .
ATOM 1401 OH    OH    . TYR TYR TYR A A 188 188 . 92.923  111.229 16.251  1.00 7.27
1 . .
ATOM 1402 CE2   CE2   . TYR TYR TYR A A 188 188 . 91.467  112.721 17.369  1.00 8.25
1 . .
ATOM 1403 CD2   CD2   . TYR TYR TYR A A 188 188 . 91.066  113.385 18.601  1.00 6.47
1 . .
ATOM 1404 C     C     . TYR TYR TYR A A 188 188 . 92.318  116.077 20.388  1.00 9.32
1 . .
ATOM 1405 O     O     . TYR TYR TYR A A 188 188 . 93.374  116.154 19.708  1.00 7.69
1 . .
ATOM 1406 N     N     . HIS HIS HIS A A 189 189 . 91.269  116.854 20.131  1.00 8.68
1 . .
ATOM 1407 CA    CA    . HIS HIS HIS A A 189 189 . 91.383  117.889 19.069  1.00 8.55
1 . .
ATOM 1408 CB    CB    . HIS HIS HIS A A 189 189 . 90.019  118.484 18.732  1.00 8.90
1 . .
ATOM 1409 CG    CG    . HIS HIS HIS A A 189 189 . 89.065  117.454 18.255  1.00 9.82
1 . .
ATOM 1410 ND1   ND1   . HIS HIS HIS A A 189 189 . 87.744  117.364 18.707  1.00 11.92
1 . .
ATOM 1411 CE1   CE1   . HIS HIS HIS A A 189 189 . 87.169  116.324 18.111  1.00 9.66
1 . .
ATOM 1412 NE2   NE2   . HIS HIS HIS A A 189 189 . 88.042  115.791 17.268  1.00 10.91
1 . .
ATOM 1413 CD2   CD2   . HIS HIS HIS A A 189 189 . 89.212  116.499 17.312  1.00 8.60
1 . .
ATOM 1414 C     C     . HIS HIS HIS A A 189 189 . 92.384  118.963 19.412  1.00 7.63
1 . .
ATOM 1415 O     O     . HIS HIS HIS A A 189 189 . 93.036  119.475 18.489  1.00 8.57
1 . .
ATOM 1416 N     N     . THR THR THR A A 190 190 . 92.489  119.289 20.707  1.00 8.44
1 . .
ATOM 1417 CA    CA    . THR THR THR A A 190 190 . 93.458  120.304 21.207  1.00 9.51
1 . .
ATOM 1418 CB    CB    . THR THR THR A A 190 190 . 93.219  120.648 22.681  1.00 9.82
1 . .
ATOM 1419 OG1   OG1   . THR THR THR A A 190 190 . 91.907  121.240 22.807  1.00 9.22
1 . .
ATOM 1420 CG2   CG2   . THR THR THR A A 190 190 . 94.258  121.658 23.137  1.00 11.88
1 . .
ATOM 1421 C     C     . THR THR THR A A 190 190 . 94.858  119.759 20.962  1.00 10.00
1 . .
ATOM 1422 O     O     . THR THR THR A A 190 190 . 95.789  120.522 20.519  1.00 9.98
1 . .
ATOM 1423 N     N     . LEU LEU LEU A A 191 191 . 95.036  118.450 21.247  1.00 8.45
1 . .
ATOM 1424 CA    CA    . LEU LEU LEU A A 191 191 . 96.354  117.802 21.083  1.00 9.29
1 . .
ATOM 1425 CB    CB    . LEU LEU LEU A A 191 191 . 96.248  116.339 21.595  1.00 8.58
1 . .
ATOM 1426 CG    CG    . LEU LEU LEU A A 191 191 . 97.515  115.488 21.420  1.00 7.63
1 . .
ATOM 1427 CD1   CD1   . LEU LEU LEU A A 191 191 . 98.727  116.133 22.171  1.00 8.10
1 . .
ATOM 1428 CD2   CD2   . LEU LEU LEU A A 191 191 . 97.229  114.004 21.882  1.00 8.56
1 . .
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ATOM 1429 C     C     . LEU LEU LEU A A 191 191 . 96.731  117.835 19.620  1.00 8.91
1 . .
ATOM 1430 O     O     . LEU LEU LEU A A 191 191 . 97.949  117.957 19.280  1.00 9.38
1 . .
ATOM 1431 N     N     . LYS LYS LYS A A 192 192 . 95.763  117.724 18.700  1.00 8.72
1 . .
ATOM 1432 CA    CA    . LYS LYS LYS A A 192 192 . 96.159  117.748 17.310  1.00 9.12
1 . .
ATOM 1433 CB    CB    . LYS LYS LYS A A 192 192 . 94.978  117.592 16.348  1.00 9.68
1 . .
ATOM 1434 CG    CG    . LYS LYS LYS A A 192 192 . 95.394  117.425 14.904  1.00 10.50
1 . .
ATOM 1435 CD    CD    . LYS LYS LYS A A 192 192 . 94.170  117.262 13.965  1.00 17.42
1 . .
ATOM 1436 CE    CE    . LYS LYS LYS A A 192 192 . 94.674  116.971 12.506  1.00 20.17
1 . .
ATOM 1437 NZ    NZ    . LYS LYS LYS A A 192 192 . 93.551  116.514 11.682  1.00 22.23
1 . .
ATOM 1438 C     C     . LYS LYS LYS A A 192 192 . 96.887  119.082 16.998  1.00 10.17
1 . .
ATOM 1439 O     O     . LYS LYS LYS A A 192 192 . 97.930  119.087 16.268  1.00 10.65
1 . .
ATOM 1440 N     N     . GLY GLY GLY A A 193 193 . 96.321  120.186 17.502  1.00 9.51
1 . .
ATOM 1441 CA    CA    . GLY GLY GLY A A 193 193 . 96.913  121.513 17.272  1.00 10.96
1 . .
ATOM 1442 C     C     . GLY GLY GLY A A 193 193 . 98.264  121.688 17.974  1.00 12.20
1 . .
ATOM 1443 O     O     . GLY GLY GLY A A 193 193 . 99.227  122.245 17.380  1.00 13.35
1 . .
ATOM 1444 N     N     . VAL VAL VAL A A 194 194 . 98.383  121.140 19.183  1.00 9.65
1 . .
ATOM 1445 CA    CA    . VAL VAL VAL A A 194 194 . 99.655  121.157 19.895  1.00 10.79
1 . .
ATOM 1446 CB    CB    . VAL VAL VAL A A 194 194 . 99.554  120.518 21.301  1.00 9.82
1 . .
ATOM 1447 CG1   CG1   . VAL VAL VAL A A 194 194 . 100.980 120.427 21.968  1.00 10.65
1 . .
ATOM 1448 CG2   CG2   . VAL VAL VAL A A 194 194 . 98.617  121.351 22.197  1.00 13.31
1 . .
ATOM 1449 C     C     . VAL VAL VAL A A 194 194 . 100.765 120.452 19.082  1.00 11.51
1 . .
ATOM 1450 O     O     . VAL VAL VAL A A 194 194 . 101.882 121.023 18.945  1.00 13.68
1 . .
ATOM 1451 N     N     . ILE ILE ILE A A 195 195 . 100.465 119.261 18.534  1.00 11.14
1 . .
ATOM 1452 CA    CA    . ILE ILE ILE A A 195 195 . 101.432 118.478 17.772  1.00 10.53
1 . .
ATOM 1453 CB    CB    . ILE ILE ILE A A 195 195 . 100.869 117.070 17.517  1.00 9.75
1 . .
ATOM 1454 CG1   CG1   . ILE ILE ILE A A 195 195 . 100.844 116.359 18.819  1.00 8.09
1 . .
ATOM 1455 CD1   CD1   . ILE ILE ILE A A 195 195 . 100.201 114.886 18.706  1.00 12.40
1 . .
ATOM 1456 CG2   CG2   . ILE ILE ILE A A 195 195 . 101.694 116.282 16.443  1.00 11.20
1 . .
ATOM 1457 C     C     . ILE ILE ILE A A 195 195 . 101.737 119.165 16.463  1.00 12.61
1 . .
ATOM 1458 O     O     . ILE ILE ILE A A 195 195 . 102.930 119.312 16.106  1.00 14.88
1 . .
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ATOM 1459 N     N     . LYS LYS LYS A A 196 196 . 100.694 119.608 15.764  1.00 12.11
1 . .
ATOM 1460 CA    CA    . LYS LYS LYS A A 196 196 . 100.917 120.313 14.487  1.00 14.00
1 . .
ATOM 1461 CB    CB    . LYS LYS LYS A A 196 196 . 99.611  120.789 13.835  1.00 14.50
1 . .
ATOM 1462 CG    CG    . LYS LYS LYS A A 196 196 . 99.848  121.574 12.495  1.00 18.19
1 . .
ATOM 1463 CD    CD    . LYS LYS LYS A A 196 196 . 98.601  122.562 12.233  1.00 25.68
1 . .
ATOM 1464 CE    CE    . LYS LYS LYS A A 196 196 . 98.992  123.984 11.566  1.00 32.95
1 . .
ATOM 1465 C     C     . LYS LYS LYS A A 196 196 . 101.825 121.541 14.677  1.00 14.26
1 . .
ATOM 1466 O     O     . LYS LYS LYS A A 196 196 . 102.721 121.745 13.848  1.00 16.54
1 . .
ATOM 1467 N     N     . ASP ASP ASP A A 197 197 . 101.611 122.335 15.738  1.00 12.96
1 . .
ATOM 1468 CA    CA    . ASP ASP ASP A A 197 197 . 102.418 123.558 15.957  1.00 15.74
1 . .
ATOM 1469 CB    CB    . ASP ASP ASP A A 197 197 . 101.896 124.383 17.153  1.00 16.32
1 . .
ATOM 1470 CG    CG    . ASP ASP ASP A A 197 197 . 100.577 125.131 16.863  1.00 23.14
1 . .
ATOM 1471 OD1   OD1   . ASP ASP ASP A A 197 197 . 100.018 125.696 17.827  1.00 26.12
1 . .
ATOM 1472 OD2   OD2   . ASP ASP ASP A A 197 197 . 100.063 125.171 15.696  1.00 28.34
1 . .
ATOM 1473 C     C     . ASP ASP ASP A A 197 197 . 103.865 123.174 16.232  1.00 16.24
1 . .
ATOM 1474 O     O     . ASP ASP ASP A A 197 197 . 104.788 123.897 15.785  1.00 16.22
1 . .
ATOM 1475 N     N     . LYS LYS LYS A A 198 198 . 104.090 122.054 16.893  1.00 14.49
1 . .
ATOM 1476 CA    CA    . LYS LYS LYS A A 198 198 . 105.448 121.729 17.352  1.00 15.05
1 . .
ATOM 1477 CB    CB    . LYS LYS LYS A A 198 198 . 105.396 121.041 18.731  1.00 14.95
1 . .
ATOM 1478 CG    CG    . LYS LYS LYS A A 198 198 . 106.759 120.945 19.393  1.00 15.04
1 . .
ATOM 1479 CD    CD    . LYS LYS LYS A A 198 198 . 106.538 120.476 20.834  1.00 13.97
1 . .
ATOM 1480 CE    CE    . LYS LYS LYS A A 198 198 . 107.760 120.598 21.708  1.00 18.12
1 . .
ATOM 1481 NZ    NZ    . LYS LYS LYS A A 198 198 . 107.421 119.845 23.053  1.00 19.30
1 . .
ATOM 1482 C     C     . LYS LYS LYS A A 198 198 . 106.202 120.902 16.348  1.00 16.56
1 . .
ATOM 1483 O     O     . LYS LYS LYS A A 198 198 . 107.421 121.154 16.106  1.00 17.97
1 . .
ATOM 1484 N     N     . TYR TYR TYR A A 199 199 . 105.508 119.934 15.741  1.00 14.89
1 . .
ATOM 1485 CA    CA    . TYR TYR TYR A A 199 199 . 106.112 118.959 14.819  1.00 15.97
1 . .
ATOM 1486 CB    CB    . TYR TYR TYR A A 199 199 . 105.992 117.535 15.390  1.00 16.35
1 . .
ATOM 1487 CG    CG    . TYR TYR TYR A A 199 199 . 106.765 117.352 16.648  1.00 17.97
1 . .
ATOM 1488 CD1   CD1   . TYR TYR TYR A A 199 199 . 106.118 117.241 17.875  1.00 15.09
1 . .
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ATOM 1489 CE1   CE1   . TYR TYR TYR A A 199 199 . 106.805 117.060 19.061  1.00 13.49
1 . .
ATOM 1490 CZ    CZ    . TYR TYR TYR A A 199 199 . 108.192 117.020 19.017  1.00 15.28
1 . .
ATOM 1491 OH    OH    . TYR TYR TYR A A 199 199 . 108.923 116.892 20.159  1.00 16.39
1 . .
ATOM 1492 CE2   CE2   . TYR TYR TYR A A 199 199 . 108.875 117.169 17.829  1.00 19.15
1 . .
ATOM 1493 CD2   CD2   . TYR TYR TYR A A 199 199 . 108.167 117.305 16.627  1.00 19.28
1 . .
ATOM 1494 C     C     . TYR TYR TYR A A 199 199 . 105.706 118.986 13.346  1.00 17.87
1 . .
ATOM 1495 O     O     . TYR TYR TYR A A 199 199 . 106.346 118.279 12.522  1.00 18.41
1 . .
ATOM 1496 N     N     . GLY GLY GLY A A 200 200 . 104.664 119.765 13.033  1.00 16.90
1 . .
ATOM 1497 CA    CA    . GLY GLY GLY A A 200 200 . 104.133 119.907 11.691  1.00 17.06
1 . .
ATOM 1498 C     C     . GLY GLY GLY A A 200 200 . 102.938 118.993 11.431  1.00 17.53
1 . .
ATOM 1499 O     O     . GLY GLY GLY A A 200 200 . 102.685 118.034 12.203  1.00 14.98
1 . .
ATOM 1500 N     N     . LYS LYS LYS A A 201 201 . 102.215 119.292 10.343  1.00 17.50
1 . .
ATOM 1501 CA    CA    . LYS LYS LYS A A 201 201 . 101.024 118.508 9.974   1.00 17.96
1 . .
ATOM 1502 CB    CB    . LYS LYS LYS A A 201 201 . 100.291 119.160 8.792   1.00 20.14
1 . .
ATOM 1503 C     C     . LYS LYS LYS A A 201 201 . 101.346 117.021 9.686   1.00 17.96
1 . .
ATOM 1504 O     O     . LYS LYS LYS A A 201 201 . 100.521 116.095 9.954   1.00 16.29
1 . .
ATOM 1505 N     N     . ASP ASP ASP A A 202 202 . 102.573 116.740 9.241   1.00 16.67
1 . .
ATOM 1506 CA    CA    . ASP ASP ASP A A 202 202 . 102.954 115.353 8.918   1.00 18.31
1 . .
ATOM 1507 CB    CB    . ASP ASP ASP A A 202 202 . 104.337 115.339 8.242   1.00 20.39
1 . .
ATOM 1508 CG    CG    . ASP ASP ASP A A 202 202 . 105.283 116.367 8.906   1.00 29.11
1 . .
ATOM 1509 OD1   OD1   . ASP ASP ASP A A 202 202 . 105.177 117.599 8.562   1.00 33.61
1 . .
ATOM 1510 OD2   OD2   . ASP ASP ASP A A 202 202 . 106.071 115.978 9.826   1.00 38.82
1 . .
ATOM 1511 C     C     . ASP ASP ASP A A 202 202 . 103.014 114.525 10.225  1.00 16.73
1 . .
ATOM 1512 O     O     . ASP ASP ASP A A 202 202 . 103.076 113.289 10.179  1.00 16.73
1 . .
ATOM 1513 N     N     . ALA ALA ALA A A 203 203 . 102.987 115.189 11.392  1.00 15.14
1 . .
ATOM 1514 CA    CA    . ALA ALA ALA A A 203 203 . 103.021 114.473 12.663  1.00 13.01
1 . .
ATOM 1515 CB    CB    . ALA ALA ALA A A 203 203 . 103.841 115.266 13.753  1.00 12.07
1 . .
ATOM 1516 C     C     . ALA ALA ALA A A 203 203 . 101.636 114.150 13.240  1.00 14.43
1 . .
ATOM 1517 O     O     . ALA ALA ALA A A 203 203 . 101.553 113.580 14.385  1.00 12.71
1 . .
ATOM 1518 N     N     . THR THR THR A A 204 204 . 100.579 114.466 12.456  1.00 13.43
1 . .
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ATOM 1519 CA    CA    . THR THR THR A A 204 204 . 99.221  114.396 13.001  1.00 14.13
1 . .
ATOM 1520 CB    CB    . THR THR THR A A 204 204 . 98.470  115.777 12.914  1.00 16.00
1 . .
ATOM 1521 OG1   OG1   . THR THR THR A A 204 204 . 98.277  116.174 11.546  1.00 16.90
1 . .
ATOM 1522 CG2   CG2   . THR THR THR A A 204 204 . 99.238  116.898 13.716  1.00 19.73
1 . .
ATOM 1523 C     C     . THR THR THR A A 204 204 . 98.390  113.335 12.302  1.00 12.71
1 . .
ATOM 1524 O     O     . THR THR THR A A 204 204 . 97.153  113.326 12.502  1.00 10.68
1 . .
ATOM 1525 N     N     . ASN ASN ASN A A 205 205 . 99.047  112.439 11.531  1.00 9.46
1 . .
ATOM 1526 CA    CA    . ASN ASN ASN A A 205 205 . 98.337  111.259 11.060  1.00 10.24
1 . .
ATOM 1527 CB    CB    . ASN ASN ASN A A 205 205 . 99.050  110.630 9.845   1.00 10.56
1 . .
ATOM 1528 CG    CG    . ASN ASN ASN A A 205 205 . 99.211  111.634 8.754   1.00 12.62
1 . .
ATOM 1529 OD1   OD1   . ASN ASN ASN A A 205 205 . 98.212  112.188 8.277   1.00 14.89
1 . .
ATOM 1530 ND2   ND2   . ASN ASN ASN A A 205 205 . 100.454 111.970 8.433   1.00 12.87
1 . .
ATOM 1531 C     C     . ASN ASN ASN A A 205 205 . 98.171  110.279 12.214  1.00 10.14
1 . .
ATOM 1532 O     O     . ASN ASN ASN A A 205 205 . 98.731  110.513 13.286  1.00 9.01
1 . .
ATOM 1533 N     N     . VAL VAL VAL A A 206 206 . 97.359  109.230 12.063  1.00 10.14
1 . .
ATOM 1534 CA    CA    . VAL VAL VAL A A 206 206 . 97.098  108.411 13.267  1.00 10.18
1 . .
ATOM 1535 CB    CB    . VAL VAL VAL A A 206 206 . 95.525  108.352 13.597  1.00 11.32
1 . .
ATOM 1536 CG1   CG1   . VAL VAL VAL A A 206 206 . 95.029  109.758 13.975  1.00 10.24
1 . .
ATOM 1537 CG2   CG2   . VAL VAL VAL A A 206 206 . 94.710  107.648 12.472  1.00 8.50
1 . .
ATOM 1538 C     C     . VAL VAL VAL A A 206 206 . 97.625  106.980 13.171  1.00 9.23
1 . .
ATOM 1539 O     O     . VAL VAL VAL A A 206 206 . 97.733  106.414 12.049  1.00 9.85
1 . .
ATOM 1540 N     N     . GLY GLY GLY A A 207 207 . 97.803  106.378 14.349  1.00 9.21
1 . .
ATOM 1541 CA    CA    . GLY GLY GLY A A 207 207 . 98.144  104.949 14.471  1.00 8.38
1 . .
ATOM 1542 C     C     . GLY GLY GLY A A 207 207 . 96.912  104.062 14.541  1.00 8.03
1 . .
ATOM 1543 O     O     . GLY GLY GLY A A 207 207 . 95.758  104.519 14.311  1.00 8.47
1 . .
ATOM 1544 N     N     . ASP ASP ASP A A 208 208 . 97.163  102.777 14.754  1.00 9.05
1 . .
ATOM 1545 CA    CA    . ASP ASP ASP A A 208 208 . 96.101  101.755 14.617  1.00 6.93
1 . .
ATOM 1546 CB    CB    . ASP ASP ASP A A 208 208 . 96.697  100.357 15.006  1.00 9.67
1 . .
ATOM 1547 CG    CG    . ASP ASP ASP A A 208 208 . 97.616  99.797  13.902  1.00 12.53
1 . .
ATOM 1548 OD1   OD1   . ASP ASP ASP A A 208 208 . 97.589  100.339 12.724  1.00 11.34
1 . .
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ATOM 1549 OD2   OD2   . ASP ASP ASP A A 208 208 . 98.381  98.847  14.265  1.00 11.60
1 . .
ATOM 1550 C     C     . ASP ASP ASP A A 208 208 . 94.914  102.014 15.542  1.00 7.06
1 . .
ATOM 1551 O     O     . ASP ASP ASP A A 208 208 . 93.818  101.647 15.207  1.00 7.85
1 . .
ATOM 1552 N     N     . GLU GLU GLU A A 209 209 . 95.129  102.678 16.677  1.00 7.77
1 . .
ATOM 1553 CA    CA    . GLU GLU GLU A A 209 209 . 94.001  102.861 17.641  1.00 6.50
1 . .
ATOM 1554 CB    CB    . GLU GLU GLU A A 209 209 . 94.448  102.510 19.096  1.00 8.29
1 . .
ATOM 1555 CG    CG    . GLU GLU GLU A A 209 209 . 94.746  100.998 19.194  1.00 8.17
1 . .
ATOM 1556 CD    CD    . GLU GLU GLU A A 209 209 . 94.890  100.455 20.582  1.00 10.30
1 . .
ATOM 1557 OE1   OE1   . GLU GLU GLU A A 209 209 . 94.986  99.160  20.715  1.00 12.25
1 . .
ATOM 1558 OE2   OE2   . GLU GLU GLU A A 209 209 . 94.853  101.321 21.500  1.00 10.93
1 . .
ATOM 1559 C     C     . GLU GLU GLU A A 209 209 . 93.451  104.305 17.639  1.00 7.77
1 . .
ATOM 1560 O     O     . GLU GLU GLU A A 209 209 . 92.697  104.670 18.527  1.00 8.39
1 . .
ATOM 1561 N     N     . GLY GLY GLY A A 210 210 . 93.812  105.048 16.594  1.00 7.62
1 . .
ATOM 1562 CA    CA    . GLY GLY GLY A A 210 210 . 93.343  106.442 16.333  1.00 7.85
1 . .
ATOM 1563 C     C     . GLY GLY GLY A A 210 210 . 94.055  107.555 17.107  1.00 9.10
1 . .
ATOM 1564 O     O     . GLY GLY GLY A A 210 210 . 93.684  108.727 16.957  1.00 8.15
1 . .
ATOM 1565 N     N     . GLY GLY GLY A A 211 211 . 95.066  107.208 17.923  1.00 9.06
1 . .
ATOM 1566 CA    CA    . GLY GLY GLY A A 211 211 . 95.955  108.218 18.530  1.00 8.66
1 . .
ATOM 1567 C     C     . GLY GLY GLY A A 211 211 . 96.860  108.843 17.429  1.00 10.21
1 . .
ATOM 1568 O     O     . GLY GLY GLY A A 211 211 . 97.201  108.201 16.409  1.00 9.47
1 . .
ATOM 1569 N     N     . PHE PHE PHE A A 212 212 . 97.328  110.049 17.652  1.00 8.13
1 . .
ATOM 1570 CA    CA    . PHE PHE PHE A A 212 212 . 98.272  110.659 16.709  1.00 8.94
1 . .
ATOM 1571 CB    CB    . PHE PHE PHE A A 212 212 . 98.530  112.076 17.105  1.00 8.58
1 . .
ATOM 1572 CG    CG    . PHE PHE PHE A A 212 212 . 97.274  112.881 17.115  1.00 10.24
1 . .
ATOM 1573 CD1   CD1   . PHE PHE PHE A A 212 212 . 96.717  113.295 18.326  1.00 7.79
1 . .
ATOM 1574 CE1   CE1   . PHE PHE PHE A A 212 212 . 95.482  114.004 18.311  1.00 10.90
1 . .
ATOM 1575 CZ    CZ    . PHE PHE PHE A A 212 212 . 94.789  114.266 17.068  1.00 9.42
1 . .
ATOM 1576 CE2   CE2   . PHE PHE PHE A A 212 212 . 95.292  113.764 15.876  1.00 10.18
1 . .
ATOM 1577 CD2   CD2   . PHE PHE PHE A A 212 212 . 96.578  113.110 15.905  1.00 9.64
1 . .
ATOM 1578 C     C     . PHE PHE PHE A A 212 212 . 99.585  109.882 16.785  1.00 9.26
1 . .
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ATOM 1579 O     O     . PHE PHE PHE A A 212 212 . 99.900  109.274 17.837  1.00 8.70
1 . .
ATOM 1580 N     N     . ALA ALA ALA A A 213 213 . 100.276 109.882 15.639  1.00 9.47
1 . .
ATOM 1581 CA    CA    . ALA ALA ALA A A 213 213 . 101.535 109.157 15.550  1.00 9.46
1 . .
ATOM 1582 CB    CB    . ALA ALA ALA A A 213 213 . 101.454 108.007 14.450  1.00 10.15
1 . .
ATOM 1583 C     C     . ALA ALA ALA A A 213 213 . 102.647 110.143 15.223  1.00 11.03
1 . .
ATOM 1584 O     O     . ALA ALA ALA A A 213 213 . 103.166 110.112 14.077  1.00 12.03
1 . .
ATOM 1585 N     N     . PRO PRO PRO A A 214 214 . 103.004 111.016 16.194  1.00 11.68
1 . .
ATOM 1586 CA    CA    . PRO PRO PRO A A 214 214 . 104.060 111.994 15.928  1.00 11.61
1 . .
ATOM 1587 CB    CB    . PRO PRO PRO A A 214 214 . 104.069 112.917 17.161  1.00 11.98
1 . .
ATOM 1588 CG    CG    . PRO PRO PRO A A 214 214 . 103.522 112.042 18.284  1.00 12.10
1 . .
ATOM 1589 CD    CD    . PRO PRO PRO A A 214 214 . 102.511 111.096 17.587  1.00 10.54
1 . .
ATOM 1590 C     C     . PRO PRO PRO A A 214 214 . 105.416 111.314 15.775  1.00 11.64
1 . .
ATOM 1591 O     O     . PRO PRO PRO A A 214 214 . 105.652 110.268 16.315  1.00 10.35
1 . .
ATOM 1592 N     N     . ASN ASN ASN A A 215 215 . 106.277 111.948 15.004  1.00 15.01
1 . .
ATOM 1593 CA    CA    . ASN ASN ASN A A 215 215 . 107.606 111.425 14.745  1.00 16.54
1 . .
ATOM 1594 CB    CB    . ASN ASN ASN A A 215 215 . 108.121 111.961 13.374  1.00 17.26
1 . .
ATOM 1595 CG    CG    . ASN ASN ASN A A 215 215 . 108.097 113.511 13.251  1.00 21.39
1 . .
ATOM 1596 OD1   OD1   . ASN ASN ASN A A 215 215 . 109.126 114.139 12.796  1.00 26.87
1 . .
ATOM 1597 ND2   ND2   . ASN ASN ASN A A 215 215 . 106.986 114.138 13.613  1.00 17.63
1 . .
ATOM 1598 C     C     . ASN ASN ASN A A 215 215 . 108.523 111.825 15.901  1.00 17.40
1 . .
ATOM 1599 O     O     . ASN ASN ASN A A 215 215 . 109.373 112.716 15.759  1.00 19.78
1 . .
ATOM 1600 N     N     . ILE ILE ILE A A 216 216 . 108.297 111.191 17.062  1.00 15.75
1 . .
ATOM 1601 CA    CA    . ILE ILE ILE A A 216 216 . 109.103 111.399 18.268  1.00 14.61
1 . .
ATOM 1602 CB    CB    . ILE ILE ILE A A 216 216 . 108.343 112.112 19.413  1.00 13.04
1 . .
ATOM 1603 CG1   CG1   . ILE ILE ILE A A 216 216 . 107.045 111.344 19.742  1.00 12.34
1 . .
ATOM 1604 CD1   CD1   . ILE ILE ILE A A 216 216 . 106.320 111.854 20.996  1.00 14.46
1 . .
ATOM 1605 CG2   CG2   . ILE ILE ILE A A 216 216 . 107.992 113.469 18.957  1.00 14.23
1 . .
ATOM 1606 C     C     . ILE ILE ILE A A 216 216 . 109.618 110.044 18.782  1.00 14.76
1 . .
ATOM 1607 O     O     . ILE ILE ILE A A 216 216 . 109.113 108.985 18.407  1.00 13.80
1 . .
ATOM 1608 N     N     . LEU LEU LEU A A 217 217 . 110.683 110.122 19.586  1.00 15.09
1 . .
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ATOM 1609 CA    CA    . LEU LEU LEU A A 217 217 . 111.306 108.938 20.214  1.00 15.14
1 . .
ATOM 1610 CB    CB    . LEU LEU LEU A A 217 217 . 112.856 109.001 19.991  1.00 15.34
1 . .
ATOM 1611 CG    CG    . LEU LEU LEU A A 217 217 . 113.705 108.020 20.800  1.00 15.23
1 . .
ATOM 1612 CD1   CD1   . LEU LEU LEU A A 217 217 . 113.428 106.561 20.407  1.00 19.52
1 . .
ATOM 1613 CD2   CD2   . LEU LEU LEU A A 217 217 . 115.213 108.362 20.589  1.00 18.49
1 . .
ATOM 1614 C     C     . LEU LEU LEU A A 217 217 . 111.035 108.879 21.684  1.00 14.92
1 . .
ATOM 1615 O     O     . LEU LEU LEU A A 217 217 . 110.811 107.769 22.216  1.00 15.85
1 . .
ATOM 1616 N     N     . GLU GLU GLU A A 218 218 . 111.145 110.030 22.385  1.00 15.39
1 . .
ATOM 1617 CA    CA    . GLU GLU GLU A A 218 218 . 111.104 110.047 23.857  1.00 16.23
1 . .
ATOM 1618 CB    CB    . GLU GLU GLU A A 218 218 . 111.723 111.330 24.468  1.00 18.00
1 . .
ATOM 1619 CG    CG    . GLU GLU GLU A A 218 218 . 113.223 111.328 24.147  1.00 25.12
1 . .
ATOM 1620 CD    CD    . GLU GLU GLU A A 218 218 . 114.070 111.967 25.194  1.00 37.34
1 . .
ATOM 1621 OE1   OE1   . GLU GLU GLU A A 218 218 . 115.307 111.807 25.073  1.00 42.40
1 . .
ATOM 1622 OE2   OE2   . GLU GLU GLU A A 218 218 . 113.541 112.592 26.150  1.00 41.77
1 . .
ATOM 1623 C     C     . GLU GLU GLU A A 218 218 . 109.679 109.882 24.417  1.00 15.67
1 . .
ATOM 1624 O     O     . GLU GLU GLU A A 218 218 . 108.800 110.691 24.100  1.00 13.61
1 . .
ATOM 1625 N     N     . ASN ASN ASN A A 219 219 . 109.513 108.875 25.294  1.00 15.00
1 . .
ATOM 1626 CA    CA    . ASN ASN ASN A A 219 219 . 108.234 108.656 25.953  1.00 13.75
1 . .
ATOM 1627 CB    CB    . ASN ASN ASN A A 219 219 . 108.242 107.325 26.691  1.00 13.52
1 . .
ATOM 1628 CG    CG    . ASN ASN ASN A A 219 219 . 108.683 106.203 25.763  1.00 14.06
1 . .
ATOM 1629 OD1   OD1   . ASN ASN ASN A A 219 219 . 109.853 105.713 25.802  1.00 18.28
1 . .
ATOM 1630 ND2   ND2   . ASN ASN ASN A A 219 219 . 107.806 105.836 24.870  1.00 7.83
1 . .
ATOM 1631 C     C     . ASN ASN ASN A A 219 219 . 107.876 109.832 26.851  1.00 13.81
1 . .
ATOM 1632 O     O     . ASN ASN ASN A A 219 219 . 106.681 110.171 26.998  1.00 10.93
1 . .
ATOM 1633 N     N     . SER SER SER A A 220 220 . 108.884 110.459 27.473  1.00 12.84
1 . .
ATOM 1634 CA    CA    . SER SER SER A A 220 220 . 108.589 111.665 28.255  1.00 13.41
1 . .
ATOM 1635 CB    CB    . SER SER SER A A 220 220 . 109.879 112.135 29.003  1.00 13.67
1 . .
ATOM 1636 OG    OG    . SER SER SER A A 220 220 . 110.832 112.429 27.974  1.00 16.87
1 . .
ATOM 1637 C     C     . SER SER SER A A 220 220 . 108.004 112.778 27.363  1.00 12.31
1 . .
ATOM 1638 O     O     . SER SER SER A A 220 220 . 107.187 113.572 27.872  1.00 14.82
1 . .
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ATOM 1639 N     N     . GLU GLU GLU A A 221 221 . 108.349 112.851 26.061  1.00 13.04
1 . .
ATOM 1640 CA    CA    . GLU GLU GLU A A 221 221 . 107.853 113.923 25.199  1.00 12.56
1 . .
ATOM 1641 CB    CB    . GLU GLU GLU A A 221 221 . 108.682 113.991 23.941  1.00 12.93
1 . .
ATOM 1642 CG    CG    . GLU GLU GLU A A 221 221 . 108.184 114.910 22.865  1.00 13.18
1 . .
ATOM 1643 CD    CD    . GLU GLU GLU A A 221 221 . 108.143 116.387 23.304  1.00 15.55
1 . .
ATOM 1644 OE1   OE1   . GLU GLU GLU A A 221 221 . 108.577 116.718 24.446  1.00 15.12
1 . .
ATOM 1645 OE2   OE2   . GLU GLU GLU A A 221 221 . 107.661 117.230 22.524  1.00 17.13
1 . .
ATOM 1646 C     C     . GLU GLU GLU A A 221 221 . 106.366 113.604 24.857  1.00 11.76
1 . .
ATOM 1647 O     O     . GLU GLU GLU A A 221 221 . 105.549 114.505 24.746  1.00 11.38
1 . .
ATOM 1648 N     N     . ALA ALA ALA A A 222 222 . 106.022 112.317 24.721  1.00 10.50
1 . .
ATOM 1649 CA    CA    . ALA ALA ALA A A 222 222 . 104.606 111.986 24.509  1.00 10.77
1 . .
ATOM 1650 CB    CB    . ALA ALA ALA A A 222 222 . 104.428 110.457 24.231  1.00 10.66
1 . .
ATOM 1651 C     C     . ALA ALA ALA A A 222 222 . 103.796 112.457 25.698  1.00 10.46
1 . .
ATOM 1652 O     O     . ALA ALA ALA A A 222 222 . 102.711 113.071 25.552  1.00 11.17
1 . .
ATOM 1653 N     N     . LEU LEU LEU A A 223 223 . 104.298 112.206 26.899  1.00 9.41
1 . .
ATOM 1654 CA    CA    . LEU LEU LEU A A 223 223 . 103.576 112.629 28.115  1.00 10.24
1 . .
ATOM 1655 CB    CB    . LEU LEU LEU A A 223 223 . 104.331 112.124 29.374  1.00 10.59
1 . .
ATOM 1656 CG    CG    . LEU LEU LEU A A 223 223 . 104.217 110.607 29.554  1.00 10.15
1 . .
ATOM 1657 CD1   CD1   . LEU LEU LEU A A 223 223 . 105.142 110.119 30.600  1.00 10.90
1 . .
ATOM 1658 CD2   CD2   . LEU LEU LEU A A 223 223 . 102.729 110.302 30.045  1.00 10.22
1 . .
ATOM 1659 C     C     . LEU LEU LEU A A 223 223 . 103.491 114.154 28.147  1.00 11.13
1 . .
ATOM 1660 O     O     . LEU LEU LEU A A 223 223 . 102.469 114.734 28.584  1.00 11.39
1 . .
ATOM 1661 N     N     . GLU GLU GLU A A 224 224 . 104.598 114.826 27.805  1.00 12.23
1 . .
ATOM 1662 CA    CA    . GLU GLU GLU A A 224 224 . 104.593 116.298 27.787  1.00 11.06
1 . .
ATOM 1663 CB    CB    . GLU GLU GLU A A 224 224 . 105.971 116.829 27.384  1.00 12.61
1 . .
ATOM 1664 CG    CG    . GLU GLU GLU A A 224 224 . 105.995 118.315 27.301  1.00 16.66
1 . .
ATOM 1665 CD    CD    . GLU GLU GLU A A 224 224 . 106.011 118.982 28.642  1.00 22.64
1 . .
ATOM 1666 OE1   OE1   . GLU GLU GLU A A 224 224 . 105.871 120.225 28.662  1.00 27.95
1 . .
ATOM 1667 OE2   OE2   . GLU GLU GLU A A 224 224 . 106.176 118.322 29.699  1.00 22.01
1 . .
ATOM 1668 C     C     . GLU GLU GLU A A 224 224 . 103.497 116.855 26.840  1.00 11.10
1 . .
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ATOM 1669 O     O     . GLU GLU GLU A A 224 224 . 102.758 117.797 27.192  1.00 11.01
1 . .
ATOM 1670 N     N     . LEU LEU LEU A A 225 225 . 103.366 116.273 25.660  1.00 8.90
1 . .
ATOM 1671 CA    CA    . LEU LEU LEU A A 225 225 . 102.372 116.754 24.676  1.00 10.25
1 . .
ATOM 1672 CB    CB    . LEU LEU LEU A A 225 225 . 102.551 115.988 23.356  1.00 11.29
1 . .
ATOM 1673 CG    CG    . LEU LEU LEU A A 225 225 . 103.853 116.303 22.540  1.00 9.78
1 . .
ATOM 1674 CD1   CD1   . LEU LEU LEU A A 225 225 . 103.970 115.188 21.460  1.00 12.73
1 . .
ATOM 1675 CD2   CD2   . LEU LEU LEU A A 225 225 . 103.682 117.654 21.895  1.00 11.19
1 . .
ATOM 1676 C     C     . LEU LEU LEU A A 225 225 . 100.990 116.521 25.231  1.00 10.66
1 . .
ATOM 1677 O     O     . LEU LEU LEU A A 225 225 . 100.084 117.374 25.088  1.00 9.97
1 . .
ATOM 1678 N     N     . VAL VAL VAL A A 226 226 . 100.816 115.373 25.888  1.00 11.13
1 . .
ATOM 1679 CA    CA    . VAL VAL VAL A A 226 226 . 99.468  115.076 26.420  1.00 10.59
1 . .
ATOM 1680 CB    CB    . VAL VAL VAL A A 226 226 . 99.283  113.598 26.849  1.00 10.86
1 . .
ATOM 1681 CG1   CG1   . VAL VAL VAL A A 226 226 . 98.040  113.355 27.630  1.00 11.72
1 . .
ATOM 1682 CG2   CG2   . VAL VAL VAL A A 226 226 . 99.278  112.704 25.580  1.00 9.85
1 . .
ATOM 1683 C     C     . VAL VAL VAL A A 226 226 . 99.145  116.035 27.556  1.00 11.41
1 . .
ATOM 1684 O     O     . VAL VAL VAL A A 226 226 . 98.042  116.620 27.578  1.00 11.35
1 . .
ATOM 1685 N     N     . LYS LYS LYS A A 227 227 . 100.092 116.281 28.450  1.00 11.31
1 . .
ATOM 1686 CA    CA    . LYS LYS LYS A A 227 227 . 99.787  117.167 29.565  1.00 12.41
1 . .
ATOM 1687 CB    CB    . LYS LYS LYS A A 227 227 . 100.975 117.156 30.530  1.00 13.08
1 . .
ATOM 1688 CG    CG    . LYS LYS LYS A A 227 227 . 100.982 118.259 31.608  1.00 18.52
1 . .
ATOM 1689 CD    CD    . LYS LYS LYS A A 227 227 . 102.482 118.459 32.125  1.00 26.47
1 . .
ATOM 1690 CE    CE    . LYS LYS LYS A A 227 227 . 102.583 119.028 33.588  1.00 33.28
1 . .
ATOM 1691 NZ    NZ    . LYS LYS LYS A A 227 227 . 102.939 117.935 34.633  1.00 33.33
1 . .
ATOM 1692 C     C     . LYS LYS LYS A A 227 227 . 99.522  118.601 29.034  1.00 11.88
1 . .
ATOM 1693 O     O     . LYS LYS LYS A A 227 227 . 98.617  119.306 29.521  1.00 12.61
1 . .
ATOM 1694 N     N     . GLU GLU GLU A A 228 228 . 100.295 119.035 28.043  1.00 11.55
1 . .
ATOM 1695 CA    CA    . GLU GLU GLU A A 228 228 . 100.068 120.353 27.422  1.00 11.67
1 . .
ATOM 1696 CB    CB    . GLU GLU GLU A A 228 228 . 101.113 120.609 26.340  1.00 13.27
1 . .
ATOM 1697 CG    CG    . GLU GLU GLU A A 228 228 . 100.910 121.963 25.660  1.00 18.06
1 . .
ATOM 1698 CD    CD    . GLU GLU GLU A A 228 228 . 101.215 123.127 26.599  1.00 26.80
1 . .
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ATOM 1699 OE1   OE1   . GLU GLU GLU A A 228 228 . 102.039 122.955 27.548  1.00 29.89
1 . .
ATOM 1700 OE2   OE2   . GLU GLU GLU A A 228 228 . 100.614 124.216 26.387  1.00 31.68
1 . .
ATOM 1701 C     C     . GLU GLU GLU A A 228 228 . 98.641  120.462 26.853  1.00 12.05
1 . .
ATOM 1702 O     O     . GLU GLU GLU A A 228 228 . 97.965  121.479 27.063  1.00 11.52
1 . .
ATOM 1703 N     N     . ALA ALA ALA A A 229 229 . 98.173  119.406 26.150  1.00 11.38
1 . .
ATOM 1704 CA    CA    . ALA ALA ALA A A 229 229 . 96.815  119.446 25.556  1.00 10.75
1 . .
ATOM 1705 CB    CB    . ALA ALA ALA A A 229 229 . 96.603  118.199 24.618  1.00 10.13
1 . .
ATOM 1706 C     C     . ALA ALA ALA A A 229 229 . 95.743  119.459 26.626  1.00 10.08
1 . .
ATOM 1707 O     O     . ALA ALA ALA A A 229 229 . 94.744  120.162 26.496  1.00 11.27
1 . .
ATOM 1708 N     N     . ILE ILE ILE A A 230 230 . 95.927  118.679 27.696  1.00 8.42
1 . .
ATOM 1709 CA    CA    . ILE ILE ILE A A 230 230 . 95.010  118.740 28.844  1.00 10.23
1 . .
ATOM 1710 CB    CB    . ILE ILE ILE A A 230 230 . 95.418  117.761 29.967  1.00 8.00
1 . .
ATOM 1711 CG1   CG1   . ILE ILE ILE A A 230 230 . 95.154  116.353 29.530  1.00 6.87
1 . .
ATOM 1712 CD1   CD1   . ILE ILE ILE A A 230 230 . 95.841  115.198 30.534  1.00 11.60
1 . .
ATOM 1713 CG2   CG2   . ILE ILE ILE A A 230 230 . 94.636  118.008 31.234  1.00 10.33
1 . .
ATOM 1714 C     C     . ILE ILE ILE A A 230 230 . 94.885  120.148 29.413  1.00 10.76
1 . .
ATOM 1715 O     O     . ILE ILE ILE A A 230 230 . 93.760  120.667 29.601  1.00 10.74
1 . .
ATOM 1716 N     N     . ASP ASP ASP A A 231 231 . 96.048  120.791 29.619  1.00 10.54
1 . .
ATOM 1717 CA    CA    . ASP ASP ASP A A 231 231 . 96.066  122.142 30.218  1.00 13.07
1 . .
ATOM 1718 CB    CB    . ASP ASP ASP A A 231 231 . 97.512  122.532 30.590  1.00 14.23
1 . .
ATOM 1719 CG    CG    . ASP ASP ASP A A 231 231 . 98.115  121.655 31.741  1.00 20.14
1 . .
ATOM 1720 OD1   OD1   . ASP ASP ASP A A 231 231 . 99.356  121.829 32.085  1.00 26.72
1 . .
ATOM 1721 OD2   OD2   . ASP ASP ASP A A 231 231 . 97.395  120.798 32.355  1.00 24.60
1 . .
ATOM 1722 C     C     . ASP ASP ASP A A 231 231 . 95.420  123.185 29.257  1.00 13.53
1 . .
ATOM 1723 O     O     . ASP ASP ASP A A 231 231 . 94.625  124.033 29.718  1.00 14.25
1 . .
ATOM 1724 N     N     . LYS LYS LYS A A 232 232 . 95.731  123.106 27.953  1.00 12.06
1 . .
ATOM 1725 CA    CA    . LYS LYS LYS A A 232 232 . 95.263  124.101 26.996  1.00 12.15
1 . .
ATOM 1726 CB    CB    . LYS LYS LYS A A 232 232 . 95.932  123.851 25.640  1.00 11.64
1 . .
ATOM 1727 CG    CG    . LYS LYS LYS A A 232 232 . 95.484  124.864 24.631  1.00 17.74
1 . .
ATOM 1728 CD    CD    . LYS LYS LYS A A 232 232 . 96.333  124.855 23.304  1.00 26.14
1 . .
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ATOM 1729 CE    CE    . LYS LYS LYS A A 232 232 . 95.521  125.691 22.322  1.00 31.70
1 . .
ATOM 1730 NZ    NZ    . LYS LYS LYS A A 232 232 . 96.359  126.092 21.214  1.00 35.97
1 . .
ATOM 1731 C     C     . LYS LYS LYS A A 232 232 . 93.745  123.961 26.834  1.00 12.40
1 . .
ATOM 1732 O     O     . LYS LYS LYS A A 232 232 . 93.025  124.957 26.551  1.00 11.30
1 . .
ATOM 1733 N     N     . ALA ALA ALA A A 233 233 . 93.251  122.724 27.012  1.00 11.16
1 . .
ATOM 1734 CA    CA    . ALA ALA ALA A A 233 233 . 91.786  122.472 26.888  1.00 11.00
1 . .
ATOM 1735 CB    CB    . ALA ALA ALA A A 233 233 . 91.512  120.922 26.594  1.00 9.73
1 . .
ATOM 1736 C     C     . ALA ALA ALA A A 233 233 . 91.038  122.874 28.138  1.00 11.63
1 . .
ATOM 1737 O     O     . ALA ALA ALA A A 233 233 . 89.767  122.932 28.154  1.00 12.18
1 . .
ATOM 1738 N     N     . GLY GLY GLY A A 234 234 . 91.796  123.114 29.206  1.00 12.47
1 . .
ATOM 1739 CA    CA    . GLY GLY GLY A A 234 234 . 91.183  123.611 30.475  1.00 12.05
1 . .
ATOM 1740 C     C     . GLY GLY GLY A A 234 234 . 90.755  122.574 31.469  1.00 11.13
1 . .
ATOM 1741 O     O     . GLY GLY GLY A A 234 234 . 89.921  122.884 32.370  1.00 12.87
1 . .
ATOM 1742 N     N     . TYR TYR TYR A A 235 235 . 91.345  121.377 31.388  1.00 9.67
1 . .
ATOM 1743 CA    CA    . TYR TYR TYR A A 235 235 . 90.842  120.282 32.158  1.00 9.37
1 . .
ATOM 1744 CB    CB    . TYR TYR TYR A A 235 235 . 90.284  119.210 31.212  1.00 10.35
1 . .
ATOM 1745 CG    CG    . TYR TYR TYR A A 235 235 . 89.060  119.671 30.494  1.00 8.56
1 . .
ATOM 1746 CD1   CD1   . TYR TYR TYR A A 235 235 . 89.003  119.633 29.057  1.00 13.34
1 . .
ATOM 1747 CE1   CE1   . TYR TYR TYR A A 235 235 . 87.872  120.090 28.332  1.00 10.28
1 . .
ATOM 1748 CZ    CZ    . TYR TYR TYR A A 235 235 . 86.752  120.543 29.085  1.00 13.22
1 . .
ATOM 1749 OH    OH    . TYR TYR TYR A A 235 235 . 85.626  120.925 28.409  1.00 14.30
1 . .
ATOM 1750 CE2   CE2   . TYR TYR TYR A A 235 235 . 86.773  120.563 30.513  1.00 12.76
1 . .
ATOM 1751 CD2   CD2   . TYR TYR TYR A A 235 235 . 87.944  120.087 31.200  1.00 10.94
1 . .
ATOM 1752 C     C     . TYR TYR TYR A A 235 235 . 91.892  119.684 33.083  1.00 10.62
1 . .
ATOM 1753 O     O     . TYR TYR TYR A A 235 235 . 91.787  118.534 33.458  1.00 10.01
1 . .
ATOM 1754 N     N     . THR THR THR A A 236 236 . 92.898  120.461 33.461  1.00 12.21
1 . .
ATOM 1755 CA    CA    . THR THR THR A A 236 236 . 93.947  119.916 34.351  1.00 12.90
1 . .
ATOM 1756 CB    CB    . THR THR THR A A 236 236 . 94.879  121.071 34.789  1.00 14.65
1 . .
ATOM 1757 OG1   OG1   . THR THR THR A A 236 236 . 95.370  121.720 33.602  1.00 18.89
1 . .
ATOM 1758 CG2   CG2   . THR THR THR A A 236 236 . 95.996  120.595 35.686  1.00 13.74
1 . .
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ATOM 1759 C     C     . THR THR THR A A 236 236 . 93.398  119.238 35.594  1.00 14.03
1 . .
ATOM 1760 O     O     . THR THR THR A A 236 236 . 93.954  118.218 36.049  1.00 13.69
1 . .
ATOM 1761 N     N     . GLU GLU GLU A A 237 237 . 92.288  119.759 36.143  1.00 14.78
1 . .
ATOM 1762 CA    CA    . GLU GLU GLU A A 237 237 . 91.834  119.194 37.438  1.00 17.98
1 . .
ATOM 1763 CB    CB    . GLU GLU GLU A A 237 237 . 91.089  120.272 38.287  1.00 21.07
1 . .
ATOM 1764 C     C     . GLU GLU GLU A A 237 237 . 90.995  117.914 37.186  1.00 18.33
1 . .
ATOM 1765 O     O     . GLU GLU GLU A A 237 237 . 90.768  117.083 38.114  1.00 20.92
1 . .
ATOM 1766 N     N     . LYS LYS LYS A A 238 238 . 90.641  117.648 35.932  1.00 15.02
1 . .
ATOM 1767 CA    CA    . LYS LYS LYS A A 238 238 . 89.613  116.616 35.725  1.00 11.54
1 . .
ATOM 1768 CB    CB    . LYS LYS LYS A A 238 238 . 88.430  117.249 34.987  1.00 12.24
1 . .
ATOM 1769 CG    CG    . LYS LYS LYS A A 238 238 . 87.606  118.266 35.866  1.00 16.37
1 . .
ATOM 1770 CD    CD    . LYS LYS LYS A A 238 238 . 86.299  118.620 34.983  1.00 18.81
1 . .
ATOM 1771 CE    CE    . LYS LYS LYS A A 238 238 . 85.117  119.178 35.748  1.00 25.87
1 . .
ATOM 1772 NZ    NZ    . LYS LYS LYS A A 238 238 . 85.754  120.339 36.267  1.00 30.64
1 . .
ATOM 1773 C     C     . LYS LYS LYS A A 238 238 . 90.087  115.460 34.865  1.00 10.70
1 . .
ATOM 1774 O     O     . LYS LYS LYS A A 238 238 . 89.379  114.468 34.746  1.00 9.94
1 . .
ATOM 1775 N     N     . ILE ILE ILE A A 239 239 . 91.299  115.571 34.320  1.00 9.25
1 . .
ATOM 1776 CA    CA    . ILE ILE ILE A A 239 239 . 91.766  114.525 33.437  1.00 9.30
1 . .
ATOM 1777 CB    CB    . ILE ILE ILE A A 239 239 . 91.732  114.982 31.920  1.00 10.95
1 . .
ATOM 1778 CG1   CG1   . ILE ILE ILE A A 239 239 . 90.268  115.340 31.484  1.00 11.28
1 . .
ATOM 1779 CD1   CD1   . ILE ILE ILE A A 239 239 . 90.114  116.043 30.065  1.00 13.53
1 . .
ATOM 1780 CG2   CG2   . ILE ILE ILE A A 239 239 . 92.364  113.824 30.999  1.00 10.39
1 . .
ATOM 1781 C     C     . ILE ILE ILE A A 239 239 . 93.120  114.087 33.876  1.00 10.14
1 . .
ATOM 1782 O     O     . ILE ILE ILE A A 239 239 . 94.014  114.921 34.115  1.00 12.32
1 . .
ATOM 1783 N     N     . VAL VAL VAL A A 240 240 . 93.273  112.770 33.976  1.00 8.63
1 . .
ATOM 1784 CA    CA    . VAL VAL VAL A A 240 240 . 94.628  112.161 34.355  1.00 9.00
1 . .
ATOM 1785 CB    CB    . VAL VAL VAL A A 240 240 . 94.565  111.481 35.731  1.00 8.46
1 . .
ATOM 1786 CG1   CG1   . VAL VAL VAL A A 240 240 . 94.279  112.595 36.783  1.00 12.17
1 . .
ATOM 1787 CG2   CG2   . VAL VAL VAL A A 240 240 . 93.541  110.336 35.751  1.00 10.44
1 . .
ATOM 1788 C     C     . VAL VAL VAL A A 240 240 . 95.123  111.192 33.264  1.00 8.14
1 . .
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ATOM 1789 O     O     . VAL VAL VAL A A 240 240 . 94.482  111.024 32.243  1.00 9.28
1 . .
ATOM 1790 N     N     . ILE ILE ILE A A 241 241 . 96.340  110.678 33.421  1.00 7.71
1 . .
ATOM 1791 CA    CA    . ILE ILE ILE A A 241 241 . 97.021  109.965 32.332  1.00 8.08
1 . .
ATOM 1792 CB    CB    . ILE ILE ILE A A 241 241 . 98.426  110.605 32.072  1.00 6.80
1 . .
ATOM 1793 CG1   CG1   . ILE ILE ILE A A 241 241 . 98.175  112.027 31.514  1.00 10.64
1 . .
ATOM 1794 CD1   CD1   . ILE ILE ILE A A 241 241 . 99.512  112.866 31.142  1.00 14.22
1 . .
ATOM 1795 CG2   CG2   . ILE ILE ILE A A 241 241 . 99.153  109.737 31.009  1.00 10.00
1 . .
ATOM 1796 C     C     . ILE ILE ILE A A 241 241 . 97.215  108.477 32.729  1.00 8.41
1 . .
ATOM 1797 O     O     . ILE ILE ILE A A 241 241 . 97.544  108.167 33.880  1.00 10.83
1 . .
ATOM 1798 N     N     . GLY GLY GLY A A 242 242 . 97.028  107.586 31.745  1.00 7.36
1 . .
ATOM 1799 CA    CA    . GLY GLY GLY A A 242 242 . 97.374  106.174 31.905  1.00 7.10
1 . .
ATOM 1800 C     C     . GLY GLY GLY A A 242 242 . 98.346  105.828 30.772  1.00 7.60
1 . .
ATOM 1801 O     O     . GLY GLY GLY A A 242 242 . 98.412  106.521 29.743  1.00 9.52
1 . .
ATOM 1802 N     N     . MET MET MET A A 243 243 . 99.155  104.771 30.978  1.00 9.06
1 . .
ATOM 1803 CA    CA    . MET MET MET A A 243 243 . 100.067 104.291 29.974  1.00 8.09
1 . .
ATOM 1804 CB    CB    . MET MET MET A A 243 243 . 101.533 104.566 30.379  1.00 8.10
1 . .
ATOM 1805 CG    CG    . MET MET MET A A 243 243 . 101.815 106.041 30.501  1.00 11.12
1 . .
ATOM 1806 SD    SD    . MET MET MET A A 243 243 . 103.488 106.338 31.237  1.00 13.09
1 . .
ATOM 1807 CE    CE    . MET MET MET A A 243 243 . 104.513 105.660 29.966  1.00 13.44
1 . .
ATOM 1808 C     C     . MET MET MET A A 243 243 . 99.923  102.787 29.791  1.00 8.55
1 . .
ATOM 1809 O     O     . MET MET MET A A 243 243 . 99.691  102.068 30.748  1.00 9.26
1 . .
ATOM 1810 N     N     . ASP ASP ASP A A 244 244 . 100.106 102.333 28.544  1.00 9.21
1 . .
ATOM 1811 CA    CA    . ASP ASP ASP A A 244 244 . 100.371 100.897 28.285  1.00 8.91
1 . .
ATOM 1812 CB    CB    . ASP ASP ASP A A 244 244 . 99.302  100.261 27.401  1.00 9.86
1 . .
ATOM 1813 CG    CG    . ASP ASP ASP A A 244 244 . 99.590  98.776  27.117  1.00 10.35
1 . .
ATOM 1814 OD1   OD1   . ASP ASP ASP A A 244 244 . 98.759  98.134  26.419  1.00 8.86
1 . .
ATOM 1815 OD2   OD2   . ASP ASP ASP A A 244 244 . 100.613 98.240  27.690  1.00 9.72
1 . .
ATOM 1816 C     C     . ASP ASP ASP A A 244 244 . 101.765 100.867 27.636  1.00 9.55
1 . .
ATOM 1817 O     O     . ASP ASP ASP A A 244 244 . 101.972 101.304 26.496  1.00 9.67
1 . .
ATOM 1818 N     N     . VAL VAL VAL A A 245 245 . 102.741 100.379 28.395  1.00 8.29
1 . .
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ATOM 1819 CA    CA    . VAL VAL VAL A A 245 245 . 104.121 100.310 27.866  1.00 9.18
1 . .
ATOM 1820 CB    CB    . VAL VAL VAL A A 245 245 . 105.052 100.053 29.062  1.00 5.51
1 . .
ATOM 1821 CG1   CG1   . VAL VAL VAL A A 245 245 . 106.500 99.921  28.624  1.00 7.14
1 . .
ATOM 1822 CG2   CG2   . VAL VAL VAL A A 245 245 . 104.973 101.273 30.053  1.00 9.92
1 . .
ATOM 1823 C     C     . VAL VAL VAL A A 245 245 . 104.240 99.179  26.861  1.00 8.72
1 . .
ATOM 1824 O     O     . VAL VAL VAL A A 245 245 . 104.991 99.300  25.859  1.00 8.82
1 . .
ATOM 1825 N     N     . ALA ALA ALA A A 246 246 . 103.520 98.071  27.165  1.00 10.34
1 . .
ATOM 1826 CA    CA    . ALA ALA ALA A A 246 246 . 103.619 96.804  26.382  1.00 8.91
1 . .
ATOM 1827 CB    CB    . ALA ALA ALA A A 246 246 . 102.991 96.957  25.033  1.00 9.85
1 . .
ATOM 1828 C     C     . ALA ALA ALA A A 246 246 . 105.077 96.375  26.266  1.00 9.61
1 . .
ATOM 1829 O     O     . ALA ALA ALA A A 246 246 . 105.587 96.104  25.160  1.00 8.22
1 . .
ATOM 1830 N     N     . ALA ALA ALA A A 247 247 . 105.725 96.308  27.426  1.00 9.99
1 . .
ATOM 1831 CA    CA    . ALA ALA ALA A A 247 247 . 107.201 96.079  27.470  1.00 11.00
1 . .
ATOM 1832 CB    CB    . ALA ALA ALA A A 247 247 . 107.670 96.233  28.876  1.00 11.18
1 . .
ATOM 1833 C     C     . ALA ALA ALA A A 247 247 . 107.649 94.729  26.858  1.00 11.22
1 . .
ATOM 1834 O     O     . ALA ALA ALA A A 247 247 . 108.827 94.622  26.464  1.00 12.07
1 . .
ATOM 1835 N     N     . SER SER SER A A 248 248 . 106.767 93.714  26.780  1.00 10.51
1 . .
ATOM 1836 CA    CA    . SER SER SER A A 248 248 . 107.124 92.457  26.093  1.00 11.05
1 . .
ATOM 1837 CB    CB    . SER SER SER A A 248 248 . 106.017 91.409  26.158  1.00 9.17
1 . .
ATOM 1838 OG    OG    . SER SER SER A A 248 248 . 105.631 91.184  27.534  1.00 10.44
1 . .
ATOM 1839 C     C     . SER SER SER A A 248 248 . 107.530 92.704  24.646  1.00 12.52
1 . .
ATOM 1840 O     O     . SER SER SER A A 248 248 . 108.319 91.885  24.059  1.00 10.69
1 . .
ATOM 1841 N     N     . GLU GLU GLU A A 249 249 . 107.050 93.822  24.063  1.00 12.46
1 . .
ATOM 1842 CA    CA    . GLU GLU GLU A A 249 249 . 107.369 94.080  22.658  1.00 10.18
1 . .
ATOM 1843 CB    CB    . GLU GLU GLU A A 249 249 . 106.484 95.169  22.110  1.00 10.52
1 . .
ATOM 1844 CG    CG    . GLU GLU GLU A A 249 249 . 105.037 94.776  21.998  1.00 8.26
1 . .
ATOM 1845 CD    CD    . GLU GLU GLU A A 249 249 . 104.812 93.624  21.033  1.00 11.13
1 . .
ATOM 1846 OE1   OE1   . GLU GLU GLU A A 249 249 . 105.084 93.802  19.845  1.00 19.32
1 . .
ATOM 1847 OE2   OE2   . GLU GLU GLU A A 249 249 . 104.339 92.528  21.407  1.00 11.75
1 . .
ATOM 1848 C     C     . GLU GLU GLU A A 249 249 . 108.846 94.516  22.441  1.00 11.43
1 . .
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ATOM 1849 O     O     . GLU GLU GLU A A 249 249 . 109.355 94.467  21.306  1.00 13.29
1 . .
ATOM 1850 N     N     . PHE PHE PHE A A 250 250 . 109.493 94.961  23.516  1.00 11.34
1 . .
ATOM 1851 CA    CA    . PHE PHE PHE A A 250 250 . 110.873 95.481  23.368  1.00 12.87
1 . .
ATOM 1852 CB    CB    . PHE PHE PHE A A 250 250 . 110.923 97.034  23.339  1.00 11.53
1 . .
ATOM 1853 CG    CG    . PHE PHE PHE A A 250 250 . 110.310 97.731  24.526  1.00 12.71
1 . .
ATOM 1854 CD1   CD1   . PHE PHE PHE A A 250 250 . 109.048 98.365  24.385  1.00 13.26
1 . .
ATOM 1855 CE1   CE1   . PHE PHE PHE A A 250 250 . 108.506 99.068  25.432  1.00 14.18
1 . .
ATOM 1856 CZ    CZ    . PHE PHE PHE A A 250 250 . 109.148 99.140  26.642  1.00 11.40
1 . .
ATOM 1857 CE2   CE2   . PHE PHE PHE A A 250 250 . 110.389 98.539  26.834  1.00 12.94
1 . .
ATOM 1858 CD2   CD2   . PHE PHE PHE A A 250 250 . 110.970 97.813  25.769  1.00 11.48
1 . .
ATOM 1859 C     C     . PHE PHE PHE A A 250 250 . 111.840 94.870  24.352  1.00 12.68
1 . .
ATOM 1860 O     O     . PHE PHE PHE A A 250 250 . 112.974 95.383  24.564  1.00 14.41
1 . .
ATOM 1861 N     N     . TYR TYR TYR A A 251 251 . 111.459 93.724  24.870  1.00 14.04
1 . .
ATOM 1862 CA    CA    . TYR TYR TYR A A 251 251 . 112.357 92.936  25.749  1.00 13.83
1 . .
ATOM 1863 CB    CB    . TYR TYR TYR A A 251 251 . 111.520 91.976  26.554  1.00 14.36
1 . .
ATOM 1864 CG    CG    . TYR TYR TYR A A 251 251 . 112.266 91.220  27.628  1.00 15.55
1 . .
ATOM 1865 CD1   CD1   . TYR TYR TYR A A 251 251 . 112.955 91.905  28.637  1.00 14.18
1 . .
ATOM 1866 CE1   CE1   . TYR TYR TYR A A 251 251 . 113.596 91.207  29.648  1.00 19.14
1 . .
ATOM 1867 CZ    CZ    . TYR TYR TYR A A 251 251 . 113.523 89.854  29.666  1.00 22.84
1 . .
ATOM 1868 OH    OH    . TYR TYR TYR A A 251 251 . 114.179 89.226  30.663  1.00 27.97
1 . .
ATOM 1869 CE2   CE2   . TYR TYR TYR A A 251 251 . 112.850 89.138  28.678  1.00 21.45
1 . .
ATOM 1870 CD2   CD2   . TYR TYR TYR A A 251 251 . 112.228 89.824  27.667  1.00 16.41
1 . .
ATOM 1871 C     C     . TYR TYR TYR A A 251 251 . 113.352 92.163  24.866  1.00 15.03
1 . .
ATOM 1872 O     O     . TYR TYR TYR A A 251 251 . 112.948 91.382  23.991  1.00 14.73
1 . .
ATOM 1873 N     N     . ARG ARG ARG A A 252 252 . 114.653 92.399  25.084  1.00 16.44
1 . .
ATOM 1874 CA    CA    . ARG ARG ARG A A 252 252 . 115.707 91.856  24.197  1.00 19.47
1 . .
ATOM 1875 CB    CB    . ARG ARG ARG A A 252 252 . 116.224 92.886  23.214  1.00 20.59
1 . .
ATOM 1876 CG    CG    . ARG ARG ARG A A 252 252 . 115.205 93.564  22.292  1.00 22.73
1 . .
ATOM 1877 CD    CD    . ARG ARG ARG A A 252 252 . 114.795 92.728  21.135  1.00 31.67
1 . .
ATOM 1878 NE    NE    . ARG ARG ARG A A 252 252 . 113.825 93.499  20.382  1.00 32.04
1 . .
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ATOM 1879 CZ    CZ    . ARG ARG ARG A A 252 252 . 112.506 93.372  20.537  1.00 30.13
1 . .
ATOM 1880 NH1   NH1   . ARG ARG ARG A A 252 252 . 111.987 92.426  21.366  1.00 28.28
1 . .
ATOM 1881 NH2   NH2   . ARG ARG ARG A A 252 252 . 111.732 94.141  19.814  1.00 23.96
1 . .
ATOM 1882 C     C     . ARG ARG ARG A A 252 252 . 116.877 91.458  25.052  1.00 23.09
1 . .
ATOM 1883 O     O     . ARG ARG ARG A A 252 252 . 117.387 92.267  25.858  1.00 22.24
1 . .
ATOM 1884 N     N     . ASP ASP ASP A A 253 253 . 117.273 90.194  24.853  1.00 25.70
1 . .
ATOM 1885 CA    CA    . ASP ASP ASP A A 253 253 . 118.294 89.490  25.700  1.00 28.36
1 . .
ATOM 1886 CB    CB    . ASP ASP ASP A A 253 253 . 119.629 89.323  24.960  1.00 30.66
1 . .
ATOM 1887 CG    CG    . ASP ASP ASP A A 253 253 . 120.082 90.599  24.232  1.00 35.64
1 . .
ATOM 1888 OD1   OD1   . ASP ASP ASP A A 253 253 . 120.306 90.540  22.958  1.00 38.77
1 . .
ATOM 1889 OD2   OD2   . ASP ASP ASP A A 253 253 . 120.207 91.661  24.942  1.00 42.00
1 . .
ATOM 1890 C     C     . ASP ASP ASP A A 253 253 . 118.396 90.096  27.136  1.00 27.36
1 . .
ATOM 1891 O     O     . ASP ASP ASP A A 253 253 . 119.469 90.663  27.580  1.00 28.70
1 . .
ATOM 1892 N     N     . GLY GLY GLY A A 254 254 . 117.265 89.961  27.844  1.00 23.79
1 . .
ATOM 1893 CA    CA    . GLY GLY GLY A A 254 254 . 117.155 90.260  29.264  1.00 22.31
1 . .
ATOM 1894 C     C     . GLY GLY GLY A A 254 254 . 117.108 91.741  29.631  1.00 19.85
1 . .
ATOM 1895 O     O     . GLY GLY GLY A A 254 254 . 117.103 92.086  30.822  1.00 20.28
1 . .
ATOM 1896 N     N     . LYS LYS LYS A A 255 255 . 117.143 92.603  28.628  1.00 18.08
1 . .
ATOM 1897 CA    CA    . LYS LYS LYS A A 255 255 . 117.088 94.031  28.826  1.00 17.57
1 . .
ATOM 1898 CB    CB    . LYS LYS LYS A A 255 255 . 118.430 94.684  28.380  1.00 18.81
1 . .
ATOM 1899 CG    CG    . LYS LYS LYS A A 255 255 . 119.611 94.261  29.378  1.00 20.78
1 . .
ATOM 1900 CD    CD    . LYS LYS LYS A A 255 255 . 120.996 94.791  29.003  1.00 25.47
1 . .
ATOM 1901 CE    CE    . LYS LYS LYS A A 255 255 . 121.019 96.337  29.178  1.00 29.50
1 . .
ATOM 1902 NZ    NZ    . LYS LYS LYS A A 255 255 . 122.342 97.020  29.182  1.00 34.97
1 . .
ATOM 1903 C     C     . LYS LYS LYS A A 255 255 . 115.896 94.604  28.022  1.00 17.19
1 . .
ATOM 1904 O     O     . LYS LYS LYS A A 255 255 . 115.169 93.854  27.351  1.00 16.99
1 . .
ATOM 1905 N     N     . TYR TYR TYR A A 256 256 . 115.805 95.934  27.981  1.00 15.06
1 . .
ATOM 1906 CA    CA    . TYR TYR TYR A A 256 256 . 114.672 96.639  27.312  1.00 14.51
1 . .
ATOM 1907 CB    CB    . TYR TYR TYR A A 256 256 . 113.809 97.290  28.404  1.00 12.89
1 . .
ATOM 1908 CG    CG    . TYR TYR TYR A A 256 256 . 113.129 96.239  29.266  1.00 13.52
1 . .
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ATOM 1909 CD1   CD1   . TYR TYR TYR A A 256 256 . 111.896 95.681  28.837  1.00 12.71
1 . .
ATOM 1910 CE1   CE1   . TYR TYR TYR A A 256 256 . 111.255 94.713  29.577  1.00 14.48
1 . .
ATOM 1911 CZ    CZ    . TYR TYR TYR A A 256 256 . 111.811 94.262  30.812  1.00 12.62
1 . .
ATOM 1912 OH    OH    . TYR TYR TYR A A 256 256 . 111.150 93.350  31.564  1.00 11.63
1 . .
ATOM 1913 CE2   CE2   . TYR TYR TYR A A 256 256 . 113.030 94.806  31.283  1.00 13.68
1 . .
ATOM 1914 CD2   CD2   . TYR TYR TYR A A 256 256 . 113.670 95.810  30.500  1.00 12.92
1 . .
ATOM 1915 C     C     . TYR TYR TYR A A 256 256 . 115.187 97.679  26.300  1.00 15.00
1 . .
ATOM 1916 O     O     . TYR TYR TYR A A 256 256 . 116.010 98.529  26.635  1.00 16.11
1 . .
ATOM 1917 N     N     . ASP ASP ASP A A 257 257 . 114.694 97.605  25.068  1.00 14.85
1 . .
ATOM 1918 CA    CA    . ASP ASP ASP A A 257 257 . 115.102 98.492  24.004  1.00 13.77
1 . .
ATOM 1919 CB    CB    . ASP ASP ASP A A 257 257 . 115.428 97.609  22.796  1.00 15.73
1 . .
ATOM 1920 CG    CG    . ASP ASP ASP A A 257 257 . 115.919 98.381  21.625  1.00 14.89
1 . .
ATOM 1921 OD1   OD1   . ASP ASP ASP A A 257 257 . 116.165 99.604  21.752  1.00 16.77
1 . .
ATOM 1922 OD2   OD2   . ASP ASP ASP A A 257 257 . 116.039 97.767  20.520  1.00 16.14
1 . .
ATOM 1923 C     C     . ASP ASP ASP A A 257 257 . 114.063 99.610  23.649  1.00 14.96
1 . .
ATOM 1924 O     O     . ASP ASP ASP A A 257 257 . 113.070 99.359  22.994  1.00 13.94
1 . .
ATOM 1925 N     N     . LEU LEU LEU A A 258 258 . 114.325 100.840 24.095  1.00 15.27
1 . .
ATOM 1926 CA    CA    . LEU LEU LEU A A 258 258 . 113.399 101.956 23.852  1.00 14.90
1 . .
ATOM 1927 CB    CB    . LEU LEU LEU A A 258 258 . 113.479 103.004 24.955  1.00 14.17
1 . .
ATOM 1928 CG    CG    . LEU LEU LEU A A 258 258 . 113.112 102.435 26.348  1.00 13.57
1 . .
ATOM 1929 CD1   CD1   . LEU LEU LEU A A 258 258 . 113.180 103.611 27.334  1.00 17.20
1 . .
ATOM 1930 CD2   CD2   . LEU LEU LEU A A 258 258 . 111.710 101.888 26.284  1.00 17.19
1 . .
ATOM 1931 C     C     . LEU LEU LEU A A 258 258 . 113.567 102.597 22.532  1.00 15.98
1 . .
ATOM 1932 O     O     . LEU LEU LEU A A 258 258 . 112.988 103.685 22.286  1.00 16.49
1 . .
ATOM 1933 N     N     . ASP ASP ASP A A 259 259 . 114.365 101.978 21.673  1.00 16.10
1 . .
ATOM 1934 CA    CA    . ASP ASP ASP A A 259 259 . 114.397 102.410 20.286  1.00 17.69
1 . .
ATOM 1935 CB    CB    . ASP ASP ASP A A 259 259 . 115.629 103.304 20.044  1.00 18.66
1 . .
ATOM 1936 CG    CG    . ASP ASP ASP A A 259 259 . 115.593 104.074 18.730  1.00 21.84
1 . .
ATOM 1937 OD1   OD1   . ASP ASP ASP A A 259 259 . 114.562 104.122 17.979  1.00 20.37
1 . .
ATOM 1938 OD2   OD2   . ASP ASP ASP A A 259 259 . 116.684 104.653 18.428  1.00 26.19
1 . .
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ATOM 1939 C     C     . ASP ASP ASP A A 259 259 . 114.309 101.162 19.395  1.00 17.28
1 . .
ATOM 1940 O     O     . ASP ASP ASP A A 259 259 . 114.919 101.101 18.332  1.00 18.56
1 . .
ATOM 1941 N     N     . PHE PHE PHE A A 260 260 . 113.430 100.206 19.779  1.00 17.39
1 . .
ATOM 1942 CA    CA    . PHE PHE PHE A A 260 260 . 113.334 98.898  19.107  1.00 15.68
1 . .
ATOM 1943 CB    CB    . PHE PHE PHE A A 260 260 . 112.462 97.916  19.937  1.00 15.68
1 . .
ATOM 1944 CG    CG    . PHE PHE PHE A A 260 260 . 110.951 98.105  19.787  1.00 14.60
1 . .
ATOM 1945 CD1   CD1   . PHE PHE PHE A A 260 260 . 110.257 99.026  20.552  1.00 14.40
1 . .
ATOM 1946 CE1   CE1   . PHE PHE PHE A A 260 260 . 108.818 99.123  20.445  1.00 16.11
1 . .
ATOM 1947 CZ    CZ    . PHE PHE PHE A A 260 260 . 108.143 98.324  19.514  1.00 18.50
1 . .
ATOM 1948 CE2   CE2   . PHE PHE PHE A A 260 260 . 108.863 97.391  18.738  1.00 17.87
1 . .
ATOM 1949 CD2   CD2   . PHE PHE PHE A A 260 260 . 110.248 97.314  18.875  1.00 15.07
1 . .
ATOM 1950 C     C     . PHE PHE PHE A A 260 260 . 112.895 98.919  17.589  1.00 17.29
1 . .
ATOM 1951 O     O     . PHE PHE PHE A A 260 260 . 113.058 97.889  16.870  1.00 16.20
1 . .
ATOM 1952 N     N     . LYS LYS LYS A A 261 261 . 112.358 100.056 17.101  1.00 17.15
1 . .
ATOM 1953 CA    CA    . LYS LYS LYS A A 261 261 . 111.985 100.121 15.668  1.00 17.98
1 . .
ATOM 1954 CB    CB    . LYS LYS LYS A A 261 261 . 110.668 100.884 15.413  1.00 18.41
1 . .
ATOM 1955 CG    CG    . LYS LYS LYS A A 261 261 . 109.454 100.190 16.132  1.00 14.55
1 . .
ATOM 1956 CD    CD    . LYS LYS LYS A A 261 261 . 108.177 101.067 16.170  1.00 12.55
1 . .
ATOM 1957 CE    CE    . LYS LYS LYS A A 261 261 . 108.179 101.920 17.416  1.00 12.65
1 . .
ATOM 1958 NZ    NZ    . LYS LYS LYS A A 261 261 . 106.876 102.749 17.377  1.00 10.16
1 . .
ATOM 1959 C     C     . LYS LYS LYS A A 261 261 . 113.096 100.755 14.885  1.00 19.58
1 . .
ATOM 1960 O     O     . LYS LYS LYS A A 261 261 . 112.889 101.068 13.706  1.00 21.62
1 . .
ATOM 1961 N     N     . SER SER SER A A 262 262 . 114.264 100.948 15.512  1.00 20.05
1 . .
ATOM 1962 CA    CA    . SER SER SER A A 262 262 . 115.428 101.406 14.727  1.00 22.23
1 . .
ATOM 1963 CB    CB    . SER SER SER A A 262 262 . 116.069 102.667 15.317  1.00 22.11
1 . .
ATOM 1964 OG    OG    . SER SER SER A A 262 262 . 115.110 103.723 15.355  1.00 23.50
1 . .
ATOM 1965 C     C     . SER SER SER A A 262 262 . 116.430 100.248 14.693  1.00 23.22
1 . .
ATOM 1966 O     O     . SER SER SER A A 262 262 . 116.385 99.376  15.562  1.00 21.43
1 . .
ATOM 1967 N     N     . PRO PRO PRO A A 263 263 . 117.309 100.224 13.671  1.00 24.84
1 . .
ATOM 1968 CA    CA    . PRO PRO PRO A A 263 263 . 118.134 98.997  13.442  1.00 25.07
1 . .
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ATOM 1969 CB    CB    . PRO PRO PRO A A 263 263 . 119.132 99.431  12.380  1.00 25.64
1 . .
ATOM 1970 CG    CG    . PRO PRO PRO A A 263 263 . 118.461 100.527 11.666  1.00 24.30
1 . .
ATOM 1971 CD    CD    . PRO PRO PRO A A 263 263 . 117.616 101.295 12.691  1.00 25.95
1 . .
ATOM 1972 C     C     . PRO PRO PRO A A 263 263 . 118.878 98.606  14.726  1.00 25.69
1 . .
ATOM 1973 O     O     . PRO PRO PRO A A 263 263 . 119.382 99.480  15.454  1.00 23.88
1 . .
ATOM 1974 N     N     . THR THR THR A A 264 264 . 118.916 97.296  14.980  1.00 27.58
1 . .
ATOM 1975 CA    CA    . THR THR THR A A 264 264 . 119.397 96.747  16.243  1.00 28.70
1 . .
ATOM 1976 CB    CB    . THR THR THR A A 264 264 . 119.455 95.244  16.134  1.00 29.44
1 . .
ATOM 1977 OG1   OG1   . THR THR THR A A 264 264 . 118.118 94.762  15.870  1.00 29.36
1 . .
ATOM 1978 CG2   CG2   . THR THR THR A A 264 264 . 119.997 94.638  17.418  1.00 31.16
1 . .
ATOM 1979 C     C     . THR THR THR A A 264 264 . 120.729 97.297  16.707  1.00 29.77
1 . .
ATOM 1980 O     O     . THR THR THR A A 264 264 . 121.721 97.304  15.951  1.00 29.86
1 . .
ATOM 1981 N     N     . ASP ASP ASP A A 265 265 . 120.761 97.779  17.944  1.00 30.23
1 . .
ATOM 1982 CA    CA    . ASP ASP ASP A A 265 265 . 121.993 98.305  18.563  1.00 30.88
1 . .
ATOM 1983 CB    CB    . ASP ASP ASP A A 265 265 . 122.229 99.800  18.257  1.00 30.54
1 . .
ATOM 1984 CG    CG    . ASP ASP ASP A A 265 265 . 123.496 100.345 18.924  1.00 32.36
1 . .
ATOM 1985 OD1   OD1   . ASP ASP ASP A A 265 265 . 124.240 99.563  19.592  1.00 30.17
1 . .
ATOM 1986 OD2   OD2   . ASP ASP ASP A A 265 265 . 123.741 101.567 18.782  1.00 35.98
1 . .
ATOM 1987 C     C     . ASP ASP ASP A A 265 265 . 121.962 98.069  20.074  1.00 30.18
1 . .
ATOM 1988 O     O     . ASP ASP ASP A A 265 265 . 121.459 98.906  20.813  1.00 29.93
1 . .
ATOM 1989 N     N     . PRO PRO PRO A A 266 266 . 122.511 96.916  20.537  1.00 29.75
1 . .
ATOM 1990 CA    CA    . PRO PRO PRO A A 266 266 . 122.373 96.530  21.931  1.00 28.85
1 . .
ATOM 1991 CB    CB    . PRO PRO PRO A A 266 266 . 123.024 95.126  21.996  1.00 28.78
1 . .
ATOM 1992 CG    CG    . PRO PRO PRO A A 266 266 . 122.896 94.641  20.584  1.00 30.17
1 . .
ATOM 1993 CD    CD    . PRO PRO PRO A A 266 266 . 123.143 95.851  19.746  1.00 29.90
1 . .
ATOM 1994 C     C     . PRO PRO PRO A A 266 266 . 123.004 97.515  22.875  1.00 28.50
1 . .
ATOM 1995 O     O     . PRO PRO PRO A A 266 266 . 122.686 97.516  24.051  1.00 28.29
1 . .
ATOM 1996 N     N     . SER SER SER A A 267 267 . 123.876 98.395  22.385  1.00 28.55
1 . .
ATOM 1997 CA    CA    . SER SER SER A A 267 267 . 124.475 99.352  23.326  1.00 27.93
1 . .
ATOM 1998 CB    CB    . SER SER SER A A 267 267 . 125.713 100.042 22.751  1.00 28.84
1 . .
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ATOM 1999 OG    OG    . SER SER SER A A 267 267 . 125.299 100.973 21.768  1.00 31.88
1 . .
ATOM 2000 C     C     . SER SER SER A A 267 267 . 123.474 100.390 23.868  1.00 26.53
1 . .
ATOM 2001 O     O     . SER SER SER A A 267 267 . 123.792 101.078 24.818  1.00 25.86
1 . .
ATOM 2002 N     N     . ARG ARG ARG A A 268 268 . 122.276 100.479 23.265  1.00 24.77
1 . .
ATOM 2003 CA    CA    . ARG ARG ARG A A 268 268 . 121.241 101.390 23.731  1.00 23.29
1 . .
ATOM 2004 CB    CB    . ARG ARG ARG A A 268 268 . 120.434 102.028 22.577  1.00 23.36
1 . .
ATOM 2005 CG    CG    . ARG ARG ARG A A 268 268 . 119.347 101.130 22.049  1.00 22.41
1 . .
ATOM 2006 CD    CD    . ARG ARG ARG A A 268 268 . 118.936 101.532 20.634  1.00 18.59
1 . .
ATOM 2007 NE    NE    . ARG ARG ARG A A 268 268 . 118.146 100.479 20.032  1.00 19.96
1 . .
ATOM 2008 CZ    CZ    . ARG ARG ARG A A 268 268 . 118.070 100.211 18.723  1.00 19.96
1 . .
ATOM 2009 NH1   NH1   . ARG ARG ARG A A 268 268 . 117.348 99.161  18.317  1.00 18.62
1 . .
ATOM 2010 NH2   NH2   . ARG ARG ARG A A 268 268 . 118.667 100.998 17.809  1.00 22.23
1 . .
ATOM 2011 C     C     . ARG ARG ARG A A 268 268 . 120.283 100.749 24.745  1.00 22.39
1 . .
ATOM 2012 O     O     . ARG ARG ARG A A 268 268 . 119.517 101.496 25.400  1.00 21.39
1 . .
ATOM 2013 N     N     . TYR TYR TYR A A 269 269 . 120.352 99.419  24.924  1.00 20.31
1 . .
ATOM 2014 CA    CA    . TYR TYR TYR A A 269 269 . 119.386 98.714  25.788  1.00 19.76
1 . .
ATOM 2015 CB    CB    . TYR TYR TYR A A 269 269 . 119.528 97.189  25.747  1.00 21.24
1 . .
ATOM 2016 CG    CG    . TYR TYR TYR A A 269 269 . 119.294 96.529  24.399  1.00 19.51
1 . .
ATOM 2017 CD1   CD1   . TYR TYR TYR A A 269 269 . 118.904 97.272  23.253  1.00 18.83
1 . .
ATOM 2018 CE1   CE1   . TYR TYR TYR A A 269 269 . 118.741 96.637  21.984  1.00 18.18
1 . .
ATOM 2019 CZ    CZ    . TYR TYR TYR A A 269 269 . 118.973 95.257  21.894  1.00 20.10
1 . .
ATOM 2020 OH    OH    . TYR TYR TYR A A 269 269 . 118.814 94.596  20.683  1.00 23.63
1 . .
ATOM 2021 CE2   CE2   . TYR TYR TYR A A 269 269 . 119.394 94.512  23.037  1.00 19.66
1 . .
ATOM 2022 CD2   CD2   . TYR TYR TYR A A 269 269 . 119.546 95.146  24.262  1.00 21.57
1 . .
ATOM 2023 C     C     . TYR TYR TYR A A 269 269 . 119.543 99.167  27.203  1.00 18.71
1 . .
ATOM 2024 O     O     . TYR TYR TYR A A 269 269 . 120.692 99.459  27.669  1.00 18.79
1 . .
ATOM 2025 N     N     . ILE ILE ILE A A 270 270 . 118.429 99.238  27.920  1.00 17.42
1 . .
ATOM 2026 CA    CA    . ILE ILE ILE A A 270 270 . 118.481 99.528  29.333  1.00 16.86
1 . .
ATOM 2027 CB    CB    . ILE ILE ILE A A 270 270 . 117.782 100.883 29.664  1.00 16.09
1 . .
ATOM 2028 CG1   CG1   . ILE ILE ILE A A 270 270 . 116.262 100.742 29.416  1.00 16.77
1 . .
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ATOM 2029 CD1   CD1   . ILE ILE ILE A A 270 270 . 115.443 101.902 29.985  1.00 16.28
1 . .
ATOM 2030 CG2   CG2   . ILE ILE ILE A A 270 270 . 118.385 102.010 28.788  1.00 17.72
1 . .
ATOM 2031 C     C     . ILE ILE ILE A A 270 270 . 117.999 98.399  30.208  1.00 16.32
1 . .
ATOM 2032 O     O     . ILE ILE ILE A A 270 270 . 117.310 97.490  29.726  1.00 17.21
1 . .
ATOM 2033 N     N     . THR THR THR A A 271 271 . 118.341 98.411  31.502  1.00 14.86
1 . .
ATOM 2034 CA    CA    . THR THR THR A A 271 271 . 117.954 97.321  32.360  1.00 14.20
1 . .
ATOM 2035 CB    CB    . THR THR THR A A 271 271 . 118.882 97.209  33.627  1.00 14.96
1 . .
ATOM 2036 OG1   OG1   . THR THR THR A A 271 271 . 118.697 98.376  34.458  1.00 15.66
1 . .
ATOM 2037 CG2   CG2   . THR THR THR A A 271 271 . 120.378 97.024  33.200  1.00 13.58
1 . .
ATOM 2038 C     C     . THR THR THR A A 271 271 . 116.519 97.505  32.920  1.00 14.74
1 . .
ATOM 2039 O     O     . THR THR THR A A 271 271 . 115.979 98.630  32.849  1.00 15.31
1 . .
ATOM 2040 N     N     . GLY GLY GLY A A 272 272 . 115.965 96.451  33.539  1.00 13.92
1 . .
ATOM 2041 CA    CA    . GLY GLY GLY A A 272 272 . 114.673 96.566  34.223  1.00 13.33
1 . .
ATOM 2042 C     C     . GLY GLY GLY A A 272 272 . 114.701 97.655  35.323  1.00 15.05
1 . .
ATOM 2043 O     O     . GLY GLY GLY A A 272 272 . 113.737 98.395  35.515  1.00 14.19
1 . .
ATOM 2044 N     N     . ASP ASP ASP A A 273 273 . 115.800 97.784  36.065  1.00 15.56
1 . .
ATOM 2045 CA    CA    . ASP ASP ASP A A 273 273 . 115.869 98.808  37.141  1.00 15.89
1 . .
ATOM 2046 CB    CB    . ASP ASP ASP A A 273 273 . 117.198 98.652  37.954  1.00 16.63
1 . .
ATOM 2047 CG    CG    . ASP ASP ASP A A 273 273 . 117.088 97.582  39.079  1.00 19.94
1 . .
ATOM 2048 OD1   OD1   . ASP ASP ASP A A 273 273 . 116.034 96.926  39.232  1.00 20.28
1 . .
ATOM 2049 OD2   OD2   . ASP ASP ASP A A 273 273 . 118.105 97.381  39.809  1.00 19.11
1 . .
ATOM 2050 C     C     . ASP ASP ASP A A 273 273 . 115.823 100.203 36.535  1.00 15.68
1 . .
ATOM 2051 O     O     . ASP ASP ASP A A 273 273 . 115.190 101.125 37.081  1.00 16.06
1 . .
ATOM 2052 N     N     . GLN GLN GLN A A 274 274 . 116.546 100.367 35.432  1.00 14.89
1 . .
ATOM 2053 CA    CA    . GLN GLN GLN A A 274 274 . 116.627 101.656 34.761  1.00 15.01
1 . .
ATOM 2054 CB    CB    . GLN GLN GLN A A 274 274 . 117.617 101.607 33.609  1.00 15.43
1 . .
ATOM 2055 CG    CG    . GLN GLN GLN A A 274 274 . 119.081 101.690 34.193  1.00 16.75
1 . .
ATOM 2056 CD    CD    . GLN GLN GLN A A 274 274 . 120.144 101.505 33.114  1.00 17.91
1 . .
ATOM 2057 OE1   OE1   . GLN GLN GLN A A 274 274 . 120.010 100.688 32.199  1.00 17.76
1 . .
ATOM 2058 NE2   NE2   . GLN GLN GLN A A 274 274 . 121.227 102.297 33.221  1.00 18.65
1 . .
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ATOM 2059 C     C     . GLN GLN GLN A A 274 274 . 115.221 102.036 34.233  1.00 14.87
1 . .
ATOM 2060 O     O     . GLN GLN GLN A A 274 274 . 114.811 103.209 34.356  1.00 15.84
1 . .
ATOM 2061 N     N     . LEU LEU LEU A A 275 275 . 114.508 101.041 33.718  1.00 13.48
1 . .
ATOM 2062 CA    CA    . LEU LEU LEU A A 275 275 . 113.138 101.211 33.193  1.00 13.16
1 . .
ATOM 2063 CB    CB    . LEU LEU LEU A A 275 275 . 112.709 99.873  32.539  1.00 12.28
1 . .
ATOM 2064 CG    CG    . LEU LEU LEU A A 275 275 . 111.378 99.962  31.790  1.00 13.68
1 . .
ATOM 2065 CD1   CD1   . LEU LEU LEU A A 275 275 . 111.280 101.200 30.851  1.00 12.68
1 . .
ATOM 2066 CD2   CD2   . LEU LEU LEU A A 275 275 . 111.134 98.672  31.042  1.00 18.51
1 . .
ATOM 2067 C     C     . LEU LEU LEU A A 275 275 . 112.201 101.611 34.353  1.00 13.42
1 . .
ATOM 2068 O     O     . LEU LEU LEU A A 275 275 . 111.405 102.533 34.236  1.00 13.91
1 . .
ATOM 2069 N     N     . GLY GLY GLY A A 276 276 . 112.298 100.929 35.481  1.00 13.12
1 . .
ATOM 2070 CA    CA    . GLY GLY GLY A A 276 276 . 111.532 101.286 36.673  1.00 13.78
1 . .
ATOM 2071 C     C     . GLY GLY GLY A A 276 276 . 111.819 102.730 37.187  1.00 14.71
1 . .
ATOM 2072 O     O     . GLY GLY GLY A A 276 276 . 110.902 103.487 37.584  1.00 12.94
1 . .
ATOM 2073 N     N     . ALA ALA ALA A A 277 277 . 113.092 103.122 37.156  1.00 15.33
1 . .
ATOM 2074 CA    CA    . ALA ALA ALA A A 277 277 . 113.474 104.523 37.497  1.00 13.92
1 . .
ATOM 2075 CB    CB    . ALA ALA ALA A A 277 277 . 115.027 104.701 37.516  1.00 15.36
1 . .
ATOM 2076 C     C     . ALA ALA ALA A A 277 277 . 112.819 105.564 36.591  1.00 14.44
1 . .
ATOM 2077 O     O     . ALA ALA ALA A A 277 277 . 112.377 106.639 37.042  1.00 14.96
1 . .
ATOM 2078 N     N     . LEU LEU LEU A A 278 278 . 112.705 105.210 35.311  1.00 14.36
1 . .
ATOM 2079 CA    CA    . LEU LEU LEU A A 278 278 . 112.098 106.068 34.322  1.00 14.37
1 . .
ATOM 2080 CB    CB    . LEU LEU LEU A A 278 278 . 112.279 105.418 32.935  1.00 15.67
1 . .
ATOM 2081 CG    CG    . LEU LEU LEU A A 278 278 . 111.868 106.183 31.684  1.00 21.65
1 . .
ATOM 2082 CD1   CD1   . LEU LEU LEU A A 278 278 . 112.493 107.620 31.705  1.00 25.10
1 . .
ATOM 2083 CD2   CD2   . LEU LEU LEU A A 278 278 . 112.377 105.370 30.477  1.00 26.25
1 . .
ATOM 2084 C     C     . LEU LEU LEU A A 278 278 . 110.601 106.204 34.669  1.00 12.80
1 . .
ATOM 2085 O     O     . LEU LEU LEU A A 278 278 . 110.072 107.355 34.684  1.00 13.10
1 . .
ATOM 2086 N     N     . TYR TYR TYR A A 279 279 . 109.945 105.080 35.018  1.00 12.21
1 . .
ATOM 2087 CA    CA    . TYR TYR TYR A A 279 279 . 108.484 105.183 35.387  1.00 10.92
1 . .
ATOM 2088 CB    CB    . TYR TYR TYR A A 279 279 . 107.925 103.827 35.708  1.00 11.28
1 . .
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ATOM 2089 CG    CG    . TYR TYR TYR A A 279 279 . 107.952 102.877 34.558  1.00 11.10
1 . .
ATOM 2090 CD1   CD1   . TYR TYR TYR A A 279 279 . 107.754 103.341 33.206  1.00 11.72
1 . .
ATOM 2091 CE1   CE1   . TYR TYR TYR A A 279 279 . 107.845 102.453 32.130  1.00 10.53
1 . .
ATOM 2092 CZ    CZ    . TYR TYR TYR A A 279 279 . 108.050 101.029 32.427  1.00 11.00
1 . .
ATOM 2093 OH    OH    . TYR TYR TYR A A 279 279 . 108.099 100.073 31.429  1.00 12.57
1 . .
ATOM 2094 CE2   CE2   . TYR TYR TYR A A 279 279 . 108.218 100.562 33.748  1.00 10.28
1 . .
ATOM 2095 CD2   CD2   . TYR TYR TYR A A 279 279 . 108.190 101.513 34.812  1.00 9.32
1 . .
ATOM 2096 C     C     . TYR TYR TYR A A 279 279 . 108.271 106.061 36.675  1.00 12.28
1 . .
ATOM 2097 O     O     . TYR TYR TYR A A 279 279 . 107.305 106.880 36.773  1.00 12.96
1 . .
ATOM 2098 N     N     . GLN GLN GLN A A 280 280 . 109.193 105.912 37.633  1.00 11.26
1 . .
ATOM 2099 CA    CA    . GLN GLN GLN A A 280 280 . 109.147 106.740 38.852  1.00 12.78
1 . .
ATOM 2100 CB    CB    . GLN GLN GLN A A 280 280 . 110.264 106.400 39.889  1.00 13.19
1 . .
ATOM 2101 CG    CG    . GLN GLN GLN A A 280 280 . 110.087 105.024 40.554  1.00 15.87
1 . .
ATOM 2102 CD    CD    . GLN GLN GLN A A 280 280 . 108.914 104.939 41.463  1.00 19.34
1 . .
ATOM 2103 OE1   OE1   . GLN GLN GLN A A 280 280 . 108.169 105.925 41.702  1.00 22.87
1 . .
ATOM 2104 NE2   NE2   . GLN GLN GLN A A 280 280 . 108.741 103.768 42.036  1.00 19.22
1 . .
ATOM 2105 C     C     . GLN GLN GLN A A 280 280 . 109.201 108.227 38.491  1.00 12.62
1 . .
ATOM 2106 O     O     . GLN GLN GLN A A 280 280 . 108.460 109.047 39.076  1.00 13.58
1 . .
ATOM 2107 N     N     . ASP ASP ASP A A 281 281 . 110.103 108.589 37.572  1.00 13.18
1 . .
ATOM 2108 CA    CA    . ASP ASP ASP A A 281 281 . 110.170 109.979 37.045  1.00 13.81
1 . .
ATOM 2109 CB    CB    . ASP ASP ASP A A 281 281 . 111.299 110.160 36.034  1.00 15.03
1 . .
ATOM 2110 CG    CG    . ASP ASP ASP A A 281 281 . 112.652 110.157 36.664  1.00 18.58
1 . .
ATOM 2111 OD1   OD1   . ASP ASP ASP A A 281 281 . 112.749 110.414 37.871  1.00 26.16
1 . .
ATOM 2112 OD2   OD2   . ASP ASP ASP A A 281 281 . 113.633 109.979 35.898  1.00 24.97
1 . .
ATOM 2113 C     C     . ASP ASP ASP A A 281 281 . 108.841 110.419 36.364  1.00 14.35
1 . .
ATOM 2114 O     O     . ASP ASP ASP A A 281 281 . 108.362 111.530 36.601  1.00 14.08
1 . .
ATOM 2115 N     N     . PHE PHE PHE A A 282 282 . 108.266 109.536 35.555  1.00 12.34
1 . .
ATOM 2116 CA    CA    . PHE PHE PHE A A 282 282 . 106.962 109.869 34.936  1.00 12.80
1 . .
ATOM 2117 CB    CB    . PHE PHE PHE A A 282 282 . 106.500 108.738 34.021  1.00 13.15
1 . .
ATOM 2118 CG    CG    . PHE PHE PHE A A 282 282 . 107.411 108.448 32.832  1.00 14.22
1 . .
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ATOM 2119 CD1   CD1   . PHE PHE PHE A A 282 282 . 107.262 107.220 32.123  1.00 14.59
1 . .
ATOM 2120 CE1   CE1   . PHE PHE PHE A A 282 282 . 108.090 106.939 31.027  1.00 17.94
1 . .
ATOM 2121 CZ    CZ    . PHE PHE PHE A A 282 282 . 109.025 107.880 30.625  1.00 16.82
1 . .
ATOM 2122 CE2   CE2   . PHE PHE PHE A A 282 282 . 109.206 109.067 31.335  1.00 19.64
1 . .
ATOM 2123 CD2   CD2   . PHE PHE PHE A A 282 282 . 108.402 109.362 32.411  1.00 17.07
1 . .
ATOM 2124 C     C     . PHE PHE PHE A A 282 282 . 105.840 110.138 35.978  1.00 12.18
1 . .
ATOM 2125 O     O     . PHE PHE PHE A A 282 282 . 105.039 111.044 35.785  1.00 13.65
1 . .
ATOM 2126 N     N     . VAL VAL VAL A A 283 283 . 105.791 109.344 37.057  1.00 11.71
1 . .
ATOM 2127 CA    CA    . VAL VAL VAL A A 283 283 . 104.713 109.371 37.991  1.00 12.11
1 . .
ATOM 2128 CB    CB    . VAL VAL VAL A A 283 283 . 104.743 108.108 38.890  1.00 11.68
1 . .
ATOM 2129 CG1   CG1   . VAL VAL VAL A A 283 283 . 103.920 108.278 40.175  1.00 16.12
1 . .
ATOM 2130 CG2   CG2   . VAL VAL VAL A A 283 283 . 104.245 106.855 38.077  1.00 12.44
1 . .
ATOM 2131 C     C     . VAL VAL VAL A A 283 283 . 104.970 110.677 38.786  1.00 12.26
1 . .
ATOM 2132 O     O     . VAL VAL VAL A A 283 283 . 104.034 111.339 39.236  1.00 13.63
1 . .
ATOM 2133 N     N     . ARG ARG ARG A A 284 284 . 106.225 111.059 38.972  1.00 14.05
1 . .
ATOM 2134 CA    CA    . ARG ARG ARG A A 284 284 . 106.431 112.301 39.710  1.00 17.25
1 . .
ATOM 2135 CB    CB    . ARG ARG ARG A A 284 284 . 107.785 112.288 40.413  1.00 20.91
1 . .
ATOM 2136 CG    CG    . ARG ARG ARG A A 284 284 . 108.838 112.666 39.576  1.00 26.17
1 . .
ATOM 2137 CD    CD    . ARG ARG ARG A A 284 284 . 109.500 113.874 40.098  1.00 31.22
1 . .
ATOM 2138 NE    NE    . ARG ARG ARG A A 284 284 . 110.893 113.544 40.186  1.00 34.00
1 . .
ATOM 2139 CZ    CZ    . ARG ARG ARG A A 284 284 . 111.817 113.492 39.211  1.00 35.01
1 . .
ATOM 2140 NH1   NH1   . ARG ARG ARG A A 284 284 . 113.052 113.154 39.548  1.00 36.91
1 . .
ATOM 2141 NH2   NH2   . ARG ARG ARG A A 284 284 . 111.577 113.758 37.952  1.00 33.01
1 . .
ATOM 2142 C     C     . ARG ARG ARG A A 284 284 . 106.190 113.548 38.842  1.00 16.50
1 . .
ATOM 2143 O     O     . ARG ARG ARG A A 284 284 . 105.706 114.578 39.386  1.00 16.82
1 . .
ATOM 2144 N     N     . ASP ASP ASP A A 285 285 . 106.483 113.461 37.525  1.00 14.74
1 . .
ATOM 2145 CA    CA    . ASP ASP ASP A A 285 285 . 106.513 114.679 36.668  1.00 14.74
1 . .
ATOM 2146 CB    CB    . ASP ASP ASP A A 285 285 . 107.638 114.676 35.648  1.00 14.57
1 . .
ATOM 2147 CG    CG    . ASP ASP ASP A A 285 285 . 109.016 114.692 36.302  1.00 18.68
1 . .
ATOM 2148 OD1   OD1   . ASP ASP ASP A A 285 285 . 109.123 115.197 37.440  1.00 21.24
1 . .
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ATOM 2149 OD2   OD2   . ASP ASP ASP A A 285 285 . 109.985 114.199 35.669  1.00 20.04
1 . .
ATOM 2150 C     C     . ASP ASP ASP A A 285 285 . 105.187 114.931 35.996  1.00 13.56
1 . .
ATOM 2151 O     O     . ASP ASP ASP A A 285 285 . 104.927 116.039 35.477  1.00 13.13
1 . .
ATOM 2152 N     N     . TYR TYR TYR A A 286 286 . 104.348 113.917 35.961  1.00 12.31
1 . .
ATOM 2153 CA    CA    . TYR TYR TYR A A 286 286 . 103.070 113.998 35.191  1.00 12.75
1 . .
ATOM 2154 CB    CB    . TYR TYR TYR A A 286 286 . 103.192 113.280 33.801  1.00 11.43
1 . .
ATOM 2155 CG    CG    . TYR TYR TYR A A 286 286 . 104.268 113.867 32.917  1.00 12.64
1 . .
ATOM 2156 CD1   CD1   . TYR TYR TYR A A 286 286 . 104.007 114.989 32.203  1.00 13.51
1 . .
ATOM 2157 CE1   CE1   . TYR TYR TYR A A 286 286 . 104.975 115.597 31.479  1.00 15.97
1 . .
ATOM 2158 CZ    CZ    . TYR TYR TYR A A 286 286 . 106.214 115.060 31.397  1.00 18.34
1 . .
ATOM 2159 OH    OH    . TYR TYR TYR A A 286 286 . 107.117 115.688 30.613  1.00 22.15
1 . .
ATOM 2160 CE2   CE2   . TYR TYR TYR A A 286 286 . 106.560 113.935 32.084  1.00 15.74
1 . .
ATOM 2161 CD2   CD2   . TYR TYR TYR A A 286 286 . 105.593 113.335 32.857  1.00 15.17
1 . .
ATOM 2162 C     C     . TYR TYR TYR A A 286 286 . 101.984 113.306 35.992  1.00 12.17
1 . .
ATOM 2163 O     O     . TYR TYR TYR A A 286 286 . 102.294 112.457 36.827  1.00 12.93
1 . .
ATOM 2164 N     N     . PRO PRO PRO A A 287 287 . 100.694 113.584 35.675  1.00 11.35
1 . .
ATOM 2165 CA    CA    . PRO PRO PRO A A 287 287 . 99.628  112.966 36.489  1.00 11.31
1 . .
ATOM 2166 CB    CB    . PRO PRO PRO A A 287 287 . 98.429  113.896 36.243  1.00 10.77
1 . .
ATOM 2167 CG    CG    . PRO PRO PRO A A 287 287 . 98.654  114.406 34.835  1.00 10.12
1 . .
ATOM 2168 CD    CD    . PRO PRO PRO A A 287 287 . 100.172 114.673 34.820  1.00 12.05
1 . .
ATOM 2169 C     C     . PRO PRO PRO A A 287 287 . 99.322  111.516 36.015  1.00 9.78
1 . .
ATOM 2170 O     O     . PRO PRO PRO A A 287 287 . 98.134  111.188 35.628  1.00 10.49
1 . .
ATOM 2171 N     N     . VAL VAL VAL A A 288 288 . 100.371 110.677 35.983  1.00 9.39
1 . .
ATOM 2172 CA    CA    . VAL VAL VAL A A 288 288 . 100.236 109.275 35.558  1.00 9.54
1 . .
ATOM 2173 CB    CB    . VAL VAL VAL A A 288 288 . 101.574 108.677 35.079  1.00 9.07
1 . .
ATOM 2174 CG1   CG1   . VAL VAL VAL A A 288 288 . 101.433 107.188 34.858  1.00 10.90
1 . .
ATOM 2175 CG2   CG2   . VAL VAL VAL A A 288 288 . 102.051 109.458 33.820  1.00 7.76
1 . .
ATOM 2176 C     C     . VAL VAL VAL A A 288 288 . 99.671  108.468 36.726  1.00 11.13
1 . .
ATOM 2177 O     O     . VAL VAL VAL A A 288 288 . 100.300 108.421 37.814  1.00 12.89
1 . .
ATOM 2178 N     N     . VAL VAL VAL A A 289 289 . 98.482  107.879 36.560  1.00 9.90
1 . .
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ATOM 2179 CA    CA    . VAL VAL VAL A A 289 289 . 97.808  107.139 37.672  1.00 9.78
1 . .
ATOM 2180 CB    CB    . VAL VAL VAL A A 289 289 . 96.413  107.706 37.929  1.00 10.00
1 . .
ATOM 2181 CG1   CG1   . VAL VAL VAL A A 289 289 . 96.490  109.257 38.155  1.00 11.65
1 . .
ATOM 2182 CG2   CG2   . VAL VAL VAL A A 289 289 . 95.459  107.458 36.739  1.00 12.52
1 . .
ATOM 2183 C     C     . VAL VAL VAL A A 289 289 . 97.661  105.632 37.375  1.00 9.62
1 . .
ATOM 2184 O     O     . VAL VAL VAL A A 289 289 . 97.128  104.845 38.204  1.00 11.18
1 . .
ATOM 2185 N     N     . SER SER SER A A 290 290 . 98.133  105.226 36.208  1.00 8.39
1 . .
ATOM 2186 CA    CA    . SER SER SER A A 290 290 . 98.005  103.815 35.809  1.00 7.86
1 . .
ATOM 2187 CB    CB    . SER SER SER A A 290 290 . 96.606  103.591 35.185  1.00 7.83
1 . .
ATOM 2188 OG    OG    . SER SER SER A A 290 290 . 96.443  102.193 34.801  1.00 8.79
1 . .
ATOM 2189 C     C     . SER SER SER A A 290 290 . 99.042  103.486 34.768  1.00 9.41
1 . .
ATOM 2190 O     O     . SER SER SER A A 290 290 . 99.227  104.251 33.789  1.00 8.98
1 . .
ATOM 2191 N     N     . ILE ILE ILE A A 291 291 . 99.773  102.398 35.016  1.00 8.75
1 . .
ATOM 2192 CA    CA    . ILE ILE ILE A A 291 291 . 100.776 101.917 34.057  1.00 9.12
1 . .
ATOM 2193 CB    CB    . ILE ILE ILE A A 291 291 . 102.252 102.164 34.583  1.00 9.70
1 . .
ATOM 2194 CG1   CG1   . ILE ILE ILE A A 291 291 . 102.489 103.669 34.762  1.00 9.47
1 . .
ATOM 2195 CD1   CD1   . ILE ILE ILE A A 291 291 . 103.912 103.961 35.300  1.00 12.38
1 . .
ATOM 2196 CG2   CG2   . ILE ILE ILE A A 291 291 . 103.226 101.625 33.586  1.00 11.76
1 . .
ATOM 2197 C     C     . ILE ILE ILE A A 291 291 . 100.541 100.429 33.788  1.00 8.95
1 . .
ATOM 2198 O     O     . ILE ILE ILE A A 291 291 . 100.464 99.615  34.725  1.00 9.98
1 . .
ATOM 2199 N     N     . GLU GLU GLU A A 292 292 . 100.395 100.106 32.497  1.00 7.98
1 . .
ATOM 2200 CA    CA    . GLU GLU GLU A A 292 292 . 100.089 98.744  32.097  1.00 8.54
1 . .
ATOM 2201 CB    CB    . GLU GLU GLU A A 292 292 . 98.928  98.758  31.092  1.00 7.47
1 . .
ATOM 2202 CG    CG    . GLU GLU GLU A A 292 292 . 98.641  97.374  30.432  1.00 10.66
1 . .
ATOM 2203 CD    CD    . GLU GLU GLU A A 292 292 . 97.584  97.477  29.346  1.00 8.90
1 . .
ATOM 2204 OE1   OE1   . GLU GLU GLU A A 292 292 . 97.578  96.573  28.504  1.00 9.09
1 . .
ATOM 2205 OE2   OE2   . GLU GLU GLU A A 292 292 . 96.799  98.487  29.319  1.00 9.14
1 . .
ATOM 2206 C     C     . GLU GLU GLU A A 292 292 . 101.325 98.110  31.462  1.00 7.78
1 . .
ATOM 2207 O     O     . GLU GLU GLU A A 292 292 . 102.060 98.751  30.687  1.00 8.17
1 . .
ATOM 2208 N     N     . ASP ASP ASP A A 293 293 . 101.540 96.811  31.787  1.00 8.28
1 . .
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ATOM 2209 CA    CA    . ASP ASP ASP A A 293 293 . 102.694 96.028  31.227  1.00 8.84
1 . .
ATOM 2210 CB    CB    . ASP ASP ASP A A 293 293 . 102.409 95.578  29.771  1.00 8.52
1 . .
ATOM 2211 CG    CG    . ASP ASP ASP A A 293 293 . 101.571 94.266  29.712  1.00 7.92
1 . .
ATOM 2212 OD1   OD1   . ASP ASP ASP A A 293 293 . 101.436 93.590  30.792  1.00 9.27
1 . .
ATOM 2213 OD2   OD2   . ASP ASP ASP A A 293 293 . 101.082 93.925  28.594  1.00 9.41
1 . .
ATOM 2214 C     C     . ASP ASP ASP A A 293 293 . 104.029 96.767  31.297  1.00 9.74
1 . .
ATOM 2215 O     O     . ASP ASP ASP A A 293 293 . 104.751 96.860  30.293  1.00 9.16
1 . .
ATOM 2216 N     N     . PRO PRO PRO A A 294 294 . 104.390 97.238  32.493  1.00 10.00
1 . .
ATOM 2217 CA    CA    . PRO PRO PRO A A 294 294 . 105.658 97.954  32.610  1.00 10.39
1 . .
ATOM 2218 CB    CB    . PRO PRO PRO A A 294 294 . 105.647 98.361  34.107  1.00 11.32
1 . .
ATOM 2219 CG    CG    . PRO PRO PRO A A 294 294 . 104.731 97.332  34.775  1.00 11.09
1 . .
ATOM 2220 CD    CD    . PRO PRO PRO A A 294 294 . 103.617 97.254  33.758  1.00 10.44
1 . .
ATOM 2221 C     C     . PRO PRO PRO A A 294 294 . 106.904 97.091  32.365  1.00 11.49
1 . .
ATOM 2222 O     O     . PRO PRO PRO A A 294 294 . 107.969 97.646  32.085  1.00 12.71
1 . .
ATOM 2223 N     N     . PHE PHE PHE A A 295 295 . 106.768 95.780  32.508  1.00 11.42
1 . .
ATOM 2224 CA    CA    . PHE PHE PHE A A 295 295 . 107.871 94.829  32.245  1.00 10.44
1 . .
ATOM 2225 CB    CB    . PHE PHE PHE A A 295 295 . 108.504 94.348  33.577  1.00 11.66
1 . .
ATOM 2226 CG    CG    . PHE PHE PHE A A 295 295 . 108.931 95.501  34.450  1.00 12.27
1 . .
ATOM 2227 CD1   CD1   . PHE PHE PHE A A 295 295 . 110.109 96.208  34.165  1.00 12.83
1 . .
ATOM 2228 CE1   CE1   . PHE PHE PHE A A 295 295 . 110.484 97.321  34.960  1.00 13.25
1 . .
ATOM 2229 CZ    CZ    . PHE PHE PHE A A 295 295 . 109.660 97.730  35.999  1.00 14.52
1 . .
ATOM 2230 CE2   CE2   . PHE PHE PHE A A 295 295 . 108.475 97.042  36.293  1.00 14.10
1 . .
ATOM 2231 CD2   CD2   . PHE PHE PHE A A 295 295 . 108.112 95.929  35.495  1.00 13.04
1 . .
ATOM 2232 C     C     . PHE PHE PHE A A 295 295 . 107.402 93.676  31.379  1.00 11.09
1 . .
ATOM 2233 O     O     . PHE PHE PHE A A 295 295 . 106.171 93.458  31.149  1.00 11.37
1 . .
ATOM 2234 N     N     . ASP ASP ASP A A 296 296 . 108.359 92.885  30.927  1.00 11.26
1 . .
ATOM 2235 CA    CA    . ASP ASP ASP A A 296 296 . 108.030 91.678  30.139  1.00 10.08
1 . .
ATOM 2236 CB    CB    . ASP ASP ASP A A 296 296 . 109.358 90.922  29.764  1.00 11.89
1 . .
ATOM 2237 CG    CG    . ASP ASP ASP A A 296 296 . 109.098 89.773  28.851  1.00 12.05
1 . .
ATOM 2238 OD1   OD1   . ASP ASP ASP A A 296 296 . 108.759 90.010  27.671  1.00 12.85
1 . .
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ATOM 2239 OD2   OD2   . ASP ASP ASP A A 296 296 . 109.250 88.622  29.334  1.00 14.79
1 . .
ATOM 2240 C     C     . ASP ASP ASP A A 296 296 . 107.076 90.701  30.810  1.00 10.39
1 . .
ATOM 2241 O     O     . ASP ASP ASP A A 296 296 . 107.012 90.582  32.032  1.00 9.46
1 . .
ATOM 2242 N     N     . GLN GLN GLN A A 297 297 . 106.361 89.926  29.988  1.00 9.97
1 . .
ATOM 2243 CA    CA    . GLN GLN GLN A A 297 297 . 105.337 89.069  30.493  1.00 11.29
1 . .
ATOM 2244 CB    CB    . GLN GLN GLN A A 297 297 . 104.563 88.414  29.294  1.00 11.50
1 . .
ATOM 2245 CG    CG    . GLN GLN GLN A A 297 297 . 105.537 87.497  28.387  1.00 9.18
1 . .
ATOM 2246 CD    CD    . GLN GLN GLN A A 297 297 . 105.174 87.699  26.900  1.00 9.83
1 . .
ATOM 2247 OE1   OE1   . GLN GLN GLN A A 297 297 . 103.988 87.727  26.565  1.00 14.88
1 . .
ATOM 2248 NE2   NE2   . GLN GLN GLN A A 297 297 . 106.183 87.889  26.017  1.00 10.40
1 . .
ATOM 2249 C     C     . GLN GLN GLN A A 297 297 . 105.906 87.969  31.409  1.00 13.13
1 . .
ATOM 2250 O     O     . GLN GLN GLN A A 297 297 . 105.136 87.349  32.089  1.00 13.23
1 . .
ATOM 2251 N     N     . ASP ASP ASP A A 298 298 . 107.242 87.683  31.319  1.00 12.66
1 . .
ATOM 2252 CA    CA    . ASP ASP ASP A A 298 298 . 107.910 86.687  32.200  1.00 15.21
1 . .
ATOM 2253 CB    CB    . ASP ASP ASP A A 298 298 . 108.804 85.668  31.409  1.00 14.87
1 . .
ATOM 2254 CG    CG    . ASP ASP ASP A A 298 298 . 108.081 84.723  30.378  1.00 20.79
1 . .
ATOM 2255 OD1   OD1   . ASP ASP ASP A A 298 298 . 107.081 84.053  30.772  1.00 17.43
1 . .
ATOM 2256 OD2   OD2   . ASP ASP ASP A A 298 298 . 108.665 84.536  29.185  1.00 22.70
1 . .
ATOM 2257 C     C     . ASP ASP ASP A A 298 298 . 108.877 87.358  33.231  1.00 15.75
1 . .
ATOM 2258 O     O     . ASP ASP ASP A A 298 298 . 109.584 86.632  33.975  1.00 15.32
1 . .
ATOM 2259 N     N     . ASP ASP ASP A A 299 299 . 108.964 88.693  33.286  1.00 14.66
1 . .
ATOM 2260 CA    CA    . ASP ASP ASP A A 299 299 . 109.904 89.385  34.187  1.00 14.74
1 . .
ATOM 2261 CB    CB    . ASP ASP ASP A A 299 299 . 110.421 90.630  33.473  1.00 16.29
1 . .
ATOM 2262 CG    CG    . ASP ASP ASP A A 299 299 . 111.663 91.297  34.195  1.00 15.77
1 . .
ATOM 2263 OD1   OD1   . ASP ASP ASP A A 299 299 . 112.138 90.746  35.229  1.00 17.74
1 . .
ATOM 2264 OD2   OD2   . ASP ASP ASP A A 299 299 . 112.139 92.360  33.709  1.00 14.66
1 . .
ATOM 2265 C     C     . ASP ASP ASP A A 299 299 . 109.202 89.671  35.572  1.00 15.33
1 . .
ATOM 2266 O     O     . ASP ASP ASP A A 299 299 . 109.099 90.829  36.022  1.00 15.45
1 . .
ATOM 2267 N     N     . TRP TRP TRP A A 300 300 . 108.794 88.574  36.233  1.00 13.89
1 . .
ATOM 2268 CA    CA    . TRP TRP TRP A A 300 300 . 107.981 88.609  37.433  1.00 14.79
1 . .
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ATOM 2269 CB    CB    . TRP TRP TRP A A 300 300 . 107.679 87.192  37.942  1.00 15.20
1 . .
ATOM 2270 CG    CG    . TRP TRP TRP A A 300 300 . 106.741 86.457  37.071  1.00 15.63
1 . .
ATOM 2271 CD1   CD1   . TRP TRP TRP A A 300 300 . 107.081 85.670  36.007  1.00 13.83
1 . .
ATOM 2272 NE1   NE1   . TRP TRP TRP A A 300 300 . 105.948 85.140  35.436  1.00 18.07
1 . .
ATOM 2273 CE2   CE2   . TRP TRP TRP A A 300 300 . 104.848 85.626  36.096  1.00 15.26
1 . .
ATOM 2274 CD2   CD2   . TRP TRP TRP A A 300 300 . 105.317 86.503  37.101  1.00 14.43
1 . .
ATOM 2275 CE3   CE3   . TRP TRP TRP A A 300 300 . 104.380 87.111  37.955  1.00 17.25
1 . .
ATOM 2276 CZ3   CZ3   . TRP TRP TRP A A 300 300 . 103.027 86.896  37.729  1.00 17.17
1 . .
ATOM 2277 CH2   CH2   . TRP TRP TRP A A 300 300 . 102.592 86.040  36.713  1.00 19.11
1 . .
ATOM 2278 CZ2   CZ2   . TRP TRP TRP A A 300 300 . 103.481 85.382  35.889  1.00 16.88
1 . .
ATOM 2279 C     C     . TRP TRP TRP A A 300 300 . 108.672 89.408  38.550  1.00 15.56
1 . .
ATOM 2280 O     O     . TRP TRP TRP A A 300 300 . 108.050 90.285  39.176  1.00 15.48
1 . .
ATOM 2281 N     N     . ALA ALA ALA A A 301 301 . 109.980 89.236  38.746  1.00 15.17
1 . .
ATOM 2282 CA    CA    . ALA ALA ALA A A 301 301 . 110.628 89.979  39.883  1.00 15.76
1 . .
ATOM 2283 CB    CB    . ALA ALA ALA A A 301 301 . 112.133 89.586  40.035  1.00 15.60
1 . .
ATOM 2284 C     C     . ALA ALA ALA A A 301 301 . 110.536 91.513  39.672  1.00 14.71
1 . .
ATOM 2285 O     O     . ALA ALA ALA A A 301 301 . 110.407 92.286  40.651  1.00 17.33
1 . .
ATOM 2286 N     N     . ALA ALA ALA A A 302 302 . 110.629 91.956  38.420  1.00 15.14
1 . .
ATOM 2287 CA    CA    . ALA ALA ALA A A 302 302 . 110.609 93.403  38.171  1.00 14.69
1 . .
ATOM 2288 CB    CB    . ALA ALA ALA A A 302 302 . 111.067 93.702  36.777  1.00 13.31
1 . .
ATOM 2289 C     C     . ALA ALA ALA A A 302 302 . 109.172 93.958  38.437  1.00 13.86
1 . .
ATOM 2290 O     O     . ALA ALA ALA A A 302 302 . 108.976 95.075  38.999  1.00 14.20
1 . .
ATOM 2291 N     N     . TRP TRP TRP A A 303 303 . 108.162 93.198  38.047  1.00 13.38
1 . .
ATOM 2292 CA    CA    . TRP TRP TRP A A 303 303 . 106.790 93.630  38.288  1.00 12.99
1 . .
ATOM 2293 CB    CB    . TRP TRP TRP A A 303 303 . 105.852 92.557  37.840  1.00 13.36
1 . .
ATOM 2294 CG    CG    . TRP TRP TRP A A 303 303 . 105.539 92.520  36.350  1.00 13.98
1 . .
ATOM 2295 CD1   CD1   . TRP TRP TRP A A 303 303 . 106.267 91.940  35.367  1.00 14.93
1 . .
ATOM 2296 NE1   NE1   . TRP TRP TRP A A 303 303 . 105.631 92.128  34.154  1.00 14.86
1 . .
ATOM 2297 CE2   CE2   . TRP TRP TRP A A 303 303 . 104.461 92.830  34.358  1.00 13.18
1 . .
ATOM 2298 CD2   CD2   . TRP TRP TRP A A 303 303 . 104.395 93.139  35.723  1.00 13.11
1 . .
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ATOM 2299 CE3   CE3   . TRP TRP TRP A A 303 303 . 103.251 93.843  36.229  1.00 9.72
1 . .
ATOM 2300 CZ3   CZ3   . TRP TRP TRP A A 303 303 . 102.272 94.222  35.345  1.00 11.09
1 . .
ATOM 2301 CH2   CH2   . TRP TRP TRP A A 303 303 . 102.361 93.904  33.928  1.00 9.89
1 . .
ATOM 2302 CZ2   CZ2   . TRP TRP TRP A A 303 303 . 103.463 93.237  33.425  1.00 11.60
1 . .
ATOM 2303 C     C     . TRP TRP TRP A A 303 303 . 106.551 93.722  39.792  1.00 13.95
1 . .
ATOM 2304 O     O     . TRP TRP TRP A A 303 303 . 106.078 94.766  40.251  1.00 14.53
1 . .
ATOM 2305 N     N     . SER SER SER A A 304 304 . 106.905 92.662  40.563  1.00 14.27
1 . .
ATOM 2306 CA    CA    . SER SER SER A A 304 304 . 106.624 92.687  41.993  1.00 15.15
1 . .
ATOM 2307 CB    CB    . SER SER SER A A 304 304 . 107.043 91.356  42.634  1.00 15.63
1 . .
ATOM 2308 OG    OG    . SER SER SER A A 304 304 . 106.264 90.321  42.077  1.00 15.79
1 . .
ATOM 2309 C     C     . SER SER SER A A 304 304 . 107.352 93.850  42.699  1.00 15.80
1 . .
ATOM 2310 O     O     . SER SER SER A A 304 304 . 106.756 94.504  43.585  1.00 16.00
1 . .
ATOM 2311 N     N     . LYS LYS LYS A A 305 305 . 108.635 94.054  42.354  1.00 15.53
1 . .
ATOM 2312 CA    CA    . LYS LYS LYS A A 305 305 . 109.425 95.133  42.942  1.00 16.83
1 . .
ATOM 2313 CB    CB    . LYS LYS LYS A A 305 305 . 110.905 95.030  42.480  1.00 17.03
1 . .
ATOM 2314 CG    CG    . LYS LYS LYS A A 305 305 . 111.744 96.322  42.551  1.00 21.99
1 . .
ATOM 2315 CD    CD    . LYS LYS LYS A A 305 305 . 113.178 96.004  42.070  1.00 24.43
1 . .
ATOM 2316 CE    CE    . LYS LYS LYS A A 305 305 . 114.154 96.980  42.629  1.00 29.45
1 . .
ATOM 2317 NZ    NZ    . LYS LYS LYS A A 305 305 . 115.556 96.594  42.310  1.00 34.14
1 . .
ATOM 2318 C     C     . LYS LYS LYS A A 305 305 . 108.831 96.520  42.633  1.00 16.17
1 . .
ATOM 2319 O     O     . LYS LYS LYS A A 305 305 . 108.743 97.404  43.538  1.00 16.60
1 . .
ATOM 2320 N     N     . PHE PHE PHE A A 306 306 . 108.453 96.736  41.375  1.00 15.19
1 . .
ATOM 2321 CA    CA    . PHE PHE PHE A A 306 306 . 107.925 98.027  41.008  1.00 14.84
1 . .
ATOM 2322 CB    CB    . PHE PHE PHE A A 306 306 . 107.809 98.156  39.458  1.00 15.48
1 . .
ATOM 2323 CG    CG    . PHE PHE PHE A A 306 306 . 107.249 99.494  39.016  1.00 15.74
1 . .
ATOM 2324 CD1   CD1   . PHE PHE PHE A A 306 306 . 107.978 100.668 39.229  1.00 16.02
1 . .
ATOM 2325 CE1   CE1   . PHE PHE PHE A A 306 306 . 107.470 101.889 38.825  1.00 16.06
1 . .
ATOM 2326 CZ    CZ    . PHE PHE PHE A A 306 306 . 106.201 101.951 38.168  1.00 16.14
1 . .
ATOM 2327 CE2   CE2   . PHE PHE PHE A A 306 306 . 105.516 100.814 37.927  1.00 17.93
1 . .
ATOM 2328 CD2   CD2   . PHE PHE PHE A A 306 306 . 106.029 99.573  38.361  1.00 17.29
1 . .
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ATOM 2329 C     C     . PHE PHE PHE A A 306 306 . 106.567 98.274  41.707  1.00 14.54
1 . .
ATOM 2330 O     O     . PHE PHE PHE A A 306 306 . 106.312 99.407  42.249  1.00 15.37
1 . .
ATOM 2331 N     N     . THR THR THR A A 307 307 . 105.663 97.298  41.612  1.00 13.78
1 . .
ATOM 2332 CA    CA    . THR THR THR A A 307 307 . 104.333 97.387  42.279  1.00 14.15
1 . .
ATOM 2333 CB    CB    . THR THR THR A A 307 307 . 103.498 96.160  41.972  1.00 15.61
1 . .
ATOM 2334 OG1   OG1   . THR THR THR A A 307 307 . 103.274 96.162  40.556  1.00 14.31
1 . .
ATOM 2335 CG2   CG2   . THR THR THR A A 307 307 . 102.116 96.197  42.694  1.00 15.27
1 . .
ATOM 2336 C     C     . THR THR THR A A 307 307 . 104.426 97.737  43.748  1.00 14.81
1 . .
ATOM 2337 O     O     . THR THR THR A A 307 307 . 103.666 98.609  44.246  1.00 12.54
1 . .
ATOM 2338 N     N     . ALA ALA ALA A A 308 308 . 105.393 97.121  44.462  1.00 15.45
1 . .
ATOM 2339 CA    CA    . ALA ALA ALA A A 308 308 . 105.541 97.402  45.898  1.00 16.95
1 . .
ATOM 2340 CB    CB    . ALA ALA ALA A A 308 308 . 106.479 96.306  46.541  1.00 17.94
1 . .
ATOM 2341 C     C     . ALA ALA ALA A A 308 308 . 106.040 98.843  46.232  1.00 18.48
1 . .
ATOM 2342 O     O     . ALA ALA ALA A A 308 308 . 105.984 99.289  47.411  1.00 19.94
1 . .
ATOM 2343 N     N     . ASN ASN ASN A A 309 309 . 106.519 99.549  45.223  1.00 17.72
1 . .
ATOM 2344 CA    CA    . ASN ASN ASN A A 309 309 . 107.193 100.820 45.361  1.00 19.11
1 . .
ATOM 2345 CB    CB    . ASN ASN ASN A A 309 309 . 108.471 100.779 44.545  1.00 21.69
1 . .
ATOM 2346 CG    CG    . ASN ASN ASN A A 309 309 . 109.647 100.461 45.337  1.00 27.35
1 . .
ATOM 2347 OD1   OD1   . ASN ASN ASN A A 309 309 . 109.542 100.107 46.517  1.00 32.06
1 . .
ATOM 2348 ND2   ND2   . ASN ASN ASN A A 309 309 . 110.829 100.557 44.695  1.00 33.44
1 . .
ATOM 2349 C     C     . ASN ASN ASN A A 309 309 . 106.403 101.949 44.768  1.00 18.29
1 . .
ATOM 2350 O     O     . ASN ASN ASN A A 309 309 . 106.952 103.052 44.503  1.00 18.87
1 . .
ATOM 2351 N     N     . VAL VAL VAL A A 310 310 . 105.144 101.686 44.421  1.00 16.18
1 . .
ATOM 2352 CA    CA    . VAL VAL VAL A A 310 310 . 104.276 102.815 43.931  1.00 15.39
1 . .
ATOM 2353 CB    CB    . VAL VAL VAL A A 310 310 . 104.026 102.824 42.352  1.00 15.01
1 . .
ATOM 2354 CG1   CG1   . VAL VAL VAL A A 310 310 . 105.276 103.000 41.591  1.00 19.27
1 . .
ATOM 2355 CG2   CG2   . VAL VAL VAL A A 310 310 . 103.251 101.530 41.903  1.00 16.19
1 . .
ATOM 2356 C     C     . VAL VAL VAL A A 310 310 . 102.907 102.713 44.565  1.00 13.65
1 . .
ATOM 2357 O     O     . VAL VAL VAL A A 310 310 . 102.502 101.638 45.037  1.00 13.41
1 . .
ATOM 2358 N     N     . GLY GLY GLY A A 311 311 . 102.142 103.811 44.517  1.00 13.84
1 . .
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ATOM 2359 CA    CA    . GLY GLY GLY A A 311 311 . 100.777 103.762 44.980  1.00 13.14
1 . .
ATOM 2360 C     C     . GLY GLY GLY A A 311 311 . 99.759  103.870 43.831  1.00 13.92
1 . .
ATOM 2361 O     O     . GLY GLY GLY A A 311 311 . 98.563  103.980 44.083  1.00 15.15
1 . .
ATOM 2362 N     N     . ILE ILE ILE A A 312 312 . 100.230 103.767 42.576  1.00 12.29
1 . .
ATOM 2363 CA    CA    . ILE ILE ILE A A 312 312 . 99.277  103.828 41.403  1.00 11.60
1 . .
ATOM 2364 CB    CB    . ILE ILE ILE A A 312 312 . 99.931  104.545 40.206  1.00 10.84
1 . .
ATOM 2365 CG1   CG1   . ILE ILE ILE A A 312 312 . 101.138 103.743 39.688  1.00 14.73
1 . .
ATOM 2366 CD1   CD1   . ILE ILE ILE A A 312 312 . 101.582 104.191 38.301  1.00 14.98
1 . .
ATOM 2367 CG2   CG2   . ILE ILE ILE A A 312 312 . 100.285 106.090 40.555  1.00 11.88
1 . .
ATOM 2368 C     C     . ILE ILE ILE A A 312 312 . 98.746  102.476 40.971  1.00 11.19
1 . .
ATOM 2369 O     O     . ILE ILE ILE A A 312 312 . 99.107  101.395 41.534  1.00 10.67
1 . .
ATOM 2370 N     N     . GLN GLN GLN A A 313 313 . 97.846  102.527 39.990  1.00 9.82
1 . .
ATOM 2371 CA    CA    . GLN GLN GLN A A 313 313 . 97.378  101.315 39.363  1.00 8.31
1 . .
ATOM 2372 CB    CB    . GLN GLN GLN A A 313 313 . 96.074  101.583 38.582  1.00 8.94
1 . .
ATOM 2373 CG    CG    . GLN GLN GLN A A 313 313 . 95.548  100.354 37.829  1.00 8.73
1 . .
ATOM 2374 CD    CD    . GLN GLN GLN A A 313 313 . 94.124  100.589 37.379  1.00 10.13
1 . .
ATOM 2375 OE1   OE1   . GLN GLN GLN A A 313 313 . 93.215  100.189 38.057  1.00 10.65
1 . .
ATOM 2376 NE2   NE2   . GLN GLN GLN A A 313 313 . 93.940  101.146 36.177  1.00 9.34
1 . .
ATOM 2377 C     C     . GLN GLN GLN A A 313 313 . 98.464  100.738 38.448  1.00 8.01
1 . .
ATOM 2378 O     O     . GLN GLN GLN A A 313 313 . 99.045  101.446 37.648  1.00 7.96
1 . .
ATOM 2379 N     N     . ILE ILE ILE A A 314 314 . 98.658  99.409  38.577  1.00 7.41
1 . .
ATOM 2380 CA    CA    . ILE ILE ILE A A 314 314 . 99.607  98.671  37.765  1.00 9.27
1 . .
ATOM 2381 CB    CB    . ILE ILE ILE A A 314 314 . 100.757 98.065  38.622  1.00 9.32
1 . .
ATOM 2382 CG1   CG1   . ILE ILE ILE A A 314 314 . 101.593 99.215  39.284  1.00 11.34
1 . .
ATOM 2383 CD1   CD1   . ILE ILE ILE A A 314 314 . 102.149 100.275 38.246  1.00 14.19
1 . .
ATOM 2384 CG2   CG2   . ILE ILE ILE A A 314 314 . 101.588 97.145  37.745  1.00 11.58
1 . .
ATOM 2385 C     C     . ILE ILE ILE A A 314 314 . 98.784  97.543  37.124  1.00 8.66
1 . .
ATOM 2386 O     O     . ILE ILE ILE A A 314 314 . 98.179  96.732  37.824  1.00 9.69
1 . .
ATOM 2387 N     N     . VAL VAL VAL A A 315 315 . 98.720  97.577  35.780  1.00 7.68
1 . .
ATOM 2388 CA    CA    . VAL VAL VAL A A 315 315 . 97.795  96.709  35.050  1.00 8.53
1 . .
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ATOM 2389 CB    CB    . VAL VAL VAL A A 315 315 . 97.011  97.504  33.906  1.00 8.11
1 . .
ATOM 2390 CG1   CG1   . VAL VAL VAL A A 315 315 . 95.967  96.583  33.227  1.00 10.41
1 . .
ATOM 2391 CG2   CG2   . VAL VAL VAL A A 315 315 . 96.354  98.760  34.508  1.00 7.89
1 . .
ATOM 2392 C     C     . VAL VAL VAL A A 315 315 . 98.517  95.524  34.399  1.00 8.18
1 . .
ATOM 2393 O     O     . VAL VAL VAL A A 315 315 . 99.413  95.711  33.566  1.00 8.21
1 . .
ATOM 2394 N     N     . GLY GLY GLY A A 316 316 . 98.098  94.301  34.705  1.00 8.96
1 . .
ATOM 2395 CA    CA    . GLY GLY GLY A A 316 316 . 98.644  93.179  33.906  1.00 9.26
1 . .
ATOM 2396 C     C     . GLY GLY GLY A A 316 316 . 97.819  92.988  32.621  1.00 9.99
1 . .
ATOM 2397 O     O     . GLY GLY GLY A A 316 316 . 96.570  93.031  32.648  1.00 9.11
1 . .
ATOM 2398 N     N     . ASP ASP ASP A A 317 317 . 98.507  92.734  31.508  1.00 9.61
1 . .
ATOM 2399 CA    CA    . ASP ASP ASP A A 317 317 . 97.801  92.440  30.256  1.00 7.52
1 . .
ATOM 2400 CB    CB    . ASP ASP ASP A A 317 317 . 97.903  93.683  29.338  1.00 8.90
1 . .
ATOM 2401 CG    CG    . ASP ASP ASP A A 317 317 . 97.523  93.376  27.867  1.00 8.13
1 . .
ATOM 2402 OD1   OD1   . ASP ASP ASP A A 317 317 . 97.884  94.146  26.911  1.00 9.21
1 . .
ATOM 2403 OD2   OD2   . ASP ASP ASP A A 317 317 . 96.845  92.322  27.680  1.00 10.94
1 . .
ATOM 2404 C     C     . ASP ASP ASP A A 317 317 . 98.505  91.241  29.673  1.00 9.33
1 . .
ATOM 2405 O     O     . ASP ASP ASP A A 317 317 . 98.015  90.109  29.812  1.00 8.83
1 . .
ATOM 2406 N     N     . ASP ASP ASP A A 318 318 . 99.696  91.442  29.099  1.00 8.85
1 . .
ATOM 2407 CA    CA    . ASP ASP ASP A A 318 318 . 100.460 90.238  28.591  1.00 9.10
1 . .
ATOM 2408 CB    CB    . ASP ASP ASP A A 318 318 . 101.632 90.660  27.703  1.00 9.57
1 . .
ATOM 2409 CG    CG    . ASP ASP ASP A A 318 318 . 101.151 91.186  26.330  1.00 10.48
1 . .
ATOM 2410 OD1   OD1   . ASP ASP ASP A A 318 318 . 100.000 90.865  25.904  1.00 10.91
1 . .
ATOM 2411 OD2   OD2   . ASP ASP ASP A A 318 318 . 101.869 91.937  25.698  1.00 9.62
1 . .
ATOM 2412 C     C     . ASP ASP ASP A A 318 318 . 100.921 89.371  29.765  1.00 9.42
1 . .
ATOM 2413 O     O     . ASP ASP ASP A A 318 318 . 101.066 88.130  29.631  1.00 11.70
1 . .
ATOM 2414 N     N     . LEU LEU LEU A A 319 319 . 101.085 89.985  30.934  1.00 9.17
1 . .
ATOM 2415 CA    CA    . LEU LEU LEU A A 319 319 . 101.405 89.192  32.104  1.00 8.85
1 . .
ATOM 2416 CB    CB    . LEU LEU LEU A A 319 319 . 101.484 90.178  33.303  1.00 9.11
1 . .
ATOM 2417 CG    CG    . LEU LEU LEU A A 319 319 . 101.873 89.498  34.611  1.00 8.11
1 . .
ATOM 2418 CD1   CD1   . LEU LEU LEU A A 319 319 . 103.354 89.039  34.496  1.00 11.86
1 . .
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ATOM 2419 CD2   CD2   . LEU LEU LEU A A 319 319 . 101.696 90.452  35.829  1.00 11.62
1 . .
ATOM 2420 C     C     . LEU LEU LEU A A 319 319 . 100.336 88.170  32.450  1.00 10.19
1 . .
ATOM 2421 O     O     . LEU LEU LEU A A 319 319 . 100.629 87.012  32.820  1.00 10.05
1 . .
ATOM 2422 N     N     . THR THR THR A A 320 320 . 99.079  88.616  32.391  1.00 8.63
1 . .
ATOM 2423 CA    CA    . THR THR THR A A 320 320 . 97.947  87.835  32.900  1.00 9.64
1 . .
ATOM 2424 CB    CB    . THR THR THR A A 320 320 . 97.055  88.762  33.738  1.00 10.53
1 . .
ATOM 2425 OG1   OG1   . THR THR THR A A 320 320 . 97.002  90.050  33.074  1.00 12.52
1 . .
ATOM 2426 CG2   CG2   . THR THR THR A A 320 320 . 97.620  88.945  35.172  1.00 10.24
1 . .
ATOM 2427 C     C     . THR THR THR A A 320 320 . 97.055  87.139  31.844  1.00 9.89
1 . .
ATOM 2428 O     O     . THR THR THR A A 320 320 . 96.395  86.126  32.157  1.00 8.64
1 . .
ATOM 2429 N     N     . VAL VAL VAL A A 321 321 . 97.040  87.678  30.610  1.00 9.23
1 . .
ATOM 2430 CA    CA    . VAL VAL VAL A A 321 321 . 96.244  87.161  29.518  1.00 8.58
1 . .
ATOM 2431 CB    CB    . VAL VAL VAL A A 321 321 . 97.044  86.110  28.625  1.00 7.58
1 . .
ATOM 2432 CG1   CG1   . VAL VAL VAL A A 321 321 . 98.255  86.815  28.037  1.00 8.21
1 . .
ATOM 2433 CG2   CG2   . VAL VAL VAL A A 321 321 . 97.507  84.885  29.499  1.00 10.54
1 . .
ATOM 2434 C     C     . VAL VAL VAL A A 321 321 . 94.807  86.706  29.817  1.00 6.54
1 . .
ATOM 2435 O     O     . VAL VAL VAL A A 321 321 . 94.339  85.669  29.255  1.00 7.81
1 . .
ATOM 2436 N     N     . THR THR THR A A 322 322 . 94.110  87.450  30.673  1.00 7.40
1 . .
ATOM 2437 CA    CA    . THR THR THR A A 322 322 . 92.703  87.184  30.972  1.00 7.63
1 . .
ATOM 2438 CB    CB    . THR THR THR A A 322 322 . 91.838  87.611  29.804  1.00 6.62
1 . .
ATOM 2439 OG1   OG1   . THR THR THR A A 322 322 . 92.204  88.942  29.413  1.00 7.71
1 . .
ATOM 2440 CG2   CG2   . THR THR THR A A 322 322 . 90.286  87.631  30.258  1.00 8.15
1 . .
ATOM 2441 C     C     . THR THR THR A A 322 322 . 92.523  85.688  31.423  1.00 8.24
1 . .
ATOM 2442 O     O     . THR THR THR A A 322 322 . 91.552  85.041  31.139  1.00 8.86
1 . .
ATOM 2443 N     N     . ASN ASN ASN A A 323 323 . 93.539  85.158  32.135  1.00 8.80
1 . .
ATOM 2444 CA    CA    . ASN ASN ASN A A 323 323 . 93.677  83.719  32.317  1.00 11.06
1 . .
ATOM 2445 CB    CB    . ASN ASN ASN A A 323 323 . 94.949  83.222  31.628  1.00 10.91
1 . .
ATOM 2446 CG    CG    . ASN ASN ASN A A 323 323 . 95.005  81.708  31.625  1.00 15.38
1 . .
ATOM 2447 OD1   OD1   . ASN ASN ASN A A 323 323 . 94.673  81.099  32.637  1.00 19.34
1 . .
ATOM 2448 ND2   ND2   . ASN ASN ASN A A 323 323 . 95.311  81.093  30.476  1.00 13.59
1 . .
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ATOM 2449 C     C     . ASN ASN ASN A A 323 323 . 93.767  83.452  33.840  1.00 12.46
1 . .
ATOM 2450 O     O     . ASN ASN ASN A A 323 323 . 94.744  83.826  34.470  1.00 12.11
1 . .
ATOM 2451 N     N     . PRO PRO PRO A A 324 324 . 92.750  82.817  34.424  1.00 13.90
1 . .
ATOM 2452 CA    CA    . PRO PRO PRO A A 324 324 . 92.745  82.541  35.897  1.00 14.49
1 . .
ATOM 2453 CB    CB    . PRO PRO PRO A A 324 324 . 91.580  81.548  36.041  1.00 15.31
1 . .
ATOM 2454 CG    CG    . PRO PRO PRO A A 324 324 . 90.618  82.022  35.081  1.00 16.63
1 . .
ATOM 2455 CD    CD    . PRO PRO PRO A A 324 324 . 91.483  82.344  33.802  1.00 13.75
1 . .
ATOM 2456 C     C     . PRO PRO PRO A A 324 324 . 94.076  81.935  36.476  1.00 16.37
1 . .
ATOM 2457 O     O     . PRO PRO PRO A A 324 324 . 94.510  82.358  37.587  1.00 16.48
1 . .
ATOM 2458 N     N     . LYS LYS LYS A A 325 325 . 94.762  81.050  35.720  1.00 16.45
1 . .
ATOM 2459 CA    CA    . LYS LYS LYS A A 325 325 . 96.029  80.448  36.156  1.00 16.32
1 . .
ATOM 2460 CB    CB    . LYS LYS LYS A A 325 325 . 96.534  79.384  35.158  1.00 17.66
1 . .
ATOM 2461 C     C     . LYS LYS LYS A A 325 325 . 97.108  81.516  36.372  1.00 16.25
1 . .
ATOM 2462 O     O     . LYS LYS LYS A A 325 325 . 97.810  81.525  37.382  1.00 16.42
1 . .
ATOM 2463 N     N     . ARG ARG ARG A A 326 326 . 97.243  82.418  35.391  1.00 13.94
1 . .
ATOM 2464 CA    CA    . ARG ARG ARG A A 326 326 . 98.256  83.421  35.420  1.00 12.68
1 . .
ATOM 2465 CB    CB    . ARG ARG ARG A A 326 326 . 98.402  84.046  34.042  1.00 12.92
1 . .
ATOM 2466 CG    CG    . ARG ARG ARG A A 326 326 . 99.088  83.239  32.930  1.00 16.64
1 . .
ATOM 2467 CD    CD    . ARG ARG ARG A A 326 326 . 100.015 84.333  32.258  1.00 23.66
1 . .
ATOM 2468 NE    NE    . ARG ARG ARG A A 326 326 . 101.224 83.767  32.625  1.00 20.65
1 . .
ATOM 2469 CZ    CZ    . ARG ARG ARG A A 326 326 . 102.503 84.144  32.581  1.00 18.33
1 . .
ATOM 2470 NH1   NH1   . ARG ARG ARG A A 326 326 . 102.963 85.344  32.369  1.00 14.41
1 . .
ATOM 2471 NH2   NH2   . ARG ARG ARG A A 326 326 . 103.367 83.159  32.888  1.00 17.22
1 . .
ATOM 2472 C     C     . ARG ARG ARG A A 326 326 . 97.833  84.506  36.449  1.00 11.82
1 . .
ATOM 2473 O     O     . ARG ARG ARG A A 326 326 . 98.697  85.094  37.125  1.00 12.96
1 . .
ATOM 2474 N     N     . ILE ILE ILE A A 327 327 . 96.519  84.785  36.538  1.00 11.10
1 . .
ATOM 2475 CA    CA    . ILE ILE ILE A A 327 327 . 96.030  85.797  37.477  1.00 12.54
1 . .
ATOM 2476 CB    CB    . ILE ILE ILE A A 327 327 . 94.503  86.024  37.295  1.00 12.01
1 . .
ATOM 2477 CG1   CG1   . ILE ILE ILE A A 327 327 . 94.287  86.716  35.925  1.00 11.79
1 . .
ATOM 2478 CD1   CD1   . ILE ILE ILE A A 327 327 . 92.804  86.618  35.526  1.00 9.40
1 . .
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ATOM 2479 CG2   CG2   . ILE ILE ILE A A 327 327 . 93.895  86.863  38.496  1.00 10.84
1 . .
ATOM 2480 C     C     . ILE ILE ILE A A 327 327 . 96.315  85.313  38.918  1.00 14.64
1 . .
ATOM 2481 O     O     . ILE ILE ILE A A 327 327 . 96.820  86.077  39.735  1.00 15.09
1 . .
ATOM 2482 N     N     . GLU GLU GLU A A 328 328 . 96.045  84.042  39.208  1.00 15.55
1 . .
ATOM 2483 CA    CA    . GLU GLU GLU A A 328 328 . 96.394  83.497  40.576  1.00 16.73
1 . .
ATOM 2484 CB    CB    . GLU GLU GLU A A 328 328 . 96.073  82.021  40.618  1.00 16.98
1 . .
ATOM 2485 CG    CG    . GLU GLU GLU A A 328 328 . 94.595  81.773  40.505  1.00 24.17
1 . .
ATOM 2486 CD    CD    . GLU GLU GLU A A 328 328 . 93.867  81.726  41.836  1.00 35.02
1 . .
ATOM 2487 OE1   OE1   . GLU GLU GLU A A 328 328 . 92.932  80.880  41.911  1.00 38.69
1 . .
ATOM 2488 OE2   OE2   . GLU GLU GLU A A 328 328 . 94.205  82.522  42.781  1.00 39.59
1 . .
ATOM 2489 C     C     . GLU GLU GLU A A 328 328 . 97.842  83.695  40.927  1.00 16.51
1 . .
ATOM 2490 O     O     . GLU GLU GLU A A 328 328 . 98.164  84.108  42.039  1.00 17.18
1 . .
ATOM 2491 N     N     . ARG ARG ARG A A 329 329 . 98.726  83.463  39.967  1.00 16.29
1 . .
ATOM 2492 CA    CA    . ARG ARG ARG A A 329 329 . 100.181 83.627  40.219  1.00 16.94
1 . .
ATOM 2493 CB    CB    . ARG ARG ARG A A 329 329 . 100.989 83.085  39.028  1.00 18.47
1 . .
ATOM 2494 CG    CG    . ARG ARG ARG A A 329 329 . 102.497 83.327  39.118  1.00 21.37
1 . .
ATOM 2495 CD    CD    . ARG ARG ARG A A 329 329 . 103.287 82.535  38.080  1.00 23.99
1 . .
ATOM 2496 NE    NE    . ARG ARG ARG A A 329 329 . 104.750 82.775  38.212  1.00 25.00
1 . .
ATOM 2497 CZ    CZ    . ARG ARG ARG A A 329 329 . 105.622 82.418  37.297  1.00 23.15
1 . .
ATOM 2498 NH1   NH1   . ARG ARG ARG A A 329 329 . 105.164 81.820  36.192  1.00 25.97
1 . .
ATOM 2499 NH2   NH2   . ARG ARG ARG A A 329 329 . 106.922 82.707  37.451  1.00 23.43
1 . .
ATOM 2500 C     C     . ARG ARG ARG A A 329 329 . 100.517 85.124  40.460  1.00 17.09
1 . .
ATOM 2501 O     O     . ARG ARG ARG A A 329 329 . 101.334 85.474  41.358  1.00 17.59
1 . .
ATOM 2502 N     N     . ALA ALA ALA A A 330 330 . 99.915  86.014  39.654  1.00 14.77
1 . .
ATOM 2503 CA    CA    . ALA ALA ALA A A 330 330 . 100.107 87.454  39.851  1.00 14.86
1 . .
ATOM 2504 CB    CB    . ALA ALA ALA A A 330 330 . 99.435  88.281  38.678  1.00 13.21
1 . .
ATOM 2505 C     C     . ALA ALA ALA A A 330 330 . 99.584  87.933  41.236  1.00 14.88
1 . .
ATOM 2506 O     O     . ALA ALA ALA A A 330 330 . 100.214 88.776  41.901  1.00 15.86
1 . .
ATOM 2507 N     N     . VAL VAL VAL A A 331 331 . 98.493  87.372  41.705  1.00 14.74
1 . .
ATOM 2508 CA    CA    . VAL VAL VAL A A 331 331 . 97.993  87.697  43.038  1.00 18.27
1 . .
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ATOM 2509 CB    CB    . VAL VAL VAL A A 331 331 . 96.619  87.073  43.282  1.00 17.73
1 . .
ATOM 2510 CG1   CG1   . VAL VAL VAL A A 331 331 . 96.217  87.124  44.762  1.00 22.52
1 . .
ATOM 2511 CG2   CG2   . VAL VAL VAL A A 331 331 . 95.532  87.761  42.422  1.00 20.13
1 . .
ATOM 2512 C     C     . VAL VAL VAL A A 331 331 . 99.028  87.218  44.074  1.00 18.59
1 . .
ATOM 2513 O     O     . VAL VAL VAL A A 331 331 . 99.447  88.003  44.926  1.00 18.59
1 . .
ATOM 2514 N     N     . GLU GLU GLU A A 332 332 . 99.437  85.961  43.993  1.00 19.54
1 . .
ATOM 2515 CA    CA    . GLU GLU GLU A A 332 332 . 100.435 85.382  44.917  1.00 22.11
1 . .
ATOM 2516 CB    CB    . GLU GLU GLU A A 332 332 . 100.673 83.877  44.589  1.00 22.89
1 . .
ATOM 2517 CG    CG    . GLU GLU GLU A A 332 332 . 101.756 83.178  45.422  1.00 29.77
1 . .
ATOM 2518 CD    CD    . GLU GLU GLU A A 332 332 . 101.485 83.280  46.931  1.00 38.06
1 . .
ATOM 2519 OE1   OE1   . GLU GLU GLU A A 332 332 . 102.490 83.244  47.701  1.00 42.41
1 . .
ATOM 2520 OE2   OE2   . GLU GLU GLU A A 332 332 . 100.288 83.416  47.355  1.00 40.50
1 . .
ATOM 2521 C     C     . GLU GLU GLU A A 332 332 . 101.753 86.196  44.944  1.00 21.55
1 . .
ATOM 2522 O     O     . GLU GLU GLU A A 332 332 . 102.303 86.460  46.011  1.00 23.28
1 . .
ATOM 2523 N     N     . GLU GLU GLU A A 333 333 . 102.244 86.660  43.796  1.00 20.69
1 . .
ATOM 2524 CA    CA    . GLU GLU GLU A A 333 333 . 103.475 87.419  43.736  1.00 19.19
1 . .
ATOM 2525 CB    CB    . GLU GLU GLU A A 333 333 . 104.218 87.111  42.440  1.00 20.73
1 . .
ATOM 2526 CG    CG    . GLU GLU GLU A A 333 333 . 104.406 85.542  42.318  1.00 24.32
1 . .
ATOM 2527 CD    CD    . GLU GLU GLU A A 333 333 . 105.498 85.079  41.369  1.00 31.45
1 . .
ATOM 2528 OE1   OE1   . GLU GLU GLU A A 333 333 . 105.410 83.900  40.910  1.00 35.47
1 . .
ATOM 2529 OE2   OE2   . GLU GLU GLU A A 333 333 . 106.440 85.863  41.079  1.00 33.65
1 . .
ATOM 2530 C     C     . GLU GLU GLU A A 333 333 . 103.287 88.949  43.925  1.00 18.27
1 . .
ATOM 2531 O     O     . GLU GLU GLU A A 333 333 . 104.287 89.667  43.875  1.00 17.53
1 . .
ATOM 2532 N     N     . LYS LYS LYS A A 334 334 . 102.031 89.431  44.087  1.00 16.08
1 . .
ATOM 2533 CA    CA    . LYS LYS LYS A A 334 334 . 101.768 90.855  44.151  1.00 16.06
1 . .
ATOM 2534 CB    CB    . LYS LYS LYS A A 334 334 . 102.219 91.418  45.531  1.00 16.17
1 . .
ATOM 2535 CG    CG    . LYS LYS LYS A A 334 334 . 101.296 90.883  46.667  1.00 18.22
1 . .
ATOM 2536 CD    CD    . LYS LYS LYS A A 334 334 . 101.818 91.322  48.024  1.00 27.28
1 . .
ATOM 2537 C     C     . LYS LYS LYS A A 334 334 . 102.400 91.594  42.958  1.00 15.45
1 . .
ATOM 2538 O     O     . LYS LYS LYS A A 334 334 . 103.059 92.648  43.101  1.00 16.15
1 . .
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ATOM 2539 N     N     . ALA ALA ALA A A 335 335 . 102.222 90.996  41.757  1.00 13.52
1 . .
ATOM 2540 CA    CA    . ALA ALA ALA A A 335 335 . 102.883 91.484  40.557  1.00 14.18
1 . .
ATOM 2541 CB    CB    . ALA ALA ALA A A 335 335 . 102.872 90.409  39.452  1.00 13.36
1 . .
ATOM 2542 C     C     . ALA ALA ALA A A 335 335 . 102.219 92.752  40.054  1.00 13.91
1 . .
ATOM 2543 O     O     . ALA ALA ALA A A 335 335 . 102.887 93.621  39.485  1.00 12.61
1 . .
ATOM 2544 N     N     . CYS CYS CYS A A 336 336 . 100.900 92.842  40.257  1.00 13.81
1 . .
ATOM 2545 CA    CA    . CYS CYS CYS A A 336 336 . 100.138 94.028  39.738  1.00 12.79
1 . .
ATOM 2546 CB    CB    . CYS CYS CYS A A 336 336 . 99.786  93.834  38.247  1.00 13.04
1 . .
ATOM 2547 SG    SG    . CYS CYS CYS A A 336 336 . 98.866  92.272  37.899  1.00 12.59
1 . .
ATOM 2548 C     C     . CYS CYS CYS A A 336 336 . 98.861  94.166  40.578  1.00 13.33
1 . .
ATOM 2549 O     O     . CYS CYS CYS A A 336 336 . 98.623  93.340  41.472  1.00 13.56
1 . .
ATOM 2550 N     N     . ASN ASN ASN A A 337 337 . 97.995  95.145  40.266  1.00 10.80
1 . .
ATOM 2551 CA    CA    . ASN ASN ASN A A 337 337 . 96.810  95.292  41.101  1.00 11.47
1 . .
ATOM 2552 CB    CB    . ASN ASN ASN A A 337 337 . 97.051  96.363  42.212  1.00 12.25
1 . .
ATOM 2553 CG    CG    . ASN ASN ASN A A 337 337 . 97.505  97.737  41.639  1.00 13.56
1 . .
ATOM 2554 OD1   OD1   . ASN ASN ASN A A 337 337 . 98.376  98.462  42.230  1.00 18.59
1 . .
ATOM 2555 ND2   ND2   . ASN ASN ASN A A 337 337 . 96.920  98.120  40.504  1.00 8.89
1 . .
ATOM 2556 C     C     . ASN ASN ASN A A 337 337 . 95.590  95.615  40.235  1.00 11.42
1 . .
ATOM 2557 O     O     . ASN ASN ASN A A 337 337 . 94.521  96.029  40.747  1.00 11.90
1 . .
ATOM 2558 N     N     . CYS CYS CYS A A 338 338 . 95.704  95.355  38.929  1.00 9.64
1 . .
ATOM 2559 CA    CA    . CYS CYS CYS A A 338 338 . 94.548  95.515  38.061  1.00 7.83
1 . .
ATOM 2560 CB    CB    . CYS CYS CYS A A 338 338 . 94.496  96.982  37.522  1.00 10.26
1 . .
ATOM 2561 SG    SG    . CYS CYS CYS A A 338 338 . 93.110  97.355  36.359  1.00 10.99
1 . .
ATOM 2562 C     C     . CYS CYS CYS A A 338 338 . 94.703  94.509  36.882  1.00 8.15
1 . .
ATOM 2563 O     O     . CYS CYS CYS A A 338 338 . 95.783  94.262  36.416  1.00 10.91
1 . .
ATOM 2564 N     N     . LEU LEU LEU A A 339 339 . 93.593  93.996  36.396  1.00 5.86
1 . .
ATOM 2565 CA    CA    . LEU LEU LEU A A 339 339 . 93.586  93.055  35.273  1.00 6.94
1 . .
ATOM 2566 CB    CB    . LEU LEU LEU A A 339 339 . 92.619  91.866  35.623  1.00 6.45
1 . .
ATOM 2567 CG    CG    . LEU LEU LEU A A 339 339 . 92.292  90.928  34.448  1.00 6.03
1 . .
ATOM 2568 CD1   CD1   . LEU LEU LEU A A 339 339 . 93.576  90.143  34.085  1.00 9.55
1 . .
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ATOM 2569 CD2   CD2   . LEU LEU LEU A A 339 339 . 91.148  89.989  34.843  1.00 10.04
1 . .
ATOM 2570 C     C     . LEU LEU LEU A A 339 339 . 93.089  93.733  34.022  1.00 7.25
1 . .
ATOM 2571 O     O     . LEU LEU LEU A A 339 339 . 92.020  94.318  34.081  1.00 7.44
1 . .
ATOM 2572 N     N     . LEU LEU LEU A A 340 340 . 93.814  93.605  32.886  1.00 7.49
1 . .
ATOM 2573 CA    CA    . LEU LEU LEU A A 340 340 . 93.208  94.024  31.582  1.00 7.01
1 . .
ATOM 2574 CB    CB    . LEU LEU LEU A A 340 340 . 94.290  94.396  30.559  1.00 6.71
1 . .
ATOM 2575 CG    CG    . LEU LEU LEU A A 340 340 . 93.747  95.260  29.420  1.00 6.70
1 . .
ATOM 2576 CD1   CD1   . LEU LEU LEU A A 340 340 . 93.574  96.704  29.970  1.00 6.10
1 . .
ATOM 2577 CD2   CD2   . LEU LEU LEU A A 340 340 . 94.675  95.274  28.145  1.00 7.32
1 . .
ATOM 2578 C     C     . LEU LEU LEU A A 340 340 . 92.342  92.858  31.081  1.00 7.77
1 . .
ATOM 2579 O     O     . LEU LEU LEU A A 340 340 . 92.824  91.737  30.938  1.00 7.90
1 . .
ATOM 2580 N     N     . LEU LEU LEU A A 341 341 . 91.057  93.138  30.802  1.00 7.56
1 . .
ATOM 2581 CA    CA    . LEU LEU LEU A A 341 341 . 90.122  92.081  30.442  1.00 8.41
1 . .
ATOM 2582 CB    CB    . LEU LEU LEU A A 341 341 . 88.786  92.240  31.185  1.00 7.84
1 . .
ATOM 2583 CG    CG    . LEU LEU LEU A A 341 341 . 87.949  90.951  31.247  1.00 8.98
1 . .
ATOM 2584 CD1   CD1   . LEU LEU LEU A A 341 341 . 88.468  90.053  32.439  1.00 12.21
1 . .
ATOM 2585 CD2   CD2   . LEU LEU LEU A A 341 341 . 86.518  91.357  31.432  1.00 13.33
1 . .
ATOM 2586 C     C     . LEU LEU LEU A A 341 341 . 89.902  92.057  28.936  1.00 8.75
1 . .
ATOM 2587 O     O     . LEU LEU LEU A A 341 341 . 89.251  92.929  28.397  1.00 8.84
1 . .
ATOM 2588 N     N     . LYS LYS LYS A A 342 342 . 90.440  91.040  28.276  1.00 9.53
1 . .
ATOM 2589 CA    CA    . LYS LYS LYS A A 342 342 . 90.350  90.837  26.782  1.00 8.86
1 . .
ATOM 2590 CB    CB    . LYS LYS LYS A A 342 342 . 91.758  90.858  26.202  1.00 9.60
1 . .
ATOM 2591 CG    CG    . LYS LYS LYS A A 342 342 . 92.282  92.329  26.052  1.00 8.33
1 . .
ATOM 2592 CD    CD    . LYS LYS LYS A A 342 342 . 93.787  92.288  25.672  1.00 7.12
1 . .
ATOM 2593 CE    CE    . LYS LYS LYS A A 342 342 . 94.219  93.627  25.129  1.00 10.51
1 . .
ATOM 2594 NZ    NZ    . LYS LYS LYS A A 342 342 . 95.652  93.560  24.967  1.00 12.68
1 . .
ATOM 2595 C     C     . LYS LYS LYS A A 342 342 . 89.725  89.466  26.580  1.00 9.88
1 . .
ATOM 2596 O     O     . LYS LYS LYS A A 342 342 . 90.345  88.431  26.775  1.00 9.76
1 . .
ATOM 2597 N     N     . VAL VAL VAL A A 343 343 . 88.461  89.481  26.148  1.00 8.17
1 . .
ATOM 2598 CA    CA    . VAL VAL VAL A A 343 343 . 87.740  88.241  25.846  1.00 8.87
1 . .
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ATOM 2599 CB    CB    . VAL VAL VAL A A 343 343 . 86.330  88.514  25.253  1.00 10.12
1 . .
ATOM 2600 CG1   CG1   . VAL VAL VAL A A 343 343 . 85.350  89.103  26.412  1.00 11.31
1 . .
ATOM 2601 CG2   CG2   . VAL VAL VAL A A 343 343 . 86.416  89.582  24.078  1.00 11.67
1 . .
ATOM 2602 C     C     . VAL VAL VAL A A 343 343 . 88.509  87.315  24.971  1.00 8.40
1 . .
ATOM 2603 O     O     . VAL VAL VAL A A 343 343 . 88.410  86.070  25.167  1.00 8.90
1 . .
ATOM 2604 N     N     . ASN ASN ASN A A 344 344 . 89.247  87.855  23.955  1.00 7.63
1 . .
ATOM 2605 CA    CA    . ASN ASN ASN A A 344 344 . 89.931  86.953  23.029  1.00 7.55
1 . .
ATOM 2606 CB    CB    . ASN ASN ASN A A 344 344 . 89.960  87.505  21.547  1.00 6.63
1 . .
ATOM 2607 CG    CG    . ASN ASN ASN A A 344 344 . 91.240  88.280  21.227  1.00 7.46
1 . .
ATOM 2608 OD1   OD1   . ASN ASN ASN A A 344 344 . 91.656  89.191  21.975  1.00 8.12
1 . .
ATOM 2609 ND2   ND2   . ASN ASN ASN A A 344 344 . 91.909  87.868  20.156  1.00 8.61
1 . .
ATOM 2610 C     C     . ASN ASN ASN A A 344 344 . 91.326  86.471  23.492  1.00 8.48
1 . .
ATOM 2611 O     O     . ASN ASN ASN A A 344 344 . 91.942  85.657  22.796  1.00 8.64
1 . .
ATOM 2612 N     N     . GLN GLN GLN A A 345 345 . 91.803  86.923  24.668  1.00 7.21
1 . .
ATOM 2613 CA    CA    . GLN GLN GLN A A 345 345 . 93.028  86.356  25.244  1.00 7.92
1 . .
ATOM 2614 CB    CB    . GLN GLN GLN A A 345 345 . 93.664  87.239  26.359  1.00 7.76
1 . .
ATOM 2615 CG    CG    . GLN GLN GLN A A 345 345 . 94.342  88.521  25.770  1.00 7.77
1 . .
ATOM 2616 CD    CD    . GLN GLN GLN A A 345 345 . 95.014  89.298  26.798  1.00 7.39
1 . .
ATOM 2617 OE1   OE1   . GLN GLN GLN A A 345 345 . 94.500  89.431  27.901  1.00 8.91
1 . .
ATOM 2618 NE2   NE2   . GLN GLN GLN A A 345 345 . 96.203  89.805  26.475  1.00 8.15
1 . .
ATOM 2619 C     C     . GLN GLN GLN A A 345 345 . 92.732  84.997  25.833  1.00 7.56
1 . .
ATOM 2620 O     O     . GLN GLN GLN A A 345 345 . 93.659  84.147  25.977  1.00 8.67
1 . .
ATOM 2621 N     N     . ILE ILE ILE A A 346 346 . 91.470  84.809  26.209  1.00 7.00
1 . .
ATOM 2622 CA    CA    . ILE ILE ILE A A 346 346 . 91.063  83.564  26.884  1.00 8.39
1 . .
ATOM 2623 CB    CB    . ILE ILE ILE A A 346 346 . 90.543  83.796  28.370  1.00 8.65
1 . .
ATOM 2624 CG1   CG1   . ILE ILE ILE A A 346 346 . 90.465  82.471  29.158  1.00 8.91
1 . .
ATOM 2625 CD1   CD1   . ILE ILE ILE A A 346 346 . 91.886  81.823  29.267  1.00 9.26
1 . .
ATOM 2626 CG2   CG2   . ILE ILE ILE A A 346 346 . 89.159  84.429  28.391  1.00 9.28
1 . .
ATOM 2627 C     C     . ILE ILE ILE A A 346 346 . 90.095  82.719  25.988  1.00 8.71
1 . .
ATOM 2628 O     O     . ILE ILE ILE A A 346 346 . 90.203  81.452  25.966  1.00 9.62
1 . .
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ATOM 2629 N     N     . GLY GLY GLY A A 347 347 . 89.141  83.370  25.292  1.00 8.17
1 . .
ATOM 2630 CA    CA    . GLY GLY GLY A A 347 347 . 88.455  82.657  24.212  1.00 9.22
1 . .
ATOM 2631 C     C     . GLY GLY GLY A A 347 347 . 86.968  82.420  24.439  1.00 8.89
1 . .
ATOM 2632 O     O     . GLY GLY GLY A A 347 347 . 86.362  81.827  23.568  1.00 8.60
1 . .
ATOM 2633 N     N     . SER SER SER A A 348 348 . 86.384  82.751  25.618  1.00 8.64
1 . .
ATOM 2634 CA    CA    . SER SER SER A A 348 348 . 84.892  82.633  25.799  1.00 8.82
1 . .
ATOM 2635 CB    CB    . SER SER SER A A 348 348 . 84.524  81.246  26.357  1.00 9.80
1 . .
ATOM 2636 OG    OG    . SER SER SER A A 348 348 . 85.006  81.102  27.716  1.00 10.63
1 . .
ATOM 2637 C     C     . SER SER SER A A 348 348 . 84.399  83.690  26.776  1.00 7.81
1 . .
ATOM 2638 O     O     . SER SER SER A A 348 348 . 85.178  84.228  27.610  1.00 8.31
1 . .
ATOM 2639 N     N     . VAL VAL VAL A A 349 349 . 83.121  84.031  26.659  1.00 8.32
1 . .
ATOM 2640 CA    CA    . VAL VAL VAL A A 349 349 . 82.543  85.008  27.559  1.00 7.72
1 . .
ATOM 2641 CB    CB    . VAL VAL VAL A A 349 349 . 81.065  85.271  27.058  1.00 7.32
1 . .
ATOM 2642 CG1   CG1   . VAL VAL VAL A A 349 349 . 80.340  86.164  28.075  1.00 8.84
1 . .
ATOM 2643 CG2   CG2   . VAL VAL VAL A A 349 349 . 81.122  85.975  25.687  1.00 10.59
1 . .
ATOM 2644 C     C     . VAL VAL VAL A A 349 349 . 82.603  84.439  29.009  1.00 8.03
1 . .
ATOM 2645 O     O     . VAL VAL VAL A A 349 349 . 82.928  85.146  29.977  1.00 8.28
1 . .
ATOM 2646 N     N     . THR THR THR A A 350 350 . 82.223  83.191  29.184  1.00 9.28
1 . .
ATOM 2647 CA    CA    . THR THR THR A A 350 350 . 82.241  82.601  30.542  1.00 8.31
1 . .
ATOM 2648 CB    CB    . THR THR THR A A 350 350 . 81.760  81.106  30.499  1.00 7.90
1 . .
ATOM 2649 OG1   OG1   . THR THR THR A A 350 350 . 80.398  81.059  30.044  1.00 10.42
1 . .
ATOM 2650 CG2   CG2   . THR THR THR A A 350 350 . 81.857  80.421  31.886  1.00 11.60
1 . .
ATOM 2651 C     C     . THR THR THR A A 350 350 . 83.595  82.674  31.225  1.00 8.43
1 . .
ATOM 2652 O     O     . THR THR THR A A 350 350 . 83.675  83.098  32.415  1.00 8.06
1 . .
ATOM 2653 N     N     . GLU GLU GLU A A 351 351 . 84.661  82.324  30.503  1.00 9.29
1 . .
ATOM 2654 CA    CA    . GLU GLU GLU A A 351 351 . 85.992  82.448  31.097  1.00 9.61
1 . .
ATOM 2655 CB    CB    . GLU GLU GLU A A 351 351 . 87.032  81.816  30.166  1.00 9.68
1 . .
ATOM 2656 CG    CG    . GLU GLU GLU A A 351 351 . 86.876  80.251  30.227  1.00 12.65
1 . .
ATOM 2657 CD    CD    . GLU GLU GLU A A 351 351 . 87.672  79.599  29.090  1.00 13.10
1 . .
ATOM 2658 OE1   OE1   . GLU GLU GLU A A 351 351 . 87.388  79.876  27.908  1.00 15.17
1 . .
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ATOM 2659 OE2   OE2   . GLU GLU GLU A A 351 351 . 88.642  78.899  29.388  1.00 16.26
1 . .
ATOM 2660 C     C     . GLU GLU GLU A A 351 351 . 86.398  83.892  31.417  1.00 10.03
1 . .
ATOM 2661 O     O     . GLU GLU GLU A A 351 351 . 87.054  84.147  32.433  1.00 10.52
1 . .
ATOM 2662 N     N     . ALA ALA ALA A A 352 352 . 86.035  84.817  30.541  1.00 9.17
1 . .
ATOM 2663 CA    CA    . ALA ALA ALA A A 352 352 . 86.405  86.250  30.766  1.00 8.51
1 . .
ATOM 2664 CB    CB    . ALA ALA ALA A A 352 352 . 85.987  87.081  29.538  1.00 8.52
1 . .
ATOM 2665 C     C     . ALA ALA ALA A A 352 352 . 85.658  86.734  32.007  1.00 9.84
1 . .
ATOM 2666 O     O     . ALA ALA ALA A A 352 352 . 86.199  87.482  32.794  1.00 10.20
1 . .
ATOM 2667 N     N     . ILE ILE ILE A A 353 353 . 84.392  86.313  32.168  1.00 9.17
1 . .
ATOM 2668 CA    CA    . ILE ILE ILE A A 353 353 . 83.629  86.727  33.345  1.00 10.69
1 . .
ATOM 2669 CB    CB    . ILE ILE ILE A A 353 353 . 82.132  86.301  33.255  1.00 9.46
1 . .
ATOM 2670 CG1   CG1   . ILE ILE ILE A A 353 353 . 81.427  87.156  32.139  1.00 11.06
1 . .
ATOM 2671 CD1   CD1   . ILE ILE ILE A A 353 353 . 79.885  86.808  31.903  1.00 13.26
1 . .
ATOM 2672 CG2   CG2   . ILE ILE ILE A A 353 353 . 81.446  86.498  34.679  1.00 11.63
1 . .
ATOM 2673 C     C     . ILE ILE ILE A A 353 353 . 84.283  86.161  34.596  1.00 10.08
1 . .
ATOM 2674 O     O     . ILE ILE ILE A A 353 353 . 84.480  86.896  35.608  1.00 11.22
1 . .
ATOM 2675 N     N     . GLN GLN GLN A A 354 354 . 84.686  84.904  34.522  1.00 11.38
1 . .
ATOM 2676 CA    CA    . GLN GLN GLN A A 354 354 . 85.374  84.257  35.680  1.00 12.70
1 . .
ATOM 2677 CB    CB    . GLN GLN GLN A A 354 354 . 85.690  82.755  35.393  1.00 13.90
1 . .
ATOM 2678 CG    CG    . GLN GLN GLN A A 354 354 . 84.335  81.969  35.490  1.00 22.29
1 . .
ATOM 2679 CD    CD    . GLN GLN GLN A A 354 354 . 84.329  80.553  34.880  1.00 29.39
1 . .
ATOM 2680 OE1   OE1   . GLN GLN GLN A A 354 354 . 83.306  79.830  35.004  1.00 33.01
1 . .
ATOM 2681 NE2   NE2   . GLN GLN GLN A A 354 354 . 85.419  80.166  34.173  1.00 29.90
1 . .
ATOM 2682 C     C     . GLN GLN GLN A A 354 354 . 86.680  84.978  35.985  1.00 11.51
1 . .
ATOM 2683 O     O     . GLN GLN GLN A A 354 354 . 86.981  85.157  37.161  1.00 12.18
1 . .
ATOM 2684 N     N     . ALA ALA ALA A A 355 355 . 87.434  85.394  34.938  1.00 9.79
1 . .
ATOM 2685 CA    CA    . ALA ALA ALA A A 355 355 . 88.730  86.101  35.174  1.00 9.08
1 . .
ATOM 2686 CB    CB    . ALA ALA ALA A A 355 355 . 89.505  86.376  33.854  1.00 9.01
1 . .
ATOM 2687 C     C     . ALA ALA ALA A A 355 355 . 88.453  87.427  35.883  1.00 10.10
1 . .
ATOM 2688 O     O     . ALA ALA ALA A A 355 355 . 89.197  87.847  36.772  1.00 10.06
1 . .
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ATOM 2689 N     N     . CYS CYS CYS A A 356 356 . 87.392  88.119  35.433  1.00 9.18
1 . .
ATOM 2690 CA    CA    . CYS CYS CYS A A 356 356 . 87.054  89.422  36.002  1.00 9.49
1 . .
ATOM 2691 CB    CB    . CYS CYS CYS A A 356 356 . 85.810  90.006  35.294  1.00 8.48
1 . .
ATOM 2692 SG    SG    . CYS CYS CYS A A 356 356 . 85.306  91.585  35.955  1.00 11.56
1 . .
ATOM 2693 C     C     . CYS CYS CYS A A 356 356 . 86.723  89.246  37.509  1.00 10.72
1 . .
ATOM 2694 O     O     . CYS CYS CYS A A 356 356 . 87.184  90.007  38.351  1.00 11.37
1 . .
ATOM 2695 N     N     . LYS LYS LYS A A 357 357 . 85.902  88.236  37.794  1.00 12.17
1 . .
ATOM 2696 CA    CA    . LYS LYS LYS A A 357 357 . 85.375  87.986  39.173  1.00 13.36
1 . .
ATOM 2697 CB    CB    . LYS LYS LYS A A 357 357 . 84.204  86.979  39.125  1.00 13.80
1 . .
ATOM 2698 CG    CG    . LYS LYS LYS A A 357 357 . 82.880  87.662  38.529  1.00 18.13
1 . .
ATOM 2699 CD    CD    . LYS LYS LYS A A 357 357 . 81.634  86.786  38.564  1.00 23.98
1 . .
ATOM 2700 CE    CE    . LYS LYS LYS A A 357 357 . 81.498  86.126  39.959  1.00 28.63
1 . .
ATOM 2701 NZ    NZ    . LYS LYS LYS A A 357 357 . 80.154  85.458  40.154  1.00 33.05
1 . .
ATOM 2702 C     C     . LYS LYS LYS A A 357 357 . 86.548  87.591  40.066  1.00 13.23
1 . .
ATOM 2703 O     O     . LYS LYS LYS A A 357 357 . 86.610  88.024  41.241  1.00 13.66
1 . .
ATOM 2704 N     N     . LEU LEU LEU A A 358 358 . 87.482  86.819  39.523  1.00 12.70
1 . .
ATOM 2705 CA    CA    . LEU LEU LEU A A 358 358 . 88.680  86.460  40.281  1.00 13.06
1 . .
ATOM 2706 CB    CB    . LEU LEU LEU A A 358 358 . 89.531  85.438  39.496  1.00 13.89
1 . .
ATOM 2707 CG    CG    . LEU LEU LEU A A 358 358 . 90.845  85.014  40.148  1.00 15.92
1 . .
ATOM 2708 CD1   CD1   . LEU LEU LEU A A 358 358 . 90.710  84.385  41.622  1.00 20.73
1 . .
ATOM 2709 CD2   CD2   . LEU LEU LEU A A 358 358 . 91.570  84.042  39.103  1.00 15.44
1 . .
ATOM 2710 C     C     . LEU LEU LEU A A 358 358 . 89.524  87.685  40.653  1.00 12.18
1 . .
ATOM 2711 O     O     . LEU LEU LEU A A 358 358 . 89.944  87.874  41.834  1.00 12.77
1 . .
ATOM 2712 N     N     . ALA ALA ALA A A 359 359 . 89.744  88.563  39.679  1.00 9.16
1 . .
ATOM 2713 CA    CA    . ALA ALA ALA A A 359 359 . 90.499  89.787  39.975  1.00 10.74
1 . .
ATOM 2714 CB    CB    . ALA ALA ALA A A 359 359 . 90.705  90.619  38.716  1.00 10.44
1 . .
ATOM 2715 C     C     . ALA ALA ALA A A 359 359 . 89.744  90.590  41.078  1.00 11.52
1 . .
ATOM 2716 O     O     . ALA ALA ALA A A 359 359 . 90.355  91.042  42.076  1.00 12.00
1 . .
ATOM 2717 N     N     . GLN GLN GLN A A 360 360 . 88.421  90.751  40.914  1.00 11.21
1 . .
ATOM 2718 CA    CA    . GLN GLN GLN A A 360 360 . 87.676  91.701  41.794  1.00 12.52
1 . .
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ATOM 2719 CB    CB    . GLN GLN GLN A A 360 360 . 86.289  91.958  41.290  1.00 12.27
1 . .
ATOM 2720 CG    CG    . GLN GLN GLN A A 360 360 . 86.268  92.657  39.852  1.00 12.00
1 . .
ATOM 2721 CD    CD    . GLN GLN GLN A A 360 360 . 84.868  92.867  39.298  1.00 14.49
1 . .
ATOM 2722 OE1   OE1   . GLN GLN GLN A A 360 360 . 84.521  93.960  38.734  1.00 17.93
1 . .
ATOM 2723 NE2   NE2   . GLN GLN GLN A A 360 360 . 84.045  91.819  39.412  1.00 9.36
1 . .
ATOM 2724 C     C     . GLN GLN GLN A A 360 360 . 87.637  91.134  43.216  1.00 13.12
1 . .
ATOM 2725 O     O     . GLN GLN GLN A A 360 360 . 87.723  91.888  44.225  1.00 15.19
1 . .
ATOM 2726 N     N     . GLU GLU GLU A A 361 361 . 87.508  89.810  43.304  1.00 15.98
1 . .
ATOM 2727 CA    CA    . GLU GLU GLU A A 361 361 . 87.586  89.099  44.616  1.00 16.86
1 . .
ATOM 2728 CB    CB    . GLU GLU GLU A A 361 361 . 87.309  87.599  44.416  1.00 17.33
1 . .
ATOM 2729 CG    CG    . GLU GLU GLU A A 361 361 . 85.900  87.292  43.983  1.00 21.20
1 . .
ATOM 2730 C     C     . GLU GLU GLU A A 361 361 . 88.906  89.247  45.353  1.00 16.78
1 . .
ATOM 2731 O     O     . GLU GLU GLU A A 361 361 . 88.915  89.147  46.594  1.00 16.30
1 . .
ATOM 2732 N     N     . ASN ASN ASN A A 362 362 . 89.995  89.495  44.624  1.00 14.91
1 . .
ATOM 2733 CA    CA    . ASN ASN ASN A A 362 362 . 91.275  89.826  45.172  1.00 15.04
1 . .
ATOM 2734 CB    CB    . ASN ASN ASN A A 362 362 . 92.361  89.096  44.394  1.00 13.69
1 . .
ATOM 2735 CG    CG    . ASN ASN ASN A A 362 362 . 92.387  87.602  44.736  1.00 17.82
1 . .
ATOM 2736 OD1   OD1   . ASN ASN ASN A A 362 362 . 92.843  87.197  45.835  1.00 19.20
1 . .
ATOM 2737 ND2   ND2   . ASN ASN ASN A A 362 362 . 91.853  86.775  43.828  1.00 15.71
1 . .
ATOM 2738 C     C     . ASN ASN ASN A A 362 362 . 91.583  91.297  45.382  1.00 14.42
1 . .
ATOM 2739 O     O     . ASN ASN ASN A A 362 362 . 92.762  91.684  45.673  1.00 17.46
1 . .
ATOM 2740 N     N     . GLY GLY GLY A A 363 363 . 90.560  92.124  45.235  1.00 13.80
1 . .
ATOM 2741 CA    CA    . GLY GLY GLY A A 363 363 . 90.684  93.584  45.489  1.00 14.96
1 . .
ATOM 2742 C     C     . GLY GLY GLY A A 363 363 . 91.345  94.317  44.316  1.00 14.60
1 . .
ATOM 2743 O     O     . GLY GLY GLY A A 363 363 . 91.732  95.470  44.427  1.00 15.99
1 . .
ATOM 2744 N     N     . TRP TRP TRP A A 364 364 . 91.566  93.639  43.200  1.00 12.74
1 . .
ATOM 2745 CA    CA    . TRP TRP TRP A A 364 364 . 92.133  94.317  42.041  1.00 11.05
1 . .
ATOM 2746 CB    CB    . TRP TRP TRP A A 364 364 . 92.623  93.279  41.033  1.00 10.14
1 . .
ATOM 2747 CG    CG    . TRP TRP TRP A A 364 364 . 93.926  92.559  41.324  1.00 12.45
1 . .
ATOM 2748 CD1   CD1   . TRP TRP TRP A A 364 364 . 94.623  92.422  42.542  1.00 13.02
1 . .
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ATOM 2749 NE1   NE1   . TRP TRP TRP A A 364 364 . 95.748  91.603  42.336  1.00 14.74
1 . .
ATOM 2750 CE2   CE2   . TRP TRP TRP A A 364 364 . 95.762  91.189  41.012  1.00 15.31
1 . .
ATOM 2751 CD2   CD2   . TRP TRP TRP A A 364 364 . 94.625  91.757  40.361  1.00 11.03
1 . .
ATOM 2752 CE3   CE3   . TRP TRP TRP A A 364 364 . 94.440  91.545  38.973  1.00 12.00
1 . .
ATOM 2753 CZ3   CZ3   . TRP TRP TRP A A 364 364 . 95.331  90.708  38.300  1.00 14.27
1 . .
ATOM 2754 CH2   CH2   . TRP TRP TRP A A 364 364 . 96.456  90.137  38.987  1.00 13.98
1 . .
ATOM 2755 CZ2   CZ2   . TRP TRP TRP A A 364 364 . 96.694  90.387  40.321  1.00 15.47
1 . .
ATOM 2756 C     C     . TRP TRP TRP A A 364 364 . 91.094  95.135  41.286  1.00 11.25
1 . .
ATOM 2757 O     O     . TRP TRP TRP A A 364 364 . 89.872  94.824  41.296  1.00 13.14
1 . .
ATOM 2758 N     N     . GLY GLY GLY A A 365 365 . 91.591  96.122  40.535  1.00 10.64
1 . .
ATOM 2759 CA    CA    . GLY GLY GLY A A 365 365 . 90.768  96.768  39.476  1.00 9.63
1 . .
ATOM 2760 C     C     . GLY GLY GLY A A 365 365 . 90.614  95.806  38.284  1.00 9.52
1 . .
ATOM 2761 O     O     . GLY GLY GLY A A 365 365 . 91.352  94.799  38.152  1.00 8.93
1 . .
ATOM 2762 N     N     . VAL VAL VAL A A 366 366 . 89.688  96.132  37.382  1.00 9.53
1 . .
ATOM 2763 CA    CA    . VAL VAL VAL A A 366 366 . 89.657  95.442  36.074  1.00 8.24
1 . .
ATOM 2764 CB    CB    . VAL VAL VAL A A 366 366 . 88.487  94.387  35.995  1.00 7.65
1 . .
ATOM 2765 CG1   CG1   . VAL VAL VAL A A 366 366 . 88.375  93.770  34.597  1.00 7.51
1 . .
ATOM 2766 CG2   CG2   . VAL VAL VAL A A 366 366 . 88.665  93.312  37.078  1.00 9.45
1 . .
ATOM 2767 C     C     . VAL VAL VAL A A 366 366 . 89.374  96.515  35.041  1.00 8.30
1 . .
ATOM 2768 O     O     . VAL VAL VAL A A 366 366 . 88.386  97.255  35.205  1.00 7.57
1 . .
ATOM 2769 N     N     . MET MET MET A A 367 367 . 90.210  96.582  34.004  1.00 6.73
1 . .
ATOM 2770 CA    CA    . MET MET MET A A 367 367 . 89.953  97.529  32.905  1.00 7.63
1 . .
ATOM 2771 CB    CB    . MET MET MET A A 367 367 . 91.174  98.427  32.590  1.00 7.77
1 . .
ATOM 2772 CG    CG    . MET MET MET A A 367 367 . 90.881  99.362  31.373  1.00 9.44
1 . .
ATOM 2773 SD    SD    . MET MET MET A A 367 367 . 92.351  100.338 30.941  1.00 9.46
1 . .
ATOM 2774 CE    CE    . MET MET MET A A 367 367 . 92.341  101.667 32.123  1.00 11.98
1 . .
ATOM 2775 C     C     . MET MET MET A A 367 367 . 89.613  96.668  31.641  1.00 6.93
1 . .
ATOM 2776 O     O     . MET MET MET A A 367 367 . 90.440  95.897  31.171  1.00 6.65
1 . .
ATOM 2777 N     N     . VAL VAL VAL A A 368 368 . 88.374  96.789  31.162  1.00 6.07
1 . .
ATOM 2778 CA    CA    . VAL VAL VAL A A 368 368 . 87.981  96.097  29.955  1.00 5.94
1 . .
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ATOM 2779 CB    CB    . VAL VAL VAL A A 368 368 . 86.438  96.210  29.761  1.00 5.84
1 . .
ATOM 2780 CG1   CG1   . VAL VAL VAL A A 368 368 . 85.998  95.750  28.338  1.00 7.30
1 . .
ATOM 2781 CG2   CG2   . VAL VAL VAL A A 368 368 . 85.731  95.335  30.871  1.00 7.55
1 . .
ATOM 2782 C     C     . VAL VAL VAL A A 368 368 . 88.716  96.725  28.788  1.00 6.49
1 . .
ATOM 2783 O     O     . VAL VAL VAL A A 368 368 . 88.910  97.965  28.745  1.00 6.13
1 . .
ATOM 2784 N     N     . SER SER SER A A 369 369 . 89.109  95.887  27.823  1.00 6.32
1 . .
ATOM 2785 CA    CA    . SER SER SER A A 369 369 . 89.903  96.419  26.687  1.00 7.23
1 . .
ATOM 2786 CB    CB    . SER SER SER A A 369 369 . 91.413  96.026  26.921  1.00 8.82
1 . .
ATOM 2787 OG    OG    . SER SER SER A A 369 369 . 92.229  96.531  25.877  1.00 8.10
1 . .
ATOM 2788 C     C     . SER SER SER A A 369 369 . 89.484  95.896  25.338  1.00 6.07
1 . .
ATOM 2789 O     O     . SER SER SER A A 369 369 . 89.106  94.755  25.187  1.00 7.13
1 . .
ATOM 2790 N     N     . HIS HIS HIS A A 370 370 . 89.567  96.769  24.329  1.00 4.82
1 . .
ATOM 2791 CA    CA    . HIS HIS HIS A A 370 370 . 89.603  96.352  22.940  1.00 6.23
1 . .
ATOM 2792 CB    CB    . HIS HIS HIS A A 370 370 . 89.523  97.627  22.031  1.00 6.36
1 . .
ATOM 2793 CG    CG    . HIS HIS HIS A A 370 370 . 90.655  98.622  22.226  1.00 7.01
1 . .
ATOM 2794 ND1   ND1   . HIS HIS HIS A A 370 370 . 90.828  99.686  21.355  1.00 7.74
1 . .
ATOM 2795 CE1   CE1   . HIS HIS HIS A A 370 370 . 91.870  100.408 21.750  1.00 9.83
1 . .
ATOM 2796 NE2   NE2   . HIS HIS HIS A A 370 370 . 92.362  99.879  22.863  1.00 6.88
1 . .
ATOM 2797 CD2   CD2   . HIS HIS HIS A A 370 370 . 91.634  98.735  23.165  1.00 6.60
1 . .
ATOM 2798 C     C     . HIS HIS HIS A A 370 370 . 90.887  95.608  22.564  1.00 6.37
1 . .
ATOM 2799 O     O     . HIS HIS HIS A A 370 370 . 91.798  95.496  23.393  1.00 6.01
1 . .
ATOM 2800 N     N     . ARG ARG ARG A A 371 371 . 90.978  95.146  21.285  1.00 5.87
1 . .
ATOM 2801 CA    CA    . ARG ARG ARG A A 371 371 . 92.285  94.869  20.680  1.00 6.11
1 . .
ATOM 2802 CB    CB    . ARG ARG ARG A A 371 371 . 92.248  93.498  19.915  1.00 5.46
1 . .
ATOM 2803 CG    CG    . ARG ARG ARG A A 371 371 . 91.859  92.320  20.894  1.00 5.98
1 . .
ATOM 2804 CD    CD    . ARG ARG ARG A A 371 371 . 92.736  92.228  22.207  1.00 4.55
1 . .
ATOM 2805 NE    NE    . ARG ARG ARG A A 371 371 . 94.227  92.169  22.041  1.00 7.30
1 . .
ATOM 2806 CZ    CZ    . ARG ARG ARG A A 371 371 . 94.956  91.062  22.243  1.00 3.79
1 . .
ATOM 2807 NH1   NH1   . ARG ARG ARG A A 371 371 . 94.368  89.859  22.479  1.00 7.48
1 . .
ATOM 2808 NH2   NH2   . ARG ARG ARG A A 371 371 . 96.289  91.178  22.237  1.00 4.87
1 . .
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ATOM 2809 C     C     . ARG ARG ARG A A 371 371 . 92.641  95.938  19.654  1.00 6.90
1 . .
ATOM 2810 O     O     . ARG ARG ARG A A 371 371 . 91.781  96.728  19.230  1.00 5.41
1 . .
ATOM 2811 N     N     . SER SER SER A A 372 372 . 93.949  96.034  19.325  1.00 5.86
1 . .
ATOM 2812 CA    CA    . SER SER SER A A 372 372 . 94.501  96.792  18.209  1.00 8.24
1 . .
ATOM 2813 CB    CB    . SER SER SER A A 372 372 . 96.080  96.135  17.878  1.00 3.66
1 . .
ATOM 2814 OG    OG    . SER SER SER A A 372 372 . 96.223  97.438  18.228  1.00 18.00
1 . .
ATOM 2815 C     C     . SER SER SER A A 372 372 . 93.702  96.689  16.896  1.00 5.81
1 . .
ATOM 2816 O     O     . SER SER SER A A 372 372 . 93.502  97.704  16.147  1.00 7.46
1 . .
ATOM 2817 N     N     . GLY GLY GLY A A 373 373 . 93.300  95.456  16.590  1.00 6.75
1 . .
ATOM 2818 CA    CA    . GLY GLY GLY A A 373 373 . 92.480  95.162  15.422  1.00 6.70
1 . .
ATOM 2819 C     C     . GLY GLY GLY A A 373 373 . 91.025  94.949  15.907  1.00 6.13
1 . .
ATOM 2820 O     O     . GLY GLY GLY A A 373 373 . 90.703  93.967  16.626  1.00 7.32
1 . .
ATOM 2821 N     N     . GLU GLU GLU A A 374 374 . 90.205  95.963  15.678  1.00 5.77
1 . .
ATOM 2822 CA    CA    . GLU GLU GLU A A 374 374 . 88.810  95.936  16.111  1.00 6.65
1 . .
ATOM 2823 CB    CB    . GLU GLU GLU A A 374 374 . 88.477  97.173  16.988  1.00 6.58
1 . .
ATOM 2824 CG    CG    . GLU GLU GLU A A 374 374 . 88.814  96.884  18.461  1.00 7.68
1 . .
ATOM 2825 CD    CD    . GLU GLU GLU A A 374 374 . 87.864  95.838  19.099  1.00 7.27
1 . .
ATOM 2826 OE1   OE1   . GLU GLU GLU A A 374 374 . 86.705  95.598  18.608  1.00 7.56
1 . .
ATOM 2827 OE2   OE2   . GLU GLU GLU A A 374 374 . 88.269  95.266  20.143  1.00 8.85
1 . .
ATOM 2828 C     C     . GLU GLU GLU A A 374 374 . 87.872  95.842  14.981  1.00 7.15
1 . .
ATOM 2829 O     O     . GLU GLU GLU A A 374 374 . 88.292  95.788  13.824  1.00 7.03
1 . .
ATOM 2830 N     N     . THR THR THR A A 375 375 . 86.591  95.710  15.317  1.00 6.87
1 . .
ATOM 2831 CA    CA    . THR THR THR A A 375 375 . 85.522  95.726  14.299  1.00 6.20
1 . .
ATOM 2832 CB    CB    . THR THR THR A A 375 375 . 84.869  94.310  14.092  1.00 7.24
1 . .
ATOM 2833 OG1   OG1   . THR THR THR A A 375 375 . 84.135  93.898  15.272  1.00 8.01
1 . .
ATOM 2834 CG2   CG2   . THR THR THR A A 375 375 . 85.972  93.208  13.809  1.00 8.81
1 . .
ATOM 2835 C     C     . THR THR THR A A 375 375 . 84.450  96.690  14.757  1.00 6.90
1 . .
ATOM 2836 O     O     . THR THR THR A A 375 375 . 84.555  97.334  15.831  1.00 7.27
1 . .
ATOM 2837 N     N     . GLU GLU GLU A A 376 376 . 83.412  96.767  13.927  1.00 7.64
1 . .
ATOM 2838 CA    CA    . GLU GLU GLU A A 376 376 . 82.247  97.580  14.231  1.00 7.88
1 . .
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ATOM 2839 CB    CB    . GLU GLU GLU A A 376 376 . 81.407  97.739  12.912  1.00 8.73
1 . .
ATOM 2840 CG    CG    . GLU GLU GLU A A 376 376 . 80.931  96.379  12.206  1.00 8.20
1 . .
ATOM 2841 CD    CD    . GLU GLU GLU A A 376 376 . 81.922  95.894  11.120  1.00 9.96
1 . .
ATOM 2842 OE1   OE1   . GLU GLU GLU A A 376 376 . 83.168  96.020  11.284  1.00 11.68
1 . .
ATOM 2843 OE2   OE2   . GLU GLU GLU A A 376 376 . 81.439  95.438  10.049  1.00 9.80
1 . .
ATOM 2844 C     C     . GLU GLU GLU A A 376 376 . 81.414  96.963  15.341  1.00 7.80
1 . .
ATOM 2845 O     O     . GLU GLU GLU A A 376 376 . 80.419  97.558  15.743  1.00 9.35
1 . .
ATOM 2846 N     N     . ASP ASP ASP A A 377 377 . 81.787  95.795  15.864  1.00 7.95
1 . .
ATOM 2847 CA    CA    . ASP ASP ASP A A 377 377 . 81.060  95.148  17.014  1.00 8.88
1 . .
ATOM 2848 CB    CB    . ASP ASP ASP A A 377 377 . 81.737  93.793  17.249  1.00 9.86
1 . .
ATOM 2849 CG    CG    . ASP ASP ASP A A 377 377 . 81.083  92.963  18.300  1.00 13.27
1 . .
ATOM 2850 OD1   OD1   . ASP ASP ASP A A 377 377 . 81.388  93.142  19.559  1.00 17.78
1 . .
ATOM 2851 OD2   OD2   . ASP ASP ASP A A 377 377 . 80.323  92.107  17.882  1.00 12.38
1 . .
ATOM 2852 C     C     . ASP ASP ASP A A 377 377 . 81.160  96.062  18.287  1.00 8.94
1 . .
ATOM 2853 O     O     . ASP ASP ASP A A 377 377 . 82.196  96.711  18.511  1.00 9.24
1 . .
ATOM 2854 N     N     . THR THR THR A A 378 378 . 80.108  96.066  19.121  1.00 7.61
1 . .
ATOM 2855 CA    CA    . THR THR THR A A 378 378 . 80.126  96.933  20.348  1.00 7.45
1 . .
ATOM 2856 CB    CB    . THR THR THR A A 378 378 . 79.035  97.993  20.271  1.00 8.78
1 . .
ATOM 2857 OG1   OG1   . THR THR THR A A 378 378 . 77.742  97.345  20.177  1.00 8.71
1 . .
ATOM 2858 CG2   CG2   . THR THR THR A A 378 378 . 79.183  98.870  18.970  1.00 9.35
1 . .
ATOM 2859 C     C     . THR THR THR A A 378 378 . 79.957  96.102  21.627  1.00 8.10
1 . .
ATOM 2860 O     O     . THR THR THR A A 378 378 . 79.648  96.681  22.647  1.00 6.86
1 . .
ATOM 2861 N     N     . PHE PHE PHE A A 379 379 . 80.122  94.764  21.584  1.00 5.80
1 . .
ATOM 2862 CA    CA    . PHE PHE PHE A A 379 379 . 79.917  93.936  22.763  1.00 7.99
1 . .
ATOM 2863 CB    CB    . PHE PHE PHE A A 379 379 . 80.436  92.514  22.439  1.00 7.60
1 . .
ATOM 2864 CG    CG    . PHE PHE PHE A A 379 379 . 80.179  91.520  23.547  1.00 6.69
1 . .
ATOM 2865 CD1   CD1   . PHE PHE PHE A A 379 379 . 81.136  91.358  24.561  1.00 8.40
1 . .
ATOM 2866 CE1   CE1   . PHE PHE PHE A A 379 379 . 80.934  90.434  25.578  1.00 10.36
1 . .
ATOM 2867 CZ    CZ    . PHE PHE PHE A A 379 379 . 79.693  89.722  25.629  1.00 10.36
1 . .
ATOM 2868 CE2   CE2   . PHE PHE PHE A A 379 379 . 78.719  89.865  24.592  1.00 11.99
1 . .
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ATOM 2869 CD2   CD2   . PHE PHE PHE A A 379 379 . 78.970  90.813  23.557  1.00 10.08
1 . .
ATOM 2870 C     C     . PHE PHE PHE A A 379 379 . 80.639  94.485  23.991  1.00 7.18
1 . .
ATOM 2871 O     O     . PHE PHE PHE A A 379 379 . 80.099  94.375  25.126  1.00 7.25
1 . .
ATOM 2872 N     N     . ILE ILE ILE A A 380 380 . 81.894  94.950  23.836  1.00 8.28
1 . .
ATOM 2873 CA    CA    . ILE ILE ILE A A 380 380 . 82.642  95.268  25.052  1.00 5.86
1 . .
ATOM 2874 CB    CB    . ILE ILE ILE A A 380 380 . 84.156  95.444  24.815  1.00 6.06
1 . .
ATOM 2875 CG1   CG1   . ILE ILE ILE A A 380 380 . 84.482  96.520  23.807  1.00 6.62
1 . .
ATOM 2876 CD1   CD1   . ILE ILE ILE A A 380 380 . 86.029  96.810  23.701  1.00 10.12
1 . .
ATOM 2877 CG2   CG2   . ILE ILE ILE A A 380 380 . 84.759  94.078  24.360  1.00 7.97
1 . .
ATOM 2878 C     C     . ILE ILE ILE A A 380 380 . 82.102  96.473  25.788  1.00 6.37
1 . .
ATOM 2879 O     O     . ILE ILE ILE A A 380 380 . 82.399  96.664  26.996  1.00 6.36
1 . .
ATOM 2880 N     N     . ALA ALA ALA A A 381 381 . 81.285  97.266  25.102  1.00 7.60
1 . .
ATOM 2881 CA    CA    . ALA ALA ALA A A 381 381 . 80.572  98.395  25.738  1.00 6.76
1 . .
ATOM 2882 CB    CB    . ALA ALA ALA A A 381 381 . 79.837  99.261  24.654  1.00 7.47
1 . .
ATOM 2883 C     C     . ALA ALA ALA A A 381 381 . 79.585  97.878  26.773  1.00 7.30
1 . .
ATOM 2884 O     O     . ALA ALA ALA A A 381 381 . 79.612  98.273  27.947  1.00 7.05
1 . .
ATOM 2885 N     N     . ASP ASP ASP A A 382 382 . 78.781  96.908  26.354  1.00 7.65
1 . .
ATOM 2886 CA    CA    . ASP ASP ASP A A 382 382 . 77.808  96.316  27.291  1.00 5.70
1 . .
ATOM 2887 CB    CB    . ASP ASP ASP A A 382 382 . 76.785  95.466  26.531  1.00 8.46
1 . .
ATOM 2888 CG    CG    . ASP ASP ASP A A 382 382 . 75.815  96.319  25.739  1.00 12.48
1 . .
ATOM 2889 OD1   OD1   . ASP ASP ASP A A 382 382 . 76.296  96.910  24.738  1.00 12.42
1 . .
ATOM 2890 OD2   OD2   . ASP ASP ASP A A 382 382 . 74.616  96.435  26.118  1.00 12.29
1 . .
ATOM 2891 C     C     . ASP ASP ASP A A 382 382 . 78.549  95.484  28.329  1.00 6.89
1 . .
ATOM 2892 O     O     . ASP ASP ASP A A 382 382 . 78.104  95.458  29.512  1.00 8.03
1 . .
ATOM 2893 N     N     . LEU LEU LEU A A 383 383 . 79.673  94.836  27.961  1.00 7.08
1 . .
ATOM 2894 CA    CA    . LEU LEU LEU A A 383 383 . 80.398  93.965  28.898  1.00 6.40
1 . .
ATOM 2895 CB    CB    . LEU LEU LEU A A 383 383 . 81.630  93.367  28.183  1.00 7.97
1 . .
ATOM 2896 CG    CG    . LEU LEU LEU A A 383 383 . 82.508  92.411  29.021  1.00 8.60
1 . .
ATOM 2897 CD1   CD1   . LEU LEU LEU A A 383 383 . 81.666  91.174  29.446  1.00 9.60
1 . .
ATOM 2898 CD2   CD2   . LEU LEU LEU A A 383 383 . 83.718  91.950  28.138  1.00 8.54
1 . .
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ATOM 2899 C     C     . LEU LEU LEU A A 383 383 . 80.940  94.814  30.078  1.00 7.40
1 . .
ATOM 2900 O     O     . LEU LEU LEU A A 383 383 . 80.825  94.397  31.238  1.00 9.01
1 . .
ATOM 2901 N     N     . VAL VAL VAL A A 384 384 . 81.583  95.972  29.791  1.00 6.81
1 . .
ATOM 2902 CA    CA    . VAL VAL VAL A A 384 384 . 82.170  96.751  30.923  1.00 6.46
1 . .
ATOM 2903 CB    CB    . VAL VAL VAL A A 384 384 . 83.042  97.923  30.396  1.00 5.85
1 . .
ATOM 2904 CG1   CG1   . VAL VAL VAL A A 384 384 . 82.207  98.967  29.683  1.00 5.94
1 . .
ATOM 2905 CG2   CG2   . VAL VAL VAL A A 384 384 . 83.815  98.553  31.527  1.00 8.86
1 . .
ATOM 2906 C     C     . VAL VAL VAL A A 384 384 . 81.043  97.255  31.895  1.00 7.03
1 . .
ATOM 2907 O     O     . VAL VAL VAL A A 384 384 . 81.278  97.346  33.111  1.00 7.56
1 . .
ATOM 2908 N     N     . VAL VAL VAL A A 385 385 . 79.855  97.580  31.340  1.00 7.96
1 . .
ATOM 2909 CA    CA    . VAL VAL VAL A A 385 385 . 78.725  98.055  32.170  1.00 9.40
1 . .
ATOM 2910 CB    CB    . VAL VAL VAL A A 385 385 . 77.637  98.720  31.317  1.00 6.62
1 . .
ATOM 2911 CG1   CG1   . VAL VAL VAL A A 385 385 . 76.421  99.091  32.188  1.00 7.63
1 . .
ATOM 2912 CG2   CG2   . VAL VAL VAL A A 385 385 . 78.225  99.991  30.735  1.00 8.36
1 . .
ATOM 2913 C     C     . VAL VAL VAL A A 385 385 . 78.196  96.892  33.023  1.00 9.78
1 . .
ATOM 2914 O     O     . VAL VAL VAL A A 385 385 . 78.018  97.039  34.269  1.00 8.03
1 . .
ATOM 2915 N     N     . GLY GLY GLY A A 386 386 . 77.960  95.755  32.371  1.00 9.08
1 . .
ATOM 2916 CA    CA    . GLY GLY GLY A A 386 386 . 77.458  94.540  33.071  1.00 10.15
1 . .
ATOM 2917 C     C     . GLY GLY GLY A A 386 386 . 78.388  94.028  34.157  1.00 10.26
1 . .
ATOM 2918 O     O     . GLY GLY GLY A A 386 386 . 77.920  93.497  35.221  1.00 9.42
1 . .
ATOM 2919 N     N     . LEU LEU LEU A A 387 387 . 79.698  94.133  33.888  1.00 9.62
1 . .
ATOM 2920 CA    CA    . LEU LEU LEU A A 387 387 . 80.716  93.647  34.834  1.00 8.46
1 . .
ATOM 2921 CB    CB    . LEU LEU LEU A A 387 387 . 82.006  93.250  34.092  1.00 7.86
1 . .
ATOM 2922 CG    CG    . LEU LEU LEU A A 387 387 . 81.863  92.000  33.212  1.00 9.73
1 . .
ATOM 2923 CD1   CD1   . LEU LEU LEU A A 387 387 . 83.282  91.712  32.569  1.00 10.43
1 . .
ATOM 2924 CD2   CD2   . LEU LEU LEU A A 387 387 . 81.290  90.818  34.006  1.00 12.84
1 . .
ATOM 2925 C     C     . LEU LEU LEU A A 387 387 . 81.055  94.687  35.910  1.00 10.20
1 . .
ATOM 2926 O     O     . LEU LEU LEU A A 387 387 . 81.786  94.381  36.856  1.00 10.21
1 . .
ATOM 2927 N     N     . CYS CYS CYS A A 388 388 . 80.477  95.884  35.766  1.00 11.00
1 . .
ATOM 2928 CA    CA    . CYS CYS CYS A A 388 388 . 80.648  97.020  36.697  1.00 11.36
1 . .
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ATOM 2929 CB    CB    . CYS CYS CYS A A 388 388 . 79.981  96.774  38.025  1.00 15.89
1 . .
ATOM 2930 SG    SG    . CYS CYS CYS A A 388 388 . 78.172  96.473  37.863  1.00 24.30
1 . .
ATOM 2931 C     C     . CYS CYS CYS A A 388 388 . 82.085  97.279  36.975  1.00 11.27
1 . .
ATOM 2932 O     O     . CYS CYS CYS A A 388 388 . 82.402  97.544  38.172  1.00 11.87
1 . .
ATOM 2933 N     N     . THR THR THR A A 389 389 . 82.957  97.227  35.952  1.00 7.47
1 . .
ATOM 2934 CA    CA    . THR THR THR A A 389 389 . 84.371  97.321  36.284  1.00 7.20
1 . .
ATOM 2935 CB    CB    . THR THR THR A A 389 389 . 85.323  96.678  35.288  1.00 8.83
1 . .
ATOM 2936 OG1   OG1   . THR THR THR A A 389 389 . 85.660  97.599  34.216  1.00 10.46
1 . .
ATOM 2937 CG2   CG2   . THR THR THR A A 389 389 . 84.778  95.392  34.700  1.00 5.92
1 . .
ATOM 2938 C     C     . THR THR THR A A 389 389 . 84.836  98.780  36.496  1.00 8.22
1 . .
ATOM 2939 O     O     . THR THR THR A A 389 389 . 85.873  98.982  37.118  1.00 10.58
1 . .
ATOM 2940 N     N     . GLY GLY GLY A A 390 390 . 84.131  99.796  35.966  1.00 6.98
1 . .
ATOM 2941 CA    CA    . GLY GLY GLY A A 390 390 . 84.569  101.174 36.266  1.00 7.19
1 . .
ATOM 2942 C     C     . GLY GLY GLY A A 390 390 . 85.543  101.799 35.275  1.00 7.04
1 . .
ATOM 2943 O     O     . GLY GLY GLY A A 390 390 . 85.829  102.999 35.378  1.00 6.81
1 . .
ATOM 2944 N     N     . GLN GLN GLN A A 391 391 . 86.146  100.989 34.374  1.00 6.49
1 . .
ATOM 2945 CA    CA    . GLN GLN GLN A A 391 391 . 87.186  101.502 33.440  1.00 6.82
1 . .
ATOM 2946 CB    CB    . GLN GLN GLN A A 391 391 . 88.579  101.639 34.089  1.00 8.57
1 . .
ATOM 2947 CG    CG    . GLN GLN GLN A A 391 391 . 88.882  100.569 35.127  1.00 9.90
1 . .
ATOM 2948 CD    CD    . GLN GLN GLN A A 391 391 . 90.310  100.649 35.702  1.00 9.25
1 . .
ATOM 2949 OE1   OE1   . GLN GLN GLN A A 391 391 . 91.170  101.295 35.151  1.00 11.50
1 . .
ATOM 2950 NE2   NE2   . GLN GLN GLN A A 391 391 . 90.530  99.941  36.812  1.00 10.43
1 . .
ATOM 2951 C     C     . GLN GLN GLN A A 391 391 . 87.236  100.670 32.180  1.00 5.23
1 . .
ATOM 2952 O     O     . GLN GLN GLN A A 391 391 . 87.153  99.432  32.208  1.00 6.45
1 . .
ATOM 2953 N     N     . ILE ILE ILE A A 392 392 . 87.312  101.396 31.063  1.00 5.76
1 . .
ATOM 2954 CA    CA    . ILE ILE ILE A A 392 392 . 87.427  100.726 29.744  1.00 5.85
1 . .
ATOM 2955 CB    CB    . ILE ILE ILE A A 392 392 . 86.078  100.586 28.994  1.00 7.42
1 . .
ATOM 2956 CG1   CG1   . ILE ILE ILE A A 392 392 . 86.309  99.831  27.656  1.00 7.93
1 . .
ATOM 2957 CD1   CD1   . ILE ILE ILE A A 392 392 . 84.948  99.375  27.023  1.00 8.99
1 . .
ATOM 2958 CG2   CG2   . ILE ILE ILE A A 392 392 . 85.465  101.990 28.668  1.00 7.05
1 . .
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ATOM 2959 C     C     . ILE ILE ILE A A 392 392 . 88.448  101.497 28.895  1.00 6.47
1 . .
ATOM 2960 O     O     . ILE ILE ILE A A 392 392 . 88.464  102.768 28.920  1.00 6.66
1 . .
ATOM 2961 N     N     . LYS LYS LYS A A 393 393 . 89.285  100.769 28.138  1.00 5.64
1 . .
ATOM 2962 CA    CA    . LYS LYS LYS A A 393 393 . 90.061  101.495 27.100  1.00 4.87
1 . .
ATOM 2963 CB    CB    . LYS LYS LYS A A 393 393 . 91.631  101.306 27.238  1.00 4.53
1 . .
ATOM 2964 CG    CG    . LYS LYS LYS A A 393 393 . 92.160  99.879  27.209  1.00 5.97
1 . .
ATOM 2965 CD    CD    . LYS LYS LYS A A 393 393 . 93.717  99.953  27.345  1.00 6.73
1 . .
ATOM 2966 CE    CE    . LYS LYS LYS A A 393 393 . 94.384  98.792  26.542  1.00 5.47
1 . .
ATOM 2967 NZ    NZ    . LYS LYS LYS A A 393 393 . 95.926  98.939  26.747  1.00 7.67
1 . .
ATOM 2968 C     C     . LYS LYS LYS A A 393 393 . 89.608  100.869 25.761  1.00 5.68
1 . .
ATOM 2969 O     O     . LYS LYS LYS A A 393 393 . 89.616  99.616  25.596  1.00 5.36
1 . .
ATOM 2970 N     N     . THR THR THR A A 394 394 . 89.194  101.722 24.833  1.00 6.30
1 . .
ATOM 2971 CA    CA    . THR THR THR A A 394 394 . 88.709  101.174 23.564  1.00 6.07
1 . .
ATOM 2972 CB    CB    . THR THR THR A A 394 394 . 87.222  100.680 23.612  1.00 6.24
1 . .
ATOM 2973 OG1   OG1   . THR THR THR A A 394 394 . 86.915  100.113 22.322  1.00 6.19
1 . .
ATOM 2974 CG2   CG2   . THR THR THR A A 394 394 . 86.260  101.875 23.945  1.00 6.51
1 . .
ATOM 2975 C     C     . THR THR THR A A 394 394 . 89.028  102.156 22.442  1.00 5.40
1 . .
ATOM 2976 O     O     . THR THR THR A A 394 394 . 88.347  102.195 21.424  1.00 6.80
1 . .
ATOM 2977 N     N     . GLY GLY GLY A A 395 395 . 90.125  102.911 22.599  1.00 6.18
1 . .
ATOM 2978 CA    CA    . GLY GLY GLY A A 395 395 . 90.655  103.738 21.493  1.00 6.22
1 . .
ATOM 2979 C     C     . GLY GLY GLY A A 395 395 . 90.719  105.208 21.833  1.00 5.30
1 . .
ATOM 2980 O     O     . GLY GLY GLY A A 395 395 . 90.093  105.666 22.827  1.00 7.52
1 . .
ATOM 2981 N     N     . ALA ALA ALA A A 396 396 . 91.466  105.946 20.986  1.00 6.36
1 . .
ATOM 2982 CA    CA    . ALA ALA ALA A A 396 396 . 91.270  107.377 20.884  1.00 6.52
1 . .
ATOM 2983 CB    CB    . ALA ALA ALA A A 396 396 . 92.163  107.939 19.774  1.00 6.77
1 . .
ATOM 2984 C     C     . ALA ALA ALA A A 396 396 . 89.802  107.583 20.499  1.00 7.21
1 . .
ATOM 2985 O     O     . ALA ALA ALA A A 396 396 . 89.154  106.635 20.041  1.00 6.72
1 . .
ATOM 2986 N     N     . PRO PRO PRO A A 397 397 . 89.275  108.834 20.636  1.00 7.18
1 . .
ATOM 2987 CA    CA    . PRO PRO PRO A A 397 397 . 87.923  109.185 20.069  1.00 5.48
1 . .
ATOM 2988 CB    CB    . PRO PRO PRO A A 397 397 . 87.547  110.444 20.849  1.00 4.91
1 . .
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ATOM 2989 CG    CG    . PRO PRO PRO A A 397 397 . 88.864  111.123 21.123  1.00 5.61
1 . .
ATOM 2990 CD    CD    . PRO PRO PRO A A 397 397 . 89.891  109.976 21.378  1.00 5.04
1 . .
ATOM 2991 C     C     . PRO PRO PRO A A 397 397 . 88.062  109.398 18.568  1.00 6.35
1 . .
ATOM 2992 O     O     . PRO PRO PRO A A 397 397 . 87.733  110.467 18.074  1.00 9.01
1 . .
ATOM 2993 N     N     . CYS CYS CYS A A 398 398 . 88.657  108.418 17.853  1.00 6.16
1 . .
ATOM 2994 CA    CA    . CYS CYS CYS A A 398 398 . 88.928  108.577 16.422  1.00 5.13
1 . .
ATOM 2995 CB    CB    . CYS CYS CYS A A 398 398 . 90.291  109.282 16.275  1.00 6.00
1 . .
ATOM 2996 SG    SG    . CYS CYS CYS A A 398 398 . 90.853  109.339 14.520  1.00 10.28
1 . .
ATOM 2997 C     C     . CYS CYS CYS A A 398 398 . 89.008  107.146 15.853  1.00 5.93
1 . .
ATOM 2998 O     O     . CYS CYS CYS A A 398 398 . 89.602  106.267 16.531  1.00 6.11
1 . .
ATOM 2999 N     N     . ARG ARG ARG A A 399 399 . 88.463  106.928 14.642  1.00 6.32
1 . .
ATOM 3000 CA    CA    . ARG ARG ARG A A 399 399 . 88.263  105.571 13.976  1.00 6.33
1 . .
ATOM 3001 CB    CB    . ARG ARG ARG A A 399 399 . 89.471  104.616 14.116  1.00 4.78
1 . .
ATOM 3002 CG    CG    . ARG ARG ARG A A 399 399 . 90.690  105.292 13.549  1.00 6.47
1 . .
ATOM 3003 CD    CD    . ARG ARG ARG A A 399 399 . 91.953  104.530 13.761  1.00 5.79
1 . .
ATOM 3004 NE    NE    . ARG ARG ARG A A 399 399 . 91.942  103.246 13.013  1.00 6.42
1 . .
ATOM 3005 CZ    CZ    . ARG ARG ARG A A 399 399 . 92.975  102.698 12.342  1.00 6.57
1 . .
ATOM 3006 NH1   NH1   . ARG ARG ARG A A 399 399 . 94.169  103.364 12.197  1.00 7.48
1 . .
ATOM 3007 NH2   NH2   . ARG ARG ARG A A 399 399 . 92.797  101.461 11.750  1.00 7.62
1 . .
ATOM 3008 C     C     . ARG ARG ARG A A 399 399 . 86.984  104.912 14.573  1.00 5.67
1 . .
ATOM 3009 O     O     . ARG ARG ARG A A 399 399 . 86.915  104.691 15.794  1.00 6.17
1 . .
ATOM 3010 N     N     . SER SER SER A A 400 400 . 86.002  104.591 13.744  1.00 5.12
1 . .
ATOM 3011 CA    CA    . SER SER SER A A 400 400 . 84.716  104.215 14.355  1.00 5.43
1 . .
ATOM 3012 CB    CB    . SER SER SER A A 400 400 . 83.566  104.360 13.354  1.00 4.17
1 . .
ATOM 3013 OG    OG    . SER SER SER A A 400 400 . 83.418  105.742 13.046  1.00 5.82
1 . .
ATOM 3014 C     C     . SER SER SER A A 400 400 . 84.734  102.798 14.923  1.00 5.76
1 . .
ATOM 3015 O     O     . SER SER SER A A 400 400 . 83.767  102.422 15.586  1.00 5.29
1 . .
ATOM 3016 N     N     . GLU GLU GLU A A 401 401 . 85.784  102.003 14.704  1.00 5.95
1 . .
ATOM 3017 CA    CA    . GLU GLU GLU A A 401 401 . 85.901  100.746 15.514  1.00 6.66
1 . .
ATOM 3018 CB    CB    . GLU GLU GLU A A 401 401 . 86.993  99.783  15.017  1.00 5.70
1 . .
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ATOM 3019 CG    CG    . GLU GLU GLU A A 401 401 . 88.438  100.271 15.279  1.00 5.75
1 . .
ATOM 3020 CD    CD    . GLU GLU GLU A A 401 401 . 89.012  101.247 14.228  1.00 7.75
1 . .
ATOM 3021 OE1   OE1   . GLU GLU GLU A A 401 401 . 88.274  101.683 13.323  1.00 5.83
1 . .
ATOM 3022 OE2   OE2   . GLU GLU GLU A A 401 401 . 90.220  101.552 14.337  1.00 5.89
1 . .
ATOM 3023 C     C     . GLU GLU GLU A A 401 401 . 86.139  101.097 16.989  1.00 7.07
1 . .
ATOM 3024 O     O     . GLU GLU GLU A A 401 401 . 85.933  100.230 17.880  1.00 7.51
1 . .
ATOM 3025 N     N     . ARG ARG ARG A A 402 402 . 86.563  102.332 17.227  1.00 5.27
1 . .
ATOM 3026 CA    CA    . ARG ARG ARG A A 402 402 . 86.670  102.907 18.604  1.00 6.48
1 . .
ATOM 3027 CB    CB    . ARG ARG ARG A A 402 402 . 87.842  103.929 18.727  1.00 4.34
1 . .
ATOM 3028 CG    CG    . ARG ARG ARG A A 402 402 . 89.143  103.326 18.059  1.00 6.21
1 . .
ATOM 3029 CD    CD    . ARG ARG ARG A A 402 402 . 89.579  101.936 18.533  1.00 4.91
1 . .
ATOM 3030 NE    NE    . ARG ARG ARG A A 402 402 . 90.473  101.408 17.451  1.00 7.62
1 . .
ATOM 3031 CZ    CZ    . ARG ARG ARG A A 402 402 . 91.058  100.202 17.442  1.00 6.91
1 . .
ATOM 3032 NH1   NH1   . ARG ARG ARG A A 402 402 . 91.058  99.421  18.540  1.00 6.19
1 . .
ATOM 3033 NH2   NH2   . ARG ARG ARG A A 402 402 . 91.617  99.773  16.303  1.00 7.70
1 . .
ATOM 3034 C     C     . ARG ARG ARG A A 402 402 . 85.334  103.589 18.990  1.00 5.51
1 . .
ATOM 3035 O     O     . ARG ARG ARG A A 402 402 . 84.716  103.258 20.058  1.00 5.12
1 . .
ATOM 3036 N     N     . LEU LEU LEU A A 403 403 . 84.909  104.527 18.135  1.00 4.90
1 . .
ATOM 3037 CA    CA    . LEU LEU LEU A A 403 403 . 83.717  105.303 18.504  1.00 5.27
1 . .
ATOM 3038 CB    CB    . LEU LEU LEU A A 403 403 . 83.398  106.413 17.463  1.00 4.85
1 . .
ATOM 3039 CG    CG    . LEU LEU LEU A A 403 403 . 84.262  107.687 17.506  1.00 5.31
1 . .
ATOM 3040 CD1   CD1   . LEU LEU LEU A A 403 403 . 84.543  108.150 18.988  1.00 4.64
1 . .
ATOM 3041 CD2   CD2   . LEU LEU LEU A A 403 403 . 85.598  107.545 16.721  1.00 5.90
1 . .
ATOM 3042 C     C     . LEU LEU LEU A A 403 403 . 82.498  104.425 18.620  1.00 5.47
1 . .
ATOM 3043 O     O     . LEU LEU LEU A A 403 403 . 81.573  104.797 19.394  1.00 6.62
1 . .
ATOM 3044 N     N     . ALA ALA ALA A A 404 404 . 82.419  103.312 17.844  1.00 6.09
1 . .
ATOM 3045 CA    CA    . ALA ALA ALA A A 404 404 . 81.192  102.477 17.982  1.00 4.84
1 . .
ATOM 3046 CB    CB    . ALA ALA ALA A A 404 404 . 81.230  101.230 17.071  1.00 5.40
1 . .
ATOM 3047 C     C     . ALA ALA ALA A A 404 404 . 80.985  102.078 19.455  1.00 5.15
1 . .
ATOM 3048 O     O     . ALA ALA ALA A A 404 404 . 79.824  102.022 19.919  1.00 5.23
1 . .
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ATOM 3049 N     N     . LYS LYS LYS A A 405 405 . 82.088  101.757 20.162  1.00 5.39
1 . .
ATOM 3050 CA    CA    . LYS LYS LYS A A 405 405 . 81.954  101.416 21.608  1.00 5.75
1 . .
ATOM 3051 CB    CB    . LYS LYS LYS A A 405 405 . 83.262  100.819 22.158  1.00 6.49
1 . .
ATOM 3052 CG    CG    . LYS LYS LYS A A 405 405 . 83.548  99.362  21.725  1.00 7.65
1 . .
ATOM 3053 CD    CD    . LYS LYS LYS A A 405 405 . 83.897  99.197  20.248  1.00 6.34
1 . .
ATOM 3054 CE    CE    . LYS LYS LYS A A 405 405 . 84.666  97.859  20.008  1.00 5.20
1 . .
ATOM 3055 NZ    NZ    . LYS LYS LYS A A 405 405 . 84.778  97.702  18.459  1.00 4.31
1 . .
ATOM 3056 C     C     . LYS LYS LYS A A 405 405 . 81.590  102.639 22.473  1.00 5.61
1 . .
ATOM 3057 O     O     . LYS LYS LYS A A 405 405 . 80.692  102.545 23.362  1.00 5.88
1 . .
ATOM 3058 N     N     . TYR TYR TYR A A 406 406 . 82.297  103.750 22.255  1.00 5.67
1 . .
ATOM 3059 CA    CA    . TYR TYR TYR A A 406 406 . 82.009  104.943 23.043  1.00 5.95
1 . .
ATOM 3060 CB    CB    . TYR TYR TYR A A 406 406 . 82.999  106.006 22.678  1.00 6.39
1 . .
ATOM 3061 CG    CG    . TYR TYR TYR A A 406 406 . 84.422  105.634 23.158  1.00 4.74
1 . .
ATOM 3062 CD1   CD1   . TYR TYR TYR A A 406 406 . 84.679  105.252 24.551  1.00 5.52
1 . .
ATOM 3063 CE1   CE1   . TYR TYR TYR A A 406 406 . 85.978  104.955 24.974  1.00 6.40
1 . .
ATOM 3064 CZ    CZ    . TYR TYR TYR A A 406 406 . 87.049  105.043 24.058  1.00 5.82
1 . .
ATOM 3065 OH    OH    . TYR TYR TYR A A 406 406 . 88.336  104.714 24.435  1.00 6.66
1 . .
ATOM 3066 CE2   CE2   . TYR TYR TYR A A 406 406 . 86.856  105.418 22.703  1.00 3.55
1 . .
ATOM 3067 CD2   CD2   . TYR TYR TYR A A 406 406 . 85.520  105.711 22.254  1.00 4.16
1 . .
ATOM 3068 C     C     . TYR TYR TYR A A 406 406 . 80.565  105.417 22.805  1.00 6.01
1 . .
ATOM 3069 O     O     . TYR TYR TYR A A 406 406 . 79.866  105.793 23.735  1.00 7.06
1 . .
ATOM 3070 N     N     . ASN ASN ASN A A 407 407 . 80.105  105.366 21.568  1.00 6.45
1 . .
ATOM 3071 CA    CA    . ASN ASN ASN A A 407 407 . 78.723  105.790 21.285  1.00 5.49
1 . .
ATOM 3072 CB    CB    . ASN ASN ASN A A 407 407 . 78.485  105.803 19.731  1.00 6.11
1 . .
ATOM 3073 CG    CG    . ASN ASN ASN A A 407 407 . 79.240  106.922 19.032  1.00 4.10
1 . .
ATOM 3074 OD1   OD1   . ASN ASN ASN A A 407 407 . 79.580  107.938 19.628  1.00 6.62
1 . .
ATOM 3075 ND2   ND2   . ASN ASN ASN A A 407 407 . 79.446  106.765 17.696  1.00 5.10
1 . .
ATOM 3076 C     C     . ASN ASN ASN A A 407 407 . 77.745  104.857 21.964  1.00 5.37
1 . .
ATOM 3077 O     O     . ASN ASN ASN A A 407 407 . 76.739  105.312 22.477  1.00 5.50
1 . .
ATOM 3078 N     N     . GLN GLN GLN A A 408 408 . 78.009  103.567 21.995  1.00 5.59
1 . .
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ATOM 3079 CA    CA    . GLN GLN GLN A A 408 408 . 77.087  102.644 22.631  1.00 6.77
1 . .
ATOM 3080 CB    CB    . GLN GLN GLN A A 408 408 . 77.491  101.189 22.298  1.00 6.74
1 . .
ATOM 3081 CG    CG    . GLN GLN GLN A A 408 408 . 76.733  100.089 23.062  1.00 9.30
1 . .
ATOM 3082 CD    CD    . GLN GLN GLN A A 408 408 . 75.251  100.036 22.772  1.00 12.80
1 . .
ATOM 3083 OE1   OE1   . GLN GLN GLN A A 408 408 . 74.731  100.793 21.940  1.00 11.37
1 . .
ATOM 3084 NE2   NE2   . GLN GLN GLN A A 408 408 . 74.534  99.117  23.467  1.00 13.33
1 . .
ATOM 3085 C     C     . GLN GLN GLN A A 408 408 . 77.060  102.900 24.147  1.00 6.38
1 . .
ATOM 3086 O     O     . GLN GLN GLN A A 408 408 . 75.999  102.824 24.774  1.00 7.20
1 . .
ATOM 3087 N     N     . LEU LEU LEU A A 409 409 . 78.215  103.205 24.745  1.00 6.00
1 . .
ATOM 3088 CA    CA    . LEU LEU LEU A A 409 409 . 78.238  103.538 26.195  1.00 5.22
1 . .
ATOM 3089 CB    CB    . LEU LEU LEU A A 409 409 . 79.686  103.776 26.715  1.00 4.82
1 . .
ATOM 3090 CG    CG    . LEU LEU LEU A A 409 409 . 80.409  102.417 26.854  1.00 5.15
1 . .
ATOM 3091 CD1   CD1   . LEU LEU LEU A A 409 409 . 81.969  102.707 26.940  1.00 6.44
1 . .
ATOM 3092 CD2   CD2   . LEU LEU LEU A A 409 409 . 79.921  101.654 28.147  1.00 5.77
1 . .
ATOM 3093 C     C     . LEU LEU LEU A A 409 409 . 77.407  104.820 26.410  1.00 5.25
1 . .
ATOM 3094 O     O     . LEU LEU LEU A A 409 409 . 76.711  104.914 27.432  1.00 6.64
1 . .
ATOM 3095 N     N     . MET MET MET A A 410 410 . 77.434  105.801 25.501  1.00 4.49
1 . .
ATOM 3096 CA    CA    . MET MET MET A A 410 410 . 76.510  106.949 25.677  1.00 6.42
1 . .
ATOM 3097 CB    CB    . MET MET MET A A 410 410 . 76.814  108.047 24.604  1.00 5.96
1 . .
ATOM 3098 CG    CG    . MET MET MET A A 410 410 . 78.117  108.738 24.968  1.00 7.96
1 . .
ATOM 3099 SD    SD    . MET MET MET A A 410 410 . 78.321  110.315 24.043  1.00 11.55
1 . .
ATOM 3100 CE    CE    . MET MET MET A A 410 410 . 78.706  109.680 22.403  1.00 10.75
1 . .
ATOM 3101 C     C     . MET MET MET A A 410 410 . 75.045  106.536 25.613  1.00 7.30
1 . .
ATOM 3102 O     O     . MET MET MET A A 410 410 . 74.225  107.083 26.387  1.00 8.86
1 . .
ATOM 3103 N     N     . ARG ARG ARG A A 411 411 . 74.709  105.607 24.713  1.00 6.73
1 . .
ATOM 3104 CA    CA    . ARG ARG ARG A A 411 411 . 73.324  105.152 24.588  1.00 7.38
1 . .
ATOM 3105 CB    CB    . ARG ARG ARG A A 411 411 . 73.184  104.203 23.404  1.00 6.74
1 . .
ATOM 3106 CG    CG    . ARG ARG ARG A A 411 411 . 73.480  104.875 22.017  1.00 7.45
1 . .
ATOM 3107 CD    CD    . ARG ARG ARG A A 411 411 . 73.041  103.899 20.930  1.00 7.89
1 . .
ATOM 3108 NE    NE    . ARG ARG ARG A A 411 411 . 73.656  104.340 19.716  1.00 11.92
1 . .
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ATOM 3109 CZ    CZ    . ARG ARG ARG A A 411 411 . 74.804  103.831 19.231  1.00 9.97
1 . .
ATOM 3110 NH1   NH1   . ARG ARG ARG A A 411 411 . 75.313  102.689 19.756  1.00 10.41
1 . .
ATOM 3111 NH2   NH2   . ARG ARG ARG A A 411 411 . 75.371  104.377 18.155  1.00 11.60
1 . .
ATOM 3112 C     C     . ARG ARG ARG A A 411 411 . 72.887  104.418 25.860  1.00 8.28
1 . .
ATOM 3113 O     O     . ARG ARG ARG A A 411 411 . 71.743  104.583 26.353  1.00 10.22
1 . .
ATOM 3114 N     N     . ILE ILE ILE A A 412 412 . 73.773  103.572 26.370  1.00 7.17
1 . .
ATOM 3115 CA    CA    . ILE ILE ILE A A 412 412 . 73.508  102.868 27.642  1.00 8.19
1 . .
ATOM 3116 CB    CB    . ILE ILE ILE A A 412 412 . 74.702  101.877 28.017  1.00 6.47
1 . .
ATOM 3117 CG1   CG1   . ILE ILE ILE A A 412 412 . 74.726  100.687 27.018  1.00 7.77
1 . .
ATOM 3118 CD1   CD1   . ILE ILE ILE A A 412 412 . 76.026  99.893  27.079  1.00 7.10
1 . .
ATOM 3119 CG2   CG2   . ILE ILE ILE A A 412 412 . 74.544  101.295 29.457  1.00 8.67
1 . .
ATOM 3120 C     C     . ILE ILE ILE A A 412 412 . 73.266  103.906 28.774  1.00 8.27
1 . .
ATOM 3121 O     O     . ILE ILE ILE A A 412 412 . 72.302  103.744 29.554  1.00 10.19
1 . .
ATOM 3122 N     N     . GLU GLU GLU A A 413 413 . 74.137  104.898 28.942  1.00 7.30
1 . .
ATOM 3123 CA    CA    . GLU GLU GLU A A 413 413 . 73.897  105.925 29.983  1.00 8.45
1 . .
ATOM 3124 CB    CB    . GLU GLU GLU A A 413 413 . 75.017  106.952 29.965  1.00 8.56
1 . .
ATOM 3125 CG    CG    . GLU GLU GLU A A 413 413 . 74.813  108.022 31.015  1.00 8.83
1 . .
ATOM 3126 CD    CD    . GLU GLU GLU A A 413 413 . 76.064  108.858 31.148  1.00 12.73
1 . .
ATOM 3127 OE1   OE1   . GLU GLU GLU A A 413 413 . 76.291  109.668 30.188  1.00 13.69
1 . .
ATOM 3128 OE2   OE2   . GLU GLU GLU A A 413 413 . 76.797  108.689 32.155  1.00 12.99
1 . .
ATOM 3129 C     C     . GLU GLU GLU A A 413 413 . 72.508  106.583 29.814  1.00 10.53
1 . .
ATOM 3130 O     O     . GLU GLU GLU A A 413 413 . 71.762  106.788 30.795  1.00 10.80
1 . .
ATOM 3131 N     N     . GLU GLU GLU A A 414 414 . 72.160  106.925 28.573  1.00 10.82
1 . .
ATOM 3132 CA    CA    . GLU GLU GLU A A 414 414 . 70.872  107.565 28.314  1.00 13.49
1 . .
ATOM 3133 CB    CB    . GLU GLU GLU A A 414 414 . 70.796  107.934 26.817  1.00 14.51
1 . .
ATOM 3134 CG    CG    . GLU GLU GLU A A 414 414 . 69.748  108.871 26.400  1.00 21.45
1 . .
ATOM 3135 CD    CD    . GLU GLU GLU A A 414 414 . 69.770  108.969 24.881  1.00 23.17
1 . .
ATOM 3136 OE1   OE1   . GLU GLU GLU A A 414 414 . 70.771  109.421 24.288  1.00 29.97
1 . .
ATOM 3137 OE2   OE2   . GLU GLU GLU A A 414 414 . 68.803  108.489 24.302  1.00 27.56
1 . .
ATOM 3138 C     C     . GLU GLU GLU A A 414 414 . 69.772  106.597 28.746  1.00 13.75
1 . .
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ATOM 3139 O     O     . GLU GLU GLU A A 414 414 . 68.801  107.061 29.407  1.00 15.66
1 . .
ATOM 3140 N     N     . GLU GLU GLU A A 415 415 . 69.895  105.291 28.441  1.00 13.10
1 . .
ATOM 3141 CA    CA    . GLU GLU GLU A A 415 415 . 68.835  104.308 28.662  1.00 14.92
1 . .
ATOM 3142 CB    CB    . GLU GLU GLU A A 415 415 . 69.157  102.933 28.001  1.00 15.79
1 . .
ATOM 3143 CG    CG    . GLU GLU GLU A A 415 415 . 69.180  102.943 26.356  1.00 17.84
1 . .
ATOM 3144 CD    CD    . GLU GLU GLU A A 415 415 . 68.451  104.167 25.813  1.00 14.24
1 . .
ATOM 3145 OE1   OE1   . GLU GLU GLU A A 415 415 . 67.347  104.523 26.320  1.00 34.80
1 . .
ATOM 3146 OE2   OE2   . GLU GLU GLU A A 415 415 . 68.980  104.798 24.857  1.00 33.44
1 . .
ATOM 3147 C     C     . GLU GLU GLU A A 415 415 . 68.624  104.133 30.145  1.00 15.93
1 . .
ATOM 3148 O     O     . GLU GLU GLU A A 415 415 . 67.482  103.929 30.605  1.00 15.43
1 . .
ATOM 3149 N     N     . LEU LEU LEU A A 416 416 . 69.710  104.173 30.915  1.00 14.07
1 . .
ATOM 3150 CA    CA    . LEU LEU LEU A A 416 416 . 69.614  103.964 32.370  1.00 15.10
1 . .
ATOM 3151 CB    CB    . LEU LEU LEU A A 416 416 . 70.991  103.669 32.995  1.00 14.09
1 . .
ATOM 3152 CG    CG    . LEU LEU LEU A A 416 416 . 71.481  102.305 32.600  1.00 14.85
1 . .
ATOM 3153 CD1   CD1   . LEU LEU LEU A A 416 416 . 72.970  102.122 32.937  1.00 14.31
1 . .
ATOM 3154 CD2   CD2   . LEU LEU LEU A A 416 416 . 70.638  101.239 33.276  1.00 17.79
1 . .
ATOM 3155 C     C     . LEU LEU LEU A A 416 416 . 69.000  105.162 33.102  1.00 16.46
1 . .
ATOM 3156 O     O     . LEU LEU LEU A A 416 416 . 68.584  105.003 34.236  1.00 17.83
1 . .
ATOM 3157 N     N     . GLY GLY GLY A A 417 417 . 68.985  106.330 32.488  1.00 19.15
1 . .
ATOM 3158 CA    CA    . GLY GLY GLY A A 417 417 . 68.234  107.520 32.981  1.00 22.10
1 . .
ATOM 3159 C     C     . GLY GLY GLY A A 417 417 . 68.758  107.970 34.319  1.00 24.76
1 . .
ATOM 3160 O     O     . GLY GLY GLY A A 417 417 . 69.985  108.085 34.488  1.00 24.06
1 . .
ATOM 3161 N     N     . ASP ASP ASP A A 418 418 . 67.847  108.212 35.300  1.00 26.38
1 . .
ATOM 3162 CA    CA    . ASP ASP ASP A A 418 418 . 68.272  108.684 36.656  1.00 27.83
1 . .
ATOM 3163 CB    CB    . ASP ASP ASP A A 418 418 . 67.046  109.249 37.464  1.00 28.80
1 . .
ATOM 3164 C     C     . ASP ASP ASP A A 418 418 . 69.038  107.603 37.460  1.00 27.49
1 . .
ATOM 3165 O     O     . ASP ASP ASP A A 418 418 . 69.631  107.945 38.495  1.00 29.63
1 . .
ATOM 3166 N     N     . GLU GLU GLU A A 419 419 . 68.981  106.330 37.013  1.00 25.29
1 . .
ATOM 3167 CA    CA    . GLU GLU GLU A A 419 419 . 69.702  105.173 37.602  1.00 24.42
1 . .
ATOM 3168 CB    CB    . GLU GLU GLU A A 419 419 . 69.057  103.854 37.160  1.00 25.60
1 . .
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ATOM 3169 CG    CG    . GLU GLU GLU A A 419 419 . 69.626  102.492 37.749  1.00 32.94
1 . .
ATOM 3170 CD    CD    . GLU GLU GLU A A 419 419 . 69.156  101.136 37.055  1.00 39.40
1 . .
ATOM 3171 OE1   OE1   . GLU GLU GLU A A 419 419 . 69.943  100.122 37.115  1.00 39.57
1 . .
ATOM 3172 OE2   OE2   . GLU GLU GLU A A 419 419 . 68.013  101.059 36.484  1.00 42.94
1 . .
ATOM 3173 C     C     . GLU GLU GLU A A 419 419 . 71.204  105.180 37.165  1.00 22.78
1 . .
ATOM 3174 O     O     . GLU GLU GLU A A 419 419 . 72.013  104.405 37.707  1.00 23.38
1 . .
ATOM 3175 N     N     . ALA ALA ALA A A 420 420 . 71.583  105.986 36.160  1.00 19.12
1 . .
ATOM 3176 CA    CA    . ALA ALA ALA A A 420 420 . 72.988  105.909 35.703  1.00 17.42
1 . .
ATOM 3177 CB    CB    . ALA ALA ALA A A 420 420 . 73.127  106.692 34.372  1.00 15.90
1 . .
ATOM 3178 C     C     . ALA ALA ALA A A 420 420 . 73.921  106.478 36.792  1.00 18.03
1 . .
ATOM 3179 O     O     . ALA ALA ALA A A 420 420 . 73.620  107.544 37.385  1.00 18.13
1 . .
ATOM 3180 N     N     . ARG ARG ARG A A 421 421 . 75.060  105.818 37.029  1.00 16.41
1 . .
ATOM 3181 CA    CA    . ARG ARG ARG A A 421 421 . 76.116  106.325 37.959  1.00 15.66
1 . .
ATOM 3182 CB    CB    . ARG ARG ARG A A 421 421 . 76.276  105.438 39.203  1.00 16.65
1 . .
ATOM 3183 CG    CG    . ARG ARG ARG A A 421 421 . 75.087  105.472 40.185  1.00 21.23
1 . .
ATOM 3184 CD    CD    . ARG ARG ARG A A 421 421 . 74.976  106.818 40.914  1.00 22.92
1 . .
ATOM 3185 NE    NE    . ARG ARG ARG A A 421 421 . 73.776  106.834 41.774  1.00 26.85
1 . .
ATOM 3186 CZ    CZ    . ARG ARG ARG A A 421 421 . 72.525  106.960 41.316  1.00 32.77
1 . .
ATOM 3187 NH1   NH1   . ARG ARG ARG A A 421 421 . 72.253  107.128 39.999  1.00 31.86
1 . .
ATOM 3188 NH2   NH2   . ARG ARG ARG A A 421 421 . 71.516  106.942 42.172  1.00 34.98
1 . .
ATOM 3189 C     C     . ARG ARG ARG A A 421 421 . 77.429  106.249 37.160  1.00 14.23
1 . .
ATOM 3190 O     O     . ARG ARG ARG A A 421 421 . 77.645  105.254 36.465  1.00 17.39
1 . .
ATOM 3191 N     N     . PHE PHE PHE A A 422 422 . 78.291  107.238 37.275  1.00 10.92
1 . .
ATOM 3192 CA    CA    . PHE PHE PHE A A 422 422 . 79.552  107.223 36.544  1.00 10.43
1 . .
ATOM 3193 CB    CB    . PHE PHE PHE A A 422 422 . 79.733  108.665 35.958  1.00 12.35
1 . .
ATOM 3194 CG    CG    . PHE PHE PHE A A 422 422 . 81.037  108.887 35.224  1.00 10.74
1 . .
ATOM 3195 CD1   CD1   . PHE PHE PHE A A 422 422 . 81.351  108.156 34.041  1.00 10.45
1 . .
ATOM 3196 CE1   CE1   . PHE PHE PHE A A 422 422 . 82.575  108.351 33.406  1.00 7.42
1 . .
ATOM 3197 CZ    CZ    . PHE PHE PHE A A 422 422 . 83.499  109.305 33.880  1.00 9.59
1 . .
ATOM 3198 CE2   CE2   . PHE PHE PHE A A 422 422 . 83.198  110.101 35.064  1.00 9.32
1 . .
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ATOM 3199 CD2   CD2   . PHE PHE PHE A A 422 422 . 81.942  109.867 35.713  1.00 6.58
1 . .
ATOM 3200 C     C     . PHE PHE PHE A A 422 422 . 80.657  106.925 37.562  1.00 10.02
1 . .
ATOM 3201 O     O     . PHE PHE PHE A A 422 422 . 80.692  107.506 38.676  1.00 10.85
1 . .
ATOM 3202 N     N     . ALA ALA ALA A A 423 423 . 81.620  106.095 37.169  1.00 9.12
1 . .
ATOM 3203 CA    CA    . ALA ALA ALA A A 423 423 . 82.673  105.694 38.115  1.00 9.12
1 . .
ATOM 3204 CB    CB    . ALA ALA ALA A A 423 423 . 83.533  104.574 37.585  1.00 9.66
1 . .
ATOM 3205 C     C     . ALA ALA ALA A A 423 423 . 83.559  106.804 38.611  1.00 10.24
1 . .
ATOM 3206 O     O     . ALA ALA ALA A A 423 423 . 83.952  106.754 39.780  1.00 7.81
1 . .
ATOM 3207 N     N     . GLY GLY GLY A A 424 424 . 83.893  107.781 37.743  1.00 8.03
1 . .
ATOM 3208 CA    CA    . GLY GLY GLY A A 424 424 . 84.682  108.942 38.203  1.00 9.25
1 . .
ATOM 3209 C     C     . GLY GLY GLY A A 424 424 . 85.981  108.570 38.869  1.00 8.97
1 . .
ATOM 3210 O     O     . GLY GLY GLY A A 424 424 . 86.734  107.720 38.392  1.00 8.66
1 . .
ATOM 3211 N     N     . HIS HIS HIS A A 425 425 . 86.215  109.199 40.030  1.00 8.27
1 . .
ATOM 3212 CA    CA    . HIS HIS HIS A A 425 425 . 87.466  108.934 40.752  1.00 8.21
1 . .
ATOM 3213 CB    CB    . HIS HIS HIS A A 425 425 . 87.638  110.038 41.809  1.00 9.54
1 . .
ATOM 3214 CG    CG    . HIS HIS HIS A A 425 425 . 87.993  111.345 41.199  1.00 9.97
1 . .
ATOM 3215 ND1   ND1   . HIS HIS HIS A A 425 425 . 89.280  111.675 40.800  1.00 15.35
1 . .
ATOM 3216 CE1   CE1   . HIS HIS HIS A A 425 425 . 89.269  112.924 40.327  1.00 13.26
1 . .
ATOM 3217 NE2   NE2   . HIS HIS HIS A A 425 425 . 88.029  113.380 40.381  1.00 14.71
1 . .
ATOM 3218 CD2   CD2   . HIS HIS HIS A A 425 425 . 87.216  112.427 40.937  1.00 12.52
1 . .
ATOM 3219 C     C     . HIS HIS HIS A A 425 425 . 87.506  107.554 41.424  1.00 8.05
1 . .
ATOM 3220 O     O     . HIS HIS HIS A A 425 425 . 88.544  107.157 41.926  1.00 11.09
1 . .
ATOM 3221 N     N     . ASN ASN ASN A A 426 426 . 86.408  106.830 41.393  1.00 7.70
1 . .
ATOM 3222 CA    CA    . ASN ASN ASN A A 426 426 . 86.377  105.417 41.864  1.00 8.19
1 . .
ATOM 3223 CB    CB    . ASN ASN ASN A A 426 426 . 85.079  105.173 42.628  1.00 8.16
1 . .
ATOM 3224 CG    CG    . ASN ASN ASN A A 426 426 . 85.121  105.927 43.923  1.00 10.62
1 . .
ATOM 3225 OD1   OD1   . ASN ASN ASN A A 426 426 . 85.946  105.557 44.814  1.00 18.94
1 . .
ATOM 3226 ND2   ND2   . ASN ASN ASN A A 426 426 . 84.458  107.051 43.979  1.00 7.76
1 . .
ATOM 3227 C     C     . ASN ASN ASN A A 426 426 . 86.541  104.403 40.732  1.00 9.68
1 . .
ATOM 3228 O     O     . ASN ASN ASN A A 426 426 . 86.078  103.285 40.823  1.00 12.44
1 . .
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ATOM 3229 N     N     . PHE PHE PHE A A 427 427 . 87.186  104.813 39.642  1.00 9.54
1 . .
ATOM 3230 CA    CA    . PHE PHE PHE A A 427 427 . 87.422  103.875 38.530  1.00 10.74
1 . .
ATOM 3231 CB    CB    . PHE PHE PHE A A 427 427 . 88.131  104.572 37.391  1.00 11.30
1 . .
ATOM 3232 CG    CG    . PHE PHE PHE A A 427 427 . 89.572  104.918 37.670  1.00 11.95
1 . .
ATOM 3233 CD1   CD1   . PHE PHE PHE A A 427 427 . 89.891  106.117 38.338  1.00 12.22
1 . .
ATOM 3234 CE1   CE1   . PHE PHE PHE A A 427 427 . 91.216  106.484 38.585  1.00 14.07
1 . .
ATOM 3235 CZ    CZ    . PHE PHE PHE A A 427 427 . 92.268  105.662 38.203  1.00 13.18
1 . .
ATOM 3236 CE2   CE2   . PHE PHE PHE A A 427 427 . 91.992  104.460 37.511  1.00 14.33
1 . .
ATOM 3237 CD2   CD2   . PHE PHE PHE A A 427 427 . 90.638  104.063 37.285  1.00 14.93
1 . .
ATOM 3238 C     C     . PHE PHE PHE A A 427 427 . 88.151  102.572 38.967  1.00 12.64
1 . .
ATOM 3239 O     O     . PHE PHE PHE A A 427 427 . 87.901  101.521 38.362  1.00 14.11
1 . .
ATOM 3240 N     N     . ARG ARG ARG A A 428 428 . 89.008  102.620 39.995  1.00 12.32
1 . .
ATOM 3241 CA    CA    . ARG ARG ARG A A 428 428 . 89.713  101.408 40.460  1.00 13.83
1 . .
ATOM 3242 CB    CB    . ARG ARG ARG A A 428 428 . 90.955  101.736 41.306  1.00 13.90
1 . .
ATOM 3243 CG    CG    . ARG ARG ARG A A 428 428 . 92.079  102.423 40.535  1.00 15.72
1 . .
ATOM 3244 CD    CD    . ARG ARG ARG A A 428 428 . 93.270  102.756 41.421  1.00 19.48
1 . .
ATOM 3245 NE    NE    . ARG ARG ARG A A 428 428 . 93.923  101.541 41.894  1.00 21.69
1 . .
ATOM 3246 CZ    CZ    . ARG ARG ARG A A 428 428 . 95.064  101.510 42.588  1.00 22.18
1 . .
ATOM 3247 NH1   NH1   . ARG ARG ARG A A 428 428 . 95.714  102.637 42.902  1.00 20.04
1 . .
ATOM 3248 NH2   NH2   . ARG ARG ARG A A 428 428 . 95.544  100.340 42.984  1.00 21.36
1 . .
ATOM 3249 C     C     . ARG ARG ARG A A 428 428 . 88.751  100.481 41.212  1.00 15.83
1 . .
ATOM 3250 O     O     . ARG ARG ARG A A 428 428 . 88.908  99.235  41.187  1.00 16.19
1 . .
ATOM 3251 N     N     . ASN ASN ASN A A 429 429 . 87.777  101.098 41.873  1.00 15.77
1 . .
ATOM 3252 CA    CA    . ASN ASN ASN A A 429 429 . 86.898  100.414 42.889  1.00 18.16
1 . .
ATOM 3253 CB    CB    . ASN ASN ASN A A 429 429 . 87.497  100.657 44.337  1.00 20.16
1 . .
ATOM 3254 CG    CG    . ASN ASN ASN A A 429 429 . 87.388  102.220 44.881  1.00 21.94
1 . .
ATOM 3255 OD1   OD1   . ASN ASN ASN A A 429 429 . 87.525  103.197 44.139  1.00 24.92
1 . .
ATOM 3256 ND2   ND2   . ASN ASN ASN A A 429 429 . 87.253  102.379 46.208  1.00 27.66
1 . .
ATOM 3257 C     C     . ASN ASN ASN A A 429 429 . 85.461  100.858 42.849  1.00 16.35
1 . .
ATOM 3258 O     O     . ASN ASN ASN A A 429 429 . 84.966  101.501 43.802  1.00 15.88
1 . .
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ATOM 3259 N     N     . PRO PRO PRO A A 430 430 . 84.747  100.630 41.742  1.00 15.05
1 . .
ATOM 3260 CA    CA    . PRO PRO PRO A A 430 430 . 83.442  101.256 41.753  1.00 15.59
1 . .
ATOM 3261 CB    CB    . PRO PRO PRO A A 430 430 . 82.984  101.242 40.260  1.00 16.59
1 . .
ATOM 3262 CG    CG    . PRO PRO PRO A A 430 430 . 83.772  100.165 39.639  1.00 14.84
1 . .
ATOM 3263 CD    CD    . PRO PRO PRO A A 430 430 . 85.110  100.077 40.400  1.00 14.44
1 . .
ATOM 3264 C     C     . PRO PRO PRO A A 430 430 . 82.350  100.638 42.640  1.00 17.74
1 . .
ATOM 3265 O     O     . PRO PRO PRO A A 430 430 . 81.236  101.238 42.729  1.00 17.60
1 . .
ATOM 3266 N     N     . SER SER SER A A 431 431 . 82.630  99.490  43.260  1.00 19.59
1 . .
ATOM 3267 CA    CA    . SER SER SER A A 431 431 . 81.565  98.869  44.062  1.00 24.06
1 . .
ATOM 3268 CB    CB    . SER SER SER A A 431 431 . 81.950  97.434  44.522  1.00 24.84
1 . .
ATOM 3269 OG    OG    . SER SER SER A A 431 431 . 83.203  97.421  45.242  1.00 28.57
1 . .
ATOM 3270 C     C     . SER SER SER A A 431 431 . 81.170  99.799  45.226  1.00 25.64
1 . .
ATOM 3271 O     O     . SER SER SER A A 431 431 . 80.099  99.642  45.821  1.00 27.66
1 . .
ATOM 3272 N     N     . VAL VAL VAL A A 432 432 . 81.950  100.837 45.514  1.00 25.34
1 . .
ATOM 3273 CA    CA    . VAL VAL VAL A A 432 432 . 81.634  101.677 46.696  1.00 25.04
1 . .
ATOM 3274 CB    CB    . VAL VAL VAL A A 432 432 . 82.888  102.439 47.215  1.00 26.05
1 . .
ATOM 3275 CG1   CG1   . VAL VAL VAL A A 432 432 . 84.037  101.486 47.573  1.00 26.24
1 . .
ATOM 3276 CG2   CG2   . VAL VAL VAL A A 432 432 . 83.282  103.553 46.217  1.00 25.76
1 . .
ATOM 3277 C     C     . VAL VAL VAL A A 432 432 . 80.524  102.673 46.405  1.00 25.20
1 . .
ATOM 3278 O     O     . VAL VAL VAL A A 432 432 . 80.016  103.307 47.323  1.00 24.69
1 . .
ATOM 3279 N     N     . LEU LEU LEU A A 433 433 . 80.134  102.838 45.136  1.00 25.01
1 . .
ATOM 3280 CA    CA    . LEU LEU LEU A A 433 433 . 79.163  103.876 44.765  1.00 25.41
1 . .
ATOM 3281 CB    CB    . LEU LEU LEU A A 433 433 . 79.355  104.346 43.298  1.00 24.90
1 . .
ATOM 3282 CG    CG    . LEU LEU LEU A A 433 433 . 80.789  104.890 43.099  1.00 22.86
1 . .
ATOM 3283 CD1   CD1   . LEU LEU LEU A A 433 433 . 81.092  105.140 41.637  1.00 22.74
1 . .
ATOM 3284 CD2   CD2   . LEU LEU LEU A A 433 433 . 81.005  106.185 43.891  1.00 23.34
1 . .
ATOM 3285 C     C     . LEU LEU LEU A A 433 433 . 77.692  103.482 45.053  1.00 26.76
1 . .
ATOM 3286 O     O     . LEU LEU LEU A A 433 433 . 77.245  102.460 44.567  1.00 26.07
1 . .
ATOM 3287 MG+2  MG+2  . MG2 MG2 MG2 A . 599 599 . 98.344  96.045  26.678  1.00 8.63
1 . .
ATOM 3288 MG+2  MG+2  . MG2 MG2 MG2 A . 600 600 . 99.196  93.888  23.311  1.00 10.03
1 . .
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ATOM 3289 O4P   O4P   . 2PG 2PG 2PG A . 601 601 . 95.488  94.362  20.837  1.00 6.93
1 . .
ATOM 3290 P     P     . 2PG 2PG 2PG A . 601 601 . 96.953  94.684  21.136  1.00 7.64
1 . .
ATOM 3291 O2P   O2P   . 2PG 2PG 2PG A . 601 601 . 97.730  95.021  19.878  1.00 8.79
1 . .
ATOM 3292 O3P   O3P   . 2PG 2PG 2PG A . 601 601 . 97.594  93.675  22.005  1.00 8.36
1 . .
ATOM 3293 O1P   O1P   . 2PG 2PG 2PG A . 601 601 . 96.986  96.104  21.872  1.00 8.27
1 . .
ATOM 3294 C2    C2    . 2PG 2PG 2PG A . 601 601 . 96.348  96.141  23.116  1.00 6.88
1 . .
ATOM 3295 C1    C1    . 2PG 2PG 2PG A . 601 601 . 97.177  96.009  24.340  1.00 10.76
1 . .
ATOM 3296 O2    O2    . 2PG 2PG 2PG A . 601 601 . 96.725  96.429  25.436  1.00 6.99
1 . .
ATOM 3297 O1    O1    . 2PG 2PG 2PG A . 601 601 . 98.391  95.669  24.234  1.00 10.03
1 . .
ATOM 3298 C3    C3    . 2PG 2PG 2PG A . 601 601 . 94.997  96.792  23.213  1.00 10.99
1 . .
ATOM 3299 O3    O3    . 2PG 2PG 2PG A . 601 601 . 95.308  98.233  23.049  1.00 15.62
1 . .
ATOM 3300 O     O     . HOH HOH HOH A . 800 800 . 100.363 95.775  26.922  1.00 5.26
1 . .
ATOM 3301 O     O     . HOH HOH HOH A . 801 801 . 100.888 94.138  24.538  1.00 7.31
1 . .
ATOM 3302 O     O     . HOH HOH HOH A . 802 802 . 98.312  92.587  24.696  1.00 8.13
1 . .
ATOM 3303 O3    O3    . TRS TRS TRS A . 700 700 . 106.297 89.018  18.904  1.00 25.29
1 . .
ATOM 3304 C3    C3    . TRS TRS TRS A . 700 700 . 106.649 89.502  20.171  1.00 19.68
1 . .
ATOM 3305 C     C     . TRS TRS TRS A . 700 700 . 105.551 89.091  21.192  1.00 17.75
1 . .
ATOM 3306 N     N     . TRS TRS TRS A . 700 700 . 104.264 89.757  20.740  1.00 14.14
1 . .
ATOM 3307 C2    C2    . TRS TRS TRS A . 700 700 . 105.365 87.554  21.274  1.00 18.24
1 . .
ATOM 3308 O2    O2    . TRS TRS TRS A . 700 700 . 105.062 87.040  19.997  1.00 21.43
1 . .
ATOM 3309 C1    C1    . TRS TRS TRS A . 700 700 . 105.985 89.554  22.589  1.00 15.33
1 . .
ATOM 3310 O1    O1    . TRS TRS TRS A . 700 700 . 105.105 89.013  23.603  1.00 14.41
1 . .
ATOM 3311 N     N     . SER SER SER B B 1   1   . 52.021  103.526 11.480  1.00 21.61
1 . .
ATOM 3312 CA    CA    . SER SER SER B B 1   1   . 52.591  104.901 11.692  1.00 22.99
1 . .
ATOM 3313 CB    CB    . SER SER SER B B 1   1   . 51.542  105.841 12.318  1.00 24.17
1 . .
ATOM 3314 OG    OG    . SER SER SER B B 1   1   . 51.064  105.292 13.553  1.00 27.70
1 . .
ATOM 3315 C     C     . SER SER SER B B 1   1   . 53.840  104.886 12.645  1.00 21.62
1 . .
ATOM 3316 O     O     . SER SER SER B B 1   1   . 54.189  103.850 13.283  1.00 22.15
1 . .
ATOM 3317 N     N     . ILE ILE ILE B B 2   2   . 54.472  106.041 12.788  1.00 20.19
1 . .
ATOM 3318 CA    CA    . ILE ILE ILE B B 2   2   . 55.680  106.084 13.624  1.00 17.01
1 . .
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ATOM 3319 CB    CB    . ILE ILE ILE B B 2   2   . 56.530  107.249 13.158  1.00 16.19
1 . .
ATOM 3320 CG1   CG1   . ILE ILE ILE B B 2   2   . 56.944  107.021 11.697  1.00 17.55
1 . .
ATOM 3321 CD1   CD1   . ILE ILE ILE B B 2   2   . 57.519  108.326 10.960  1.00 15.02
1 . .
ATOM 3322 CG2   CG2   . ILE ILE ILE B B 2   2   . 57.710  107.393 14.052  1.00 17.18
1 . .
ATOM 3323 C     C     . ILE ILE ILE B B 2   2   . 55.271  106.205 15.094  1.00 17.39
1 . .
ATOM 3324 O     O     . ILE ILE ILE B B 2   2   . 54.376  107.028 15.418  1.00 17.19
1 . .
ATOM 3325 N     N     . GLN GLN GLN B B 3   3   . 55.868  105.411 15.982  1.00 15.21
1 . .
ATOM 3326 CA    CA    . GLN GLN GLN B B 3   3   . 55.594  105.514 17.426  1.00 17.15
1 . .
ATOM 3327 CB    CB    . GLN GLN GLN B B 3   3   . 55.748  104.169 18.115  1.00 18.73
1 . .
ATOM 3328 CG    CG    . GLN GLN GLN B B 3   3   . 54.765  103.141 17.595  1.00 24.44
1 . .
ATOM 3329 CD    CD    . GLN GLN GLN B B 3   3   . 54.932  101.801 18.282  1.00 30.45
1 . .
ATOM 3330 OE1   OE1   . GLN GLN GLN B B 3   3   . 55.971  101.524 18.900  1.00 32.52
1 . .
ATOM 3331 NE2   NE2   . GLN GLN GLN B B 3   3   . 53.908  100.943 18.166  1.00 33.24
1 . .
ATOM 3332 C     C     . GLN GLN GLN B B 3   3   . 56.407  106.531 18.170  1.00 15.85
1 . .
ATOM 3333 O     O     . GLN GLN GLN B B 3   3   . 55.893  107.146 19.107  1.00 15.24
1 . .
ATOM 3334 N     N     . LYS LYS LYS B B 4   4   . 57.705  106.676 17.826  1.00 14.78
1 . .
ATOM 3335 CA    CA    . LYS LYS LYS B B 4   4   . 58.623  107.566 18.561  1.00 14.94
1 . .
ATOM 3336 CB    CB    . LYS LYS LYS B B 4   4   . 59.126  106.868 19.848  1.00 16.71
1 . .
ATOM 3337 CG    CG    . LYS LYS LYS B B 4   4   . 59.961  107.704 20.706  1.00 21.81
1 . .
ATOM 3338 CD    CD    . LYS LYS LYS B B 4   4   . 60.195  107.040 22.069  1.00 25.25
1 . .
ATOM 3339 CE    CE    . LYS LYS LYS B B 4   4   . 60.276  108.132 23.094  1.00 32.80
1 . .
ATOM 3340 NZ    NZ    . LYS LYS LYS B B 4   4   . 60.682  107.607 24.421  1.00 34.31
1 . .
ATOM 3341 C     C     . LYS LYS LYS B B 4   4   . 59.811  107.808 17.648  1.00 14.61
1 . .
ATOM 3342 O     O     . LYS LYS LYS B B 4   4   . 60.219  106.865 16.886  1.00 12.57
1 . .
ATOM 3343 N     N     . ILE ILE ILE B B 5   5   . 60.306  109.057 17.662  1.00 13.99
1 . .
ATOM 3344 CA    CA    . ILE ILE ILE B B 5   5   . 61.589  109.423 17.057  1.00 13.26
1 . .
ATOM 3345 CB    CB    . ILE ILE ILE B B 5   5   . 61.366  110.369 15.866  1.00 12.33
1 . .
ATOM 3346 CG1   CG1   . ILE ILE ILE B B 5   5   . 60.605  109.673 14.724  1.00 14.88
1 . .
ATOM 3347 CD1   CD1   . ILE ILE ILE B B 5   5   . 60.081  110.735 13.742  1.00 20.49
1 . .
ATOM 3348 CG2   CG2   . ILE ILE ILE B B 5   5   . 62.714  110.990 15.391  1.00 12.73
1 . .
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ATOM 3349 C     C     . ILE ILE ILE B B 5   5   . 62.395  110.109 18.122  1.00 13.81
1 . .
ATOM 3350 O     O     . ILE ILE ILE B B 5   5   . 61.905  111.057 18.795  1.00 16.01
1 . .
ATOM 3351 N     N     . TRP TRP TRP B B 6   6   . 63.668  109.708 18.286  1.00 11.82
1 . .
ATOM 3352 CA    CA    . TRP TRP TRP B B 6   6   . 64.465  110.283 19.345  1.00 9.16
1 . .
ATOM 3353 CB    CB    . TRP TRP TRP B B 6   6   . 64.522  109.386 20.599  1.00 11.50
1 . .
ATOM 3354 CG    CG    . TRP TRP TRP B B 6   6   . 65.396  109.999 21.631  1.00 13.75
1 . .
ATOM 3355 CD1   CD1   . TRP TRP TRP B B 6   6   . 66.645  109.555 22.053  1.00 17.22
1 . .
ATOM 3356 NE1   NE1   . TRP TRP TRP B B 6   6   . 67.145  110.433 23.002  1.00 18.98
1 . .
ATOM 3357 CE2   CE2   . TRP TRP TRP B B 6   6   . 66.232  111.445 23.224  1.00 17.32
1 . .
ATOM 3358 CD2   CD2   . TRP TRP TRP B B 6   6   . 65.130  111.227 22.368  1.00 14.23
1 . .
ATOM 3359 CE3   CE3   . TRP TRP TRP B B 6   6   . 64.038  112.120 22.428  1.00 14.96
1 . .
ATOM 3360 CZ3   CZ3   . TRP TRP TRP B B 6   6   . 64.116  113.210 23.297  1.00 17.55
1 . .
ATOM 3361 CH2   CH2   . TRP TRP TRP B B 6   6   . 65.237  113.400 24.134  1.00 20.52
1 . .
ATOM 3362 CZ2   CZ2   . TRP TRP TRP B B 6   6   . 66.288  112.549 24.119  1.00 20.16
1 . .
ATOM 3363 C     C     . TRP TRP TRP B B 6   6   . 65.896  110.413 18.744  1.00 9.27
1 . .
ATOM 3364 O     O     . TRP TRP TRP B B 6   6   . 66.465  109.375 18.312  1.00 11.54
1 . .
ATOM 3365 N     N     . ALA ALA ALA B B 7   7   . 66.419  111.629 18.717  1.00 8.29
1 . .
ATOM 3366 CA    CA    . ALA ALA ALA B B 7   7   . 67.768  111.901 18.211  1.00 8.47
1 . .
ATOM 3367 CB    CB    . ALA ALA ALA B B 7   7   . 67.720  113.133 17.312  1.00 10.90
1 . .
ATOM 3368 C     C     . ALA ALA ALA B B 7   7   . 68.722  112.197 19.335  1.00 9.81
1 . .
ATOM 3369 O     O     . ALA ALA ALA B B 7   7   . 68.302  112.660 20.408  1.00 10.64
1 . .
ATOM 3370 N     N     . ARG ARG ARG B B 8   8   . 70.021  112.005 19.059  1.00 8.63
1 . .
ATOM 3371 CA    CA    . ARG ARG ARG B B 8   8   . 71.040  112.272 20.033  1.00 8.70
1 . .
ATOM 3372 CB    CB    . ARG ARG ARG B B 8   8   . 71.285  110.964 20.867  1.00 9.69
1 . .
ATOM 3373 CG    CG    . ARG ARG ARG B B 8   8   . 71.953  109.765 20.072  1.00 10.26
1 . .
ATOM 3374 CD    CD    . ARG ARG ARG B B 8   8   . 72.408  108.629 21.060  1.00 11.91
1 . .
ATOM 3375 NE    NE    . ARG ARG ARG B B 8   8   . 71.239  108.121 21.784  1.00 12.17
1 . .
ATOM 3376 CZ    CZ    . ARG ARG ARG B B 8   8   . 70.340  107.279 21.281  1.00 14.35
1 . .
ATOM 3377 NH1   NH1   . ARG ARG ARG B B 8   8   . 70.496  106.794 20.054  1.00 12.24
1 . .
ATOM 3378 NH2   NH2   . ARG ARG ARG B B 8   8   . 69.263  106.917 22.012  1.00 19.00
1 . .
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ATOM 3379 C     C     . ARG ARG ARG B B 8   8   . 72.326  112.629 19.260  1.00 7.64
1 . .
ATOM 3380 O     O     . ARG ARG ARG B B 8   8   . 72.452  112.383 18.060  1.00 7.81
1 . .
ATOM 3381 N     N     . GLU GLU GLU B B 9   9   . 73.256  113.207 19.969  1.00 8.23
1 . .
ATOM 3382 CA    CA    . GLU GLU GLU B B 9   9   . 74.611  113.452 19.473  1.00 9.44
1 . .
ATOM 3383 CB    CB    . GLU GLU GLU B B 9   9   . 75.055  114.700 20.276  1.00 12.10
1 . .
ATOM 3384 CG    CG    . GLU GLU GLU B B 9   9   . 76.216  115.447 19.803  1.00 15.51
1 . .
ATOM 3385 CD    CD    . GLU GLU GLU B B 9   9   . 76.444  116.633 20.737  1.00 15.46
1 . .
ATOM 3386 OE1   OE1   . GLU GLU GLU B B 9   9   . 76.547  117.781 20.233  1.00 11.94
1 . .
ATOM 3387 OE2   OE2   . GLU GLU GLU B B 9   9   . 76.502  116.380 22.007  1.00 14.59
1 . .
ATOM 3388 C     C     . GLU GLU GLU B B 9   9   . 75.494  112.209 19.682  1.00 9.98
1 . .
ATOM 3389 O     O     . GLU GLU GLU B B 9   9   . 75.503  111.637 20.807  1.00 13.29
1 . .
ATOM 3390 N     N     . ILE ILE ILE B B 10  10  . 76.154  111.722 18.632  1.00 6.92
1 . .
ATOM 3391 CA    CA    . ILE ILE ILE B B 10  10  . 77.194  110.661 18.808  1.00 6.01
1 . .
ATOM 3392 CB    CB    . ILE ILE ILE B B 10  10  . 76.839  109.329 18.028  1.00 5.02
1 . .
ATOM 3393 CG1   CG1   . ILE ILE ILE B B 10  10  . 76.651  109.623 16.491  1.00 6.49
1 . .
ATOM 3394 CD1   CD1   . ILE ILE ILE B B 10  10  . 76.623  108.392 15.639  1.00 8.26
1 . .
ATOM 3395 CG2   CG2   . ILE ILE ILE B B 10  10  . 75.578  108.616 18.696  1.00 6.97
1 . .
ATOM 3396 C     C     . ILE ILE ILE B B 10  10  . 78.470  111.289 18.274  1.00 5.75
1 . .
ATOM 3397 O     O     . ILE ILE ILE B B 10  10  . 78.434  112.393 17.705  1.00 7.88
1 . .
ATOM 3398 N     N     . LEU LEU LEU B B 11  11  . 79.593  110.565 18.352  1.00 4.34
1 . .
ATOM 3399 CA    CA    . LEU LEU LEU B B 11  11  . 80.825  111.035 17.708  1.00 6.01
1 . .
ATOM 3400 CB    CB    . LEU LEU LEU B B 11  11  . 82.069  110.877 18.581  1.00 4.73
1 . .
ATOM 3401 CG    CG    . LEU LEU LEU B B 11  11  . 81.994  111.737 19.848  1.00 7.27
1 . .
ATOM 3402 CD1   CD1   . LEU LEU LEU B B 11  11  . 83.368  111.686 20.620  1.00 9.56
1 . .
ATOM 3403 CD2   CD2   . LEU LEU LEU B B 11  11  . 81.490  113.265 19.588  1.00 7.27
1 . .
ATOM 3404 C     C     . LEU LEU LEU B B 11  11  . 81.139  110.320 16.387  1.00 5.80
1 . .
ATOM 3405 O     O     . LEU LEU LEU B B 11  11  . 80.979  109.095 16.273  1.00 7.54
1 . .
ATOM 3406 N     N     . ASP ASP ASP B B 12  12  . 81.532  111.099 15.376  1.00 5.95
1 . .
ATOM 3407 CA    CA    . ASP ASP ASP B B 12  12  . 81.918  110.467 14.078  1.00 6.26
1 . .
ATOM 3408 CB    CB    . ASP ASP ASP B B 12  12  . 81.668  111.434 12.908  1.00 7.13
1 . .
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ATOM 3409 CG    CG    . ASP ASP ASP B B 12  12  . 82.667  112.589 12.807  1.00 8.48
1 . .
ATOM 3410 OD1   OD1   . ASP ASP ASP B B 12  12  . 83.729  112.649 13.481  1.00 8.01
1 . .
ATOM 3411 OD2   OD2   . ASP ASP ASP B B 12  12  . 82.435  113.450 11.906  1.00 8.00
1 . .
ATOM 3412 C     C     . ASP ASP ASP B B 12  12  . 83.368  110.012 14.097  1.00 6.89
1 . .
ATOM 3413 O     O     . ASP ASP ASP B B 12  12  . 84.035  110.018 15.125  1.00 6.77
1 . .
ATOM 3414 N     N     . SER SER SER B B 13  13  . 83.848  109.574 12.970  1.00 6.69
1 . .
ATOM 3415 CA    CA    . SER SER SER B B 13  13  . 85.162  108.930 12.934  1.00 6.23
1 . .
ATOM 3416 CB    CB    . SER SER SER B B 13  13  . 85.252  108.139 11.585  1.00 6.04
1 . .
ATOM 3417 OG    OG    . SER SER SER B B 13  13  . 85.248  109.022 10.461  1.00 7.65
1 . .
ATOM 3418 C     C     . SER SER SER B B 13  13  . 86.378  109.814 13.128  1.00 6.46
1 . .
ATOM 3419 O     O     . SER SER SER B B 13  13  . 87.473  109.279 13.289  1.00 7.00
1 . .
ATOM 3420 N     N     . ARG ARG ARG B B 14  14  . 86.214  111.145 13.109  1.00 6.49
1 . .
ATOM 3421 CA    CA    . ARG ARG ARG B B 14  14  . 87.265  112.083 13.500  1.00 7.30
1 . .
ATOM 3422 CB    CB    . ARG ARG ARG B B 14  14  . 87.191  113.310 12.536  1.00 7.61
1 . .
ATOM 3423 CG    CG    . ARG ARG ARG B B 14  14  . 87.939  113.080 11.301  1.00 11.04
1 . .
ATOM 3424 CD    CD    . ARG ARG ARG B B 14  14  . 87.991  114.400 10.445  1.00 12.86
1 . .
ATOM 3425 NE    NE    . ARG ARG ARG B B 14  14  . 86.718  114.729 9.814   1.00 12.05
1 . .
ATOM 3426 CZ    CZ    . ARG ARG ARG B B 14  14  . 86.519  114.722 8.490   1.00 12.20
1 . .
ATOM 3427 NH1   NH1   . ARG ARG ARG B B 14  14  . 87.529  114.434 7.611   1.00 11.46
1 . .
ATOM 3428 NH2   NH2   . ARG ARG ARG B B 14  14  . 85.293  115.037 8.078   1.00 13.02
1 . .
ATOM 3429 C     C     . ARG ARG ARG B B 14  14  . 87.055  112.557 14.944  1.00 7.92
1 . .
ATOM 3430 O     O     . ARG ARG ARG B B 14  14  . 87.848  113.400 15.415  1.00 8.66
1 . .
ATOM 3431 N     N     . GLY GLY GLY B B 15  15  . 85.996  112.079 15.634  1.00 5.79
1 . .
ATOM 3432 CA    CA    . GLY GLY GLY B B 15  15  . 85.750  112.531 17.044  1.00 6.44
1 . .
ATOM 3433 C     C     . GLY GLY GLY B B 15  15  . 84.898  113.761 17.120  1.00 8.28
1 . .
ATOM 3434 O     O     . GLY GLY GLY B B 15  15  . 84.889  114.422 18.154  1.00 8.61
1 . .
ATOM 3435 N     N     . ASN ASN ASN B B 16  16  . 84.243  114.134 15.993  1.00 8.33
1 . .
ATOM 3436 CA    CA    . ASN ASN ASN B B 16  16  . 83.322  115.308 16.030  1.00 7.70
1 . .
ATOM 3437 CB    CB    . ASN ASN ASN B B 16  16  . 83.447  116.169 14.782  1.00 7.16
1 . .
ATOM 3438 CG    CG    . ASN ASN ASN B B 16  16  . 84.835  116.774 14.665  1.00 8.39
1 . .
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ATOM 3439 OD1   OD1   . ASN ASN ASN B B 16  16  . 85.360  117.306 15.676  1.00 11.21
1 . .
ATOM 3440 ND2   ND2   . ASN ASN ASN B B 16  16  . 85.475  116.630 13.473  1.00 11.18
1 . .
ATOM 3441 C     C     . ASN ASN ASN B B 16  16  . 81.864  114.867 16.174  1.00 6.58
1 . .
ATOM 3442 O     O     . ASN ASN ASN B B 16  16  . 81.451  113.854 15.674  1.00 7.30
1 . .
ATOM 3443 N     N     . PRO PRO PRO B B 17  17  . 81.063  115.665 16.864  1.00 6.59
1 . .
ATOM 3444 CA    CA    . PRO PRO PRO B B 17  17  . 79.618  115.339 16.988  1.00 5.56
1 . .
ATOM 3445 CB    CB    . PRO PRO PRO B B 17  17  . 79.030  116.547 17.796  1.00 5.28
1 . .
ATOM 3446 CG    CG    . PRO PRO PRO B B 17  17  . 80.296  117.091 18.508  1.00 6.58
1 . .
ATOM 3447 CD    CD    . PRO PRO PRO B B 17  17  . 81.446  116.932 17.515  1.00 7.15
1 . .
ATOM 3448 C     C     . PRO PRO PRO B B 17  17  . 78.899  115.173 15.674  1.00 6.00
1 . .
ATOM 3449 O     O     . PRO PRO PRO B B 17  17  . 79.164  115.935 14.719  1.00 6.92
1 . .
ATOM 3450 N     N     . THR THR THR B B 18  18  . 77.936  114.237 15.632  1.00 6.42
1 . .
ATOM 3451 CA    CA    . THR THR THR B B 18  18  . 77.012  114.165 14.492  1.00 7.34
1 . .
ATOM 3452 CB    CB    . THR THR THR B B 18  18  . 77.544  113.350 13.354  1.00 6.82
1 . .
ATOM 3453 OG1   OG1   . THR THR THR B B 18  18  . 76.730  113.589 12.189  1.00 6.88
1 . .
ATOM 3454 CG2   CG2   . THR THR THR B B 18  18  . 77.670  111.809 13.687  1.00 6.69
1 . .
ATOM 3455 C     C     . THR THR THR B B 18  18  . 75.681  113.686 14.970  1.00 7.62
1 . .
ATOM 3456 O     O     . THR THR THR B B 18  18  . 75.532  113.321 16.126  1.00 7.45
1 . .
ATOM 3457 N     N     . VAL VAL VAL B B 19  19  . 74.685  113.749 14.101  1.00 5.54
1 . .
ATOM 3458 CA    CA    . VAL VAL VAL B B 19  19  . 73.312  113.348 14.467  1.00 6.63
1 . .
ATOM 3459 CB    CB    . VAL VAL VAL B B 19  19  . 72.342  114.067 13.525  1.00 5.28
1 . .
ATOM 3460 CG1   CG1   . VAL VAL VAL B B 19  19  . 70.876  113.553 13.665  1.00 8.36
1 . .
ATOM 3461 CG2   CG2   . VAL VAL VAL B B 19  19  . 72.469  115.606 13.758  1.00 8.92
1 . .
ATOM 3462 C     C     . VAL VAL VAL B B 19  19  . 73.077  111.833 14.309  1.00 8.01
1 . .
ATOM 3463 O     O     . VAL VAL VAL B B 19  19  . 73.454  111.245 13.269  1.00 8.57
1 . .
ATOM 3464 N     N     . GLU GLU GLU B B 20  20  . 72.435  111.209 15.334  1.00 6.98
1 . .
ATOM 3465 CA    CA    . GLU GLU GLU B B 20  20  . 71.926  109.850 15.230  1.00 6.90
1 . .
ATOM 3466 CB    CB    . GLU GLU GLU B B 20  20  . 72.665  108.950 16.223  1.00 7.72
1 . .
ATOM 3467 CG    CG    . GLU GLU GLU B B 20  20  . 72.012  107.518 16.313  1.00 9.64
1 . .
ATOM 3468 CD    CD    . GLU GLU GLU B B 20  20  . 72.918  106.628 17.127  1.00 12.79
1 . .
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ATOM 3469 OE1   OE1   . GLU GLU GLU B B 20  20  . 73.937  106.131 16.553  1.00 12.07
1 . .
ATOM 3470 OE2   OE2   . GLU GLU GLU B B 20  20  . 72.692  106.499 18.357  1.00 12.29
1 . .
ATOM 3471 C     C     . GLU GLU GLU B B 20  20  . 70.438  109.910 15.564  1.00 6.88
1 . .
ATOM 3472 O     O     . GLU GLU GLU B B 20  20  . 70.013  110.663 16.476  1.00 9.72
1 . .
ATOM 3473 N     N     . VAL VAL VAL B B 21  21  . 69.649  109.131 14.855  1.00 7.10
1 . .
ATOM 3474 CA    CA    . VAL VAL VAL B B 21  21  . 68.191  109.060 15.107  1.00 7.35
1 . .
ATOM 3475 CB    CB    . VAL VAL VAL B B 21  21  . 67.467  109.537 13.913  1.00 7.01
1 . .
ATOM 3476 CG1   CG1   . VAL VAL VAL B B 21  21  . 65.874  109.290 14.052  1.00 9.14
1 . .
ATOM 3477 CG2   CG2   . VAL VAL VAL B B 21  21  . 67.796  111.061 13.660  1.00 10.17
1 . .
ATOM 3478 C     C     . VAL VAL VAL B B 21  21  . 67.776  107.591 15.365  1.00 8.21
1 . .
ATOM 3479 O     O     . VAL VAL VAL B B 21  21  . 68.129  106.707 14.570  1.00 9.21
1 . .
ATOM 3480 N     N     . ASP ASP ASP B B 22  22  . 66.993  107.384 16.432  1.00 9.63
1 . .
ATOM 3481 CA    CA    . ASP ASP ASP B B 22  22  . 66.302  106.102 16.691  1.00 9.66
1 . .
ATOM 3482 CB    CB    . ASP ASP ASP B B 22  22  . 66.341  105.782 18.167  1.00 9.36
1 . .
ATOM 3483 CG    CG    . ASP ASP ASP B B 22  22  . 67.721  105.282 18.665  1.00 13.37
1 . .
ATOM 3484 OD1   OD1   . ASP ASP ASP B B 22  22  . 67.910  105.179 19.890  1.00 17.19
1 . .
ATOM 3485 OD2   OD2   . ASP ASP ASP B B 22  22  . 68.591  104.964 17.852  1.00 15.40
1 . .
ATOM 3486 C     C     . ASP ASP ASP B B 22  22  . 64.845  106.326 16.388  1.00 10.89
1 . .
ATOM 3487 O     O     . ASP ASP ASP B B 22  22  . 64.273  107.287 16.838  1.00 11.88
1 . .
ATOM 3488 N     N     . LEU LEU LEU B B 23  23  . 64.285  105.449 15.563  1.00 12.23
1 . .
ATOM 3489 CA    CA    . LEU LEU LEU B B 23  23  . 62.882  105.561 15.159  1.00 11.19
1 . .
ATOM 3490 CB    CB    . LEU LEU LEU B B 23  23  . 62.804  105.846 13.653  1.00 12.41
1 . .
ATOM 3491 CG    CG    . LEU LEU LEU B B 23  23  . 61.378  106.100 13.157  1.00 11.30
1 . .
ATOM 3492 CD1   CD1   . LEU LEU LEU B B 23  23  . 61.448  106.927 11.953  1.00 13.72
1 . .
ATOM 3493 CD2   CD2   . LEU LEU LEU B B 23  23  . 60.631  104.786 12.854  1.00 11.44
1 . .
ATOM 3494 C     C     . LEU LEU LEU B B 23  23  . 62.243  104.245 15.486  1.00 12.00
1 . .
ATOM 3495 O     O     . LEU LEU LEU B B 23  23  . 62.733  103.170 15.104  1.00 11.70
1 . .
ATOM 3496 N     N     . TYR TYR TYR B B 24  24  . 61.076  104.331 16.126  1.00 12.59
1 . .
ATOM 3497 CA    CA    . TYR TYR TYR B B 24  24  . 60.421  103.101 16.567  1.00 14.20
1 . .
ATOM 3498 CB    CB    . TYR TYR TYR B B 24  24  . 60.093  103.217 18.060  1.00 14.52
1 . .
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ATOM 3499 CG    CG    . TYR TYR TYR B B 24  24  . 61.252  103.290 18.985  1.00 16.51
1 . .
ATOM 3500 CD1   CD1   . TYR TYR TYR B B 24  24  . 61.923  104.513 19.216  1.00 16.61
1 . .
ATOM 3501 CE1   CE1   . TYR TYR TYR B B 24  24  . 63.063  104.557 20.085  1.00 19.63
1 . .
ATOM 3502 CZ    CZ    . TYR TYR TYR B B 24  24  . 63.460  103.373 20.739  1.00 21.51
1 . .
ATOM 3503 OH    OH    . TYR TYR TYR B B 24  24  . 64.532  103.405 21.612  1.00 21.54
1 . .
ATOM 3504 CE2   CE2   . TYR TYR TYR B B 24  24  . 62.804  102.154 20.516  1.00 21.47
1 . .
ATOM 3505 CD2   CD2   . TYR TYR TYR B B 24  24  . 61.707  102.114 19.627  1.00 19.01
1 . .
ATOM 3506 C     C     . TYR TYR TYR B B 24  24  . 59.103  102.956 15.869  1.00 15.23
1 . .
ATOM 3507 O     O     . TYR TYR TYR B B 24  24  . 58.336  103.932 15.784  1.00 15.75
1 . .
ATOM 3508 N     N     . THR THR THR B B 25  25  . 58.798  101.744 15.416  1.00 14.93
1 . .
ATOM 3509 CA    CA    . THR THR THR B B 25  25  . 57.466  101.412 14.940  1.00 16.41
1 . .
ATOM 3510 CB    CB    . THR THR THR B B 25  25  . 57.486  101.084 13.432  1.00 14.19
1 . .
ATOM 3511 OG1   OG1   . THR THR THR B B 25  25  . 58.295  99.898  13.204  1.00 16.10
1 . .
ATOM 3512 CG2   CG2   . THR THR THR B B 25  25  . 57.974  102.260 12.604  1.00 16.79
1 . .
ATOM 3513 C     C     . THR THR THR B B 25  25  . 57.062  100.132 15.683  1.00 16.73
1 . .
ATOM 3514 O     O     . THR THR THR B B 25  25  . 57.816  99.631  16.531  1.00 17.26
1 . .
ATOM 3515 N     N     . ALA ALA ALA B B 26  26  . 55.886  99.586  15.354  1.00 17.79
1 . .
ATOM 3516 CA    CA    . ALA ALA ALA B B 26  26  . 55.524  98.263  15.843  1.00 19.40
1 . .
ATOM 3517 CB    CB    . ALA ALA ALA B B 26  26  . 54.136  97.888  15.331  1.00 20.76
1 . .
ATOM 3518 C     C     . ALA ALA ALA B B 26  26  . 56.500  97.120  15.556  1.00 20.34
1 . .
ATOM 3519 O     O     . ALA ALA ALA B B 26  26  . 56.533  96.131  16.319  1.00 21.02
1 . .
ATOM 3520 N     N     . LYS LYS LYS B B 27  27  . 57.273  97.258  14.489  1.00 18.95
1 . .
ATOM 3521 CA    CA    . LYS LYS LYS B B 27  27  . 58.332  96.326  14.097  1.00 20.64
1 . .
ATOM 3522 CB    CB    . LYS LYS LYS B B 27  27  . 58.600  96.417  12.600  1.00 20.84
1 . .
ATOM 3523 CG    CG    . LYS LYS LYS B B 27  27  . 57.300  96.231  11.851  1.00 26.11
1 . .
ATOM 3524 CD    CD    . LYS LYS LYS B B 27  27  . 57.405  95.215  10.801  1.00 27.07
1 . .
ATOM 3525 CE    CE    . LYS LYS LYS B B 27  27  . 55.999  94.818  10.304  1.00 29.81
1 . .
ATOM 3526 NZ    NZ    . LYS LYS LYS B B 27  27  . 55.620  93.494  10.851  1.00 33.29
1 . .
ATOM 3527 C     C     . LYS LYS LYS B B 27  27  . 59.636  96.480  14.886  1.00 19.49
1 . .
ATOM 3528 O     O     . LYS LYS LYS B B 27  27  . 60.437  95.559  14.912  1.00 23.07
1 . .
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ATOM 3529 N     N     . GLY GLY GLY B B 28  28  . 59.872  97.608  15.532  1.00 17.69
1 . .
ATOM 3530 CA    CA    . GLY GLY GLY B B 28  28  . 61.034  97.649  16.416  1.00 18.22
1 . .
ATOM 3531 C     C     . GLY GLY GLY B B 28  28  . 61.740  98.968  16.331  1.00 17.06
1 . .
ATOM 3532 O     O     . GLY GLY GLY B B 28  28  . 61.122  99.992  16.044  1.00 14.74
1 . .
ATOM 3533 N     N     . LEU LEU LEU B B 29  29  . 63.049  98.911  16.584  1.00 14.82
1 . .
ATOM 3534 CA    CA    . LEU LEU LEU B B 29  29  . 63.915  100.108 16.611  1.00 15.57
1 . .
ATOM 3535 CB    CB    . LEU LEU LEU B B 29  29  . 64.903  99.984  17.767  1.00 15.05
1 . .
ATOM 3536 CG    CG    . LEU LEU LEU B B 29  29  . 66.155  100.853 17.765  1.00 19.78
1 . .
ATOM 3537 CD1   CD1   . LEU LEU LEU B B 29  29  . 65.777  102.322 17.755  1.00 22.60
1 . .
ATOM 3538 CD2   CD2   . LEU LEU LEU B B 29  29  . 66.897  100.477 19.012  1.00 18.94
1 . .
ATOM 3539 C     C     . LEU LEU LEU B B 29  29  . 64.714  100.186 15.335  1.00 13.84
1 . .
ATOM 3540 O     O     . LEU LEU LEU B B 29  29  . 65.348  99.153  14.936  1.00 16.71
1 . .
ATOM 3541 N     N     . PHE PHE PHE B B 30  30  . 64.800  101.377 14.732  1.00 12.20
1 . .
ATOM 3542 CA    CA    . PHE PHE PHE B B 30  30  . 65.573  101.567 13.466  1.00 11.23
1 . .
ATOM 3543 CB    CB    . PHE PHE PHE B B 30  30  . 64.591  101.757 12.322  1.00 10.30
1 . .
ATOM 3544 CG    CG    . PHE PHE PHE B B 30  30  . 63.722  100.580 12.164  1.00 12.17
1 . .
ATOM 3545 CD1   CD1   . PHE PHE PHE B B 30  30  . 64.193  99.445  11.483  1.00 12.09
1 . .
ATOM 3546 CE1   CE1   . PHE PHE PHE B B 30  30  . 63.422  98.274  11.365  1.00 12.24
1 . .
ATOM 3547 CZ    CZ    . PHE PHE PHE B B 30  30  . 62.149  98.238  11.998  1.00 13.41
1 . .
ATOM 3548 CE2   CE2   . PHE PHE PHE B B 30  30  . 61.693  99.372  12.700  1.00 15.07
1 . .
ATOM 3549 CD2   CD2   . PHE PHE PHE B B 30  30  . 62.459  100.539 12.787  1.00 13.06
1 . .
ATOM 3550 C     C     . PHE PHE PHE B B 30  30  . 66.453  102.765 13.667  1.00 12.59
1 . .
ATOM 3551 O     O     . PHE PHE PHE B B 30  30  . 65.965  103.855 13.903  1.00 14.79
1 . .
ATOM 3552 N     N     . ARG ARG ARG B B 31  31  . 67.757  102.567 13.560  1.00 10.86
1 . .
ATOM 3553 CA    CA    . ARG ARG ARG B B 31  31  . 68.654  103.615 13.923  1.00 8.29
1 . .
ATOM 3554 CB    CB    . ARG ARG ARG B B 31  31  . 69.613  103.021 14.931  1.00 9.50
1 . .
ATOM 3555 CG    CG    . ARG ARG ARG B B 31  31  . 70.638  104.056 15.434  1.00 8.47
1 . .
ATOM 3556 CD    CD    . ARG ARG ARG B B 31  31  . 71.578  103.497 16.469  1.00 9.66
1 . .
ATOM 3557 NE    NE    . ARG ARG ARG B B 31  31  . 70.889  103.086 17.677  1.00 10.97
1 . .
ATOM 3558 CZ    CZ    . ARG ARG ARG B B 31  31  . 71.329  102.061 18.432  1.00 13.96
1 . .
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ATOM 3559 NH1   NH1   . ARG ARG ARG B B 31  31  . 70.690  101.714 19.511  1.00 15.59
1 . .
ATOM 3560 NH2   NH2   . ARG ARG ARG B B 31  31  . 72.431  101.393 18.092  1.00 13.57
1 . .
ATOM 3561 C     C     . ARG ARG ARG B B 31  31  . 69.486  104.031 12.694  1.00 9.38
1 . .
ATOM 3562 O     O     . ARG ARG ARG B B 31  31  . 69.954  103.150 11.875  1.00 9.67
1 . .
ATOM 3563 N     N     . ALA ALA ALA B B 32  32  . 69.779  105.331 12.586  1.00 8.11
1 . .
ATOM 3564 CA    CA    . ALA ALA ALA B B 32  32  . 70.637  105.793 11.481  1.00 8.49
1 . .
ATOM 3565 CB    CB    . ALA ALA ALA B B 32  32  . 69.789  106.186 10.263  1.00 9.44
1 . .
ATOM 3566 C     C     . ALA ALA ALA B B 32  32  . 71.471  106.946 11.954  1.00 8.32
1 . .
ATOM 3567 O     O     . ALA ALA ALA B B 32  32  . 71.041  107.689 12.850  1.00 8.02
1 . .
ATOM 3568 N     N     . ALA ALA ALA B B 33  33  . 72.655  107.136 11.339  1.00 8.27
1 . .
ATOM 3569 CA    CA    . ALA ALA ALA B B 33  33  . 73.467  108.296 11.681  1.00 7.62
1 . .
ATOM 3570 CB    CB    . ALA ALA ALA B B 33  33  . 74.641  107.862 12.633  1.00 8.61
1 . .
ATOM 3571 C     C     . ALA ALA ALA B B 33  33  . 73.968  109.031 10.433  1.00 9.36
1 . .
ATOM 3572 O     O     . ALA ALA ALA B B 33  33  . 74.052  108.467 9.358   1.00 9.63
1 . .
ATOM 3573 N     N     . VAL VAL VAL B B 34  34  . 74.331  110.292 10.617  1.00 8.57
1 . .
ATOM 3574 CA    CA    . VAL VAL VAL B B 34  34  . 74.572  111.213 9.506   1.00 8.21
1 . .
ATOM 3575 CB    CB    . VAL VAL VAL B B 34  34  . 73.873  112.522 9.773   1.00 7.76
1 . .
ATOM 3576 CG1   CG1   . VAL VAL VAL B B 34  34  . 74.246  113.619 8.674   1.00 7.50
1 . .
ATOM 3577 CG2   CG2   . VAL VAL VAL B B 34  34  . 72.346  112.273 9.862   1.00 9.17
1 . .
ATOM 3578 C     C     . VAL VAL VAL B B 34  34  . 76.120  111.452 9.400   1.00 7.19
1 . .
ATOM 3579 O     O     . VAL VAL VAL B B 34  34  . 76.792  111.691 10.422  1.00 7.85
1 . .
ATOM 3580 N     N     . PRO PRO PRO B B 35  35  . 76.712  111.375 8.167   1.00 6.86
1 . .
ATOM 3581 CA    CA    . PRO PRO PRO B B 35  35  . 78.169  111.549 8.004   1.00 5.94
1 . .
ATOM 3582 CB    CB    . PRO PRO PRO B B 35  35  . 78.440  110.835 6.669   1.00 6.55
1 . .
ATOM 3583 CG    CG    . PRO PRO PRO B B 35  35  . 77.193  111.171 5.841   1.00 6.35
1 . .
ATOM 3584 CD    CD    . PRO PRO PRO B B 35  35  . 76.044  111.087 6.893   1.00 6.45
1 . .
ATOM 3585 C     C     . PRO PRO PRO B B 35  35  . 78.468  113.095 7.892   1.00 6.15
1 . .
ATOM 3586 O     O     . PRO PRO PRO B B 35  35  . 77.515  113.909 7.925   1.00 8.93
1 . .
ATOM 3587 N     N     . SER SER SER B B 36  36  . 79.732  113.465 7.841   1.00 6.65
1 . .
ATOM 3588 CA    CA    . SER SER SER B B 36  36  . 80.120  114.823 7.697   1.00 7.60
1 . .
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ATOM 3589 CB    CB    . SER SER SER B B 36  36  . 80.355  115.365 9.111   1.00 6.75
1 . .
ATOM 3590 OG    OG    . SER SER SER B B 36  36  . 80.735  116.764 8.959   1.00 10.45
1 . .
ATOM 3591 C     C     . SER SER SER B B 36  36  . 81.352  114.993 6.876   1.00 6.46
1 . .
ATOM 3592 O     O     . SER SER SER B B 36  36  . 82.380  114.317 7.103   1.00 6.39
1 . .
ATOM 3593 N     N     . GLY GLY GLY B B 37  37  . 81.284  115.890 5.856   1.00 6.91
1 . .
ATOM 3594 CA    CA    . GLY GLY GLY B B 37  37  . 82.511  116.113 5.033   1.00 7.85
1 . .
ATOM 3595 C     C     . GLY GLY GLY B B 37  37  . 83.458  117.187 5.564   1.00 7.92
1 . .
ATOM 3596 O     O     . GLY GLY GLY B B 37  37  . 83.157  117.936 6.530   1.00 8.78
1 . .
ATOM 3597 N     N     . ALA ALA ALA B B 38  38  . 84.661  117.122 5.052   1.00 8.18
1 . .
ATOM 3598 CA    CA    . ALA ALA ALA B B 38  38  . 85.670  118.084 5.270   1.00 9.08
1 . .
ATOM 3599 CB    CB    . ALA ALA ALA B B 38  38  . 87.001  117.394 5.632   1.00 9.97
1 . .
ATOM 3600 C     C     . ALA ALA ALA B B 38  38  . 85.866  118.995 4.038   1.00 9.29
1 . .
ATOM 3601 O     O     . ALA ALA ALA B B 38  38  . 85.827  120.233 4.201   1.00 9.71
1 . .
ATOM 3602 N     N     . SER SER SER B B 39  39  . 86.098  118.431 2.842   1.00 9.88
1 . .
ATOM 3603 CA    CA    . SER SER SER B B 39  39  . 86.246  119.275 1.639   1.00 7.95
1 . .
ATOM 3604 CB    CB    . SER SER SER B B 39  39  . 87.146  118.598 0.585   1.00 8.21
1 . .
ATOM 3605 OG    OG    . SER SER SER B B 39  39  . 86.772  117.180 0.396   1.00 7.20
1 . .
ATOM 3606 C     C     . SER SER SER B B 39  39  . 84.816  119.408 1.122   1.00 8.24
1 . .
ATOM 3607 O     O     . SER SER SER B B 39  39  . 84.389  118.725 0.120   1.00 8.12
1 . .
ATOM 3608 N     N     . THR THR THR B B 40  40  . 84.044  120.255 1.777   1.00 9.55
1 . .
ATOM 3609 CA    CA    . THR THR THR B B 40  40  . 82.591  120.357 1.459   1.00 8.37
1 . .
ATOM 3610 CB    CB    . THR THR THR B B 40  40  . 81.808  120.784 2.706   1.00 10.25
1 . .
ATOM 3611 OG1   OG1   . THR THR THR B B 40  40  . 82.557  121.809 3.387   1.00 12.07
1 . .
ATOM 3612 CG2   CG2   . THR THR THR B B 40  40  . 81.678  119.553 3.648   1.00 7.54
1 . .
ATOM 3613 C     C     . THR THR THR B B 40  40  . 82.367  121.432 0.359   1.00 9.34
1 . .
ATOM 3614 O     O     . THR THR THR B B 40  40  . 82.886  122.570 0.463   1.00 11.55
1 . .
ATOM 3615 N     N     . GLY GLY GLY B B 41  41  . 81.592  121.082 -0.653  1.00 7.45
1 . .
ATOM 3616 CA    CA    . GLY GLY GLY B B 41  41  . 81.298  122.086 -1.709  1.00 7.62
1 . .
ATOM 3617 C     C     . GLY GLY GLY B B 41  41  . 80.437  123.200 -1.234  1.00 8.56
1 . .
ATOM 3618 O     O     . GLY GLY GLY B B 41  41  . 79.620  123.029 -0.278  1.00 8.81
1 . .
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ATOM 3619 N     N     . ILE ILE ILE B B 42  42  . 80.601  124.372 -1.874  1.00 7.31
1 . .
ATOM 3620 CA    CA    . ILE ILE ILE B B 42  42  . 79.784  125.501 -1.380  1.00 8.93
1 . .
ATOM 3621 CB    CB    . ILE ILE ILE B B 42  42  . 80.229  126.873 -1.972  1.00 6.04
1 . .
ATOM 3622 CG1   CG1   . ILE ILE ILE B B 42  42  . 80.059  126.870 -3.531  1.00 8.91
1 . .
ATOM 3623 CD1   CD1   . ILE ILE ILE B B 42  42  . 80.519  128.161 -4.277  1.00 11.48
1 . .
ATOM 3624 CG2   CG2   . ILE ILE ILE B B 42  42  . 81.683  127.123 -1.566  1.00 12.12
1 . .
ATOM 3625 C     C     . ILE ILE ILE B B 42  42  . 78.306  125.330 -1.605  1.00 9.35
1 . .
ATOM 3626 O     O     . ILE ILE ILE B B 42  42  . 77.514  126.062 -0.984  1.00 10.37
1 . .
ATOM 3627 N     N     . TYR TYR TYR B B 43  43  . 77.929  124.460 -2.542  1.00 8.33
1 . .
ATOM 3628 CA    CA    . TYR TYR TYR B B 43  43  . 76.512  124.231 -2.873  1.00 8.82
1 . .
ATOM 3629 CB    CB    . TYR TYR TYR B B 43  43  . 76.303  124.046 -4.412  1.00 8.57
1 . .
ATOM 3630 CG    CG    . TYR TYR TYR B B 43  43  . 76.796  125.229 -5.172  1.00 10.35
1 . .
ATOM 3631 CD1   CD1   . TYR TYR TYR B B 43  43  . 77.890  125.134 -5.981  1.00 9.51
1 . .
ATOM 3632 CE1   CE1   . TYR TYR TYR B B 43  43  . 78.416  126.275 -6.731  1.00 10.04
1 . .
ATOM 3633 CZ    CZ    . TYR TYR TYR B B 43  43  . 77.770  127.491 -6.573  1.00 11.11
1 . .
ATOM 3634 OH    OH    . TYR TYR TYR B B 43  43  . 78.242  128.604 -7.274  1.00 10.87
1 . .
ATOM 3635 CE2   CE2   . TYR TYR TYR B B 43  43  . 76.639  127.584 -5.750  1.00 13.71
1 . .
ATOM 3636 CD2   CD2   . TYR TYR TYR B B 43  43  . 76.147  126.484 -5.061  1.00 13.05
1 . .
ATOM 3637 C     C     . TYR TYR TYR B B 43  43  . 75.831  123.092 -2.095  1.00 8.48
1 . .
ATOM 3638 O     O     . TYR TYR TYR B B 43  43  . 74.629  122.844 -2.282  1.00 8.86
1 . .
ATOM 3639 N     N     . GLU GLU GLU B B 44  44  . 76.571  122.504 -1.148  1.00 8.35
1 . .
ATOM 3640 CA    CA    . GLU GLU GLU B B 44  44  . 76.001  121.430 -0.306  1.00 8.17
1 . .
ATOM 3641 CB    CB    . GLU GLU GLU B B 44  44  . 77.101  120.846 0.578   1.00 7.77
1 . .
ATOM 3642 CG    CG    . GLU GLU GLU B B 44  44  . 78.093  120.026 -0.322  1.00 6.61
1 . .
ATOM 3643 CD    CD    . GLU GLU GLU B B 44  44  . 78.993  119.089 0.522   1.00 8.23
1 . .
ATOM 3644 OE1   OE1   . GLU GLU GLU B B 44  44  . 78.572  118.717 1.662   1.00 10.83
1 . .
ATOM 3645 OE2   OE2   . GLU GLU GLU B B 44  44  . 80.056  118.668 0.003   1.00 11.18
1 . .
ATOM 3646 C     C     . GLU GLU GLU B B 44  44  . 74.856  121.980 0.582   1.00 8.28
1 . .
ATOM 3647 O     O     . GLU GLU GLU B B 44  44  . 74.900  123.118 1.032   1.00 7.87
1 . .
ATOM 3648 N     N     . ALA ALA ALA B B 45  45  . 73.823  121.191 0.780   1.00 9.19
1 . .
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ATOM 3649 CA    CA    . ALA ALA ALA B B 45  45  . 72.785  121.567 1.790   1.00 10.18
1 . .
ATOM 3650 CB    CB    . ALA ALA ALA B B 45  45  . 71.751  120.430 1.984   1.00 9.99
1 . .
ATOM 3651 C     C     . ALA ALA ALA B B 45  45  . 73.441  121.842 3.174   1.00 9.57
1 . .
ATOM 3652 O     O     . ALA ALA ALA B B 45  45  . 74.505  121.319 3.479   1.00 10.72
1 . .
ATOM 3653 N     N     . LEU LEU LEU B B 46  46  . 72.833  122.739 3.969   1.00 9.40
1 . .
ATOM 3654 CA    CA    . LEU LEU LEU B B 46  46  . 73.463  123.207 5.199   1.00 9.97
1 . .
ATOM 3655 CB    CB    . LEU LEU LEU B B 46  46  . 72.649  124.395 5.813   1.00 11.19
1 . .
ATOM 3656 CG    CG    . LEU LEU LEU B B 46  46  . 73.265  124.901 7.163   1.00 15.72
1 . .
ATOM 3657 CD1   CD1   . LEU LEU LEU B B 46  46  . 74.567  125.686 6.818   1.00 20.06
1 . .
ATOM 3658 CD2   CD2   . LEU LEU LEU B B 46  46  . 72.366  125.701 8.059   1.00 20.91
1 . .
ATOM 3659 C     C     . LEU LEU LEU B B 46  46  . 73.672  122.100 6.265   1.00 10.72
1 . .
ATOM 3660 O     O     . LEU LEU LEU B B 46  46  . 72.730  121.428 6.662   1.00 13.27
1 . .
ATOM 3661 N     N     . GLU GLU GLU B B 47  47  . 74.904  121.902 6.722   1.00 9.30
1 . .
ATOM 3662 CA    CA    . GLU GLU GLU B B 47  47  . 75.125  121.068 7.923   1.00 8.11
1 . .
ATOM 3663 CB    CB    . GLU GLU GLU B B 47  47  . 76.545  120.465 7.775   1.00 8.11
1 . .
ATOM 3664 CG    CG    . GLU GLU GLU B B 47  47  . 77.003  119.764 9.080   1.00 8.06
1 . .
ATOM 3665 CD    CD    . GLU GLU GLU B B 47  47  . 78.413  119.234 8.909   1.00 10.32
1 . .
ATOM 3666 OE1   OE1   . GLU GLU GLU B B 47  47  . 78.528  118.072 8.373   1.00 12.21
1 . .
ATOM 3667 OE2   OE2   . GLU GLU GLU B B 47  47  . 79.364  119.975 9.244   1.00 13.96
1 . .
ATOM 3668 C     C     . GLU GLU GLU B B 47  47  . 75.038  122.065 9.120   1.00 8.98
1 . .
ATOM 3669 O     O     . GLU GLU GLU B B 47  47  . 75.959  122.935 9.277   1.00 10.65
1 . .
ATOM 3670 N     N     . LEU LEU LEU B B 48  48  . 74.038  121.898 10.000  1.00 7.41
1 . .
ATOM 3671 CA    CA    . LEU LEU LEU B B 48  48  . 73.850  122.862 11.086  1.00 8.85
1 . .
ATOM 3672 CB    CB    . LEU LEU LEU B B 48  48  . 72.354  122.950 11.448  1.00 8.88
1 . .
ATOM 3673 CG    CG    . LEU LEU LEU B B 48  48  . 72.091  123.866 12.685  1.00 9.40
1 . .
ATOM 3674 CD1   CD1   . LEU LEU LEU B B 48  48  . 72.322  125.296 12.199  1.00 13.33
1 . .
ATOM 3675 CD2   CD2   . LEU LEU LEU B B 48  48  . 70.628  123.672 13.018  1.00 10.88
1 . .
ATOM 3676 C     C     . LEU LEU LEU B B 48  48  . 74.701  122.457 12.283  1.00 9.18
1 . .
ATOM 3677 O     O     . LEU LEU LEU B B 48  48  . 74.542  121.328 12.794  1.00 8.82
1 . .
ATOM 3678 N     N     . ARG ARG ARG B B 49  49  . 75.617  123.354 12.685  1.00 10.32
1 . .
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ATOM 3679 CA    CA    . ARG ARG ARG B B 49  49  . 76.416  123.135 13.855  1.00 10.35
1 . .
ATOM 3680 CB    CB    . ARG ARG ARG B B 49  49  . 77.901  123.225 13.525  1.00 12.78
1 . .
ATOM 3681 CG    CG    . ARG ARG ARG B B 49  49  . 78.333  122.201 12.518  1.00 15.49
1 . .
ATOM 3682 CD    CD    . ARG ARG ARG B B 49  49  . 79.231  121.203 13.098  1.00 16.74
1 . .
ATOM 3683 NE    NE    . ARG ARG ARG B B 49  49  . 79.617  120.145 12.121  1.00 14.16
1 . .
ATOM 3684 CZ    CZ    . ARG ARG ARG B B 49  49  . 79.795  118.884 12.487  1.00 13.20
1 . .
ATOM 3685 NH1   NH1   . ARG ARG ARG B B 49  49  . 79.658  118.593 13.775  1.00 8.46
1 . .
ATOM 3686 NH2   NH2   . ARG ARG ARG B B 49  49  . 80.107  117.946 11.588  1.00 13.73
1 . .
ATOM 3687 C     C     . ARG ARG ARG B B 49  49  . 76.085  124.210 14.879  1.00 10.81
1 . .
ATOM 3688 O     O     . ARG ARG ARG B B 49  49  . 75.609  125.316 14.504  1.00 12.09
1 . .
ATOM 3689 N     N     . ASP ASP ASP B B 50  50  . 76.427  123.957 16.129  1.00 7.98
1 . .
ATOM 3690 CA    CA    . ASP ASP ASP B B 50  50  . 75.983  124.881 17.212  1.00 10.75
1 . .
ATOM 3691 CB    CB    . ASP ASP ASP B B 50  50  . 76.029  124.199 18.549  1.00 9.68
1 . .
ATOM 3692 CG    CG    . ASP ASP ASP B B 50  50  . 75.062  122.965 18.627  1.00 13.16
1 . .
ATOM 3693 OD1   OD1   . ASP ASP ASP B B 50  50  . 74.120  122.799 17.792  1.00 11.94
1 . .
ATOM 3694 OD2   OD2   . ASP ASP ASP B B 50  50  . 75.252  122.154 19.554  1.00 13.27
1 . .
ATOM 3695 C     C     . ASP ASP ASP B B 50  50  . 76.767  126.179 17.294  1.00 12.18
1 . .
ATOM 3696 O     O     . ASP ASP ASP B B 50  50  . 76.195  127.202 17.733  1.00 13.03
1 . .
ATOM 3697 N     N     . GLY GLY GLY B B 51  51  . 78.055  126.138 16.978  1.00 13.59
1 . .
ATOM 3698 CA    CA    . GLY GLY GLY B B 51  51  . 78.926  127.339 17.047  1.00 16.72
1 . .
ATOM 3699 C     C     . GLY GLY GLY B B 51  51  . 79.178  127.750 18.491  1.00 19.27
1 . .
ATOM 3700 O     O     . GLY GLY GLY B B 51  51  . 79.550  128.890 18.774  1.00 20.59
1 . .
ATOM 3701 N     N     . ASP ASP ASP B B 52  52  . 79.020  126.843 19.435  1.00 18.81
1 . .
ATOM 3702 CA    CA    . ASP ASP ASP B B 52  52  . 79.366  127.228 20.840  1.00 18.06
1 . .
ATOM 3703 CB    CB    . ASP ASP ASP B B 52  52  . 78.462  126.480 21.799  1.00 19.11
1 . .
ATOM 3704 CG    CG    . ASP ASP ASP B B 52  52  . 78.836  126.686 23.251  1.00 19.49
1 . .
ATOM 3705 OD1   OD1   . ASP ASP ASP B B 52  52  . 79.834  127.358 23.518  1.00 22.34
1 . .
ATOM 3706 OD2   OD2   . ASP ASP ASP B B 52  52  . 78.172  126.128 24.112  1.00 20.16
1 . .
ATOM 3707 C     C     . ASP ASP ASP B B 52  52  . 80.860  126.893 21.022  1.00 19.13
1 . .
ATOM 3708 O     O     . ASP ASP ASP B B 52  52  . 81.236  125.741 21.065  1.00 18.41
1 . .
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ATOM 3709 N     N     . LYS LYS LYS B B 53  53  . 81.716  127.898 21.100  1.00 20.90
1 . .
ATOM 3710 CA    CA    . LYS LYS LYS B B 53  53  . 83.171  127.716 20.929  1.00 22.70
1 . .
ATOM 3711 CB    CB    . LYS LYS LYS B B 53  53  . 83.883  129.089 20.681  1.00 24.02
1 . .
ATOM 3712 CG    CG    . LYS LYS LYS B B 53  53  . 84.100  129.510 19.178  1.00 27.81
1 . .
ATOM 3713 C     C     . LYS LYS LYS B B 53  53  . 83.718  126.991 22.119  1.00 22.98
1 . .
ATOM 3714 O     O     . LYS LYS LYS B B 53  53  . 84.794  126.412 22.063  1.00 23.80
1 . .
ATOM 3715 N     N     . GLN GLN GLN B B 54  54  . 82.940  126.982 23.187  1.00 23.76
1 . .
ATOM 3716 CA    CA    . GLN GLN GLN B B 54  54  . 83.294  126.342 24.435  1.00 25.12
1 . .
ATOM 3717 CB    CB    . GLN GLN GLN B B 54  54  . 82.489  126.952 25.602  1.00 27.23
1 . .
ATOM 3718 CG    CG    . GLN GLN GLN B B 54  54  . 82.901  128.390 25.953  1.00 34.97
1 . .
ATOM 3719 CD    CD    . GLN GLN GLN B B 54  54  . 84.380  128.484 26.225  1.00 43.19
1 . .
ATOM 3720 OE1   OE1   . GLN GLN GLN B B 54  54  . 85.158  129.074 25.435  1.00 45.89
1 . .
ATOM 3721 NE2   NE2   . GLN GLN GLN B B 54  54  . 84.807  127.845 27.334  1.00 48.79
1 . .
ATOM 3722 C     C     . GLN GLN GLN B B 54  54  . 83.025  124.839 24.429  1.00 22.80
1 . .
ATOM 3723 O     O     . GLN GLN GLN B B 54  54  . 83.558  124.115 25.271  1.00 24.85
1 . .
ATOM 3724 N     N     . ARG ARG ARG B B 55  55  . 82.230  124.333 23.473  1.00 18.91
1 . .
ATOM 3725 CA    CA    . ARG ARG ARG B B 55  55  . 81.760  122.979 23.560  1.00 13.95
1 . .
ATOM 3726 CB    CB    . ARG ARG ARG B B 55  55  . 80.285  122.988 23.810  1.00 15.58
1 . .
ATOM 3727 CG    CG    . ARG ARG ARG B B 55  55  . 79.740  121.624 23.898  1.00 14.70
1 . .
ATOM 3728 CD    CD    . ARG ARG ARG B B 55  55  . 78.226  121.592 24.478  1.00 13.83
1 . .
ATOM 3729 NE    NE    . ARG ARG ARG B B 55  55  . 77.869  120.199 24.637  1.00 12.85
1 . .
ATOM 3730 CZ    CZ    . ARG ARG ARG B B 55  55  . 77.503  119.347 23.639  1.00 11.43
1 . .
ATOM 3731 NH1   NH1   . ARG ARG ARG B B 55  55  . 77.364  119.770 22.377  1.00 7.88
1 . .
ATOM 3732 NH2   NH2   . ARG ARG ARG B B 55  55  . 77.279  118.071 23.936  1.00 11.92
1 . .
ATOM 3733 C     C     . ARG ARG ARG B B 55  55  . 82.115  122.287 22.224  1.00 11.68
1 . .
ATOM 3734 O     O     . ARG ARG ARG B B 55  55  . 81.599  122.697 21.158  1.00 11.60
1 . .
ATOM 3735 N     N     . TYR TYR TYR B B 56  56  . 82.969  121.236 22.265  1.00 9.39
1 . .
ATOM 3736 CA    CA    . TYR TYR TYR B B 56  56  . 83.399  120.587 20.982  1.00 10.20
1 . .
ATOM 3737 CB    CB    . TYR TYR TYR B B 56  56  . 82.219  119.763 20.407  1.00 9.14
1 . .
ATOM 3738 CG    CG    . TYR TYR TYR B B 56  56  . 82.006  118.497 21.126  1.00 8.01
1 . .
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ATOM 3739 CD1   CD1   . TYR TYR TYR B B 56  56  . 80.828  118.268 21.856  1.00 7.78
1 . .
ATOM 3740 CE1   CE1   . TYR TYR TYR B B 56  56  . 80.573  117.063 22.490  1.00 8.73
1 . .
ATOM 3741 CZ    CZ    . TYR TYR TYR B B 56  56  . 81.459  116.008 22.347  1.00 7.68
1 . .
ATOM 3742 OH    OH    . TYR TYR TYR B B 56  56  . 81.209  114.799 22.993  1.00 10.72
1 . .
ATOM 3743 CE2   CE2   . TYR TYR TYR B B 56  56  . 82.619  116.162 21.631  1.00 9.23
1 . .
ATOM 3744 CD2   CD2   . TYR TYR TYR B B 56  56  . 82.881  117.422 20.952  1.00 7.87
1 . .
ATOM 3745 C     C     . TYR TYR TYR B B 56  56  . 83.913  121.588 19.959  1.00 13.12
1 . .
ATOM 3746 O     O     . TYR TYR TYR B B 56  56  . 83.741  121.412 18.745  1.00 13.00
1 . .
ATOM 3747 N     N     . LEU LEU LEU B B 57  57  . 84.528  122.658 20.457  1.00 15.70
1 . .
ATOM 3748 CA    CA    . LEU LEU LEU B B 57  57  . 85.106  123.704 19.583  1.00 16.88
1 . .
ATOM 3749 CB    CB    . LEU LEU LEU B B 57  57  . 86.417  123.170 18.934  1.00 20.51
1 . .
ATOM 3750 CG    CG    . LEU LEU LEU B B 57  57  . 87.641  123.109 19.869  1.00 25.68
1 . .
ATOM 3751 CD1   CD1   . LEU LEU LEU B B 57  57  . 88.288  121.677 20.051  1.00 29.66
1 . .
ATOM 3752 CD2   CD2   . LEU LEU LEU B B 57  57  . 88.625  124.226 19.386  1.00 33.46
1 . .
ATOM 3753 C     C     . LEU LEU LEU B B 57  57  . 84.109  124.207 18.518  1.00 15.97
1 . .
ATOM 3754 O     O     . LEU LEU LEU B B 57  57  . 84.440  124.444 17.329  1.00 16.53
1 . .
ATOM 3755 N     N     . GLY GLY GLY B B 58  58  . 82.863  124.368 18.928  1.00 13.24
1 . .
ATOM 3756 CA    CA    . GLY GLY GLY B B 58  58  . 81.824  124.927 18.074  1.00 13.97
1 . .
ATOM 3757 C     C     . GLY GLY GLY B B 58  58  . 81.127  123.902 17.229  1.00 12.86
1 . .
ATOM 3758 O     O     . GLY GLY GLY B B 58  58  . 80.281  124.288 16.412  1.00 13.13
1 . .
ATOM 3759 N     N     . LYS LYS LYS B B 59  59  . 81.509  122.614 17.373  1.00 11.62
1 . .
ATOM 3760 CA    CA    . LYS LYS LYS B B 59  59  . 81.002  121.582 16.466  1.00 9.66
1 . .
ATOM 3761 CB    CB    . LYS LYS LYS B B 59  59  . 82.147  120.705 15.958  1.00 10.88
1 . .
ATOM 3762 CG    CG    . LYS LYS LYS B B 59  59  . 83.136  121.569 15.145  1.00 13.70
1 . .
ATOM 3763 CD    CD    . LYS LYS LYS B B 59  59  . 84.391  120.768 14.824  1.00 20.38
1 . .
ATOM 3764 CE    CE    . LYS LYS LYS B B 59  59  . 85.439  121.730 14.252  1.00 24.00
1 . .
ATOM 3765 NZ    NZ    . LYS LYS LYS B B 59  59  . 86.874  121.261 14.221  1.00 29.59
1 . .
ATOM 3766 C     C     . LYS LYS LYS B B 59  59  . 79.818  120.749 16.958  1.00 8.81
1 . .
ATOM 3767 O     O     . LYS LYS LYS B B 59  59  . 79.502  119.739 16.354  1.00 9.90
1 . .
ATOM 3768 N     N     . GLY GLY GLY B B 60  60  . 79.190  121.114 18.090  1.00 8.26
1 . .
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ATOM 3769 CA    CA    . GLY GLY GLY B B 60  60  . 78.085  120.284 18.622  1.00 8.27
1 . .
ATOM 3770 C     C     . GLY GLY GLY B B 60  60  . 76.918  120.322 17.637  1.00 9.25
1 . .
ATOM 3771 O     O     . GLY GLY GLY B B 60  60  . 76.876  121.208 16.732  1.00 9.71
1 . .
ATOM 3772 N     N     . VAL VAL VAL B B 61  61  . 76.007  119.345 17.741  1.00 7.78
1 . .
ATOM 3773 CA    CA    . VAL VAL VAL B B 61  61  . 74.781  119.355 16.909  1.00 8.66
1 . .
ATOM 3774 CB    CB    . VAL VAL VAL B B 61  61  . 74.851  118.186 15.820  1.00 7.88
1 . .
ATOM 3775 CG1   CG1   . VAL VAL VAL B B 61  61  . 76.014  118.521 14.839  1.00 9.14
1 . .
ATOM 3776 CG2   CG2   . VAL VAL VAL B B 61  61  . 75.061  116.778 16.483  1.00 6.41
1 . .
ATOM 3777 C     C     . VAL VAL VAL B B 61  61  . 73.522  119.284 17.762  1.00 9.75
1 . .
ATOM 3778 O     O     . VAL VAL VAL B B 61  61  . 72.557  118.666 17.393  1.00 9.03
1 . .
ATOM 3779 N     N     . LEU LEU LEU B B 62  62  . 73.570  119.896 18.955  1.00 9.69
1 . .
ATOM 3780 CA    CA    . LEU LEU LEU B B 62  62  . 72.408  119.939 19.807  1.00 10.01
1 . .
ATOM 3781 CB    CB    . LEU LEU LEU B B 62  62  . 72.734  120.759 21.092  1.00 10.20
1 . .
ATOM 3782 CG    CG    . LEU LEU LEU B B 62  62  . 73.896  120.183 21.948  1.00 13.86
1 . .
ATOM 3783 CD1   CD1   . LEU LEU LEU B B 62  62  . 74.117  121.142 23.211  1.00 14.64
1 . .
ATOM 3784 CD2   CD2   . LEU LEU LEU B B 62  62  . 73.588  118.701 22.295  1.00 13.11
1 . .
ATOM 3785 C     C     . LEU LEU LEU B B 62  62  . 71.252  120.681 19.094  1.00 10.11
1 . .
ATOM 3786 O     O     . LEU LEU LEU B B 62  62  . 70.068  120.326 19.276  1.00 12.06
1 . .
ATOM 3787 N     N     . LYS LYS LYS B B 63  63  . 71.586  121.715 18.309  1.00 10.40
1 . .
ATOM 3788 CA    CA    . LYS LYS LYS B B 63  63  . 70.464  122.433 17.616  1.00 10.92
1 . .
ATOM 3789 CB    CB    . LYS LYS LYS B B 63  63  . 70.913  123.664 16.888  1.00 10.25
1 . .
ATOM 3790 CG    CG    . LYS LYS LYS B B 63  63  . 71.380  124.770 17.855  1.00 10.76
1 . .
ATOM 3791 CD    CD    . LYS LYS LYS B B 63  63  . 71.867  126.006 17.114  1.00 12.50
1 . .
ATOM 3792 CE    CE    . LYS LYS LYS B B 63  63  . 72.542  126.863 18.156  1.00 14.54
1 . .
ATOM 3793 NZ    NZ    . LYS LYS LYS B B 63  63  . 73.017  128.194 17.625  1.00 18.57
1 . .
ATOM 3794 C     C     . LYS LYS LYS B B 63  63  . 69.724  121.512 16.637  1.00 10.67
1 . .
ATOM 3795 O     O     . LYS LYS LYS B B 63  63  . 68.487  121.421 16.667  1.00 10.29
1 . .
ATOM 3796 N     N     . ALA ALA ALA B B 64  64  . 70.483  120.809 15.823  1.00 9.47
1 . .
ATOM 3797 CA    CA    . ALA ALA ALA B B 64  64  . 69.900  119.848 14.868  1.00 9.31
1 . .
ATOM 3798 CB    CB    . ALA ALA ALA B B 64  64  . 71.049  119.222 14.019  1.00 9.13
1 . .
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ATOM 3799 C     C     . ALA ALA ALA B B 64  64  . 69.152  118.718 15.602  1.00 10.14
1 . .
ATOM 3800 O     O     . ALA ALA ALA B B 64  64  . 68.011  118.394 15.255  1.00 10.64
1 . .
ATOM 3801 N     N     . VAL VAL VAL B B 65  65  . 69.737  118.209 16.696  1.00 8.57
1 . .
ATOM 3802 CA    CA    . VAL VAL VAL B B 65  65  . 69.049  117.204 17.516  1.00 8.25
1 . .
ATOM 3803 CB    CB    . VAL VAL VAL B B 65  65  . 69.983  116.640 18.670  1.00 8.32
1 . .
ATOM 3804 CG1   CG1   . VAL VAL VAL B B 65  65  . 69.179  115.883 19.760  1.00 10.31
1 . .
ATOM 3805 CG2   CG2   . VAL VAL VAL B B 65  65  . 71.115  115.728 18.050  1.00 9.70
1 . .
ATOM 3806 C     C     . VAL VAL VAL B B 65  65  . 67.709  117.729 18.032  1.00 8.15
1 . .
ATOM 3807 O     O     . VAL VAL VAL B B 65  65  . 66.677  117.035 17.995  1.00 9.45
1 . .
ATOM 3808 N     N     . ASP ASP ASP B B 66  66  . 67.731  118.973 18.547  1.00 9.99
1 . .
ATOM 3809 CA    CA    . ASP ASP ASP B B 66  66  . 66.487  119.531 19.099  1.00 11.67
1 . .
ATOM 3810 CB    CB    . ASP ASP ASP B B 66  66  . 66.785  120.797 19.917  1.00 13.52
1 . .
ATOM 3811 CG    CG    . ASP ASP ASP B B 66  66  . 65.522  121.494 20.370  1.00 19.91
1 . .
ATOM 3812 OD1   OD1   . ASP ASP ASP B B 66  66  . 65.194  122.589 19.863  1.00 27.81
1 . .
ATOM 3813 OD2   OD2   . ASP ASP ASP B B 66  66  . 64.837  120.934 21.217  1.00 25.43
1 . .
ATOM 3814 C     C     . ASP ASP ASP B B 66  66  . 65.474  119.804 18.007  1.00 12.20
1 . .
ATOM 3815 O     O     . ASP ASP ASP B B 66  66  . 64.252  119.630 18.244  1.00 13.18
1 . .
ATOM 3816 N     N     . HIS HIS HIS B B 67  67  . 65.907  120.196 16.802  1.00 11.75
1 . .
ATOM 3817 CA    CA    . HIS HIS HIS B B 67  67  . 64.906  120.351 15.704  1.00 11.89
1 . .
ATOM 3818 CB    CB    . HIS HIS HIS B B 67  67  . 65.514  120.862 14.420  1.00 11.34
1 . .
ATOM 3819 CG    CG    . HIS HIS HIS B B 67  67  . 65.939  122.302 14.483  1.00 12.37
1 . .
ATOM 3820 ND1   ND1   . HIS HIS HIS B B 67  67  . 65.100  123.315 14.918  1.00 12.67
1 . .
ATOM 3821 CE1   CE1   . HIS HIS HIS B B 67  67  . 65.761  124.471 14.890  1.00 15.02
1 . .
ATOM 3822 NE2   NE2   . HIS HIS HIS B B 67  67  . 66.991  124.246 14.432  1.00 14.63
1 . .
ATOM 3823 CD2   CD2   . HIS HIS HIS B B 67  67  . 67.124  122.897 14.170  1.00 14.47
1 . .
ATOM 3824 C     C     . HIS HIS HIS B B 67  67  . 64.204  119.013 15.473  1.00 12.40
1 . .
ATOM 3825 O     O     . HIS HIS HIS B B 67  67  . 62.974  118.937 15.183  1.00 12.54
1 . .
ATOM 3826 N     N     . ILE ILE ILE B B 68  68  . 64.955  117.910 15.594  1.00 10.80
1 . .
ATOM 3827 CA    CA    . ILE ILE ILE B B 68  68  . 64.311  116.603 15.393  1.00 9.21
1 . .
ATOM 3828 CB    CB    . ILE ILE ILE B B 68  68  . 65.364  115.449 15.294  1.00 8.53
1 . .
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ATOM 3829 CG1   CG1   . ILE ILE ILE B B 68  68  . 66.244  115.669 14.030  1.00 10.87
1 . .
ATOM 3830 CD1   CD1   . ILE ILE ILE B B 68  68  . 67.453  114.681 13.985  1.00 9.31
1 . .
ATOM 3831 CG2   CG2   . ILE ILE ILE B B 68  68  . 64.662  114.086 15.333  1.00 11.14
1 . .
ATOM 3832 C     C     . ILE ILE ILE B B 68  68  . 63.356  116.310 16.531  1.00 11.55
1 . .
ATOM 3833 O     O     . ILE ILE ILE B B 68  68  . 62.171  115.959 16.296  1.00 12.29
1 . .
ATOM 3834 N     N     . ASN ASN ASN B B 69  69  . 63.858  116.398 17.761  1.00 11.15
1 . .
ATOM 3835 CA    CA    . ASN ASN ASN B B 69  69  . 63.070  115.965 18.913  1.00 12.13
1 . .
ATOM 3836 CB    CB    . ASN ASN ASN B B 69  69  . 63.956  115.878 20.167  1.00 10.75
1 . .
ATOM 3837 CG    CG    . ASN ASN ASN B B 69  69  . 64.924  114.709 20.043  1.00 8.78
1 . .
ATOM 3838 OD1   OD1   . ASN ASN ASN B B 69  69  . 64.630  113.738 19.319  1.00 10.81
1 . .
ATOM 3839 ND2   ND2   . ASN ASN ASN B B 69  69  . 66.035  114.771 20.751  1.00 11.10
1 . .
ATOM 3840 C     C     . ASN ASN ASN B B 69  69  . 61.861  116.850 19.168  1.00 12.39
1 . .
ATOM 3841 O     O     . ASN ASN ASN B B 69  69  . 60.802  116.298 19.565  1.00 14.52
1 . .
ATOM 3842 N     N     . SER SER SER B B 70  70  . 62.038  118.171 18.962  1.00 13.64
1 . .
ATOM 3843 CA    CA    . SER SER SER B B 70  70  . 61.024  119.161 19.300  1.00 15.03
1 . .
ATOM 3844 CB    CB    . SER SER SER B B 70  70  . 61.702  120.442 19.718  1.00 16.20
1 . .
ATOM 3845 OG    OG    . SER SER SER B B 70  70  . 62.281  120.157 20.970  1.00 21.38
1 . .
ATOM 3846 C     C     . SER SER SER B B 70  70  . 60.015  119.464 18.218  1.00 14.64
1 . .
ATOM 3847 O     O     . SER SER SER B B 70  70  . 58.849  119.847 18.557  1.00 15.55
1 . .
ATOM 3848 N     N     . THR THR THR B B 71  71  . 60.410  119.251 16.957  1.00 13.10
1 . .
ATOM 3849 CA    CA    . THR THR THR B B 71  71  . 59.644  119.728 15.798  1.00 13.28
1 . .
ATOM 3850 CB    CB    . THR THR THR B B 71  71  . 60.341  120.918 15.147  1.00 13.30
1 . .
ATOM 3851 OG1   OG1   . THR THR THR B B 71  71  . 60.388  122.009 16.082  1.00 14.06
1 . .
ATOM 3852 CG2   CG2   . THR THR THR B B 71  71  . 59.556  121.421 13.907  1.00 15.85
1 . .
ATOM 3853 C     C     . THR THR THR B B 71  71  . 59.332  118.654 14.766  1.00 12.93
1 . .
ATOM 3854 O     O     . THR THR THR B B 71  71  . 58.151  118.370 14.447  1.00 12.94
1 . .
ATOM 3855 N     N     . ILE ILE ILE B B 72  72  . 60.373  117.995 14.233  1.00 11.43
1 . .
ATOM 3856 CA    CA    . ILE ILE ILE B B 72  72  . 60.155  116.950 13.229  1.00 9.33
1 . .
ATOM 3857 CB    CB    . ILE ILE ILE B B 72  72  . 61.493  116.518 12.571  1.00 9.58
1 . .
ATOM 3858 CG1   CG1   . ILE ILE ILE B B 72  72  . 62.153  117.716 11.913  1.00 10.30
1 . .
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ATOM 3859 CD1   CD1   . ILE ILE ILE B B 72  72  . 63.569  117.438 11.334  1.00 11.46
1 . .
ATOM 3860 CG2   CG2   . ILE ILE ILE B B 72  72  . 61.258  115.316 11.578  1.00 12.18
1 . .
ATOM 3861 C     C     . ILE ILE ILE B B 72  72  . 59.390  115.731 13.769  1.00 11.09
1 . .
ATOM 3862 O     O     . ILE ILE ILE B B 72  72  . 58.392  115.257 13.120  1.00 13.11
1 . .
ATOM 3863 N     N     . ALA ALA ALA B B 73  73  . 59.869  115.192 14.898  1.00 10.71
1 . .
ATOM 3864 CA    CA    . ALA ALA ALA B B 73  73  . 59.309  113.982 15.476  1.00 10.77
1 . .
ATOM 3865 CB    CB    . ALA ALA ALA B B 73  73  . 59.988  113.581 16.822  1.00 13.28
1 . .
ATOM 3866 C     C     . ALA ALA ALA B B 73  73  . 57.800  114.211 15.691  1.00 12.57
1 . .
ATOM 3867 O     O     . ALA ALA ALA B B 73  73  . 57.032  113.396 15.226  1.00 12.95
1 . .
ATOM 3868 N     N     . PRO PRO PRO B B 74  74  . 57.411  115.261 16.446  1.00 12.33
1 . .
ATOM 3869 CA    CA    . PRO PRO PRO B B 74  74  . 55.937  115.296 16.686  1.00 13.02
1 . .
ATOM 3870 CB    CB    . PRO PRO PRO B B 74  74  . 55.762  116.434 17.673  1.00 12.66
1 . .
ATOM 3871 CG    CG    . PRO PRO PRO B B 74  74  . 56.967  117.196 17.689  1.00 14.47
1 . .
ATOM 3872 CD    CD    . PRO PRO PRO B B 74  74  . 58.109  116.257 17.273  1.00 12.17
1 . .
ATOM 3873 C     C     . PRO PRO PRO B B 74  74  . 55.113  115.500 15.382  1.00 12.56
1 . .
ATOM 3874 O     O     . PRO PRO PRO B B 74  74  . 54.007  114.886 15.213  1.00 14.29
1 . .
ATOM 3875 N     N     . ALA ALA ALA B B 75  75  . 55.644  116.284 14.444  1.00 11.88
1 . .
ATOM 3876 CA    CA    . ALA ALA ALA B B 75  75  . 54.949  116.443 13.184  1.00 12.12
1 . .
ATOM 3877 CB    CB    . ALA ALA ALA B B 75  75  . 55.655  117.420 12.333  1.00 12.26
1 . .
ATOM 3878 C     C     . ALA ALA ALA B B 75  75  . 54.794  115.119 12.429  1.00 12.68
1 . .
ATOM 3879 O     O     . ALA ALA ALA B B 75  75  . 53.693  114.803 11.955  1.00 12.83
1 . .
ATOM 3880 N     N     . LEU LEU LEU B B 76  76  . 55.874  114.334 12.260  1.00 11.29
1 . .
ATOM 3881 CA    CA    . LEU LEU LEU B B 76  76  . 55.711  113.073 11.492  1.00 11.72
1 . .
ATOM 3882 CB    CB    . LEU LEU LEU B B 76  76  . 57.050  112.407 11.163  1.00 11.70
1 . .
ATOM 3883 CG    CG    . LEU LEU LEU B B 76  76  . 58.111  113.262 10.546  1.00 15.91
1 . .
ATOM 3884 CD1   CD1   . LEU LEU LEU B B 76  76  . 59.229  112.374 10.029  1.00 14.07
1 . .
ATOM 3885 CD2   CD2   . LEU LEU LEU B B 76  76  . 57.652  114.257 9.523   1.00 15.92
1 . .
ATOM 3886 C     C     . LEU LEU LEU B B 76  76  . 54.833  112.077 12.203  1.00 12.10
1 . .
ATOM 3887 O     O     . LEU LEU LEU B B 76  76  . 54.128  111.307 11.557  1.00 13.72
1 . .
ATOM 3888 N     N     . ILE ILE ILE B B 77  77  . 54.907  112.021 13.514  1.00 12.53
1 . .
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ATOM 3889 CA    CA    . ILE ILE ILE B B 77  77  . 54.109  111.075 14.261  1.00 13.93
1 . .
ATOM 3890 CB    CB    . ILE ILE ILE B B 77  77  . 54.538  111.004 15.750  1.00 13.42
1 . .
ATOM 3891 CG1   CG1   . ILE ILE ILE B B 77  77  . 55.891  110.235 15.816  1.00 14.50
1 . .
ATOM 3892 CD1   CD1   . ILE ILE ILE B B 77  77  . 56.579  110.442 17.111  1.00 17.36
1 . .
ATOM 3893 CG2   CG2   . ILE ILE ILE B B 77  77  . 53.479  110.187 16.508  1.00 15.23
1 . .
ATOM 3894 C     C     . ILE ILE ILE B B 77  77  . 52.627  111.479 14.125  1.00 15.02
1 . .
ATOM 3895 O     O     . ILE ILE ILE B B 77  77  . 51.723  110.605 13.858  1.00 12.82
1 . .
ATOM 3896 N     N     . SER SER SER B B 78  78  . 52.363  112.784 14.228  1.00 14.92
1 . .
ATOM 3897 CA    CA    . SER SER SER B B 78  78  . 50.924  113.222 14.144  1.00 16.49
1 . .
ATOM 3898 CB    CB    . SER SER SER B B 78  78  . 50.794  114.674 14.572  1.00 18.74
1 . .
ATOM 3899 OG    OG    . SER SER SER B B 78  78  . 51.108  114.759 15.964  1.00 22.86
1 . .
ATOM 3900 C     C     . SER SER SER B B 78  78  . 50.283  113.033 12.763  1.00 15.84
1 . .
ATOM 3901 O     O     . SER SER SER B B 78  78  . 48.993  112.901 12.611  1.00 17.53
1 . .
ATOM 3902 N     N     . SER SER SER B B 79  79  . 51.126  113.067 11.736  1.00 16.37
1 . .
ATOM 3903 CA    CA    . SER SER SER B B 79  79  . 50.657  112.840 10.366  1.00 16.71
1 . .
ATOM 3904 CB    CB    . SER SER SER B B 79  79  . 51.786  113.035 9.374   1.00 15.37
1 . .
ATOM 3905 OG    OG    . SER SER SER B B 79  79  . 52.516  111.794 9.257   1.00 16.93
1 . .
ATOM 3906 C     C     . SER SER SER B B 79  79  . 50.062  111.449 10.160  1.00 17.33
1 . .
ATOM 3907 O     O     . SER SER SER B B 79  79  . 49.273  111.235 9.227   1.00 20.00
1 . .
ATOM 3908 N     N     . GLY GLY GLY B B 80  80  . 50.426  110.489 11.016  1.00 17.00
1 . .
ATOM 3909 CA    CA    . GLY GLY GLY B B 80  80  . 49.990  109.117 10.765  1.00 17.45
1 . .
ATOM 3910 C     C     . GLY GLY GLY B B 80  80  . 50.490  108.387 9.516   1.00 17.41
1 . .
ATOM 3911 O     O     . GLY GLY GLY B B 80  80  . 50.100  107.225 9.297   1.00 18.93
1 . .
ATOM 3912 N     N     . LEU LEU LEU B B 81  81  . 51.366  109.016 8.726   1.00 16.05
1 . .
ATOM 3913 CA    CA    . LEU LEU LEU B B 81  81  . 51.934  108.417 7.517   1.00 16.78
1 . .
ATOM 3914 CB    CB    . LEU LEU LEU B B 81  81  . 52.822  109.394 6.754   1.00 17.82
1 . .
ATOM 3915 CG    CG    . LEU LEU LEU B B 81  81  . 52.053  110.557 6.116   1.00 17.01
1 . .
ATOM 3916 CD1   CD1   . LEU LEU LEU B B 81  81  . 52.983  111.658 5.792   1.00 18.07
1 . .
ATOM 3917 CD2   CD2   . LEU LEU LEU B B 81  81  . 51.294  110.057 4.813   1.00 17.94
1 . .
ATOM 3918 C     C     . LEU LEU LEU B B 81  81  . 52.721  107.127 7.860   1.00 17.21
1 . .
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ATOM 3919 O     O     . LEU LEU LEU B B 81  81  . 53.429  107.111 8.842   1.00 17.84
1 . .
ATOM 3920 N     N     . SER SER SER B B 82  82  . 52.560  106.079 7.051   1.00 16.66
1 . .
ATOM 3921 CA    CA    . SER SER SER B B 82  82  . 53.344  104.852 7.240   1.00 16.79
1 . .
ATOM 3922 CB    CB    . SER SER SER B B 82  82  . 52.763  103.764 6.335   1.00 18.08
1 . .
ATOM 3923 OG    OG    . SER SER SER B B 82  82  . 53.615  102.616 6.285   1.00 20.29
1 . .
ATOM 3924 C     C     . SER SER SER B B 82  82  . 54.773  105.093 6.785   1.00 15.64
1 . .
ATOM 3925 O     O     . SER SER SER B B 82  82  . 54.994  105.865 5.856   1.00 14.05
1 . .
ATOM 3926 N     N     . VAL VAL VAL B B 83  83  . 55.744  104.396 7.394   1.00 14.65
1 . .
ATOM 3927 CA    CA    . VAL VAL VAL B B 83  83  . 57.185  104.586 7.075   1.00 14.49
1 . .
ATOM 3928 CB    CB    . VAL VAL VAL B B 83  83  . 58.107  103.872 8.125   1.00 14.34
1 . .
ATOM 3929 CG1   CG1   . VAL VAL VAL B B 83  83  . 58.094  104.645 9.482   1.00 14.86
1 . .
ATOM 3930 CG2   CG2   . VAL VAL VAL B B 83  83  . 57.691  102.366 8.372   1.00 12.98
1 . .
ATOM 3931 C     C     . VAL VAL VAL B B 83  83  . 57.493  104.038 5.678   1.00 14.75
1 . .
ATOM 3932 O     O     . VAL VAL VAL B B 83  83  . 58.575  104.242 5.150   1.00 15.21
1 . .
ATOM 3933 N     N     . VAL VAL VAL B B 84  84  . 56.541  103.351 5.047   1.00 14.47
1 . .
ATOM 3934 CA    CA    . VAL VAL VAL B B 84  84  . 56.748  103.004 3.651   1.00 14.49
1 . .
ATOM 3935 CB    CB    . VAL VAL VAL B B 84  84  . 55.856  101.815 3.097   1.00 14.55
1 . .
ATOM 3936 CG1   CG1   . VAL VAL VAL B B 84  84  . 55.953  100.569 4.111   1.00 14.94
1 . .
ATOM 3937 CG2   CG2   . VAL VAL VAL B B 84  84  . 54.476  102.263 2.842   1.00 17.11
1 . .
ATOM 3938 C     C     . VAL VAL VAL B B 84  84  . 56.609  104.191 2.739   1.00 14.41
1 . .
ATOM 3939 O     O     . VAL VAL VAL B B 84  84  . 57.047  104.066 1.583   1.00 17.13
1 . .
ATOM 3940 N     N     . GLU GLU GLU B B 85  85  . 55.968  105.273 3.197   1.00 15.26
1 . .
ATOM 3941 CA    CA    . GLU GLU GLU B B 85  85  . 55.724  106.442 2.301   1.00 14.55
1 . .
ATOM 3942 CB    CB    . GLU GLU GLU B B 85  85  . 54.428  107.176 2.714   1.00 16.39
1 . .
ATOM 3943 CG    CG    . GLU GLU GLU B B 85  85  . 53.279  106.092 2.917   1.00 20.34
1 . .
ATOM 3944 CD    CD    . GLU GLU GLU B B 85  85  . 51.868  106.619 3.102   1.00 29.76
1 . .
ATOM 3945 OE1   OE1   . GLU GLU GLU B B 85  85  . 51.265  106.420 4.233   1.00 34.72
1 . .
ATOM 3946 OE2   OE2   . GLU GLU GLU B B 85  85  . 51.352  107.184 2.092   1.00 34.26
1 . .
ATOM 3947 C     C     . GLU GLU GLU B B 85  85  . 56.940  107.364 2.391   1.00 13.74
1 . .
ATOM 3948 O     O     . GLU GLU GLU B B 85  85  . 56.866  108.493 2.982   1.00 12.17
1 . .
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ATOM 3949 N     N     . GLN GLN GLN B B 86  86  . 58.058  106.872 1.831   1.00 13.38
1 . .
ATOM 3950 CA    CA    . GLN GLN GLN B B 86  86  . 59.357  107.590 1.930   1.00 13.79
1 . .
ATOM 3951 CB    CB    . GLN GLN GLN B B 86  86  . 60.466  106.822 1.221   1.00 13.71
1 . .
ATOM 3952 CG    CG    . GLN GLN GLN B B 86  86  . 61.819  107.532 1.362   1.00 13.50
1 . .
ATOM 3953 CD    CD    . GLN GLN GLN B B 86  86  . 62.436  107.283 2.722   1.00 13.95
1 . .
ATOM 3954 OE1   OE1   . GLN GLN GLN B B 86  86  . 62.409  106.159 3.261   1.00 14.25
1 . .
ATOM 3955 NE2   NE2   . GLN GLN GLN B B 86  86  . 63.055  108.310 3.260   1.00 14.16
1 . .
ATOM 3956 C     C     . GLN GLN GLN B B 86  86  . 59.208  109.022 1.338   1.00 15.10
1 . .
ATOM 3957 O     O     . GLN GLN GLN B B 86  86  . 59.588  110.009 1.948   1.00 14.95
1 . .
ATOM 3958 N     N     . GLU GLU GLU B B 87  87  . 58.594  109.121 0.147   1.00 15.71
1 . .
ATOM 3959 CA    CA    . GLU GLU GLU B B 87  87  . 58.504  110.414 -0.498  1.00 16.27
1 . .
ATOM 3960 CB    CB    . GLU GLU GLU B B 87  87  . 58.005  110.253 -1.944  1.00 18.35
1 . .
ATOM 3961 CG    CG    . GLU GLU GLU B B 87  87  . 57.907  111.550 -2.711  1.00 22.71
1 . .
ATOM 3962 CD    CD    . GLU GLU GLU B B 87  87  . 57.902  111.360 -4.241  1.00 31.96
1 . .
ATOM 3963 OE1   OE1   . GLU GLU GLU B B 87  87  . 58.091  112.370 -4.974  1.00 34.08
1 . .
ATOM 3964 OE2   OE2   . GLU GLU GLU B B 87  87  . 57.684  110.208 -4.696  1.00 35.42
1 . .
ATOM 3965 C     C     . GLU GLU GLU B B 87  87  . 57.579  111.363 0.283   1.00 15.82
1 . .
ATOM 3966 O     O     . GLU GLU GLU B B 87  87  . 57.921  112.574 0.411   1.00 15.84
1 . .
ATOM 3967 N     N     . LYS LYS LYS B B 88  88  . 56.445  110.867 0.810   1.00 13.85
1 . .
ATOM 3968 CA    CA    . LYS LYS LYS B B 88  88  . 55.551  111.778 1.569   1.00 15.56
1 . .
ATOM 3969 CB    CB    . LYS LYS LYS B B 88  88  . 54.211  111.158 1.882   1.00 16.88
1 . .
ATOM 3970 CG    CG    . LYS LYS LYS B B 88  88  . 53.412  110.950 0.608   1.00 20.99
1 . .
ATOM 3971 CD    CD    . LYS LYS LYS B B 88  88  . 52.132  110.230 0.912   1.00 29.90
1 . .
ATOM 3972 CE    CE    . LYS LYS LYS B B 88  88  . 51.110  111.191 1.310   1.00 32.64
1 . .
ATOM 3973 NZ    NZ    . LYS LYS LYS B B 88  88  . 49.946  110.816 0.527   1.00 37.56
1 . .
ATOM 3974 C     C     . LYS LYS LYS B B 88  88  . 56.233  112.329 2.825   1.00 14.81
1 . .
ATOM 3975 O     O     . LYS LYS LYS B B 88  88  . 56.126  113.495 3.183   1.00 12.68
1 . .
ATOM 3976 N     N     . LEU LEU LEU B B 89  89  . 56.916  111.445 3.525   1.00 13.97
1 . .
ATOM 3977 CA    CA    . LEU LEU LEU B B 89  89  . 57.552  111.842 4.771   1.00 12.39
1 . .
ATOM 3978 CB    CB    . LEU LEU LEU B B 89  89  . 57.996  110.589 5.515   1.00 12.21
1 . .
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ATOM 3979 CG    CG    . LEU LEU LEU B B 89  89  . 56.851  109.854 6.277   1.00 10.09
1 . .
ATOM 3980 CD1   CD1   . LEU LEU LEU B B 89  89  . 57.277  108.378 6.671   1.00 11.83
1 . .
ATOM 3981 CD2   CD2   . LEU LEU LEU B B 89  89  . 56.436  110.657 7.540   1.00 11.35
1 . .
ATOM 3982 C     C     . LEU LEU LEU B B 89  89  . 58.726  112.809 4.510   1.00 11.67
1 . .
ATOM 3983 O     O     . LEU LEU LEU B B 89  89  . 58.887  113.805 5.274   1.00 11.25
1 . .
ATOM 3984 N     N     . ASP ASP ASP B B 90  90  . 59.513  112.539 3.459   1.00 10.58
1 . .
ATOM 3985 CA    CA    . ASP ASP ASP B B 90  90  . 60.675  113.398 3.156   1.00 11.20
1 . .
ATOM 3986 CB    CB    . ASP ASP ASP B B 90  90  . 61.547  112.807 2.037   1.00 13.78
1 . .
ATOM 3987 CG    CG    . ASP ASP ASP B B 90  90  . 62.505  111.716 2.554   1.00 13.95
1 . .
ATOM 3988 OD1   OD1   . ASP ASP ASP B B 90  90  . 62.831  111.722 3.797   1.00 13.69
1 . .
ATOM 3989 OD2   OD2   . ASP ASP ASP B B 90  90  . 62.906  110.898 1.723   1.00 13.70
1 . .
ATOM 3990 C     C     . ASP ASP ASP B B 90  90  . 60.122  114.757 2.721   1.00 12.33
1 . .
ATOM 3991 O     O     . ASP ASP ASP B B 90  90  . 60.609  115.821 3.177   1.00 13.28
1 . .
ATOM 3992 N     N     . ASN ASN ASN B B 91  91  . 59.071  114.752 1.894   1.00 13.34
1 . .
ATOM 3993 CA    CA    . ASN ASN ASN B B 91  91  . 58.529  116.049 1.418   1.00 15.03
1 . .
ATOM 3994 CB    CB    . ASN ASN ASN B B 91  91  . 57.514  115.892 0.255   1.00 18.53
1 . .
ATOM 3995 CG    CG    . ASN ASN ASN B B 91  91  . 58.186  115.480 -1.046  1.00 20.27
1 . .
ATOM 3996 OD1   OD1   . ASN ASN ASN B B 91  91  . 57.629  114.728 -1.843  1.00 29.32
1 . .
ATOM 3997 ND2   ND2   . ASN ASN ASN B B 91  91  . 59.384  115.998 -1.273  1.00 25.85
1 . .
ATOM 3998 C     C     . ASN ASN ASN B B 91  91  . 57.922  116.838 2.558   1.00 14.75
1 . .
ATOM 3999 O     O     . ASN ASN ASN B B 91  91  . 58.052  118.044 2.576   1.00 14.68
1 . .
ATOM 4000 N     N     . LEU LEU LEU B B 92  92  . 57.268  116.158 3.513   1.00 14.33
1 . .
ATOM 4001 CA    CA    . LEU LEU LEU B B 92  92  . 56.807  116.824 4.691   1.00 13.22
1 . .
ATOM 4002 CB    CB    . LEU LEU LEU B B 92  92  . 55.989  115.861 5.558   1.00 14.95
1 . .
ATOM 4003 CG    CG    . LEU LEU LEU B B 92  92  . 55.509  116.403 6.903   1.00 14.84
1 . .
ATOM 4004 CD1   CD1   . LEU LEU LEU B B 92  92  . 54.778  117.813 6.696   1.00 13.40
1 . .
ATOM 4005 CD2   CD2   . LEU LEU LEU B B 92  92  . 54.659  115.413 7.740   1.00 14.51
1 . .
ATOM 4006 C     C     . LEU LEU LEU B B 92  92  . 57.940  117.505 5.445   1.00 12.46
1 . .
ATOM 4007 O     O     . LEU LEU LEU B B 92  92  . 57.819  118.693 5.803   1.00 12.96
1 . .
ATOM 4008 N     N     . MET MET MET B B 93  93  . 59.064  116.788 5.676   1.00 11.57
1 . .
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ATOM 4009 CA    CA    . MET MET MET B B 93  93  . 60.185  117.430 6.346   1.00 9.74
1 . .
ATOM 4010 CB    CB    . MET MET MET B B 93  93  . 61.274  116.408 6.608   1.00 10.72
1 . .
ATOM 4011 CG    CG    . MET MET MET B B 93  93  . 60.891  115.404 7.659   1.00 9.58
1 . .
ATOM 4012 SD    SD    . MET MET MET B B 93  93  . 62.381  114.407 8.142   1.00 11.88
1 . .
ATOM 4013 CE    CE    . MET MET MET B B 93  93  . 62.610  113.279 6.722   1.00 9.45
1 . .
ATOM 4014 C     C     . MET MET MET B B 93  93  . 60.734  118.573 5.537   1.00 9.54
1 . .
ATOM 4015 O     O     . MET MET MET B B 93  93  . 61.064  119.613 6.123   1.00 10.46
1 . .
ATOM 4016 N     N     . LEU LEU LEU B B 94  94  . 60.790  118.441 4.199   1.00 9.04
1 . .
ATOM 4017 CA    CA    . LEU LEU LEU B B 94  94  . 61.275  119.608 3.415   1.00 11.61
1 . .
ATOM 4018 CB    CB    . LEU LEU LEU B B 94  94  . 61.338  119.280 1.904   1.00 12.23
1 . .
ATOM 4019 CG    CG    . LEU LEU LEU B B 94  94  . 62.123  118.060 1.435   1.00 18.21
1 . .
ATOM 4020 CD1   CD1   . LEU LEU LEU B B 94  94  . 62.199  117.988 -0.092  1.00 16.17
1 . .
ATOM 4021 CD2   CD2   . LEU LEU LEU B B 94  94  . 63.472  117.979 2.024   1.00 21.05
1 . .
ATOM 4022 C     C     . LEU LEU LEU B B 94  94  . 60.371  120.870 3.584   1.00 11.85
1 . .
ATOM 4023 O     O     . LEU LEU LEU B B 94  94  . 60.905  121.972 3.658   1.00 12.27
1 . .
ATOM 4024 N     N     . GLU GLU GLU B B 95  95  . 59.043  120.698 3.595   1.00 13.63
1 . .
ATOM 4025 CA    CA    . GLU GLU GLU B B 95  95  . 58.123  121.823 3.738   1.00 13.31
1 . .
ATOM 4026 CB    CB    . GLU GLU GLU B B 95  95  . 56.688  121.410 3.413   1.00 15.19
1 . .
ATOM 4027 CG    CG    . GLU GLU GLU B B 95  95  . 56.501  120.667 2.211   1.00 25.19
1 . .
ATOM 4028 CD    CD    . GLU GLU GLU B B 95  95  . 56.617  121.523 1.031   1.00 35.57
1 . .
ATOM 4029 OE1   OE1   . GLU GLU GLU B B 95  95  . 55.637  121.512 0.254   1.00 43.51
1 . .
ATOM 4030 OE2   OE2   . GLU GLU GLU B B 95  95  . 57.669  122.198 0.881   1.00 40.73
1 . .
ATOM 4031 C     C     . GLU GLU GLU B B 95  95  . 58.154  122.379 5.201   1.00 13.16
1 . .
ATOM 4032 O     O     . GLU GLU GLU B B 95  95  . 58.028  123.576 5.387   1.00 13.67
1 . .
ATOM 4033 N     N     . LEU LEU LEU B B 96  96  . 58.325  121.515 6.210   1.00 13.13
1 . .
ATOM 4034 CA    CA    . LEU LEU LEU B B 96  96  . 58.496  121.975 7.621   1.00 12.70
1 . .
ATOM 4035 CB    CB    . LEU LEU LEU B B 96  96  . 58.640  120.770 8.572   1.00 13.92
1 . .
ATOM 4036 CG    CG    . LEU LEU LEU B B 96  96  . 57.437  119.948 9.044   1.00 18.94
1 . .
ATOM 4037 CD1   CD1   . LEU LEU LEU B B 96  96  . 57.934  118.727 9.742   1.00 24.89
1 . .
ATOM 4038 CD2   CD2   . LEU LEU LEU B B 96  96  . 56.493  120.824 9.992   1.00 20.65
1 . .
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ATOM 4039 C     C     . LEU LEU LEU B B 96  96  . 59.711  122.919 7.773   1.00 13.56
1 . .
ATOM 4040 O     O     . LEU LEU LEU B B 96  96  . 59.668  123.942 8.467   1.00 13.67
1 . .
ATOM 4041 N     N     . ASP ASP ASP B B 97  97  . 60.817  122.555 7.124   1.00 12.71
1 . .
ATOM 4042 CA    CA    . ASP ASP ASP B B 97  97  . 62.041  123.358 7.145   1.00 11.73
1 . .
ATOM 4043 CB    CB    . ASP ASP ASP B B 97  97  . 63.241  122.516 6.602   1.00 10.79
1 . .
ATOM 4044 CG    CG    . ASP ASP ASP B B 97  97  . 64.452  123.387 6.248   1.00 12.50
1 . .
ATOM 4045 OD1   OD1   . ASP ASP ASP B B 97  97  . 65.401  123.548 7.051   1.00 15.18
1 . .
ATOM 4046 OD2   OD2   . ASP ASP ASP B B 97  97  . 64.421  123.956 5.117   1.00 15.00
1 . .
ATOM 4047 C     C     . ASP ASP ASP B B 97  97  . 61.831  124.687 6.341   1.00 12.91
1 . .
ATOM 4048 O     O     . ASP ASP ASP B B 97  97  . 62.295  125.740 6.760   1.00 12.06
1 . .
ATOM 4049 N     N     . GLY GLY GLY B B 98  98  . 61.194  124.591 5.177   1.00 13.35
1 . .
ATOM 4050 CA    CA    . GLY GLY GLY B B 98  98  . 60.685  125.814 4.452   1.00 13.79
1 . .
ATOM 4051 C     C     . GLY GLY GLY B B 98  98  . 61.745  126.503 3.637   1.00 14.77
1 . .
ATOM 4052 O     O     . GLY GLY GLY B B 98  98  . 61.454  127.541 3.020   1.00 15.69
1 . .
ATOM 4053 N     N     . THR THR THR B B 99  99  . 62.978  125.976 3.634   1.00 13.66
1 . .
ATOM 4054 CA    CA    . THR THR THR B B 99  99  . 64.100  126.615 2.924   1.00 13.95
1 . .
ATOM 4055 CB    CB    . THR THR THR B B 99  99  . 65.282  126.998 3.867   1.00 13.97
1 . .
ATOM 4056 OG1   OG1   . THR THR THR B B 99  99  . 65.945  125.822 4.280   1.00 12.93
1 . .
ATOM 4057 CG2   CG2   . THR THR THR B B 99  99  . 64.795  127.739 5.160   1.00 12.96
1 . .
ATOM 4058 C     C     . THR THR THR B B 99  99  . 64.636  125.724 1.780   1.00 14.99
1 . .
ATOM 4059 O     O     . THR THR THR B B 99  99  . 64.543  124.505 1.824   1.00 16.64
1 . .
ATOM 4060 N     N     . GLU GLU GLU B B 100 100 . 65.243  126.330 0.793   1.00 15.27
1 . .
ATOM 4061 CA    CA    . GLU GLU GLU B B 100 100 . 65.791  125.586 -0.289  1.00 16.93
1 . .
ATOM 4062 CB    CB    . GLU GLU GLU B B 100 100 . 66.227  126.513 -1.448  1.00 18.19
1 . .
ATOM 4063 CG    CG    . GLU GLU GLU B B 100 100 . 66.711  125.716 -2.677  1.00 27.99
1 . .
ATOM 4064 CD    CD    . GLU GLU GLU B B 100 100 . 65.579  125.003 -3.380  1.00 39.55
1 . .
ATOM 4065 OE1   OE1   . GLU GLU GLU B B 100 100 . 64.748  125.708 -3.988  1.00 46.09
1 . .
ATOM 4066 OE2   OE2   . GLU GLU GLU B B 100 100 . 65.484  123.755 -3.295  1.00 45.23
1 . .
ATOM 4067 C     C     . GLU GLU GLU B B 100 100 . 66.964  124.717 0.188   1.00 14.43
1 . .
ATOM 4068 O     O     . GLU GLU GLU B B 100 100 . 67.024  123.545 -0.195  1.00 15.93
1 . .
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ATOM 4069 N     N     . ASN ASN ASN B B 101 101 . 67.897  125.295 0.950   1.00 12.94
1 . .
ATOM 4070 CA    CA    . ASN ASN ASN B B 101 101 . 69.114  124.519 1.294   1.00 12.94
1 . .
ATOM 4071 CB    CB    . ASN ASN ASN B B 101 101 . 70.347  125.387 1.179   1.00 16.47
1 . .
ATOM 4072 CG    CG    . ASN ASN ASN B B 101 101 . 70.375  126.504 2.201   1.00 23.66
1 . .
ATOM 4073 OD1   OD1   . ASN ASN ASN B B 101 101 . 71.495  126.973 2.568   1.00 34.70
1 . .
ATOM 4074 ND2   ND2   . ASN ASN ASN B B 101 101 . 69.184  126.945 2.715   1.00 30.68
1 . .
ATOM 4075 C     C     . ASN ASN ASN B B 101 101 . 69.056  123.877 2.705   1.00 12.48
1 . .
ATOM 4076 O     O     . ASN ASN ASN B B 101 101 . 70.102  123.524 3.273   1.00 11.11
1 . .
ATOM 4077 N     N     . LYS LYS LYS B B 102 102 . 67.851  123.705 3.232   1.00 9.60
1 . .
ATOM 4078 CA    CA    . LYS LYS LYS B B 102 102 . 67.649  123.073 4.556   1.00 10.99
1 . .
ATOM 4079 CB    CB    . LYS LYS LYS B B 102 102 . 68.041  121.585 4.484   1.00 10.57
1 . .
ATOM 4080 CG    CG    . LYS LYS LYS B B 102 102 . 67.216  120.823 3.428   1.00 9.50
1 . .
ATOM 4081 CD    CD    . LYS LYS LYS B B 102 102 . 67.699  119.374 3.353   1.00 10.23
1 . .
ATOM 4082 CE    CE    . LYS LYS LYS B B 102 102 . 66.746  118.494 2.453   1.00 9.21
1 . .
ATOM 4083 NZ    NZ    . LYS LYS LYS B B 102 102 . 66.764  119.094 1.004   1.00 12.97
1 . .
ATOM 4084 C     C     . LYS LYS LYS B B 102 102 . 68.396  123.816 5.671   1.00 11.58
1 . .
ATOM 4085 O     O     . LYS LYS LYS B B 102 102 . 68.979  123.192 6.595   1.00 10.52
1 . .
ATOM 4086 N     N     . SER SER SER B B 103 103 . 68.338  125.164 5.618   1.00 12.19
1 . .
ATOM 4087 CA    CA    . SER SER SER B B 103 103 . 69.118  125.952 6.553   1.00 13.31
1 . .
ATOM 4088 CB    CB    . SER SER SER B B 103 103 . 69.598  127.230 5.865   1.00 14.31
1 . .
ATOM 4089 OG    OG    . SER SER SER B B 103 103 . 68.478  127.967 5.343   1.00 17.20
1 . .
ATOM 4090 C     C     . SER SER SER B B 103 103 . 68.343  126.278 7.835   1.00 14.24
1 . .
ATOM 4091 O     O     . SER SER SER B B 103 103 . 68.916  126.800 8.804   1.00 16.79
1 . .
ATOM 4092 N     N     . LYS LYS LYS B B 104 104 . 67.053  125.968 7.868   1.00 11.66
1 . .
ATOM 4093 CA    CA    . LYS LYS LYS B B 104 104 . 66.306  126.166 9.153   1.00 12.24
1 . .
ATOM 4094 CB    CB    . LYS LYS LYS B B 104 104 . 64.805  126.265 8.835   1.00 10.75
1 . .
ATOM 4095 CG    CG    . LYS LYS LYS B B 104 104 . 63.824  126.546 10.018  1.00 12.96
1 . .
ATOM 4096 CD    CD    . LYS LYS LYS B B 104 104 . 63.949  127.939 10.441  1.00 20.26
1 . .
ATOM 4097 CE    CE    . LYS LYS LYS B B 104 104 . 63.102  128.131 11.643  1.00 23.82
1 . .
ATOM 4098 NZ    NZ    . LYS LYS LYS B B 104 104 . 63.488  129.438 12.185  1.00 26.84
1 . .
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ATOM 4099 C     C     . LYS LYS LYS B B 104 104 . 66.568  125.024 10.171  1.00 11.63
1 . .
ATOM 4100 O     O     . LYS LYS LYS B B 104 104 . 66.883  125.313 11.316  1.00 13.16
1 . .
ATOM 4101 N     N     . PHE PHE PHE B B 105 105 . 66.471  123.760 9.728   1.00 9.52
1 . .
ATOM 4102 CA    CA    . PHE PHE PHE B B 105 105 . 66.709  122.620 10.641  1.00 10.19
1 . .
ATOM 4103 CB    CB    . PHE PHE PHE B B 105 105 . 65.730  121.459 10.370  1.00 10.40
1 . .
ATOM 4104 CG    CG    . PHE PHE PHE B B 105 105 . 64.265  121.826 10.632  1.00 12.87
1 . .
ATOM 4105 CD1   CD1   . PHE PHE PHE B B 105 105 . 63.257  121.161 9.986   1.00 13.16
1 . .
ATOM 4106 CE1   CE1   . PHE PHE PHE B B 105 105 . 61.907  121.506 10.272  1.00 14.13
1 . .
ATOM 4107 CZ    CZ    . PHE PHE PHE B B 105 105 . 61.642  122.527 11.166  1.00 18.04
1 . .
ATOM 4108 CE2   CE2   . PHE PHE PHE B B 105 105 . 62.628  123.180 11.817  1.00 18.94
1 . .
ATOM 4109 CD2   CD2   . PHE PHE PHE B B 105 105 . 63.947  122.843 11.544  1.00 13.19
1 . .
ATOM 4110 C     C     . PHE PHE PHE B B 105 105 . 68.101  122.038 10.493  1.00 10.67
1 . .
ATOM 4111 O     O     . PHE PHE PHE B B 105 105 . 68.583  121.411 11.434  1.00 11.50
1 . .
ATOM 4112 N     N     . GLY GLY GLY B B 106 106 . 68.719  122.226 9.326   1.00 10.72
1 . .
ATOM 4113 CA    CA    . GLY GLY GLY B B 106 106 . 69.966  121.512 8.987   1.00 10.15
1 . .
ATOM 4114 C     C     . GLY GLY GLY B B 106 106 . 69.633  120.330 8.095   1.00 9.02
1 . .
ATOM 4115 O     O     . GLY GLY GLY B B 106 106 . 68.654  119.603 8.319   1.00 10.13
1 . .
ATOM 4116 N     N     . ALA ALA ALA B B 107 107 . 70.431  120.116 7.053   1.00 8.88
1 . .
ATOM 4117 CA    CA    . ALA ALA ALA B B 107 107 . 70.325  118.881 6.296   1.00 9.55
1 . .
ATOM 4118 CB    CB    . ALA ALA ALA B B 107 107 . 71.290  118.877 5.109   1.00 9.81
1 . .
ATOM 4119 C     C     . ALA ALA ALA B B 107 107 . 70.662  117.690 7.179   1.00 9.82
1 . .
ATOM 4120 O     O     . ALA ALA ALA B B 107 107 . 70.196  116.579 6.884   1.00 8.68
1 . .
ATOM 4121 N     N     . ASN ASN ASN B B 108 108 . 71.495  117.925 8.205   1.00 9.01
1 . .
ATOM 4122 CA    CA    . ASN ASN ASN B B 108 108 . 71.828  116.809 9.153   1.00 10.02
1 . .
ATOM 4123 CB    CB    . ASN ASN ASN B B 108 108 . 73.104  117.049 10.002  1.00 7.95
1 . .
ATOM 4124 CG    CG    . ASN ASN ASN B B 108 108 . 73.174  118.466 10.614  1.00 11.29
1 . .
ATOM 4125 OD1   OD1   . ASN ASN ASN B B 108 108 . 72.471  119.389 10.184  1.00 9.65
1 . .
ATOM 4126 ND2   ND2   . ASN ASN ASN B B 108 108 . 74.006  118.626 11.633  1.00 10.52
1 . .
ATOM 4127 C     C     . ASN ASN ASN B B 108 108 . 70.616  116.399 9.981   1.00 10.45
1 . .
ATOM 4128 O     O     . ASN ASN ASN B B 108 108 . 70.437  115.218 10.284  1.00 12.38
1 . .
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ATOM 4129 N     N     . ALA ALA ALA B B 109 109 . 69.738  117.340 10.306  1.00 9.48
1 . .
ATOM 4130 CA    CA    . ALA ALA ALA B B 109 109 . 68.508  116.990 11.037  1.00 9.33
1 . .
ATOM 4131 CB    CB    . ALA ALA ALA B B 109 109 . 67.881  118.244 11.507  1.00 9.58
1 . .
ATOM 4132 C     C     . ALA ALA ALA B B 109 109 . 67.557  116.193 10.162  1.00 8.27
1 . .
ATOM 4133 O     O     . ALA ALA ALA B B 109 109 . 67.092  115.099 10.544  1.00 8.60
1 . .
ATOM 4134 N     N     . ILE ILE ILE B B 110 110 . 67.275  116.713 8.955   1.00 8.56
1 . .
ATOM 4135 CA    CA    . ILE ILE ILE B B 110 110 . 66.340  116.025 8.040   1.00 7.84
1 . .
ATOM 4136 CB    CB    . ILE ILE ILE B B 110 110 . 66.080  116.908 6.831   1.00 8.94
1 . .
ATOM 4137 CG1   CG1   . ILE ILE ILE B B 110 110 . 65.250  118.114 7.290   1.00 10.74
1 . .
ATOM 4138 CD1   CD1   . ILE ILE ILE B B 110 110 . 65.269  119.323 6.290   1.00 12.72
1 . .
ATOM 4139 CG2   CG2   . ILE ILE ILE B B 110 110 . 65.245  116.124 5.799   1.00 8.53
1 . .
ATOM 4140 C     C     . ILE ILE ILE B B 110 110 . 66.876  114.648 7.650   1.00 8.41
1 . .
ATOM 4141 O     O     . ILE ILE ILE B B 110 110 . 66.161  113.680 7.670   1.00 8.87
1 . .
ATOM 4142 N     N     . LEU LEU LEU B B 111 111 . 68.179  114.527 7.373   1.00 6.86
1 . .
ATOM 4143 CA    CA    . LEU LEU LEU B B 111 111 . 68.606  113.263 6.760   1.00 7.52
1 . .
ATOM 4144 CB    CB    . LEU LEU LEU B B 111 111 . 70.039  113.431 6.135   1.00 7.40
1 . .
ATOM 4145 CG    CG    . LEU LEU LEU B B 111 111 . 70.573  112.113 5.540   1.00 6.65
1 . .
ATOM 4146 CD1   CD1   . LEU LEU LEU B B 111 111 . 69.763  111.668 4.309   1.00 8.63
1 . .
ATOM 4147 CD2   CD2   . LEU LEU LEU B B 111 111 . 72.098  112.303 5.228   1.00 10.33
1 . .
ATOM 4148 C     C     . LEU LEU LEU B B 111 111 . 68.609  112.162 7.780   1.00 8.97
1 . .
ATOM 4149 O     O     . LEU LEU LEU B B 111 111 . 68.301  111.003 7.419   1.00 9.64
1 . .
ATOM 4150 N     N     . GLY GLY GLY B B 112 112 . 68.955  112.492 9.052   1.00 8.78
1 . .
ATOM 4151 CA    CA    . GLY GLY GLY B B 112 112 . 69.005  111.426 10.094  1.00 9.60
1 . .
ATOM 4152 C     C     . GLY GLY GLY B B 112 112 . 67.604  110.790 10.230  1.00 9.47
1 . .
ATOM 4153 O     O     . GLY GLY GLY B B 112 112 . 67.495  109.614 10.312  1.00 10.32
1 . .
ATOM 4154 N     N     . VAL VAL VAL B B 113 113 . 66.502  111.597 10.123  1.00 10.00
1 . .
ATOM 4155 CA    CA    . VAL VAL VAL B B 113 113 . 65.168  111.020 10.109  1.00 8.97
1 . .
ATOM 4156 CB    CB    . VAL VAL VAL B B 113 113 . 64.143  112.126 10.368  1.00 9.17
1 . .
ATOM 4157 CG1   CG1   . VAL VAL VAL B B 113 113 . 62.712  111.501 10.387  1.00 11.05
1 . .
ATOM 4158 CG2   CG2   . VAL VAL VAL B B 113 113 . 64.465  112.763 11.739  1.00 9.74
1 . .
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ATOM 4159 C     C     . VAL VAL VAL B B 113 113 . 64.852  110.244 8.830   1.00 8.30
1 . .
ATOM 4160 O     O     . VAL VAL VAL B B 113 113 . 64.274  109.139 8.869   1.00 9.16
1 . .
ATOM 4161 N     N     . SER SER SER B B 114 114 . 65.183  110.843 7.669   1.00 8.62
1 . .
ATOM 4162 CA    CA    . SER SER SER B B 114 114 . 64.940  110.245 6.335   1.00 7.99
1 . .
ATOM 4163 CB    CB    . SER SER SER B B 114 114 . 65.555  111.173 5.270   1.00 10.25
1 . .
ATOM 4164 OG    OG    . SER SER SER B B 114 114 . 65.179  110.759 3.979   1.00 12.84
1 . .
ATOM 4165 C     C     . SER SER SER B B 114 114 . 65.530  108.817 6.275   1.00 8.72
1 . .
ATOM 4166 O     O     . SER SER SER B B 114 114 . 64.861  107.852 5.835   1.00 8.91
1 . .
ATOM 4167 N     N     . LEU LEU LEU B B 115 115 . 66.776  108.688 6.747   1.00 8.18
1 . .
ATOM 4168 CA    CA    . LEU LEU LEU B B 115 115 . 67.462  107.400 6.741   1.00 8.91
1 . .
ATOM 4169 CB    CB    . LEU LEU LEU B B 115 115 . 68.951  107.545 7.179   1.00 7.66
1 . .
ATOM 4170 CG    CG    . LEU LEU LEU B B 115 115 . 69.831  108.397 6.258   1.00 6.54
1 . .
ATOM 4171 CD1   CD1   . LEU LEU LEU B B 115 115 . 71.148  108.650 7.000   1.00 7.31
1 . .
ATOM 4172 CD2   CD2   . LEU LEU LEU B B 115 115 . 70.073  107.641 4.914   1.00 9.65
1 . .
ATOM 4173 C     C     . LEU LEU LEU B B 115 115 . 66.777  106.395 7.675   1.00 10.18
1 . .
ATOM 4174 O     O     . LEU LEU LEU B B 115 115 . 66.604  105.205 7.313   1.00 11.41
1 . .
ATOM 4175 N     N     . ALA ALA ALA B B 116 116 . 66.392  106.845 8.847   1.00 9.26
1 . .
ATOM 4176 CA    CA    . ALA ALA ALA B B 116 116 . 65.755  105.920 9.822   1.00 9.88
1 . .
ATOM 4177 CB    CB    . ALA ALA ALA B B 116 116 . 65.732  106.521 11.216  1.00 8.73
1 . .
ATOM 4178 C     C     . ALA ALA ALA B B 116 116 . 64.340  105.493 9.311   1.00 9.66
1 . .
ATOM 4179 O     O     . ALA ALA ALA B B 116 116 . 63.978  104.322 9.387   1.00 11.63
1 . .
ATOM 4180 N     N     . VAL VAL VAL B B 117 117 . 63.634  106.425 8.666   1.00 9.46
1 . .
ATOM 4181 CA    CA    . VAL VAL VAL B B 117 117 . 62.347  106.114 8.008   1.00 10.33
1 . .
ATOM 4182 CB    CB    . VAL VAL VAL B B 117 117 . 61.747  107.380 7.328   1.00 9.50
1 . .
ATOM 4183 CG1   CG1   . VAL VAL VAL B B 117 117 . 60.685  106.977 6.332   1.00 13.09
1 . .
ATOM 4184 CG2   CG2   . VAL VAL VAL B B 117 117 . 61.104  108.264 8.407   1.00 11.38
1 . .
ATOM 4185 C     C     . VAL VAL VAL B B 117 117 . 62.538  105.015 6.954   1.00 11.69
1 . .
ATOM 4186 O     O     . VAL VAL VAL B B 117 117 . 61.725  104.062 6.891   1.00 12.77
1 . .
ATOM 4187 N     N     . CYS CYS CYS B B 118 118 . 63.623  105.126 6.147   1.00 11.71
1 . .
ATOM 4188 CA    CA    . CYS CYS CYS B B 118 118 . 63.812  104.194 5.064   1.00 11.78
1 . .
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ATOM 4189 CB    CB    . CYS CYS CYS B B 118 118 . 65.024  104.660 4.216   1.00 10.86
1 . .
ATOM 4190 SG    SG    . CYS CYS CYS B B 118 118 . 65.168  103.756 2.679   1.00 13.20
1 . .
ATOM 4191 C     C     . CYS CYS CYS B B 118 118 . 64.070  102.792 5.626   1.00 12.78
1 . .
ATOM 4192 O     O     . CYS CYS CYS B B 118 118 . 63.555  101.800 5.088   1.00 12.23
1 . .
ATOM 4193 N     N     . LYS LYS LYS B B 119 119 . 64.885  102.717 6.695   1.00 12.36
1 . .
ATOM 4194 CA    CA    . LYS LYS LYS B B 119 119 . 65.134  101.408 7.332   1.00 12.11
1 . .
ATOM 4195 CB    CB    . LYS LYS LYS B B 119 119 . 66.225  101.501 8.410   1.00 11.45
1 . .
ATOM 4196 CG    CG    . LYS LYS LYS B B 119 119 . 67.592  101.975 7.880   1.00 11.79
1 . .
ATOM 4197 CD    CD    . LYS LYS LYS B B 119 119 . 68.632  101.983 9.034   1.00 14.36
1 . .
ATOM 4198 CE    CE    . LYS LYS LYS B B 119 119 . 69.946  102.674 8.514   1.00 18.30
1 . .
ATOM 4199 NZ    NZ    . LYS LYS LYS B B 119 119 . 71.146  102.754 9.423   1.00 15.70
1 . .
ATOM 4200 C     C     . LYS LYS LYS B B 119 119 . 63.833  100.787 7.923   1.00 12.00
1 . .
ATOM 4201 O     O     . LYS LYS LYS B B 119 119 . 63.557  99.565  7.742   1.00 13.96
1 . .
ATOM 4202 N     N     . ALA ALA ALA B B 120 120 . 63.045  101.616 8.586   1.00 11.85
1 . .
ATOM 4203 CA    CA    . ALA ALA ALA B B 120 120 . 61.758  101.178 9.183   1.00 11.98
1 . .
ATOM 4204 CB    CB    . ALA ALA ALA B B 120 120 . 61.173  102.329 10.032  1.00 10.91
1 . .
ATOM 4205 C     C     . ALA ALA ALA B B 120 120 . 60.796  100.764 8.051   1.00 12.43
1 . .
ATOM 4206 O     O     . ALA ALA ALA B B 120 120 . 60.068  99.765  8.156   1.00 14.03
1 . .
ATOM 4207 N     N     . GLY GLY GLY B B 121 121 . 60.823  101.477 6.931   1.00 11.81
1 . .
ATOM 4208 CA    CA    . GLY GLY GLY B B 121 121 . 60.005  101.115 5.793   1.00 12.14
1 . .
ATOM 4209 C     C     . GLY GLY GLY B B 121 121 . 60.344  99.766  5.233   1.00 13.22
1 . .
ATOM 4210 O     O     . GLY GLY GLY B B 121 121 . 59.438  98.996  4.869   1.00 13.22
1 . .
ATOM 4211 N     N     . ALA ALA ALA B B 122 122 . 61.648  99.463  5.158   1.00 12.35
1 . .
ATOM 4212 CA    CA    . ALA ALA ALA B B 122 122 . 62.044  98.172  4.654   1.00 13.87
1 . .
ATOM 4213 CB    CB    . ALA ALA ALA B B 122 122 . 63.616  98.078  4.574   1.00 12.96
1 . .
ATOM 4214 C     C     . ALA ALA ALA B B 122 122 . 61.445  97.041  5.527   1.00 13.81
1 . .
ATOM 4215 O     O     . ALA ALA ALA B B 122 122 . 60.903  96.022  5.000   1.00 15.08
1 . .
ATOM 4216 N     N     . ALA ALA ALA B B 123 123 . 61.532  97.216  6.846   1.00 13.83
1 . .
ATOM 4217 CA    CA    . ALA ALA ALA B B 123 123 . 61.003  96.245  7.773   1.00 13.74
1 . .
ATOM 4218 CB    CB    . ALA ALA ALA B B 123 123 . 61.356  96.638  9.174   1.00 14.23
1 . .
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ATOM 4219 C     C     . ALA ALA ALA B B 123 123 . 59.480  96.145  7.591   1.00 15.27
1 . .
ATOM 4220 O     O     . ALA ALA ALA B B 123 123 . 58.908  95.010  7.717   1.00 15.92
1 . .
ATOM 4221 N     N     . GLU GLU GLU B B 124 124 . 58.803  97.261  7.308   1.00 15.92
1 . .
ATOM 4222 CA    CA    . GLU GLU GLU B B 124 124 . 57.311  97.202  7.146   1.00 16.78
1 . .
ATOM 4223 CB    CB    . GLU GLU GLU B B 124 124 . 56.682  98.628  7.180   1.00 17.70
1 . .
ATOM 4224 CG    CG    . GLU GLU GLU B B 124 124 . 55.127  98.697  7.014   1.00 21.04
1 . .
ATOM 4225 CD    CD    . GLU GLU GLU B B 124 124 . 54.310  97.833  7.976   1.00 24.85
1 . .
ATOM 4226 OE1   OE1   . GLU GLU GLU B B 124 124 . 53.263  97.257  7.550   1.00 29.60
1 . .
ATOM 4227 OE2   OE2   . GLU GLU GLU B B 124 124 . 54.645  97.782  9.164   1.00 26.12
1 . .
ATOM 4228 C     C     . GLU GLU GLU B B 124 124 . 56.959  96.452  5.867   1.00 18.02
1 . .
ATOM 4229 O     O     . GLU GLU GLU B B 124 124 . 55.915  95.713  5.788   1.00 18.94
1 . .
ATOM 4230 N     N     . ARG ARG ARG B B 125 125 . 57.808  96.593  4.858   1.00 18.11
1 . .
ATOM 4231 CA    CA    . ARG ARG ARG B B 125 125 . 57.657  95.823  3.619   1.00 20.13
1 . .
ATOM 4232 CB    CB    . ARG ARG ARG B B 125 125 . 58.383  96.502  2.442   1.00 20.38
1 . .
ATOM 4233 CG    CG    . ARG ARG ARG B B 125 125 . 57.791  97.842  1.987   1.00 22.16
1 . .
ATOM 4234 CD    CD    . ARG ARG ARG B B 125 125 . 56.478  97.702  1.182   1.00 29.69
1 . .
ATOM 4235 NE    NE    . ARG ARG ARG B B 125 125 . 56.132  98.997  0.603   1.00 35.60
1 . .
ATOM 4236 CZ    CZ    . ARG ARG ARG B B 125 125 . 54.886  99.483  0.436   1.00 40.70
1 . .
ATOM 4237 NH1   NH1   . ARG ARG ARG B B 125 125 . 53.792  98.793  0.821   1.00 40.80
1 . .
ATOM 4238 NH2   NH2   . ARG ARG ARG B B 125 125 . 54.721  100.698 -0.113  1.00 42.44
1 . .
ATOM 4239 C     C     . ARG ARG ARG B B 125 125 . 58.085  94.355  3.757   1.00 20.68
1 . .
ATOM 4240 O     O     . ARG ARG ARG B B 125 125 . 57.853  93.561  2.847   1.00 22.34
1 . .
ATOM 4241 N     N     . GLU GLU GLU B B 126 126 . 58.729  94.000  4.862   1.00 19.54
1 . .
ATOM 4242 CA    CA    . GLU GLU GLU B B 126 126 . 59.326  92.650  4.991   1.00 20.43
1 . .
ATOM 4243 CB    CB    . GLU GLU GLU B B 126 126 . 58.198  91.583  5.074   1.00 22.71
1 . .
ATOM 4244 CG    CG    . GLU GLU GLU B B 126 126 . 57.415  91.759  6.306   1.00 25.66
1 . .
ATOM 4245 CD    CD    . GLU GLU GLU B B 126 126 . 56.496  90.591  6.547   1.00 33.85
1 . .
ATOM 4246 OE1   OE1   . GLU GLU GLU B B 126 126 . 55.624  90.376  5.695   1.00 32.78
1 . .
ATOM 4247 OE2   OE2   . GLU GLU GLU B B 126 126 . 56.669  89.884  7.576   1.00 38.06
1 . .
ATOM 4248 C     C     . GLU GLU GLU B B 126 126 . 60.393  92.374  3.918   1.00 19.76
1 . .
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ATOM 4249 O     O     . GLU GLU GLU B B 126 126 . 60.494  91.272  3.340   1.00 21.18
1 . .
ATOM 4250 N     N     . LEU LEU LEU B B 127 127 . 61.237  93.387  3.680   1.00 16.93
1 . .
ATOM 4251 CA    CA    . LEU LEU LEU B B 127 127 . 62.344  93.322  2.767   1.00 16.81
1 . .
ATOM 4252 CB    CB    . LEU LEU LEU B B 127 127 . 62.068  94.309  1.591   1.00 16.75
1 . .
ATOM 4253 CG    CG    . LEU LEU LEU B B 127 127 . 60.821  94.080  0.693   1.00 16.67
1 . .
ATOM 4254 CD1   CD1   . LEU LEU LEU B B 127 127 . 60.575  95.359  -0.201  1.00 15.49
1 . .
ATOM 4255 CD2   CD2   . LEU LEU LEU B B 127 127 . 61.092  92.823  -0.109  1.00 17.20
1 . .
ATOM 4256 C     C     . LEU LEU LEU B B 127 127 . 63.681  93.705  3.376   1.00 15.91
1 . .
ATOM 4257 O     O     . LEU LEU LEU B B 127 127 . 63.698  94.545  4.234   1.00 15.76
1 . .
ATOM 4258 N     N     . PRO PRO PRO B B 128 128 . 64.816  93.150  2.874   1.00 15.42
1 . .
ATOM 4259 CA    CA    . PRO PRO PRO B B 128 128 . 66.112  93.721  3.196   1.00 16.08
1 . .
ATOM 4260 CB    CB    . PRO PRO PRO B B 128 128 . 67.102  92.863  2.385   1.00 16.47
1 . .
ATOM 4261 CG    CG    . PRO PRO PRO B B 128 128 . 66.297  91.769  1.785   1.00 18.25
1 . .
ATOM 4262 CD    CD    . PRO PRO PRO B B 128 128 . 64.893  92.067  1.883   1.00 15.67
1 . .
ATOM 4263 C     C     . PRO PRO PRO B B 128 128 . 66.155  95.161  2.692   1.00 14.76
1 . .
ATOM 4264 O     O     . PRO PRO PRO B B 128 128 . 65.536  95.503  1.657   1.00 15.07
1 . .
ATOM 4265 N     N     . LEU LEU LEU B B 129 129 . 66.856  96.024  3.422   1.00 14.67
1 . .
ATOM 4266 CA    CA    . LEU LEU LEU B B 129 129 . 66.911  97.426  3.052   1.00 13.95
1 . .
ATOM 4267 CB    CB    . LEU LEU LEU B B 129 129 . 67.941  98.143  3.976   1.00 12.59
1 . .
ATOM 4268 CG    CG    . LEU LEU LEU B B 129 129 . 68.216  99.613  3.656   1.00 12.00
1 . .
ATOM 4269 CD1   CD1   . LEU LEU LEU B B 129 129 . 66.949  100.481 3.721   1.00 11.14
1 . .
ATOM 4270 CD2   CD2   . LEU LEU LEU B B 129 129 . 69.286  100.203 4.571   1.00 11.95
1 . .
ATOM 4271 C     C     . LEU LEU LEU B B 129 129 . 67.267  97.634  1.527   1.00 13.61
1 . .
ATOM 4272 O     O     . LEU LEU LEU B B 129 129 . 66.633  98.446  0.834   1.00 14.34
1 . .
ATOM 4273 N     N     . TYR TYR TYR B B 130 130 . 68.273  96.930  1.000   1.00 13.37
1 . .
ATOM 4274 CA    CA    . TYR TYR TYR B B 130 130 . 68.678  97.150  -0.428  1.00 14.30
1 . .
ATOM 4275 CB    CB    . TYR TYR TYR B B 130 130 . 69.907  96.321  -0.858  1.00 14.15
1 . .
ATOM 4276 CG    CG    . TYR TYR TYR B B 130 130 . 69.762  94.789  -0.580  1.00 13.85
1 . .
ATOM 4277 CD1   CD1   . TYR TYR TYR B B 130 130 . 69.189  93.933  -1.530  1.00 16.49
1 . .
ATOM 4278 CE1   CE1   . TYR TYR TYR B B 130 130 . 69.090  92.502  -1.287  1.00 18.98
1 . .
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ATOM 4279 CZ    CZ    . TYR TYR TYR B B 130 130 . 69.565  91.993  -0.102  1.00 17.80
1 . .
ATOM 4280 OH    OH    . TYR TYR TYR B B 130 130 . 69.481  90.622  0.118   1.00 22.13
1 . .
ATOM 4281 CE2   CE2   . TYR TYR TYR B B 130 130 . 70.169  92.822  0.849   1.00 15.38
1 . .
ATOM 4282 CD2   CD2   . TYR TYR TYR B B 130 130 . 70.262  94.196  0.625   1.00 12.01
1 . .
ATOM 4283 C     C     . TYR TYR TYR B B 130 130 . 67.527  96.824  -1.405  1.00 13.44
1 . .
ATOM 4284 O     O     . TYR TYR TYR B B 130 130 . 67.433  97.446  -2.446  1.00 14.12
1 . .
ATOM 4285 N     N     . ARG ARG ARG B B 131 131 . 66.688  95.839  -1.081  1.00 12.96
1 . .
ATOM 4286 CA    CA    . ARG ARG ARG B B 131 131 . 65.484  95.561  -1.900  1.00 13.85
1 . .
ATOM 4287 CB    CB    . ARG ARG ARG B B 131 131 . 64.930  94.196  -1.559  1.00 15.68
1 . .
ATOM 4288 CG    CG    . ARG ARG ARG B B 131 131 . 65.739  93.147  -2.144  1.00 21.29
1 . .
ATOM 4289 CD    CD    . ARG ARG ARG B B 131 131 . 64.824  92.051  -2.699  1.00 31.18
1 . .
ATOM 4290 NE    NE    . ARG ARG ARG B B 131 131 . 65.570  90.799  -2.737  1.00 36.80
1 . .
ATOM 4291 CZ    CZ    . ARG ARG ARG B B 131 131 . 66.153  90.349  -3.852  1.00 40.41
1 . .
ATOM 4292 NH1   NH1   . ARG ARG ARG B B 131 131 . 66.824  89.211  -3.831  1.00 40.73
1 . .
ATOM 4293 NH2   NH2   . ARG ARG ARG B B 131 131 . 66.055  91.050  -4.994  1.00 41.56
1 . .
ATOM 4294 C     C     . ARG ARG ARG B B 131 131 . 64.410  96.617  -1.768  1.00 13.07
1 . .
ATOM 4295 O     O     . ARG ARG ARG B B 131 131 . 63.768  96.968  -2.764  1.00 14.58
1 . .
ATOM 4296 N     N     . HIS HIS HIS B B 132 132 . 64.193  97.149  -0.568  1.00 11.99
1 . .
ATOM 4297 CA    CA    . HIS HIS HIS B B 132 132 . 63.269  98.263  -0.435  1.00 12.69
1 . .
ATOM 4298 CB    CB    . HIS HIS HIS B B 132 132 . 63.150  98.599  1.049   1.00 11.48
1 . .
ATOM 4299 CG    CG    . HIS HIS HIS B B 132 132 . 62.258  99.772  1.344   1.00 13.31
1 . .
ATOM 4300 ND1   ND1   . HIS HIS HIS B B 132 132 . 60.936  99.845  0.927   1.00 15.36
1 . .
ATOM 4301 CE1   CE1   . HIS HIS HIS B B 132 132 . 60.393  100.954 1.404   1.00 13.61
1 . .
ATOM 4302 NE2   NE2   . HIS HIS HIS B B 132 132 . 61.299  101.569 2.155   1.00 13.57
1 . .
ATOM 4303 CD2   CD2   . HIS HIS HIS B B 132 132 . 62.461  100.842 2.146   1.00 12.67
1 . .
ATOM 4304 C     C     . HIS HIS HIS B B 132 132 . 63.759  99.472  -1.252  1.00 12.12
1 . .
ATOM 4305 O     O     . HIS HIS HIS B B 132 132 . 62.948  100.148 -1.886  1.00 13.01
1 . .
ATOM 4306 N     N     . ILE ILE ILE B B 133 133 . 65.084  99.762  -1.183  1.00 12.58
1 . .
ATOM 4307 CA    CA    . ILE ILE ILE B B 133 133 . 65.663  100.936 -1.916  1.00 11.96
1 . .
ATOM 4308 CB    CB    . ILE ILE ILE B B 133 133 . 67.168  101.168 -1.524  1.00 10.97
1 . .
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ATOM 4309 CG1   CG1   . ILE ILE ILE B B 133 133 . 67.196  101.706 -0.074  1.00 10.75
1 . .
ATOM 4310 CD1   CD1   . ILE ILE ILE B B 133 133 . 68.616  101.767 0.541   1.00 10.98
1 . .
ATOM 4311 CG2   CG2   . ILE ILE ILE B B 133 133 . 67.877  102.097 -2.580  1.00 12.83
1 . .
ATOM 4312 C     C     . ILE ILE ILE B B 133 133 . 65.487  100.649 -3.465  1.00 13.04
1 . .
ATOM 4313 O     O     . ILE ILE ILE B B 133 133 . 65.027  101.529 -4.220  1.00 12.43
1 . .
ATOM 4314 N     N     . ALA ALA ALA B B 134 134 . 65.777  99.421  -3.920  1.00 13.19
1 . .
ATOM 4315 CA    CA    . ALA ALA ALA B B 134 134 . 65.479  99.083  -5.338  1.00 13.65
1 . .
ATOM 4316 CB    CB    . ALA ALA ALA B B 134 134 . 65.879  97.648  -5.655  1.00 12.47
1 . .
ATOM 4317 C     C     . ALA ALA ALA B B 134 134 . 64.036  99.409  -5.778  1.00 14.82
1 . .
ATOM 4318 O     O     . ALA ALA ALA B B 134 134 . 63.840  100.027 -6.895  1.00 16.18
1 . .
ATOM 4319 N     N     . GLN GLN GLN B B 135 135 . 63.061  99.075  -4.922  1.00 15.99
1 . .
ATOM 4320 CA    CA    . GLN GLN GLN B B 135 135 . 61.599  99.301  -5.208  1.00 17.32
1 . .
ATOM 4321 CB    CB    . GLN GLN GLN B B 135 135 . 60.690  98.601  -4.211  1.00 17.30
1 . .
ATOM 4322 CG    CG    . GLN GLN GLN B B 135 135 . 60.812  97.116  -4.335  1.00 20.26
1 . .
ATOM 4323 CD    CD    . GLN GLN GLN B B 135 135 . 59.751  96.322  -3.515  1.00 25.74
1 . .
ATOM 4324 OE1   OE1   . GLN GLN GLN B B 135 135 . 58.925  96.875  -2.744  1.00 26.91
1 . .
ATOM 4325 NE2   NE2   . GLN GLN GLN B B 135 135 . 59.802  95.001  -3.678  1.00 31.06
1 . .
ATOM 4326 C     C     . GLN GLN GLN B B 135 135 . 61.296  100.779 -5.167  1.00 17.86
1 . .
ATOM 4327 O     O     . GLN GLN GLN B B 135 135 . 60.540  101.261 -6.019  1.00 18.48
1 . .
ATOM 4328 N     N     . LEU LEU LEU B B 136 136 . 61.877  101.507 -4.208  1.00 16.77
1 . .
ATOM 4329 CA    CA    . LEU LEU LEU B B 136 136 . 61.706  102.974 -4.192  1.00 16.87
1 . .
ATOM 4330 CB    CB    . LEU LEU LEU B B 136 136 . 62.380  103.618 -2.963  1.00 16.13
1 . .
ATOM 4331 CG    CG    . LEU LEU LEU B B 136 136 . 61.755  103.342 -1.577  1.00 15.45
1 . .
ATOM 4332 CD1   CD1   . LEU LEU LEU B B 136 136 . 62.651  103.921 -0.479  1.00 16.60
1 . .
ATOM 4333 CD2   CD2   . LEU LEU LEU B B 136 136 . 60.300  103.876 -1.445  1.00 16.90
1 . .
ATOM 4334 C     C     . LEU LEU LEU B B 136 136 . 62.249  103.595 -5.460  1.00 17.57
1 . .
ATOM 4335 O     O     . LEU LEU LEU B B 136 136 . 61.721  104.641 -5.905  1.00 19.07
1 . .
ATOM 4336 N     N     . ALA ALA ALA B B 137 137 . 63.340  103.041 -5.982  1.00 17.80
1 . .
ATOM 4337 CA    CA    . ALA ALA ALA B B 137 137 . 64.042  103.542 -7.171  1.00 17.59
1 . .
ATOM 4338 CB    CB    . ALA ALA ALA B B 137 137 . 65.550  103.235 -7.071  1.00 17.44
1 . .
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ATOM 4339 C     C     . ALA ALA ALA B B 137 137 . 63.462  103.014 -8.510  1.00 19.30
1 . .
ATOM 4340 O     O     . ALA ALA ALA B B 137 137 . 63.821  103.533 -9.559  1.00 19.37
1 . .
ATOM 4341 N     N     . GLY GLY GLY B B 138 138 . 62.564  102.047 -8.439  1.00 21.00
1 . .
ATOM 4342 CA    CA    . GLY GLY GLY B B 138 138 . 62.058  101.336 -9.645  1.00 25.20
1 . .
ATOM 4343 C     C     . GLY GLY GLY B B 138 138 . 63.087  100.396 -10.260 1.00 28.20
1 . .
ATOM 4344 O     O     . GLY GLY GLY B B 138 138 . 63.118  100.265 -11.508 1.00 30.17
1 . .
ATOM 4345 N     N     . ASN ASN ASN B B 139 139 . 63.943  99.750  -9.442  1.00 28.78
1 . .
ATOM 4346 CA    CA    . ASN ASN ASN B B 139 139 . 64.992  98.820  -9.946  1.00 30.02
1 . .
ATOM 4347 CB    CB    . ASN ASN ASN B B 139 139 . 66.341  99.007  -9.235  1.00 30.23
1 . .
ATOM 4348 CG    CG    . ASN ASN ASN B B 139 139 . 67.118  100.118 -9.833  1.00 31.19
1 . .
ATOM 4349 OD1   OD1   . ASN ASN ASN B B 139 139 . 67.097  100.253 -11.046 1.00 33.72
1 . .
ATOM 4350 ND2   ND2   . ASN ASN ASN B B 139 139 . 67.790  100.952 -9.014  1.00 26.91
1 . .
ATOM 4351 C     C     . ASN ASN ASN B B 139 139 . 64.578  97.409  -9.733  1.00 31.47
1 . .
ATOM 4352 O     O     . ASN ASN ASN B B 139 139 . 63.844  97.135  -8.802  1.00 29.82
1 . .
ATOM 4353 N     N     . SER SER SER B B 140 140 . 65.025  96.519  -10.613 1.00 34.07
1 . .
ATOM 4354 CA    CA    . SER SER SER B B 140 140 . 64.682  95.095  -10.481 1.00 36.44
1 . .
ATOM 4355 CB    CB    . SER SER SER B B 140 140 . 63.893  94.594  -11.703 1.00 37.63
1 . .
ATOM 4356 OG    OG    . SER SER SER B B 140 140 . 62.556  95.029  -11.598 1.00 39.49
1 . .
ATOM 4357 C     C     . SER SER SER B B 140 140 . 65.919  94.266  -10.291 1.00 37.44
1 . .
ATOM 4358 O     O     . SER SER SER B B 140 140 . 65.939  93.325  -9.448  1.00 39.76
1 . .
ATOM 4359 N     N     . ASP ASP ASP B B 141 141 . 66.954  94.593  -11.061 1.00 36.79
1 . .
ATOM 4360 CA    CA    . ASP ASP ASP B B 141 141 . 68.206  93.870  -10.965 1.00 35.46
1 . .
ATOM 4361 CB    CB    . ASP ASP ASP B B 141 141 . 69.082  94.096  -12.201 1.00 36.52
1 . .
ATOM 4362 C     C     . ASP ASP ASP B B 141 141 . 68.875  94.436  -9.725  1.00 34.29
1 . .
ATOM 4363 O     O     . ASP ASP ASP B B 141 141 . 68.540  95.561  -9.246  1.00 35.49
1 . .
ATOM 4364 N     N     . LEU LEU LEU B B 142 142 . 69.782  93.666  -9.150  1.00 29.87
1 . .
ATOM 4365 CA    CA    . LEU LEU LEU B B 142 142 . 70.607  94.257  -8.114  1.00 25.19
1 . .
ATOM 4366 CB    CB    . LEU LEU LEU B B 142 142 . 70.305  93.596  -6.782  1.00 23.95
1 . .
ATOM 4367 CG    CG    . LEU LEU LEU B B 142 142 . 68.859  93.646  -6.262  1.00 22.67
1 . .
ATOM 4368 CD1   CD1   . LEU LEU LEU B B 142 142 . 68.725  92.655  -5.120  1.00 20.41
1 . .
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ATOM 4369 CD2   CD2   . LEU LEU LEU B B 142 142 . 68.575  94.982  -5.648  1.00 24.48
1 . .
ATOM 4370 C     C     . LEU LEU LEU B B 142 142 . 71.940  93.855  -8.629  1.00 23.97
1 . .
ATOM 4371 O     O     . LEU LEU LEU B B 142 142 . 72.054  92.792  -9.290  1.00 24.35
1 . .
ATOM 4372 N     N     . ILE ILE ILE B B 143 143 . 72.945  94.657  -8.341  1.00 20.41
1 . .
ATOM 4373 CA    CA    . ILE ILE ILE B B 143 143 . 74.275  94.386  -8.782  1.00 20.27
1 . .
ATOM 4374 CB    CB    . ILE ILE ILE B B 143 143 . 74.532  95.119  -10.122 1.00 22.26
1 . .
ATOM 4375 CG1   CG1   . ILE ILE ILE B B 143 143 . 75.998  95.165  -10.433 1.00 25.16
1 . .
ATOM 4376 CD1   CD1   . ILE ILE ILE B B 143 143 . 76.396  93.939  -10.919 1.00 24.72
1 . .
ATOM 4377 CG2   CG2   . ILE ILE ILE B B 143 143 . 74.175  96.543  -10.018 1.00 25.35
1 . .
ATOM 4378 C     C     . ILE ILE ILE B B 143 143 . 75.273  94.830  -7.693  1.00 17.68
1 . .
ATOM 4379 O     O     . ILE ILE ILE B B 143 143 . 75.117  95.873  -7.048  1.00 16.98
1 . .
ATOM 4380 N     N     . LEU LEU LEU B B 144 144 . 76.264  94.005  -7.427  1.00 16.16
1 . .
ATOM 4381 CA    CA    . LEU LEU LEU B B 144 144 . 77.287  94.417  -6.443  1.00 13.70
1 . .
ATOM 4382 CB    CB    . LEU LEU LEU B B 144 144 . 78.069  93.233  -5.873  1.00 13.59
1 . .
ATOM 4383 CG    CG    . LEU LEU LEU B B 144 144 . 77.509  92.421  -4.689  1.00 13.72
1 . .
ATOM 4384 CD1   CD1   . LEU LEU LEU B B 144 144 . 77.457  93.444  -3.484  1.00 14.89
1 . .
ATOM 4385 CD2   CD2   . LEU LEU LEU B B 144 144 . 76.153  91.824  -4.991  1.00 15.84
1 . .
ATOM 4386 C     C     . LEU LEU LEU B B 144 144 . 78.254  95.366  -7.153  1.00 12.20
1 . .
ATOM 4387 O     O     . LEU LEU LEU B B 144 144 . 78.663  95.089  -8.270  1.00 11.93
1 . .
ATOM 4388 N     N     . PRO PRO PRO B B 145 145 . 78.654  96.448  -6.483  1.00 10.76
1 . .
ATOM 4389 CA    CA    . PRO PRO PRO B B 145 145 . 79.563  97.427  -7.122  1.00 9.68
1 . .
ATOM 4390 CB    CB    . PRO PRO PRO B B 145 145 . 79.345  98.665  -6.220  1.00 9.29
1 . .
ATOM 4391 CG    CG    . PRO PRO PRO B B 145 145 . 79.170  98.009  -4.794  1.00 8.50
1 . .
ATOM 4392 CD    CD    . PRO PRO PRO B B 145 145 . 78.243  96.852  -5.091  1.00 10.00
1 . .
ATOM 4393 C     C     . PRO PRO PRO B B 145 145 . 81.052  97.075  -7.119  1.00 9.43
1 . .
ATOM 4394 O     O     . PRO PRO PRO B B 145 145 . 81.524  96.316  -6.229  1.00 9.71
1 . .
ATOM 4395 N     N     . VAL VAL VAL B B 146 146 . 81.864  97.676  -7.991  1.00 8.07
1 . .
ATOM 4396 CA    CA    . VAL VAL VAL B B 146 146 . 83.292  97.594  -7.794  1.00 7.86
1 . .
ATOM 4397 CB    CB    . VAL VAL VAL B B 146 146 . 83.992  98.021  -9.088  1.00 8.64
1 . .
ATOM 4398 CG1   CG1   . VAL VAL VAL B B 146 146 . 85.523  98.190  -8.898  1.00 11.49
1 . .
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ATOM 4399 CG2   CG2   . VAL VAL VAL B B 146 146 . 83.594  97.029  -10.181 1.00 13.40
1 . .
ATOM 4400 C     C     . VAL VAL VAL B B 146 146 . 83.563  98.655  -6.681  1.00 9.93
1 . .
ATOM 4401 O     O     . VAL VAL VAL B B 146 146 . 83.085  99.806  -6.761  1.00 8.94
1 . .
ATOM 4402 N     N     . PRO PRO PRO B B 147 147 . 84.392  98.294  -5.697  1.00 10.47
1 . .
ATOM 4403 CA    CA    . PRO PRO PRO B B 147 147 . 84.784  99.244  -4.642  1.00 9.86
1 . .
ATOM 4404 CB    CB    . PRO PRO PRO B B 147 147 . 85.055  98.320  -3.416  1.00 10.15
1 . .
ATOM 4405 CG    CG    . PRO PRO PRO B B 147 147 . 85.680  97.000  -4.141  1.00 8.70
1 . .
ATOM 4406 CD    CD    . PRO PRO PRO B B 147 147 . 84.837  96.905  -5.423  1.00 10.17
1 . .
ATOM 4407 C     C     . PRO PRO PRO B B 147 147 . 85.992  100.020 -5.093  1.00 10.35
1 . .
ATOM 4408 O     O     . PRO PRO PRO B B 147 147 . 86.920  99.493  -5.789  1.00 10.24
1 . .
ATOM 4409 N     N     . ALA ALA ALA B B 148 148 . 85.971  101.312 -4.774  1.00 9.99
1 . .
ATOM 4410 CA    CA    . ALA ALA ALA B B 148 148 . 87.115  102.165 -5.040  1.00 9.80
1 . .
ATOM 4411 CB    CB    . ALA ALA ALA B B 148 148 . 86.662  103.432 -5.805  1.00 7.97
1 . .
ATOM 4412 C     C     . ALA ALA ALA B B 148 148 . 87.777  102.557 -3.740  1.00 9.66
1 . .
ATOM 4413 O     O     . ALA ALA ALA B B 148 148 . 87.200  103.312 -2.961  1.00 11.00
1 . .
ATOM 4414 N     N     . PHE PHE PHE B B 149 149 . 88.976  102.045 -3.489  1.00 9.27
1 . .
ATOM 4415 CA    CA    . PHE PHE PHE B B 149 149 . 89.571  102.244 -2.145  1.00 9.17
1 . .
ATOM 4416 CB    CB    . PHE PHE PHE B B 149 149 . 90.366  100.966 -1.755  1.00 9.43
1 . .
ATOM 4417 CG    CG    . PHE PHE PHE B B 149 149 . 89.537  99.710  -1.654  1.00 10.91
1 . .
ATOM 4418 CD1   CD1   . PHE PHE PHE B B 149 149 . 88.752  99.401  -0.534  1.00 9.43
1 . .
ATOM 4419 CE1   CE1   . PHE PHE PHE B B 149 149 . 88.043  98.177  -0.515  1.00 10.14
1 . .
ATOM 4420 CZ    CZ    . PHE PHE PHE B B 149 149 . 88.147  97.249  -1.612  1.00 12.27
1 . .
ATOM 4421 CE2   CE2   . PHE PHE PHE B B 149 149 . 88.942  97.626  -2.708  1.00 9.85
1 . .
ATOM 4422 CD2   CD2   . PHE PHE PHE B B 149 149 . 89.610  98.783  -2.701  1.00 11.38
1 . .
ATOM 4423 C     C     . PHE PHE PHE B B 149 149 . 90.590  103.361 -2.168  1.00 11.26
1 . .
ATOM 4424 O     O     . PHE PHE PHE B B 149 149 . 91.616  103.272 -2.895  1.00 10.76
1 . .
ATOM 4425 N     N     . ASN ASN ASN B B 150 150 . 90.423  104.363 -1.316  1.00 9.98
1 . .
ATOM 4426 CA    CA    . ASN ASN ASN B B 150 150 . 91.354  105.470 -1.297  1.00 12.75
1 . .
ATOM 4427 CB    CB    . ASN ASN ASN B B 150 150 . 90.607  106.613 -0.573  1.00 13.24
1 . .
ATOM 4428 CG    CG    . ASN ASN ASN B B 150 150 . 91.368  107.888 -0.422  1.00 15.68
1 . .
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ATOM 4429 OD1   OD1   . ASN ASN ASN B B 150 150 . 90.855  108.840 0.289   1.00 23.91
1 . .
ATOM 4430 ND2   ND2   . ASN ASN ASN B B 150 150 . 92.470  108.030 -1.089  1.00 12.31
1 . .
ATOM 4431 C     C     . ASN ASN ASN B B 150 150 . 92.583  105.038 -0.531  1.00 12.87
1 . .
ATOM 4432 O     O     . ASN ASN ASN B B 150 150 . 92.523  105.003 0.699   1.00 15.82
1 . .
ATOM 4433 N     N     . VAL VAL VAL B B 151 151 . 93.732  104.860 -1.181  1.00 11.27
1 . .
ATOM 4434 CA    CA    . VAL VAL VAL B B 151 151 . 94.934  104.343 -0.451  1.00 12.60
1 . .
ATOM 4435 CB    CB    . VAL VAL VAL B B 151 151 . 95.452  103.042 -1.130  1.00 12.81
1 . .
ATOM 4436 CG1   CG1   . VAL VAL VAL B B 151 151 . 94.359  102.040 -1.169  1.00 14.93
1 . .
ATOM 4437 CG2   CG2   . VAL VAL VAL B B 151 151 . 95.912  103.337 -2.551  1.00 13.71
1 . .
ATOM 4438 C     C     . VAL VAL VAL B B 151 151 . 96.077  105.287 -0.206  1.00 14.03
1 . .
ATOM 4439 O     O     . VAL VAL VAL B B 151 151 . 96.990  104.993 0.595   1.00 13.94
1 . .
ATOM 4440 N     N     . ILE ILE ILE B B 152 152 . 96.079  106.416 -0.882  1.00 13.06
1 . .
ATOM 4441 CA    CA    . ILE ILE ILE B B 152 152 . 96.978  107.464 -0.556  1.00 16.99
1 . .
ATOM 4442 CB    CB    . ILE ILE ILE B B 152 152 . 98.056  107.685 -1.604  1.00 16.79
1 . .
ATOM 4443 CG1   CG1   . ILE ILE ILE B B 152 152 . 98.845  106.351 -1.728  1.00 18.53
1 . .
ATOM 4444 CD1   CD1   . ILE ILE ILE B B 152 152 . 100.108 106.362 -2.386  1.00 15.20
1 . .
ATOM 4445 CG2   CG2   . ILE ILE ILE B B 152 152 . 98.879  108.966 -1.259  1.00 19.09
1 . .
ATOM 4446 C     C     . ILE ILE ILE B B 152 152 . 96.056  108.675 -0.395  1.00 19.00
1 . .
ATOM 4447 O     O     . ILE ILE ILE B B 152 152 . 95.405  109.103 -1.348  1.00 17.67
1 . .
ATOM 4448 N     N     . ASN ASN ASN B B 153 153 . 95.995  109.147 0.838   1.00 20.59
1 . .
ATOM 4449 CA    CA    . ASN ASN ASN B B 153 153 . 95.238  110.356 1.244   1.00 22.71
1 . .
ATOM 4450 CB    CB    . ASN ASN ASN B B 153 153 . 94.720  110.187 2.715   1.00 23.64
1 . .
ATOM 4451 CG    CG    . ASN ASN ASN B B 153 153 . 93.539  109.079 2.901   1.00 24.94
1 . .
ATOM 4452 OD1   OD1   . ASN ASN ASN B B 153 153 . 93.087  108.358 1.941   1.00 30.89
1 . .
ATOM 4453 ND2   ND2   . ASN ASN ASN B B 153 153 . 93.118  108.931 4.135   1.00 9.62
1 . .
ATOM 4454 C     C     . ASN ASN ASN B B 153 153 . 96.112  111.663 1.031   1.00 21.15
1 . .
ATOM 4455 O     O     . ASN ASN ASN B B 153 153 . 97.313  111.797 1.484   1.00 22.58
1 . .
ATOM 4456 N     N     . GLY GLY GLY B B 154 154 . 95.546  112.674 0.336   1.00 18.87
1 . .
ATOM 4457 CA    CA    . GLY GLY GLY B B 154 154 . 96.216  113.962 0.055   1.00 15.82
1 . .
ATOM 4458 C     C     . GLY GLY GLY B B 154 154 . 95.216  115.097 0.406   1.00 14.64
1 . .
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ATOM 4459 O     O     . GLY GLY GLY B B 154 154 . 94.202  114.858 1.004   1.00 13.34
1 . .
ATOM 4460 N     N     . GLY GLY GLY B B 155 155 . 95.490  116.308 0.010   1.00 13.18
1 . .
ATOM 4461 N     N     . GLY GLY GLY B B 159 159 . 97.707  114.568 6.489   0.61 19.21
1 . .
ATOM 4462 CA    CA    . GLY GLY GLY B B 159 159 . 98.794  115.460 6.896   1.00 22.08
1 . .
ATOM 4463 C     C     . GLY GLY GLY B B 159 159 . 100.081 115.222 6.121   1.00 23.18
1 . .
ATOM 4464 O     O     . GLY GLY GLY B B 159 159 . 100.861 114.261 6.459   1.00 20.58
1 . .
ATOM 4465 N     N     . ASN ASN ASN B B 160 160 . 100.247 116.070 5.066   1.00 23.73
1 . .
ATOM 4466 CA    CA    . ASN ASN ASN B B 160 160 . 101.353 116.076 4.058   1.00 22.51
1 . .
ATOM 4467 CB    CB    . ASN ASN ASN B B 160 160 . 101.486 114.708 3.283   1.00 23.04
1 . .
ATOM 4468 CG    CG    . ASN ASN ASN B B 160 160 . 100.216 114.330 2.473   1.00 25.67
1 . .
ATOM 4469 OD1   OD1   . ASN ASN ASN B B 160 160 . 99.378  115.174 2.201   1.00 27.65
1 . .
ATOM 4470 ND2   ND2   . ASN ASN ASN B B 160 160 . 100.079 113.050 2.106   1.00 27.34
1 . .
ATOM 4471 C     C     . ASN ASN ASN B B 160 160 . 101.179 117.216 3.076   1.00 22.95
1 . .
ATOM 4472 O     O     . ASN ASN ASN B B 160 160 . 100.152 117.921 3.135   1.00 22.80
1 . .
ATOM 4473 N     N     . LYS LYS LYS B B 161 161 . 102.089 117.372 2.102   1.00 20.62
1 . .
ATOM 4474 CA    CA    . LYS LYS LYS B B 161 161 . 101.959 118.436 1.092   1.00 21.07
1 . .
ATOM 4475 CB    CB    . LYS LYS LYS B B 161 161 . 103.326 118.826 0.602   1.00 22.50
1 . .
ATOM 4476 CG    CG    . LYS LYS LYS B B 161 161 . 104.233 119.493 1.631   1.00 27.29
1 . .
ATOM 4477 CD    CD    . LYS LYS LYS B B 161 161 . 104.121 121.015 1.518   1.00 34.67
1 . .
ATOM 4478 CE    CE    . LYS LYS LYS B B 161 161 . 105.273 121.738 2.264   1.00 38.60
1 . .
ATOM 4479 NZ    NZ    . LYS LYS LYS B B 161 161 . 104.737 122.755 3.286   1.00 38.16
1 . .
ATOM 4480 C     C     . LYS LYS LYS B B 161 161 . 101.161 118.100 -0.221  1.00 21.34
1 . .
ATOM 4481 O     O     . LYS LYS LYS B B 161 161 . 100.859 119.011 -1.040  1.00 22.71
1 . .
ATOM 4482 N     N     . LEU LEU LEU B B 162 162 . 100.905 116.810 -0.420  1.00 19.87
1 . .
ATOM 4483 CA    CA    . LEU LEU LEU B B 162 162 . 100.248 116.281 -1.646  1.00 18.78
1 . .
ATOM 4484 CB    CB    . LEU LEU LEU B B 162 162 . 99.978  114.801 -1.374  1.00 17.68
1 . .
ATOM 4485 CG    CG    . LEU LEU LEU B B 162 162 . 99.464  113.898 -2.515  1.00 18.52
1 . .
ATOM 4486 CD1   CD1   . LEU LEU LEU B B 162 162 . 100.361 113.972 -3.679  1.00 18.55
1 . .
ATOM 4487 CD2   CD2   . LEU LEU LEU B B 162 162 . 99.246  112.494 -2.023  1.00 19.31
1 . .
ATOM 4488 C     C     . LEU LEU LEU B B 162 162 . 98.918  117.093 -1.891  1.00 17.64
1 . .
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ATOM 4489 O     O     . LEU LEU LEU B B 162 162 . 98.041  117.056 -1.007  1.00 18.81
1 . .
ATOM 4490 N     N     . ALA ALA ALA B B 163 163 . 98.779  117.779 -3.040  1.00 16.47
1 . .
ATOM 4491 CA    CA    . ALA ALA ALA B B 163 163 . 97.569  118.647 -3.301  1.00 16.36
1 . .
ATOM 4492 CB    CB    . ALA ALA ALA B B 163 163 . 97.824  119.681 -4.435  1.00 16.19
1 . .
ATOM 4493 C     C     . ALA ALA ALA B B 163 163 . 96.269  117.901 -3.608  1.00 14.96
1 . .
ATOM 4494 O     O     . ALA ALA ALA B B 163 163 . 95.182  118.193 -3.074  1.00 15.57
1 . .
ATOM 4495 N     N     . MET MET MET B B 164 164 . 96.370  116.931 -4.504  1.00 13.75
1 . .
ATOM 4496 CA    CA    . MET MET MET B B 164 164 . 95.184  116.170 -4.854  1.00 11.64
1 . .
ATOM 4497 CB    CB    . MET MET MET B B 164 164 . 95.401  115.488 -6.222  1.00 13.83
1 . .
ATOM 4498 CG    CG    . MET MET MET B B 164 164 . 95.891  116.506 -7.257  1.00 13.46
1 . .
ATOM 4499 SD    SD    . MET MET MET B B 164 164 . 96.102  115.724 -8.888  1.00 13.38
1 . .
ATOM 4500 CE    CE    . MET MET MET B B 164 164 . 96.515  117.247 -9.785  1.00 14.36
1 . .
ATOM 4501 C     C     . MET MET MET B B 164 164 . 94.680  115.219 -3.736  1.00 11.83
1 . .
ATOM 4502 O     O     . MET MET MET B B 164 164 . 95.457  114.664 -2.959  1.00 13.34
1 . .
ATOM 4503 N     N     . GLN GLN GLN B B 165 165 . 93.365  115.076 -3.605  1.00 9.63
1 . .
ATOM 4504 CA    CA    . GLN GLN GLN B B 165 165 . 92.828  114.544 -2.363  1.00 11.13
1 . .
ATOM 4505 CB    CB    . GLN GLN GLN B B 165 165 . 91.389  115.007 -2.210  1.00 10.82
1 . .
ATOM 4506 CG    CG    . GLN GLN GLN B B 165 165 . 90.727  114.593 -0.895  1.00 10.70
1 . .
ATOM 4507 CD    CD    . GLN GLN GLN B B 165 165 . 89.343  115.176 -0.837  1.00 12.82
1 . .
ATOM 4508 OE1   OE1   . GLN GLN GLN B B 165 165 . 89.186  116.358 -0.449  1.00 12.25
1 . .
ATOM 4509 NE2   NE2   . GLN GLN GLN B B 165 165 . 88.333  114.398 -1.249  1.00 13.51
1 . .
ATOM 4510 C     C     . GLN GLN GLN B B 165 165 . 92.940  113.022 -2.239  1.00 11.08
1 . .
ATOM 4511 O     O     . GLN GLN GLN B B 165 165 . 93.211  112.526 -1.143  1.00 13.26
1 . .
ATOM 4512 N     N     . GLU GLU GLU B B 166 166 . 92.726  112.267 -3.327  1.00 11.24
1 . .
ATOM 4513 CA    CA    . GLU GLU GLU B B 166 166 . 92.532  110.792 -3.179  1.00 9.95
1 . .
ATOM 4514 CB    CB    . GLU GLU GLU B B 166 166 . 91.077  110.419 -3.163  1.00 8.94
1 . .
ATOM 4515 CG    CG    . GLU GLU GLU B B 166 166 . 90.279  111.079 -1.998  1.00 11.71
1 . .
ATOM 4516 CD    CD    . GLU GLU GLU B B 166 166 . 88.780  110.847 -2.088  1.00 13.78
1 . .
ATOM 4517 OE1   OE1   . GLU GLU GLU B B 166 166 . 88.297  109.938 -2.814  1.00 14.45
1 . .
ATOM 4518 OE2   OE2   . GLU GLU GLU B B 166 166 . 88.027  111.625 -1.439  1.00 15.77
1 . .
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ATOM 4519 C     C     . GLU GLU GLU B B 166 166 . 93.053  110.089 -4.359  1.00 10.71
1 . .
ATOM 4520 O     O     . GLU GLU GLU B B 166 166 . 92.767  110.524 -5.506  1.00 10.58
1 . .
ATOM 4521 N     N     . PHE PHE PHE B B 167 167 . 93.787  109.011 -4.089  1.00 10.53
1 . .
ATOM 4522 CA    CA    . PHE PHE PHE B B 167 167 . 94.326  108.059 -5.104  1.00 10.82
1 . .
ATOM 4523 CB    CB    . PHE PHE PHE B B 167 167 . 95.848  108.077 -5.059  1.00 11.80
1 . .
ATOM 4524 CG    CG    . PHE PHE PHE B B 167 167 . 96.387  109.442 -5.450  1.00 12.17
1 . .
ATOM 4525 CD1   CD1   . PHE PHE PHE B B 167 167 . 96.496  110.497 -4.470  1.00 13.69
1 . .
ATOM 4526 CE1   CE1   . PHE PHE PHE B B 167 167 . 96.949  111.815 -4.868  1.00 13.35
1 . .
ATOM 4527 CZ    CZ    . PHE PHE PHE B B 167 167 . 97.349  112.050 -6.168  1.00 13.84
1 . .
ATOM 4528 CE2   CE2   . PHE PHE PHE B B 167 167 . 97.238  111.000 -7.140  1.00 15.51
1 . .
ATOM 4529 CD2   CD2   . PHE PHE PHE B B 167 167 . 96.767  109.703 -6.754  1.00 14.98
1 . .
ATOM 4530 C     C     . PHE PHE PHE B B 167 167 . 93.723  106.755 -4.766  1.00 11.89
1 . .
ATOM 4531 O     O     . PHE PHE PHE B B 167 167 . 94.079  106.173 -3.679  1.00 13.15
1 . .
ATOM 4532 N     N     . MET MET MET B B 168 168 . 92.812  106.281 -5.643  1.00 8.86
1 . .
ATOM 4533 CA    CA    . MET MET MET B B 168 168 . 91.988  105.101 -5.380  1.00 8.54
1 . .
ATOM 4534 CB    CB    . MET MET MET B B 168 168 . 90.486  105.378 -5.621  1.00 9.49
1 . .
ATOM 4535 CG    CG    . MET MET MET B B 168 168 . 89.946  106.354 -4.562  1.00 8.68
1 . .
ATOM 4536 SD    SD    . MET MET MET B B 168 168 . 88.272  106.798 -4.950  1.00 12.96
1 . .
ATOM 4537 CE    CE    . MET MET MET B B 168 168 . 88.576  108.398 -5.821  1.00 11.72
1 . .
ATOM 4538 C     C     . MET MET MET B B 168 168 . 92.390  103.886 -6.234  1.00 9.70
1 . .
ATOM 4539 O     O     . MET MET MET B B 168 168 . 92.804  104.047 -7.364  1.00 10.61
1 . .
ATOM 4540 N     N     . ILE ILE ILE B B 169 169 . 92.208  102.678 -5.698  1.00 7.69
1 . .
ATOM 4541 CA    CA    . ILE ILE ILE B B 169 169 . 92.320  101.484 -6.565  1.00 9.38
1 . .
ATOM 4542 CB    CB    . ILE ILE ILE B B 169 169 . 93.312  100.439 -5.969  1.00 7.21
1 . .
ATOM 4543 CG1   CG1   . ILE ILE ILE B B 169 169 . 92.996  100.110 -4.489  1.00 9.62
1 . .
ATOM 4544 CD1   CD1   . ILE ILE ILE B B 169 169 . 93.977  99.012  -3.869  1.00 11.33
1 . .
ATOM 4545 CG2   CG2   . ILE ILE ILE B B 169 169 . 94.690  100.993 -6.113  1.00 12.07
1 . .
ATOM 4546 C     C     . ILE ILE ILE B B 169 169 . 90.966  100.807 -6.698  1.00 10.31
1 . .
ATOM 4547 O     O     . ILE ILE ILE B B 169 169 . 90.168  100.782 -5.737  1.00 10.74
1 . .
ATOM 4548 N     N     . LEU LEU LEU B B 170 170 . 90.681  100.271 -7.895  1.00 9.35
1 . .
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ATOM 4549 CA    CA    . LEU LEU LEU B B 170 170 . 89.399  99.696  -8.192  1.00 10.44
1 . .
ATOM 4550 CB    CB    . LEU LEU LEU B B 170 170 . 88.635  100.537 -9.275  1.00 10.45
1 . .
ATOM 4551 CG    CG    . LEU LEU LEU B B 170 170 . 87.967  101.869 -8.831  1.00 9.40
1 . .
ATOM 4552 CD1   CD1   . LEU LEU LEU B B 170 170 . 89.064  102.962 -8.557  1.00 11.31
1 . .
ATOM 4553 CD2   CD2   . LEU LEU LEU B B 170 170 . 86.992  102.301 -10.008 1.00 13.50
1 . .
ATOM 4554 C     C     . LEU LEU LEU B B 170 170 . 89.648  98.288  -8.780  1.00 10.26
1 . .
ATOM 4555 O     O     . LEU LEU LEU B B 170 170 . 90.244  98.199  -9.896  1.00 10.13
1 . .
ATOM 4556 N     N     . PRO PRO PRO B B 171 171 . 89.267  97.221  -8.055  1.00 9.80
1 . .
ATOM 4557 CA    CA    . PRO PRO PRO B B 171 171 . 89.505  95.855  -8.561  1.00 11.37
1 . .
ATOM 4558 CB    CB    . PRO PRO PRO B B 171 171 . 89.408  94.963  -7.257  1.00 12.88
1 . .
ATOM 4559 CG    CG    . PRO PRO PRO B B 171 171 . 89.666  95.912  -6.094  1.00 13.16
1 . .
ATOM 4560 CD    CD    . PRO PRO PRO B B 171 171 . 88.991  97.222  -6.596  1.00 9.90
1 . .
ATOM 4561 C     C     . PRO PRO PRO B B 171 171 . 88.496  95.439  -9.608  1.00 12.30
1 . .
ATOM 4562 O     O     . PRO PRO PRO B B 171 171 . 87.634  94.577  -9.392  1.00 13.52
1 . .
ATOM 4563 N     N     . VAL VAL VAL B B 172 172 . 88.538  96.123  -10.746 1.00 11.68
1 . .
ATOM 4564 CA    CA    . VAL VAL VAL B B 172 172 . 87.559  95.813  -11.797 1.00 13.61
1 . .
ATOM 4565 CB    CB    . VAL VAL VAL B B 172 172 . 87.704  96.784  -12.978 1.00 14.30
1 . .
ATOM 4566 CG1   CG1   . VAL VAL VAL B B 172 172 . 87.369  98.241  -12.513 1.00 12.26
1 . .
ATOM 4567 CG2   CG2   . VAL VAL VAL B B 172 172 . 89.151  96.714  -13.556 1.00 14.88
1 . .
ATOM 4568 C     C     . VAL VAL VAL B B 172 172 . 87.601  94.387  -12.332 1.00 12.61
1 . .
ATOM 4569 O     O     . VAL VAL VAL B B 172 172 . 86.565  93.876  -12.798 1.00 14.74
1 . .
ATOM 4570 N     N     . GLY GLY GLY B B 173 173 . 88.789  93.798  -12.286 1.00 14.28
1 . .
ATOM 4571 CA    CA    . GLY GLY GLY B B 173 173 . 89.042  92.420  -12.744 1.00 14.21
1 . .
ATOM 4572 C     C     . GLY GLY GLY B B 173 173 . 88.732  91.339  -11.706 1.00 14.59
1 . .
ATOM 4573 O     O     . GLY GLY GLY B B 173 173 . 88.981  90.104  -12.003 1.00 16.12
1 . .
ATOM 4574 N     N     . ALA ALA ALA B B 174 174 . 88.245  91.716  -10.496 1.00 13.25
1 . .
ATOM 4575 CA    CA    . ALA ALA ALA B B 174 174 . 87.966  90.657  -9.491  1.00 14.90
1 . .
ATOM 4576 CB    CB    . ALA ALA ALA B B 174 174 . 87.640  91.297  -8.120  1.00 13.12
1 . .
ATOM 4577 C     C     . ALA ALA ALA B B 174 174 . 86.803  89.769  -9.888  1.00 14.97
1 . .
ATOM 4578 O     O     . ALA ALA ALA B B 174 174 . 85.951  90.148  -10.717 1.00 15.91
1 . .
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ATOM 4579 N     N     . GLU GLU GLU B B 175 175 . 86.705  88.593  -9.250  1.00 16.50
1 . .
ATOM 4580 CA    CA    . GLU GLU GLU B B 175 175 . 85.661  87.633  -9.585  1.00 18.25
1 . .
ATOM 4581 CB    CB    . GLU GLU GLU B B 175 175 . 86.123  86.202  -9.220  1.00 20.46
1 . .
ATOM 4582 CG    CG    . GLU GLU GLU B B 175 175 . 87.588  85.949  -9.778  1.00 27.61
1 . .
ATOM 4583 CD    CD    . GLU GLU GLU B B 175 175 . 87.967  84.486  -9.955  1.00 38.48
1 . .
ATOM 4584 OE1   OE1   . GLU GLU GLU B B 175 175 . 87.486  83.639  -9.150  1.00 42.13
1 . .
ATOM 4585 OE2   OE2   . GLU GLU GLU B B 175 175 . 88.751  84.176  -10.907 1.00 43.19
1 . .
ATOM 4586 C     C     . GLU GLU GLU B B 175 175 . 84.319  87.907  -8.960  1.00 16.27
1 . .
ATOM 4587 O     O     . GLU GLU GLU B B 175 175 . 83.272  87.473  -9.479  1.00 17.39
1 . .
ATOM 4588 N     N     . SER SER SER B B 176 176 . 84.308  88.687  -7.858  1.00 14.06
1 . .
ATOM 4589 CA    CA    . SER SER SER B B 176 176 . 83.094  88.850  -7.082  1.00 11.93
1 . .
ATOM 4590 CB    CB    . SER SER SER B B 176 176 . 82.799  87.617  -6.186  1.00 13.11
1 . .
ATOM 4591 OG    OG    . SER SER SER B B 176 176 . 83.872  87.416  -5.264  1.00 13.08
1 . .
ATOM 4592 C     C     . SER SER SER B B 176 176 . 83.467  90.031  -6.118  1.00 10.96
1 . .
ATOM 4593 O     O     . SER SER SER B B 176 176 . 84.638  90.473  -6.029  1.00 11.12
1 . .
ATOM 4594 N     N     . PHE PHE PHE B B 177 177 . 82.465  90.429  -5.378  1.00 11.10
1 . .
ATOM 4595 CA    CA    . PHE PHE PHE B B 177 177 . 82.700  91.515  -4.355  1.00 10.52
1 . .
ATOM 4596 CB    CB    . PHE PHE PHE B B 177 177 . 81.395  92.067  -3.743  1.00 9.43
1 . .
ATOM 4597 CG    CG    . PHE PHE PHE B B 177 177 . 81.690  93.318  -2.961  1.00 9.19
1 . .
ATOM 4598 CD1   CD1   . PHE PHE PHE B B 177 177 . 81.753  94.539  -3.627  1.00 8.45
1 . .
ATOM 4599 CE1   CE1   . PHE PHE PHE B B 177 177 . 82.110  95.746  -2.966  1.00 10.46
1 . .
ATOM 4600 CZ    CZ    . PHE PHE PHE B B 177 177 . 82.522  95.670  -1.629  1.00 11.11
1 . .
ATOM 4601 CE2   CE2   . PHE PHE PHE B B 177 177 . 82.507  94.389  -0.940  1.00 10.88
1 . .
ATOM 4602 CD2   CD2   . PHE PHE PHE B B 177 177 . 82.101  93.235  -1.612  1.00 12.19
1 . .
ATOM 4603 C     C     . PHE PHE PHE B B 177 177 . 83.675  91.063  -3.258  1.00 10.14
1 . .
ATOM 4604 O     O     . PHE PHE PHE B B 177 177 . 84.638  91.776  -2.896  1.00 9.43
1 . .
ATOM 4605 N     N     . ARG ARG ARG B B 178 178 . 83.499  89.816  -2.772  1.00 11.22
1 . .
ATOM 4606 CA    CA    . ARG ARG ARG B B 178 178 . 84.383  89.383  -1.697  1.00 10.43
1 . .
ATOM 4607 CB    CB    . ARG ARG ARG B B 178 178 . 83.786  88.083  -1.101  1.00 12.22
1 . .
ATOM 4608 CG    CG    . ARG ARG ARG B B 178 178 . 84.743  87.276  -0.217  1.00 16.33
1 . .
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ATOM 4609 C     C     . ARG ARG ARG B B 178 178 . 85.803  89.254  -2.226  1.00 10.52
1 . .
ATOM 4610 O     O     . ARG ARG ARG B B 178 178 . 86.795  89.537  -1.536  1.00 10.24
1 . .
ATOM 4611 N     N     . ASP ASP ASP B B 179 179 . 85.935  88.819  -3.490  1.00 9.27
1 . .
ATOM 4612 CA    CA    . ASP ASP ASP B B 179 179 . 87.281  88.759  -4.126  1.00 11.87
1 . .
ATOM 4613 CB    CB    . ASP ASP ASP B B 179 179 . 87.190  88.046  -5.491  1.00 12.05
1 . .
ATOM 4614 CG    CG    . ASP ASP ASP B B 179 179 . 88.547  87.743  -6.073  1.00 18.80
1 . .
ATOM 4615 OD1   OD1   . ASP ASP ASP B B 179 179 . 88.827  88.075  -7.289  1.00 25.05
1 . .
ATOM 4616 OD2   OD2   . ASP ASP ASP B B 179 179 . 89.352  87.117  -5.329  1.00 22.34
1 . .
ATOM 4617 C     C     . ASP ASP ASP B B 179 179 . 87.936  90.177  -4.307  1.00 9.69
1 . .
ATOM 4618 O     O     . ASP ASP ASP B B 179 179 . 89.132  90.378  -4.022  1.00 9.26
1 . .
ATOM 4619 N     N     . ALA ALA ALA B B 180 180 . 87.109  91.160  -4.681  1.00 10.22
1 . .
ATOM 4620 CA    CA    . ALA ALA ALA B B 180 180 . 87.541  92.568  -4.798  1.00 10.58
1 . .
ATOM 4621 CB    CB    . ALA ALA ALA B B 180 180 . 86.321  93.437  -5.250  1.00 10.97
1 . .
ATOM 4622 C     C     . ALA ALA ALA B B 180 180 . 88.054  93.102  -3.456  1.00 9.70
1 . .
ATOM 4623 O     O     . ALA ALA ALA B B 180 180 . 89.061  93.833  -3.370  1.00 9.22
1 . .
ATOM 4624 N     N     . MET MET MET B B 181 181 . 87.416  92.636  -2.374  1.00 9.97
1 . .
ATOM 4625 CA    CA    . MET MET MET B B 181 181 . 87.915  93.017  -1.048  1.00 9.78
1 . .
ATOM 4626 CB    CB    . MET MET MET B B 181 181 . 86.977  92.582  0.060   1.00 8.74
1 . .
ATOM 4627 CG    CG    . MET MET MET B B 181 181 . 85.592  93.243  0.036   1.00 8.96
1 . .
ATOM 4628 SD    SD    . MET MET MET B B 181 181 . 85.810  95.084  0.163   1.00 11.18
1 . .
ATOM 4629 CE    CE    . MET MET MET B B 181 181 . 86.854  95.225  1.583   1.00 9.09
1 . .
ATOM 4630 C     C     . MET MET MET B B 181 181 . 89.269  92.443  -0.744  1.00 10.19
1 . .
ATOM 4631 O     O     . MET MET MET B B 181 181 . 90.141  93.127  -0.186  1.00 9.39
1 . .
ATOM 4632 N     N     . ARG ARG ARG B B 182 182 . 89.469  91.176  -1.150  1.00 8.18
1 . .
ATOM 4633 CA    CA    . ARG ARG ARG B B 182 182 . 90.819  90.606  -0.976  1.00 9.45
1 . .
ATOM 4634 CB    CB    . ARG ARG ARG B B 182 182 . 90.824  89.097  -1.260  1.00 9.91
1 . .
ATOM 4635 CG    CG    . ARG ARG ARG B B 182 182 . 92.243  88.496  -1.011  1.00 13.32
1 . .
ATOM 4636 CD    CD    . ARG ARG ARG B B 182 182 . 92.231  86.995  -1.214  1.00 18.21
1 . .
ATOM 4637 NE    NE    . ARG ARG ARG B B 182 182 . 91.874  86.720  -2.586  1.00 22.60
1 . .
ATOM 4638 CZ    CZ    . ARG ARG ARG B B 182 182 . 92.784  86.677  -3.552  1.00 29.48
1 . .
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ATOM 4639 NH1   NH1   . ARG ARG ARG B B 182 182 . 94.084  86.803  -3.260  1.00 30.38
1 . .
ATOM 4640 NH2   NH2   . ARG ARG ARG B B 182 182 . 92.402  86.471  -4.798  1.00 33.10
1 . .
ATOM 4641 C     C     . ARG ARG ARG B B 182 182 . 91.878  91.335  -1.791  1.00 10.85
1 . .
ATOM 4642 O     O     . ARG ARG ARG B B 182 182 . 92.979  91.621  -1.295  1.00 10.01
1 . .
ATOM 4643 N     N     . LEU LEU LEU B B 183 183 . 91.562  91.613  -3.046  1.00 12.23
1 . .
ATOM 4644 CA    CA    . LEU LEU LEU B B 183 183 . 92.521  92.341  -3.901  1.00 12.61
1 . .
ATOM 4645 CB    CB    . LEU LEU LEU B B 183 183 . 91.929  92.516  -5.317  1.00 11.98
1 . .
ATOM 4646 CG    CG    . LEU LEU LEU B B 183 183 . 91.721  91.261  -6.183  1.00 18.42
1 . .
ATOM 4647 CD1   CD1   . LEU LEU LEU B B 183 183 . 91.883  91.604  -7.702  1.00 16.48
1 . .
ATOM 4648 CD2   CD2   . LEU LEU LEU B B 183 183 . 92.192  89.897  -5.697  1.00 15.98
1 . .
ATOM 4649 C     C     . LEU LEU LEU B B 183 183 . 92.866  93.691  -3.319  1.00 11.95
1 . .
ATOM 4650 O     O     . LEU LEU LEU B B 183 183 . 94.019  94.057  -3.272  1.00 9.25
1 . .
ATOM 4651 N     N     . GLY GLY GLY B B 184 184 . 91.832  94.394  -2.811  1.00 11.57
1 . .
ATOM 4652 CA    CA    . GLY GLY GLY B B 184 184 . 92.075  95.755  -2.275  1.00 10.52
1 . .
ATOM 4653 C     C     . GLY GLY GLY B B 184 184 . 92.934  95.692  -0.990  1.00 9.04
1 . .
ATOM 4654 O     O     . GLY GLY GLY B B 184 184 . 93.871  96.457  -0.839  1.00 9.13
1 . .
ATOM 4655 N     N     . ALA ALA ALA B B 185 185 . 92.604  94.774  -0.091  1.00 8.58
1 . .
ATOM 4656 CA    CA    . ALA ALA ALA B B 185 185 . 93.374  94.618  1.128   1.00 7.43
1 . .
ATOM 4657 CB    CB    . ALA ALA ALA B B 185 185 . 92.659  93.608  2.116   1.00 8.15
1 . .
ATOM 4658 C     C     . ALA ALA ALA B B 185 185 . 94.844  94.214  0.870   1.00 8.44
1 . .
ATOM 4659 O     O     . ALA ALA ALA B B 185 185 . 95.767  94.785  1.457   1.00 9.65
1 . .
ATOM 4660 N     N     . GLU GLU GLU B B 186 186 . 95.037  93.234  -0.063  1.00 9.76
1 . .
ATOM 4661 CA    CA    . GLU GLU GLU B B 186 186 . 96.412  92.808  -0.409  1.00 9.48
1 . .
ATOM 4662 CB    CB    . GLU GLU GLU B B 186 186 . 96.400  91.615  -1.386  1.00 11.45
1 . .
ATOM 4663 CG    CG    . GLU GLU GLU B B 186 186 . 95.959  90.333  -0.575  1.00 11.40
1 . .
ATOM 4664 CD    CD    . GLU GLU GLU B B 186 186 . 96.049  89.058  -1.434  1.00 15.77
1 . .
ATOM 4665 OE1   OE1   . GLU GLU GLU B B 186 186 . 96.644  89.163  -2.550  1.00 15.49
1 . .
ATOM 4666 OE2   OE2   . GLU GLU GLU B B 186 186 . 95.532  87.984  -1.026  1.00 15.21
1 . .
ATOM 4667 C     C     . GLU GLU GLU B B 186 186 . 97.231  93.950  -0.985  1.00 9.98
1 . .
ATOM 4668 O     O     . GLU GLU GLU B B 186 186 . 98.376  94.155  -0.588  1.00 9.63
1 . .
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ATOM 4669 N     N     . VAL VAL VAL B B 187 187 . 96.649  94.722  -1.916  1.00 9.68
1 . .
ATOM 4670 CA    CA    . VAL VAL VAL B B 187 187 . 97.391  95.863  -2.467  1.00 10.29
1 . .
ATOM 4671 CB    CB    . VAL VAL VAL B B 187 187 . 96.660  96.461  -3.662  1.00 8.37
1 . .
ATOM 4672 CG1   CG1   . VAL VAL VAL B B 187 187 . 97.387  97.713  -4.106  1.00 10.27
1 . .
ATOM 4673 CG2   CG2   . VAL VAL VAL B B 187 187 . 96.541  95.409  -4.831  1.00 10.25
1 . .
ATOM 4674 C     C     . VAL VAL VAL B B 187 187 . 97.671  96.929  -1.385  1.00 9.26
1 . .
ATOM 4675 O     O     . VAL VAL VAL B B 187 187 . 98.786  97.482  -1.306  1.00 8.24
1 . .
ATOM 4676 N     N     . TYR TYR TYR B B 188 188 . 96.660  97.210  -0.542  1.00 10.15
1 . .
ATOM 4677 CA    CA    . TYR TYR TYR B B 188 188 . 96.846  98.143  0.574   1.00 8.68
1 . .
ATOM 4678 CB    CB    . TYR TYR TYR B B 188 188 . 95.516  98.229  1.372   1.00 9.51
1 . .
ATOM 4679 CG    CG    . TYR TYR TYR B B 188 188 . 95.577  99.180  2.537   1.00 7.69
1 . .
ATOM 4680 CD1   CD1   . TYR TYR TYR B B 188 188 . 95.495  100.575 2.357   1.00 9.07
1 . .
ATOM 4681 CE1   CE1   . TYR TYR TYR B B 188 188 . 95.622  101.460 3.473   1.00 6.68
1 . .
ATOM 4682 CZ    CZ    . TYR TYR TYR B B 188 188 . 95.690  100.923 4.728   1.00 11.53
1 . .
ATOM 4683 OH    OH    . TYR TYR TYR B B 188 188 . 95.754  101.743 5.853   1.00 11.39
1 . .
ATOM 4684 CE2   CE2   . TYR TYR TYR B B 188 188 . 95.734  99.543  4.916   1.00 9.85
1 . .
ATOM 4685 CD2   CD2   . TYR TYR TYR B B 188 188 . 95.654  98.681  3.824   1.00 9.59
1 . .
ATOM 4686 C     C     . TYR TYR TYR B B 188 188 . 98.072  97.761  1.485   1.00 8.99
1 . .
ATOM 4687 O     O     . TYR TYR TYR B B 188 188 . 98.938  98.571  1.798   1.00 9.12
1 . .
ATOM 4688 N     N     . HIS HIS HIS B B 189 189 . 98.092  96.508  1.938   1.00 9.57
1 . .
ATOM 4689 CA    CA    . HIS HIS HIS B B 189 189 . 99.133  96.056  2.830   1.00 9.33
1 . .
ATOM 4690 CB    CB    . HIS HIS HIS B B 189 189 . 98.823  94.646  3.388   1.00 10.57
1 . .
ATOM 4691 CG    CG    . HIS HIS HIS B B 189 189 . 97.529  94.558  4.188   1.00 11.84
1 . .
ATOM 4692 ND1   ND1   . HIS HIS HIS B B 189 189 . 97.141  95.491  5.149   1.00 19.37
1 . .
ATOM 4693 CE1   CE1   . HIS HIS HIS B B 189 189 . 95.958  95.149  5.650   1.00 11.66
1 . .
ATOM 4694 NE2   NE2   . HIS HIS HIS B B 189 189 . 95.567  94.036  5.050   1.00 17.67
1 . .
ATOM 4695 CD2   CD2   . HIS HIS HIS B B 189 189 . 96.537  93.646  4.139   1.00 12.42
1 . .
ATOM 4696 C     C     . HIS HIS HIS B B 189 189 . 100.480 96.053  2.063   1.00 10.12
1 . .
ATOM 4697 O     O     . HIS HIS HIS B B 189 189 . 101.521 96.368  2.621   1.00 11.77
1 . .
ATOM 4698 N     N     . THR THR THR B B 190 190 . 100.443 95.680  0.799   1.00 10.68
1 . .
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ATOM 4699 CA    CA    . THR THR THR B B 190 190 . 101.683 95.768  -0.005  1.00 11.57
1 . .
ATOM 4700 CB    CB    . THR THR THR B B 190 190 . 101.443 95.154  -1.442  1.00 10.60
1 . .
ATOM 4701 OG1   OG1   . THR THR THR B B 190 190 . 101.054 93.794  -1.313  1.00 13.22
1 . .
ATOM 4702 CG2   CG2   . THR THR THR B B 190 190 . 102.745 95.245  -2.275  1.00 13.70
1 . .
ATOM 4703 C     C     . THR THR THR B B 190 190 . 102.202 97.216  -0.120  1.00 11.30
1 . .
ATOM 4704 O     O     . THR THR THR B B 190 190 . 103.406 97.508  0.061   1.00 11.43
1 . .
ATOM 4705 N     N     . LEU LEU LEU B B 191 191 . 101.263 98.134  -0.316  1.00 9.97
1 . .
ATOM 4706 CA    CA    . LEU LEU LEU B B 191 191 . 101.618 99.563  -0.419  1.00 9.79
1 . .
ATOM 4707 CB    CB    . LEU LEU LEU B B 191 191 . 100.298 100.363 -0.704  1.00 8.78
1 . .
ATOM 4708 CG    CG    . LEU LEU LEU B B 191 191 . 100.496 101.893 -0.744  1.00 11.96
1 . .
ATOM 4709 CD1   CD1   . LEU LEU LEU B B 191 191 . 101.567 102.334 -1.747  1.00 14.62
1 . .
ATOM 4710 CD2   CD2   . LEU LEU LEU B B 191 191 . 99.122  102.469 -1.074  1.00 11.86
1 . .
ATOM 4711 C     C     . LEU LEU LEU B B 191 191 . 102.279 100.080 0.849   1.00 9.95
1 . .
ATOM 4712 O     O     . LEU LEU LEU B B 191 191 . 103.237 100.853 0.784   1.00 12.64
1 . .
ATOM 4713 N     N     . LYS LYS LYS B B 192 192 . 101.803 99.596  2.029   1.00 9.39
1 . .
ATOM 4714 CA    CA    . LYS LYS LYS B B 192 192 . 102.398 100.010 3.283   1.00 10.26
1 . .
ATOM 4715 CB    CB    . LYS LYS LYS B B 192 192 . 101.760 99.241  4.480   1.00 9.48
1 . .
ATOM 4716 CG    CG    . LYS LYS LYS B B 192 192 . 102.101 99.913  5.849   1.00 11.96
1 . .
ATOM 4717 CD    CD    . LYS LYS LYS B B 192 192 . 101.412 99.167  6.985   1.00 12.89
1 . .
ATOM 4718 CE    CE    . LYS LYS LYS B B 192 192 . 101.836 99.853  8.339   1.00 18.23
1 . .
ATOM 4719 NZ    NZ    . LYS LYS LYS B B 192 192 . 101.075 99.374  9.514   1.00 23.50
1 . .
ATOM 4720 C     C     . LYS LYS LYS B B 192 192 . 103.909 99.708  3.250   1.00 12.06
1 . .
ATOM 4721 O     O     . LYS LYS LYS B B 192 192 . 104.709 100.506 3.716   1.00 13.40
1 . .
ATOM 4722 N     N     . GLY GLY GLY B B 193 193 . 104.257 98.518  2.788   1.00 11.97
1 . .
ATOM 4723 CA    CA    . GLY GLY GLY B B 193 193 . 105.706 98.150  2.703   1.00 13.60
1 . .
ATOM 4724 C     C     . GLY GLY GLY B B 193 193 . 106.478 98.964  1.669   1.00 14.08
1 . .
ATOM 4725 O     O     . GLY GLY GLY B B 193 193 . 107.671 99.297  1.893   1.00 16.33
1 . .
ATOM 4726 N     N     . VAL VAL VAL B B 194 194 . 105.851 99.226  0.541   1.00 14.31
1 . .
ATOM 4727 CA    CA    . VAL VAL VAL B B 194 194 . 106.497 100.020 -0.573  1.00 14.31
1 . .
ATOM 4728 CB    CB    . VAL VAL VAL B B 194 194 . 105.566 100.163 -1.779  1.00 14.65
1 . .
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ATOM 4729 CG1   CG1   . VAL VAL VAL B B 194 194 . 106.099 101.270 -2.787  1.00 14.77
1 . .
ATOM 4730 CG2   CG2   . VAL VAL VAL B B 194 194 . 105.291 98.809  -2.415  1.00 16.77
1 . .
ATOM 4731 C     C     . VAL VAL VAL B B 194 194 . 106.816 101.385 0.020   1.00 15.14
1 . .
ATOM 4732 O     O     . VAL VAL VAL B B 194 194 . 107.921 101.944 -0.140  1.00 17.55
1 . .
ATOM 4733 N     N     . ILE ILE ILE B B 195 195 . 105.842 101.960 0.733   1.00 13.83
1 . .
ATOM 4734 CA    CA    . ILE ILE ILE B B 195 195 . 106.082 103.240 1.416   1.00 14.06
1 . .
ATOM 4735 CB    CB    . ILE ILE ILE B B 195 195 . 104.721 103.851 1.921   1.00 12.79
1 . .
ATOM 4736 CG1   CG1   . ILE ILE ILE B B 195 195 . 103.885 104.197 0.694   1.00 13.33
1 . .
ATOM 4737 CD1   CD1   . ILE ILE ILE B B 195 195 . 102.375 104.560 1.047   1.00 15.40
1 . .
ATOM 4738 CG2   CG2   . ILE ILE ILE B B 195 195 . 104.975 105.073 2.786   1.00 13.27
1 . .
ATOM 4739 C     C     . ILE ILE ILE B B 195 195 . 107.159 103.181 2.510   1.00 15.66
1 . .
ATOM 4740 O     O     . ILE ILE ILE B B 195 195 . 108.051 104.032 2.558   1.00 16.29
1 . .
ATOM 4741 N     N     . LYS LYS LYS B B 196 196 . 107.104 102.142 3.362   1.00 15.75
1 . .
ATOM 4742 CA    CA    . LYS LYS LYS B B 196 196 . 108.053 102.015 4.435   1.00 16.82
1 . .
ATOM 4743 CB    CB    . LYS LYS LYS B B 196 196 . 107.786 100.728 5.216   1.00 16.97
1 . .
ATOM 4744 CG    CG    . LYS LYS LYS B B 196 196 . 108.595 100.633 6.559   1.00 19.20
1 . .
ATOM 4745 CD    CD    . LYS LYS LYS B B 196 196 . 108.001 99.463  7.418   1.00 21.80
1 . .
ATOM 4746 C     C     . LYS LYS LYS B B 196 196 . 109.466 101.967 3.808   1.00 17.91
1 . .
ATOM 4747 O     O     . LYS LYS LYS B B 196 196 . 110.416 102.579 4.349   1.00 18.29
1 . .
ATOM 4748 N     N     . ASP ASP ASP B B 197 197 . 109.571 101.208 2.709   1.00 18.17
1 . .
ATOM 4749 CA    CA    . ASP ASP ASP B B 197 197 . 110.925 100.935 2.099   1.00 20.67
1 . .
ATOM 4750 CB    CB    . ASP ASP ASP B B 197 197 . 110.899 99.868  0.987   1.00 21.64
1 . .
ATOM 4751 CG    CG    . ASP ASP ASP B B 197 197 . 110.675 98.450  1.538   1.00 25.80
1 . .
ATOM 4752 OD1   OD1   . ASP ASP ASP B B 197 197 . 110.296 97.554  0.763   1.00 28.37
1 . .
ATOM 4753 OD2   OD2   . ASP ASP ASP B B 197 197 . 110.793 98.236  2.756   1.00 30.67
1 . .
ATOM 4754 C     C     . ASP ASP ASP B B 197 197 . 111.501 102.223 1.582   1.00 20.67
1 . .
ATOM 4755 O     O     . ASP ASP ASP B B 197 197 . 112.706 102.473 1.744   1.00 21.33
1 . .
ATOM 4756 N     N     . LYS LYS LYS B B 198 198 . 110.633 103.098 1.048   1.00 18.57
1 . .
ATOM 4757 CA    CA    . LYS LYS LYS B B 198 198 . 111.088 104.279 0.304   1.00 17.57
1 . .
ATOM 4758 CB    CB    . LYS LYS LYS B B 198 198 . 110.159 104.565 -0.887  1.00 18.30
1 . .
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ATOM 4759 CG    CG    . LYS LYS LYS B B 198 198 . 110.565 105.820 -1.723  1.00 19.72
1 . .
ATOM 4760 CD    CD    . LYS LYS LYS B B 198 198 . 109.891 105.846 -3.033  1.00 23.23
1 . .
ATOM 4761 CE    CE    . LYS LYS LYS B B 198 198 . 110.807 106.630 -3.933  1.00 28.46
1 . .
ATOM 4762 NZ    NZ    . LYS LYS LYS B B 198 198 . 110.124 107.555 -4.838  1.00 29.89
1 . .
ATOM 4763 C     C     . LYS LYS LYS B B 198 198 . 111.215 105.490 1.214   1.00 17.93
1 . .
ATOM 4764 O     O     . LYS LYS LYS B B 198 198 . 112.237 106.209 1.147   1.00 17.70
1 . .
ATOM 4765 N     N     . TYR TYR TYR B B 199 199 . 110.229 105.650 2.109   1.00 15.70
1 . .
ATOM 4766 CA    CA    . TYR TYR TYR B B 199 199 . 110.104 106.864 2.962   1.00 17.43
1 . .
ATOM 4767 CB    CB    . TYR TYR TYR B B 199 199 . 108.696 107.502 2.790   1.00 17.43
1 . .
ATOM 4768 CG    CG    . TYR TYR TYR B B 199 199 . 108.478 107.953 1.362   1.00 15.29
1 . .
ATOM 4769 CD1   CD1   . TYR TYR TYR B B 199 199 . 107.675 107.212 0.477   1.00 17.59
1 . .
ATOM 4770 CE1   CE1   . TYR TYR TYR B B 199 199 . 107.522 107.635 -0.890  1.00 15.22
1 . .
ATOM 4771 CZ    CZ    . TYR TYR TYR B B 199 199 . 108.196 108.793 -1.291  1.00 18.88
1 . .
ATOM 4772 OH    OH    . TYR TYR TYR B B 199 199 . 108.147 109.296 -2.598  1.00 24.92
1 . .
ATOM 4773 CE2   CE2   . TYR TYR TYR B B 199 199 . 109.036 109.502 -0.412  1.00 19.67
1 . .
ATOM 4774 CD2   CD2   . TYR TYR TYR B B 199 199 . 109.164 109.082 0.886   1.00 17.49
1 . .
ATOM 4775 C     C     . TYR TYR TYR B B 199 199 . 110.342 106.688 4.441   1.00 18.29
1 . .
ATOM 4776 O     O     . TYR TYR TYR B B 199 199 . 110.482 107.704 5.149   1.00 20.45
1 . .
ATOM 4777 N     N     . GLY GLY GLY B B 200 200 . 110.364 105.437 4.899   1.00 17.15
1 . .
ATOM 4778 CA    CA    . GLY GLY GLY B B 200 200 . 110.543 105.163 6.306   1.00 17.59
1 . .
ATOM 4779 C     C     . GLY GLY GLY B B 200 200 . 109.226 104.908 7.005   1.00 17.23
1 . .
ATOM 4780 O     O     . GLY GLY GLY B B 200 200 . 108.145 105.254 6.504   1.00 17.32
1 . .
ATOM 4781 N     N     . LYS LYS LYS B B 201 201 . 109.297 104.256 8.148   1.00 17.63
1 . .
ATOM 4782 CA    CA    . LYS LYS LYS B B 201 201 . 108.080 103.999 8.956   1.00 19.20
1 . .
ATOM 4783 CB    CB    . LYS LYS LYS B B 201 201 . 108.481 103.308 10.272  1.00 20.27
1 . .
ATOM 4784 CG    CG    . LYS LYS LYS B B 201 201 . 109.280 104.169 11.249  1.00 21.76
1 . .
ATOM 4785 CD    CD    . LYS LYS LYS B B 201 201 . 109.890 103.326 12.379  1.00 25.36
1 . .
ATOM 4786 CE    CE    . LYS LYS LYS B B 201 201 . 110.862 104.175 13.211  1.00 27.58
1 . .
ATOM 4787 NZ    NZ    . LYS LYS LYS B B 201 201 . 112.209 104.258 12.611  1.00 29.73
1 . .
ATOM 4788 C     C     . LYS LYS LYS B B 201 201 . 107.242 105.242 9.275   1.00 18.24
1 . .
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ATOM 4789 O     O     . LYS LYS LYS B B 201 201 . 106.005 105.149 9.420   1.00 17.54
1 . .
ATOM 4790 N     N     . ASP ASP ASP B B 202 202 . 107.858 106.400 9.405   1.00 19.64
1 . .
ATOM 4791 CA    CA    . ASP ASP ASP B B 202 202 . 107.034 107.630 9.695   1.00 19.14
1 . .
ATOM 4792 CB    CB    . ASP ASP ASP B B 202 202 . 107.900 108.900 9.846   1.00 20.46
1 . .
ATOM 4793 CG    CG    . ASP ASP ASP B B 202 202 . 108.759 108.907 11.105  1.00 23.75
1 . .
ATOM 4794 OD1   OD1   . ASP ASP ASP B B 202 202 . 108.715 107.917 11.877  1.00 27.52
1 . .
ATOM 4795 OD2   OD2   . ASP ASP ASP B B 202 202 . 109.529 109.901 11.293  1.00 29.94
1 . .
ATOM 4796 C     C     . ASP ASP ASP B B 202 202 . 105.969 107.956 8.648   1.00 18.31
1 . .
ATOM 4797 O     O     . ASP ASP ASP B B 202 202 . 105.029 108.699 8.921   1.00 19.13
1 . .
ATOM 4798 N     N     . ALA ALA ALA B B 203 203 . 106.090 107.389 7.458   1.00 16.03
1 . .
ATOM 4799 CA    CA    . ALA ALA ALA B B 203 203 . 105.239 107.688 6.372   1.00 14.48
1 . .
ATOM 4800 CB    CB    . ALA ALA ALA B B 203 203 . 106.066 107.730 5.044   1.00 15.49
1 . .
ATOM 4801 C     C     . ALA ALA ALA B B 203 203 . 104.060 106.714 6.272   1.00 12.86
1 . .
ATOM 4802 O     O     . ALA ALA ALA B B 203 203 . 103.322 106.787 5.326   1.00 14.98
1 . .
ATOM 4803 N     N     . THR THR THR B B 204 204 . 103.974 105.754 7.217   1.00 12.76
1 . .
ATOM 4804 CA    CA    . THR THR THR B B 204 204 . 103.022 104.660 7.123   1.00 12.81
1 . .
ATOM 4805 CB    CB    . THR THR THR B B 204 204 . 103.680 103.271 7.345   1.00 13.53
1 . .
ATOM 4806 OG1   OG1   . THR THR THR B B 204 204 . 104.119 103.156 8.713   1.00 15.94
1 . .
ATOM 4807 CG2   CG2   . THR THR THR B B 204 204 . 104.871 103.024 6.308   1.00 15.41
1 . .
ATOM 4808 C     C     . THR THR THR B B 204 204 . 101.814 104.775 8.050   1.00 11.55
1 . .
ATOM 4809 O     O     . THR THR THR B B 204 204 . 101.045 103.799 8.181   1.00 11.49
1 . .
ATOM 4810 N     N     . ASN ASN ASN B B 205 205 . 101.653 105.939 8.678   1.00 10.43
1 . .
ATOM 4811 CA    CA    . ASN ASN ASN B B 205 205 . 100.405 106.225 9.445   1.00 8.73
1 . .
ATOM 4812 CB    CB    . ASN ASN ASN B B 205 205 . 100.733 107.307 10.472  1.00 10.24
1 . .
ATOM 4813 CG    CG    . ASN ASN ASN B B 205 205 . 101.867 106.849 11.343  1.00 11.53
1 . .
ATOM 4814 OD1   OD1   . ASN ASN ASN B B 205 205 . 101.820 105.764 11.970  1.00 13.81
1 . .
ATOM 4815 ND2   ND2   . ASN ASN ASN B B 205 205 . 102.949 107.584 11.285  1.00 10.12
1 . .
ATOM 4816 C     C     . ASN ASN ASN B B 205 205 . 99.310  106.619 8.532   1.00 10.96
1 . .
ATOM 4817 O     O     . ASN ASN ASN B B 205 205 . 99.544  106.796 7.308   1.00 10.95
1 . .
ATOM 4818 N     N     . VAL VAL VAL B B 206 206 . 98.067  106.711 9.054   1.00 10.05
1 . .
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ATOM 4819 CA    CA    . VAL VAL VAL B B 206 206 . 96.970  106.902 8.098   1.00 10.01
1 . .
ATOM 4820 CB    CB    . VAL VAL VAL B B 206 206 . 95.936  105.702 8.152   1.00 9.46
1 . .
ATOM 4821 CG1   CG1   . VAL VAL VAL B B 206 206 . 96.702  104.326 7.915   1.00 11.19
1 . .
ATOM 4822 CG2   CG2   . VAL VAL VAL B B 206 206 . 95.212  105.657 9.542   1.00 9.69
1 . .
ATOM 4823 C     C     . VAL VAL VAL B B 206 206 . 96.212  108.181 8.300   1.00 9.39
1 . .
ATOM 4824 O     O     . VAL VAL VAL B B 206 206 . 96.234  108.824 9.389   1.00 10.17
1 . .
ATOM 4825 N     N     . GLY GLY GLY B B 207 207 . 95.593  108.587 7.202   1.00 8.87
1 . .
ATOM 4826 CA    CA    . GLY GLY GLY B B 207 207 . 94.726  109.772 7.230   1.00 8.24
1 . .
ATOM 4827 C     C     . GLY GLY GLY B B 207 207 . 93.263  109.440 7.519   1.00 9.02
1 . .
ATOM 4828 O     O     . GLY GLY GLY B B 207 207 . 92.922  108.329 7.969   1.00 9.48
1 . .
ATOM 4829 N     N     . ASP ASP ASP B B 208 208 . 92.414  110.447 7.295   1.00 10.73
1 . .
ATOM 4830 CA    CA    . ASP ASP ASP B B 208 208 . 90.984  110.341 7.763   1.00 9.30
1 . .
ATOM 4831 CB    CB    . ASP ASP ASP B B 208 208 . 90.224  111.632 7.451   1.00 9.55
1 . .
ATOM 4832 CG    CG    . ASP ASP ASP B B 208 208 . 90.661  112.786 8.314   1.00 12.25
1 . .
ATOM 4833 OD1   OD1   . ASP ASP ASP B B 208 208 . 91.260  112.579 9.417   1.00 14.58
1 . .
ATOM 4834 OD2   OD2   . ASP ASP ASP B B 208 208 . 90.286  113.928 7.892   1.00 14.53
1 . .
ATOM 4835 C     C     . ASP ASP ASP B B 208 208 . 90.204  109.146 7.177   1.00 9.22
1 . .
ATOM 4836 O     O     . ASP ASP ASP B B 208 208 . 89.355  108.594 7.868   1.00 9.27
1 . .
ATOM 4837 N     N     . GLU GLU GLU B B 209 209 . 90.517  108.745 5.943   1.00 9.51
1 . .
ATOM 4838 CA    CA    . GLU GLU GLU B B 209 209 . 89.807  107.655 5.266   1.00 9.32
1 . .
ATOM 4839 CB    CB    . GLU GLU GLU B B 209 209 . 89.501  108.063 3.837   1.00 10.21
1 . .
ATOM 4840 CG    CG    . GLU GLU GLU B B 209 209 . 88.438  109.286 3.807   1.00 11.72
1 . .
ATOM 4841 CD    CD    . GLU GLU GLU B B 209 209 . 87.974  109.601 2.417   1.00 20.42
1 . .
ATOM 4842 OE1   OE1   . GLU GLU GLU B B 209 209 . 88.502  108.980 1.476   1.00 18.52
1 . .
ATOM 4843 OE2   OE2   . GLU GLU GLU B B 209 209 . 87.013  110.412 2.262   1.00 22.21
1 . .
ATOM 4844 C     C     . GLU GLU GLU B B 209 209 . 90.592  106.352 5.268   1.00 8.60
1 . .
ATOM 4845 O     O     . GLU GLU GLU B B 209 209 . 90.209  105.410 4.598   1.00 9.95
1 . .
ATOM 4846 N     N     . GLY GLY GLY B B 210 210 . 91.710  106.336 5.967   1.00 8.67
1 . .
ATOM 4847 CA    CA    . GLY GLY GLY B B 210 210 . 92.481  105.070 6.207   1.00 9.37
1 . .
ATOM 4848 C     C     . GLY GLY GLY B B 210 210 . 93.602  104.895 5.189   1.00 11.44
1 . .
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ATOM 4849 O     O     . GLY GLY GLY B B 210 210 . 94.343  103.902 5.265   1.00 12.96
1 . .
ATOM 4850 N     N     . GLY GLY GLY B B 211 211 . 93.718  105.811 4.212   1.00 12.12
1 . .
ATOM 4851 CA    CA    . GLY GLY GLY B B 211 211 . 94.859  105.723 3.335   1.00 13.17
1 . .
ATOM 4852 C     C     . GLY GLY GLY B B 211 211 . 96.164  106.231 3.954   1.00 12.80
1 . .
ATOM 4853 O     O     . GLY GLY GLY B B 211 211 . 96.201  106.926 4.969   1.00 12.39
1 . .
ATOM 4854 N     N     . PHE PHE PHE B B 212 212 . 97.268  105.889 3.322   1.00 14.96
1 . .
ATOM 4855 CA    CA    . PHE PHE PHE B B 212 212 . 98.534  106.356 3.830   1.00 16.36
1 . .
ATOM 4856 CB    CB    . PHE PHE PHE B B 212 212 . 99.744  105.467 3.387   1.00 14.31
1 . .
ATOM 4857 CG    CG    . PHE PHE PHE B B 212 212 . 99.558  104.047 3.723   1.00 15.20
1 . .
ATOM 4858 CD1   CD1   . PHE PHE PHE B B 212 212 . 99.179  103.121 2.726   1.00 15.32
1 . .
ATOM 4859 CE1   CE1   . PHE PHE PHE B B 212 212 . 98.941  101.782 3.034   1.00 16.41
1 . .
ATOM 4860 CZ    CZ    . PHE PHE PHE B B 212 212 . 99.016  101.347 4.436   1.00 17.75
1 . .
ATOM 4861 CE2   CE2   . PHE PHE PHE B B 212 212 . 99.339  102.253 5.430   1.00 15.75
1 . .
ATOM 4862 CD2   CD2   . PHE PHE PHE B B 212 212 . 99.597  103.628 5.084   1.00 14.32
1 . .
ATOM 4863 C     C     . PHE PHE PHE B B 212 212 . 98.760  107.805 3.478   1.00 17.47
1 . .
ATOM 4864 O     O     . PHE PHE PHE B B 212 212 . 98.376  108.356 2.416   1.00 18.67
1 . .
ATOM 4865 N     N     . ALA ALA ALA B B 213 213 . 99.425  108.455 4.398   1.00 19.10
1 . .
ATOM 4866 CA    CA    . ALA ALA ALA B B 213 213 . 99.826  109.798 4.162   1.00 21.03
1 . .
ATOM 4867 CB    CB    . ALA ALA ALA B B 213 213 . 99.177  110.727 5.302   1.00 21.53
1 . .
ATOM 4868 C     C     . ALA ALA ALA B B 213 213 . 101.339 109.960 4.163   1.00 22.67
1 . .
ATOM 4869 O     O     . ALA ALA ALA B B 213 213 . 101.886 110.408 5.199   1.00 22.83
1 . .
ATOM 4870 N     N     . PRO PRO PRO B B 214 214 . 102.021 109.635 3.029   1.00 22.08
1 . .
ATOM 4871 CA    CA    . PRO PRO PRO B B 214 214 . 103.462 109.854 2.902   1.00 22.79
1 . .
ATOM 4872 CB    CB    . PRO PRO PRO B B 214 214 . 103.844 108.983 1.676   1.00 22.68
1 . .
ATOM 4873 CG    CG    . PRO PRO PRO B B 214 214 . 102.604 108.977 0.859   1.00 20.41
1 . .
ATOM 4874 CD    CD    . PRO PRO PRO B B 214 214 . 101.461 108.963 1.812   1.00 21.33
1 . .
ATOM 4875 C     C     . PRO PRO PRO B B 214 214 . 103.764 111.307 2.667   1.00 23.16
1 . .
ATOM 4876 O     O     . PRO PRO PRO B B 214 214 . 102.893 112.098 2.189   1.00 22.32
1 . .
ATOM 4877 N     N     . ASN ASN ASN B B 215 215 . 104.975 111.664 3.067   1.00 24.23
1 . .
ATOM 4878 CA    CA    . ASN ASN ASN B B 215 215 . 105.514 112.995 2.968   1.00 25.71
1 . .
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ATOM 4879 CB    CB    . ASN ASN ASN B B 215 215 . 106.717 113.201 3.976   1.00 26.34
1 . .
ATOM 4880 CG    CG    . ASN ASN ASN B B 215 215 . 107.742 111.936 4.057   1.00 27.95
1 . .
ATOM 4881 OD1   OD1   . ASN ASN ASN B B 215 215 . 108.989 112.130 4.051   1.00 35.32
1 . .
ATOM 4882 ND2   ND2   . ASN ASN ASN B B 215 215 . 107.223 110.698 4.142   1.00 19.18
1 . .
ATOM 4883 C     C     . ASN ASN ASN B B 215 215 . 105.931 113.287 1.542   1.00 24.96
1 . .
ATOM 4884 O     O     . ASN ASN ASN B B 215 215 . 107.127 113.431 1.221   1.00 26.94
1 . .
ATOM 4885 N     N     . ILE ILE ILE B B 216 216 . 104.954 113.370 0.647   1.00 24.77
1 . .
ATOM 4886 CA    CA    . ILE ILE ILE B B 216 216 . 105.225 113.722 -0.753  1.00 22.11
1 . .
ATOM 4887 CB    CB    . ILE ILE ILE B B 216 216 . 104.977 112.501 -1.709  1.00 22.43
1 . .
ATOM 4888 CG1   CG1   . ILE ILE ILE B B 216 216 . 103.531 112.004 -1.586  1.00 21.06
1 . .
ATOM 4889 CD1   CD1   . ILE ILE ILE B B 216 216 . 103.097 110.813 -2.554  1.00 17.34
1 . .
ATOM 4890 CG2   CG2   . ILE ILE ILE B B 216 216 . 105.891 111.336 -1.320  1.00 19.34
1 . .
ATOM 4891 C     C     . ILE ILE ILE B B 216 216 . 104.403 114.962 -1.256  1.00 23.54
1 . .
ATOM 4892 O     O     . ILE ILE ILE B B 216 216 . 103.337 115.279 -0.711  1.00 23.80
1 . .
ATOM 4893 N     N     . LEU LEU LEU B B 217 217 . 104.928 115.603 -2.266  1.00 23.82
1 . .
ATOM 4894 CA    CA    . LEU LEU LEU B B 217 217 . 104.301 116.722 -2.954  1.00 25.05
1 . .
ATOM 4895 CB    CB    . LEU LEU LEU B B 217 217 . 105.299 117.837 -3.215  1.00 26.48
1 . .
ATOM 4896 CG    CG    . LEU LEU LEU B B 217 217 . 104.919 119.021 -4.117  1.00 27.14
1 . .
ATOM 4897 CD1   CD1   . LEU LEU LEU B B 217 217 . 103.714 119.843 -3.503  1.00 26.07
1 . .
ATOM 4898 CD2   CD2   . LEU LEU LEU B B 217 217 . 106.155 119.931 -4.449  1.00 29.37
1 . .
ATOM 4899 C     C     . LEU LEU LEU B B 217 217 . 103.696 116.282 -4.294  1.00 25.87
1 . .
ATOM 4900 O     O     . LEU LEU LEU B B 217 217 . 102.492 116.495 -4.492  1.00 25.34
1 . .
ATOM 4901 N     N     . GLU GLU GLU B B 218 218 . 104.539 115.717 -5.191  1.00 24.29
1 . .
ATOM 4902 CA    CA    . GLU GLU GLU B B 218 218 . 104.160 115.417 -6.626  1.00 24.07
1 . .
ATOM 4903 CB    CB    . GLU GLU GLU B B 218 218 . 105.336 114.929 -7.463  1.00 24.18
1 . .
ATOM 4904 CG    CG    . GLU GLU GLU B B 218 218 . 106.637 115.634 -7.230  1.00 29.90
1 . .
ATOM 4905 CD    CD    . GLU GLU GLU B B 218 218 . 107.003 116.557 -8.353  1.00 37.53
1 . .
ATOM 4906 OE1   OE1   . GLU GLU GLU B B 218 218 . 106.099 116.874 -9.172  1.00 40.04
1 . .
ATOM 4907 OE2   OE2   . GLU GLU GLU B B 218 218 . 108.209 116.955 -8.434  1.00 41.18
1 . .
ATOM 4908 C     C     . GLU GLU GLU B B 218 218 . 103.022 114.373 -6.754  1.00 21.53
1 . .
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ATOM 4909 O     O     . GLU GLU GLU B B 218 218 . 103.077 113.236 -6.198  1.00 20.80
1 . .
ATOM 4910 N     N     . ASN ASN ASN B B 219 219 . 101.956 114.745 -7.495  1.00 19.79
1 . .
ATOM 4911 CA    CA    . ASN ASN ASN B B 219 219 . 100.832 113.841 -7.585  1.00 17.00
1 . .
ATOM 4912 CB    CB    . ASN ASN ASN B B 219 219 . 99.571  114.583 -8.108  1.00 16.74
1 . .
ATOM 4913 CG    CG    . ASN ASN ASN B B 219 219 . 99.177  115.688 -7.190  1.00 12.02
1 . .
ATOM 4914 OD1   OD1   . ASN ASN ASN B B 219 219 . 98.661  115.415 -6.133  1.00 12.52
1 . .
ATOM 4915 ND2   ND2   . ASN ASN ASN B B 219 219 . 99.525  116.949 -7.539  1.00 14.22
1 . .
ATOM 4916 C     C     . ASN ASN ASN B B 219 219 . 101.212 112.647 -8.458  1.00 17.00
1 . .
ATOM 4917 O     O     . ASN ASN ASN B B 219 219 . 100.702 111.556 -8.241  1.00 15.82
1 . .
ATOM 4918 N     N     . SER SER SER B B 220 220 . 102.176 112.821 -9.372  1.00 17.23
1 . .
ATOM 4919 CA    CA    . SER SER SER B B 220 220 . 102.644 111.668 -10.166 1.00 17.65
1 . .
ATOM 4920 CB    CB    . SER SER SER B B 220 220 . 103.599 112.113 -11.244 1.00 17.86
1 . .
ATOM 4921 OG    OG    . SER SER SER B B 220 220 . 104.675 112.815 -10.607 1.00 20.61
1 . .
ATOM 4922 C     C     . SER SER SER B B 220 220 . 103.371 110.635 -9.250  1.00 17.65
1 . .
ATOM 4923 O     O     . SER SER SER B B 220 220 . 103.359 109.466 -9.566  1.00 16.61
1 . .
ATOM 4924 N     N     . GLU GLU GLU B B 221 221 . 104.041 111.093 -8.168  1.00 17.51
1 . .
ATOM 4925 CA    CA    . GLU GLU GLU B B 221 221 . 104.657 110.144 -7.242  1.00 18.26
1 . .
ATOM 4926 CB    CB    . GLU GLU GLU B B 221 221 . 105.692 110.834 -6.335  1.00 18.80
1 . .
ATOM 4927 CG    CG    . GLU GLU GLU B B 221 221 . 106.324 109.994 -5.155  1.00 23.94
1 . .
ATOM 4928 CD    CD    . GLU GLU GLU B B 221 221 . 107.072 108.707 -5.549  1.00 29.68
1 . .
ATOM 4929 OE1   OE1   . GLU GLU GLU B B 221 221 . 107.142 108.323 -6.751  1.00 30.78
1 . .
ATOM 4930 OE2   OE2   . GLU GLU GLU B B 221 221 . 107.572 108.029 -4.596  1.00 30.03
1 . .
ATOM 4931 C     C     . GLU GLU GLU B B 221 221 . 103.644 109.300 -6.487  1.00 16.53
1 . .
ATOM 4932 O     O     . GLU GLU GLU B B 221 221 . 103.907 108.147 -6.221  1.00 15.55
1 . .
ATOM 4933 N     N     . ALA ALA ALA B B 222 222 . 102.475 109.865 -6.102  1.00 15.27
1 . .
ATOM 4934 CA    CA    . ALA ALA ALA B B 222 222 . 101.429 109.070 -5.517  1.00 13.68
1 . .
ATOM 4935 CB    CB    . ALA ALA ALA B B 222 222 . 100.238 109.920 -5.149  1.00 14.27
1 . .
ATOM 4936 C     C     . ALA ALA ALA B B 222 222 . 100.986 108.005 -6.512  1.00 13.60
1 . .
ATOM 4937 O     O     . ALA ALA ALA B B 222 222 . 100.787 106.865 -6.125  1.00 13.67
1 . .
ATOM 4938 N     N     . LEU LEU LEU B B 223 223 . 100.814 108.376 -7.788  1.00 11.82
1 . .
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ATOM 4939 CA    CA    . LEU LEU LEU B B 223 223 . 100.362 107.442 -8.795  1.00 11.43
1 . .
ATOM 4940 CB    CB    . LEU LEU LEU B B 223 223 . 100.110 108.198 -10.163 1.00 11.91
1 . .
ATOM 4941 CG    CG    . LEU LEU LEU B B 223 223 . 98.763  108.959 -10.116 1.00 13.22
1 . .
ATOM 4942 CD1   CD1   . LEU LEU LEU B B 223 223 . 98.701  109.939 -11.291 1.00 15.59
1 . .
ATOM 4943 CD2   CD2   . LEU LEU LEU B B 223 223 . 97.548  108.049 -10.170 1.00 14.44
1 . .
ATOM 4944 C     C     . LEU LEU LEU B B 223 223 . 101.445 106.345 -8.957  1.00 11.62
1 . .
ATOM 4945 O     O     . LEU LEU LEU B B 223 223 . 101.084 105.158 -9.148  1.00 13.19
1 . .
ATOM 4946 N     N     . GLU GLU GLU B B 224 224 . 102.729 106.727 -8.941  1.00 13.14
1 . .
ATOM 4947 CA    CA    . GLU GLU GLU B B 224 224 . 103.822 105.753 -9.100  1.00 14.44
1 . .
ATOM 4948 CB    CB    . GLU GLU GLU B B 224 224 . 105.184 106.442 -9.088  1.00 15.27
1 . .
ATOM 4949 CG    CG    . GLU GLU GLU B B 224 224 . 106.277 105.564 -9.681  1.00 24.41
1 . .
ATOM 4950 CD    CD    . GLU GLU GLU B B 224 224 . 106.149 105.527 -11.204 1.00 30.26
1 . .
ATOM 4951 OE1   OE1   . GLU GLU GLU B B 224 224 . 106.017 104.435 -11.726 1.00 37.10
1 . .
ATOM 4952 OE2   OE2   . GLU GLU GLU B B 224 224 . 106.088 106.601 -11.879 1.00 36.36
1 . .
ATOM 4953 C     C     . GLU GLU GLU B B 224 224 . 103.802 104.741 -7.970  1.00 14.63
1 . .
ATOM 4954 O     O     . GLU GLU GLU B B 224 224 . 104.057 103.531 -8.200  1.00 15.76
1 . .
ATOM 4955 N     N     . LEU LEU LEU B B 225 225 . 103.538 105.231 -6.758  1.00 12.61
1 . .
ATOM 4956 CA    CA    . LEU LEU LEU B B 225 225 . 103.537 104.301 -5.604  1.00 11.83
1 . .
ATOM 4957 CB    CB    . LEU LEU LEU B B 225 225 . 103.385 105.094 -4.276  1.00 13.34
1 . .
ATOM 4958 CG    CG    . LEU LEU LEU B B 225 225 . 104.605 105.851 -3.817  1.00 15.53
1 . .
ATOM 4959 CD1   CD1   . LEU LEU LEU B B 225 225 . 104.212 106.868 -2.720  1.00 16.33
1 . .
ATOM 4960 CD2   CD2   . LEU LEU LEU B B 225 225 . 105.730 104.908 -3.341  1.00 21.06
1 . .
ATOM 4961 C     C     . LEU LEU LEU B B 225 225 . 102.412 103.354 -5.717  1.00 11.66
1 . .
ATOM 4962 O     O     . LEU LEU LEU B B 225 225 . 102.526 102.174 -5.384  1.00 13.04
1 . .
ATOM 4963 N     N     . VAL VAL VAL B B 226 226 . 101.221 103.854 -6.099  1.00 11.18
1 . .
ATOM 4964 CA    CA    . VAL VAL VAL B B 226 226 . 100.092 102.971 -6.196  1.00 11.11
1 . .
ATOM 4965 CB    CB    . VAL VAL VAL B B 226 226 . 98.733  103.786 -6.456  1.00 10.52
1 . .
ATOM 4966 CG1   CG1   . VAL VAL VAL B B 226 226 . 97.511  102.859 -6.636  1.00 11.54
1 . .
ATOM 4967 CG2   CG2   . VAL VAL VAL B B 226 226 . 98.426  104.674 -5.233  1.00 9.86
1 . .
ATOM 4968 C     C     . VAL VAL VAL B B 226 226 . 100.294 101.911 -7.291  1.00 12.60
1 . .
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ATOM 4969 O     O     . VAL VAL VAL B B 226 226 . 99.998  100.730 -7.109  1.00 13.42
1 . .
ATOM 4970 N     N     . LYS LYS LYS B B 227 227 . 100.788 102.358 -8.458  1.00 13.24
1 . .
ATOM 4971 CA    CA    . LYS LYS LYS B B 227 227 . 101.079 101.419 -9.536  1.00 15.50
1 . .
ATOM 4972 CB    CB    . LYS LYS LYS B B 227 227 . 101.650 102.172 -10.756 1.00 16.94
1 . .
ATOM 4973 CG    CG    . LYS LYS LYS B B 227 227 . 101.906 101.296 -12.037 1.00 22.74
1 . .
ATOM 4974 CD    CD    . LYS LYS LYS B B 227 227 . 102.559 102.295 -13.085 1.00 30.56
1 . .
ATOM 4975 CE    CE    . LYS LYS LYS B B 227 227 . 102.779 101.738 -14.468 1.00 37.85
1 . .
ATOM 4976 NZ    NZ    . LYS LYS LYS B B 227 227 . 104.080 100.977 -14.474 1.00 42.91
1 . .
ATOM 4977 C     C     . LYS LYS LYS B B 227 227 . 102.125 100.409 -9.075  1.00 14.87
1 . .
ATOM 4978 O     O     . LYS LYS LYS B B 227 227 . 102.010 99.230  -9.375  1.00 18.08
1 . .
ATOM 4979 N     N     . GLU GLU GLU B B 228 228 . 103.146 100.854 -8.373  1.00 15.79
1 . .
ATOM 4980 CA    CA    . GLU GLU GLU B B 228 228 . 104.142 99.881  -7.848  1.00 16.54
1 . .
ATOM 4981 CB    CB    . GLU GLU GLU B B 228 228 . 105.309 100.556 -7.246  1.00 15.03
1 . .
ATOM 4982 CG    CG    . GLU GLU GLU B B 228 228 . 106.221 99.469  -6.676  1.00 21.18
1 . .
ATOM 4983 CD    CD    . GLU GLU GLU B B 228 228 . 107.557 99.916  -6.123  1.00 35.06
1 . .
ATOM 4984 OE1   OE1   . GLU GLU GLU B B 228 228 . 108.337 98.944  -5.783  1.00 41.05
1 . .
ATOM 4985 OE2   OE2   . GLU GLU GLU B B 228 228 . 107.837 101.169 -6.046  1.00 39.18
1 . .
ATOM 4986 C     C     . GLU GLU GLU B B 228 228 . 103.582 98.828  -6.851  1.00 16.26
1 . .
ATOM 4987 O     O     . GLU GLU GLU B B 228 228 . 103.935 97.628  -6.922  1.00 16.70
1 . .
ATOM 4988 N     N     . ALA ALA ALA B B 229 229 . 102.659 99.266  -5.985  1.00 15.15
1 . .
ATOM 4989 CA    CA    . ALA ALA ALA B B 229 229 . 102.002 98.346  -5.079  1.00 14.57
1 . .
ATOM 4990 CB    CB    . ALA ALA ALA B B 229 229 . 101.226 99.146  -4.058  1.00 12.94
1 . .
ATOM 4991 C     C     . ALA ALA ALA B B 229 229 . 101.080 97.327  -5.813  1.00 14.63
1 . .
ATOM 4992 O     O     . ALA ALA ALA B B 229 229 . 101.048 96.162  -5.459  1.00 15.15
1 . .
ATOM 4993 N     N     . ILE ILE ILE B B 230 230 . 100.310 97.765  -6.841  1.00 13.28
1 . .
ATOM 4994 CA    CA    . ILE ILE ILE B B 230 230 . 99.475  96.902  -7.626  1.00 13.39
1 . .
ATOM 4995 CB    CB    . ILE ILE ILE B B 230 230 . 98.768  97.680  -8.712  1.00 12.95
1 . .
ATOM 4996 CG1   CG1   . ILE ILE ILE B B 230 230 . 97.647  98.569  -8.100  1.00 10.83
1 . .
ATOM 4997 CD1   CD1   . ILE ILE ILE B B 230 230 . 97.072  99.570  -9.151  1.00 11.11
1 . .
ATOM 4998 CG2   CG2   . ILE ILE ILE B B 230 230 . 98.083  96.714  -9.705  1.00 13.92
1 . .
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ATOM 4999 C     C     . ILE ILE ILE B B 230 230 . 100.393 95.860  -8.308  1.00 15.04
1 . .
ATOM 5000 O     O     . ILE ILE ILE B B 230 230 . 100.052 94.661  -8.342  1.00 15.60
1 . .
ATOM 5001 N     N     . ASP ASP ASP B B 231 231 . 101.568 96.308  -8.778  1.00 16.49
1 . .
ATOM 5002 CA    CA    . ASP ASP ASP B B 231 231 . 102.437 95.370  -9.526  1.00 18.59
1 . .
ATOM 5003 CB    CB    . ASP ASP ASP B B 231 231 . 103.550 96.056  -10.322 1.00 18.79
1 . .
ATOM 5004 CG    CG    . ASP ASP ASP B B 231 231 . 104.416 95.025  -11.085 1.00 30.00
1 . .
ATOM 5005 OD1   OD1   . ASP ASP ASP B B 231 231 . 105.662 94.969  -10.844 1.00 38.70
1 . .
ATOM 5006 OD2   OD2   . ASP ASP ASP B B 231 231 . 103.815 94.272  -11.916 1.00 36.24
1 . .
ATOM 5007 C     C     . ASP ASP ASP B B 231 231 . 102.991 94.333  -8.538  1.00 18.69
1 . .
ATOM 5008 O     O     . ASP ASP ASP B B 231 231 . 102.938 93.092  -8.831  1.00 18.68
1 . .
ATOM 5009 N     N     . LYS LYS LYS B B 232 232 . 103.564 94.829  -7.436  1.00 18.07
1 . .
ATOM 5010 CA    CA    . LYS LYS LYS B B 232 232 . 104.164 93.974  -6.410  1.00 20.23
1 . .
ATOM 5011 CB    CB    . LYS LYS LYS B B 232 232 . 104.911 94.805  -5.371  1.00 21.30
1 . .
ATOM 5012 CG    CG    . LYS LYS LYS B B 232 232 . 105.727 94.025  -4.368  1.00 29.03
1 . .
ATOM 5013 CD    CD    . LYS LYS LYS B B 232 232 . 106.299 94.912  -3.262  1.00 34.74
1 . .
ATOM 5014 CE    CE    . LYS LYS LYS B B 232 232 . 106.848 94.041  -2.078  1.00 38.01
1 . .
ATOM 5015 NZ    NZ    . LYS LYS LYS B B 232 232 . 108.255 93.568  -2.281  1.00 44.23
1 . .
ATOM 5016 C     C     . LYS LYS LYS B B 232 232 . 103.145 92.979  -5.811  1.00 19.02
1 . .
ATOM 5017 O     O     . LYS LYS LYS B B 232 232 . 103.476 91.822  -5.534  1.00 19.26
1 . .
ATOM 5018 N     N     . ALA ALA ALA B B 233 233 . 101.886 93.376  -5.709  1.00 17.27
1 . .
ATOM 5019 CA    CA    . ALA ALA ALA B B 233 233 . 100.832 92.457  -5.332  1.00 16.93
1 . .
ATOM 5020 CB    CB    . ALA ALA ALA B B 233 233 . 99.549  93.293  -4.819  1.00 16.09
1 . .
ATOM 5021 C     C     . ALA ALA ALA B B 233 233 . 100.420 91.440  -6.359  1.00 16.92
1 . .
ATOM 5022 O     O     . ALA ALA ALA B B 233 233 . 99.709  90.482  -6.037  1.00 16.68
1 . .
ATOM 5023 N     N     . GLY GLY GLY B B 234 234 . 100.832 91.659  -7.607  1.00 16.56
1 . .
ATOM 5024 CA    CA    . GLY GLY GLY B B 234 234 . 100.545 90.735  -8.674  1.00 17.22
1 . .
ATOM 5025 C     C     . GLY GLY GLY B B 234 234 . 99.242  90.934  -9.390  1.00 17.65
1 . .
ATOM 5026 O     O     . GLY GLY GLY B B 234 234 . 98.731  90.017  -10.058 1.00 18.21
1 . .
ATOM 5027 N     N     . TYR TYR TYR B B 235 235 . 98.706  92.169  -9.320  1.00 16.25
1 . .
ATOM 5028 CA    CA    . TYR TYR TYR B B 235 235 . 97.388  92.430  -9.836  1.00 14.89
1 . .
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ATOM 5029 CB    CB    . TYR TYR TYR B B 235 235 . 96.434  92.849  -8.694  1.00 14.33
1 . .
ATOM 5030 CG    CG    . TYR TYR TYR B B 235 235 . 96.232  91.714  -7.673  1.00 15.66
1 . .
ATOM 5031 CD1   CD1   . TYR TYR TYR B B 235 235 . 96.517  91.893  -6.286  1.00 16.50
1 . .
ATOM 5032 CE1   CE1   . TYR TYR TYR B B 235 235 . 96.319  90.848  -5.407  1.00 15.17
1 . .
ATOM 5033 CZ    CZ    . TYR TYR TYR B B 235 235 . 95.806  89.639  -5.845  1.00 15.62
1 . .
ATOM 5034 OH    OH    . TYR TYR TYR B B 235 235 . 95.559  88.559  -4.986  1.00 19.84
1 . .
ATOM 5035 CE2   CE2   . TYR TYR TYR B B 235 235 . 95.502  89.436  -7.183  1.00 16.58
1 . .
ATOM 5036 CD2   CD2   . TYR TYR TYR B B 235 235 . 95.688  90.502  -8.090  1.00 16.09
1 . .
ATOM 5037 C     C     . TYR TYR TYR B B 235 235 . 97.332  93.463  -10.958 1.00 15.57
1 . .
ATOM 5038 O     O     . TYR TYR TYR B B 235 235 . 96.261  94.031  -11.207 1.00 14.83
1 . .
ATOM 5039 N     N     . THR THR THR B B 236 236 . 98.450  93.622  -11.677 1.00 15.21
1 . .
ATOM 5040 CA    CA    . THR THR THR B B 236 236 . 98.471  94.585  -12.772 1.00 17.97
1 . .
ATOM 5041 CB    CB    . THR THR THR B B 236 236 . 99.759  94.498  -13.517 1.00 18.90
1 . .
ATOM 5042 OG1   OG1   . THR THR THR B B 236 236 . 100.815 94.702  -12.581 1.00 22.65
1 . .
ATOM 5043 CG2   CG2   . THR THR THR B B 236 236 . 99.797  95.591  -14.587 1.00 18.68
1 . .
ATOM 5044 C     C     . THR THR THR B B 236 236 . 97.296  94.458  -13.720 1.00 17.92
1 . .
ATOM 5045 O     O     . THR THR THR B B 236 236 . 96.711  95.471  -14.138 1.00 19.82
1 . .
ATOM 5046 N     N     . GLU GLU GLU B B 237 237 . 96.911  93.247  -14.086 1.00 18.63
1 . .
ATOM 5047 CA    CA    . GLU GLU GLU B B 237 237 . 95.825  93.091  -15.025 1.00 21.87
1 . .
ATOM 5048 CB    CB    . GLU GLU GLU B B 237 237 . 95.908  91.735  -15.838 1.00 23.35
1 . .
ATOM 5049 CG    CG    . GLU GLU GLU B B 237 237 . 97.334  91.257  -16.120 1.00 26.45
1 . .
ATOM 5050 C     C     . GLU GLU GLU B B 237 237 . 94.424  93.240  -14.429 1.00 21.04
1 . .
ATOM 5051 O     O     . GLU GLU GLU B B 237 237 . 93.439  93.204  -15.207 1.00 22.46
1 . .
ATOM 5052 N     N     . LYS LYS LYS B B 238 238 . 94.279  93.387  -13.091 1.00 18.23
1 . .
ATOM 5053 CA    CA    . LYS LYS LYS B B 238 238 . 92.924  93.361  -12.552 1.00 15.41
1 . .
ATOM 5054 CB    CB    . LYS LYS LYS B B 238 238 . 92.796  92.214  -11.544 1.00 15.75
1 . .
ATOM 5055 CG    CG    . LYS LYS LYS B B 238 238 . 92.633  90.877  -12.295 1.00 18.90
1 . .
ATOM 5056 CD    CD    . LYS LYS LYS B B 238 238 . 92.648  89.706  -11.308 1.00 22.64
1 . .
ATOM 5057 CE    CE    . LYS LYS LYS B B 238 238 . 92.802  88.375  -12.120 1.00 26.67
1 . .
ATOM 5058 NZ    NZ    . LYS LYS LYS B B 238 238 . 92.158  87.230  -11.421 1.00 28.81
1 . .
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ATOM 5059 C     C     . LYS LYS LYS B B 238 238 . 92.521  94.619  -11.784 1.00 13.37
1 . .
ATOM 5060 O     O     . LYS LYS LYS B B 238 238 . 91.333  94.747  -11.389 1.00 12.97
1 . .
ATOM 5061 N     N     . ILE ILE ILE B B 239 239 . 93.466  95.510  -11.576 1.00 12.15
1 . .
ATOM 5062 CA    CA    . ILE ILE ILE B B 239 239 . 93.145  96.720  -10.725 1.00 12.39
1 . .
ATOM 5063 CB    CB    . ILE ILE ILE B B 239 239 . 93.936  96.615  -9.449  1.00 13.05
1 . .
ATOM 5064 CG1   CG1   . ILE ILE ILE B B 239 239 . 93.477  95.318  -8.705  1.00 13.43
1 . .
ATOM 5065 CD1   CD1   . ILE ILE ILE B B 239 239 . 94.037  95.214  -7.290  1.00 16.76
1 . .
ATOM 5066 CG2   CG2   . ILE ILE ILE B B 239 239 . 93.687  97.911  -8.519  1.00 12.26
1 . .
ATOM 5067 C     C     . ILE ILE ILE B B 239 239 . 93.563  97.979  -11.467 1.00 13.33
1 . .
ATOM 5068 O     O     . ILE ILE ILE B B 239 239 . 94.692  98.088  -11.923 1.00 14.52
1 . .
ATOM 5069 N     N     . VAL VAL VAL B B 240 240 . 92.643  98.925  -11.549 1.00 10.80
1 . .
ATOM 5070 CA    CA    . VAL VAL VAL B B 240 240 . 92.922  100.251 -12.134 1.00 10.91
1 . .
ATOM 5071 CB    CB    . VAL VAL VAL B B 240 240 . 91.963  100.495 -13.291 1.00 10.71
1 . .
ATOM 5072 CG1   CG1   . VAL VAL VAL B B 240 240 . 92.243  99.446  -14.401 1.00 13.00
1 . .
ATOM 5073 CG2   CG2   . VAL VAL VAL B B 240 240 . 90.517  100.502 -12.882 1.00 9.57
1 . .
ATOM 5074 C     C     . VAL VAL VAL B B 240 240 . 92.820  101.392 -11.077 1.00 10.79
1 . .
ATOM 5075 O     O     . VAL VAL VAL B B 240 240 . 92.552  101.139 -9.885  1.00 11.26
1 . .
ATOM 5076 N     N     . ILE ILE ILE B B 241 241 . 93.157  102.619 -11.482 1.00 10.13
1 . .
ATOM 5077 CA    CA    . ILE ILE ILE B B 241 241 . 93.251  103.745 -10.546 1.00 9.66
1 . .
ATOM 5078 CB    CB    . ILE ILE ILE B B 241 241 . 94.603  104.407 -10.661 1.00 10.15
1 . .
ATOM 5079 CG1   CG1   . ILE ILE ILE B B 241 241 . 95.622  103.334 -10.279 1.00 7.39
1 . .
ATOM 5080 CD1   CD1   . ILE ILE ILE B B 241 241 . 97.090  103.791 -10.351 1.00 10.18
1 . .
ATOM 5081 CG2   CG2   . ILE ILE ILE B B 241 241 . 94.693  105.663 -9.805  1.00 9.12
1 . .
ATOM 5082 C     C     . ILE ILE ILE B B 241 241 . 92.175  104.769 -10.808 1.00 10.75
1 . .
ATOM 5083 O     O     . ILE ILE ILE B B 241 241 . 91.863  105.057 -11.954 1.00 10.48
1 . .
ATOM 5084 N     N     . GLY GLY GLY B B 242 242 . 91.569  105.271 -9.739  1.00 9.13
1 . .
ATOM 5085 CA    CA    . GLY GLY GLY B B 242 242 . 90.675  106.473 -9.869  1.00 9.67
1 . .
ATOM 5086 C     C     . GLY GLY GLY B B 242 242 . 91.243  107.599 -8.990  1.00 10.74
1 . .
ATOM 5087 O     O     . GLY GLY GLY B B 242 242 . 92.011  107.355 -8.046  1.00 10.88
1 . .
ATOM 5088 N     N     . MET MET MET B B 243 243 . 90.925  108.838 -9.338  1.00 9.08
1 . .
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ATOM 5089 CA    CA    . MET MET MET B B 243 243 . 91.466  109.966 -8.558  1.00 10.81
1 . .
ATOM 5090 CB    CB    . MET MET MET B B 243 243 . 92.392  110.796 -9.392  1.00 9.05
1 . .
ATOM 5091 CG    CG    . MET MET MET B B 243 243 . 93.675  110.057 -9.777  1.00 9.86
1 . .
ATOM 5092 SD    SD    . MET MET MET B B 243 243 . 94.670  111.003 -10.924 1.00 13.44
1 . .
ATOM 5093 CE    CE    . MET MET MET B B 243 243 . 95.163  112.417 -9.927  1.00 15.28
1 . .
ATOM 5094 C     C     . MET MET MET B B 243 243 . 90.300  110.827 -8.086  1.00 10.16
1 . .
ATOM 5095 O     O     . MET MET MET B B 243 243 . 89.293  110.930 -8.815  1.00 10.29
1 . .
ATOM 5096 N     N     . ASP ASP ASP B B 244 244 . 90.421  111.407 -6.862  1.00 8.43
1 . .
ATOM 5097 CA    CA    . ASP ASP ASP B B 244 244 . 89.543  112.553 -6.500  1.00 8.56
1 . .
ATOM 5098 CB    CB    . ASP ASP ASP B B 244 244 . 88.652  112.326 -5.269  1.00 8.11
1 . .
ATOM 5099 CG    CG    . ASP ASP ASP B B 244 244 . 87.769  113.583 -4.961  1.00 9.38
1 . .
ATOM 5100 OD1   OD1   . ASP ASP ASP B B 244 244 . 86.992  113.572 -3.989  1.00 8.79
1 . .
ATOM 5101 OD2   OD2   . ASP ASP ASP B B 244 244 . 87.798  114.591 -5.730  1.00 8.79
1 . .
ATOM 5102 C     C     . ASP ASP ASP B B 244 244 . 90.491  113.755 -6.331  1.00 9.61
1 . .
ATOM 5103 O     O     . ASP ASP ASP B B 244 244 . 91.293  113.825 -5.378  1.00 11.04
1 . .
ATOM 5104 N     N     . VAL VAL VAL B B 245 245 . 90.457  114.693 -7.279  1.00 7.87
1 . .
ATOM 5105 CA    CA    . VAL VAL VAL B B 245 245 . 91.363  115.859 -7.221  1.00 9.43
1 . .
ATOM 5106 CB    CB    . VAL VAL VAL B B 245 245 . 91.423  116.536 -8.593  1.00 9.84
1 . .
ATOM 5107 CG1   CG1   . VAL VAL VAL B B 245 245 . 92.334  117.775 -8.566  1.00 8.22
1 . .
ATOM 5108 CG2   CG2   . VAL VAL VAL B B 245 245 . 91.926  115.461 -9.592  1.00 9.31
1 . .
ATOM 5109 C     C     . VAL VAL VAL B B 245 245 . 90.879  116.837 -6.131  1.00 9.53
1 . .
ATOM 5110 O     O     . VAL VAL VAL B B 245 245 . 91.720  117.467 -5.413  1.00 9.25
1 . .
ATOM 5111 N     N     . ALA ALA ALA B B 246 246 . 89.542  116.966 -6.032  1.00 8.62
1 . .
ATOM 5112 CA    CA    . ALA ALA ALA B B 246 246 . 88.909  117.975 -5.154  1.00 8.95
1 . .
ATOM 5113 CB    CB    . ALA ALA ALA B B 246 246 . 89.075  117.568 -3.658  1.00 7.67
1 . .
ATOM 5114 C     C     . ALA ALA ALA B B 246 246 . 89.469  119.368 -5.454  1.00 9.94
1 . .
ATOM 5115 O     O     . ALA ALA ALA B B 246 246 . 89.918  120.073 -4.555  1.00 10.06
1 . .
ATOM 5116 N     N     . ALA ALA ALA B B 247 247 . 89.503  119.772 -6.748  1.00 8.00
1 . .
ATOM 5117 CA    CA    . ALA ALA ALA B B 247 247 . 90.191  120.945 -7.187  1.00 8.79
1 . .
ATOM 5118 CB    CB    . ALA ALA ALA B B 247 247 . 90.201  120.997 -8.734  1.00 7.53
1 . .
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ATOM 5119 C     C     . ALA ALA ALA B B 247 247 . 89.582  122.249 -6.595  1.00 10.18
1 . .
ATOM 5120 O     O     . ALA ALA ALA B B 247 247 . 90.278  123.250 -6.545  1.00 10.64
1 . .
ATOM 5121 N     N     . SER SER SER B B 248 248 . 88.326  122.221 -6.095  1.00 10.64
1 . .
ATOM 5122 CA    CA    . SER SER SER B B 248 248 . 87.805  123.438 -5.433  1.00 12.17
1 . .
ATOM 5123 CB    CB    . SER SER SER B B 248 248 . 86.358  123.287 -4.992  1.00 10.91
1 . .
ATOM 5124 OG    OG    . SER SER SER B B 248 248 . 85.573  122.900 -6.113  1.00 11.55
1 . .
ATOM 5125 C     C     . SER SER SER B B 248 248 . 88.636  123.815 -4.211  1.00 13.33
1 . .
ATOM 5126 O     O     . SER SER SER B B 248 248 . 88.624  124.982 -3.814  1.00 13.81
1 . .
ATOM 5127 N     N     . GLU GLU GLU B B 249 249 . 89.316  122.835 -3.607  1.00 13.98
1 . .
ATOM 5128 CA    CA    . GLU GLU GLU B B 249 249 . 90.132  123.106 -2.423  1.00 14.41
1 . .
ATOM 5129 CB    CB    . GLU GLU GLU B B 249 249 . 90.483  121.772 -1.729  1.00 12.54
1 . .
ATOM 5130 CG    CG    . GLU GLU GLU B B 249 249 . 89.226  121.039 -1.227  1.00 13.15
1 . .
ATOM 5131 CD    CD    . GLU GLU GLU B B 249 249 . 88.569  121.769 -0.121  1.00 15.84
1 . .
ATOM 5132 OE1   OE1   . GLU GLU GLU B B 249 249 . 89.269  122.239 0.803   1.00 22.40
1 . .
ATOM 5133 OE2   OE2   . GLU GLU GLU B B 249 249 . 87.347  121.838 -0.136  1.00 12.64
1 . .
ATOM 5134 C     C     . GLU GLU GLU B B 249 249 . 91.410  123.859 -2.711  1.00 15.00
1 . .
ATOM 5135 O     O     . GLU GLU GLU B B 249 249 . 91.978  124.474 -1.767  1.00 16.15
1 . .
ATOM 5136 N     N     . PHE PHE PHE B B 250 250 . 91.853  123.868 -3.974  1.00 12.32
1 . .
ATOM 5137 CA    CA    . PHE PHE PHE B B 250 250 . 93.093  124.540 -4.341  1.00 12.43
1 . .
ATOM 5138 CB    CB    . PHE PHE PHE B B 250 250 . 94.245  123.558 -4.511  1.00 12.25
1 . .
ATOM 5139 CG    CG    . PHE PHE PHE B B 250 250 . 94.057  122.491 -5.593  1.00 11.15
1 . .
ATOM 5140 CD1   CD1   . PHE PHE PHE B B 250 250 . 93.839  121.138 -5.255  1.00 11.89
1 . .
ATOM 5141 CE1   CE1   . PHE PHE PHE B B 250 250 . 93.763  120.135 -6.267  1.00 12.84
1 . .
ATOM 5142 CZ    CZ    . PHE PHE PHE B B 250 250 . 93.918  120.513 -7.671  1.00 10.52
1 . .
ATOM 5143 CE2   CE2   . PHE PHE PHE B B 250 250 . 94.152  121.846 -7.984  1.00 11.70
1 . .
ATOM 5144 CD2   CD2   . PHE PHE PHE B B 250 250 . 94.224  122.843 -6.933  1.00 11.68
1 . .
ATOM 5145 C     C     . PHE PHE PHE B B 250 250 . 92.934  125.573 -5.508  1.00 12.74
1 . .
ATOM 5146 O     O     . PHE PHE PHE B B 250 250 . 93.885  126.085 -6.058  1.00 13.27
1 . .
ATOM 5147 N     N     . TYR TYR TYR B B 251 251 . 91.690  125.901 -5.832  1.00 12.56
1 . .
ATOM 5148 CA    CA    . TYR TYR TYR B B 251 251 . 91.433  127.020 -6.721  1.00 11.05
1 . .
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ATOM 5149 CB    CB    . TYR TYR TYR B B 251 251 . 89.899  126.981 -7.008  1.00 10.84
1 . .
ATOM 5150 CG    CG    . TYR TYR TYR B B 251 251 . 89.431  128.137 -7.857  1.00 11.62
1 . .
ATOM 5151 CD1   CD1   . TYR TYR TYR B B 251 251 . 89.476  128.058 -9.285  1.00 10.48
1 . .
ATOM 5152 CE1   CE1   . TYR TYR TYR B B 251 251 . 89.029  129.147 -10.095 1.00 14.03
1 . .
ATOM 5153 CZ    CZ    . TYR TYR TYR B B 251 251 . 88.585  130.304 -9.424  1.00 13.03
1 . .
ATOM 5154 OH    OH    . TYR TYR TYR B B 251 251 . 88.152  131.402 -10.100 1.00 14.89
1 . .
ATOM 5155 CE2   CE2   . TYR TYR TYR B B 251 251 . 88.562  130.392 -8.038  1.00 14.69
1 . .
ATOM 5156 CD2   CD2   . TYR TYR TYR B B 251 251 . 88.995  129.315 -7.263  1.00 13.78
1 . .
ATOM 5157 C     C     . TYR TYR TYR B B 251 251 . 91.787  128.346 -6.024  1.00 11.18
1 . .
ATOM 5158 O     O     . TYR TYR TYR B B 251 251 . 91.336  128.566 -4.854  1.00 13.73
1 . .
ATOM 5159 N     N     . ARG ARG ARG B B 252 252 . 92.493  129.232 -6.734  1.00 12.34
1 . .
ATOM 5160 CA    CA    . ARG ARG ARG B B 252 252 . 92.943  130.517 -6.172  1.00 13.83
1 . .
ATOM 5161 CB    CB    . ARG ARG ARG B B 252 252 . 94.436  130.376 -5.684  1.00 15.13
1 . .
ATOM 5162 CG    CG    . ARG ARG ARG B B 252 252 . 94.679  129.307 -4.607  1.00 16.78
1 . .
ATOM 5163 CD    CD    . ARG ARG ARG B B 252 252 . 94.193  129.721 -3.191  1.00 22.63
1 . .
ATOM 5164 NE    NE    . ARG ARG ARG B B 252 252 . 94.402  128.687 -2.166  1.00 21.44
1 . .
ATOM 5165 CZ    CZ    . ARG ARG ARG B B 252 252 . 93.518  127.749 -1.801  1.00 21.16
1 . .
ATOM 5166 NH1   NH1   . ARG ARG ARG B B 252 252 . 92.300  127.630 -2.317  1.00 21.51
1 . .
ATOM 5167 NH2   NH2   . ARG ARG ARG B B 252 252 . 93.869  126.897 -0.879  1.00 22.96
1 . .
ATOM 5168 C     C     . ARG ARG ARG B B 252 252 . 92.869  131.581 -7.239  1.00 14.76
1 . .
ATOM 5169 O     O     . ARG ARG ARG B B 252 252 . 93.598  131.500 -8.257  1.00 14.80
1 . .
ATOM 5170 N     N     . ASP ASP ASP B B 253 253 . 91.979  132.588 -7.061  1.00 16.33
1 . .
ATOM 5171 CA    CA    . ASP ASP ASP B B 253 253 . 91.963  133.751 -7.987  1.00 16.86
1 . .
ATOM 5172 CB    CB    . ASP ASP ASP B B 253 253 . 93.289  134.554 -7.878  1.00 17.76
1 . .
ATOM 5173 CG    CG    . ASP ASP ASP B B 253 253 . 93.447  135.226 -6.561  1.00 24.56
1 . .
ATOM 5174 OD1   OD1   . ASP ASP ASP B B 253 253 . 94.583  135.725 -6.324  1.00 32.11
1 . .
ATOM 5175 OD2   OD2   . ASP ASP ASP B B 253 253 . 92.472  135.231 -5.782  1.00 26.33
1 . .
ATOM 5176 C     C     . ASP ASP ASP B B 253 253 . 91.865  133.370 -9.457  1.00 15.19
1 . .
ATOM 5177 O     O     . ASP ASP ASP B B 253 253 . 92.498  133.970 -10.277 1.00 16.64
1 . .
ATOM 5178 N     N     . GLY GLY GLY B B 254 254 . 91.166  132.297 -9.822  1.00 14.82
1 . .
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ATOM 5179 CA    CA    . GLY GLY GLY B B 254 254 . 91.003  132.008 -11.261 1.00 12.86
1 . .
ATOM 5180 C     C     . GLY GLY GLY B B 254 254 . 91.974  130.972 -11.776 1.00 12.60
1 . .
ATOM 5181 O     O     . GLY GLY GLY B B 254 254 . 91.876  130.593 -12.935 1.00 13.16
1 . .
ATOM 5182 N     N     . LYS LYS LYS B B 255 255 . 92.918  130.554 -10.904 1.00 13.75
1 . .
ATOM 5183 CA    CA    . LYS LYS LYS B B 255 255 . 93.965  129.559 -11.244 1.00 13.23
1 . .
ATOM 5184 CB    CB    . LYS LYS LYS B B 255 255 . 95.350  130.270 -11.333 1.00 14.58
1 . .
ATOM 5185 CG    CG    . LYS LYS LYS B B 255 255 . 95.536  131.140 -12.571 1.00 15.99
1 . .
ATOM 5186 CD    CD    . LYS LYS LYS B B 255 255 . 96.972  131.761 -12.502 1.00 19.22
1 . .
ATOM 5187 CE    CE    . LYS LYS LYS B B 255 255 . 97.173  132.800 -13.538 1.00 19.17
1 . .
ATOM 5188 NZ    NZ    . LYS LYS LYS B B 255 255 . 98.700  133.213 -13.434 1.00 22.68
1 . .
ATOM 5189 C     C     . LYS LYS LYS B B 255 255 . 93.995  128.487 -10.167 1.00 13.60
1 . .
ATOM 5190 O     O     . LYS LYS LYS B B 255 255 . 93.092  128.448 -9.321  1.00 12.61
1 . .
ATOM 5191 N     N     . TYR TYR TYR B B 256 256 . 94.979  127.562 -10.203 1.00 12.97
1 . .
ATOM 5192 CA    CA    . TYR TYR TYR B B 256 256 . 94.981  126.370 -9.332  1.00 12.12
1 . .
ATOM 5193 CB    CB    . TYR TYR TYR B B 256 256 . 94.712  125.107 -10.172 1.00 11.49
1 . .
ATOM 5194 CG    CG    . TYR TYR TYR B B 256 256 . 93.244  125.100 -10.601 1.00 8.65
1 . .
ATOM 5195 CD1   CD1   . TYR TYR TYR B B 256 256 . 92.261  124.569 -9.746  1.00 11.28
1 . .
ATOM 5196 CE1   CE1   . TYR TYR TYR B B 256 256 . 90.858  124.613 -10.107 1.00 6.91
1 . .
ATOM 5197 CZ    CZ    . TYR TYR TYR B B 256 256 . 90.517  125.152 -11.342 1.00 7.59
1 . .
ATOM 5198 OH    OH    . TYR TYR TYR B B 256 256 . 89.145  125.127 -11.677 1.00 10.00
1 . .
ATOM 5199 CE2   CE2   . TYR TYR TYR B B 256 256 . 91.518  125.698 -12.216 1.00 9.63
1 . .
ATOM 5200 CD2   CD2   . TYR TYR TYR B B 256 256 . 92.866  125.718 -11.800 1.00 9.44
1 . .
ATOM 5201 C     C     . TYR TYR TYR B B 256 256 . 96.382  126.249 -8.710  1.00 13.99
1 . .
ATOM 5202 O     O     . TYR TYR TYR B B 256 256 . 97.370  126.419 -9.442  1.00 15.03
1 . .
ATOM 5203 N     N     . ASP ASP ASP B B 257 257 . 96.417  125.946 -7.413  1.00 13.85
1 . .
ATOM 5204 CA    CA    . ASP ASP ASP B B 257 257 . 97.680  125.862 -6.629  1.00 17.34
1 . .
ATOM 5205 CB    CB    . ASP ASP ASP B B 257 257 . 97.541  126.711 -5.361  1.00 17.61
1 . .
ATOM 5206 CG    CG    . ASP ASP ASP B B 257 257 . 98.870  126.895 -4.647  1.00 22.82
1 . .
ATOM 5207 OD1   OD1   . ASP ASP ASP B B 257 257 . 99.913  126.454 -5.258  1.00 24.38
1 . .
ATOM 5208 OD2   OD2   . ASP ASP ASP B B 257 257 . 98.854  127.527 -3.540  1.00 23.42
1 . .
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ATOM 5209 C     C     . ASP ASP ASP B B 257 257 . 97.976  124.434 -6.195  1.00 16.09
1 . .
ATOM 5210 O     O     . ASP ASP ASP B B 257 257 . 97.418  123.930 -5.216  1.00 17.02
1 . .
ATOM 5211 N     N     . LEU LEU LEU B B 258 258 . 98.861  123.773 -6.924  1.00 18.17
1 . .
ATOM 5212 CA    CA    . LEU LEU LEU B B 258 258 . 99.221  122.365 -6.597  1.00 20.00
1 . .
ATOM 5213 CB    CB    . LEU LEU LEU B B 258 258 . 99.735  121.697 -7.875  1.00 20.76
1 . .
ATOM 5214 CG    CG    . LEU LEU LEU B B 258 258 . 98.697  121.460 -8.972  1.00 21.08
1 . .
ATOM 5215 CD1   CD1   . LEU LEU LEU B B 258 258 . 99.335  120.770 -10.224 1.00 21.90
1 . .
ATOM 5216 CD2   CD2   . LEU LEU LEU B B 258 258 . 97.550  120.635 -8.444  1.00 19.72
1 . .
ATOM 5217 C     C     . LEU LEU LEU B B 258 258 . 100.239 122.265 -5.435  1.00 23.17
1 . .
ATOM 5218 O     O     . LEU LEU LEU B B 258 258 . 100.676 121.193 -5.035  1.00 23.58
1 . .
ATOM 5219 N     N     . ASP ASP ASP B B 259 259 . 100.622 123.414 -4.884  1.00 26.20
1 . .
ATOM 5220 CA    CA    . ASP ASP ASP B B 259 259 . 101.325 123.378 -3.570  1.00 27.76
1 . .
ATOM 5221 CB    CB    . ASP ASP ASP B B 259 259 . 102.818 123.739 -3.777  1.00 28.98
1 . .
ATOM 5222 CG    CG    . ASP ASP ASP B B 259 259 . 103.705 123.370 -2.556  1.00 29.55
1 . .
ATOM 5223 OD1   OD1   . ASP ASP ASP B B 259 259 . 103.203 122.801 -1.545  1.00 30.82
1 . .
ATOM 5224 OD2   OD2   . ASP ASP ASP B B 259 259 . 104.915 123.703 -2.620  1.00 32.06
1 . .
ATOM 5225 C     C     . ASP ASP ASP B B 259 259 . 100.617 124.228 -2.515  1.00 28.50
1 . .
ATOM 5226 O     O     . ASP ASP ASP B B 259 259 . 101.244 124.973 -1.772  1.00 28.53
1 . .
ATOM 5227 N     N     . PHE PHE PHE B B 260 260 . 99.297  124.124 -2.418  1.00 27.21
1 . .
ATOM 5228 CA    CA    . PHE PHE PHE B B 260 260 . 98.574  125.066 -1.538  1.00 29.36
1 . .
ATOM 5229 CB    CB    . PHE PHE PHE B B 260 260 . 97.073  125.072 -1.877  1.00 27.55
1 . .
ATOM 5230 CG    CG    . PHE PHE PHE B B 260 260 . 96.360  123.899 -1.375  1.00 23.16
1 . .
ATOM 5231 CD1   CD1   . PHE PHE PHE B B 260 260 . 95.613  123.942 -0.182  1.00 23.95
1 . .
ATOM 5232 CE1   CE1   . PHE PHE PHE B B 260 260 . 94.910  122.825 0.314   1.00 21.63
1 . .
ATOM 5233 CZ    CZ    . PHE PHE PHE B B 260 260 . 94.982  121.587 -0.403  1.00 21.55
1 . .
ATOM 5234 CE2   CE2   . PHE PHE PHE B B 260 260 . 95.730  121.552 -1.583  1.00 13.07
1 . .
ATOM 5235 CD2   CD2   . PHE PHE PHE B B 260 260 . 96.446  122.683 -2.064  1.00 20.33
1 . .
ATOM 5236 C     C     . PHE PHE PHE B B 260 260 . 98.746  124.898 -0.005  1.00 31.86
1 . .
ATOM 5237 O     O     . PHE PHE PHE B B 260 260 . 98.219  125.704 0.766   1.00 33.00
1 . .
ATOM 5238 N     N     . LYS LYS LYS B B 261 261 . 99.391  123.831 0.457   1.00 33.38
1 . .
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ATOM 5239 CA    CA    . LYS LYS LYS B B 261 261 . 99.598  123.631 1.903   1.00 34.31
1 . .
ATOM 5240 CB    CB    . LYS LYS LYS B B 261 261 . 99.453  122.152 2.287   1.00 32.86
1 . .
ATOM 5241 CG    CG    . LYS LYS LYS B B 261 261 . 97.980  121.614 2.259   1.00 29.57
1 . .
ATOM 5242 CD    CD    . LYS LYS LYS B B 261 261 . 97.829  120.110 2.616   1.00 24.35
1 . .
ATOM 5243 CE    CE    . LYS LYS LYS B B 261 261 . 98.207  119.197 1.399   1.00 21.85
1 . .
ATOM 5244 NZ    NZ    . LYS LYS LYS B B 261 261 . 97.781  117.826 1.665   1.00 23.96
1 . .
ATOM 5245 C     C     . LYS LYS LYS B B 261 261 . 100.940 124.278 2.306   1.00 36.53
1 . .
ATOM 5246 O     O     . LYS LYS LYS B B 261 261 . 101.271 124.372 3.497   1.00 37.21
1 . .
ATOM 5247 N     N     . SER SER SER B B 262 262 . 101.673 124.770 1.314   1.00 37.84
1 . .
ATOM 5248 CA    CA    . SER SER SER B B 262 262 . 102.830 125.636 1.519   1.00 40.20
1 . .
ATOM 5249 CB    CB    . SER SER SER B B 262 262 . 103.824 125.458 0.371   1.00 39.76
1 . .
ATOM 5250 OG    OG    . SER SER SER B B 262 262 . 104.408 124.158 0.395   1.00 37.94
1 . .
ATOM 5251 C     C     . SER SER SER B B 262 262 . 102.401 127.135 1.634   1.00 42.68
1 . .
ATOM 5252 O     O     . SER SER SER B B 262 262 . 101.199 127.445 1.428   1.00 42.18
1 . .
ATOM 5253 N     N     . PRO PRO PRO B B 263 263 . 103.377 128.067 1.940   1.00 43.91
1 . .
ATOM 5254 CA    CA    . PRO PRO PRO B B 263 263 . 102.963 129.452 2.191   1.00 43.96
1 . .
ATOM 5255 CB    CB    . PRO PRO PRO B B 263 263 . 104.173 130.055 2.945   1.00 44.50
1 . .
ATOM 5256 CG    CG    . PRO PRO PRO B B 263 263 . 105.411 129.320 2.357   1.00 44.26
1 . .
ATOM 5257 CD    CD    . PRO PRO PRO B B 263 263 . 104.863 127.958 1.831   1.00 44.11
1 . .
ATOM 5258 C     C     . PRO PRO PRO B B 263 263 . 102.662 130.209 0.878   1.00 43.67
1 . .
ATOM 5259 O     O     . PRO PRO PRO B B 263 263 . 103.512 130.255 -0.058  1.00 42.82
1 . .
ATOM 5260 N     N     . THR THR THR B B 264 264 . 101.461 130.796 0.823   1.00 42.82
1 . .
ATOM 5261 CA    CA    . THR THR THR B B 264 264 . 100.950 131.413 -0.408  1.00 42.19
1 . .
ATOM 5262 CB    CB    . THR THR THR B B 264 264 . 99.993  132.554 -0.107  1.00 41.49
1 . .
ATOM 5263 OG1   OG1   . THR THR THR B B 264 264 . 99.143  132.148 0.962   1.00 40.56
1 . .
ATOM 5264 CG2   CG2   . THR THR THR B B 264 264 . 99.145  132.843 -1.293  1.00 42.31
1 . .
ATOM 5265 C     C     . THR THR THR B B 264 264 . 102.048 131.901 -1.326  1.00 41.97
1 . .
ATOM 5266 O     O     . THR THR THR B B 264 264 . 102.971 132.623 -0.899  1.00 42.73
1 . .
ATOM 5267 N     N     . ASP ASP ASP B B 265 265 . 101.983 131.478 -2.578  1.00 40.90
1 . .
ATOM 5268 CA    CA    . ASP ASP ASP B B 265 265 . 102.818 132.064 -3.613  1.00 40.67
1 . .
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ATOM 5269 CB    CB    . ASP ASP ASP B B 265 265 . 104.235 131.470 -3.630  1.00 41.09
1 . .
ATOM 5270 CG    CG    . ASP ASP ASP B B 265 265 . 105.032 131.949 -4.825  1.00 40.71
1 . .
ATOM 5271 OD1   OD1   . ASP ASP ASP B B 265 265 . 104.789 133.067 -5.335  1.00 41.77
1 . .
ATOM 5272 OD2   OD2   . ASP ASP ASP B B 265 265 . 105.910 131.213 -5.292  1.00 43.88
1 . .
ATOM 5273 C     C     . ASP ASP ASP B B 265 265 . 102.213 131.991 -5.022  1.00 40.62
1 . .
ATOM 5274 O     O     . ASP ASP ASP B B 265 265 . 102.385 130.976 -5.713  1.00 40.96
1 . .
ATOM 5275 N     N     . PRO PRO PRO B B 266 266 . 101.568 133.089 -5.477  1.00 39.47
1 . .
ATOM 5276 CA    CA    . PRO PRO PRO B B 266 266 . 100.903 133.170 -6.787  1.00 38.54
1 . .
ATOM 5277 CB    CB    . PRO PRO PRO B B 266 266 . 100.492 134.663 -6.904  1.00 38.34
1 . .
ATOM 5278 CG    CG    . PRO PRO PRO B B 266 266 . 100.381 135.139 -5.467  1.00 39.16
1 . .
ATOM 5279 CD    CD    . PRO PRO PRO B B 266 266 . 101.451 134.354 -4.709  1.00 39.46
1 . .
ATOM 5280 C     C     . PRO PRO PRO B B 266 266 . 101.727 132.760 -8.000  1.00 37.14
1 . .
ATOM 5281 O     O     . PRO PRO PRO B B 266 266 . 101.159 132.427 -9.048  1.00 36.58
1 . .
ATOM 5282 N     N     . SER SER SER B B 267 267 . 103.055 132.782 -7.899  1.00 36.00
1 . .
ATOM 5283 CA    CA    . SER SER SER B B 267 267 . 103.866 132.487 -9.069  1.00 34.72
1 . .
ATOM 5284 CB    CB    . SER SER SER B B 267 267 . 105.333 132.969 -8.894  1.00 35.52
1 . .
ATOM 5285 OG    OG    . SER SER SER B B 267 267 . 105.848 132.613 -7.612  1.00 37.13
1 . .
ATOM 5286 C     C     . SER SER SER B B 267 267 . 103.803 130.980 -9.433  1.00 33.24
1 . .
ATOM 5287 O     O     . SER SER SER B B 267 267 . 104.057 130.606 -10.566 1.00 32.67
1 . .
ATOM 5288 N     N     . ARG ARG ARG B B 268 268 . 103.423 130.149 -8.469  1.00 32.51
1 . .
ATOM 5289 CA    CA    . ARG ARG ARG B B 268 268 . 103.423 128.685 -8.657  1.00 30.99
1 . .
ATOM 5290 CB    CB    . ARG ARG ARG B B 268 268 . 103.784 127.950 -7.339  1.00 31.81
1 . .
ATOM 5291 CG    CG    . ARG ARG ARG B B 268 268 . 102.686 127.919 -6.232  1.00 30.87
1 . .
ATOM 5292 CD    CD    . ARG ARG ARG B B 268 268 . 103.173 127.474 -4.866  1.00 29.22
1 . .
ATOM 5293 NE    NE    . ARG ARG ARG B B 268 268 . 102.123 127.676 -3.883  1.00 31.02
1 . .
ATOM 5294 CZ    CZ    . ARG ARG ARG B B 268 268 . 102.295 127.908 -2.581  1.00 32.69
1 . .
ATOM 5295 NH1   NH1   . ARG ARG ARG B B 268 268 . 103.515 127.964 -2.015  1.00 33.25
1 . .
ATOM 5296 NH2   NH2   . ARG ARG ARG B B 268 268 . 101.229 128.073 -1.816  1.00 33.46
1 . .
ATOM 5297 C     C     . ARG ARG ARG B B 268 268 . 102.042 128.252 -9.234  1.00 30.41
1 . .
ATOM 5298 O     O     . ARG ARG ARG B B 268 268 . 101.871 127.091 -9.614  1.00 29.79
1 . .
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ATOM 5299 N     N     . TYR TYR TYR B B 269 269 . 101.086 129.190 -9.338  1.00 27.66
1 . .
ATOM 5300 CA    CA    . TYR TYR TYR B B 269 269 . 99.729  128.816 -9.815  1.00 24.95
1 . .
ATOM 5301 CB    CB    . TYR TYR TYR B B 269 269 . 98.734  129.987 -9.631  1.00 24.25
1 . .
ATOM 5302 CG    CG    . TYR TYR TYR B B 269 269 . 98.478  130.442 -8.233  1.00 22.56
1 . .
ATOM 5303 CD1   CD1   . TYR TYR TYR B B 269 269 . 97.687  131.616 -8.011  1.00 23.01
1 . .
ATOM 5304 CE1   CE1   . TYR TYR TYR B B 269 269 . 97.417  132.062 -6.734  1.00 23.12
1 . .
ATOM 5305 CZ    CZ    . TYR TYR TYR B B 269 269 . 97.926  131.378 -5.615  1.00 27.14
1 . .
ATOM 5306 OH    OH    . TYR TYR TYR B B 269 269 . 97.660  131.871 -4.323  1.00 29.47
1 . .
ATOM 5307 CE2   CE2   . TYR TYR TYR B B 269 269 . 98.740  130.210 -5.789  1.00 26.09
1 . .
ATOM 5308 CD2   CD2   . TYR TYR TYR B B 269 269 . 98.997  129.749 -7.089  1.00 24.32
1 . .
ATOM 5309 C     C     . TYR TYR TYR B B 269 269 . 99.727  128.423 -11.288 1.00 22.59
1 . .
ATOM 5310 O     O     . TYR TYR TYR B B 269 269 . 100.471 128.992 -12.121 1.00 22.29
1 . .
ATOM 5311 N     N     . ILE ILE ILE B B 270 270 . 98.872  127.464 -11.647 1.00 19.66
1 . .
ATOM 5312 CA    CA    . ILE ILE ILE B B 270 270 . 98.691  127.115 -13.028 1.00 18.25
1 . .
ATOM 5313 CB    CB    . ILE ILE ILE B B 270 270 . 99.139  125.655 -13.277 1.00 17.67
1 . .
ATOM 5314 CG1   CG1   . ILE ILE ILE B B 270 270 . 98.250  124.687 -12.486 1.00 18.74
1 . .
ATOM 5315 CD1   CD1   . ILE ILE ILE B B 270 270 . 98.530  123.186 -12.775 1.00 17.00
1 . .
ATOM 5316 CG2   CG2   . ILE ILE ILE B B 270 270 . 100.698 125.564 -12.983 1.00 19.17
1 . .
ATOM 5317 C     C     . ILE ILE ILE B B 270 270 . 97.245  127.262 -13.481 1.00 16.72
1 . .
ATOM 5318 O     O     . ILE ILE ILE B B 270 270 . 96.342  127.299 -12.635 1.00 17.27
1 . .
ATOM 5319 N     N     . THR THR THR B B 271 271 . 97.035  127.310 -14.793 1.00 15.39
1 . .
ATOM 5320 CA    CA    . THR THR THR B B 271 271 . 95.696  127.538 -15.346 1.00 15.86
1 . .
ATOM 5321 CB    CB    . THR THR THR B B 271 271 . 95.692  128.202 -16.776 1.00 16.02
1 . .
ATOM 5322 OG1   OG1   . THR THR THR B B 271 271 . 96.146  127.263 -17.771 1.00 19.73
1 . .
ATOM 5323 CG2   CG2   . THR THR THR B B 271 271 . 96.508  129.502 -16.861 1.00 19.40
1 . .
ATOM 5324 C     C     . THR THR THR B B 271 271 . 94.946  126.246 -15.487 1.00 14.13
1 . .
ATOM 5325 O     O     . THR THR THR B B 271 271 . 95.552  125.158 -15.500 1.00 14.48
1 . .
ATOM 5326 N     N     . GLY GLY GLY B B 272 272 . 93.625  126.307 -15.618 1.00 14.11
1 . .
ATOM 5327 CA    CA    . GLY GLY GLY B B 272 272 . 92.901  125.082 -15.915 1.00 13.94
1 . .
ATOM 5328 C     C     . GLY GLY GLY B B 272 272 . 93.369  124.291 -17.145 1.00 15.36
1 . .
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ATOM 5329 O     O     . GLY GLY GLY B B 272 272 . 93.289  123.048 -17.135 1.00 13.78
1 . .
ATOM 5330 N     N     . ASP ASP ASP B B 273 273 . 93.815  124.972 -18.230 1.00 15.94
1 . .
ATOM 5331 CA    CA    . ASP ASP ASP B B 273 273 . 94.360  124.278 -19.396 1.00 17.77
1 . .
ATOM 5332 CB    CB    . ASP ASP ASP B B 273 273 . 94.680  125.230 -20.562 1.00 18.21
1 . .
ATOM 5333 CG    CG    . ASP ASP ASP B B 273 273 . 93.493  125.376 -21.618 1.00 23.20
1 . .
ATOM 5334 OD1   OD1   . ASP ASP ASP B B 273 273 . 92.259  125.259 -21.334 1.00 26.27
1 . .
ATOM 5335 OD2   OD2   . ASP ASP ASP B B 273 273 . 93.812  125.733 -22.793 1.00 27.42
1 . .
ATOM 5336 C     C     . ASP ASP ASP B B 273 273 . 95.621  123.495 -19.013 1.00 16.82
1 . .
ATOM 5337 O     O     . ASP ASP ASP B B 273 273 . 95.811  122.331 -19.481 1.00 15.50
1 . .
ATOM 5338 N     N     . GLN GLN GLN B B 274 274 . 96.492  124.132 -18.230 1.00 16.33
1 . .
ATOM 5339 CA    CA    . GLN GLN GLN B B 274 274 . 97.712  123.456 -17.738 1.00 17.11
1 . .
ATOM 5340 CB    CB    . GLN GLN GLN B B 274 274 . 98.612  124.382 -16.925 1.00 16.76
1 . .
ATOM 5341 CG    CG    . GLN GLN GLN B B 274 274 . 99.230  125.472 -17.780 1.00 19.07
1 . .
ATOM 5342 CD    CD    . GLN GLN GLN B B 274 274 . 100.028 126.437 -16.966 1.00 21.19
1 . .
ATOM 5343 OE1   OE1   . GLN GLN GLN B B 274 274 . 99.475  127.269 -16.275 1.00 18.96
1 . .
ATOM 5344 NE2   NE2   . GLN GLN GLN B B 274 274 . 101.363 126.298 -17.006 1.00 25.91
1 . .
ATOM 5345 C     C     . GLN GLN GLN B B 274 274 . 97.355  122.230 -16.887 1.00 15.91
1 . .
ATOM 5346 O     O     . GLN GLN GLN B B 274 274 . 97.948  121.155 -17.015 1.00 14.95
1 . .
ATOM 5347 N     N     . LEU LEU LEU B B 275 275 . 96.407  122.430 -15.997 1.00 14.41
1 . .
ATOM 5348 CA    CA    . LEU LEU LEU B B 275 275 . 95.963  121.346 -15.179 1.00 13.79
1 . .
ATOM 5349 CB    CB    . LEU LEU LEU B B 275 275 . 94.971  121.917 -14.171 1.00 14.89
1 . .
ATOM 5350 CG    CG    . LEU LEU LEU B B 275 275 . 94.494  121.018 -13.052 1.00 14.33
1 . .
ATOM 5351 CD1   CD1   . LEU LEU LEU B B 275 275 . 95.658  120.354 -12.227 1.00 14.98
1 . .
ATOM 5352 CD2   CD2   . LEU LEU LEU B B 275 275 . 93.515  121.792 -12.177 1.00 11.89
1 . .
ATOM 5353 C     C     . LEU LEU LEU B B 275 275 . 95.363  120.208 -16.033 1.00 13.72
1 . .
ATOM 5354 O     O     . LEU LEU LEU B B 275 275 . 95.663  119.020 -15.758 1.00 14.07
1 . .
ATOM 5355 N     N     . GLY GLY GLY B B 276 276 . 94.499  120.527 -17.034 1.00 11.55
1 . .
ATOM 5356 CA    CA    . GLY GLY GLY B B 276 276 . 93.923  119.499 -17.950 1.00 12.20
1 . .
ATOM 5357 C     C     . GLY GLY GLY B B 276 276 . 95.060  118.719 -18.642 1.00 13.77
1 . .
ATOM 5358 O     O     . GLY GLY GLY B B 276 276 . 94.989  117.475 -18.818 1.00 12.95
1 . .
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ATOM 5359 N     N     . ALA ALA ALA B B 277 277 . 96.130  119.431 -19.015 1.00 14.08
1 . .
ATOM 5360 CA    CA    . ALA ALA ALA B B 277 277 . 97.276  118.780 -19.652 1.00 13.22
1 . .
ATOM 5361 CB    CB    . ALA ALA ALA B B 277 277 . 98.301  119.837 -20.120 1.00 14.04
1 . .
ATOM 5362 C     C     . ALA ALA ALA B B 277 277 . 97.940  117.764 -18.754 1.00 13.00
1 . .
ATOM 5363 O     O     . ALA ALA ALA B B 277 277 . 98.346  116.647 -19.191 1.00 13.92
1 . .
ATOM 5364 N     N     . LEU LEU LEU B B 278 278 . 98.065  118.103 -17.478 1.00 13.75
1 . .
ATOM 5365 CA    CA    . LEU LEU LEU B B 278 278 . 98.648  117.193 -16.501 1.00 12.70
1 . .
ATOM 5366 CB    CB    . LEU LEU LEU B B 278 278 . 98.682  117.914 -15.164 1.00 13.94
1 . .
ATOM 5367 CG    CG    . LEU LEU LEU B B 278 278 . 99.250  117.076 -14.054 1.00 16.33
1 . .
ATOM 5368 CD1   CD1   . LEU LEU LEU B B 278 278 . 100.738 116.777 -14.408 1.00 19.70
1 . .
ATOM 5369 CD2   CD2   . LEU LEU LEU B B 278 278 . 99.122  117.831 -12.684 1.00 18.45
1 . .
ATOM 5370 C     C     . LEU LEU LEU B B 278 278 . 97.833  115.918 -16.374 1.00 13.31
1 . .
ATOM 5371 O     O     . LEU LEU LEU B B 278 278 . 98.394  114.796 -16.315 1.00 12.39
1 . .
ATOM 5372 N     N     . TYR TYR TYR B B 279 279 . 96.508  116.084 -16.336 1.00 9.91
1 . .
ATOM 5373 CA    CA    . TYR TYR TYR B B 279 279 . 95.642  114.898 -16.290 1.00 10.07
1 . .
ATOM 5374 CB    CB    . TYR TYR TYR B B 279 279 . 94.135  115.241 -16.158 1.00 8.46
1 . .
ATOM 5375 CG    CG    . TYR TYR TYR B B 279 279 . 93.771  116.060 -14.955 1.00 6.35
1 . .
ATOM 5376 CD1   CD1   . TYR TYR TYR B B 279 279 . 94.393  115.873 -13.694 1.00 7.88
1 . .
ATOM 5377 CE1   CE1   . TYR TYR TYR B B 279 279 . 94.035  116.690 -12.576 1.00 8.65
1 . .
ATOM 5378 CZ    CZ    . TYR TYR TYR B B 279 279 . 93.049  117.651 -12.738 1.00 9.34
1 . .
ATOM 5379 OH    OH    . TYR TYR TYR B B 279 279 . 92.664  118.475 -11.662 1.00 11.51
1 . .
ATOM 5380 CE2   CE2   . TYR TYR TYR B B 279 279 . 92.470  117.868 -13.988 1.00 10.15
1 . .
ATOM 5381 CD2   CD2   . TYR TYR TYR B B 279 279 . 92.784  117.072 -15.081 1.00 8.30
1 . .
ATOM 5382 C     C     . TYR TYR TYR B B 279 279 . 95.788  114.029 -17.517 1.00 10.59
1 . .
ATOM 5383 O     O     . TYR TYR TYR B B 279 279 . 95.698  112.814 -17.421 1.00 12.00
1 . .
ATOM 5384 N     N     . GLN GLN GLN B B 280 280 . 95.928  114.631 -18.690 1.00 10.99
1 . .
ATOM 5385 CA    CA    . GLN GLN GLN B B 280 280 . 96.126  113.796 -19.878 1.00 12.30
1 . .
ATOM 5386 CB    CB    . GLN GLN GLN B B 280 280 . 96.165  114.689 -21.122 1.00 13.65
1 . .
ATOM 5387 CG    CG    . GLN GLN GLN B B 280 280 . 94.854  115.361 -21.296 1.00 17.34
1 . .
ATOM 5388 CD    CD    . GLN GLN GLN B B 280 280 . 93.948  114.668 -22.209 1.00 26.56
1 . .
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ATOM 5389 OE1   OE1   . GLN GLN GLN B B 280 280 . 94.127  113.476 -22.506 1.00 31.37
1 . .
ATOM 5390 NE2   NE2   . GLN GLN GLN B B 280 280 . 92.905  115.380 -22.660 1.00 28.70
1 . .
ATOM 5391 C     C     . GLN GLN GLN B B 280 280 . 97.441  112.998 -19.745 1.00 12.02
1 . .
ATOM 5392 O     O     . GLN GLN GLN B B 280 280 . 97.495  111.843 -20.183 1.00 12.19
1 . .
ATOM 5393 N     N     . ASP ASP ASP B B 281 281 . 98.471  113.587 -19.146 1.00 12.58
1 . .
ATOM 5394 CA    CA    . ASP ASP ASP B B 281 281 . 99.733  112.824 -18.940 1.00 14.19
1 . .
ATOM 5395 CB    CB    . ASP ASP ASP B B 281 281 . 100.896 113.698 -18.476 1.00 15.27
1 . .
ATOM 5396 CG    CG    . ASP ASP ASP B B 281 281 . 101.396 114.651 -19.530 1.00 22.18
1 . .
ATOM 5397 OD1   OD1   . ASP ASP ASP B B 281 281 . 101.181 114.459 -20.751 1.00 25.66
1 . .
ATOM 5398 OD2   OD2   . ASP ASP ASP B B 281 281 . 102.021 115.647 -19.089 1.00 29.47
1 . .
ATOM 5399 C     C     . ASP ASP ASP B B 281 281 . 99.502  111.653 -17.946 1.00 13.45
1 . .
ATOM 5400 O     O     . ASP ASP ASP B B 281 281 . 99.921  110.513 -18.210 1.00 13.77
1 . .
ATOM 5401 N     N     . PHE PHE PHE B B 282 282 . 98.778  111.923 -16.865 1.00 11.70
1 . .
ATOM 5402 CA    CA    . PHE PHE PHE B B 282 282 . 98.410  110.822 -15.928 1.00 12.47
1 . .
ATOM 5403 CB    CB    . PHE PHE PHE B B 282 282 . 97.524  111.306 -14.771 1.00 14.65
1 . .
ATOM 5404 CG    CG    . PHE PHE PHE B B 282 282 . 98.188  112.320 -13.869 1.00 15.36
1 . .
ATOM 5405 CD1   CD1   . PHE PHE PHE B B 282 282 . 97.389  113.085 -12.994 1.00 15.71
1 . .
ATOM 5406 CE1   CE1   . PHE PHE PHE B B 282 282 . 97.984  114.024 -12.119 1.00 16.03
1 . .
ATOM 5407 CZ    CZ    . PHE PHE PHE B B 282 282 . 99.369  114.199 -12.141 1.00 17.81
1 . .
ATOM 5408 CE2   CE2   . PHE PHE PHE B B 282 282 . 100.172 113.491 -13.036 1.00 15.14
1 . .
ATOM 5409 CD2   CD2   . PHE PHE PHE B B 282 282 . 99.582  112.514 -13.868 1.00 14.24
1 . .
ATOM 5410 C     C     . PHE PHE PHE B B 282 282 . 97.640  109.690 -16.594 1.00 12.60
1 . .
ATOM 5411 O     O     . PHE PHE PHE B B 282 282 . 97.853  108.517 -16.264 1.00 11.86
1 . .
ATOM 5412 N     N     . VAL VAL VAL B B 283 283 . 96.711  110.014 -17.507 1.00 11.21
1 . .
ATOM 5413 CA    CA    . VAL VAL VAL B B 283 283 . 95.927  109.002 -18.168 1.00 11.44
1 . .
ATOM 5414 CB    CB    . VAL VAL VAL B B 283 283 . 94.690  109.614 -18.853 1.00 11.58
1 . .
ATOM 5415 CG1   CG1   . VAL VAL VAL B B 283 283 . 93.930  108.580 -19.672 1.00 12.86
1 . .
ATOM 5416 CG2   CG2   . VAL VAL VAL B B 283 283 . 93.744  110.161 -17.771 1.00 10.99
1 . .
ATOM 5417 C     C     . VAL VAL VAL B B 283 283 . 96.791  108.173 -19.120 1.00 12.07
1 . .
ATOM 5418 O     O     . VAL VAL VAL B B 283 283 . 96.545  106.988 -19.300 1.00 11.68
1 . .
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ATOM 5419 N     N     . ARG ARG ARG B B 284 284 . 97.761  108.823 -19.738 1.00 12.09
1 . .
ATOM 5420 CA    CA    . ARG ARG ARG B B 284 284 . 98.640  108.110 -20.667 1.00 12.29
1 . .
ATOM 5421 CB    CB    . ARG ARG ARG B B 284 284 . 99.445  109.110 -21.528 1.00 14.46
1 . .
ATOM 5422 CG    CG    . ARG ARG ARG B B 284 284 . 100.498 108.440 -22.459 1.00 13.98
1 . .
ATOM 5423 CD    CD    . ARG ARG ARG B B 284 284 . 99.837  107.584 -23.603 1.00 17.34
1 . .
ATOM 5424 NE    NE    . ARG ARG ARG B B 284 284 . 99.037  108.429 -24.518 1.00 16.24
1 . .
ATOM 5425 CZ    CZ    . ARG ARG ARG B B 284 284 . 99.556  109.131 -25.535 1.00 18.02
1 . .
ATOM 5426 NH1   NH1   . ARG ARG ARG B B 284 284 . 100.890 109.185 -25.808 1.00 18.41
1 . .
ATOM 5427 NH2   NH2   . ARG ARG ARG B B 284 284 . 98.738  109.813 -26.274 1.00 23.19
1 . .
ATOM 5428 C     C     . ARG ARG ARG B B 284 284 . 99.598  107.182 -19.912 1.00 12.79
1 . .
ATOM 5429 O     O     . ARG ARG ARG B B 284 284 . 99.896  106.064 -20.330 1.00 13.93
1 . .
ATOM 5430 N     N     . ASP ASP ASP B B 285 285 . 100.088 107.651 -18.794 1.00 12.46
1 . .
ATOM 5431 CA    CA    . ASP ASP ASP B B 285 285 . 101.281 107.047 -18.127 1.00 12.81
1 . .
ATOM 5432 CB    CB    . ASP ASP ASP B B 285 285 . 102.097 108.168 -17.509 1.00 14.67
1 . .
ATOM 5433 CG    CG    . ASP ASP ASP B B 285 285 . 102.807 109.032 -18.557 1.00 18.06
1 . .
ATOM 5434 OD1   OD1   . ASP ASP ASP B B 285 285 . 102.851 108.684 -19.769 1.00 19.02
1 . .
ATOM 5435 OD2   OD2   . ASP ASP ASP B B 285 285 . 103.348 110.051 -18.160 1.00 20.22
1 . .
ATOM 5436 C     C     . ASP ASP ASP B B 285 285 . 100.956 106.039 -17.004 1.00 12.26
1 . .
ATOM 5437 O     O     . ASP ASP ASP B B 285 285 . 101.829 105.303 -16.566 1.00 13.48
1 . .
ATOM 5438 N     N     . TYR TYR TYR B B 286 286 . 99.726  106.091 -16.514 1.00 10.59
1 . .
ATOM 5439 CA    CA    . TYR TYR TYR B B 286 286 . 99.256  105.291 -15.362 1.00 11.90
1 . .
ATOM 5440 CB    CB    . TYR TYR TYR B B 286 286 . 99.173  106.129 -14.062 1.00 10.93
1 . .
ATOM 5441 CG    CG    . TYR TYR TYR B B 286 286 . 100.457 106.778 -13.709 1.00 13.28
1 . .
ATOM 5442 CD1   CD1   . TYR TYR TYR B B 286 286 . 101.492 106.039 -13.166 1.00 17.74
1 . .
ATOM 5443 CE1   CE1   . TYR TYR TYR B B 286 286 . 102.745 106.651 -12.882 1.00 22.74
1 . .
ATOM 5444 CZ    CZ    . TYR TYR TYR B B 286 286 . 102.913 108.015 -13.167 1.00 23.85
1 . .
ATOM 5445 OH    OH    . TYR TYR TYR B B 286 286 . 104.125 108.672 -12.925 1.00 25.92
1 . .
ATOM 5446 CE2   CE2   . TYR TYR TYR B B 286 286 . 101.869 108.733 -13.726 1.00 19.70
1 . .
ATOM 5447 CD2   CD2   . TYR TYR TYR B B 286 286 . 100.686 108.120 -13.996 1.00 13.52
1 . .
ATOM 5448 C     C     . TYR TYR TYR B B 286 286 . 97.847  104.765 -15.740 1.00 11.52
1 . .
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ATOM 5449 O     O     . TYR TYR TYR B B 286 286 . 97.116  105.354 -16.620 1.00 12.03
1 . .
ATOM 5450 N     N     . PRO PRO PRO B B 287 287 . 97.381  103.703 -15.075 1.00 11.89
1 . .
ATOM 5451 CA    CA    . PRO PRO PRO B B 287 287 . 96.076  103.140 -15.384 1.00 10.86
1 . .
ATOM 5452 CB    CB    . PRO PRO PRO B B 287 287 . 96.203  101.697 -14.836 1.00 12.29
1 . .
ATOM 5453 CG    CG    . PRO PRO PRO B B 287 287 . 97.120  101.869 -13.713 1.00 13.56
1 . .
ATOM 5454 CD    CD    . PRO PRO PRO B B 287 287 . 98.146  102.820 -14.151 1.00 12.28
1 . .
ATOM 5455 C     C     . PRO PRO PRO B B 287 287 . 94.911  103.934 -14.724 1.00 11.53
1 . .
ATOM 5456 O     O     . PRO PRO PRO B B 287 287 . 94.046  103.333 -14.087 1.00 11.44
1 . .
ATOM 5457 N     N     . VAL VAL VAL B B 288 288 . 94.838  105.251 -14.970 1.00 9.91
1 . .
ATOM 5458 CA    CA    . VAL VAL VAL B B 288 288 . 93.781  106.086 -14.408 1.00 9.80
1 . .
ATOM 5459 CB    CB    . VAL VAL VAL B B 288 288 . 94.311  107.519 -14.328 1.00 9.32
1 . .
ATOM 5460 CG1   CG1   . VAL VAL VAL B B 288 288 . 93.092  108.558 -13.994 1.00 8.49
1 . .
ATOM 5461 CG2   CG2   . VAL VAL VAL B B 288 288 . 95.483  107.600 -13.345 1.00 11.05
1 . .
ATOM 5462 C     C     . VAL VAL VAL B B 288 288 . 92.574  106.010 -15.314 1.00 10.24
1 . .
ATOM 5463 O     O     . VAL VAL VAL B B 288 288 . 92.647  106.376 -16.535 1.00 11.02
1 . .
ATOM 5464 N     N     . VAL VAL VAL B B 289 289 . 91.440  105.591 -14.761 1.00 8.20
1 . .
ATOM 5465 CA    CA    . VAL VAL VAL B B 289 289 . 90.198  105.405 -15.522 1.00 10.30
1 . .
ATOM 5466 CB    CB    . VAL VAL VAL B B 289 289 . 89.719  103.932 -15.439 1.00 11.05
1 . .
ATOM 5467 CG1   CG1   . VAL VAL VAL B B 289 289 . 90.872  102.998 -15.894 1.00 11.81
1 . .
ATOM 5468 CG2   CG2   . VAL VAL VAL B B 289 289 . 89.276  103.560 -13.999 1.00 11.01
1 . .
ATOM 5469 C     C     . VAL VAL VAL B B 289 289 . 89.083  106.355 -15.121 1.00 9.15
1 . .
ATOM 5470 O     O     . VAL VAL VAL B B 289 289 . 87.955  106.324 -15.689 1.00 9.36
1 . .
ATOM 5471 N     N     . SER SER SER B B 290 290 . 89.345  107.179 -14.083 1.00 9.12
1 . .
ATOM 5472 CA    CA    . SER SER SER B B 290 290 . 88.245  108.010 -13.552 1.00 8.87
1 . .
ATOM 5473 CB    CB    . SER SER SER B B 290 290 . 87.460  107.226 -12.498 1.00 9.96
1 . .
ATOM 5474 OG    OG    . SER SER SER B B 290 290 . 86.326  107.997 -11.993 1.00 10.35
1 . .
ATOM 5475 C     C     . SER SER SER B B 290 290 . 88.939  109.152 -12.762 1.00 8.61
1 . .
ATOM 5476 O     O     . SER SER SER B B 290 290 . 89.907  108.918 -11.971 1.00 10.13
1 . .
ATOM 5477 N     N     . ILE ILE ILE B B 291 291 . 88.443  110.369 -12.996 1.00 6.67
1 . .
ATOM 5478 CA    CA    . ILE ILE ILE B B 291 291 . 88.977  111.571 -12.273 1.00 6.75
1 . .
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ATOM 5479 CB    CB    . ILE ILE ILE B B 291 291 . 89.901  112.452 -13.134 1.00 6.62
1 . .
ATOM 5480 CG1   CG1   . ILE ILE ILE B B 291 291 . 91.187  111.693 -13.581 1.00 7.27
1 . .
ATOM 5481 CD1   CD1   . ILE ILE ILE B B 291 291 . 92.114  112.539 -14.443 1.00 8.70
1 . .
ATOM 5482 CG2   CG2   . ILE ILE ILE B B 291 291 . 90.271  113.740 -12.276 1.00 7.18
1 . .
ATOM 5483 C     C     . ILE ILE ILE B B 291 291 . 87.748  112.341 -11.808 1.00 7.31
1 . .
ATOM 5484 O     O     . ILE ILE ILE B B 291 291 . 86.812  112.662 -12.599 1.00 8.64
1 . .
ATOM 5485 N     N     . GLU GLU GLU B B 292 292 . 87.696  112.554 -10.490 1.00 7.19
1 . .
ATOM 5486 CA    CA    . GLU GLU GLU B B 292 292 . 86.592  113.259 -9.866  1.00 6.01
1 . .
ATOM 5487 CB    CB    . GLU GLU GLU B B 292 292 . 86.247  112.510 -8.569  1.00 8.00
1 . .
ATOM 5488 CG    CG    . GLU GLU GLU B B 292 292 . 85.201  113.262 -7.723  1.00 7.96
1 . .
ATOM 5489 CD    CD    . GLU GLU GLU B B 292 292 . 84.997  112.545 -6.382  1.00 9.35
1 . .
ATOM 5490 OE1   OE1   . GLU GLU GLU B B 292 292 . 84.568  113.238 -5.452  1.00 9.13
1 . .
ATOM 5491 OE2   OE2   . GLU GLU GLU B B 292 292 . 85.264  111.300 -6.269  1.00 7.95
1 . .
ATOM 5492 C     C     . GLU GLU GLU B B 292 292 . 87.075  114.684 -9.482  1.00 5.71
1 . .
ATOM 5493 O     O     . GLU GLU GLU B B 292 292 . 88.232  114.927 -9.095  1.00 6.77
1 . .
ATOM 5494 N     N     . ASP ASP ASP B B 293 293 . 86.135  115.610 -9.636  1.00 5.21
1 . .
ATOM 5495 CA    CA    . ASP ASP ASP B B 293 293 . 86.397  117.070 -9.397  1.00 5.45
1 . .
ATOM 5496 CB    CB    . ASP ASP ASP B B 293 293 . 86.242  117.411 -7.896  1.00 7.55
1 . .
ATOM 5497 CG    CG    . ASP ASP ASP B B 293 293 . 84.768  117.551 -7.459  1.00 8.16
1 . .
ATOM 5498 OD1   OD1   . ASP ASP ASP B B 293 293 . 83.883  117.764 -8.302  1.00 7.31
1 . .
ATOM 5499 OD2   OD2   . ASP ASP ASP B B 293 293 . 84.509  117.579 -6.233  1.00 7.55
1 . .
ATOM 5500 C     C     . ASP ASP ASP B B 293 293 . 87.729  117.556 -9.943  1.00 7.31
1 . .
ATOM 5501 O     O     . ASP ASP ASP B B 293 293 . 88.559  118.151 -9.247  1.00 8.01
1 . .
ATOM 5502 N     N     . PRO PRO PRO B B 294 294 . 87.964  117.357 -11.268 1.00 6.79
1 . .
ATOM 5503 CA    CA    . PRO PRO PRO B B 294 294 . 89.205  117.832 -11.841 1.00 7.43
1 . .
ATOM 5504 CB    CB    . PRO PRO PRO B B 294 294 . 89.095  117.370 -13.338 1.00 7.30
1 . .
ATOM 5505 CG    CG    . PRO PRO PRO B B 294 294 . 87.571  117.207 -13.546 1.00 4.94
1 . .
ATOM 5506 CD    CD    . PRO PRO PRO B B 294 294 . 87.161  116.583 -12.250 1.00 7.20
1 . .
ATOM 5507 C     C     . PRO PRO PRO B B 294 294 . 89.309  119.379 -11.788 1.00 6.99
1 . .
ATOM 5508 O     O     . PRO PRO PRO B B 294 294 . 90.383  119.902 -11.911 1.00 7.30
1 . .
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ATOM 5509 N     N     . PHE PHE PHE B B 295 295 . 88.176  120.085 -11.710 1.00 7.89
1 . .
ATOM 5510 CA    CA    . PHE PHE PHE B B 295 295 . 88.278  121.575 -11.672 1.00 7.50
1 . .
ATOM 5511 CB    CB    . PHE PHE PHE B B 295 295 . 87.888  122.188 -13.036 1.00 7.89
1 . .
ATOM 5512 CG    CG    . PHE PHE PHE B B 295 295 . 88.738  121.619 -14.170 1.00 6.32
1 . .
ATOM 5513 CD1   CD1   . PHE PHE PHE B B 295 295 . 90.069  122.060 -14.386 1.00 8.81
1 . .
ATOM 5514 CE1   CE1   . PHE PHE PHE B B 295 295 . 90.849  121.510 -15.407 1.00 9.06
1 . .
ATOM 5515 CZ    CZ    . PHE PHE PHE B B 295 295 . 90.321  120.462 -16.155 1.00 7.64
1 . .
ATOM 5516 CE2   CE2   . PHE PHE PHE B B 295 295 . 89.031  119.994 -15.904 1.00 8.32
1 . .
ATOM 5517 CD2   CD2   . PHE PHE PHE B B 295 295 . 88.255  120.567 -14.920 1.00 6.07
1 . .
ATOM 5518 C     C     . PHE PHE PHE B B 295 295 . 87.335  122.101 -10.625 1.00 8.47
1 . .
ATOM 5519 O     O     . PHE PHE PHE B B 295 295 . 86.534  121.343 -10.072 1.00 8.51
1 . .
ATOM 5520 N     N     . ASP ASP ASP B B 296 296 . 87.416  123.403 -10.359 1.00 8.10
1 . .
ATOM 5521 CA    CA    . ASP ASP ASP B B 296 296 . 86.598  124.009 -9.293  1.00 7.70
1 . .
ATOM 5522 CB    CB    . ASP ASP ASP B B 296 296 . 86.910  125.496 -9.226  1.00 7.77
1 . .
ATOM 5523 CG    CG    . ASP ASP ASP B B 296 296 . 86.153  126.205 -8.107  1.00 10.34
1 . .
ATOM 5524 OD1   OD1   . ASP ASP ASP B B 296 296 . 86.497  126.000 -6.868  1.00 11.12
1 . .
ATOM 5525 OD2   OD2   . ASP ASP ASP B B 296 296 . 85.162  126.945 -8.472  1.00 9.45
1 . .
ATOM 5526 C     C     . ASP ASP ASP B B 296 296 . 85.091  123.849 -9.617  1.00 8.14
1 . .
ATOM 5527 O     O     . ASP ASP ASP B B 296 296 . 84.654  123.805 -10.809 1.00 9.11
1 . .
ATOM 5528 N     N     . GLN GLN GLN B B 297 297 . 84.287  123.820 -8.556  1.00 6.86
1 . .
ATOM 5529 CA    CA    . GLN GLN GLN B B 297 297 . 82.819  123.672 -8.631  1.00 7.05
1 . .
ATOM 5530 CB    CB    . GLN GLN GLN B B 297 297 . 82.214  123.685 -7.255  1.00 7.89
1 . .
ATOM 5531 CG    CG    . GLN GLN GLN B B 297 297 . 82.476  125.037 -6.499  1.00 8.22
1 . .
ATOM 5532 CD    CD    . GLN GLN GLN B B 297 297 . 82.758  124.891 -4.978  1.00 9.30
1 . .
ATOM 5533 OE1   OE1   . GLN GLN GLN B B 297 297 . 82.207  124.019 -4.324  1.00 8.46
1 . .
ATOM 5534 NE2   NE2   . GLN GLN GLN B B 297 297 . 83.694  125.697 -4.458  1.00 11.28
1 . .
ATOM 5535 C     C     . GLN GLN GLN B B 297 297 . 82.092  124.722 -9.499  1.00 8.42
1 . .
ATOM 5536 O     O     . GLN GLN GLN B B 297 297 . 80.957  124.511 -9.875  1.00 8.69
1 . .
ATOM 5537 N     N     . ASP ASP ASP B B 298 298 . 82.758  125.842 -9.736  1.00 7.18
1 . .
ATOM 5538 CA    CA    . ASP ASP ASP B B 298 298 . 82.198  126.890 -10.583 1.00 8.65
1 . .
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ATOM 5539 CB    CB    . ASP ASP ASP B B 298 298 . 82.243  128.253 -9.840  1.00 9.53
1 . .
ATOM 5540 CG    CG    . ASP ASP ASP B B 298 298 . 81.173  128.361 -8.731  1.00 10.66
1 . .
ATOM 5541 OD1   OD1   . ASP ASP ASP B B 298 298 . 79.955  128.128 -9.018  1.00 11.71
1 . .
ATOM 5542 OD2   OD2   . ASP ASP ASP B B 298 298 . 81.549  128.705 -7.558  1.00 15.80
1 . .
ATOM 5543 C     C     . ASP ASP ASP B B 298 298 . 82.832  126.992 -11.979 1.00 9.05
1 . .
ATOM 5544 O     O     . ASP ASP ASP B B 298 298 . 82.333  127.801 -12.810 1.00 8.56
1 . .
ATOM 5545 N     N     . ASP ASP ASP B B 299 299 . 83.911  126.211 -12.253 1.00 8.87
1 . .
ATOM 5546 CA    CA    . ASP ASP ASP B B 299 299 . 84.707  126.407 -13.470 1.00 7.15
1 . .
ATOM 5547 CB    CB    . ASP ASP ASP B B 299 299 . 86.162  126.152 -13.103 1.00 7.20
1 . .
ATOM 5548 CG    CG    . ASP ASP ASP B B 299 299 . 87.162  126.469 -14.187 1.00 7.42
1 . .
ATOM 5549 OD1   OD1   . ASP ASP ASP B B 299 299 . 86.857  127.027 -15.260 1.00 9.58
1 . .
ATOM 5550 OD2   OD2   . ASP ASP ASP B B 299 299 . 88.357  126.153 -13.948 1.00 9.26
1 . .
ATOM 5551 C     C     . ASP ASP ASP B B 299 299 . 84.139  125.535 -14.567 1.00 8.58
1 . .
ATOM 5552 O     O     . ASP ASP ASP B B 299 299 . 84.840  124.651 -15.144 1.00 8.70
1 . .
ATOM 5553 N     N     . TRP TRP TRP B B 300 300 . 82.843  125.780 -14.856 1.00 7.72
1 . .
ATOM 5554 CA    CA    . TRP TRP TRP B B 300 300 . 82.162  125.013 -15.887 1.00 6.84
1 . .
ATOM 5555 CB    CB    . TRP TRP TRP B B 300 300 . 80.752  125.630 -16.199 1.00 7.76
1 . .
ATOM 5556 CG    CG    . TRP TRP TRP B B 300 300 . 79.861  125.546 -15.069 1.00 7.24
1 . .
ATOM 5557 CD1   CD1   . TRP TRP TRP B B 300 300 . 79.641  126.506 -14.105 1.00 9.04
1 . .
ATOM 5558 NE1   NE1   . TRP TRP TRP B B 300 300 . 78.774  126.011 -13.169 1.00 9.76
1 . .
ATOM 5559 CE2   CE2   . TRP TRP TRP B B 300 300 . 78.385  124.731 -13.529 1.00 8.01
1 . .
ATOM 5560 CD2   CD2   . TRP TRP TRP B B 300 300 . 79.065  124.409 -14.711 1.00 10.23
1 . .
ATOM 5561 CE3   CE3   . TRP TRP TRP B B 300 300 . 78.887  123.124 -15.286 1.00 9.48
1 . .
ATOM 5562 CZ3   CZ3   . TRP TRP TRP B B 300 300 . 78.012  122.218 -14.685 1.00 12.32
1 . .
ATOM 5563 CH2   CH2   . TRP TRP TRP B B 300 300 . 77.314  122.560 -13.502 1.00 9.51
1 . .
ATOM 5564 CZ2   CZ2   . TRP TRP TRP B B 300 300 . 77.484  123.826 -12.901 1.00 8.79
1 . .
ATOM 5565 C     C     . TRP TRP TRP B B 300 300 . 82.943  124.863 -17.208 1.00 8.92
1 . .
ATOM 5566 O     O     . TRP TRP TRP B B 300 300 . 82.932  123.773 -17.812 1.00 7.90
1 . .
ATOM 5567 N     N     . ALA ALA ALA B B 301 301 . 83.575  125.946 -17.716 1.00 8.36
1 . .
ATOM 5568 CA    CA    . ALA ALA ALA B B 301 301 . 84.289  125.834 -19.013 1.00 8.81
1 . .
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ATOM 5569 CB    CB    . ALA ALA ALA B B 301 301 . 84.892  127.212 -19.482 1.00 8.88
1 . .
ATOM 5570 C     C     . ALA ALA ALA B B 301 301 . 85.367  124.731 -19.051 1.00 8.26
1 . .
ATOM 5571 O     O     . ALA ALA ALA B B 301 301 . 85.498  124.034 -20.066 1.00 9.42
1 . .
ATOM 5572 N     N     . ALA ALA ALA B B 302 302 . 86.112  124.562 -17.962 1.00 8.83
1 . .
ATOM 5573 CA    CA    . ALA ALA ALA B B 302 302 . 87.237  123.623 -17.955 1.00 7.87
1 . .
ATOM 5574 CB    CB    . ALA ALA ALA B B 302 302 . 88.158  123.916 -16.786 1.00 7.01
1 . .
ATOM 5575 C     C     . ALA ALA ALA B B 302 302 . 86.678  122.209 -17.864 1.00 9.06
1 . .
ATOM 5576 O     O     . ALA ALA ALA B B 302 302 . 87.222  121.288 -18.508 1.00 10.16
1 . .
ATOM 5577 N     N     . TRP TRP TRP B B 303 303 . 85.577  122.050 -17.138 1.00 7.99
1 . .
ATOM 5578 CA    CA    . TRP TRP TRP B B 303 303 . 84.992  120.694 -17.054 1.00 8.62
1 . .
ATOM 5579 CB    CB    . TRP TRP TRP B B 303 303 . 83.795  120.709 -16.154 1.00 8.58
1 . .
ATOM 5580 CG    CG    . TRP TRP TRP B B 303 303 . 84.046  120.713 -14.687 1.00 5.31
1 . .
ATOM 5581 CD1   CD1   . TRP TRP TRP B B 303 303 . 84.246  121.784 -13.871 1.00 6.03
1 . .
ATOM 5582 NE1   NE1   . TRP TRP TRP B B 303 303 . 84.290  121.384 -12.559 1.00 7.71
1 . .
ATOM 5583 CE2   CE2   . TRP TRP TRP B B 303 303 . 84.104  120.023 -12.504 1.00 6.77
1 . .
ATOM 5584 CD2   CD2   . TRP TRP TRP B B 303 303 . 83.929  119.565 -13.815 1.00 5.42
1 . .
ATOM 5585 CE3   CE3   . TRP TRP TRP B B 303 303 . 83.665  118.165 -14.050 1.00 7.36
1 . .
ATOM 5586 CZ3   CZ3   . TRP TRP TRP B B 303 303 . 83.599  117.312 -12.947 1.00 6.13
1 . .
ATOM 5587 CH2   CH2   . TRP TRP TRP B B 303 303 . 83.790  117.805 -11.632 1.00 4.78
1 . .
ATOM 5588 CZ2   CZ2   . TRP TRP TRP B B 303 303 . 84.072  119.158 -11.393 1.00 6.84
1 . .
ATOM 5589 C     C     . TRP TRP TRP B B 303 303 . 84.491  120.241 -18.451 1.00 8.16
1 . .
ATOM 5590 O     O     . TRP TRP TRP B B 303 303 . 84.795  119.124 -18.888 1.00 9.19
1 . .
ATOM 5591 N     N     . SER SER SER B B 304 304 . 83.716  121.106 -19.126 1.00 8.68
1 . .
ATOM 5592 CA    CA    . SER SER SER B B 304 304 . 83.134  120.710 -20.428 1.00 9.04
1 . .
ATOM 5593 CB    CB    . SER SER SER B B 304 304 . 82.263  121.872 -20.920 1.00 8.26
1 . .
ATOM 5594 OG    OG    . SER SER SER B B 304 304 . 81.125  121.949 -20.085 1.00 9.04
1 . .
ATOM 5595 C     C     . SER SER SER B B 304 304 . 84.269  120.512 -21.423 1.00 10.41
1 . .
ATOM 5596 O     O     . SER SER SER B B 304 304 . 84.228  119.554 -22.229 1.00 10.52
1 . .
ATOM 5597 N     N     . LYS LYS LYS B B 305 305 . 85.283  121.378 -21.396 1.00 9.97
1 . .
ATOM 5598 CA    CA    . LYS LYS LYS B B 305 305 . 86.397  121.198 -22.369 1.00 11.37
1 . .
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ATOM 5599 CB    CB    . LYS LYS LYS B B 305 305 . 87.355  122.398 -22.370 1.00 12.57
1 . .
ATOM 5600 CG    CG    . LYS LYS LYS B B 305 305 . 88.728  122.163 -23.095 1.00 15.06
1 . .
ATOM 5601 CD    CD    . LYS LYS LYS B B 305 305 . 89.508  123.461 -23.057 1.00 20.12
1 . .
ATOM 5602 CE    CE    . LYS LYS LYS B B 305 305 . 90.747  123.450 -23.959 1.00 25.35
1 . .
ATOM 5603 NZ    NZ    . LYS LYS LYS B B 305 305 . 90.942  124.893 -24.104 1.00 28.85
1 . .
ATOM 5604 C     C     . LYS LYS LYS B B 305 305 . 87.118  119.863 -22.122 1.00 12.46
1 . .
ATOM 5605 O     O     . LYS LYS LYS B B 305 305 . 87.392  119.129 -23.100 1.00 11.27
1 . .
ATOM 5606 N     N     . PHE PHE PHE B B 306 306 . 87.358  119.520 -20.834 1.00 9.74
1 . .
ATOM 5607 CA    CA    . PHE PHE PHE B B 306 306 . 88.176  118.346 -20.525 1.00 9.24
1 . .
ATOM 5608 CB    CB    . PHE PHE PHE B B 306 306 . 88.575  118.415 -19.045 1.00 8.43
1 . .
ATOM 5609 CG    CG    . PHE PHE PHE B B 306 306 . 89.456  117.267 -18.648 1.00 10.31
1 . .
ATOM 5610 CD1   CD1   . PHE PHE PHE B B 306 306 . 90.731  117.146 -19.221 1.00 12.06
1 . .
ATOM 5611 CE1   CE1   . PHE PHE PHE B B 306 306 . 91.603  116.069 -18.865 1.00 14.58
1 . .
ATOM 5612 CZ    CZ    . PHE PHE PHE B B 306 306 . 91.222  115.150 -17.901 1.00 12.75
1 . .
ATOM 5613 CE2   CE2   . PHE PHE PHE B B 306 306 . 89.916  115.252 -17.301 1.00 15.62
1 . .
ATOM 5614 CD2   CD2   . PHE PHE PHE B B 306 306 . 89.016  116.311 -17.717 1.00 12.37
1 . .
ATOM 5615 C     C     . PHE PHE PHE B B 306 306 . 87.368  117.066 -20.842 1.00 9.49
1 . .
ATOM 5616 O     O     . PHE PHE PHE B B 306 306 . 87.852  116.119 -21.536 1.00 10.05
1 . .
ATOM 5617 N     N     . THR THR THR B B 307 307 . 86.076  117.108 -20.489 1.00 8.15
1 . .
ATOM 5618 CA    CA    . THR THR THR B B 307 307 . 85.205  115.942 -20.671 1.00 10.82
1 . .
ATOM 5619 CB    CB    . THR THR THR B B 307 307 . 83.813  116.198 -20.026 1.00 10.67
1 . .
ATOM 5620 OG1   OG1   . THR THR THR B B 307 307 . 84.031  116.208 -18.615 1.00 9.79
1 . .
ATOM 5621 CG2   CG2   . THR THR THR B B 307 307 . 82.807  115.053 -20.317 1.00 11.32
1 . .
ATOM 5622 C     C     . THR THR THR B B 307 307 . 85.112  115.603 -22.156 1.00 11.26
1 . .
ATOM 5623 O     O     . THR THR THR B B 307 307 . 85.171  114.429 -22.535 1.00 11.32
1 . .
ATOM 5624 N     N     . ALA ALA ALA B B 308 308 . 85.030  116.643 -22.993 1.00 10.81
1 . .
ATOM 5625 CA    CA    . ALA ALA ALA B B 308 308 . 85.006  116.410 -24.425 1.00 9.41
1 . .
ATOM 5626 CB    CB    . ALA ALA ALA B B 308 308 . 84.512  117.695 -25.091 1.00 11.14
1 . .
ATOM 5627 C     C     . ALA ALA ALA B B 308 308 . 86.306  115.957 -25.049 1.00 10.22
1 . .
ATOM 5628 O     O     . ALA ALA ALA B B 308 308 . 86.290  115.498 -26.210 1.00 12.98
1 . .
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ATOM 5629 N     N     . ASN ASN ASN B B 309 309 . 87.406  116.028 -24.333 1.00 9.08
1 . .
ATOM 5630 CA    CA    . ASN ASN ASN B B 309 309 . 88.730  115.662 -24.877 1.00 11.21
1 . .
ATOM 5631 CB    CB    . ASN ASN ASN B B 309 309 . 89.713  116.801 -24.592 1.00 12.31
1 . .
ATOM 5632 CG    CG    . ASN ASN ASN B B 309 309 . 89.556  118.001 -25.596 1.00 19.30
1 . .
ATOM 5633 OD1   OD1   . ASN ASN ASN B B 309 309 . 89.120  117.816 -26.765 1.00 25.34
1 . .
ATOM 5634 ND2   ND2   . ASN ASN ASN B B 309 309 . 89.902  119.253 -25.125 1.00 24.07
1 . .
ATOM 5635 C     C     . ASN ASN ASN B B 309 309 . 89.260  114.381 -24.287 1.00 10.76
1 . .
ATOM 5636 O     O     . ASN ASN ASN B B 309 309 . 90.433  114.062 -24.469 1.00 12.23
1 . .
ATOM 5637 N     N     . VAL VAL VAL B B 310 310 . 88.436  113.623 -23.600 1.00 10.17
1 . .
ATOM 5638 CA    CA    . VAL VAL VAL B B 310 310 . 88.940  112.369 -22.934 1.00 10.41
1 . .
ATOM 5639 CB    CB    . VAL VAL VAL B B 310 310 . 89.419  112.578 -21.409 1.00 10.86
1 . .
ATOM 5640 CG1   CG1   . VAL VAL VAL B B 310 310 . 90.401  113.708 -21.341 1.00 16.75
1 . .
ATOM 5641 CG2   CG2   . VAL VAL VAL B B 310 310 . 88.257  112.869 -20.478 1.00 9.94
1 . .
ATOM 5642 C     C     . VAL VAL VAL B B 310 310 . 87.885  111.275 -22.963 1.00 9.78
1 . .
ATOM 5643 O     O     . VAL VAL VAL B B 310 310 . 86.695  111.556 -23.148 1.00 9.61
1 . .
ATOM 5644 N     N     . GLY GLY GLY B B 311 311 . 88.319  110.030 -22.728 1.00 9.43
1 . .
ATOM 5645 CA    CA    . GLY GLY GLY B B 311 311 . 87.391  108.900 -22.736 1.00 8.25
1 . .
ATOM 5646 C     C     . GLY GLY GLY B B 311 311 . 87.209  108.330 -21.336 1.00 9.56
1 . .
ATOM 5647 O     O     . GLY GLY GLY B B 311 311 . 86.367  107.472 -21.145 1.00 9.75
1 . .
ATOM 5648 N     N     . ILE ILE ILE B B 312 312 . 87.932  108.895 -20.357 1.00 8.57
1 . .
ATOM 5649 CA    CA    . ILE ILE ILE B B 312 312 . 87.789  108.388 -18.979 1.00 8.68
1 . .
ATOM 5650 CB    CB    . ILE ILE ILE B B 312 312 . 89.008  108.736 -18.116 1.00 8.70
1 . .
ATOM 5651 CG1   CG1   . ILE ILE ILE B B 312 312 . 89.224  110.227 -18.040 1.00 8.92
1 . .
ATOM 5652 CD1   CD1   . ILE ILE ILE B B 312 312 . 89.962  110.699 -16.720 1.00 10.57
1 . .
ATOM 5653 CG2   CG2   . ILE ILE ILE B B 312 312 . 90.338  107.982 -18.590 1.00 8.25
1 . .
ATOM 5654 C     C     . ILE ILE ILE B B 312 312 . 86.498  108.850 -18.288 1.00 9.03
1 . .
ATOM 5655 O     O     . ILE ILE ILE B B 312 312 . 85.758  109.769 -18.777 1.00 9.90
1 . .
ATOM 5656 N     N     . GLN GLN GLN B B 313 313 . 86.218  108.243 -17.125 1.00 7.62
1 . .
ATOM 5657 CA    CA    . GLN GLN GLN B B 313 313 . 85.026  108.636 -16.341 1.00 5.98
1 . .
ATOM 5658 CB    CB    . GLN GLN GLN B B 313 313 . 84.795  107.600 -15.235 1.00 5.36
1 . .
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ATOM 5659 CG    CG    . GLN GLN GLN B B 313 313 . 83.616  108.079 -14.346 1.00 8.43
1 . .
ATOM 5660 CD    CD    . GLN GLN GLN B B 313 313 . 83.058  106.972 -13.554 1.00 9.04
1 . .
ATOM 5661 OE1   OE1   . GLN GLN GLN B B 313 313 . 82.000  106.430 -13.893 1.00 12.78
1 . .
ATOM 5662 NE2   NE2   . GLN GLN GLN B B 313 313 . 83.740  106.632 -12.483 1.00 8.91
1 . .
ATOM 5663 C     C     . GLN GLN GLN B B 313 313 . 85.423  109.987 -15.703 1.00 6.74
1 . .
ATOM 5664 O     O     . GLN GLN GLN B B 313 313 . 86.559  110.162 -15.234 1.00 7.52
1 . .
ATOM 5665 N     N     . ILE ILE ILE B B 314 314 . 84.533  110.961 -15.793 1.00 7.05
1 . .
ATOM 5666 CA    CA    . ILE ILE ILE B B 314 314 . 84.721  112.304 -15.150 1.00 6.84
1 . .
ATOM 5667 CB    CB    . ILE ILE ILE B B 314 314 . 84.664  113.419 -16.248 1.00 6.22
1 . .
ATOM 5668 CG1   CG1   . ILE ILE ILE B B 314 314 . 85.851  113.273 -17.212 1.00 7.86
1 . .
ATOM 5669 CD1   CD1   . ILE ILE ILE B B 314 314 . 87.264  113.289 -16.637 1.00 9.13
1 . .
ATOM 5670 CG2   CG2   . ILE ILE ILE B B 314 314 . 84.656  114.867 -15.620 1.00 7.14
1 . .
ATOM 5671 C     C     . ILE ILE ILE B B 314 314 . 83.598  112.500 -14.154 1.00 7.83
1 . .
ATOM 5672 O     O     . ILE ILE ILE B B 314 314 . 82.436  112.553 -14.534 1.00 7.24
1 . .
ATOM 5673 N     N     . VAL VAL VAL B B 315 315 . 83.942  112.592 -12.846 1.00 8.32
1 . .
ATOM 5674 CA    CA    . VAL VAL VAL B B 315 315 . 82.914  112.495 -11.844 1.00 6.99
1 . .
ATOM 5675 CB    CB    . VAL VAL VAL B B 315 315 . 83.389  111.581 -10.689 1.00 7.91
1 . .
ATOM 5676 CG1   CG1   . VAL VAL VAL B B 315 315 . 82.237  111.395 -9.619  1.00 8.81
1 . .
ATOM 5677 CG2   CG2   . VAL VAL VAL B B 315 315 . 83.705  110.196 -11.205 1.00 7.19
1 . .
ATOM 5678 C     C     . VAL VAL VAL B B 315 315 . 82.663  113.889 -11.213 1.00 8.04
1 . .
ATOM 5679 O     O     . VAL VAL VAL B B 315 315 . 83.607  114.515 -10.733 1.00 7.77
1 . .
ATOM 5680 N     N     . GLY GLY GLY B B 316 316 . 81.401  114.344 -11.235 1.00 6.80
1 . .
ATOM 5681 CA    CA    . GLY GLY GLY B B 316 316 . 81.062  115.560 -10.526 1.00 6.93
1 . .
ATOM 5682 C     C     . GLY GLY GLY B B 316 316 . 80.803  115.182 -9.037  1.00 8.18
1 . .
ATOM 5683 O     O     . GLY GLY GLY B B 316 316 . 80.027  114.243 -8.712  1.00 8.84
1 . .
ATOM 5684 N     N     . ASP ASP ASP B B 317 317 . 81.350  115.996 -8.135  1.00 8.82
1 . .
ATOM 5685 CA    CA    . ASP ASP ASP B B 317 317 . 81.089  115.819 -6.696  1.00 7.31
1 . .
ATOM 5686 CB    CB    . ASP ASP ASP B B 317 317 . 82.364  115.283 -5.985  1.00 7.98
1 . .
ATOM 5687 CG    CG    . ASP ASP ASP B B 317 317 . 82.228  115.303 -4.461  1.00 7.39
1 . .
ATOM 5688 OD1   OD1   . ASP ASP ASP B B 317 317 . 83.290  115.196 -3.783  1.00 6.98
1 . .
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ATOM 5689 OD2   OD2   . ASP ASP ASP B B 317 317 . 81.092  115.423 -3.985  1.00 8.31
1 . .
ATOM 5690 C     C     . ASP ASP ASP B B 317 317 . 80.689  117.233 -6.208  1.00 6.18
1 . .
ATOM 5691 O     O     . ASP ASP ASP B B 317 317 . 79.478  117.496 -6.055  1.00 6.53
1 . .
ATOM 5692 N     N     . ASP ASP ASP B B 318 318 . 81.674  118.076 -5.981  1.00 6.08
1 . .
ATOM 5693 CA    CA    . ASP ASP ASP B B 318 318 . 81.331  119.465 -5.521  1.00 6.29
1 . .
ATOM 5694 CB    CB    . ASP ASP ASP B B 318 318 . 82.572  120.226 -4.984  1.00 6.30
1 . .
ATOM 5695 CG    CG    . ASP ASP ASP B B 318 318 . 83.129  119.596 -3.676  1.00 4.11
1 . .
ATOM 5696 OD1   OD1   . ASP ASP ASP B B 318 318 . 82.319  118.996 -2.896  1.00 8.95
1 . .
ATOM 5697 OD2   OD2   . ASP ASP ASP B B 318 318 . 84.371  119.738 -3.502  1.00 10.31
1 . .
ATOM 5698 C     C     . ASP ASP ASP B B 318 318 . 80.658  120.194 -6.673  1.00 7.86
1 . .
ATOM 5699 O     O     . ASP ASP ASP B B 318 318 . 79.858  121.134 -6.447  1.00 6.88
1 . .
ATOM 5700 N     N     . LEU LEU LEU B B 319 319 . 80.890  119.724 -7.913  1.00 7.45
1 . .
ATOM 5701 CA    CA    . LEU LEU LEU B B 319 319 . 80.241  120.414 -9.054  1.00 8.05
1 . .
ATOM 5702 CB    CB    . LEU LEU LEU B B 319 319 . 80.674  119.714 -10.355 1.00 8.70
1 . .
ATOM 5703 CG    CG    . LEU LEU LEU B B 319 319 . 80.022  120.351 -11.612 1.00 6.48
1 . .
ATOM 5704 CD1   CD1   . LEU LEU LEU B B 319 319 . 80.675  121.752 -11.909 1.00 8.48
1 . .
ATOM 5705 CD2   CD2   . LEU LEU LEU B B 319 319 . 80.256  119.411 -12.762 1.00 6.94
1 . .
ATOM 5706 C     C     . LEU LEU LEU B B 319 319 . 78.713  120.198 -8.911  1.00 8.15
1 . .
ATOM 5707 O     O     . LEU LEU LEU B B 319 319 . 77.900  121.121 -9.163  1.00 8.74
1 . .
ATOM 5708 N     N     . THR THR THR B B 320 320 . 78.313  118.940 -8.585  1.00 7.84
1 . .
ATOM 5709 CA    CA    . THR THR THR B B 320 320 . 76.882  118.520 -8.668  1.00 7.56
1 . .
ATOM 5710 CB    CB    . THR THR THR B B 320 320 . 76.798  117.136 -9.352  1.00 7.19
1 . .
ATOM 5711 OG1   OG1   . THR THR THR B B 320 320 . 77.912  116.366 -8.910  1.00 9.04
1 . .
ATOM 5712 CG2   CG2   . THR THR THR B B 320 320 . 76.915  117.371 -10.931 1.00 9.19
1 . .
ATOM 5713 C     C     . THR THR THR B B 320 320 . 76.132  118.466 -7.335  1.00 7.78
1 . .
ATOM 5714 O     O     . THR THR THR B B 320 320 . 74.858  118.546 -7.332  1.00 7.45
1 . .
ATOM 5715 N     N     . VAL VAL VAL B B 321 321 . 76.888  118.291 -6.255  1.00 7.13
1 . .
ATOM 5716 CA    CA    . VAL VAL VAL B B 321 321 . 76.328  118.182 -4.901  1.00 7.31
1 . .
ATOM 5717 CB    CB    . VAL VAL VAL B B 321 321 . 76.269  119.583 -4.137  1.00 7.35
1 . .
ATOM 5718 CG1   CG1   . VAL VAL VAL B B 321 321 . 77.742  120.041 -3.951  1.00 6.75
1 . .
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ATOM 5719 CG2   CG2   . VAL VAL VAL B B 321 321 . 75.493  120.593 -4.972  1.00 10.63
1 . .
ATOM 5720 C     C     . VAL VAL VAL B B 321 321 . 75.011  117.403 -4.784  1.00 7.81
1 . .
ATOM 5721 O     O     . VAL VAL VAL B B 321 321 . 74.121  117.780 -4.006  1.00 8.14
1 . .
ATOM 5722 N     N     . THR THR THR B B 322 322 . 74.960  116.260 -5.460  1.00 7.48
1 . .
ATOM 5723 CA    CA    . THR THR THR B B 322 322 . 73.839  115.349 -5.389  1.00 5.84
1 . .
ATOM 5724 CB    CB    . THR THR THR B B 322 322 . 73.940  114.532 -4.069  1.00 6.43
1 . .
ATOM 5725 OG1   OG1   . THR THR THR B B 322 322 . 75.249  113.947 -4.021  1.00 8.41
1 . .
ATOM 5726 CG2   CG2   . THR THR THR B B 322 322 . 72.967  113.351 -4.122  1.00 6.39
1 . .
ATOM 5727 C     C     . THR THR THR B B 322 322 . 72.482  116.129 -5.540  1.00 8.26
1 . .
ATOM 5728 O     O     . THR THR THR B B 322 322 . 71.462  115.794 -4.931  1.00 7.49
1 . .
ATOM 5729 N     N     . ASN ASN ASN B B 323 323 . 72.466  117.114 -6.435  1.00 9.59
1 . .
ATOM 5730 CA    CA    . ASN ASN ASN B B 323 323 . 71.383  118.087 -6.446  1.00 8.12
1 . .
ATOM 5731 CB    CB    . ASN ASN ASN B B 323 323 . 71.946  119.435 -5.995  1.00 9.60
1 . .
ATOM 5732 CG    CG    . ASN ASN ASN B B 323 323 . 70.844  120.518 -5.909  1.00 12.88
1 . .
ATOM 5733 OD1   OD1   . ASN ASN ASN B B 323 323 . 69.981  120.550 -6.758  1.00 15.68
1 . .
ATOM 5734 ND2   ND2   . ASN ASN ASN B B 323 323 . 70.881  121.391 -4.879  1.00 12.41
1 . .
ATOM 5735 C     C     . ASN ASN ASN B B 323 323 . 70.829  118.165 -7.865  1.00 8.53
1 . .
ATOM 5736 O     O     . ASN ASN ASN B B 323 323 . 71.550  118.520 -8.785  1.00 8.21
1 . .
ATOM 5737 N     N     . PRO PRO PRO B B 324 324 . 69.533  117.810 -8.050  1.00 9.63
1 . .
ATOM 5738 CA    CA    . PRO PRO PRO B B 324 324 . 68.979  117.644 -9.422  1.00 9.14
1 . .
ATOM 5739 CB    CB    . PRO PRO PRO B B 324 324 . 67.505  117.432 -9.152  1.00 9.13
1 . .
ATOM 5740 CG    CG    . PRO PRO PRO B B 324 324 . 67.573  116.513 -7.853  1.00 11.61
1 . .
ATOM 5741 CD    CD    . PRO PRO PRO B B 324 324 . 68.713  117.119 -7.044  1.00 10.29
1 . .
ATOM 5742 C     C     . PRO PRO PRO B B 324 324 . 69.110  118.917 -10.173 1.00 9.88
1 . .
ATOM 5743 O     O     . PRO PRO PRO B B 324 324 . 69.281  118.870 -11.426 1.00 11.40
1 . .
ATOM 5744 N     N     . LYS LYS LYS B B 325 325 . 69.026  120.068 -9.487  1.00 9.63
1 . .
ATOM 5745 CA    CA    . LYS LYS LYS B B 325 325 . 69.206  121.331 -10.264 1.00 11.97
1 . .
ATOM 5746 CB    CB    . LYS LYS LYS B B 325 325 . 68.836  122.569 -9.434  1.00 13.17
1 . .
ATOM 5747 CG    CG    . LYS LYS LYS B B 325 325 . 67.317  122.639 -9.116  1.00 20.67
1 . .
ATOM 5748 C     C     . LYS LYS LYS B B 325 325 . 70.592  121.535 -10.843 1.00 10.86
1 . .
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ATOM 5749 O     O     . LYS LYS LYS B B 325 325 . 70.713  122.020 -12.021 1.00 11.77
1 . .
ATOM 5750 N     N     . ARG ARG ARG B B 326 326 . 71.645  121.198 -10.080 1.00 9.76
1 . .
ATOM 5751 CA    CA    . ARG ARG ARG B B 326 326 . 73.024  121.345 -10.588 1.00 9.29
1 . .
ATOM 5752 CB    CB    . ARG ARG ARG B B 326 326 . 74.040  121.157 -9.428  1.00 8.97
1 . .
ATOM 5753 CG    CG    . ARG ARG ARG B B 326 326 . 73.822  122.161 -8.295  1.00 14.34
1 . .
ATOM 5754 CD    CD    . ARG ARG ARG B B 326 326 . 74.587  123.424 -8.383  1.00 14.67
1 . .
ATOM 5755 NE    NE    . ARG ARG ARG B B 326 326 . 76.044  123.266 -8.652  1.00 11.54
1 . .
ATOM 5756 CZ    CZ    . ARG ARG ARG B B 326 326 . 76.817  124.248 -9.139  1.00 10.07
1 . .
ATOM 5757 NH1   NH1   . ARG ARG ARG B B 326 326 . 76.300  125.461 -9.324  1.00 13.90
1 . .
ATOM 5758 NH2   NH2   . ARG ARG ARG B B 326 326 . 78.101  124.005 -9.406  1.00 8.48
1 . .
ATOM 5759 C     C     . ARG ARG ARG B B 326 326 . 73.281  120.241 -11.595 1.00 9.51
1 . .
ATOM 5760 O     O     . ARG ARG ARG B B 326 326 . 74.049  120.421 -12.559 1.00 10.98
1 . .
ATOM 5761 N     N     . ILE ILE ILE B B 327 327 . 72.697  119.058 -11.361 1.00 8.57
1 . .
ATOM 5762 CA    CA    . ILE ILE ILE B B 327 327 . 72.869  117.950 -12.318 1.00 9.08
1 . .
ATOM 5763 CB    CB    . ILE ILE ILE B B 327 327 . 72.235  116.654 -11.786 1.00 8.61
1 . .
ATOM 5764 CG1   CG1   . ILE ILE ILE B B 327 327 . 73.063  116.279 -10.520 1.00 10.26
1 . .
ATOM 5765 CD1   CD1   . ILE ILE ILE B B 327 327 . 72.324  115.239 -9.576  1.00 10.64
1 . .
ATOM 5766 CG2   CG2   . ILE ILE ILE B B 327 327 . 72.252  115.569 -12.915 1.00 9.32
1 . .
ATOM 5767 C     C     . ILE ILE ILE B B 327 327 . 72.282  118.318 -13.697 1.00 10.21
1 . .
ATOM 5768 O     O     . ILE ILE ILE B B 327 327 . 72.887  118.032 -14.730 1.00 10.14
1 . .
ATOM 5769 N     N     . GLU GLU GLU B B 328 328 . 71.092  118.913 -13.698 1.00 11.07
1 . .
ATOM 5770 CA    CA    . GLU GLU GLU B B 328 328 . 70.500  119.391 -14.972 1.00 12.82
1 . .
ATOM 5771 CB    CB    . GLU GLU GLU B B 328 328 . 69.184  120.128 -14.699 1.00 15.04
1 . .
ATOM 5772 CG    CG    . GLU GLU GLU B B 328 328 . 68.124  119.143 -14.257 1.00 21.89
1 . .
ATOM 5773 CD    CD    . GLU GLU GLU B B 328 328 . 67.332  118.498 -15.429 1.00 33.31
1 . .
ATOM 5774 OE1   OE1   . GLU GLU GLU B B 328 328 . 67.890  118.317 -16.574 1.00 36.62
1 . .
ATOM 5775 OE2   OE2   . GLU GLU GLU B B 328 328 . 66.131  118.171 -15.177 1.00 37.11
1 . .
ATOM 5776 C     C     . GLU GLU GLU B B 328 328 . 71.442  120.310 -15.728 1.00 12.96
1 . .
ATOM 5777 O     O     . GLU GLU GLU B B 328 328 . 71.593  120.184 -16.929 1.00 12.59
1 . .
ATOM 5778 N     N     . ARG ARG ARG B B 329 329 . 72.054  121.267 -15.022 1.00 12.24
1 . .
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ATOM 5779 CA    CA    . ARG ARG ARG B B 329 329 . 73.042  122.158 -15.641 1.00 11.73
1 . .
ATOM 5780 CB    CB    . ARG ARG ARG B B 329 329 . 73.452  123.279 -14.661 1.00 11.59
1 . .
ATOM 5781 CG    CG    . ARG ARG ARG B B 329 329 . 74.506  124.239 -15.274 1.00 12.64
1 . .
ATOM 5782 CD    CD    . ARG ARG ARG B B 329 329 . 74.630  125.480 -14.615 1.00 16.57
1 . .
ATOM 5783 NE    NE    . ARG ARG ARG B B 329 329 . 75.637  126.325 -15.308 1.00 14.53
1 . .
ATOM 5784 CZ    CZ    . ARG ARG ARG B B 329 329 . 76.149  127.406 -14.767 1.00 16.94
1 . .
ATOM 5785 NH1   NH1   . ARG ARG ARG B B 329 329 . 75.746  127.753 -13.553 1.00 17.29
1 . .
ATOM 5786 NH2   NH2   . ARG ARG ARG B B 329 329 . 77.080  128.111 -15.386 1.00 16.15
1 . .
ATOM 5787 C     C     . ARG ARG ARG B B 329 329 . 74.233  121.377 -16.189 1.00 12.45
1 . .
ATOM 5788 O     O     . ARG ARG ARG B B 329 329 . 74.679  121.584 -17.356 1.00 11.43
1 . .
ATOM 5789 N     N     . ALA ALA ALA B B 330 330 . 74.762  120.450 -15.378 1.00 10.29
1 . .
ATOM 5790 CA    CA    . ALA ALA ALA B B 330 330 . 75.944  119.680 -15.867 1.00 8.89
1 . .
ATOM 5791 CB    CB    . ALA ALA ALA B B 330 330 . 76.497  118.816 -14.739 1.00 9.23
1 . .
ATOM 5792 C     C     . ALA ALA ALA B B 330 330 . 75.550  118.820 -17.087 1.00 9.86
1 . .
ATOM 5793 O     O     . ALA ALA ALA B B 330 330 . 76.385  118.637 -17.944 1.00 10.93
1 . .
ATOM 5794 N     N     . VAL VAL VAL B B 331 331 . 74.276  118.315 -17.153 1.00 9.95
1 . .
ATOM 5795 CA    CA    . VAL VAL VAL B B 331 331 . 73.870  117.515 -18.353 1.00 12.29
1 . .
ATOM 5796 CB    CB    . VAL VAL VAL B B 331 331 . 72.464  116.842 -18.164 1.00 12.44
1 . .
ATOM 5797 CG1   CG1   . VAL VAL VAL B B 331 331 . 71.888  116.281 -19.527 1.00 16.14
1 . .
ATOM 5798 CG2   CG2   . VAL VAL VAL B B 331 331 . 72.571  115.675 -17.098 1.00 13.31
1 . .
ATOM 5799 C     C     . VAL VAL VAL B B 331 331 . 73.846  118.416 -19.564 1.00 12.46
1 . .
ATOM 5800 O     O     . VAL VAL VAL B B 331 331 . 74.385  118.073 -20.605 1.00 15.85
1 . .
ATOM 5801 N     N     . GLU GLU GLU B B 332 332 . 73.214  119.585 -19.432 1.00 14.49
1 . .
ATOM 5802 CA    CA    . GLU GLU GLU B B 332 332 . 73.114  120.586 -20.542 1.00 16.46
1 . .
ATOM 5803 CB    CB    . GLU GLU GLU B B 332 332 . 72.277  121.796 -20.076 1.00 18.31
1 . .
ATOM 5804 CG    CG    . GLU GLU GLU B B 332 332 . 72.223  123.055 -20.976 1.00 26.81
1 . .
ATOM 5805 CD    CD    . GLU GLU GLU B B 332 332 . 73.028  124.367 -20.476 1.00 39.87
1 . .
ATOM 5806 OE1   OE1   . GLU GLU GLU B B 332 332 . 73.164  124.720 -19.210 1.00 41.30
1 . .
ATOM 5807 OE2   OE2   . GLU GLU GLU B B 332 332 . 73.479  125.119 -21.413 1.00 45.15
1 . .
ATOM 5808 C     C     . GLU GLU GLU B B 332 332 . 74.517  120.985 -21.033 1.00 15.88
1 . .
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ATOM 5809 O     O     . GLU GLU GLU B B 332 332 . 74.735  121.069 -22.239 1.00 17.13
1 . .
ATOM 5810 N     N     . GLU GLU GLU B B 333 333 . 75.465  121.240 -20.140 1.00 13.47
1 . .
ATOM 5811 CA    CA    . GLU GLU GLU B B 333 333 . 76.818  121.641 -20.517 1.00 13.84
1 . .
ATOM 5812 CB    CB    . GLU GLU GLU B B 333 333 . 77.369  122.585 -19.468 1.00 14.92
1 . .
ATOM 5813 CG    CG    . GLU GLU GLU B B 333 333 . 76.362  123.756 -19.355 1.00 17.92
1 . .
ATOM 5814 CD    CD    . GLU GLU GLU B B 333 333 . 76.919  124.927 -18.613 1.00 19.06
1 . .
ATOM 5815 OE1   OE1   . GLU GLU GLU B B 333 333 . 76.085  125.691 -18.107 1.00 18.35
1 . .
ATOM 5816 OE2   OE2   . GLU GLU GLU B B 333 333 . 78.145  125.119 -18.576 1.00 22.47
1 . .
ATOM 5817 C     C     . GLU GLU GLU B B 333 333 . 77.799  120.523 -20.817 1.00 11.29
1 . .
ATOM 5818 O     O     . GLU GLU GLU B B 333 333 . 78.937  120.791 -21.222 1.00 11.06
1 . .
ATOM 5819 N     N     . LYS LYS LYS B B 334 334 . 77.354  119.260 -20.694 1.00 12.09
1 . .
ATOM 5820 CA    CA    . LYS LYS LYS B B 334 334 . 78.223  118.082 -20.860 1.00 10.98
1 . .
ATOM 5821 CB    CB    . LYS LYS LYS B B 334 334 . 78.507  117.830 -22.374 1.00 12.86
1 . .
ATOM 5822 CG    CG    . LYS LYS LYS B B 334 334 . 77.129  117.594 -23.099 1.00 17.30
1 . .
ATOM 5823 CD    CD    . LYS LYS LYS B B 334 334 . 77.451  117.055 -24.528 1.00 24.96
1 . .
ATOM 5824 CE    CE    . LYS LYS LYS B B 334 334 . 76.212  116.511 -25.218 1.00 31.23
1 . .
ATOM 5825 NZ    NZ    . LYS LYS LYS B B 334 334 . 75.763  115.221 -24.546 1.00 35.10
1 . .
ATOM 5826 C     C     . LYS LYS LYS B B 334 334 . 79.477  118.267 -20.021 1.00 9.94
1 . .
ATOM 5827 O     O     . LYS LYS LYS B B 334 334 . 80.636  118.048 -20.468 1.00 9.91
1 . .
ATOM 5828 N     N     . ALA ALA ALA B B 335 335 . 79.236  118.668 -18.769 1.00 7.78
1 . .
ATOM 5829 CA    CA    . ALA ALA ALA B B 335 335 . 80.375  118.993 -17.899 1.00 8.47
1 . .
ATOM 5830 CB    CB    . ALA ALA ALA B B 335 335 . 79.911  119.844 -16.723 1.00 8.64
1 . .
ATOM 5831 C     C     . ALA ALA ALA B B 335 335 . 81.106  117.724 -17.367 1.00 9.11
1 . .
ATOM 5832 O     O     . ALA ALA ALA B B 335 335 . 82.329  117.772 -17.085 1.00 8.84
1 . .
ATOM 5833 N     N     . CYS CYS CYS B B 336 336 . 80.365  116.625 -17.216 1.00 9.50
1 . .
ATOM 5834 CA    CA    . CYS CYS CYS B B 336 336 . 80.941  115.397 -16.617 1.00 8.31
1 . .
ATOM 5835 CB    CB    . CYS CYS CYS B B 336 336 . 80.885  115.499 -15.081 1.00 8.30
1 . .
ATOM 5836 SG    SG    . CYS CYS CYS B B 336 336 . 79.317  115.799 -14.306 1.00 11.20
1 . .
ATOM 5837 C     C     . CYS CYS CYS B B 336 336 . 80.108  114.224 -17.095 1.00 8.70
1 . .
ATOM 5838 O     O     . CYS CYS CYS B B 336 336 . 79.118  114.440 -17.782 1.00 11.96
1 . .
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ATOM 5839 N     N     . ASN ASN ASN B B 337 337 . 80.443  112.996 -16.702 1.00 9.36
1 . .
ATOM 5840 CA    CA    . ASN ASN ASN B B 337 337 . 79.657  111.837 -17.143 1.00 8.89
1 . .
ATOM 5841 CB    CB    . ASN ASN ASN B B 337 337 . 80.338  111.186 -18.369 1.00 10.11
1 . .
ATOM 5842 CG    CG    . ASN ASN ASN B B 337 337 . 81.789  110.756 -18.061 1.00 8.36
1 . .
ATOM 5843 OD1   OD1   . ASN ASN ASN B B 337 337 . 82.096  110.269 -16.950 1.00 9.80
1 . .
ATOM 5844 ND2   ND2   . ASN ASN ASN B B 337 337 . 82.668  110.911 -19.033 1.00 10.68
1 . .
ATOM 5845 C     C     . ASN ASN ASN B B 337 337 . 79.394  110.815 -16.021 1.00 9.23
1 . .
ATOM 5846 O     O     . ASN ASN ASN B B 337 337 . 79.044  109.640 -16.273 1.00 9.96
1 . .
ATOM 5847 N     N     . CYS CYS CYS B B 338 338 . 79.550  111.275 -14.766 1.00 7.12
1 . .
ATOM 5848 CA    CA    . CYS CYS CYS B B 338 338 . 79.257  110.390 -13.613 1.00 7.89
1 . .
ATOM 5849 CB    CB    . CYS CYS CYS B B 338 338 . 80.536  109.579 -13.271 1.00 5.98
1 . .
ATOM 5850 SG    SG    . CYS CYS CYS B B 338 338 . 80.296  108.412 -11.938 1.00 9.87
1 . .
ATOM 5851 C     C     . CYS CYS CYS B B 338 338 . 78.926  111.326 -12.462 1.00 8.30
1 . .
ATOM 5852 O     O     . CYS CYS CYS B B 338 338 . 79.552  112.374 -12.346 1.00 8.91
1 . .
ATOM 5853 N     N     . LEU LEU LEU B B 339 339 . 77.955  110.898 -11.629 1.00 8.24
1 . .
ATOM 5854 CA    CA    . LEU LEU LEU B B 339 339 . 77.539  111.668 -10.452 1.00 6.74
1 . .
ATOM 5855 CB    CB    . LEU LEU LEU B B 339 339 . 76.010  111.616 -10.355 1.00 8.09
1 . .
ATOM 5856 CG    CG    . LEU LEU LEU B B 339 339 . 75.435  112.162 -9.019  1.00 5.85
1 . .
ATOM 5857 CD1   CD1   . LEU LEU LEU B B 339 339 . 75.689  113.681 -8.922  1.00 7.90
1 . .
ATOM 5858 CD2   CD2   . LEU LEU LEU B B 339 339 . 73.918  111.925 -9.053  1.00 7.89
1 . .
ATOM 5859 C     C     . LEU LEU LEU B B 339 339 . 78.159  110.950 -9.245  1.00 7.83
1 . .
ATOM 5860 O     O     . LEU LEU LEU B B 339 339 . 78.004  109.716 -9.108  1.00 9.14
1 . .
ATOM 5861 N     N     . LEU LEU LEU B B 340 340 . 78.756  111.720 -8.330  1.00 7.36
1 . .
ATOM 5862 CA    CA    . LEU LEU LEU B B 340 340 . 79.123  111.161 -6.995  1.00 7.77
1 . .
ATOM 5863 CB    CB    . LEU LEU LEU B B 340 340 . 80.296  111.956 -6.417  1.00 7.30
1 . .
ATOM 5864 CG    CG    . LEU LEU LEU B B 340 340 . 80.938  111.097 -5.296  1.00 7.63
1 . .
ATOM 5865 CD1   CD1   . LEU LEU LEU B B 340 340 . 81.742  109.876 -5.833  1.00 9.08
1 . .
ATOM 5866 CD2   CD2   . LEU LEU LEU B B 340 340 . 81.819  111.861 -4.217  1.00 7.66
1 . .
ATOM 5867 C     C     . LEU LEU LEU B B 340 340 . 77.860  111.332 -6.149  1.00 9.72
1 . .
ATOM 5868 O     O     . LEU LEU LEU B B 340 340 . 77.387  112.475 -5.951  1.00 10.99
1 . .
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ATOM 5869 N     N     . LEU LEU LEU B B 341 341 . 77.347  110.253 -5.545  1.00 8.70
1 . .
ATOM 5870 CA    CA    . LEU LEU LEU B B 341 341 . 76.090  110.357 -4.814  1.00 8.51
1 . .
ATOM 5871 CB    CB    . LEU LEU LEU B B 341 341 . 75.141  109.230 -5.203  1.00 8.34
1 . .
ATOM 5872 CG    CG    . LEU LEU LEU B B 341 341 . 73.642  109.433 -4.857  1.00 9.50
1 . .
ATOM 5873 CD1   CD1   . LEU LEU LEU B B 341 341 . 72.896  110.179 -5.912  1.00 16.47
1 . .
ATOM 5874 CD2   CD2   . LEU LEU LEU B B 341 341 . 72.906  108.053 -4.923  1.00 14.07
1 . .
ATOM 5875 C     C     . LEU LEU LEU B B 341 341 . 76.337  110.356 -3.304  1.00 9.41
1 . .
ATOM 5876 O     O     . LEU LEU LEU B B 341 341 . 76.733  109.333 -2.695  1.00 9.64
1 . .
ATOM 5877 N     N     . LYS LYS LYS B B 342 342 . 76.089  111.509 -2.708  1.00 9.34
1 . .
ATOM 5878 CA    CA    . LYS LYS LYS B B 342 342 . 76.278  111.727 -1.253  1.00 9.42
1 . .
ATOM 5879 CB    CB    . LYS LYS LYS B B 342 342 . 77.293  112.827 -1.021  1.00 7.39
1 . .
ATOM 5880 CG    CG    . LYS LYS LYS B B 342 342 . 78.760  112.324 -1.180  1.00 10.66
1 . .
ATOM 5881 CD    CD    . LYS LYS LYS B B 342 342 . 79.659  113.523 -1.029  1.00 9.35
1 . .
ATOM 5882 CE    CE    . LYS LYS LYS B B 342 342 . 81.051  113.101 -1.003  1.00 10.42
1 . .
ATOM 5883 NZ    NZ    . LYS LYS LYS B B 342 342 . 81.962  114.209 -1.308  1.00 13.20
1 . .
ATOM 5884 C     C     . LYS LYS LYS B B 342 342 . 74.958  112.180 -0.676  1.00 9.35
1 . .
ATOM 5885 O     O     . LYS LYS LYS B B 342 342 . 74.567  113.304 -0.900  1.00 10.78
1 . .
ATOM 5886 N     N     . VAL VAL VAL B B 343 343 . 74.269  111.297 0.048   1.00 9.02
1 . .
ATOM 5887 CA    CA    . VAL VAL VAL B B 343 343 . 72.939  111.616 0.595   1.00 8.97
1 . .
ATOM 5888 CB    CB    . VAL VAL VAL B B 343 343 . 72.373  110.467 1.496   1.00 9.43
1 . .
ATOM 5889 CG1   CG1   . VAL VAL VAL B B 343 343 . 71.837  109.304 0.610   1.00 12.49
1 . .
ATOM 5890 CG2   CG2   . VAL VAL VAL B B 343 343 . 73.435  110.034 2.474   1.00 12.27
1 . .
ATOM 5891 C     C     . VAL VAL VAL B B 343 343 . 72.971  112.931 1.399   1.00 9.05
1 . .
ATOM 5892 O     O     . VAL VAL VAL B B 343 343 . 71.997  113.683 1.398   1.00 10.04
1 . .
ATOM 5893 N     N     . ASN ASN ASN B B 344 344 . 74.076  113.233 2.090   1.00 8.19
1 . .
ATOM 5894 CA    CA    . ASN ASN ASN B B 344 344 . 74.046  114.417 2.949   1.00 7.61
1 . .
ATOM 5895 CB    CB    . ASN ASN ASN B B 344 344 . 74.892  114.241 4.250   1.00 7.65
1 . .
ATOM 5896 CG    CG    . ASN ASN ASN B B 344 344 . 76.339  114.747 4.081   1.00 8.04
1 . .
ATOM 5897 OD1   OD1   . ASN ASN ASN B B 344 344 . 77.070  114.326 3.190   1.00 11.98
1 . .
ATOM 5898 ND2   ND2   . ASN ASN ASN B B 344 344 . 76.719  115.726 4.916   1.00 9.00
1 . .
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ATOM 5899 C     C     . ASN ASN ASN B B 344 344 . 74.439  115.707 2.186   1.00 9.74
1 . .
ATOM 5900 O     O     . ASN ASN ASN B B 344 344 . 74.397  116.787 2.765   1.00 10.85
1 . .
ATOM 5901 N     N     . GLN GLN GLN B B 345 345 . 74.802  115.603 0.928   1.00 7.72
1 . .
ATOM 5902 CA    CA    . GLN GLN GLN B B 345 345 . 74.950  116.847 0.074   1.00 8.88
1 . .
ATOM 5903 CB    CB    . GLN GLN GLN B B 345 345 . 75.687  116.531 -1.228  1.00 6.91
1 . .
ATOM 5904 CG    CG    . GLN GLN GLN B B 345 345 . 77.225  116.448 -0.979  1.00 7.49
1 . .
ATOM 5905 CD    CD    . GLN GLN GLN B B 345 345 . 78.043  116.332 -2.241  1.00 6.25
1 . .
ATOM 5906 OE1   OE1   . GLN GLN GLN B B 345 345 . 79.198  116.890 -2.326  1.00 13.54
1 . .
ATOM 5907 NE2   NE2   . GLN GLN GLN B B 345 345 . 77.514  115.606 -3.203  1.00 4.07
1 . .
ATOM 5908 C     C     . GLN GLN GLN B B 345 345 . 73.611  117.443 -0.259  1.00 8.49
1 . .
ATOM 5909 O     O     . GLN GLN GLN B B 345 345 . 73.545  118.636 -0.494  1.00 10.27
1 . .
ATOM 5910 N     N     . ILE ILE ILE B B 346 346 . 72.554  116.633 -0.314  1.00 9.46
1 . .
ATOM 5911 CA    CA    . ILE ILE ILE B B 346 346 . 71.185  117.108 -0.597  1.00 9.26
1 . .
ATOM 5912 CB    CB    . ILE ILE ILE B B 346 346 . 70.641  116.410 -1.890  1.00 8.52
1 . .
ATOM 5913 CG1   CG1   . ILE ILE ILE B B 346 346 . 69.379  117.124 -2.469  1.00 7.95
1 . .
ATOM 5914 CD1   CD1   . ILE ILE ILE B B 346 346 . 69.685  118.555 -2.872  1.00 11.40
1 . .
ATOM 5915 CG2   CG2   . ILE ILE ILE B B 346 346 . 70.337  114.877 -1.702  1.00 9.68
1 . .
ATOM 5916 C     C     . ILE ILE ILE B B 346 346 . 70.213  116.976 0.587   1.00 10.26
1 . .
ATOM 5917 O     O     . ILE ILE ILE B B 346 346 . 69.376  117.857 0.773   1.00 11.18
1 . .
ATOM 5918 N     N     . GLY GLY GLY B B 347 347 . 70.350  115.925 1.425   1.00 9.09
1 . .
ATOM 5919 CA    CA    . GLY GLY GLY B B 347 347 . 69.672  115.968 2.712   1.00 9.28
1 . .
ATOM 5920 C     C     . GLY GLY GLY B B 347 347 . 68.437  115.083 2.896   1.00 9.32
1 . .
ATOM 5921 O     O     . GLY GLY GLY B B 347 347 . 67.855  115.115 3.989   1.00 10.72
1 . .
ATOM 5922 N     N     . SER SER SER B B 348 348 . 68.069  114.272 1.903   1.00 9.71
1 . .
ATOM 5923 CA    CA    . SER SER SER B B 348 348 . 66.966  113.307 2.073   1.00 9.41
1 . .
ATOM 5924 CB    CB    . SER SER SER B B 348 348 . 65.533  113.885 1.804   1.00 9.62
1 . .
ATOM 5925 OG    OG    . SER SER SER B B 348 348 . 65.380  114.214 0.422   1.00 11.08
1 . .
ATOM 5926 C     C     . SER SER SER B B 348 348 . 67.192  112.138 1.180   1.00 10.41
1 . .
ATOM 5927 O     O     . SER SER SER B B 348 348 . 67.807  112.266 0.105   1.00 10.58
1 . .
ATOM 5928 N     N     . VAL VAL VAL B B 349 349 . 66.683  110.986 1.635   1.00 11.72
1 . .
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ATOM 5929 CA    CA    . VAL VAL VAL B B 349 349 . 66.747  109.795 0.758   1.00 10.39
1 . .
ATOM 5930 CB    CB    . VAL VAL VAL B B 349 349 . 66.239  108.530 1.469   1.00 11.91
1 . .
ATOM 5931 CG1   CG1   . VAL VAL VAL B B 349 349 . 66.101  107.378 0.470   1.00 13.04
1 . .
ATOM 5932 CG2   CG2   . VAL VAL VAL B B 349 349 . 67.206  108.204 2.677   1.00 11.75
1 . .
ATOM 5933 C     C     . VAL VAL VAL B B 349 349 . 66.039  110.076 -0.603  1.00 11.18
1 . .
ATOM 5934 O     O     . VAL VAL VAL B B 349 349 . 66.545  109.682 -1.652  1.00 10.13
1 . .
ATOM 5935 N     N     . THR THR THR B B 350 350 . 64.812  110.624 -0.553  1.00 10.24
1 . .
ATOM 5936 CA    CA    . THR THR THR B B 350 350 . 63.970  110.804 -1.773  1.00 10.62
1 . .
ATOM 5937 CB    CB    . THR THR THR B B 350 350 . 62.618  111.430 -1.442  1.00 11.91
1 . .
ATOM 5938 OG1   OG1   . THR THR THR B B 350 350 . 61.867  110.508 -0.658  1.00 13.01
1 . .
ATOM 5939 CG2   CG2   . THR THR THR B B 350 350 . 61.842  111.750 -2.744  1.00 12.27
1 . .
ATOM 5940 C     C     . THR THR THR B B 350 350 . 64.738  111.679 -2.799  1.00 10.80
1 . .
ATOM 5941 O     O     . THR THR THR B B 350 350 . 64.804  111.309 -3.990  1.00 11.08
1 . .
ATOM 5942 N     N     . GLU GLU GLU B B 351 351 . 65.371  112.773 -2.338  1.00 10.48
1 . .
ATOM 5943 CA    CA    . GLU GLU GLU B B 351 351 . 66.116  113.634 -3.292  1.00 11.43
1 . .
ATOM 5944 CB    CB    . GLU GLU GLU B B 351 351 . 66.445  114.996 -2.685  1.00 11.19
1 . .
ATOM 5945 CG    CG    . GLU GLU GLU B B 351 351 . 65.222  115.800 -2.335  1.00 14.22
1 . .
ATOM 5946 CD    CD    . GLU GLU GLU B B 351 351 . 65.609  116.970 -1.436  1.00 16.89
1 . .
ATOM 5947 OE1   OE1   . GLU GLU GLU B B 351 351 . 65.942  116.757 -0.256  1.00 14.09
1 . .
ATOM 5948 OE2   OE2   . GLU GLU GLU B B 351 351 . 65.534  118.127 -1.872  1.00 15.41
1 . .
ATOM 5949 C     C     . GLU GLU GLU B B 351 351 . 67.371  112.938 -3.808  1.00 11.21
1 . .
ATOM 5950 O     O     . GLU GLU GLU B B 351 351 . 67.730  113.132 -4.984  1.00 13.20
1 . .
ATOM 5951 N     N     . ALA ALA ALA B B 352 352 . 68.022  112.097 -2.998  1.00 10.41
1 . .
ATOM 5952 CA    CA    . ALA ALA ALA B B 352 352 . 69.240  111.455 -3.472  1.00 9.67
1 . .
ATOM 5953 CB    CB    . ALA ALA ALA B B 352 352 . 69.996  110.732 -2.279  1.00 10.17
1 . .
ATOM 5954 C     C     . ALA ALA ALA B B 352 352 . 68.850  110.406 -4.544  1.00 10.35
1 . .
ATOM 5955 O     O     . ALA ALA ALA B B 352 352 . 69.559  110.217 -5.519  1.00 9.85
1 . .
ATOM 5956 N     N     . ILE ILE ILE B B 353 353 . 67.747  109.697 -4.322  1.00 10.10
1 . .
ATOM 5957 CA    CA    . ILE ILE ILE B B 353 353 . 67.255  108.731 -5.324  1.00 11.21
1 . .
ATOM 5958 CB    CB    . ILE ILE ILE B B 353 353 . 66.071  107.894 -4.790  1.00 12.58
1 . .
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ATOM 5959 CG1   CG1   . ILE ILE ILE B B 353 353 . 66.598  106.981 -3.681  1.00 12.81
1 . .
ATOM 5960 CD1   CD1   . ILE ILE ILE B B 353 353 . 65.494  106.095 -2.978  1.00 13.19
1 . .
ATOM 5961 CG2   CG2   . ILE ILE ILE B B 353 353 . 65.446  107.015 -5.960  1.00 15.45
1 . .
ATOM 5962 C     C     . ILE ILE ILE B B 353 353 . 66.918  109.500 -6.591  1.00 10.51
1 . .
ATOM 5963 O     O     . ILE ILE ILE B B 353 353 . 67.220  109.040 -7.703  1.00 10.83
1 . .
ATOM 5964 N     N     . GLN GLN GLN B B 354 354 . 66.249  110.621 -6.445  1.00 10.77
1 . .
ATOM 5965 CA    CA    . GLN GLN GLN B B 354 354 . 65.926  111.458 -7.654  1.00 12.94
1 . .
ATOM 5966 CB    CB    . GLN GLN GLN B B 354 354 . 65.149  112.697 -7.230  1.00 15.10
1 . .
ATOM 5967 CG    CG    . GLN GLN GLN B B 354 354 . 64.739  113.659 -8.411  1.00 23.17
1 . .
ATOM 5968 CD    CD    . GLN GLN GLN B B 354 354 . 64.185  115.025 -7.905  1.00 30.31
1 . .
ATOM 5969 OE1   OE1   . GLN GLN GLN B B 354 354 . 63.945  115.204 -6.681  1.00 34.01
1 . .
ATOM 5970 NE2   NE2   . GLN GLN GLN B B 354 354 . 63.984  115.989 -8.851  1.00 30.82
1 . .
ATOM 5971 C     C     . GLN GLN GLN B B 354 354 . 67.170  111.898 -8.426  1.00 12.64
1 . .
ATOM 5972 O     O     . GLN GLN GLN B B 354 354 . 67.158  111.869 -9.675  1.00 12.88
1 . .
ATOM 5973 N     N     . ALA ALA ALA B B 355 355 . 68.196  112.368 -7.700  1.00 8.95
1 . .
ATOM 5974 CA    CA    . ALA ALA ALA B B 355 355 . 69.503  112.700 -8.314  1.00 9.12
1 . .
ATOM 5975 CB    CB    . ALA ALA ALA B B 355 355 . 70.505  113.202 -7.287  1.00 9.74
1 . .
ATOM 5976 C     C     . ALA ALA ALA B B 355 355 . 70.078  111.508 -9.082  1.00 10.18
1 . .
ATOM 5977 O     O     . ALA ALA ALA B B 355 355 . 70.520  111.648 -10.193 1.00 10.81
1 . .
ATOM 5978 N     N     . CYS CYS CYS B B 356 356 . 70.123  110.325 -8.450  1.00 11.16
1 . .
ATOM 5979 CA    CA    . CYS CYS CYS B B 356 356 . 70.677  109.136 -9.072  1.00 11.27
1 . .
ATOM 5980 CB    CB    . CYS CYS CYS B B 356 356 . 70.539  107.943 -8.122  1.00 12.55
1 . .
ATOM 5981 SG    SG    . CYS CYS CYS B B 356 356 . 71.253  106.407 -8.808  1.00 12.39
1 . .
ATOM 5982 C     C     . CYS CYS CYS B B 356 356 . 69.882  108.829 -10.380 1.00 11.87
1 . .
ATOM 5983 O     O     . CYS CYS CYS B B 356 356 . 70.489  108.581 -11.424 1.00 12.06
1 . .
ATOM 5984 N     N     . LYS LYS LYS B B 357 357 . 68.550  108.893 -10.310 1.00 12.57
1 . .
ATOM 5985 CA    CA    . LYS LYS LYS B B 357 357 . 67.739  108.483 -11.446 1.00 13.53
1 . .
ATOM 5986 CB    CB    . LYS LYS LYS B B 357 357 . 66.273  108.399 -11.030 1.00 14.93
1 . .
ATOM 5987 CG    CG    . LYS LYS LYS B B 357 357 . 65.961  107.158 -10.196 1.00 19.86
1 . .
ATOM 5988 CD    CD    . LYS LYS LYS B B 357 357 . 64.481  107.095 -9.838  1.00 27.90
1 . .
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ATOM 5989 CE    CE    . LYS LYS LYS B B 357 357 . 63.800  106.393 -11.081 1.00 33.21
1 . .
ATOM 5990 NZ    NZ    . LYS LYS LYS B B 357 357 . 62.311  106.309 -11.020 1.00 36.42
1 . .
ATOM 5991 C     C     . LYS LYS LYS B B 357 357 . 67.913  109.463 -12.607 1.00 13.82
1 . .
ATOM 5992 O     O     . LYS LYS LYS B B 357 357 . 68.002  109.028 -13.786 1.00 13.17
1 . .
ATOM 5993 N     N     . LEU LEU LEU B B 358 358 . 68.097  110.744 -12.266 1.00 13.29
1 . .
ATOM 5994 CA    CA    . LEU LEU LEU B B 358 358 . 68.337  111.813 -13.265 1.00 12.69
1 . .
ATOM 5995 CB    CB    . LEU LEU LEU B B 358 358 . 68.323  113.169 -12.540 1.00 13.04
1 . .
ATOM 5996 CG    CG    . LEU LEU LEU B B 358 358 . 68.557  114.375 -13.442 1.00 15.04
1 . .
ATOM 5997 CD1   CD1   . LEU LEU LEU B B 358 358 . 67.448  114.425 -14.559 1.00 18.82
1 . .
ATOM 5998 CD2   CD2   . LEU LEU LEU B B 358 358 . 68.600  115.703 -12.648 1.00 15.83
1 . .
ATOM 5999 C     C     . LEU LEU LEU B B 358 358 . 69.653  111.576 -14.003 1.00 13.05
1 . .
ATOM 6000 O     O     . LEU LEU LEU B B 358 358 . 69.745  111.673 -15.255 1.00 12.87
1 . .
ATOM 6001 N     N     . ALA ALA ALA B B 359 359 . 70.684  111.245 -13.232 1.00 10.94
1 . .
ATOM 6002 CA    CA    . ALA ALA ALA B B 359 359 . 72.024  110.990 -13.803 1.00 11.93
1 . .
ATOM 6003 CB    CB    . ALA ALA ALA B B 359 359 . 73.088  110.775 -12.658 1.00 13.26
1 . .
ATOM 6004 C     C     . ALA ALA ALA B B 359 359 . 71.913  109.769 -14.704 1.00 12.74
1 . .
ATOM 6005 O     O     . ALA ALA ALA B B 359 359 . 72.347  109.776 -15.884 1.00 12.36
1 . .
ATOM 6006 N     N     . GLN GLN GLN B B 360 360 . 71.291  108.719 -14.182 1.00 12.97
1 . .
ATOM 6007 CA    CA    . GLN GLN GLN B B 360 360 . 71.230  107.461 -14.979 1.00 12.41
1 . .
ATOM 6008 CB    CB    . GLN GLN GLN B B 360 360 . 70.656  106.341 -14.129 1.00 12.37
1 . .
ATOM 6009 CG    CG    . GLN GLN GLN B B 360 360 . 71.693  105.897 -13.087 1.00 11.96
1 . .
ATOM 6010 CD    CD    . GLN GLN GLN B B 360 360 . 71.099  104.869 -12.116 1.00 15.05
1 . .
ATOM 6011 OE1   OE1   . GLN GLN GLN B B 360 360 . 69.879  104.850 -11.859 1.00 16.59
1 . .
ATOM 6012 NE2   NE2   . GLN GLN GLN B B 360 360 . 71.957  103.992 -11.605 1.00 16.23
1 . .
ATOM 6013 C     C     . GLN GLN GLN B B 360 360 . 70.398  107.637 -16.276 1.00 14.21
1 . .
ATOM 6014 O     O     . GLN GLN GLN B B 360 360 . 70.761  107.048 -17.318 1.00 14.43
1 . .
ATOM 6015 N     N     . GLU GLU GLU B B 361 361 . 69.290  108.395 -16.179 1.00 15.20
1 . .
ATOM 6016 CA    CA    . GLU GLU GLU B B 361 361 . 68.416  108.657 -17.364 1.00 17.12
1 . .
ATOM 6017 CB    CB    . GLU GLU GLU B B 361 361 . 67.209  109.525 -17.036 1.00 18.04
1 . .
ATOM 6018 CG    CG    . GLU GLU GLU B B 361 361 . 66.127  108.946 -16.216 1.00 29.52
1 . .
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ATOM 6019 CD    CD    . GLU GLU GLU B B 361 361 . 65.123  110.088 -15.749 1.00 39.04
1 . .
ATOM 6020 OE1   OE1   . GLU GLU GLU B B 361 361 . 64.143  109.748 -15.023 1.00 45.99
1 . .
ATOM 6021 OE2   OE2   . GLU GLU GLU B B 361 361 . 65.341  111.316 -16.060 1.00 39.66
1 . .
ATOM 6022 C     C     . GLU GLU GLU B B 361 361 . 69.180  109.368 -18.462 1.00 15.77
1 . .
ATOM 6023 O     O     . GLU GLU GLU B B 361 361 . 68.841  109.207 -19.644 1.00 16.87
1 . .
ATOM 6024 N     N     . ASN ASN ASN B B 362 362 . 70.183  110.165 -18.097 1.00 14.21
1 . .
ATOM 6025 CA    CA    . ASN ASN ASN B B 362 362 . 71.025  110.885 -19.030 1.00 14.39
1 . .
ATOM 6026 CB    CB    . ASN ASN ASN B B 362 362 . 71.281  112.274 -18.418 1.00 14.58
1 . .
ATOM 6027 CG    CG    . ASN ASN ASN B B 362 362 . 70.111  113.152 -18.597 1.00 16.39
1 . .
ATOM 6028 OD1   OD1   . ASN ASN ASN B B 362 362 . 69.832  113.591 -19.734 1.00 17.58
1 . .
ATOM 6029 ND2   ND2   . ASN ASN ASN B B 362 362 . 69.382  113.414 -17.540 1.00 16.59
1 . .
ATOM 6030 C     C     . ASN ASN ASN B B 362 362 . 72.309  110.194 -19.406 1.00 14.53
1 . .
ATOM 6031 O     O     . ASN ASN ASN B B 362 362 . 73.208  110.815 -20.022 1.00 14.31
1 . .
ATOM 6032 N     N     . GLY GLY GLY B B 363 363 . 72.407  108.902 -19.099 1.00 13.32
1 . .
ATOM 6033 CA    CA    . GLY GLY GLY B B 363 363 . 73.553  108.122 -19.523 1.00 14.00
1 . .
ATOM 6034 C     C     . GLY GLY GLY B B 363 363 . 74.820  108.270 -18.700 1.00 14.68
1 . .
ATOM 6035 O     O     . GLY GLY GLY B B 363 363 . 75.860  107.765 -19.083 1.00 17.28
1 . .
ATOM 6036 N     N     . TRP TRP TRP B B 364 364 . 74.747  108.915 -17.535 1.00 12.41
1 . .
ATOM 6037 CA    CA    . TRP TRP TRP B B 364 364 . 75.914  108.982 -16.690 1.00 11.90
1 . .
ATOM 6038 CB    CB    . TRP TRP TRP B B 364 364 . 75.726  110.112 -15.685 1.00 11.00
1 . .
ATOM 6039 CG    CG    . TRP TRP TRP B B 364 364 . 75.818  111.532 -16.209 1.00 11.05
1 . .
ATOM 6040 CD1   CD1   . TRP TRP TRP B B 364 364 . 75.698  112.001 -17.526 1.00 14.08
1 . .
ATOM 6041 NE1   NE1   . TRP TRP TRP B B 364 364 . 75.743  113.390 -17.517 1.00 11.44
1 . .
ATOM 6042 CE2   CE2   . TRP TRP TRP B B 364 364 . 75.839  113.824 -16.217 1.00 11.61
1 . .
ATOM 6043 CD2   CD2   . TRP TRP TRP B B 364 364 . 75.862  112.676 -15.371 1.00 8.52
1 . .
ATOM 6044 CE3   CE3   . TRP TRP TRP B B 364 364 . 75.993  112.842 -13.960 1.00 9.20
1 . .
ATOM 6045 CZ3   CZ3   . TRP TRP TRP B B 364 364 . 76.061  114.123 -13.446 1.00 9.67
1 . .
ATOM 6046 CH2   CH2   . TRP TRP TRP B B 364 364 . 76.021  115.244 -14.311 1.00 8.79
1 . .
ATOM 6047 CZ2   CZ2   . TRP TRP TRP B B 364 364 . 75.960  115.118 -15.712 1.00 12.61
1 . .
ATOM 6048 C     C     . TRP TRP TRP B B 364 364 . 76.070  107.729 -15.810 1.00 11.37
1 . .
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ATOM 6049 O     O     . TRP TRP TRP B B 364 364 . 75.080  107.079 -15.514 1.00 11.71
1 . .
ATOM 6050 N     N     . GLY GLY GLY B B 365 365 . 77.314  107.489 -15.365 1.00 12.12
1 . .
ATOM 6051 CA    CA    . GLY GLY GLY B B 365 365 . 77.627  106.563 -14.238 1.00 10.95
1 . .
ATOM 6052 C     C     . GLY GLY GLY B B 365 365 . 77.163  107.203 -12.929 1.00 9.11
1 . .
ATOM 6053 O     O     . GLY GLY GLY B B 365 365 . 76.873  108.416 -12.876 1.00 9.38
1 . .
ATOM 6054 N     N     . VAL VAL VAL B B 366 366 . 77.050  106.402 -11.854 1.00 9.07
1 . .
ATOM 6055 CA    CA    . VAL VAL VAL B B 366 366 . 76.824  107.019 -10.512 1.00 8.58
1 . .
ATOM 6056 CB    CB    . VAL VAL VAL B B 366 366 . 75.356  106.904 -9.991  1.00 9.38
1 . .
ATOM 6057 CG1   CG1   . VAL VAL VAL B B 366 366 . 75.231  107.518 -8.594  1.00 10.94
1 . .
ATOM 6058 CG2   CG2   . VAL VAL VAL B B 366 366 . 74.356  107.610 -10.983 1.00 11.86
1 . .
ATOM 6059 C     C     . VAL VAL VAL B B 366 366 . 77.742  106.237 -9.568  1.00 9.68
1 . .
ATOM 6060 O     O     . VAL VAL VAL B B 366 366 . 77.746  104.960 -9.575  1.00 9.52
1 . .
ATOM 6061 N     N     . MET MET MET B B 367 367 . 78.503  106.976 -8.779  1.00 8.17
1 . .
ATOM 6062 CA    CA    . MET MET MET B B 367 367 . 79.351  106.307 -7.776  1.00 7.69
1 . .
ATOM 6063 CB    CB    . MET MET MET B B 367 367 . 80.838  106.715 -7.974  1.00 7.73
1 . .
ATOM 6064 CG    CG    . MET MET MET B B 367 367 . 81.745  106.142 -6.842  1.00 7.34
1 . .
ATOM 6065 SD    SD    . MET MET MET B B 367 367 . 83.494  106.597 -6.863  1.00 10.71
1 . .
ATOM 6066 CE    CE    . MET MET MET B B 367 367 . 84.129  105.511 -8.163  1.00 12.84
1 . .
ATOM 6067 C     C     . MET MET MET B B 367 367 . 78.831  106.737 -6.435  1.00 8.27
1 . .
ATOM 6068 O     O     . MET MET MET B B 367 367 . 78.910  107.965 -6.108  1.00 7.98
1 . .
ATOM 6069 N     N     . VAL VAL VAL B B 368 368 . 78.366  105.783 -5.619  1.00 7.25
1 . .
ATOM 6070 CA    CA    . VAL VAL VAL B B 368 368 . 77.876  106.160 -4.234  1.00 7.94
1 . .
ATOM 6071 CB    CB    . VAL VAL VAL B B 368 368 . 77.056  105.031 -3.644  1.00 9.04
1 . .
ATOM 6072 CG1   CG1   . VAL VAL VAL B B 368 368 . 76.752  105.249 -2.118  1.00 7.36
1 . .
ATOM 6073 CG2   CG2   . VAL VAL VAL B B 368 368 . 75.770  104.810 -4.500  1.00 10.15
1 . .
ATOM 6074 C     C     . VAL VAL VAL B B 368 368 . 79.114  106.438 -3.402  1.00 7.31
1 . .
ATOM 6075 O     O     . VAL VAL VAL B B 368 368 . 80.180  105.829 -3.621  1.00 7.81
1 . .
ATOM 6076 N     N     . SER SER SER B B 369 369 . 79.006  107.382 -2.456  1.00 6.90
1 . .
ATOM 6077 CA    CA    . SER SER SER B B 369 369 . 80.234  107.737 -1.691  1.00 8.13
1 . .
ATOM 6078 CB    CB    . SER SER SER B B 369 369 . 80.787  109.105 -2.248  1.00 7.53
1 . .
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ATOM 6079 OG    OG    . SER SER SER B B 369 369 . 81.950  109.533 -1.562  1.00 7.63
1 . .
ATOM 6080 C     C     . SER SER SER B B 369 369 . 79.947  107.962 -0.228  1.00 6.88
1 . .
ATOM 6081 O     O     . SER SER SER B B 369 369 . 78.901  108.561 0.125   1.00 8.04
1 . .
ATOM 6082 N     N     . HIS HIS HIS B B 370 370 . 80.908  107.587 0.620   1.00 7.39
1 . .
ATOM 6083 CA    CA    . HIS HIS HIS B B 370 370 . 80.983  108.068 2.005   1.00 7.00
1 . .
ATOM 6084 CB    CB    . HIS HIS HIS B B 370 370 . 82.149  107.311 2.704   1.00 6.74
1 . .
ATOM 6085 CG    CG    . HIS HIS HIS B B 370 370 . 83.479  107.560 2.117   1.00 5.90
1 . .
ATOM 6086 ND1   ND1   . HIS HIS HIS B B 370 370 . 84.641  107.142 2.748   1.00 7.24
1 . .
ATOM 6087 CE1   CE1   . HIS HIS HIS B B 370 370 . 85.687  107.507 2.006   1.00 11.92
1 . .
ATOM 6088 NE2   NE2   . HIS HIS HIS B B 370 370 . 85.242  108.025 0.855   1.00 9.16
1 . .
ATOM 6089 CD2   CD2   . HIS HIS HIS B B 370 370 . 83.865  108.066 0.895   1.00 9.77
1 . .
ATOM 6090 C     C     . HIS HIS HIS B B 370 370 . 81.306  109.600 2.072   1.00 8.28
1 . .
ATOM 6091 O     O     . HIS HIS HIS B B 370 370 . 81.550  110.302 1.040   1.00 8.62
1 . .
ATOM 6092 N     N     . ARG ARG ARG B B 371 371 . 81.328  110.107 3.314   1.00 7.38
1 . .
ATOM 6093 CA    CA    . ARG ARG ARG B B 371 371 . 82.055  111.349 3.595   1.00 7.07
1 . .
ATOM 6094 CB    CB    . ARG ARG ARG B B 371 371 . 81.278  112.338 4.448   1.00 5.38
1 . .
ATOM 6095 CG    CG    . ARG ARG ARG B B 371 371 . 79.876  112.667 3.885   1.00 6.38
1 . .
ATOM 6096 CD    CD    . ARG ARG ARG B B 371 371 . 79.966  113.238 2.452   1.00 5.70
1 . .
ATOM 6097 NE    NE    . ARG ARG ARG B B 371 371 . 80.881  114.364 2.185   1.00 9.61
1 . .
ATOM 6098 CZ    CZ    . ARG ARG ARG B B 371 371 . 80.453  115.620 1.882   1.00 7.02
1 . .
ATOM 6099 NH1   NH1   . ARG ARG ARG B B 371 371 . 79.137  115.936 1.981   1.00 6.30
1 . .
ATOM 6100 NH2   NH2   . ARG ARG ARG B B 371 371 . 81.373  116.509 1.525   1.00 7.40
1 . .
ATOM 6101 C     C     . ARG ARG ARG B B 371 371 . 83.362  111.018 4.338   1.00 7.30
1 . .
ATOM 6102 O     O     . ARG ARG ARG B B 371 371 . 83.513  109.904 4.849   1.00 8.01
1 . .
ATOM 6103 N     N     . SER SER SER B B 372 372 . 84.299  111.965 4.365   1.00 6.37
1 . .
ATOM 6104 CA    CA    . SER SER SER B B 372 372 . 85.559  111.719 5.076   1.00 8.06
1 . .
ATOM 6105 CB    CB    . SER SER SER B B 372 372 . 86.580  112.827 4.774   1.00 7.50
1 . .
ATOM 6106 OG    OG    . SER SER SER B B 372 372 . 86.061  114.124 5.128   1.00 8.78
1 . .
ATOM 6107 C     C     . SER SER SER B B 372 372 . 85.331  111.528 6.628   1.00 7.72
1 . .
ATOM 6108 O     O     . SER SER SER B B 372 372 . 86.143  110.912 7.317   1.00 8.94
1 . .
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ATOM 6109 N     N     . GLY GLY GLY B B 373 373 . 84.206  112.078 7.135   1.00 9.28
1 . .
ATOM 6110 CA    CA    . GLY GLY GLY B B 373 373 . 83.731  111.966 8.540   1.00 9.01
1 . .
ATOM 6111 C     C     . GLY GLY GLY B B 373 373 . 82.612  110.949 8.470   1.00 8.90
1 . .
ATOM 6112 O     O     . GLY GLY GLY B B 373 373 . 81.556  111.243 7.948   1.00 9.11
1 . .
ATOM 6113 N     N     . GLU GLU GLU B B 374 374 . 82.892  109.690 8.842   1.00 8.22
1 . .
ATOM 6114 CA    CA    . GLU GLU GLU B B 374 374 . 81.863  108.667 8.767   1.00 6.48
1 . .
ATOM 6115 CB    CB    . GLU GLU GLU B B 374 374 . 82.313  107.425 7.891   1.00 6.89
1 . .
ATOM 6116 CG    CG    . GLU GLU GLU B B 374 374 . 81.948  107.649 6.398   1.00 6.49
1 . .
ATOM 6117 CD    CD    . GLU GLU GLU B B 374 374 . 80.443  107.579 6.188   1.00 9.37
1 . .
ATOM 6118 OE1   OE1   . GLU GLU GLU B B 374 374 . 79.741  106.956 6.983   1.00 8.01
1 . .
ATOM 6119 OE2   OE2   . GLU GLU GLU B B 374 374 . 79.938  108.133 5.194   1.00 10.31
1 . .
ATOM 6120 C     C     . GLU GLU GLU B B 374 374 . 81.455  108.157 10.118  1.00 6.84
1 . .
ATOM 6121 O     O     . GLU GLU GLU B B 374 374 . 81.931  108.639 11.134  1.00 7.16
1 . .
ATOM 6122 N     N     . THR THR THR B B 375 375 . 80.492  107.239 10.115  1.00 7.17
1 . .
ATOM 6123 CA    CA    . THR THR THR B B 375 375 . 80.113  106.561 11.360  1.00 7.37
1 . .
ATOM 6124 CB    CB    . THR THR THR B B 375 375 . 78.709  107.039 11.897  1.00 6.45
1 . .
ATOM 6125 OG1   OG1   . THR THR THR B B 375 375 . 77.675  106.539 11.018  1.00 7.59
1 . .
ATOM 6126 CG2   CG2   . THR THR THR B B 375 375 . 78.652  108.583 11.955  1.00 8.00
1 . .
ATOM 6127 C     C     . THR THR THR B B 375 375 . 80.068  105.039 11.091  1.00 8.06
1 . .
ATOM 6128 O     O     . THR THR THR B B 375 375 . 80.307  104.596 9.966   1.00 9.38
1 . .
ATOM 6129 N     N     . GLU GLU GLU B B 376 376 . 79.738  104.292 12.143  1.00 7.96
1 . .
ATOM 6130 CA    CA    . GLU GLU GLU B B 376 376 . 79.502  102.843 12.047  1.00 8.71
1 . .
ATOM 6131 CB    CB    . GLU GLU GLU B B 376 376 . 79.442  102.239 13.531  1.00 9.33
1 . .
ATOM 6132 CG    CG    . GLU GLU GLU B B 376 376 . 78.379  102.861 14.439  1.00 10.55
1 . .
ATOM 6133 CD    CD    . GLU GLU GLU B B 376 376 . 78.864  104.056 15.305  1.00 11.42
1 . .
ATOM 6134 OE1   OE1   . GLU GLU GLU B B 376 376 . 79.653  104.904 14.762  1.00 11.97
1 . .
ATOM 6135 OE2   OE2   . GLU GLU GLU B B 376 376 . 78.475  104.127 16.545  1.00 10.94
1 . .
ATOM 6136 C     C     . GLU GLU GLU B B 376 376 . 78.242  102.519 11.222  1.00 9.87
1 . .
ATOM 6137 O     O     . GLU GLU GLU B B 376 376 . 77.961  101.325 10.950  1.00 12.28
1 . .
ATOM 6138 N     N     . ASP ASP ASP B B 377 377 . 77.512  103.544 10.782  1.00 8.96
1 . .
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ATOM 6139 CA    CA    . ASP ASP ASP B B 377 377 . 76.270  103.311 9.953   1.00 10.21
1 . .
ATOM 6140 CB    CB    . ASP ASP ASP B B 377 377 . 75.662  104.674 9.654   1.00 10.60
1 . .
ATOM 6141 CG    CG    . ASP ASP ASP B B 377 377 . 74.282  104.584 8.997   1.00 12.80
1 . .
ATOM 6142 OD1   OD1   . ASP ASP ASP B B 377 377 . 74.252  104.480 7.752   1.00 15.40
1 . .
ATOM 6143 OD2   OD2   . ASP ASP ASP B B 377 377 . 73.253  104.703 9.705   1.00 15.30
1 . .
ATOM 6144 C     C     . ASP ASP ASP B B 377 377 . 76.665  102.570 8.645   1.00 9.67
1 . .
ATOM 6145 O     O     . ASP ASP ASP B B 377 377 . 77.705  102.857 8.087   1.00 9.83
1 . .
ATOM 6146 N     N     . THR THR THR B B 378 378 . 75.803  101.706 8.102   1.00 9.07
1 . .
ATOM 6147 CA    CA    . THR THR THR B B 378 378 . 76.114  101.055 6.848   1.00 9.13
1 . .
ATOM 6148 CB    CB    . THR THR THR B B 378 378 . 76.274  99.514  7.042   1.00 10.03
1 . .
ATOM 6149 OG1   OG1   . THR THR THR B B 378 378 . 75.048  98.949  7.508   1.00 10.91
1 . .
ATOM 6150 CG2   CG2   . THR THR THR B B 378 378 . 77.437  99.166  8.036   1.00 10.61
1 . .
ATOM 6151 C     C     . THR THR THR B B 378 378 . 75.097  101.252 5.760   1.00 9.85
1 . .
ATOM 6152 O     O     . THR THR THR B B 378 378 . 75.125  100.491 4.745   1.00 9.28
1 . .
ATOM 6153 N     N     . PHE PHE PHE B B 379 379 . 74.192  102.210 5.940   1.00 10.44
1 . .
ATOM 6154 CA    CA    . PHE PHE PHE B B 379 379 . 73.127  102.479 4.936   1.00 9.85
1 . .
ATOM 6155 CB    CB    . PHE PHE PHE B B 379 379 . 72.495  103.827 5.229   1.00 10.79
1 . .
ATOM 6156 CG    CG    . PHE PHE PHE B B 379 379 . 71.298  104.151 4.392   1.00 7.77
1 . .
ATOM 6157 CD1   CD1   . PHE PHE PHE B B 379 379 . 71.432  104.889 3.179   1.00 9.98
1 . .
ATOM 6158 CE1   CE1   . PHE PHE PHE B B 379 379 . 70.296  105.191 2.412   1.00 11.62
1 . .
ATOM 6159 CZ    CZ    . PHE PHE PHE B B 379 379 . 69.029  104.707 2.858   1.00 11.75
1 . .
ATOM 6160 CE2   CE2   . PHE PHE PHE B B 379 379 . 68.908  104.029 4.091   1.00 13.23
1 . .
ATOM 6161 CD2   CD2   . PHE PHE PHE B B 379 379 . 70.020  103.724 4.816   1.00 12.29
1 . .
ATOM 6162 C     C     . PHE PHE PHE B B 379 379 . 73.674  102.507 3.519   1.00 8.90
1 . .
ATOM 6163 O     O     . PHE PHE PHE B B 379 379 . 72.993  101.978 2.596   1.00 9.99
1 . .
ATOM 6164 N     N     . ILE ILE ILE B B 380 380 . 74.815  103.193 3.296   1.00 8.35
1 . .
ATOM 6165 CA    CA    . ILE ILE ILE B B 380 380 . 75.252  103.363 1.911   1.00 8.69
1 . .
ATOM 6166 CB    CB    . ILE ILE ILE B B 380 380 . 76.355  104.456 1.700   1.00 8.79
1 . .
ATOM 6167 CG1   CG1   . ILE ILE ILE B B 380 380 . 77.687  104.095 2.412   1.00 9.30
1 . .
ATOM 6168 CD1   CD1   . ILE ILE ILE B B 380 380 . 78.820  105.101 2.096   1.00 8.67
1 . .
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ATOM 6169 CG2   CG2   . ILE ILE ILE B B 380 380 . 75.798  105.826 2.148   1.00 8.88
1 . .
ATOM 6170 C     C     . ILE ILE ILE B B 380 380 . 75.609  102.062 1.176   1.00 9.13
1 . .
ATOM 6171 O     O     . ILE ILE ILE B B 380 380 . 75.661  102.071 -0.049  1.00 8.93
1 . .
ATOM 6172 N     N     . ALA ALA ALA B B 381 381 . 75.903  100.984 1.935   1.00 6.76
1 . .
ATOM 6173 CA    CA    . ALA ALA ALA B B 381 381 . 76.163  99.643  1.285   1.00 7.82
1 . .
ATOM 6174 CB    CB    . ALA ALA ALA B B 381 381 . 76.604  98.684  2.318   1.00 8.19
1 . .
ATOM 6175 C     C     . ALA ALA ALA B B 381 381 . 74.848  99.186  0.675   1.00 7.79
1 . .
ATOM 6176 O     O     . ALA ALA ALA B B 381 381 . 74.810  98.796  -0.514  1.00 9.29
1 . .
ATOM 6177 N     N     . ASP ASP ASP B B 382 382 . 73.752  99.232  1.421   1.00 8.02
1 . .
ATOM 6178 CA    CA    . ASP ASP ASP B B 382 382 . 72.446  98.818  0.835   1.00 8.57
1 . .
ATOM 6179 CB    CB    . ASP ASP ASP B B 382 382 . 71.367  98.795  1.878   1.00 9.78
1 . .
ATOM 6180 CG    CG    . ASP ASP ASP B B 382 382 . 71.594  97.614  2.872   1.00 10.79
1 . .
ATOM 6181 OD1   OD1   . ASP ASP ASP B B 382 382 . 72.590  97.672  3.641   1.00 12.79
1 . .
ATOM 6182 OD2   OD2   . ASP ASP ASP B B 382 382 . 70.903  96.568  2.812   1.00 15.39
1 . .
ATOM 6183 C     C     . ASP ASP ASP B B 382 382 . 72.028  99.780  -0.288  1.00 9.26
1 . .
ATOM 6184 O     O     . ASP ASP ASP B B 382 382 . 71.460  99.351  -1.275  1.00 9.42
1 . .
ATOM 6185 N     N     . LEU LEU LEU B B 383 383 . 72.322  101.074 -0.092  1.00 8.22
1 . .
ATOM 6186 CA    CA    . LEU LEU LEU B B 383 383 . 71.978  102.065 -1.115  1.00 6.61
1 . .
ATOM 6187 CB    CB    . LEU LEU LEU B B 383 383 . 72.392  103.487 -0.588  1.00 5.86
1 . .
ATOM 6188 CG    CG    . LEU LEU LEU B B 383 383 . 72.096  104.672 -1.543  1.00 6.22
1 . .
ATOM 6189 CD1   CD1   . LEU LEU LEU B B 383 383 . 70.530  104.821 -1.614  1.00 8.45
1 . .
ATOM 6190 CD2   CD2   . LEU LEU LEU B B 383 383 . 72.758  105.952 -1.035  1.00 10.53
1 . .
ATOM 6191 C     C     . LEU LEU LEU B B 383 383 . 72.626  101.800 -2.464  1.00 8.06
1 . .
ATOM 6192 O     O     . LEU LEU LEU B B 383 383 . 71.897  101.823 -3.490  1.00 9.77
1 . .
ATOM 6193 N     N     . VAL VAL VAL B B 384 384 . 73.946  101.577 -2.512  1.00 8.84
1 . .
ATOM 6194 CA    CA    . VAL VAL VAL B B 384 384 . 74.610  101.317 -3.810  1.00 8.99
1 . .
ATOM 6195 CB    CB    . VAL VAL VAL B B 384 384 . 76.169  101.319 -3.724  1.00 8.22
1 . .
ATOM 6196 CG1   CG1   . VAL VAL VAL B B 384 384 . 76.718  100.080 -2.908  1.00 7.48
1 . .
ATOM 6197 CG2   CG2   . VAL VAL VAL B B 384 384 . 76.771  101.363 -5.173  1.00 9.72
1 . .
ATOM 6198 C     C     . VAL VAL VAL B B 384 384 . 74.044  100.051 -4.518  1.00 10.48
1 . .
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ATOM 6199 O     O     . VAL VAL VAL B B 384 384 . 73.941  100.002 -5.756  1.00 11.04
1 . .
ATOM 6200 N     N     . VAL VAL VAL B B 385 385 . 73.693  99.026  -3.729  1.00 10.48
1 . .
ATOM 6201 CA    CA    . VAL VAL VAL B B 385 385 . 73.101  97.792  -4.335  1.00 10.81
1 . .
ATOM 6202 CB    CB    . VAL VAL VAL B B 385 385 . 73.134  96.591  -3.328  1.00 10.68
1 . .
ATOM 6203 CG1   CG1   . VAL VAL VAL B B 385 385 . 72.437  95.329  -3.921  1.00 11.86
1 . .
ATOM 6204 CG2   CG2   . VAL VAL VAL B B 385 385 . 74.671  96.247  -3.031  1.00 10.68
1 . .
ATOM 6205 C     C     . VAL VAL VAL B B 385 385 . 71.679  98.057  -4.864  1.00 11.13
1 . .
ATOM 6206 O     O     . VAL VAL VAL B B 385 385 . 71.393  97.693  -6.058  1.00 11.88
1 . .
ATOM 6207 N     N     . GLY GLY GLY B B 386 386 . 70.841  98.704  -4.044  1.00 10.06
1 . .
ATOM 6208 CA    CA    . GLY GLY GLY B B 386 386 . 69.421  98.930  -4.403  1.00 11.23
1 . .
ATOM 6209 C     C     . GLY GLY GLY B B 386 386 . 69.352  99.888  -5.589  1.00 12.59
1 . .
ATOM 6210 O     O     . GLY GLY GLY B B 386 386 . 68.447  99.749  -6.424  1.00 12.36
1 . .
ATOM 6211 N     N     . LEU LEU LEU B B 387 387 . 70.302  100.835 -5.678  1.00 11.98
1 . .
ATOM 6212 CA    CA    . LEU LEU LEU B B 387 387 . 70.320  101.777 -6.860  1.00 12.53
1 . .
ATOM 6213 CB    CB    . LEU LEU LEU B B 387 387 . 70.963  103.156 -6.487  1.00 11.55
1 . .
ATOM 6214 CG    CG    . LEU LEU LEU B B 387 387 . 70.180  103.882 -5.363  1.00 12.07
1 . .
ATOM 6215 CD1   CD1   . LEU LEU LEU B B 387 387 . 70.889  105.190 -5.086  1.00 14.62
1 . .
ATOM 6216 CD2   CD2   . LEU LEU LEU B B 387 387 . 68.705  104.117 -5.767  1.00 11.82
1 . .
ATOM 6217 C     C     . LEU LEU LEU B B 387 387 . 71.030  101.208 -8.094  1.00 15.25
1 . .
ATOM 6218 O     O     . LEU LEU LEU B B 387 387 . 71.024  101.877 -9.188  1.00 16.08
1 . .
ATOM 6219 N     N     . CYS CYS CYS B B 388 388 . 71.644  100.015 -7.941  1.00 14.69
1 . .
ATOM 6220 CA    CA    . CYS CYS CYS B B 388 388 . 72.335  99.310  -9.055  1.00 17.73
1 . .
ATOM 6221 CB    CB    . CYS CYS CYS B B 388 388 . 71.321  98.859  -10.084 1.00 20.29
1 . .
ATOM 6222 SG    SG    . CYS CYS CYS B B 388 388 . 70.254  97.653  -9.517  1.00 36.18
1 . .
ATOM 6223 C     C     . CYS CYS CYS B B 388 388 . 73.336  100.179 -9.738  1.00 16.88
1 . .
ATOM 6224 O     O     . CYS CYS CYS B B 388 388 . 73.443  100.140 -10.977 1.00 16.96
1 . .
ATOM 6225 N     N     . THR THR THR B B 389 389 . 74.151  100.907 -8.970  1.00 13.87
1 . .
ATOM 6226 CA    CA    . THR THR THR B B 389 389 . 75.024  101.891 -9.650  1.00 13.51
1 . .
ATOM 6227 CB    CB    . THR THR THR B B 389 389 . 75.318  103.176 -8.809  1.00 12.95
1 . .
ATOM 6228 OG1   OG1   . THR THR THR B B 389 389 . 76.440  102.925 -7.933  1.00 14.44
1 . .
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ATOM 6229 CG2   CG2   . THR THR THR B B 389 389 . 74.092  103.562 -8.014  1.00 12.23
1 . .
ATOM 6230 C     C     . THR THR THR B B 389 389 . 76.351  101.301 -10.131 1.00 12.95
1 . .
ATOM 6231 O     O     . THR THR THR B B 389 389 . 76.972  101.869 -11.048 1.00 14.45
1 . .
ATOM 6232 N     N     . GLY GLY GLY B B 390 390 . 76.773  100.177 -9.551  1.00 9.98
1 . .
ATOM 6233 CA    CA    . GLY GLY GLY B B 390 390 . 78.043  99.524  -9.941  1.00 10.96
1 . .
ATOM 6234 C     C     . GLY GLY GLY B B 390 390 . 79.337  100.002 -9.403  1.00 8.74
1 . .
ATOM 6235 O     O     . GLY GLY GLY B B 390 390 . 80.388  99.423  -9.753  1.00 10.70
1 . .
ATOM 6236 N     N     . GLN GLN GLN B B 391 391 . 79.352  101.112 -8.594  1.00 10.02
1 . .
ATOM 6237 CA    CA    . GLN GLN GLN B B 391 391 . 80.635  101.611 -8.081  1.00 10.18
1 . .
ATOM 6238 CB    CB    . GLN GLN GLN B B 391 391 . 81.390  102.521 -9.064  1.00 12.29
1 . .
ATOM 6239 CG    CG    . GLN GLN GLN B B 391 391 . 80.482  103.207 -10.038 1.00 13.59
1 . .
ATOM 6240 CD    CD    . GLN GLN GLN B B 391 391 . 81.216  104.240 -10.941 1.00 12.54
1 . .
ATOM 6241 OE1   OE1   . GLN GLN GLN B B 391 391 . 82.420  104.547 -10.722 1.00 10.97
1 . .
ATOM 6242 NE2   NE2   . GLN GLN GLN B B 391 391 . 80.513  104.716 -12.004 1.00 13.11
1 . .
ATOM 6243 C     C     . GLN GLN GLN B B 391 391 . 80.371  102.389 -6.755  1.00 10.79
1 . .
ATOM 6244 O     O     . GLN GLN GLN B B 391 391 . 79.348  103.061 -6.660  1.00 8.84
1 . .
ATOM 6245 N     N     . ILE ILE ILE B B 392 392 . 81.245  102.157 -5.770  1.00 8.50
1 . .
ATOM 6246 CA    CA    . ILE ILE ILE B B 392 392 . 81.152  102.833 -4.480  1.00 8.22
1 . .
ATOM 6247 CB    CB    . ILE ILE ILE B B 392 392 . 80.432  101.970 -3.409  1.00 8.92
1 . .
ATOM 6248 CG1   CG1   . ILE ILE ILE B B 392 392 . 80.411  102.752 -2.058  1.00 6.52
1 . .
ATOM 6249 CD1   CD1   . ILE ILE ILE B B 392 392 . 79.340  102.122 -1.087  1.00 9.44
1 . .
ATOM 6250 CG2   CG2   . ILE ILE ILE B B 392 392 . 81.116  100.554 -3.263  1.00 8.19
1 . .
ATOM 6251 C     C     . ILE ILE ILE B B 392 392 . 82.569  103.158 -4.048  1.00 9.29
1 . .
ATOM 6252 O     O     . ILE ILE ILE B B 392 392 . 83.466  102.357 -4.226  1.00 8.43
1 . .
ATOM 6253 N     N     . LYS LYS LYS B B 393 393 . 82.759  104.350 -3.452  1.00 7.95
1 . .
ATOM 6254 CA    CA    . LYS LYS LYS B B 393 393 . 84.006  104.691 -2.760  1.00 6.34
1 . .
ATOM 6255 CB    CB    . LYS LYS LYS B B 393 393 . 84.785  105.909 -3.330  1.00 6.06
1 . .
ATOM 6256 CG    CG    . LYS LYS LYS B B 393 393 . 84.106  107.249 -3.094  1.00 6.86
1 . .
ATOM 6257 CD    CD    . LYS LYS LYS B B 393 393 . 85.050  108.309 -3.672  1.00 10.22
1 . .
ATOM 6258 CE    CE    . LYS LYS LYS B B 393 393 . 84.809  109.696 -2.982  1.00 9.07
1 . .
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ATOM 6259 NZ    NZ    . LYS LYS LYS B B 393 393 . 85.740  110.692 -3.517  1.00 9.81
1 . .
ATOM 6260 C     C     . LYS LYS LYS B B 393 393 . 83.586  104.863 -1.308  1.00 8.81
1 . .
ATOM 6261 O     O     . LYS LYS LYS B B 393 393 . 82.636  105.632 -1.007  1.00 8.35
1 . .
ATOM 6262 N     N     . THR THR THR B B 394 394 . 84.175  104.072 -0.403  1.00 8.49
1 . .
ATOM 6263 CA    CA    . THR THR THR B B 394 394 . 83.831  104.287 1.043   1.00 7.77
1 . .
ATOM 6264 CB    CB    . THR THR THR B B 394 394 . 82.541  103.529 1.400   1.00 8.92
1 . .
ATOM 6265 OG1   OG1   . THR THR THR B B 394 394 . 82.202  103.766 2.789   1.00 9.63
1 . .
ATOM 6266 CG2   CG2   . THR THR THR B B 394 394 . 82.648  102.011 1.165   1.00 8.08
1 . .
ATOM 6267 C     C     . THR THR THR B B 394 394 . 85.046  103.984 1.925   1.00 8.55
1 . .
ATOM 6268 O     O     . THR THR THR B B 394 394 . 84.902  103.510 3.090   1.00 9.18
1 . .
ATOM 6269 N     N     . GLY GLY GLY B B 395 395 . 86.228  104.371 1.415   1.00 7.79
1 . .
ATOM 6270 CA    CA    . GLY GLY GLY B B 395 395 . 87.468  104.341 2.189   1.00 8.01
1 . .
ATOM 6271 C     C     . GLY GLY GLY B B 395 395 . 88.530  103.343 1.769   1.00 7.51
1 . .
ATOM 6272 O     O     . GLY GLY GLY B B 395 395 . 88.294  102.442 0.936   1.00 8.06
1 . .
ATOM 6273 N     N     . ALA ALA ALA B B 396 396 . 89.729  103.541 2.277   1.00 9.01
1 . .
ATOM 6274 CA    CA    . ALA ALA ALA B B 396 396 . 90.717  102.435 2.269   1.00 8.19
1 . .
ATOM 6275 CB    CB    . ALA ALA ALA B B 396 396 . 91.974  102.880 3.054   1.00 9.70
1 . .
ATOM 6276 C     C     . ALA ALA ALA B B 396 396 . 90.083  101.221 2.977   1.00 8.69
1 . .
ATOM 6277 O     O     . ALA ALA ALA B B 396 396 . 89.094  101.323 3.721   1.00 8.82
1 . .
ATOM 6278 N     N     . PRO PRO PRO B B 397 397 . 90.683  100.034 2.792   1.00 8.36
1 . .
ATOM 6279 CA    CA    . PRO PRO PRO B B 397 397 . 90.246  98.910  3.613   1.00 7.93
1 . .
ATOM 6280 CB    CB    . PRO PRO PRO B B 397 397 . 90.658  97.671  2.768   1.00 9.20
1 . .
ATOM 6281 CG    CG    . PRO PRO PRO B B 397 397 . 91.987  98.185  2.082   1.00 10.28
1 . .
ATOM 6282 CD    CD    . PRO PRO PRO B B 397 397 . 91.699  99.691  1.770   1.00 8.26
1 . .
ATOM 6283 C     C     . PRO PRO PRO B B 397 397 . 90.881  98.976  5.040   1.00 8.53
1 . .
ATOM 6284 O     O     . PRO PRO PRO B B 397 397 . 91.629  98.056  5.493   1.00 9.43
1 . .
ATOM 6285 N     N     . CYS CYS CYS B B 398 398 . 90.616  100.095 5.723   1.00 7.37
1 . .
ATOM 6286 CA    CA    . CYS CYS CYS B B 398 398 . 91.260  100.369 6.988   1.00 7.33
1 . .
ATOM 6287 CB    CB    . CYS CYS CYS B B 398 398 . 92.738  100.890 6.793   1.00 8.16
1 . .
ATOM 6288 SG    SG    . CYS CYS CYS B B 398 398 . 93.524  101.520 8.247   1.00 10.12
1 . .
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ATOM 6289 C     C     . CYS CYS CYS B B 398 398 . 90.392  101.437 7.639   1.00 8.09
1 . .
ATOM 6290 O     O     . CYS CYS CYS B B 398 398 . 90.015  102.398 7.013   1.00 7.60
1 . .
ATOM 6291 N     N     . ARG ARG ARG B B 399 399 . 90.166  101.245 8.931   1.00 7.69
1 . .
ATOM 6292 CA    CA    . ARG ARG ARG B B 399 399 . 89.285  102.000 9.831   1.00 7.41
1 . .
ATOM 6293 CB    CB    . ARG ARG ARG B B 399 399 . 89.338  103.526 9.573   1.00 5.68
1 . .
ATOM 6294 CG    CG    . ARG ARG ARG B B 399 399 . 90.774  104.050 9.759   1.00 6.33
1 . .
ATOM 6295 CD    CD    . ARG ARG ARG B B 399 399 . 90.858  105.575 9.290   1.00 7.86
1 . .
ATOM 6296 NE    NE    . ARG ARG ARG B B 399 399 . 89.934  106.467 10.022  1.00 7.64
1 . .
ATOM 6297 CZ    CZ    . ARG ARG ARG B B 399 399 . 90.330  107.600 10.622  1.00 7.15
1 . .
ATOM 6298 NH1   NH1   . ARG ARG ARG B B 399 399 . 91.614  108.080 10.595  1.00 8.21
1 . .
ATOM 6299 NH2   NH2   . ARG ARG ARG B B 399 399 . 89.401  108.289 11.265  1.00 6.88
1 . .
ATOM 6300 C     C     . ARG ARG ARG B B 399 399 . 87.875  101.481 9.657   1.00 7.35
1 . .
ATOM 6301 O     O     . ARG ARG ARG B B 399 399 . 87.373  101.478 8.543   1.00 6.29
1 . .
ATOM 6302 N     N     . SER SER SER B B 400 400 . 87.238  101.024 10.767  1.00 6.15
1 . .
ATOM 6303 CA    CA    . SER SER SER B B 400 400 . 85.924  100.369 10.585  1.00 5.03
1 . .
ATOM 6304 CB    CB    . SER SER SER B B 400 400 . 85.590  99.448  11.765  1.00 6.25
1 . .
ATOM 6305 OG    OG    . SER SER SER B B 400 400 . 86.625  98.480  11.960  1.00 6.93
1 . .
ATOM 6306 C     C     . SER SER SER B B 400 400 . 84.691  101.216 10.194  1.00 4.96
1 . .
ATOM 6307 O     O     . SER SER SER B B 400 400 . 83.689  100.659 9.772   1.00 6.54
1 . .
ATOM 6308 N     N     . GLU GLU GLU B B 401 401 . 84.765  102.550 10.253  1.00 5.67
1 . .
ATOM 6309 CA    CA    . GLU GLU GLU B B 401 401 . 83.711  103.311 9.565   1.00 6.88
1 . .
ATOM 6310 CB    CB    . GLU GLU GLU B B 401 401 . 83.851  104.806 9.859   1.00 5.94
1 . .
ATOM 6311 CG    CG    . GLU GLU GLU B B 401 401 . 84.982  105.566 9.254   1.00 6.45
1 . .
ATOM 6312 CD    CD    . GLU GLU GLU B B 401 401 . 86.362  105.442 9.985   1.00 6.67
1 . .
ATOM 6313 OE1   OE1   . GLU GLU GLU B B 401 401 . 86.511  104.697 11.042  1.00 7.78
1 . .
ATOM 6314 OE2   OE2   . GLU GLU GLU B B 401 401 . 87.301  106.147 9.528   1.00 6.54
1 . .
ATOM 6315 C     C     . GLU GLU GLU B B 401 401 . 83.802  103.098 8.031   1.00 6.56
1 . .
ATOM 6316 O     O     . GLU GLU GLU B B 401 401 . 82.828  103.381 7.340   1.00 6.45
1 . .
ATOM 6317 N     N     . ARG ARG ARG B B 402 402 . 84.940  102.562 7.529   1.00 5.91
1 . .
ATOM 6318 CA    CA    . ARG ARG ARG B B 402 402 . 85.061  102.173 6.074   1.00 5.48
1 . .
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ATOM 6319 CB    CB    . ARG ARG ARG B B 402 402 . 86.517  102.408 5.585   1.00 4.75
1 . .
ATOM 6320 CG    CG    . ARG ARG ARG B B 402 402 . 87.110  103.792 5.961   1.00 4.82
1 . .
ATOM 6321 CD    CD    . ARG ARG ARG B B 402 402 . 86.210  104.989 5.581   1.00 4.19
1 . .
ATOM 6322 NE    NE    . ARG ARG ARG B B 402 402 . 86.602  106.126 6.444   1.00 6.35
1 . .
ATOM 6323 CZ    CZ    . ARG ARG ARG B B 402 402 . 86.037  107.327 6.443   1.00 7.10
1 . .
ATOM 6324 NH1   NH1   . ARG ARG ARG B B 402 402 . 85.180  107.666 5.437   1.00 6.45
1 . .
ATOM 6325 NH2   NH2   . ARG ARG ARG B B 402 402 . 86.362  108.192 7.452   1.00 4.99
1 . .
ATOM 6326 C     C     . ARG ARG ARG B B 402 402 . 84.696  100.667 5.976   1.00 5.61
1 . .
ATOM 6327 O     O     . ARG ARG ARG B B 402 402 . 83.763  100.307 5.211   1.00 6.75
1 . .
ATOM 6328 N     N     . LEU LEU LEU B B 403 403 . 85.357  99.807  6.785   1.00 5.78
1 . .
ATOM 6329 CA    CA    . LEU LEU LEU B B 403 403 . 85.066  98.398  6.669   1.00 6.50
1 . .
ATOM 6330 CB    CB    . LEU LEU LEU B B 403 403 . 85.989  97.497  7.551   1.00 6.56
1 . .
ATOM 6331 CG    CG    . LEU LEU LEU B B 403 403 . 87.500  97.318  7.202   1.00 6.95
1 . .
ATOM 6332 CD1   CD1   . LEU LEU LEU B B 403 403 . 87.645  97.049  5.704   1.00 8.50
1 . .
ATOM 6333 CD2   CD2   . LEU LEU LEU B B 403 403 . 88.350  98.447  7.669   1.00 10.21
1 . .
ATOM 6334 C     C     . LEU LEU LEU B B 403 403 . 83.653  98.065  7.010   1.00 6.81
1 . .
ATOM 6335 O     O     . LEU LEU LEU B B 403 403 . 83.141  97.043  6.458   1.00 7.88
1 . .
ATOM 6336 N     N     . ALA ALA ALA B B 404 404 . 82.987  98.842  7.876   1.00 5.83
1 . .
ATOM 6337 CA    CA    . ALA ALA ALA B B 404 404 . 81.590  98.434  8.157   1.00 6.38
1 . .
ATOM 6338 CB    CB    . ALA ALA ALA B B 404 404 . 80.936  99.345  9.041   1.00 7.46
1 . .
ATOM 6339 C     C     . ALA ALA ALA B B 404 404 . 80.790  98.339  6.857   1.00 8.42
1 . .
ATOM 6340 O     O     . ALA ALA ALA B B 404 404 . 79.906  97.465  6.753   1.00 9.13
1 . .
ATOM 6341 N     N     . LYS LYS LYS B B 405 405 . 81.000  99.293  5.913   1.00 7.57
1 . .
ATOM 6342 CA    CA    . LYS LYS LYS B B 405 405 . 80.254  99.277  4.664   1.00 7.06
1 . .
ATOM 6343 CB    CB    . LYS LYS LYS B B 405 405 . 80.405  100.555 3.839   1.00 6.40
1 . .
ATOM 6344 CG    CG    . LYS LYS LYS B B 405 405 . 79.658  101.806 4.361   1.00 8.45
1 . .
ATOM 6345 CD    CD    . LYS LYS LYS B B 405 405 . 80.171  102.269 5.707   1.00 6.61
1 . .
ATOM 6346 CE    CE    . LYS LYS LYS B B 405 405 . 79.801  103.714 5.866   1.00 5.42
1 . .
ATOM 6347 NZ    NZ    . LYS LYS LYS B B 405 405 . 80.080  104.199 7.330   1.00 6.28
1 . .
ATOM 6348 C     C     . LYS LYS LYS B B 405 405 . 80.732  98.111  3.775   1.00 7.58
1 . .
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ATOM 6349 O     O     . LYS LYS LYS B B 405 405 . 79.918  97.428  3.231   1.00 7.43
1 . .
ATOM 6350 N     N     . TYR TYR TYR B B 406 406 . 82.055  97.904  3.663   1.00 6.63
1 . .
ATOM 6351 CA    CA    . TYR TYR TYR B B 406 406 . 82.608  96.825  2.812   1.00 7.63
1 . .
ATOM 6352 CB    CB    . TYR TYR TYR B B 406 406 . 84.139  96.885  2.790   1.00 7.36
1 . .
ATOM 6353 CG    CG    . TYR TYR TYR B B 406 406 . 84.639  98.084  2.038   1.00 8.43
1 . .
ATOM 6354 CD1   CD1   . TYR TYR TYR B B 406 406 . 84.113  98.416  0.707   1.00 7.59
1 . .
ATOM 6355 CE1   CE1   . TYR TYR TYR B B 406 406 . 84.564  99.549  0.026   1.00 9.69
1 . .
ATOM 6356 CZ    CZ    . TYR TYR TYR B B 406 406 . 85.507  100.422 0.619   1.00 6.82
1 . .
ATOM 6357 OH    OH    . TYR TYR TYR B B 406 406 . 85.964  101.537 -0.098  1.00 7.30
1 . .
ATOM 6358 CE2   CE2   . TYR TYR TYR B B 406 406 . 86.054  100.157 1.887   1.00 7.29
1 . .
ATOM 6359 CD2   CD2   . TYR TYR TYR B B 406 406 . 85.574  98.974  2.636   1.00 7.92
1 . .
ATOM 6360 C     C     . TYR TYR TYR B B 406 406 . 82.151  95.466  3.336   1.00 8.73
1 . .
ATOM 6361 O     O     . TYR TYR TYR B B 406 406 . 81.782  94.562  2.555   1.00 7.38
1 . .
ATOM 6362 N     N     . ASN ASN ASN B B 407 407 . 82.192  95.285  4.647   1.00 7.02
1 . .
ATOM 6363 CA    CA    . ASN ASN ASN B B 407 407 . 81.696  94.000  5.213   1.00 6.07
1 . .
ATOM 6364 CB    CB    . ASN ASN ASN B B 407 407 . 81.912  94.028  6.716   1.00 6.40
1 . .
ATOM 6365 CG    CG    . ASN ASN ASN B B 407 407 . 83.406  93.947  7.088   1.00 5.53
1 . .
ATOM 6366 OD1   OD1   . ASN ASN ASN B B 407 407 . 84.231  93.406  6.305   1.00 8.57
1 . .
ATOM 6367 ND2   ND2   . ASN ASN ASN B B 407 407 . 83.748  94.348  8.328   1.00 7.66
1 . .
ATOM 6368 C     C     . ASN ASN ASN B B 407 407 . 80.202  93.823  4.954   1.00 7.40
1 . .
ATOM 6369 O     O     . ASN ASN ASN B B 407 407 . 79.758  92.710  4.733   1.00 8.13
1 . .
ATOM 6370 N     N     . GLN GLN GLN B B 408 408 . 79.415  94.906  5.028   1.00 7.30
1 . .
ATOM 6371 CA    CA    . GLN GLN GLN B B 408 408 . 77.983  94.757  4.713   1.00 8.67
1 . .
ATOM 6372 CB    CB    . GLN GLN GLN B B 408 408 . 77.242  96.043  5.053   1.00 9.63
1 . .
ATOM 6373 CG    CG    . GLN GLN GLN B B 408 408 . 75.747  96.102  4.672   1.00 11.09
1 . .
ATOM 6374 CD    CD    . GLN GLN GLN B B 408 408 . 74.898  95.097  5.356   1.00 12.06
1 . .
ATOM 6375 OE1   OE1   . GLN GLN GLN B B 408 408 . 75.392  94.326  6.184   1.00 14.46
1 . .
ATOM 6376 NE2   NE2   . GLN GLN GLN B B 408 408 . 73.570  95.120  5.073   1.00 13.23
1 . .
ATOM 6377 C     C     . GLN GLN GLN B B 408 408 . 77.747  94.364  3.219   1.00 7.88
1 . .
ATOM 6378 O     O     . GLN GLN GLN B B 408 408 . 76.845  93.534  2.934   1.00 8.44
1 . .
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ATOM 6379 N     N     . LEU LEU LEU B B 409 409 . 78.563  94.948  2.312   1.00 9.28
1 . .
ATOM 6380 CA    CA    . LEU LEU LEU B B 409 409 . 78.508  94.549  0.892   1.00 7.65
1 . .
ATOM 6381 CB    CB    . LEU LEU LEU B B 409 409 . 79.380  95.406  0.008   1.00 8.12
1 . .
ATOM 6382 CG    CG    . LEU LEU LEU B B 409 409 . 78.809  96.837  -0.172  1.00 10.67
1 . .
ATOM 6383 CD1   CD1   . LEU LEU LEU B B 409 409 . 79.869  97.809  -0.714  1.00 11.40
1 . .
ATOM 6384 CD2   CD2   . LEU LEU LEU B B 409 409 . 77.557  96.835  -1.099  1.00 8.68
1 . .
ATOM 6385 C     C     . LEU LEU LEU B B 409 409 . 78.827  93.069  0.764   1.00 9.38
1 . .
ATOM 6386 O     O     . LEU LEU LEU B B 409 409 . 78.184  92.394  -0.040  1.00 8.98
1 . .
ATOM 6387 N     N     . MET MET MET B B 410 410 . 79.811  92.581  1.493   1.00 7.05
1 . .
ATOM 6388 CA    CA    . MET MET MET B B 410 410 . 80.111  91.111  1.465   1.00 8.02
1 . .
ATOM 6389 CB    CB    . MET MET MET B B 410 410 . 81.368  90.778  2.271   1.00 9.10
1 . .
ATOM 6390 CG    CG    . MET MET MET B B 410 410 . 82.630  91.233  1.581   1.00 11.21
1 . .
ATOM 6391 SD    SD    . MET MET MET B B 410 410 . 84.161  90.466  2.164   1.00 13.99
1 . .
ATOM 6392 CE    CE    . MET MET MET B B 410 410 . 84.181  91.288  3.741   1.00 11.92
1 . .
ATOM 6393 C     C     . MET MET MET B B 410 410 . 78.910  90.286  1.945   1.00 8.66
1 . .
ATOM 6394 O     O     . MET MET MET B B 410 410 . 78.581  89.251  1.341   1.00 10.49
1 . .
ATOM 6395 N     N     . ARG ARG ARG B B 411 411 . 78.256  90.714  3.041   1.00 9.68
1 . .
ATOM 6396 CA    CA    . ARG ARG ARG B B 411 411 . 77.031  90.036  3.502   1.00 8.86
1 . .
ATOM 6397 CB    CB    . ARG ARG ARG B B 411 411 . 76.506  90.657  4.829   1.00 8.90
1 . .
ATOM 6398 CG    CG    . ARG ARG ARG B B 411 411 . 77.515  90.529  5.960   1.00 8.68
1 . .
ATOM 6399 CD    CD    . ARG ARG ARG B B 411 411 . 76.857  91.071  7.373   1.00 9.89
1 . .
ATOM 6400 NE    NE    . ARG ARG ARG B B 411 411 . 77.976  91.441  8.228   1.00 10.67
1 . .
ATOM 6401 CZ    CZ    . ARG ARG ARG B B 411 411 . 78.386  92.673  8.469   1.00 11.15
1 . .
ATOM 6402 NH1   NH1   . ARG ARG ARG B B 411 411 . 77.714  93.755  7.967   1.00 10.37
1 . .
ATOM 6403 NH2   NH2   . ARG ARG ARG B B 411 411 . 79.471  92.813  9.240   1.00 13.93
1 . .
ATOM 6404 C     C     . ARG ARG ARG B B 411 411 . 75.910  90.067  2.485   1.00 10.27
1 . .
ATOM 6405 O     O     . ARG ARG ARG B B 411 411 . 75.207  89.085  2.320   1.00 10.97
1 . .
ATOM 6406 N     N     . ILE ILE ILE B B 412 412 . 75.742  91.203  1.788   1.00 8.99
1 . .
ATOM 6407 CA    CA    . ILE ILE ILE B B 412 412 . 74.643  91.304  0.843   1.00 9.67
1 . .
ATOM 6408 CB    CB    . ILE ILE ILE B B 412 412 . 74.536  92.728  0.270   1.00 9.87
1 . .
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ATOM 6409 CG1   CG1   . ILE ILE ILE B B 412 412 . 73.950  93.633  1.349   1.00 8.42
1 . .
ATOM 6410 CD1   CD1   . ILE ILE ILE B B 412 412 . 74.036  95.105  1.074   1.00 10.55
1 . .
ATOM 6411 CG2   CG2   . ILE ILE ILE B B 412 412 . 73.614  92.698  -0.960  1.00 10.96
1 . .
ATOM 6412 C     C     . ILE ILE ILE B B 412 412 . 74.934  90.289  -0.315  1.00 9.61
1 . .
ATOM 6413 O     O     . ILE ILE ILE B B 412 412 . 74.038  89.545  -0.746  1.00 13.02
1 . .
ATOM 6414 N     N     . GLU GLU GLU B B 413 413 . 76.185  90.272  -0.793  1.00 10.24
1 . .
ATOM 6415 CA    CA    . GLU GLU GLU B B 413 413 . 76.577  89.331  -1.882  1.00 10.00
1 . .
ATOM 6416 CB    CB    . GLU GLU GLU B B 413 413 . 78.056  89.491  -2.204  1.00 10.39
1 . .
ATOM 6417 CG    CG    . GLU GLU GLU B B 413 413 . 78.486  88.554  -3.386  1.00 14.50
1 . .
ATOM 6418 CD    CD    . GLU GLU GLU B B 413 413 . 79.847  88.876  -3.835  1.00 14.48
1 . .
ATOM 6419 OE1   OE1   . GLU GLU GLU B B 413 413 . 80.766  88.651  -3.022  1.00 16.07
1 . .
ATOM 6420 OE2   OE2   . GLU GLU GLU B B 413 413 . 80.001  89.382  -4.981  1.00 17.03
1 . .
ATOM 6421 C     C     . GLU GLU GLU B B 413 413 . 76.331  87.866  -1.440  1.00 10.51
1 . .
ATOM 6422 O     O     . GLU GLU GLU B B 413 413 . 75.748  87.089  -2.213  1.00 12.17
1 . .
ATOM 6423 N     N     . GLU GLU GLU B B 414 414 . 76.702  87.544  -0.185  1.00 10.74
1 . .
ATOM 6424 CA    CA    . GLU GLU GLU B B 414 414 . 76.486  86.199  0.320   1.00 12.65
1 . .
ATOM 6425 CB    CB    . GLU GLU GLU B B 414 414 . 77.111  86.104  1.733   1.00 14.27
1 . .
ATOM 6426 CG    CG    . GLU GLU GLU B B 414 414 . 77.022  84.723  2.405   1.00 18.30
1 . .
ATOM 6427 CD    CD    . GLU GLU GLU B B 414 414 . 77.370  84.841  3.885   1.00 18.18
1 . .
ATOM 6428 OE1   OE1   . GLU GLU GLU B B 414 414 . 78.531  85.143  4.180   1.00 20.52
1 . .
ATOM 6429 OE2   OE2   . GLU GLU GLU B B 414 414 . 76.446  84.745  4.706   1.00 20.72
1 . .
ATOM 6430 C     C     . GLU GLU GLU B B 414 414 . 74.969  85.927  0.330   1.00 14.42
1 . .
ATOM 6431 O     O     . GLU GLU GLU B B 414 414 . 74.514  84.820  -0.077  1.00 17.73
1 . .
ATOM 6432 N     N     . GLU GLU GLU B B 415 415 . 74.163  86.889  0.783   1.00 14.00
1 . .
ATOM 6433 CA    CA    . GLU GLU GLU B B 415 415 . 72.715  86.708  0.885   1.00 16.12
1 . .
ATOM 6434 CB    CB    . GLU GLU GLU B B 415 415 . 72.113  87.814  1.677   1.00 16.89
1 . .
ATOM 6435 CG    CG    . GLU GLU GLU B B 415 415 . 72.491  87.554  3.315   1.00 18.76
1 . .
ATOM 6436 CD    CD    . GLU GLU GLU B B 415 415 . 72.235  88.785  4.126   1.00 25.92
1 . .
ATOM 6437 OE1   OE1   . GLU GLU GLU B B 415 415 . 72.946  89.076  5.225   1.00 34.42
1 . .
ATOM 6438 OE2   OE2   . GLU GLU GLU B B 415 415 . 71.236  89.428  3.785   1.00 35.57
1 . .
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ATOM 6439 C     C     . GLU GLU GLU B B 415 415 . 72.031  86.500  -0.454  1.00 17.64
1 . .
ATOM 6440 O     O     . GLU GLU GLU B B 415 415 . 71.084  85.701  -0.557  1.00 18.77
1 . .
ATOM 6441 N     N     . LEU LEU LEU B B 416 416 . 72.525  87.159  -1.479  1.00 18.54
1 . .
ATOM 6442 CA    CA    . LEU LEU LEU B B 416 416 . 71.950  87.012  -2.824  1.00 19.50
1 . .
ATOM 6443 CB    CB    . LEU LEU LEU B B 416 416 . 72.454  88.131  -3.754  1.00 18.53
1 . .
ATOM 6444 CG    CG    . LEU LEU LEU B B 416 416 . 71.969  89.511  -3.294  1.00 18.01
1 . .
ATOM 6445 CD1   CD1   . LEU LEU LEU B B 416 416 . 72.643  90.615  -4.075  1.00 18.32
1 . .
ATOM 6446 CD2   CD2   . LEU LEU LEU B B 416 416 . 70.438  89.602  -3.439  1.00 24.47
1 . .
ATOM 6447 C     C     . LEU LEU LEU B B 416 416 . 72.256  85.638  -3.478  1.00 21.15
1 . .
ATOM 6448 O     O     . LEU LEU LEU B B 416 416 . 71.562  85.256  -4.487  1.00 20.98
1 . .
ATOM 6449 N     N     . GLY GLY GLY B B 417 417 . 73.266  84.918  -2.958  1.00 22.35
1 . .
ATOM 6450 CA    CA    . GLY GLY GLY B B 417 417 . 73.582  83.518  -3.413  1.00 24.05
1 . .
ATOM 6451 C     C     . GLY GLY GLY B B 417 417 . 73.919  83.497  -4.912  1.00 26.32
1 . .
ATOM 6452 O     O     . GLY GLY GLY B B 417 417 . 74.710  84.339  -5.360  1.00 24.17
1 . .
ATOM 6453 N     N     . ASP ASP ASP B B 418 418 . 73.358  82.518  -5.669  1.00 27.73
1 . .
ATOM 6454 CA    CA    . ASP ASP ASP B B 418 418 . 73.543  82.428  -7.151  1.00 29.62
1 . .
ATOM 6455 CB    CB    . ASP ASP ASP B B 418 418 . 72.877  81.126  -7.716  1.00 30.49
1 . .
ATOM 6456 C     C     . ASP ASP ASP B B 418 418 . 73.057  83.642  -7.975  1.00 30.19
1 . .
ATOM 6457 O     O     . ASP ASP ASP B B 418 418 . 73.426  83.761  -9.173  1.00 31.88
1 . .
ATOM 6458 N     N     . GLU GLU GLU B B 419 419 . 72.167  84.451  -7.392  1.00 28.74
1 . .
ATOM 6459 CA    CA    . GLU GLU GLU B B 419 419 . 71.626  85.672  -8.002  1.00 28.72
1 . .
ATOM 6460 CB    CB    . GLU GLU GLU B B 419 419 . 70.271  86.072  -7.394  1.00 29.05
1 . .
ATOM 6461 C     C     . GLU GLU GLU B B 419 419 . 72.586  86.873  -7.916  1.00 28.28
1 . .
ATOM 6462 O     O     . GLU GLU GLU B B 419 419 . 72.308  87.927  -8.511  1.00 29.64
1 . .
ATOM 6463 N     N     . ALA ALA ALA B B 420 420 . 73.692  86.738  -7.186  1.00 26.09
1 . .
ATOM 6464 CA    CA    . ALA ALA ALA B B 420 420 . 74.655  87.852  -7.094  1.00 23.14
1 . .
ATOM 6465 CB    CB    . ALA ALA ALA B B 420 420 . 75.579  87.693  -5.850  1.00 22.61
1 . .
ATOM 6466 C     C     . ALA ALA ALA B B 420 420 . 75.476  88.014  -8.356  1.00 22.86
1 . .
ATOM 6467 O     O     . ALA ALA ALA B B 420 420 . 76.081  87.028  -8.872  1.00 21.77
1 . .
ATOM 6468 N     N     . ARG ARG ARG B B 421 421 . 75.481  89.250  -8.876  1.00 21.81
1 . .
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ATOM 6469 CA    CA    . ARG ARG ARG B B 421 421 . 76.346  89.656  -9.972  1.00 22.40
1 . .
ATOM 6470 CB    CB    . ARG ARG ARG B B 421 421 . 75.515  90.087  -11.197 1.00 23.07
1 . .
ATOM 6471 CG    CG    . ARG ARG ARG B B 421 421 . 74.741  88.918  -11.920 1.00 27.19
1 . .
ATOM 6472 C     C     . ARG ARG ARG B B 421 421 . 77.216  90.797  -9.502  1.00 20.20
1 . .
ATOM 6473 O     O     . ARG ARG ARG B B 421 421 . 76.793  91.580  -8.651  1.00 20.50
1 . .
ATOM 6474 N     N     . PHE PHE PHE B B 422 422 . 78.410  90.860  -10.063 1.00 17.75
1 . .
ATOM 6475 CA    CA    . PHE PHE PHE B B 422 422 . 79.455  91.851  -9.727  1.00 16.24
1 . .
ATOM 6476 CB    CB    . PHE PHE PHE B B 422 422 . 80.741  91.128  -9.278  1.00 15.20
1 . .
ATOM 6477 CG    CG    . PHE PHE PHE B B 422 422 . 81.899  92.031  -9.008  1.00 13.72
1 . .
ATOM 6478 CD1   CD1   . PHE PHE PHE B B 422 422 . 81.843  93.004  -7.943  1.00 13.15
1 . .
ATOM 6479 CE1   CE1   . PHE PHE PHE B B 422 422 . 82.943  93.793  -7.676  1.00 10.31
1 . .
ATOM 6480 CZ    CZ    . PHE PHE PHE B B 422 422 . 84.148  93.729  -8.529  1.00 12.76
1 . .
ATOM 6481 CE2   CE2   . PHE PHE PHE B B 422 422 . 84.175  92.786  -9.580  1.00 15.05
1 . .
ATOM 6482 CD2   CD2   . PHE PHE PHE B B 422 422 . 83.047  91.972  -9.802  1.00 13.41
1 . .
ATOM 6483 C     C     . PHE PHE PHE B B 422 422 . 79.707  92.707  -10.954 1.00 16.06
1 . .
ATOM 6484 O     O     . PHE PHE PHE B B 422 422 . 79.878  92.170  -12.082 1.00 17.25
1 . .
ATOM 6485 N     N     . ALA ALA ALA B B 423 423 . 79.696  94.044  -10.792 1.00 14.96
1 . .
ATOM 6486 CA    CA    . ALA ALA ALA B B 423 423 . 79.785  94.937  -11.960 1.00 14.89
1 . .
ATOM 6487 CB    CB    . ALA ALA ALA B B 423 423 . 79.594  96.419  -11.493 1.00 14.97
1 . .
ATOM 6488 C     C     . ALA ALA ALA B B 423 423 . 81.108  94.771  -12.765 1.00 15.23
1 . .
ATOM 6489 O     O     . ALA ALA ALA B B 423 423 . 81.090  94.946  -14.021 1.00 15.12
1 . .
ATOM 6490 N     N     . GLY GLY GLY B B 424 424 . 82.236  94.508  -12.089 1.00 14.62
1 . .
ATOM 6491 CA    CA    . GLY GLY GLY B B 424 424 . 83.543  94.298  -12.687 1.00 16.56
1 . .
ATOM 6492 C     C     . GLY GLY GLY B B 424 424 . 83.899  95.350  -13.737 1.00 17.87
1 . .
ATOM 6493 O     O     . GLY GLY GLY B B 424 424 . 83.921  96.547  -13.443 1.00 16.18
1 . .
ATOM 6494 N     N     . HIS HIS HIS B B 425 425 . 84.136  94.920  -14.970 1.00 17.30
1 . .
ATOM 6495 CA    CA    . HIS HIS HIS B B 425 425 . 84.547  95.885  -16.045 1.00 18.96
1 . .
ATOM 6496 CB    CB    . HIS HIS HIS B B 425 425 . 85.185  95.132  -17.239 1.00 18.18
1 . .
ATOM 6497 CG    CG    . HIS HIS HIS B B 425 425 . 86.486  94.481  -16.877 1.00 21.66
1 . .
ATOM 6498 ND1   ND1   . HIS HIS HIS B B 425 425 . 86.612  93.111  -16.723 1.00 24.38
1 . .
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ATOM 6499 CE1   CE1   . HIS HIS HIS B B 425 425 . 87.848  92.827  -16.356 1.00 25.57
1 . .
ATOM 6500 NE2   NE2   . HIS HIS HIS B B 425 425 . 88.519  93.964  -16.238 1.00 26.42
1 . .
ATOM 6501 CD2   CD2   . HIS HIS HIS B B 425 425 . 87.685  95.014  -16.545 1.00 21.89
1 . .
ATOM 6502 C     C     . HIS HIS HIS B B 425 425 . 83.420  96.810  -16.512 1.00 19.44
1 . .
ATOM 6503 O     O     . HIS HIS HIS B B 425 425 . 83.653  97.794  -17.252 1.00 21.42
1 . .
ATOM 6504 N     N     . ASN ASN ASN B B 426 426 . 82.201  96.486  -16.122 1.00 18.39
1 . .
ATOM 6505 CA    CA    . ASN ASN ASN B B 426 426 . 81.083  97.303  -16.439 1.00 19.99
1 . .
ATOM 6506 CB    CB    . ASN ASN ASN B B 426 426 . 79.954  96.412  -16.866 1.00 21.10
1 . .
ATOM 6507 CG    CG    . ASN ASN ASN B B 426 426 . 80.174  95.885  -18.275 1.00 27.73
1 . .
ATOM 6508 OD1   OD1   . ASN ASN ASN B B 426 426 . 80.283  96.641  -19.283 1.00 35.79
1 . .
ATOM 6509 ND2   ND2   . ASN ASN ASN B B 426 426 . 80.236  94.619  -18.356 1.00 30.81
1 . .
ATOM 6510 C     C     . ASN ASN ASN B B 426 426 . 80.657  98.259  -15.311 1.00 16.90
1 . .
ATOM 6511 O     O     . ASN ASN ASN B B 426 426 . 79.490  98.613  -15.150 1.00 16.72
1 . .
ATOM 6512 N     N     . PHE PHE PHE B B 427 427 . 81.640  98.671  -14.540 1.00 14.60
1 . .
ATOM 6513 CA    CA    . PHE PHE PHE B B 427 427 . 81.346  99.511  -13.388 1.00 13.82
1 . .
ATOM 6514 CB    CB    . PHE PHE PHE B B 427 427 . 82.554  99.724  -12.441 1.00 12.38
1 . .
ATOM 6515 CG    CG    . PHE PHE PHE B B 427 427 . 83.645  100.632 -12.985 1.00 14.74
1 . .
ATOM 6516 CD1   CD1   . PHE PHE PHE B B 427 427 . 84.604  100.149 -13.853 1.00 17.03
1 . .
ATOM 6517 CE1   CE1   . PHE PHE PHE B B 427 427 . 85.652  100.982 -14.325 1.00 16.92
1 . .
ATOM 6518 CZ    CZ    . PHE PHE PHE B B 427 427 . 85.712  102.295 -13.961 1.00 15.60
1 . .
ATOM 6519 CE2   CE2   . PHE PHE PHE B B 427 427 . 84.744  102.804 -13.071 1.00 14.43
1 . .
ATOM 6520 CD2   CD2   . PHE PHE PHE B B 427 427 . 83.722  101.981 -12.571 1.00 13.14
1 . .
ATOM 6521 C     C     . PHE PHE PHE B B 427 427 . 80.719  100.864 -13.816 1.00 13.08
1 . .
ATOM 6522 O     O     . PHE PHE PHE B B 427 427 . 79.856  101.387 -13.107 1.00 13.10
1 . .
ATOM 6523 N     N     . ARG ARG ARG B B 428 428 . 81.142  101.401 -14.952 1.00 13.49
1 . .
ATOM 6524 CA    CA    . ARG ARG ARG B B 428 428 . 80.552  102.673 -15.391 1.00 13.58
1 . .
ATOM 6525 CB    CB    . ARG ARG ARG B B 428 428 . 81.380  103.369 -16.497 1.00 12.70
1 . .
ATOM 6526 CG    CG    . ARG ARG ARG B B 428 428 . 82.790  103.781 -16.028 1.00 13.41
1 . .
ATOM 6527 CD    CD    . ARG ARG ARG B B 428 428 . 83.678  104.375 -17.112 1.00 16.04
1 . .
ATOM 6528 NE    NE    . ARG ARG ARG B B 428 428 . 83.008  105.474 -17.788 1.00 14.99
1 . .
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ATOM 6529 CZ    CZ    . ARG ARG ARG B B 428 428 . 83.527  106.186 -18.801 1.00 11.67
1 . .
ATOM 6530 NH1   NH1   . ARG ARG ARG B B 428 428 . 84.731  105.958 -19.253 1.00 10.10
1 . .
ATOM 6531 NH2   NH2   . ARG ARG ARG B B 428 428 . 82.798  107.165 -19.341 1.00 14.71
1 . .
ATOM 6532 C     C     . ARG ARG ARG B B 428 428 . 79.113  102.550 -15.838 1.00 16.01
1 . .
ATOM 6533 O     O     . ARG ARG ARG B B 428 428 . 78.310  103.484 -15.656 1.00 19.18
1 . .
ATOM 6534 N     N     . ASN ASN ASN B B 429 429 . 78.776  101.403 -16.461 1.00 17.49
1 . .
ATOM 6535 CA    CA    . ASN ASN ASN B B 429 429 . 77.432  101.248 -17.046 1.00 19.57
1 . .
ATOM 6536 CB    CB    . ASN ASN ASN B B 429 429 . 77.441  101.575 -18.536 1.00 23.18
1 . .
ATOM 6537 CG    CG    . ASN ASN ASN B B 429 429 . 78.292  100.631 -19.327 1.00 25.63
1 . .
ATOM 6538 OD1   OD1   . ASN ASN ASN B B 429 429 . 77.997  100.403 -20.522 1.00 30.31
1 . .
ATOM 6539 ND2   ND2   . ASN ASN ASN B B 429 429 . 79.354  100.023 -18.674 1.00 24.15
1 . .
ATOM 6540 C     C     . ASN ASN ASN B B 429 429 . 76.959  99.841  -16.795 1.00 20.84
1 . .
ATOM 6541 O     O     . ASN ASN ASN B B 429 429 . 76.979  98.972  -17.703 1.00 22.18
1 . .
ATOM 6542 N     N     . PRO PRO PRO B B 430 430 . 76.532  99.592  -15.561 1.00 20.57
1 . .
ATOM 6543 CA    CA    . PRO PRO PRO B B 430 430 . 76.226  98.228  -15.203 1.00 22.82
1 . .
ATOM 6544 CB    CB    . PRO PRO PRO B B 430 430 . 76.167  98.284  -13.666 1.00 22.91
1 . .
ATOM 6545 CG    CG    . PRO PRO PRO B B 430 430 . 75.853  99.663  -13.357 1.00 20.96
1 . .
ATOM 6546 CD    CD    . PRO PRO PRO B B 430 430 . 76.603  100.473 -14.375 1.00 19.69
1 . .
ATOM 6547 C     C     . PRO PRO PRO B B 430 430 . 74.906  97.760  -15.799 1.00 26.52
1 . .
ATOM 6548 O     O     . PRO PRO PRO B B 430 430 . 74.678  96.542  -15.810 1.00 27.13
1 . .
ATOM 6549 N     N     . SER SER SER B B 431 431 . 74.035  98.661  -16.256 1.00 29.16
1 . .
ATOM 6550 CA    CA    . SER SER SER B B 431 431 . 72.711  98.244  -16.777 1.00 33.50
1 . .
ATOM 6551 CB    CB    . SER SER SER B B 431 431 . 71.854  99.449  -17.200 1.00 33.87
1 . .
ATOM 6552 OG    OG    . SER SER SER B B 431 431 . 72.418  100.159 -18.304 1.00 37.54
1 . .
ATOM 6553 C     C     . SER SER SER B B 431 431 . 72.756  97.155  -17.903 1.00 36.03
1 . .
ATOM 6554 O     O     . SER SER SER B B 431 431 . 71.713  96.556  -18.259 1.00 36.70
1 . .
ATOM 6555 N     N     . VAL VAL VAL B B 432 432 . 73.953  96.881  -18.418 1.00 37.75
1 . .
ATOM 6556 CA    CA    . VAL VAL VAL B B 432 432 . 74.121  95.883  -19.466 1.00 39.32
1 . .
ATOM 6557 CB    CB    . VAL VAL VAL B B 432 432 . 75.391  96.192  -20.317 1.00 40.19
1 . .
ATOM 6558 CG1   CG1   . VAL VAL VAL B B 432 432 . 75.358  97.679  -20.846 1.00 40.77
1 . .
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ATOM 6559 CG2   CG2   . VAL VAL VAL B B 432 432 . 76.670  95.903  -19.541 1.00 40.33
1 . .
ATOM 6560 C     C     . VAL VAL VAL B B 432 432 . 74.171  94.442  -18.943 1.00 40.31
1 . .
ATOM 6561 O     O     . VAL VAL VAL B B 432 432 . 74.060  94.189  -17.732 1.00 41.20
1 . .
ATOM 6562 MG+2  MG+2  . MG2 MG2 MG2 B B 599 599 . 85.107  114.370 -3.845  1.00 9.47
1 . .
ATOM 6563 MG+2  MG+2  . MG2 MG2 MG2 B B 600 600 . 84.872  116.873 -0.603  1.00 9.32
1 . .
ATOM 6564 O3P   O3P   . PEP PEP PEP B B 601 601 . 84.114  115.989 1.025   1.00 8.52
1 . .
ATOM 6565 P     P     . PEP PEP PEP B B 601 601 . 84.672  114.963 1.985   1.00 8.21
1 . .
ATOM 6566 O1P   O1P   . PEP PEP PEP B B 601 601 . 83.601  114.100 2.602   1.00 7.64
1 . .
ATOM 6567 O2P   O2P   . PEP PEP PEP B B 601 601 . 85.738  115.495 2.938   1.00 9.91
1 . .
ATOM 6568 O2    O2    . PEP PEP PEP B B 601 601 . 85.648  113.972 1.127   1.00 9.89
1 . .
ATOM 6569 C2    C2    . PEP PEP PEP B B 601 601 . 84.893  113.254 0.125   1.00 9.91
1 . .
ATOM 6570 C3    C3    . PEP PEP PEP B B 601 601 . 84.803  111.741 0.248   1.00 15.80
1 . .
ATOM 6571 C1    C1    . PEP PEP PEP B B 601 601 . 85.031  113.793 -1.274  1.00 9.87
1 . .
ATOM 6572 O1    O1    . PEP PEP PEP B B 601 601 . 85.435  114.964 -1.454  1.00 8.72
1 . .
ATOM 6573 "O2'" "O2'" . PEP PEP PEP B B 601 601 . 84.662  113.091 -2.245  1.00 8.95
1 . .
ATOM 6574 O     O     . HOH HOH HOH B B 800 800 . 85.968  116.117 -4.612  1.00 8.52
1 . .
ATOM 6575 O     O     . HOH HOH HOH B B 801 801 . 85.723  117.788 -2.272  1.00 7.66
1 . .
ATOM 6576 O     O     . HOH HOH HOH B B 802 802 . 82.949  116.831 -1.505  1.00 8.34
1 . .
ATOM 6577 CA    CA    . GLY GLY GLY B B 155 155 . 94.348  117.480 -0.013  0.61 8.39
1 . .
ATOM 6578 C     C     . GLY GLY GLY B B 155 155 . 94.449  118.415 1.163   0.61 12.21
1 . .
ATOM 6579 O     O     . GLY GLY GLY B B 155 155 . 95.484  118.527 1.829   0.61 13.63
1 . .
ATOM 6580 N     N     . SER SER SER B B 156 156 . 93.335  119.084 1.378   0.61 12.16
1 . .
ATOM 6581 CA    CA    . SER SER SER B B 156 156 . 93.144  120.113 2.352   0.61 14.24
1 . .
ATOM 6582 CB    CB    . SER SER SER B B 156 156 . 91.690  120.576 2.235   0.61 12.16
1 . .
ATOM 6583 OG    OG    . SER SER SER B B 156 156 . 91.813  121.631 1.322   0.61 20.09
1 . .
ATOM 6584 C     C     . SER SER SER B B 156 156 . 93.383  119.740 3.764   0.61 16.03
1 . .
ATOM 6585 O     O     . SER SER SER B B 156 156 . 93.774  120.630 4.588   0.61 17.80
1 . .
ATOM 6586 N     N     . HIS HIS HIS B B 157 157 . 93.140  118.474 4.049   0.61 15.55
1 . .
ATOM 6587 CA    CA    . HIS HIS HIS B B 157 157 . 93.103  118.017 5.428   0.61 18.83
1 . .
ATOM 6588 CB    CB    . HIS HIS HIS B B 157 157 . 91.710  117.473 5.751   0.61 17.49
1 . .
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ATOM 6589 CG    CG    . HIS HIS HIS B B 157 157 . 90.702  118.585 5.794   0.61 18.96
1 . .
ATOM 6590 ND1   ND1   . HIS HIS HIS B B 157 157 . 90.162  119.134 4.642   0.61 19.17
1 . .
ATOM 6591 CE1   CE1   . HIS HIS HIS B B 157 157 . 89.373  120.149 4.963   0.61 19.46
1 . .
ATOM 6592 NE2   NE2   . HIS HIS HIS B B 157 157 . 89.397  120.293 6.277   0.61 21.48
1 . .
ATOM 6593 CD2   CD2   . HIS HIS HIS B B 157 157 . 90.233  119.338 6.822   0.61 19.32
1 . .
ATOM 6594 C     C     . HIS HIS HIS B B 157 157 . 94.253  117.103 5.754   0.61 20.37
1 . .
ATOM 6595 O     O     . HIS HIS HIS B B 157 157 . 94.568  116.858 6.932   0.61 22.22
1 . .
ATOM 6596 N     N     . ALA ALA ALA B B 158 158 . 94.939  116.684 4.705   0.61 20.56
1 . .
ATOM 6597 CA    CA    . ALA ALA ALA B B 158 158 . 96.091  115.781 4.816   0.61 20.00
1 . .
ATOM 6598 CB    CB    . ALA ALA ALA B B 158 158 . 96.457  115.212 3.436   0.61 19.05
1 . .
ATOM 6599 C     C     . ALA ALA ALA B B 158 158 . 97.266  116.427 5.450   0.61 19.21
1 . .
ATOM 6600 O     O     . ALA ALA ALA B B 158 158 . 97.880  117.366 4.945   0.61 19.65
1 . .
ATOM 6601 O     O     . HOH HOH HOH S . 1   1   . 103.301 106.556 43.541  1.00 7.44
1 . .
ATOM 6602 O     O     . HOH HOH HOH S . 2   2   . 92.171  103.643 24.414  1.00 6.92
1 . .
ATOM 6603 O     O     . HOH HOH HOH S . 3   3   . 87.246  92.188  26.307  1.00 8.35
1 . .
ATOM 6604 O     O     . HOH HOH HOH S . 4   4   . 94.472  88.202  18.792  1.00 9.15
1 . .
ATOM 6605 O     O     . HOH HOH HOH S . 5   5   . 87.570  105.153 -0.935  1.00 7.63
1 . .
ATOM 6606 O     O     . HOH HOH HOH S . 6   6   . 103.896 97.841  21.113  1.00 9.57
1 . .
ATOM 6607 O     O     . HOH HOH HOH S . 7   7   . 78.868  117.556 5.621   1.00 9.76
1 . .
ATOM 6608 O     O     . HOH HOH HOH S . 8   8   . 94.162  101.655 24.223  1.00 8.98
1 . .
ATOM 6609 O     O     . HOH HOH HOH S . 9   9   . 79.627  122.811 -4.275  1.00 6.93
1 . .
ATOM 6610 O     O     . HOH HOH HOH S . 10  10  . 54.408  102.536 9.791   1.00 13.30
1 . .
ATOM 6611 O     O     . HOH HOH HOH S . 11  11  . 66.911  79.730  22.625  1.00 11.79
1 . .
ATOM 6612 O     O     . HOH HOH HOH S . 12  12  . 91.520  80.087  10.493  1.00 7.72
1 . .
ATOM 6613 O     O     . HOH HOH HOH S . 13  13  . 89.622  90.522  23.395  1.00 10.38
1 . .
ATOM 6614 O     O     . HOH HOH HOH S . 14  14  . 81.510  106.863 14.581  1.00 7.53
1 . .
ATOM 6615 O     O     . HOH HOH HOH S . 15  15  . 77.139  122.574 21.377  1.00 11.60
1 . .
ATOM 6616 O     O     . HOH HOH HOH S . 16  16  . 87.551  110.155 9.507   1.00 9.03
1 . .
ATOM 6617 O     O     . HOH HOH HOH S . 17  17  . 95.702  86.371  20.400  1.00 11.11
1 . .
ATOM 6618 O     O     . HOH HOH HOH S . 18  18  . 86.169  120.176 -5.509  1.00 8.36
1 . .
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ATOM 6619 O     O     . HOH HOH HOH S . 19  19  . 77.533  115.204 -6.421  1.00 7.72
1 . .
ATOM 6620 O     O     . HOH HOH HOH S . 20  20  . 83.178  94.779  21.138  1.00 8.51
1 . .
ATOM 6621 O     O     . HOH HOH HOH S . 21  21  . 92.956  81.535  3.728   1.00 12.02
1 . .
ATOM 6622 O     O     . HOH HOH HOH S . 22  22  . 85.728  96.192  10.853  1.00 8.11
1 . .
ATOM 6623 O     O     . HOH HOH HOH S . 23  23  . 90.077  86.056  14.383  1.00 11.59
1 . .
ATOM 6624 O     O     . HOH HOH HOH S . 24  24  . 77.869  119.484 4.075   1.00 10.79
1 . .
ATOM 6625 O     O     . HOH HOH HOH S . 25  25  . 77.813  102.211 18.062  1.00 7.98
1 . .
ATOM 6626 O     O     . HOH HOH HOH S . 26  26  . 91.368  86.856  16.789  1.00 11.30
1 . .
ATOM 6627 O     O     . HOH HOH HOH S . 27  27  . 74.527  77.978  31.813  1.00 11.27
1 . .
ATOM 6628 O     O     . HOH HOH HOH S . 28  28  . 74.121  67.297  15.496  1.00 11.35
1 . .
ATOM 6629 O     O     . HOH HOH HOH S . 29  29  . 91.219  109.220 -22.458 1.00 12.44
1 . .
ATOM 6630 O     O     . HOH HOH HOH S . 30  30  . 93.334  99.065  13.801  1.00 8.21
1 . .
ATOM 6631 O     O     . HOH HOH HOH S . 31  31  . 75.500  67.437  17.273  1.00 10.61
1 . .
ATOM 6632 O     O     . HOH HOH HOH S . 32  32  . 68.025  74.943  28.324  1.00 10.63
1 . .
ATOM 6633 O     O     . HOH HOH HOH S . 33  33  . 92.349  112.350 13.738  1.00 10.62
1 . .
ATOM 6634 O     O     . HOH HOH HOH S . 34  34  . 84.850  110.671 -21.159 1.00 9.84
1 . .
ATOM 6635 O     O     . HOH HOH HOH S . 35  35  . 84.580  120.663 -8.050  1.00 11.43
1 . .
ATOM 6636 O     O     . HOH HOH HOH S . 36  36  . 76.187  104.530 5.535   1.00 9.07
1 . .
ATOM 6637 O     O     . HOH HOH HOH S . 37  37  . 88.225  98.487  38.272  1.00 13.40
1 . .
ATOM 6638 O     O     . HOH HOH HOH S . 38  38  . 76.512  116.406 8.539   1.00 11.97
1 . .
ATOM 6639 O     O     . HOH HOH HOH S . 39  39  . 94.629  93.027  12.422  1.00 13.75
1 . .
ATOM 6640 O     O     . HOH HOH HOH S . 40  40  . 79.969  68.481  16.224  1.00 8.02
1 . .
ATOM 6641 O     O     . HOH HOH HOH S . 41  41  . 105.678 98.686  23.107  1.00 11.05
1 . .
ATOM 6642 O     O     . HOH HOH HOH S . 42  42  . 79.274  123.510 19.789  1.00 9.82
1 . .
ATOM 6643 O     O     . HOH HOH HOH S . 43  43  . 95.618  99.988  31.122  1.00 10.05
1 . .
ATOM 6644 O     O     . HOH HOH HOH S . 44  44  . 73.208  121.762 15.374  1.00 8.92
1 . .
ATOM 6645 O     O     . HOH HOH HOH S . 45  45  . 95.088  90.262  30.933  1.00 9.06
1 . .
ATOM 6646 O     O     . HOH HOH HOH S . 46  46  . 72.782  120.677 -2.633  1.00 9.92
1 . .
ATOM 6647 O     O     . HOH HOH HOH S . 47  47  . 96.954  100.768 8.236   1.00 11.95
1 . .
ATOM 6648 O     O     . HOH HOH HOH S . 48  48  . 79.221  96.090  8.905   1.00 8.45
1 . .
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ATOM 6649 O     O     . HOH HOH HOH S . 49  49  . 75.475  108.538 -0.230  1.00 11.62
1 . .
ATOM 6650 O     O     . HOH HOH HOH S . 50  50  . 74.548  117.148 6.750   1.00 12.29
1 . .
ATOM 6651 O     O     . HOH HOH HOH S . 52  52  . 97.089  102.019 32.209  1.00 10.99
1 . .
ATOM 6652 O     O     . HOH HOH HOH S . 53  53  . 88.090  92.804  23.527  1.00 10.93
1 . .
ATOM 6653 O     O     . HOH HOH HOH S . 54  54  . 95.357  82.697  27.899  1.00 13.03
1 . .
ATOM 6654 O     O     . HOH HOH HOH S . 55  55  . 101.597 86.562  27.448  1.00 8.58
1 . .
ATOM 6655 O     O     . HOH HOH HOH S . 56  56  . 81.827  118.296 -22.839 1.00 11.80
1 . .
ATOM 6656 O     O     . HOH HOH HOH S . 57  57  . 84.280  115.276 11.202  1.00 13.35
1 . .
ATOM 6657 O     O     . HOH HOH HOH S . 58  58  . 75.705  116.235 11.406  1.00 9.96
1 . .
ATOM 6658 O     O     . HOH HOH HOH S . 59  59  . 95.627  101.098 10.842  1.00 13.41
1 . .
ATOM 6659 O     O     . HOH HOH HOH S . 60  60  . 87.312  108.826 -9.547  1.00 9.17
1 . .
ATOM 6660 O     O     . HOH HOH HOH S . 61  61  . 103.819 93.443  27.107  1.00 10.88
1 . .
ATOM 6661 O     O     . HOH HOH HOH S . 62  62  . 92.495  118.713 -2.985  1.00 13.20
1 . .
ATOM 6662 O     O     . HOH HOH HOH S . 63  63  . 81.711  99.922  34.294  1.00 9.80
1 . .
ATOM 6663 O     O     . HOH HOH HOH S . 64  64  . 83.444  108.433 46.109  1.00 11.58
1 . .
ATOM 6664 O     O     . HOH HOH HOH S . 65  65  . 103.917 92.072  29.972  1.00 13.02
1 . .
ATOM 6665 O     O     . HOH HOH HOH S . 66  66  . 79.362  114.444 24.737  1.00 12.97
1 . .
ATOM 6666 O     O     . HOH HOH HOH S . 67  67  . 73.796  83.757  27.134  1.00 11.31
1 . .
ATOM 6667 O     O     . HOH HOH HOH S . 68  68  . 76.478  111.875 2.238   1.00 10.97
1 . .
ATOM 6668 O     O     . HOH HOH HOH S . 69  69  . 75.176  118.888 4.496   1.00 10.24
1 . .
ATOM 6669 O     O     . HOH HOH HOH S . 70  70  . 86.517  93.526  21.214  1.00 13.26
1 . .
ATOM 6670 O     O     . HOH HOH HOH S . 71  71  . 93.484  84.662  20.715  1.00 9.12
1 . .
ATOM 6671 O     O     . HOH HOH HOH S . 72  72  . 72.452  81.732  32.471  1.00 15.03
1 . .
ATOM 6672 O     O     . HOH HOH HOH S . 73  73  . 73.745  75.795  11.812  1.00 14.19
1 . .
ATOM 6673 O     O     . HOH HOH HOH S . 74  74  . 110.947 105.224 22.969  1.00 14.20
1 . .
ATOM 6674 O     O     . HOH HOH HOH S . 75  75  . 83.972  128.234 -6.480  1.00 10.56
1 . .
ATOM 6675 O     O     . HOH HOH HOH S . 76  76  . 78.438  116.813 26.349  1.00 16.95
1 . .
ATOM 6676 O     O     . HOH HOH HOH S . 77  77  . 78.028  127.329 -10.703 1.00 11.93
1 . .
ATOM 6677 O     O     . HOH HOH HOH S . 78  78  . 85.425  92.944  17.402  1.00 10.21
1 . .
ATOM 6678 O     O     . HOH HOH HOH S . 79  79  . 91.274  85.085  18.996  1.00 13.63
1 . .
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ATOM 6679 O     O     . HOH HOH HOH S . 80  80  . 60.473  104.047 3.335   1.00 13.93
1 . .
ATOM 6680 O     O     . HOH HOH HOH S . 81  81  . 85.195  109.187 -7.897  1.00 12.10
1 . .
ATOM 6681 O     O     . HOH HOH HOH S . 82  82  . 92.251  90.128  12.175  1.00 12.06
1 . .
ATOM 6682 O     O     . HOH HOH HOH S . 83  83  . 120.774 99.160  36.014  1.00 17.77
1 . .
ATOM 6683 O     O     . HOH HOH HOH S . 84  84  . 85.512  123.344 23.064  1.00 16.48
1 . .
ATOM 6684 O     O     . HOH HOH HOH S . 85  85  . 98.784  102.590 20.485  1.00 12.05
1 . .
ATOM 6685 O     O     . HOH HOH HOH S . 86  86  . 75.862  98.550  -7.287  1.00 12.04
1 . .
ATOM 6686 O     O     . HOH HOH HOH S . 87  87  . 83.892  112.727 38.410  1.00 16.02
1 . .
ATOM 6687 O     O     . HOH HOH HOH S . 88  88  . 91.115  118.204 -0.455  1.00 14.80
1 . .
ATOM 6688 O     O     . HOH HOH HOH S . 89  89  . 89.962  104.920 41.678  1.00 13.77
1 . .
ATOM 6689 O     O     . HOH HOH HOH S . 90  90  . 109.162 89.430  25.051  1.00 13.57
1 . .
ATOM 6690 O     O     . HOH HOH HOH S . 91  91  . 56.087  120.213 15.022  1.00 16.63
1 . .
ATOM 6691 O     O     . HOH HOH HOH S . 92  92  . 105.512 109.607 12.685  1.00 14.27
1 . .
ATOM 6692 O     O     . HOH HOH HOH S . 93  93  . 89.852  121.882 -19.551 1.00 14.82
1 . .
ATOM 6693 O     O     . HOH HOH HOH S . 94  94  . 91.215  110.823 11.596  1.00 13.63
1 . .
ATOM 6694 O     O     . HOH HOH HOH S . 95  95  . 95.678  123.241 20.119  1.00 14.93
1 . .
ATOM 6695 O     O     . HOH HOH HOH S . 96  96  . 77.439  107.872 4.635   1.00 18.74
1 . .
ATOM 6696 O     O     . HOH HOH HOH S . 97  97  . 84.557  125.081 -22.367 1.00 11.07
1 . .
ATOM 6697 O     O     . HOH HOH HOH S . 98  98  . 84.587  124.454 -1.894  1.00 13.23
1 . .
ATOM 6698 O     O     . HOH HOH HOH S . 99  99  . 101.764 117.037 -9.816  1.00 21.80
1 . .
ATOM 6699 O     O     . HOH HOH HOH S . 100 100 . 101.924 111.115 11.678  1.00 14.95
1 . .
ATOM 6700 O     O     . HOH HOH HOH S . 101 101 . 75.195  80.708  32.491  1.00 12.65
1 . .
ATOM 6701 O     O     . HOH HOH HOH S . 102 102 . 97.374  88.420  15.980  1.00 15.08
1 . .
ATOM 6702 O     O     . HOH HOH HOH S . 103 103 . 77.781  103.740 -12.739 1.00 16.00
1 . .
ATOM 6703 O     O     . HOH HOH HOH S . 104 104 . 83.686  83.472  4.572   1.00 16.27
1 . .
ATOM 6704 O     O     . HOH HOH HOH S . 105 105 . 87.406  107.857 -1.150  1.00 13.89
1 . .
ATOM 6705 O     O     . HOH HOH HOH S . 106 106 . 72.255  114.105 22.684  1.00 16.28
1 . .
ATOM 6706 O     O     . HOH HOH HOH S . 107 107 . 79.368  123.765 2.352   1.00 16.03
1 . .
ATOM 6707 O     O     . HOH HOH HOH S . 108 108 . 92.650  129.017 -15.060 1.00 16.71
1 . .
ATOM 6708 O     O     . HOH HOH HOH S . 110 110 . 109.721 108.872 14.634  1.00 19.52
1 . .
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ATOM 6709 O     O     . HOH HOH HOH S . 111 111 . 67.161  123.769 17.814  1.00 15.21
1 . .
ATOM 6710 O     O     . HOH HOH HOH S . 112 112 . 89.159  74.136  25.113  1.00 16.43
1 . .
ATOM 6711 O     O     . HOH HOH HOH S . 113 113 . 81.739  91.562  37.671  1.00 21.31
1 . .
ATOM 6712 O     O     . HOH HOH HOH S . 114 114 . 95.442  82.735  4.522   1.00 11.85
1 . .
ATOM 6713 O     O     . HOH HOH HOH S . 115 115 . 87.637  88.389  0.858   1.00 16.92
1 . .
ATOM 6714 O     O     . HOH HOH HOH S . 116 116 . 88.526  74.077  9.498   1.00 14.47
1 . .
ATOM 6715 O     O     . HOH HOH HOH S . 117 117 . 97.766  82.814  18.808  1.00 17.85
1 . .
ATOM 6716 O     O     . HOH HOH HOH S . 118 118 . 81.642  111.915 -21.712 1.00 17.03
1 . .
ATOM 6717 O     O     . HOH HOH HOH S . 119 119 . 80.570  115.295 12.421  1.00 12.85
1 . .
ATOM 6718 O     O     . HOH HOH HOH S . 120 120 . 90.379  114.258 14.193  1.00 14.02
1 . .
ATOM 6719 O     O     . HOH HOH HOH S . 121 121 . 111.769 112.508 20.930  1.00 16.89
1 . .
ATOM 6720 O     O     . HOH HOH HOH S . 122 122 . 103.380 91.205  23.597  1.00 13.45
1 . .
ATOM 6721 O     O     . HOH HOH HOH S . 123 123 . 104.610 93.759  44.921  1.00 18.38
1 . .
ATOM 6722 O     O     . HOH HOH HOH S . 124 124 . 78.300  98.935  14.903  1.00 15.89
1 . .
ATOM 6723 O     O     . HOH HOH HOH S . 125 125 . 77.041  113.982 23.036  1.00 19.12
1 . .
ATOM 6724 O     O     . HOH HOH HOH S . 126 126 . 113.775 95.723  38.209  1.00 19.98
1 . .
ATOM 6725 O     O     . HOH HOH HOH S . 127 127 . 88.153  117.781 12.269  1.00 16.97
1 . .
ATOM 6726 O     O     . HOH HOH HOH S . 128 128 . 97.436  90.954  44.689  1.00 21.17
1 . .
ATOM 6727 O     O     . HOH HOH HOH S . 129 129 . 101.163 110.445 39.436  1.00 14.85
1 . .
ATOM 6728 O     O     . HOH HOH HOH S . 130 130 . 77.209  109.253 2.202   1.00 12.87
1 . .
ATOM 6729 O     O     . HOH HOH HOH S . 131 131 . 102.737 123.122 20.365  1.00 14.90
1 . .
ATOM 6730 O     O     . HOH HOH HOH S . 132 132 . 63.617  122.079 3.082   1.00 14.04
1 . .
ATOM 6731 O     O     . HOH HOH HOH S . 133 133 . 55.280  108.250 -0.454  1.00 15.86
1 . .
ATOM 6732 O     O     . HOH HOH HOH S . 134 134 . 112.148 102.793 17.841  1.00 18.51
1 . .
ATOM 6733 O     O     . HOH HOH HOH S . 135 135 . 80.445  124.622 -19.760 1.00 15.75
1 . .
ATOM 6734 O     O     . HOH HOH HOH S . 136 136 . 84.573  118.365 18.124  1.00 14.20
1 . .
ATOM 6735 O     O     . HOH HOH HOH S . 137 137 . 106.060 84.082  32.575  1.00 23.47
1 . .
ATOM 6736 O     O     . HOH HOH HOH S . 138 138 . 77.699  94.664  18.246  1.00 16.70
1 . .
ATOM 6737 O     O     . HOH HOH HOH S . 139 139 . 70.480  86.420  32.422  1.00 15.78
1 . .
ATOM 6738 O     O     . HOH HOH HOH S . 140 140 . 77.782  71.989  28.960  1.00 19.55
1 . .
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ATOM 6739 O     O     . HOH HOH HOH S . 141 141 . 92.641  73.581  12.023  1.00 17.05
1 . .
ATOM 6740 O     O     . HOH HOH HOH S . 142 142 . 68.865  126.593 14.584  1.00 18.66
1 . .
ATOM 6741 O     O     . HOH HOH HOH S . 143 143 . 81.566  119.914 7.487   1.00 16.09
1 . .
ATOM 6742 O     O     . HOH HOH HOH S . 144 144 . 86.294  96.344  39.213  1.00 18.13
1 . .
ATOM 6743 O     O     . HOH HOH HOH S . 145 145 . 102.501 108.889 8.162   1.00 15.46
1 . .
ATOM 6744 O     O     . HOH HOH HOH S . 146 146 . 76.394  96.044  22.194  1.00 15.73
1 . .
ATOM 6745 O     O     . HOH HOH HOH S . 147 147 . 86.521  128.067 -5.266  1.00 21.32
1 . .
ATOM 6746 O     O     . HOH HOH HOH S . 148 148 . 68.059  95.162  6.038   1.00 20.74
1 . .
ATOM 6747 O     O     . HOH HOH HOH S . 149 149 . 85.478  130.589 -7.185  1.00 17.10
1 . .
ATOM 6748 O     O     . HOH HOH HOH S . 150 150 . 117.666 95.309  36.448  1.00 19.88
1 . .
ATOM 6749 O     O     . HOH HOH HOH S . 151 151 . 68.601  92.294  23.900  1.00 23.31
1 . .
ATOM 6750 O     O     . HOH HOH HOH S . 152 152 . 96.881  97.893  7.937   1.00 15.09
1 . .
ATOM 6751 O     O     . HOH HOH HOH S . 153 153 . 72.753  98.659  6.024   1.00 18.53
1 . .
ATOM 6752 O     O     . HOH HOH HOH S . 154 154 . 70.528  74.762  21.169  1.00 15.94
1 . .
ATOM 6753 O     O     . HOH HOH HOH S . 155 155 . 74.366  107.126 7.056   1.00 16.05
1 . .
ATOM 6754 O     O     . HOH HOH HOH S . 156 156 . 65.135  80.211  27.723  1.00 17.22
1 . .
ATOM 6755 O     O     . HOH HOH HOH S . 157 157 . 69.423  113.425 22.875  1.00 17.46
1 . .
ATOM 6756 O     O     . HOH HOH HOH S . 159 159 . 79.899  92.882  12.596  1.00 20.35
1 . .
ATOM 6757 O     O     . HOH HOH HOH S . 160 160 . 69.162  103.320 21.160  1.00 16.95
1 . .
ATOM 6758 O     O     . HOH HOH HOH S . 161 161 . 90.226  75.932  26.745  1.00 16.12
1 . .
ATOM 6759 O     O     . HOH HOH HOH S . 162 162 . 58.501  99.336  10.637  1.00 17.00
1 . .
ATOM 6760 O     O     . HOH HOH HOH S . 163 163 . 70.531  95.048  4.951   1.00 22.64
1 . .
ATOM 6761 O     O     . HOH HOH HOH S . 164 164 . 94.372  113.368 12.130  1.00 17.94
1 . .
ATOM 6762 O     O     . HOH HOH HOH S . 165 165 . 76.671  85.075  -3.762  1.00 18.90
1 . .
ATOM 6763 O     O     . HOH HOH HOH S . 166 166 . 76.301  124.348 23.266  1.00 17.65
1 . .
ATOM 6764 O     O     . HOH HOH HOH S . 167 167 . 53.482  108.489 11.387  1.00 19.43
1 . .
ATOM 6765 O     O     . HOH HOH HOH S . 168 168 . 82.571  77.250  6.302   1.00 17.66
1 . .
ATOM 6766 O     O     . HOH HOH HOH S . 169 169 . 76.371  68.502  21.586  1.00 17.58
1 . .
ATOM 6767 O     O     . HOH HOH HOH S . 170 170 . 96.748  73.636  23.756  1.00 21.11
1 . .
ATOM 6768 O     O     . HOH HOH HOH S . 171 171 . 99.168  97.272  44.888  1.00 18.87
1 . .
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ATOM 6769 O     O     . HOH HOH HOH S . 173 173 . 73.866  88.436  8.019   1.00 17.38
1 . .
ATOM 6770 O     O     . HOH HOH HOH S . 175 175 . 76.217  75.882  10.262  1.00 15.71
1 . .
ATOM 6771 O     O     . HOH HOH HOH S . 176 176 . 65.061  121.537 0.778   1.00 17.75
1 . .
ATOM 6772 O     O     . HOH HOH HOH S . 177 177 . 95.996  110.977 -22.436 1.00 19.30
1 . .
ATOM 6773 O     O     . HOH HOH HOH S . 178 178 . 95.847  116.792 34.905  1.00 18.06
1 . .
ATOM 6774 O     O     . HOH HOH HOH S . 179 179 . 81.270  81.606  5.288   1.00 15.14
1 . .
ATOM 6775 O     O     . HOH HOH HOH S . 180 180 . 77.229  107.876 8.771   1.00 13.14
1 . .
ATOM 6776 O     O     . HOH HOH HOH S . 181 181 . 81.175  71.112  5.252   1.00 18.49
1 . .
ATOM 6777 O     O     . HOH HOH HOH S . 182 182 . 73.291  84.620  7.844   1.00 18.70
1 . .
ATOM 6778 O     O     . HOH HOH HOH S . 183 183 . 83.438  91.580  19.876  1.00 18.85
1 . .
ATOM 6779 O     O     . HOH HOH HOH S . 184 184 . 78.213  114.668 -20.246 1.00 19.10
1 . .
ATOM 6780 O     O     . HOH HOH HOH S . 185 185 . 75.804  98.185  18.406  1.00 20.64
1 . .
ATOM 6781 O     O     . HOH HOH HOH S . 186 186 . 77.475  94.165  11.989  1.00 17.73
1 . .
ATOM 6782 O     O     . HOH HOH HOH S . 187 187 . 57.497  125.243 3.124   1.00 17.34
1 . .
ATOM 6783 O     O     . HOH HOH HOH S . 189 189 . 62.565  123.482 15.924  1.00 19.73
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ATOM 6784 O     O     . HOH HOH HOH S . 190 190 . 99.255  101.980 9.235   1.00 17.70
1 . .
ATOM 6785 O     O     . HOH HOH HOH S . 191 191 . 93.595  99.022  40.523  1.00 15.20
1 . .
ATOM 6786 O     O     . HOH HOH HOH S . 192 192 . 98.637  94.371  10.002  1.00 25.95
1 . .
ATOM 6787 O     O     . HOH HOH HOH S . 193 193 . 85.633  129.369 -9.343  1.00 19.29
1 . .
ATOM 6788 O     O     . HOH HOH HOH S . 194 194 . 103.173 89.779  18.253  1.00 24.61
1 . .
ATOM 6789 O     O     . HOH HOH HOH S . 195 195 . 68.499  79.934  33.091  1.00 21.32
1 . .
ATOM 6790 O     O     . HOH HOH HOH S . 196 196 . 87.520  119.025 15.460  1.00 21.15
1 . .
ATOM 6791 O     O     . HOH HOH HOH S . 197 197 . 111.376 96.746  38.927  1.00 17.41
1 . .
ATOM 6792 O     O     . HOH HOH HOH S . 198 198 . 96.731  76.900  9.853   1.00 17.63
1 . .
ATOM 6793 O     O     . HOH HOH HOH S . 199 199 . 105.608 111.710 10.721  1.00 17.38
1 . .
ATOM 6794 O     O     . HOH HOH HOH S . 200 200 . 88.475  86.184  -0.828  1.00 17.95
1 . .
ATOM 6795 O     O     . HOH HOH HOH S . 201 201 . 61.907  128.473 7.035   1.00 18.57
1 . .
ATOM 6796 O     O     . HOH HOH HOH S . 202 202 . 75.496  114.798 -20.398 1.00 16.42
1 . .
ATOM 6797 O     O     . HOH HOH HOH S . 203 203 . 67.029  84.573  21.307  1.00 15.80
1 . .
ATOM 6798 O     O     . HOH HOH HOH S . 204 204 . 67.434  76.914  30.353  1.00 16.47
1 . .
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ATOM 6799 O     O     . HOH HOH HOH S . 205 205 . 79.164  88.477  -11.881 1.00 21.63
1 . .
ATOM 6800 O     O     . HOH HOH HOH S . 206 206 . 65.008  97.321  8.231   1.00 19.06
1 . .
ATOM 6801 O     O     . HOH HOH HOH S . 207 207 . 74.543  101.693 15.821  1.00 17.38
1 . .
ATOM 6802 O     O     . HOH HOH HOH S . 208 208 . 87.343  67.146  26.185  1.00 22.31
1 . .
ATOM 6803 O     O     . HOH HOH HOH S . 209 209 . 66.696  120.569 -2.635  1.00 22.31
1 . .
ATOM 6804 O     O     . HOH HOH HOH S . 210 210 . 80.636  130.878 -6.164  1.00 16.66
1 . .
ATOM 6805 O     O     . HOH HOH HOH S . 211 211 . 99.310  90.030  -3.342  1.00 19.27
1 . .
ATOM 6806 O     O     . HOH HOH HOH S . 212 212 . 81.981  124.612 2.876   1.00 24.31
1 . .
ATOM 6807 O     O     . HOH HOH HOH S . 213 213 . 107.141 113.971 -3.936  1.00 17.75
1 . .
ATOM 6808 O     O     . HOH HOH HOH S . 214 214 . 87.022  104.745 -17.862 1.00 18.72
1 . .
ATOM 6809 O     O     . HOH HOH HOH S . 216 216 . 58.785  110.982 19.626  1.00 19.42
1 . .
ATOM 6810 O     O     . HOH HOH HOH S . 217 217 . 73.530  103.818 12.463  1.00 20.01
1 . .
ATOM 6811 O     O     . HOH HOH HOH S . 218 218 . 109.803 101.282 -2.072  1.00 18.17
1 . .
ATOM 6812 O     O     . HOH HOH HOH S . 219 219 . 83.248  117.480 9.899   1.00 18.59
1 . .
ATOM 6813 O     O     . HOH HOH HOH S . 220 220 . 108.988 86.783  27.456  1.00 18.27
1 . .
ATOM 6814 O     O     . HOH HOH HOH S . 221 221 . 98.433  80.181  28.224  1.00 21.10
1 . .
ATOM 6815 O     O     . HOH HOH HOH S . 222 222 . 82.794  100.429 -17.158 1.00 23.67
1 . .
ATOM 6816 O     O     . HOH HOH HOH S . 223 223 . 77.891  98.951  12.282  1.00 19.53
1 . .
ATOM 6817 O     O     . HOH HOH HOH S . 224 224 . 85.253  121.833 -1.895  1.00 15.92
1 . .
ATOM 6818 O     O     . HOH HOH HOH S . 225 225 . 74.797  97.151  9.508   1.00 21.21
1 . .
ATOM 6819 O     O     . HOH HOH HOH S . 226 226 . 102.821 122.014 8.995   1.00 22.47
1 . .
ATOM 6820 O     O     . HOH HOH HOH S . 227 227 . 64.779  79.568  19.322  1.00 24.31
1 . .
ATOM 6821 O     O     . HOH HOH HOH S . 228 228 . 110.929 91.275  43.119  1.00 20.34
1 . .
ATOM 6822 O     O     . HOH HOH HOH S . 229 229 . 85.754  91.325  -13.224 1.00 19.05
1 . .
ATOM 6823 O     O     . HOH HOH HOH S . 230 230 . 47.233  113.426 14.679  1.00 27.74
1 . .
ATOM 6824 O     O     . HOH HOH HOH S . 231 231 . 68.556  99.934  12.658  1.00 20.72
1 . .
ATOM 6825 O     O     . HOH HOH HOH S . 232 232 . 105.509 95.712  0.128   1.00 23.10
1 . .
ATOM 6826 O     O     . HOH HOH HOH S . 233 233 . 74.308  127.726 14.883  1.00 16.90
1 . .
ATOM 6827 O     O     . HOH HOH HOH S . 234 234 . 111.311 109.898 15.855  1.00 31.39
1 . .
ATOM 6828 O     O     . HOH HOH HOH S . 235 235 . 107.629 108.810 41.666  1.00 22.43
1 . .
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ATOM 6829 O     O     . HOH HOH HOH S . 236 236 . 91.422  98.330  43.208  1.00 25.02
1 . .
ATOM 6830 O     O     . HOH HOH HOH S . 237 237 . 75.845  109.081 34.739  1.00 27.66
1 . .
ATOM 6831 O     O     . HOH HOH HOH S . 238 238 . 78.399  72.862  31.982  1.00 25.67
1 . .
ATOM 6832 O     O     . HOH HOH HOH S . 239 239 . 83.379  92.313  -15.665 1.00 27.84
1 . .
ATOM 6833 O     O     . HOH HOH HOH S . 240 240 . 100.872 91.827  -11.882 1.00 29.37
1 . .
ATOM 6834 O     O     . HOH HOH HOH S . 241 241 . 76.078  125.651 11.029  1.00 26.56
1 . .
ATOM 6835 O     O     . HOH HOH HOH S . 242 242 . 69.437  119.030 21.803  1.00 17.19
1 . .
ATOM 6836 O     O     . HOH HOH HOH S . 243 243 . 55.779  99.819  10.550  1.00 23.95
1 . .
ATOM 6837 O     O     . HOH HOH HOH S . 244 244 . 100.345 84.929  21.029  1.00 16.97
1 . .
ATOM 6838 O     O     . HOH HOH HOH S . 245 245 . 68.400  121.170 -0.251  1.00 15.79
1 . .
ATOM 6839 O     O     . HOH HOH HOH S . 246 246 . 90.060  132.402 -4.748  1.00 33.22
1 . .
ATOM 6840 O     O     . HOH HOH HOH S . 247 247 . 91.418  78.173  29.501  1.00 24.89
1 . .
ATOM 6841 O     O     . HOH HOH HOH S . 248 248 . 100.534 118.500 -5.097  1.00 20.82
1 . .
ATOM 6842 O     O     . HOH HOH HOH S . 249 249 . 104.587 92.277  17.797  1.00 27.72
1 . .
ATOM 6843 O     O     . HOH HOH HOH S . 250 250 . 85.055  117.108 38.923  1.00 27.53
1 . .
ATOM 6844 O     O     . HOH HOH HOH S . 251 251 . 95.327  90.545  5.387   1.00 21.70
1 . .
ATOM 6845 O     O     . HOH HOH HOH S . 252 252 . 98.671  87.158  -0.013  1.00 26.41
1 . .
ATOM 6846 O     O     . HOH HOH HOH S . 253 253 . 79.144  92.461  15.238  1.00 18.42
1 . .
ATOM 6847 O     O     . HOH HOH HOH S . 254 254 . 86.265  83.344  39.074  1.00 19.06
1 . .
ATOM 6848 O     O     . HOH HOH HOH S . 255 255 . 56.531  120.866 17.788  1.00 27.19
1 . .
ATOM 6849 O     O     . HOH HOH HOH S . 256 256 . 71.895  100.043 38.224  1.00 33.86
1 . .
ATOM 6850 O     O     . HOH HOH HOH S . 257 257 . 83.956  114.607 -27.690 1.00 23.06
1 . .
ATOM 6851 O     O     . HOH HOH HOH S . 258 258 . 77.438  109.470 39.079  1.00 20.13
1 . .
ATOM 6852 O     O     . HOH HOH HOH S . 259 259 . 71.099  94.726  23.771  1.00 21.48
1 . .
ATOM 6853 O     O     . HOH HOH HOH S . 260 260 . 78.423  127.884 -17.869 1.00 19.79
1 . .
ATOM 6854 O     O     . HOH HOH HOH S . 261 261 . 105.474 116.568 1.572   1.00 31.07
1 . .
ATOM 6855 O     O     . HOH HOH HOH S . 262 262 . 77.823  119.787 27.459  1.00 20.32
1 . .
ATOM 6856 O     O     . HOH HOH HOH S . 263 263 . 70.554  91.166  22.170  1.00 22.64
1 . .
ATOM 6857 O     O     . HOH HOH HOH S . 264 264 . 71.235  108.841 32.240  1.00 23.17
1 . .
ATOM 6858 O     O     . HOH HOH HOH S . 265 265 . 111.120 115.163 20.477  1.00 23.30
1 . .
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ATOM 6859 O     O     . HOH HOH HOH S . 266 266 . 76.538  124.150 2.928   1.00 20.72
1 . .
ATOM 6860 O     O     . HOH HOH HOH S . 267 267 . 78.740  82.975  31.586  1.00 21.88
1 . .
ATOM 6861 O     O     . HOH HOH HOH S . 268 268 . 74.790  104.444 14.927  1.00 25.41
1 . .
ATOM 6862 O     O     . HOH HOH HOH S . 269 269 . 98.346  92.684  7.183   1.00 22.99
1 . .
ATOM 6863 O     O     . HOH HOH HOH S . 270 270 . 73.083  91.250  16.752  1.00 22.19
1 . .
ATOM 6864 O     O     . HOH HOH HOH S . 271 271 . 117.252 94.028  32.806  1.00 24.71
1 . .
ATOM 6865 O     O     . HOH HOH HOH S . 272 272 . 110.751 101.197 41.847  1.00 22.57
1 . .
ATOM 6866 O     O     . HOH HOH HOH S . 274 274 . 103.050 110.641 -21.735 1.00 26.88
1 . .
ATOM 6867 O     O     . HOH HOH HOH S . 275 275 . 101.000 97.832  -11.923 1.00 30.89
1 . .
ATOM 6868 O     O     . HOH HOH HOH S . 276 276 . 116.752 102.039 25.229  1.00 24.09
1 . .
ATOM 6869 O     O     . HOH HOH HOH S . 277 277 . 72.612  97.119  24.593  1.00 25.42
1 . .
ATOM 6870 O     O     . HOH HOH HOH S . 278 278 . 69.476  119.281 -18.597 1.00 28.76
1 . .
ATOM 6871 O     O     . HOH HOH HOH S . 279 279 . 74.752  109.538 27.489  1.00 24.39
1 . .
ATOM 6872 O     O     . HOH HOH HOH S . 280 280 . 102.439 86.387  19.712  1.00 19.71
1 . .
ATOM 6873 O     O     . HOH HOH HOH S . 281 281 . 90.525  87.555  -8.714  1.00 27.39
1 . .
ATOM 6874 O     O     . HOH HOH HOH S . 282 282 . 91.711  111.367 1.186   1.00 25.07
1 . .
ATOM 6875 O     O     . HOH HOH HOH S . 283 283 . 77.115  123.558 5.581   1.00 18.10
1 . .
ATOM 6876 O     O     . HOH HOH HOH S . 284 284 . 73.864  94.231  8.710   1.00 23.79
1 . .
ATOM 6877 O     O     . HOH HOH HOH S . 285 285 . 80.808  106.844 -16.161 1.00 24.33
1 . .
ATOM 6878 O     O     . HOH HOH HOH S . 286 286 . 69.247  123.685 -13.424 1.00 23.94
1 . .
ATOM 6879 O     O     . HOH HOH HOH S . 287 287 . 95.655  112.934 8.869   1.00 25.27
1 . .
ATOM 6880 O     O     . HOH HOH HOH S . 288 288 . 85.551  71.422  11.480  1.00 29.65
1 . .
ATOM 6881 O     O     . HOH HOH HOH S . 289 289 . 80.539  87.237  -9.105  1.00 25.61
1 . .
ATOM 6882 O     O     . HOH HOH HOH S . 290 290 . 73.629  100.870 9.702   1.00 22.79
1 . .
ATOM 6883 O     O     . HOH HOH HOH S . 291 291 . 57.570  106.604 -1.435  1.00 25.01
1 . .
ATOM 6884 O     O     . HOH HOH HOH S . 292 292 . 88.332  115.954 -28.599 1.00 19.28
1 . .
ATOM 6885 O     O     . HOH HOH HOH S . 293 293 . 88.191  122.642 25.867  1.00 19.70
1 . .
ATOM 6886 O     O     . HOH HOH HOH S . 294 294 . 96.222  108.107 -23.393 1.00 20.24
1 . .
ATOM 6887 O     O     . HOH HOH HOH S . 295 295 . 66.233  105.674 21.773  1.00 23.04
1 . .
ATOM 6888 O     O     . HOH HOH HOH S . 296 296 . 97.400  80.035  13.318  1.00 19.60
1 . .
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ATOM 6889 O     O     . HOH HOH HOH S . 297 297 . 92.245  78.864  26.814  1.00 17.23
1 . .
ATOM 6890 O     O     . HOH HOH HOH S . 298 298 . 95.928  91.164  13.790  1.00 18.60
1 . .
ATOM 6891 O     O     . HOH HOH HOH S . 300 300 . 85.448  78.422  5.703   1.00 14.39
1 . .
ATOM 6892 O     O     . HOH HOH HOH S . 301 301 . 97.742  103.454 11.448  1.00 23.65
1 . .
ATOM 6893 O     O     . HOH HOH HOH S . 302 302 . 111.308 114.282 16.176  1.00 24.82
1 . .
ATOM 6894 O     O     . HOH HOH HOH S . 303 303 . 99.900  100.540 43.792  1.00 20.92
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ATOM 6895 O     O     . HOH HOH HOH S . 304 304 . 73.376  99.261  19.704  1.00 24.87
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ATOM 6896 O     O     . HOH HOH HOH S . 305 305 . 86.369  70.227  13.457  1.00 22.44
1 . .
ATOM 6897 O     O     . HOH HOH HOH S . 306 306 . 96.743  90.438  -12.805 1.00 32.71
1 . .
ATOM 6898 O     O     . HOH HOH HOH S . 307 307 . 81.245  68.993  24.308  1.00 17.85
1 . .
ATOM 6899 O     O     . HOH HOH HOH S . 308 308 . 100.459 120.895 -17.449 1.00 26.60
1 . .
ATOM 6900 O     O     . HOH HOH HOH S . 309 309 . 104.957 99.794  14.300  1.00 23.57
1 . .
ATOM 6901 O     O     . HOH HOH HOH S . 310 310 . 97.397  91.012  2.948   1.00 8.05
1 . .
ATOM 6902 O     O     . HOH HOH HOH S . 311 311 . 111.807 107.910 27.407  1.00 14.23
1 . .
ATOM 6903 O     O     . HOH HOH HOH S . 312 312 . 79.830  113.942 -22.508 1.00 14.50
1 . .
ATOM 6904 O     O     . HOH HOH HOH S . 313 313 . 76.626  100.151 16.689  1.00 11.58
1 . .
ATOM 6905 O     O     . HOH HOH HOH S . 314 314 . 75.997  66.297  19.838  1.00 11.43
1 . .
ATOM 6906 O     O     . HOH HOH HOH S . 315 315 . 77.294  96.607  10.830  1.00 10.26
1 . .
ATOM 6907 O     O     . HOH HOH HOH S . 317 317 . 73.323  87.037  6.348   1.00 19.53
1 . .
ATOM 6908 O     O     . HOH HOH HOH S . 318 318 . 80.917  109.364 45.439  1.00 17.87
1 . .
ATOM 6909 O     O     . HOH HOH HOH S . 319 319 . 70.734  122.017 -0.971  1.00 14.27
1 . .
ATOM 6910 O     O     . HOH HOH HOH S . 320 320 . 94.521  80.088  26.951  1.00 17.61
1 . .
ATOM 6911 O     O     . HOH HOH HOH S . 321 321 . 64.471  86.117  33.157  1.00 16.67
1 . .
ATOM 6912 O     O     . HOH HOH HOH S . 322 322 . 120.176 100.980 37.862  1.00 18.85
1 . .
ATOM 6913 O     O     . HOH HOH HOH S . 323 323 . 93.103  79.603  1.835   1.00 18.91
1 . .
ATOM 6914 O     O     . HOH HOH HOH S . 324 324 . 71.392  84.201  33.729  1.00 19.94
1 . .
ATOM 6915 O     O     . HOH HOH HOH S . 325 325 . 74.613  127.794 10.305  1.00 24.11
1 . .
ATOM 6916 O     O     . HOH HOH HOH S . 326 326 . 101.643 116.195 37.540  1.00 24.96
1 . .
ATOM 6917 O     O     . HOH HOH HOH S . 327 327 . 100.929 121.794 -0.569  1.00 27.11
1 . .
ATOM 6918 O     O     . HOH HOH HOH S . 328 328 . 91.171  120.070 -21.605 1.00 27.00
1 . .
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ATOM 6919 O     O     . HOH HOH HOH S . 329 329 . 112.609 115.550 22.911  1.00 24.33
1 . .
ATOM 6920 O     O     . HOH HOH HOH S . 330 330 . 85.527  127.770 -23.010 1.00 17.54
1 . .
ATOM 6921 O     O     . HOH HOH HOH S . 331 331 . 86.697  101.847 -17.598 1.00 20.97
1 . .
ATOM 6922 O     O     . HOH HOH HOH S . 332 332 . 79.490  69.875  5.454   1.00 10.12
1 . .
ATOM 6923 O     O     . HOH HOH HOH S . 333 333 . 81.475  115.807 -24.068 1.00 16.67
1 . .
ATOM 6924 O     O     . HOH HOH HOH S . 334 334 . 74.501  103.864 -12.613 1.00 25.24
1 . .
ATOM 6925 O     O     . HOH HOH HOH S . 335 335 . 78.931  121.821 4.656   1.00 21.20
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ATOM 6926 O     O     . HOH HOH HOH S . 336 336 . 86.625  87.368  3.000   1.00 24.11
1 . .
ATOM 6927 O     O     . HOH HOH HOH S . 337 337 . 69.210  123.607 -3.984  1.00 22.42
1 . .
ATOM 6928 O     O     . HOH HOH HOH S . 338 338 . 111.583 86.951  37.577  1.00 25.10
1 . .
ATOM 6929 O     O     . HOH HOH HOH S . 339 339 . 53.865  101.380 13.877  1.00 26.62
1 . .
ATOM 6930 O     O     . HOH HOH HOH S . 340 340 . 99.990  102.320 -17.036 1.00 22.90
1 . .
ATOM 6931 O     O     . HOH HOH HOH S . 341 341 . 100.009 94.837  45.712  1.00 22.76
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ATOM 6932 O     O     . HOH HOH HOH S . 342 342 . 116.486 105.195 34.264  1.00 25.40
1 . .
ATOM 6933 O     O     . HOH HOH HOH S . 343 343 . 102.989 115.432 -10.728 1.00 33.25
1 . .
ATOM 6934 O     O     . HOH HOH HOH S . 344 344 . 86.948  66.581  22.303  1.00 23.79
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ATOM 6935 O     O     . HOH HOH HOH S . 345 345 . 67.788  126.206 17.423  1.00 19.52
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ATOM 6936 O     O     . HOH HOH HOH S . 346 346 . 85.573  123.607 1.019   1.00 20.88
1 . .
ATOM 6937 O     O     . HOH HOH HOH S . 347 347 . 85.614  118.674 8.946   1.00 25.55
1 . .
ATOM 6938 O     O     . HOH HOH HOH S . 348 348 . 111.999 102.554 8.842   1.00 22.81
1 . .
ATOM 6939 O     O     . HOH HOH HOH S . 349 349 . 69.742  102.421 23.089  1.00 17.36
1 . .
ATOM 6940 O     O     . HOH HOH HOH S . 350 350 . 89.541  104.098 44.247  1.00 22.28
1 . .
ATOM 6941 O     O     . HOH HOH HOH S . 351 351 . 89.869  79.573  31.963  1.00 22.63
1 . .
ATOM 6942 O     O     . HOH HOH HOH S . 352 352 . 64.781  84.126  29.711  1.00 23.38
1 . .
ATOM 6943 O     O     . HOH HOH HOH S . 353 353 . 73.930  84.436  3.901   1.00 23.14
1 . .
ATOM 6944 O     O     . HOH HOH HOH S . 354 354 . 88.700  104.700 47.998  1.00 24.77
1 . .
ATOM 6945 O     O     . HOH HOH HOH S . 356 356 . 69.207  74.669  10.923  1.00 25.25
1 . .
ATOM 6946 O     O     . HOH HOH HOH S . 358 358 . 103.438 109.398 -24.327 1.00 27.46
1 . .
ATOM 6947 O     O     . HOH HOH HOH S . 359 359 . 57.263  113.179 19.195  1.00 24.49
1 . .
ATOM 6948 O     O     . HOH HOH HOH S . 360 360 . 66.590  117.219 22.346  1.00 29.69
1 . .
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ATOM 6949 O     O     . HOH HOH HOH S . 361 361 . 74.526  103.051 36.439  1.00 25.33
1 . .
ATOM 6950 O     O     . HOH HOH HOH S . 362 362 . 109.942 97.208  45.899  1.00 24.53
1 . .
ATOM 6951 O     O     . HOH HOH HOH S . 363 363 . 70.904  96.943  7.488   1.00 32.50
1 . .
ATOM 6952 O     O     . HOH HOH HOH S . 364 364 . 75.843  82.375  -0.714  1.00 29.72
1 . .
ATOM 6953 O     O     . HOH HOH HOH S . 365 365 . 90.121  83.342  -2.190  1.00 21.29
1 . .
ATOM 6954 O     O     . HOH HOH HOH S . 366 366 . 111.481 110.244 40.430  1.00 45.38
1 . .
ATOM 6955 O     O     . HOH HOH HOH S . 367 367 . 54.780  119.646 19.549  0.50 20.46
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ATOM 6956 O     O     . HOH HOH HOH S . 368 368 . 91.033  123.601 22.908  1.00 30.11
1 . .
ATOM 6957 O     O     . HOH HOH HOH S . 369 369 . 83.686  112.506 -23.583 1.00 27.73
1 . .
ATOM 6958 O     O     . HOH HOH HOH S . 370 370 . 91.617  114.617 10.996  1.00 37.42
1 . .
ATOM 6959 O     O     . HOH HOH HOH S . 371 371 . 83.114  87.193  3.500   1.00 31.06
1 . .
ATOM 6960 O     O     . HOH HOH HOH S . 372 372 . 104.108 122.680 22.895  1.00 21.96
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ATOM 6961 O     O     . HOH HOH HOH S . 373 373 . 111.478 99.465  40.306  1.00 22.72
1 . .
ATOM 6962 O     O     . HOH HOH HOH S . 374 374 . 97.241  98.205  -13.241 1.00 24.11
1 . .
ATOM 6963 O     O     . HOH HOH HOH S . 375 375 . 94.943  121.231 14.255  1.00 29.73
1 . .
ATOM 6964 O     O     . HOH HOH HOH S . 376 376 . 97.681  133.659 -16.961 1.00 32.07
1 . .
ATOM 6965 O     O     . HOH HOH HOH S . 377 377 . 75.063  123.317 25.681  1.00 28.71
1 . .
ATOM 6966 O     O     . HOH HOH HOH S . 378 378 . 89.075  85.894  -3.243  1.00 36.54
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ATOM 6967 O     O     . HOH HOH HOH S . 379 379 . 68.659  103.567 -9.642  1.00 23.89
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ATOM 6968 O     O     . HOH HOH HOH S . 381 381 . 93.577  77.582  3.925   1.00 28.81
1 . .
ATOM 6969 O     O     . HOH HOH HOH S . 382 382 . 99.087  87.954  -6.833  1.00 28.29
1 . .
ATOM 6970 O     O     . HOH HOH HOH S . 383 383 . 64.472  95.067  6.657   1.00 28.56
1 . .
ATOM 6971 O     O     . HOH HOH HOH S . 384 384 . 76.023  129.506 -11.112 1.00 26.22
1 . .
ATOM 6972 O     O     . HOH HOH HOH S . 385 385 . 90.596  124.554 -19.607 1.00 20.59
1 . .
ATOM 6973 O     O     . HOH HOH HOH S . 386 386 . 89.731  121.166 35.357  1.00 33.46
1 . .
ATOM 6974 O     O     . HOH HOH HOH S . 387 387 . 59.212  98.972  -1.244  1.00 26.50
1 . .
ATOM 6975 O     O     . HOH HOH HOH S . 388 388 . 119.813 92.143  20.599  1.00 31.09
1 . .
ATOM 6976 O     O     . HOH HOH HOH S . 389 389 . 96.187  128.512 -20.334 1.00 35.67
1 . .
ATOM 6977 O     O     . HOH HOH HOH S . 390 390 . 72.511  107.227 45.099  1.00 37.46
1 . .
ATOM 6978 O     O     . HOH HOH HOH S . 391 391 . 78.796  73.721  7.193   1.00 26.35
1 . .
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ATOM 6979 O     O     . HOH HOH HOH S . 392 392 . 72.892  124.630 -3.363  1.00 24.99
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ATOM 6980 O     O     . HOH HOH HOH S . 393 393 . 86.190  131.013 -4.367  1.00 17.91
1 . .
ATOM 6981 O     O     . HOH HOH HOH S . 394 394 . 92.717  72.102  14.116  1.00 31.42
1 . .
ATOM 6982 O     O     . HOH HOH HOH S . 395 395 . 96.021  105.591 40.923  1.00 24.12
1 . .
ATOM 6983 O     O     . HOH HOH HOH S . 396 396 . 102.878 95.301  46.401  1.00 19.70
1 . .
ATOM 6984 O     O     . HOH HOH HOH S . 397 397 . 117.094 104.239 23.204  1.00 28.94
1 . .
ATOM 6985 O     O     . HOH HOH HOH S . 398 398 . 81.732  125.074 -22.449 1.00 28.63
1 . .
ATOM 6986 O     O     . HOH HOH HOH S . 399 399 . 89.352  76.045  29.466  1.00 28.99
1 . .
ATOM 6987 O     O     . HOH HOH HOH S . 400 400 . 73.424  90.937  -7.805  1.00 27.86
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ATOM 6988 O     O     . HOH HOH HOH S . 401 401 . 81.019  120.019 -24.740 1.00 24.48
1 . .
ATOM 6989 O     O     . HOH HOH HOH S . 402 402 . 63.651  120.889 -1.432  1.00 33.37
1 . .
ATOM 6990 O     O     . HOH HOH HOH S . 403 403 . 50.122  113.999 1.151   1.00 30.57
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ATOM 6991 O     O     . HOH HOH HOH S . 404 404 . 67.224  85.922  34.621  1.00 33.21
1 . .
ATOM 6992 O     O     . HOH HOH HOH S . 405 405 . 73.868  110.909 28.983  1.00 33.05
1 . .
ATOM 6993 O     O     . HOH HOH HOH S . 406 406 . 83.720  108.781 42.212  1.00 27.28
1 . .
ATOM 6994 O     O     . HOH HOH HOH S . 407 407 . 63.183  118.605 -3.509  1.00 27.59
1 . .
ATOM 6995 O     O     . HOH HOH HOH S . 408 408 . 70.605  91.385  16.697  1.00 37.17
1 . .
ATOM 6996 O     O     . HOH HOH HOH S . 410 410 . 91.147  72.918  9.626   1.00 22.64
1 . .
ATOM 6997 O     O     . HOH HOH HOH S . 411 411 . 100.707 124.772 -8.844  1.00 26.74
1 . .
ATOM 6998 O     O     . HOH HOH HOH S . 412 412 . 95.922  71.013  19.242  1.00 29.59
1 . .
ATOM 6999 O     O     . HOH HOH HOH S . 413 413 . 80.528  87.642  -0.027  1.00 24.47
1 . .
ATOM 7000 O     O     . HOH HOH HOH S . 414 414 . 63.606  131.383 10.049  1.00 32.78
1 . .
ATOM 7001 O     O     . HOH HOH HOH S . 416 416 . 80.774  130.674 21.002  1.00 31.02
1 . .
ATOM 7002 O     O     . HOH HOH HOH S . 417 417 . 92.370  105.342 -19.204 1.00 31.08
1 . .
ATOM 7003 O     O     . HOH HOH HOH S . 418 418 . 67.581  98.002  7.509   1.00 23.63
1 . .
ATOM 7004 O     O     . HOH HOH HOH S . 419 419 . 90.589  118.833 14.925  1.00 25.98
1 . .
ATOM 7005 O     O     . HOH HOH HOH S . 420 420 . 116.099 95.187  19.201  1.00 28.73
1 . .
ATOM 7006 O     O     . HOH HOH HOH S . 421 421 . 73.793  96.242  21.677  1.00 28.83
1 . .
ATOM 7007 O     O     . HOH HOH HOH S . 422 422 . 78.877  88.285  -7.137  1.00 32.67
1 . .
ATOM 7008 O     O     . HOH HOH HOH S . 423 423 . 103.652 123.787 12.323  1.00 28.59
1 . .
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ATOM 7009 O     O     . HOH HOH HOH S . 424 424 . 101.926 92.796  1.904   1.00 28.67
1 . .
ATOM 7010 O     O     . HOH HOH HOH S . 425 425 . 92.446  112.622 -24.694 1.00 33.81
1 . .
ATOM 7011 O     O     . HOH HOH HOH S . 426 426 . 73.523  126.382 -11.486 1.00 31.29
1 . .
ATOM 7012 O     O     . HOH HOH HOH S . 427 427 . 113.816 106.724 6.007   1.00 34.21
1 . .
ATOM 7013 O     O     . HOH HOH HOH S . 428 428 . 90.890  108.510 42.402  1.00 24.55
1 . .
ATOM 7014 O     O     . HOH HOH HOH S . 429 429 . 71.659  100.474 22.210  1.00 28.04
1 . .
ATOM 7015 O     O     . HOH HOH HOH S . 430 430 . 110.592 107.328 9.038   1.00 35.46
1 . .
ATOM 7016 O     O     . HOH HOH HOH S . 431 431 . 100.783 122.713 -19.921 1.00 34.32
1 . .
ATOM 7017 O     O     . HOH HOH HOH S . 432 432 . 96.123  115.380 9.686   1.00 32.05
1 . .
ATOM 7018 O     O     . HOH HOH HOH S . 433 433 . 84.211  111.297 40.989  1.00 26.24
1 . .
ATOM 7019 O     O     . HOH HOH HOH S . 434 434 . 70.641  98.768  16.118  1.00 41.24
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ATOM 7020 O     O     . HOH HOH HOH S . 436 436 . 59.943  92.983  9.065   1.00 26.59
1 . .
ATOM 7021 O     O     . HOH HOH HOH S . 437 437 . 100.407 103.363 11.985  1.00 21.47
1 . .
ATOM 7022 O     O     . HOH HOH HOH S . 438 438 . 76.533  130.329 -8.213  1.00 29.88
1 . .
ATOM 7023 O     O     . HOH HOH HOH S . 439 439 . 68.339  70.329  25.849  1.00 38.97
1 . .
ATOM 7024 O     O     . HOH HOH HOH S . 440 440 . 95.162  77.980  29.616  1.00 31.51
1 . .
ATOM 7025 O     O     . HOH HOH HOH S . 441 441 . 104.555 92.414  -0.477  1.00 53.39
1 . .
ATOM 7026 O     O     . HOH HOH HOH S . 442 442 . 105.125 111.559 7.482   1.00 28.11
1 . .
ATOM 7027 O     O     . HOH HOH HOH S . 443 443 . 97.926  85.467  19.213  1.00 18.75
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ATOM 7028 O     O     . HOH HOH HOH S . 444 444 . 71.362  100.578 7.435   1.00 26.41
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ATOM 7029 O     O     . HOH HOH HOH S . 445 445 . 58.993  107.466 -3.398  1.00 37.65
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ATOM 7030 O     O     . HOH HOH HOH S . 446 446 . 98.760  81.999  21.024  1.00 23.63
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ATOM 7031 O     O     . HOH HOH HOH S . 447 447 . 111.112 104.664 -6.396  1.00 33.41
1 . .
ATOM 7032 O     O     . HOH HOH HOH S . 448 448 . 88.201  123.369 23.213  1.00 22.03
1 . .
ATOM 7033 O     O     . HOH HOH HOH S . 449 449 . 94.406  93.431  46.192  1.00 34.78
1 . .
ATOM 7034 O     O     . HOH HOH HOH S . 450 450 . 106.403 97.675  14.840  1.00 39.83
1 . .
ATOM 7035 O     O     . HOH HOH HOH S . 451 451 . 67.953  99.347  31.253  1.00 29.21
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ATOM 7036 O     O     . HOH HOH HOH S . 452 452 . 65.099  112.007 -11.281 1.00 26.62
1 . .
ATOM 7037 O     O     . HOH HOH HOH S . 453 453 . 113.586 107.664 39.300  1.00 26.96
1 . .
ATOM 7038 O     O     . HOH HOH HOH S . 454 454 . 118.033 102.595 37.943  1.00 18.60
1 . .
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ATOM 7039 O     O     . HOH HOH HOH S . 455 455 . 96.019  70.715  25.988  1.00 23.62
1 . .
ATOM 7040 O     O     . HOH HOH HOH S . 456 456 . 106.094 92.245  46.571  1.00 31.04
1 . .
ATOM 7041 O     O     . HOH HOH HOH S . 457 457 . 67.407  96.394  32.322  1.00 42.75
1 . .
ATOM 7042 O     O     . HOH HOH HOH S . 458 458 . 75.141  68.134  24.019  1.00 25.78
1 . .
ATOM 7043 O     O     . HOH HOH HOH S . 459 459 . 58.041  120.053 21.064  1.00 32.93
1 . .
ATOM 7044 O     O     . HOH HOH HOH S . 461 461 . 69.898  119.588 -21.391 1.00 33.29
1 . .
ATOM 7045 O     O     . HOH HOH HOH S . 462 462 . 74.424  125.752 21.477  1.00 24.33
1 . .
ATOM 7046 O     O     . HOH HOH HOH S . 463 463 . 83.301  119.416 12.436  1.00 42.05
1 . .
ATOM 7047 O     O     . HOH HOH HOH S . 464 464 . 75.219  101.591 40.552  1.00 35.15
1 . .
ATOM 7048 O     O     . HOH HOH HOH S . 465 465 . 89.508  106.136 -22.056 1.00 20.43
1 . .
ATOM 7049 O     O     . HOH HOH HOH S . 466 466 . 99.162  111.926 -28.061 1.00 32.54
1 . .
ATOM 7050 O     O     . HOH HOH HOH S . 467 467 . 102.641 111.585 -15.779 1.00 23.39
1 . .
ATOM 7051 O     O     . HOH HOH HOH S . 468 468 . 61.746  107.990 -2.021  1.00 24.85
1 . .
ATOM 7052 O     O     . HOH HOH HOH S . 469 469 . 102.009 80.120  32.483  1.00 45.77
1 . .
ATOM 7053 O     O     . HOH HOH HOH S . 470 470 . 77.717  130.753 -4.611  1.00 44.58
1 . .
ATOM 7054 O     O     . HOH HOH HOH S . 471 471 . 98.090  77.552  14.043  1.00 30.08
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ATOM 7055 O     O     . HOH HOH HOH S . 472 472 . 97.384  112.518 -24.124 1.00 33.06
1 . .
ATOM 7056 O     O     . HOH HOH HOH S . 473 473 . 117.324 106.666 16.717  1.00 30.86
1 . .
ATOM 7057 O     O     . HOH HOH HOH S . 474 474 . 84.230  125.795 1.257   1.00 26.98
1 . .
ATOM 7058 O     O     . HOH HOH HOH S . 476 476 . 118.450 104.911 36.321  1.00 17.28
1 . .
ATOM 7059 O     O     . HOH HOH HOH S . 477 477 . 88.774  99.965  -16.491 1.00 23.70
1 . .
ATOM 7060 O     O     . HOH HOH HOH S . 478 478 . 98.952  92.885  44.050  1.00 28.26
1 . .
ATOM 7061 O     O     . HOH HOH HOH S . 479 479 . 86.571  125.959 2.094   1.00 31.89
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ATOM 7062 O     O     . HOH HOH HOH S . 480 480 . 93.063  123.562 33.335  1.00 31.31
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ATOM 7063 O     O     . HOH HOH HOH S . 481 481 . 77.793  108.414 42.355  1.00 32.00
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ATOM 7064 O     O     . HOH HOH HOH S . 482 482 . 65.717  75.572  24.191  1.00 28.80
1 . .
ATOM 7065 O     O     . HOH HOH HOH S . 483 483 . 92.427  79.034  32.379  1.00 25.04
1 . .
ATOM 7066 O     O     . HOH HOH HOH S . 484 484 . 108.510 99.589  12.102  1.00 41.03
1 . .
ATOM 7067 O     O     . HOH HOH HOH S . 485 485 . 94.114  107.560 40.859  1.00 27.62
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ATOM 7068 O     O     . HOH HOH HOH S . 486 486 . 108.512 86.885  23.725  1.00 31.27
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ATOM 7069 O     O     . HOH HOH HOH S . 487 487 . 80.098  109.632 42.833  1.00 24.15
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ATOM 7070 O     O     . HOH HOH HOH S . 488 488 . 67.193  120.437 -6.066  1.00 22.98
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ATOM 7071 O     O     . HOH HOH HOH S . 489 489 . 114.345 91.297  36.914  1.00 24.64
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ATOM 7072 O     O     . HOH HOH HOH S . 490 490 . 108.189 93.636  19.217  1.00 29.44
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ATOM 7073 O     O     . HOH HOH HOH S . 491 491 . 99.238  133.708 -10.271 1.00 26.44
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ATOM 7074 O     O     . HOH HOH HOH S . 492 492 . 74.247  69.496  26.464  1.00 37.23
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ATOM 7075 O     O     . HOH HOH HOH S . 493 493 . 68.163  72.785  19.075  1.00 30.13
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ATOM 7076 O     O     . HOH HOH HOH S . 494 494 . 102.018 91.341  -1.878  1.00 26.57
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ATOM 7077 O     O     . HOH HOH HOH S . 495 495 . 91.897  102.586 45.241  1.00 27.73
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ATOM 7079 O     O     . HOH HOH HOH S . 497 497 . 114.230 100.706 39.608  1.00 25.55
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ATOM 7082 O     O     . HOH HOH HOH S . 500 500 . 95.421  127.175 1.156   1.00 38.33
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ATOM 7084 O     O     . HOH HOH HOH S . 502 502 . 102.243 113.658 39.452  1.00 23.09
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ATOM 7085 O     O     . HOH HOH HOH S . 503 503 . 109.603 119.722 14.677  0.50 28.06
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ATOM 7086 O     O     . HOH HOH HOH S . 505 505 . 121.141 104.290 35.671  1.00 18.63
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ATOM 7087 O     O     . HOH HOH HOH S . 506 506 . 73.640  110.582 33.375  1.00 33.43
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ATOM 7088 O     O     . HOH HOH HOH S . 507 507 . 95.607  108.792 -26.231 1.00 28.27
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ATOM 7089 O     O     . HOH HOH HOH S . 508 508 . 97.750  104.236 -19.182 1.00 27.49
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ATOM 7090 O     O     . HOH HOH HOH S . 509 509 . 88.675  128.956 -3.622  1.00 38.72
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ATOM 7091 O     O     . HOH HOH HOH S . 510 510 . 94.084  110.897 10.373  1.00 37.22
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ATOM 7092 O     O     . HOH HOH HOH S . 511 511 . 95.440  74.426  11.186  1.00 35.56
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ATOM 7098 O     O     . HOH HOH HOH S . 517 517 . 85.523  84.124  2.661   1.00 27.70
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ATOM 7101 O     O     . HOH HOH HOH S . 520 520 . 72.840  92.729  21.860  1.00 27.51
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ATOM 7102 O     O     . HOH HOH HOH S . 521 521 . 104.632 120.512 24.257  1.00 24.70
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ATOM 7106 O     O     . HOH HOH HOH S . 525 525 . 80.084  85.276  -1.078  1.00 36.46
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ATOM 7112 O     O     . HOH HOH HOH S . 533 533 . 100.415 95.372  6.643   1.00 47.45
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ATOM 7113 O     O     . HOH HOH HOH S . 534 534 . 109.390 98.448  -2.717  1.00 38.52
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ATOM 7117 O     O     . HOH HOH HOH S . 538 538 . 109.870 119.394 27.505  0.50 25.30
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ATOM 7120 O     O     . HOH HOH HOH S . 541 541 . 97.053  128.812 -1.614  1.00 33.41
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ATOM 7124 O     O     . HOH HOH HOH S . 546 546 . 103.588 106.383 -21.311 1.00 21.01
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ATOM 7125 O     O     . HOH HOH HOH S . 547 547 . 71.411  80.793  -4.087  1.00 37.67
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ATOM 7126 O     O     . HOH HOH HOH S . 548 548 . 67.707  95.368  10.850  1.00 36.22
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ATOM 7128 O     O     . HOH HOH HOH S . 551 551 . 98.101  118.162 33.416  1.00 39.45
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ATOM 7129 O     O     . HOH HOH HOH S . 552 552 . 66.474  89.369  13.081  1.00 25.17
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ATOM 7133 O     O     . HOH HOH HOH S . 557 557 . 88.604  81.567  38.806  1.00 34.93
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ATOM 7146 O     O     . HOH HOH HOH S . 570 570 . 82.967  118.554 33.252  1.00 31.69
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ATOM 7147 O     O     . HOH HOH HOH S . 571 571 . 98.710  76.714  2.499   1.00 44.32
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ATOM 7148 O     O     . HOH HOH HOH S . 572 572 . 88.126  117.967 9.289   1.00 32.52
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ATOM 7171 O     O     . HOH HOH HOH S . 599 599 . 80.040  107.725 -18.354 1.00 30.43
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ATOM 7172 O     O     . HOH HOH HOH S . 600 600 . 74.950  119.963 27.005  1.00 48.28
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ATOM 7173 O     O     . HOH HOH HOH S . 601 601 . 104.994 97.618  6.481   1.00 31.84
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ATOM 7184 O     O     . HOH HOH HOH S . 614 614 . 86.408  76.987  3.677   1.00 38.39
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0.0020  1 .
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0.0099  1 .
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0.0170  1 .
4    OG    OG    . SER SER SER A A 1   1   . 0.3501 0.2720 0.3850 -0.0463 0.0126  -
0.0241 1 .
5    C     C     . SER SER SER A A 1   1   . 0.2002 0.2204 0.2238 0.0062  0.0263
0.0099  1 .
6    O     O     . SER SER SER A A 1   1   . 0.1889 0.2468 0.2304 0.0008  0.0392
0.0302  1 .
7    N     N     . ILE ILE ILE A A 2   2   . 0.1721 0.1900 0.1934 0.0023  0.0300  -
0.0025 1 .
8    CA    CA    . ILE ILE ILE A A 2   2   . 0.1437 0.1518 0.1926 -0.0005 0.0248  -
0.0030 1 .
9    CB    CB    . ILE ILE ILE A A 2   2   . 0.1221 0.1407 0.1708 0.0010  0.0174  -
0.0165 1 .
10   CG1   CG1   . ILE ILE ILE A A 2   2   . 0.1237 0.1360 0.1669 0.0218  -0.0013
0.0000  1 .
11   CD1   CD1   . ILE ILE ILE A A 2   2   . 0.1049 0.1563 0.1760 -0.0086 0.0116
0.0024  1 .
12   CG2   CG2   . ILE ILE ILE A A 2   2   . 0.1565 0.1331 0.1683 -0.0119 0.0051
0.0032  1 .
13   C     C     . ILE ILE ILE A A 2   2   . 0.1661 0.1854 0.2068 0.0002  0.0251
0.0025  1 .
14   O     O     . ILE ILE ILE A A 2   2   . 0.1494 0.1547 0.2394 0.0064  0.0333
0.0027  1 .
15   N     N     . GLN GLN GLN A A 3   3   . 0.1638 0.1800 0.2249 0.0095  0.0035
0.0004  1 .
16   CA    CA    . GLN GLN GLN A A 3   3   . 0.2064 0.2034 0.2437 -0.0007 0.0041  -
0.0014 1 .
17   CB    CB    . GLN GLN GLN A A 3   3   . 0.2271 0.2140 0.2523 0.0062  0.0010
0.0130  1 .
18   CG    CG    . GLN GLN GLN A A 3   3   . 0.2605 0.2901 0.2992 0.0047  0.0228  -
0.0189 1 .
19   CD    CD    . GLN GLN GLN A A 3   3   . 0.3855 0.4704 0.4721 0.0193  0.0080
0.0341  1 .
20   OE1   OE1   . GLN GLN GLN A A 3   3   . 0.4418 0.5306 0.5072 0.0289  0.0348
0.0505  1 .
21   NE2   NE2   . GLN GLN GLN A A 3   3   . 0.4129 0.5635 0.5112 -0.0217 0.0290
0.0245  1 .
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22   C     C     . GLN GLN GLN A A 3   3   . 0.1816 0.1845 0.2350 -0.0161 -0.0002 -
0.0153 1 .
23   O     O     . GLN GLN GLN A A 3   3   . 0.1708 0.1940 0.2851 -0.0315 -0.0052 -
0.0226 1 .
24   N     N     . LYS LYS LYS A A 4   4   . 0.1673 0.1710 0.2008 -0.0283 -0.0012 -
0.0118 1 .
25   CA    CA    . LYS LYS LYS A A 4   4   . 0.1697 0.1685 0.1890 -0.0240 -0.0151 -
0.0071 1 .
26   CB    CB    . LYS LYS LYS A A 4   4   . 0.2013 0.1958 0.1531 -0.0193 -0.0330 -
0.0195 1 .
27   CG    CG    . LYS LYS LYS A A 4   4   . 0.2622 0.3030 0.2563 -0.0012 -0.0419
0.0062  1 .
28   CD    CD    . LYS LYS LYS A A 4   4   . 0.3559 0.3597 0.2904 0.0219  -0.0767
0.0029  1 .
29   CE    CE    . LYS LYS LYS A A 4   4   . 0.3549 0.4005 0.4940 0.0326  -0.0256 -
0.0328 1 .
30   C     C     . LYS LYS LYS A A 4   4   . 0.1481 0.1510 0.1512 -0.0203 0.0065  -
0.0114 1 .
31   O     O     . LYS LYS LYS A A 4   4   . 0.1283 0.1623 0.1735 -0.0253 0.0013  -
0.0047 1 .
32   N     N     . ILE ILE ILE A A 5   5   . 0.1283 0.1223 0.1500 -0.0249 -0.0003 -
0.0094 1 .
33   CA    CA    . ILE ILE ILE A A 5   5   . 0.1291 0.1458 0.1469 -0.0209 -0.0004 -
0.0079 1 .
34   CB    CB    . ILE ILE ILE A A 5   5   . 0.1140 0.1507 0.1432 -0.0142 0.0032  -
0.0062 1 .
35   CG1   CG1   . ILE ILE ILE A A 5   5   . 0.1136 0.1266 0.1545 -0.0090 -0.0100
0.0052  1 .
36   CD1   CD1   . ILE ILE ILE A A 5   5   . 0.1224 0.1485 0.1317 0.0192  -0.0029 -
0.0145 1 .
37   CG2   CG2   . ILE ILE ILE A A 5   5   . 0.1138 0.1446 0.1521 -0.0354 -0.0256
0.0318  1 .
38   C     C     . ILE ILE ILE A A 5   5   . 0.1367 0.1315 0.1558 -0.0207 0.0049  -
0.0041 1 .
39   O     O     . ILE ILE ILE A A 5   5   . 0.1818 0.1418 0.1797 -0.0331 0.0090  -
0.0286 1 .
40   N     N     . TRP TRP TRP A A 6   6   . 0.1247 0.1344 0.1282 -0.0222 -0.0140 -
0.0034 1 .
41   CA    CA    . TRP TRP TRP A A 6   6   . 0.1271 0.1234 0.1440 -0.0151 -0.0088
0.0032  1 .
42   CB    CB    . TRP TRP TRP A A 6   6   . 0.1306 0.1349 0.1458 -0.0141 -0.0234 -
0.0097 1 .
43   CG    CG    . TRP TRP TRP A A 6   6   . 0.1651 0.1663 0.1822 -0.0093 -0.0097 -
0.0106 1 .
44   CD1   CD1   . TRP TRP TRP A A 6   6   . 0.2110 0.2262 0.1883 0.0136  -0.0161
0.0213  1 .
45   NE1   NE1   . TRP TRP TRP A A 6   6   . 0.2352 0.2022 0.1826 0.0186  -0.0148 -
0.0039 1 .
46   CE2   CE2   . TRP TRP TRP A A 6   6   . 0.2420 0.2480 0.2157 -0.0067 -0.0143 -
0.0122 1 .
47   CD2   CD2   . TRP TRP TRP A A 6   6   . 0.1912 0.2183 0.1911 -0.0036 -0.0138 -
0.0297 1 .
48   CE3   CE3   . TRP TRP TRP A A 6   6   . 0.1631 0.2422 0.1752 0.0015  -0.0717 -
0.0198 1 .
49   CZ3   CZ3   . TRP TRP TRP A A 6   6   . 0.1943 0.2398 0.1498 -0.0021 -0.0706 -
0.0477 1 .
50   CH2   CH2   . TRP TRP TRP A A 6   6   . 0.2576 0.2264 0.1950 -0.0329 -0.0437 -
0.0244 1 .
51   CZ2   CZ2   . TRP TRP TRP A A 6   6   . 0.1623 0.1875 0.2188 -0.0107 -0.0687 -
0.0439 1 .
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52   C     C     . TRP TRP TRP A A 6   6   . 0.1370 0.1230 0.1271 -0.0101 -0.0067
0.0091  1 .
53   O     O     . TRP TRP TRP A A 6   6   . 0.1734 0.1315 0.1236 -0.0165 -0.0140
0.0097  1 .
54   N     N     . ALA ALA ALA A A 7   7   . 0.1140 0.1122 0.1346 -0.0024 -0.0069
0.0144  1 .
55   CA    CA    . ALA ALA ALA A A 7   7   . 0.1037 0.1052 0.1269 -0.0044 -0.0085
0.0170  1 .
56   CB    CB    . ALA ALA ALA A A 7   7   . 0.1423 0.1151 0.1211 -0.0139 -0.0254
0.0232  1 .
57   C     C     . ALA ALA ALA A A 7   7   . 0.1143 0.1007 0.1189 -0.0087 -0.0072
0.0021  1 .
58   O     O     . ALA ALA ALA A A 7   7   . 0.1338 0.1007 0.1138 -0.0009 -0.0098
0.0080  1 .
59   N     N     . ARG ARG ARG A A 8   8   . 0.1279 0.0908 0.1188 -0.0098 0.0034  -
0.0094 1 .
60   CA    CA    . ARG ARG ARG A A 8   8   . 0.1187 0.1053 0.1062 0.0065  0.0063  -
0.0151 1 .
61   CB    CB    . ARG ARG ARG A A 8   8   . 0.1055 0.0787 0.0826 0.0119  -0.0169 -
0.0127 1 .
62   CG    CG    . ARG ARG ARG A A 8   8   . 0.1361 0.0779 0.0666 0.0255  0.0000  -
0.0264 1 .
63   CD    CD    . ARG ARG ARG A A 8   8   . 0.1383 0.1009 0.0878 0.0222  -0.0227
0.0192  1 .
64   NE    NE    . ARG ARG ARG A A 8   8   . 0.1393 0.0917 0.1417 -0.0086 0.0304  -
0.0110 1 .
65   CZ    CZ    . ARG ARG ARG A A 8   8   . 0.1099 0.1507 0.1280 -0.0030 0.0007  -
0.0389 1 .
66   NH1   NH1   . ARG ARG ARG A A 8   8   . 0.1178 0.1215 0.1872 0.0096  -0.0054 -
0.0419 1 .
67   NH2   NH2   . ARG ARG ARG A A 8   8   . 0.1375 0.1483 0.2248 0.0241  0.0088  -
0.0135 1 .
68   C     C     . ARG ARG ARG A A 8   8   . 0.1154 0.1103 0.1034 -0.0012 0.0060  -
0.0111 1 .
69   O     O     . ARG ARG ARG A A 8   8   . 0.1177 0.1148 0.1059 -0.0053 -0.0044
0.0079  1 .
70   N     N     . GLU GLU GLU A A 9   9   . 0.1335 0.1100 0.1151 -0.0007 -0.0073
0.0133  1 .
71   CA    CA    . GLU GLU GLU A A 9   9   . 0.1435 0.1107 0.1146 0.0052  -0.0050 -
0.0060 1 .
72   CB    CB    . GLU GLU GLU A A 9   9   . 0.1720 0.1785 0.1723 -0.0179 0.0141  -
0.0058 1 .
73   CG    CG    . GLU GLU GLU A A 9   9   . 0.1596 0.2621 0.1575 0.0162  0.0079  -
0.0202 1 .
74   CD    CD    . GLU GLU GLU A A 9   9   . 0.1853 0.2549 0.1604 0.0852  -0.0148 -
0.0444 1 .
75   OE1   OE1   . GLU GLU GLU A A 9   9   . 0.1648 0.1223 0.1158 0.0211  0.0133
0.0047  1 .
76   OE2   OE2   . GLU GLU GLU A A 9   9   . 0.2293 0.2493 0.1443 0.0718  0.0411
0.0113  1 .
77   C     C     . GLU GLU GLU A A 9   9   . 0.1480 0.1191 0.1193 0.0052  -0.0186 -
0.0052 1 .
78   O     O     . GLU GLU GLU A A 9   9   . 0.2366 0.1192 0.1628 0.0052  -0.0549 -
0.0201 1 .
79   N     N     . ILE ILE ILE A A 10  10  . 0.1284 0.0835 0.1133 0.0146  -0.0180 -
0.0069 1 .
80   CA    CA    . ILE ILE ILE A A 10  10  . 0.1061 0.0799 0.1047 0.0016  0.0052
0.0119  1 .
81   CB    CB    . ILE ILE ILE A A 10  10  . 0.0937 0.0648 0.0787 0.0103  -0.0145
0.0005  1 .
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82   CG1   CG1   . ILE ILE ILE A A 10  10  . 0.0897 0.0968 0.0494 0.0075  0.0182  -
0.0196 1 .
83   CD1   CD1   . ILE ILE ILE A A 10  10  . 0.1677 0.0769 0.1201 0.0317  0.0153  -
0.0192 1 .
84   CG2   CG2   . ILE ILE ILE A A 10  10  . 0.0689 0.0865 0.1206 -0.0005 -0.0302
0.0269  1 .
85   C     C     . ILE ILE ILE A A 10  10  . 0.1087 0.0843 0.0904 0.0121  -0.0089 -
0.0099 1 .
86   O     O     . ILE ILE ILE A A 10  10  . 0.1301 0.1099 0.1019 0.0081  0.0030
0.0175  1 .
87   N     N     . LEU LEU LEU A A 11  11  . 0.0903 0.0757 0.0609 -0.0013 0.0108
0.0161  1 .
88   CA    CA    . LEU LEU LEU A A 11  11  . 0.1063 0.0892 0.0528 -0.0072 0.0173  -
0.0073 1 .
89   CB    CB    . LEU LEU LEU A A 11  11  . 0.1305 0.0841 0.0831 -0.0009 0.0216
0.0103  1 .
90   CG    CG    . LEU LEU LEU A A 11  11  . 0.1200 0.1014 0.0521 0.0079  0.0415
0.0289  1 .
91   CD1   CD1   . LEU LEU LEU A A 11  11  . 0.1787 0.1104 0.0425 -0.0041 0.0215
0.0340  1 .
92   CD2   CD2   . LEU LEU LEU A A 11  11  . 0.1524 0.1475 0.0560 0.0559  0.0078
0.0196  1 .
93   C     C     . LEU LEU LEU A A 11  11  . 0.1005 0.0578 0.0752 0.0059  0.0130
0.0047  1 .
94   O     O     . LEU LEU LEU A A 11  11  . 0.0912 0.0885 0.1044 0.0099  0.0010
0.0205  1 .
95   N     N     . ASP ASP ASP A A 12  12  . 0.0913 0.0796 0.0622 -0.0080 0.0133  -
0.0131 1 .
96   CA    CA    . ASP ASP ASP A A 12  12  . 0.1070 0.0668 0.0682 0.0104  -0.0090 -
0.0003 1 .
97   CB    CB    . ASP ASP ASP A A 12  12  . 0.0533 0.0834 0.0815 0.0281  0.0056
0.0006  1 .
98   CG    CG    . ASP ASP ASP A A 12  12  . 0.0993 0.1033 0.0973 0.0182  0.0165  -
0.0037 1 .
99   OD1   OD1   . ASP ASP ASP A A 12  12  . 0.1052 0.0852 0.0973 0.0129  -0.0062
0.0062  1 .
100  OD2   OD2   . ASP ASP ASP A A 12  12  . 0.1667 0.1311 0.1261 0.0258  0.0069
0.0087  1 .
101  C     C     . ASP ASP ASP A A 12  12  . 0.0766 0.0848 0.0782 -0.0008 0.0015  -
0.0064 1 .
102  O     O     . ASP ASP ASP A A 12  12  . 0.1088 0.0916 0.0823 0.0160  0.0000
0.0056  1 .
103  N     N     . SER SER SER A A 13  13  . 0.0905 0.0700 0.0648 0.0178  0.0100  -
0.0091 1 .
104  CA    CA    . SER SER SER A A 13  13  . 0.0575 0.0651 0.0477 -0.0069 0.0175  -
0.0097 1 .
105  CB    CB    . SER SER SER A A 13  13  . 0.0689 0.0598 0.0737 0.0202  0.0004  -
0.0242 1 .
106  OG    OG    . SER SER SER A A 13  13  . 0.1081 0.1070 0.1203 0.0200  0.0035
0.0253  1 .
107  C     C     . SER SER SER A A 13  13  . 0.0988 0.0865 0.0883 -0.0003 0.0089  -
0.0026 1 .
108  O     O     . SER SER SER A A 13  13  . 0.1193 0.1097 0.1040 0.0013  0.0188  -
0.0115 1 .
109  N     N     . ARG ARG ARG A A 14  14  . 0.0792 0.1072 0.0789 0.0038  0.0095  -
0.0137 1 .
110  CA    CA    . ARG ARG ARG A A 14  14  . 0.1099 0.1044 0.1047 0.0085  0.0084
0.0009  1 .
111  CB    CB    . ARG ARG ARG A A 14  14  . 0.0943 0.1168 0.0974 -0.0037 -0.0080
0.0034  1 .
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112  CG    CG    . ARG ARG ARG A A 14  14  . 0.0835 0.1233 0.1382 0.0107  0.0053  -
0.0322 1 .
113  CD    CD    . ARG ARG ARG A A 14  14  . 0.1277 0.1326 0.1282 0.0537  0.0124
0.0298  1 .
114  NE    NE    . ARG ARG ARG A A 14  14  . 0.1382 0.1835 0.1440 0.0195  -0.0217 -
0.0129 1 .
115  CZ    CZ    . ARG ARG ARG A A 14  14  . 0.0927 0.1378 0.1141 0.0198  -0.0118
0.0237  1 .
116  NH1   NH1   . ARG ARG ARG A A 14  14  . 0.1240 0.1075 0.1165 0.0307  0.0445
0.0150  1 .
117  NH2   NH2   . ARG ARG ARG A A 14  14  . 0.1051 0.1036 0.1421 -0.0141 -0.0015 -
0.0087 1 .
118  C     C     . ARG ARG ARG A A 14  14  . 0.1117 0.0735 0.1051 -0.0016 0.0101
0.0041  1 .
119  O     O     . ARG ARG ARG A A 14  14  . 0.1546 0.1310 0.1449 0.0187  0.0315  -
0.0259 1 .
120  N     N     . GLY GLY GLY A A 15  15  . 0.0986 0.0741 0.0840 0.0085  -0.0079
0.0004  1 .
121  CA    CA    . GLY GLY GLY A A 15  15  . 0.0980 0.0762 0.1074 0.0181  0.0158  -
0.0085 1 .
122  C     C     . GLY GLY GLY A A 15  15  . 0.1295 0.1092 0.1116 0.0335  0.0110
0.0025  1 .
123  O     O     . GLY GLY GLY A A 15  15  . 0.1380 0.1192 0.1066 0.0347  0.0145  -
0.0020 1 .
124  N     N     . ASN ASN ASN A A 16  16  . 0.1025 0.0788 0.0870 0.0289  0.0188
0.0238  1 .
125  CA    CA    . ASN ASN ASN A A 16  16  . 0.1139 0.1069 0.1235 0.0017  0.0151
0.0059  1 .
126  CB    CB    . ASN ASN ASN A A 16  16  . 0.0934 0.1184 0.0933 0.0031  0.0086
0.0272  1 .
127  CG    CG    . ASN ASN ASN A A 16  16  . 0.1322 0.1349 0.1469 0.0221  -0.0048
0.0174  1 .
128  OD1   OD1   . ASN ASN ASN A A 16  16  . 0.1769 0.1610 0.1831 0.0499  0.0505
0.0298  1 .
129  ND2   ND2   . ASN ASN ASN A A 16  16  . 0.1552 0.1191 0.1615 0.0580  -0.0318 -
0.0150 1 .
130  C     C     . ASN ASN ASN A A 16  16  . 0.0927 0.0884 0.0882 -0.0012 0.0206
0.0117  1 .
131  O     O     . ASN ASN ASN A A 16  16  . 0.1195 0.0887 0.0826 0.0104  0.0287
0.0004  1 .
132  N     N     . PRO PRO PRO A A 17  17  . 0.1103 0.1047 0.1003 0.0107  0.0272  -
0.0093 1 .
133  CA    CA    . PRO PRO PRO A A 17  17  . 0.1119 0.0941 0.0789 -0.0005 0.0257  -
0.0170 1 .
134  CB    CB    . PRO PRO PRO A A 17  17  . 0.0952 0.0969 0.1006 0.0143  0.0384  -
0.0168 1 .
135  CG    CG    . PRO PRO PRO A A 17  17  . 0.1410 0.1205 0.0785 0.0060  0.0263  -
0.0036 1 .
136  CD    CD    . PRO PRO PRO A A 17  17  . 0.1212 0.1419 0.1258 0.0217  0.0346  -
0.0096 1 .
137  C     C     . PRO PRO PRO A A 17  17  . 0.1201 0.0920 0.0906 0.0098  0.0139
0.0055  1 .
138  O     O     . PRO PRO PRO A A 17  17  . 0.1213 0.1152 0.0881 0.0106  0.0159  -
0.0200 1 .
139  N     N     . THR THR THR A A 18  18  . 0.1042 0.0839 0.0882 0.0126  0.0113
0.0220  1 .
140  CA    CA    . THR THR THR A A 18  18  . 0.1144 0.0880 0.0781 0.0035  0.0195  -
0.0037 1 .
141  CB    CB    . THR THR THR A A 18  18  . 0.1243 0.0876 0.0630 0.0207  0.0188  -
0.0016 1 .
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142  OG1   OG1   . THR THR THR A A 18  18  . 0.1181 0.0461 0.0721 0.0261  -0.0023
0.0032  1 .
143  CG2   CG2   . THR THR THR A A 18  18  . 0.1075 0.0803 0.0716 0.0039  0.0270  -
0.0015 1 .
144  C     C     . THR THR THR A A 18  18  . 0.1158 0.0978 0.0922 0.0071  0.0065  -
0.0034 1 .
145  O     O     . THR THR THR A A 18  18  . 0.1062 0.0955 0.1173 -0.0078 -0.0095
0.0107  1 .
146  N     N     . VAL VAL VAL A A 19  19  . 0.0967 0.0701 0.0797 0.0021  0.0128
0.0038  1 .
147  CA    CA    . VAL VAL VAL A A 19  19  . 0.0836 0.0594 0.0852 -0.0035 0.0099
0.0002  1 .
148  CB    CB    . VAL VAL VAL A A 19  19  . 0.0543 0.0738 0.0672 0.0059  0.0182
0.0104  1 .
149  CG1   CG1   . VAL VAL VAL A A 19  19  . 0.0760 0.0787 0.0922 -0.0223 0.0145  -
0.0039 1 .
150  CG2   CG2   . VAL VAL VAL A A 19  19  . 0.1420 0.0643 0.0768 0.0169  0.0201  -
0.0014 1 .
151  C     C     . VAL VAL VAL A A 19  19  . 0.0926 0.0712 0.0874 -0.0069 -0.0015
0.0099  1 .
152  O     O     . VAL VAL VAL A A 19  19  . 0.1234 0.0822 0.1106 0.0066  -0.0045 -
0.0082 1 .
153  N     N     . GLU GLU GLU A A 20  20  . 0.0743 0.0726 0.0738 0.0211  -0.0055
0.0107  1 .
154  CA    CA    . GLU GLU GLU A A 20  20  . 0.1076 0.1090 0.1208 0.0099  0.0060
0.0079  1 .
155  CB    CB    . GLU GLU GLU A A 20  20  . 0.0781 0.1264 0.1008 0.0315  -0.0172 -
0.0066 1 .
156  CG    CG    . GLU GLU GLU A A 20  20  . 0.1056 0.1155 0.1443 0.0343  -0.0119
0.0253  1 .
157  CD    CD    . GLU GLU GLU A A 20  20  . 0.1073 0.1198 0.1502 0.0106  -0.0070
0.0247  1 .
158  OE1   OE1   . GLU GLU GLU A A 20  20  . 0.1999 0.1112 0.1210 0.0123  0.0029
0.0167  1 .
159  OE2   OE2   . GLU GLU GLU A A 20  20  . 0.1349 0.1237 0.1844 0.0042  -0.0120 -
0.0022 1 .
160  C     C     . GLU GLU GLU A A 20  20  . 0.0860 0.1237 0.1082 0.0007  -0.0059 -
0.0069 1 .
161  O     O     . GLU GLU GLU A A 20  20  . 0.1078 0.0843 0.1176 0.0003  0.0197
0.0009  1 .
162  N     N     . VAL VAL VAL A A 21  21  . 0.0705 0.1108 0.0835 -0.0083 -0.0005
0.0065  1 .
163  CA    CA    . VAL VAL VAL A A 21  21  . 0.0776 0.0927 0.0980 0.0034  -0.0116
0.0000  1 .
164  CB    CB    . VAL VAL VAL A A 21  21  . 0.0591 0.0851 0.0866 -0.0030 -0.0111
0.0040  1 .
165  CG1   CG1   . VAL VAL VAL A A 21  21  . 0.1306 0.0702 0.1285 -0.0201 0.0325
0.0094  1 .
166  CG2   CG2   . VAL VAL VAL A A 21  21  . 0.0828 0.0836 0.0928 0.0405  -0.0144
0.0040  1 .
167  C     C     . VAL VAL VAL A A 21  21  . 0.0728 0.1069 0.0929 -0.0038 0.0054  -
0.0054 1 .
168  O     O     . VAL VAL VAL A A 21  21  . 0.0642 0.0970 0.1091 0.0035  0.0005
0.0003  1 .
169  N     N     . ASP ASP ASP A A 22  22  . 0.0739 0.0799 0.0918 -0.0138 -0.0044 -
0.0058 1 .
170  CA    CA    . ASP ASP ASP A A 22  22  . 0.0941 0.0947 0.1099 -0.0257 -0.0049
0.0147  1 .
171  CB    CB    . ASP ASP ASP A A 22  22  . 0.1221 0.1246 0.1163 -0.0269 -0.0071
0.0184  1 .
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172  CG    CG    . ASP ASP ASP A A 22  22  . 0.1433 0.1353 0.1514 -0.0192 -0.0135
0.0116  1 .
173  OD1   OD1   . ASP ASP ASP A A 22  22  . 0.1982 0.1811 0.1729 0.0214  0.0048
0.0248  1 .
174  OD2   OD2   . ASP ASP ASP A A 22  22  . 0.1546 0.1220 0.1342 -0.0197 -0.0115
0.0233  1 .
175  C     C     . ASP ASP ASP A A 22  22  . 0.1158 0.1222 0.1283 -0.0162 -0.0040
0.0027  1 .
176  O     O     . ASP ASP ASP A A 22  22  . 0.1571 0.1353 0.1473 -0.0162 0.0119  -
0.0148 1 .
177  N     N     . LEU LEU LEU A A 23  23  . 0.1042 0.1076 0.1192 -0.0094 0.0121
0.0119  1 .
178  CA    CA    . LEU LEU LEU A A 23  23  . 0.0811 0.1075 0.1142 0.0030  0.0050  -
0.0016 1 .
179  CB    CB    . LEU LEU LEU A A 23  23  . 0.1201 0.0965 0.0929 -0.0085 0.0193
0.0127  1 .
180  CG    CG    . LEU LEU LEU A A 23  23  . 0.1088 0.1137 0.1233 -0.0063 0.0086
0.0572  1 .
181  CD1   CD1   . LEU LEU LEU A A 23  23  . 0.1074 0.1704 0.1227 -0.0135 -0.0126
0.0363  1 .
182  CD2   CD2   . LEU LEU LEU A A 23  23  . 0.1362 0.1234 0.1356 -0.0055 0.0410
0.0254  1 .
183  C     C     . LEU LEU LEU A A 23  23  . 0.0978 0.1214 0.1282 -0.0021 -0.0029 -
0.0120 1 .
184  O     O     . LEU LEU LEU A A 23  23  . 0.1025 0.1338 0.1577 -0.0096 -0.0145 -
0.0008 1 .
185  N     N     . TYR TYR TYR A A 24  24  . 0.0736 0.1151 0.1246 -0.0207 -0.0118 -
0.0033 1 .
186  CA    CA    . TYR TYR TYR A A 24  24  . 0.1102 0.1475 0.1632 0.0015  -0.0046 -
0.0018 1 .
187  CB    CB    . TYR TYR TYR A A 24  24  . 0.1379 0.1517 0.1418 -0.0128 -0.0028
0.0110  1 .
188  CG    CG    . TYR TYR TYR A A 24  24  . 0.1769 0.1592 0.1708 -0.0098 -0.0056
0.0359  1 .
189  CD1   CD1   . TYR TYR TYR A A 24  24  . 0.1686 0.1557 0.1525 -0.0257 -0.0148
0.0330  1 .
190  CE1   CE1   . TYR TYR TYR A A 24  24  . 0.2351 0.1967 0.1982 -0.0637 -0.0321
0.0407  1 .
191  CZ    CZ    . TYR TYR TYR A A 24  24  . 0.2657 0.2665 0.2877 -0.0195 -0.0162
0.0691  1 .
192  OH    OH    . TYR TYR TYR A A 24  24  . 0.2832 0.3582 0.2727 -0.0221 -0.0356
0.0743  1 .
193  CE2   CE2   . TYR TYR TYR A A 24  24  . 0.2525 0.2690 0.2947 -0.0213 0.0016
0.0914  1 .
194  CD2   CD2   . TYR TYR TYR A A 24  24  . 0.2526 0.2873 0.2543 0.0247  -0.0172
0.0556  1 .
195  C     C     . TYR TYR TYR A A 24  24  . 0.1140 0.1448 0.1754 -0.0089 -0.0059
0.0111  1 .
196  O     O     . TYR TYR TYR A A 24  24  . 0.1130 0.1350 0.2032 -0.0108 -0.0112
0.0020  1 .
197  N     N     . THR THR THR A A 25  25  . 0.1363 0.1624 0.1943 -0.0156 0.0108
0.0033  1 .
198  CA    CA    . THR THR THR A A 25  25  . 0.1432 0.1762 0.1965 -0.0134 -0.0022
0.0082  1 .
199  CB    CB    . THR THR THR A A 25  25  . 0.1328 0.1776 0.1931 -0.0012 -0.0175
0.0174  1 .
200  OG1   OG1   . THR THR THR A A 25  25  . 0.1326 0.1759 0.1950 -0.0159 -0.0230 -
0.0126 1 .
201  CG2   CG2   . THR THR THR A A 25  25  . 0.1086 0.1961 0.1778 -0.0185 -0.0363 -
0.0212 1 .
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202  C     C     . THR THR THR A A 25  25  . 0.1715 0.1947 0.2141 -0.0189 -0.0071
0.0153  1 .
203  O     O     . THR THR THR A A 25  25  . 0.1560 0.2487 0.2084 -0.0255 -0.0334
0.0194  1 .
204  N     N     . ALA ALA ALA A A 26  26  . 0.1700 0.2131 0.2580 -0.0284 0.0156
0.0192  1 .
205  CA    CA    . ALA ALA ALA A A 26  26  . 0.2180 0.2318 0.2860 -0.0132 0.0033
0.0237  1 .
206  CB    CB    . ALA ALA ALA A A 26  26  . 0.2026 0.2227 0.3087 -0.0418 0.0222
0.0309  1 .
207  C     C     . ALA ALA ALA A A 26  26  . 0.2263 0.2464 0.2899 -0.0040 0.0008
0.0296  1 .
208  O     O     . ALA ALA ALA A A 26  26  . 0.1905 0.2621 0.3360 -0.0130 -0.0156
0.0364  1 .
209  N     N     . LYS LYS LYS A A 27  27  . 0.1937 0.2510 0.2805 -0.0046 0.0086
0.0179  1 .
210  CA    CA    . LYS LYS LYS A A 27  27  . 0.2250 0.2559 0.2805 0.0005  0.0247
0.0162  1 .
211  CB    CB    . LYS LYS LYS A A 27  27  . 0.2521 0.2735 0.2916 0.0153  0.0437
0.0136  1 .
212  CG    CG    . LYS LYS LYS A A 27  27  . 0.2930 0.2783 0.3457 0.0350  0.0594
0.0349  1 .
213  CD    CD    . LYS LYS LYS A A 27  27  . 0.3321 0.3438 0.4426 0.0410  0.0850
0.0337  1 .
214  CE    CE    . LYS LYS LYS A A 27  27  . 0.3441 0.4228 0.4532 0.0726  0.0851  -
0.0192 1 .
215  NZ    NZ    . LYS LYS LYS A A 27  27  . 0.3356 0.5011 0.4887 0.0315  0.0850  -
0.0140 1 .
216  C     C     . LYS LYS LYS A A 27  27  . 0.2381 0.2531 0.2932 0.0004  0.0188
0.0125  1 .
217  O     O     . LYS LYS LYS A A 27  27  . 0.2671 0.2574 0.3310 0.0052  0.0271
0.0159  1 .
218  N     N     . GLY GLY GLY A A 28  28  . 0.1952 0.2448 0.2586 -0.0063 0.0266
0.0243  1 .
219  CA    CA    . GLY GLY GLY A A 28  28  . 0.1716 0.2443 0.2577 0.0136  0.0144
0.0370  1 .
220  C     C     . GLY GLY GLY A A 28  28  . 0.1625 0.2112 0.2287 -0.0077 0.0082
0.0193  1 .
221  O     O     . GLY GLY GLY A A 28  28  . 0.1329 0.1878 0.2122 -0.0113 0.0058
0.0246  1 .
222  N     N     . LEU LEU LEU A A 29  29  . 0.1616 0.2011 0.1871 0.0029  0.0118
0.0308  1 .
223  CA    CA    . LEU LEU LEU A A 29  29  . 0.1683 0.2014 0.1784 -0.0015 0.0107
0.0193  1 .
224  CB    CB    . LEU LEU LEU A A 29  29  . 0.2120 0.2016 0.1835 0.0143  0.0033
0.0340  1 .
225  CG    CG    . LEU LEU LEU A A 29  29  . 0.2561 0.3184 0.1757 -0.0507 0.0379
0.0369  1 .
226  CD1   CD1   . LEU LEU LEU A A 29  29  . 0.3923 0.4027 0.1860 0.0034  -0.0085
0.0415  1 .
227  CD2   CD2   . LEU LEU LEU A A 29  29  . 0.3403 0.3424 0.2548 -0.0504 -0.0101 -
0.0054 1 .
228  C     C     . LEU LEU LEU A A 29  29  . 0.1407 0.1515 0.1599 -0.0020 0.0098
0.0110  1 .
229  O     O     . LEU LEU LEU A A 29  29  . 0.1436 0.1406 0.1927 0.0032  -0.0065
0.0106  1 .
230  N     N     . PHE PHE PHE A A 30  30  . 0.1033 0.1184 0.1417 0.0036  0.0153
0.0068  1 .
231  CA    CA    . PHE PHE PHE A A 30  30  . 0.0959 0.1202 0.1532 -0.0052 0.0249  -
0.0010 1 .
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232  CB    CB    . PHE PHE PHE A A 30  30  . 0.0918 0.1301 0.1268 0.0104  0.0298  -
0.0143 1 .
233  CG    CG    . PHE PHE PHE A A 30  30  . 0.1055 0.1145 0.1323 0.0097  -0.0028 -
0.0146 1 .
234  CD1   CD1   . PHE PHE PHE A A 30  30  . 0.1076 0.1332 0.1644 0.0256  0.0317  -
0.0038 1 .
235  CE1   CE1   . PHE PHE PHE A A 30  30  . 0.1504 0.1945 0.1781 0.0260  0.0486  -
0.0094 1 .
236  CZ    CZ    . PHE PHE PHE A A 30  30  . 0.1752 0.1709 0.1623 0.0067  0.0037  -
0.0048 1 .
237  CE2   CE2   . PHE PHE PHE A A 30  30  . 0.1381 0.1678 0.1624 0.0132  0.0394  -
0.0067 1 .
238  CD2   CD2   . PHE PHE PHE A A 30  30  . 0.1119 0.1185 0.1535 -0.0043 0.0434  -
0.0115 1 .
239  C     C     . PHE PHE PHE A A 30  30  . 0.1108 0.1222 0.1636 -0.0002 0.0219  -
0.0052 1 .
240  O     O     . PHE PHE PHE A A 30  30  . 0.1114 0.1607 0.2184 -0.0127 0.0705  -
0.0251 1 .
241  N     N     . ARG ARG ARG A A 31  31  . 0.1050 0.1063 0.1362 -0.0100 0.0176
0.0175  1 .
242  CA    CA    . ARG ARG ARG A A 31  31  . 0.1029 0.0740 0.0980 0.0016  0.0047
0.0149  1 .
243  CB    CB    . ARG ARG ARG A A 31  31  . 0.1202 0.0665 0.0994 0.0099  0.0011
0.0091  1 .
244  CG    CG    . ARG ARG ARG A A 31  31  . 0.1454 0.0876 0.1122 0.0076  0.0009
0.0344  1 .
245  CD    CD    . ARG ARG ARG A A 31  31  . 0.2192 0.0951 0.1722 -0.0112 -0.0342
0.0356  1 .
246  NE    NE    . ARG ARG ARG A A 31  31  . 0.1442 0.1549 0.1500 0.0188  -0.0151
0.0494  1 .
247  CZ    CZ    . ARG ARG ARG A A 31  31  . 0.2061 0.1747 0.2305 0.0069  -0.0200
0.0218  1 .
248  NH1   NH1   . ARG ARG ARG A A 31  31  . 0.1994 0.2273 0.2329 0.0198  -0.0316
0.0127  1 .
249  NH2   NH2   . ARG ARG ARG A A 31  31  . 0.2305 0.2771 0.1700 0.0307  -0.0326
0.0068  1 .
250  C     C     . ARG ARG ARG A A 31  31  . 0.1073 0.0883 0.0983 0.0030  0.0064
0.0141  1 .
251  O     O     . ARG ARG ARG A A 31  31  . 0.1200 0.0985 0.1204 0.0069  -0.0123 -
0.0026 1 .
252  N     N     . ALA ALA ALA A A 32  32  . 0.0882 0.0931 0.0952 -0.0056 -0.0144
0.0290  1 .
253  CA    CA    . ALA ALA ALA A A 32  32  . 0.0883 0.1242 0.0881 -0.0145 0.0057
0.0029  1 .
254  CB    CB    . ALA ALA ALA A A 32  32  . 0.1196 0.1157 0.0879 0.0169  0.0120
0.0222  1 .
255  C     C     . ALA ALA ALA A A 32  32  . 0.0927 0.1089 0.1025 0.0078  0.0042  -
0.0111 1 .
256  O     O     . ALA ALA ALA A A 32  32  . 0.1026 0.1190 0.1038 0.0012  0.0183  -
0.0162 1 .
257  N     N     . ALA ALA ALA A A 33  33  . 0.0703 0.0762 0.0971 -0.0011 0.0266
0.0191  1 .
258  CA    CA    . ALA ALA ALA A A 33  33  . 0.0943 0.0991 0.0997 0.0123  0.0210
0.0201  1 .
259  CB    CB    . ALA ALA ALA A A 33  33  . 0.1216 0.0792 0.1141 0.0034  0.0237
0.0386  1 .
260  C     C     . ALA ALA ALA A A 33  33  . 0.0903 0.0713 0.0799 0.0005  0.0039
0.0060  1 .
261  O     O     . ALA ALA ALA A A 33  33  . 0.1249 0.1098 0.1209 0.0074  0.0112  -
0.0291 1 .
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262  N     N     . VAL VAL VAL A A 34  34  . 0.0830 0.0931 0.0742 0.0011  0.0067
0.0002  1 .
263  CA    CA    . VAL VAL VAL A A 34  34  . 0.0925 0.0892 0.1036 -0.0034 0.0019  -
0.0043 1 .
264  CB    CB    . VAL VAL VAL A A 34  34  . 0.0836 0.0763 0.1156 -0.0132 -0.0026 -
0.0002 1 .
265  CG1   CG1   . VAL VAL VAL A A 34  34  . 0.0936 0.0600 0.0949 0.0326  -0.0317 -
0.0003 1 .
266  CG2   CG2   . VAL VAL VAL A A 34  34  . 0.0998 0.1263 0.1047 -0.0442 0.0065
0.0143  1 .
267  C     C     . VAL VAL VAL A A 34  34  . 0.0926 0.0851 0.0945 -0.0054 0.0067  -
0.0020 1 .
268  O     O     . VAL VAL VAL A A 34  34  . 0.1181 0.0932 0.0853 0.0100  0.0000
0.0042  1 .
269  N     N     . PRO PRO PRO A A 35  35  . 0.0905 0.0790 0.0782 -0.0008 0.0155  -
0.0057 1 .
270  CA    CA    . PRO PRO PRO A A 35  35  . 0.0818 0.0702 0.0865 0.0036  0.0042  -
0.0098 1 .
271  CB    CB    . PRO PRO PRO A A 35  35  . 0.0609 0.0426 0.0363 0.0067  0.0115  -
0.0011 1 .
272  CG    CG    . PRO PRO PRO A A 35  35  . 0.0303 0.0604 0.0766 -0.0083 0.0081
0.0149  1 .
273  CD    CD    . PRO PRO PRO A A 35  35  . 0.0974 0.0964 0.0526 -0.0177 -0.0039 -
0.0003 1 .
274  C     C     . PRO PRO PRO A A 35  35  . 0.0802 0.0933 0.0722 0.0065  -0.0033
0.0034  1 .
275  O     O     . PRO PRO PRO A A 35  35  . 0.0775 0.0845 0.1397 0.0016  0.0261  -
0.0068 1 .
276  N     N     . SER SER SER A A 36  36  . 0.0639 0.0706 0.0788 -0.0016 0.0023
0.0022  1 .
277  CA    CA    . SER SER SER A A 36  36  . 0.0651 0.0755 0.1001 0.0104  -0.0026
0.0014  1 .
278  CB    CB    . SER SER SER A A 36  36  . 0.0566 0.1030 0.0905 0.0177  0.0085  -
0.0042 1 .
279  OG    OG    . SER SER SER A A 36  36  . 0.1023 0.1266 0.1207 0.0256  0.0222  -
0.0148 1 .
280  C     C     . SER SER SER A A 36  36  . 0.0746 0.0821 0.1009 0.0083  0.0055
0.0066  1 .
281  O     O     . SER SER SER A A 36  36  . 0.0721 0.0748 0.0883 0.0250  0.0145  -
0.0002 1 .
282  N     N     . GLY GLY GLY A A 37  37  . 0.0681 0.0899 0.0938 -0.0022 -0.0157
0.0044  1 .
283  CA    CA    . GLY GLY GLY A A 37  37  . 0.0488 0.0784 0.1059 -0.0005 0.0033
0.0004  1 .
284  C     C     . GLY GLY GLY A A 37  37  . 0.0960 0.0898 0.1035 0.0007  0.0009  -
0.0041 1 .
285  O     O     . GLY GLY GLY A A 37  37  . 0.1296 0.1469 0.1238 -0.0072 0.0035  -
0.0014 1 .
286  N     N     . ALA ALA ALA A A 38  38  . 0.0566 0.0987 0.1261 -0.0212 0.0162  -
0.0050 1 .
287  CA    CA    . ALA ALA ALA A A 38  38  . 0.0885 0.1031 0.1042 -0.0054 0.0115
0.0122  1 .
288  CB    CB    . ALA ALA ALA A A 38  38  . 0.1101 0.1161 0.1518 -0.0346 0.0037
0.0255  1 .
289  C     C     . ALA ALA ALA A A 38  38  . 0.1002 0.1206 0.1427 -0.0011 0.0150  -
0.0103 1 .
290  O     O     . ALA ALA ALA A A 38  38  . 0.1186 0.1215 0.1473 0.0446  0.0047  -
0.0246 1 .
291  N     N     . SER SER SER A A 39  39  . 0.0742 0.1122 0.0990 0.0008  0.0187  -
0.0026 1 .
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292  CA    CA    . SER SER SER A A 39  39  . 0.1014 0.1034 0.0996 -0.0019 -0.0192 -
0.0147 1 .
293  CB    CB    . SER SER SER A A 39  39  . 0.1157 0.0924 0.1210 0.0134  0.0079  -
0.0180 1 .
294  OG    OG    . SER SER SER A A 39  39  . 0.1081 0.1108 0.1009 0.0187  -0.0081 -
0.0082 1 .
295  C     C     . SER SER SER A A 39  39  . 0.0902 0.1077 0.0955 0.0085  -0.0134 -
0.0104 1 .
296  O     O     . SER SER SER A A 39  39  . 0.0850 0.1074 0.1008 0.0199  -0.0066 -
0.0201 1 .
297  N     N     . THR THR THR A A 40  40  . 0.1128 0.1130 0.1404 0.0077  -0.0107 -
0.0030 1 .
298  CA    CA    . THR THR THR A A 40  40  . 0.1126 0.1429 0.1446 0.0238  -0.0028
0.0069  1 .
299  CB    CB    . THR THR THR A A 40  40  . 0.1371 0.1556 0.1572 0.0144  -0.0065 -
0.0096 1 .
300  OG1   OG1   . THR THR THR A A 40  40  . 0.1671 0.1710 0.1187 -0.0033 0.0022  -
0.0163 1 .
301  CG2   CG2   . THR THR THR A A 40  40  . 0.1356 0.1306 0.1621 0.0394  -0.0116
0.0099  1 .
302  C     C     . THR THR THR A A 40  40  . 0.1278 0.1395 0.1510 0.0162  -0.0073
0.0103  1 .
303  O     O     . THR THR THR A A 40  40  . 0.1117 0.1686 0.1607 0.0112  0.0135
0.0162  1 .
304  N     N     . GLY GLY GLY A A 41  41  . 0.1156 0.1094 0.1273 0.0071  -0.0202
0.0104  1 .
305  CA    CA    . GLY GLY GLY A A 41  41  . 0.1149 0.1144 0.1419 0.0133  -0.0228
0.0013  1 .
306  C     C     . GLY GLY GLY A A 41  41  . 0.1130 0.1392 0.1346 0.0167  -0.0119
0.0079  1 .
307  O     O     . GLY GLY GLY A A 41  41  . 0.1359 0.1382 0.1406 0.0230  -0.0089
0.0050  1 .
308  N     N     . ILE ILE ILE A A 42  42  . 0.1163 0.1413 0.1361 0.0349  -0.0199
0.0057  1 .
309  CA    CA    . ILE ILE ILE A A 42  42  . 0.1151 0.1325 0.1494 0.0195  -0.0149 -
0.0005 1 .
310  CB    CB    . ILE ILE ILE A A 42  42  . 0.0933 0.1491 0.1262 0.0244  -0.0226
0.0150  1 .
311  CG1   CG1   . ILE ILE ILE A A 42  42  . 0.0995 0.1464 0.1423 0.0534  -0.0349 -
0.0032 1 .
312  CD1   CD1   . ILE ILE ILE A A 42  42  . 0.1265 0.2406 0.2394 0.0285  -0.0308
0.0120  1 .
313  CG2   CG2   . ILE ILE ILE A A 42  42  . 0.1557 0.2007 0.2004 0.0224  0.0112
0.0127  1 .
314  C     C     . ILE ILE ILE A A 42  42  . 0.1206 0.1387 0.1466 0.0166  -0.0150
0.0018  1 .
315  O     O     . ILE ILE ILE A A 42  42  . 0.1544 0.1249 0.1475 0.0127  -0.0222 -
0.0313 1 .
316  N     N     . TYR TYR TYR A A 43  43  . 0.1033 0.1209 0.1413 0.0182  -0.0151
0.0090  1 .
317  CA    CA    . TYR TYR TYR A A 43  43  . 0.1027 0.1135 0.1200 0.0195  -0.0089
0.0169  1 .
318  CB    CB    . TYR TYR TYR A A 43  43  . 0.0906 0.1152 0.0955 0.0198  -0.0289
0.0215  1 .
319  CG    CG    . TYR TYR TYR A A 43  43  . 0.1304 0.1539 0.1487 0.0148  -0.0280
0.0031  1 .
320  CD1   CD1   . TYR TYR TYR A A 43  43  . 0.1194 0.1865 0.0989 0.0148  -0.0165
0.0035  1 .
321  CE1   CE1   . TYR TYR TYR A A 43  43  . 0.1486 0.2035 0.1902 0.0627  -0.0083 -
0.0339 1 .
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322  CZ    CZ    . TYR TYR TYR A A 43  43  . 0.1787 0.1840 0.2274 0.0427  -0.0701 -
0.0090 1 .
323  OH    OH    . TYR TYR TYR A A 43  43  . 0.1890 0.2060 0.2948 0.0811  -0.0442 -
0.0025 1 .
324  CE2   CE2   . TYR TYR TYR A A 43  43  . 0.1811 0.1801 0.2163 0.0247  -0.0612
0.0160  1 .
325  CD2   CD2   . TYR TYR TYR A A 43  43  . 0.1383 0.1783 0.1845 0.0322  -0.0081
0.0036  1 .
326  C     C     . TYR TYR TYR A A 43  43  . 0.1085 0.1225 0.1108 0.0123  -0.0098
0.0147  1 .
327  O     O     . TYR TYR TYR A A 43  43  . 0.1422 0.1157 0.1739 0.0232  -0.0127
0.0209  1 .
328  N     N     . GLU GLU GLU A A 44  44  . 0.0940 0.0855 0.1280 0.0123  -0.0232
0.0191  1 .
329  CA    CA    . GLU GLU GLU A A 44  44  . 0.0954 0.0914 0.1227 0.0113  -0.0183
0.0108  1 .
330  CB    CB    . GLU GLU GLU A A 44  44  . 0.1187 0.0989 0.1231 0.0080  -0.0296
0.0155  1 .
331  CG    CG    . GLU GLU GLU A A 44  44  . 0.1218 0.0881 0.1074 0.0183  -0.0281
0.0172  1 .
332  CD    CD    . GLU GLU GLU A A 44  44  . 0.1111 0.0861 0.1278 0.0338  -0.0276
0.0151  1 .
333  OE1   OE1   . GLU GLU GLU A A 44  44  . 0.1366 0.1346 0.1407 0.0550  -0.0301 -
0.0105 1 .
334  OE2   OE2   . GLU GLU GLU A A 44  44  . 0.1369 0.1114 0.1488 0.0166  -0.0184
0.0112  1 .
335  C     C     . GLU GLU GLU A A 44  44  . 0.1060 0.0994 0.1049 0.0058  -0.0054
0.0150  1 .
336  O     O     . GLU GLU GLU A A 44  44  . 0.1223 0.1141 0.1486 0.0303  -0.0104
0.0166  1 .
337  N     N     . ALA ALA ALA A A 45  45  . 0.1096 0.1076 0.1205 0.0085  -0.0173
0.0117  1 .
338  CA    CA    . ALA ALA ALA A A 45  45  . 0.1031 0.1102 0.1148 0.0043  -0.0036 -
0.0131 1 .
339  CB    CB    . ALA ALA ALA A A 45  45  . 0.0814 0.1042 0.0957 0.0173  -0.0078 -
0.0198 1 .
340  C     C     . ALA ALA ALA A A 45  45  . 0.1166 0.1179 0.1267 0.0180  -0.0116 -
0.0021 1 .
341  O     O     . ALA ALA ALA A A 45  45  . 0.1078 0.1130 0.1335 -0.0013 -0.0130 -
0.0169 1 .
342  N     N     . LEU LEU LEU A A 46  46  . 0.1257 0.1083 0.1310 0.0132  -0.0067 -
0.0160 1 .
343  CA    CA    . LEU LEU LEU A A 46  46  . 0.1458 0.1136 0.1258 0.0177  0.0073  -
0.0030 1 .
344  CB    CB    . LEU LEU LEU A A 46  46  . 0.1790 0.1208 0.1210 -0.0010 0.0335  -
0.0274 1 .
345  CG    CG    . LEU LEU LEU A A 46  46  . 0.2595 0.2453 0.1782 -0.0300 0.0414  -
0.0280 1 .
346  CD1   CD1   . LEU LEU LEU A A 46  46  . 0.1704 0.2980 0.1696 -0.0273 0.0048
0.0103  1 .
347  CD2   CD2   . LEU LEU LEU A A 46  46  . 0.3209 0.1952 0.2077 0.0304  0.0972
0.0155  1 .
348  C     C     . LEU LEU LEU A A 46  46  . 0.1298 0.1250 0.1132 -0.0005 -0.0041 -
0.0011 1 .
349  O     O     . LEU LEU LEU A A 46  46  . 0.1443 0.1500 0.1420 0.0164  -0.0089
0.0032  1 .
350  N     N     . GLU GLU GLU A A 47  47  . 0.1290 0.1181 0.1105 0.0178  0.0031  -
0.0001 1 .
351  CA    CA    . GLU GLU GLU A A 47  47  . 0.1220 0.1040 0.1008 0.0152  -0.0008 -
0.0119 1 .
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352  CB    CB    . GLU GLU GLU A A 47  47  . 0.1170 0.1185 0.1008 0.0062  0.0019
0.0007  1 .
353  CG    CG    . GLU GLU GLU A A 47  47  . 0.1406 0.0947 0.1442 0.0077  0.0087
0.0013  1 .
354  CD    CD    . GLU GLU GLU A A 47  47  . 0.1157 0.0931 0.1186 0.0029  0.0306
0.0151  1 .
355  OE1   OE1   . GLU GLU GLU A A 47  47  . 0.1612 0.0960 0.1594 0.0024  0.0261  -
0.0042 1 .
356  OE2   OE2   . GLU GLU GLU A A 47  47  . 0.1620 0.1543 0.1300 -0.0208 0.0280
0.0237  1 .
357  C     C     . GLU GLU GLU A A 47  47  . 0.0927 0.1073 0.0944 0.0077  0.0004  -
0.0161 1 .
358  O     O     . GLU GLU GLU A A 47  47  . 0.1223 0.1286 0.0829 0.0102  0.0218  -
0.0241 1 .
359  N     N     . LEU LEU LEU A A 48  48  . 0.1172 0.0954 0.1000 0.0312  0.0055  -
0.0247 1 .
360  CA    CA    . LEU LEU LEU A A 48  48  . 0.1383 0.1039 0.0817 0.0173  0.0037  -
0.0097 1 .
361  CB    CB    . LEU LEU LEU A A 48  48  . 0.1078 0.0922 0.0832 0.0067  -0.0135 -
0.0205 1 .
362  CG    CG    . LEU LEU LEU A A 48  48  . 0.1152 0.0752 0.1265 0.0035  0.0144  -
0.0306 1 .
363  CD1   CD1   . LEU LEU LEU A A 48  48  . 0.1491 0.1941 0.1955 0.0439  0.0370  -
0.0196 1 .
364  CD2   CD2   . LEU LEU LEU A A 48  48  . 0.1536 0.1581 0.1441 -0.0400 0.0213  -
0.0016 1 .
365  C     C     . LEU LEU LEU A A 48  48  . 0.1423 0.1235 0.0922 0.0248  -0.0022 -
0.0050 1 .
366  O     O     . LEU LEU LEU A A 48  48  . 0.1475 0.1256 0.1057 0.0361  0.0090  -
0.0068 1 .
367  N     N     . ARG ARG ARG A A 49  49  . 0.1436 0.1177 0.0990 0.0188  0.0067
0.0014  1 .
368  CA    CA    . ARG ARG ARG A A 49  49  . 0.1653 0.1261 0.1245 0.0134  0.0240  -
0.0198 1 .
369  CB    CB    . ARG ARG ARG A A 49  49  . 0.2012 0.1051 0.1412 -0.0038 0.0348  -
0.0163 1 .
370  CG    CG    . ARG ARG ARG A A 49  49  . 0.2721 0.1074 0.1702 0.0310  0.0005  -
0.0150 1 .
371  CD    CD    . ARG ARG ARG A A 49  49  . 0.2256 0.1854 0.1118 0.1369  -0.0320 -
0.0331 1 .
372  NE    NE    . ARG ARG ARG A A 49  49  . 0.2129 0.1493 0.1652 0.0626  -0.0066 -
0.0335 1 .
373  CZ    CZ    . ARG ARG ARG A A 49  49  . 0.1653 0.1355 0.1476 0.0316  -0.0014 -
0.0157 1 .
374  NH1   NH1   . ARG ARG ARG A A 49  49  . 0.1379 0.1744 0.1607 0.0144  -0.0110 -
0.0368 1 .
375  NH2   NH2   . ARG ARG ARG A A 49  49  . 0.1771 0.1603 0.1667 0.0238  0.0107  -
0.0525 1 .
376  C     C     . ARG ARG ARG A A 49  49  . 0.1494 0.1207 0.1316 0.0127  0.0190  -
0.0120 1 .
377  O     O     . ARG ARG ARG A A 49  49  . 0.2176 0.1662 0.1570 0.0333  0.0153  -
0.0044 1 .
378  N     N     . ASP ASP ASP A A 50  50  . 0.1494 0.1196 0.1228 0.0089  0.0103  -
0.0339 1 .
379  CA    CA    . ASP ASP ASP A A 50  50  . 0.1546 0.1433 0.1487 0.0287  0.0023  -
0.0170 1 .
380  CB    CB    . ASP ASP ASP A A 50  50  . 0.1338 0.1040 0.1262 0.0324  -0.0057 -
0.0277 1 .
381  CG    CG    . ASP ASP ASP A A 50  50  . 0.1645 0.1277 0.1481 0.0165  0.0030  -
0.0117 1 .
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382  OD1   OD1   . ASP ASP ASP A A 50  50  . 0.1569 0.1327 0.1592 0.0060  0.0012
0.0148  1 .
383  OD2   OD2   . ASP ASP ASP A A 50  50  . 0.1502 0.1302 0.1164 0.0273  -0.0023
0.0032  1 .
384  C     C     . ASP ASP ASP A A 50  50  . 0.1897 0.1694 0.1597 0.0338  0.0213
0.0022  1 .
385  O     O     . ASP ASP ASP A A 50  50  . 0.2231 0.1515 0.1937 0.0322  0.0373  -
0.0059 1 .
386  N     N     . GLY GLY GLY A A 51  51  . 0.1747 0.1918 0.2135 0.0354  0.0155
0.0114  1 .
387  CA    CA    . GLY GLY GLY A A 51  51  . 0.2167 0.2325 0.2128 0.0477  0.0266
0.0210  1 .
388  C     C     . GLY GLY GLY A A 51  51  . 0.2301 0.2370 0.2454 0.0436  0.0264
0.0083  1 .
389  O     O     . GLY GLY GLY A A 51  51  . 0.2596 0.2544 0.2817 0.0801  0.0422
0.0282  1 .
390  N     N     . ASP ASP ASP A A 52  52  . 0.2358 0.2184 0.2163 0.0389  0.0007
0.0061  1 .
391  CA    CA    . ASP ASP ASP A A 52  52  . 0.2123 0.2347 0.2291 0.0288  0.0245
0.0024  1 .
392  CB    CB    . ASP ASP ASP A A 52  52  . 0.2430 0.2520 0.2266 0.0076  0.0088  -
0.0156 1 .
393  CG    CG    . ASP ASP ASP A A 52  52  . 0.2068 0.2452 0.2296 0.0148  0.0025
0.0169  1 .
394  OD1   OD1   . ASP ASP ASP A A 52  52  . 0.3136 0.2435 0.1975 0.0361  -0.0363 -
0.0831 1 .
395  OD2   OD2   . ASP ASP ASP A A 52  52  . 0.3101 0.2500 0.2213 0.0764  0.1060
0.0256  1 .
396  C     C     . ASP ASP ASP A A 52  52  . 0.2420 0.2478 0.2421 0.0290  0.0314
0.0047  1 .
397  O     O     . ASP ASP ASP A A 52  52  . 0.2284 0.2176 0.1709 0.0359  0.0565
0.0083  1 .
398  N     N     . LYS LYS LYS A A 53  53  . 0.2660 0.2695 0.2845 0.0064  0.0403
0.0112  1 .
399  CA    CA    . LYS LYS LYS A A 53  53  . 0.3036 0.3017 0.3219 0.0152  0.0365
0.0069  1 .
400  CB    CB    . LYS LYS LYS A A 53  53  . 0.2871 0.3063 0.3341 0.0219  0.0354
0.0178  1 .
401  CG    CG    . LYS LYS LYS A A 53  53  . 0.3349 0.3886 0.3740 -0.0139 0.0251  -
0.0217 1 .
402  CD    CD    . LYS LYS LYS A A 53  53  . 0.3671 0.4172 0.4763 -0.0042 0.0265  -
0.0591 1 .
403  C     C     . LYS LYS LYS A A 53  53  . 0.3147 0.3033 0.3075 0.0275  0.0474
0.0031  1 .
404  O     O     . LYS LYS LYS A A 53  53  . 0.3558 0.3076 0.3381 0.0557  0.0821
0.0045  1 .
405  N     N     . GLN GLN GLN A A 54  54  . 0.3288 0.3109 0.3124 0.0505  0.0293
0.0011  1 .
406  CA    CA    . GLN GLN GLN A A 54  54  . 0.3340 0.3213 0.3015 0.0535  0.0212
0.0093  1 .
407  CB    CB    . GLN GLN GLN A A 54  54  . 0.3624 0.3443 0.3183 0.0548  0.0050
0.0117  1 .
408  C     C     . GLN GLN GLN A A 54  54  . 0.3286 0.3226 0.2766 0.0539  0.0209
0.0095  1 .
409  O     O     . GLN GLN GLN A A 54  54  . 0.3813 0.3266 0.2703 0.0581  0.0421
0.0267  1 .
410  N     N     . ARG ARG ARG A A 55  55  . 0.2876 0.2673 0.2337 0.0492  0.0428
0.0218  1 .
411  CA    CA    . ARG ARG ARG A A 55  55  . 0.2467 0.2363 0.2135 0.0179  0.0251
0.0050  1 .
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412  CB    CB    . ARG ARG ARG A A 55  55  . 0.2470 0.2511 0.2514 0.0154  0.0140  -
0.0222 1 .
413  CG    CG    . ARG ARG ARG A A 55  55  . 0.2151 0.2484 0.2281 -0.0003 0.0031  -
0.0078 1 .
414  CD    CD    . ARG ARG ARG A A 55  55  . 0.2154 0.1801 0.2170 0.0184  0.0182
0.0238  1 .
415  NE    NE    . ARG ARG ARG A A 55  55  . 0.1979 0.1533 0.1947 0.0431  0.0500
0.0198  1 .
416  CZ    CZ    . ARG ARG ARG A A 55  55  . 0.2206 0.2007 0.1903 0.0141  0.0043  -
0.0104 1 .
417  NH1   NH1   . ARG ARG ARG A A 55  55  . 0.2344 0.1369 0.1871 0.0172  0.0177
0.0116  1 .
418  NH2   NH2   . ARG ARG ARG A A 55  55  . 0.2078 0.1548 0.1976 0.0422  0.0073  -
0.0387 1 .
419  C     C     . ARG ARG ARG A A 55  55  . 0.2197 0.1985 0.2025 0.0099  0.0278
0.0000  1 .
420  O     O     . ARG ARG ARG A A 55  55  . 0.2030 0.1975 0.1899 0.0021  0.0464
0.0117  1 .
421  N     N     . TYR TYR TYR A A 56  56  . 0.1939 0.1566 0.1622 0.0256  0.0330
0.0161  1 .
422  CA    CA    . TYR TYR TYR A A 56  56  . 0.1776 0.1553 0.1478 0.0053  0.0376
0.0070  1 .
423  CB    CB    . TYR TYR TYR A A 56  56  . 0.1768 0.1644 0.1332 0.0246  0.0556
0.0020  1 .
424  CG    CG    . TYR TYR TYR A A 56  56  . 0.1809 0.1294 0.1036 0.0060  0.0322  -
0.0040 1 .
425  CD1   CD1   . TYR TYR TYR A A 56  56  . 0.1715 0.1330 0.1132 0.0377  0.0457  -
0.0039 1 .
426  CE1   CE1   . TYR TYR TYR A A 56  56  . 0.1881 0.1246 0.1242 0.0310  0.0309  -
0.0366 1 .
427  CZ    CZ    . TYR TYR TYR A A 56  56  . 0.1629 0.1157 0.1019 0.0156  0.0090  -
0.0005 1 .
428  OH    OH    . TYR TYR TYR A A 56  56  . 0.1730 0.1804 0.1181 0.0168  0.0234  -
0.0140 1 .
429  CE2   CE2   . TYR TYR TYR A A 56  56  . 0.1521 0.1435 0.1289 0.0007  0.0229
0.0278  1 .
430  CD2   CD2   . TYR TYR TYR A A 56  56  . 0.1996 0.1394 0.1043 0.0374  0.0489  -
0.0051 1 .
431  C     C     . TYR TYR TYR A A 56  56  . 0.2149 0.1717 0.1845 -0.0001 0.0349
0.0036  1 .
432  O     O     . TYR TYR TYR A A 56  56  . 0.2155 0.1721 0.1629 -0.0107 0.0473
0.0256  1 .
433  N     N     . LEU LEU LEU A A 57  57  . 0.2096 0.2005 0.1900 0.0156  0.0386
0.0049  1 .
434  CA    CA    . LEU LEU LEU A A 57  57  . 0.2215 0.2276 0.2397 0.0051  0.0197  -
0.0055 1 .
435  CB    CB    . LEU LEU LEU A A 57  57  . 0.2497 0.2491 0.2954 0.0050  0.0250
0.0084  1 .
436  CG    CG    . LEU LEU LEU A A 57  57  . 0.2936 0.3398 0.3587 -0.0002 0.0207  -
0.0306 1 .
437  CD1   CD1   . LEU LEU LEU A A 57  57  . 0.3684 0.4599 0.4174 0.0136  -0.0133 -
0.0207 1 .
438  CD2   CD2   . LEU LEU LEU A A 57  57  . 0.3755 0.4354 0.3657 -0.0193 0.0572  -
0.0374 1 .
439  C     C     . LEU LEU LEU A A 57  57  . 0.2002 0.2161 0.2358 0.0016  0.0160
0.0002  1 .
440  O     O     . LEU LEU LEU A A 57  57  . 0.2012 0.2108 0.2324 -0.0246 0.0207
0.0202  1 .
441  N     N     . GLY GLY GLY A A 58  58  . 0.1745 0.1915 0.2257 0.0166  0.0309
0.0106  1 .
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442  CA    CA    . GLY GLY GLY A A 58  58  . 0.1479 0.1839 0.1929 0.0130  0.0295
0.0157  1 .
443  C     C     . GLY GLY GLY A A 58  58  . 0.1666 0.1468 0.1694 0.0145  0.0308
0.0033  1 .
444  O     O     . GLY GLY GLY A A 58  58  . 0.1728 0.1651 0.1733 0.0338  0.0197  -
0.0018 1 .
445  N     N     . LYS LYS LYS A A 59  59  . 0.1342 0.1407 0.1669 0.0084  0.0283  -
0.0022 1 .
446  CA    CA    . LYS LYS LYS A A 59  59  . 0.1402 0.0888 0.1446 0.0026  0.0099  -
0.0078 1 .
447  CB    CB    . LYS LYS LYS A A 59  59  . 0.1455 0.0948 0.1495 0.0121  0.0087  -
0.0124 1 .
448  CG    CG    . LYS LYS LYS A A 59  59  . 0.1604 0.1708 0.2363 -0.0242 0.0257  -
0.0217 1 .
449  CD    CD    . LYS LYS LYS A A 59  59  . 0.2848 0.2299 0.3767 -0.0443 0.0025  -
0.0431 1 .
450  CE    CE    . LYS LYS LYS A A 59  59  . 0.2884 0.4061 0.4227 -0.0444 0.0317
0.0112  1 .
451  NZ    NZ    . LYS LYS LYS A A 59  59  . 0.3443 0.4722 0.5163 -0.0258 0.0779
0.0149  1 .
452  C     C     . LYS LYS LYS A A 59  59  . 0.1302 0.0757 0.1163 0.0081  0.0044
0.0036  1 .
453  O     O     . LYS LYS LYS A A 59  59  . 0.1145 0.0767 0.1231 0.0018  0.0015
0.0178  1 .
454  N     N     . GLY GLY GLY A A 60  60  . 0.1029 0.0979 0.0946 0.0168  -0.0180 -
0.0017 1 .
455  CA    CA    . GLY GLY GLY A A 60  60  . 0.1061 0.0695 0.0858 -0.0185 0.0192
0.0001  1 .
456  C     C     . GLY GLY GLY A A 60  60  . 0.1062 0.0886 0.1008 -0.0031 0.0045  -
0.0181 1 .
457  O     O     . GLY GLY GLY A A 60  60  . 0.1177 0.1182 0.0912 0.0215  0.0029  -
0.0049 1 .
458  N     N     . VAL VAL VAL A A 61  61  . 0.1113 0.1071 0.0967 0.0065  0.0187  -
0.0172 1 .
459  CA    CA    . VAL VAL VAL A A 61  61  . 0.1010 0.0789 0.1040 -0.0044 0.0163  -
0.0054 1 .
460  CB    CB    . VAL VAL VAL A A 61  61  . 0.1038 0.1080 0.0884 -0.0043 0.0024  -
0.0095 1 .
461  CG1   CG1   . VAL VAL VAL A A 61  61  . 0.1134 0.1065 0.1343 -0.0190 0.0090  -
0.0201 1 .
462  CG2   CG2   . VAL VAL VAL A A 61  61  . 0.1073 0.0830 0.1018 -0.0025 0.0058
0.0160  1 .
463  C     C     . VAL VAL VAL A A 61  61  . 0.1027 0.0807 0.0887 0.0124  0.0064  -
0.0006 1 .
464  O     O     . VAL VAL VAL A A 61  61  . 0.1163 0.0957 0.1348 -0.0040 0.0237  -
0.0292 1 .
465  N     N     . LEU LEU LEU A A 62  62  . 0.0982 0.0917 0.1014 0.0047  -0.0022 -
0.0046 1 .
466  CA    CA    . LEU LEU LEU A A 62  62  . 0.1311 0.0979 0.0956 0.0009  0.0010
0.0053  1 .
467  CB    CB    . LEU LEU LEU A A 62  62  . 0.1488 0.1109 0.0888 0.0228  0.0073  -
0.0008 1 .
468  CG    CG    . LEU LEU LEU A A 62  62  . 0.1839 0.1538 0.0870 0.0005  0.0081
0.0018  1 .
469  CD1   CD1   . LEU LEU LEU A A 62  62  . 0.3053 0.1747 0.0916 -0.0095 0.0975
0.0093  1 .
470  CD2   CD2   . LEU LEU LEU A A 62  62  . 0.1827 0.1420 0.1321 -0.0199 0.0266
0.0333  1 .
471  C     C     . LEU LEU LEU A A 62  62  . 0.1192 0.1201 0.1136 0.0027  -0.0024
0.0100  1 .
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472  O     O     . LEU LEU LEU A A 62  62  . 0.1243 0.1101 0.0941 -0.0148 0.0183
0.0077  1 .
473  N     N     . LYS LYS LYS A A 63  63  . 0.1353 0.1079 0.0998 0.0051  -0.0006 -
0.0054 1 .
474  CA    CA    . LYS LYS LYS A A 63  63  . 0.1180 0.1157 0.0929 0.0000  -0.0028
0.0040  1 .
475  CB    CB    . LYS LYS LYS A A 63  63  . 0.1016 0.1237 0.1057 0.0180  0.0047
0.0015  1 .
476  CG    CG    . LYS LYS LYS A A 63  63  . 0.1325 0.1018 0.1672 0.0042  0.0252
0.0057  1 .
477  CD    CD    . LYS LYS LYS A A 63  63  . 0.1421 0.1417 0.1711 0.0138  -0.0227
0.0123  1 .
478  CE    CE    . LYS LYS LYS A A 63  63  . 0.2099 0.2282 0.2471 0.0324  -0.0145 -
0.0127 1 .
479  NZ    NZ    . LYS LYS LYS A A 63  63  . 0.1865 0.1888 0.3146 0.0536  0.0410  -
0.0421 1 .
480  C     C     . LYS LYS LYS A A 63  63  . 0.1146 0.1033 0.1181 0.0047  0.0063  -
0.0040 1 .
481  O     O     . LYS LYS LYS A A 63  63  . 0.1081 0.0958 0.1340 0.0075  -0.0098 -
0.0058 1 .
482  N     N     . ALA ALA ALA A A 64  64  . 0.1154 0.0985 0.1024 0.0001  0.0067  -
0.0134 1 .
483  CA    CA    . ALA ALA ALA A A 64  64  . 0.1032 0.0677 0.0978 0.0017  0.0011  -
0.0133 1 .
484  CB    CB    . ALA ALA ALA A A 64  64  . 0.1132 0.0725 0.0809 -0.0106 -0.0065 -
0.0158 1 .
485  C     C     . ALA ALA ALA A A 64  64  . 0.1124 0.0522 0.0912 -0.0020 0.0035  -
0.0122 1 .
486  O     O     . ALA ALA ALA A A 64  64  . 0.1075 0.0860 0.0860 0.0057  0.0177  -
0.0229 1 .
487  N     N     . VAL VAL VAL A A 65  65  . 0.1143 0.0726 0.0825 0.0070  -0.0052 -
0.0069 1 .
488  CA    CA    . VAL VAL VAL A A 65  65  . 0.0991 0.0756 0.0968 -0.0008 -0.0032 -
0.0122 1 .
489  CB    CB    . VAL VAL VAL A A 65  65  . 0.1003 0.0735 0.0998 0.0000  -0.0171 -
0.0099 1 .
490  CG1   CG1   . VAL VAL VAL A A 65  65  . 0.1112 0.1294 0.1338 0.0202  0.0059  -
0.0120 1 .
491  CG2   CG2   . VAL VAL VAL A A 65  65  . 0.1411 0.0420 0.1367 -0.0098 -0.0013 -
0.0247 1 .
492  C     C     . VAL VAL VAL A A 65  65  . 0.1102 0.0903 0.1188 0.0028  0.0041
0.0058  1 .
493  O     O     . VAL VAL VAL A A 65  65  . 0.1080 0.0985 0.1073 -0.0091 -0.0067
0.0036  1 .
494  N     N     . ASP ASP ASP A A 66  66  . 0.1253 0.0906 0.0801 0.0028  0.0010
0.0051  1 .
495  CA    CA    . ASP ASP ASP A A 66  66  . 0.1568 0.0994 0.1237 0.0057  0.0148
0.0043  1 .
496  CB    CB    . ASP ASP ASP A A 66  66  . 0.1987 0.1055 0.1241 0.0139  0.0336  -
0.0004 1 .
497  CG    CG    . ASP ASP ASP A A 66  66  . 0.3070 0.2522 0.2780 -0.0461 0.0147  -
0.0069 1 .
498  OD1   OD1   . ASP ASP ASP A A 66  66  . 0.3092 0.3746 0.2070 -0.1173 -0.0194 -
0.0087 1 .
499  OD2   OD2   . ASP ASP ASP A A 66  66  . 0.3992 0.3453 0.4825 0.0177  0.0035  -
0.0682 1 .
500  C     C     . ASP ASP ASP A A 66  66  . 0.1277 0.0985 0.1033 0.0021  0.0028
0.0069  1 .
501  O     O     . ASP ASP ASP A A 66  66  . 0.1087 0.0993 0.1157 0.0077  -0.0010
0.0064  1 .
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502  N     N     . HIS HIS HIS A A 67  67  . 0.1391 0.1126 0.1063 0.0095  0.0054
0.0075  1 .
503  CA    CA    . HIS HIS HIS A A 67  67  . 0.1145 0.1116 0.1056 0.0045  -0.0022
0.0076  1 .
504  CB    CB    . HIS HIS HIS A A 67  67  . 0.1047 0.1253 0.1236 0.0097  -0.0055
0.0044  1 .
505  CG    CG    . HIS HIS HIS A A 67  67  . 0.1251 0.1371 0.1481 0.0250  0.0011
0.0080  1 .
506  ND1   ND1   . HIS HIS HIS A A 67  67  . 0.1569 0.1496 0.1931 0.0280  -0.0184 -
0.0471 1 .
507  CE1   CE1   . HIS HIS HIS A A 67  67  . 0.1474 0.2014 0.2402 0.0214  -0.0093 -
0.0205 1 .
508  NE2   NE2   . HIS HIS HIS A A 67  67  . 0.1656 0.1633 0.1364 0.0293  0.0017
0.0111  1 .
509  CD2   CD2   . HIS HIS HIS A A 67  67  . 0.1551 0.1414 0.1420 0.0207  -0.0340
0.0265  1 .
510  C     C     . HIS HIS HIS A A 67  67  . 0.1067 0.1022 0.1060 -0.0003 0.0030
0.0016  1 .
511  O     O     . HIS HIS HIS A A 67  67  . 0.1332 0.0701 0.1247 -0.0071 0.0101  -
0.0044 1 .
512  N     N     . ILE ILE ILE A A 68  68  . 0.0919 0.0915 0.1284 0.0070  0.0091  -
0.0095 1 .
513  CA    CA    . ILE ILE ILE A A 68  68  . 0.0936 0.0744 0.1121 0.0116  0.0203  -
0.0039 1 .
514  CB    CB    . ILE ILE ILE A A 68  68  . 0.0926 0.0719 0.1088 0.0047  0.0047  -
0.0101 1 .
515  CG1   CG1   . ILE ILE ILE A A 68  68  . 0.0846 0.0716 0.0816 -0.0256 -0.0032
0.0168  1 .
516  CD1   CD1   . ILE ILE ILE A A 68  68  . 0.1287 0.0553 0.1099 -0.0203 -0.0282
0.0141  1 .
517  CG2   CG2   . ILE ILE ILE A A 68  68  . 0.0539 0.0619 0.1033 0.0119  -0.0021 -
0.0168 1 .
518  C     C     . ILE ILE ILE A A 68  68  . 0.1144 0.0897 0.1144 0.0117  0.0219  -
0.0216 1 .
519  O     O     . ILE ILE ILE A A 68  68  . 0.1169 0.0867 0.1149 -0.0093 0.0070  -
0.0028 1 .
520  N     N     . ASN ASN ASN A A 69  69  . 0.1100 0.0884 0.1099 0.0156  0.0044
0.0007  1 .
521  CA    CA    . ASN ASN ASN A A 69  69  . 0.1005 0.0762 0.1079 0.0012  -0.0062
0.0035  1 .
522  CB    CB    . ASN ASN ASN A A 69  69  . 0.1202 0.0714 0.1052 0.0121  0.0092
0.0020  1 .
523  CG    CG    . ASN ASN ASN A A 69  69  . 0.1303 0.0887 0.1241 -0.0171 -0.0022 -
0.0005 1 .
524  OD1   OD1   . ASN ASN ASN A A 69  69  . 0.1840 0.1039 0.1336 -0.0039 0.0200
0.0044  1 .
525  ND2   ND2   . ASN ASN ASN A A 69  69  . 0.1058 0.1261 0.1816 -0.0264 -0.0289
0.0301  1 .
526  C     C     . ASN ASN ASN A A 69  69  . 0.1244 0.1069 0.1154 -0.0012 -0.0011
0.0081  1 .
527  O     O     . ASN ASN ASN A A 69  69  . 0.0972 0.1053 0.1492 0.0007  -0.0122
0.0042  1 .
528  N     N     . SER SER SER A A 70  70  . 0.1455 0.0873 0.1263 0.0018  -0.0060
0.0116  1 .
529  CA    CA    . SER SER SER A A 70  70  . 0.1662 0.1070 0.1281 -0.0014 -0.0032
0.0207  1 .
530  CB    CB    . SER SER SER A A 70  70  . 0.2370 0.0886 0.1221 -0.0217 0.0226
0.0157  1 .
531  OG    OG    . SER SER SER A A 70  70  . 0.3264 0.2222 0.2193 0.0005  -0.0384
0.0128  1 .
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532  C     C     . SER SER SER A A 70  70  . 0.1454 0.1077 0.1106 -0.0089 -0.0121
0.0100  1 .
533  O     O     . SER SER SER A A 70  70  . 0.1302 0.1039 0.1300 -0.0068 0.0011
0.0021  1 .
534  N     N     . THR THR THR A A 71  71  . 0.1182 0.1067 0.0950 -0.0024 -0.0064
0.0228  1 .
535  CA    CA    . THR THR THR A A 71  71  . 0.0846 0.0869 0.0730 0.0125  -0.0167
0.0123  1 .
536  CB    CB    . THR THR THR A A 71  71  . 0.1049 0.0947 0.0558 0.0285  -0.0184
0.0048  1 .
537  OG1   OG1   . THR THR THR A A 71  71  . 0.1396 0.1041 0.1141 0.0053  -0.0133
0.0013  1 .
538  CG2   CG2   . THR THR THR A A 71  71  . 0.0901 0.1017 0.0884 -0.0097 -0.0002
0.0338  1 .
539  C     C     . THR THR THR A A 71  71  . 0.1123 0.0943 0.0949 -0.0060 -0.0124
0.0094  1 .
540  O     O     . THR THR THR A A 71  71  . 0.1060 0.1003 0.1056 -0.0124 0.0018
0.0038  1 .
541  N     N     . ILE ILE ILE A A 72  72  . 0.1192 0.0812 0.0905 -0.0095 -0.0041 -
0.0093 1 .
542  CA    CA    . ILE ILE ILE A A 72  72  . 0.1087 0.0971 0.1059 -0.0072 -0.0080 -
0.0144 1 .
543  CB    CB    . ILE ILE ILE A A 72  72  . 0.1241 0.0759 0.1087 -0.0050 0.0099  -
0.0116 1 .
544  CG1   CG1   . ILE ILE ILE A A 72  72  . 0.1047 0.0611 0.1176 0.0029  -0.0031 -
0.0298 1 .
545  CD1   CD1   . ILE ILE ILE A A 72  72  . 0.1040 0.0898 0.1262 0.0091  -0.0108
0.0121  1 .
546  CG2   CG2   . ILE ILE ILE A A 72  72  . 0.1257 0.0854 0.1022 0.0035  -0.0045
0.0022  1 .
547  C     C     . ILE ILE ILE A A 72  72  . 0.1232 0.0972 0.1135 -0.0048 0.0069  -
0.0107 1 .
548  O     O     . ILE ILE ILE A A 72  72  . 0.1043 0.0878 0.1368 -0.0018 0.0078  -
0.0119 1 .
549  N     N     . ALA ALA ALA A A 73  73  . 0.1015 0.0790 0.0957 0.0025  -0.0280
0.0113  1 .
550  CA    CA    . ALA ALA ALA A A 73  73  . 0.0938 0.0989 0.1310 -0.0145 -0.0083
0.0036  1 .
551  CB    CB    . ALA ALA ALA A A 73  73  . 0.1089 0.1134 0.1663 -0.0109 -0.0381
0.0286  1 .
552  C     C     . ALA ALA ALA A A 73  73  . 0.1256 0.0982 0.1295 -0.0004 0.0035
0.0096  1 .
553  O     O     . ALA ALA ALA A A 73  73  . 0.1524 0.1101 0.1678 0.0094  0.0021  -
0.0053 1 .
554  N     N     . PRO PRO PRO A A 74  74  . 0.1361 0.1120 0.1443 -0.0124 0.0021  -
0.0078 1 .
555  CA    CA    . PRO PRO PRO A A 74  74  . 0.1238 0.0704 0.1196 -0.0029 -0.0020 -
0.0034 1 .
556  CB    CB    . PRO PRO PRO A A 74  74  . 0.1109 0.0786 0.0970 0.0024  0.0185  -
0.0048 1 .
557  CG    CG    . PRO PRO PRO A A 74  74  . 0.1144 0.0747 0.1553 0.0074  0.0004
0.0098  1 .
558  CD    CD    . PRO PRO PRO A A 74  74  . 0.1361 0.0780 0.1216 -0.0180 0.0113  -
0.0136 1 .
559  C     C     . PRO PRO PRO A A 74  74  . 0.1320 0.1071 0.1422 -0.0065 0.0121  -
0.0147 1 .
560  O     O     . PRO PRO PRO A A 74  74  . 0.1332 0.1051 0.1563 -0.0018 0.0218  -
0.0101 1 .
561  N     N     . ALA ALA ALA A A 75  75  . 0.1337 0.1194 0.1363 -0.0006 -0.0026
0.0037  1 .
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562  CA    CA    . ALA ALA ALA A A 75  75  . 0.1692 0.1414 0.1706 0.0037  -0.0101 -
0.0129 1 .
563  CB    CB    . ALA ALA ALA A A 75  75  . 0.1386 0.1336 0.1736 -0.0092 -0.0058 -
0.0045 1 .
564  C     C     . ALA ALA ALA A A 75  75  . 0.1546 0.1450 0.1568 0.0104  -0.0023 -
0.0011 1 .
565  O     O     . ALA ALA ALA A A 75  75  . 0.1722 0.1300 0.1784 0.0126  -0.0025 -
0.0257 1 .
566  N     N     . LEU LEU LEU A A 76  76  . 0.1314 0.1115 0.1396 -0.0107 0.0040  -
0.0211 1 .
567  CA    CA    . LEU LEU LEU A A 76  76  . 0.1234 0.1191 0.1671 -0.0038 -0.0009 -
0.0130 1 .
568  CB    CB    . LEU LEU LEU A A 76  76  . 0.1219 0.0965 0.1664 -0.0052 0.0061  -
0.0134 1 .
569  CG    CG    . LEU LEU LEU A A 76  76  . 0.1062 0.1079 0.1676 -0.0340 0.0044  -
0.0097 1 .
570  CD1   CD1   . LEU LEU LEU A A 76  76  . 0.1726 0.1490 0.2116 -0.0584 0.0466
0.0276  1 .
571  CD2   CD2   . LEU LEU LEU A A 76  76  . 0.1536 0.2049 0.2157 0.0081  -0.0152 -
0.0186 1 .
572  C     C     . LEU LEU LEU A A 76  76  . 0.1398 0.1266 0.1633 -0.0055 0.0065  -
0.0050 1 .
573  O     O     . LEU LEU LEU A A 76  76  . 0.1525 0.1669 0.1922 -0.0088 0.0270
0.0103  1 .
574  N     N     . ILE ILE ILE A A 77  77  . 0.1370 0.1025 0.1610 -0.0021 -0.0085
0.0095  1 .
575  CA    CA    . ILE ILE ILE A A 77  77  . 0.1344 0.1331 0.1648 -0.0090 0.0106
0.0199  1 .
576  CB    CB    . ILE ILE ILE A A 77  77  . 0.1127 0.1166 0.1690 0.0018  -0.0158
0.0208  1 .
577  CG1   CG1   . ILE ILE ILE A A 77  77  . 0.1074 0.1115 0.1524 -0.0148 0.0131
0.0229  1 .
578  CD1   CD1   . ILE ILE ILE A A 77  77  . 0.2026 0.1945 0.1947 0.0255  0.0255
0.0678  1 .
579  CG2   CG2   . ILE ILE ILE A A 77  77  . 0.1241 0.1454 0.1883 -0.0350 0.0081
0.0640  1 .
580  C     C     . ILE ILE ILE A A 77  77  . 0.1426 0.1178 0.1821 -0.0046 0.0213
0.0021  1 .
581  O     O     . ILE ILE ILE A A 77  77  . 0.1535 0.1447 0.1983 0.0184  0.0275  -
0.0033 1 .
582  N     N     . SER SER SER A A 78  78  . 0.1490 0.1168 0.1493 0.0050  0.0093
0.0007  1 .
583  CA    CA    . SER SER SER A A 78  78  . 0.1433 0.1000 0.1565 -0.0031 0.0158  -
0.0120 1 .
584  CB    CB    . SER SER SER A A 78  78  . 0.1052 0.1268 0.1293 0.0069  0.0060  -
0.0073 1 .
585  OG    OG    . SER SER SER A A 78  78  . 0.1786 0.1243 0.1452 -0.0202 -0.0321 -
0.0031 1 .
586  C     C     . SER SER SER A A 78  78  . 0.1528 0.1409 0.1654 -0.0062 0.0146
0.0030  1 .
587  O     O     . SER SER SER A A 78  78  . 0.1835 0.1381 0.1960 -0.0261 0.0401  -
0.0048 1 .
588  N     N     . SER SER SER A A 79  79  . 0.1622 0.1463 0.1737 -0.0044 0.0171  -
0.0115 1 .
589  CA    CA    . SER SER SER A A 79  79  . 0.1717 0.1668 0.1902 -0.0053 0.0053  -
0.0076 1 .
590  CB    CB    . SER SER SER A A 79  79  . 0.1890 0.1793 0.2231 -0.0031 -0.0028 -
0.0162 1 .
591  OG    OG    . SER SER SER A A 79  79  . 0.1644 0.1581 0.1655 -0.0221 0.0207
0.0115  1 .
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592  C     C     . SER SER SER A A 79  79  . 0.1886 0.1798 0.2020 -0.0114 0.0190  -
0.0052 1 .
593  O     O     . SER SER SER A A 79  79  . 0.1895 0.1821 0.1956 -0.0098 0.0321
0.0059  1 .
594  N     N     . GLY GLY GLY A A 80  80  . 0.1569 0.1572 0.1998 -0.0019 0.0082  -
0.0192 1 .
595  CA    CA    . GLY GLY GLY A A 80  80  . 0.1915 0.1864 0.2077 -0.0023 0.0119
0.0054  1 .
596  C     C     . GLY GLY GLY A A 80  80  . 0.1728 0.1705 0.2042 0.0120  0.0004
0.0059  1 .
597  O     O     . GLY GLY GLY A A 80  80  . 0.1925 0.2155 0.2193 -0.0177 0.0278
0.0248  1 .
598  N     N     . LEU LEU LEU A A 81  81  . 0.1682 0.1444 0.1726 -0.0189 -0.0009 -
0.0003 1 .
599  CA    CA    . LEU LEU LEU A A 81  81  . 0.1324 0.1461 0.1568 0.0035  -0.0004 -
0.0001 1 .
600  CB    CB    . LEU LEU LEU A A 81  81  . 0.1549 0.1618 0.1804 0.0062  -0.0142 -
0.0058 1 .
601  CG    CG    . LEU LEU LEU A A 81  81  . 0.1774 0.1914 0.1790 0.0112  -0.0141
0.0316  1 .
602  CD1   CD1   . LEU LEU LEU A A 81  81  . 0.1923 0.1890 0.2139 -0.0061 -0.0646
0.0102  1 .
603  CD2   CD2   . LEU LEU LEU A A 81  81  . 0.2416 0.1975 0.2559 0.0164  0.0356
0.0601  1 .
604  C     C     . LEU LEU LEU A A 81  81  . 0.1472 0.1646 0.1521 0.0085  0.0129  -
0.0018 1 .
605  O     O     . LEU LEU LEU A A 81  81  . 0.1627 0.1682 0.1530 0.0081  0.0078  -
0.0084 1 .
606  N     N     . SER SER SER A A 82  82  . 0.1440 0.1331 0.1452 0.0095  0.0171  -
0.0004 1 .
607  CA    CA    . SER SER SER A A 82  82  . 0.1162 0.1201 0.1748 -0.0147 0.0293  -
0.0043 1 .
608  CB    CB    . SER SER SER A A 82  82  . 0.1383 0.1003 0.1708 -0.0070 0.0524  -
0.0087 1 .
609  OG    OG    . SER SER SER A A 82  82  . 0.1429 0.1546 0.2124 -0.0205 -0.0104 -
0.0015 1 .
610  C     C     . SER SER SER A A 82  82  . 0.1218 0.1314 0.1503 -0.0121 0.0192
0.0030  1 .
611  O     O     . SER SER SER A A 82  82  . 0.1256 0.1159 0.1445 -0.0233 0.0118  -
0.0055 1 .
612  N     N     . VAL VAL VAL A A 83  83  . 0.1252 0.1186 0.1550 -0.0106 0.0216  -
0.0078 1 .
613  CA    CA    . VAL VAL VAL A A 83  83  . 0.1441 0.1265 0.1346 -0.0161 0.0127  -
0.0109 1 .
614  CB    CB    . VAL VAL VAL A A 83  83  . 0.1517 0.1262 0.1355 0.0106  0.0147  -
0.0097 1 .
615  CG1   CG1   . VAL VAL VAL A A 83  83  . 0.1366 0.0929 0.1092 -0.0125 0.0302  -
0.0350 1 .
616  CG2   CG2   . VAL VAL VAL A A 83  83  . 0.1184 0.1265 0.1430 0.0079  -0.0121 -
0.0118 1 .
617  C     C     . VAL VAL VAL A A 83  83  . 0.1432 0.1244 0.1455 -0.0086 0.0143  -
0.0140 1 .
618  O     O     . VAL VAL VAL A A 83  83  . 0.1267 0.1437 0.1528 -0.0154 0.0327  -
0.0008 1 .
619  N     N     . VAL VAL VAL A A 84  84  . 0.1432 0.1286 0.1454 -0.0068 0.0220  -
0.0136 1 .
620  CA    CA    . VAL VAL VAL A A 84  84  . 0.1340 0.1403 0.1379 -0.0026 0.0271
0.0014  1 .
621  CB    CB    . VAL VAL VAL A A 84  84  . 0.1149 0.1417 0.1430 0.0011  0.0336
0.0128  1 .
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622  CG1   CG1   . VAL VAL VAL A A 84  84  . 0.1246 0.1379 0.1543 -0.0102 -0.0031
0.0314  1 .
623  CG2   CG2   . VAL VAL VAL A A 84  84  . 0.1235 0.1381 0.1423 -0.0237 0.0575
0.0113  1 .
624  C     C     . VAL VAL VAL A A 84  84  . 0.1402 0.1534 0.1452 -0.0130 0.0274  -
0.0007 1 .
625  O     O     . VAL VAL VAL A A 84  84  . 0.1322 0.1564 0.1544 -0.0179 0.0183  -
0.0068 1 .
626  N     N     . GLU GLU GLU A A 85  85  . 0.1453 0.1330 0.1530 0.0034  0.0228
0.0088  1 .
627  CA    CA    . GLU GLU GLU A A 85  85  . 0.1152 0.1357 0.1690 -0.0138 0.0173
0.0022  1 .
628  CB    CB    . GLU GLU GLU A A 85  85  . 0.1051 0.1220 0.1543 -0.0070 0.0513
0.0194  1 .
629  CG    CG    . GLU GLU GLU A A 85  85  . 0.0760 0.1451 0.1684 0.0131  0.0504
0.0060  1 .
630  CD    CD    . GLU GLU GLU A A 85  85  . 0.1900 0.2286 0.2400 -0.0061 0.0163
0.0079  1 .
631  OE1   OE1   . GLU GLU GLU A A 85  85  . 0.2151 0.2637 0.2057 -0.0123 0.0208
0.0329  1 .
632  OE2   OE2   . GLU GLU GLU A A 85  85  . 0.2276 0.2057 0.2748 0.0288  0.0503
0.0431  1 .
633  C     C     . GLU GLU GLU A A 85  85  . 0.1340 0.1342 0.1475 -0.0186 0.0409
0.0066  1 .
634  O     O     . GLU GLU GLU A A 85  85  . 0.1000 0.1408 0.1673 -0.0339 0.0309
0.0188  1 .
635  N     N     . GLN GLN GLN A A 86  86  . 0.1003 0.1268 0.1123 -0.0256 0.0165
0.0142  1 .
636  CA    CA    . GLN GLN GLN A A 86  86  . 0.1043 0.1272 0.1158 -0.0132 0.0232
0.0054  1 .
637  CB    CB    . GLN GLN GLN A A 86  86  . 0.0827 0.1020 0.1062 -0.0165 0.0297
0.0089  1 .
638  CG    CG    . GLN GLN GLN A A 86  86  . 0.1023 0.1115 0.0673 -0.0290 0.0250
0.0221  1 .
639  CD    CD    . GLN GLN GLN A A 86  86  . 0.1400 0.1094 0.1244 0.0090  -0.0123
0.0286  1 .
640  OE1   OE1   . GLN GLN GLN A A 86  86  . 0.1306 0.0992 0.1232 -0.0143 0.0102
0.0181  1 .
641  NE2   NE2   . GLN GLN GLN A A 86  86  . 0.1108 0.0748 0.1349 -0.0003 0.0417
0.0310  1 .
642  C     C     . GLN GLN GLN A A 86  86  . 0.1293 0.1288 0.1081 -0.0066 0.0108
0.0075  1 .
643  O     O     . GLN GLN GLN A A 86  86  . 0.1140 0.1269 0.1330 -0.0213 0.0190
0.0123  1 .
644  N     N     . GLU GLU GLU A A 87  87  . 0.1232 0.1426 0.1346 -0.0086 0.0019
0.0100  1 .
645  CA    CA    . GLU GLU GLU A A 87  87  . 0.1538 0.1298 0.1465 -0.0018 -0.0126
0.0068  1 .
646  CB    CB    . GLU GLU GLU A A 87  87  . 0.1406 0.1586 0.1279 -0.0029 -0.0150
0.0096  1 .
647  CG    CG    . GLU GLU GLU A A 87  87  . 0.2561 0.1890 0.1808 0.0379  -0.0361
0.0090  1 .
648  CD    CD    . GLU GLU GLU A A 87  87  . 0.3869 0.3688 0.2023 0.0844  -0.0286 -
0.0157 1 .
649  OE1   OE1   . GLU GLU GLU A A 87  87  . 0.4756 0.4512 0.2116 0.0462  -0.1037 -
0.0100 1 .
650  OE2   OE2   . GLU GLU GLU A A 87  87  . 0.4346 0.4538 0.2460 0.0678  0.0092  -
0.0014 1 .
651  C     C     . GLU GLU GLU A A 87  87  . 0.1569 0.1402 0.1442 -0.0018 -0.0007
0.0005  1 .
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652  O     O     . GLU GLU GLU A A 87  87  . 0.1299 0.1527 0.1634 -0.0075 0.0143
0.0396  1 .
653  N     N     . LYS LYS LYS A A 88  88  . 0.1280 0.1294 0.1435 -0.0018 0.0133  -
0.0058 1 .
654  CA    CA    . LYS LYS LYS A A 88  88  . 0.1382 0.1226 0.1285 -0.0130 0.0128
0.0007  1 .
655  CB    CB    . LYS LYS LYS A A 88  88  . 0.1586 0.1451 0.1406 -0.0220 0.0248
0.0049  1 .
656  CG    CG    . LYS LYS LYS A A 88  88  . 0.1859 0.1906 0.1536 -0.0131 0.0504
0.0134  1 .
657  CD    CD    . LYS LYS LYS A A 88  88  . 0.1820 0.2437 0.1590 -0.0117 0.0303
0.0287  1 .
658  CE    CE    . LYS LYS LYS A A 88  88  . 0.2766 0.3465 0.2726 -0.0377 0.0664
0.0230  1 .
659  NZ    NZ    . LYS LYS LYS A A 88  88  . 0.3767 0.4184 0.3529 -0.0740 0.0552
0.0401  1 .
660  C     C     . LYS LYS LYS A A 88  88  . 0.1373 0.1328 0.1352 0.0018  0.0009  -
0.0023 1 .
661  O     O     . LYS LYS LYS A A 88  88  . 0.1312 0.1610 0.1370 0.0005  0.0265  -
0.0061 1 .
662  N     N     . LEU LEU LEU A A 89  89  . 0.1348 0.1147 0.1284 -0.0106 0.0139
0.0201  1 .
663  CA    CA    . LEU LEU LEU A A 89  89  . 0.1135 0.1097 0.1006 0.0057  -0.0050 -
0.0006 1 .
664  CB    CB    . LEU LEU LEU A A 89  89  . 0.0980 0.1147 0.1135 0.0025  -0.0086 -
0.0015 1 .
665  CG    CG    . LEU LEU LEU A A 89  89  . 0.0855 0.0771 0.0827 0.0057  0.0065  -
0.0141 1 .
666  CD1   CD1   . LEU LEU LEU A A 89  89  . 0.0920 0.1322 0.1215 0.0286  0.0155
0.0013  1 .
667  CD2   CD2   . LEU LEU LEU A A 89  89  . 0.1741 0.1007 0.1516 0.0063  0.0057  -
0.0134 1 .
668  C     C     . LEU LEU LEU A A 89  89  . 0.1422 0.1235 0.1307 0.0006  0.0046
0.0001  1 .
669  O     O     . LEU LEU LEU A A 89  89  . 0.1462 0.1148 0.1547 0.0039  0.0204
0.0047  1 .
670  N     N     . ASP ASP ASP A A 90  90  . 0.1292 0.1241 0.1226 -0.0022 -0.0278
0.0095  1 .
671  CA    CA    . ASP ASP ASP A A 90  90  . 0.1210 0.1321 0.1222 0.0063  -0.0045
0.0085  1 .
672  CB    CB    . ASP ASP ASP A A 90  90  . 0.1420 0.1106 0.1089 0.0098  -0.0077
0.0110  1 .
673  CG    CG    . ASP ASP ASP A A 90  90  . 0.1524 0.1421 0.1444 0.0031  -0.0194
0.0038  1 .
674  OD1   OD1   . ASP ASP ASP A A 90  90  . 0.1610 0.1340 0.1378 0.0042  0.0115  -
0.0182 1 .
675  OD2   OD2   . ASP ASP ASP A A 90  90  . 0.1231 0.1196 0.1300 0.0361  0.0070  -
0.0051 1 .
676  C     C     . ASP ASP ASP A A 90  90  . 0.1419 0.1247 0.1339 0.0010  0.0103
0.0018  1 .
677  O     O     . ASP ASP ASP A A 90  90  . 0.1461 0.1288 0.1574 0.0112  0.0192
0.0053  1 .
678  N     N     . ASN ASN ASN A A 91  91  . 0.1496 0.1343 0.1370 0.0095  0.0111
0.0273  1 .
679  CA    CA    . ASN ASN ASN A A 91  91  . 0.1660 0.1372 0.1592 0.0116  0.0199
0.0062  1 .
680  CB    CB    . ASN ASN ASN A A 91  91  . 0.2061 0.1768 0.1549 0.0154  0.0145
0.0004  1 .
681  CG    CG    . ASN ASN ASN A A 91  91  . 0.2321 0.2618 0.2070 -0.0009 0.0038
0.0012  1 .
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682  OD1   OD1   . ASN ASN ASN A A 91  91  . 0.3166 0.3083 0.2562 -0.0365 0.0125  -
0.0299 1 .
683  ND2   ND2   . ASN ASN ASN A A 91  91  . 0.2976 0.3373 0.2342 0.0739  0.0264  -
0.0296 1 .
684  C     C     . ASN ASN ASN A A 91  91  . 0.1596 0.1471 0.1527 0.0007  0.0099
0.0134  1 .
685  O     O     . ASN ASN ASN A A 91  91  . 0.1804 0.1156 0.1258 0.0229  0.0053  -
0.0034 1 .
686  N     N     . LEU LEU LEU A A 92  92  . 0.1716 0.1057 0.1468 0.0041  0.0028
0.0228  1 .
687  CA    CA    . LEU LEU LEU A A 92  92  . 0.1652 0.1445 0.1626 0.0033  -0.0047
0.0113  1 .
688  CB    CB    . LEU LEU LEU A A 92  92  . 0.1661 0.1644 0.1998 0.0083  -0.0172
0.0312  1 .
689  CG    CG    . LEU LEU LEU A A 92  92  . 0.2395 0.2727 0.3278 -0.0278 -0.0599
0.0432  1 .
690  CD1   CD1   . LEU LEU LEU A A 92  92  . 0.2582 0.2752 0.3923 -0.0621 -0.0454
0.0727  1 .
691  CD2   CD2   . LEU LEU LEU A A 92  92  . 0.1192 0.2671 0.2952 -0.0701 0.0301
0.0671  1 .
692  C     C     . LEU LEU LEU A A 92  92  . 0.1344 0.1254 0.1528 -0.0013 0.0023
0.0034  1 .
693  O     O     . LEU LEU LEU A A 92  92  . 0.1416 0.1280 0.1536 -0.0044 0.0130  -
0.0035 1 .
694  N     N     . MET MET MET A A 93  93  . 0.1274 0.1375 0.1404 0.0042  -0.0098
0.0085  1 .
695  CA    CA    . MET MET MET A A 93  93  . 0.1245 0.1212 0.1462 0.0096  -0.0048
0.0219  1 .
696  CB    CB    . MET MET MET A A 93  93  . 0.1220 0.1030 0.1592 0.0084  -0.0152
0.0134  1 .
697  CG    CG    . MET MET MET A A 93  93  . 0.1251 0.0869 0.1226 0.0107  -0.0002
0.0389  1 .
698  SD    SD    . MET MET MET A A 93  93  . 0.1691 0.1036 0.1572 -0.0120 -0.0023 -
0.0021 1 .
699  CE    CE    . MET MET MET A A 93  93  . 0.1669 0.1169 0.1447 -0.0291 0.0134  -
0.0562 1 .
700  C     C     . MET MET MET A A 93  93  . 0.1338 0.1245 0.1410 0.0175  -0.0075
0.0093  1 .
701  O     O     . MET MET MET A A 93  93  . 0.1462 0.1379 0.1559 0.0148  0.0125
0.0048  1 .
702  N     N     . LEU LEU LEU A A 94  94  . 0.1275 0.0787 0.1221 0.0194  -0.0176 -
0.0015 1 .
703  CA    CA    . LEU LEU LEU A A 94  94  . 0.1465 0.0852 0.1378 0.0286  -0.0107 -
0.0013 1 .
704  CB    CB    . LEU LEU LEU A A 94  94  . 0.1677 0.1081 0.1575 0.0102  -0.0265 -
0.0019 1 .
705  CG    CG    . LEU LEU LEU A A 94  94  . 0.1788 0.1223 0.1421 -0.0108 -0.0020 -
0.0395 1 .
706  CD1   CD1   . LEU LEU LEU A A 94  94  . 0.2528 0.2461 0.1567 -0.0431 0.0177  -
0.0221 1 .
707  CD2   CD2   . LEU LEU LEU A A 94  94  . 0.2093 0.1499 0.1978 -0.0144 0.0415  -
0.0295 1 .
708  C     C     . LEU LEU LEU A A 94  94  . 0.1477 0.1138 0.1431 0.0185  -0.0095 -
0.0024 1 .
709  O     O     . LEU LEU LEU A A 94  94  . 0.1865 0.1550 0.1656 0.0313  -0.0032
0.0157  1 .
710  N     N     . GLU GLU GLU A A 95  95  . 0.1589 0.1142 0.1596 0.0158  -0.0175
0.0167  1 .
711  CA    CA    . GLU GLU GLU A A 95  95  . 0.1706 0.1483 0.1821 -0.0054 0.0016
0.0092  1 .
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712  CB    CB    . GLU GLU GLU A A 95  95  . 0.2082 0.1684 0.1868 -0.0177 0.0161
0.0407  1 .
713  CG    CG    . GLU GLU GLU A A 95  95  . 0.3374 0.2663 0.2749 -0.0089 -0.0225
0.0257  1 .
714  CD    CD    . GLU GLU GLU A A 95  95  . 0.4766 0.4260 0.4538 0.0254  -0.0833
0.0185  1 .
715  OE1   OE1   . GLU GLU GLU A A 95  95  . 0.6007 0.4551 0.5249 0.0308  -0.0579
0.0007  1 .
716  OE2   OE2   . GLU GLU GLU A A 95  95  . 0.5219 0.4532 0.5335 -0.0080 -0.0823 -
0.0029 1 .
717  C     C     . GLU GLU GLU A A 95  95  . 0.1582 0.1428 0.1816 -0.0086 -0.0033
0.0099  1 .
718  O     O     . GLU GLU GLU A A 95  95  . 0.1566 0.1218 0.2051 0.0011  -0.0195
0.0284  1 .
719  N     N     . LEU LEU LEU A A 96  96  . 0.1427 0.1430 0.1740 -0.0141 -0.0131 -
0.0011 1 .
720  CA    CA    . LEU LEU LEU A A 96  96  . 0.1307 0.1195 0.1552 -0.0090 -0.0028 -
0.0029 1 .
721  CB    CB    . LEU LEU LEU A A 96  96  . 0.1247 0.1293 0.1448 -0.0186 -0.0251 -
0.0107 1 .
722  CG    CG    . LEU LEU LEU A A 96  96  . 0.1573 0.1307 0.1240 0.0011  -0.0081 -
0.0023 1 .
723  CD1   CD1   . LEU LEU LEU A A 96  96  . 0.2272 0.1655 0.1388 -0.0299 -0.0245 -
0.0267 1 .
724  CD2   CD2   . LEU LEU LEU A A 96  96  . 0.1399 0.1396 0.1097 -0.0084 -0.0471
0.0195  1 .
725  C     C     . LEU LEU LEU A A 96  96  . 0.1370 0.1302 0.1719 0.0007  -0.0017 -
0.0069 1 .
726  O     O     . LEU LEU LEU A A 96  96  . 0.1603 0.1238 0.1926 0.0039  0.0098  -
0.0225 1 .
727  N     N     . ASP ASP ASP A A 97  97  . 0.1294 0.0964 0.1524 -0.0039 0.0027  -
0.0024 1 .
728  CA    CA    . ASP ASP ASP A A 97  97  . 0.1065 0.0992 0.1448 -0.0054 -0.0091
0.0022  1 .
729  CB    CB    . ASP ASP ASP A A 97  97  . 0.1001 0.1144 0.1727 -0.0136 -0.0240 -
0.0197 1 .
730  CG    CG    . ASP ASP ASP A A 97  97  . 0.1393 0.0974 0.1489 -0.0070 0.0087  -
0.0095 1 .
731  OD1   OD1   . ASP ASP ASP A A 97  97  . 0.1302 0.1317 0.1471 0.0063  -0.0075 -
0.0044 1 .
732  OD2   OD2   . ASP ASP ASP A A 97  97  . 0.1674 0.1289 0.1607 -0.0161 -0.0285
0.0232  1 .
733  C     C     . ASP ASP ASP A A 97  97  . 0.1398 0.1182 0.1536 0.0077  0.0070
0.0038  1 .
734  O     O     . ASP ASP ASP A A 97  97  . 0.1604 0.1185 0.1438 0.0044  0.0084  -
0.0048 1 .
735  N     N     . GLY GLY GLY A A 98  98  . 0.1587 0.1377 0.1467 0.0060  -0.0043
0.0307  1 .
736  CA    CA    . GLY GLY GLY A A 98  98  . 0.1604 0.1372 0.1914 0.0044  -0.0081
0.0212  1 .
737  C     C     . GLY GLY GLY A A 98  98  . 0.1664 0.1632 0.1947 0.0112  -0.0115
0.0282  1 .
738  O     O     . GLY GLY GLY A A 98  98  . 0.1893 0.1637 0.2721 -0.0098 0.0085
0.0444  1 .
739  N     N     . THR THR THR A A 99  99  . 0.1588 0.1404 0.1626 -0.0017 -0.0039
0.0127  1 .
740  CA    CA    . THR THR THR A A 99  99  . 0.1822 0.1476 0.1562 0.0082  -0.0079
0.0098  1 .
741  CB    CB    . THR THR THR A A 99  99  . 0.1808 0.1710 0.1802 0.0209  -0.0023
0.0021  1 .
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742  OG1   OG1   . THR THR THR A A 99  99  . 0.2174 0.1270 0.1860 0.0352  0.0247  -
0.0006 1 .
743  CG2   CG2   . THR THR THR A A 99  99  . 0.1843 0.0960 0.1653 -0.0048 -0.0010
0.0036  1 .
744  C     C     . THR THR THR A A 99  99  . 0.1882 0.1671 0.1901 0.0083  -0.0086 -
0.0021 1 .
745  O     O     . THR THR THR A A 99  99  . 0.2142 0.1941 0.1992 0.0109  -0.0151 -
0.0048 1 .
746  N     N     . GLU GLU GLU A A 100 100 . 0.2098 0.1675 0.1631 0.0094  -0.0330
0.0125  1 .
747  CA    CA    . GLU GLU GLU A A 100 100 . 0.2393 0.1632 0.2106 -0.0024 -0.0245
0.0204  1 .
748  CB    CB    . GLU GLU GLU A A 100 100 . 0.2648 0.2093 0.2170 -0.0132 -0.0350
0.0165  1 .
749  CG    CG    . GLU GLU GLU A A 100 100 . 0.4058 0.2431 0.3084 -0.0183 -0.0287 -
0.0216 1 .
750  CD    CD    . GLU GLU GLU A A 100 100 . 0.4592 0.4134 0.4607 -0.0264 -0.0043 -
0.0069 1 .
751  OE1   OE1   . GLU GLU GLU A A 100 100 . 0.5201 0.4468 0.5036 -0.0625 -0.0458
0.0494  1 .
752  OE2   OE2   . GLU GLU GLU A A 100 100 . 0.5328 0.4430 0.5317 -0.0172 -0.0072 -
0.0188 1 .
753  C     C     . GLU GLU GLU A A 100 100 . 0.2060 0.1571 0.1878 0.0019  -0.0164
0.0154  1 .
754  O     O     . GLU GLU GLU A A 100 100 . 0.2342 0.1348 0.1688 -0.0001 -0.0095
0.0262  1 .
755  N     N     . ASN ASN ASN A A 101 101 . 0.1564 0.1380 0.1754 -0.0004 -0.0094
0.0123  1 .
756  CA    CA    . ASN ASN ASN A A 101 101 . 0.1576 0.1421 0.1730 -0.0028 0.0033
0.0111  1 .
757  CB    CB    . ASN ASN ASN A A 101 101 . 0.1770 0.2030 0.2382 0.0069  0.0050
0.0110  1 .
758  CG    CG    . ASN ASN ASN A A 101 101 . 0.2975 0.3081 0.3272 -0.0148 0.0034  -
0.0109 1 .
759  OD1   OD1   . ASN ASN ASN A A 101 101 . 0.4616 0.4016 0.4408 -0.0245 -0.0306
0.0193  1 .
760  ND2   ND2   . ASN ASN ASN A A 101 101 . 0.4942 0.3765 0.4459 -0.0470 -0.0179
0.0757  1 .
761  C     C     . ASN ASN ASN A A 101 101 . 0.1390 0.1297 0.1496 0.0042  0.0056
0.0112  1 .
762  O     O     . ASN ASN ASN A A 101 101 . 0.1223 0.1354 0.1526 0.0025  -0.0004
0.0165  1 .
763  N     N     . LYS LYS LYS A A 102 102 . 0.1145 0.0956 0.1243 0.0153  0.0023
0.0177  1 .
764  CA    CA    . LYS LYS LYS A A 102 102 . 0.1217 0.0951 0.1232 0.0181  -0.0021 -
0.0014 1 .
765  CB    CB    . LYS LYS LYS A A 102 102 . 0.1172 0.1214 0.1112 0.0400  0.0040  -
0.0051 1 .
766  CG    CG    . LYS LYS LYS A A 102 102 . 0.1156 0.1073 0.0767 0.0320  0.0020  -
0.0090 1 .
767  CD    CD    . LYS LYS LYS A A 102 102 . 0.1112 0.0823 0.1156 0.0012  0.0006
0.0057  1 .
768  CE    CE    . LYS LYS LYS A A 102 102 . 0.1527 0.1388 0.1892 -0.0168 -0.0073 -
0.0046 1 .
769  NZ    NZ    . LYS LYS LYS A A 102 102 . 0.2045 0.1429 0.0648 0.0174  -0.0141
0.0097  1 .
770  C     C     . LYS LYS LYS A A 102 102 . 0.1360 0.1142 0.1362 0.0157  0.0011
0.0061  1 .
771  O     O     . LYS LYS LYS A A 102 102 . 0.1253 0.1102 0.1184 0.0118  -0.0055 -
0.0101 1 .
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772  N     N     . SER SER SER A A 103 103 . 0.1214 0.1328 0.1454 0.0093  0.0010
0.0102  1 .
773  CA    CA    . SER SER SER A A 103 103 . 0.1483 0.1598 0.1766 0.0170  -0.0002 -
0.0072 1 .
774  CB    CB    . SER SER SER A A 103 103 . 0.1574 0.1842 0.2020 0.0286  -0.0077
0.0070  1 .
775  OG    OG    . SER SER SER A A 103 103 . 0.1656 0.2151 0.2545 0.0354  0.0002
0.0305  1 .
776  C     C     . SER SER SER A A 103 103 . 0.1642 0.1576 0.1483 0.0208  0.0074  -
0.0012 1 .
777  O     O     . SER SER SER A A 103 103 . 0.2219 0.2096 0.1459 0.0369  0.0338  -
0.0192 1 .
778  N     N     . LYS LYS LYS A A 104 104 . 0.1387 0.1393 0.1344 0.0153  -0.0058 -
0.0272 1 .
779  CA    CA    . LYS LYS LYS A A 104 104 . 0.1579 0.1378 0.1595 0.0136  -0.0050 -
0.0082 1 .
780  CB    CB    . LYS LYS LYS A A 104 104 . 0.1872 0.1499 0.1685 -0.0080 -0.0093 -
0.0106 1 .
781  CG    CG    . LYS LYS LYS A A 104 104 . 0.2014 0.1613 0.1519 0.0077  -0.0319 -
0.0014 1 .
782  CD    CD    . LYS LYS LYS A A 104 104 . 0.2185 0.2003 0.2376 -0.0193 -0.0840
0.0000  1 .
783  CE    CE    . LYS LYS LYS A A 104 104 . 0.2695 0.2643 0.3176 -0.0320 -0.0390
0.0448  1 .
784  NZ    NZ    . LYS LYS LYS A A 104 104 . 0.2598 0.3069 0.2732 0.0007  0.0146  -
0.0026 1 .
785  C     C     . LYS LYS LYS A A 104 104 . 0.1659 0.1520 0.1541 0.0086  0.0030  -
0.0063 1 .
786  O     O     . LYS LYS LYS A A 104 104 . 0.1905 0.1633 0.1648 0.0310  -0.0191 -
0.0084 1 .
787  N     N     . PHE PHE PHE A A 105 105 . 0.1341 0.1278 0.1723 0.0164  0.0097  -
0.0001 1 .
788  CA    CA    . PHE PHE PHE A A 105 105 . 0.1331 0.1238 0.1439 0.0036  0.0093  -
0.0006 1 .
789  CB    CB    . PHE PHE PHE A A 105 105 . 0.1121 0.1372 0.1310 -0.0102 0.0117
0.0263  1 .
790  CG    CG    . PHE PHE PHE A A 105 105 . 0.1503 0.1378 0.1550 -0.0115 -0.0057 -
0.0079 1 .
791  CD1   CD1   . PHE PHE PHE A A 105 105 . 0.1865 0.1567 0.1572 -0.0577 -0.0022
0.0532  1 .
792  CE1   CE1   . PHE PHE PHE A A 105 105 . 0.2579 0.1477 0.2193 -0.0568 -0.0184
0.0055  1 .
793  CZ    CZ    . PHE PHE PHE A A 105 105 . 0.2126 0.2149 0.1621 0.0078  0.0210  -
0.0179 1 .
794  CE2   CE2   . PHE PHE PHE A A 105 105 . 0.1996 0.1530 0.1266 0.0025  0.0024
0.0342  1 .
795  CD2   CD2   . PHE PHE PHE A A 105 105 . 0.1477 0.1498 0.1235 0.0127  -0.0541
0.0175  1 .
796  C     C     . PHE PHE PHE A A 105 105 . 0.1345 0.1260 0.1395 -0.0079 -0.0001
0.0081  1 .
797  O     O     . PHE PHE PHE A A 105 105 . 0.1375 0.1363 0.1393 -0.0045 0.0016
0.0077  1 .
798  N     N     . GLY GLY GLY A A 106 106 . 0.1259 0.1133 0.1134 0.0020  0.0061  -
0.0136 1 .
799  CA    CA    . GLY GLY GLY A A 106 106 . 0.1082 0.1047 0.1071 0.0019  0.0024
0.0165  1 .
800  C     C     . GLY GLY GLY A A 106 106 . 0.1229 0.0917 0.1067 0.0004  -0.0015
0.0214  1 .
801  O     O     . GLY GLY GLY A A 106 106 . 0.1063 0.1177 0.1250 0.0081  0.0069
0.0332  1 .
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802  N     N     . ALA ALA ALA A A 107 107 . 0.1197 0.1236 0.1149 0.0035  -0.0074
0.0094  1 .
803  CA    CA    . ALA ALA ALA A A 107 107 . 0.1039 0.1097 0.1084 0.0011  -0.0021 -
0.0050 1 .
804  CB    CB    . ALA ALA ALA A A 107 107 . 0.1281 0.1497 0.0851 0.0111  -0.0070 -
0.0204 1 .
805  C     C     . ALA ALA ALA A A 107 107 . 0.0970 0.1219 0.1080 0.0137  0.0104
0.0116  1 .
806  O     O     . ALA ALA ALA A A 107 107 . 0.1067 0.1157 0.0936 -0.0039 0.0163  -
0.0073 1 .
807  N     N     . ASN ASN ASN A A 108 108 . 0.1037 0.1120 0.1024 0.0156  -0.0028 -
0.0079 1 .
808  CA    CA    . ASN ASN ASN A A 108 108 . 0.1034 0.1055 0.1077 -0.0027 -0.0011
0.0121  1 .
809  CB    CB    . ASN ASN ASN A A 108 108 . 0.1072 0.1064 0.0797 0.0220  0.0206
0.0055  1 .
810  CG    CG    . ASN ASN ASN A A 108 108 . 0.1417 0.1186 0.1253 0.0176  0.0181
0.0080  1 .
811  OD1   OD1   . ASN ASN ASN A A 108 108 . 0.1324 0.1483 0.1119 0.0229  0.0121  -
0.0082 1 .
812  ND2   ND2   . ASN ASN ASN A A 108 108 . 0.1145 0.1419 0.1165 -0.0042 0.0066
0.0159  1 .
813  C     C     . ASN ASN ASN A A 108 108 . 0.1187 0.1066 0.1225 -0.0017 0.0027
0.0012  1 .
814  O     O     . ASN ASN ASN A A 108 108 . 0.1109 0.1165 0.1420 -0.0100 -0.0084
0.0098  1 .
815  N     N     . ALA ALA ALA A A 109 109 . 0.1135 0.1034 0.0999 -0.0040 -0.0053
0.0018  1 .
816  CA    CA    . ALA ALA ALA A A 109 109 . 0.0892 0.0947 0.1014 0.0059  0.0011  -
0.0108 1 .
817  CB    CB    . ALA ALA ALA A A 109 109 . 0.1039 0.0883 0.1000 0.0213  -0.0231 -
0.0297 1 .
818  C     C     . ALA ALA ALA A A 109 109 . 0.1044 0.0993 0.1123 0.0160  0.0061  -
0.0016 1 .
819  O     O     . ALA ALA ALA A A 109 109 . 0.0816 0.0978 0.1114 -0.0027 0.0054
0.0060  1 .
820  N     N     . ILE ILE ILE A A 110 110 . 0.1077 0.0647 0.0668 0.0098  0.0016  -
0.0185 1 .
821  CA    CA    . ILE ILE ILE A A 110 110 . 0.1209 0.0865 0.1081 0.0177  0.0019  -
0.0015 1 .
822  CB    CB    . ILE ILE ILE A A 110 110 . 0.1102 0.0841 0.0904 0.0194  0.0007  -
0.0122 1 .
823  CG1   CG1   . ILE ILE ILE A A 110 110 . 0.1079 0.0625 0.0956 0.0181  -0.0307 -
0.0062 1 .
824  CD1   CD1   . ILE ILE ILE A A 110 110 . 0.1381 0.1091 0.1776 0.0243  -0.0717
0.0242  1 .
825  CG2   CG2   . ILE ILE ILE A A 110 110 . 0.1222 0.0989 0.1242 0.0268  0.0401
0.0067  1 .
826  C     C     . ILE ILE ILE A A 110 110 . 0.1045 0.0866 0.1087 0.0016  0.0007  -
0.0145 1 .
827  O     O     . ILE ILE ILE A A 110 110 . 0.1105 0.0926 0.1150 -0.0001 0.0003  -
0.0081 1 .
828  N     N     . LEU LEU LEU A A 111 111 . 0.1064 0.0887 0.0817 0.0044  -0.0065 -
0.0066 1 .
829  CA    CA    . LEU LEU LEU A A 111 111 . 0.0800 0.0619 0.0732 0.0064  -0.0112 -
0.0208 1 .
830  CB    CB    . LEU LEU LEU A A 111 111 . 0.0867 0.0543 0.1085 -0.0021 -0.0057 -
0.0097 1 .
831  CG    CG    . LEU LEU LEU A A 111 111 . 0.0770 0.0698 0.0864 -0.0025 0.0127  -
0.0243 1 .
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832  CD1   CD1   . LEU LEU LEU A A 111 111 . 0.1122 0.1019 0.0645 0.0026  0.0179  -
0.0344 1 .
833  CD2   CD2   . LEU LEU LEU A A 111 111 . 0.1114 0.0923 0.1092 -0.0320 0.0063  -
0.0205 1 .
834  C     C     . LEU LEU LEU A A 111 111 . 0.0908 0.0621 0.0872 -0.0078 0.0038  -
0.0086 1 .
835  O     O     . LEU LEU LEU A A 111 111 . 0.1091 0.0941 0.0809 -0.0021 -0.0006 -
0.0012 1 .
836  N     N     . GLY GLY GLY A A 112 112 . 0.0801 0.0785 0.0635 -0.0062 -0.0002 -
0.0061 1 .
837  CA    CA    . GLY GLY GLY A A 112 112 . 0.1055 0.0650 0.0861 -0.0051 -0.0164
0.0019  1 .
838  C     C     . GLY GLY GLY A A 112 112 . 0.1122 0.1017 0.0708 0.0115  0.0072  -
0.0003 1 .
839  O     O     . GLY GLY GLY A A 112 112 . 0.0905 0.1123 0.0854 0.0089  -0.0078
0.0005  1 .
840  N     N     . VAL VAL VAL A A 113 113 . 0.0991 0.0701 0.0842 -0.0041 0.0202  -
0.0015 1 .
841  CA    CA    . VAL VAL VAL A A 113 113 . 0.0885 0.0864 0.1025 -0.0039 0.0200
0.0028  1 .
842  CB    CB    . VAL VAL VAL A A 113 113 . 0.0960 0.0651 0.0941 -0.0216 0.0269  -
0.0013 1 .
843  CG1   CG1   . VAL VAL VAL A A 113 113 . 0.1042 0.0946 0.0944 -0.0137 0.0176
0.0183  1 .
844  CG2   CG2   . VAL VAL VAL A A 113 113 . 0.1020 0.0633 0.0724 -0.0110 0.0013  -
0.0084 1 .
845  C     C     . VAL VAL VAL A A 113 113 . 0.0804 0.0695 0.0933 -0.0080 0.0064
0.0169  1 .
846  O     O     . VAL VAL VAL A A 113 113 . 0.0778 0.0719 0.0954 0.0154  0.0122
0.0051  1 .
847  N     N     . SER SER SER A A 114 114 . 0.0961 0.0781 0.1034 -0.0075 0.0143
0.0077  1 .
848  CA    CA    . SER SER SER A A 114 114 . 0.0923 0.0799 0.0941 0.0011  0.0084  -
0.0011 1 .
849  CB    CB    . SER SER SER A A 114 114 . 0.1072 0.1044 0.1051 0.0171  0.0086  -
0.0051 1 .
850  OG    OG    . SER SER SER A A 114 114 . 0.1242 0.1348 0.1185 0.0134  -0.0135 -
0.0046 1 .
851  C     C     . SER SER SER A A 114 114 . 0.1114 0.0941 0.1083 0.0024  0.0199  -
0.0051 1 .
852  O     O     . SER SER SER A A 114 114 . 0.1060 0.1014 0.0837 -0.0038 0.0087  -
0.0188 1 .
853  N     N     . LEU LEU LEU A A 115 115 . 0.1309 0.0849 0.1307 -0.0035 -0.0109 -
0.0007 1 .
854  CA    CA    . LEU LEU LEU A A 115 115 . 0.0672 0.0576 0.1033 0.0021  -0.0003
0.0137  1 .
855  CB    CB    . LEU LEU LEU A A 115 115 . 0.0852 0.0890 0.1033 -0.0092 0.0091
0.0010  1 .
856  CG    CG    . LEU LEU LEU A A 115 115 . 0.0717 0.1300 0.0917 -0.0050 0.0011  -
0.0285 1 .
857  CD1   CD1   . LEU LEU LEU A A 115 115 . 0.1064 0.1609 0.1030 -0.0849 -0.0502
0.0059  1 .
858  CD2   CD2   . LEU LEU LEU A A 115 115 . 0.1012 0.1281 0.0952 -0.0391 -0.0336 -
0.0261 1 .
859  C     C     . LEU LEU LEU A A 115 115 . 0.0948 0.0880 0.0915 0.0018  -0.0060
0.0042  1 .
860  O     O     . LEU LEU LEU A A 115 115 . 0.0968 0.1005 0.0909 0.0036  -0.0065
0.0048  1 .
861  N     N     . ALA ALA ALA A A 116 116 . 0.0916 0.0788 0.0957 -0.0070 -0.0090
0.0098  1 .
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862  CA    CA    . ALA ALA ALA A A 116 116 . 0.1010 0.1224 0.1113 -0.0104 -0.0019 -
0.0089 1 .
863  CB    CB    . ALA ALA ALA A A 116 116 . 0.1362 0.1250 0.1332 -0.0370 0.0072
0.0049  1 .
864  C     C     . ALA ALA ALA A A 116 116 . 0.1293 0.1192 0.1180 -0.0052 -0.0040
0.0068  1 .
865  O     O     . ALA ALA ALA A A 116 116 . 0.1072 0.1106 0.1145 0.0066  0.0060
0.0157  1 .
866  N     N     . VAL VAL VAL A A 117 117 . 0.1287 0.0968 0.1127 -0.0027 0.0089
0.0018  1 .
867  CA    CA    . VAL VAL VAL A A 117 117 . 0.0916 0.0918 0.0854 -0.0098 0.0177  -
0.0008 1 .
868  CB    CB    . VAL VAL VAL A A 117 117 . 0.0733 0.0821 0.1025 -0.0176 0.0346
0.0045  1 .
869  CG1   CG1   . VAL VAL VAL A A 117 117 . 0.1084 0.1374 0.0981 -0.0330 0.0137
0.0302  1 .
870  CG2   CG2   . VAL VAL VAL A A 117 117 . 0.1137 0.1259 0.0961 -0.0316 0.0306  -
0.0072 1 .
871  C     C     . VAL VAL VAL A A 117 117 . 0.1026 0.1029 0.1041 -0.0117 0.0145  -
0.0063 1 .
872  O     O     . VAL VAL VAL A A 117 117 . 0.1199 0.0908 0.1417 0.0005  0.0049  -
0.0067 1 .
873  N     N     . CYS CYS CYS A A 118 118 . 0.1464 0.1191 0.1197 -0.0139 0.0175
0.0059  1 .
874  CA    CA    . CYS CYS CYS A A 118 118 . 0.1109 0.1024 0.1160 -0.0150 0.0130
0.0098  1 .
875  CB    CB    . CYS CYS CYS A A 118 118 . 0.1467 0.1076 0.1035 -0.0220 0.0001
0.0127  1 .
876  SG    SG    . CYS CYS CYS A A 118 118 . 0.1305 0.1530 0.1395 -0.0026 0.0216  -
0.0116 1 .
877  C     C     . CYS CYS CYS A A 118 118 . 0.1296 0.1149 0.1293 -0.0103 0.0208
0.0087  1 .
878  O     O     . CYS CYS CYS A A 118 118 . 0.1074 0.1081 0.1116 -0.0007 0.0384
0.0219  1 .
879  N     N     . LYS LYS LYS A A 119 119 . 0.1130 0.1108 0.0940 0.0024  0.0044  -
0.0110 1 .
880  CA    CA    . LYS LYS LYS A A 119 119 . 0.1047 0.1042 0.1243 -0.0063 0.0054  -
0.0020 1 .
881  CB    CB    . LYS LYS LYS A A 119 119 . 0.0873 0.1179 0.1137 -0.0155 0.0129  -
0.0039 1 .
882  CG    CG    . LYS LYS LYS A A 119 119 . 0.0819 0.1395 0.0882 -0.0442 0.0109
0.0135  1 .
883  CD    CD    . LYS LYS LYS A A 119 119 . 0.1542 0.1399 0.1097 -0.0484 0.0344
0.0091  1 .
884  CE    CE    . LYS LYS LYS A A 119 119 . 0.1735 0.2066 0.1306 -0.0692 0.0126
0.0251  1 .
885  NZ    NZ    . LYS LYS LYS A A 119 119 . 0.2144 0.1372 0.1205 -0.0536 0.0261
0.0356  1 .
886  C     C     . LYS LYS LYS A A 119 119 . 0.1150 0.1175 0.1341 -0.0025 -0.0011 -
0.0054 1 .
887  O     O     . LYS LYS LYS A A 119 119 . 0.1391 0.1424 0.1210 0.0011  0.0316  -
0.0070 1 .
888  N     N     . ALA ALA ALA A A 120 120 . 0.1066 0.1266 0.1461 -0.0300 -0.0015 -
0.0060 1 .
889  CA    CA    . ALA ALA ALA A A 120 120 . 0.0847 0.1106 0.1352 -0.0173 -0.0064 -
0.0057 1 .
890  CB    CB    . ALA ALA ALA A A 120 120 . 0.0859 0.1028 0.1394 0.0117  0.0032  -
0.0109 1 .
891  C     C     . ALA ALA ALA A A 120 120 . 0.0809 0.0960 0.1223 -0.0041 -0.0030
0.0010  1 .
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892  O     O     . ALA ALA ALA A A 120 120 . 0.0969 0.1121 0.1543 -0.0032 0.0200
0.0013  1 .
893  N     N     . GLY GLY GLY A A 121 121 . 0.0776 0.1148 0.1048 0.0099  0.0056  -
0.0092 1 .
894  CA    CA    . GLY GLY GLY A A 121 121 . 0.0931 0.1015 0.1143 0.0084  0.0193
0.0151  1 .
895  C     C     . GLY GLY GLY A A 121 121 . 0.1309 0.1126 0.1415 0.0000  0.0177
0.0067  1 .
896  O     O     . GLY GLY GLY A A 121 121 . 0.1109 0.1185 0.1517 -0.0069 -0.0019
0.0010  1 .
897  N     N     . ALA ALA ALA A A 122 122 . 0.1041 0.1171 0.1436 -0.0211 0.0004  -
0.0028 1 .
898  CA    CA    . ALA ALA ALA A A 122 122 . 0.1055 0.1145 0.1427 -0.0135 0.0140
0.0039  1 .
899  CB    CB    . ALA ALA ALA A A 122 122 . 0.1137 0.0910 0.1140 -0.0250 0.0046
0.0145  1 .
900  C     C     . ALA ALA ALA A A 122 122 . 0.1255 0.1283 0.1325 -0.0063 0.0049
0.0079  1 .
901  O     O     . ALA ALA ALA A A 122 122 . 0.1601 0.1481 0.1597 -0.0029 -0.0037
0.0095  1 .
902  N     N     . ALA ALA ALA A A 123 123 . 0.1264 0.1394 0.1400 -0.0016 -0.0016
0.0088  1 .
903  CA    CA    . ALA ALA ALA A A 123 123 . 0.1309 0.1364 0.1585 -0.0036 -0.0055
0.0026  1 .
904  CB    CB    . ALA ALA ALA A A 123 123 . 0.1507 0.1471 0.1681 -0.0185 0.0020  -
0.0030 1 .
905  C     C     . ALA ALA ALA A A 123 123 . 0.1247 0.1462 0.1653 0.0005  -0.0077
0.0008  1 .
906  O     O     . ALA ALA ALA A A 123 123 . 0.1515 0.1640 0.2037 0.0234  0.0110  -
0.0192 1 .
907  N     N     . GLU GLU GLU A A 124 124 . 0.1356 0.1384 0.1674 0.0003  -0.0001
0.0103  1 .
908  CA    CA    . GLU GLU GLU A A 124 124 . 0.1317 0.1290 0.1899 0.0045  0.0051
0.0129  1 .
909  CB    CB    . GLU GLU GLU A A 124 124 . 0.1601 0.1305 0.2219 0.0097  0.0081  -
0.0045 1 .
910  CG    CG    . GLU GLU GLU A A 124 124 . 0.1778 0.1608 0.2917 -0.0148 -0.0050
0.0074  1 .
911  CD    CD    . GLU GLU GLU A A 124 124 . 0.2968 0.3002 0.3370 -0.0131 -0.0379
0.0135  1 .
912  OE1   OE1   . GLU GLU GLU A A 124 124 . 0.4366 0.3064 0.3766 -0.0836 -0.1345
0.0451  1 .
913  OE2   OE2   . GLU GLU GLU A A 124 124 . 0.3622 0.2858 0.5048 -0.0626 -0.0999
0.0682  1 .
914  C     C     . GLU GLU GLU A A 124 124 . 0.1460 0.1583 0.2045 -0.0062 0.0089
0.0043  1 .
915  O     O     . GLU GLU GLU A A 124 124 . 0.1389 0.1651 0.2195 -0.0314 0.0279
0.0027  1 .
916  N     N     . ARG ARG ARG A A 125 125 . 0.1418 0.1705 0.1759 -0.0078 0.0033  -
0.0039 1 .
917  CA    CA    . ARG ARG ARG A A 125 125 . 0.1572 0.1626 0.1894 -0.0069 0.0117
0.0087  1 .
918  CB    CB    . ARG ARG ARG A A 125 125 . 0.1600 0.1675 0.1806 -0.0106 0.0030
0.0138  1 .
919  CG    CG    . ARG ARG ARG A A 125 125 . 0.2041 0.2021 0.1872 0.0282  0.0218
0.0274  1 .
920  CD    CD    . ARG ARG ARG A A 125 125 . 0.2372 0.1613 0.2369 0.0153  -0.0068
0.0792  1 .
921  NE    NE    . ARG ARG ARG A A 125 125 . 0.2152 0.2311 0.2526 0.0127  0.0208
0.0499  1 .
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922  CZ    CZ    . ARG ARG ARG A A 125 125 . 0.2083 0.2183 0.2170 0.0263  0.0044  -
0.0145 1 .
923  NH1   NH1   . ARG ARG ARG A A 125 125 . 0.1639 0.1943 0.2076 0.0673  0.0400
0.0044  1 .
924  NH2   NH2   . ARG ARG ARG A A 125 125 . 0.2619 0.2294 0.2423 -0.0218 0.0138  -
0.0561 1 .
925  C     C     . ARG ARG ARG A A 125 125 . 0.1497 0.1791 0.2044 -0.0131 0.0172  -
0.0078 1 .
926  O     O     . ARG ARG ARG A A 125 125 . 0.1306 0.1491 0.1971 -0.0113 0.0438  -
0.0147 1 .
927  N     N     . GLU GLU GLU A A 126 126 . 0.1111 0.1619 0.2297 -0.0019 0.0043  -
0.0017 1 .
928  CA    CA    . GLU GLU GLU A A 126 126 . 0.1239 0.1824 0.2586 -0.0179 0.0095  -
0.0151 1 .
929  CB    CB    . GLU GLU GLU A A 126 126 . 0.1592 0.2195 0.2880 -0.0043 0.0077  -
0.0131 1 .
930  CG    CG    . GLU GLU GLU A A 126 126 . 0.2841 0.2856 0.3476 -0.0330 -0.0324 -
0.0187 1 .
931  CD    CD    . GLU GLU GLU A A 126 126 . 0.4711 0.4567 0.4299 -0.0453 -0.0474
0.0392  1 .
932  OE1   OE1   . GLU GLU GLU A A 126 126 . 0.4244 0.5575 0.5444 -0.0833 -0.0039
0.0111  1 .
933  OE2   OE2   . GLU GLU GLU A A 126 126 . 0.6099 0.5006 0.5626 -0.0445 -0.0312
0.0372  1 .
934  C     C     . GLU GLU GLU A A 126 126 . 0.1498 0.1898 0.2385 0.0004  0.0206  -
0.0250 1 .
935  O     O     . GLU GLU GLU A A 126 126 . 0.1297 0.1826 0.2560 -0.0153 0.0316  -
0.0401 1 .
936  N     N     . LEU LEU LEU A A 127 127 . 0.1132 0.1650 0.2066 -0.0095 0.0063  -
0.0023 1 .
937  CA    CA    . LEU LEU LEU A A 127 127 . 0.1512 0.1626 0.1545 -0.0080 0.0063  -
0.0103 1 .
938  CB    CB    . LEU LEU LEU A A 127 127 . 0.1390 0.1566 0.1562 0.0094  0.0029  -
0.0222 1 .
939  CG    CG    . LEU LEU LEU A A 127 127 . 0.1594 0.1730 0.1873 -0.0111 0.0029
0.0070  1 .
940  CD1   CD1   . LEU LEU LEU A A 127 127 . 0.1738 0.1906 0.1979 -0.0482 -0.0074
0.0450  1 .
941  CD2   CD2   . LEU LEU LEU A A 127 127 . 0.1895 0.2046 0.1956 -0.0426 0.0428  -
0.0224 1 .
942  C     C     . LEU LEU LEU A A 127 127 . 0.1314 0.1497 0.1574 -0.0143 0.0163  -
0.0198 1 .
943  O     O     . LEU LEU LEU A A 127 127 . 0.1125 0.1750 0.1789 0.0071  0.0146  -
0.0161 1 .
944  N     N     . PRO PRO PRO A A 128 128 . 0.1174 0.1457 0.1536 -0.0173 0.0218
0.0005  1 .
945  CA    CA    . PRO PRO PRO A A 128 128 . 0.1134 0.1295 0.1691 -0.0117 0.0238  -
0.0132 1 .
946  CB    CB    . PRO PRO PRO A A 128 128 . 0.1351 0.1388 0.1909 -0.0141 0.0266  -
0.0376 1 .
947  CG    CG    . PRO PRO PRO A A 128 128 . 0.1697 0.1562 0.1977 -0.0363 0.0454
0.0123  1 .
948  CD    CD    . PRO PRO PRO A A 128 128 . 0.1229 0.1160 0.1623 -0.0365 0.0267  -
0.0073 1 .
949  C     C     . PRO PRO PRO A A 128 128 . 0.1205 0.1422 0.1426 -0.0062 0.0130
0.0059  1 .
950  O     O     . PRO PRO PRO A A 128 128 . 0.0976 0.1407 0.1451 0.0160  -0.0026 -
0.0085 1 .
951  N     N     . LEU LEU LEU A A 129 129 . 0.0907 0.1415 0.1412 0.0242  0.0105  -
0.0040 1 .
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952  CA    CA    . LEU LEU LEU A A 129 129 . 0.1044 0.1344 0.1364 0.0138  0.0142
0.0019  1 .
953  CB    CB    . LEU LEU LEU A A 129 129 . 0.0934 0.0949 0.1123 0.0227  0.0181  -
0.0082 1 .
954  CG    CG    . LEU LEU LEU A A 129 129 . 0.0571 0.0824 0.1121 0.0199  0.0408
0.0102  1 .
955  CD1   CD1   . LEU LEU LEU A A 129 129 . 0.1196 0.1093 0.1208 -0.0065 0.0330
0.0191  1 .
956  CD2   CD2   . LEU LEU LEU A A 129 129 . 0.1438 0.1241 0.0569 -0.0061 -0.0066
0.0102  1 .
957  C     C     . LEU LEU LEU A A 129 129 . 0.0895 0.1198 0.1202 0.0101  0.0218  -
0.0030 1 .
958  O     O     . LEU LEU LEU A A 129 129 . 0.1225 0.0943 0.1199 0.0118  0.0206  -
0.0022 1 .
959  N     N     . TYR TYR TYR A A 130 130 . 0.0911 0.1185 0.1298 0.0133  0.0148
0.0020  1 .
960  CA    CA    . TYR TYR TYR A A 130 130 . 0.1074 0.1005 0.1258 -0.0047 0.0181  -
0.0036 1 .
961  CB    CB    . TYR TYR TYR A A 130 130 . 0.1387 0.1027 0.1520 0.0069  0.0215
0.0116  1 .
962  CG    CG    . TYR TYR TYR A A 130 130 . 0.1249 0.1519 0.1228 0.0134  0.0042
0.0233  1 .
963  CD1   CD1   . TYR TYR TYR A A 130 130 . 0.1399 0.1345 0.2017 0.0251  0.0100
0.0329  1 .
964  CE1   CE1   . TYR TYR TYR A A 130 130 . 0.1470 0.1036 0.1962 0.0131  0.0278
0.0012  1 .
965  CZ    CZ    . TYR TYR TYR A A 130 130 . 0.1152 0.1111 0.1745 -0.0084 0.0018  -
0.0194 1 .
966  OH    OH    . TYR TYR TYR A A 130 130 . 0.1922 0.1227 0.3069 0.0429  -0.0139 -
0.0363 1 .
967  CE2   CE2   . TYR TYR TYR A A 130 130 . 0.1212 0.1117 0.1925 -0.0049 -0.0064
0.0180  1 .
968  CD2   CD2   . TYR TYR TYR A A 130 130 . 0.1109 0.0834 0.1882 0.0147  -0.0089
0.0774  1 .
969  C     C     . TYR TYR TYR A A 130 130 . 0.1101 0.1183 0.1179 0.0052  0.0040
0.0066  1 .
970  O     O     . TYR TYR TYR A A 130 130 . 0.1382 0.1137 0.1084 0.0113  0.0155
0.0049  1 .
971  N     N     . ARG ARG ARG A A 131 131 . 0.1036 0.1098 0.1308 0.0090  0.0172
0.0023  1 .
972  CA    CA    . ARG ARG ARG A A 131 131 . 0.1072 0.1239 0.1550 0.0052  0.0148
0.0164  1 .
973  CB    CB    . ARG ARG ARG A A 131 131 . 0.1321 0.1676 0.2029 0.0365  0.0027  -
0.0181 1 .
974  CG    CG    . ARG ARG ARG A A 131 131 . 0.3089 0.2926 0.2865 0.0066  0.0226  -
0.0021 1 .
975  CD    CD    . ARG ARG ARG A A 131 131 . 0.3922 0.4938 0.3609 -0.0115 0.0823
0.0111  1 .
976  NE    NE    . ARG ARG ARG A A 131 131 . 0.4444 0.5022 0.4362 -0.0487 0.0526  -
0.0373 1 .
977  CZ    CZ    . ARG ARG ARG A A 131 131 . 0.4513 0.5110 0.4508 -0.0207 0.0472  -
0.0443 1 .
978  NH1   NH1   . ARG ARG ARG A A 131 131 . 0.3994 0.4771 0.4487 -0.0369 0.0663  -
0.0467 1 .
979  NH2   NH2   . ARG ARG ARG A A 131 131 . 0.3935 0.4701 0.5044 -0.0498 0.0689  -
0.0515 1 .
980  C     C     . ARG ARG ARG A A 131 131 . 0.1137 0.1289 0.1268 0.0019  0.0164
0.0036  1 .
981  O     O     . ARG ARG ARG A A 131 131 . 0.1223 0.1247 0.1201 0.0000  0.0188
0.0252  1 .
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982  N     N     . HIS HIS HIS A A 132 132 . 0.0889 0.1021 0.1286 -0.0207 0.0227
0.0093  1 .
983  CA    CA    . HIS HIS HIS A A 132 132 . 0.0942 0.0954 0.0962 0.0052  0.0212  -
0.0096 1 .
984  CB    CB    . HIS HIS HIS A A 132 132 . 0.1406 0.1079 0.1143 0.0063  0.0109  -
0.0142 1 .
985  CG    CG    . HIS HIS HIS A A 132 132 . 0.1718 0.1060 0.1192 0.0053  0.0050  -
0.0101 1 .
986  ND1   ND1   . HIS HIS HIS A A 132 132 . 0.1327 0.1540 0.1818 -0.0306 0.0084  -
0.0269 1 .
987  CE1   CE1   . HIS HIS HIS A A 132 132 . 0.1600 0.1893 0.2415 -0.0337 0.0285  -
0.0260 1 .
988  NE2   NE2   . HIS HIS HIS A A 132 132 . 0.1923 0.1314 0.1695 0.0031  0.0180
0.0001  1 .
989  CD2   CD2   . HIS HIS HIS A A 132 132 . 0.1053 0.1257 0.1561 0.0052  -0.0179 -
0.0558 1 .
990  C     C     . HIS HIS HIS A A 132 132 . 0.1209 0.0902 0.0916 -0.0074 0.0104  -
0.0117 1 .
991  O     O     . HIS HIS HIS A A 132 132 . 0.1199 0.1156 0.0888 0.0050  0.0087  -
0.0075 1 .
992  N     N     . ILE ILE ILE A A 133 133 . 0.0985 0.1009 0.0890 -0.0104 0.0096  -
0.0176 1 .
993  CA    CA    . ILE ILE ILE A A 133 133 . 0.1082 0.1125 0.1044 -0.0075 0.0102
0.0012  1 .
994  CB    CB    . ILE ILE ILE A A 133 133 . 0.1077 0.1257 0.1112 -0.0095 0.0086  -
0.0046 1 .
995  CG1   CG1   . ILE ILE ILE A A 133 133 . 0.1308 0.0895 0.0952 -0.0406 0.0352  -
0.0080 1 .
996  CD1   CD1   . ILE ILE ILE A A 133 133 . 0.0978 0.0712 0.0851 0.0027  0.0330
0.0322  1 .
997  CG2   CG2   . ILE ILE ILE A A 133 133 . 0.0924 0.1463 0.1083 -0.0023 -0.0042
0.0305  1 .
998  C     C     . ILE ILE ILE A A 133 133 . 0.1113 0.1168 0.1144 -0.0083 0.0110  -
0.0002 1 .
999  O     O     . ILE ILE ILE A A 133 133 . 0.1286 0.1077 0.0925 -0.0098 0.0162
0.0067  1 .
1000 N     N     . ALA ALA ALA A A 134 134 . 0.1305 0.1140 0.0991 -0.0142 0.0237  -
0.0134 1 .
1001 CA    CA    . ALA ALA ALA A A 134 134 . 0.1552 0.1361 0.1210 -0.0094 0.0178  -
0.0049 1 .
1002 CB    CB    . ALA ALA ALA A A 134 134 . 0.1488 0.1099 0.1165 0.0047  0.0080  -
0.0056 1 .
1003 C     C     . ALA ALA ALA A A 134 134 . 0.1301 0.1403 0.1084 -0.0048 0.0162
0.0011  1 .
1004 O     O     . ALA ALA ALA A A 134 134 . 0.1573 0.1454 0.1372 -0.0099 0.0304
0.0248  1 .
1005 N     N     . GLN GLN GLN A A 135 135 . 0.1574 0.1562 0.1469 -0.0141 0.0371  -
0.0066 1 .
1006 CA    CA    . GLN GLN GLN A A 135 135 . 0.1604 0.1324 0.1354 -0.0063 0.0197
0.0196  1 .
1007 CB    CB    . GLN GLN GLN A A 135 135 . 0.1460 0.1557 0.1598 0.0038  0.0116
0.0279  1 .
1008 CG    CG    . GLN GLN GLN A A 135 135 . 0.1792 0.1771 0.1680 0.0077  0.0372  -
0.0024 1 .
1009 CD    CD    . GLN GLN GLN A A 135 135 . 0.1441 0.1996 0.2287 0.0014  0.0581  -
0.0301 1 .
1010 OE1   OE1   . GLN GLN GLN A A 135 135 . 0.2720 0.3511 0.3445 0.0273  0.0826  -
0.0597 1 .
1011 NE2   NE2   . GLN GLN GLN A A 135 135 . 0.1510 0.2129 0.1904 -0.0410 0.0590  -
0.0027 1 .
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1012 C     C     . GLN GLN GLN A A 135 135 . 0.1427 0.1469 0.1436 0.0051  0.0217
0.0238  1 .
1013 O     O     . GLN GLN GLN A A 135 135 . 0.1583 0.1652 0.1290 0.0115  0.0317
0.0443  1 .
1014 N     N     . LEU LEU LEU A A 136 136 . 0.1475 0.1163 0.1507 0.0053  0.0267
0.0197  1 .
1015 CA    CA    . LEU LEU LEU A A 136 136 . 0.1599 0.1588 0.1450 0.0076  0.0236
0.0126  1 .
1016 CB    CB    . LEU LEU LEU A A 136 136 . 0.1469 0.1291 0.0777 -0.0035 0.0202
0.0237  1 .
1017 CG    CG    . LEU LEU LEU A A 136 136 . 0.1401 0.1233 0.1232 -0.0276 0.0479  -
0.0228 1 .
1018 CD1   CD1   . LEU LEU LEU A A 136 136 . 0.0897 0.1317 0.1043 -0.0177 0.0318
0.0238  1 .
1019 CD2   CD2   . LEU LEU LEU A A 136 136 . 0.1582 0.1279 0.1527 -0.0323 0.0681
0.0310  1 .
1020 C     C     . LEU LEU LEU A A 136 136 . 0.1855 0.1728 0.1487 0.0133  0.0047
0.0187  1 .
1021 O     O     . LEU LEU LEU A A 136 136 . 0.2163 0.1635 0.1602 0.0385  -0.0029
0.0206  1 .
1022 N     N     . ALA ALA ALA A A 137 137 . 0.1555 0.1484 0.1400 -0.0100 0.0036
0.0100  1 .
1023 CA    CA    . ALA ALA ALA A A 137 137 . 0.1788 0.1763 0.1318 0.0039  -0.0002
0.0187  1 .
1024 CB    CB    . ALA ALA ALA A A 137 137 . 0.1662 0.1553 0.1378 -0.0078 -0.0224 -
0.0307 1 .
1025 C     C     . ALA ALA ALA A A 137 137 . 0.1895 0.1801 0.1557 0.0005  -0.0065
0.0043  1 .
1026 O     O     . ALA ALA ALA A A 137 137 . 0.2091 0.2406 0.1851 0.0182  0.0045
0.0196  1 .
1027 N     N     . GLY GLY GLY A A 138 138 . 0.1944 0.1616 0.1631 0.0097  0.0176
0.0262  1 .
1028 CA    CA    . GLY GLY GLY A A 138 138 . 0.2669 0.2304 0.2177 0.0011  0.0058  -
0.0009 1 .
1029 C     C     . GLY GLY GLY A A 138 138 . 0.2918 0.2528 0.2389 -0.0066 0.0108
0.0048  1 .
1030 O     O     . GLY GLY GLY A A 138 138 . 0.3278 0.3048 0.2537 -0.0045 0.0040
0.0129  1 .
1031 N     N     . ASN ASN ASN A A 139 139 . 0.2539 0.2703 0.2165 0.0081  0.0157
0.0117  1 .
1032 CA    CA    . ASN ASN ASN A A 139 139 . 0.2608 0.2610 0.2339 -0.0108 0.0216
0.0120  1 .
1033 CB    CB    . ASN ASN ASN A A 139 139 . 0.2577 0.2901 0.2446 -0.0148 0.0191
0.0203  1 .
1034 CG    CG    . ASN ASN ASN A A 139 139 . 0.2517 0.2756 0.2228 -0.0065 0.0354
0.0359  1 .
1035 OD1   OD1   . ASN ASN ASN A A 139 139 . 0.2929 0.3908 0.1844 -0.0317 0.0369
0.0580  1 .
1036 ND2   ND2   . ASN ASN ASN A A 139 139 . 0.2117 0.2259 0.1510 -0.0034 0.0155
0.0255  1 .
1037 C     C     . ASN ASN ASN A A 139 139 . 0.2834 0.2971 0.2754 0.0010  0.0177
0.0020  1 .
1038 O     O     . ASN ASN ASN A A 139 139 . 0.2622 0.3014 0.3023 0.0259  0.0411  -
0.0123 1 .
1039 N     N     . SER SER SER A A 140 140 . 0.3313 0.3111 0.3192 0.0084  0.0103  -
0.0121 1 .
1040 CA    CA    . SER SER SER A A 140 140 . 0.3773 0.3838 0.3776 0.0081  0.0014  -
0.0027 1 .
1041 CB    CB    . SER SER SER A A 140 140 . 0.3812 0.3712 0.3857 0.0045  0.0166
0.0063  1 .
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1042 OG    OG    . SER SER SER A A 140 140 . 0.4789 0.4517 0.4535 0.0051  0.0181
0.0388  1 .
1043 C     C     . SER SER SER A A 140 140 . 0.3997 0.3946 0.3841 0.0141  -0.0078 -
0.0004 1 .
1044 O     O     . SER SER SER A A 140 140 . 0.4232 0.4546 0.4532 0.0376  -0.0157 -
0.0216 1 .
1045 N     N     . ASP ASP ASP A A 141 141 . 0.3779 0.4024 0.3823 0.0041  -0.0061
0.0011  1 .
1046 CA    CA    . ASP ASP ASP A A 141 141 . 0.3939 0.4012 0.3783 -0.0106 0.0040
0.0121  1 .
1047 CB    CB    . ASP ASP ASP A A 141 141 . 0.4131 0.4136 0.3961 -0.0146 -0.0035
0.0024  1 .
1048 CG    CG    . ASP ASP ASP A A 141 141 . 0.4588 0.4555 0.4196 -0.0021 0.0107  -
0.0060 1 .
1049 OD1   OD1   . ASP ASP ASP A A 141 141 . 0.4599 0.4492 0.4392 -0.0219 0.0307  -
0.0480 1 .
1050 OD2   OD2   . ASP ASP ASP A A 141 141 . 0.5582 0.5328 0.4856 -0.0039 -0.0551
0.0338  1 .
1051 C     C     . ASP ASP ASP A A 141 141 . 0.3617 0.3923 0.3670 -0.0093 -0.0020
0.0141  1 .
1052 O     O     . ASP ASP ASP A A 141 141 . 0.4021 0.4192 0.3835 -0.0113 -0.0177
0.0163  1 .
1053 N     N     . LEU LEU LEU A A 142 142 . 0.3067 0.3333 0.2952 -0.0243 -0.0005
0.0069  1 .
1054 CA    CA    . LEU LEU LEU A A 142 142 . 0.2406 0.2553 0.2617 -0.0213 0.0122
0.0122  1 .
1055 CB    CB    . LEU LEU LEU A A 142 142 . 0.2306 0.2492 0.2341 -0.0372 0.0346  -
0.0148 1 .
1056 CG    CG    . LEU LEU LEU A A 142 142 . 0.2503 0.2655 0.2797 -0.0050 0.0455  -
0.0102 1 .
1057 CD1   CD1   . LEU LEU LEU A A 142 142 . 0.2578 0.3156 0.2536 -0.0122 0.0437  -
0.0085 1 .
1058 CD2   CD2   . LEU LEU LEU A A 142 142 . 0.2058 0.1778 0.2924 -0.0016 0.1179  -
0.0354 1 .
1059 C     C     . LEU LEU LEU A A 142 142 . 0.2275 0.2391 0.2270 -0.0136 0.0052
0.0115  1 .
1060 O     O     . LEU LEU LEU A A 142 142 . 0.2258 0.2491 0.1650 -0.0333 0.0384
0.0138  1 .
1061 N     N     . ILE ILE ILE A A 143 143 . 0.2108 0.2086 0.2027 -0.0178 0.0172
0.0331  1 .
1062 CA    CA    . ILE ILE ILE A A 143 143 . 0.2131 0.2247 0.1924 -0.0127 0.0038
0.0189  1 .
1063 CB    CB    . ILE ILE ILE A A 143 143 . 0.2374 0.2973 0.2109 -0.0041 0.0193
0.0396  1 .
1064 CG1   CG1   . ILE ILE ILE A A 143 143 . 0.2469 0.2803 0.1996 0.0118  0.0115
0.0470  1 .
1065 CD1   CD1   . ILE ILE ILE A A 143 143 . 0.2684 0.1746 0.2778 -0.0782 -0.0384
0.0277  1 .
1066 CG2   CG2   . ILE ILE ILE A A 143 143 . 0.2838 0.3012 0.2175 -0.0416 0.0469
0.0479  1 .
1067 C     C     . ILE ILE ILE A A 143 143 . 0.1586 0.1726 0.1925 -0.0133 0.0056
0.0168  1 .
1068 O     O     . ILE ILE ILE A A 143 143 . 0.1712 0.2086 0.1849 -0.0025 0.0059
0.0218  1 .
1069 N     N     . LEU LEU LEU A A 144 144 . 0.1422 0.1443 0.1466 -0.0103 0.0048
0.0113  1 .
1070 CA    CA    . LEU LEU LEU A A 144 144 . 0.1045 0.1161 0.1252 -0.0026 -0.0056 -
0.0016 1 .
1071 CB    CB    . LEU LEU LEU A A 144 144 . 0.0926 0.1065 0.0856 0.0191  -0.0202 -
0.0020 1 .
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1072 CG    CG    . LEU LEU LEU A A 144 144 . 0.1095 0.1370 0.1295 0.0061  -0.0226
0.0190  1 .
1073 CD1   CD1   . LEU LEU LEU A A 144 144 . 0.1955 0.1246 0.1259 0.0089  0.0129
0.0376  1 .
1074 CD2   CD2   . LEU LEU LEU A A 144 144 . 0.2464 0.1941 0.1844 -0.0320 0.0275
0.0437  1 .
1075 C     C     . LEU LEU LEU A A 144 144 . 0.0894 0.1123 0.1074 0.0034  -0.0065 -
0.0022 1 .
1076 O     O     . LEU LEU LEU A A 144 144 . 0.1092 0.1336 0.1140 0.0116  0.0000  -
0.0275 1 .
1077 N     N     . PRO PRO PRO A A 145 145 . 0.0841 0.1049 0.0924 0.0105  -0.0001 -
0.0188 1 .
1078 CA    CA    . PRO PRO PRO A A 145 145 . 0.0863 0.0911 0.0732 0.0003  0.0038  -
0.0239 1 .
1079 CB    CB    . PRO PRO PRO A A 145 145 . 0.0918 0.1013 0.0726 -0.0010 0.0080  -
0.0110 1 .
1080 CG    CG    . PRO PRO PRO A A 145 145 . 0.0580 0.0896 0.1116 0.0181  0.0101  -
0.0043 1 .
1081 CD    CD    . PRO PRO PRO A A 145 145 . 0.0549 0.1079 0.0871 0.0004  0.0000  -
0.0149 1 .
1082 C     C     . PRO PRO PRO A A 145 145 . 0.1057 0.1250 0.0873 -0.0008 0.0000  -
0.0140 1 .
1083 O     O     . PRO PRO PRO A A 145 145 . 0.1001 0.1137 0.1108 0.0095  -0.0065
0.0128  1 .
1084 N     N     . VAL VAL VAL A A 146 146 . 0.0774 0.1189 0.0742 -0.0004 -0.0029 -
0.0153 1 .
1085 CA    CA    . VAL VAL VAL A A 146 146 . 0.0960 0.1066 0.0785 -0.0040 0.0100
0.0012  1 .
1086 CB    CB    . VAL VAL VAL A A 146 146 . 0.0844 0.1337 0.0730 -0.0154 0.0336  -
0.0102 1 .
1087 CG1   CG1   . VAL VAL VAL A A 146 146 . 0.1224 0.1414 0.1024 -0.0303 -0.0149
0.0432  1 .
1088 CG2   CG2   . VAL VAL VAL A A 146 146 . 0.1157 0.0963 0.0629 -0.0023 0.0247  -
0.0255 1 .
1089 C     C     . VAL VAL VAL A A 146 146 . 0.0850 0.0845 0.0777 0.0128  -0.0013
0.0079  1 .
1090 O     O     . VAL VAL VAL A A 146 146 . 0.1150 0.0884 0.0929 0.0114  0.0214  -
0.0020 1 .
1091 N     N     . PRO PRO PRO A A 147 147 . 0.0778 0.0898 0.0844 0.0139  -0.0032 -
0.0006 1 .
1092 CA    CA    . PRO PRO PRO A A 147 147 . 0.0651 0.1016 0.0852 0.0101  0.0006
0.0066  1 .
1093 CB    CB    . PRO PRO PRO A A 147 147 . 0.0751 0.0767 0.0798 0.0258  0.0067
0.0031  1 .
1094 CG    CG    . PRO PRO PRO A A 147 147 . 0.0554 0.0678 0.0320 -0.0112 0.0130  -
0.0112 1 .
1095 CD    CD    . PRO PRO PRO A A 147 147 . 0.1132 0.0904 0.0681 0.0406  -0.0075
0.0407  1 .
1096 C     C     . PRO PRO PRO A A 147 147 . 0.0737 0.0866 0.0899 -0.0030 -0.0035
0.0033  1 .
1097 O     O     . PRO PRO PRO A A 147 147 . 0.0949 0.0983 0.0766 0.0050  -0.0096
0.0118  1 .
1098 N     N     . ALA ALA ALA A A 148 148 . 0.0508 0.0971 0.0783 0.0064  0.0086  -
0.0023 1 .
1099 CA    CA    . ALA ALA ALA A A 148 148 . 0.0673 0.0884 0.0837 0.0000  -0.0129 -
0.0020 1 .
1100 CB    CB    . ALA ALA ALA A A 148 148 . 0.0983 0.0638 0.0830 0.0160  0.0069
0.0044  1 .
1101 C     C     . ALA ALA ALA A A 148 148 . 0.0744 0.0931 0.0930 0.0020  -0.0006
0.0099  1 .
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1102 O     O     . ALA ALA ALA A A 148 148 . 0.0996 0.0820 0.0899 0.0008  -0.0057
0.0063  1 .
1103 N     N     . PHE PHE PHE A A 149 149 . 0.0651 0.0896 0.0863 0.0011  -0.0063
0.0213  1 .
1104 CA    CA    . PHE PHE PHE A A 149 149 . 0.0707 0.0766 0.0783 0.0211  0.0194
0.0051  1 .
1105 CB    CB    . PHE PHE PHE A A 149 149 . 0.0455 0.0851 0.0622 0.0056  0.0070
0.0273  1 .
1106 CG    CG    . PHE PHE PHE A A 149 149 . 0.0575 0.0772 0.0657 0.0292  0.0162  -
0.0138 1 .
1107 CD1   CD1   . PHE PHE PHE A A 149 149 . 0.0479 0.0934 0.0905 0.0094  -0.0095
0.0050  1 .
1108 CE1   CE1   . PHE PHE PHE A A 149 149 . 0.0612 0.1002 0.0766 0.0146  0.0190  -
0.0155 1 .
1109 CZ    CZ    . PHE PHE PHE A A 149 149 . 0.0816 0.0986 0.0802 -0.0192 -0.0041 -
0.0168 1 .
1110 CE2   CE2   . PHE PHE PHE A A 149 149 . 0.0680 0.0760 0.0763 0.0146  0.0082  -
0.0090 1 .
1111 CD2   CD2   . PHE PHE PHE A A 149 149 . 0.0595 0.0792 0.0943 -0.0026 0.0099  -
0.0079 1 .
1112 C     C     . PHE PHE PHE A A 149 149 . 0.0624 0.0612 0.0755 0.0045  0.0095
0.0153  1 .
1113 O     O     . PHE PHE PHE A A 149 149 . 0.0829 0.0771 0.0643 0.0102  0.0004
0.0056  1 .
1114 N     N     . ASN ASN ASN A A 150 150 . 0.0539 0.0652 0.0716 0.0150  0.0189  -
0.0044 1 .
1115 CA    CA    . ASN ASN ASN A A 150 150 . 0.0620 0.0736 0.1093 0.0073  0.0264
0.0022  1 .
1116 CB    CB    . ASN ASN ASN A A 150 150 . 0.0604 0.0752 0.1205 0.0293  0.0142  -
0.0357 1 .
1117 CG    CG    . ASN ASN ASN A A 150 150 . 0.1295 0.1413 0.1276 -0.0129 0.0345  -
0.0362 1 .
1118 OD1   OD1   . ASN ASN ASN A A 150 150 . 0.1979 0.1313 0.1941 0.0187  0.0168  -
0.0341 1 .
1119 ND2   ND2   . ASN ASN ASN A A 150 150 . 0.0747 0.0598 0.0882 0.0021  0.0044  -
0.0180 1 .
1120 C     C     . ASN ASN ASN A A 150 150 . 0.0782 0.1140 0.1059 0.0153  0.0082  -
0.0017 1 .
1121 O     O     . ASN ASN ASN A A 150 150 . 0.1306 0.1255 0.1183 0.0074  0.0094  -
0.0102 1 .
1122 N     N     . VAL VAL VAL A A 151 151 . 0.0739 0.0925 0.0922 0.0050  0.0050
0.0152  1 .
1123 CA    CA    . VAL VAL VAL A A 151 151 . 0.0788 0.0818 0.1214 0.0061  0.0220
0.0095  1 .
1124 CB    CB    . VAL VAL VAL A A 151 151 . 0.0691 0.1058 0.1173 0.0043  0.0113  -
0.0055 1 .
1125 CG1   CG1   . VAL VAL VAL A A 151 151 . 0.0796 0.1101 0.1135 -0.0184 0.0220  -
0.0035 1 .
1126 CG2   CG2   . VAL VAL VAL A A 151 151 . 0.1294 0.0978 0.1611 0.0039  -0.0045 -
0.0210 1 .
1127 C     C     . VAL VAL VAL A A 151 151 . 0.0872 0.0786 0.1076 -0.0070 0.0066
0.0049  1 .
1128 O     O     . VAL VAL VAL A A 151 151 . 0.0783 0.0971 0.1108 -0.0082 0.0236
0.0199  1 .
1129 N     N     . ILE ILE ILE A A 152 152 . 0.0744 0.0737 0.1119 -0.0048 0.0016
0.0021  1 .
1130 CA    CA    . ILE ILE ILE A A 152 152 . 0.0942 0.0741 0.1237 0.0032  0.0155  -
0.0115 1 .
1131 CB    CB    . ILE ILE ILE A A 152 152 . 0.0773 0.0819 0.0982 0.0030  0.0109  -
0.0118 1 .
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1132 CG1   CG1   . ILE ILE ILE A A 152 152 . 0.1268 0.1136 0.1128 -0.0291 -0.0056
0.0027  1 .
1133 CD1   CD1   . ILE ILE ILE A A 152 152 . 0.1011 0.0786 0.1435 -0.0221 -0.0193 -
0.0103 1 .
1134 CG2   CG2   . ILE ILE ILE A A 152 152 . 0.1088 0.0735 0.1668 -0.0063 0.0437  -
0.0128 1 .
1135 C     C     . ILE ILE ILE A A 152 152 . 0.0969 0.0991 0.1287 0.0083  0.0079
0.0076  1 .
1136 O     O     . ILE ILE ILE A A 152 152 . 0.0787 0.0926 0.1283 0.0191  -0.0011
0.0057  1 .
1137 N     N     . ASN ASN ASN A A 153 153 . 0.0894 0.0938 0.1208 0.0089  0.0051  -
0.0121 1 .
1138 CA    CA    . ASN ASN ASN A A 153 153 . 0.1008 0.1192 0.1350 0.0230  0.0047  -
0.0123 1 .
1139 CB    CB    . ASN ASN ASN A A 153 153 . 0.0841 0.1379 0.1406 0.0211  -0.0059
0.0003  1 .
1140 CG    CG    . ASN ASN ASN A A 153 153 . 0.1135 0.1536 0.1507 0.0198  -0.0068 -
0.0229 1 .
1141 OD1   OD1   . ASN ASN ASN A A 153 153 . 0.1735 0.2416 0.1887 0.0212  0.0042
0.0089  1 .
1142 ND2   ND2   . ASN ASN ASN A A 153 153 . 0.0658 0.1116 0.0871 0.0094  -0.0149 -
0.0020 1 .
1143 C     C     . ASN ASN ASN A A 153 153 . 0.0970 0.1202 0.1304 0.0070  0.0173
0.0076  1 .
1144 O     O     . ASN ASN ASN A A 153 153 . 0.1112 0.1506 0.1612 0.0111  0.0303  -
0.0016 1 .
1145 N     N     . GLY GLY GLY A A 154 154 . 0.0817 0.1196 0.1319 0.0299  0.0156  -
0.0088 1 .
1146 CA    CA    . GLY GLY GLY A A 154 154 . 0.1035 0.1154 0.1308 0.0229  0.0138  -
0.0100 1 .
1147 C     C     . GLY GLY GLY A A 154 154 . 0.1058 0.1212 0.1306 0.0163  0.0003  -
0.0143 1 .
1148 O     O     . GLY GLY GLY A A 154 154 . 0.1138 0.1415 0.1572 0.0190  0.0063  -
0.0206 1 .
1149 N     N     . GLY GLY GLY A A 155 155 . 0.1057 0.1263 0.1251 0.0255  0.0093  -
0.0164 1 .
1150 CA    CA    . GLY GLY GLY A A 155 155 . 0.1128 0.1198 0.1568 0.0355  -0.0127 -
0.0017 1 .
1151 C     C     . GLY GLY GLY A A 155 155 . 0.1242 0.1369 0.1617 0.0319  0.0046  -
0.0087 1 .
1152 O     O     . GLY GLY GLY A A 155 155 . 0.1532 0.1387 0.1378 0.0360  -0.0014 -
0.0085 1 .
1153 N     N     . SER SER SER A A 156 156 . 0.1644 0.1480 0.1771 0.0179  -0.0049 -
0.0173 1 .
1154 CA    CA    . SER SER SER A A 156 156 . 0.1798 0.1499 0.2151 0.0170  -0.0103 -
0.0199 1 .
1155 CB    CB    . SER SER SER A A 156 156 . 0.1761 0.1550 0.2298 0.0027  -0.0160
0.0071  1 .
1156 OG    OG    . SER SER SER A A 156 156 . 0.2283 0.2119 0.2663 0.0525  -0.0110 -
0.0544 1 .
1157 C     C     . SER SER SER A A 156 156 . 0.1924 0.1599 0.1886 0.0146  -0.0123 -
0.0191 1 .
1158 O     O     . SER SER SER A A 156 156 . 0.2126 0.1744 0.2201 0.0408  -0.0255 -
0.0202 1 .
1159 N     N     . HIS HIS HIS A A 157 157 . 0.1530 0.1396 0.1875 0.0312  0.0052  -
0.0175 1 .
1160 CA    CA    . HIS HIS HIS A A 157 157 . 0.1483 0.1489 0.1539 0.0061  0.0227  -
0.0087 1 .
1161 CB    CB    . HIS HIS HIS A A 157 157 . 0.1291 0.1594 0.1616 -0.0003 0.0319  -
0.0130 1 .
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1162 CG    CG    . HIS HIS HIS A A 157 157 . 0.1516 0.1608 0.1813 -0.0051 0.0092
0.0108  1 .
1163 ND1   ND1   . HIS HIS HIS A A 157 157 . 0.1169 0.1528 0.1679 -0.0020 -0.0041 -
0.0043 1 .
1164 CE1   CE1   . HIS HIS HIS A A 157 157 . 0.1887 0.1516 0.1951 -0.0341 -0.0218
0.0070  1 .
1165 NE2   NE2   . HIS HIS HIS A A 157 157 . 0.1246 0.1705 0.1938 -0.0013 0.0034
0.0165  1 .
1166 CD2   CD2   . HIS HIS HIS A A 157 157 . 0.1355 0.1785 0.1841 0.0241  0.0291  -
0.0099 1 .
1167 C     C     . HIS HIS HIS A A 157 157 . 0.1582 0.1653 0.1476 0.0075  0.0210  -
0.0124 1 .
1168 O     O     . HIS HIS HIS A A 157 157 . 0.1058 0.1527 0.1543 -0.0020 0.0302
0.0035  1 .
1169 N     N     . ALA ALA ALA A A 158 158 . 0.1617 0.1734 0.1559 -0.0038 0.0088  -
0.0181 1 .
1170 CA    CA    . ALA ALA ALA A A 158 158 . 0.1636 0.1720 0.1511 -0.0086 0.0234  -
0.0164 1 .
1171 CB    CB    . ALA ALA ALA A A 158 158 . 0.1921 0.1980 0.2199 0.0062  0.0225  -
0.0213 1 .
1172 C     C     . ALA ALA ALA A A 158 158 . 0.1502 0.1791 0.1608 -0.0020 0.0163  -
0.0081 1 .
1173 O     O     . ALA ALA ALA A A 158 158 . 0.1828 0.1715 0.1631 -0.0140 0.0016  -
0.0062 1 .
1174 N     N     . GLY GLY GLY A A 159 159 . 0.1309 0.1674 0.1654 -0.0021 0.0132  -
0.0013 1 .
1175 CA    CA    . GLY GLY GLY A A 159 159 . 0.1524 0.1758 0.1834 -0.0183 0.0280  -
0.0143 1 .
1176 C     C     . GLY GLY GLY A A 159 159 . 0.1536 0.1833 0.1934 -0.0189 0.0133  -
0.0042 1 .
1177 O     O     . GLY GLY GLY A A 159 159 . 0.1510 0.1840 0.2171 -0.0214 0.0267  -
0.0155 1 .
1178 N     N     . ASN ASN ASN A A 160 160 . 0.1357 0.1786 0.1737 -0.0174 0.0189  -
0.0018 1 .
1179 CA    CA    . ASN ASN ASN A A 160 160 . 0.1571 0.1737 0.1900 -0.0046 0.0171  -
0.0209 1 .
1180 CB    CB    . ASN ASN ASN A A 160 160 . 0.1390 0.1699 0.1679 -0.0053 0.0296  -
0.0249 1 .
1181 CG    CG    . ASN ASN ASN A A 160 160 . 0.1425 0.1605 0.1661 0.0028  0.0107  -
0.0072 1 .
1182 OD1   OD1   . ASN ASN ASN A A 160 160 . 0.1187 0.1771 0.1862 -0.0197 0.0239
0.0046  1 .
1183 ND2   ND2   . ASN ASN ASN A A 160 160 . 0.0933 0.1369 0.1348 -0.0079 0.0092  -
0.0136 1 .
1184 C     C     . ASN ASN ASN A A 160 160 . 0.1347 0.1674 0.1808 -0.0026 0.0062  -
0.0126 1 .
1185 O     O     . ASN ASN ASN A A 160 160 . 0.1282 0.1664 0.1621 0.0040  0.0179  -
0.0113 1 .
1186 N     N     . LYS LYS LYS A A 161 161 . 0.1582 0.1915 0.1737 -0.0032 0.0317  -
0.0219 1 .
1187 CA    CA    . LYS LYS LYS A A 161 161 . 0.1405 0.2063 0.1799 -0.0156 0.0169  -
0.0125 1 .
1188 CB    CB    . LYS LYS LYS A A 161 161 . 0.1341 0.2220 0.1828 -0.0307 0.0372  -
0.0044 1 .
1189 CG    CG    . LYS LYS LYS A A 161 161 . 0.1837 0.2412 0.1853 -0.0607 0.0379
0.0129  1 .
1190 CD    CD    . LYS LYS LYS A A 161 161 . 0.1887 0.2459 0.2829 -0.0418 0.0257
0.0114  1 .
1191 CE    CE    . LYS LYS LYS A A 161 161 . 0.2490 0.3610 0.3494 -0.1018 0.0264
0.0226  1 .
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1192 NZ    NZ    . LYS LYS LYS A A 161 161 . 0.2922 0.4701 0.4597 -0.0478 -0.0106
0.0420  1 .
1193 C     C     . LYS LYS LYS A A 161 161 . 0.1581 0.1769 0.1813 0.0019  0.0169
0.0010  1 .
1194 O     O     . LYS LYS LYS A A 161 161 . 0.1279 0.2241 0.2206 -0.0030 0.0116  -
0.0163 1 .
1195 N     N     . LEU LEU LEU A A 162 162 . 0.1253 0.1996 0.1708 0.0112  0.0259  -
0.0042 1 .
1196 CA    CA    . LEU LEU LEU A A 162 162 . 0.1298 0.1551 0.1412 0.0293  0.0021
0.0054  1 .
1197 CB    CB    . LEU LEU LEU A A 162 162 . 0.0795 0.1664 0.1279 0.0303  0.0121  -
0.0248 1 .
1198 CG    CG    . LEU LEU LEU A A 162 162 . 0.1017 0.1277 0.0733 0.0285  0.0108  -
0.0014 1 .
1199 CD1   CD1   . LEU LEU LEU A A 162 162 . 0.1016 0.2114 0.1377 0.0145  -0.0249 -
0.0084 1 .
1200 CD2   CD2   . LEU LEU LEU A A 162 162 . 0.1035 0.1685 0.1750 0.0366  0.0300
0.0159  1 .
1201 C     C     . LEU LEU LEU A A 162 162 . 0.1374 0.1745 0.1679 0.0110  0.0084  -
0.0028 1 .
1202 O     O     . LEU LEU LEU A A 162 162 . 0.1493 0.1819 0.1588 -0.0008 -0.0074 -
0.0092 1 .
1203 N     N     . ALA ALA ALA A A 163 163 . 0.1166 0.1394 0.1372 0.0312  0.0066
0.0248  1 .
1204 CA    CA    . ALA ALA ALA A A 163 163 . 0.1098 0.1332 0.1537 -0.0058 0.0014
0.0051  1 .
1205 CB    CB    . ALA ALA ALA A A 163 163 . 0.1195 0.1412 0.1576 0.0027  -0.0072
0.0145  1 .
1206 C     C     . ALA ALA ALA A A 163 163 . 0.1276 0.1308 0.1451 0.0013  -0.0032
0.0028  1 .
1207 O     O     . ALA ALA ALA A A 163 163 . 0.0895 0.1435 0.1720 0.0081  -0.0051
0.0138  1 .
1208 N     N     . MET MET MET A A 164 164 . 0.0936 0.1300 0.1380 0.0025  0.0020  -
0.0192 1 .
1209 CA    CA    . MET MET MET A A 164 164 . 0.1033 0.1443 0.1282 -0.0148 -0.0069 -
0.0145 1 .
1210 CB    CB    . MET MET MET A A 164 164 . 0.0894 0.1603 0.1402 -0.0015 -0.0147 -
0.0222 1 .
1211 CG    CG    . MET MET MET A A 164 164 . 0.1065 0.1315 0.0719 -0.0094 -0.0363
0.0108  1 .
1212 SD    SD    . MET MET MET A A 164 164 . 0.1244 0.1590 0.1545 0.0116  -0.0096 -
0.0219 1 .
1213 CE    CE    . MET MET MET A A 164 164 . 0.1083 0.1708 0.1667 0.0394  -0.0295
0.0000  1 .
1214 C     C     . MET MET MET A A 164 164 . 0.1004 0.1326 0.1233 0.0082  -0.0023 -
0.0038 1 .
1215 O     O     . MET MET MET A A 164 164 . 0.0977 0.1240 0.1404 0.0026  -0.0058 -
0.0003 1 .
1216 N     N     . GLN GLN GLN A A 165 165 . 0.0885 0.1052 0.1272 -0.0088 -0.0080 -
0.0146 1 .
1217 CA    CA    . GLN GLN GLN A A 165 165 . 0.0851 0.0916 0.1107 0.0096  -0.0003 -
0.0046 1 .
1218 CB    CB    . GLN GLN GLN A A 165 165 . 0.0766 0.1126 0.1135 0.0045  -0.0137 -
0.0127 1 .
1219 CG    CG    . GLN GLN GLN A A 165 165 . 0.0696 0.1013 0.0844 -0.0250 0.0294  -
0.0200 1 .
1220 CD    CD    . GLN GLN GLN A A 165 165 . 0.1320 0.1212 0.1193 -0.0224 0.0082  -
0.0225 1 .
1221 OE1   OE1   . GLN GLN GLN A A 165 165 . 0.1091 0.1344 0.1418 0.0050  0.0174  -
0.0155 1 .
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1222 NE2   NE2   . GLN GLN GLN A A 165 165 . 0.0980 0.1525 0.0938 -0.0048 -0.0175 -
0.0033 1 .
1223 C     C     . GLN GLN GLN A A 165 165 . 0.1010 0.1173 0.1132 0.0150  0.0082
0.0068  1 .
1224 O     O     . GLN GLN GLN A A 165 165 . 0.0820 0.1077 0.1117 0.0170  0.0028
0.0177  1 .
1225 N     N     . GLU GLU GLU A A 166 166 . 0.1104 0.0814 0.1209 0.0106  0.0117  -
0.0067 1 .
1226 CA    CA    . GLU GLU GLU A A 166 166 . 0.0731 0.0960 0.1006 -0.0047 0.0155  -
0.0214 1 .
1227 CB    CB    . GLU GLU GLU A A 166 166 . 0.0968 0.0394 0.1080 -0.0262 0.0179  -
0.0163 1 .
1228 CG    CG    . GLU GLU GLU A A 166 166 . 0.1404 0.1016 0.0750 -0.0077 0.0158  -
0.0449 1 .
1229 CD    CD    . GLU GLU GLU A A 166 166 . 0.0994 0.1056 0.1205 -0.0007 0.0120  -
0.0335 1 .
1230 OE1   OE1   . GLU GLU GLU A A 166 166 . 0.1195 0.1539 0.1573 -0.0173 0.0015  -
0.0189 1 .
1231 OE2   OE2   . GLU GLU GLU A A 166 166 . 0.1472 0.1171 0.1851 -0.0083 0.0033  -
0.0336 1 .
1232 C     C     . GLU GLU GLU A A 166 166 . 0.0790 0.0965 0.1084 -0.0064 0.0099  -
0.0119 1 .
1233 O     O     . GLU GLU GLU A A 166 166 . 0.0875 0.1322 0.1185 0.0018  0.0076  -
0.0277 1 .
1234 N     N     . PHE PHE PHE A A 167 167 . 0.0681 0.0801 0.0905 0.0020  0.0016  -
0.0115 1 .
1235 CA    CA    . PHE PHE PHE A A 167 167 . 0.0612 0.0768 0.0928 0.0032  0.0160  -
0.0113 1 .
1236 CB    CB    . PHE PHE PHE A A 167 167 . 0.0793 0.1060 0.1299 0.0169  0.0187  -
0.0153 1 .
1237 CG    CG    . PHE PHE PHE A A 167 167 . 0.1019 0.1318 0.1539 0.0082  0.0128  -
0.0094 1 .
1238 CD1   CD1   . PHE PHE PHE A A 167 167 . 0.0909 0.1243 0.1318 0.0052  0.0292
0.0061  1 .
1239 CE1   CE1   . PHE PHE PHE A A 167 167 . 0.1014 0.1066 0.1460 0.0150  -0.0290
0.0273  1 .
1240 CZ    CZ    . PHE PHE PHE A A 167 167 . 0.0991 0.1271 0.0986 0.0033  -0.0094 -
0.0283 1 .
1241 CE2   CE2   . PHE PHE PHE A A 167 167 . 0.0925 0.0925 0.1953 0.0151  0.0199  -
0.0019 1 .
1242 CD2   CD2   . PHE PHE PHE A A 167 167 . 0.0685 0.0871 0.1645 -0.0102 -0.0218 -
0.0236 1 .
1243 C     C     . PHE PHE PHE A A 167 167 . 0.0606 0.0822 0.0784 0.0066  0.0041  -
0.0050 1 .
1244 O     O     . PHE PHE PHE A A 167 167 . 0.0766 0.0971 0.1135 0.0052  0.0120  -
0.0072 1 .
1245 N     N     . MET MET MET A A 168 168 . 0.0621 0.0781 0.0830 -0.0041 0.0113  -
0.0043 1 .
1246 CA    CA    . MET MET MET A A 168 168 . 0.0681 0.0685 0.0928 0.0117  0.0093  -
0.0074 1 .
1247 CB    CB    . MET MET MET A A 168 168 . 0.0776 0.1034 0.0917 0.0120  0.0276
0.0047  1 .
1248 CG    CG    . MET MET MET A A 168 168 . 0.1255 0.0888 0.0975 -0.0047 0.0160  -
0.0061 1 .
1249 SD    SD    . MET MET MET A A 168 168 . 0.1274 0.1263 0.1636 0.0052  0.0008
0.0009  1 .
1250 CE    CE    . MET MET MET A A 168 168 . 0.1031 0.1095 0.1720 -0.0091 -0.0569
0.0005  1 .
1251 C     C     . MET MET MET A A 168 168 . 0.0805 0.0798 0.0813 0.0034  0.0002  -
0.0085 1 .
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1252 O     O     . MET MET MET A A 168 168 . 0.1072 0.0974 0.1118 0.0190  -0.0039 -
0.0075 1 .
1253 N     N     . ILE ILE ILE A A 169 169 . 0.0882 0.0686 0.0834 0.0174  0.0063
0.0048  1 .
1254 CA    CA    . ILE ILE ILE A A 169 169 . 0.0627 0.0723 0.0691 0.0020  0.0122  -
0.0008 1 .
1255 CB    CB    . ILE ILE ILE A A 169 169 . 0.0902 0.0706 0.0935 -0.0332 -0.0093
0.0085  1 .
1256 CG1   CG1   . ILE ILE ILE A A 169 169 . 0.0817 0.0727 0.1003 -0.0144 -0.0336
0.0393  1 .
1257 CD1   CD1   . ILE ILE ILE A A 169 169 . 0.1060 0.0573 0.1022 0.0164  -0.0184
0.0418  1 .
1258 CG2   CG2   . ILE ILE ILE A A 169 169 . 0.1066 0.1166 0.0693 -0.0284 0.0097
0.0139  1 .
1259 C     C     . ILE ILE ILE A A 169 169 . 0.0865 0.0932 0.1032 0.0070  -0.0042
0.0022  1 .
1260 O     O     . ILE ILE ILE A A 169 169 . 0.0910 0.0882 0.1220 0.0154  -0.0085 -
0.0066 1 .
1261 N     N     . LEU LEU LEU A A 170 170 . 0.0742 0.0916 0.0879 0.0186  0.0116
0.0018  1 .
1262 CA    CA    . LEU LEU LEU A A 170 170 . 0.0757 0.0735 0.0694 0.0030  -0.0004
0.0122  1 .
1263 CB    CB    . LEU LEU LEU A A 170 170 . 0.1042 0.0936 0.1221 0.0217  -0.0064
0.0127  1 .
1264 CG    CG    . LEU LEU LEU A A 170 170 . 0.1520 0.1005 0.1059 0.0053  0.0180  -
0.0051 1 .
1265 CD1   CD1   . LEU LEU LEU A A 170 170 . 0.1475 0.1636 0.2299 0.0161  -0.0237 -
0.0083 1 .
1266 CD2   CD2   . LEU LEU LEU A A 170 170 . 0.1709 0.1433 0.1093 0.0207  0.0079
0.0139  1 .
1267 C     C     . LEU LEU LEU A A 170 170 . 0.1093 0.0818 0.0905 0.0006  -0.0100
0.0074  1 .
1268 O     O     . LEU LEU LEU A A 170 170 . 0.0987 0.0726 0.0993 0.0039  -0.0239
0.0056  1 .
1269 N     N     . PRO PRO PRO A A 171 171 . 0.0896 0.0949 0.1115 0.0104  -0.0097 -
0.0146 1 .
1270 CA    CA    . PRO PRO PRO A A 171 171 . 0.1167 0.1125 0.0988 0.0055  -0.0003 -
0.0150 1 .
1271 CB    CB    . PRO PRO PRO A A 171 171 . 0.1155 0.1152 0.1055 0.0008  0.0100  -
0.0009 1 .
1272 CG    CG    . PRO PRO PRO A A 171 171 . 0.0980 0.1156 0.1054 0.0563  0.0115  -
0.0089 1 .
1273 CD    CD    . PRO PRO PRO A A 171 171 . 0.1274 0.0824 0.1128 0.0160  -0.0262 -
0.0011 1 .
1274 C     C     . PRO PRO PRO A A 171 171 . 0.0833 0.0966 0.0808 -0.0018 0.0007  -
0.0010 1 .
1275 O     O     . PRO PRO PRO A A 171 171 . 0.1286 0.1265 0.0777 0.0028  0.0206  -
0.0066 1 .
1276 N     N     . VAL VAL VAL A A 172 172 . 0.1044 0.0844 0.0736 0.0011  0.0048  -
0.0057 1 .
1277 CA    CA    . VAL VAL VAL A A 172 172 . 0.0899 0.0956 0.0860 0.0173  -0.0050 -
0.0021 1 .
1278 CB    CB    . VAL VAL VAL A A 172 172 . 0.0880 0.0885 0.0802 0.0134  -0.0199 -
0.0025 1 .
1279 CG1   CG1   . VAL VAL VAL A A 172 172 . 0.1424 0.0920 0.1121 0.0104  0.0046  -
0.0328 1 .
1280 CG2   CG2   . VAL VAL VAL A A 172 172 . 0.0795 0.1199 0.1002 -0.0059 -0.0178
0.0022  1 .
1281 C     C     . VAL VAL VAL A A 172 172 . 0.1175 0.1150 0.0978 0.0049  0.0040  -
0.0177 1 .
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1282 O     O     . VAL VAL VAL A A 172 172 . 0.1029 0.1033 0.1027 -0.0048 0.0292  -
0.0215 1 .
1283 N     N     . GLY GLY GLY A A 173 173 . 0.1095 0.1156 0.1014 0.0059  0.0081  -
0.0142 1 .
1284 CA    CA    . GLY GLY GLY A A 173 173 . 0.1172 0.1295 0.1140 0.0057  -0.0009 -
0.0129 1 .
1285 C     C     . GLY GLY GLY A A 173 173 . 0.1293 0.1337 0.1311 0.0011  -0.0006 -
0.0117 1 .
1286 O     O     . GLY GLY GLY A A 173 173 . 0.1399 0.1435 0.1483 0.0030  0.0041  -
0.0226 1 .
1287 N     N     . ALA ALA ALA A A 174 174 . 0.1312 0.1228 0.1383 -0.0050 -0.0150 -
0.0200 1 .
1288 CA    CA    . ALA ALA ALA A A 174 174 . 0.1271 0.1222 0.1237 -0.0043 -0.0065 -
0.0371 1 .
1289 CB    CB    . ALA ALA ALA A A 174 174 . 0.1223 0.1158 0.1061 -0.0063 -0.0134 -
0.0607 1 .
1290 C     C     . ALA ALA ALA A A 174 174 . 0.1367 0.1298 0.1236 0.0032  -0.0012 -
0.0282 1 .
1291 O     O     . ALA ALA ALA A A 174 174 . 0.1397 0.1710 0.1413 0.0024  0.0115  -
0.0204 1 .
1292 N     N     . GLU GLU GLU A A 175 175 . 0.1592 0.1484 0.1632 0.0101  0.0058  -
0.0293 1 .
1293 CA    CA    . GLU GLU GLU A A 175 175 . 0.1639 0.1697 0.1904 0.0018  0.0153  -
0.0155 1 .
1294 CB    CB    . GLU GLU GLU A A 175 175 . 0.1884 0.1932 0.2350 0.0096  0.0194  -
0.0253 1 .
1295 CG    CG    . GLU GLU GLU A A 175 175 . 0.3600 0.2769 0.3765 0.0030  0.0318  -
0.0117 1 .
1296 CD    CD    . GLU GLU GLU A A 175 175 . 0.5377 0.4536 0.5287 0.0537  0.0762  -
0.0130 1 .
1297 OE1   OE1   . GLU GLU GLU A A 175 175 . 0.6329 0.5550 0.5654 0.0011  0.0706
0.0548  1 .
1298 OE2   OE2   . GLU GLU GLU A A 175 175 . 0.6142 0.4575 0.6598 0.0702  0.0470
0.0391  1 .
1299 C     C     . GLU GLU GLU A A 175 175 . 0.1654 0.1634 0.1639 0.0046  0.0168
0.0003  1 .
1300 O     O     . GLU GLU GLU A A 175 175 . 0.1586 0.1911 0.1586 -0.0061 0.0382  -
0.0288 1 .
1301 N     N     . SER SER SER A A 176 176 . 0.1415 0.1261 0.1173 0.0060  0.0181  -
0.0080 1 .
1302 CA    CA    . SER SER SER A A 176 176 . 0.1401 0.1397 0.1248 0.0022  0.0150  -
0.0013 1 .
1303 CB    CB    . SER SER SER A A 176 176 . 0.1695 0.1585 0.1588 0.0133  0.0188
0.0073  1 .
1304 OG    OG    . SER SER SER A A 176 176 . 0.1236 0.1626 0.1192 0.0084  0.0320
0.0331  1 .
1305 C     C     . SER SER SER A A 176 176 . 0.1342 0.1304 0.1216 -0.0005 0.0167  -
0.0205 1 .
1306 O     O     . SER SER SER A A 176 176 . 0.1183 0.0989 0.0929 0.0070  0.0062  -
0.0096 1 .
1307 N     N     . PHE PHE PHE A A 177 177 . 0.1085 0.1011 0.0925 0.0135  0.0098  -
0.0199 1 .
1308 CA    CA    . PHE PHE PHE A A 177 177 . 0.1042 0.0926 0.0774 0.0174  0.0001  -
0.0002 1 .
1309 CB    CB    . PHE PHE PHE A A 177 177 . 0.1132 0.0770 0.0885 0.0138  -0.0061 -
0.0230 1 .
1310 CG    CG    . PHE PHE PHE A A 177 177 . 0.0712 0.1130 0.1057 0.0062  -0.0022 -
0.0003 1 .
1311 CD1   CD1   . PHE PHE PHE A A 177 177 . 0.0648 0.1368 0.1271 0.0054  -0.0372 -
0.0376 1 .
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1312 CE1   CE1   . PHE PHE PHE A A 177 177 . 0.0851 0.1207 0.0888 0.0091  0.0007  -
0.0326 1 .
1313 CZ    CZ    . PHE PHE PHE A A 177 177 . 0.0933 0.1255 0.0952 0.0186  0.0044
0.0096  1 .
1314 CE2   CE2   . PHE PHE PHE A A 177 177 . 0.1420 0.0579 0.1571 0.0081  0.0095  -
0.0047 1 .
1315 CD2   CD2   . PHE PHE PHE A A 177 177 . 0.0953 0.1152 0.1363 -0.0110 0.0178
0.0000  1 .
1316 C     C     . PHE PHE PHE A A 177 177 . 0.0833 0.1079 0.0828 0.0152  0.0096
0.0053  1 .
1317 O     O     . PHE PHE PHE A A 177 177 . 0.1067 0.0973 0.0753 0.0101  0.0007
0.0000  1 .
1318 N     N     . ARG ARG ARG A A 178 178 . 0.0892 0.0978 0.0822 0.0289  -0.0117
0.0034  1 .
1319 CA    CA    . ARG ARG ARG A A 178 178 . 0.0749 0.0748 0.0929 0.0221  0.0057  -
0.0083 1 .
1320 CB    CB    . ARG ARG ARG A A 178 178 . 0.0786 0.1074 0.0956 0.0289  -0.0151
0.0225  1 .
1321 CG    CG    . ARG ARG ARG A A 178 178 . 0.1828 0.1647 0.1704 0.0546  -0.0016
0.0520  1 .
1322 CD    CD    . ARG ARG ARG A A 178 178 . 0.2071 0.3474 0.3566 0.0151  -0.0336
0.0425  1 .
1323 NE    NE    . ARG ARG ARG A A 178 178 . 0.4274 0.4388 0.4290 0.0248  -0.0336
0.0516  1 .
1324 CZ    CZ    . ARG ARG ARG A A 178 178 . 0.5273 0.4698 0.4821 -0.0066 -0.0225
0.0122  1 .
1325 NH1   NH1   . ARG ARG ARG A A 178 178 . 0.5043 0.4392 0.4553 -0.0041 -0.0152
0.0343  1 .
1326 NH2   NH2   . ARG ARG ARG A A 178 178 . 0.5152 0.4992 0.4790 -0.0403 -0.0070 -
0.0364 1 .
1327 C     C     . ARG ARG ARG A A 178 178 . 0.0860 0.1238 0.1123 0.0240  0.0099  -
0.0081 1 .
1328 O     O     . ARG ARG ARG A A 178 178 . 0.0967 0.0684 0.0969 0.0137  0.0070  -
0.0080 1 .
1329 N     N     . ASP ASP ASP A A 179 179 . 0.1011 0.1119 0.1056 0.0064  0.0006  -
0.0122 1 .
1330 CA    CA    . ASP ASP ASP A A 179 179 . 0.0848 0.1307 0.1086 0.0038  -0.0036 -
0.0213 1 .
1331 CB    CB    . ASP ASP ASP A A 179 179 . 0.1120 0.1379 0.0893 -0.0085 0.0387
0.0018  1 .
1332 CG    CG    . ASP ASP ASP A A 179 179 . 0.2078 0.2214 0.1994 0.0010  0.0097  -
0.0152 1 .
1333 OD1   OD1   . ASP ASP ASP A A 179 179 . 0.2626 0.2839 0.2409 0.0060  -0.0185
0.0194  1 .
1334 OD2   OD2   . ASP ASP ASP A A 179 179 . 0.2393 0.1965 0.2245 0.0254  0.0016
0.0077  1 .
1335 C     C     . ASP ASP ASP A A 179 179 . 0.0946 0.1005 0.0898 0.0164  0.0167  -
0.0045 1 .
1336 O     O     . ASP ASP ASP A A 179 179 . 0.0816 0.1064 0.0881 0.0165  -0.0035
0.0079  1 .
1337 N     N     . ALA ALA ALA A A 180 180 . 0.0902 0.1046 0.0769 0.0363  0.0079  -
0.0120 1 .
1338 CA    CA    . ALA ALA ALA A A 180 180 . 0.0801 0.1018 0.0782 0.0271  0.0162
0.0180  1 .
1339 CB    CB    . ALA ALA ALA A A 180 180 . 0.0622 0.0816 0.1035 0.0081  0.0324
0.0033  1 .
1340 C     C     . ALA ALA ALA A A 180 180 . 0.0834 0.0952 0.0782 0.0164  0.0077  -
0.0078 1 .
1341 O     O     . ALA ALA ALA A A 180 180 . 0.0940 0.1048 0.0818 0.0054  -0.0023
0.0109  1 .
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1342 N     N     . MET MET MET A A 181 181 . 0.0859 0.0592 0.0718 0.0160  -0.0013 -
0.0028 1 .
1343 CA    CA    . MET MET MET A A 181 181 . 0.0944 0.0767 0.0798 -0.0022 -0.0099 -
0.0034 1 .
1344 CB    CB    . MET MET MET A A 181 181 . 0.0579 0.0799 0.1251 0.0115  -0.0236
0.0288  1 .
1345 CG    CG    . MET MET MET A A 181 181 . 0.0798 0.0612 0.0860 0.0042  0.0089
0.0248  1 .
1346 SD    SD    . MET MET MET A A 181 181 . 0.1075 0.1123 0.0937 0.0101  0.0058  -
0.0044 1 .
1347 CE    CE    . MET MET MET A A 181 181 . 0.1257 0.0579 0.0762 0.0045  0.0397
0.0141  1 .
1348 C     C     . MET MET MET A A 181 181 . 0.1002 0.0908 0.0967 0.0012  -0.0052 -
0.0031 1 .
1349 O     O     . MET MET MET A A 181 181 . 0.1053 0.0955 0.1079 0.0092  0.0047  -
0.0105 1 .
1350 N     N     . ARG ARG ARG A A 182 182 . 0.0798 0.0720 0.1060 0.0193  -0.0084
0.0078  1 .
1351 CA    CA    . ARG ARG ARG A A 182 182 . 0.0822 0.0891 0.1302 0.0035  0.0025
0.0045  1 .
1352 CB    CB    . ARG ARG ARG A A 182 182 . 0.1318 0.0583 0.1448 0.0130  0.0112
0.0010  1 .
1353 CG    CG    . ARG ARG ARG A A 182 182 . 0.1243 0.0884 0.2416 -0.0239 0.0553  -
0.0086 1 .
1354 CD    CD    . ARG ARG ARG A A 182 182 . 0.1800 0.1200 0.3406 0.0931  0.0132  -
0.0602 1 .
1355 NE    NE    . ARG ARG ARG A A 182 182 . 0.2984 0.2644 0.4861 0.0706  0.0601  -
0.0633 1 .
1356 CZ    CZ    . ARG ARG ARG A A 182 182 . 0.4239 0.3967 0.4277 0.0239  0.0479  -
0.1056 1 .
1357 NH1   NH1   . ARG ARG ARG A A 182 182 . 0.4757 0.4694 0.4926 -0.0419 0.0646  -
0.1079 1 .
1358 NH2   NH2   . ARG ARG ARG A A 182 182 . 0.4237 0.5048 0.4289 0.0738  0.0671  -
0.0487 1 .
1359 C     C     . ARG ARG ARG A A 182 182 . 0.0817 0.0883 0.0996 -0.0019 -0.0020
0.0056  1 .
1360 O     O     . ARG ARG ARG A A 182 182 . 0.0907 0.0865 0.1059 0.0061  -0.0218
0.0096  1 .
1361 N     N     . LEU LEU LEU A A 183 183 . 0.0871 0.0780 0.0913 -0.0129 -0.0085
0.0019  1 .
1362 CA    CA    . LEU LEU LEU A A 183 183 . 0.0805 0.0804 0.0940 -0.0075 0.0041
0.0109  1 .
1363 CB    CB    . LEU LEU LEU A A 183 183 . 0.1197 0.1053 0.0867 -0.0042 -0.0086 -
0.0081 1 .
1364 CG    CG    . LEU LEU LEU A A 183 183 . 0.1181 0.0850 0.0989 0.0267  0.0175  -
0.0156 1 .
1365 CD1   CD1   . LEU LEU LEU A A 183 183 . 0.1533 0.1754 0.1588 0.0248  0.0031
0.0084  1 .
1366 CD2   CD2   . LEU LEU LEU A A 183 183 . 0.1520 0.1376 0.1059 0.0363  0.0136  -
0.0048 1 .
1367 C     C     . LEU LEU LEU A A 183 183 . 0.0782 0.0815 0.1030 -0.0088 0.0066  -
0.0053 1 .
1368 O     O     . LEU LEU LEU A A 183 183 . 0.0885 0.0938 0.1311 -0.0132 0.0069
0.0068  1 .
1369 N     N     . GLY GLY GLY A A 184 184 . 0.0807 0.0832 0.0943 0.0041  0.0155  -
0.0129 1 .
1370 CA    CA    . GLY GLY GLY A A 184 184 . 0.0796 0.0883 0.1025 0.0027  0.0099
0.0015  1 .
1371 C     C     . GLY GLY GLY A A 184 184 . 0.0890 0.0878 0.0983 0.0090  0.0083  -
0.0030 1 .
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1372 O     O     . GLY GLY GLY A A 184 184 . 0.0825 0.0696 0.0827 -0.0024 0.0192
0.0209  1 .
1373 N     N     . ALA ALA ALA A A 185 185 . 0.0966 0.0872 0.0734 -0.0019 -0.0075
0.0059  1 .
1374 CA    CA    . ALA ALA ALA A A 185 185 . 0.0852 0.0897 0.0955 -0.0035 -0.0018
0.0042  1 .
1375 CB    CB    . ALA ALA ALA A A 185 185 . 0.0366 0.1006 0.0679 0.0060  -0.0075
0.0180  1 .
1376 C     C     . ALA ALA ALA A A 185 185 . 0.0854 0.0855 0.1146 -0.0098 0.0185  -
0.0076 1 .
1377 O     O     . ALA ALA ALA A A 185 185 . 0.0959 0.0901 0.0953 -0.0044 0.0266
0.0049  1 .
1378 N     N     . GLU GLU GLU A A 186 186 . 0.0738 0.0786 0.1073 -0.0063 -0.0052 -
0.0103 1 .
1379 CA    CA    . GLU GLU GLU A A 186 186 . 0.0765 0.0739 0.1077 0.0190  -0.0196 -
0.0149 1 .
1380 CB    CB    . GLU GLU GLU A A 186 186 . 0.0715 0.1180 0.0925 0.0274  -0.0120 -
0.0059 1 .
1381 CG    CG    . GLU GLU GLU A A 186 186 . 0.0620 0.1099 0.0928 0.0473  -0.0408 -
0.0298 1 .
1382 CD    CD    . GLU GLU GLU A A 186 186 . 0.1507 0.1798 0.1493 0.0268  -0.0072 -
0.0211 1 .
1383 OE1   OE1   . GLU GLU GLU A A 186 186 . 0.1915 0.1437 0.1707 0.0298  -0.0219 -
0.0377 1 .
1384 OE2   OE2   . GLU GLU GLU A A 186 186 . 0.1330 0.1429 0.1458 0.0237  0.0004  -
0.0315 1 .
1385 C     C     . GLU GLU GLU A A 186 186 . 0.0915 0.0668 0.0992 0.0049  0.0060  -
0.0200 1 .
1386 O     O     . GLU GLU GLU A A 186 186 . 0.0923 0.0795 0.1341 0.0038  -0.0012
0.0146  1 .
1387 N     N     . VAL VAL VAL A A 187 187 . 0.0882 0.0682 0.0826 -0.0074 -0.0189 -
0.0227 1 .
1388 CA    CA    . VAL VAL VAL A A 187 187 . 0.0909 0.1033 0.1046 0.0001  -0.0006 -
0.0047 1 .
1389 CB    CB    . VAL VAL VAL A A 187 187 . 0.0901 0.1004 0.0791 0.0109  -0.0067 -
0.0011 1 .
1390 CG1   CG1   . VAL VAL VAL A A 187 187 . 0.0865 0.0805 0.1197 0.0045  0.0006  -
0.0079 1 .
1391 CG2   CG2   . VAL VAL VAL A A 187 187 . 0.1209 0.0971 0.1152 0.0096  0.0215  -
0.0291 1 .
1392 C     C     . VAL VAL VAL A A 187 187 . 0.0940 0.1033 0.1060 -0.0031 0.0020  -
0.0066 1 .
1393 O     O     . VAL VAL VAL A A 187 187 . 0.1046 0.1281 0.1209 -0.0103 -0.0040
0.0007  1 .
1394 N     N     . TYR TYR TYR A A 188 188 . 0.0996 0.1224 0.1157 -0.0113 0.0165  -
0.0256 1 .
1395 CA    CA    . TYR TYR TYR A A 188 188 . 0.1032 0.1124 0.0782 -0.0143 0.0087  -
0.0028 1 .
1396 CB    CB    . TYR TYR TYR A A 188 188 . 0.1037 0.1060 0.0823 -0.0028 0.0013
0.0024  1 .
1397 CG    CG    . TYR TYR TYR A A 188 188 . 0.0777 0.0847 0.0624 0.0112  -0.0150 -
0.0233 1 .
1398 CD1   CD1   . TYR TYR TYR A A 188 188 . 0.0805 0.0825 0.0978 -0.0025 0.0241
0.0127  1 .
1399 CE1   CE1   . TYR TYR TYR A A 188 188 . 0.1038 0.0920 0.0720 -0.0204 0.0241  -
0.0197 1 .
1400 CZ    CZ    . TYR TYR TYR A A 188 188 . 0.0976 0.1261 0.1015 0.0215  0.0100  -
0.0199 1 .
1401 OH    OH    . TYR TYR TYR A A 188 188 . 0.0900 0.0933 0.0928 -0.0164 0.0139  -
0.0164 1 .
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1402 CE2   CE2   . TYR TYR TYR A A 188 188 . 0.0788 0.1172 0.1174 -0.0018 0.0219  -
0.0245 1 .
1403 CD2   CD2   . TYR TYR TYR A A 188 188 . 0.0963 0.0604 0.0891 0.0003  -0.0050 -
0.0096 1 .
1404 C     C     . TYR TYR TYR A A 188 188 . 0.1228 0.1065 0.1246 0.0007  0.0094
0.0093  1 .
1405 O     O     . TYR TYR TYR A A 188 188 . 0.0783 0.0988 0.1151 0.0038  0.0080
0.0115  1 .
1406 N     N     . HIS HIS HIS A A 189 189 . 0.1081 0.1194 0.1020 -0.0076 -0.0012
0.0104  1 .
1407 CA    CA    . HIS HIS HIS A A 189 189 . 0.0910 0.1121 0.1216 -0.0052 0.0011
0.0070  1 .
1408 CB    CB    . HIS HIS HIS A A 189 189 . 0.1014 0.1157 0.1208 0.0003  -0.0032 -
0.0020 1 .
1409 CG    CG    . HIS HIS HIS A A 189 189 . 0.0902 0.1470 0.1359 -0.0016 0.0002  -
0.0082 1 .
1410 ND1   ND1   . HIS HIS HIS A A 189 189 . 0.1401 0.1839 0.1290 -0.0144 0.0046
0.0194  1 .
1411 CE1   CE1   . HIS HIS HIS A A 189 189 . 0.1492 0.1010 0.1167 0.0037  0.0002
0.0295  1 .
1412 NE2   NE2   . HIS HIS HIS A A 189 189 . 0.1417 0.1300 0.1426 0.0020  0.0005
0.0029  1 .
1413 CD2   CD2   . HIS HIS HIS A A 189 189 . 0.0607 0.1398 0.1260 0.0215  -0.0050 -
0.0212 1 .
1414 C     C     . HIS HIS HIS A A 189 189 . 0.0756 0.1047 0.1094 -0.0016 -0.0064
0.0035  1 .
1415 O     O     . HIS HIS HIS A A 189 189 . 0.0874 0.1113 0.1268 -0.0123 -0.0177 -
0.0022 1 .
1416 N     N     . THR THR THR A A 190 190 . 0.0920 0.1115 0.1169 -0.0228 -0.0044 -
0.0009 1 .
1417 CA    CA    . THR THR THR A A 190 190 . 0.1037 0.1210 0.1364 -0.0143 -0.0120 -
0.0057 1 .
1418 CB    CB    . THR THR THR A A 190 190 . 0.1111 0.1170 0.1448 -0.0137 -0.0127 -
0.0052 1 .
1419 OG1   OG1   . THR THR THR A A 190 190 . 0.1181 0.1141 0.1181 -0.0035 0.0345  -
0.0367 1 .
1420 CG2   CG2   . THR THR THR A A 190 190 . 0.1407 0.1681 0.1423 -0.0292 -0.0465 -
0.0139 1 .
1421 C     C     . THR THR THR A A 190 190 . 0.1195 0.1091 0.1513 0.0003  0.0073
0.0063  1 .
1422 O     O     . THR THR THR A A 190 190 . 0.1167 0.0979 0.1643 -0.0066 0.0081
0.0014  1 .
1423 N     N     . LEU LEU LEU A A 191 191 . 0.0972 0.0819 0.1418 0.0047  0.0007  -
0.0062 1 .
1424 CA    CA    . LEU LEU LEU A A 191 191 . 0.1138 0.0969 0.1421 -0.0036 0.0096  -
0.0054 1 .
1425 CB    CB    . LEU LEU LEU A A 191 191 . 0.1040 0.0773 0.1446 0.0208  0.0032
0.0046  1 .
1426 CG    CG    . LEU LEU LEU A A 191 191 . 0.0874 0.0761 0.1263 0.0013  -0.0210 -
0.0090 1 .
1427 CD1   CD1   . LEU LEU LEU A A 191 191 . 0.1086 0.0863 0.1126 -0.0222 -0.0208 -
0.0267 1 .
1428 CD2   CD2   . LEU LEU LEU A A 191 191 . 0.1110 0.1148 0.0993 -0.0043 0.0049
0.0221  1 .
1429 C     C     . LEU LEU LEU A A 191 191 . 0.1088 0.0978 0.1315 -0.0031 -0.0014
0.0039  1 .
1430 O     O     . LEU LEU LEU A A 191 191 . 0.1220 0.1231 0.1112 -0.0032 0.0124  -
0.0064 1 .
1431 N     N     . LYS LYS LYS A A 192 192 . 0.0941 0.1100 0.1273 -0.0085 0.0054
0.0025  1 .
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1432 CA    CA    . LYS LYS LYS A A 192 192 . 0.1139 0.1159 0.1165 -0.0126 -0.0027
0.0143  1 .
1433 CB    CB    . LYS LYS LYS A A 192 192 . 0.1002 0.1514 0.1161 -0.0038 -0.0002
0.0085  1 .
1434 CG    CG    . LYS LYS LYS A A 192 192 . 0.1474 0.1304 0.1210 -0.0396 -0.0085
0.0180  1 .
1435 CD    CD    . LYS LYS LYS A A 192 192 . 0.2380 0.2448 0.1790 -0.0428 -0.0152 -
0.0203 1 .
1436 CE    CE    . LYS LYS LYS A A 192 192 . 0.2737 0.3068 0.1857 -0.0377 0.0198
0.0180  1 .
1437 NZ    NZ    . LYS LYS LYS A A 192 192 . 0.3417 0.3604 0.1423 -0.0785 0.0274
0.0157  1 .
1438 C     C     . LYS LYS LYS A A 192 192 . 0.1241 0.1236 0.1384 -0.0140 0.0088
0.0097  1 .
1439 O     O     . LYS LYS LYS A A 192 192 . 0.1223 0.1523 0.1300 0.0018  0.0230
0.0170  1 .
1440 N     N     . GLY GLY GLY A A 193 193 . 0.1282 0.1136 0.1193 -0.0140 0.0129  -
0.0044 1 .
1441 CA    CA    . GLY GLY GLY A A 193 193 . 0.1474 0.1403 0.1287 -0.0300 -0.0065 -
0.0153 1 .
1442 C     C     . GLY GLY GLY A A 193 193 . 0.1552 0.1511 0.1569 -0.0114 -0.0005
0.0027  1 .
1443 O     O     . GLY GLY GLY A A 193 193 . 0.1543 0.1748 0.1779 -0.0309 -0.0159
0.0149  1 .
1444 N     N     . VAL VAL VAL A A 194 194 . 0.1472 0.1153 0.1039 -0.0046 -0.0156 -
0.0149 1 .
1445 CA    CA    . VAL VAL VAL A A 194 194 . 0.1228 0.1358 0.1513 -0.0131 0.0030  -
0.0132 1 .
1446 CB    CB    . VAL VAL VAL A A 194 194 . 0.1091 0.1429 0.1209 -0.0129 -0.0092 -
0.0252 1 .
1447 CG1   CG1   . VAL VAL VAL A A 194 194 . 0.0823 0.1819 0.1404 -0.0118 -0.0083 -
0.0330 1 .
1448 CG2   CG2   . VAL VAL VAL A A 194 194 . 0.1538 0.2038 0.1480 -0.0228 0.0255  -
0.0516 1 .
1449 C     C     . VAL VAL VAL A A 194 194 . 0.1454 0.1307 0.1609 -0.0049 0.0039  -
0.0077 1 .
1450 O     O     . VAL VAL VAL A A 194 194 . 0.1540 0.1528 0.2128 -0.0039 0.0231
0.0103  1 .
1451 N     N     . ILE ILE ILE A A 195 195 . 0.1312 0.1491 0.1426 -0.0095 -0.0011 -
0.0102 1 .
1452 CA    CA    . ILE ILE ILE A A 195 195 . 0.1428 0.1177 0.1395 -0.0099 0.0113  -
0.0186 1 .
1453 CB    CB    . ILE ILE ILE A A 195 195 . 0.1252 0.1044 0.1407 -0.0225 0.0312  -
0.0238 1 .
1454 CG1   CG1   . ILE ILE ILE A A 195 195 . 0.0898 0.0750 0.1423 0.0012  0.0069
0.0123  1 .
1455 CD1   CD1   . ILE ILE ILE A A 195 195 . 0.1582 0.1003 0.2126 -0.0416 0.0040  -
0.0170 1 .
1456 CG2   CG2   . ILE ILE ILE A A 195 195 . 0.1127 0.1314 0.1813 -0.0110 0.0366  -
0.0281 1 .
1457 C     C     . ILE ILE ILE A A 195 195 . 0.1695 0.1447 0.1647 -0.0050 0.0084  -
0.0121 1 .
1458 O     O     . ILE ILE ILE A A 195 195 . 0.1860 0.1913 0.1880 0.0111  0.0178
0.0131  1 .
1459 N     N     . LYS LYS LYS A A 196 196 . 0.1528 0.1483 0.1590 -0.0040 -0.0045 -
0.0015 1 .
1460 CA    CA    . LYS LYS LYS A A 196 196 . 0.1679 0.1828 0.1813 -0.0114 0.0104
0.0061  1 .
1461 CB    CB    . LYS LYS LYS A A 196 196 . 0.1711 0.1984 0.1815 0.0106  -0.0048
0.0402  1 .
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1462 CG    CG    . LYS LYS LYS A A 196 196 . 0.2192 0.2625 0.2091 0.0340  0.0233
0.0410  1 .
1463 CD    CD    . LYS LYS LYS A A 196 196 . 0.2752 0.3779 0.3224 0.0667  0.0035
0.0818  1 .
1464 CE    CE    . LYS LYS LYS A A 196 196 . 0.4054 0.3910 0.4556 0.0275  -0.0153
0.0435  1 .
1465 C     C     . LYS LYS LYS A A 196 196 . 0.1690 0.1842 0.1884 -0.0277 0.0148
0.0004  1 .
1466 O     O     . LYS LYS LYS A A 196 196 . 0.1936 0.2098 0.2248 -0.0503 0.0172
0.0119  1 .
1467 N     N     . ASP ASP ASP A A 197 197 . 0.1546 0.1550 0.1827 -0.0291 0.0025
0.0014  1 .
1468 CA    CA    . ASP ASP ASP A A 197 197 . 0.1710 0.2116 0.2152 -0.0408 0.0023  -
0.0029 1 .
1469 CB    CB    . ASP ASP ASP A A 197 197 . 0.1875 0.1951 0.2372 -0.0414 -0.0008 -
0.0315 1 .
1470 CG    CG    . ASP ASP ASP A A 197 197 . 0.2979 0.2837 0.2974 -0.0168 0.0013  -
0.0183 1 .
1471 OD1   OD1   . ASP ASP ASP A A 197 197 . 0.3059 0.3372 0.3490 -0.0073 0.0612  -
0.0437 1 .
1472 OD2   OD2   . ASP ASP ASP A A 197 197 . 0.3470 0.3728 0.3569 0.0112  -0.0351
0.0352  1 .
1473 C     C     . ASP ASP ASP A A 197 197 . 0.1851 0.2118 0.2199 -0.0313 -0.0039
0.0161  1 .
1474 O     O     . ASP ASP ASP A A 197 197 . 0.1753 0.2066 0.2342 -0.0646 -0.0127
0.0402  1 .
1475 N     N     . LYS LYS LYS A A 198 198 . 0.1579 0.2103 0.1822 -0.0271 -0.0210
0.0193  1 .
1476 CA    CA    . LYS LYS LYS A A 198 198 . 0.1664 0.2156 0.1899 -0.0133 -0.0074
0.0204  1 .
1477 CB    CB    . LYS LYS LYS A A 198 198 . 0.1570 0.2246 0.1862 -0.0044 -0.0341
0.0461  1 .
1478 CG    CG    . LYS LYS LYS A A 198 198 . 0.1675 0.2239 0.1800 -0.0024 -0.0291
0.0195  1 .
1479 CD    CD    . LYS LYS LYS A A 198 198 . 0.1666 0.1856 0.1783 0.0017  -0.0372
0.0182  1 .
1480 CE    CE    . LYS LYS LYS A A 198 198 . 0.2288 0.2370 0.2223 -0.0064 -0.0300
0.0125  1 .
1481 NZ    NZ    . LYS LYS LYS A A 198 198 . 0.3371 0.2084 0.1874 -0.0171 0.0175  -
0.0167 1 .
1482 C     C     . LYS LYS LYS A A 198 198 . 0.1809 0.2355 0.2128 -0.0179 -0.0092
0.0085  1 .
1483 O     O     . LYS LYS LYS A A 198 198 . 0.1756 0.2700 0.2370 -0.0402 0.0000  -
0.0039 1 .
1484 N     N     . TYR TYR TYR A A 199 199 . 0.1510 0.2210 0.1935 -0.0187 -0.0268
0.0044  1 .
1485 CA    CA    . TYR TYR TYR A A 199 199 . 0.1720 0.2315 0.2033 -0.0049 -0.0168 -
0.0049 1 .
1486 CB    CB    . TYR TYR TYR A A 199 199 . 0.1846 0.2263 0.2102 -0.0146 -0.0156 -
0.0130 1 .
1487 CG    CG    . TYR TYR TYR A A 199 199 . 0.1997 0.2501 0.2328 -0.0046 -0.0048
0.0010  1 .
1488 CD1   CD1   . TYR TYR TYR A A 199 199 . 0.1639 0.1794 0.2301 -0.0423 -0.0034
0.0316  1 .
1489 CE1   CE1   . TYR TYR TYR A A 199 199 . 0.1674 0.1856 0.1595 -0.0331 -0.0080 -
0.0324 1 .
1490 CZ    CZ    . TYR TYR TYR A A 199 199 . 0.1748 0.2143 0.1915 -0.0160 -0.0281 -
0.0122 1 .
1491 OH    OH    . TYR TYR TYR A A 199 199 . 0.1508 0.2533 0.2185 -0.0560 -0.0479
0.0108  1 .
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1492 CE2   CE2   . TYR TYR TYR A A 199 199 . 0.2356 0.2730 0.2190 -0.0041 -0.0137 -
0.0103 1 .
1493 CD2   CD2   . TYR TYR TYR A A 199 199 . 0.1929 0.2512 0.2881 -0.0251 -0.0514
0.0061  1 .
1494 C     C     . TYR TYR TYR A A 199 199 . 0.2059 0.2494 0.2234 0.0023  -0.0109 -
0.0163 1 .
1495 O     O     . TYR TYR TYR A A 199 199 . 0.1944 0.2771 0.2278 0.0080  -0.0114 -
0.0271 1 .
1496 N     N     . GLY GLY GLY A A 200 200 . 0.1900 0.2503 0.2016 0.0100  -0.0031 -
0.0004 1 .
1497 CA    CA    . GLY GLY GLY A A 200 200 . 0.1908 0.2348 0.2225 -0.0028 -0.0133 -
0.0017 1 .
1498 C     C     . GLY GLY GLY A A 200 200 . 0.2023 0.2280 0.2355 -0.0027 -0.0182
0.0109  1 .
1499 O     O     . GLY GLY GLY A A 200 200 . 0.1665 0.1895 0.2129 0.0047  -0.0296
0.0205  1 .
1500 N     N     . LYS LYS LYS A A 201 201 . 0.2216 0.2217 0.2213 -0.0070 -0.0306
0.0074  1 .
1501 CA    CA    . LYS LYS LYS A A 201 201 . 0.2017 0.2386 0.2418 0.0000  -0.0347
0.0230  1 .
1502 CB    CB    . LYS LYS LYS A A 201 201 . 0.2440 0.2785 0.2427 0.0006  -0.0481
0.0179  1 .
1503 C     C     . LYS LYS LYS A A 201 201 . 0.2080 0.2419 0.2325 -0.0127 -0.0204 -
0.0006 1 .
1504 O     O     . LYS LYS LYS A A 201 201 . 0.1518 0.2228 0.2440 -0.0049 -0.0388
0.0409  1 .
1505 N     N     . ASP ASP ASP A A 202 202 . 0.1630 0.2503 0.2199 -0.0209 -0.0325
0.0061  1 .
1506 CA    CA    . ASP ASP ASP A A 202 202 . 0.1930 0.2571 0.2454 -0.0203 -0.0156
0.0077  1 .
1507 CB    CB    . ASP ASP ASP A A 202 202 . 0.2428 0.2785 0.2531 -0.0290 0.0165
0.0253  1 .
1508 CG    CG    . ASP ASP ASP A A 202 202 . 0.3334 0.3816 0.3910 -0.0545 -0.0276
0.0227  1 .
1509 OD1   OD1   . ASP ASP ASP A A 202 202 . 0.3943 0.3991 0.4836 0.0185  0.0210  -
0.0262 1 .
1510 OD2   OD2   . ASP ASP ASP A A 202 202 . 0.4497 0.4540 0.5712 -0.0049 -0.0325
0.0745  1 .
1511 C     C     . ASP ASP ASP A A 202 202 . 0.1748 0.2403 0.2204 -0.0182 -0.0012 -
0.0084 1 .
1512 O     O     . ASP ASP ASP A A 202 202 . 0.2105 0.2255 0.1996 -0.0046 -0.0163 -
0.0205 1 .
1513 N     N     . ALA ALA ALA A A 203 203 . 0.1432 0.2296 0.2022 -0.0205 -0.0174 -
0.0129 1 .
1514 CA    CA    . ALA ALA ALA A A 203 203 . 0.1287 0.1901 0.1754 -0.0258 -0.0077
0.0047  1 .
1515 CB    CB    . ALA ALA ALA A A 203 203 . 0.1437 0.1548 0.1600 -0.0326 -0.0236
0.0001  1 .
1516 C     C     . ALA ALA ALA A A 203 203 . 0.1564 0.2037 0.1881 -0.0053 -0.0067
0.0045  1 .
1517 O     O     . ALA ALA ALA A A 203 203 . 0.1322 0.1812 0.1695 0.0328  0.0160  -
0.0026 1 .
1518 N     N     . THR THR THR A A 204 204 . 0.1452 0.1568 0.2080 -0.0031 -0.0070 -
0.0137 1 .
1519 CA    CA    . THR THR THR A A 204 204 . 0.1586 0.1557 0.2223 -0.0079 -0.0083 -
0.0235 1 .
1520 CB    CB    . THR THR THR A A 204 204 . 0.1795 0.1863 0.2419 -0.0044 -0.0111 -
0.0407 1 .
1521 OG1   OG1   . THR THR THR A A 204 204 . 0.1753 0.1879 0.2788 0.0152  -0.0381 -
0.0168 1 .
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1522 CG2   CG2   . THR THR THR A A 204 204 . 0.2068 0.2357 0.3069 -0.0176 -0.0402 -
0.0615 1 .
1523 C     C     . THR THR THR A A 204 204 . 0.1476 0.1533 0.1820 -0.0063 -0.0038 -
0.0277 1 .
1524 O     O     . THR THR THR A A 204 204 . 0.1134 0.1323 0.1599 -0.0205 0.0004  -
0.0333 1 .
1525 N     N     . ASN ASN ASN A A 205 205 . 0.1321 0.1133 0.1139 -0.0105 -0.0028
0.0001  1 .
1526 CA    CA    . ASN ASN ASN A A 205 205 . 0.1353 0.1350 0.1185 -0.0054 -0.0050 -
0.0024 1 .
1527 CB    CB    . ASN ASN ASN A A 205 205 . 0.1387 0.1305 0.1318 0.0018  0.0109
0.0022  1 .
1528 CG    CG    . ASN ASN ASN A A 205 205 . 0.1666 0.1882 0.1246 0.0159  0.0109  -
0.0031 1 .
1529 OD1   OD1   . ASN ASN ASN A A 205 205 . 0.2214 0.1668 0.1776 0.0182  -0.0197
0.0545  1 .
1530 ND2   ND2   . ASN ASN ASN A A 205 205 . 0.1944 0.1911 0.1032 -0.0247 -0.0033 -
0.0219 1 .
1531 C     C     . ASN ASN ASN A A 205 205 . 0.1260 0.1252 0.1341 -0.0055 0.0078  -
0.0045 1 .
1532 O     O     . ASN ASN ASN A A 205 205 . 0.0938 0.1329 0.1153 -0.0012 0.0070
0.0070  1 .
1533 N     N     . VAL VAL VAL A A 206 206 . 0.1076 0.1240 0.1536 -0.0052 0.0232  -
0.0026 1 .
1534 CA    CA    . VAL VAL VAL A A 206 206 . 0.1067 0.1285 0.1514 0.0025  0.0119  -
0.0102 1 .
1535 CB    CB    . VAL VAL VAL A A 206 206 . 0.1204 0.1296 0.1798 0.0019  -0.0066 -
0.0214 1 .
1536 CG1   CG1   . VAL VAL VAL A A 206 206 . 0.0943 0.1329 0.1619 0.0250  0.0174  -
0.0317 1 .
1537 CG2   CG2   . VAL VAL VAL A A 206 206 . 0.0658 0.1245 0.1326 0.0185  -0.0281 -
0.0302 1 .
1538 C     C     . VAL VAL VAL A A 206 206 . 0.0903 0.1176 0.1428 -0.0268 0.0129
0.0062  1 .
1539 O     O     . VAL VAL VAL A A 206 206 . 0.0948 0.1325 0.1469 -0.0279 0.0224
0.0041  1 .
1540 N     N     . GLY GLY GLY A A 207 207 . 0.0833 0.1299 0.1365 -0.0210 0.0051
0.0102  1 .
1541 CA    CA    . GLY GLY GLY A A 207 207 . 0.1025 0.1024 0.1132 -0.0149 0.0216  -
0.0092 1 .
1542 C     C     . GLY GLY GLY A A 207 207 . 0.1026 0.1115 0.0908 0.0009  0.0117  -
0.0018 1 .
1543 O     O     . GLY GLY GLY A A 207 207 . 0.1042 0.1112 0.1063 0.0134  0.0110
0.0027  1 .
1544 N     N     . ASP ASP ASP A A 208 208 . 0.1316 0.1046 0.1075 -0.0195 0.0203  -
0.0042 1 .
1545 CA    CA    . ASP ASP ASP A A 208 208 . 0.0902 0.0818 0.0910 -0.0040 0.0071  -
0.0004 1 .
1546 CB    CB    . ASP ASP ASP A A 208 208 . 0.1388 0.1079 0.1206 0.0146  -0.0025 -
0.0122 1 .
1547 CG    CG    . ASP ASP ASP A A 208 208 . 0.1539 0.1603 0.1618 0.0327  -0.0047 -
0.0169 1 .
1548 OD1   OD1   . ASP ASP ASP A A 208 208 . 0.1286 0.1426 0.1597 0.0340  0.0287  -
0.0054 1 .
1549 OD2   OD2   . ASP ASP ASP A A 208 208 . 0.1443 0.1317 0.1647 0.0425  -0.0119 -
0.0375 1 .
1550 C     C     . ASP ASP ASP A A 208 208 . 0.0944 0.0814 0.0925 0.0058  0.0042  -
0.0080 1 .
1551 O     O     . ASP ASP ASP A A 208 208 . 0.1005 0.0880 0.1096 0.0089  0.0027  -
0.0121 1 .
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1552 N     N     . GLU GLU GLU A A 209 209 . 0.1062 0.1013 0.0875 0.0037  0.0125  -
0.0087 1 .
1553 CA    CA    . GLU GLU GLU A A 209 209 . 0.0956 0.0734 0.0780 0.0139  0.0295
0.0113  1 .
1554 CB    CB    . GLU GLU GLU A A 209 209 . 0.1167 0.0984 0.0998 -0.0141 -0.0108 -
0.0039 1 .
1555 CG    CG    . GLU GLU GLU A A 209 209 . 0.1238 0.1000 0.0864 0.0299  0.0329
0.0099  1 .
1556 CD    CD    . GLU GLU GLU A A 209 209 . 0.1278 0.1297 0.1337 0.0050  0.0265
0.0032  1 .
1557 OE1   OE1   . GLU GLU GLU A A 209 209 . 0.1425 0.1534 0.1695 0.0015  0.0037  -
0.0001 1 .
1558 OE2   OE2   . GLU GLU GLU A A 209 209 . 0.1533 0.1278 0.1342 0.0020  0.0005
0.0202  1 .
1559 C     C     . GLU GLU GLU A A 209 209 . 0.1022 0.0933 0.0997 0.0083  0.0057
0.0000  1 .
1560 O     O     . GLU GLU GLU A A 209 209 . 0.1065 0.0921 0.1201 0.0166  0.0088  -
0.0051 1 .
1561 N     N     . GLY GLY GLY A A 210 210 . 0.0784 0.0937 0.1172 0.0013  0.0099
0.0167  1 .
1562 CA    CA    . GLY GLY GLY A A 210 210 . 0.1011 0.0924 0.1046 -0.0036 0.0105  -
0.0221 1 .
1563 C     C     . GLY GLY GLY A A 210 210 . 0.1198 0.1184 0.1073 -0.0042 0.0069  -
0.0061 1 .
1564 O     O     . GLY GLY GLY A A 210 210 . 0.1100 0.1027 0.0969 0.0042  0.0066  -
0.0119 1 .
1565 N     N     . GLY GLY GLY A A 211 211 . 0.1017 0.1287 0.1137 -0.0053 0.0143  -
0.0070 1 .
1566 CA    CA    . GLY GLY GLY A A 211 211 . 0.1141 0.1071 0.1076 -0.0225 0.0334  -
0.0141 1 .
1567 C     C     . GLY GLY GLY A A 211 211 . 0.1419 0.1238 0.1220 -0.0151 0.0215  -
0.0016 1 .
1568 O     O     . GLY GLY GLY A A 211 211 . 0.0960 0.1469 0.1169 -0.0317 0.0236
0.0071  1 .
1569 N     N     . PHE PHE PHE A A 212 212 . 0.1107 0.0935 0.1048 -0.0381 0.0189  -
0.0103 1 .
1570 CA    CA    . PHE PHE PHE A A 212 212 . 0.0913 0.1150 0.1332 0.0121  0.0345
0.0010  1 .
1571 CB    CB    . PHE PHE PHE A A 212 212 . 0.0898 0.0969 0.1391 0.0087  0.0307  -
0.0024 1 .
1572 CG    CG    . PHE PHE PHE A A 212 212 . 0.1239 0.1179 0.1472 0.0089  0.0105  -
0.0111 1 .
1573 CD1   CD1   . PHE PHE PHE A A 212 212 . 0.1105 0.0545 0.1309 -0.0101 0.0135  -
0.0150 1 .
1574 CE1   CE1   . PHE PHE PHE A A 212 212 . 0.1190 0.1254 0.1698 -0.0001 -0.0003
0.0142  1 .
1575 CZ    CZ    . PHE PHE PHE A A 212 212 . 0.1471 0.0800 0.1306 -0.0006 -0.0059 -
0.0313 1 .
1576 CE2   CE2   . PHE PHE PHE A A 212 212 . 0.1182 0.0918 0.1766 -0.0048 0.0088  -
0.0098 1 .
1577 CD2   CD2   . PHE PHE PHE A A 212 212 . 0.1280 0.0623 0.1761 -0.0106 -0.0078 -
0.0124 1 .
1578 C     C     . PHE PHE PHE A A 212 212 . 0.0811 0.1354 0.1351 -0.0014 0.0046
0.0067  1 .
1579 O     O     . PHE PHE PHE A A 212 212 . 0.0718 0.1234 0.1353 -0.0157 0.0271
0.0019  1 .
1580 N     N     . ALA ALA ALA A A 213 213 . 0.0987 0.1325 0.1285 0.0032  0.0172  -
0.0196 1 .
1581 CA    CA    . ALA ALA ALA A A 213 213 . 0.1028 0.1379 0.1185 0.0038  0.0120  -
0.0209 1 .
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1582 CB    CB    . ALA ALA ALA A A 213 213 . 0.1254 0.1074 0.1528 -0.0075 0.0118  -
0.0302 1 .
1583 C     C     . ALA ALA ALA A A 213 213 . 0.1420 0.1365 0.1403 -0.0042 0.0128  -
0.0089 1 .
1584 O     O     . ALA ALA ALA A A 213 213 . 0.1364 0.1549 0.1655 0.0110  0.0279  -
0.0045 1 .
1585 N     N     . PRO PRO PRO A A 214 214 . 0.1360 0.1573 0.1503 -0.0042 0.0151  -
0.0049 1 .
1586 CA    CA    . PRO PRO PRO A A 214 214 . 0.1347 0.1507 0.1554 -0.0037 0.0133  -
0.0046 1 .
1587 CB    CB    . PRO PRO PRO A A 214 214 . 0.1532 0.1512 0.1505 0.0208  0.0139  -
0.0100 1 .
1588 CG    CG    . PRO PRO PRO A A 214 214 . 0.1466 0.1466 0.1663 -0.0147 -0.0042
0.0043  1 .
1589 CD    CD    . PRO PRO PRO A A 214 214 . 0.1256 0.1557 0.1189 0.0091  -0.0008 -
0.0083 1 .
1590 C     C     . PRO PRO PRO A A 214 214 . 0.1343 0.1489 0.1589 0.0007  0.0117
0.0015  1 .
1591 O     O     . PRO PRO PRO A A 214 214 . 0.0730 0.1676 0.1526 0.0053  0.0155
0.0000  1 .
1592 N     N     . ASN ASN ASN A A 215 215 . 0.1683 0.2120 0.1900 -0.0151 0.0183
0.0035  1 .
1593 CA    CA    . ASN ASN ASN A A 215 215 . 0.1920 0.2311 0.2054 -0.0205 0.0083  -
0.0037 1 .
1594 CB    CB    . ASN ASN ASN A A 215 215 . 0.2042 0.2455 0.2061 -0.0305 0.0136  -
0.0042 1 .
1595 CG    CG    . ASN ASN ASN A A 215 215 . 0.2303 0.2805 0.3017 -0.0571 0.0204
0.0107  1 .
1596 OD1   OD1   . ASN ASN ASN A A 215 215 . 0.2548 0.4018 0.3643 -0.0762 0.0917
0.0911  1 .
1597 ND2   ND2   . ASN ASN ASN A A 215 215 . 0.2195 0.2115 0.2385 -0.0620 0.0567
0.0383  1 .
1598 C     C     . ASN ASN ASN A A 215 215 . 0.2128 0.2422 0.2060 -0.0193 0.0097
0.0043  1 .
1599 O     O     . ASN ASN ASN A A 215 215 . 0.2481 0.2773 0.2261 -0.0342 0.0072
0.0106  1 .
1600 N     N     . ILE ILE ILE A A 216 216 . 0.2023 0.2062 0.1899 -0.0135 0.0055
0.0115  1 .
1601 CA    CA    . ILE ILE ILE A A 216 216 . 0.1559 0.1989 0.2001 -0.0066 0.0091  -
0.0045 1 .
1602 CB    CB    . ILE ILE ILE A A 216 216 . 0.1448 0.1604 0.1902 -0.0212 0.0248  -
0.0204 1 .
1603 CG1   CG1   . ILE ILE ILE A A 216 216 . 0.1440 0.1733 0.1514 -0.0469 0.0082  -
0.0168 1 .
1604 CD1   CD1   . ILE ILE ILE A A 216 216 . 0.1324 0.2178 0.1991 -0.0330 0.0358  -
0.0246 1 .
1605 CG2   CG2   . ILE ILE ILE A A 216 216 . 0.1554 0.1956 0.1895 -0.0086 0.0175  -
0.0095 1 .
1606 C     C     . ILE ILE ILE A A 216 216 . 0.1646 0.1910 0.2049 -0.0004 0.0074
0.0070  1 .
1607 O     O     . ILE ILE ILE A A 216 216 . 0.1357 0.1837 0.2047 0.0186  -0.0092 -
0.0065 1 .
1608 N     N     . LEU LEU LEU A A 217 217 . 0.1628 0.1959 0.2146 0.0187  -0.0170
0.0116  1 .
1609 CA    CA    . LEU LEU LEU A A 217 217 . 0.1404 0.1944 0.2405 0.0042  -0.0022
0.0186  1 .
1610 CB    CB    . LEU LEU LEU A A 217 217 . 0.1418 0.2043 0.2364 0.0043  0.0018
0.0100  1 .
1611 CG    CG    . LEU LEU LEU A A 217 217 . 0.1218 0.1866 0.2700 0.0116  -0.0171
0.0316  1 .
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1612 CD1   CD1   . LEU LEU LEU A A 217 217 . 0.1761 0.2565 0.3088 0.0207  -0.0186 -
0.0100 1 .
1613 CD2   CD2   . LEU LEU LEU A A 217 217 . 0.1681 0.2642 0.2701 -0.0225 -0.0282
0.0087  1 .
1614 C     C     . LEU LEU LEU A A 217 217 . 0.1385 0.1936 0.2347 -0.0003 0.0089
0.0089  1 .
1615 O     O     . LEU LEU LEU A A 217 217 . 0.1466 0.2029 0.2526 -0.0007 0.0226
0.0264  1 .
1616 N     N     . GLU GLU GLU A A 218 218 . 0.1481 0.1944 0.2419 0.0019  0.0237
0.0029  1 .
1617 CA    CA    . GLU GLU GLU A A 218 218 . 0.1661 0.2114 0.2390 -0.0179 0.0205
0.0042  1 .
1618 CB    CB    . GLU GLU GLU A A 218 218 . 0.1730 0.2448 0.2660 -0.0141 0.0222  -
0.0144 1 .
1619 CG    CG    . GLU GLU GLU A A 218 218 . 0.2150 0.3520 0.3875 -0.0327 0.0282  -
0.0303 1 .
1620 CD    CD    . GLU GLU GLU A A 218 218 . 0.3690 0.5545 0.4950 -0.0430 -0.0030 -
0.0819 1 .
1621 OE1   OE1   . GLU GLU GLU A A 218 218 . 0.4053 0.6005 0.6050 -0.0316 0.0212  -
0.0682 1 .
1622 OE2   OE2   . GLU GLU GLU A A 218 218 . 0.3898 0.5817 0.6155 -0.0336 -0.0139 -
0.1406 1 .
1623 C     C     . GLU GLU GLU A A 218 218 . 0.1721 0.2005 0.2228 -0.0064 0.0150
0.0040  1 .
1624 O     O     . GLU GLU GLU A A 218 218 . 0.1416 0.1795 0.1960 -0.0054 0.0151
0.0060  1 .
1625 N     N     . ASN ASN ASN A A 219 219 . 0.1693 0.1979 0.2026 -0.0054 0.0227
0.0083  1 .
1626 CA    CA    . ASN ASN ASN A A 219 219 . 0.1621 0.1734 0.1869 -0.0058 0.0078  -
0.0001 1 .
1627 CB    CB    . ASN ASN ASN A A 219 219 . 0.1665 0.1629 0.1842 -0.0027 -0.0092 -
0.0093 1 .
1628 CG    CG    . ASN ASN ASN A A 219 219 . 0.1733 0.1745 0.1861 0.0058  -0.0123 -
0.0113 1 .
1629 OD1   OD1   . ASN ASN ASN A A 219 219 . 0.1755 0.2262 0.2925 0.0002  -0.0040
0.0023  1 .
1630 ND2   ND2   . ASN ASN ASN A A 219 219 . 0.0462 0.0996 0.1514 0.0081  0.0082
0.0281  1 .
1631 C     C     . ASN ASN ASN A A 219 219 . 0.1668 0.1594 0.1985 -0.0107 -0.0018 -
0.0024 1 .
1632 O     O     . ASN ASN ASN A A 219 219 . 0.1110 0.1321 0.1722 0.0019  -0.0195 -
0.0052 1 .
1633 N     N     . SER SER SER A A 220 220 . 0.1509 0.1626 0.1740 -0.0126 -0.0073 -
0.0123 1 .
1634 CA    CA    . SER SER SER A A 220 220 . 0.1584 0.1703 0.1805 -0.0218 -0.0105 -
0.0190 1 .
1635 CB    CB    . SER SER SER A A 220 220 . 0.1642 0.1762 0.1787 -0.0494 0.0061  -
0.0281 1 .
1636 OG    OG    . SER SER SER A A 220 220 . 0.1623 0.2104 0.2680 -0.0548 0.0202  -
0.0159 1 .
1637 C     C     . SER SER SER A A 220 220 . 0.1462 0.1584 0.1631 -0.0155 -0.0092 -
0.0252 1 .
1638 O     O     . SER SER SER A A 220 220 . 0.1743 0.2064 0.1824 -0.0080 -0.0192 -
0.0073 1 .
1639 N     N     . GLU GLU GLU A A 221 221 . 0.1564 0.1557 0.1830 -0.0054 -0.0275 -
0.0006 1 .
1640 CA    CA    . GLU GLU GLU A A 221 221 . 0.1399 0.1676 0.1696 -0.0026 -0.0151 -
0.0065 1 .
1641 CB    CB    . GLU GLU GLU A A 221 221 . 0.1503 0.1589 0.1819 -0.0082 -0.0121
0.0157  1 .
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1642 CG    CG    . GLU GLU GLU A A 221 221 . 0.1519 0.1796 0.1691 0.0093  -0.0309
0.0052  1 .
1643 CD    CD    . GLU GLU GLU A A 221 221 . 0.1885 0.2057 0.1964 -0.0327 -0.0389 -
0.0108 1 .
1644 OE1   OE1   . GLU GLU GLU A A 221 221 . 0.2002 0.2028 0.1713 -0.0294 -0.0557 -
0.0138 1 .
1645 OE2   OE2   . GLU GLU GLU A A 221 221 . 0.2495 0.1984 0.2029 -0.0242 -0.0151
0.0076  1 .
1646 C     C     . GLU GLU GLU A A 221 221 . 0.1366 0.1430 0.1672 -0.0034 -0.0081 -
0.0146 1 .
1647 O     O     . GLU GLU GLU A A 221 221 . 0.1286 0.1533 0.1504 -0.0089 -0.0108 -
0.0064 1 .
1648 N     N     . ALA ALA ALA A A 222 222 . 0.1081 0.1358 0.1551 -0.0306 -0.0053 -
0.0085 1 .
1649 CA    CA    . ALA ALA ALA A A 222 222 . 0.1175 0.1365 0.1549 -0.0228 0.0002  -
0.0116 1 .
1650 CB    CB    . ALA ALA ALA A A 222 222 . 0.1282 0.1144 0.1624 -0.0261 0.0057  -
0.0215 1 .
1651 C     C     . ALA ALA ALA A A 222 222 . 0.1162 0.1327 0.1485 -0.0234 -0.0066 -
0.0051 1 .
1652 O     O     . ALA ALA ALA A A 222 222 . 0.1138 0.1412 0.1693 -0.0183 -0.0396 -
0.0159 1 .
1653 N     N     . LEU LEU LEU A A 223 223 . 0.0783 0.1379 0.1410 -0.0313 -0.0078 -
0.0019 1 .
1654 CA    CA    . LEU LEU LEU A A 223 223 . 0.1123 0.1363 0.1404 -0.0146 -0.0115 -
0.0071 1 .
1655 CB    CB    . LEU LEU LEU A A 223 223 . 0.1178 0.1334 0.1510 -0.0096 0.0017
0.0211  1 .
1656 CG    CG    . LEU LEU LEU A A 223 223 . 0.1045 0.1181 0.1631 -0.0159 -0.0100 -
0.0086 1 .
1657 CD1   CD1   . LEU LEU LEU A A 223 223 . 0.1069 0.1662 0.1407 0.0040  -0.0366 -
0.0417 1 .
1658 CD2   CD2   . LEU LEU LEU A A 223 223 . 0.1055 0.1267 0.1560 -0.0121 0.0512  -
0.0202 1 .
1659 C     C     . LEU LEU LEU A A 223 223 . 0.1196 0.1409 0.1623 -0.0043 0.0013
0.0097  1 .
1660 O     O     . LEU LEU LEU A A 223 223 . 0.1331 0.1502 0.1493 -0.0065 0.0115
0.0085  1 .
1661 N     N     . GLU GLU GLU A A 224 224 . 0.1448 0.1467 0.1732 -0.0177 -0.0020
0.0024  1 .
1662 CA    CA    . GLU GLU GLU A A 224 224 . 0.1188 0.1296 0.1717 0.0049  0.0069
0.0056  1 .
1663 CB    CB    . GLU GLU GLU A A 224 224 . 0.1601 0.1325 0.1865 -0.0217 0.0173  -
0.0043 1 .
1664 CG    CG    . GLU GLU GLU A A 224 224 . 0.2188 0.1631 0.2510 -0.0129 0.0078
0.0139  1 .
1665 CD    CD    . GLU GLU GLU A A 224 224 . 0.3526 0.2411 0.2665 -0.0360 -0.0033
0.0263  1 .
1666 OE1   OE1   . GLU GLU GLU A A 224 224 . 0.4883 0.2732 0.3003 0.0086  0.0014
0.0283  1 .
1667 OE2   OE2   . GLU GLU GLU A A 224 224 . 0.3376 0.2193 0.2792 -0.0515 -0.0358
0.0165  1 .
1668 C     C     . GLU GLU GLU A A 224 224 . 0.1223 0.1431 0.1564 -0.0119 0.0056  -
0.0023 1 .
1669 O     O     . GLU GLU GLU A A 224 224 . 0.1052 0.1473 0.1657 -0.0042 -0.0037 -
0.0207 1 .
1670 N     N     . LEU LEU LEU A A 225 225 . 0.0749 0.1338 0.1293 -0.0148 0.0057  -
0.0008 1 .
1671 CA    CA    . LEU LEU LEU A A 225 225 . 0.1155 0.1296 0.1440 -0.0186 0.0190
0.0108  1 .
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1672 CB    CB    . LEU LEU LEU A A 225 225 . 0.1219 0.1725 0.1345 -0.0277 0.0349  -
0.0010 1 .
1673 CG    CG    . LEU LEU LEU A A 225 225 . 0.0887 0.1378 0.1451 -0.0089 0.0394
0.0290  1 .
1674 CD1   CD1   . LEU LEU LEU A A 225 225 . 0.1565 0.1666 0.1605 0.0094  0.0166
0.0232  1 .
1675 CD2   CD2   . LEU LEU LEU A A 225 225 . 0.1120 0.1363 0.1765 -0.0367 0.0468
0.0471  1 .
1676 C     C     . LEU LEU LEU A A 225 225 . 0.1214 0.1276 0.1560 -0.0176 0.0003  -
0.0008 1 .
1677 O     O     . LEU LEU LEU A A 225 225 . 0.1073 0.1102 0.1611 -0.0228 -0.0073
0.0027  1 .
1678 N     N     . VAL VAL VAL A A 226 226 . 0.1429 0.1351 0.1449 -0.0234 0.0059
0.0081  1 .
1679 CA    CA    . VAL VAL VAL A A 226 226 . 0.1192 0.1329 0.1501 0.0064  0.0176  -
0.0159 1 .
1680 CB    CB    . VAL VAL VAL A A 226 226 . 0.1268 0.1311 0.1545 -0.0002 0.0286  -
0.0086 1 .
1681 CG1   CG1   . VAL VAL VAL A A 226 226 . 0.1588 0.1607 0.1254 -0.0208 0.0310
0.0080  1 .
1682 CG2   CG2   . VAL VAL VAL A A 226 226 . 0.1622 0.0902 0.1219 -0.0163 -0.0089 -
0.0215 1 .
1683 C     C     . VAL VAL VAL A A 226 226 . 0.1359 0.1476 0.1500 0.0016  0.0017  -
0.0151 1 .
1684 O     O     . VAL VAL VAL A A 226 226 . 0.1142 0.1336 0.1832 0.0012  0.0033  -
0.0068 1 .
1685 N     N     . LYS LYS LYS A A 227 227 . 0.1318 0.1546 0.1431 0.0039  0.0035  -
0.0193 1 .
1686 CA    CA    . LYS LYS LYS A A 227 227 . 0.1616 0.1535 0.1563 0.0105  -0.0131 -
0.0302 1 .
1687 CB    CB    . LYS LYS LYS A A 227 227 . 0.1690 0.1766 0.1512 0.0290  -0.0266 -
0.0318 1 .
1688 CG    CG    . LYS LYS LYS A A 227 227 . 0.2658 0.2235 0.2144 0.0527  -0.0675 -
0.0609 1 .
1689 CD    CD    . LYS LYS LYS A A 227 227 . 0.3290 0.3275 0.3490 0.0567  -0.0799 -
0.0943 1 .
1690 CE    CE    . LYS LYS LYS A A 227 227 . 0.4430 0.4668 0.3546 0.0788  -0.0594 -
0.0596 1 .
1691 NZ    NZ    . LYS LYS LYS A A 227 227 . 0.4457 0.4411 0.3795 0.1083  -0.0984 -
0.0548 1 .
1692 C     C     . LYS LYS LYS A A 227 227 . 0.1562 0.1549 0.1401 0.0084  -0.0098 -
0.0181 1 .
1693 O     O     . LYS LYS LYS A A 227 227 . 0.1321 0.1725 0.1745 -0.0092 -0.0071 -
0.0103 1 .
1694 N     N     . GLU GLU GLU A A 228 228 . 0.1401 0.1301 0.1683 -0.0104 -0.0111 -
0.0104 1 .
1695 CA    CA    . GLU GLU GLU A A 228 228 . 0.1401 0.1464 0.1569 0.0052  -0.0293 -
0.0007 1 .
1696 CB    CB    . GLU GLU GLU A A 228 228 . 0.1671 0.1395 0.1973 0.0055  -0.0195
0.0191  1 .
1697 CG    CG    . GLU GLU GLU A A 228 228 . 0.2731 0.2028 0.2102 0.0228  -0.0484
0.0286  1 .
1698 CD    CD    . GLU GLU GLU A A 228 228 . 0.3865 0.3023 0.3292 0.0303  -0.0457 -
0.0446 1 .
1699 OE1   OE1   . GLU GLU GLU A A 228 228 . 0.4479 0.3099 0.3777 -0.0320 -0.0988 -
0.1102 1 .
1700 OE2   OE2   . GLU GLU GLU A A 228 228 . 0.5103 0.3170 0.3763 0.0245  -0.0267 -
0.0444 1 .
1701 C     C     . GLU GLU GLU A A 228 228 . 0.1443 0.1419 0.1716 0.0013  -0.0160 -
0.0128 1 .
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1702 O     O     . GLU GLU GLU A A 228 228 . 0.1370 0.1395 0.1609 0.0000  -0.0115 -
0.0205 1 .
1703 N     N     . ALA ALA ALA A A 229 229 . 0.1349 0.1478 0.1495 -0.0149 -0.0216 -
0.0136 1 .
1704 CA    CA    . ALA ALA ALA A A 229 229 . 0.1214 0.1433 0.1437 -0.0145 -0.0127 -
0.0172 1 .
1705 CB    CB    . ALA ALA ALA A A 229 229 . 0.1348 0.1221 0.1276 -0.0123 -0.0330 -
0.0398 1 .
1706 C     C     . ALA ALA ALA A A 229 229 . 0.1310 0.1181 0.1339 -0.0036 -0.0121 -
0.0223 1 .
1707 O     O     . ALA ALA ALA A A 229 229 . 0.1306 0.1444 0.1530 -0.0020 -0.0209
0.0122  1 .
1708 N     N     . ILE ILE ILE A A 230 230 . 0.1077 0.0889 0.1231 -0.0140 0.0042  -
0.0219 1 .
1709 CA    CA    . ILE ILE ILE A A 230 230 . 0.1291 0.1151 0.1443 -0.0089 0.0078  -
0.0199 1 .
1710 CB    CB    . ILE ILE ILE A A 230 230 . 0.0984 0.0902 0.1152 0.0129  0.0112  -
0.0301 1 .
1711 CG1   CG1   . ILE ILE ILE A A 230 230 . 0.0911 0.0548 0.1151 0.0061  -0.0245 -
0.0188 1 .
1712 CD1   CD1   . ILE ILE ILE A A 230 230 . 0.1549 0.1311 0.1547 0.0219  -0.0259
0.0233  1 .
1713 CG2   CG2   . ILE ILE ILE A A 230 230 . 0.1284 0.1401 0.1239 -0.0173 0.0185  -
0.0367 1 .
1714 C     C     . ILE ILE ILE A A 230 230 . 0.1318 0.1361 0.1408 0.0005  0.0006  -
0.0353 1 .
1715 O     O     . ILE ILE ILE A A 230 230 . 0.1264 0.1533 0.1284 0.0078  -0.0032 -
0.0202 1 .
1716 N     N     . ASP ASP ASP A A 231 231 . 0.1235 0.1243 0.1524 -0.0238 0.0139  -
0.0330 1 .
1717 CA    CA    . ASP ASP ASP A A 231 231 . 0.1695 0.1412 0.1859 0.0003  -0.0073 -
0.0240 1 .
1718 CB    CB    . ASP ASP ASP A A 231 231 . 0.1898 0.1439 0.2071 -0.0190 -0.0211 -
0.0570 1 .
1719 CG    CG    . ASP ASP ASP A A 231 231 . 0.2674 0.2519 0.2457 -0.0369 -0.0128 -
0.0315 1 .
1720 OD1   OD1   . ASP ASP ASP A A 231 231 . 0.2890 0.3929 0.3329 -0.0258 0.0220  -
0.0408 1 .
1721 OD2   OD2   . ASP ASP ASP A A 231 231 . 0.2929 0.3980 0.2436 -0.0921 -0.0181 -
0.0029 1 .
1722 C     C     . ASP ASP ASP A A 231 231 . 0.1736 0.1583 0.1819 -0.0079 -0.0050 -
0.0204 1 .
1723 O     O     . ASP ASP ASP A A 231 231 . 0.1943 0.1687 0.1781 0.0133  -0.0100 -
0.0262 1 .
1724 N     N     . LYS LYS LYS A A 232 232 . 0.1562 0.1425 0.1593 -0.0158 -0.0138 -
0.0066 1 .
1725 CA    CA    . LYS LYS LYS A A 232 232 . 0.1352 0.1503 0.1761 -0.0205 -0.0064 -
0.0027 1 .
1726 CB    CB    . LYS LYS LYS A A 232 232 . 0.1755 0.1175 0.1493 0.0057  0.0016  -
0.0027 1 .
1727 CG    CG    . LYS LYS LYS A A 232 232 . 0.1983 0.2670 0.2087 -0.0098 -0.0222 -
0.0155 1 .
1728 CD    CD    . LYS LYS LYS A A 232 232 . 0.3583 0.3671 0.2678 -0.0571 0.0280  -
0.0076 1 .
1729 CE    CE    . LYS LYS LYS A A 232 232 . 0.4711 0.3930 0.3403 -0.0561 -0.0049 -
0.0019 1 .
1730 NZ    NZ    . LYS LYS LYS A A 232 232 . 0.5328 0.4570 0.3767 -0.0711 0.0206  -
0.0394 1 .
1731 C     C     . LYS LYS LYS A A 232 232 . 0.1378 0.1445 0.1887 -0.0021 -0.0057 -
0.0053 1 .
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1732 O     O     . LYS LYS LYS A A 232 232 . 0.1054 0.1110 0.2126 -0.0049 -0.0214 -
0.0028 1 .
1733 N     N     . ALA ALA ALA A A 233 233 . 0.1212 0.1221 0.1807 -0.0004 0.0020  -
0.0078 1 .
1734 CA    CA    . ALA ALA ALA A A 233 233 . 0.1254 0.1362 0.1560 -0.0174 0.0000  -
0.0234 1 .
1735 CB    CB    . ALA ALA ALA A A 233 233 . 0.1383 0.0776 0.1536 -0.0054 0.0216  -
0.0346 1 .
1736 C     C     . ALA ALA ALA A A 233 233 . 0.1517 0.1240 0.1662 0.0002  -0.0020 -
0.0258 1 .
1737 O     O     . ALA ALA ALA A A 233 233 . 0.1378 0.1511 0.1737 -0.0311 -0.0037 -
0.0423 1 .
1738 N     N     . GLY GLY GLY A A 234 234 . 0.1628 0.1535 0.1572 0.0053  -0.0035 -
0.0122 1 .
1739 CA    CA    . GLY GLY GLY A A 234 234 . 0.1638 0.1472 0.1467 0.0097  0.0000  -
0.0104 1 .
1740 C     C     . GLY GLY GLY A A 234 234 . 0.1358 0.1373 0.1496 -0.0100 0.0042  -
0.0210 1 .
1741 O     O     . GLY GLY GLY A A 234 234 . 0.1780 0.1471 0.1636 0.0174  0.0170  -
0.0120 1 .
1742 N     N     . TYR TYR TYR A A 235 235 . 0.1051 0.1326 0.1296 -0.0074 -0.0067 -
0.0116 1 .
1743 CA    CA    . TYR TYR TYR A A 235 235 . 0.1232 0.1083 0.1244 -0.0020 -0.0274 -
0.0155 1 .
1744 CB    CB    . TYR TYR TYR A A 235 235 . 0.1284 0.1390 0.1259 0.0006  -0.0297 -
0.0212 1 .
1745 CG    CG    . TYR TYR TYR A A 235 235 . 0.1116 0.0898 0.1234 -0.0035 -0.0232 -
0.0130 1 .
1746 CD1   CD1   . TYR TYR TYR A A 235 235 . 0.1538 0.1851 0.1679 0.0052  -0.0262
0.0063  1 .
1747 CE1   CE1   . TYR TYR TYR A A 235 235 . 0.1141 0.1242 0.1520 0.0001  -0.0351 -
0.0034 1 .
1748 CZ    CZ    . TYR TYR TYR A A 235 235 . 0.1701 0.1618 0.1704 0.0139  -0.0114
0.0128  1 .
1749 OH    OH    . TYR TYR TYR A A 235 235 . 0.1640 0.1794 0.1998 0.0284  -0.0440 -
0.0212 1 .
1750 CE2   CE2   . TYR TYR TYR A A 235 235 . 0.1685 0.1719 0.1441 0.0096  -0.0326 -
0.0033 1 .
1751 CD2   CD2   . TYR TYR TYR A A 235 235 . 0.1471 0.1457 0.1228 0.0018  0.0014  -
0.0198 1 .
1752 C     C     . TYR TYR TYR A A 235 235 . 0.1219 0.1393 0.1422 -0.0059 -0.0116 -
0.0051 1 .
1753 O     O     . TYR TYR TYR A A 235 235 . 0.1202 0.1281 0.1317 0.0004  -0.0044 -
0.0177 1 .
1754 N     N     . THR THR THR A A 236 236 . 0.1498 0.1611 0.1528 -0.0158 -0.0341 -
0.0238 1 .
1755 CA    CA    . THR THR THR A A 236 236 . 0.1620 0.1619 0.1659 -0.0106 -0.0199 -
0.0008 1 .
1756 CB    CB    . THR THR THR A A 236 236 . 0.1640 0.2068 0.1856 -0.0389 -0.0265
0.0028  1 .
1757 OG1   OG1   . THR THR THR A A 236 236 . 0.2319 0.2518 0.2337 -0.0571 -0.0424
0.0137  1 .
1758 CG2   CG2   . THR THR THR A A 236 236 . 0.1718 0.1596 0.1907 -0.0088 -0.0079
0.0216  1 .
1759 C     C     . THR THR THR A A 236 236 . 0.1851 0.1836 0.1643 -0.0120 -0.0231 -
0.0270 1 .
1760 O     O     . THR THR THR A A 236 236 . 0.1909 0.1736 0.1554 0.0018  -0.0271 -
0.0076 1 .
1761 N     N     . GLU GLU GLU A A 237 237 . 0.1827 0.1984 0.1805 -0.0161 -0.0199 -
0.0328 1 .
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1762 CA    CA    . GLU GLU GLU A A 237 237 . 0.2372 0.2308 0.2149 -0.0238 -0.0053 -
0.0285 1 .
1763 CB    CB    . GLU GLU GLU A A 237 237 . 0.2795 0.2794 0.2414 -0.0085 -0.0010 -
0.0307 1 .
1764 C     C     . GLU GLU GLU A A 237 237 . 0.2380 0.2402 0.2180 -0.0310 -0.0130 -
0.0051 1 .
1765 O     O     . GLU GLU GLU A A 237 237 . 0.2783 0.2767 0.2397 -0.0685 -0.0312
0.0040  1 .
1766 N     N     . LYS LYS LYS A A 238 238 . 0.1858 0.1962 0.1885 -0.0168 -0.0098 -
0.0219 1 .
1767 CA    CA    . LYS LYS LYS A A 238 238 . 0.1433 0.1376 0.1575 -0.0010 -0.0064 -
0.0298 1 .
1768 CB    CB    . LYS LYS LYS A A 238 238 . 0.1415 0.1435 0.1798 0.0154  0.0000  -
0.0123 1 .
1769 CG    CG    . LYS LYS LYS A A 238 238 . 0.2165 0.2108 0.1947 0.0207  -0.0031 -
0.0440 1 .
1770 CD    CD    . LYS LYS LYS A A 238 238 . 0.2269 0.2273 0.2605 0.0710  -0.0043 -
0.0218 1 .
1771 CE    CE    . LYS LYS LYS A A 238 238 . 0.3329 0.3441 0.3057 0.0022  0.0500  -
0.0845 1 .
1772 NZ    NZ    . LYS LYS LYS A A 238 238 . 0.4566 0.3333 0.3743 -0.0020 0.0534  -
0.1087 1 .
1773 C     C     . LYS LYS LYS A A 238 238 . 0.1278 0.1374 0.1414 0.0000  -0.0054 -
0.0211 1 .
1774 O     O     . LYS LYS LYS A A 238 238 . 0.1068 0.1332 0.1373 -0.0086 -0.0019 -
0.0218 1 .
1775 N     N     . ILE ILE ILE A A 239 239 . 0.1264 0.1178 0.1070 0.0050  0.0014  -
0.0260 1 .
1776 CA    CA    . ILE ILE ILE A A 239 239 . 0.1079 0.1309 0.1144 0.0157  0.0006  -
0.0223 1 .
1777 CB    CB    . ILE ILE ILE A A 239 239 . 0.1381 0.1501 0.1277 0.0222  0.0067  -
0.0094 1 .
1778 CG1   CG1   . ILE ILE ILE A A 239 239 . 0.1278 0.1444 0.1563 0.0129  0.0234  -
0.0104 1 .
1779 CD1   CD1   . ILE ILE ILE A A 239 239 . 0.1714 0.1526 0.1898 -0.0429 -0.0243 -
0.0128 1 .
1780 CG2   CG2   . ILE ILE ILE A A 239 239 . 0.1702 0.0943 0.1303 0.0007  -0.0003 -
0.0523 1 .
1781 C     C     . ILE ILE ILE A A 239 239 . 0.1193 0.1258 0.1401 0.0164  -0.0021 -
0.0177 1 .
1782 O     O     . ILE ILE ILE A A 239 239 . 0.1291 0.1315 0.2071 0.0085  -0.0047 -
0.0374 1 .
1783 N     N     . VAL VAL VAL A A 240 240 . 0.1020 0.1179 0.1079 0.0244  -0.0230 -
0.0059 1 .
1784 CA    CA    . VAL VAL VAL A A 240 240 . 0.0998 0.1277 0.1144 0.0233  -0.0083 -
0.0182 1 .
1785 CB    CB    . VAL VAL VAL A A 240 240 . 0.1099 0.1131 0.0981 0.0056  -0.0010 -
0.0255 1 .
1786 CG1   CG1   . VAL VAL VAL A A 240 240 . 0.1537 0.1985 0.1101 0.0273  -0.0289 -
0.0676 1 .
1787 CG2   CG2   . VAL VAL VAL A A 240 240 . 0.1410 0.1685 0.0871 -0.0230 -0.0290
0.0111  1 .
1788 C     C     . VAL VAL VAL A A 240 240 . 0.0946 0.1218 0.0929 0.0219  -0.0008 -
0.0113 1 .
1789 O     O     . VAL VAL VAL A A 240 240 . 0.0755 0.1383 0.1386 -0.0025 -0.0135 -
0.0397 1 .
1790 N     N     . ILE ILE ILE A A 241 241 . 0.0902 0.0989 0.1037 0.0181  -0.0049 -
0.0047 1 .
1791 CA    CA    . ILE ILE ILE A A 241 241 . 0.0957 0.1059 0.1055 -0.0008 -0.0007 -
0.0004 1 .
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1792 CB    CB    . ILE ILE ILE A A 241 241 . 0.0836 0.0910 0.0837 -0.0038 -0.0008
0.0160  1 .
1793 CG1   CG1   . ILE ILE ILE A A 241 241 . 0.1433 0.1075 0.1536 -0.0264 -0.0036 -
0.0032 1 .
1794 CD1   CD1   . ILE ILE ILE A A 241 241 . 0.1492 0.1430 0.2481 -0.0579 -0.0365
0.0427  1 .
1795 CG2   CG2   . ILE ILE ILE A A 241 241 . 0.1252 0.1299 0.1245 0.0053  0.0097
0.0150  1 .
1796 C     C     . ILE ILE ILE A A 241 241 . 0.0962 0.1061 0.1171 0.0190  -0.0025 -
0.0110 1 .
1797 O     O     . ILE ILE ILE A A 241 241 . 0.1342 0.1415 0.1357 0.0037  0.0012  -
0.0289 1 .
1798 N     N     . GLY GLY GLY A A 242 242 . 0.0772 0.0859 0.1163 -0.0036 -0.0094 -
0.0262 1 .
1799 CA    CA    . GLY GLY GLY A A 242 242 . 0.0593 0.1012 0.1092 0.0121  -0.0082 -
0.0030 1 .
1800 C     C     . GLY GLY GLY A A 242 242 . 0.0916 0.1055 0.0916 0.0145  -0.0006
0.0196  1 .
1801 O     O     . GLY GLY GLY A A 242 242 . 0.1111 0.1261 0.1245 0.0188  -0.0026
0.0026  1 .
1802 N     N     . MET MET MET A A 243 243 . 0.0986 0.1111 0.1342 0.0059  0.0088  -
0.0032 1 .
1803 CA    CA    . MET MET MET A A 243 243 . 0.0996 0.1101 0.0975 0.0045  -0.0132 -
0.0026 1 .
1804 CB    CB    . MET MET MET A A 243 243 . 0.0843 0.0989 0.1242 -0.0171 -0.0267
0.0044  1 .
1805 CG    CG    . MET MET MET A A 243 243 . 0.1249 0.1138 0.1838 -0.0269 -0.0377 -
0.0376 1 .
1806 SD    SD    . MET MET MET A A 243 243 . 0.1371 0.1631 0.1972 -0.0141 -0.0041 -
0.0369 1 .
1807 CE    CE    . MET MET MET A A 243 243 . 0.1360 0.2368 0.1379 -0.0029 -0.0249 -
0.0425 1 .
1808 C     C     . MET MET MET A A 243 243 . 0.0997 0.1145 0.1105 -0.0090 -0.0133
0.0010  1 .
1809 O     O     . MET MET MET A A 243 243 . 0.1089 0.1275 0.1151 -0.0150 0.0099
0.0064  1 .
1810 N     N     . ASP ASP ASP A A 244 244 . 0.1040 0.1201 0.1255 0.0024  -0.0203 -
0.0282 1 .
1811 CA    CA    . ASP ASP ASP A A 244 244 . 0.0906 0.1117 0.1360 0.0000  -0.0117 -
0.0186 1 .
1812 CB    CB    . ASP ASP ASP A A 244 244 . 0.1107 0.1090 0.1549 0.0008  -0.0190 -
0.0212 1 .
1813 CG    CG    . ASP ASP ASP A A 244 244 . 0.1146 0.1233 0.1551 0.0112  -0.0329 -
0.0162 1 .
1814 OD1   OD1   . ASP ASP ASP A A 244 244 . 0.1178 0.0903 0.1284 -0.0244 -0.0210 -
0.0085 1 .
1815 OD2   OD2   . ASP ASP ASP A A 244 244 . 0.1079 0.1324 0.1288 0.0139  -0.0036 -
0.0038 1 .
1816 C     C     . ASP ASP ASP A A 244 244 . 0.1083 0.1262 0.1281 0.0135  -0.0009 -
0.0038 1 .
1817 O     O     . ASP ASP ASP A A 244 244 . 0.1116 0.1383 0.1174 0.0169  0.0194  -
0.0116 1 .
1818 N     N     . VAL VAL VAL A A 245 245 . 0.0773 0.1194 0.1180 -0.0071 -0.0081 -
0.0105 1 .
1819 CA    CA    . VAL VAL VAL A A 245 245 . 0.0880 0.1414 0.1194 0.0132  -0.0043 -
0.0222 1 .
1820 CB    CB    . VAL VAL VAL A A 245 245 . 0.0502 0.0935 0.0658 0.0305  0.0023  -
0.0068 1 .
1821 CG1   CG1   . VAL VAL VAL A A 245 245 . 0.0284 0.1450 0.0977 0.0167  -0.0013 -
0.0543 1 .
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1822 CG2   CG2   . VAL VAL VAL A A 245 245 . 0.1127 0.1341 0.1300 0.0140  -0.0151 -
0.0429 1 .
1823 C     C     . VAL VAL VAL A A 245 245 . 0.1034 0.1136 0.1140 -0.0017 -0.0038 -
0.0047 1 .
1824 O     O     . VAL VAL VAL A A 245 245 . 0.1061 0.1148 0.1139 -0.0174 -0.0137 -
0.0175 1 .
1825 N     N     . ALA ALA ALA A A 246 246 . 0.1079 0.1335 0.1513 0.0175  -0.0198 -
0.0084 1 .
1826 CA    CA    . ALA ALA ALA A A 246 246 . 0.0974 0.1142 0.1267 0.0113  -0.0228
0.0025  1 .
1827 CB    CB    . ALA ALA ALA A A 246 246 . 0.1242 0.1485 0.1015 0.0040  -0.0159
0.0053  1 .
1828 C     C     . ALA ALA ALA A A 246 246 . 0.1174 0.1171 0.1302 0.0007  -0.0079 -
0.0045 1 .
1829 O     O     . ALA ALA ALA A A 246 246 . 0.0843 0.1063 0.1215 0.0232  -0.0136
0.0104  1 .
1830 N     N     . ALA ALA ALA A A 247 247 . 0.1000 0.1317 0.1477 0.0084  -0.0279 -
0.0006 1 .
1831 CA    CA    . ALA ALA ALA A A 247 247 . 0.1117 0.1581 0.1481 0.0225  -0.0136 -
0.0311 1 .
1832 CB    CB    . ALA ALA ALA A A 247 247 . 0.0853 0.1801 0.1592 0.0174  -0.0189 -
0.0205 1 .
1833 C     C     . ALA ALA ALA A A 247 247 . 0.1080 0.1574 0.1608 0.0247  0.0007  -
0.0213 1 .
1834 O     O     . ALA ALA ALA A A 247 247 . 0.1157 0.1793 0.1636 0.0227  0.0092  -
0.0427 1 .
1835 N     N     . SER SER SER A A 248 248 . 0.1197 0.1290 0.1507 0.0282  -0.0076 -
0.0369 1 .
1836 CA    CA    . SER SER SER A A 248 248 . 0.1301 0.1405 0.1492 0.0270  -0.0017 -
0.0120 1 .
1837 CB    CB    . SER SER SER A A 248 248 . 0.0954 0.1227 0.1302 0.0275  0.0083  -
0.0208 1 .
1838 OG    OG    . SER SER SER A A 248 248 . 0.1258 0.1359 0.1347 0.0149  -0.0250 -
0.0031 1 .
1839 C     C     . SER SER SER A A 248 248 . 0.1460 0.1622 0.1672 0.0302  0.0054  -
0.0087 1 .
1840 O     O     . SER SER SER A A 248 248 . 0.1246 0.1476 0.1340 0.0497  0.0192  -
0.0377 1 .
1841 N     N     . GLU GLU GLU A A 249 249 . 0.1258 0.1792 0.1683 0.0204  -0.0104
0.0125  1 .
1842 CA    CA    . GLU GLU GLU A A 249 249 . 0.0897 0.1607 0.1364 0.0117  0.0021
0.0043  1 .
1843 CB    CB    . GLU GLU GLU A A 249 249 . 0.1219 0.1338 0.1440 -0.0017 0.0065
0.0099  1 .
1844 CG    CG    . GLU GLU GLU A A 249 249 . 0.0915 0.0997 0.1223 -0.0010 0.0096  -
0.0223 1 .
1845 CD    CD    . GLU GLU GLU A A 249 249 . 0.1539 0.1334 0.1353 -0.0202 0.0255  -
0.0112 1 .
1846 OE1   OE1   . GLU GLU GLU A A 249 249 . 0.2742 0.2567 0.2031 -0.0498 0.0288
0.0065  1 .
1847 OE2   OE2   . GLU GLU GLU A A 249 249 . 0.1594 0.1540 0.1329 0.0105  0.0147
0.0105  1 .
1848 C     C     . GLU GLU GLU A A 249 249 . 0.1072 0.1703 0.1568 0.0080  0.0079  -
0.0042 1 .
1849 O     O     . GLU GLU GLU A A 249 249 . 0.1220 0.2038 0.1790 0.0101  -0.0076 -
0.0040 1 .
1850 N     N     . PHE PHE PHE A A 250 250 . 0.0839 0.1631 0.1838 0.0134  0.0049  -
0.0138 1 .
1851 CA    CA    . PHE PHE PHE A A 250 250 . 0.1322 0.1757 0.1811 0.0026  0.0065  -
0.0171 1 .
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1852 CB    CB    . PHE PHE PHE A A 250 250 . 0.1162 0.1586 0.1631 0.0007  0.0066  -
0.0097 1 .
1853 CG    CG    . PHE PHE PHE A A 250 250 . 0.1338 0.1964 0.1527 0.0164  -0.0101 -
0.0134 1 .
1854 CD1   CD1   . PHE PHE PHE A A 250 250 . 0.1231 0.1855 0.1950 0.0402  0.0166  -
0.0050 1 .
1855 CE1   CE1   . PHE PHE PHE A A 250 250 . 0.1804 0.1780 0.1803 0.0082  -0.0057 -
0.0227 1 .
1856 CZ    CZ    . PHE PHE PHE A A 250 250 . 0.1066 0.1515 0.1749 0.0136  -0.0021
0.0283  1 .
1857 CE2   CE2   . PHE PHE PHE A A 250 250 . 0.1288 0.1712 0.1913 0.0535  -0.0122 -
0.0075 1 .
1858 CD2   CD2   . PHE PHE PHE A A 250 250 . 0.1068 0.1869 0.1424 0.0133  0.0005  -
0.0048 1 .
1859 C     C     . PHE PHE PHE A A 250 250 . 0.1440 0.1644 0.1731 0.0195  0.0087  -
0.0117 1 .
1860 O     O     . PHE PHE PHE A A 250 250 . 0.1567 0.2052 0.1854 0.0268  0.0065  -
0.0211 1 .
1861 N     N     . TYR TYR TYR A A 251 251 . 0.1393 0.1858 0.2083 0.0219  0.0066  -
0.0067 1 .
1862 CA    CA    . TYR TYR TYR A A 251 251 . 0.1584 0.1776 0.1893 0.0222  -0.0002 -
0.0105 1 .
1863 CB    CB    . TYR TYR TYR A A 251 251 . 0.1751 0.1935 0.1770 0.0363  -0.0094
0.0003  1 .
1864 CG    CG    . TYR TYR TYR A A 251 251 . 0.1776 0.2049 0.2081 0.0212  -0.0075 -
0.0172 1 .
1865 CD1   CD1   . TYR TYR TYR A A 251 251 . 0.1078 0.2468 0.1843 0.0709  -0.0355 -
0.0109 1 .
1866 CE1   CE1   . TYR TYR TYR A A 251 251 . 0.2524 0.2503 0.2245 0.0423  -0.0400
0.0233  1 .
1867 CZ    CZ    . TYR TYR TYR A A 251 251 . 0.2847 0.2907 0.2922 0.0198  -0.0616
0.0396  1 .
1868 OH    OH    . TYR TYR TYR A A 251 251 . 0.3904 0.3569 0.3154 0.0240  -0.0758
0.1200  1 .
1869 CE2   CE2   . TYR TYR TYR A A 251 251 . 0.2592 0.2509 0.3048 0.0072  -0.0539
0.0206  1 .
1870 CD2   CD2   . TYR TYR TYR A A 251 251 . 0.1905 0.2039 0.2291 0.0126  0.0036
0.0230  1 .
1871 C     C     . TYR TYR TYR A A 251 251 . 0.1820 0.1934 0.1954 0.0214  -0.0001 -
0.0170 1 .
1872 O     O     . TYR TYR TYR A A 251 251 . 0.1728 0.1877 0.1991 0.0126  0.0062  -
0.0132 1 .
1873 N     N     . ARG ARG ARG A A 252 252 . 0.1862 0.2237 0.2148 0.0082  0.0071  -
0.0303 1 .
1874 CA    CA    . ARG ARG ARG A A 252 252 . 0.2054 0.2635 0.2706 0.0413  -0.0043 -
0.0187 1 .
1875 CB    CB    . ARG ARG ARG A A 252 252 . 0.2130 0.2827 0.2864 0.0248  0.0101  -
0.0156 1 .
1876 CG    CG    . ARG ARG ARG A A 252 252 . 0.2438 0.3050 0.3145 0.0489  0.0277  -
0.0342 1 .
1877 CD    CD    . ARG ARG ARG A A 252 252 . 0.3570 0.4670 0.3794 0.0356  -0.0199 -
0.0447 1 .
1878 NE    NE    . ARG ARG ARG A A 252 252 . 0.3578 0.4612 0.3981 0.0289  0.0265  -
0.0340 1 .
1879 CZ    CZ    . ARG ARG ARG A A 252 252 . 0.3472 0.4216 0.3760 -0.0054 -0.0125 -
0.0312 1 .
1880 NH1   NH1   . ARG ARG ARG A A 252 252 . 0.2977 0.4450 0.3316 -0.0409 0.0205  -
0.0431 1 .
1881 NH2   NH2   . ARG ARG ARG A A 252 252 . 0.2948 0.2779 0.3376 0.0250  0.0361  -
0.0454 1 .
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1882 C     C     . ARG ARG ARG A A 252 252 . 0.2531 0.3135 0.3105 0.0205  -0.0191 -
0.0272 1 .
1883 O     O     . ARG ARG ARG A A 252 252 . 0.2073 0.3203 0.3173 0.0025  -0.0233 -
0.0398 1 .
1884 N     N     . ASP ASP ASP A A 253 253 . 0.2870 0.3423 0.3469 0.0373  -0.0278 -
0.0181 1 .
1885 CA    CA    . ASP ASP ASP A A 253 253 . 0.3315 0.3853 0.3607 0.0308  -0.0211 -
0.0078 1 .
1886 CB    CB    . ASP ASP ASP A A 253 253 . 0.3570 0.4182 0.3894 0.0347  -0.0125 -
0.0098 1 .
1887 CG    CG    . ASP ASP ASP A A 253 253 . 0.4215 0.4804 0.4521 0.0327  0.0061  -
0.0020 1 .
1888 OD1   OD1   . ASP ASP ASP A A 253 253 . 0.4479 0.5769 0.4481 0.1340  0.0371  -
0.0704 1 .
1889 OD2   OD2   . ASP ASP ASP A A 253 253 . 0.4881 0.5890 0.5185 0.0079  -0.0060 -
0.0351 1 .
1890 C     C     . ASP ASP ASP A A 253 253 . 0.3199 0.3641 0.3554 0.0168  -0.0112 -
0.0242 1 .
1891 O     O     . ASP ASP ASP A A 253 253 . 0.3059 0.3911 0.3934 0.0387  -0.0050 -
0.0224 1 .
1892 N     N     . GLY GLY GLY A A 254 254 . 0.2607 0.3164 0.3266 0.0364  -0.0147 -
0.0249 1 .
1893 CA    CA    . GLY GLY GLY A A 254 254 . 0.2598 0.2819 0.3060 0.0321  -0.0178 -
0.0242 1 .
1894 C     C     . GLY GLY GLY A A 254 254 . 0.2266 0.2515 0.2762 0.0362  -0.0140 -
0.0111 1 .
1895 O     O     . GLY GLY GLY A A 254 254 . 0.2546 0.2342 0.2817 0.0554  -0.0192 -
0.0174 1 .
1896 N     N     . LYS LYS LYS A A 255 255 . 0.1884 0.2402 0.2583 0.0358  -0.0195 -
0.0234 1 .
1897 CA    CA    . LYS LYS LYS A A 255 255 . 0.1828 0.2223 0.2622 0.0214  -0.0197 -
0.0030 1 .
1898 CB    CB    . LYS LYS LYS A A 255 255 . 0.1808 0.2558 0.2780 0.0304  -0.0146 -
0.0058 1 .
1899 CG    CG    . LYS LYS LYS A A 255 255 . 0.2144 0.2808 0.2941 0.0150  -0.0495 -
0.0228 1 .
1900 CD    CD    . LYS LYS LYS A A 255 255 . 0.2839 0.2802 0.4034 -0.0055 0.0343
0.0208  1 .
1901 CE    CE    . LYS LYS LYS A A 255 255 . 0.3140 0.3593 0.4474 -0.0145 0.0274  -
0.0175 1 .
1902 NZ    NZ    . LYS LYS LYS A A 255 255 . 0.3557 0.4329 0.5398 -0.0196 -0.0094
0.0451  1 .
1903 C     C     . LYS LYS LYS A A 255 255 . 0.1659 0.2205 0.2665 0.0283  -0.0165 -
0.0182 1 .
1904 O     O     . LYS LYS LYS A A 255 255 . 0.1267 0.2214 0.2971 0.0403  -0.0230 -
0.0183 1 .
1905 N     N     . TYR TYR TYR A A 256 256 . 0.1355 0.1949 0.2417 0.0312  -0.0137 -
0.0030 1 .
1906 CA    CA    . TYR TYR TYR A A 256 256 . 0.1563 0.1948 0.2002 0.0287  -0.0093 -
0.0108 1 .
1907 CB    CB    . TYR TYR TYR A A 256 256 . 0.0955 0.1940 0.2002 0.0332  -0.0160 -
0.0148 1 .
1908 CG    CG    . TYR TYR TYR A A 256 256 . 0.1322 0.2093 0.1719 0.0077  0.0026  -
0.0168 1 .
1909 CD1   CD1   . TYR TYR TYR A A 256 256 . 0.1168 0.1912 0.1748 -0.0036 -0.0135 -
0.0446 1 .
1910 CE1   CE1   . TYR TYR TYR A A 256 256 . 0.1558 0.2044 0.1899 0.0167  0.0021  -
0.0226 1 .
1911 CZ    CZ    . TYR TYR TYR A A 256 256 . 0.1637 0.1484 0.1674 0.0127  -0.0102 -
0.0262 1 .
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1912 OH    OH    . TYR TYR TYR A A 256 256 . 0.1269 0.1647 0.1502 0.0126  -0.0101 -
0.0093 1 .
1913 CE2   CE2   . TYR TYR TYR A A 256 256 . 0.1301 0.1929 0.1967 -0.0064 -0.0049 -
0.0353 1 .
1914 CD2   CD2   . TYR TYR TYR A A 256 256 . 0.1168 0.1834 0.1905 0.0135  0.0169  -
0.0106 1 .
1915 C     C     . TYR TYR TYR A A 256 256 . 0.1537 0.2073 0.2086 0.0257  -0.0005 -
0.0105 1 .
1916 O     O     . TYR TYR TYR A A 256 256 . 0.1888 0.1895 0.2336 0.0195  -0.0037 -
0.0277 1 .
1917 N     N     . ASP ASP ASP A A 257 257 . 0.1388 0.2173 0.2079 0.0289  0.0039  -
0.0121 1 .
1918 CA    CA    . ASP ASP ASP A A 257 257 . 0.1393 0.1902 0.1936 0.0265  -0.0042 -
0.0145 1 .
1919 CB    CB    . ASP ASP ASP A A 257 257 . 0.1733 0.2167 0.2077 0.0242  0.0005  -
0.0197 1 .
1920 CG    CG    . ASP ASP ASP A A 257 257 . 0.1347 0.2188 0.2121 0.0312  -0.0176 -
0.0260 1 .
1921 OD1   OD1   . ASP ASP ASP A A 257 257 . 0.1043 0.2288 0.3040 0.0500  0.0219  -
0.0157 1 .
1922 OD2   OD2   . ASP ASP ASP A A 257 257 . 0.1618 0.2342 0.2172 0.0444  -0.0065 -
0.0797 1 .
1923 C     C     . ASP ASP ASP A A 257 257 . 0.1659 0.2019 0.2003 0.0176  0.0097  -
0.0183 1 .
1924 O     O     . ASP ASP ASP A A 257 257 . 0.1206 0.2146 0.1943 0.0269  0.0000  -
0.0237 1 .
1925 N     N     . LEU LEU LEU A A 258 258 . 0.1569 0.1941 0.2288 0.0115  0.0260  -
0.0131 1 .
1926 CA    CA    . LEU LEU LEU A A 258 258 . 0.1603 0.2024 0.2034 0.0106  -0.0025
0.0053  1 .
1927 CB    CB    . LEU LEU LEU A A 258 258 . 0.1338 0.1960 0.2082 0.0060  0.0059
0.0070  1 .
1928 CG    CG    . LEU LEU LEU A A 258 258 . 0.1396 0.1766 0.1992 -0.0148 -0.0010
0.0150  1 .
1929 CD1   CD1   . LEU LEU LEU A A 258 258 . 0.2081 0.2373 0.2082 0.0145  -0.0448 -
0.0088 1 .
1930 CD2   CD2   . LEU LEU LEU A A 258 258 . 0.1681 0.2247 0.2602 -0.0348 -0.0163
0.0189  1 .
1931 C     C     . LEU LEU LEU A A 258 258 . 0.1760 0.2027 0.2283 -0.0090 0.0133
0.0023  1 .
1932 O     O     . LEU LEU LEU A A 258 258 . 0.1596 0.2374 0.2295 0.0047  0.0194  -
0.0096 1 .
1933 N     N     . ASP ASP ASP A A 259 259 . 0.2026 0.1879 0.2210 -0.0064 0.0110  -
0.0091 1 .
1934 CA    CA    . ASP ASP ASP A A 259 259 . 0.1987 0.2388 0.2346 -0.0104 0.0020  -
0.0011 1 .
1935 CB    CB    . ASP ASP ASP A A 259 259 . 0.2347 0.2423 0.2319 -0.0168 0.0102
0.0049  1 .
1936 CG    CG    . ASP ASP ASP A A 259 259 . 0.2478 0.3058 0.2759 -0.0226 -0.0032
0.0061  1 .
1937 OD1   OD1   . ASP ASP ASP A A 259 259 . 0.2165 0.2945 0.2627 0.0095  0.0122  -
0.0082 1 .
1938 OD2   OD2   . ASP ASP ASP A A 259 259 . 0.2326 0.4235 0.3388 -0.0617 0.0210
0.0191  1 .
1939 C     C     . ASP ASP ASP A A 259 259 . 0.1972 0.2225 0.2368 0.0027  0.0136
0.0057  1 .
1940 O     O     . ASP ASP ASP A A 259 259 . 0.1718 0.2686 0.2646 0.0018  0.0219
0.0013  1 .
1941 N     N     . PHE PHE PHE A A 260 260 . 0.1774 0.2344 0.2488 0.0051  0.0093  -
0.0027 1 .
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1942 CA    CA    . PHE PHE PHE A A 260 260 . 0.1710 0.2043 0.2204 0.0107  0.0083  -
0.0050 1 .
1943 CB    CB    . PHE PHE PHE A A 260 260 . 0.1727 0.1986 0.2242 0.0108  -0.0030 -
0.0001 1 .
1944 CG    CG    . PHE PHE PHE A A 260 260 . 0.1724 0.1731 0.2090 0.0132  -0.0008 -
0.0094 1 .
1945 CD1   CD1   . PHE PHE PHE A A 260 260 . 0.1608 0.1873 0.1989 0.0160  0.0139
0.0403  1 .
1946 CE1   CE1   . PHE PHE PHE A A 260 260 . 0.1557 0.2258 0.2305 0.0364  -0.0412
0.0057  1 .
1947 CZ    CZ    . PHE PHE PHE A A 260 260 . 0.2211 0.2389 0.2427 0.0146  -0.0160 -
0.0082 1 .
1948 CE2   CE2   . PHE PHE PHE A A 260 260 . 0.1691 0.2576 0.2523 0.0061  -0.0164
0.0040  1 .
1949 CD2   CD2   . PHE PHE PHE A A 260 260 . 0.1588 0.2243 0.1895 0.0369  -0.0195 -
0.0239 1 .
1950 C     C     . PHE PHE PHE A A 260 260 . 0.1971 0.2271 0.2328 0.0166  0.0111  -
0.0098 1 .
1951 O     O     . PHE PHE PHE A A 260 260 . 0.1622 0.2249 0.2283 0.0199  0.0369  -
0.0436 1 .
1952 N     N     . LYS LYS LYS A A 261 261 . 0.1697 0.2589 0.2231 0.0331  0.0204  -
0.0077 1 .
1953 CA    CA    . LYS LYS LYS A A 261 261 . 0.1846 0.2614 0.2372 0.0477  0.0172
0.0052  1 .
1954 CB    CB    . LYS LYS LYS A A 261 261 . 0.1978 0.2636 0.2382 0.0629  0.0178
0.0102  1 .
1955 CG    CG    . LYS LYS LYS A A 261 261 . 0.1727 0.1404 0.2394 0.0292  -0.0112
0.0126  1 .
1956 CD    CD    . LYS LYS LYS A A 261 261 . 0.1453 0.1652 0.1660 0.0328  0.0287  -
0.0384 1 .
1957 CE    CE    . LYS LYS LYS A A 261 261 . 0.1692 0.1539 0.1574 0.0595  0.0029  -
0.0169 1 .
1958 NZ    NZ    . LYS LYS LYS A A 261 261 . 0.0932 0.1820 0.1107 0.0142  -0.0128 -
0.0121 1 .
1959 C     C     . LYS LYS LYS A A 261 261 . 0.2294 0.2678 0.2464 0.0442  0.0311
0.0049  1 .
1960 O     O     . LYS LYS LYS A A 261 261 . 0.2477 0.3054 0.2683 0.0665  0.0368
0.0002  1 .
1961 N     N     . SER SER SER A A 262 262 . 0.2278 0.2832 0.2507 0.0332  0.0475  -
0.0050 1 .
1962 CA    CA    . SER SER SER A A 262 262 . 0.2694 0.2851 0.2902 0.0277  0.0405
0.0070  1 .
1963 CB    CB    . SER SER SER A A 262 262 . 0.2728 0.2857 0.2816 0.0192  0.0435
0.0078  1 .
1964 OG    OG    . SER SER SER A A 262 262 . 0.3189 0.2944 0.2795 0.0326  0.0250
0.0238  1 .
1965 C     C     . SER SER SER A A 262 262 . 0.2853 0.3022 0.2944 0.0386  0.0443
0.0047  1 .
1966 O     O     . SER SER SER A A 262 262 . 0.2506 0.2846 0.2788 0.0555  0.0583  -
0.0092 1 .
1967 N     N     . PRO PRO PRO A A 263 263 . 0.2970 0.3281 0.3185 0.0288  0.0475
0.0193  1 .
1968 CA    CA    . PRO PRO PRO A A 263 263 . 0.3033 0.3324 0.3167 0.0314  0.0444
0.0086  1 .
1969 CB    CB    . PRO PRO PRO A A 263 263 . 0.3101 0.3474 0.3166 0.0172  0.0401
0.0191  1 .
1970 CG    CG    . PRO PRO PRO A A 263 263 . 0.2954 0.3255 0.3022 0.0488  0.0701
0.0129  1 .
1971 CD    CD    . PRO PRO PRO A A 263 263 . 0.3247 0.3499 0.3112 0.0383  0.0503
0.0202  1 .
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1972 C     C     . PRO PRO PRO A A 263 263 . 0.2923 0.3451 0.3385 0.0301  0.0390
0.0061  1 .
1973 O     O     . PRO PRO PRO A A 263 263 . 0.2495 0.3388 0.3189 0.0414  0.0370  -
0.0052 1 .
1974 N     N     . THR THR THR A A 264 264 . 0.3211 0.3680 0.3586 0.0258  0.0433
0.0049  1 .
1975 CA    CA    . THR THR THR A A 264 264 . 0.3431 0.3793 0.3680 0.0240  0.0298  -
0.0014 1 .
1976 CB    CB    . THR THR THR A A 264 264 . 0.3564 0.3870 0.3749 0.0117  0.0276  -
0.0020 1 .
1977 OG1   OG1   . THR THR THR A A 264 264 . 0.3488 0.3992 0.3674 0.0177  0.0375  -
0.0233 1 .
1978 CG2   CG2   . THR THR THR A A 264 264 . 0.3835 0.4084 0.3920 0.0289  0.0070  -
0.0129 1 .
1979 C     C     . THR THR THR A A 264 264 . 0.3622 0.3899 0.3789 0.0215  0.0256  -
0.0020 1 .
1980 O     O     . THR THR THR A A 264 264 . 0.3576 0.3997 0.3771 0.0221  0.0470
0.0181  1 .
1981 N     N     . ASP ASP ASP A A 265 265 . 0.3609 0.4027 0.3846 0.0250  0.0171  -
0.0068 1 .
1982 CA    CA    . ASP ASP ASP A A 265 265 . 0.3657 0.4054 0.4022 0.0113  0.0037  -
0.0059 1 .
1983 CB    CB    . ASP ASP ASP A A 265 265 . 0.3580 0.4043 0.3980 0.0221  0.0026
0.0005  1 .
1984 CG    CG    . ASP ASP ASP A A 265 265 . 0.3988 0.4107 0.4198 0.0141  -0.0014
0.0011  1 .
1985 OD1   OD1   . ASP ASP ASP A A 265 265 . 0.2932 0.4608 0.3920 0.0495  -0.0336
0.0069  1 .
1986 OD2   OD2   . ASP ASP ASP A A 265 265 . 0.4445 0.4255 0.4971 -0.0235 0.0105
0.0308  1 .
1987 C     C     . ASP ASP ASP A A 265 265 . 0.3555 0.3922 0.3989 0.0112  0.0021  -
0.0097 1 .
1988 O     O     . ASP ASP ASP A A 265 265 . 0.3384 0.3888 0.4100 0.0167  -0.0048 -
0.0297 1 .
1989 N     N     . PRO PRO PRO A A 266 266 . 0.3391 0.3891 0.4020 0.0135  -0.0003 -
0.0072 1 .
1990 CA    CA    . PRO PRO PRO A A 266 266 . 0.3339 0.3770 0.3849 0.0152  0.0056  -
0.0040 1 .
1991 CB    CB    . PRO PRO PRO A A 266 266 . 0.3267 0.3798 0.3870 0.0151  -0.0033 -
0.0170 1 .
1992 CG    CG    . PRO PRO PRO A A 266 266 . 0.3485 0.3935 0.4043 0.0177  -0.0086 -
0.0070 1 .
1993 CD    CD    . PRO PRO PRO A A 266 266 . 0.3601 0.3897 0.3860 0.0099  0.0010  -
0.0198 1 .
1994 C     C     . PRO PRO PRO A A 266 266 . 0.3286 0.3723 0.3819 0.0081  0.0103
0.0025  1 .
1995 O     O     . PRO PRO PRO A A 266 266 . 0.3188 0.3831 0.3730 0.0120  0.0329
0.0079  1 .
1996 N     N     . SER SER SER A A 267 267 . 0.3406 0.3617 0.3825 0.0075  0.0130
0.0058  1 .
1997 CA    CA    . SER SER SER A A 267 267 . 0.3296 0.3638 0.3675 0.0031  0.0130  -
0.0005 1 .
1998 CB    CB    . SER SER SER A A 267 267 . 0.3409 0.3699 0.3848 -0.0115 0.0159
0.0069  1 .
1999 OG    OG    . SER SER SER A A 267 267 . 0.3821 0.4043 0.4248 -0.0292 0.0565
0.0445  1 .
2000 C     C     . SER SER SER A A 267 267 . 0.3143 0.3479 0.3458 0.0088  0.0006  -
0.0103 1 .
2001 O     O     . SER SER SER A A 267 267 . 0.2828 0.3479 0.3516 0.0186  0.0055  -
0.0161 1 .
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2002 N     N     . ARG ARG ARG A A 268 268 . 0.2885 0.3235 0.3289 -0.0017 0.0164  -
0.0060 1 .
2003 CA    CA    . ARG ARG ARG A A 268 268 . 0.2694 0.3059 0.3093 0.0071  0.0108  -
0.0057 1 .
2004 CB    CB    . ARG ARG ARG A A 268 268 . 0.2914 0.3047 0.2914 0.0091  0.0152  -
0.0176 1 .
2005 CG    CG    . ARG ARG ARG A A 268 268 . 0.2174 0.3142 0.3196 0.0257  0.0129
0.0099  1 .
2006 CD    CD    . ARG ARG ARG A A 268 268 . 0.1999 0.2602 0.2461 0.0153  0.0199  -
0.0270 1 .
2007 NE    NE    . ARG ARG ARG A A 268 268 . 0.2190 0.2684 0.2707 -0.0253 0.0313
0.0039  1 .
2008 CZ    CZ    . ARG ARG ARG A A 268 268 . 0.2207 0.2717 0.2659 -0.0230 0.0186
0.0230  1 .
2009 NH1   NH1   . ARG ARG ARG A A 268 268 . 0.1814 0.2434 0.2827 0.0142  0.0350  -
0.0349 1 .
2010 NH2   NH2   . ARG ARG ARG A A 268 268 . 0.2369 0.2829 0.3247 0.0247  0.0198
0.0826  1 .
2011 C     C     . ARG ARG ARG A A 268 268 . 0.2599 0.2870 0.3038 0.0023  0.0137  -
0.0080 1 .
2012 O     O     . ARG ARG ARG A A 268 268 . 0.2330 0.2940 0.2854 0.0019  0.0188  -
0.0074 1 .
2013 N     N     . TYR TYR TYR A A 269 269 . 0.2125 0.2781 0.2810 -0.0033 0.0023  -
0.0112 1 .
2014 CA    CA    . TYR TYR TYR A A 269 269 . 0.2181 0.2613 0.2713 0.0098  -0.0011 -
0.0113 1 .
2015 CB    CB    . TYR TYR TYR A A 269 269 . 0.2470 0.2813 0.2786 0.0157  0.0113  -
0.0126 1 .
2016 CG    CG    . TYR TYR TYR A A 269 269 . 0.1943 0.2667 0.2802 -0.0130 -0.0134 -
0.0235 1 .
2017 CD1   CD1   . TYR TYR TYR A A 269 269 . 0.1177 0.3020 0.2955 0.0118  -0.0083 -
0.0360 1 .
2018 CE1   CE1   . TYR TYR TYR A A 269 269 . 0.1208 0.2856 0.2844 0.0079  -0.0015 -
0.0180 1 .
2019 CZ    CZ    . TYR TYR TYR A A 269 269 . 0.1569 0.3000 0.3067 0.0188  0.0147  -
0.0238 1 .
2020 OH    OH    . TYR TYR TYR A A 269 269 . 0.2370 0.3635 0.2973 0.0494  0.0108  -
0.0376 1 .
2021 CE2   CE2   . TYR TYR TYR A A 269 269 . 0.1864 0.2943 0.2662 0.0270  0.0173  -
0.0381 1 .
2022 CD2   CD2   . TYR TYR TYR A A 269 269 . 0.1783 0.2967 0.3442 0.0109  -0.0038 -
0.0551 1 .
2023 C     C     . TYR TYR TYR A A 269 269 . 0.1991 0.2641 0.2474 0.0105  -0.0110 -
0.0046 1 .
2024 O     O     . TYR TYR TYR A A 269 269 . 0.1639 0.2890 0.2610 0.0361  -0.0157 -
0.0135 1 .
2025 N     N     . ILE ILE ILE A A 270 270 . 0.1764 0.2481 0.2373 0.0148  -0.0274 -
0.0152 1 .
2026 CA    CA    . ILE ILE ILE A A 270 270 . 0.1592 0.2488 0.2324 0.0144  -0.0279 -
0.0146 1 .
2027 CB    CB    . ILE ILE ILE A A 270 270 . 0.1564 0.2142 0.2408 0.0244  -0.0363
0.0005  1 .
2028 CG1   CG1   . ILE ILE ILE A A 270 270 . 0.1415 0.2451 0.2504 0.0191  -0.0256 -
0.0324 1 .
2029 CD1   CD1   . ILE ILE ILE A A 270 270 . 0.1153 0.2374 0.2657 0.0064  -0.0039 -
0.0787 1 .
2030 CG2   CG2   . ILE ILE ILE A A 270 270 . 0.1933 0.2386 0.2414 -0.0254 -0.0178 -
0.0184 1 .
2031 C     C     . ILE ILE ILE A A 270 270 . 0.1701 0.2207 0.2293 0.0196  -0.0380 -
0.0108 1 .
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2032 O     O     . ILE ILE ILE A A 270 270 . 0.1845 0.2280 0.2414 0.0387  -0.0250 -
0.0166 1 .
2033 N     N     . THR THR THR A A 271 271 . 0.1482 0.2236 0.1928 0.0323  -0.0307 -
0.0178 1 .
2034 CA    CA    . THR THR THR A A 271 271 . 0.1458 0.2046 0.1891 0.0191  -0.0329 -
0.0173 1 .
2035 CB    CB    . THR THR THR A A 271 271 . 0.1630 0.2132 0.1920 0.0204  -0.0361 -
0.0349 1 .
2036 OG1   OG1   . THR THR THR A A 271 271 . 0.1553 0.2078 0.2319 0.0362  -0.0369 -
0.0441 1 .
2037 CG2   CG2   . THR THR THR A A 271 271 . 0.1702 0.1680 0.1777 0.0290  -0.0314
0.0003  1 .
2038 C     C     . THR THR THR A A 271 271 . 0.1672 0.2102 0.1826 0.0060  -0.0305 -
0.0214 1 .
2039 O     O     . THR THR THR A A 271 271 . 0.1652 0.2000 0.2165 -0.0009 -0.0299 -
0.0189 1 .
2040 N     N     . GLY GLY GLY A A 272 272 . 0.1647 0.1861 0.1780 0.0044  -0.0294 -
0.0197 1 .
2041 CA    CA    . GLY GLY GLY A A 272 272 . 0.1552 0.1793 0.1718 0.0031  -0.0260 -
0.0231 1 .
2042 C     C     . GLY GLY GLY A A 272 272 . 0.1739 0.1901 0.2076 0.0111  -0.0356 -
0.0153 1 .
2043 O     O     . GLY GLY GLY A A 272 272 . 0.1599 0.1813 0.1979 0.0245  -0.0455 -
0.0009 1 .
2044 N     N     . ASP ASP ASP A A 273 273 . 0.1803 0.1974 0.2135 0.0151  -0.0608 -
0.0093 1 .
2045 CA    CA    . ASP ASP ASP A A 273 273 . 0.1815 0.2098 0.2124 0.0167  -0.0634 -
0.0064 1 .
2046 CB    CB    . ASP ASP ASP A A 273 273 . 0.1971 0.2216 0.2130 0.0009  -0.0708
0.0036  1 .
2047 CG    CG    . ASP ASP ASP A A 273 273 . 0.2439 0.2764 0.2373 -0.0120 -0.0574
0.0158  1 .
2048 OD1   OD1   . ASP ASP ASP A A 273 273 . 0.2280 0.2417 0.3006 0.0016  -0.1042
0.0126  1 .
2049 OD2   OD2   . ASP ASP ASP A A 273 273 . 0.2695 0.2285 0.2282 -0.0029 -0.0837 -
0.0031 1 .
2050 C     C     . ASP ASP ASP A A 273 273 . 0.1634 0.2211 0.2112 -0.0021 -0.0535 -
0.0102 1 .
2051 O     O     . ASP ASP ASP A A 273 273 . 0.1728 0.2090 0.2284 0.0001  -0.0447
0.0000  1 .
2052 N     N     . GLN GLN GLN A A 274 274 . 0.1479 0.2134 0.2042 0.0108  -0.0557 -
0.0043 1 .
2053 CA    CA    . GLN GLN GLN A A 274 274 . 0.1396 0.2133 0.2173 0.0234  -0.0494 -
0.0046 1 .
2054 CB    CB    . GLN GLN GLN A A 274 274 . 0.1157 0.2394 0.2311 0.0284  -0.0432 -
0.0065 1 .
2055 CG    CG    . GLN GLN GLN A A 274 274 . 0.0959 0.2992 0.2411 0.0079  -0.0461
0.0017  1 .
2056 CD    CD    . GLN GLN GLN A A 274 274 . 0.1527 0.2742 0.2535 0.0206  -0.0247 -
0.0306 1 .
2057 OE1   OE1   . GLN GLN GLN A A 274 274 . 0.1469 0.2316 0.2961 0.0244  -0.0754 -
0.0358 1 .
2058 NE2   NE2   . GLN GLN GLN A A 274 274 . 0.2106 0.2086 0.2895 -0.0173 -0.0364 -
0.0561 1 .
2059 C     C     . GLN GLN GLN A A 274 274 . 0.1442 0.1925 0.2280 0.0226  -0.0484 -
0.0150 1 .
2060 O     O     . GLN GLN GLN A A 274 274 . 0.1713 0.1996 0.2310 0.0421  -0.0498 -
0.0033 1 .
2061 N     N     . LEU LEU LEU A A 275 275 . 0.1462 0.1732 0.1928 0.0068  -0.0504 -
0.0093 1 .
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2062 CA   CA   . LEU LEU LEU A A 275 275 . 0.1446 0.1570 0.1984 -0.0061 -0.0296 -
0.0201 1 .
2063 CB   CB   . LEU LEU LEU A A 275 275 . 0.1151 0.1525 0.1987 -0.0247 -0.0343 -
0.0127 1 .
2064 CG   CG   . LEU LEU LEU A A 275 275 . 0.1619 0.1551 0.2027 -0.0044 -0.0573
0.0120  1 .
2065 CD1  CD1  . LEU LEU LEU A A 275 275 . 0.1601 0.1750 0.1467 -0.0284 -0.0286
0.0179  1 .
2066 CD2  CD2  . LEU LEU LEU A A 275 275 . 0.2262 0.1779 0.2991 0.0334  -0.0902 -
0.0567 1 .
2067 C    C    . LEU LEU LEU A A 275 275 . 0.1497 0.1617 0.1984 -0.0129 -0.0264 -
0.0103 1 .
2068 O    O    . LEU LEU LEU A A 275 275 . 0.1564 0.1818 0.1899 -0.0023 -0.0370 -
0.0187 1 .
2069 N    N    . GLY GLY GLY A A 276 276 . 0.1452 0.1668 0.1865 -0.0052 -0.0396 -
0.0048 1 .
2070 CA   CA   . GLY GLY GLY A A 276 276 . 0.1656 0.1719 0.1860 -0.0069 -0.0389 -
0.0205 1 .
2071 C    C    . GLY GLY GLY A A 276 276 . 0.1680 0.1723 0.2182 -0.0126 -0.0229 -
0.0124 1 .
2072 O    O    . GLY GLY GLY A A 276 276 . 0.1299 0.1842 0.1772 0.0010  -0.0585 -
0.0155 1 .
2073 N    N    . ALA ALA ALA A A 277 277 . 0.1526 0.2015 0.2282 -0.0019 -0.0345 -
0.0140 1 .
2074 CA   CA   . ALA ALA ALA A A 277 277 . 0.1423 0.1916 0.1950 -0.0027 -0.0147 -
0.0113 1 .
2075 CB   CB   . ALA ALA ALA A A 277 277 . 0.1419 0.2407 0.2007 -0.0094 -0.0376 -
0.0096 1 .
2076 C    C    . ALA ALA ALA A A 277 277 . 0.1464 0.2032 0.1990 -0.0077 -0.0130 -
0.0133 1 .
2077 O    O    . ALA ALA ALA A A 277 277 . 0.1662 0.1850 0.2170 0.0107  -0.0518 -
0.0206 1 .
2078 N    N    . LEU LEU LEU A A 278 278 . 0.1494 0.2025 0.1935 -0.0084 0.0001  -
0.0004 1 .
2079 CA   CA   . LEU LEU LEU A A 278 278 . 0.1558 0.1963 0.1939 -0.0028 0.0033  -
0.0027 1 .
2080 CB   CB   . LEU LEU LEU A A 278 278 . 0.2036 0.1998 0.1918 0.0064  0.0080  -
0.0091 1 .
2081 CG   CG   . LEU LEU LEU A A 278 278 . 0.2930 0.2563 0.2732 -0.0189 0.0203
0.0149  1 .
2082 CD1  CD1  . LEU LEU LEU A A 278 278 . 0.4240 0.2403 0.2892 -0.0385 0.0020
0.0553  1 .
2083 CD2  CD2  . LEU LEU LEU A A 278 278 . 0.4124 0.2898 0.2953 -0.0608 0.0537  -
0.0088 1 .
2084 C    C    . LEU LEU LEU A A 278 278 . 0.1364 0.1759 0.1740 0.0000  -0.0007 -
0.0077 1 .
2085 O    O    . LEU LEU LEU A A 278 278 . 0.1221 0.1964 0.1791 0.0071  -0.0070 -
0.0074 1 .
2086 N    N    . TYR TYR TYR A A 279 279 . 0.1387 0.1695 0.1557 0.0061  -0.0092 -
0.0116 1 .
2087 CA   CA   . TYR TYR TYR A A 279 279 . 0.1255 0.1520 0.1373 0.0073  0.0022  -
0.0230 1 .
2088 CB   CB   . TYR TYR TYR A A 279 279 . 0.1374 0.1386 0.1525 0.0052  -0.0009 -
0.0268 1 .
2089 CG   CG   . TYR TYR TYR A A 279 279 . 0.1116 0.1595 0.1505 -0.0144 -0.0066 -
0.0191 1 .
2090 CD1  CD1  . TYR TYR TYR A A 279 279 . 0.0958 0.1859 0.1635 -0.0135 -0.0327 -
0.0340 1 .
2091 CE1  CE1  . TYR TYR TYR A A 279 279 . 0.0895 0.1636 0.1467 -0.0158 -0.0033 -
0.0381 1 .
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2092 CZ    CZ    . TYR TYR TYR A A 279 279 . 0.1261 0.1505 0.1413 0.0360  0.0018  -
0.0188 1 .
2093 OH    OH    . TYR TYR TYR A A 279 279 . 0.1432 0.1741 0.1602 -0.0008 -0.0497 -
0.0376 1 .
2094 CE2   CE2   . TYR TYR TYR A A 279 279 . 0.0885 0.1517 0.1502 0.0221  -0.0055 -
0.0383 1 .
2095 CD2   CD2   . TYR TYR TYR A A 279 279 . 0.0716 0.1377 0.1447 -0.0319 -0.0153 -
0.0315 1 .
2096 C     C     . TYR TYR TYR A A 279 279 . 0.1552 0.1652 0.1460 0.0206  -0.0154 -
0.0326 1 .
2097 O     O     . TYR TYR TYR A A 279 279 . 0.1522 0.1956 0.1443 0.0163  -0.0055 -
0.0553 1 .
2098 N     N     . GLN GLN GLN A A 280 280 . 0.1335 0.1477 0.1465 0.0314  -0.0259 -
0.0139 1 .
2099 CA    CA    . GLN GLN GLN A A 280 280 . 0.1578 0.1688 0.1589 0.0175  -0.0236 -
0.0043 1 .
2100 CB    CB    . GLN GLN GLN A A 280 280 . 0.1622 0.1671 0.1718 0.0104  -0.0252
0.0087  1 .
2101 CG    CG    . GLN GLN GLN A A 280 280 . 0.2322 0.2000 0.1705 -0.0027 -0.0284
0.0148  1 .
2102 CD    CD    . GLN GLN GLN A A 280 280 . 0.2482 0.2400 0.2463 0.0010  -0.0224
0.0115  1 .
2103 OE1   OE1   . GLN GLN GLN A A 280 280 . 0.2878 0.2971 0.2838 0.0429  0.0202
0.0156  1 .
2104 NE2   NE2   . GLN GLN GLN A A 280 280 . 0.2592 0.2163 0.2546 0.0236  -0.0606
0.0318  1 .
2105 C     C     . GLN GLN GLN A A 280 280 . 0.1550 0.1645 0.1598 0.0012  -0.0172 -
0.0046 1 .
2106 O     O     . GLN GLN GLN A A 280 280 . 0.1443 0.1843 0.1872 0.0071  -0.0231 -
0.0207 1 .
2107 N     N     . ASP ASP ASP A A 281 281 . 0.1396 0.1816 0.1794 0.0031  -0.0281 -
0.0194 1 .
2108 CA    CA    . ASP ASP ASP A A 281 281 . 0.1526 0.1924 0.1795 0.0081  -0.0341
0.0039  1 .
2109 CB    CB    . ASP ASP ASP A A 281 281 . 0.1509 0.1968 0.2234 0.0000  -0.0164 -
0.0077 1 .
2110 CG    CG    . ASP ASP ASP A A 281 281 . 0.2074 0.2543 0.2441 0.0143  -0.0183
0.0148  1 .
2111 OD1   OD1   . ASP ASP ASP A A 281 281 . 0.2358 0.4102 0.3478 -0.0171 -0.0748
0.0266  1 .
2112 OD2   OD2   . ASP ASP ASP A A 281 281 . 0.1604 0.3814 0.4068 0.0050  0.0166
0.0415  1 .
2113 C     C     . ASP ASP ASP A A 281 281 . 0.1545 0.1858 0.2049 0.0158  -0.0341 -
0.0091 1 .
2114 O     O     . ASP ASP ASP A A 281 281 . 0.1655 0.1669 0.2024 -0.0041 -0.0329
0.0047  1 .
2115 N     N     . PHE PHE PHE A A 282 282 . 0.1363 0.1660 0.1664 -0.0006 -0.0311
0.0097  1 .
2116 CA    CA    . PHE PHE PHE A A 282 282 . 0.1442 0.1728 0.1691 0.0015  -0.0160
0.0002  1 .
2117 CB    CB    . PHE PHE PHE A A 282 282 . 0.1696 0.1806 0.1491 0.0104  -0.0130 -
0.0132 1 .
2118 CG    CG    . PHE PHE PHE A A 282 282 . 0.1541 0.1877 0.1983 0.0237  -0.0207 -
0.0115 1 .
2119 CD1   CD1   . PHE PHE PHE A A 282 282 . 0.1297 0.2496 0.1751 0.0262  -0.0490 -
0.0044 1 .
2120 CE1   CE1   . PHE PHE PHE A A 282 282 . 0.1758 0.2705 0.2354 0.0258  -0.0368 -
0.0398 1 .
2121 CZ    CZ    . PHE PHE PHE A A 282 282 . 0.1732 0.2478 0.2180 0.0342  -0.0329 -
0.0001 1 .
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2122 CE2   CE2   . PHE PHE PHE A A 282 282 . 0.2319 0.2500 0.2642 0.0454  0.0097  -
0.0034 1 .
2123 CD2   CD2   . PHE PHE PHE A A 282 282 . 0.2084 0.2578 0.1822 0.0257  0.0070  -
0.0022 1 .
2124 C     C     . PHE PHE PHE A A 282 282 . 0.1565 0.1528 0.1533 0.0042  -0.0214 -
0.0182 1 .
2125 O     O     . PHE PHE PHE A A 282 282 . 0.1890 0.1612 0.1683 0.0132  -0.0179 -
0.0233 1 .
2126 N     N     . VAL VAL VAL A A 283 283 . 0.1490 0.1474 0.1484 0.0037  -0.0075 -
0.0269 1 .
2127 CA    CA    . VAL VAL VAL A A 283 283 . 0.1527 0.1486 0.1586 0.0080  -0.0095 -
0.0190 1 .
2128 CB    CB    . VAL VAL VAL A A 283 283 . 0.1455 0.1452 0.1528 0.0117  -0.0079 -
0.0231 1 .
2129 CG1   CG1   . VAL VAL VAL A A 283 283 . 0.2235 0.1896 0.1991 0.0066  -0.0072 -
0.0609 1 .
2130 CG2   CG2   . VAL VAL VAL A A 283 283 . 0.1305 0.1220 0.2201 -0.0176 -0.0291 -
0.0101 1 .
2131 C     C     . VAL VAL VAL A A 283 283 . 0.1542 0.1491 0.1625 0.0193  -0.0107 -
0.0189 1 .
2132 O     O     . VAL VAL VAL A A 283 283 . 0.1623 0.1866 0.1689 0.0495  -0.0140 -
0.0159 1 .
2133 N     N     . ARG ARG ARG A A 284 284 . 0.1818 0.1620 0.1900 0.0140  -0.0072 -
0.0327 1 .
2134 CA    CA    . ARG ARG ARG A A 284 284 . 0.2009 0.2125 0.2420 -0.0060 -0.0319 -
0.0208 1 .
2135 CB    CB    . ARG ARG ARG A A 284 284 . 0.2469 0.2754 0.2720 -0.0125 -0.0239 -
0.0341 1 .
2136 CG    CG    . ARG ARG ARG A A 284 284 . 0.3320 0.3185 0.3434 -0.0395 -0.0295
0.0117  1 .
2137 CD    CD    . ARG ARG ARG A A 284 284 . 0.4506 0.3262 0.4094 -0.0515 -0.0931 -
0.0254 1 .
2138 NE    NE    . ARG ARG ARG A A 284 284 . 0.4416 0.4061 0.4440 -0.0186 -0.0633 -
0.0293 1 .
2139 CZ    CZ    . ARG ARG ARG A A 284 284 . 0.4677 0.4154 0.4470 -0.0196 -0.0460 -
0.0142 1 .
2140 NH1   NH1   . ARG ARG ARG A A 284 284 . 0.4594 0.4311 0.5116 0.0040  -0.0209 -
0.0030 1 .
2141 NH2   NH2   . ARG ARG ARG A A 284 284 . 0.4389 0.3632 0.4519 -0.0217 -0.0782
0.0056  1 .
2142 C     C     . ARG ARG ARG A A 284 284 . 0.1928 0.2056 0.2284 -0.0092 -0.0242 -
0.0230 1 .
2143 O     O     . ARG ARG ARG A A 284 284 . 0.2021 0.2040 0.2329 -0.0068 -0.0315 -
0.0499 1 .
2144 N     N     . ASP ASP ASP A A 285 285 . 0.1753 0.1825 0.2021 -0.0001 -0.0231 -
0.0074 1 .
2145 CA    CA    . ASP ASP ASP A A 285 285 . 0.1778 0.1906 0.1915 -0.0011 -0.0235 -
0.0106 1 .
2146 CB    CB    . ASP ASP ASP A A 285 285 . 0.1664 0.1883 0.1987 -0.0220 -0.0236 -
0.0184 1 .
2147 CG    CG    . ASP ASP ASP A A 285 285 . 0.2005 0.2633 0.2456 -0.0071 -0.0119 -
0.0271 1 .
2148 OD1   OD1   . ASP ASP ASP A A 285 285 . 0.2085 0.3047 0.2935 -0.0698 -0.0942 -
0.0288 1 .
2149 OD2   OD2   . ASP ASP ASP A A 285 285 . 0.1244 0.2656 0.3712 0.0107  -0.0198 -
0.0249 1 .
2150 C     C     . ASP ASP ASP A A 285 285 . 0.1552 0.1713 0.1888 -0.0109 -0.0281 -
0.0051 1 .
2151 O     O     . ASP ASP ASP A A 285 285 . 0.1323 0.1585 0.2078 -0.0139 -0.0598 -
0.0169 1 .
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2152 N     N     . TYR TYR TYR A A 286 286 . 0.1579 0.1367 0.1731 0.0022  -0.0283 -
0.0128 1 .
2153 CA    CA    . TYR TYR TYR A A 286 286 . 0.1505 0.1631 0.1705 0.0054  -0.0230 -
0.0050 1 .
2154 CB    CB    . TYR TYR TYR A A 286 286 . 0.1484 0.1477 0.1382 0.0288  -0.0196 -
0.0064 1 .
2155 CG    CG    . TYR TYR TYR A A 286 286 . 0.1520 0.1406 0.1876 0.0099  -0.0346 -
0.0022 1 .
2156 CD1   CD1   . TYR TYR TYR A A 286 286 . 0.2195 0.1664 0.1273 -0.0330 -0.0024
0.0363  1 .
2157 CE1   CE1   . TYR TYR TYR A A 286 286 . 0.1989 0.1796 0.2280 -0.0847 0.0078  -
0.0305 1 .
2158 CZ    CZ    . TYR TYR TYR A A 286 286 . 0.2151 0.2179 0.2637 -0.0550 -0.0031
0.0144  1 .
2159 OH    OH    . TYR TYR TYR A A 286 286 . 0.2919 0.3079 0.2417 -0.0910 0.0400
0.0321  1 .
2160 CE2   CE2   . TYR TYR TYR A A 286 286 . 0.2026 0.2148 0.1807 -0.0294 -0.0304 -
0.0132 1 .
2161 CD2   CD2   . TYR TYR TYR A A 286 286 . 0.1933 0.2178 0.1651 -0.0238 -0.0227 -
0.0351 1 .
2162 C     C     . TYR TYR TYR A A 286 286 . 0.1540 0.1467 0.1616 0.0041  -0.0178 -
0.0101 1 .
2163 O     O     . TYR TYR TYR A A 286 286 . 0.1535 0.1761 0.1615 0.0074  -0.0406
0.0143  1 .
2164 N     N     . PRO PRO PRO A A 287 287 . 0.1412 0.1376 0.1525 0.0048  -0.0129 -
0.0123 1 .
2165 CA    CA    . PRO PRO PRO A A 287 287 . 0.1312 0.1303 0.1681 0.0035  -0.0034 -
0.0089 1 .
2166 CB    CB    . PRO PRO PRO A A 287 287 . 0.1200 0.1414 0.1477 0.0186  -0.0177
0.0010  1 .
2167 CG    CG    . PRO PRO PRO A A 287 287 . 0.0902 0.1358 0.1582 -0.0033 -0.0013
0.0156  1 .
2168 CD    CD    . PRO PRO PRO A A 287 287 . 0.1472 0.1440 0.1664 -0.0070 -0.0237 -
0.0008 1 .
2169 C     C     . PRO PRO PRO A A 287 287 . 0.1194 0.1189 0.1330 0.0030  -0.0033 -
0.0269 1 .
2170 O     O     . PRO PRO PRO A A 287 287 . 0.1195 0.1128 0.1661 0.0081  0.0032  -
0.0359 1 .
2171 N     N     . VAL VAL VAL A A 288 288 . 0.1110 0.1188 0.1268 0.0054  -0.0207 -
0.0184 1 .
2172 CA    CA    . VAL VAL VAL A A 288 288 . 0.1001 0.1213 0.1408 0.0063  -0.0080 -
0.0136 1 .
2173 CB    CB    . VAL VAL VAL A A 288 288 . 0.0985 0.1050 0.1409 0.0004  0.0081  -
0.0036 1 .
2174 CG1   CG1   . VAL VAL VAL A A 288 288 . 0.1367 0.1131 0.1643 0.0044  -0.0372 -
0.0466 1 .
2175 CG2   CG2   . VAL VAL VAL A A 288 288 . 0.0986 0.1047 0.0914 0.0017  0.0104
0.0111  1 .
2176 C     C     . VAL VAL VAL A A 288 288 . 0.1362 0.1475 0.1392 -0.0011 -0.0136
0.0004  1 .
2177 O     O     . VAL VAL VAL A A 288 288 . 0.1511 0.1856 0.1530 0.0070  -0.0271
0.0059  1 .
2178 N     N     . VAL VAL VAL A A 289 289 . 0.1158 0.1193 0.1410 0.0006  -0.0201 -
0.0106 1 .
2179 CA    CA    . VAL VAL VAL A A 289 289 . 0.1160 0.1138 0.1416 0.0017  0.0011  -
0.0225 1 .
2180 CB    CB    . VAL VAL VAL A A 289 289 . 0.1115 0.1196 0.1486 0.0147  -0.0190 -
0.0229 1 .
2181 CG1   CG1   . VAL VAL VAL A A 289 289 . 0.1767 0.1222 0.1437 -0.0034 0.0148  -
0.0089 1 .
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2182 CG2   CG2   . VAL VAL VAL A A 289 289 . 0.1290 0.1944 0.1521 -0.0145 -0.0152 -
0.0204 1 .
2183 C     C     . VAL VAL VAL A A 289 289 . 0.1033 0.1194 0.1425 0.0015  -0.0026 -
0.0047 1 .
2184 O     O     . VAL VAL VAL A A 289 289 . 0.1632 0.1134 0.1480 -0.0012 -0.0014
0.0010  1 .
2185 N     N     . SER SER SER A A 290 290 . 0.0986 0.1060 0.1141 -0.0089 -0.0073 -
0.0081 1 .
2186 CA    CA    . SER SER SER A A 290 290 . 0.0990 0.0886 0.1108 0.0072  -0.0006 -
0.0006 1 .
2187 CB    CB    . SER SER SER A A 290 290 . 0.0968 0.0917 0.1089 -0.0071 -0.0232 -
0.0242 1 .
2188 OG    OG    . SER SER SER A A 290 290 . 0.1318 0.0828 0.1190 -0.0134 0.0077
0.0223  1 .
2189 C     C     . SER SER SER A A 290 290 . 0.1159 0.1182 0.1233 0.0117  0.0007
0.0050  1 .
2190 O     O     . SER SER SER A A 290 290 . 0.0920 0.1236 0.1254 -0.0021 -0.0056
0.0168  1 .
2191 N     N     . ILE ILE ILE A A 291 291 . 0.1115 0.1024 0.1185 0.0194  0.0020  -
0.0113 1 .
2192 CA    CA    . ILE ILE ILE A A 291 291 . 0.0904 0.1229 0.1329 0.0019  -0.0044 -
0.0131 1 .
2193 CB    CB    . ILE ILE ILE A A 291 291 . 0.0998 0.1162 0.1523 0.0055  -0.0078 -
0.0139 1 .
2194 CG1   CG1   . ILE ILE ILE A A 291 291 . 0.0850 0.1054 0.1692 -0.0266 -0.0185 -
0.0129 1 .
2195 CD1   CD1   . ILE ILE ILE A A 291 291 . 0.1110 0.1762 0.1832 -0.0140 -0.0546 -
0.0231 1 .
2196 CG2   CG2   . ILE ILE ILE A A 291 291 . 0.0785 0.2061 0.1621 0.0020  0.0062
0.0212  1 .
2197 C     C     . ILE ILE ILE A A 291 291 . 0.0783 0.1334 0.1282 0.0103  -0.0123 -
0.0115 1 .
2198 O     O     . ILE ILE ILE A A 291 291 . 0.1092 0.1311 0.1386 0.0051  -0.0067 -
0.0286 1 .
2199 N     N     . GLU GLU GLU A A 292 292 . 0.0886 0.1170 0.0974 0.0216  0.0037  -
0.0328 1 .
2200 CA    CA    . GLU GLU GLU A A 292 292 . 0.0885 0.1111 0.1248 0.0131  -0.0198 -
0.0140 1 .
2201 CB    CB    . GLU GLU GLU A A 292 292 . 0.0920 0.0931 0.0987 0.0120  -0.0182 -
0.0091 1 .
2202 CG    CG    . GLU GLU GLU A A 292 292 . 0.1289 0.1217 0.1541 0.0159  -0.0338 -
0.0111 1 .
2203 CD    CD    . GLU GLU GLU A A 292 292 . 0.1156 0.1073 0.1151 0.0017  -0.0099 -
0.0037 1 .
2204 OE1   OE1   . GLU GLU GLU A A 292 292 . 0.1107 0.1269 0.1077 0.0118  -0.0328 -
0.0135 1 .
2205 OE2   OE2   . GLU GLU GLU A A 292 292 . 0.1161 0.1222 0.1090 -0.0022 -0.0199 -
0.0039 1 .
2206 C     C     . GLU GLU GLU A A 292 292 . 0.0833 0.1069 0.1052 0.0034  -0.0112 -
0.0053 1 .
2207 O     O     . GLU GLU GLU A A 292 292 . 0.0942 0.0992 0.1170 0.0142  -0.0189
0.0043  1 .
2208 N     N     . ASP ASP ASP A A 293 293 . 0.0918 0.1021 0.1204 0.0257  -0.0135 -
0.0130 1 .
2209 CA    CA    . ASP ASP ASP A A 293 293 . 0.0845 0.1279 0.1234 -0.0013 -0.0063 -
0.0059 1 .
2210 CB    CB    . ASP ASP ASP A A 293 293 . 0.1024 0.1080 0.1130 0.0060  0.0042  -
0.0177 1 .
2211 CG    CG    . ASP ASP ASP A A 293 293 . 0.0785 0.1096 0.1128 0.0141  -0.0198 -
0.0096 1 .
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2212 OD1   OD1   . ASP ASP ASP A A 293 293 . 0.0948 0.1017 0.1557 -0.0237 0.0002  -
0.0063 1 .
2213 OD2   OD2   . ASP ASP ASP A A 293 293 . 0.1336 0.1098 0.1140 0.0007  -0.0027 -
0.0335 1 .
2214 C     C     . ASP ASP ASP A A 293 293 . 0.1271 0.1071 0.1356 -0.0008 -0.0056 -
0.0049 1 .
2215 O     O     . ASP ASP ASP A A 293 293 . 0.0993 0.1187 0.1301 -0.0013 -0.0033
0.0047  1 .
2216 N     N     . PRO PRO PRO A A 294 294 . 0.1241 0.1318 0.1238 0.0009  -0.0115 -
0.0166 1 .
2217 CA    CA    . PRO PRO PRO A A 294 294 . 0.1215 0.1228 0.1504 0.0181  -0.0057 -
0.0156 1 .
2218 CB    CB    . PRO PRO PRO A A 294 294 . 0.1217 0.1690 0.1391 0.0039  -0.0083 -
0.0042 1 .
2219 CG    CG    . PRO PRO PRO A A 294 294 . 0.1307 0.1497 0.1410 -0.0192 -0.0340
0.0088  1 .
2220 CD    CD    . PRO PRO PRO A A 294 294 . 0.1300 0.1380 0.1286 -0.0274 -0.0138
0.0031  1 .
2221 C     C     . PRO PRO PRO A A 294 294 . 0.1225 0.1539 0.1602 0.0075  -0.0043 -
0.0067 1 .
2222 O     O     . PRO PRO PRO A A 294 294 . 0.1215 0.1726 0.1886 0.0213  0.0000  -
0.0179 1 .
2223 N     N     . PHE PHE PHE A A 295 295 . 0.1233 0.1545 0.1558 0.0232  -0.0158 -
0.0205 1 .
2224 CA    CA    . PHE PHE PHE A A 295 295 . 0.1200 0.1363 0.1403 0.0267  -0.0212 -
0.0197 1 .
2225 CB    CB    . PHE PHE PHE A A 295 295 . 0.1367 0.1512 0.1550 0.0250  -0.0160 -
0.0298 1 .
2226 CG    CG    . PHE PHE PHE A A 295 295 . 0.1400 0.1563 0.1696 0.0060  -0.0189 -
0.0241 1 .
2227 CD1   CD1   . PHE PHE PHE A A 295 295 . 0.1630 0.1492 0.1749 0.0081  -0.0311 -
0.0108 1 .
2228 CE1   CE1   . PHE PHE PHE A A 295 295 . 0.1879 0.1456 0.1698 0.0138  -0.0283 -
0.0171 1 .
2229 CZ    CZ    . PHE PHE PHE A A 295 295 . 0.1908 0.1769 0.1840 0.0156  -0.0173 -
0.0151 1 .
2230 CE2   CE2   . PHE PHE PHE A A 295 295 . 0.1904 0.1616 0.1835 0.0145  -0.0186 -
0.0400 1 .
2231 CD2   CD2   . PHE PHE PHE A A 295 295 . 0.1914 0.1776 0.1264 0.0191  -0.0356 -
0.0267 1 .
2232 C     C     . PHE PHE PHE A A 295 295 . 0.1301 0.1321 0.1589 0.0239  -0.0063 -
0.0190 1 .
2233 O     O     . PHE PHE PHE A A 295 295 . 0.1305 0.1429 0.1586 0.0223  -0.0101 -
0.0155 1 .
2234 N     N     . ASP ASP ASP A A 296 296 . 0.1301 0.1459 0.1516 0.0345  -0.0180 -
0.0216 1 .
2235 CA    CA    . ASP ASP ASP A A 296 296 . 0.0919 0.1241 0.1670 0.0322  -0.0031 -
0.0445 1 .
2236 CB    CB    . ASP ASP ASP A A 296 296 . 0.1190 0.1337 0.1990 0.0625  0.0042  -
0.0494 1 .
2237 CG    CG    . ASP ASP ASP A A 296 296 . 0.1244 0.1560 0.1775 0.0344  -0.0064 -
0.0140 1 .
2238 OD1   OD1   . ASP ASP ASP A A 296 296 . 0.1475 0.1669 0.1735 0.0466  0.0079  -
0.0032 1 .
2239 OD2   OD2   . ASP ASP ASP A A 296 296 . 0.1700 0.1720 0.2197 0.0321  0.0306  -
0.0098 1 .
2240 C     C     . ASP ASP ASP A A 296 296 . 0.1254 0.1292 0.1399 0.0360  -0.0126 -
0.0177 1 .
2241 O     O     . ASP ASP ASP A A 296 296 . 0.0907 0.1308 0.1378 0.0230  -0.0329 -
0.0142 1 .
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2242 N     N     . GLN GLN GLN A A 297 297 . 0.1264 0.1219 0.1305 0.0074  -0.0219 -
0.0087 1 .
2243 CA    CA    . GLN GLN GLN A A 297 297 . 0.1319 0.1491 0.1480 0.0096  -0.0190 -
0.0097 1 .
2244 CB    CB    . GLN GLN GLN A A 297 297 . 0.1530 0.1507 0.1332 0.0004  -0.0251 -
0.0164 1 .
2245 CG    CG    . GLN GLN GLN A A 297 297 . 0.1172 0.1195 0.1117 0.0076  -0.0106 -
0.0162 1 .
2246 CD    CD    . GLN GLN GLN A A 297 297 . 0.1354 0.1243 0.1138 -0.0022 0.0191  -
0.0122 1 .
2247 OE1   OE1   . GLN GLN GLN A A 297 297 . 0.1949 0.1847 0.1858 -0.0014 -0.0223 -
0.0068 1 .
2248 NE2   NE2   . GLN GLN GLN A A 297 297 . 0.1155 0.1301 0.1495 -0.0264 0.0340
0.0005  1 .
2249 C     C     . GLN GLN GLN A A 297 297 . 0.1622 0.1823 0.1542 0.0024  -0.0162
0.0027  1 .
2250 O     O     . GLN GLN GLN A A 297 297 . 0.1665 0.1898 0.1464 0.0090  -0.0008
0.0102  1 .
2251 N     N     . ASP ASP ASP A A 298 298 . 0.1588 0.1639 0.1582 0.0248  -0.0354 -
0.0164 1 .
2252 CA    CA    . ASP ASP ASP A A 298 298 . 0.1823 0.1940 0.2013 0.0133  -0.0332
0.0074  1 .
2253 CB    CB    . ASP ASP ASP A A 298 298 . 0.2071 0.1622 0.1956 0.0365  -0.0381 -
0.0046 1 .
2254 CG    CG    . ASP ASP ASP A A 298 298 . 0.2523 0.2599 0.2775 -0.0168 -0.0125
0.0205  1 .
2255 OD1   OD1   . ASP ASP ASP A A 298 298 . 0.1753 0.2122 0.2746 -0.0083 -0.0701
0.0446  1 .
2256 OD2   OD2   . ASP ASP ASP A A 298 298 . 0.3323 0.2811 0.2490 -0.0142 -0.0514
0.0396  1 .
2257 C     C     . ASP ASP ASP A A 298 298 . 0.2042 0.1869 0.2073 0.0267  -0.0466
0.0057  1 .
2258 O     O     . ASP ASP ASP A A 298 298 . 0.1709 0.1867 0.2242 0.0506  -0.0454
0.0157  1 .
2259 N     N     . ASP ASP ASP A A 299 299 . 0.1720 0.1904 0.1943 0.0025  -0.0489
0.0053  1 .
2260 CA    CA    . ASP ASP ASP A A 299 299 . 0.1828 0.1928 0.1844 0.0073  -0.0265 -
0.0026 1 .
2261 CB    CB    . ASP ASP ASP A A 299 299 . 0.2048 0.2106 0.2034 -0.0026 -0.0393 -
0.0108 1 .
2262 CG    CG    . ASP ASP ASP A A 299 299 . 0.1650 0.2246 0.2096 0.0027  -0.0129 -
0.0059 1 .
2263 OD1   OD1   . ASP ASP ASP A A 299 299 . 0.2444 0.2125 0.2169 0.0800  -0.0581 -
0.0354 1 .
2264 OD2   OD2   . ASP ASP ASP A A 299 299 . 0.1667 0.1744 0.2155 0.0098  -0.0549 -
0.0404 1 .
2265 C     C     . ASP ASP ASP A A 299 299 . 0.1925 0.1959 0.1941 0.0203  -0.0319 -
0.0013 1 .
2266 O     O     . ASP ASP ASP A A 299 299 . 0.2075 0.1913 0.1881 0.0365  -0.0651 -
0.0035 1 .
2267 N     N     . TRP TRP TRP A A 300 300 . 0.1694 0.1793 0.1789 0.0312  -0.0223
0.0142  1 .
2268 CA    CA    . TRP TRP TRP A A 300 300 . 0.1820 0.1821 0.1977 0.0133  -0.0118
0.0122  1 .
2269 CB    CB    . TRP TRP TRP A A 300 300 . 0.1828 0.1849 0.2095 0.0029  -0.0143 -
0.0039 1 .
2270 CG    CG    . TRP TRP TRP A A 300 300 . 0.1990 0.1934 0.2012 -0.0105 0.0080  -
0.0064 1 .
2271 CD1   CD1   . TRP TRP TRP A A 300 300 . 0.2020 0.1517 0.1718 0.0029  0.0068
0.0019  1 .
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2272 NE1   NE1   . TRP TRP TRP A A 300 300 . 0.2254 0.2016 0.2593 0.0207  0.0167  -
0.0158 1 .
2273 CE2   CE2   . TRP TRP TRP A A 300 300 . 0.1916 0.1737 0.2144 0.0204  0.0263
0.0137  1 .
2274 CD2   CD2   . TRP TRP TRP A A 300 300 . 0.1907 0.1863 0.1711 0.0373  0.0075
0.0119  1 .
2275 CE3   CE3   . TRP TRP TRP A A 300 300 . 0.2138 0.2041 0.2374 0.0248  0.0152  -
0.0190 1 .
2276 CZ3   CZ3   . TRP TRP TRP A A 300 300 . 0.1978 0.2286 0.2259 -0.0145 -0.0340
0.0116  1 .
2277 CH2   CH2   . TRP TRP TRP A A 300 300 . 0.2633 0.2195 0.2433 -0.0139 0.0191  -
0.0154 1 .
2278 CZ2   CZ2   . TRP TRP TRP A A 300 300 . 0.2209 0.2027 0.2176 0.0074  -0.0012
0.0173  1 .
2279 C     C     . TRP TRP TRP A A 300 300 . 0.1877 0.2010 0.2022 0.0198  -0.0223
0.0009  1 .
2280 O     O     . TRP TRP TRP A A 300 300 . 0.1842 0.2203 0.1834 0.0320  -0.0173
0.0040  1 .
2281 N     N     . ALA ALA ALA A A 301 301 . 0.1727 0.1882 0.2154 0.0294  -0.0272 -
0.0093 1 .
2282 CA    CA    . ALA ALA ALA A A 301 301 . 0.1685 0.1906 0.2396 0.0303  -0.0250 -
0.0233 1 .
2283 CB    CB    . ALA ALA ALA A A 301 301 . 0.1365 0.1930 0.2631 0.0378  -0.0413 -
0.0165 1 .
2284 C     C     . ALA ALA ALA A A 301 301 . 0.1567 0.1906 0.2113 0.0472  -0.0213 -
0.0084 1 .
2285 O     O     . ALA ALA ALA A A 301 301 . 0.2017 0.2068 0.2497 0.0701  -0.0475 -
0.0327 1 .
2286 N     N     . ALA ALA ALA A A 302 302 . 0.1473 0.1942 0.2337 0.0382  -0.0227 -
0.0132 1 .
2287 CA    CA    . ALA ALA ALA A A 302 302 . 0.1623 0.1864 0.2093 0.0230  -0.0121 -
0.0008 1 .
2288 CB    CB    . ALA ALA ALA A A 302 302 . 0.1373 0.1826 0.1857 0.0183  0.0029  -
0.0161 1 .
2289 C     C     . ALA ALA ALA A A 302 302 . 0.1477 0.1817 0.1972 0.0237  -0.0275 -
0.0133 1 .
2290 O     O     . ALA ALA ALA A A 302 302 . 0.1307 0.2115 0.1972 0.0368  -0.0604 -
0.0318 1 .
2291 N     N     . TRP TRP TRP A A 303 303 . 0.1601 0.1718 0.1764 0.0249  -0.0187 -
0.0187 1 .
2292 CA    CA    . TRP TRP TRP A A 303 303 . 0.1474 0.1844 0.1617 0.0255  -0.0194 -
0.0098 1 .
2293 CB    CB    . TRP TRP TRP A A 303 303 . 0.1541 0.1779 0.1754 0.0275  -0.0341
0.0034  1 .
2294 CG    CG    . TRP TRP TRP A A 303 303 . 0.1854 0.1884 0.1570 0.0456  -0.0238 -
0.0247 1 .
2295 CD1   CD1   . TRP TRP TRP A A 303 303 . 0.1971 0.1891 0.1808 0.0280  -0.0362 -
0.0367 1 .
2296 NE1   NE1   . TRP TRP TRP A A 303 303 . 0.2012 0.1638 0.1996 0.0664  -0.0220 -
0.0091 1 .
2297 CE2   CE2   . TRP TRP TRP A A 303 303 . 0.1682 0.1837 0.1488 0.0619  -0.0042
0.0134  1 .
2298 CD2   CD2   . TRP TRP TRP A A 303 303 . 0.1506 0.1779 0.1695 0.0459  -0.0147 -
0.0124 1 .
2299 CE3   CE3   . TRP TRP TRP A A 303 303 . 0.1265 0.1194 0.1232 0.0167  -0.0336
0.0164  1 .
2300 CZ3   CZ3   . TRP TRP TRP A A 303 303 . 0.1390 0.1532 0.1288 0.0677  -0.0098
0.0160  1 .
2301 CH2   CH2   . TRP TRP TRP A A 303 303 . 0.1214 0.1457 0.1085 0.0441  0.0164  -
0.0138 1 .
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2302 CZ2   CZ2   . TRP TRP TRP A A 303 303 . 0.1436 0.1548 0.1423 0.0627  -0.0205 -
0.0316 1 .
2303 C     C     . TRP TRP TRP A A 303 303 . 0.1736 0.1866 0.1695 0.0325  -0.0287 -
0.0077 1 .
2304 O     O     . TRP TRP TRP A A 303 303 . 0.1644 0.2281 0.1595 0.0515  -0.0493 -
0.0261 1 .
2305 N     N     . SER SER SER A A 304 304 . 0.1723 0.1902 0.1794 0.0099  -0.0237
0.0121  1 .
2306 CA    CA    . SER SER SER A A 304 304 . 0.1972 0.1887 0.1896 0.0120  -0.0274
0.0105  1 .
2307 CB    CB    . SER SER SER A A 304 304 . 0.1986 0.1955 0.1996 -0.0080 -0.0077
0.0338  1 .
2308 OG    OG    . SER SER SER A A 304 304 . 0.2649 0.1568 0.1781 0.0087  -0.0415
0.0199  1 .
2309 C     C     . SER SER SER A A 304 304 . 0.1943 0.2015 0.2045 0.0114  -0.0160 -
0.0029 1 .
2310 O     O     . SER SER SER A A 304 304 . 0.1972 0.2140 0.1965 0.0386  -0.0545 -
0.0265 1 .
2311 N     N     . LYS LYS LYS A A 305 305 . 0.1940 0.1839 0.2120 0.0173  -0.0278 -
0.0112 1 .
2312 CA    CA    . LYS LYS LYS A A 305 305 . 0.1857 0.2143 0.2393 0.0138  -0.0115 -
0.0187 1 .
2313 CB    CB    . LYS LYS LYS A A 305 305 . 0.1739 0.2184 0.2546 0.0104  -0.0119 -
0.0261 1 .
2314 CG    CG    . LYS LYS LYS A A 305 305 . 0.2612 0.2650 0.3092 0.0017  0.0105  -
0.0098 1 .
2315 CD    CD    . LYS LYS LYS A A 305 305 . 0.2300 0.3273 0.3707 0.0317  0.0248  -
0.0533 1 .
2316 CE    CE    . LYS LYS LYS A A 305 305 . 0.3212 0.3438 0.4537 0.0076  0.0336  -
0.0178 1 .
2317 NZ    NZ    . LYS LYS LYS A A 305 305 . 0.4022 0.3973 0.4977 0.0455  0.0531
0.0075  1 .
2318 C     C     . LYS LYS LYS A A 305 305 . 0.1971 0.2059 0.2112 0.0156  -0.0200 -
0.0087 1 .
2319 O     O     . LYS LYS LYS A A 305 305 . 0.1806 0.2155 0.2344 0.0451  -0.0316 -
0.0222 1 .
2320 N     N     . PHE PHE PHE A A 306 306 . 0.1751 0.1922 0.2096 0.0248  -0.0317
0.0008  1 .
2321 CA    CA    . PHE PHE PHE A A 306 306 . 0.1888 0.1947 0.1802 0.0243  -0.0216
0.0120  1 .
2322 CB    CB    . PHE PHE PHE A A 306 306 . 0.2039 0.2076 0.1765 0.0379  -0.0224
0.0245  1 .
2323 CG    CG    . PHE PHE PHE A A 306 306 . 0.2386 0.1763 0.1830 0.0087  -0.0156 -
0.0110 1 .
2324 CD1   CD1   . PHE PHE PHE A A 306 306 . 0.2142 0.2096 0.1846 0.0097  0.0101
0.0003  1 .
2325 CE1   CE1   . PHE PHE PHE A A 306 306 . 0.2393 0.1840 0.1869 0.0283  -0.0331 -
0.0288 1 .
2326 CZ    CZ    . PHE PHE PHE A A 306 306 . 0.2106 0.1933 0.2090 0.0384  -0.0113 -
0.0542 1 .
2327 CE2   CE2   . PHE PHE PHE A A 306 306 . 0.1948 0.2337 0.2526 0.0004  0.0162
0.0201  1 .
2328 CD2   CD2   . PHE PHE PHE A A 306 306 . 0.1950 0.1996 0.2624 0.0185  0.0140
0.0035  1 .
2329 C     C     . PHE PHE PHE A A 306 306 . 0.1845 0.1885 0.1791 0.0297  -0.0305
0.0205  1 .
2330 O     O     . PHE PHE PHE A A 306 306 . 0.1859 0.2313 0.1664 0.0214  -0.0356
0.0026  1 .
2331 N     N     . THR THR THR A A 307 307 . 0.1740 0.1643 0.1850 0.0387  -0.0252
0.0245  1 .
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2332 CA    CA    . THR THR THR A A 307 307 . 0.1806 0.1811 0.1757 0.0320  -0.0242
0.0079  1 .
2333 CB    CB    . THR THR THR A A 307 307 . 0.1947 0.2090 0.1894 0.0224  -0.0055
0.0035  1 .
2334 OG1   OG1   . THR THR THR A A 307 307 . 0.1909 0.2065 0.1461 0.0414  -0.0380 -
0.0030 1 .
2335 CG2   CG2   . THR THR THR A A 307 307 . 0.1743 0.2277 0.1781 -0.0065 -0.0263 -
0.0087 1 .
2336 C     C     . THR THR THR A A 307 307 . 0.1942 0.1888 0.1794 0.0441  -0.0213
0.0035  1 .
2337 O     O     . THR THR THR A A 307 307 . 0.1476 0.1805 0.1480 0.0383  -0.0273
0.0133  1 .
2338 N     N     . ALA ALA ALA A A 308 308 . 0.2050 0.1985 0.1835 0.0419  -0.0302 -
0.0088 1 .
2339 CA    CA    . ALA ALA ALA A A 308 308 . 0.2315 0.2112 0.2013 0.0318  -0.0317 -
0.0142 1 .
2340 CB    CB    . ALA ALA ALA A A 308 308 . 0.2574 0.2055 0.2186 0.0387  -0.0198 -
0.0001 1 .
2341 C     C     . ALA ALA ALA A A 308 308 . 0.2517 0.2302 0.2200 0.0394  -0.0182 -
0.0149 1 .
2342 O     O     . ALA ALA ALA A A 308 308 . 0.2865 0.2519 0.2190 0.0401  -0.0223 -
0.0580 1 .
2343 N     N     . ASN ASN ASN A A 309 309 . 0.2323 0.2240 0.2169 0.0325  -0.0047 -
0.0132 1 .
2344 CA    CA    . ASN ASN ASN A A 309 309 . 0.2434 0.2511 0.2315 0.0068  -0.0226 -
0.0118 1 .
2345 CB    CB    . ASN ASN ASN A A 309 309 . 0.2639 0.2900 0.2703 0.0089  -0.0173
0.0143  1 .
2346 CG    CG    . ASN ASN ASN A A 309 309 . 0.2931 0.4335 0.3124 -0.0006 -0.0334
0.0000  1 .
2347 OD1   OD1   . ASN ASN ASN A A 309 309 . 0.3261 0.5092 0.3826 0.0118  0.0256
0.0671  1 .
2348 ND2   ND2   . ASN ASN ASN A A 309 309 . 0.4155 0.5038 0.3510 -0.0488 0.0072
0.0359  1 .
2349 C     C     . ASN ASN ASN A A 309 309 . 0.2264 0.2316 0.2368 0.0056  -0.0289 -
0.0122 1 .
2350 O     O     . ASN ASN ASN A A 309 309 . 0.2146 0.2568 0.2455 -0.0172 -0.0571 -
0.0031 1 .
2351 N     N     . VAL VAL VAL A A 310 310 . 0.2026 0.1932 0.2188 0.0048  -0.0308 -
0.0209 1 .
2352 CA    CA    . VAL VAL VAL A A 310 310 . 0.2151 0.1882 0.1813 0.0098  -0.0305 -
0.0030 1 .
2353 CB    CB    . VAL VAL VAL A A 310 310 . 0.2001 0.1804 0.1897 0.0004  -0.0282 -
0.0219 1 .
2354 CG1   CG1   . VAL VAL VAL A A 310 310 . 0.2483 0.2645 0.2194 -0.0132 -0.0227
0.0236  1 .
2355 CG2   CG2   . VAL VAL VAL A A 310 310 . 0.2270 0.1886 0.1995 -0.0057 -0.0453 -
0.0117 1 .
2356 C     C     . VAL VAL VAL A A 310 310 . 0.1878 0.1712 0.1593 0.0067  -0.0324 -
0.0125 1 .
2357 O     O     . VAL VAL VAL A A 310 310 . 0.1977 0.1725 0.1392 0.0110  -0.0492 -
0.0075 1 .
2358 N     N     . GLY GLY GLY A A 311 311 . 0.1916 0.1927 0.1416 0.0178  -0.0424 -
0.0123 1 .
2359 CA    CA    . GLY GLY GLY A A 311 311 . 0.1831 0.1850 0.1308 0.0070  -0.0315 -
0.0080 1 .
2360 C     C     . GLY GLY GLY A A 311 311 . 0.1784 0.1925 0.1581 0.0167  -0.0220
0.0100  1 .
2361 O     O     . GLY GLY GLY A A 311 311 . 0.2049 0.2188 0.1518 0.0305  0.0149
0.0046  1 .
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2362 N     N     . ILE ILE ILE A A 312 312 . 0.1761 0.1623 0.1284 0.0172  -0.0422 -
0.0076 1 .
2363 CA    CA    . ILE ILE ILE A A 312 312 . 0.1672 0.1403 0.1331 0.0068  -0.0262 -
0.0044 1 .
2364 CB    CB    . ILE ILE ILE A A 312 312 . 0.1451 0.1392 0.1276 -0.0001 -0.0162 -
0.0202 1 .
2365 CG1   CG1   . ILE ILE ILE A A 312 312 . 0.1863 0.2127 0.1604 0.0039  0.0070
0.0110  1 .
2366 CD1   CD1   . ILE ILE ILE A A 312 312 . 0.1943 0.2066 0.1680 -0.0089 0.0466
0.0404  1 .
2367 CG2   CG2   . ILE ILE ILE A A 312 312 . 0.1690 0.1215 0.1606 0.0056  -0.0191 -
0.0110 1 .
2368 C     C     . ILE ILE ILE A A 312 312 . 0.1587 0.1470 0.1191 0.0028  -0.0314 -
0.0074 1 .
2369 O     O     . ILE ILE ILE A A 312 312 . 0.1535 0.1357 0.1162 0.0027  -0.0378 -
0.0190 1 .
2370 N     N     . GLN GLN GLN A A 313 313 . 0.1366 0.1195 0.1170 -0.0051 -0.0294 -
0.0015 1 .
2371 CA    CA    . GLN GLN GLN A A 313 313 . 0.1149 0.0977 0.1030 0.0065  -0.0237 -
0.0021 1 .
2372 CB    CB    . GLN GLN GLN A A 313 313 . 0.0978 0.1218 0.1200 -0.0128 -0.0212 -
0.0114 1 .
2373 CG    CG    . GLN GLN GLN A A 313 313 . 0.1018 0.1502 0.0794 0.0009  -0.0265 -
0.0095 1 .
2374 CD    CD    . GLN GLN GLN A A 313 313 . 0.1140 0.1524 0.1182 0.0152  -0.0009 -
0.0016 1 .
2375 OE1   OE1   . GLN GLN GLN A A 313 313 . 0.1232 0.1550 0.1263 0.0016  -0.0204 -
0.0069 1 .
2376 NE2   NE2   . GLN GLN GLN A A 313 313 . 0.1264 0.1173 0.1110 0.0050  0.0052  -
0.0049 1 .
2377 C     C     . GLN GLN GLN A A 313 313 . 0.1041 0.0998 0.1003 0.0032  -0.0100
0.0092  1 .
2378 O     O     . GLN GLN GLN A A 313 313 . 0.0789 0.1168 0.1065 -0.0017 -0.0106 -
0.0061 1 .
2379 N     N     . ILE ILE ILE A A 314 314 . 0.0955 0.0997 0.0862 0.0142  -0.0178 -
0.0122 1 .
2380 CA    CA    . ILE ILE ILE A A 314 314 . 0.1180 0.1189 0.1153 0.0158  -0.0267 -
0.0149 1 .
2381 CB    CB    . ILE ILE ILE A A 314 314 . 0.0978 0.1323 0.1237 0.0071  -0.0287 -
0.0121 1 .
2382 CG1   CG1   . ILE ILE ILE A A 314 314 . 0.1527 0.1386 0.1392 -0.0029 0.0075  -
0.0095 1 .
2383 CD1   CD1   . ILE ILE ILE A A 314 314 . 0.1676 0.1728 0.1988 0.0054  0.0362
0.0305  1 .
2384 CG2   CG2   . ILE ILE ILE A A 314 314 . 0.1579 0.1458 0.1360 0.0354  -0.0235 -
0.0114 1 .
2385 C     C     . ILE ILE ILE A A 314 314 . 0.1065 0.1112 0.1111 -0.0018 -0.0185
0.0029  1 .
2386 O     O     . ILE ILE ILE A A 314 314 . 0.1177 0.1383 0.1120 0.0136  -0.0297
0.0110  1 .
2387 N     N     . VAL VAL VAL A A 315 315 . 0.0995 0.1082 0.0839 0.0246  -0.0261 -
0.0141 1 .
2388 CA    CA    . VAL VAL VAL A A 315 315 . 0.1112 0.0930 0.1198 0.0118  -0.0108
0.0059  1 .
2389 CB    CB    . VAL VAL VAL A A 315 315 . 0.1110 0.1104 0.0865 0.0238  -0.0359 -
0.0154 1 .
2390 CG1   CG1   . VAL VAL VAL A A 315 315 . 0.0887 0.1384 0.1683 0.0054  0.0017  -
0.0002 1 .
2391 CG2   CG2   . VAL VAL VAL A A 315 315 . 0.0964 0.0801 0.1231 0.0107  0.0109  -
0.0059 1 .
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2392 C     C     . VAL VAL VAL A A 315 315 . 0.1081 0.0999 0.1027 0.0106  -0.0055 -
0.0077 1 .
2393 O     O     . VAL VAL VAL A A 315 315 . 0.0956 0.0929 0.1233 0.0117  -0.0041 -
0.0011 1 .
2394 N     N     . GLY GLY GLY A A 316 316 . 0.1208 0.0977 0.1218 0.0214  -0.0101
0.0042  1 .
2395 CA    CA    . GLY GLY GLY A A 316 316 . 0.1373 0.1021 0.1124 0.0181  -0.0149 -
0.0113 1 .
2396 C     C     . GLY GLY GLY A A 316 316 . 0.1381 0.1202 0.1212 0.0108  -0.0107 -
0.0027 1 .
2397 O     O     . GLY GLY GLY A A 316 316 . 0.1203 0.1007 0.1249 0.0156  -0.0241 -
0.0193 1 .
2398 N     N     . ASP ASP ASP A A 317 317 . 0.1292 0.1216 0.1141 0.0294  -0.0087 -
0.0014 1 .
2399 CA    CA    . ASP ASP ASP A A 317 317 . 0.1051 0.0899 0.0906 0.0153  -0.0060 -
0.0047 1 .
2400 CB    CB    . ASP ASP ASP A A 317 317 . 0.1304 0.1106 0.0972 0.0019  0.0004
0.0086  1 .
2401 CG    CG    . ASP ASP ASP A A 317 317 . 0.1176 0.0998 0.0912 0.0006  -0.0070 -
0.0022 1 .
2402 OD1   OD1   . ASP ASP ASP A A 317 317 . 0.0972 0.1131 0.1397 -0.0020 0.0222
0.0099  1 .
2403 OD2   OD2   . ASP ASP ASP A A 317 317 . 0.1522 0.1554 0.1079 -0.0249 -0.0123 -
0.0009 1 .
2404 C     C     . ASP ASP ASP A A 317 317 . 0.1286 0.1123 0.1136 0.0078  -0.0057 -
0.0046 1 .
2405 O     O     . ASP ASP ASP A A 317 317 . 0.1125 0.1185 0.1045 -0.0082 -0.0185 -
0.0055 1 .
2406 N     N     . ASP ASP ASP A A 318 318 . 0.1117 0.1013 0.1229 0.0186  -0.0054 -
0.0125 1 .
2407 CA    CA    . ASP ASP ASP A A 318 318 . 0.1227 0.0987 0.1241 0.0305  0.0044  -
0.0049 1 .
2408 CB    CB    . ASP ASP ASP A A 318 318 . 0.1244 0.1077 0.1314 0.0349  -0.0073
0.0059  1 .
2409 CG    CG    . ASP ASP ASP A A 318 318 . 0.1436 0.1163 0.1383 0.0169  0.0025  -
0.0022 1 .
2410 OD1   OD1   . ASP ASP ASP A A 318 318 . 0.1394 0.1392 0.1356 0.0161  0.0058  -
0.0196 1 .
2411 OD2   OD2   . ASP ASP ASP A A 318 318 . 0.1192 0.1215 0.1248 0.0054  -0.0089 -
0.0039 1 .
2412 C     C     . ASP ASP ASP A A 318 318 . 0.1288 0.1120 0.1170 0.0118  -0.0029 -
0.0101 1 .
2413 O     O     . ASP ASP ASP A A 318 318 . 0.1389 0.1455 0.1601 0.0095  0.0003  -
0.0107 1 .
2414 N     N     . LEU LEU LEU A A 319 319 . 0.1135 0.1319 0.1029 0.0197  -0.0063 -
0.0048 1 .
2415 CA    CA    . LEU LEU LEU A A 319 319 . 0.1221 0.1252 0.0888 0.0060  -0.0066 -
0.0102 1 .
2416 CB    CB    . LEU LEU LEU A A 319 319 . 0.1271 0.1096 0.1093 0.0199  -0.0106 -
0.0160 1 .
2417 CG    CG    . LEU LEU LEU A A 319 319 . 0.0967 0.1127 0.0986 0.0400  -0.0365 -
0.0185 1 .
2418 CD1   CD1   . LEU LEU LEU A A 319 319 . 0.1123 0.1731 0.1649 0.0428  0.0015
0.0181  1 .
2419 CD2   CD2   . LEU LEU LEU A A 319 319 . 0.1600 0.1518 0.1294 0.0636  -0.0159 -
0.0241 1 .
2420 C     C     . LEU LEU LEU A A 319 319 . 0.1481 0.1284 0.1105 0.0099  -0.0107 -
0.0164 1 .
2421 O     O     . LEU LEU LEU A A 319 319 . 0.1397 0.1189 0.1230 0.0106  0.0014
0.0009  1 .
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2422 N     N     . THR THR THR A A 320 320 . 0.1177 0.1131 0.0970 0.0108  -0.0183 -
0.0101 1 .
2423 CA    CA    . THR THR THR A A 320 320 . 0.1400 0.1165 0.1096 0.0018  -0.0042 -
0.0082 1 .
2424 CB    CB    . THR THR THR A A 320 320 . 0.1398 0.1277 0.1326 0.0106  -0.0134
0.0054  1 .
2425 OG1   OG1   . THR THR THR A A 320 320 . 0.2020 0.1113 0.1623 0.0083  0.0051
0.0167  1 .
2426 CG2   CG2   . THR THR THR A A 320 320 . 0.1394 0.1108 0.1385 0.0137  -0.0334
0.0067  1 .
2427 C     C     . THR THR THR A A 320 320 . 0.1357 0.1137 0.1264 0.0080  -0.0099
0.0094  1 .
2428 O     O     . THR THR THR A A 320 320 . 0.1197 0.0890 0.1194 0.0010  -0.0223
0.0083  1 .
2429 N     N     . VAL VAL VAL A A 321 321 . 0.1405 0.1038 0.1064 0.0216  -0.0073 -
0.0158 1 .
2430 CA    CA    . VAL VAL VAL A A 321 321 . 0.1085 0.1066 0.1107 0.0145  -0.0088 -
0.0002 1 .
2431 CB    CB    . VAL VAL VAL A A 321 321 . 0.0883 0.0901 0.1095 0.0153  0.0095  -
0.0025 1 .
2432 CG1   CG1   . VAL VAL VAL A A 321 321 . 0.1260 0.0848 0.1012 0.0397  0.0358  -
0.0087 1 .
2433 CG2   CG2   . VAL VAL VAL A A 321 321 . 0.1486 0.1249 0.1270 0.0319  -0.0092
0.0052  1 .
2434 C     C     . VAL VAL VAL A A 321 321 . 0.0874 0.0873 0.0734 0.0040  -0.0023
0.0028  1 .
2435 O     O     . VAL VAL VAL A A 321 321 . 0.1167 0.0965 0.0836 0.0171  0.0060
0.0030  1 .
2436 N     N     . THR THR THR A A 322 322 . 0.0888 0.0992 0.0930 0.0039  -0.0155 -
0.0037 1 .
2437 CA    CA    . THR THR THR A A 322 322 . 0.0964 0.0953 0.0981 0.0177  -0.0019
0.0005  1 .
2438 CB    CB    . THR THR THR A A 322 322 . 0.0901 0.0795 0.0818 0.0001  -0.0039
0.0037  1 .
2439 OG1   OG1   . THR THR THR A A 322 322 . 0.0828 0.1065 0.1034 0.0202  0.0048  -
0.0127 1 .
2440 CG2   CG2   . THR THR THR A A 322 322 . 0.0931 0.1102 0.1062 0.0129  -0.0064
0.0152  1 .
2441 C     C     . THR THR THR A A 322 322 . 0.1052 0.1049 0.1028 0.0003  -0.0033
0.0019  1 .
2442 O     O     . THR THR THR A A 322 322 . 0.1134 0.1084 0.1149 0.0121  -0.0110
0.0176  1 .
2443 N     N     . ASN ASN ASN A A 323 323 . 0.1205 0.1098 0.1039 0.0153  -0.0091
0.0099  1 .
2444 CA    CA    . ASN ASN ASN A A 323 323 . 0.1602 0.1358 0.1239 0.0150  0.0081
0.0162  1 .
2445 CB    CB    . ASN ASN ASN A A 323 323 . 0.1681 0.1149 0.1315 0.0293  0.0045
0.0115  1 .
2446 CG    CG    . ASN ASN ASN A A 323 323 . 0.2470 0.1607 0.1765 0.0337  0.0285
0.0017  1 .
2447 OD1   OD1   . ASN ASN ASN A A 323 323 . 0.3499 0.1716 0.2130 0.0364  0.0517
0.0352  1 .
2448 ND2   ND2   . ASN ASN ASN A A 323 323 . 0.1844 0.1585 0.1732 0.0450  -0.0078 -
0.0436 1 .
2449 C     C     . ASN ASN ASN A A 323 323 . 0.1700 0.1574 0.1461 0.0036  -0.0111
0.0067  1 .
2450 O     O     . ASN ASN ASN A A 323 323 . 0.1738 0.1567 0.1296 0.0172  -0.0162 -
0.0117 1 .
2451 N     N     . PRO PRO PRO A A 324 324 . 0.1900 0.1775 0.1604 -0.0135 -0.0117
0.0040  1 .
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2452 CA    CA    . PRO PRO PRO A A 324 324 . 0.1997 0.1934 0.1575 -0.0080 0.0044
0.0126  1 .
2453 CB    CB    . PRO PRO PRO A A 324 324 . 0.1910 0.2172 0.1734 -0.0058 0.0063  -
0.0016 1 .
2454 CG    CG    . PRO PRO PRO A A 324 324 . 0.2364 0.2360 0.1592 -0.0049 -0.0075
0.0043  1 .
2455 CD    CD    . PRO PRO PRO A A 324 324 . 0.1403 0.2058 0.1762 -0.0079 -0.0121
0.0098  1 .
2456 C     C     . PRO PRO PRO A A 324 324 . 0.2469 0.1941 0.1810 0.0133  -0.0065
0.0204  1 .
2457 O     O     . PRO PRO PRO A A 324 324 . 0.2570 0.1652 0.2038 0.0197  -0.0291
0.0163  1 .
2458 N     N     . LYS LYS LYS A A 325 325 . 0.2422 0.1923 0.1905 0.0172  0.0026
0.0328  1 .
2459 CA    CA    . LYS LYS LYS A A 325 325 . 0.2329 0.1934 0.1937 0.0176  -0.0011
0.0206  1 .
2460 CB    CB    . LYS LYS LYS A A 325 325 . 0.2613 0.1976 0.2118 0.0267  0.0098
0.0216  1 .
2461 C     C     . LYS LYS LYS A A 325 325 . 0.2286 0.1986 0.1900 0.0233  -0.0102
0.0165  1 .
2462 O     O     . LYS LYS LYS A A 325 325 . 0.2494 0.1984 0.1761 0.0337  -0.0409
0.0339  1 .
2463 N     N     . ARG ARG ARG A A 326 326 . 0.2012 0.1620 0.1661 0.0201  0.0039
0.0101  1 .
2464 CA    CA    . ARG ARG ARG A A 326 326 . 0.1752 0.1533 0.1532 0.0297  -0.0050 -
0.0023 1 .
2465 CB    CB    . ARG ARG ARG A A 326 326 . 0.1806 0.1708 0.1392 0.0449  0.0292  -
0.0255 1 .
2466 CG    CG    . ARG ARG ARG A A 326 326 . 0.3069 0.1439 0.1812 0.0106  0.0369  -
0.0450 1 .
2467 CD    CD    . ARG ARG ARG A A 326 326 . 0.3539 0.3286 0.2162 0.0373  0.0500
0.0111  1 .
2468 NE    NE    . ARG ARG ARG A A 326 326 . 0.2316 0.3546 0.1984 0.0943  0.0152  -
0.0302 1 .
2469 CZ    CZ    . ARG ARG ARG A A 326 326 . 0.2650 0.2295 0.2017 -0.0051 0.0014
0.0339  1 .
2470 NH1   NH1   . ARG ARG ARG A A 326 326 . 0.1515 0.2215 0.1745 0.0445  0.0052  -
0.0039 1 .
2471 NH2   NH2   . ARG ARG ARG A A 326 326 . 0.2496 0.1830 0.2215 0.0565  0.0695
0.0104  1 .
2472 C     C     . ARG ARG ARG A A 326 326 . 0.1560 0.1512 0.1416 0.0283  -0.0083 -
0.0078 1 .
2473 O     O     . ARG ARG ARG A A 326 326 . 0.1882 0.1569 0.1472 0.0328  -0.0068
0.0088  1 .
2474 N     N     . ILE ILE ILE A A 327 327 . 0.1774 0.1402 0.1038 0.0332  -0.0081
0.0068  1 .
2475 CA    CA    . ILE ILE ILE A A 327 327 . 0.1894 0.1570 0.1297 0.0387  -0.0143
0.0126  1 .
2476 CB    CB    . ILE ILE ILE A A 327 327 . 0.1765 0.1527 0.1271 0.0298  -0.0109
0.0049  1 .
2477 CG1   CG1   . ILE ILE ILE A A 327 327 . 0.1774 0.1363 0.1341 0.0335  -0.0399
0.0002  1 .
2478 CD1   CD1   . ILE ILE ILE A A 327 327 . 0.1256 0.0695 0.1617 0.0050  -0.0274 -
0.0110 1 .
2479 CG2   CG2   . ILE ILE ILE A A 327 327 . 0.1452 0.1413 0.1251 0.0303  0.0018
0.0085  1 .
2480 C     C     . ILE ILE ILE A A 327 327 . 0.2281 0.1764 0.1517 0.0251  -0.0187
0.0123  1 .
2481 O     O     . ILE ILE ILE A A 327 327 . 0.2474 0.1609 0.1650 0.0127  -0.0420 -
0.0020 1 .
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2482 N     N     . GLU GLU GLU A A 328 328 . 0.2300 0.1944 0.1661 0.0137  -0.0084
0.0187  1 .
2483 CA    CA    . GLU GLU GLU A A 328 328 . 0.2336 0.2051 0.1970 0.0094  -0.0078
0.0318  1 .
2484 CB    CB    . GLU GLU GLU A A 328 328 . 0.2502 0.1956 0.1992 -0.0047 -0.0058
0.0233  1 .
2485 CG    CG    . GLU GLU GLU A A 328 328 . 0.3115 0.2990 0.3077 -0.0005 0.0037
0.0207  1 .
2486 CD    CD    . GLU GLU GLU A A 328 328 . 0.4940 0.4565 0.3800 -0.0593 0.0106
0.0392  1 .
2487 OE1   OE1   . GLU GLU GLU A A 328 328 . 0.5290 0.4939 0.4468 -0.1204 -0.0168
0.0355  1 .
2488 OE2   OE2   . GLU GLU GLU A A 328 328 . 0.5835 0.4799 0.4407 -0.0777 -0.0217
0.0196  1 .
2489 C     C     . GLU GLU GLU A A 328 328 . 0.2378 0.1890 0.2003 0.0141  -0.0083
0.0323  1 .
2490 O     O     . GLU GLU GLU A A 328 328 . 0.2551 0.2097 0.1878 0.0223  0.0008
0.0312  1 .
2491 N     N     . ARG ARG ARG A A 329 329 . 0.2259 0.1836 0.2094 0.0259  -0.0018
0.0257  1 .
2492 CA    CA    . ARG ARG ARG A A 329 329 . 0.2195 0.2116 0.2125 0.0136  -0.0229
0.0215  1 .
2493 CB    CB    . ARG ARG ARG A A 329 329 . 0.2217 0.2309 0.2489 0.0317  -0.0276
0.0264  1 .
2494 CG    CG    . ARG ARG ARG A A 329 329 . 0.2619 0.2717 0.2782 0.0074  0.0113
0.0464  1 .
2495 CD    CD    . ARG ARG ARG A A 329 329 . 0.2857 0.3295 0.2964 0.0089  0.0049
0.0306  1 .
2496 NE    NE    . ARG ARG ARG A A 329 329 . 0.3094 0.3364 0.3039 -0.0049 0.0190
0.0619  1 .
2497 CZ    CZ    . ARG ARG ARG A A 329 329 . 0.2925 0.2829 0.3039 0.0616  -0.0330
0.0441  1 .
2498 NH1   NH1   . ARG ARG ARG A A 329 329 . 0.3799 0.2855 0.3211 0.0576  -0.0256 -
0.0221 1 .
2499 NH2   NH2   . ARG ARG ARG A A 329 329 . 0.3094 0.2912 0.2897 0.0258  0.0041
0.0890  1 .
2500 C     C     . ARG ARG ARG A A 329 329 . 0.2192 0.2171 0.2128 0.0190  -0.0271
0.0150  1 .
2501 O     O     . ARG ARG ARG A A 329 329 . 0.2350 0.2091 0.2243 0.0140  -0.0241 -
0.0130 1 .
2502 N     N     . ALA ALA ALA A A 330 330 . 0.1756 0.1855 0.1999 0.0319  -0.0267
0.0149  1 .
2503 CA    CA    . ALA ALA ALA A A 330 330 . 0.1914 0.1900 0.1832 0.0338  -0.0255
0.0027  1 .
2504 CB    CB    . ALA ALA ALA A A 330 330 . 0.1885 0.1673 0.1458 0.0394  -0.0214
0.0189  1 .
2505 C     C     . ALA ALA ALA A A 330 330 . 0.1937 0.1974 0.1743 0.0275  -0.0312
0.0093  1 .
2506 O     O     . ALA ALA ALA A A 330 330 . 0.2038 0.1934 0.2053 0.0206  -0.0280
0.0062  1 .
2507 N     N     . VAL VAL VAL A A 331 331 . 0.2019 0.1866 0.1715 0.0304  -0.0249
0.0102  1 .
2508 CA    CA    . VAL VAL VAL A A 331 331 . 0.2541 0.2341 0.2057 0.0195  -0.0126
0.0005  1 .
2509 CB    CB    . VAL VAL VAL A A 331 331 . 0.2543 0.2140 0.2051 0.0049  0.0024
0.0072  1 .
2510 CG1   CG1   . VAL VAL VAL A A 331 331 . 0.3503 0.2718 0.2333 0.0031  0.0277  -
0.0135 1 .
2511 CG2   CG2   . VAL VAL VAL A A 331 331 . 0.2708 0.2554 0.2384 -0.0006 0.0162
0.0015  1 .
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2512 C     C     . VAL VAL VAL A A 331 331 . 0.2703 0.2305 0.2055 0.0136  -0.0201
0.0165  1 .
2513 O     O     . VAL VAL VAL A A 331 331 . 0.2896 0.2482 0.1683 0.0322  -0.0268
0.0305  1 .
2514 N     N     . GLU GLU GLU A A 332 332 . 0.2676 0.2526 0.2219 0.0239  -0.0134
0.0108  1 .
2515 CA    CA    . GLU GLU GLU A A 332 332 . 0.3102 0.2779 0.2517 0.0159  -0.0355
0.0143  1 .
2516 CB    CB    . GLU GLU GLU A A 332 332 . 0.3063 0.2894 0.2739 0.0284  -0.0427
0.0298  1 .
2517 CG    CG    . GLU GLU GLU A A 332 332 . 0.3972 0.3763 0.3573 0.0235  -0.0471
0.0509  1 .
2518 CD    CD    . GLU GLU GLU A A 332 332 . 0.5014 0.5163 0.4282 0.0036  -0.0242
0.0422  1 .
2519 OE1   OE1   . GLU GLU GLU A A 332 332 . 0.5282 0.5657 0.5175 -0.0035 -0.0519
0.0515  1 .
2520 OE2   OE2   . GLU GLU GLU A A 332 332 . 0.5060 0.5577 0.4750 -0.0027 -0.0353
0.0787  1 .
2521 C     C     . GLU GLU GLU A A 332 332 . 0.3045 0.2684 0.2457 0.0163  -0.0315
0.0107  1 .
2522 O     O     . GLU GLU GLU A A 332 332 . 0.3589 0.2764 0.2490 0.0201  -0.0556
0.0351  1 .
2523 N     N     . GLU GLU GLU A A 333 333 . 0.2929 0.2464 0.2466 0.0122  -0.0323
0.0071  1 .
2524 CA    CA    . GLU GLU GLU A A 333 333 . 0.2575 0.2306 0.2409 0.0227  -0.0317 -
0.0041 1 .
2525 CB    CB    . GLU GLU GLU A A 333 333 . 0.2664 0.2461 0.2748 0.0222  -0.0277 -
0.0013 1 .
2526 CG    CG    . GLU GLU GLU A A 333 333 . 0.3445 0.2511 0.3285 0.0197  -0.0190 -
0.0216 1 .
2527 CD    CD    . GLU GLU GLU A A 333 333 . 0.3980 0.3714 0.4253 0.0104  0.0170  -
0.0138 1 .
2528 OE1   OE1   . GLU GLU GLU A A 333 333 . 0.4735 0.3765 0.4974 -0.0043 -0.0083
0.0019  1 .
2529 OE2   OE2   . GLU GLU GLU A A 333 333 . 0.4166 0.3677 0.4943 -0.0012 0.0046  -
0.0080 1 .
2530 C     C     . GLU GLU GLU A A 333 333 . 0.2417 0.2263 0.2262 0.0129  -0.0246 -
0.0030 1 .
2531 O     O     . GLU GLU GLU A A 333 333 . 0.2250 0.2072 0.2336 0.0352  -0.0494
0.0007  1 .
2532 N     N     . LYS LYS LYS A A 334 334 . 0.2182 0.2134 0.1792 0.0165  -0.0427 -
0.0200 1 .
2533 CA    CA    . LYS LYS LYS A A 334 334 . 0.2203 0.2184 0.1714 0.0082  -0.0208 -
0.0123 1 .
2534 CB    CB    . LYS LYS LYS A A 334 334 . 0.2143 0.2307 0.1693 0.0073  -0.0255 -
0.0060 1 .
2535 CG    CG    . LYS LYS LYS A A 334 334 . 0.2924 0.2315 0.1683 -0.0045 0.0076  -
0.0091 1 .
2536 CD    CD    . LYS LYS LYS A A 334 334 . 0.4138 0.3340 0.2887 -0.0065 -0.0706 -
0.0481 1 .
2537 C     C     . LYS LYS LYS A A 334 334 . 0.2154 0.1962 0.1752 0.0184  -0.0300 -
0.0136 1 .
2538 O     O     . LYS LYS LYS A A 334 334 . 0.2449 0.2011 0.1673 0.0134  -0.0090 -
0.0228 1 .
2539 N     N     . ALA ALA ALA A A 335 335 . 0.2045 0.1601 0.1491 0.0354  -0.0227 -
0.0165 1 .
2540 CA    CA    . ALA ALA ALA A A 335 335 . 0.1989 0.1682 0.1715 0.0276  -0.0194 -
0.0142 1 .
2541 CB    CB    . ALA ALA ALA A A 335 335 . 0.1957 0.1664 0.1453 0.0350  -0.0234 -
0.0319 1 .
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2542 C     C     . ALA ALA ALA A A 335 335 . 0.1863 0.1787 0.1632 0.0282  -0.0185 -
0.0067 1 .
2543 O     O     . ALA ALA ALA A A 335 335 . 0.1656 0.1658 0.1476 0.0145  -0.0401 -
0.0084 1 .
2544 N     N     . CYS CYS CYS A A 336 336 . 0.1870 0.1695 0.1679 0.0351  -0.0182 -
0.0056 1 .
2545 CA    CA    . CYS CYS CYS A A 336 336 . 0.1730 0.1694 0.1433 0.0395  -0.0218
0.0029  1 .
2546 CB    CB    . CYS CYS CYS A A 336 336 . 0.1925 0.1580 0.1448 0.0305  -0.0266 -
0.0154 1 .
2547 SG    SG    . CYS CYS CYS A A 336 336 . 0.1651 0.1640 0.1490 0.0231  -0.0225
0.0091  1 .
2548 C     C     . CYS CYS CYS A A 336 336 . 0.1789 0.1707 0.1566 0.0308  -0.0119 -
0.0016 1 .
2549 O     O     . CYS CYS CYS A A 336 336 . 0.1835 0.1755 0.1559 0.0357  -0.0128
0.0074  1 .
2550 N     N     . ASN ASN ASN A A 337 337 . 0.1463 0.1442 0.1197 0.0286  -0.0377 -
0.0208 1 .
2551 CA    CA    . ASN ASN ASN A A 337 337 . 0.1439 0.1498 0.1420 0.0087  -0.0314 -
0.0159 1 .
2552 CB    CB    . ASN ASN ASN A A 337 337 . 0.1668 0.1629 0.1354 -0.0044 -0.0378 -
0.0122 1 .
2553 CG    CG    . ASN ASN ASN A A 337 337 . 0.1630 0.1897 0.1623 -0.0043 -0.0293 -
0.0084 1 .
2554 OD1   OD1   . ASN ASN ASN A A 337 337 . 0.2214 0.2281 0.2565 0.0107  -0.0314 -
0.0308 1 .
2555 ND2   ND2   . ASN ASN ASN A A 337 337 . 0.1216 0.0943 0.1215 -0.0076 -0.0578 -
0.0093 1 .
2556 C     C     . ASN ASN ASN A A 337 337 . 0.1519 0.1475 0.1345 0.0099  -0.0198 -
0.0206 1 .
2557 O     O     . ASN ASN ASN A A 337 337 . 0.1492 0.1405 0.1623 0.0002  -0.0185 -
0.0121 1 .
2558 N     N     . CYS CYS CYS A A 338 338 . 0.1346 0.1090 0.1224 -0.0019 -0.0142
0.0084  1 .
2559 CA    CA    . CYS CYS CYS A A 338 338 . 0.1248 0.0800 0.0927 0.0124  -0.0219 -
0.0119 1 .
2560 CB    CB    . CYS CYS CYS A A 338 338 . 0.1481 0.1208 0.1209 0.0010  -0.0414
0.0050  1 .
2561 SG    SG    . CYS CYS CYS A A 338 338 . 0.1423 0.1266 0.1485 0.0372  -0.0265 -
0.0155 1 .
2562 C     C     . CYS CYS CYS A A 338 338 . 0.1125 0.0968 0.1000 0.0068  -0.0061 -
0.0122 1 .
2563 O     O     . CYS CYS CYS A A 338 338 . 0.1474 0.1057 0.1611 0.0247  -0.0271 -
0.0121 1 .
2564 N     N     . LEU LEU LEU A A 339 339 . 0.0830 0.0729 0.0665 0.0148  -0.0101 -
0.0081 1 .
2565 CA    CA    . LEU LEU LEU A A 339 339 . 0.1080 0.0834 0.0722 0.0065  -0.0113 -
0.0055 1 .
2566 CB    CB    . LEU LEU LEU A A 339 339 . 0.1029 0.0825 0.0594 -0.0126 -0.0146 -
0.0107 1 .
2567 CG    CG    . LEU LEU LEU A A 339 339 . 0.1012 0.0726 0.0553 -0.0026 -0.0004 -
0.0025 1 .
2568 CD1   CD1   . LEU LEU LEU A A 339 339 . 0.1446 0.0878 0.1303 0.0522  0.0118
0.0201  1 .
2569 CD2   CD2   . LEU LEU LEU A A 339 339 . 0.1248 0.1302 0.1262 -0.0076 0.0087  -
0.0187 1 .
2570 C     C     . LEU LEU LEU A A 339 339 . 0.1034 0.1011 0.0710 0.0094  0.0006
0.0029  1 .
2571 O     O     . LEU LEU LEU A A 339 339 . 0.1220 0.1011 0.0596 0.0109  0.0064
0.0043  1 .
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2572 N     N     . LEU LEU LEU A A 340 340 . 0.1116 0.1014 0.0717 0.0044  0.0036
0.0105  1 .
2573 CA    CA    . LEU LEU LEU A A 340 340 . 0.0920 0.1030 0.0711 -0.0024 0.0053
0.0140  1 .
2574 CB    CB    . LEU LEU LEU A A 340 340 . 0.0870 0.0763 0.0915 0.0056  0.0130
0.0175  1 .
2575 CG    CG    . LEU LEU LEU A A 340 340 . 0.1096 0.0732 0.0716 0.0014  0.0166
0.0094  1 .
2576 CD1   CD1   . LEU LEU LEU A A 340 340 . 0.0731 0.0614 0.0970 -0.0119 0.0026  -
0.0077 1 .
2577 CD2   CD2   . LEU LEU LEU A A 340 340 . 0.1140 0.0920 0.0719 -0.0131 0.0104  -
0.0117 1 .
2578 C     C     . LEU LEU LEU A A 340 340 . 0.1028 0.1062 0.0859 0.0099  0.0002  -
0.0005 1 .
2579 O     O     . LEU LEU LEU A A 340 340 . 0.1131 0.1044 0.0825 -0.0123 -0.0135
0.0116  1 .
2580 N     N     . LEU LEU LEU A A 341 341 . 0.0914 0.1028 0.0928 0.0064  -0.0009 -
0.0002 1 .
2581 CA    CA    . LEU LEU LEU A A 341 341 . 0.0996 0.1177 0.1021 0.0088  0.0054
0.0062  1 .
2582 CB    CB    . LEU LEU LEU A A 341 341 . 0.1068 0.0927 0.0983 0.0095  0.0140
0.0040  1 .
2583 CG    CG    . LEU LEU LEU A A 341 341 . 0.0937 0.1221 0.1252 -0.0001 -0.0071
0.0059  1 .
2584 CD1   CD1   . LEU LEU LEU A A 341 341 . 0.1925 0.1249 0.1464 0.0642  0.0206  -
0.0028 1 .
2585 CD2   CD2   . LEU LEU LEU A A 341 341 . 0.1293 0.1844 0.1926 0.0203  0.0302  -
0.0100 1 .
2586 C     C     . LEU LEU LEU A A 341 341 . 0.1060 0.1216 0.1046 0.0117  0.0030
0.0001  1 .
2587 O     O     . LEU LEU LEU A A 341 341 . 0.1173 0.1168 0.1018 0.0112  -0.0138
0.0098  1 .
2588 N     N     . LYS LYS LYS A A 342 342 . 0.1226 0.1320 0.1073 0.0301  -0.0002 -
0.0098 1 .
2589 CA    CA    . LYS LYS LYS A A 342 342 . 0.1081 0.1392 0.0892 0.0074  -0.0027
0.0075  1 .
2590 CB    CB    . LYS LYS LYS A A 342 342 . 0.1171 0.1469 0.1005 0.0163  -0.0066
0.0097  1 .
2591 CG    CG    . LYS LYS LYS A A 342 342 . 0.1033 0.1096 0.1034 0.0256  -0.0239
0.0136  1 .
2592 CD    CD    . LYS LYS LYS A A 342 342 . 0.0898 0.0945 0.0859 -0.0038 -0.0352
0.0212  1 .
2593 CE    CE    . LYS LYS LYS A A 342 342 . 0.1348 0.1555 0.1090 -0.0210 -0.0312
0.0085  1 .
2594 NZ    NZ    . LYS LYS LYS A A 342 342 . 0.1463 0.1749 0.1606 -0.0262 0.0121
0.0206  1 .
2595 C     C     . LYS LYS LYS A A 342 342 . 0.1402 0.1423 0.0929 0.0246  -0.0117 -
0.0119 1 .
2596 O     O     . LYS LYS LYS A A 342 342 . 0.1462 0.1444 0.0802 0.0338  -0.0335
0.0063  1 .
2597 N     N     . VAL VAL VAL A A 343 343 . 0.0911 0.1282 0.0909 -0.0050 0.0009
0.0012  1 .
2598 CA    CA    . VAL VAL VAL A A 343 343 . 0.1219 0.1169 0.0982 0.0008  0.0074
0.0118  1 .
2599 CB    CB    . VAL VAL VAL A A 343 343 . 0.1307 0.1443 0.1092 0.0141  0.0149
0.0141  1 .
2600 CG1   CG1   . VAL VAL VAL A A 343 343 . 0.1625 0.1916 0.0754 0.0427  0.0206
0.0136  1 .
2601 CG2   CG2   . VAL VAL VAL A A 343 343 . 0.1401 0.1798 0.1233 -0.0094 0.0055
0.0282  1 .
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2602 C     C     . VAL VAL VAL A A 343 343 . 0.1213 0.1110 0.0868 -0.0032 0.0123
0.0116  1 .
2603 O     O     . VAL VAL VAL A A 343 343 . 0.1607 0.0965 0.0808 0.0066  0.0105
0.0135  1 .
2604 N     N     . ASN ASN ASN A A 344 344 . 0.0903 0.0907 0.1089 -0.0048 0.0061
0.0226  1 .
2605 CA    CA    . ASN ASN ASN A A 344 344 . 0.0903 0.1063 0.0903 0.0028  0.0024
0.0164  1 .
2606 CB    CB    . ASN ASN ASN A A 344 344 . 0.0801 0.1006 0.0710 0.0127  0.0036  -
0.0006 1 .
2607 CG    CG    . ASN ASN ASN A A 344 344 . 0.0893 0.0995 0.0944 0.0065  -0.0078 -
0.0215 1 .
2608 OD1   OD1   . ASN ASN ASN A A 344 344 . 0.1048 0.0737 0.1298 -0.0120 -0.0074 -
0.0052 1 .
2609 ND2   ND2   . ASN ASN ASN A A 344 344 . 0.1040 0.1269 0.0960 0.0306  0.0109
0.0109  1 .
2610 C     C     . ASN ASN ASN A A 344 344 . 0.1094 0.1094 0.1034 0.0071  -0.0085 -
0.0060 1 .
2611 O     O     . ASN ASN ASN A A 344 344 . 0.1170 0.0957 0.1154 0.0128  0.0095  -
0.0050 1 .
2612 N     N     . GLN GLN GLN A A 345 345 . 0.1054 0.0825 0.0858 0.0004  -0.0006 -
0.0023 1 .
2613 CA    CA    . GLN GLN GLN A A 345 345 . 0.1120 0.0938 0.0948 0.0001  -0.0066 -
0.0010 1 .
2614 CB    CB    . GLN GLN GLN A A 345 345 . 0.0957 0.0920 0.1072 -0.0177 0.0036
0.0054  1 .
2615 CG    CG    . GLN GLN GLN A A 345 345 . 0.1031 0.0947 0.0974 -0.0166 -0.0015
0.0027  1 .
2616 CD    CD    . GLN GLN GLN A A 345 345 . 0.0945 0.0993 0.0868 -0.0163 0.0034
0.0077  1 .
2617 OE1   OE1   . GLN GLN GLN A A 345 345 . 0.1134 0.0913 0.1336 0.0145  -0.0172
0.0254  1 .
2618 NE2   NE2   . GLN GLN GLN A A 345 345 . 0.0615 0.1072 0.1410 0.0013  -0.0094
0.0053  1 .
2619 C     C     . GLN GLN GLN A A 345 345 . 0.1029 0.0880 0.0961 -0.0057 0.0088  -
0.0032 1 .
2620 O     O     . GLN GLN GLN A A 345 345 . 0.1193 0.1171 0.0930 0.0110  0.0070
0.0114  1 .
2621 N     N     . ILE ILE ILE A A 346 346 . 0.0922 0.0844 0.0892 -0.0114 0.0005  -
0.0127 1 .
2622 CA    CA    . ILE ILE ILE A A 346 346 . 0.1102 0.1015 0.1071 0.0156  0.0023
0.0051  1 .
2623 CB    CB    . ILE ILE ILE A A 346 346 . 0.1214 0.1147 0.0924 0.0091  -0.0035
0.0120  1 .
2624 CG1   CG1   . ILE ILE ILE A A 346 346 . 0.1178 0.0980 0.1225 0.0353  -0.0094
0.0244  1 .
2625 CD1   CD1   . ILE ILE ILE A A 346 346 . 0.1057 0.1317 0.1142 0.0143  -0.0211
0.0269  1 .
2626 CG2   CG2   . ILE ILE ILE A A 346 346 . 0.1178 0.1290 0.1057 0.0132  0.0198
0.0402  1 .
2627 C     C     . ILE ILE ILE A A 346 346 . 0.1078 0.1077 0.1152 0.0050  -0.0070
0.0084  1 .
2628 O     O     . ILE ILE ILE A A 346 346 . 0.1152 0.1328 0.1172 -0.0023 -0.0231 -
0.0202 1 .
2629 N     N     . GLY GLY GLY A A 347 347 . 0.1110 0.0960 0.1034 0.0058  -0.0176
0.0105  1 .
2630 CA    CA    . GLY GLY GLY A A 347 347 . 0.1129 0.1169 0.1203 0.0014  -0.0061
0.0078  1 .
2631 C     C     . GLY GLY GLY A A 347 347 . 0.1120 0.1154 0.1103 0.0016  -0.0038
0.0040  1 .
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2632 O     O     . GLY GLY GLY A A 347 347 . 0.1094 0.0922 0.1250 -0.0028 -0.0066
0.0009  1 .
2633 N     N     . SER SER SER A A 348 348 . 0.1104 0.1009 0.1170 0.0099  -0.0006 -
0.0139 1 .
2634 CA    CA    . SER SER SER A A 348 348 . 0.1268 0.0964 0.1117 -0.0114 0.0041  -
0.0184 1 .
2635 CB    CB    . SER SER SER A A 348 348 . 0.1448 0.1144 0.1131 -0.0126 -0.0055
0.0084  1 .
2636 OG    OG    . SER SER SER A A 348 348 . 0.1693 0.1563 0.0781 -0.0179 -0.0054
0.0039  1 .
2637 C     C     . SER SER SER A A 348 348 . 0.0896 0.1066 0.1004 0.0033  0.0111  -
0.0132 1 .
2638 O     O     . SER SER SER A A 348 348 . 0.0994 0.1030 0.1133 -0.0158 0.0018  -
0.0033 1 .
2639 N     N     . VAL VAL VAL A A 349 349 . 0.1119 0.0976 0.1064 0.0017  0.0030  -
0.0116 1 .
2640 CA    CA    . VAL VAL VAL A A 349 349 . 0.1050 0.1013 0.0869 0.0155  0.0209
0.0065  1 .
2641 CB    CB    . VAL VAL VAL A A 349 349 . 0.1055 0.0935 0.0792 0.0204  0.0070  -
0.0039 1 .
2642 CG1   CG1   . VAL VAL VAL A A 349 349 . 0.0880 0.1012 0.1463 0.0577  0.0137  -
0.0095 1 .
2643 CG2   CG2   . VAL VAL VAL A A 349 349 . 0.1657 0.1056 0.1311 -0.0094 0.0137
0.0040  1 .
2644 C     C     . VAL VAL VAL A A 349 349 . 0.1111 0.0919 0.1020 0.0039  -0.0043
0.0000  1 .
2645 O     O     . VAL VAL VAL A A 349 349 . 0.1185 0.1170 0.0791 0.0008  0.0151
0.0101  1 .
2646 N     N     . THR THR THR A A 350 350 . 0.1191 0.1105 0.1230 -0.0076 0.0095
0.0174  1 .
2647 CA    CA    . THR THR THR A A 350 350 . 0.1100 0.1085 0.0971 -0.0187 -0.0156
0.0200  1 .
2648 CB    CB    . THR THR THR A A 350 350 . 0.1061 0.0910 0.1029 -0.0126 -0.0221
0.0096  1 .
2649 OG1   OG1   . THR THR THR A A 350 350 . 0.1327 0.1175 0.1455 -0.0195 -0.0107
0.0466  1 .
2650 CG2   CG2   . THR THR THR A A 350 350 . 0.1479 0.1461 0.1464 -0.0331 -0.0305
0.0154  1 .
2651 C     C     . THR THR THR A A 350 350 . 0.1184 0.0992 0.1023 -0.0207 0.0057
0.0184  1 .
2652 O     O     . THR THR THR A A 350 350 . 0.0929 0.1130 0.1002 -0.0182 0.0071
0.0011  1 .
2653 N     N     . GLU GLU GLU A A 351 351 . 0.1153 0.1100 0.1276 -0.0012 -0.0063
0.0087  1 .
2654 CA    CA    . GLU GLU GLU A A 351 351 . 0.1211 0.1046 0.1394 0.0015  0.0066
0.0055  1 .
2655 CB    CB    . GLU GLU GLU A A 351 351 . 0.1399 0.1056 0.1223 0.0229  0.0082  -
0.0057 1 .
2656 CG    CG    . GLU GLU GLU A A 351 351 . 0.1847 0.1259 0.1698 0.0180  -0.0009 -
0.0257 1 .
2657 CD    CD    . GLU GLU GLU A A 351 351 . 0.1779 0.1460 0.1737 0.0158  0.0125  -
0.0344 1 .
2658 OE1   OE1   . GLU GLU GLU A A 351 351 . 0.2149 0.1861 0.1750 0.0024  0.0096  -
0.0110 1 .
2659 OE2   OE2   . GLU GLU GLU A A 351 351 . 0.2397 0.1935 0.1847 0.0380  0.0063
0.0297  1 .
2660 C     C     . GLU GLU GLU A A 351 351 . 0.1291 0.1238 0.1280 0.0062  0.0050  -
0.0094 1 .
2661 O     O     . GLU GLU GLU A A 351 351 . 0.1329 0.1303 0.1365 -0.0148 -0.0099 -
0.0035 1 .
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2662 N     N     . ALA ALA ALA A A 352 352 . 0.1314 0.0935 0.1232 -0.0120 0.0158
0.0070  1 .
2663 CA    CA    . ALA ALA ALA A A 352 352 . 0.1138 0.1027 0.1067 -0.0075 0.0050
0.0063  1 .
2664 CB    CB    . ALA ALA ALA A A 352 352 . 0.1437 0.1074 0.0727 -0.0182 -0.0010
0.0328  1 .
2665 C     C     . ALA ALA ALA A A 352 352 . 0.1330 0.1229 0.1179 -0.0123 -0.0041 -
0.0052 1 .
2666 O     O     . ALA ALA ALA A A 352 352 . 0.1366 0.1319 0.1188 -0.0152 -0.0158
0.0051  1 .
2667 N     N     . ILE ILE ILE A A 353 353 . 0.1106 0.1252 0.1123 -0.0066 0.0190
0.0028  1 .
2668 CA    CA    . ILE ILE ILE A A 353 353 . 0.1240 0.1462 0.1358 -0.0086 0.0008  -
0.0022 1 .
2669 CB    CB    . ILE ILE ILE A A 353 353 . 0.1083 0.1288 0.1221 -0.0164 -0.0092 -
0.0045 1 .
2670 CG1   CG1   . ILE ILE ILE A A 353 353 . 0.1529 0.1278 0.1395 0.0065  -0.0191 -
0.0094 1 .
2671 CD1   CD1   . ILE ILE ILE A A 353 353 . 0.1384 0.1975 0.1679 0.0287  -0.0045
0.0091  1 .
2672 CG2   CG2   . ILE ILE ILE A A 353 353 . 0.1215 0.1815 0.1389 -0.0272 0.0261  -
0.0195 1 .
2673 C     C     . ILE ILE ILE A A 353 353 . 0.1211 0.1259 0.1357 -0.0315 0.0161
0.0151  1 .
2674 O     O     . ILE ILE ILE A A 353 353 . 0.1433 0.1554 0.1275 -0.0061 0.0162  -
0.0075 1 .
2675 N     N     . GLN GLN GLN A A 354 354 . 0.1299 0.1462 0.1562 -0.0022 0.0106
0.0012  1 .
2676 CA    CA    . GLN GLN GLN A A 354 354 . 0.1698 0.1568 0.1558 -0.0121 -0.0023
0.0147  1 .
2677 CB    CB    . GLN GLN GLN A A 354 354 . 0.2081 0.1461 0.1736 -0.0067 0.0038
0.0124  1 .
2678 CG    CG    . GLN GLN GLN A A 354 354 . 0.3074 0.2797 0.2596 -0.0354 -0.0249
0.0545  1 .
2679 CD    CD    . GLN GLN GLN A A 354 354 . 0.4230 0.3376 0.3561 -0.0198 0.0046
0.0476  1 .
2680 OE1   OE1   . GLN GLN GLN A A 354 354 . 0.4864 0.4244 0.3434 -0.0653 -0.0281
0.0935  1 .
2681 NE2   NE2   . GLN GLN GLN A A 354 354 . 0.4475 0.3279 0.3606 0.0354  0.0435
0.1286  1 .
2682 C     C     . GLN GLN GLN A A 354 354 . 0.1523 0.1397 0.1451 -0.0038 -0.0040
0.0010  1 .
2683 O     O     . GLN GLN GLN A A 354 354 . 0.1528 0.1542 0.1557 -0.0136 -0.0035
0.0053  1 .
2684 N     N     . ALA ALA ALA A A 355 355 . 0.1250 0.1209 0.1260 -0.0066 0.0050  -
0.0013 1 .
2685 CA    CA    . ALA ALA ALA A A 355 355 . 0.1088 0.1094 0.1268 0.0076  0.0111
0.0031  1 .
2686 CB    CB    . ALA ALA ALA A A 355 355 . 0.1113 0.1204 0.1105 0.0294  0.0014  -
0.0046 1 .
2687 C     C     . ALA ALA ALA A A 355 355 . 0.1276 0.1333 0.1227 0.0064  0.0033
0.0055  1 .
2688 O     O     . ALA ALA ALA A A 355 355 . 0.1088 0.1423 0.1310 0.0146  0.0000
0.0194  1 .
2689 N     N     . CYS CYS CYS A A 356 356 . 0.1123 0.1222 0.1140 0.0199  0.0079
0.0105  1 .
2690 CA    CA    . CYS CYS CYS A A 356 356 . 0.1339 0.1285 0.0979 0.0164  -0.0051
0.0062  1 .
2691 CB    CB    . CYS CYS CYS A A 356 356 . 0.0999 0.1146 0.1077 0.0436  -0.0029 -
0.0274 1 .
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2692 SG    SG    . CYS CYS CYS A A 356 356 . 0.1693 0.1345 0.1354 0.0149  -0.0044 -
0.0091 1 .
2693 C     C     . CYS CYS CYS A A 356 356 . 0.1410 0.1471 0.1190 0.0057  0.0028
0.0045  1 .
2694 O     O     . CYS CYS CYS A A 356 356 . 0.1691 0.1459 0.1170 -0.0083 0.0149
0.0046  1 .
2695 N     N     . LYS LYS LYS A A 357 357 . 0.1888 0.1450 0.1284 0.0047  0.0249
0.0193  1 .
2696 CA    CA    . LYS LYS LYS A A 357 357 . 0.1961 0.1741 0.1373 0.0014  0.0081
0.0208  1 .
2697 CB    CB    . LYS LYS LYS A A 357 357 . 0.2053 0.1744 0.1446 0.0026  0.0092
0.0112  1 .
2698 CG    CG    . LYS LYS LYS A A 357 357 . 0.2343 0.2668 0.1875 -0.0167 0.0065
0.0306  1 .
2699 CD    CD    . LYS LYS LYS A A 357 357 . 0.2810 0.3863 0.2437 -0.0443 0.0115
0.0143  1 .
2700 CE    CE    . LYS LYS LYS A A 357 357 . 0.3229 0.4461 0.3187 -0.0804 0.0279
0.0840  1 .
2701 NZ    NZ    . LYS LYS LYS A A 357 357 . 0.3924 0.4581 0.4052 -0.1035 -0.0012
0.0592  1 .
2702 C     C     . LYS LYS LYS A A 357 357 . 0.1911 0.1610 0.1505 0.0042  0.0029
0.0181  1 .
2703 O     O     . LYS LYS LYS A A 357 357 . 0.1956 0.1738 0.1494 0.0006  -0.0079
0.0333  1 .
2704 N     N     . LEU LEU LEU A A 358 358 . 0.1742 0.1573 0.1507 -0.0053 0.0086
0.0247  1 .
2705 CA    CA    . LEU LEU LEU A A 358 358 . 0.1799 0.1524 0.1637 0.0040  0.0088
0.0114  1 .
2706 CB    CB    . LEU LEU LEU A A 358 358 . 0.1940 0.1710 0.1626 0.0151  0.0160
0.0083  1 .
2707 CG    CG    . LEU LEU LEU A A 358 358 . 0.2239 0.2018 0.1788 0.0081  0.0211
0.0117  1 .
2708 CD1   CD1   . LEU LEU LEU A A 358 358 . 0.2950 0.2835 0.2091 -0.0079 0.0302  -
0.0128 1 .
2709 CD2   CD2   . LEU LEU LEU A A 358 358 . 0.2292 0.1789 0.1782 0.0529  0.0149
0.0010  1 .
2710 C     C     . LEU LEU LEU A A 358 358 . 0.1759 0.1419 0.1448 0.0004  -0.0056
0.0056  1 .
2711 O     O     . LEU LEU LEU A A 358 358 . 0.1884 0.1486 0.1482 0.0091  0.0081
0.0219  1 .
2712 N     N     . ALA ALA ALA A A 359 359 . 0.1452 0.1131 0.0896 -0.0154 -0.0044 -
0.0043 1 .
2713 CA    CA    . ALA ALA ALA A A 359 359 . 0.1735 0.1192 0.1153 -0.0074 0.0047
0.0149  1 .
2714 CB    CB    . ALA ALA ALA A A 359 359 . 0.1617 0.1148 0.1201 -0.0140 -0.0154
0.0146  1 .
2715 C     C     . ALA ALA ALA A A 359 359 . 0.1653 0.1450 0.1274 0.0004  0.0023
0.0101  1 .
2716 O     O     . ALA ALA ALA A A 359 359 . 0.1733 0.1417 0.1408 -0.0024 -0.0072
0.0091  1 .
2717 N     N     . GLN GLN GLN A A 360 360 . 0.1738 0.1544 0.0976 0.0083  0.0031
0.0164  1 .
2718 CA    CA    . GLN GLN GLN A A 360 360 . 0.1899 0.1645 0.1211 0.0032  0.0056
0.0054  1 .
2719 CB    CB    . GLN GLN GLN A A 360 360 . 0.1995 0.1780 0.0886 0.0140  0.0117
0.0035  1 .
2720 CG    CG    . GLN GLN GLN A A 360 360 . 0.1857 0.1823 0.0878 -0.0029 0.0061
0.0438  1 .
2721 CD    CD    . GLN GLN GLN A A 360 360 . 0.1842 0.1987 0.1677 -0.0055 0.0122
0.0265  1 .
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2722 OE1   OE1   . GLN GLN GLN A A 360 360 . 0.2487 0.1907 0.2417 0.0066  -0.0009 -
0.0073 1 .
2723 NE2   NE2   . GLN GLN GLN A A 360 360 . 0.1587 0.1479 0.0487 0.0055  -0.0041
0.0532  1 .
2724 C     C     . GLN GLN GLN A A 360 360 . 0.2024 0.1665 0.1294 0.0002  -0.0107
0.0098  1 .
2725 O     O     . GLN GLN GLN A A 360 360 . 0.2236 0.1747 0.1787 0.0139  0.0130  -
0.0168 1 .
2726 N     N     . GLU GLU GLU A A 361 361 . 0.2394 0.1983 0.1693 0.0022  -0.0122
0.0187  1 .
2727 CA    CA    . GLU GLU GLU A A 361 361 . 0.2377 0.2183 0.1844 -0.0117 -0.0282
0.0280  1 .
2728 CB    CB    . GLU GLU GLU A A 361 361 . 0.2360 0.2156 0.2066 -0.0313 -0.0229
0.0284  1 .
2729 CG    CG    . GLU GLU GLU A A 361 361 . 0.2595 0.3190 0.2270 -0.0055 -0.0623
0.0686  1 .
2730 C     C     . GLU GLU GLU A A 361 361 . 0.2300 0.2284 0.1791 -0.0186 -0.0116
0.0142  1 .
2731 O     O     . GLU GLU GLU A A 361 361 . 0.2286 0.2325 0.1580 -0.0234 -0.0285
0.0179  1 .
2732 N     N     . ASN ASN ASN A A 362 362 . 0.2166 0.2110 0.1388 -0.0013 -0.0171
0.0096  1 .
2733 CA    CA    . ASN ASN ASN A A 362 362 . 0.2174 0.2073 0.1465 -0.0038 -0.0017
0.0160  1 .
2734 CB    CB    . ASN ASN ASN A A 362 362 . 0.1878 0.1958 0.1364 0.0070  -0.0272
0.0050  1 .
2735 CG    CG    . ASN ASN ASN A A 362 362 . 0.2603 0.2265 0.1899 -0.0225 -0.0498
0.0117  1 .
2736 OD1   OD1   . ASN ASN ASN A A 362 362 . 0.2949 0.2536 0.1807 0.0092  -0.0848
0.0387  1 .
2737 ND2   ND2   . ASN ASN ASN A A 362 362 . 0.2519 0.2011 0.1438 0.0189  -0.0591
0.0054  1 .
2738 C     C     . ASN ASN ASN A A 362 362 . 0.2006 0.2113 0.1359 -0.0096 0.0095
0.0000  1 .
2739 O     O     . ASN ASN ASN A A 362 362 . 0.2383 0.2603 0.1647 -0.0048 -0.0116
0.0058  1 .
2740 N     N     . GLY GLY GLY A A 363 363 . 0.2181 0.1824 0.1237 -0.0034 -0.0008
0.0113  1 .
2741 CA    CA    . GLY GLY GLY A A 363 363 . 0.2414 0.1882 0.1386 -0.0182 -0.0017 -
0.0103 1 .
2742 C     C     . GLY GLY GLY A A 363 363 . 0.2287 0.1740 0.1521 -0.0110 0.0015  -
0.0073 1 .
2743 O     O     . GLY GLY GLY A A 363 363 . 0.2844 0.1954 0.1274 -0.0166 0.0174  -
0.0334 1 .
2744 N     N     . TRP TRP TRP A A 364 364 . 0.1864 0.1702 0.1275 -0.0037 -0.0062 -
0.0081 1 .
2745 CA    CA    . TRP TRP TRP A A 364 364 . 0.1636 0.1341 0.1220 -0.0001 0.0011  -
0.0092 1 .
2746 CB    CB    . TRP TRP TRP A A 364 364 . 0.1351 0.1430 0.1068 0.0121  0.0087  -
0.0188 1 .
2747 CG    CG    . TRP TRP TRP A A 364 364 . 0.1967 0.1500 0.1262 0.0164  0.0091
0.0080  1 .
2748 CD1   CD1   . TRP TRP TRP A A 364 364 . 0.1566 0.1926 0.1454 0.0019  0.0083
0.0142  1 .
2749 NE1   NE1   . TRP TRP TRP A A 364 364 . 0.2295 0.1868 0.1438 0.0192  -0.0311 -
0.0042 1 .
2750 CE2   CE2   . TRP TRP TRP A A 364 364 . 0.2106 0.2041 0.1669 0.0335  0.0060  -
0.0087 1 .
2751 CD2   CD2   . TRP TRP TRP A A 364 364 . 0.1670 0.1381 0.1139 0.0211  -0.0016 -
0.0002 1 .
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2752 CE3   CE3   . TRP TRP TRP A A 364 364 . 0.1638 0.1688 0.1232 -0.0001 0.0051  -
0.0140 1 .
2753 CZ3   CZ3   . TRP TRP TRP A A 364 364 . 0.1842 0.1795 0.1782 0.0437  0.0077
0.0077  1 .
2754 CH2   CH2   . TRP TRP TRP A A 364 364 . 0.1802 0.2005 0.1503 0.0349  -0.0272 -
0.0167 1 .
2755 CZ2   CZ2   . TRP TRP TRP A A 364 364 . 0.1934 0.2399 0.1542 0.0226  -0.0082 -
0.0043 1 .
2756 C     C     . TRP TRP TRP A A 364 364 . 0.1495 0.1528 0.1248 -0.0129 -0.0003 -
0.0118 1 .
2757 O     O     . TRP TRP TRP A A 364 364 . 0.1566 0.2049 0.1375 -0.0053 -0.0009
0.0040  1 .
2758 N     N     . GLY GLY GLY A A 365 365 . 0.1666 0.1155 0.1220 0.0125  -0.0260 -
0.0010 1 .
2759 CA    CA    . GLY GLY GLY A A 365 365 . 0.1500 0.1184 0.0974 0.0081  -0.0394 -
0.0081 1 .
2760 C     C     . GLY GLY GLY A A 365 365 . 0.1462 0.1152 0.1003 0.0161  -0.0200 -
0.0098 1 .
2761 O     O     . GLY GLY GLY A A 365 365 . 0.0964 0.1079 0.1348 -0.0147 0.0056
0.0057  1 .
2762 N     N     . VAL VAL VAL A A 366 366 . 0.1235 0.1221 0.1165 0.0053  -0.0270 -
0.0191 1 .
2763 CA    CA    . VAL VAL VAL A A 366 366 . 0.1194 0.1081 0.0855 0.0150  -0.0104
0.0103  1 .
2764 CB    CB    . VAL VAL VAL A A 366 366 . 0.1184 0.0861 0.0860 0.0059  -0.0185
0.0013  1 .
2765 CG1   CG1   . VAL VAL VAL A A 366 366 . 0.0875 0.1393 0.0584 0.0092  -0.0012 -
0.0032 1 .
2766 CG2   CG2   . VAL VAL VAL A A 366 366 . 0.1387 0.0714 0.1488 0.0078  -0.0084
0.0196  1 .
2767 C     C     . VAL VAL VAL A A 366 366 . 0.1163 0.0915 0.1073 0.0071  0.0035
0.0144  1 .
2768 O     O     . VAL VAL VAL A A 366 366 . 0.0962 0.0902 0.1012 0.0131  -0.0113
0.0045  1 .
2769 N     N     . MET MET MET A A 367 367 . 0.0967 0.0902 0.0686 -0.0008 0.0150
0.0186  1 .
2770 CA    CA    . MET MET MET A A 367 367 . 0.1016 0.0956 0.0927 -0.0095 -0.0048
0.0067  1 .
2771 CB    CB    . MET MET MET A A 367 367 . 0.1084 0.0968 0.0897 -0.0018 0.0031
0.0182  1 .
2772 CG    CG    . MET MET MET A A 367 367 . 0.1374 0.1174 0.1036 -0.0483 -0.0340
0.0042  1 .
2773 SD    SD    . MET MET MET A A 367 367 . 0.1209 0.1258 0.1124 -0.0052 -0.0023 -
0.0122 1 .
2774 CE    CE    . MET MET MET A A 367 367 . 0.1877 0.1155 0.1519 -0.0030 0.0130  -
0.0675 1 .
2775 C     C     . MET MET MET A A 367 367 . 0.0860 0.0976 0.0794 -0.0015 0.0082  -
0.0053 1 .
2776 O     O     . MET MET MET A A 367 367 . 0.0784 0.0793 0.0947 0.0114  0.0007
0.0022  1 .
2777 N     N     . VAL VAL VAL A A 368 368 . 0.0759 0.0907 0.0638 -0.0091 -0.0151 -
0.0043 1 .
2778 CA    CA    . VAL VAL VAL A A 368 368 . 0.0682 0.0867 0.0705 -0.0064 0.0022  -
0.0031 1 .
2779 CB    CB    . VAL VAL VAL A A 368 368 . 0.0603 0.0916 0.0698 -0.0054 0.0014
0.0065  1 .
2780 CG1   CG1   . VAL VAL VAL A A 368 368 . 0.0741 0.1291 0.0741 0.0073  -0.0258
0.0047  1 .
2781 CG2   CG2   . VAL VAL VAL A A 368 368 . 0.0906 0.0956 0.1006 -0.0201 0.0017
0.0192  1 .
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2782 C     C     . VAL VAL VAL A A 368 368 . 0.0836 0.0793 0.0837 -0.0014 -0.0012
0.0049  1 .
2783 O     O     . VAL VAL VAL A A 368 368 . 0.0809 0.0730 0.0788 0.0077  -0.0103 -
0.0167 1 .
2784 N     N     . SER SER SER A A 369 369 . 0.0839 0.0922 0.0639 0.0085  0.0136
0.0067  1 .
2785 CA    CA    . SER SER SER A A 369 369 . 0.0830 0.1011 0.0904 -0.0068 0.0063
0.0188  1 .
2786 CB    CB    . SER SER SER A A 369 369 . 0.0851 0.1230 0.1268 -0.0098 0.0191
0.0389  1 .
2787 OG    OG    . SER SER SER A A 369 369 . 0.0876 0.1347 0.0852 0.0098  0.0233
0.0114  1 .
2788 C     C     . SER SER SER A A 369 369 . 0.0667 0.0734 0.0904 -0.0055 0.0067
0.0131  1 .
2789 O     O     . SER SER SER A A 369 369 . 0.0824 0.0958 0.0926 -0.0127 0.0084  -
0.0040 1 .
2790 N     N     . HIS HIS HIS A A 370 370 . 0.0421 0.0816 0.0593 -0.0096 -0.0060
0.0130  1 .
2791 CA    CA    . HIS HIS HIS A A 370 370 . 0.0826 0.0751 0.0788 -0.0080 0.0109
0.0114  1 .
2792 CB    CB    . HIS HIS HIS A A 370 370 . 0.0728 0.0601 0.1086 -0.0110 -0.0089
0.0183  1 .
2793 CG    CG    . HIS HIS HIS A A 370 370 . 0.0814 0.0920 0.0930 -0.0243 0.0135
0.0038  1 .
2794 ND1   ND1   . HIS HIS HIS A A 370 370 . 0.0983 0.0654 0.1303 0.0188  0.0184  -
0.0016 1 .
2795 CE1   CE1   . HIS HIS HIS A A 370 370 . 0.1274 0.1364 0.1095 0.0249  -0.0027
0.0002  1 .
2796 NE2   NE2   . HIS HIS HIS A A 370 370 . 0.0836 0.0887 0.0890 0.0249  0.0220
0.0228  1 .
2797 CD2   CD2   . HIS HIS HIS A A 370 370 . 0.0753 0.0811 0.0943 0.0087  0.0325
0.0140  1 .
2798 C     C     . HIS HIS HIS A A 370 370 . 0.0772 0.0803 0.0846 0.0009  -0.0009
0.0067  1 .
2799 O     O     . HIS HIS HIS A A 370 370 . 0.0697 0.0942 0.0645 0.0101  0.0084
0.0078  1 .
2800 N     N     . ARG ARG ARG A A 371 371 . 0.0787 0.0741 0.0701 0.0068  0.0265  -
0.0095 1 .
2801 CA    CA    . ARG ARG ARG A A 371 371 . 0.0698 0.0793 0.0831 0.0022  0.0070  -
0.0121 1 .
2802 CB    CB    . ARG ARG ARG A A 371 371 . 0.0565 0.0581 0.0926 0.0195  0.0143  -
0.0095 1 .
2803 CG    CG    . ARG ARG ARG A A 371 371 . 0.0891 0.0735 0.0646 0.0079  -0.0180 -
0.0011 1 .
2804 CD    CD    . ARG ARG ARG A A 371 371 . 0.0511 0.0562 0.0654 0.0242  -0.0262 -
0.0140 1 .
2805 NE    NE    . ARG ARG ARG A A 371 371 . 0.0975 0.0764 0.1032 0.0082  -0.0074 -
0.0073 1 .
2806 CZ    CZ    . ARG ARG ARG A A 371 371 . 0.0356 0.0445 0.0639 0.0090  0.0191
0.0109  1 .
2807 NH1   NH1   . ARG ARG ARG A A 371 371 . 0.0922 0.0987 0.0934 0.0070  -0.0002
0.0075  1 .
2808 NH2   NH2   . ARG ARG ARG A A 371 371 . 0.0428 0.0746 0.0674 0.0266  -0.0168 -
0.0104 1 .
2809 C     C     . ARG ARG ARG A A 371 371 . 0.0740 0.0920 0.0960 0.0015  0.0074
0.0074  1 .
2810 O     O     . ARG ARG ARG A A 371 371 . 0.0559 0.0865 0.0629 0.0138  0.0026
0.0014  1 .
2811 N     N     . SER SER SER A A 372 372 . 0.0527 0.1082 0.0618 -0.0088 0.0275
0.0064  1 .
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2812 CA    CA    . SER SER SER A A 372 372 . 0.1077 0.1075 0.0977 0.0128  0.0064
0.0130  1 .
2813 CB    CB    . SER SER SER A A 372 372 . 0.0425 0.0691 0.0271 -0.0275 -0.0055
0.0089  1 .
2814 OG    OG    . SER SER SER A A 372 372 . 0.2369 0.1791 0.2680 -0.0455 -0.0294 -
0.0541 1 .
2815 C     C     . SER SER SER A A 372 372 . 0.0567 0.0850 0.0789 0.0026  0.0116
0.0215  1 .
2816 O     O     . SER SER SER A A 372 372 . 0.0871 0.0961 0.1001 0.0265  0.0163
0.0145  1 .
2817 N     N     . GLY GLY GLY A A 373 373 . 0.0788 0.0932 0.0842 0.0052  0.0290  -
0.0127 1 .
2818 CA    CA    . GLY GLY GLY A A 373 373 . 0.0703 0.1016 0.0825 -0.0033 0.0075  -
0.0031 1 .
2819 C     C     . GLY GLY GLY A A 373 373 . 0.0623 0.0782 0.0924 0.0023  0.0129
0.0098  1 .
2820 O     O     . GLY GLY GLY A A 373 373 . 0.0644 0.0997 0.1139 0.0118  0.0121
0.0169  1 .
2821 N     N     . GLU GLU GLU A A 374 374 . 0.0695 0.0840 0.0656 0.0090  -0.0060
0.0072  1 .
2822 CA    CA    . GLU GLU GLU A A 374 374 . 0.0821 0.0926 0.0776 0.0074  0.0007  -
0.0083 1 .
2823 CB    CB    . GLU GLU GLU A A 374 374 . 0.0993 0.0660 0.0846 0.0121  0.0001
0.0052  1 .
2824 CG    CG    . GLU GLU GLU A A 374 374 . 0.1294 0.1024 0.0598 -0.0105 0.0118
0.0133  1 .
2825 CD    CD    . GLU GLU GLU A A 374 374 . 0.0811 0.1064 0.0887 0.0138  -0.0015 -
0.0018 1 .
2826 OE1   OE1   . GLU GLU GLU A A 374 374 . 0.0896 0.0935 0.1040 -0.0061 0.0228
0.0043  1 .
2827 OE2   OE2   . GLU GLU GLU A A 374 374 . 0.1347 0.1025 0.0989 0.0355  0.0123  -
0.0036 1 .
2828 C     C     . GLU GLU GLU A A 374 374 . 0.0960 0.0870 0.0885 -0.0027 0.0013  -
0.0001 1 .
2829 O     O     . GLU GLU GLU A A 374 374 . 0.0956 0.0825 0.0887 -0.0021 0.0077  -
0.0048 1 .
2830 N     N     . THR THR THR A A 375 375 . 0.0828 0.0884 0.0895 0.0062  0.0046
0.0085  1 .
2831 CA    CA    . THR THR THR A A 375 375 . 0.0753 0.0813 0.0786 -0.0011 0.0036
0.0018  1 .
2832 CB    CB    . THR THR THR A A 375 375 . 0.0856 0.1004 0.0889 0.0063  0.0186  -
0.0129 1 .
2833 OG1   OG1   . THR THR THR A A 375 375 . 0.1040 0.1058 0.0944 -0.0093 0.0309  -
0.0040 1 .
2834 CG2   CG2   . THR THR THR A A 375 375 . 0.0839 0.0982 0.1524 0.0402  0.0250  -
0.0024 1 .
2835 C     C     . THR THR THR A A 375 375 . 0.0994 0.0704 0.0924 0.0059  -0.0086
0.0024  1 .
2836 O     O     . THR THR THR A A 375 375 . 0.0996 0.0997 0.0767 0.0099  0.0125
0.0142  1 .
2837 N     N     . GLU GLU GLU A A 376 376 . 0.0904 0.0901 0.1098 0.0125  0.0088
0.0171  1 .
2838 CA    CA    . GLU GLU GLU A A 376 376 . 0.0798 0.1151 0.1042 0.0258  0.0035
0.0114  1 .
2839 CB    CB    . GLU GLU GLU A A 376 376 . 0.1322 0.1035 0.0959 0.0066  -0.0195 -
0.0007 1 .
2840 CG    CG    . GLU GLU GLU A A 376 376 . 0.0868 0.1211 0.1035 0.0186  0.0031  -
0.0221 1 .
2841 CD    CD    . GLU GLU GLU A A 376 376 . 0.1362 0.1337 0.1085 -0.0022 -0.0016 -
0.0184 1 .
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2842 OE1   OE1   . GLU GLU GLU A A 376 376 . 0.1694 0.1519 0.1223 -0.0164 0.0012  -
0.0180 1 .
2843 OE2   OE2   . GLU GLU GLU A A 376 376 . 0.1231 0.1215 0.1276 -0.0131 -0.0028 -
0.0102 1 .
2844 C     C     . GLU GLU GLU A A 376 376 . 0.1025 0.1015 0.0924 0.0241  0.0053
0.0074  1 .
2845 O     O     . GLU GLU GLU A A 376 376 . 0.0993 0.1541 0.1017 0.0277  0.0172
0.0101  1 .
2846 N     N     . ASP ASP ASP A A 377 377 . 0.1119 0.1058 0.0841 0.0032  0.0225
0.0043  1 .
2847 CA    CA    . ASP ASP ASP A A 377 377 . 0.1272 0.1197 0.0903 0.0039  0.0175  -
0.0031 1 .
2848 CB    CB    . ASP ASP ASP A A 377 377 . 0.1415 0.1192 0.1136 -0.0023 0.0255
0.0098  1 .
2849 CG    CG    . ASP ASP ASP A A 377 377 . 0.2052 0.1367 0.1620 -0.0128 -0.0142
0.0185  1 .
2850 OD1   OD1   . ASP ASP ASP A A 377 377 . 0.3371 0.1402 0.1979 -0.0045 0.0200
0.0153  1 .
2851 OD2   OD2   . ASP ASP ASP A A 377 377 . 0.1418 0.1688 0.1598 -0.0354 0.0258  -
0.0048 1 .
2852 C     C     . ASP ASP ASP A A 377 377 . 0.1137 0.1192 0.1065 -0.0115 0.0089  -
0.0130 1 .
2853 O     O     . ASP ASP ASP A A 377 377 . 0.1235 0.1153 0.1121 0.0126  -0.0082 -
0.0167 1 .
2854 N     N     . THR THR THR A A 378 378 . 0.0983 0.1058 0.0851 -0.0189 0.0080  -
0.0255 1 .
2855 CA    CA    . THR THR THR A A 378 378 . 0.1076 0.0974 0.0778 -0.0015 0.0062
0.0030  1 .
2856 CB    CB    . THR THR THR A A 378 378 . 0.1128 0.1097 0.1108 -0.0130 0.0177
0.0200  1 .
2857 OG1   OG1   . THR THR THR A A 378 378 . 0.0826 0.1242 0.1239 0.0122  0.0096
0.0155  1 .
2858 CG2   CG2   . THR THR THR A A 378 378 . 0.1826 0.1161 0.0563 -0.0168 0.0113
0.0348  1 .
2859 C     C     . THR THR THR A A 378 378 . 0.1029 0.1039 0.1007 -0.0029 0.0074  -
0.0063 1 .
2860 O     O     . THR THR THR A A 378 378 . 0.0838 0.0912 0.0855 -0.0003 -0.0048 -
0.0044 1 .
2861 N     N     . PHE PHE PHE A A 379 379 . 0.0768 0.0682 0.0751 -0.0109 0.0034
0.0121  1 .
2862 CA    CA    . PHE PHE PHE A A 379 379 . 0.1175 0.0948 0.0910 0.0036  -0.0008
0.0051  1 .
2863 CB    CB    . PHE PHE PHE A A 379 379 . 0.1122 0.0793 0.0970 0.0082  0.0017
0.0408  1 .
2864 CG    CG    . PHE PHE PHE A A 379 379 . 0.1014 0.0549 0.0978 0.0017  0.0096
0.0128  1 .
2865 CD1   CD1   . PHE PHE PHE A A 379 379 . 0.1597 0.0860 0.0734 0.0042  0.0260
0.0366  1 .
2866 CE1   CE1   . PHE PHE PHE A A 379 379 . 0.1708 0.1050 0.1177 -0.0018 0.0541
0.0453  1 .
2867 CZ    CZ    . PHE PHE PHE A A 379 379 . 0.1323 0.0904 0.1709 -0.0082 0.0066
0.0043  1 .
2868 CE2   CE2   . PHE PHE PHE A A 379 379 . 0.1624 0.1290 0.1639 0.0292  0.0327
0.0641  1 .
2869 CD2   CD2   . PHE PHE PHE A A 379 379 . 0.0996 0.1087 0.1744 0.0087  0.0327
0.0581  1 .
2870 C     C     . PHE PHE PHE A A 379 379 . 0.0820 0.1050 0.0858 -0.0106 0.0017
0.0042  1 .
2871 O     O     . PHE PHE PHE A A 379 379 . 0.0937 0.0836 0.0978 0.0143  0.0060
0.0028  1 .
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2872 N     N     . ILE ILE ILE A A 380 380 . 0.1046 0.1078 0.1022 -0.0010 0.0026
0.0148  1 .
2873 CA    CA    . ILE ILE ILE A A 380 380 . 0.0570 0.0834 0.0820 0.0055  -0.0048 -
0.0016 1 .
2874 CB    CB    . ILE ILE ILE A A 380 380 . 0.0664 0.0744 0.0895 0.0115  0.0192
0.0146  1 .
2875 CG1   CG1   . ILE ILE ILE A A 380 380 . 0.0668 0.0772 0.1073 -0.0058 0.0160
0.0362  1 .
2876 CD1   CD1   . ILE ILE ILE A A 380 380 . 0.1036 0.1166 0.1643 0.0100  0.0525  -
0.0182 1 .
2877 CG2   CG2   . ILE ILE ILE A A 380 380 . 0.1152 0.0945 0.0929 0.0478  0.0158  -
0.0165 1 .
2878 C     C     . ILE ILE ILE A A 380 380 . 0.0749 0.0847 0.0824 0.0068  -0.0002
0.0106  1 .
2879 O     O     . ILE ILE ILE A A 380 380 . 0.0766 0.0828 0.0819 0.0129  -0.0051 -
0.0034 1 .
2880 N     N     . ALA ALA ALA A A 381 381 . 0.0959 0.0964 0.0964 0.0149  0.0086
0.0174  1 .
2881 CA    CA    . ALA ALA ALA A A 381 381 . 0.1111 0.0798 0.0659 -0.0051 -0.0008
0.0163  1 .
2882 CB    CB    . ALA ALA ALA A A 381 381 . 0.0896 0.0865 0.1076 0.0155  -0.0073
0.0162  1 .
2883 C     C     . ALA ALA ALA A A 381 381 . 0.0841 0.0980 0.0952 -0.0060 -0.0022
0.0025  1 .
2884 O     O     . ALA ALA ALA A A 381 381 . 0.0796 0.0987 0.0895 -0.0030 0.0053  -
0.0139 1 .
2885 N     N     . ASP ASP ASP A A 382 382 . 0.0923 0.1024 0.0959 -0.0179 -0.0047 -
0.0043 1 .
2886 CA    CA    . ASP ASP ASP A A 382 382 . 0.0757 0.0891 0.0517 -0.0217 0.0017
0.0071  1 .
2887 CB    CB    . ASP ASP ASP A A 382 382 . 0.1048 0.1030 0.1135 -0.0071 -0.0040
0.0185  1 .
2888 CG    CG    . ASP ASP ASP A A 382 382 . 0.1701 0.1395 0.1644 0.0004  0.0098
0.0168  1 .
2889 OD1   OD1   . ASP ASP ASP A A 382 382 . 0.1755 0.1733 0.1228 0.0018  0.0284
0.0443  1 .
2890 OD2   OD2   . ASP ASP ASP A A 382 382 . 0.1716 0.1352 0.1601 -0.0191 0.0228  -
0.0143 1 .
2891 C     C     . ASP ASP ASP A A 382 382 . 0.0890 0.0845 0.0883 0.0085  0.0097
0.0035  1 .
2892 O     O     . ASP ASP ASP A A 382 382 . 0.0933 0.1152 0.0965 0.0166  0.0155
0.0098  1 .
2893 N     N     . LEU LEU LEU A A 383 383 . 0.1036 0.0849 0.0804 -0.0039 -0.0024
0.0100  1 .
2894 CA    CA    . LEU LEU LEU A A 383 383 . 0.0939 0.0768 0.0722 0.0101  0.0033  -
0.0010 1 .
2895 CB    CB    . LEU LEU LEU A A 383 383 . 0.0765 0.1047 0.1213 0.0173  0.0077  -
0.0117 1 .
2896 CG    CG    . LEU LEU LEU A A 383 383 . 0.0957 0.1126 0.1184 -0.0008 0.0109
0.0200  1 .
2897 CD1   CD1   . LEU LEU LEU A A 383 383 . 0.1403 0.1102 0.1143 -0.0194 -0.0259
0.0441  1 .
2898 CD2   CD2   . LEU LEU LEU A A 383 383 . 0.0979 0.1061 0.1203 0.0047  0.0132  -
0.0267 1 .
2899 C     C     . LEU LEU LEU A A 383 383 . 0.1051 0.0911 0.0848 -0.0071 -0.0035
0.0031  1 .
2900 O     O     . LEU LEU LEU A A 383 383 . 0.1277 0.1174 0.0970 0.0140  -0.0021
0.0022  1 .
2901 N     N     . VAL VAL VAL A A 384 384 . 0.1057 0.0719 0.0810 -0.0050 -0.0119 -
0.0034 1 .
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2902 CA    CA    . VAL VAL VAL A A 384 384 . 0.0835 0.0781 0.0836 0.0014  0.0057  -
0.0091 1 .
2903 CB    CB    . VAL VAL VAL A A 384 384 . 0.0747 0.0714 0.0761 -0.0030 -0.0001 -
0.0037 1 .
2904 CG1   CG1   . VAL VAL VAL A A 384 384 . 0.0874 0.0764 0.0616 -0.0057 -0.0254
0.0142  1 .
2905 CG2   CG2   . VAL VAL VAL A A 384 384 . 0.1044 0.1292 0.1028 -0.0028 -0.0076
0.0101  1 .
2906 C     C     . VAL VAL VAL A A 384 384 . 0.0863 0.0945 0.0862 0.0007  0.0049
0.0013  1 .
2907 O     O     . VAL VAL VAL A A 384 384 . 0.1017 0.0880 0.0974 0.0197  0.0118  -
0.0134 1 .
2908 N     N     . VAL VAL VAL A A 385 385 . 0.0943 0.1023 0.1055 0.0027  0.0194
0.0000  1 .
2909 CA    CA    . VAL VAL VAL A A 385 385 . 0.1096 0.1143 0.1332 0.0053  0.0257
0.0133  1 .
2910 CB    CB    . VAL VAL VAL A A 385 385 . 0.0754 0.0869 0.0892 0.0105  0.0281
0.0150  1 .
2911 CG1   CG1   . VAL VAL VAL A A 385 385 . 0.0912 0.1030 0.0955 0.0203  0.0268
0.0010  1 .
2912 CG2   CG2   . VAL VAL VAL A A 385 385 . 0.0918 0.1116 0.1140 -0.0136 0.0036  -
0.0021 1 .
2913 C     C     . VAL VAL VAL A A 385 385 . 0.1101 0.1318 0.1295 -0.0015 0.0200
0.0125  1 .
2914 O     O     . VAL VAL VAL A A 385 385 . 0.0851 0.1179 0.1019 -0.0135 0.0303
0.0037  1 .
2915 N     N     . GLY GLY GLY A A 386 386 . 0.1156 0.1017 0.1275 -0.0076 0.0120
0.0041  1 .
2916 CA    CA    . GLY GLY GLY A A 386 386 . 0.1343 0.1281 0.1229 -0.0114 0.0121
0.0209  1 .
2917 C     C     . GLY GLY GLY A A 386 386 . 0.1377 0.1201 0.1318 -0.0066 0.0067  -
0.0057 1 .
2918 O     O     . GLY GLY GLY A A 386 386 . 0.1232 0.1091 0.1255 -0.0223 0.0173  -
0.0003 1 .
2919 N     N     . LEU LEU LEU A A 387 387 . 0.1162 0.1080 0.1413 -0.0043 -0.0003 -
0.0023 1 .
2920 CA    CA    . LEU LEU LEU A A 387 387 . 0.1099 0.1070 0.1045 0.0100  -0.0067 -
0.0139 1 .
2921 CB    CB    . LEU LEU LEU A A 387 387 . 0.1013 0.0957 0.1015 0.0032  0.0019  -
0.0026 1 .
2922 CG    CG    . LEU LEU LEU A A 387 387 . 0.1185 0.1167 0.1344 -0.0025 0.0094  -
0.0035 1 .
2923 CD1   CD1   . LEU LEU LEU A A 387 387 . 0.1247 0.1289 0.1425 0.0362  0.0159  -
0.0183 1 .
2924 CD2   CD2   . LEU LEU LEU A A 387 387 . 0.1934 0.1257 0.1685 -0.0031 0.0130  -
0.0224 1 .
2925 C     C     . LEU LEU LEU A A 387 387 . 0.1253 0.1344 0.1275 0.0051  0.0055
0.0008  1 .
2926 O     O     . LEU LEU LEU A A 387 387 . 0.1179 0.1406 0.1293 0.0084  0.0020  -
0.0081 1 .
2927 N     N     . CYS CYS CYS A A 388 388 . 0.1446 0.1275 0.1458 0.0121  0.0059
0.0041  1 .
2928 CA    CA    . CYS CYS CYS A A 388 388 . 0.1468 0.1502 0.1344 0.0003  -0.0032
0.0071  1 .
2929 CB    CB    . CYS CYS CYS A A 388 388 . 0.1926 0.2182 0.1928 0.0036  0.0024
0.0179  1 .
2930 SG    SG    . CYS CYS CYS A A 388 388 . 0.2933 0.3370 0.2927 0.0107  0.0199
0.0202  1 .
2931 C     C     . CYS CYS CYS A A 388 388 . 0.1481 0.1511 0.1290 0.0082  -0.0107
0.0046  1 .
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2932 O     O     . CYS CYS CYS A A 388 388 . 0.1569 0.1789 0.1150 0.0071  0.0004  -
0.0374 1 .
2933 N     N     . THR THR THR A A 389 389 . 0.1011 0.0959 0.0865 0.0090  -0.0032
0.0000  1 .
2934 CA    CA    . THR THR THR A A 389 389 . 0.1030 0.0936 0.0769 -0.0003 0.0015  -
0.0040 1 .
2935 CB    CB    . THR THR THR A A 389 389 . 0.1170 0.0925 0.1257 0.0036  0.0101
0.0015  1 .
2936 OG1   OG1   . THR THR THR A A 389 389 . 0.1636 0.1360 0.0977 0.0065  -0.0057
0.0030  1 .
2937 CG2   CG2   . THR THR THR A A 389 389 . 0.0753 0.0801 0.0694 -0.0174 0.0398  -
0.0384 1 .
2938 C     C     . THR THR THR A A 389 389 . 0.1051 0.1018 0.1054 0.0071  -0.0007 -
0.0037 1 .
2939 O     O     . THR THR THR A A 389 389 . 0.1420 0.1348 0.1249 0.0129  -0.0188 -
0.0199 1 .
2940 N     N     . GLY GLY GLY A A 390 390 . 0.0841 0.0891 0.0918 0.0080  -0.0031
0.0006  1 .
2941 CA    CA    . GLY GLY GLY A A 390 390 . 0.0921 0.0809 0.0998 0.0109  0.0070
0.0037  1 .
2942 C     C     . GLY GLY GLY A A 390 390 . 0.1153 0.0780 0.0741 0.0112  0.0106
0.0112  1 .
2943 O     O     . GLY GLY GLY A A 390 390 . 0.1045 0.0938 0.0604 0.0015  0.0028  -
0.0176 1 .
2944 N     N     . GLN GLN GLN A A 391 391 . 0.0968 0.0790 0.0707 0.0029  0.0066
0.0122  1 .
2945 CA    CA    . GLN GLN GLN A A 391 391 . 0.0896 0.0857 0.0835 0.0043  0.0001
0.0052  1 .
2946 CB    CB    . GLN GLN GLN A A 391 391 . 0.0988 0.1179 0.1089 0.0023  -0.0053
0.0223  1 .
2947 CG    CG    . GLN GLN GLN A A 391 391 . 0.0853 0.1492 0.1414 0.0201  -0.0131
0.0267  1 .
2948 CD    CD    . GLN GLN GLN A A 391 391 . 0.0932 0.1456 0.1126 -0.0045 -0.0022
0.0031  1 .
2949 OE1   OE1   . GLN GLN GLN A A 391 391 . 0.1234 0.1501 0.1635 0.0078  -0.0210
0.0148  1 .
2950 NE2   NE2   . GLN GLN GLN A A 391 391 . 0.1229 0.1524 0.1209 0.0253  -0.0353 -
0.0028 1 .
2951 C     C     . GLN GLN GLN A A 391 391 . 0.0761 0.0600 0.0626 0.0020  0.0085
0.0049  1 .
2952 O     O     . GLN GLN GLN A A 391 391 . 0.0784 0.0878 0.0789 0.0010  0.0050
0.0160  1 .
2953 N     N     . ILE ILE ILE A A 392 392 . 0.0798 0.0893 0.0495 0.0025  -0.0080 -
0.0035 1 .
2954 CA    CA    . ILE ILE ILE A A 392 392 . 0.0678 0.0933 0.0611 0.0036  0.0035  -
0.0106 1 .
2955 CB    CB    . ILE ILE ILE A A 392 392 . 0.1179 0.0940 0.0700 0.0062  -0.0195 -
0.0060 1 .
2956 CG1   CG1   . ILE ILE ILE A A 392 392 . 0.1114 0.0983 0.0915 0.0295  0.0018  -
0.0364 1 .
2957 CD1   CD1   . ILE ILE ILE A A 392 392 . 0.1118 0.1257 0.1038 -0.0155 0.0056  -
0.0406 1 .
2958 CG2   CG2   . ILE ILE ILE A A 392 392 . 0.0787 0.0924 0.0965 0.0498  -0.0128
0.0175  1 .
2959 C     C     . ILE ILE ILE A A 392 392 . 0.0930 0.0862 0.0665 -0.0005 -0.0098
0.0069  1 .
2960 O     O     . ILE ILE ILE A A 392 392 . 0.0796 0.1012 0.0721 -0.0047 -0.0077
0.0097  1 .
2961 N     N     . LYS LYS LYS A A 393 393 . 0.0594 0.0802 0.0744 -0.0030 0.0048  -
0.0014 1 .
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2962 CA    CA    . LYS LYS LYS A A 393 393 . 0.0520 0.0940 0.0387 -0.0056 0.0031  -
0.0010 1 .
2963 CB    CB    . LYS LYS LYS A A 393 393 . 0.0592 0.0464 0.0665 0.0100  -0.0369 -
0.0067 1 .
2964 CG    CG    . LYS LYS LYS A A 393 393 . 0.0517 0.0992 0.0759 0.0238  -0.0040 -
0.0189 1 .
2965 CD    CD    . LYS LYS LYS A A 393 393 . 0.0683 0.1114 0.0757 0.0233  0.0205  -
0.0021 1 .
2966 CE    CE    . LYS LYS LYS A A 393 393 . 0.0535 0.0477 0.1066 0.0018  0.0015  -
0.0424 1 .
2967 NZ    NZ    . LYS LYS LYS A A 393 393 . 0.0799 0.1325 0.0789 -0.0045 -0.0022
0.0155  1 .
2968 C     C     . LYS LYS LYS A A 393 393 . 0.0684 0.0766 0.0705 -0.0085 -0.0052
0.0039  1 .
2969 O     O     . LYS LYS LYS A A 393 393 . 0.0669 0.0887 0.0480 0.0092  -0.0059 -
0.0149 1 .
2970 N     N     . THR THR THR A A 394 394 . 0.0655 0.1136 0.0602 -0.0001 -0.0047 -
0.0030 1 .
2971 CA    CA    . THR THR THR A A 394 394 . 0.0654 0.0936 0.0715 -0.0134 0.0027  -
0.0045 1 .
2972 CB    CB    . THR THR THR A A 394 394 . 0.0765 0.0892 0.0713 0.0073  -0.0087 -
0.0080 1 .
2973 OG1   OG1   . THR THR THR A A 394 394 . 0.1017 0.0868 0.0464 0.0008  0.0159
0.0032  1 .
2974 CG2   CG2   . THR THR THR A A 394 394 . 0.0713 0.0935 0.0823 0.0095  0.0449  -
0.0201 1 .
2975 C     C     . THR THR THR A A 394 394 . 0.0627 0.0791 0.0633 -0.0009 -0.0029 -
0.0003 1 .
2976 O     O     . THR THR THR A A 394 394 . 0.0783 0.1031 0.0769 -0.0010 0.0133  -
0.0073 1 .
2977 N     N     . GLY GLY GLY A A 395 395 . 0.0871 0.0827 0.0648 -0.0093 0.0035
0.0017  1 .
2978 CA    CA    . GLY GLY GLY A A 395 395 . 0.0939 0.0660 0.0761 -0.0096 0.0170
0.0167  1 .
2979 C     C     . GLY GLY GLY A A 395 395 . 0.0668 0.0738 0.0607 -0.0044 -0.0001
0.0088  1 .
2980 O     O     . GLY GLY GLY A A 395 395 . 0.1002 0.0875 0.0978 -0.0055 0.0065  -
0.0172 1 .
2981 N     N     . ALA ALA ALA A A 396 396 . 0.0652 0.0722 0.1041 -0.0013 -0.0011
0.0117  1 .
2982 CA    CA    . ALA ALA ALA A A 396 396 . 0.0787 0.0757 0.0932 -0.0081 0.0031
0.0085  1 .
2983 CB    CB    . ALA ALA ALA A A 396 396 . 0.0777 0.0899 0.0895 -0.0150 0.0207
0.0146  1 .
2984 C     C     . ALA ALA ALA A A 396 396 . 0.0900 0.0893 0.0946 -0.0003 0.0066  -
0.0069 1 .
2985 O     O     . ALA ALA ALA A A 396 396 . 0.0783 0.0777 0.0992 -0.0141 0.0131  -
0.0022 1 .
2986 N     N     . PRO PRO PRO A A 397 397 . 0.0878 0.0928 0.0920 0.0103  0.0019  -
0.0085 1 .
2987 CA    CA    . PRO PRO PRO A A 397 397 . 0.0641 0.0706 0.0735 0.0050  -0.0008 -
0.0168 1 .
2988 CB    CB    . PRO PRO PRO A A 397 397 . 0.0505 0.0593 0.0767 0.0041  -0.0001 -
0.0296 1 .
2989 CG    CG    . PRO PRO PRO A A 397 397 . 0.0469 0.0957 0.0704 0.0050  0.0176  -
0.0021 1 .
2990 CD    CD    . PRO PRO PRO A A 397 397 . 0.0685 0.0548 0.0681 0.0161  0.0045  -
0.0298 1 .
2991 C     C     . PRO PRO PRO A A 397 397 . 0.0775 0.0767 0.0867 0.0161  -0.0126 -
0.0006 1 .
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2992 O     O     . PRO PRO PRO A A 397 397 . 0.1089 0.1032 0.1301 0.0070  -0.0116
0.0019  1 .
2993 N     N     . CYS CYS CYS A A 398 398 . 0.0711 0.0933 0.0696 -0.0127 0.0119  -
0.0125 1 .
2994 CA    CA    . CYS CYS CYS A A 398 398 . 0.0734 0.0640 0.0573 -0.0110 0.0056
0.0022  1 .
2995 CB    CB    . CYS CYS CYS A A 398 398 . 0.0685 0.0928 0.0663 -0.0085 0.0290  -
0.0045 1 .
2996 SG    SG    . CYS CYS CYS A A 398 398 . 0.1343 0.1292 0.1270 -0.0206 0.0285  -
0.0005 1 .
2997 C     C     . CYS CYS CYS A A 398 398 . 0.0802 0.0774 0.0676 -0.0043 0.0087  -
0.0044 1 .
2998 O     O     . CYS CYS CYS A A 398 398 . 0.0980 0.0674 0.0667 0.0001  -0.0079
0.0007  1 .
2999 N     N     . ARG ARG ARG A A 399 399 . 0.0869 0.0728 0.0803 -0.0083 0.0043
0.0077  1 .
3000 CA    CA    . ARG ARG ARG A A 399 399 . 0.0719 0.0770 0.0914 -0.0088 0.0079
0.0006  1 .
3001 CB    CB    . ARG ARG ARG A A 399 399 . 0.0593 0.0411 0.0810 -0.0046 0.0036
0.0036  1 .
3002 CG    CG    . ARG ARG ARG A A 399 399 . 0.0527 0.0948 0.0980 -0.0012 0.0078  -
0.0041 1 .
3003 CD    CD    . ARG ARG ARG A A 399 399 . 0.0593 0.0511 0.1095 0.0293  -0.0051 -
0.0115 1 .
3004 NE    NE    . ARG ARG ARG A A 399 399 . 0.0879 0.0619 0.0940 -0.0001 0.0053  -
0.0095 1 .
3005 CZ    CZ    . ARG ARG ARG A A 399 399 . 0.0788 0.0812 0.0895 0.0018  0.0018  -
0.0085 1 .
3006 NH1   NH1   . ARG ARG ARG A A 399 399 . 0.0969 0.0684 0.1187 -0.0141 0.0056
0.0024  1 .
3007 NH2   NH2   . ARG ARG ARG A A 399 399 . 0.1294 0.0769 0.0830 -0.0019 0.0029
0.0049  1 .
3008 C     C     . ARG ARG ARG A A 399 399 . 0.0659 0.0721 0.0775 -0.0012 0.0110
0.0001  1 .
3009 O     O     . ARG ARG ARG A A 399 399 . 0.1006 0.0621 0.0715 0.0011  0.0143
0.0005  1 .
3010 N     N     . SER SER SER A A 400 400 . 0.0566 0.0620 0.0760 -0.0001 0.0141  -
0.0037 1 .
3011 CA    CA    . SER SER SER A A 400 400 . 0.0694 0.0618 0.0751 0.0016  -0.0001
0.0008  1 .
3012 CB    CB    . SER SER SER A A 400 400 . 0.0513 0.0444 0.0628 0.0187  -0.0029
0.0122  1 .
3013 OG    OG    . SER SER SER A A 400 400 . 0.0860 0.0713 0.0637 0.0056  0.0310  -
0.0066 1 .
3014 C     C     . SER SER SER A A 400 400 . 0.0772 0.0712 0.0705 -0.0002 0.0002
0.0035  1 .
3015 O     O     . SER SER SER A A 400 400 . 0.0649 0.0581 0.0779 0.0102  0.0172
0.0108  1 .
3016 N     N     . GLU GLU GLU A A 401 401 . 0.0818 0.0828 0.0613 0.0059  -0.0028
0.0051  1 .
3017 CA    CA    . GLU GLU GLU A A 401 401 . 0.1092 0.0812 0.0624 0.0109  0.0055  -
0.0087 1 .
3018 CB    CB    . GLU GLU GLU A A 401 401 . 0.0534 0.0845 0.0784 -0.0005 0.0072
0.0094  1 .
3019 CG    CG    . GLU GLU GLU A A 401 401 . 0.0592 0.0899 0.0691 -0.0096 0.0077
0.0415  1 .
3020 CD    CD    . GLU GLU GLU A A 401 401 . 0.1041 0.0855 0.1045 -0.0206 -0.0160
0.0407  1 .
3021 OE1   OE1   . GLU GLU GLU A A 401 401 . 0.0750 0.0782 0.0681 0.0000  0.0059
0.0002  1 .
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3022 OE2   OE2   . GLU GLU GLU A A 401 401 . 0.0641 0.0709 0.0885 -0.0102 0.0093
0.0212  1 .
3023 C     C     . GLU GLU GLU A A 401 401 . 0.0970 0.0906 0.0807 0.0064  -0.0039 -
0.0085 1 .
3024 O     O     . GLU GLU GLU A A 401 401 . 0.1282 0.0932 0.0636 0.0128  -0.0081 -
0.0139 1 .
3025 N     N     . ARG ARG ARG A A 402 402 . 0.0691 0.0617 0.0693 0.0004  0.0047  -
0.0071 1 .
3026 CA    CA    . ARG ARG ARG A A 402 402 . 0.0677 0.0953 0.0831 -0.0004 0.0090  -
0.0039 1 .
3027 CB    CB    . ARG ARG ARG A A 402 402 . 0.0375 0.0706 0.0565 -0.0095 0.0195  -
0.0143 1 .
3028 CG    CG    . ARG ARG ARG A A 402 402 . 0.0599 0.0662 0.1098 0.0349  0.0188  -
0.0013 1 .
3029 CD    CD    . ARG ARG ARG A A 402 402 . 0.0517 0.0630 0.0716 0.0208  -0.0035 -
0.0127 1 .
3030 NE    NE    . ARG ARG ARG A A 402 402 . 0.1151 0.0820 0.0924 0.0121  0.0125  -
0.0143 1 .
3031 CZ    CZ    . ARG ARG ARG A A 402 402 . 0.0582 0.1039 0.1004 0.0217  0.0046  -
0.0131 1 .
3032 NH1   NH1   . ARG ARG ARG A A 402 402 . 0.0827 0.0621 0.0905 -0.0028 0.0105  -
0.0244 1 .
3033 NH2   NH2   . ARG ARG ARG A A 402 402 . 0.0882 0.1068 0.0972 -0.0098 0.0157  -
0.0027 1 .
3034 C     C     . ARG ARG ARG A A 402 402 . 0.0594 0.0794 0.0705 0.0067  0.0006  -
0.0065 1 .
3035 O     O     . ARG ARG ARG A A 402 402 . 0.0572 0.0889 0.0482 0.0119  -0.0023 -
0.0026 1 .
3036 N     N     . LEU LEU LEU A A 403 403 . 0.0642 0.0561 0.0657 0.0098  -0.0025 -
0.0035 1 .
3037 CA    CA    . LEU LEU LEU A A 403 403 . 0.0675 0.0679 0.0647 0.0055  0.0039
0.0098  1 .
3038 CB    CB    . LEU LEU LEU A A 403 403 . 0.0548 0.0629 0.0663 -0.0016 -0.0017
0.0079  1 .
3039 CG    CG    . LEU LEU LEU A A 403 403 . 0.0770 0.0697 0.0547 -0.0099 0.0177  -
0.0131 1 .
3040 CD1   CD1   . LEU LEU LEU A A 403 403 . 0.0533 0.0721 0.0509 -0.0173 -0.0059 -
0.0259 1 .
3041 CD2   CD2   . LEU LEU LEU A A 403 403 . 0.0522 0.0910 0.0809 0.0265  0.0165
0.0047  1 .
3042 C     C     . LEU LEU LEU A A 403 403 . 0.0809 0.0608 0.0660 0.0008  0.0064
0.0005  1 .
3043 O     O     . LEU LEU LEU A A 403 403 . 0.0702 0.0742 0.1070 -0.0023 0.0126
0.0176  1 .
3044 N     N     . ALA ALA ALA A A 404 404 . 0.0853 0.0778 0.0682 -0.0096 -0.0134 -
0.0045 1 .
3045 CA    CA    . ALA ALA ALA A A 404 404 . 0.0793 0.0574 0.0472 -0.0055 0.0057  -
0.0078 1 .
3046 CB    CB    . ALA ALA ALA A A 404 404 . 0.0901 0.0590 0.0558 0.0085  0.0070  -
0.0164 1 .
3047 C     C     . ALA ALA ALA A A 404 404 . 0.0723 0.0696 0.0537 -0.0107 -0.0094
0.0023  1 .
3048 O     O     . ALA ALA ALA A A 404 404 . 0.0681 0.0944 0.0362 -0.0011 0.0009  -
0.0108 1 .
3049 N     N     . LYS LYS LYS A A 405 405 . 0.0772 0.0639 0.0636 -0.0044 -0.0048 -
0.0014 1 .
3050 CA    CA    . LYS LYS LYS A A 405 405 . 0.0761 0.0811 0.0610 -0.0018 -0.0152 -
0.0006 1 .
3051 CB    CB    . LYS LYS LYS A A 405 405 . 0.0782 0.0987 0.0694 0.0187  -0.0012
0.0185  1 .
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3052 CG    CG    . LYS LYS LYS A A 405 405 . 0.1152 0.0839 0.0915 -0.0019 0.0096
0.0098  1 .
3053 CD    CD    . LYS LYS LYS A A 405 405 . 0.0950 0.0649 0.0808 0.0075  0.0136  -
0.0243 1 .
3054 CE    CE    . LYS LYS LYS A A 405 405 . 0.0794 0.0755 0.0425 0.0270  -0.0170
0.0090  1 .
3055 NZ    NZ    . LYS LYS LYS A A 405 405 . 0.0480 0.0853 0.0303 0.0103  0.0082  -
0.0070 1 .
3056 C     C     . LYS LYS LYS A A 405 405 . 0.0771 0.0700 0.0658 0.0055  0.0033
0.0084  1 .
3057 O     O     . LYS LYS LYS A A 405 405 . 0.0703 0.0807 0.0721 0.0101  -0.0023 -
0.0194 1 .
3058 N     N     . TYR TYR TYR A A 406 406 . 0.0892 0.0680 0.0582 0.0108  0.0028  -
0.0164 1 .
3059 CA    CA    . TYR TYR TYR A A 406 406 . 0.0834 0.0681 0.0745 0.0004  0.0027  -
0.0020 1 .
3060 CB    CB    . TYR TYR TYR A A 406 406 . 0.0733 0.0915 0.0778 -0.0217 -0.0030
0.0062  1 .
3061 CG    CG    . TYR TYR TYR A A 406 406 . 0.0557 0.0758 0.0484 0.0181  -0.0005
0.0053  1 .
3062 CD1   CD1   . TYR TYR TYR A A 406 406 . 0.0569 0.0539 0.0987 -0.0049 -0.0192
0.0214  1 .
3063 CE1   CE1   . TYR TYR TYR A A 406 406 . 0.0771 0.0800 0.0858 0.0096  -0.0158 -
0.0139 1 .
3064 CZ    CZ    . TYR TYR TYR A A 406 406 . 0.0790 0.0792 0.0629 0.0149  0.0049
0.0191  1 .
3065 OH    OH    . TYR TYR TYR A A 406 406 . 0.0792 0.1025 0.0713 -0.0016 -0.0098
0.0031  1 .
3066 CE2   CE2   . TYR TYR TYR A A 406 406 . 0.0661 0.0370 0.0317 0.0210  -0.0145 -
0.0085 1 .
3067 CD2   CD2   . TYR TYR TYR A A 406 406 . 0.0382 0.0469 0.0729 -0.0076 0.0004
0.0075  1 .
3068 C     C     . TYR TYR TYR A A 406 406 . 0.0757 0.0794 0.0732 -0.0027 0.0085
0.0028  1 .
3069 O     O     . TYR TYR TYR A A 406 406 . 0.0917 0.1040 0.0725 0.0188  0.0031  -
0.0257 1 .
3070 N     N     . ASN ASN ASN A A 407 407 . 0.0624 0.0978 0.0849 0.0127  -0.0114
0.0014  1 .
3071 CA    CA    . ASN ASN ASN A A 407 407 . 0.0534 0.0928 0.0624 0.0114  -0.0033
0.0087  1 .
3072 CB    CB    . ASN ASN ASN A A 407 407 . 0.0788 0.0913 0.0620 0.0080  0.0067
0.0170  1 .
3073 CG    CG    . ASN ASN ASN A A 407 407 . 0.0411 0.0655 0.0490 -0.0005 -0.0051 -
0.0077 1 .
3074 OD1   OD1   . ASN ASN ASN A A 407 407 . 0.1116 0.0779 0.0617 0.0045  -0.0107
0.0030  1 .
3075 ND2   ND2   . ASN ASN ASN A A 407 407 . 0.0680 0.0880 0.0377 0.0100  0.0124  -
0.0006 1 .
3076 C     C     . ASN ASN ASN A A 407 407 . 0.0707 0.0741 0.0591 0.0066  -0.0066
0.0040  1 .
3077 O     O     . ASN ASN ASN A A 407 407 . 0.0572 0.0710 0.0808 -0.0007 0.0244
0.0098  1 .
3078 N     N     . GLN GLN GLN A A 408 408 . 0.0662 0.0827 0.0635 0.0031  0.0010  -
0.0079 1 .
3079 CA    CA    . GLN GLN GLN A A 408 408 . 0.1067 0.0729 0.0773 -0.0058 0.0092
0.0010  1 .
3080 CB    CB    . GLN GLN GLN A A 408 408 . 0.0883 0.0795 0.0880 0.0057  0.0296  -
0.0060 1 .
3081 CG    CG    . GLN GLN GLN A A 408 408 . 0.1091 0.1006 0.1436 -0.0274 -0.0009
0.0372  1 .
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3082 CD    CD    . GLN GLN GLN A A 408 408 . 0.1479 0.1597 0.1786 -0.0310 -0.0017
0.0246  1 .
3083 OE1   OE1   . GLN GLN GLN A A 408 408 . 0.1213 0.1229 0.1877 -0.0499 -0.0246
0.0094  1 .
3084 NE2   NE2   . GLN GLN GLN A A 408 408 . 0.1829 0.1607 0.1629 -0.0382 0.0137
0.0520  1 .
3085 C     C     . GLN GLN GLN A A 408 408 . 0.0785 0.0945 0.0694 0.0056  0.0047  -
0.0068 1 .
3086 O     O     . GLN GLN GLN A A 408 408 . 0.0684 0.0936 0.1114 -0.0036 -0.0025
0.0173  1 .
3087 N     N     . LEU LEU LEU A A 409 409 . 0.0735 0.0850 0.0692 -0.0125 0.0065  -
0.0039 1 .
3088 CA    CA    . LEU LEU LEU A A 409 409 . 0.0509 0.0841 0.0631 0.0047  -0.0020 -
0.0141 1 .
3089 CB    CB    . LEU LEU LEU A A 409 409 . 0.0580 0.0612 0.0637 -0.0153 -0.0114
0.0058  1 .
3090 CG    CG    . LEU LEU LEU A A 409 409 . 0.0298 0.0760 0.0898 0.0119  -0.0057
0.0181  1 .
3091 CD1   CD1   . LEU LEU LEU A A 409 409 . 0.0271 0.0805 0.1369 -0.0004 -0.0137
0.0236  1 .
3092 CD2   CD2   . LEU LEU LEU A A 409 409 . 0.0655 0.0501 0.1034 0.0174  0.0208
0.0085  1 .
3093 C     C     . LEU LEU LEU A A 409 409 . 0.0646 0.0684 0.0663 0.0125  0.0114
0.0079  1 .
3094 O     O     . LEU LEU LEU A A 409 409 . 0.0949 0.0889 0.0683 -0.0010 0.0139  -
0.0177 1 .
3095 N     N     . MET MET MET A A 410 410 . 0.0577 0.0625 0.0502 0.0120  0.0045  -
0.0097 1 .
3096 CA    CA    . MET MET MET A A 410 410 . 0.0676 0.0717 0.1046 0.0110  0.0033
0.0077  1 .
3097 CB    CB    . MET MET MET A A 410 410 . 0.0770 0.0508 0.0986 0.0003  -0.0084
0.0085  1 .
3098 CG    CG    . MET MET MET A A 410 410 . 0.1166 0.0858 0.0997 -0.0240 0.0262
0.0089  1 .
3099 SD    SD    . MET MET MET A A 410 410 . 0.1460 0.1577 0.1349 0.0020  0.0075
0.0167  1 .
3100 CE    CE    . MET MET MET A A 410 410 . 0.1773 0.1560 0.0749 -0.0443 0.0646
0.0092  1 .
3101 C     C     . MET MET MET A A 410 410 . 0.0873 0.0936 0.0964 0.0089  0.0042  -
0.0029 1 .
3102 O     O     . MET MET MET A A 410 410 . 0.0741 0.1423 0.1201 0.0142  0.0096
0.0025  1 .
3103 N     N     . ARG ARG ARG A A 411 411 . 0.0747 0.0951 0.0858 -0.0036 0.0024  -
0.0090 1 .
3104 CA    CA    . ARG ARG ARG A A 411 411 . 0.0890 0.1048 0.0864 0.0056  0.0041
0.0049  1 .
3105 CB    CB    . ARG ARG ARG A A 411 411 . 0.0787 0.1169 0.0605 -0.0035 0.0031
0.0121  1 .
3106 CG    CG    . ARG ARG ARG A A 411 411 . 0.1351 0.0755 0.0721 -0.0040 -0.0025
0.0216  1 .
3107 CD    CD    . ARG ARG ARG A A 411 411 . 0.1055 0.1150 0.0793 -0.0342 0.0057  -
0.0076 1 .
3108 NE    NE    . ARG ARG ARG A A 411 411 . 0.1358 0.1769 0.1400 0.0022  -0.0037 -
0.0020 1 .
3109 CZ    CZ    . ARG ARG ARG A A 411 411 . 0.1418 0.1151 0.1218 0.0448  0.0152  -
0.0351 1 .
3110 NH1   NH1   . ARG ARG ARG A A 411 411 . 0.0775 0.1718 0.1459 0.0575  -0.0123
0.0181  1 .
3111 NH2   NH2   . ARG ARG ARG A A 411 411 . 0.1689 0.1261 0.1457 0.0258  -0.0103
0.0002  1 .
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3112 C     C     . ARG ARG ARG A A 411 411 . 0.1044 0.1158 0.0944 0.0054  0.0050
0.0027  1 .
3113 O     O     . ARG ARG ARG A A 411 411 . 0.1281 0.1504 0.1096 0.0067  0.0067
0.0177  1 .
3114 N     N     . ILE ILE ILE A A 412 412 . 0.0854 0.0989 0.0880 0.0189  0.0187
0.0208  1 .
3115 CA    CA    . ILE ILE ILE A A 412 412 . 0.1038 0.1196 0.0878 0.0241  0.0088
0.0081  1 .
3116 CB    CB    . ILE ILE ILE A A 412 412 . 0.0862 0.0780 0.0816 0.0174  0.0126
0.0073  1 .
3117 CG1   CG1   . ILE ILE ILE A A 412 412 . 0.0830 0.1003 0.1120 0.0131  0.0044  -
0.0127 1 .
3118 CD1   CD1   . ILE ILE ILE A A 412 412 . 0.0414 0.0983 0.1299 0.0200  0.0187  -
0.0030 1 .
3119 CG2   CG2   . ILE ILE ILE A A 412 412 . 0.0851 0.1457 0.0984 0.0032  -0.0093
0.0169  1 .
3120 C     C     . ILE ILE ILE A A 412 412 . 0.1084 0.1013 0.1043 0.0140  0.0103
0.0157  1 .
3121 O     O     . ILE ILE ILE A A 412 412 . 0.1281 0.1415 0.1173 0.0022  0.0335  -
0.0103 1 .
3122 N     N     . GLU GLU GLU A A 413 413 . 0.0879 0.1055 0.0840 0.0091  0.0041  -
0.0083 1 .
3123 CA    CA    . GLU GLU GLU A A 413 413 . 0.0918 0.1245 0.1046 0.0041  -0.0015 -
0.0010 1 .
3124 CB    CB    . GLU GLU GLU A A 413 413 . 0.1134 0.1114 0.1005 0.0024  -0.0150
0.0024  1 .
3125 CG    CG    . GLU GLU GLU A A 413 413 . 0.1171 0.0918 0.1264 -0.0086 0.0197  -
0.0116 1 .
3126 CD    CD    . GLU GLU GLU A A 413 413 . 0.1312 0.1867 0.1656 0.0175  0.0266  -
0.0101 1 .
3127 OE1   OE1   . GLU GLU GLU A A 413 413 . 0.1277 0.1606 0.2318 -0.0149 0.0204
0.0156  1 .
3128 OE2   OE2   . GLU GLU GLU A A 413 413 . 0.1592 0.1789 0.1553 0.0286  0.0241  -
0.0007 1 .
3129 C     C     . GLU GLU GLU A A 413 413 . 0.1319 0.1495 0.1186 0.0320  0.0046  -
0.0027 1 .
3130 O     O     . GLU GLU GLU A A 413 413 . 0.1257 0.1923 0.0923 0.0121  0.0030
0.0297  1 .
3131 N     N     . GLU GLU GLU A A 414 414 . 0.1193 0.1717 0.1200 0.0386  -0.0049 -
0.0019 1 .
3132 CA    CA    . GLU GLU GLU A A 414 414 . 0.1549 0.2175 0.1400 0.0479  -0.0036
0.0000  1 .
3133 CB    CB    . GLU GLU GLU A A 414 414 . 0.1847 0.2282 0.1383 0.0687  -0.0303 -
0.0116 1 .
3134 CG    CG    . GLU GLU GLU A A 414 414 . 0.2921 0.3156 0.2070 0.0615  -0.0058 -
0.0059 1 .
3135 CD    CD    . GLU GLU GLU A A 414 414 . 0.3387 0.3319 0.2098 0.0333  -0.0347 -
0.0010 1 .
3136 OE1   OE1   . GLU GLU GLU A A 414 414 . 0.4237 0.4165 0.2984 0.0335  0.0098  -
0.0301 1 .
3137 OE2   OE2   . GLU GLU GLU A A 414 414 . 0.3510 0.4076 0.2883 0.0683  0.0023  -
0.0692 1 .
3138 C     C     . GLU GLU GLU A A 414 414 . 0.1510 0.2193 0.1519 0.0388  -0.0081 -
0.0100 1 .
3139 O     O     . GLU GLU GLU A A 414 414 . 0.1380 0.2835 0.1735 0.0495  0.0089  -
0.0107 1 .
3140 N     N     . GLU GLU GLU A A 415 415 . 0.1427 0.2091 0.1458 -0.0041 -0.0075 -
0.0107 1 .
3141 CA    CA    . GLU GLU GLU A A 415 415 . 0.1718 0.2370 0.1580 -0.0166 0.0089
0.0035  1 .
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3142 CB    CB    . GLU GLU GLU A A 415 415 . 0.1756 0.2403 0.1839 -0.0238 0.0148  -
0.0023 1 .
3143 CG    CG    . GLU GLU GLU A A 415 415 . 0.1656 0.2923 0.2196 -0.0828 -0.0401
0.0669  1 .
3144 CD    CD    . GLU GLU GLU A A 415 415 . 0.1442 0.2477 0.1490 -0.0215 0.0365
0.0008  1 .
3145 OE1   OE1   . GLU GLU GLU A A 415 415 . 0.4284 0.4839 0.4100 -0.0075 0.0189  -
0.0188 1 .
3146 OE2   OE2   . GLU GLU GLU A A 415 415 . 0.4010 0.4113 0.4581 -0.0225 0.0408
0.0724  1 .
3147 C     C     . GLU GLU GLU A A 415 415 . 0.1695 0.2657 0.1700 -0.0188 0.0054
0.0000  1 .
3148 O     O     . GLU GLU GLU A A 415 415 . 0.1361 0.2763 0.1739 -0.0333 0.0197  -
0.0102 1 .
3149 N     N     . LEU LEU LEU A A 416 416 . 0.1344 0.2287 0.1714 -0.0200 0.0027  -
0.0082 1 .
3150 CA    CA    . LEU LEU LEU A A 416 416 . 0.1675 0.2371 0.1689 -0.0072 0.0149  -
0.0083 1 .
3151 CB    CB    . LEU LEU LEU A A 416 416 . 0.1636 0.2124 0.1591 0.0118  0.0264
0.0134  1 .
3152 CG    CG    . LEU LEU LEU A A 416 416 . 0.1609 0.2009 0.2023 -0.0124 0.0454  -
0.0049 1 .
3153 CD1   CD1   . LEU LEU LEU A A 416 416 . 0.1419 0.2250 0.1766 0.0349  0.0164
0.0159  1 .
3154 CD2   CD2   . LEU LEU LEU A A 416 416 . 0.2311 0.1894 0.2553 -0.0349 0.0216
0.0123  1 .
3155 C     C     . LEU LEU LEU A A 416 416 . 0.1973 0.2404 0.1876 0.0021  0.0082  -
0.0104 1 .
3156 O     O     . LEU LEU LEU A A 416 416 . 0.2255 0.2700 0.1818 -0.0178 0.0340  -
0.0131 1 .
3157 N     N     . GLY GLY GLY A A 417 417 . 0.2351 0.2793 0.2132 0.0025  0.0165  -
0.0251 1 .
3158 CA    CA    . GLY GLY GLY A A 417 417 . 0.2750 0.3128 0.2519 0.0048  0.0207  -
0.0222 1 .
3159 C     C     . GLY GLY GLY A A 417 417 . 0.2909 0.3635 0.2863 0.0028  0.0220  -
0.0286 1 .
3160 O     O     . GLY GLY GLY A A 417 417 . 0.2547 0.3805 0.2787 0.0075  0.0492  -
0.0292 1 .
3161 N     N     . ASP ASP ASP A A 418 418 . 0.2978 0.3995 0.3049 0.0053  0.0286  -
0.0274 1 .
3162 CA    CA    . ASP ASP ASP A A 418 418 . 0.3261 0.4062 0.3249 0.0125  0.0259  -
0.0245 1 .
3163 CB    CB    . ASP ASP ASP A A 418 418 . 0.3489 0.4124 0.3329 0.0193  0.0354  -
0.0394 1 .
3164 C     C     . ASP ASP ASP A A 418 418 . 0.3122 0.4003 0.3320 0.0071  0.0196  -
0.0153 1 .
3165 O     O     . ASP ASP ASP A A 418 418 . 0.3275 0.4443 0.3537 0.0193  0.0039  -
0.0199 1 .
3166 N     N     . GLU GLU GLU A A 419 419 . 0.2826 0.3645 0.3135 0.0084  0.0253  -
0.0001 1 .
3167 CA    CA    . GLU GLU GLU A A 419 419 . 0.2740 0.3512 0.3027 -0.0039 0.0192
0.0129  1 .
3168 CB    CB    . GLU GLU GLU A A 419 419 . 0.2994 0.3578 0.3152 -0.0081 0.0148
0.0245  1 .
3169 CG    CG    . GLU GLU GLU A A 419 419 . 0.4012 0.4235 0.4269 -0.0061 -0.0057
0.0218  1 .
3170 CD    CD    . GLU GLU GLU A A 419 419 . 0.5000 0.4859 0.5108 -0.0258 0.0041
0.0190  1 .
3171 OE1   OE1   . GLU GLU GLU A A 419 419 . 0.5548 0.4525 0.4960 -0.0167 0.0480
0.0390  1 .
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3172 OE2   OE2   . GLU GLU GLU A A 419 419 . 0.5220 0.5433 0.5660 -0.0894 -0.0299
0.0295  1 .
3173 C     C     . GLU GLU GLU A A 419 419 . 0.2607 0.3159 0.2890 -0.0045 0.0096
0.0244  1 .
3174 O     O     . GLU GLU GLU A A 419 419 . 0.2295 0.3362 0.3225 -0.0113 0.0184
0.0421  1 .
3175 N     N     . ALA ALA ALA A A 420 420 . 0.2172 0.2611 0.2479 -0.0068 0.0240
0.0159  1 .
3176 CA    CA    . ALA ALA ALA A A 420 420 . 0.2083 0.2258 0.2276 -0.0017 0.0075
0.0123  1 .
3177 CB    CB    . ALA ALA ALA A A 420 420 . 0.1952 0.2058 0.2027 0.0126  0.0279
0.0198  1 .
3178 C     C     . ALA ALA ALA A A 420 420 . 0.2132 0.2370 0.2347 0.0110  0.0029  -
0.0055 1 .
3179 O     O     . ALA ALA ALA A A 420 420 . 0.2182 0.2445 0.2262 0.0117  0.0011  -
0.0097 1 .
3180 N     N     . ARG ARG ARG A A 421 421 . 0.1916 0.2199 0.2118 0.0000  0.0156  -
0.0027 1 .
3181 CA    CA    . ARG ARG ARG A A 421 421 . 0.1759 0.2232 0.1958 -0.0118 0.0382  -
0.0097 1 .
3182 CB    CB    . ARG ARG ARG A A 421 421 . 0.2054 0.2163 0.2108 0.0005  0.0535  -
0.0219 1 .
3183 CG    CG    . ARG ARG ARG A A 421 421 . 0.2251 0.3037 0.2777 0.0074  0.0425  -
0.0202 1 .
3184 CD    CD    . ARG ARG ARG A A 421 421 . 0.2828 0.2924 0.2955 0.0469  0.0217  -
0.0177 1 .
3185 NE    NE    . ARG ARG ARG A A 421 421 . 0.3484 0.3972 0.2744 0.0174  0.0307  -
0.0001 1 .
3186 CZ    CZ    . ARG ARG ARG A A 421 421 . 0.3681 0.5175 0.3596 0.0332  0.0427  -
0.0104 1 .
3187 NH1   NH1   . ARG ARG ARG A A 421 421 . 0.3841 0.4755 0.3509 0.0183  0.0043  -
0.0782 1 .
3188 NH2   NH2   . ARG ARG ARG A A 421 421 . 0.3762 0.5772 0.3755 0.0368  0.0624
0.0017  1 .
3189 C     C     . ARG ARG ARG A A 421 421 . 0.1535 0.1975 0.1897 -0.0086 0.0409  -
0.0251 1 .
3190 O     O     . ARG ARG ARG A A 421 421 . 0.1653 0.2457 0.2496 -0.0370 0.0910  -
0.0312 1 .
3191 N     N     . PHE PHE PHE A A 422 422 . 0.1272 0.1628 0.1246 -0.0117 0.0351
0.0139  1 .
3192 CA    CA    . PHE PHE PHE A A 422 422 . 0.1115 0.1475 0.1370 0.0146  0.0057
0.0031  1 .
3193 CB    CB    . PHE PHE PHE A A 422 422 . 0.1368 0.1789 0.1535 -0.0094 0.0275
0.0210  1 .
3194 CG    CG    . PHE PHE PHE A A 422 422 . 0.1212 0.1453 0.1414 0.0105  0.0041
0.0003  1 .
3195 CD1   CD1   . PHE PHE PHE A A 422 422 . 0.1218 0.1492 0.1258 0.0215  0.0017  -
0.0089 1 .
3196 CE1   CE1   . PHE PHE PHE A A 422 422 . 0.1224 0.0855 0.0739 0.0026  0.0088  -
0.0022 1 .
3197 CZ    CZ    . PHE PHE PHE A A 422 422 . 0.1026 0.1360 0.1255 0.0119  0.0025  -
0.0208 1 .
3198 CE2   CE2   . PHE PHE PHE A A 422 422 . 0.1242 0.1423 0.0876 0.0038  0.0259
0.0111  1 .
3199 CD2   CD2   . PHE PHE PHE A A 422 422 . 0.0773 0.0814 0.0911 0.0006  0.0113
0.0050  1 .
3200 C     C     . PHE PHE PHE A A 422 422 . 0.1113 0.1544 0.1148 0.0120  0.0011  -
0.0223 1 .
3201 O     O     . PHE PHE PHE A A 422 422 . 0.1142 0.1546 0.1434 0.0171  0.0075  -
0.0476 1 .
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3202 N     N     . ALA ALA ALA A A 423 423 . 0.1116 0.1104 0.1244 0.0115  -0.0181 -
0.0021 1 .
3203 CA    CA    . ALA ALA ALA A A 423 423 . 0.1139 0.1183 0.1140 0.0052  -0.0185 -
0.0117 1 .
3204 CB    CB    . ALA ALA ALA A A 423 423 . 0.0972 0.1388 0.1310 0.0236  0.0095  -
0.0279 1 .
3205 C     C     . ALA ALA ALA A A 423 423 . 0.1349 0.1313 0.1229 -0.0065 -0.0093
0.0036  1 .
3206 O     O     . ALA ALA ALA A A 423 423 . 0.1105 0.1089 0.0773 0.0046  -0.0317
0.0151  1 .
3207 N     N     . GLY GLY GLY A A 424 424 . 0.1098 0.0883 0.1070 -0.0085 -0.0091
0.0086  1 .
3208 CA    CA    . GLY GLY GLY A A 424 424 . 0.1339 0.1136 0.1036 0.0004  -0.0205 -
0.0003 1 .
3209 C     C     . GLY GLY GLY A A 424 424 . 0.1243 0.1193 0.0971 -0.0074 -0.0060 -
0.0074 1 .
3210 O     O     . GLY GLY GLY A A 424 424 . 0.1085 0.1181 0.1024 0.0235  -0.0098 -
0.0132 1 .
3211 N     N     . HIS HIS HIS A A 425 425 . 0.1216 0.1004 0.0921 -0.0169 -0.0016 -
0.0181 1 .
3212 CA    CA    . HIS HIS HIS A A 425 425 . 0.1338 0.0919 0.0861 -0.0087 -0.0195 -
0.0116 1 .
3213 CB    CB    . HIS HIS HIS A A 425 425 . 0.1611 0.0917 0.1096 -0.0015 -0.0134 -
0.0178 1 .
3214 CG    CG    . HIS HIS HIS A A 425 425 . 0.1313 0.1055 0.1419 -0.0157 -0.0270 -
0.0233 1 .
3215 ND1   ND1   . HIS HIS HIS A A 425 425 . 0.2414 0.1772 0.1643 0.0036  0.0017  -
0.0083 1 .
3216 CE1   CE1   . HIS HIS HIS A A 425 425 . 0.2136 0.1644 0.1257 -0.0030 -0.0314 -
0.0249 1 .
3217 NE2   NE2   . HIS HIS HIS A A 425 425 . 0.2512 0.1494 0.1582 -0.0142 -0.0017 -
0.0423 1 .
3218 CD2   CD2   . HIS HIS HIS A A 425 425 . 0.2070 0.1362 0.1321 -0.0157 -0.0413 -
0.0264 1 .
3219 C     C     . HIS HIS HIS A A 425 425 . 0.1217 0.0846 0.0993 0.0048  -0.0120 -
0.0037 1 .
3220 O     O     . HIS HIS HIS A A 425 425 . 0.1363 0.1401 0.1447 -0.0148 -0.0311
0.0343  1 .
3221 N     N     . ASN ASN ASN A A 426 426 . 0.1141 0.1046 0.0736 0.0044  0.0117  -
0.0006 1 .
3222 CA    CA    . ASN ASN ASN A A 426 426 . 0.1303 0.0902 0.0907 -0.0072 0.0143  -
0.0189 1 .
3223 CB    CB    . ASN ASN ASN A A 426 426 . 0.1268 0.1041 0.0790 0.0075  0.0105  -
0.0222 1 .
3224 CG    CG    . ASN ASN ASN A A 426 426 . 0.1490 0.1360 0.1183 0.0108  -0.0139 -
0.0233 1 .
3225 OD1   OD1   . ASN ASN ASN A A 426 426 . 0.2751 0.3011 0.1432 -0.0174 -0.0385 -
0.0355 1 .
3226 ND2   ND2   . ASN ASN ASN A A 426 426 . 0.1155 0.1003 0.0789 -0.0207 -0.0003 -
0.0105 1 .
3227 C     C     . ASN ASN ASN A A 426 426 . 0.1524 0.1128 0.1025 -0.0175 0.0129  -
0.0186 1 .
3228 O     O     . ASN ASN ASN A A 426 426 . 0.1936 0.1410 0.1379 -0.0109 0.0195  -
0.0089 1 .
3229 N     N     . PHE PHE PHE A A 427 427 . 0.1437 0.1137 0.1048 -0.0276 0.0168  -
0.0175 1 .
3230 CA    CA    . PHE PHE PHE A A 427 427 . 0.1598 0.1279 0.1202 -0.0106 0.0148  -
0.0184 1 .
3231 CB    CB    . PHE PHE PHE A A 427 427 . 0.1714 0.1406 0.1173 -0.0219 0.0081  -
0.0205 1 .
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3232 CG    CG    . PHE PHE PHE A A 427 427 . 0.1456 0.1615 0.1469 0.0074  0.0098  -
0.0076 1 .
3233 CD1   CD1   . PHE PHE PHE A A 427 427 . 0.1898 0.1350 0.1393 -0.0148 0.0016
0.0112  1 .
3234 CE1   CE1   . PHE PHE PHE A A 427 427 . 0.1837 0.1866 0.1641 0.0359  -0.0181
0.0222  1 .
3235 CZ    CZ    . PHE PHE PHE A A 427 427 . 0.1893 0.1518 0.1593 0.0138  0.0397  -
0.0005 1 .
3236 CE2   CE2   . PHE PHE PHE A A 427 427 . 0.1889 0.1731 0.1825 0.0009  0.0069  -
0.0392 1 .
3237 CD2   CD2   . PHE PHE PHE A A 427 427 . 0.1891 0.1483 0.2299 0.0053  0.0136  -
0.0395 1 .
3238 C     C     . PHE PHE PHE A A 427 427 . 0.1634 0.1541 0.1628 0.0022  0.0083  -
0.0288 1 .
3239 O     O     . PHE PHE PHE A A 427 427 . 0.1721 0.1666 0.1971 0.0050  -0.0017 -
0.0549 1 .
3240 N     N     . ARG ARG ARG A A 428 428 . 0.1937 0.1472 0.1272 0.0140  -0.0042 -
0.0163 1 .
3241 CA    CA    . ARG ARG ARG A A 428 428 . 0.2023 0.1753 0.1477 0.0128  0.0054  -
0.0065 1 .
3242 CB    CB    . ARG ARG ARG A A 428 428 . 0.2068 0.1675 0.1538 0.0077  -0.0009 -
0.0093 1 .
3243 CG    CG    . ARG ARG ARG A A 428 428 . 0.1964 0.1996 0.2013 0.0138  0.0014  -
0.0275 1 .
3244 CD    CD    . ARG ARG ARG A A 428 428 . 0.2264 0.2763 0.2373 0.0344  -0.0168 -
0.0076 1 .
3245 NE    NE    . ARG ARG ARG A A 428 428 . 0.2879 0.2592 0.2770 0.0338  -0.0564 -
0.0286 1 .
3246 CZ    CZ    . ARG ARG ARG A A 428 428 . 0.2591 0.2759 0.3075 0.0223  -0.0294 -
0.0142 1 .
3247 NH1   NH1   . ARG ARG ARG A A 428 428 . 0.2280 0.2852 0.2481 0.0635  -0.0025 -
0.0649 1 .
3248 NH2   NH2   . ARG ARG ARG A A 428 428 . 0.2480 0.3323 0.2310 0.0646  -0.0233 -
0.0354 1 .
3249 C     C     . ARG ARG ARG A A 428 428 . 0.2343 0.1985 0.1684 0.0008  -0.0046 -
0.0013 1 .
3250 O     O     . ARG ARG ARG A A 428 428 . 0.2881 0.1784 0.1485 -0.0016 0.0092
0.0067  1 .
3251 N     N     . ASN ASN ASN A A 429 429 . 0.2211 0.2077 0.1703 0.0020  0.0038
0.0054  1 .
3252 CA    CA    . ASN ASN ASN A A 429 429 . 0.2638 0.2294 0.1966 -0.0076 0.0050
0.0048  1 .
3253 CB    CB    . ASN ASN ASN A A 429 429 . 0.2878 0.2614 0.2168 -0.0109 -0.0114
0.0093  1 .
3254 CG    CG    . ASN ASN ASN A A 429 429 . 0.3041 0.2694 0.2599 0.0283  0.0001
0.0152  1 .
3255 OD1   OD1   . ASN ASN ASN A A 429 429 . 0.3772 0.2798 0.2898 0.0485  0.0174
0.0044  1 .
3256 ND2   ND2   . ASN ASN ASN A A 429 429 . 0.4234 0.2560 0.3712 0.0578  0.0623  -
0.0794 1 .
3257 C     C     . ASN ASN ASN A A 429 429 . 0.2383 0.2112 0.1716 -0.0221 0.0076
0.0028  1 .
3258 O     O     . ASN ASN ASN A A 429 429 . 0.2580 0.1918 0.1533 -0.0235 -0.0194 -
0.0192 1 .
3259 N     N     . PRO PRO PRO A A 430 430 . 0.2239 0.1886 0.1592 -0.0211 0.0034  -
0.0211 1 .
3260 CA    CA    . PRO PRO PRO A A 430 430 . 0.2158 0.2084 0.1681 -0.0160 0.0158  -
0.0166 1 .
3261 CB    CB    . PRO PRO PRO A A 430 430 . 0.2016 0.2313 0.1972 -0.0027 -0.0014 -
0.0339 1 .
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3262 CG    CG    . PRO PRO PRO A A 430 430 . 0.1995 0.1848 0.1795 0.0006  0.0140  -
0.0361 1 .
3263 CD    CD    . PRO PRO PRO A A 430 430 . 0.2151 0.2135 0.1198 -0.0059 -0.0023 -
0.0299 1 .
3264 C     C     . PRO PRO PRO A A 430 430 . 0.2311 0.2363 0.2066 -0.0251 0.0114  -
0.0180 1 .
3265 O     O     . PRO PRO PRO A A 430 430 . 0.2258 0.2465 0.1964 -0.0370 0.0286  -
0.0103 1 .
3266 N     N     . SER SER SER A A 431 431 . 0.2623 0.2632 0.2188 -0.0453 0.0147  -
0.0203 1 .
3267 CA    CA    . SER SER SER A A 431 431 . 0.3062 0.3283 0.2795 -0.0413 0.0220  -
0.0136 1 .
3268 CB    CB    . SER SER SER A A 431 431 . 0.3061 0.3367 0.3008 -0.0330 -0.0027 -
0.0018 1 .
3269 OG    OG    . SER SER SER A A 431 431 . 0.3504 0.4269 0.3082 -0.0100 -0.0014
0.0221  1 .
3270 C     C     . SER SER SER A A 431 431 . 0.3133 0.3548 0.3059 -0.0498 0.0259  -
0.0194 1 .
3271 O     O     . SER SER SER A A 431 431 . 0.3226 0.4053 0.3230 -0.0752 0.0361  -
0.0078 1 .
3272 N     N     . VAL VAL VAL A A 432 432 . 0.3261 0.3447 0.2919 -0.0561 0.0288  -
0.0330 1 .
3273 CA    CA    . VAL VAL VAL A A 432 432 . 0.3193 0.3375 0.2944 -0.0475 0.0305  -
0.0320 1 .
3274 CB    CB    . VAL VAL VAL A A 432 432 . 0.3522 0.3455 0.2920 -0.0436 0.0129  -
0.0462 1 .
3275 CG1   CG1   . VAL VAL VAL A A 432 432 . 0.3321 0.3713 0.2935 -0.0301 0.0051  -
0.0700 1 .
3276 CG2   CG2   . VAL VAL VAL A A 432 432 . 0.3423 0.3664 0.2700 -0.0775 0.0218  -
0.0390 1 .
3277 C     C     . VAL VAL VAL A A 432 432 . 0.3329 0.3288 0.2956 -0.0421 0.0268  -
0.0145 1 .
3278 O     O     . VAL VAL VAL A A 432 432 . 0.3307 0.3550 0.2521 -0.0309 0.0512
0.0032  1 .
3279 N     N     . LEU LEU LEU A A 433 433 . 0.3145 0.3365 0.2990 -0.0500 0.0283  -
0.0087 1 .
3280 CA    CA    . LEU LEU LEU A A 433 433 . 0.3063 0.3457 0.3131 -0.0440 0.0322  -
0.0089 1 .
3281 CB    CB    . LEU LEU LEU A A 433 433 . 0.2967 0.3424 0.3067 -0.0437 0.0301  -
0.0169 1 .
3282 CG    CG    . LEU LEU LEU A A 433 433 . 0.2884 0.3113 0.2689 -0.0445 0.0488  -
0.0152 1 .
3283 CD1   CD1   . LEU LEU LEU A A 433 433 . 0.2642 0.3750 0.2249 -0.0539 0.0391  -
0.0131 1 .
3284 CD2   CD2   . LEU LEU LEU A A 433 433 . 0.3110 0.2921 0.2837 -0.0516 0.0166  -
0.0248 1 .
3285 C     C     . LEU LEU LEU A A 433 433 . 0.3189 0.3587 0.3389 -0.0667 0.0272  -
0.0020 1 .
3286 O     O     . LEU LEU LEU A A 433 433 . 0.3204 0.3373 0.3326 -0.0561 0.0566  -
0.0334 1 .
3287 MG+2  MG+2  . MG2 MG2 MG2 A . 599 599 . 0.1056 0.1073 0.1147 0.0149  -0.0055 -
0.0100 1 .
3288 MG+2  MG+2  . MG2 MG2 MG2 A . 600 600 . 0.1075 0.1221 0.1513 0.0265  -0.0039 -
0.0094 1 .
3289 O4P   O4P   . 2PG 2PG 2PG A . 601 601 . 0.0777 0.0885 0.0968 -0.0131 0.0042  -
0.0057 1 .
3290 P     P     . 2PG 2PG 2PG A . 601 601 . 0.0980 0.0858 0.1061 0.0079  -0.0034 -
0.0044 1 .
3291 O2P   O2P   . 2PG 2PG 2PG A . 601 601 . 0.0976 0.1208 0.1153 0.0046  -0.0138
0.0465  1 .
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3292 O3P   O3P   . 2PG 2PG 2PG A . 601 601 . 0.0849 0.1196 0.1131 0.0033  -0.0330
0.0241  1 .
3293 O1P   O1P   . 2PG 2PG 2PG A . 601 601 . 0.0988 0.1009 0.1143 0.0005  -0.0121 -
0.0303 1 .
3294 C2    C2    . 2PG 2PG 2PG A . 601 601 . 0.0888 0.0831 0.0896 0.0199  -0.0125
0.0182  1 .
3295 C1    C1    . 2PG 2PG 2PG A . 601 601 . 0.1351 0.1572 0.1164 0.0240  -0.0044 -
0.0141 1 .
3296 O2    O2    . 2PG 2PG 2PG A . 601 601 . 0.0652 0.0998 0.1003 0.0152  -0.0056
0.0023  1 .
3297 O1    O1    . 2PG 2PG 2PG A . 601 601 . 0.1176 0.1081 0.1555 0.0377  0.0125  -
0.0112 1 .
3298 C3    C3    . 2PG 2PG 2PG A . 601 601 . 0.1058 0.1389 0.1727 0.0030  -0.0467
0.0088  1 .
3299 O3    O3    . 2PG 2PG 2PG A . 601 601 . 0.1611 0.2384 0.1940 -0.0058 -0.0337
0.0375  1 .
3300 O     O     . HOH HOH HOH A . 800 800 . 0.0398 0.0934 0.0664 0.0284  -0.0123 -
0.0048 1 .
3301 O     O     . HOH HOH HOH A . 801 801 . 0.0761 0.1069 0.0945 0.0000  -0.0260
0.0089  1 .
3302 O     O     . HOH HOH HOH A . 802 802 . 0.0816 0.1168 0.1106 0.0082  -0.0003 -
0.0098 1 .
3303 O3    O3    . TRS TRS TRS A . 700 700 . 0.2921 0.3968 0.2719 0.0222  0.0213  -
0.0331 1 .
3304 C3    C3    . TRS TRS TRS A . 700 700 . 0.2191 0.2934 0.2353 0.0361  0.0023  -
0.0137 1 .
3305 C     C     . TRS TRS TRS A . 700 700 . 0.2093 0.2366 0.2286 0.0245  0.0020  -
0.0069 1 .
3306 N     N     . TRS TRS TRS A . 700 700 . 0.1714 0.1706 0.1951 0.0307  0.0238  -
0.0028 1 .
3307 C2    C2    . TRS TRS TRS A . 700 700 . 0.2263 0.2438 0.2228 0.0267  -0.0081 -
0.0072 1 .
3308 O2    O2    . TRS TRS TRS A . 700 700 . 0.2632 0.2881 0.2629 0.0234  -0.0278 -
0.0698 1 .
3309 C1    C1    . TRS TRS TRS A . 700 700 . 0.1755 0.2139 0.1930 0.0413  0.0017
0.0027  1 .
3310 O1    O1    . TRS TRS TRS A . 700 700 . 0.1707 0.1598 0.2168 0.0565  0.0273
0.0332  1 .
3311 N     N     . SER SER SER B B 1   1   . 0.2236 0.2884 0.3089 0.0091  -0.0425
0.0159  1 .
3312 CA    CA    . SER SER SER B B 1   1   . 0.2470 0.3050 0.3213 0.0110  -0.0315
0.0096  1 .
3313 CB    CB    . SER SER SER B B 1   1   . 0.2768 0.3273 0.3142 0.0304  -0.0197
0.0178  1 .
3314 OG    OG    . SER SER SER B B 1   1   . 0.3043 0.3843 0.3636 -0.0087 -0.0267
0.0566  1 .
3315 C     C     . SER SER SER B B 1   1   . 0.2321 0.2844 0.3047 0.0030  -0.0317
0.0081  1 .
3316 O     O     . SER SER SER B B 1   1   . 0.2191 0.3080 0.3145 -0.0034 -0.0213
0.0268  1 .
3317 N     N     . ILE ILE ILE B B 2   2   . 0.2143 0.2681 0.2845 0.0141  -0.0218
0.0044  1 .
3318 CA    CA    . ILE ILE ILE B B 2   2   . 0.1825 0.2236 0.2399 0.0066  -0.0167 -
0.0161 1 .
3319 CB    CB    . ILE ILE ILE B B 2   2   . 0.1676 0.2196 0.2276 0.0236  -0.0004 -
0.0052 1 .
3320 CG1   CG1   . ILE ILE ILE B B 2   2   . 0.2294 0.2173 0.2202 0.0024  -0.0222 -
0.0184 1 .
3321 CD1   CD1   . ILE ILE ILE B B 2   2   . 0.1863 0.1930 0.1914 0.0216  -0.0458 -
0.0369 1 .
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3322 CG2   CG2   . ILE ILE ILE B B 2   2   . 0.1892 0.2106 0.2528 0.0058  -0.0291 -
0.0132 1 .
3323 C     C     . ILE ILE ILE B B 2   2   . 0.1816 0.2222 0.2567 0.0128  -0.0041 -
0.0082 1 .
3324 O     O     . ILE ILE ILE B B 2   2   . 0.1595 0.2128 0.2806 0.0431  0.0060  -
0.0303 1 .
3325 N     N     . GLN GLN GLN B B 3   3   . 0.1501 0.2045 0.2231 0.0103  0.0054  -
0.0053 1 .
3326 CA    CA    . GLN GLN GLN B B 3   3   . 0.1846 0.2235 0.2434 0.0047  0.0005
0.0096  1 .
3327 CB    CB    . GLN GLN GLN B B 3   3   . 0.1953 0.2378 0.2784 -0.0084 -0.0019
0.0193  1 .
3328 CG    CG    . GLN GLN GLN B B 3   3   . 0.3040 0.2800 0.3444 -0.0487 0.0008
0.0000  1 .
3329 CD    CD    . GLN GLN GLN B B 3   3   . 0.3755 0.3687 0.4124 -0.0292 0.0165
0.0442  1 .
3330 OE1   OE1   . GLN GLN GLN B B 3   3   . 0.4153 0.3943 0.4260 -0.0135 0.0238
0.0628  1 .
3331 NE2   NE2   . GLN GLN GLN B B 3   3   . 0.4018 0.3945 0.4667 -0.0624 0.0448
0.0226  1 .
3332 C     C     . GLN GLN GLN B B 3   3   . 0.1751 0.2120 0.2151 0.0095  0.0052
0.0074  1 .
3333 O     O     . GLN GLN GLN B B 3   3   . 0.1494 0.2120 0.2178 0.0050  0.0064
0.0016  1 .
3334 N     N     . LYS LYS LYS B B 4   4   . 0.1687 0.2045 0.1884 0.0097  0.0128
0.0171  1 .
3335 CA    CA    . LYS LYS LYS B B 4   4   . 0.1793 0.2030 0.1852 0.0105  0.0032
0.0138  1 .
3336 CB    CB    . LYS LYS LYS B B 4   4   . 0.1864 0.2333 0.2152 0.0092  0.0021
0.0072  1 .
3337 CG    CG    . LYS LYS LYS B B 4   4   . 0.2891 0.2892 0.2502 0.0065  -0.0240
0.0057  1 .
3338 CD    CD    . LYS LYS LYS B B 4   4   . 0.3266 0.3522 0.2803 0.0152  -0.0466
0.0341  1 .
3339 CE    CE    . LYS LYS LYS B B 4   4   . 0.4433 0.4498 0.3530 0.0233  -0.0239
0.0017  1 .
3340 NZ    NZ    . LYS LYS LYS B B 4   4   . 0.4392 0.5199 0.3445 0.0490  -0.0398 -
0.0031 1 .
3341 C     C     . LYS LYS LYS B B 4   4   . 0.1548 0.1903 0.2097 0.0000  -0.0080 -
0.0031 1 .
3342 O     O     . LYS LYS LYS B B 4   4   . 0.1185 0.1918 0.1671 0.0078  -0.0206 -
0.0129 1 .
3343 N     N     . ILE ILE ILE B B 5   5   . 0.1499 0.1800 0.2015 0.0129  0.0163
0.0077  1 .
3344 CA    CA    . ILE ILE ILE B B 5   5   . 0.1420 0.1709 0.1909 -0.0034 0.0101
0.0062  1 .
3345 CB    CB    . ILE ILE ILE B B 5   5   . 0.1392 0.1457 0.1835 -0.0091 0.0151
0.0077  1 .
3346 CG1   CG1   . ILE ILE ILE B B 5   5   . 0.1689 0.2106 0.1858 0.0089  -0.0101
0.0541  1 .
3347 CD1   CD1   . ILE ILE ILE B B 5   5   . 0.2561 0.2620 0.2603 0.0512  -0.0384
0.0644  1 .
3348 CG2   CG2   . ILE ILE ILE B B 5   5   . 0.1152 0.1756 0.1928 0.0124  0.0251
0.0353  1 .
3349 C     C     . ILE ILE ILE B B 5   5   . 0.1460 0.1856 0.1931 0.0134  0.0117  -
0.0081 1 .
3350 O     O     . ILE ILE ILE B B 5   5   . 0.1553 0.1987 0.2542 -0.0011 0.0045  -
0.0272 1 .
3351 N     N     . TRP TRP TRP B B 6   6   . 0.1169 0.1583 0.1736 0.0136  0.0061
0.0089  1 .
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3352 CA    CA    . TRP TRP TRP B B 6   6   . 0.0912 0.1283 0.1284 0.0011  0.0182
0.0121  1 .
3353 CB    CB    . TRP TRP TRP B B 6   6   . 0.1314 0.1607 0.1448 -0.0004 0.0220  -
0.0106 1 .
3354 CG    CG    . TRP TRP TRP B B 6   6   . 0.1503 0.2033 0.1686 -0.0189 0.0145
0.0082  1 .
3355 CD1   CD1   . TRP TRP TRP B B 6   6   . 0.1991 0.1998 0.2554 -0.0024 0.0100
0.0262  1 .
3356 NE1   NE1   . TRP TRP TRP B B 6   6   . 0.2190 0.2799 0.2222 -0.0182 0.0276
0.0063  1 .
3357 CE2   CE2   . TRP TRP TRP B B 6   6   . 0.2415 0.2028 0.2138 -0.0355 0.0105
0.0112  1 .
3358 CD2   CD2   . TRP TRP TRP B B 6   6   . 0.1935 0.1666 0.1805 0.0099  0.0102
0.0116  1 .
3359 CE3   CE3   . TRP TRP TRP B B 6   6   . 0.1796 0.1970 0.1917 0.0022  0.0416
0.0076  1 .
3360 CZ3   CZ3   . TRP TRP TRP B B 6   6   . 0.2151 0.2690 0.1828 -0.0132 0.0116  -
0.0009 1 .
3361 CH2   CH2   . TRP TRP TRP B B 6   6   . 0.2587 0.2980 0.2227 -0.0211 0.0037  -
0.0302 1 .
3362 CZ2   CZ2   . TRP TRP TRP B B 6   6   . 0.2944 0.2645 0.2068 -0.0217 0.0273  -
0.0046 1 .
3363 C     C     . TRP TRP TRP B B 6   6   . 0.0813 0.1323 0.1385 0.0090  0.0059
0.0009  1 .
3364 O     O     . TRP TRP TRP B B 6   6   . 0.1095 0.1607 0.1682 0.0155  0.0113
0.0058  1 .
3365 N     N     . ALA ALA ALA B B 7   7   . 0.0842 0.1211 0.1095 0.0106  0.0064
0.0160  1 .
3366 CA    CA    . ALA ALA ALA B B 7   7   . 0.0848 0.1238 0.1130 -0.0001 0.0019
0.0099  1 .
3367 CB    CB    . ALA ALA ALA B B 7   7   . 0.1404 0.1423 0.1315 0.0017  -0.0095
0.0107  1 .
3368 C     C     . ALA ALA ALA B B 7   7   . 0.1142 0.1409 0.1174 0.0114  0.0001
0.0038  1 .
3369 O     O     . ALA ALA ALA B B 7   7   . 0.1248 0.1608 0.1186 0.0215  0.0011
0.0220  1 .
3370 N     N     . ARG ARG ARG B B 8   8   . 0.0870 0.1245 0.1163 0.0104  -0.0032
0.0021  1 .
3371 CA    CA    . ARG ARG ARG B B 8   8   . 0.0923 0.1248 0.1133 0.0099  0.0030
0.0033  1 .
3372 CB    CB    . ARG ARG ARG B B 8   8   . 0.0919 0.1403 0.1360 0.0064  0.0042
0.0066  1 .
3373 CG    CG    . ARG ARG ARG B B 8   8   . 0.1240 0.1330 0.1327 0.0512  0.0063
0.0112  1 .
3374 CD    CD    . ARG ARG ARG B B 8   8   . 0.1623 0.1482 0.1419 -0.0007 -0.0064
0.0101  1 .
3375 NE    NE    . ARG ARG ARG B B 8   8   . 0.1513 0.1645 0.1466 0.0299  0.0100
0.0186  1 .
3376 CZ    CZ    . ARG ARG ARG B B 8   8   . 0.2155 0.1531 0.1765 0.0208  -0.0003
0.0436  1 .
3377 NH1   NH1   . ARG ARG ARG B B 8   8   . 0.1437 0.1404 0.1809 0.0375  -0.0157 -
0.0160 1 .
3378 NH2   NH2   . ARG ARG ARG B B 8   8   . 0.2488 0.2332 0.2397 0.0246  0.0388
0.0222  1 .
3379 C     C     . ARG ARG ARG B B 8   8   . 0.0921 0.1049 0.0932 0.0036  0.0031
0.0073  1 .
3380 O     O     . ARG ARG ARG B B 8   8   . 0.0817 0.1211 0.0938 0.0131  0.0117  -
0.0052 1 .
3381 N     N     . GLU GLU GLU B B 9   9   . 0.0953 0.1091 0.1081 -0.0065 0.0142  -
0.0001 1 .
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3382 CA    CA    . GLU GLU GLU B B 9   9   . 0.1341 0.1113 0.1130 -0.0060 0.0065
0.0011  1 .
3383 CB    CB    . GLU GLU GLU B B 9   9   . 0.1629 0.1962 0.1005 -0.0423 0.0103  -
0.0158 1 .
3384 CG    CG    . GLU GLU GLU B B 9   9   . 0.2401 0.1950 0.1541 -0.0768 -0.0433 -
0.0098 1 .
3385 CD    CD    . GLU GLU GLU B B 9   9   . 0.2715 0.1530 0.1629 -0.0329 -0.0206 -
0.0168 1 .
3386 OE1   OE1   . GLU GLU GLU B B 9   9   . 0.1561 0.1628 0.1348 0.0076  -0.0161
0.0159  1 .
3387 OE2   OE2   . GLU GLU GLU B B 9   9   . 0.2316 0.1747 0.1481 -0.0139 -0.0167
0.0083  1 .
3388 C     C     . GLU GLU GLU B B 9   9   . 0.1239 0.1409 0.1143 0.0144  0.0077
0.0111  1 .
3389 O     O     . GLU GLU GLU B B 9   9   . 0.1750 0.1716 0.1580 0.0549  0.0319
0.0177  1 .
3390 N     N     . ILE ILE ILE B B 10  10  . 0.0840 0.0904 0.0884 0.0167  -0.0035
0.0000  1 .
3391 CA    CA    . ILE ILE ILE B B 10  10  . 0.0729 0.0785 0.0769 0.0031  0.0062  -
0.0082 1 .
3392 CB    CB    . ILE ILE ILE B B 10  10  . 0.0554 0.0848 0.0502 -0.0030 0.0053
0.0092  1 .
3393 CG1   CG1   . ILE ILE ILE B B 10  10  . 0.1212 0.0879 0.0374 0.0035  -0.0228 -
0.0199 1 .
3394 CD1   CD1   . ILE ILE ILE B B 10  10  . 0.1143 0.0922 0.1070 0.0141  -0.0126 -
0.0072 1 .
3395 CG2   CG2   . ILE ILE ILE B B 10  10  . 0.0805 0.1127 0.0715 -0.0134 0.0417  -
0.0193 1 .
3396 C     C     . ILE ILE ILE B B 10  10  . 0.0642 0.0737 0.0804 0.0002  -0.0096 -
0.0031 1 .
3397 O     O     . ILE ILE ILE B B 10  10  . 0.0796 0.1024 0.1173 0.0194  -0.0055
0.0023  1 .
3398 N     N     . LEU LEU LEU B B 11  11  . 0.0537 0.0490 0.0621 0.0160  -0.0025 -
0.0048 1 .
3399 CA    CA    . LEU LEU LEU B B 11  11  . 0.0765 0.0858 0.0660 -0.0028 -0.0043 -
0.0072 1 .
3400 CB    CB    . LEU LEU LEU B B 11  11  . 0.0762 0.0564 0.0470 0.0213  -0.0242 -
0.0037 1 .
3401 CG    CG    . LEU LEU LEU B B 11  11  . 0.0925 0.0949 0.0887 0.0133  -0.0004 -
0.0154 1 .
3402 CD1   CD1   . LEU LEU LEU B B 11  11  . 0.1300 0.1491 0.0841 -0.0019 -0.0423
0.0487  1 .
3403 CD2   CD2   . LEU LEU LEU B B 11  11  . 0.1280 0.0753 0.0726 0.0097  -0.0194
0.0119  1 .
3404 C     C     . LEU LEU LEU B B 11  11  . 0.0850 0.0709 0.0643 0.0055  -0.0043 -
0.0088 1 .
3405 O     O     . LEU LEU LEU B B 11  11  . 0.1091 0.0891 0.0880 0.0009  0.0052
0.0296  1 .
3406 N     N     . ASP ASP ASP B B 12  12  . 0.0828 0.0772 0.0658 0.0024  -0.0005
0.0057  1 .
3407 CA    CA    . ASP ASP ASP B B 12  12  . 0.0736 0.0947 0.0695 0.0089  -0.0136
0.0192  1 .
3408 CB    CB    . ASP ASP ASP B B 12  12  . 0.0975 0.1059 0.0672 -0.0151 -0.0164
0.0424  1 .
3409 CG    CG    . ASP ASP ASP B B 12  12  . 0.1121 0.1195 0.0904 -0.0092 -0.0214
0.0286  1 .
3410 OD1   OD1   . ASP ASP ASP B B 12  12  . 0.1009 0.1168 0.0865 0.0031  0.0003  -
0.0033 1 .
3411 OD2   OD2   . ASP ASP ASP B B 12  12  . 0.1216 0.0827 0.0995 0.0149  -0.0034
0.0163  1 .
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3412 C     C     . ASP ASP ASP B B 12  12  . 0.0816 0.0957 0.0843 0.0049  0.0005  -
0.0017 1 .
3413 O     O     . ASP ASP ASP B B 12  12  . 0.0942 0.0760 0.0867 -0.0033 -0.0072 -
0.0010 1 .
3414 N     N     . SER SER SER B B 13  13  . 0.0757 0.0961 0.0821 0.0032  0.0017  -
0.0006 1 .
3415 CA    CA    . SER SER SER B B 13  13  . 0.0800 0.0769 0.0795 0.0070  0.0005  -
0.0193 1 .
3416 CB    CB    . SER SER SER B B 13  13  . 0.1047 0.0896 0.0351 0.0076  0.0095  -
0.0225 1 .
3417 OG    OG    . SER SER SER B B 13  13  . 0.1052 0.0909 0.0942 0.0192  -0.0037
0.0070  1 .
3418 C     C     . SER SER SER B B 13  13  . 0.0931 0.0870 0.0652 0.0075  -0.0028 -
0.0103 1 .
3419 O     O     . SER SER SER B B 13  13  . 0.0717 0.0866 0.1073 0.0119  -0.0143 -
0.0121 1 .
3420 N     N     . ARG ARG ARG B B 14  14  . 0.0893 0.0896 0.0676 -0.0020 -0.0093
0.0048  1 .
3421 CA    CA    . ARG ARG ARG B B 14  14  . 0.1063 0.0833 0.0878 -0.0020 0.0002
0.0042  1 .
3422 CB    CB    . ARG ARG ARG B B 14  14  . 0.1106 0.0879 0.0904 -0.0205 0.0158
0.0104  1 .
3423 CG    CG    . ARG ARG ARG B B 14  14  . 0.1708 0.1224 0.1262 -0.0041 0.0183
0.0215  1 .
3424 CD    CD    . ARG ARG ARG B B 14  14  . 0.1802 0.1322 0.1761 0.0332  -0.0146
0.0287  1 .
3425 NE    NE    . ARG ARG ARG B B 14  14  . 0.1606 0.1347 0.1623 0.0058  -0.0243 -
0.0057 1 .
3426 CZ    CZ    . ARG ARG ARG B B 14  14  . 0.1496 0.1631 0.1507 0.0132  -0.0185
0.0282  1 .
3427 NH1   NH1   . ARG ARG ARG B B 14  14  . 0.1982 0.1090 0.1282 0.0102  -0.0044
0.0177  1 .
3428 NH2   NH2   . ARG ARG ARG B B 14  14  . 0.1724 0.1655 0.1565 -0.0077 -0.0646
0.0163  1 .
3429 C     C     . ARG ARG ARG B B 14  14  . 0.1114 0.0921 0.0973 0.0031  -0.0102
0.0125  1 .
3430 O     O     . ARG ARG ARG B B 14  14  . 0.1175 0.0938 0.1177 -0.0077 -0.0102
0.0095  1 .
3431 N     N     . GLY GLY GLY B B 15  15  . 0.0798 0.0750 0.0649 0.0130  -0.0076 -
0.0045 1 .
3432 CA    CA    . GLY GLY GLY B B 15  15  . 0.1018 0.0668 0.0759 0.0198  -0.0126
0.0058  1 .
3433 C     C     . GLY GLY GLY B B 15  15  . 0.0985 0.1123 0.1035 -0.0063 0.0058  -
0.0033 1 .
3434 O     O     . GLY GLY GLY B B 15  15  . 0.1165 0.1159 0.0946 -0.0068 0.0090  -
0.0304 1 .
3435 N     N     . ASN ASN ASN B B 16  16  . 0.1030 0.1064 0.1069 0.0118  -0.0054
0.0031  1 .
3436 CA    CA    . ASN ASN ASN B B 16  16  . 0.0898 0.0983 0.1042 0.0081  0.0056  -
0.0001 1 .
3437 CB    CB    . ASN ASN ASN B B 16  16  . 0.0635 0.1017 0.1068 -0.0082 0.0171
0.0106  1 .
3438 CG    CG    . ASN ASN ASN B B 16  16  . 0.0890 0.1153 0.1144 -0.0365 -0.0020 -
0.0129 1 .
3439 OD1   OD1   . ASN ASN ASN B B 16  16  . 0.1506 0.0978 0.1773 -0.0213 -0.0151 -
0.0081 1 .
3440 ND2   ND2   . ASN ASN ASN B B 16  16  . 0.1643 0.1239 0.1366 -0.0010 0.0033
0.0289  1 .
3441 C     C     . ASN ASN ASN B B 16  16  . 0.0740 0.0951 0.0808 0.0005  -0.0017 -
0.0103 1 .
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3442 O     O     . ASN ASN ASN B B 16  16  . 0.1065 0.0729 0.0978 0.0153  0.0028  -
0.0199 1 .
3443 N     N     . PRO PRO PRO B B 17  17  . 0.0793 0.0820 0.0891 -0.0014 -0.0108 -
0.0151 1 .
3444 CA    CA    . PRO PRO PRO B B 17  17  . 0.0594 0.0735 0.0784 0.0006  0.0058  -
0.0170 1 .
3445 CB    CB    . PRO PRO PRO B B 17  17  . 0.0683 0.0636 0.0684 0.0067  -0.0138 -
0.0196 1 .
3446 CG    CG    . PRO PRO PRO B B 17  17  . 0.0610 0.1019 0.0872 -0.0074 0.0014  -
0.0088 1 .
3447 CD    CD    . PRO PRO PRO B B 17  17  . 0.1009 0.0886 0.0820 0.0077  -0.0047 -
0.0387 1 .
3448 C     C     . PRO PRO PRO B B 17  17  . 0.0607 0.0787 0.0885 0.0069  0.0199  -
0.0021 1 .
3449 O     O     . PRO PRO PRO B B 17  17  . 0.0823 0.0915 0.0891 0.0213  0.0006  -
0.0034 1 .
3450 N     N     . THR THR THR B B 18  18  . 0.0875 0.0727 0.0837 0.0079  -0.0063 -
0.0176 1 .
3451 CA    CA    . THR THR THR B B 18  18  . 0.0795 0.1032 0.0963 0.0148  -0.0003 -
0.0053 1 .
3452 CB    CB    . THR THR THR B B 18  18  . 0.1075 0.0796 0.0719 0.0121  -0.0201 -
0.0160 1 .
3453 OG1   OG1   . THR THR THR B B 18  18  . 0.0748 0.0963 0.0903 0.0259  -0.0113
0.0112  1 .
3454 CG2   CG2   . THR THR THR B B 18  18  . 0.0771 0.0863 0.0908 0.0143  0.0097  -
0.0081 1 .
3455 C     C     . THR THR THR B B 18  18  . 0.0971 0.0909 0.1012 0.0029  -0.0026 -
0.0020 1 .
3456 O     O     . THR THR THR B B 18  18  . 0.0827 0.1002 0.0999 0.0124  0.0037  -
0.0060 1 .
3457 N     N     . VAL VAL VAL B B 19  19  . 0.0658 0.0829 0.0618 0.0017  -0.0124
0.0021  1 .
3458 CA    CA    . VAL VAL VAL B B 19  19  . 0.0703 0.0824 0.0991 0.0048  0.0125
0.0147  1 .
3459 CB    CB    . VAL VAL VAL B B 19  19  . 0.0599 0.0631 0.0776 -0.0046 0.0001
0.0227  1 .
3460 CG1   CG1   . VAL VAL VAL B B 19  19  . 0.0657 0.1239 0.1277 0.0071  -0.0151
0.0295  1 .
3461 CG2   CG2   . VAL VAL VAL B B 19  19  . 0.0871 0.0905 0.1613 0.0324  0.0217
0.0167  1 .
3462 C     C     . VAL VAL VAL B B 19  19  . 0.0948 0.1133 0.0959 -0.0054 -0.0001
0.0039  1 .
3463 O     O     . VAL VAL VAL B B 19  19  . 0.0969 0.1065 0.1221 0.0113  0.0016
0.0126  1 .
3464 N     N     . GLU GLU GLU B B 20  20  . 0.0971 0.0921 0.0761 0.0038  0.0042
0.0233  1 .
3465 CA    CA    . GLU GLU GLU B B 20  20  . 0.0773 0.1008 0.0839 0.0059  -0.0095
0.0155  1 .
3466 CB    CB    . GLU GLU GLU B B 20  20  . 0.0864 0.1007 0.1061 0.0014  -0.0002
0.0167  1 .
3467 CG    CG    . GLU GLU GLU B B 20  20  . 0.1260 0.1061 0.1339 0.0138  -0.0193
0.0102  1 .
3468 CD    CD    . GLU GLU GLU B B 20  20  . 0.1746 0.1491 0.1620 0.0393  0.0166
0.0240  1 .
3469 OE1   OE1   . GLU GLU GLU B B 20  20  . 0.1677 0.1429 0.1479 0.0184  0.0324
0.0429  1 .
3470 OE2   OE2   . GLU GLU GLU B B 20  20  . 0.1528 0.1544 0.1596 0.0261  0.0050
0.0218  1 .
3471 C     C     . GLU GLU GLU B B 20  20  . 0.0816 0.0987 0.0811 0.0053  -0.0025 -
0.0026 1 .
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3472 O     O     . GLU GLU GLU B B 20  20  . 0.0715 0.1473 0.1503 0.0159  -0.0095 -
0.0014 1 .
3473 N     N     . VAL VAL VAL B B 21  21  . 0.0664 0.1111 0.0919 0.0076  0.0016
0.0014  1 .
3474 CA    CA    . VAL VAL VAL B B 21  21  . 0.0840 0.1002 0.0950 -0.0053 0.0061
0.0054  1 .
3475 CB    CB    . VAL VAL VAL B B 21  21  . 0.0660 0.1036 0.0967 -0.0034 0.0037
0.0056  1 .
3476 CG1   CG1   . VAL VAL VAL B B 21  21  . 0.0570 0.1262 0.1640 0.0002  0.0030
0.0025  1 .
3477 CG2   CG2   . VAL VAL VAL B B 21  21  . 0.1437 0.1219 0.1207 -0.0037 -0.0314
0.0000  1 .
3478 C     C     . VAL VAL VAL B B 21  21  . 0.1064 0.1007 0.1048 0.0013  0.0053
0.0139  1 .
3479 O     O     . VAL VAL VAL B B 21  21  . 0.1141 0.1053 0.1306 -0.0185 0.0101
0.0159  1 .
3480 N     N     . ASP ASP ASP B B 22  22  . 0.1115 0.1256 0.1288 0.0111  0.0093
0.0260  1 .
3481 CA    CA    . ASP ASP ASP B B 22  22  . 0.1044 0.1243 0.1383 0.0087  -0.0159
0.0032  1 .
3482 CB    CB    . ASP ASP ASP B B 22  22  . 0.1030 0.1304 0.1218 0.0227  -0.0047
0.0246  1 .
3483 CG    CG    . ASP ASP ASP B B 22  22  . 0.1326 0.2122 0.1632 -0.0027 -0.0148 -
0.0101 1 .
3484 OD1   OD1   . ASP ASP ASP B B 22  22  . 0.2036 0.2422 0.2073 -0.0126 -0.0170
0.0424  1 .
3485 OD2   OD2   . ASP ASP ASP B B 22  22  . 0.1204 0.2170 0.2474 0.0406  0.0075
0.0059  1 .
3486 C     C     . ASP ASP ASP B B 22  22  . 0.1291 0.1408 0.1439 0.0123  -0.0147 -
0.0051 1 .
3487 O     O     . ASP ASP ASP B B 22  22  . 0.1107 0.1629 0.1777 0.0226  -0.0060
0.0178  1 .
3488 N     N     . LEU LEU LEU B B 23  23  . 0.1243 0.1595 0.1808 0.0066  -0.0386
0.0035  1 .
3489 CA    CA    . LEU LEU LEU B B 23  23  . 0.1175 0.1571 0.1507 0.0047  -0.0219
0.0078  1 .
3490 CB    CB    . LEU LEU LEU B B 23  23  . 0.1173 0.1855 0.1684 0.0099  -0.0367
0.0231  1 .
3491 CG    CG    . LEU LEU LEU B B 23  23  . 0.1126 0.1589 0.1576 0.0087  -0.0355
0.0289  1 .
3492 CD1   CD1   . LEU LEU LEU B B 23  23  . 0.1686 0.2159 0.1367 -0.0203 -0.0477
0.0244  1 .
3493 CD2   CD2   . LEU LEU LEU B B 23  23  . 0.0670 0.2047 0.1627 -0.0009 -0.0342
0.0011  1 .
3494 C     C     . LEU LEU LEU B B 23  23  . 0.1394 0.1711 0.1452 0.0052  -0.0166
0.0241  1 .
3495 O     O     . LEU LEU LEU B B 23  23  . 0.1412 0.1561 0.1470 -0.0036 0.0067
0.0168  1 .
3496 N     N     . TYR TYR TYR B B 24  24  . 0.1452 0.1714 0.1617 0.0055  0.0054
0.0334  1 .
3497 CA    CA    . TYR TYR TYR B B 24  24  . 0.1568 0.1841 0.1983 -0.0167 -0.0095
0.0113  1 .
3498 CB    CB    . TYR TYR TYR B B 24  24  . 0.1612 0.1919 0.1986 -0.0064 -0.0089
0.0218  1 .
3499 CG    CG    . TYR TYR TYR B B 24  24  . 0.1799 0.2356 0.2115 -0.0031 -0.0167
0.0117  1 .
3500 CD1   CD1   . TYR TYR TYR B B 24  24  . 0.1776 0.2482 0.2051 -0.0029 -0.0638 -
0.0060 1 .
3501 CE1   CE1   . TYR TYR TYR B B 24  24  . 0.1684 0.3149 0.2624 0.0057  -0.0365
0.0203  1 .
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3502 CZ    CZ    . TYR TYR TYR B B 24  24  . 0.2228 0.3104 0.2838 -0.0001 -0.0638
0.0505  1 .
3503 OH    OH    . TYR TYR TYR B B 24  24  . 0.1800 0.3443 0.2938 -0.0327 -0.0415
0.0749  1 .
3504 CE2   CE2   . TYR TYR TYR B B 24  24  . 0.2402 0.3256 0.2499 0.0136  -0.0249
0.0340  1 .
3505 CD2   CD2   . TYR TYR TYR B B 24  24  . 0.2202 0.2932 0.2087 -0.0342 0.0089
0.0747  1 .
3506 C     C     . TYR TYR TYR B B 24  24  . 0.1787 0.1860 0.2139 -0.0027 -0.0067
0.0137  1 .
3507 O     O     . TYR TYR TYR B B 24  24  . 0.1764 0.1980 0.2237 -0.0082 0.0220
0.0009  1 .
3508 N     N     . THR THR THR B B 25  25  . 0.1670 0.1804 0.2196 -0.0152 -0.0093 -
0.0068 1 .
3509 CA    CA    . THR THR THR B B 25  25  . 0.1888 0.1979 0.2367 -0.0197 0.0022
0.0105  1 .
3510 CB    CB    . THR THR THR B B 25  25  . 0.1734 0.1682 0.1974 -0.0193 0.0205
0.0104  1 .
3511 OG1   OG1   . THR THR THR B B 25  25  . 0.1714 0.1958 0.2444 -0.0211 0.0255
0.0408  1 .
3512 CG2   CG2   . THR THR THR B B 25  25  . 0.2043 0.2086 0.2250 -0.0208 0.0568  -
0.0006 1 .
3513 C     C     . THR THR THR B B 25  25  . 0.1961 0.2112 0.2281 -0.0230 -0.0034
0.0125  1 .
3514 O     O     . THR THR THR B B 25  25  . 0.1807 0.2211 0.2539 -0.0293 0.0092
0.0155  1 .
3515 N     N     . ALA ALA ALA B B 26  26  . 0.1812 0.2351 0.2593 -0.0304 -0.0061
0.0158  1 .
3516 CA    CA    . ALA ALA ALA B B 26  26  . 0.2106 0.2356 0.2907 -0.0166 -0.0130
0.0264  1 .
3517 CB    CB    . ALA ALA ALA B B 26  26  . 0.2249 0.2506 0.3132 -0.0325 -0.0372
0.0307  1 .
3518 C     C     . ALA ALA ALA B B 26  26  . 0.2294 0.2520 0.2912 -0.0137 -0.0162
0.0322  1 .
3519 O     O     . ALA ALA ALA B B 26  26  . 0.2207 0.2549 0.3228 -0.0304 0.0130
0.0660  1 .
3520 N     N     . LYS LYS LYS B B 27  27  . 0.2166 0.2354 0.2679 -0.0076 -0.0288
0.0126  1 .
3521 CA    CA    . LYS LYS LYS B B 27  27  . 0.2496 0.2524 0.2821 -0.0024 -0.0247
0.0057  1 .
3522 CB    CB    . LYS LYS LYS B B 27  27  . 0.2660 0.2509 0.2747 0.0053  -0.0325
0.0074  1 .
3523 CG    CG    . LYS LYS LYS B B 27  27  . 0.3185 0.3444 0.3290 0.0046  -0.0509 -
0.0115 1 .
3524 CD    CD    . LYS LYS LYS B B 27  27  . 0.3857 0.3775 0.2652 -0.0133 -0.0029 -
0.0024 1 .
3525 CE    CE    . LYS LYS LYS B B 27  27  . 0.3814 0.3636 0.3874 -0.0726 -0.0092
0.0220  1 .
3526 NZ    NZ    . LYS LYS LYS B B 27  27  . 0.3705 0.4494 0.4448 -0.1083 0.0283
0.0398  1 .
3527 C     C     . LYS LYS LYS B B 27  27  . 0.2249 0.2395 0.2760 -0.0008 -0.0207
0.0158  1 .
3528 O     O     . LYS LYS LYS B B 27  27  . 0.2502 0.2798 0.3464 0.0061  -0.0307
0.0017  1 .
3529 N     N     . GLY GLY GLY B B 28  28  . 0.1985 0.2319 0.2416 -0.0098 -0.0279
0.0267  1 .
3530 CA    CA    . GLY GLY GLY B B 28  28  . 0.1962 0.2285 0.2674 -0.0338 -0.0202
0.0359  1 .
3531 C     C     . GLY GLY GLY B B 28  28  . 0.1914 0.2144 0.2421 -0.0260 -0.0110
0.0391  1 .
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3532 O     O     . GLY GLY GLY B B 28  28  . 0.1545 0.1877 0.2176 -0.0266 0.0078
0.0333  1 .
3533 N     N     . LEU LEU LEU B B 29  29  . 0.1492 0.1962 0.2177 -0.0157 -0.0208
0.0457  1 .
3534 CA    CA    . LEU LEU LEU B B 29  29  . 0.1835 0.1963 0.2118 -0.0075 -0.0221
0.0161  1 .
3535 CB    CB    . LEU LEU LEU B B 29  29  . 0.1586 0.2041 0.2092 -0.0112 -0.0297
0.0235  1 .
3536 CG    CG    . LEU LEU LEU B B 29  29  . 0.2426 0.2270 0.2818 -0.0195 -0.0745
0.0089  1 .
3537 CD1   CD1   . LEU LEU LEU B B 29  29  . 0.3111 0.2206 0.3271 -0.0209 -0.0589 -
0.0387 1 .
3538 CD2   CD2   . LEU LEU LEU B B 29  29  . 0.1940 0.2894 0.2360 -0.0263 -0.0640
0.0133  1 .
3539 C     C     . LEU LEU LEU B B 29  29  . 0.1545 0.1794 0.1919 0.0047  -0.0117
0.0030  1 .
3540 O     O     . LEU LEU LEU B B 29  29  . 0.1961 0.2013 0.2373 0.0118  0.0055  -
0.0007 1 .
3541 N     N     . PHE PHE PHE B B 30  30  . 0.1312 0.1651 0.1671 -0.0059 0.0069  -
0.0045 1 .
3542 CA    CA    . PHE PHE PHE B B 30  30  . 0.1377 0.1282 0.1606 -0.0102 0.0033  -
0.0017 1 .
3543 CB    CB    . PHE PHE PHE B B 30  30  . 0.1195 0.1295 0.1421 -0.0190 0.0098
0.0028  1 .
3544 CG    CG    . PHE PHE PHE B B 30  30  . 0.1165 0.1523 0.1936 -0.0147 0.0022
0.0000  1 .
3545 CD1   CD1   . PHE PHE PHE B B 30  30  . 0.1321 0.1603 0.1667 -0.0117 -0.0105
0.0030  1 .
3546 CE1   CE1   . PHE PHE PHE B B 30  30  . 0.1292 0.1781 0.1575 -0.0398 0.0073
0.0144  1 .
3547 CZ    CZ    . PHE PHE PHE B B 30  30  . 0.1380 0.2168 0.1548 0.0267  0.0351  -
0.0230 1 .
3548 CE2   CE2   . PHE PHE PHE B B 30  30  . 0.1830 0.1691 0.2202 -0.0142 0.0303  -
0.0039 1 .
3549 CD2   CD2   . PHE PHE PHE B B 30  30  . 0.1262 0.1886 0.1815 -0.0146 -0.0030
0.0050  1 .
3550 C     C     . PHE PHE PHE B B 30  30  . 0.1345 0.1540 0.1897 -0.0036 0.0007
0.0002  1 .
3551 O     O     . PHE PHE PHE B B 30  30  . 0.1755 0.1527 0.2337 -0.0119 0.0000  -
0.0377 1 .
3552 N     N     . ARG ARG ARG B B 31  31  . 0.1137 0.1341 0.1648 0.0076  -0.0109
0.0252  1 .
3553 CA    CA    . ARG ARG ARG B B 31  31  . 0.1049 0.0947 0.1154 0.0122  -0.0120
0.0016  1 .
3554 CB    CB    . ARG ARG ARG B B 31  31  . 0.1139 0.1182 0.1287 0.0036  -0.0420
0.0238  1 .
3555 CG    CG    . ARG ARG ARG B B 31  31  . 0.1123 0.0981 0.1112 0.0146  -0.0288 -
0.0056 1 .
3556 CD    CD    . ARG ARG ARG B B 31  31  . 0.1269 0.1137 0.1262 0.0147  -0.0341
0.0270  1 .
3557 NE    NE    . ARG ARG ARG B B 31  31  . 0.1487 0.1272 0.1407 0.0243  -0.0164 -
0.0019 1 .
3558 CZ    CZ    . ARG ARG ARG B B 31  31  . 0.1761 0.1913 0.1630 0.0053  -0.0151 -
0.0010 1 .
3559 NH1   NH1   . ARG ARG ARG B B 31  31  . 0.2173 0.2077 0.1670 -0.1088 -0.0147
0.0015  1 .
3560 NH2   NH2   . ARG ARG ARG B B 31  31  . 0.1819 0.1621 0.1715 0.0045  -0.0107 -
0.0253 1 .
3561 C     C     . ARG ARG ARG B B 31  31  . 0.1235 0.1071 0.1258 0.0104  0.0051
0.0117  1 .
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3562 O     O     . ARG ARG ARG B B 31  31  . 0.1289 0.1142 0.1243 -0.0009 0.0031
0.0249  1 .
3563 N     N     . ALA ALA ALA B B 32  32  . 0.0882 0.1003 0.1194 0.0068  0.0085
0.0157  1 .
3564 CA    CA    . ALA ALA ALA B B 32  32  . 0.1048 0.1051 0.1127 0.0061  0.0024
0.0100  1 .
3565 CB    CB    . ALA ALA ALA B B 32  32  . 0.1218 0.1210 0.1157 0.0004  -0.0043
0.0121  1 .
3566 C     C     . ALA ALA ALA B B 32  32  . 0.0995 0.1048 0.1115 0.0107  0.0000
0.0091  1 .
3567 O     O     . ALA ALA ALA B B 32  32  . 0.0932 0.1198 0.0917 -0.0112 0.0036
0.0043  1 .
3568 N     N     . ALA ALA ALA B B 33  33  . 0.0893 0.1035 0.1213 0.0074  -0.0124
0.0188  1 .
3569 CA    CA    . ALA ALA ALA B B 33  33  . 0.0863 0.1009 0.1019 0.0030  -0.0193
0.0099  1 .
3570 CB    CB    . ALA ALA ALA B B 33  33  . 0.0712 0.1301 0.1256 0.0237  -0.0354 -
0.0175 1 .
3571 C     C     . ALA ALA ALA B B 33  33  . 0.1299 0.1134 0.1121 0.0038  -0.0092 -
0.0015 1 .
3572 O     O     . ALA ALA ALA B B 33  33  . 0.1320 0.1123 0.1214 0.0069  -0.0002 -
0.0118 1 .
3573 N     N     . VAL VAL VAL B B 34  34  . 0.1154 0.0938 0.1162 -0.0028 0.0023
0.0111  1 .
3574 CA    CA    . VAL VAL VAL B B 34  34  . 0.1068 0.0979 0.1071 0.0115  0.0015
0.0020  1 .
3575 CB    CB    . VAL VAL VAL B B 34  34  . 0.0973 0.0980 0.0996 0.0133  0.0136
0.0037  1 .
3576 CG1   CG1   . VAL VAL VAL B B 34  34  . 0.1016 0.0921 0.0912 0.0069  0.0142  -
0.0096 1 .
3577 CG2   CG2   . VAL VAL VAL B B 34  34  . 0.1026 0.1372 0.1086 0.0249  -0.0144 -
0.0025 1 .
3578 C     C     . VAL VAL VAL B B 34  34  . 0.0848 0.0906 0.0975 0.0132  -0.0019
0.0001  1 .
3579 O     O     . VAL VAL VAL B B 34  34  . 0.1188 0.1051 0.0743 0.0375  -0.0019 -
0.0151 1 .
3580 N     N     . PRO PRO PRO B B 35  35  . 0.0902 0.0974 0.0729 0.0143  -0.0064 -
0.0024 1 .
3581 CA    CA    . PRO PRO PRO B B 35  35  . 0.0924 0.0708 0.0625 0.0069  0.0069
0.0016  1 .
3582 CB    CB    . PRO PRO PRO B B 35  35  . 0.0824 0.0875 0.0789 0.0090  -0.0087 -
0.0083 1 .
3583 CG    CG    . PRO PRO PRO B B 35  35  . 0.0762 0.0707 0.0943 0.0133  0.0076  -
0.0215 1 .
3584 CD    CD    . PRO PRO PRO B B 35  35  . 0.0782 0.0861 0.0805 0.0040  -0.0121 -
0.0063 1 .
3585 C     C     . PRO PRO PRO B B 35  35  . 0.0905 0.0782 0.0648 0.0086  0.0117
0.0141  1 .
3586 O     O     . PRO PRO PRO B B 35  35  . 0.1113 0.0985 0.1294 0.0165  0.0190
0.0151  1 .
3587 N     N     . SER SER SER B B 36  36  . 0.1081 0.0711 0.0731 0.0049  -0.0018
0.0029  1 .
3588 CA    CA    . SER SER SER B B 36  36  . 0.1139 0.0929 0.0820 -0.0075 0.0063  -
0.0163 1 .
3589 CB    CB    . SER SER SER B B 36  36  . 0.0947 0.1003 0.0613 0.0033  -0.0077 -
0.0215 1 .
3590 OG    OG    . SER SER SER B B 36  36  . 0.1485 0.1289 0.1193 -0.0124 0.0132  -
0.0155 1 .
3591 C     C     . SER SER SER B B 36  36  . 0.0940 0.0784 0.0730 -0.0046 -0.0139 -
0.0040 1 .
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3592 O     O     . SER SER SER B B 36  36  . 0.0802 0.0886 0.0737 0.0182  -0.0049
0.0005  1 .
3593 N     N     . GLY GLY GLY B B 37  37  . 0.1056 0.0764 0.0804 -0.0063 0.0008  -
0.0123 1 .
3594 CA    CA    . GLY GLY GLY B B 37  37  . 0.1094 0.1082 0.0806 -0.0168 -0.0041 -
0.0005 1 .
3595 C     C     . GLY GLY GLY B B 37  37  . 0.1072 0.0947 0.0988 0.0085  -0.0072
0.0027  1 .
3596 O     O     . GLY GLY GLY B B 37  37  . 0.1303 0.1083 0.0947 0.0151  -0.0107 -
0.0194 1 .
3597 N     N     . ALA ALA ALA B B 38  38  . 0.1230 0.1024 0.0854 0.0097  0.0092
0.0022  1 .
3598 CA    CA    . ALA ALA ALA B B 38  38  . 0.1179 0.1119 0.1151 -0.0004 -0.0082
0.0080  1 .
3599 CB    CB    . ALA ALA ALA B B 38  38  . 0.1213 0.1237 0.1336 0.0167  -0.0057
0.0015  1 .
3600 C     C     . ALA ALA ALA B B 38  38  . 0.1520 0.1075 0.0934 0.0193  -0.0132
0.0077  1 .
3601 O     O     . ALA ALA ALA B B 38  38  . 0.1621 0.1063 0.1004 0.0103  0.0014  -
0.0155 1 .
3602 N     N     . SER SER SER B B 39  39  . 0.1388 0.1229 0.1137 0.0114  -0.0093
0.0163  1 .
3603 CA    CA    . SER SER SER B B 39  39  . 0.1133 0.1058 0.0826 0.0161  -0.0098
0.0014  1 .
3604 CB    CB    . SER SER SER B B 39  39  . 0.1311 0.1080 0.0726 -0.0088 0.0104  -
0.0278 1 .
3605 OG    OG    . SER SER SER B B 39  39  . 0.0983 0.0979 0.0774 -0.0054 -0.0118
0.0091  1 .
3606 C     C     . SER SER SER B B 39  39  . 0.1114 0.1015 0.1001 0.0089  -0.0064 -
0.0001 1 .
3607 O     O     . SER SER SER B B 39  39  . 0.1518 0.0807 0.0759 0.0062  -0.0280 -
0.0119 1 .
3608 N     N     . THR THR THR B B 40  40  . 0.1335 0.1271 0.1020 -0.0001 -0.0112
0.0108  1 .
3609 CA    CA    . THR THR THR B B 40  40  . 0.1156 0.1052 0.0973 0.0072  0.0039
0.0273  1 .
3610 CB    CB    . THR THR THR B B 40  40  . 0.1486 0.1204 0.1203 -0.0094 0.0150
0.0177  1 .
3611 OG1   OG1   . THR THR THR B B 40  40  . 0.1734 0.1442 0.1410 0.0263  0.0206  -
0.0128 1 .
3612 CG2   CG2   . THR THR THR B B 40  40  . 0.1260 0.0793 0.0810 0.0437  0.0083
0.0347  1 .
3613 C     C     . THR THR THR B B 40  40  . 0.1275 0.1129 0.1145 0.0083  -0.0137
0.0155  1 .
3614 O     O     . THR THR THR B B 40  40  . 0.1899 0.1130 0.1358 -0.0103 -0.0360
0.0171  1 .
3615 N     N     . GLY GLY GLY B B 41  41  . 0.1114 0.0902 0.0814 0.0142  -0.0125
0.0125  1 .
3616 CA    CA    . GLY GLY GLY B B 41  41  . 0.1205 0.0708 0.0981 0.0153  0.0068
0.0131  1 .
3617 C     C     . GLY GLY GLY B B 41  41  . 0.1203 0.0953 0.1094 0.0030  0.0030
0.0119  1 .
3618 O     O     . GLY GLY GLY B B 41  41  . 0.1423 0.0820 0.1102 0.0141  -0.0051
0.0104  1 .
3619 N     N     . ILE ILE ILE B B 42  42  . 0.1292 0.0703 0.0781 0.0156  -0.0026
0.0170  1 .
3620 CA    CA    . ILE ILE ILE B B 42  42  . 0.1268 0.0970 0.1154 0.0107  -0.0008
0.0143  1 .
3621 CB    CB    . ILE ILE ILE B B 42  42  . 0.0946 0.0610 0.0739 0.0007  -0.0024
0.0056  1 .
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3622 CG1   CG1   . ILE ILE ILE B B 42  42  . 0.1391 0.1177 0.0815 0.0159  0.0097
0.0492  1 .
3623 CD1   CD1   . ILE ILE ILE B B 42  42  . 0.1570 0.1371 0.1418 -0.0042 0.0017  -
0.0094 1 .
3624 CG2   CG2   . ILE ILE ILE B B 42  42  . 0.1498 0.1649 0.1457 0.0022  -0.0274
0.0049  1 .
3625 C     C     . ILE ILE ILE B B 42  42  . 0.1355 0.0969 0.1229 0.0067  0.0077
0.0161  1 .
3626 O     O     . ILE ILE ILE B B 42  42  . 0.1454 0.1377 0.1108 0.0215  0.0274  -
0.0197 1 .
3627 N     N     . TYR TYR TYR B B 43  43  . 0.1359 0.0897 0.0907 -0.0041 0.0011
0.0282  1 .
3628 CA    CA    . TYR TYR TYR B B 43  43  . 0.1233 0.1063 0.1052 0.0153  0.0037
0.0236  1 .
3629 CB    CB    . TYR TYR TYR B B 43  43  . 0.1483 0.0903 0.0870 0.0167  0.0113
0.0195  1 .
3630 CG    CG    . TYR TYR TYR B B 43  43  . 0.1631 0.0858 0.1443 0.0171  0.0378
0.0162  1 .
3631 CD1   CD1   . TYR TYR TYR B B 43  43  . 0.1225 0.0843 0.1544 0.0107  -0.0004
0.0051  1 .
3632 CE1   CE1   . TYR TYR TYR B B 43  43  . 0.1358 0.1215 0.1242 0.0194  -0.0233
0.0405  1 .
3633 CZ    CZ    . TYR TYR TYR B B 43  43  . 0.1670 0.0997 0.1552 0.0049  0.0188
0.0224  1 .
3634 OH    OH    . TYR TYR TYR B B 43  43  . 0.1783 0.0786 0.1558 0.0066  0.0369
0.0248  1 .
3635 CE2   CE2   . TYR TYR TYR B B 43  43  . 0.2117 0.1541 0.1550 0.0225  0.0186
0.0155  1 .
3636 CD2   CD2   . TYR TYR TYR B B 43  43  . 0.1886 0.1294 0.1777 0.0232  0.0043
0.0118  1 .
3637 C     C     . TYR TYR TYR B B 43  43  . 0.1143 0.1021 0.1059 0.0044  -0.0060
0.0121  1 .
3638 O     O     . TYR TYR TYR B B 43  43  . 0.1381 0.0968 0.1017 0.0071  0.0327
0.0108  1 .
3639 N     N     . GLU GLU GLU B B 44  44  . 0.1279 0.0857 0.1036 0.0321  0.0084
0.0036  1 .
3640 CA    CA    . GLU GLU GLU B B 44  44  . 0.0893 0.1059 0.1151 0.0206  0.0057
0.0139  1 .
3641 CB    CB    . GLU GLU GLU B B 44  44  . 0.1147 0.1096 0.0708 0.0404  0.0014
0.0194  1 .
3642 CG    CG    . GLU GLU GLU B B 44  44  . 0.0696 0.0836 0.0978 0.0384  0.0184
0.0062  1 .
3643 CD    CD    . GLU GLU GLU B B 44  44  . 0.1059 0.1103 0.0962 0.0175  -0.0135 -
0.0065 1 .
3644 OE1   OE1   . GLU GLU GLU B B 44  44  . 0.1568 0.1250 0.1296 0.0210  -0.0014
0.0002  1 .
3645 OE2   OE2   . GLU GLU GLU B B 44  44  . 0.1567 0.1285 0.1394 0.0212  -0.0095
0.0128  1 .
3646 C     C     . GLU GLU GLU B B 44  44  . 0.0988 0.1144 0.1014 0.0087  -0.0015 -
0.0055 1 .
3647 O     O     . GLU GLU GLU B B 44  44  . 0.0947 0.1011 0.1031 0.0201  -0.0129 -
0.0060 1 .
3648 N     N     . ALA ALA ALA B B 45  45  . 0.1090 0.1237 0.1164 0.0064  -0.0028
0.0155  1 .
3649 CA    CA    . ALA ALA ALA B B 45  45  . 0.1278 0.1465 0.1123 -0.0046 0.0078  -
0.0178 1 .
3650 CB    CB    . ALA ALA ALA B B 45  45  . 0.1359 0.1245 0.1191 -0.0191 -0.0088 -
0.0003 1 .
3651 C     C     . ALA ALA ALA B B 45  45  . 0.1205 0.1382 0.1047 0.0170  -0.0086 -
0.0008 1 .
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3652 O     O     . ALA ALA ALA B B 45  45  . 0.1480 0.1314 0.1277 0.0436  0.0051
0.0089  1 .
3653 N     N     . LEU LEU LEU B B 46  46  . 0.1301 0.1102 0.1166 0.0111  -0.0009 -
0.0059 1 .
3654 CA    CA    . LEU LEU LEU B B 46  46  . 0.1370 0.1251 0.1164 0.0235  -0.0109 -
0.0017 1 .
3655 CB    CB    . LEU LEU LEU B B 46  46  . 0.1742 0.1126 0.1381 0.0205  -0.0232 -
0.0154 1 .
3656 CG    CG    . LEU LEU LEU B B 46  46  . 0.1971 0.1994 0.2007 0.0211  -0.0206 -
0.0415 1 .
3657 CD1   CD1   . LEU LEU LEU B B 46  46  . 0.2528 0.2329 0.2762 -0.0702 -0.0138 -
0.0329 1 .
3658 CD2   CD2   . LEU LEU LEU B B 46  46  . 0.2672 0.2846 0.2426 0.0426  0.0113  -
0.0260 1 .
3659 C     C     . LEU LEU LEU B B 46  46  . 0.1421 0.1415 0.1233 0.0074  -0.0004
0.0039  1 .
3660 O     O     . LEU LEU LEU B B 46  46  . 0.1700 0.1784 0.1555 0.0006  -0.0014
0.0196  1 .
3661 N     N     . GLU GLU GLU B B 47  47  . 0.1271 0.1271 0.0988 0.0304  0.0108
0.0133  1 .
3662 CA    CA    . GLU GLU GLU B B 47  47  . 0.1095 0.1152 0.0834 0.0280  -0.0012
0.0052  1 .
3663 CB    CB    . GLU GLU GLU B B 47  47  . 0.1079 0.1034 0.0967 0.0334  -0.0119
0.0037  1 .
3664 CG    CG    . GLU GLU GLU B B 47  47  . 0.1097 0.1260 0.0702 0.0482  -0.0070 -
0.0090 1 .
3665 CD    CD    . GLU GLU GLU B B 47  47  . 0.1235 0.1425 0.1261 0.0189  -0.0063 -
0.0283 1 .
3666 OE1   OE1   . GLU GLU GLU B B 47  47  . 0.2148 0.1292 0.1197 0.0116  0.0141  -
0.0145 1 .
3667 OE2   OE2   . GLU GLU GLU B B 47  47  . 0.1852 0.1699 0.1752 0.0201  0.0247  -
0.0060 1 .
3668 C     C     . GLU GLU GLU B B 47  47  . 0.1172 0.1064 0.1175 0.0045  0.0036
0.0029  1 .
3669 O     O     . GLU GLU GLU B B 47  47  . 0.1411 0.1234 0.1400 -0.0094 0.0172
0.0114  1 .
3670 N     N     . LEU LEU LEU B B 48  48  . 0.1166 0.0824 0.0822 0.0267  0.0106  -
0.0174 1 .
3671 CA    CA    . LEU LEU LEU B B 48  48  . 0.1254 0.1020 0.1088 0.0152  0.0023  -
0.0028 1 .
3672 CB    CB    . LEU LEU LEU B B 48  48  . 0.1235 0.1022 0.1116 0.0208  0.0205  -
0.0185 1 .
3673 CG    CG    . LEU LEU LEU B B 48  48  . 0.1297 0.1214 0.1058 -0.0010 0.0210  -
0.0246 1 .
3674 CD1   CD1   . LEU LEU LEU B B 48  48  . 0.2066 0.1392 0.1605 0.0172  0.0145  -
0.0305 1 .
3675 CD2   CD2   . LEU LEU LEU B B 48  48  . 0.1437 0.1606 0.1091 -0.0132 -0.0039
0.0042  1 .
3676 C     C     . LEU LEU LEU B B 48  48  . 0.1329 0.1140 0.1017 0.0018  0.0009  -
0.0142 1 .
3677 O     O     . LEU LEU LEU B B 48  48  . 0.1308 0.0951 0.1088 0.0313  -0.0036 -
0.0140 1 .
3678 N     N     . ARG ARG ARG B B 49  49  . 0.1514 0.1050 0.1355 0.0081  -0.0104 -
0.0136 1 .
3679 CA    CA    . ARG ARG ARG B B 49  49  . 0.1571 0.1186 0.1173 0.0106  -0.0086 -
0.0203 1 .
3680 CB    CB    . ARG ARG ARG B B 49  49  . 0.1910 0.1556 0.1389 0.0379  -0.0015 -
0.0227 1 .
3681 CG    CG    . ARG ARG ARG B B 49  49  . 0.2037 0.1914 0.1934 0.0740  -0.0019 -
0.0631 1 .
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3682 CD    CD    . ARG ARG ARG B B 49  49  . 0.3518 0.1515 0.1325 0.0578  -0.0218 -
0.0109 1 .
3683 NE    NE    . ARG ARG ARG B B 49  49  . 0.2217 0.1445 0.1717 0.0238  0.0111
0.0098  1 .
3684 CZ    CZ    . ARG ARG ARG B B 49  49  . 0.2046 0.1374 0.1595 0.0617  0.0128
0.0177  1 .
3685 NH1   NH1   . ARG ARG ARG B B 49  49  . 0.1425 0.1015 0.0775 0.0210  0.0176  -
0.0103 1 .
3686 NH2   NH2   . ARG ARG ARG B B 49  49  . 0.2522 0.1256 0.1438 0.0378  -0.0046
0.0170  1 .
3687 C     C     . ARG ARG ARG B B 49  49  . 0.1580 0.1160 0.1366 0.0242  -0.0023 -
0.0117 1 .
3688 O     O     . ARG ARG ARG B B 49  49  . 0.2064 0.1291 0.1237 0.0389  -0.0097 -
0.0011 1 .
3689 N     N     . ASP ASP ASP B B 50  50  . 0.1306 0.0842 0.0883 0.0281  0.0132  -
0.0166 1 .
3690 CA    CA    . ASP ASP ASP B B 50  50  . 0.1630 0.1192 0.1263 0.0052  -0.0065 -
0.0204 1 .
3691 CB    CB    . ASP ASP ASP B B 50  50  . 0.1406 0.1003 0.1269 0.0003  -0.0034 -
0.0055 1 .
3692 CG    CG    . ASP ASP ASP B B 50  50  . 0.2039 0.1479 0.1480 -0.0083 -0.0117 -
0.0012 1 .
3693 OD1   OD1   . ASP ASP ASP B B 50  50  . 0.1596 0.1051 0.1888 0.0419  0.0175
0.0103  1 .
3694 OD2   OD2   . ASP ASP ASP B B 50  50  . 0.2246 0.1235 0.1560 0.0184  0.0221
0.0189  1 .
3695 C     C     . ASP ASP ASP B B 50  50  . 0.1836 0.1428 0.1362 0.0120  -0.0040 -
0.0018 1 .
3696 O     O     . ASP ASP ASP B B 50  50  . 0.2046 0.1259 0.1645 0.0360  0.0015  -
0.0160 1 .
3697 N     N     . GLY GLY GLY B B 51  51  . 0.1932 0.1656 0.1575 0.0043  -0.0013 -
0.0060 1 .
3698 CA    CA    . GLY GLY GLY B B 51  51  . 0.2303 0.1950 0.2097 -0.0014 -0.0174
0.0023  1 .
3699 C     C     . GLY GLY GLY B B 51  51  . 0.2530 0.2263 0.2528 -0.0018 -0.0085 -
0.0102 1 .
3700 O     O     . GLY GLY GLY B B 51  51  . 0.2741 0.2121 0.2961 -0.0142 -0.0129 -
0.0192 1 .
3701 N     N     . ASP ASP ASP B B 52  52  . 0.2454 0.2270 0.2423 0.0134  -0.0104 -
0.0017 1 .
3702 CA    CA    . ASP ASP ASP B B 52  52  . 0.2410 0.2076 0.2373 0.0133  -0.0192 -
0.0276 1 .
3703 CB    CB    . ASP ASP ASP B B 52  52  . 0.2723 0.2187 0.2349 0.0223  -0.0186 -
0.0351 1 .
3704 CG    CG    . ASP ASP ASP B B 52  52  . 0.2748 0.2206 0.2451 0.0191  -0.0095 -
0.0296 1 .
3705 OD1   OD1   . ASP ASP ASP B B 52  52  . 0.3580 0.2113 0.2795 0.0206  -0.0650 -
0.0789 1 .
3706 OD2   OD2   . ASP ASP ASP B B 52  52  . 0.3275 0.2280 0.2103 0.0627  0.0100  -
0.0471 1 .
3707 C     C     . ASP ASP ASP B B 52  52  . 0.2559 0.2182 0.2524 0.0061  -0.0209 -
0.0099 1 .
3708 O     O     . ASP ASP ASP B B 52  52  . 0.2529 0.1897 0.2567 0.0099  -0.0231 -
0.0157 1 .
3709 N     N     . LYS LYS LYS B B 53  53  . 0.2688 0.2303 0.2949 0.0063  -0.0252 -
0.0027 1 .
3710 CA    CA    . LYS LYS LYS B B 53  53  . 0.2905 0.2518 0.3200 -0.0118 -0.0120 -
0.0106 1 .
3711 CB    CB    . LYS LYS LYS B B 53  53  . 0.2970 0.2746 0.3409 -0.0135 -0.0163
0.0023  1 .
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3712 CG    CG    . LYS LYS LYS B B 53  53  . 0.3634 0.3300 0.3630 0.0126  -0.0201
0.0109  1 .
3713 C     C     . LYS LYS LYS B B 53  53  . 0.2978 0.2427 0.3325 -0.0148 -0.0158 -
0.0145 1 .
3714 O     O     . LYS LYS LYS B B 53  53  . 0.2999 0.2458 0.3585 -0.0262 -0.0422 -
0.0066 1 .
3715 N     N     . GLN GLN GLN B B 54  54  . 0.3470 0.2382 0.3174 -0.0115 -0.0257 -
0.0237 1 .
3716 CA    CA    . GLN GLN GLN B B 54  54  . 0.3659 0.2720 0.3165 0.0014  -0.0421 -
0.0177 1 .
3717 CB    CB    . GLN GLN GLN B B 54  54  . 0.3796 0.3184 0.3364 0.0043  -0.0387 -
0.0133 1 .
3718 CG    CG    . GLN GLN GLN B B 54  54  . 0.4864 0.4021 0.4398 -0.0016 -0.0328 -
0.0103 1 .
3719 CD    CD    . GLN GLN GLN B B 54  54  . 0.5515 0.5507 0.5386 -0.0341 -0.0376 -
0.0061 1 .
3720 OE1   OE1   . GLN GLN GLN B B 54  54  . 0.6369 0.5749 0.5316 -0.0589 0.0036  -
0.0256 1 .
3721 NE2   NE2   . GLN GLN GLN B B 54  54  . 0.6520 0.6243 0.5773 -0.0156 -0.0436
0.0131  1 .
3722 C     C     . GLN GLN GLN B B 54  54  . 0.3362 0.2557 0.2741 -0.0039 -0.0539 -
0.0193 1 .
3723 O     O     . GLN GLN GLN B B 54  54  . 0.4145 0.2754 0.2543 -0.0084 -0.0840 -
0.0522 1 .
3724 N     N     . ARG ARG ARG B B 55  55  . 0.3057 0.2026 0.2100 0.0173  -0.0398 -
0.0155 1 .
3725 CA    CA    . ARG ARG ARG B B 55  55  . 0.1929 0.1801 0.1568 -0.0111 -0.0189 -
0.0300 1 .
3726 CB    CB    . ARG ARG ARG B B 55  55  . 0.2225 0.1935 0.1759 0.0132  -0.0025 -
0.0293 1 .
3727 CG    CG    . ARG ARG ARG B B 55  55  . 0.1808 0.2196 0.1580 -0.0137 -0.0129 -
0.0036 1 .
3728 CD    CD    . ARG ARG ARG B B 55  55  . 0.1813 0.1929 0.1513 0.0395  -0.0025
0.0072  1 .
3729 NE    NE    . ARG ARG ARG B B 55  55  . 0.1338 0.1890 0.1654 0.0107  -0.0282 -
0.0285 1 .
3730 CZ    CZ    . ARG ARG ARG B B 55  55  . 0.1187 0.1603 0.1550 0.0202  -0.0256 -
0.0105 1 .
3731 NH1   NH1   . ARG ARG ARG B B 55  55  . 0.0749 0.1474 0.0771 0.0458  0.0029  -
0.0242 1 .
3732 NH2   NH2   . ARG ARG ARG B B 55  55  . 0.1295 0.1417 0.1816 0.0215  0.0052
0.0000  1 .
3733 C     C     . ARG ARG ARG B B 55  55  . 0.1557 0.1472 0.1409 -0.0012 0.0001  -
0.0150 1 .
3734 O     O     . ARG ARG ARG B B 55  55  . 0.1202 0.1564 0.1641 0.0004  0.0042  -
0.0255 1 .
3735 N     N     . TYR TYR TYR B B 56  56  . 0.1240 0.1131 0.1196 -0.0013 -0.0115 -
0.0331 1 .
3736 CA    CA    . TYR TYR TYR B B 56  56  . 0.1327 0.1295 0.1251 -0.0285 -0.0201 -
0.0153 1 .
3737 CB    CB    . TYR TYR TYR B B 56  56  . 0.1090 0.1016 0.1366 -0.0057 -0.0209 -
0.0273 1 .
3738 CG    CG    . TYR TYR TYR B B 56  56  . 0.1063 0.0950 0.1030 -0.0051 0.0000  -
0.0196 1 .
3739 CD1   CD1   . TYR TYR TYR B B 56  56  . 0.1152 0.0721 0.1081 0.0182  0.0426  -
0.0085 1 .
3740 CE1   CE1   . TYR TYR TYR B B 56  56  . 0.1279 0.0952 0.1083 -0.0044 0.0056
0.0209  1 .
3741 CZ    CZ    . TYR TYR TYR B B 56  56  . 0.1200 0.0974 0.0745 0.0079  0.0237
0.0217  1 .
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3742 OH    OH    . TYR TYR TYR B B 56  56  . 0.1574 0.1193 0.1305 -0.0233 -0.0159 -
0.0160 1 .
3743 CE2   CE2   . TYR TYR TYR B B 56  56  . 0.1018 0.1198 0.1291 -0.0071 0.0183
0.0035  1 .
3744 CD2   CD2   . TYR TYR TYR B B 56  56  . 0.0903 0.1076 0.1010 0.0141  -0.0316 -
0.0022 1 .
3745 C     C     . TYR TYR TYR B B 56  56  . 0.1712 0.1655 0.1617 -0.0053 -0.0164 -
0.0115 1 .
3746 O     O     . TYR TYR TYR B B 56  56  . 0.1617 0.1684 0.1636 -0.0028 -0.0120 -
0.0160 1 .
3747 N     N     . LEU LEU LEU B B 57  57  . 0.1980 0.1893 0.2092 -0.0254 -0.0139 -
0.0088 1 .
3748 CA    CA    . LEU LEU LEU B B 57  57  . 0.2138 0.2042 0.2233 -0.0188 0.0044  -
0.0002 1 .
3749 CB    CB    . LEU LEU LEU B B 57  57  . 0.2270 0.2779 0.2744 -0.0309 -0.0074
0.0096  1 .
3750 CG    CG    . LEU LEU LEU B B 57  57  . 0.2906 0.3451 0.3398 -0.0345 -0.0248
0.0152  1 .
3751 CD1   CD1   . LEU LEU LEU B B 57  57  . 0.3502 0.3295 0.4471 -0.0136 -0.0302 -
0.0755 1 .
3752 CD2   CD2   . LEU LEU LEU B B 57  57  . 0.3713 0.4406 0.4591 -0.1002 -0.0099 -
0.0029 1 .
3753 C     C     . LEU LEU LEU B B 57  57  . 0.2040 0.1942 0.2083 -0.0246 0.0080  -
0.0069 1 .
3754 O     O     . LEU LEU LEU B B 57  57  . 0.2048 0.2131 0.2100 -0.0262 0.0078  -
0.0099 1 .
3755 N     N     . GLY GLY GLY B B 58  58  . 0.1830 0.1223 0.1976 -0.0090 0.0072  -
0.0149 1 .
3756 CA    CA    . GLY GLY GLY B B 58  58  . 0.2001 0.1536 0.1768 -0.0150 -0.0150 -
0.0177 1 .
3757 C     C     . GLY GLY GLY B B 58  58  . 0.1606 0.1543 0.1735 0.0013  -0.0073 -
0.0022 1 .
3758 O     O     . GLY GLY GLY B B 58  58  . 0.1787 0.1358 0.1842 0.0046  -0.0277
0.0127  1 .
3759 N     N     . LYS LYS LYS B B 59  59  . 0.1602 0.1231 0.1581 -0.0149 0.0138
0.0053  1 .
3760 CA    CA    . LYS LYS LYS B B 59  59  . 0.1169 0.1185 0.1314 0.0008  0.0187  -
0.0091 1 .
3761 CB    CB    . LYS LYS LYS B B 59  59  . 0.1302 0.1244 0.1587 -0.0023 0.0286  -
0.0043 1 .
3762 CG    CG    . LYS LYS LYS B B 59  59  . 0.1294 0.1655 0.2253 -0.0056 0.0560
0.0022  1 .
3763 CD    CD    . LYS LYS LYS B B 59  59  . 0.2128 0.2251 0.3361 0.0538  0.0474
0.0851  1 .
3764 CE    CE    . LYS LYS LYS B B 59  59  . 0.2312 0.3557 0.3249 -0.0031 0.0523
0.1053  1 .
3765 NZ    NZ    . LYS LYS LYS B B 59  59  . 0.3293 0.4103 0.3845 0.0747  0.0068
0.1105  1 .
3766 C     C     . LYS LYS LYS B B 59  59  . 0.1174 0.1070 0.1102 -0.0016 0.0036  -
0.0065 1 .
3767 O     O     . LYS LYS LYS B B 59  59  . 0.1284 0.1189 0.1288 0.0063  0.0053  -
0.0083 1 .
3768 N     N     . GLY GLY GLY B B 60  60  . 0.1060 0.1101 0.0977 0.0091  0.0176
0.0123  1 .
3769 CA    CA    . GLY GLY GLY B B 60  60  . 0.0969 0.1220 0.0953 -0.0162 -0.0001
0.0073  1 .
3770 C     C     . GLY GLY GLY B B 60  60  . 0.1169 0.1194 0.1150 0.0020  0.0024
0.0002  1 .
3771 O     O     . GLY GLY GLY B B 60  60  . 0.1488 0.0953 0.1247 -0.0010 0.0014
0.0026  1 .
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3772 N     N     . VAL VAL VAL B B 61  61  . 0.1099 0.0975 0.0882 0.0014  0.0063  -
0.0123 1 .
3773 CA    CA    . VAL VAL VAL B B 61  61  . 0.1234 0.1093 0.0961 0.0052  0.0094  -
0.0050 1 .
3774 CB    CB    . VAL VAL VAL B B 61  61  . 0.1091 0.0947 0.0956 0.0105  0.0014
0.0049  1 .
3775 CG1   CG1   . VAL VAL VAL B B 61  61  . 0.1205 0.1203 0.1065 -0.0030 0.0252
0.0251  1 .
3776 CG2   CG2   . VAL VAL VAL B B 61  61  . 0.0834 0.0852 0.0749 0.0094  -0.0048
0.0128  1 .
3777 C     C     . VAL VAL VAL B B 61  61  . 0.1326 0.1120 0.1259 0.0162  -0.0030 -
0.0152 1 .
3778 O     O     . VAL VAL VAL B B 61  61  . 0.1225 0.1067 0.1138 0.0099  0.0189  -
0.0116 1 .
3779 N     N     . LEU LEU LEU B B 62  62  . 0.1561 0.1040 0.1081 0.0330  -0.0039 -
0.0032 1 .
3780 CA    CA    . LEU LEU LEU B B 62  62  . 0.1239 0.1305 0.1258 0.0135  -0.0170 -
0.0096 1 .
3781 CB    CB    . LEU LEU LEU B B 62  62  . 0.1242 0.1560 0.1072 0.0231  -0.0450 -
0.0140 1 .
3782 CG    CG    . LEU LEU LEU B B 62  62  . 0.1516 0.1917 0.1834 0.0485  -0.0439 -
0.0344 1 .
3783 CD1   CD1   . LEU LEU LEU B B 62  62  . 0.1657 0.2381 0.1523 0.0211  -0.0483 -
0.0686 1 .
3784 CD2   CD2   . LEU LEU LEU B B 62  62  . 0.1006 0.2346 0.1627 0.0394  0.0569
0.0149  1 .
3785 C     C     . LEU LEU LEU B B 62  62  . 0.1324 0.1218 0.1299 0.0144  -0.0176
0.0024  1 .
3786 O     O     . LEU LEU LEU B B 62  62  . 0.1595 0.1476 0.1509 0.0125  0.0000  -
0.0088 1 .
3787 N     N     . LYS LYS LYS B B 63  63  . 0.1453 0.1277 0.1221 0.0157  -0.0135 -
0.0114 1 .
3788 CA    CA    . LYS LYS LYS B B 63  63  . 0.1461 0.1343 0.1344 0.0066  -0.0009 -
0.0080 1 .
3789 CB    CB    . LYS LYS LYS B B 63  63  . 0.1386 0.1043 0.1465 -0.0014 0.0110  -
0.0127 1 .
3790 CG    CG    . LYS LYS LYS B B 63  63  . 0.1499 0.1202 0.1386 0.0079  0.0221  -
0.0128 1 .
3791 CD    CD    . LYS LYS LYS B B 63  63  . 0.1915 0.1268 0.1565 -0.0095 0.0122
0.0069  1 .
3792 CE    CE    . LYS LYS LYS B B 63  63  . 0.2395 0.1539 0.1588 -0.0351 0.0087  -
0.0079 1 .
3793 NZ    NZ    . LYS LYS LYS B B 63  63  . 0.2925 0.1466 0.2665 0.0263  0.0362  -
0.0234 1 .
3794 C     C     . LYS LYS LYS B B 63  63  . 0.1438 0.1325 0.1288 0.0080  -0.0042
0.0025  1 .
3795 O     O     . LYS LYS LYS B B 63  63  . 0.1316 0.1371 0.1223 0.0013  -0.0053 -
0.0103 1 .
3796 N     N     . ALA ALA ALA B B 64  64  . 0.1471 0.1155 0.0972 0.0228  0.0172
0.0077  1 .
3797 CA    CA    . ALA ALA ALA B B 64  64  . 0.1180 0.1303 0.1052 0.0304  0.0069
0.0085  1 .
3798 CB    CB    . ALA ALA ALA B B 64  64  . 0.1204 0.1479 0.0782 0.0464  0.0013  -
0.0101 1 .
3799 C     C     . ALA ALA ALA B B 64  64  . 0.1211 0.1351 0.1289 0.0177  0.0073  -
0.0031 1 .
3800 O     O     . ALA ALA ALA B B 64  64  . 0.1390 0.1504 0.1148 0.0028  -0.0206 -
0.0120 1 .
3801 N     N     . VAL VAL VAL B B 65  65  . 0.1065 0.1204 0.0985 0.0326  0.0248  -
0.0203 1 .
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3802 CA    CA    . VAL VAL VAL B B 65  65  . 0.1078 0.1007 0.1049 0.0279  0.0087  -
0.0066 1 .
3803 CB    CB    . VAL VAL VAL B B 65  65  . 0.0855 0.1186 0.1117 0.0221  0.0145
0.0035  1 .
3804 CG1   CG1   . VAL VAL VAL B B 65  65  . 0.1044 0.1363 0.1508 0.0088  0.0300
0.0246  1 .
3805 CG2   CG2   . VAL VAL VAL B B 65  65  . 0.1065 0.1359 0.1258 0.0426  0.0149  -
0.0006 1 .
3806 C     C     . VAL VAL VAL B B 65  65  . 0.1020 0.1078 0.0998 0.0120  0.0040  -
0.0055 1 .
3807 O     O     . VAL VAL VAL B B 65  65  . 0.1116 0.1163 0.1310 0.0221  0.0121  -
0.0067 1 .
3808 N     N     . ASP ASP ASP B B 66  66  . 0.1257 0.1161 0.1378 0.0250  0.0127  -
0.0092 1 .
3809 CA    CA    . ASP ASP ASP B B 66  66  . 0.1432 0.1432 0.1567 0.0127  0.0084  -
0.0025 1 .
3810 CB    CB    . ASP ASP ASP B B 66  66  . 0.1611 0.1652 0.1871 0.0137  0.0181  -
0.0298 1 .
3811 CG    CG    . ASP ASP ASP B B 66  66  . 0.2361 0.2548 0.2654 0.0136  0.0120  -
0.0073 1 .
3812 OD1   OD1   . ASP ASP ASP B B 66  66  . 0.3189 0.3221 0.4156 0.0936  0.0186  -
0.0205 1 .
3813 OD2   OD2   . ASP ASP ASP B B 66  66  . 0.2901 0.4311 0.2447 -0.0135 0.0717  -
0.0394 1 .
3814 C     C     . ASP ASP ASP B B 66  66  . 0.1453 0.1435 0.1746 0.0084  0.0047
0.0020  1 .
3815 O     O     . ASP ASP ASP B B 66  66  . 0.1369 0.1634 0.2005 0.0249  0.0208
0.0122  1 .
3816 N     N     . HIS HIS HIS B B 67  67  . 0.1160 0.1581 0.1722 0.0146  0.0090  -
0.0045 1 .
3817 CA    CA    . HIS HIS HIS B B 67  67  . 0.1373 0.1579 0.1563 0.0211  -0.0025
0.0038  1 .
3818 CB    CB    . HIS HIS HIS B B 67  67  . 0.1433 0.1405 0.1469 0.0130  0.0011
0.0050  1 .
3819 CG    CG    . HIS HIS HIS B B 67  67  . 0.1523 0.1451 0.1724 0.0280  0.0057  -
0.0185 1 .
3820 ND1   ND1   . HIS HIS HIS B B 67  67  . 0.1693 0.1494 0.1624 0.0567  0.0017  -
0.0028 1 .
3821 CE1   CE1   . HIS HIS HIS B B 67  67  . 0.1548 0.1866 0.2290 0.0355  0.0217
0.0015  1 .
3822 NE2   NE2   . HIS HIS HIS B B 67  67  . 0.1802 0.1979 0.1776 0.0055  0.0120
0.0000  1 .
3823 CD2   CD2   . HIS HIS HIS B B 67  67  . 0.1651 0.1780 0.2065 0.0329  -0.0065
0.0355  1 .
3824 C     C     . HIS HIS HIS B B 67  67  . 0.1452 0.1512 0.1745 0.0264  -0.0086
0.0038  1 .
3825 O     O     . HIS HIS HIS B B 67  67  . 0.1399 0.1800 0.1566 0.0309  -0.0163
0.0320  1 .
3826 N     N     . ILE ILE ILE B B 68  68  . 0.1272 0.1393 0.1435 0.0387  -0.0092
0.0098  1 .
3827 CA    CA    . ILE ILE ILE B B 68  68  . 0.0990 0.1163 0.1342 0.0341  -0.0014 -
0.0016 1 .
3828 CB    CB    . ILE ILE ILE B B 68  68  . 0.1115 0.0904 0.1221 0.0352  0.0075  -
0.0180 1 .
3829 CG1   CG1   . ILE ILE ILE B B 68  68  . 0.1027 0.1474 0.1626 0.0737  0.0030
0.0064  1 .
3830 CD1   CD1   . ILE ILE ILE B B 68  68  . 0.0869 0.1125 0.1544 0.0726  0.0398
0.0347  1 .
3831 CG2   CG2   . ILE ILE ILE B B 68  68  . 0.1296 0.1316 0.1618 0.0058  0.0100
0.0075  1 .
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3832 C     C     . ILE ILE ILE B B 68  68  . 0.1334 0.1455 0.1597 0.0329  -0.0033 -
0.0087 1 .
3833 O     O     . ILE ILE ILE B B 68  68  . 0.1109 0.1868 0.1690 0.0249  0.0118  -
0.0175 1 .
3834 N     N     . ASN ASN ASN B B 69  69  . 0.1172 0.1600 0.1463 0.0496  0.0152  -
0.0042 1 .
3835 CA    CA    . ASN ASN ASN B B 69  69  . 0.1374 0.1623 0.1610 0.0459  0.0079
0.0082  1 .
3836 CB    CB    . ASN ASN ASN B B 69  69  . 0.1177 0.1411 0.1495 0.0535  0.0000  -
0.0001 1 .
3837 CG    CG    . ASN ASN ASN B B 69  69  . 0.1059 0.1064 0.1209 0.0498  -0.0120
0.0190  1 .
3838 OD1   OD1   . ASN ASN ASN B B 69  69  . 0.0968 0.1598 0.1541 0.0515  -0.0164
0.0219  1 .
3839 ND2   ND2   . ASN ASN ASN B B 69  69  . 0.0956 0.1888 0.1371 -0.0144 0.0079
0.0258  1 .
3840 C     C     . ASN ASN ASN B B 69  69  . 0.1210 0.1763 0.1735 0.0358  0.0181
0.0016  1 .
3841 O     O     . ASN ASN ASN B B 69  69  . 0.1386 0.2174 0.1954 0.0372  0.0212
0.0109  1 .
3842 N     N     . SER SER SER B B 70  70  . 0.1385 0.2020 0.1778 0.0607  0.0190  -
0.0153 1 .
3843 CA    CA    . SER SER SER B B 70  70  . 0.1671 0.2121 0.1918 0.0537  0.0061  -
0.0142 1 .
3844 CB    CB    . SER SER SER B B 70  70  . 0.1720 0.2250 0.2185 0.0584  -0.0105 -
0.0361 1 .
3845 OG    OG    . SER SER SER B B 70  70  . 0.2661 0.3041 0.2419 0.0509  0.0126  -
0.0192 1 .
3846 C     C     . SER SER SER B B 70  70  . 0.1537 0.2175 0.1850 0.0443  0.0069  -
0.0139 1 .
3847 O     O     . SER SER SER B B 70  70  . 0.1584 0.2258 0.2064 0.0538  0.0246  -
0.0268 1 .
3848 N     N     . THR THR THR B B 71  71  . 0.1333 0.1926 0.1716 0.0394  0.0109  -
0.0183 1 .
3849 CA    CA    . THR THR THR B B 71  71  . 0.1534 0.1815 0.1694 0.0339  0.0008  -
0.0034 1 .
3850 CB    CB    . THR THR THR B B 71  71  . 0.1241 0.1985 0.1827 0.0255  -0.0046 -
0.0105 1 .
3851 OG1   OG1   . THR THR THR B B 71  71  . 0.1291 0.1899 0.2151 0.0395  0.0074  -
0.0236 1 .
3852 CG2   CG2   . THR THR THR B B 71  71  . 0.1727 0.2273 0.2020 0.0176  -0.0395 -
0.0116 1 .
3853 C     C     . THR THR THR B B 71  71  . 0.1453 0.1774 0.1685 0.0250  0.0074
0.0074  1 .
3854 O     O     . THR THR THR B B 71  71  . 0.1291 0.1934 0.1690 0.0312  0.0002
0.0170  1 .
3855 N     N     . ILE ILE ILE B B 72  72  . 0.1143 0.1570 0.1630 0.0320  0.0061
0.0272  1 .
3856 CA    CA    . ILE ILE ILE B B 72  72  . 0.1089 0.1194 0.1259 0.0294  0.0012
0.0059  1 .
3857 CB    CB    . ILE ILE ILE B B 72  72  . 0.1066 0.1239 0.1333 0.0171  0.0124
0.0115  1 .
3858 CG1   CG1   . ILE ILE ILE B B 72  72  . 0.1041 0.1228 0.1641 0.0747  0.0394
0.0021  1 .
3859 CD1   CD1   . ILE ILE ILE B B 72  72  . 0.0910 0.1809 0.1634 0.0900  0.0552
0.0391  1 .
3860 CG2   CG2   . ILE ILE ILE B B 72  72  . 0.1301 0.1755 0.1568 0.0244  -0.0314
0.0059  1 .
3861 C     C     . ILE ILE ILE B B 72  72  . 0.1218 0.1472 0.1522 0.0231  -0.0029 -
0.0068 1 .
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3862 O     O     . ILE ILE ILE B B 72  72  . 0.1415 0.1789 0.1776 0.0157  -0.0219
0.0082  1 .
3863 N     N     . ALA ALA ALA B B 73  73  . 0.1111 0.1429 0.1529 0.0245  -0.0098 -
0.0001 1 .
3864 CA    CA    . ALA ALA ALA B B 73  73  . 0.0999 0.1746 0.1346 0.0222  -0.0025
0.0128  1 .
3865 CB    CB    . ALA ALA ALA B B 73  73  . 0.1427 0.1744 0.1872 0.0250  -0.0210
0.0174  1 .
3866 C     C     . ALA ALA ALA B B 73  73  . 0.1263 0.1815 0.1698 0.0260  -0.0168 -
0.0003 1 .
3867 O     O     . ALA ALA ALA B B 73  73  . 0.0998 0.1842 0.2077 0.0170  -0.0090
0.0188  1 .
3868 N     N     . PRO PRO PRO B B 74  74  . 0.1225 0.1737 0.1723 0.0273  -0.0014
0.0037  1 .
3869 CA    CA    . PRO PRO PRO B B 74  74  . 0.1341 0.1802 0.1803 0.0366  -0.0143 -
0.0017 1 .
3870 CB    CB    . PRO PRO PRO B B 74  74  . 0.1295 0.1890 0.1622 0.0330  -0.0284 -
0.0119 1 .
3871 CG    CG    . PRO PRO PRO B B 74  74  . 0.1590 0.1883 0.2022 0.0316  0.0194  -
0.0120 1 .
3872 CD    CD    . PRO PRO PRO B B 74  74  . 0.1115 0.1734 0.1773 0.0427  -0.0115 -
0.0081 1 .
3873 C     C     . PRO PRO PRO B B 74  74  . 0.1495 0.1726 0.1549 0.0195  0.0001
0.0023  1 .
3874 O     O     . PRO PRO PRO B B 74  74  . 0.1757 0.1766 0.1906 0.0311  -0.0256
0.0056  1 .
3875 N     N     . ALA ALA ALA B B 75  75  . 0.1441 0.1364 0.1706 0.0206  0.0070  -
0.0002 1 .
3876 CA    CA    . ALA ALA ALA B B 75  75  . 0.1435 0.1561 0.1608 0.0217  0.0064  -
0.0014 1 .
3877 CB    CB    . ALA ALA ALA B B 75  75  . 0.1500 0.1573 0.1582 0.0155  0.0021
0.0275  1 .
3878 C     C     . ALA ALA ALA B B 75  75  . 0.1472 0.1619 0.1724 0.0246  -0.0031
0.0048  1 .
3879 O     O     . ALA ALA ALA B B 75  75  . 0.1380 0.1655 0.1840 0.0461  -0.0057 -
0.0030 1 .
3880 N     N     . LEU LEU LEU B B 76  76  . 0.1249 0.1496 0.1542 0.0437  -0.0192
0.0128  1 .
3881 CA    CA    . LEU LEU LEU B B 76  76  . 0.1230 0.1487 0.1735 0.0416  -0.0033
0.0076  1 .
3882 CB    CB    . LEU LEU LEU B B 76  76  . 0.1204 0.1496 0.1744 0.0381  -0.0088
0.0172  1 .
3883 CG    CG    . LEU LEU LEU B B 76  76  . 0.1723 0.2132 0.2188 0.0349  0.0027
0.0191  1 .
3884 CD1   CD1   . LEU LEU LEU B B 76  76  . 0.0998 0.1891 0.2456 0.0394  0.0021
0.0360  1 .
3885 CD2   CD2   . LEU LEU LEU B B 76  76  . 0.0767 0.2925 0.2356 0.0511  0.0048
0.0685  1 .
3886 C     C     . LEU LEU LEU B B 76  76  . 0.1274 0.1526 0.1795 0.0334  -0.0098
0.0008  1 .
3887 O     O     . LEU LEU LEU B B 76  76  . 0.1396 0.1816 0.1999 0.0133  -0.0157
0.0134  1 .
3888 N     N     . ILE ILE ILE B B 77  77  . 0.1073 0.1737 0.1948 0.0295  0.0047  -
0.0003 1 .
3889 CA    CA    . ILE ILE ILE B B 77  77  . 0.1422 0.1851 0.2017 0.0281  -0.0033
0.0240  1 .
3890 CB    CB    . ILE ILE ILE B B 77  77  . 0.1218 0.1825 0.2054 0.0227  0.0024
0.0098  1 .
3891 CG1   CG1   . ILE ILE ILE B B 77  77  . 0.1445 0.1885 0.2178 0.0367  0.0006
0.0053  1 .
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3892 CD1   CD1   . ILE ILE ILE B B 77  77  . 0.2007 0.2306 0.2282 0.0391  -0.0045 -
0.0343 1 .
3893 CG2   CG2   . ILE ILE ILE B B 77  77  . 0.1925 0.2019 0.1843 0.0147  0.0011
0.0626  1 .
3894 C     C     . ILE ILE ILE B B 77  77  . 0.1517 0.1914 0.2274 0.0165  0.0126
0.0028  1 .
3895 O     O     . ILE ILE ILE B B 77  77  . 0.0956 0.1652 0.2260 0.0104  0.0024
0.0203  1 .
3896 N     N     . SER SER SER B B 78  78  . 0.1696 0.1668 0.2304 0.0196  0.0007
0.0277  1 .
3897 CA    CA    . SER SER SER B B 78  78  . 0.1770 0.1958 0.2536 0.0170  0.0107
0.0078  1 .
3898 CB    CB    . SER SER SER B B 78  78  . 0.2214 0.2314 0.2592 0.0308  -0.0004 -
0.0240 1 .
3899 OG    OG    . SER SER SER B B 78  78  . 0.2325 0.3480 0.2878 0.0363  0.0086  -
0.0129 1 .
3900 C     C     . SER SER SER B B 78  78  . 0.1922 0.1699 0.2396 0.0119  0.0074  -
0.0047 1 .
3901 O     O     . SER SER SER B B 78  78  . 0.2148 0.1920 0.2590 0.0144  -0.0211 -
0.0093 1 .
3902 N     N     . SER SER SER B B 79  79  . 0.1917 0.1892 0.2408 0.0257  -0.0002 -
0.0065 1 .
3903 CA    CA    . SER SER SER B B 79  79  . 0.1983 0.1979 0.2387 0.0235  0.0074
0.0016  1 .
3904 CB    CB    . SER SER SER B B 79  79  . 0.1664 0.1897 0.2276 0.0118  0.0121
0.0040  1 .
3905 OG    OG    . SER SER SER B B 79  79  . 0.1753 0.2316 0.2361 0.0263  0.0185
0.0113  1 .
3906 C     C     . SER SER SER B B 79  79  . 0.1983 0.2134 0.2464 0.0178  -0.0033
0.0048  1 .
3907 O     O     . SER SER SER B B 79  79  . 0.2320 0.2312 0.2965 0.0169  -0.0072 -
0.0029 1 .
3908 N     N     . GLY GLY GLY B B 80  80  . 0.1773 0.2147 0.2536 0.0193  -0.0139
0.0151  1 .
3909 CA    CA    . GLY GLY GLY B B 80  80  . 0.2002 0.2192 0.2436 0.0110  -0.0107
0.0131  1 .
3910 C     C     . GLY GLY GLY B B 80  80  . 0.2076 0.2127 0.2410 0.0032  -0.0162
0.0082  1 .
3911 O     O     . GLY GLY GLY B B 80  80  . 0.2153 0.2400 0.2639 -0.0071 -0.0069
0.0065  1 .
3912 N     N     . LEU LEU LEU B B 81  81  . 0.1808 0.2007 0.2282 0.0130  -0.0276
0.0159  1 .
3913 CA    CA    . LEU LEU LEU B B 81  81  . 0.1920 0.1980 0.2473 0.0165  -0.0268
0.0134  1 .
3914 CB    CB    . LEU LEU LEU B B 81  81  . 0.2132 0.2280 0.2356 0.0365  -0.0238
0.0264  1 .
3915 CG    CG    . LEU LEU LEU B B 81  81  . 0.2082 0.1895 0.2485 0.0463  -0.0395
0.0029  1 .
3916 CD1   CD1   . LEU LEU LEU B B 81  81  . 0.2185 0.2182 0.2499 0.0391  -0.0323
0.0027  1 .
3917 CD2   CD2   . LEU LEU LEU B B 81  81  . 0.2500 0.2043 0.2274 0.0366  -0.0487
0.0253  1 .
3918 C     C     . LEU LEU LEU B B 81  81  . 0.2076 0.2041 0.2419 0.0196  -0.0176
0.0157  1 .
3919 O     O     . LEU LEU LEU B B 81  81  . 0.2275 0.1999 0.2500 0.0089  -0.0213
0.0208  1 .
3920 N     N     . SER SER SER B B 82  82  . 0.1876 0.1876 0.2577 0.0048  -0.0161
0.0137  1 .
3921 CA    CA    . SER SER SER B B 82  82  . 0.1961 0.1873 0.2545 -0.0010 -0.0114
0.0088  1 .
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3922 CB    CB    . SER SER SER B B 82  82  . 0.2111 0.2093 0.2662 -0.0179 -0.0237 -
0.0071 1 .
3923 OG    OG    . SER SER SER B B 82  82  . 0.2335 0.2420 0.2953 -0.0333 0.0156  -
0.0436 1 .
3924 C     C     . SER SER SER B B 82  82  . 0.1814 0.1913 0.2212 0.0044  -0.0209
0.0140  1 .
3925 O     O     . SER SER SER B B 82  82  . 0.1650 0.1535 0.2150 0.0008  -0.0352
0.0144  1 .
3926 N     N     . VAL VAL VAL B B 83  83  . 0.1735 0.1609 0.2220 0.0239  -0.0113
0.0181  1 .
3927 CA    CA    . VAL VAL VAL B B 83  83  . 0.1833 0.1671 0.1998 0.0063  -0.0095
0.0174  1 .
3928 CB    CB    . VAL VAL VAL B B 83  83  . 0.1659 0.1698 0.2089 0.0157  -0.0084
0.0053  1 .
3929 CG1   CG1   . VAL VAL VAL B B 83  83  . 0.1652 0.2173 0.1821 0.0132  -0.0307 -
0.0127 1 .
3930 CG2   CG2   . VAL VAL VAL B B 83  83  . 0.1582 0.1359 0.1990 -0.0027 0.0228  -
0.0238 1 .
3931 C     C     . VAL VAL VAL B B 83  83  . 0.1852 0.1662 0.2089 0.0070  -0.0087
0.0226  1 .
3932 O     O     . VAL VAL VAL B B 83  83  . 0.1736 0.1886 0.2155 -0.0114 -0.0288
0.0379  1 .
3933 N     N     . VAL VAL VAL B B 84  84  . 0.1787 0.1562 0.2149 0.0008  -0.0151
0.0203  1 .
3934 CA    CA    . VAL VAL VAL B B 84  84  . 0.1932 0.1531 0.2042 -0.0101 -0.0255
0.0212  1 .
3935 CB    CB    . VAL VAL VAL B B 84  84  . 0.1718 0.1688 0.2121 -0.0109 -0.0228
0.0243  1 .
3936 CG1   CG1   . VAL VAL VAL B B 84  84  . 0.2067 0.1279 0.2329 -0.0382 -0.0429
0.0282  1 .
3937 CG2   CG2   . VAL VAL VAL B B 84  84  . 0.2255 0.1645 0.2599 0.0038  -0.0504
0.0083  1 .
3938 C     C     . VAL VAL VAL B B 84  84  . 0.1765 0.1719 0.1992 -0.0074 -0.0163
0.0176  1 .
3939 O     O     . VAL VAL VAL B B 84  84  . 0.2042 0.2112 0.2356 -0.0133 -0.0321
0.0192  1 .
3940 N     N     . GLU GLU GLU B B 85  85  . 0.2000 0.1750 0.2048 -0.0176 -0.0249
0.0019  1 .
3941 CA    CA    . GLU GLU GLU B B 85  85  . 0.1743 0.1667 0.2117 -0.0031 -0.0117
0.0080  1 .
3942 CB    CB    . GLU GLU GLU B B 85  85  . 0.1991 0.1906 0.2330 0.0044  -0.0026 -
0.0067 1 .
3943 CG    CG    . GLU GLU GLU B B 85  85  . 0.2483 0.2449 0.2795 -0.0170 -0.0270 -
0.0267 1 .
3944 CD    CD    . GLU GLU GLU B B 85  85  . 0.3865 0.3260 0.4182 0.0462  -0.0395 -
0.0259 1 .
3945 OE1   OE1   . GLU GLU GLU B B 85  85  . 0.4782 0.3597 0.4812 0.0600  -0.0335 -
0.0082 1 .
3946 OE2   OE2   . GLU GLU GLU B B 85  85  . 0.4607 0.4179 0.4228 0.0544  -0.0803
0.0025  1 .
3947 C     C     . GLU GLU GLU B B 85  85  . 0.1600 0.1760 0.1858 -0.0019 -0.0129 -
0.0063 1 .
3948 O     O     . GLU GLU GLU B B 85  85  . 0.1460 0.1572 0.1590 0.0123  -0.0032
0.0042  1 .
3949 N     N     . GLN GLN GLN B B 86  86  . 0.1709 0.1744 0.1627 -0.0063 -0.0236
0.0127  1 .
3950 CA    CA    . GLN GLN GLN B B 86  86  . 0.1770 0.1789 0.1681 -0.0085 -0.0159
0.0156  1 .
3951 CB    CB    . GLN GLN GLN B B 86  86  . 0.1617 0.2015 0.1577 -0.0048 -0.0108
0.0161  1 .
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3952 CG    CG    . GLN GLN GLN B B 86  86  . 0.1858 0.1690 0.1580 -0.0131 -0.0170
0.0141  1 .
3953 CD    CD    . GLN GLN GLN B B 86  86  . 0.1815 0.1783 0.1701 -0.0070 -0.0194
0.0029  1 .
3954 OE1   OE1   . GLN GLN GLN B B 86  86  . 0.1749 0.1648 0.2016 -0.0198 0.0063  -
0.0017 1 .
3955 NE2   NE2   . GLN GLN GLN B B 86  86  . 0.1718 0.1763 0.1899 0.0202  0.0044  -
0.0160 1 .
3956 C     C     . GLN GLN GLN B B 86  86  . 0.2136 0.1966 0.1634 -0.0157 -0.0157
0.0147  1 .
3957 O     O     . GLN GLN GLN B B 86  86  . 0.1950 0.1994 0.1736 -0.0240 -0.0018
0.0394  1 .
3958 N     N     . GLU GLU GLU B B 87  87  . 0.2061 0.2131 0.1776 0.0046  -0.0392
0.0315  1 .
3959 CA    CA    . GLU GLU GLU B B 87  87  . 0.2366 0.1947 0.1866 -0.0055 -0.0262
0.0146  1 .
3960 CB    CB    . GLU GLU GLU B B 87  87  . 0.2706 0.2236 0.2030 -0.0069 -0.0456
0.0200  1 .
3961 CG    CG    . GLU GLU GLU B B 87  87  . 0.3684 0.2546 0.2398 -0.0325 -0.0493
0.0300  1 .
3962 CD    CD    . GLU GLU GLU B B 87  87  . 0.5629 0.3726 0.2787 -0.0361 -0.0328
0.0209  1 .
3963 OE1   OE1   . GLU GLU GLU B B 87  87  . 0.5950 0.4089 0.2910 -0.0183 -0.0255
0.0903  1 .
3964 OE2   OE2   . GLU GLU GLU B B 87  87  . 0.6378 0.4449 0.2629 -0.0501 -0.0637 -
0.0194 1 .
3965 C     C     . GLU GLU GLU B B 87  87  . 0.2156 0.1940 0.1913 -0.0006 -0.0232
0.0125  1 .
3966 O     O     . GLU GLU GLU B B 87  87  . 0.1837 0.2014 0.2164 -0.0227 -0.0172
0.0253  1 .
3967 N     N     . LYS LYS LYS B B 88  88  . 0.1896 0.1575 0.1792 -0.0016 -0.0257
0.0075  1 .
3968 CA    CA    . LYS LYS LYS B B 88  88  . 0.1991 0.1963 0.1956 -0.0031 -0.0247
0.0174  1 .
3969 CB    CB    . LYS LYS LYS B B 88  88  . 0.2135 0.2176 0.2101 -0.0067 -0.0254
0.0169  1 .
3970 CG    CG    . LYS LYS LYS B B 88  88  . 0.2569 0.2624 0.2782 -0.0508 -0.0468
0.0202  1 .
3971 CD    CD    . LYS LYS LYS B B 88  88  . 0.3545 0.3888 0.3925 -0.0524 0.0057
0.0503  1 .
3972 CE    CE    . LYS LYS LYS B B 88  88  . 0.4033 0.3973 0.4395 -0.0466 -0.0204
0.0218  1 .
3973 NZ    NZ    . LYS LYS LYS B B 88  88  . 0.4885 0.4469 0.4914 -0.0609 -0.1077
0.0026  1 .
3974 C     C     . LYS LYS LYS B B 88  88  . 0.1902 0.1736 0.1989 0.0010  -0.0207
0.0071  1 .
3975 O     O     . LYS LYS LYS B B 88  88  . 0.1538 0.1259 0.2019 0.0415  -0.0330 -
0.0014 1 .
3976 N     N     . LEU LEU LEU B B 89  89  . 0.1523 0.1800 0.1985 0.0020  -0.0286
0.0024  1 .
3977 CA    CA    . LEU LEU LEU B B 89  89  . 0.1445 0.1535 0.1725 -0.0013 -0.0193
0.0128  1 .
3978 CB    CB    . LEU LEU LEU B B 89  89  . 0.1490 0.1363 0.1784 -0.0176 -0.0132
0.0283  1 .
3979 CG    CG    . LEU LEU LEU B B 89  89  . 0.0881 0.1450 0.1502 0.0011  0.0074
0.0095  1 .
3980 CD1   CD1   . LEU LEU LEU B B 89  89  . 0.1316 0.1401 0.1778 0.0051  -0.0109
0.0130  1 .
3981 CD2   CD2   . LEU LEU LEU B B 89  89  . 0.1355 0.1407 0.1550 0.0281  0.0246  -
0.0268 1 .
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3982 C     C     . LEU LEU LEU B B 89  89  . 0.1374 0.1455 0.1603 0.0031  -0.0256
0.0119  1 .
3983 O     O     . LEU LEU LEU B B 89  89  . 0.1378 0.1351 0.1545 0.0079  -0.0341
0.0142  1 .
3984 N     N     . ASP ASP ASP B B 90  90  . 0.1309 0.1408 0.1303 -0.0025 -0.0233
0.0075  1 .
3985 CA    CA    . ASP ASP ASP B B 90  90  . 0.1436 0.1403 0.1415 -0.0078 -0.0118
0.0052  1 .
3986 CB    CB    . ASP ASP ASP B B 90  90  . 0.1756 0.1589 0.1889 0.0270  -0.0110
0.0305  1 .
3987 CG    CG    . ASP ASP ASP B B 90  90  . 0.1710 0.1686 0.1902 0.0201  -0.0096
0.0200  1 .
3988 OD1   OD1   . ASP ASP ASP B B 90  90  . 0.1889 0.1546 0.1765 0.0153  0.0023
0.0002  1 .
3989 OD2   OD2   . ASP ASP ASP B B 90  90  . 0.1741 0.1713 0.1751 0.0238  -0.0011
0.0212  1 .
3990 C     C     . ASP ASP ASP B B 90  90  . 0.1569 0.1483 0.1633 0.0029  -0.0219 -
0.0037 1 .
3991 O     O     . ASP ASP ASP B B 90  90  . 0.1852 0.1557 0.1634 -0.0116 -0.0192
0.0105  1 .
3992 N     N     . ASN ASN ASN B B 91  91  . 0.1569 0.1546 0.1953 0.0079  -0.0268
0.0082  1 .
3993 CA    CA    . ASN ASN ASN B B 91  91  . 0.1853 0.1850 0.2005 0.0090  -0.0242
0.0024  1 .
3994 CB    CB    . ASN ASN ASN B B 91  91  . 0.2167 0.2440 0.2431 0.0041  -0.0299
0.0088  1 .
3995 CG    CG    . ASN ASN ASN B B 91  91  . 0.2873 0.2723 0.2106 -0.0106 -0.0358
0.0469  1 .
3996 OD1   OD1   . ASN ASN ASN B B 91  91  . 0.4482 0.3256 0.3401 -0.0395 -0.0184
0.0213  1 .
3997 ND2   ND2   . ASN ASN ASN B B 91  91  . 0.3301 0.4379 0.2142 -0.0465 -0.0214
0.0487  1 .
3998 C     C     . ASN ASN ASN B B 91  91  . 0.1782 0.1847 0.1975 0.0010  -0.0135
0.0032  1 .
3999 O     O     . ASN ASN ASN B B 91  91  . 0.1551 0.1937 0.2089 0.0228  -0.0175 -
0.0056 1 .
4000 N     N     . LEU LEU LEU B B 92  92  . 0.1654 0.2003 0.1784 0.0122  -0.0251 -
0.0104 1 .
4001 CA    CA    . LEU LEU LEU B B 92  92  . 0.1344 0.1842 0.1836 0.0229  -0.0119 -
0.0055 1 .
4002 CB    CB    . LEU LEU LEU B B 92  92  . 0.1838 0.1934 0.1909 0.0226  -0.0100
0.0121  1 .
4003 CG    CG    . LEU LEU LEU B B 92  92  . 0.1794 0.1596 0.2247 0.0387  0.0010
0.0108  1 .
4004 CD1   CD1   . LEU LEU LEU B B 92  92  . 0.1345 0.1316 0.2429 0.0600  -0.0257 -
0.0102 1 .
4005 CD2   CD2   . LEU LEU LEU B B 92  92  . 0.1512 0.1541 0.2458 0.0278  0.0212
0.0245  1 .
4006 C     C     . LEU LEU LEU B B 92  92  . 0.1400 0.1544 0.1790 0.0316  -0.0026 -
0.0160 1 .
4007 O     O     . LEU LEU LEU B B 92  92  . 0.1466 0.1611 0.1847 0.0341  -0.0078 -
0.0087 1 .
4008 N     N     . MET MET MET B B 93  93  . 0.1231 0.1537 0.1628 0.0288  -0.0280
0.0136  1 .
4009 CA    CA    . MET MET MET B B 93  93  . 0.1021 0.1190 0.1488 0.0353  -0.0132
0.0111  1 .
4010 CB    CB    . MET MET MET B B 93  93  . 0.0924 0.1521 0.1625 0.0501  -0.0064
0.0175  1 .
4011 CG    CG    . MET MET MET B B 93  93  . 0.1133 0.0943 0.1564 0.0439  0.0082
0.0000  1 .
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4012 SD    SD    . MET MET MET B B 93  93  . 0.1404 0.1681 0.1429 0.0299  -0.0048
0.0066  1 .
4013 CE    CE    . MET MET MET B B 93  93  . 0.1103 0.1190 0.1296 0.0390  -0.0239 -
0.0354 1 .
4014 C     C     . MET MET MET B B 93  93  . 0.0946 0.1318 0.1360 0.0262  -0.0058
0.0031  1 .
4015 O     O     . MET MET MET B B 93  93  . 0.1132 0.1288 0.1554 0.0270  0.0065
0.0124  1 .
4016 N     N     . LEU LEU LEU B B 94  94  . 0.0950 0.1235 0.1249 0.0264  -0.0022
0.0218  1 .
4017 CA    CA    . LEU LEU LEU B B 94  94  . 0.1464 0.1461 0.1483 0.0350  -0.0023
0.0059  1 .
4018 CB    CB    . LEU LEU LEU B B 94  94  . 0.1599 0.1686 0.1361 0.0267  0.0200  -
0.0076 1 .
4019 CG    CG    . LEU LEU LEU B B 94  94  . 0.2337 0.2563 0.2016 0.0671  0.0058  -
0.0357 1 .
4020 CD1   CD1   . LEU LEU LEU B B 94  94  . 0.1824 0.2657 0.1661 0.0869  0.0624
0.0028  1 .
4021 CD2   CD2   . LEU LEU LEU B B 94  94  . 0.1760 0.3555 0.2681 0.0265  0.0005  -
0.0842 1 .
4022 C     C     . LEU LEU LEU B B 94  94  . 0.1517 0.1420 0.1563 0.0164  -0.0081
0.0067  1 .
4023 O     O     . LEU LEU LEU B B 94  94  . 0.1866 0.1160 0.1634 0.0226  -0.0354
0.0178  1 .
4024 N     N     . GLU GLU GLU B B 95  95  . 0.1713 0.1737 0.1729 0.0212  -0.0053
0.0072  1 .
4025 CA    CA    . GLU GLU GLU B B 95  95  . 0.1712 0.1698 0.1644 0.0212  0.0089  -
0.0101 1 .
4026 CB    CB    . GLU GLU GLU B B 95  95  . 0.1975 0.1996 0.1799 0.0211  -0.0077 -
0.0285 1 .
4027 CG    CG    . GLU GLU GLU B B 95  95  . 0.3188 0.3529 0.2854 0.0190  -0.0298 -
0.0317 1 .
4028 CD    CD    . GLU GLU GLU B B 95  95  . 0.4688 0.4674 0.4152 -0.0152 -0.0340
0.0343  1 .
4029 OE1   OE1   . GLU GLU GLU B B 95  95  . 0.5362 0.5973 0.5196 -0.0349 -0.0931
0.0123  1 .
4030 OE2   OE2   . GLU GLU GLU B B 95  95  . 0.5348 0.5232 0.4894 -0.0567 -0.0510 -
0.0203 1 .
4031 C     C     . GLU GLU GLU B B 95  95  . 0.1548 0.1723 0.1728 0.0067  -0.0025 -
0.0022 1 .
4032 O     O     . GLU GLU GLU B B 95  95  . 0.1634 0.1737 0.1822 0.0387  -0.0071 -
0.0006 1 .
4033 N     N     . LEU LEU LEU B B 96  96  . 0.1475 0.1763 0.1748 0.0183  0.0147
0.0106  1 .
4034 CA    CA    . LEU LEU LEU B B 96  96  . 0.1464 0.1689 0.1671 0.0264  0.0003
0.0109  1 .
4035 CB    CB    . LEU LEU LEU B B 96  96  . 0.1500 0.1853 0.1933 0.0204  0.0208
0.0266  1 .
4036 CG    CG    . LEU LEU LEU B B 96  96  . 0.2228 0.2245 0.2722 0.0649  0.0286
0.0354  1 .
4037 CD1   CD1   . LEU LEU LEU B B 96  96  . 0.3070 0.2955 0.3431 0.0590  0.0227
0.0897  1 .
4038 CD2   CD2   . LEU LEU LEU B B 96  96  . 0.2219 0.3465 0.2162 0.1237  0.0479
0.0222  1 .
4039 C     C     . LEU LEU LEU B B 96  96  . 0.1651 0.1740 0.1759 0.0298  0.0008
0.0020  1 .
4040 O     O     . LEU LEU LEU B B 96  96  . 0.1556 0.1729 0.1909 0.0500  -0.0064
0.0005  1 .
4041 N     N     . ASP ASP ASP B B 97  97  . 0.1379 0.1704 0.1747 0.0209  0.0086
0.0058  1 .
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4042 CA    CA    . ASP ASP ASP B B 97  97  . 0.1521 0.1318 0.1616 0.0145  0.0035
0.0196  1 .
4043 CB    CB    . ASP ASP ASP B B 97  97  . 0.1261 0.1324 0.1513 0.0182  0.0189
0.0219  1 .
4044 CG    CG    . ASP ASP ASP B B 97  97  . 0.1581 0.1678 0.1490 0.0253  0.0147
0.0084  1 .
4045 OD1   OD1   . ASP ASP ASP B B 97  97  . 0.1656 0.2144 0.1965 -0.0019 0.0493  -
0.0052 1 .
4046 OD2   OD2   . ASP ASP ASP B B 97  97  . 0.1945 0.1992 0.1759 0.0497  -0.0098
0.0329  1 .
4047 C     C     . ASP ASP ASP B B 97  97  . 0.1557 0.1491 0.1855 0.0255  -0.0077
0.0113  1 .
4048 O     O     . ASP ASP ASP B B 97  97  . 0.1546 0.1201 0.1835 0.0333  -0.0136
0.0009  1 .
4049 N     N     . GLY GLY GLY B B 98  98  . 0.1828 0.1538 0.1704 0.0281  -0.0158
0.0296  1 .
4050 CA    CA    . GLY GLY GLY B B 98  98  . 0.1736 0.1646 0.1856 0.0257  -0.0049
0.0452  1 .
4051 C     C     . GLY GLY GLY B B 98  98  . 0.1908 0.1762 0.1942 0.0245  0.0002
0.0399  1 .
4052 O     O     . GLY GLY GLY B B 98  98  . 0.1789 0.1872 0.2300 0.0431  0.0044
0.0535  1 .
4053 N     N     . THR THR THR B B 99  99  . 0.1754 0.1736 0.1700 0.0259  -0.0094
0.0357  1 .
4054 CA    CA    . THR THR THR B B 99  99  . 0.1719 0.1635 0.1946 0.0085  0.0005
0.0089  1 .
4055 CB    CB    . THR THR THR B B 99  99  . 0.1780 0.1676 0.1851 0.0005  -0.0053
0.0013  1 .
4056 OG1   OG1   . THR THR THR B B 99  99  . 0.1578 0.1585 0.1747 0.0182  0.0036
0.0018  1 .
4057 CG2   CG2   . THR THR THR B B 99  99  . 0.1445 0.1684 0.1795 0.0050  -0.0146 -
0.0060 1 .
4058 C     C     . THR THR THR B B 99  99  . 0.1934 0.1795 0.1963 -0.0004 0.0147
0.0097  1 .
4059 O     O     . THR THR THR B B 99  99  . 0.2178 0.1820 0.2324 0.0024  0.0509  -
0.0094 1 .
4060 N     N     . GLU GLU GLU B B 100 100 . 0.1928 0.1954 0.1918 0.0158  0.0067
0.0059  1 .
4061 CA    CA    . GLU GLU GLU B B 100 100 . 0.2056 0.2149 0.2225 0.0256  0.0160
0.0274  1 .
4062 CB    CB    . GLU GLU GLU B B 100 100 . 0.2258 0.2304 0.2348 0.0161  0.0461
0.0388  1 .
4063 CG    CG    . GLU GLU GLU B B 100 100 . 0.3731 0.3580 0.3322 0.0134  0.0295  -
0.0075 1 .
4064 CD    CD    . GLU GLU GLU B B 100 100 . 0.5515 0.4982 0.4527 -0.0088 -0.0439 -
0.0141 1 .
4065 OE1   OE1   . GLU GLU GLU B B 100 100 . 0.6044 0.6224 0.5244 0.0575  -0.0679 -
0.0056 1 .
4066 OE2   OE2   . GLU GLU GLU B B 100 100 . 0.7037 0.5039 0.5109 0.0096  0.0043  -
0.0711 1 .
4067 C     C     . GLU GLU GLU B B 100 100 . 0.1803 0.1857 0.1821 0.0177  -0.0066
0.0391  1 .
4068 O     O     . GLU GLU GLU B B 100 100 . 0.1845 0.2183 0.2022 0.0165  -0.0319
0.0203  1 .
4069 N     N     . ASN ASN ASN B B 101 101 . 0.1724 0.1689 0.1503 0.0183  0.0093
0.0423  1 .
4070 CA    CA    . ASN ASN ASN B B 101 101 . 0.1619 0.1748 0.1547 0.0096  -0.0002
0.0405  1 .
4071 CB    CB    . ASN ASN ASN B B 101 101 . 0.2162 0.2145 0.1948 -0.0085 -0.0162
0.0397  1 .
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4072 CG    CG    . ASN ASN ASN B B 101 101 . 0.3042 0.2884 0.3061 -0.0046 -0.0122
0.0371  1 .
4073 OD1   OD1   . ASN ASN ASN B B 101 101 . 0.3601 0.4945 0.4638 -0.0558 0.0177
0.1012  1 .
4074 ND2   ND2   . ASN ASN ASN B B 101 101 . 0.3410 0.4543 0.3704 -0.0689 0.0246
0.0329  1 .
4075 C     C     . ASN ASN ASN B B 101 101 . 0.1625 0.1544 0.1571 0.0096  -0.0063
0.0203  1 .
4076 O     O     . ASN ASN ASN B B 101 101 . 0.1361 0.1358 0.1501 0.0012  -0.0092
0.0108  1 .
4077 N     N     . LYS LYS LYS B B 102 102 . 0.1229 0.1160 0.1256 0.0318  0.0125
0.0120  1 .
4078 CA    CA    . LYS LYS LYS B B 102 102 . 0.1463 0.1273 0.1439 0.0168  0.0110
0.0021  1 .
4079 CB    CB    . LYS LYS LYS B B 102 102 . 0.1500 0.1064 0.1453 -0.0030 0.0064
0.0176  1 .
4080 CG    CG    . LYS LYS LYS B B 102 102 . 0.1258 0.0953 0.1397 0.0391  -0.0071
0.0141  1 .
4081 CD    CD    . LYS LYS LYS B B 102 102 . 0.1192 0.0960 0.1735 0.0074  -0.0400 -
0.0085 1 .
4082 CE    CE    . LYS LYS LYS B B 102 102 . 0.1076 0.1466 0.0956 0.0015  -0.0425
0.0274  1 .
4083 NZ    NZ    . LYS LYS LYS B B 102 102 . 0.1887 0.1676 0.1365 -0.0036 -0.0481
0.0604  1 .
4084 C     C     . LYS LYS LYS B B 102 102 . 0.1378 0.1476 0.1547 0.0117  0.0136
0.0047  1 .
4085 O     O     . LYS LYS LYS B B 102 102 . 0.1457 0.1407 0.1132 0.0083  0.0025
0.0037  1 .
4086 N     N     . SER SER SER B B 103 103 . 0.1517 0.1540 0.1575 0.0048  0.0232
0.0106  1 .
4087 CA    CA    . SER SER SER B B 103 103 . 0.1702 0.1567 0.1786 -0.0048 0.0224  -
0.0058 1 .
4088 CB    CB    . SER SER SER B B 103 103 . 0.1786 0.1581 0.2068 0.0096  0.0113
0.0127  1 .
4089 OG    OG    . SER SER SER B B 103 103 . 0.2188 0.1667 0.2678 0.0132  -0.0294
0.0194  1 .
4090 C     C     . SER SER SER B B 103 103 . 0.1782 0.1759 0.1868 -0.0095 0.0180  -
0.0089 1 .
4091 O     O     . SER SER SER B B 103 103 . 0.2001 0.2267 0.2111 -0.0185 0.0241  -
0.0276 1 .
4092 N     N     . LYS LYS LYS B B 104 104 . 0.1305 0.1625 0.1499 0.0082  0.0310  -
0.0154 1 .
4093 CA    CA    . LYS LYS LYS B B 104 104 . 0.1623 0.1623 0.1403 0.0099  0.0190
0.0070  1 .
4094 CB    CB    . LYS LYS LYS B B 104 104 . 0.1303 0.1750 0.1032 0.0084  0.0053
0.0022  1 .
4095 CG    CG    . LYS LYS LYS B B 104 104 . 0.2058 0.1270 0.1595 0.0201  0.0195  -
0.0104 1 .
4096 CD    CD    . LYS LYS LYS B B 104 104 . 0.3225 0.2326 0.2146 0.0196  0.0205  -
0.0354 1 .
4097 CE    CE    . LYS LYS LYS B B 104 104 . 0.2669 0.3099 0.3280 0.0439  0.0268  -
0.0604 1 .
4098 NZ    NZ    . LYS LYS LYS B B 104 104 . 0.3155 0.3296 0.3746 0.0515  0.0369  -
0.0970 1 .
4099 C     C     . LYS LYS LYS B B 104 104 . 0.1431 0.1628 0.1358 0.0129  -0.0152
0.0033  1 .
4100 O     O     . LYS LYS LYS B B 104 104 . 0.1998 0.1708 0.1294 0.0174  0.0029  -
0.0038 1 .
4101 N     N     . PHE PHE PHE B B 105 105 . 0.1054 0.1221 0.1342 0.0390  0.0122
0.0220  1 .
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4102 CA    CA    . PHE PHE PHE B B 105 105 . 0.1117 0.1335 0.1419 0.0295  0.0015
0.0159  1 .
4103 CB    CB    . PHE PHE PHE B B 105 105 . 0.0724 0.1652 0.1574 0.0285  0.0021
0.0127  1 .
4104 CG    CG    . PHE PHE PHE B B 105 105 . 0.1277 0.2111 0.1498 0.0415  -0.0006 -
0.0074 1 .
4105 CD1   CD1   . PHE PHE PHE B B 105 105 . 0.1280 0.1718 0.2000 0.0381  0.0086
0.0450  1 .
4106 CE1   CE1   . PHE PHE PHE B B 105 105 . 0.1422 0.2295 0.1651 0.0517  0.0268
0.0570  1 .
4107 CZ    CZ    . PHE PHE PHE B B 105 105 . 0.1783 0.2367 0.2704 0.0150  -0.0188
0.0137  1 .
4108 CE2   CE2   . PHE PHE PHE B B 105 105 . 0.1688 0.2895 0.2612 0.0128  -0.0186
0.0244  1 .
4109 CD2   CD2   . PHE PHE PHE B B 105 105 . 0.1309 0.1758 0.1943 0.0814  -0.0033
0.0059  1 .
4110 C     C     . PHE PHE PHE B B 105 105 . 0.1259 0.1405 0.1389 0.0349  0.0114
0.0104  1 .
4111 O     O     . PHE PHE PHE B B 105 105 . 0.1334 0.1493 0.1541 0.0582  -0.0018 -
0.0201 1 .
4112 N     N     . GLY GLY GLY B B 106 106 . 0.1293 0.1398 0.1380 0.0305  0.0103
0.0040  1 .
4113 CA    CA    . GLY GLY GLY B B 106 106 . 0.1292 0.1258 0.1307 0.0218  0.0140
0.0164  1 .
4114 C     C     . GLY GLY GLY B B 106 106 . 0.0988 0.1177 0.1260 0.0127  0.0020
0.0173  1 .
4115 O     O     . GLY GLY GLY B B 106 106 . 0.1251 0.1169 0.1428 0.0197  0.0244
0.0342  1 .
4116 N     N     . ALA ALA ALA B B 107 107 . 0.1143 0.1178 0.1054 0.0192  -0.0061
0.0012  1 .
4117 CA    CA    . ALA ALA ALA B B 107 107 . 0.1189 0.1208 0.1229 0.0060  -0.0014
0.0181  1 .
4118 CB    CB    . ALA ALA ALA B B 107 107 . 0.1327 0.1418 0.0981 0.0184  0.0153
0.0180  1 .
4119 C     C     . ALA ALA ALA B B 107 107 . 0.1247 0.1228 0.1256 0.0057  0.0026
0.0159  1 .
4120 O     O     . ALA ALA ALA B B 107 107 . 0.0999 0.1041 0.1256 -0.0055 0.0025
0.0184  1 .
4121 N     N     . ASN ASN ASN B B 108 108 . 0.1078 0.1139 0.1206 0.0253  -0.0037
0.0242  1 .
4122 CA    CA    . ASN ASN ASN B B 108 108 . 0.1256 0.1117 0.1433 0.0069  -0.0023
0.0272  1 .
4123 CB    CB    . ASN ASN ASN B B 108 108 . 0.0914 0.0792 0.1315 0.0017  -0.0086 -
0.0068 1 .
4124 CG    CG    . ASN ASN ASN B B 108 108 . 0.1539 0.1178 0.1570 0.0147  -0.0131
0.0106  1 .
4125 OD1   OD1   . ASN ASN ASN B B 108 108 . 0.1410 0.1179 0.1077 0.0098  -0.0208 -
0.0116 1 .
4126 ND2   ND2   . ASN ASN ASN B B 108 108 . 0.1171 0.1468 0.1358 0.0003  -0.0001
0.0129  1 .
4127 C     C     . ASN ASN ASN B B 108 108 . 0.1296 0.1178 0.1493 0.0191  0.0017
0.0255  1 .
4128 O     O     . ASN ASN ASN B B 108 108 . 0.1532 0.1199 0.1973 -0.0072 0.0195
0.0282  1 .
4129 N     N     . ALA ALA ALA B B 109 109 . 0.1073 0.1172 0.1355 0.0217  0.0192
0.0160  1 .
4130 CA    CA    . ALA ALA ALA B B 109 109 . 0.1159 0.1146 0.1236 0.0176  -0.0041
0.0238  1 .
4131 CB    CB    . ALA ALA ALA B B 109 109 . 0.1328 0.1132 0.1180 0.0181  0.0177  -
0.0157 1 .
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4132 C     C     . ALA ALA ALA B B 109 109 . 0.1129 0.1086 0.0924 0.0039  0.0004
0.0087  1 .
4133 O     O     . ALA ALA ALA B B 109 109 . 0.1182 0.1116 0.0966 0.0112  -0.0217
0.0045  1 .
4134 N     N     . ILE ILE ILE B B 110 110 . 0.1048 0.1087 0.1117 0.0075  -0.0092
0.0163  1 .
4135 CA    CA    . ILE ILE ILE B B 110 110 . 0.1003 0.1089 0.0885 0.0109  -0.0061
0.0144  1 .
4136 CB    CB    . ILE ILE ILE B B 110 110 . 0.1301 0.1113 0.0983 0.0169  -0.0193
0.0153  1 .
4137 CG1   CG1   . ILE ILE ILE B B 110 110 . 0.1622 0.1261 0.1195 0.0236  0.0049  -
0.0012 1 .
4138 CD1   CD1   . ILE ILE ILE B B 110 110 . 0.2226 0.1419 0.1186 0.0301  -0.0077
0.0013  1 .
4139 CG2   CG2   . ILE ILE ILE B B 110 110 . 0.1326 0.0797 0.1116 0.0165  -0.0478
0.0036  1 .
4140 C     C     . ILE ILE ILE B B 110 110 . 0.1052 0.1125 0.1018 -0.0041 0.0008
0.0028  1 .
4141 O     O     . ILE ILE ILE B B 110 110 . 0.1037 0.1126 0.1206 0.0014  0.0043
0.0062  1 .
4142 N     N     . LEU LEU LEU B B 111 111 . 0.0711 0.1015 0.0881 0.0276  -0.0059 -
0.0006 1 .
4143 CA    CA    . LEU LEU LEU B B 111 111 . 0.0896 0.0985 0.0977 0.0016  0.0051  -
0.0008 1 .
4144 CB    CB    . LEU LEU LEU B B 111 111 . 0.0666 0.0992 0.1154 0.0355  0.0068
0.0050  1 .
4145 CG    CG    . LEU LEU LEU B B 111 111 . 0.0658 0.0827 0.1039 0.0216  0.0030  -
0.0227 1 .
4146 CD1   CD1   . LEU LEU LEU B B 111 111 . 0.1333 0.0815 0.1129 -0.0170 0.0121  -
0.0444 1 .
4147 CD2   CD2   . LEU LEU LEU B B 111 111 . 0.1038 0.1382 0.1503 -0.0125 0.0265
0.0424  1 .
4148 C     C     . LEU LEU LEU B B 111 111 . 0.0852 0.1274 0.1281 -0.0031 -0.0027 -
0.0031 1 .
4149 O     O     . LEU LEU LEU B B 111 111 . 0.1188 0.1168 0.1304 0.0194  0.0018  -
0.0048 1 .
4150 N     N     . GLY GLY GLY B B 112 112 . 0.1242 0.1292 0.0802 -0.0012 0.0137
0.0059  1 .
4151 CA    CA    . GLY GLY GLY B B 112 112 . 0.1162 0.1407 0.1078 0.0143  -0.0094
0.0165  1 .
4152 C     C     . GLY GLY GLY B B 112 112 . 0.1161 0.1164 0.1271 0.0188  -0.0033
0.0146  1 .
4153 O     O     . GLY GLY GLY B B 112 112 . 0.1271 0.1297 0.1351 0.0280  -0.0105
0.0170  1 .
4154 N     N     . VAL VAL VAL B B 113 113 . 0.1108 0.1368 0.1321 0.0202  -0.0209
0.0056  1 .
4155 CA    CA    . VAL VAL VAL B B 113 113 . 0.0997 0.1213 0.1197 0.0197  -0.0008
0.0093  1 .
4156 CB    CB    . VAL VAL VAL B B 113 113 . 0.0902 0.1220 0.1360 0.0067  -0.0208 -
0.0003 1 .
4157 CG1   CG1   . VAL VAL VAL B B 113 113 . 0.1054 0.1704 0.1437 -0.0267 -0.0224
0.0343  1 .
4158 CG2   CG2   . VAL VAL VAL B B 113 113 . 0.1009 0.1321 0.1368 0.0359  0.0124
0.0091  1 .
4159 C     C     . VAL VAL VAL B B 113 113 . 0.0889 0.1083 0.1181 0.0188  -0.0153
0.0194  1 .
4160 O     O     . VAL VAL VAL B B 113 113 . 0.1159 0.1280 0.1041 0.0109  -0.0136
0.0142  1 .
4161 N     N     . SER SER SER B B 114 114 . 0.0962 0.1154 0.1157 0.0116  -0.0092
0.0110  1 .
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4162 CA    CA    . SER SER SER B B 114 114 . 0.0996 0.0939 0.1099 0.0126  -0.0128
0.0103  1 .
4163 CB    CB    . SER SER SER B B 114 114 . 0.1297 0.1512 0.1086 -0.0058 -0.0130 -
0.0013 1 .
4164 OG    OG    . SER SER SER B B 114 114 . 0.1958 0.1507 0.1411 0.0009  -0.0200
0.0081  1 .
4165 C     C     . SER SER SER B B 114 114 . 0.1122 0.1066 0.1125 0.0020  -0.0016 -
0.0045 1 .
4166 O     O     . SER SER SER B B 114 114 . 0.1104 0.1010 0.1271 0.0097  -0.0088
0.0113  1 .
4167 N     N     . LEU LEU LEU B B 115 115 . 0.0982 0.0907 0.1217 0.0116  -0.0065
0.0071  1 .
4168 CA    CA    . LEU LEU LEU B B 115 115 . 0.1006 0.0935 0.1443 0.0158  0.0081
0.0212  1 .
4169 CB    CB    . LEU LEU LEU B B 115 115 . 0.0816 0.0955 0.1139 -0.0044 0.0101
0.0085  1 .
4170 CG    CG    . LEU LEU LEU B B 115 115 . 0.0900 0.0736 0.0846 0.0146  0.0275
0.0098  1 .
4171 CD1   CD1   . LEU LEU LEU B B 115 115 . 0.0858 0.1091 0.0829 -0.0130 0.0113
0.0094  1 .
4172 CD2   CD2   . LEU LEU LEU B B 115 115 . 0.1398 0.1079 0.1189 -0.0149 0.0292
0.0237  1 .
4173 C     C     . LEU LEU LEU B B 115 115 . 0.1161 0.1283 0.1424 0.0151  -0.0048
0.0132  1 .
4174 O     O     . LEU LEU LEU B B 115 115 . 0.1528 0.1191 0.1613 0.0106  -0.0161
0.0176  1 .
4175 N     N     . ALA ALA ALA B B 116 116 . 0.1142 0.1079 0.1296 0.0228  0.0130
0.0055  1 .
4176 CA    CA    . ALA ALA ALA B B 116 116 . 0.1088 0.1344 0.1322 0.0016  -0.0062
0.0119  1 .
4177 CB    CB    . ALA ALA ALA B B 116 116 . 0.1080 0.1083 0.1153 -0.0005 0.0079  -
0.0030 1 .
4178 C     C     . ALA ALA ALA B B 116 116 . 0.1113 0.1253 0.1302 0.0060  0.0001  -
0.0028 1 .
4179 O     O     . ALA ALA ALA B B 116 116 . 0.1292 0.1597 0.1530 -0.0059 -0.0102
0.0303  1 .
4180 N     N     . VAL VAL VAL B B 117 117 . 0.1253 0.1190 0.1149 0.0084  -0.0271
0.0091  1 .
4181 CA    CA    . VAL VAL VAL B B 117 117 . 0.1305 0.1247 0.1372 0.0189  -0.0228
0.0162  1 .
4182 CB    CB    . VAL VAL VAL B B 117 117 . 0.1227 0.1095 0.1287 0.0280  -0.0330
0.0139  1 .
4183 CG1   CG1   . VAL VAL VAL B B 117 117 . 0.1670 0.1348 0.1953 0.0277  -0.0508
0.0193  1 .
4184 CG2   CG2   . VAL VAL VAL B B 117 117 . 0.1360 0.1649 0.1314 0.0371  -0.0230
0.0077  1 .
4185 C     C     . VAL VAL VAL B B 117 117 . 0.1432 0.1504 0.1504 0.0088  -0.0080
0.0111  1 .
4186 O     O     . VAL VAL VAL B B 117 117 . 0.1513 0.1751 0.1586 0.0153  -0.0154
0.0120  1 .
4187 N     N     . CYS CYS CYS B B 118 118 . 0.1555 0.1573 0.1321 0.0324  -0.0071
0.0224  1 .
4188 CA    CA    . CYS CYS CYS B B 118 118 . 0.1504 0.1492 0.1478 0.0149  0.0024
0.0180  1 .
4189 CB    CB    . CYS CYS CYS B B 118 118 . 0.1313 0.1449 0.1362 -0.0091 0.0162
0.0076  1 .
4190 SG    SG    . CYS CYS CYS B B 118 118 . 0.1682 0.1643 0.1688 -0.0060 0.0131
0.0012  1 .
4191 C     C     . CYS CYS CYS B B 118 118 . 0.1573 0.1549 0.1732 0.0050  -0.0043
0.0049  1 .
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4192 O     O     . CYS CYS CYS B B 118 118 . 0.1306 0.1513 0.1826 0.0236  0.0038  -
0.0024 1 .
4193 N     N     . LYS LYS LYS B B 119 119 . 0.1620 0.1543 0.1534 0.0222  -0.0032
0.0092  1 .
4194 CA    CA    . LYS LYS LYS B B 119 119 . 0.1527 0.1519 0.1555 -0.0077 0.0006
0.0203  1 .
4195 CB    CB    . LYS LYS LYS B B 119 119 . 0.1391 0.1456 0.1503 -0.0143 -0.0045 -
0.0093 1 .
4196 CG    CG    . LYS LYS LYS B B 119 119 . 0.1156 0.1805 0.1516 0.0140  0.0005  -
0.0123 1 .
4197 CD    CD    . LYS LYS LYS B B 119 119 . 0.1122 0.2580 0.1752 0.0136  -0.0034 -
0.0424 1 .
4198 CE    CE    . LYS LYS LYS B B 119 119 . 0.2060 0.2940 0.1952 -0.0137 -0.0027
0.0029  1 .
4199 NZ    NZ    . LYS LYS LYS B B 119 119 . 0.1462 0.2707 0.1795 0.0145  0.0158  -
0.0070 1 .
4200 C     C     . LYS LYS LYS B B 119 119 . 0.1415 0.1619 0.1524 -0.0090 -0.0052
0.0081  1 .
4201 O     O     . LYS LYS LYS B B 119 119 . 0.1891 0.1759 0.1653 -0.0137 -0.0081
0.0175  1 .
4202 N     N     . ALA ALA ALA B B 120 120 . 0.1428 0.1494 0.1580 -0.0155 -0.0013
0.0090  1 .
4203 CA    CA    . ALA ALA ALA B B 120 120 . 0.1456 0.1556 0.1537 -0.0086 0.0051  -
0.0035 1 .
4204 CB    CB    . ALA ALA ALA B B 120 120 . 0.1439 0.1474 0.1232 -0.0124 0.0182  -
0.0191 1 .
4205 C     C     . ALA ALA ALA B B 120 120 . 0.1666 0.1453 0.1602 -0.0084 -0.0021
0.0058  1 .
4206 O     O     . ALA ALA ALA B B 120 120 . 0.1818 0.1687 0.1822 -0.0051 -0.0087
0.0280  1 .
4207 N     N     . GLY GLY GLY B B 121 121 . 0.1692 0.1371 0.1422 0.0097  -0.0015
0.0030  1 .
4208 CA    CA    . GLY GLY GLY B B 121 121 . 0.1426 0.1447 0.1737 0.0088  -0.0045 -
0.0045 1 .
4209 C     C     . GLY GLY GLY B B 121 121 . 0.1622 0.1699 0.1699 -0.0045 -0.0093
0.0018  1 .
4210 O     O     . GLY GLY GLY B B 121 121 . 0.1626 0.1521 0.1877 -0.0193 -0.0123
0.0139  1 .
4211 N     N     . ALA ALA ALA B B 122 122 . 0.1558 0.1633 0.1501 0.0037  0.0049
0.0046  1 .
4212 CA    CA    . ALA ALA ALA B B 122 122 . 0.1560 0.1837 0.1870 0.0021  0.0028
0.0015  1 .
4213 CB    CB    . ALA ALA ALA B B 122 122 . 0.1235 0.1959 0.1729 0.0043  0.0095  -
0.0041 1 .
4214 C     C     . ALA ALA ALA B B 122 122 . 0.1513 0.1866 0.1866 -0.0056 -0.0083
0.0037  1 .
4215 O     O     . ALA ALA ALA B B 122 122 . 0.2016 0.1693 0.2018 -0.0003 -0.0083
0.0090  1 .
4216 N     N     . ALA ALA ALA B B 123 123 . 0.1602 0.1772 0.1879 -0.0164 -0.0033
0.0186  1 .
4217 CA    CA    . ALA ALA ALA B B 123 123 . 0.1460 0.1867 0.1893 -0.0231 -0.0024
0.0134  1 .
4218 CB    CB    . ALA ALA ALA B B 123 123 . 0.1703 0.1772 0.1932 -0.0223 -0.0183
0.0051  1 .
4219 C     C     . ALA ALA ALA B B 123 123 . 0.1685 0.1938 0.2179 -0.0080 -0.0015
0.0106  1 .
4220 O     O     . ALA ALA ALA B B 123 123 . 0.1609 0.1966 0.2474 -0.0045 -0.0091
0.0038  1 .
4221 N     N     . GLU GLU GLU B B 124 124 . 0.1683 0.1935 0.2430 -0.0157 -0.0062
0.0202  1 .
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4222 CA    CA    . GLU GLU GLU B B 124 124 . 0.1804 0.2116 0.2453 -0.0146 0.0015
0.0185  1 .
4223 CB    CB    . GLU GLU GLU B B 124 124 . 0.1822 0.2246 0.2656 -0.0237 -0.0024
0.0116  1 .
4224 CG    CG    . GLU GLU GLU B B 124 124 . 0.2325 0.2794 0.2872 0.0000  0.0137
0.0347  1 .
4225 CD    CD    . GLU GLU GLU B B 124 124 . 0.3272 0.2988 0.3182 -0.0354 -0.0049
0.0558  1 .
4226 OE1   OE1   . GLU GLU GLU B B 124 124 . 0.3966 0.3303 0.3976 -0.0757 0.0165
0.0458  1 .
4227 OE2   OE2   . GLU GLU GLU B B 124 124 . 0.3712 0.2842 0.3370 0.0099  0.0230
0.0747  1 .
4228 C     C     . GLU GLU GLU B B 124 124 . 0.1993 0.2194 0.2658 -0.0215 -0.0087
0.0118  1 .
4229 O     O     . GLU GLU GLU B B 124 124 . 0.2016 0.2232 0.2946 -0.0390 0.0041
0.0098  1 .
4230 N     N     . ARG ARG ARG B B 125 125 . 0.1986 0.2375 0.2519 -0.0215 -0.0127 -
0.0029 1 .
4231 CA    CA    . ARG ARG ARG B B 125 125 . 0.2417 0.2501 0.2730 -0.0122 -0.0066 -
0.0057 1 .
4232 CB    CB    . ARG ARG ARG B B 125 125 . 0.2461 0.2587 0.2693 -0.0026 -0.0222 -
0.0095 1 .
4233 CG    CG    . ARG ARG ARG B B 125 125 . 0.3024 0.2545 0.2850 0.0102  -0.0268 -
0.0114 1 .
4234 CD    CD    . ARG ARG ARG B B 125 125 . 0.3341 0.3910 0.4026 -0.0005 -0.0466
0.0067  1 .
4235 NE    NE    . ARG ARG ARG B B 125 125 . 0.4437 0.4400 0.4687 -0.0134 -0.0467
0.0129  1 .
4236 CZ    CZ    . ARG ARG ARG B B 125 125 . 0.5122 0.5079 0.5261 -0.0189 -0.0488
0.0150  1 .
4237 NH1   NH1   . ARG ARG ARG B B 125 125 . 0.5119 0.5278 0.5102 -0.0725 -0.0491 -
0.0163 1 .
4238 NH2   NH2   . ARG ARG ARG B B 125 125 . 0.5951 0.4972 0.5200 -0.0433 -0.0643
0.0303  1 .
4239 C     C     . ARG ARG ARG B B 125 125 . 0.2493 0.2593 0.2772 -0.0272 0.0067  -
0.0065 1 .
4240 O     O     . ARG ARG ARG B B 125 125 . 0.2721 0.2603 0.3163 -0.0577 -0.0025 -
0.0116 1 .
4241 N     N     . GLU GLU GLU B B 126 126 . 0.2216 0.2423 0.2785 -0.0279 0.0085
0.0041  1 .
4242 CA    CA    . GLU GLU GLU B B 126 126 . 0.2426 0.2348 0.2986 -0.0428 0.0144  -
0.0068 1 .
4243 CB    CB    . GLU GLU GLU B B 126 126 . 0.2702 0.2608 0.3318 -0.0475 0.0260
0.0001  1 .
4244 CG    CG    . GLU GLU GLU B B 126 126 . 0.2995 0.3134 0.3619 -0.0876 0.0330
0.0247  1 .
4245 CD    CD    . GLU GLU GLU B B 126 126 . 0.3919 0.4376 0.4564 -0.1337 0.0004
0.0688  1 .
4246 OE1   OE1   . GLU GLU GLU B B 126 126 . 0.2859 0.4604 0.4992 -0.1733 0.0121
0.1002  1 .
4247 OE2   OE2   . GLU GLU GLU B B 126 126 . 0.4509 0.5000 0.4950 -0.1400 -0.0020
0.1150  1 .
4248 C     C     . GLU GLU GLU B B 126 126 . 0.2549 0.2227 0.2732 -0.0286 0.0083  -
0.0219 1 .
4249 O     O     . GLU GLU GLU B B 126 126 . 0.2653 0.2269 0.3124 -0.0355 0.0150  -
0.0193 1 .
4250 N     N     . LEU LEU LEU B B 127 127 . 0.2301 0.1813 0.2317 -0.0250 0.0140  -
0.0063 1 .
4251 CA    CA    . LEU LEU LEU B B 127 127 . 0.2190 0.2043 0.2151 -0.0176 -0.0055 -
0.0002 1 .
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4252 CB    CB    . LEU LEU LEU B B 127 127 . 0.1893 0.2167 0.2302 -0.0135 -0.0170
0.0227  1 .
4253 CG    CG    . LEU LEU LEU B B 127 127 . 0.2224 0.1974 0.2133 -0.0198 -0.0430
0.0148  1 .
4254 CD1   CD1   . LEU LEU LEU B B 127 127 . 0.1887 0.2336 0.1660 -0.0934 -0.0288
0.0477  1 .
4255 CD2   CD2   . LEU LEU LEU B B 127 127 . 0.2382 0.2004 0.2147 -0.0818 -0.0116
0.0069  1 .
4256 C     C     . LEU LEU LEU B B 127 127 . 0.2117 0.1866 0.2059 -0.0133 0.0034
0.0037  1 .
4257 O     O     . LEU LEU LEU B B 127 127 . 0.2060 0.2132 0.1794 -0.0317 0.0076
0.0082  1 .
4258 N     N     . PRO PRO PRO B B 128 128 . 0.1966 0.1759 0.2134 -0.0190 -0.0039
0.0076  1 .
4259 CA    CA    . PRO PRO PRO B B 128 128 . 0.2040 0.1870 0.2198 -0.0139 -0.0030
0.0114  1 .
4260 CB    CB    . PRO PRO PRO B B 128 128 . 0.2201 0.1673 0.2383 -0.0152 0.0072
0.0033  1 .
4261 CG    CG    . PRO PRO PRO B B 128 128 . 0.2329 0.2185 0.2417 0.0021  -0.0196 -
0.0015 1 .
4262 CD    CD    . PRO PRO PRO B B 128 128 . 0.1969 0.2043 0.1941 -0.0084 0.0025
0.0009  1 .
4263 C     C     . PRO PRO PRO B B 128 128 . 0.1950 0.1649 0.2009 -0.0206 -0.0224
0.0034  1 .
4264 O     O     . PRO PRO PRO B B 128 128 . 0.1942 0.1676 0.2106 -0.0327 -0.0368 -
0.0084 1 .
4265 N     N     . LEU LEU LEU B B 129 129 . 0.1977 0.1783 0.1812 -0.0173 -0.0258
0.0127  1 .
4266 CA    CA    . LEU LEU LEU B B 129 129 . 0.1834 0.1693 0.1772 -0.0119 -0.0234 -
0.0124 1 .
4267 CB    CB    . LEU LEU LEU B B 129 129 . 0.1336 0.1797 0.1648 -0.0089 -0.0327
0.0024  1 .
4268 CG    CG    . LEU LEU LEU B B 129 129 . 0.1175 0.1388 0.1995 0.0089  -0.0265 -
0.0166 1 .
4269 CD1   CD1   . LEU LEU LEU B B 129 129 . 0.1244 0.1507 0.1483 0.0444  0.0396  -
0.0262 1 .
4270 CD2   CD2   . LEU LEU LEU B B 129 129 . 0.1812 0.1453 0.1276 -0.0025 -0.0297 -
0.0155 1 .
4271 C     C     . LEU LEU LEU B B 129 129 . 0.1745 0.1712 0.1713 -0.0156 -0.0214
0.0000  1 .
4272 O     O     . LEU LEU LEU B B 129 129 . 0.2056 0.1603 0.1786 0.0021  -0.0243
0.0055  1 .
4273 N     N     . TYR TYR TYR B B 130 130 . 0.1809 0.1511 0.1759 -0.0141 -0.0176
0.0021  1 .
4274 CA    CA    . TYR TYR TYR B B 130 130 . 0.1948 0.1743 0.1741 -0.0094 -0.0179
0.0026  1 .
4275 CB    CB    . TYR TYR TYR B B 130 130 . 0.1886 0.1381 0.2107 -0.0097 -0.0037
0.0043  1 .
4276 CG    CG    . TYR TYR TYR B B 130 130 . 0.2175 0.1401 0.1684 -0.0033 -0.0233
0.0377  1 .
4277 CD1   CD1   . TYR TYR TYR B B 130 130 . 0.2769 0.1491 0.2006 0.0167  -0.0488
0.0289  1 .
4278 CE1   CE1   . TYR TYR TYR B B 130 130 . 0.2622 0.2109 0.2477 -0.0073 -0.0413
0.0212  1 .
4279 CZ    CZ    . TYR TYR TYR B B 130 130 . 0.2233 0.1948 0.2582 -0.0087 -0.0094
0.0405  1 .
4280 OH    OH    . TYR TYR TYR B B 130 130 . 0.2302 0.2122 0.3983 0.0171  0.0196
0.0369  1 .
4281 CE2   CE2   . TYR TYR TYR B B 130 130 . 0.1915 0.1746 0.2181 -0.0018 0.0234
0.0069  1 .
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4282 CD2   CD2   . TYR TYR TYR B B 130 130 . 0.1481 0.1507 0.1575 -0.0011 -0.0284
0.0148  1 .
4283 C     C     . TYR TYR TYR B B 130 130 . 0.1743 0.1643 0.1720 -0.0181 -0.0243
0.0064  1 .
4284 O     O     . TYR TYR TYR B B 130 130 . 0.2024 0.1804 0.1536 -0.0186 -0.0482 -
0.0022 1 .
4285 N     N     . ARG ARG ARG B B 131 131 . 0.1778 0.1588 0.1557 -0.0091 -0.0194 -
0.0002 1 .
4286 CA    CA    . ARG ARG ARG B B 131 131 . 0.1633 0.1666 0.1962 -0.0157 -0.0188
0.0024  1 .
4287 CB    CB    . ARG ARG ARG B B 131 131 . 0.1914 0.1799 0.2244 -0.0302 -0.0289 -
0.0056 1 .
4288 CG    CG    . ARG ARG ARG B B 131 131 . 0.2416 0.2281 0.3392 -0.0144 -0.0223 -
0.0041 1 .
4289 CD    CD    . ARG ARG ARG B B 131 131 . 0.3702 0.3519 0.4624 -0.0597 -0.0481 -
0.1221 1 .
4290 NE    NE    . ARG ARG ARG B B 131 131 . 0.4490 0.4190 0.5301 -0.0323 -0.0412 -
0.0872 1 .
4291 CZ    CZ    . ARG ARG ARG B B 131 131 . 0.5034 0.4949 0.5371 -0.0170 -0.0053 -
0.0537 1 .
4292 NH1   NH1   . ARG ARG ARG B B 131 131 . 0.5204 0.4842 0.5430 -0.0062 0.0050  -
0.0378 1 .
4293 NH2   NH2   . ARG ARG ARG B B 131 131 . 0.5222 0.5448 0.5120 -0.0357 -0.0028 -
0.0419 1 .
4294 C     C     . ARG ARG ARG B B 131 131 . 0.1613 0.1704 0.1647 -0.0130 -0.0071 -
0.0063 1 .
4295 O     O     . ARG ARG ARG B B 131 131 . 0.1857 0.1743 0.1937 -0.0039 -0.0214 -
0.0253 1 .
4296 N     N     . HIS HIS HIS B B 132 132 . 0.1541 0.1371 0.1641 -0.0055 -0.0246 -
0.0138 1 .
4297 CA    CA    . HIS HIS HIS B B 132 132 . 0.1580 0.1621 0.1620 -0.0185 -0.0020 -
0.0077 1 .
4298 CB    CB    . HIS HIS HIS B B 132 132 . 0.1408 0.1424 0.1527 -0.0177 0.0064  -
0.0306 1 .
4299 CG    CG    . HIS HIS HIS B B 132 132 . 0.1729 0.1555 0.1771 0.0097  -0.0082
0.0076  1 .
4300 ND1   ND1   . HIS HIS HIS B B 132 132 . 0.2024 0.1959 0.1853 0.0139  -0.0059 -
0.0108 1 .
4301 CE1   CE1   . HIS HIS HIS B B 132 132 . 0.1834 0.1480 0.1856 0.0001  0.0015
0.0045  1 .
4302 NE2   NE2   . HIS HIS HIS B B 132 132 . 0.1728 0.1615 0.1811 0.0080  -0.0262
0.0432  1 .
4303 CD2   CD2   . HIS HIS HIS B B 132 132 . 0.1775 0.1439 0.1598 0.0025  0.0000
0.0038  1 .
4304 C     C     . HIS HIS HIS B B 132 132 . 0.1471 0.1503 0.1628 -0.0063 -0.0062
0.0061  1 .
4305 O     O     . HIS HIS HIS B B 132 132 . 0.1637 0.1783 0.1523 -0.0226 0.0042
0.0119  1 .
4306 N     N     . ILE ILE ILE B B 133 133 . 0.1502 0.1474 0.1801 -0.0248 0.0116
0.0147  1 .
4307 CA    CA    . ILE ILE ILE B B 133 133 . 0.1468 0.1576 0.1499 -0.0215 -0.0078
0.0153  1 .
4308 CB    CB    . ILE ILE ILE B B 133 133 . 0.1462 0.1399 0.1306 -0.0272 0.0049  -
0.0074 1 .
4309 CG1   CG1   . ILE ILE ILE B B 133 133 . 0.1248 0.1648 0.1189 -0.0012 -0.0517 -
0.0247 1 .
4310 CD1   CD1   . ILE ILE ILE B B 133 133 . 0.1488 0.1520 0.1164 -0.0073 -0.0722 -
0.0083 1 .
4311 CG2   CG2   . ILE ILE ILE B B 133 133 . 0.1969 0.1234 0.1669 -0.0063 -0.0097
0.0400  1 .
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4312 C     C     . ILE ILE ILE B B 133 133 . 0.1626 0.1604 0.1721 -0.0262 -0.0147 -
0.0034 1 .
4313 O     O     . ILE ILE ILE B B 133 133 . 0.1783 0.1472 0.1467 -0.0324 -0.0442
0.0106  1 .
4314 N     N     . ALA ALA ALA B B 134 134 . 0.1712 0.1606 0.1691 -0.0177 -0.0043
0.0026  1 .
4315 CA    CA    . ALA ALA ALA B B 134 134 . 0.1816 0.1674 0.1696 0.0001  -0.0046
0.0022  1 .
4316 CB    CB    . ALA ALA ALA B B 134 134 . 0.1707 0.1537 0.1493 -0.0146 0.0044  -
0.0030 1 .
4317 C     C     . ALA ALA ALA B B 134 134 . 0.1962 0.1804 0.1865 -0.0128 -0.0112
0.0021  1 .
4318 O     O     . ALA ALA ALA B B 134 134 . 0.2049 0.1975 0.2124 0.0000  -0.0285
0.0027  1 .
4319 N     N     . GLN GLN GLN B B 135 135 . 0.1950 0.2054 0.2070 -0.0015 -0.0176 -
0.0098 1 .
4320 CA    CA    . GLN GLN GLN B B 135 135 . 0.2188 0.2172 0.2218 0.0073  -0.0253
0.0026  1 .
4321 CB    CB    . GLN GLN GLN B B 135 135 . 0.2097 0.2142 0.2332 -0.0223 -0.0228 -
0.0097 1 .
4322 CG    CG    . GLN GLN GLN B B 135 135 . 0.2393 0.2408 0.2895 -0.0065 -0.0187
0.0246  1 .
4323 CD    CD    . GLN GLN GLN B B 135 135 . 0.3083 0.3130 0.3564 -0.0637 -0.0176 -
0.0029 1 .
4324 OE1   OE1   . GLN GLN GLN B B 135 135 . 0.2722 0.3108 0.4394 -0.0401 -0.0191
0.0091  1 .
4325 NE2   NE2   . GLN GLN GLN B B 135 135 . 0.4246 0.3405 0.4151 -0.0619 -0.0478
0.0113  1 .
4326 C     C     . GLN GLN GLN B B 135 135 . 0.2279 0.2177 0.2329 0.0137  -0.0402 -
0.0024 1 .
4327 O     O     . GLN GLN GLN B B 135 135 . 0.2463 0.2325 0.2232 0.0228  -0.0852
0.0033  1 .
4328 N     N     . LEU LEU LEU B B 136 136 . 0.2244 0.2073 0.2056 0.0118  -0.0434 -
0.0109 1 .
4329 CA    CA    . LEU LEU LEU B B 136 136 . 0.2110 0.2147 0.2152 0.0057  -0.0261
0.0009  1 .
4330 CB    CB    . LEU LEU LEU B B 136 136 . 0.2023 0.2027 0.2076 -0.0044 -0.0012 -
0.0161 1 .
4331 CG    CG    . LEU LEU LEU B B 136 136 . 0.2131 0.1849 0.1886 0.0051  -0.0289
0.0001  1 .
4332 CD1   CD1   . LEU LEU LEU B B 136 136 . 0.2819 0.1749 0.1739 -0.0050 -0.0583 -
0.0288 1 .
4333 CD2   CD2   . LEU LEU LEU B B 136 136 . 0.2296 0.2228 0.1896 0.0201  -0.0366
0.0062  1 .
4334 C     C     . LEU LEU LEU B B 136 136 . 0.2305 0.2258 0.2110 0.0152  -0.0255 -
0.0006 1 .
4335 O     O     . LEU LEU LEU B B 136 136 . 0.2436 0.2494 0.2314 0.0286  -0.0209
0.0217  1 .
4336 N     N     . ALA ALA ALA B B 137 137 . 0.2413 0.2316 0.2031 -0.0066 -0.0242 -
0.0095 1 .
4337 CA    CA    . ALA ALA ALA B B 137 137 . 0.2513 0.2395 0.1775 -0.0128 -0.0260 -
0.0225 1 .
4338 CB    CB    . ALA ALA ALA B B 137 137 . 0.2631 0.2382 0.1611 -0.0163 -0.0206 -
0.0135 1 .
4339 C     C     . ALA ALA ALA B B 137 137 . 0.2775 0.2580 0.1976 -0.0199 -0.0176 -
0.0213 1 .
4340 O     O     . ALA ALA ALA B B 137 137 . 0.2939 0.2649 0.1769 -0.0357 -0.0428 -
0.0069 1 .
4341 N     N     . GLY GLY GLY B B 138 138 . 0.2910 0.2831 0.2235 -0.0244 -0.0228 -
0.0197 1 .
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4342 CA    CA    . GLY GLY GLY B B 138 138 . 0.3521 0.3363 0.2688 -0.0218 -0.0158 -
0.0122 1 .
4343 C     C     . GLY GLY GLY B B 138 138 . 0.3898 0.3658 0.3158 -0.0189 -0.0156 -
0.0070 1 .
4344 O     O     . GLY GLY GLY B B 138 138 . 0.4391 0.3951 0.3119 -0.0269 -0.0400
0.0061  1 .
4345 N     N     . ASN ASN ASN B B 139 139 . 0.3873 0.3739 0.3320 -0.0223 -0.0256
0.0050  1 .
4346 CA    CA    . ASN ASN ASN B B 139 139 . 0.3950 0.3917 0.3539 -0.0293 -0.0153
0.0023  1 .
4347 CB    CB    . ASN ASN ASN B B 139 139 . 0.3908 0.4008 0.3568 -0.0426 -0.0177
0.0108  1 .
4348 CG    CG    . ASN ASN ASN B B 139 139 . 0.4033 0.4435 0.3380 -0.0616 -0.0343
0.0253  1 .
4349 OD1   OD1   . ASN ASN ASN B B 139 139 . 0.3975 0.5528 0.3307 -0.1408 -0.0969 -
0.0123 1 .
4350 ND2   ND2   . ASN ASN ASN B B 139 139 . 0.4101 0.3982 0.2142 -0.0357 -0.0391
0.0693  1 .
4351 C     C     . ASN ASN ASN B B 139 139 . 0.4138 0.3962 0.3855 -0.0268 -0.0119 -
0.0107 1 .
4352 O     O     . ASN ASN ASN B B 139 139 . 0.4119 0.3696 0.3513 -0.0353 -0.0138 -
0.0234 1 .
4353 N     N     . SER SER SER B B 140 140 . 0.4358 0.4385 0.4200 -0.0133 0.0007  -
0.0124 1 .
4354 CA    CA    . SER SER SER B B 140 140 . 0.4668 0.4628 0.4549 -0.0040 -0.0067 -
0.0115 1 .
4355 CB    CB    . SER SER SER B B 140 140 . 0.4650 0.4765 0.4880 -0.0055 -0.0111 -
0.0158 1 .
4356 OG    OG    . SER SER SER B B 140 140 . 0.4558 0.5291 0.5155 -0.0012 -0.0334 -
0.0280 1 .
4357 C     C     . SER SER SER B B 140 140 . 0.4847 0.4737 0.4640 -0.0006 -0.0037 -
0.0022 1 .
4358 O     O     . SER SER SER B B 140 140 . 0.5259 0.4904 0.4943 -0.0118 0.0017
0.0051  1 .
4359 N     N     . ASP ASP ASP B B 141 141 . 0.4700 0.4634 0.4642 -0.0030 -0.0033
0.0017  1 .
4360 CA    CA    . ASP ASP ASP B B 141 141 . 0.4607 0.4463 0.4401 0.0006  -0.0101 -
0.0021 1 .
4361 CB    CB    . ASP ASP ASP B B 141 141 . 0.4733 0.4466 0.4674 0.0068  0.0089  -
0.0026 1 .
4362 C     C     . ASP ASP ASP B B 141 141 . 0.4422 0.4255 0.4349 0.0061  -0.0094 -
0.0003 1 .
4363 O     O     . ASP ASP ASP B B 141 141 . 0.4570 0.4429 0.4484 -0.0019 -0.0198 -
0.0144 1 .
4364 N     N     . LEU LEU LEU B B 142 142 . 0.3904 0.3858 0.3586 0.0053  -0.0174 -
0.0011 1 .
4365 CA    CA    . LEU LEU LEU B B 142 142 . 0.3354 0.2934 0.3282 -0.0103 -0.0091 -
0.0151 1 .
4366 CB    CB    . LEU LEU LEU B B 142 142 . 0.3380 0.2831 0.2889 0.0084  -0.0126 -
0.0363 1 .
4367 CG    CG    . LEU LEU LEU B B 142 142 . 0.2910 0.2467 0.3237 -0.0142 -0.0339 -
0.0192 1 .
4368 CD1   CD1   . LEU LEU LEU B B 142 142 . 0.3053 0.2133 0.2566 0.0223  -0.0161 -
0.0552 1 .
4369 CD2   CD2   . LEU LEU LEU B B 142 142 . 0.3127 0.2528 0.3645 0.0061  -0.0677 -
0.0239 1 .
4370 C     C     . LEU LEU LEU B B 142 142 . 0.3209 0.2887 0.3010 -0.0036 -0.0108 -
0.0090 1 .
4371 O     O     . LEU LEU LEU B B 142 142 . 0.3229 0.3224 0.2798 -0.0111 -0.0092 -
0.0237 1 .
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4372 N     N     . ILE ILE ILE B B 143 143 . 0.2745 0.2502 0.2507 -0.0021 -0.0104
0.0078  1 .
4373 CA    CA    . ILE ILE ILE B B 143 143 . 0.2818 0.2522 0.2361 -0.0011 -0.0173
0.0113  1 .
4374 CB    CB    . ILE ILE ILE B B 143 143 . 0.2971 0.2870 0.2614 -0.0050 0.0019
0.0143  1 .
4375 CG1   CG1   . ILE ILE ILE B B 143 143 . 0.3120 0.3584 0.2853 0.0104  -0.0270
0.0045  1 .
4376 CD1   CD1   . ILE ILE ILE B B 143 143 . 0.3501 0.2599 0.3292 -0.0574 -0.0468 -
0.0396 1 .
4377 CG2   CG2   . ILE ILE ILE B B 143 143 . 0.3798 0.2972 0.2862 -0.0145 -0.0158
0.0106  1 .
4378 C     C     . ILE ILE ILE B B 143 143 . 0.2506 0.2120 0.2090 0.0083  -0.0161
0.0104  1 .
4379 O     O     . ILE ILE ILE B B 143 143 . 0.2629 0.1868 0.1951 0.0172  -0.0226
0.0325  1 .
4380 N     N     . LEU LEU LEU B B 144 144 . 0.2195 0.2047 0.1898 0.0122  -0.0182 -
0.0061 1 .
4381 CA    CA    . LEU LEU LEU B B 144 144 . 0.1851 0.1676 0.1677 -0.0080 -0.0030
0.0018  1 .
4382 CB    CB    . LEU LEU LEU B B 144 144 . 0.1777 0.1810 0.1573 0.0092  0.0010
0.0063  1 .
4383 CG    CG    . LEU LEU LEU B B 144 144 . 0.1856 0.1906 0.1450 -0.0229 0.0111
0.0004  1 .
4384 CD1   CD1   . LEU LEU LEU B B 144 144 . 0.2489 0.1946 0.1220 0.0441  0.0319
0.0106  1 .
4385 CD2   CD2   . LEU LEU LEU B B 144 144 . 0.2187 0.1900 0.1929 -0.0441 -0.0260 -
0.0044 1 .
4386 C     C     . LEU LEU LEU B B 144 144 . 0.1715 0.1520 0.1398 -0.0029 0.0000
0.0026  1 .
4387 O     O     . LEU LEU LEU B B 144 144 . 0.1999 0.1404 0.1129 0.0000  0.0104  -
0.0018 1 .
4388 N     N     . PRO PRO PRO B B 145 145 . 0.1604 0.1369 0.1113 0.0002  0.0140  -
0.0050 1 .
4389 CA    CA    . PRO PRO PRO B B 145 145 . 0.1460 0.1004 0.1210 -0.0001 -0.0012 -
0.0150 1 .
4390 CB    CB    . PRO PRO PRO B B 145 145 . 0.1658 0.1055 0.0816 0.0094  0.0293  -
0.0160 1 .
4391 CG    CG    . PRO PRO PRO B B 145 145 . 0.1312 0.1085 0.0831 -0.0058 0.0074  -
0.0198 1 .
4392 CD    CD    . PRO PRO PRO B B 145 145 . 0.1553 0.1270 0.0975 -0.0047 0.0065  -
0.0217 1 .
4393 C     C     . PRO PRO PRO B B 145 145 . 0.1573 0.0905 0.1104 0.0015  0.0077  -
0.0203 1 .
4394 O     O     . PRO PRO PRO B B 145 145 . 0.1534 0.1078 0.1078 0.0250  -0.0052 -
0.0021 1 .
4395 N     N     . VAL VAL VAL B B 146 146 . 0.1383 0.0803 0.0877 0.0048  0.0074  -
0.0069 1 .
4396 CA    CA    . VAL VAL VAL B B 146 146 . 0.1365 0.0762 0.0858 0.0062  -0.0002 -
0.0131 1 .
4397 CB    CB    . VAL VAL VAL B B 146 146 . 0.1276 0.1002 0.1005 0.0107  -0.0011 -
0.0246 1 .
4398 CG1   CG1   . VAL VAL VAL B B 146 146 . 0.1584 0.1549 0.1231 0.0154  0.0018  -
0.0117 1 .
4399 CG2   CG2   . VAL VAL VAL B B 146 146 . 0.2020 0.1451 0.1619 0.0068  0.0107  -
0.0310 1 .
4400 C     C     . VAL VAL VAL B B 146 146 . 0.1558 0.1187 0.1025 0.0153  -0.0165 -
0.0082 1 .
4401 O     O     . VAL VAL VAL B B 146 146 . 0.1553 0.1040 0.0803 0.0244  -0.0096 -
0.0121 1 .
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4402 N     N     . PRO PRO PRO B B 147 147 . 0.1720 0.1209 0.1049 0.0269  -0.0191 -
0.0095 1 .
4403 CA    CA    . PRO PRO PRO B B 147 147 . 0.1470 0.1059 0.1217 0.0220  -0.0192 -
0.0026 1 .
4404 CB    CB    . PRO PRO PRO B B 147 147 . 0.1690 0.0926 0.1238 0.0280  -0.0074 -
0.0132 1 .
4405 CG    CG    . PRO PRO PRO B B 147 147 . 0.1736 0.0637 0.0930 -0.0039 -0.0228 -
0.0355 1 .
4406 CD    CD    . PRO PRO PRO B B 147 147 . 0.1643 0.1086 0.1133 0.0345  -0.0389 -
0.0059 1 .
4407 C     C     . PRO PRO PRO B B 147 147 . 0.1520 0.1207 0.1204 0.0328  -0.0100
0.0111  1 .
4408 O     O     . PRO PRO PRO B B 147 147 . 0.1478 0.1195 0.1218 0.0358  0.0221
0.0064  1 .
4409 N     N     . ALA ALA ALA B B 148 148 . 0.1557 0.1153 0.1083 0.0264  -0.0047
0.0070  1 .
4410 CA    CA    . ALA ALA ALA B B 148 148 . 0.1346 0.1264 0.1112 0.0197  -0.0173
0.0106  1 .
4411 CB    CB    . ALA ALA ALA B B 148 148 . 0.1292 0.1081 0.0653 0.0396  -0.0002
0.0068  1 .
4412 C     C     . ALA ALA ALA B B 148 148 . 0.1371 0.1257 0.1040 0.0293  -0.0056
0.0100  1 .
4413 O     O     . ALA ALA ALA B B 148 148 . 0.1311 0.1440 0.1426 0.0463  -0.0134
0.0106  1 .
4414 N     N     . PHE PHE PHE B B 149 149 . 0.1114 0.1529 0.0876 0.0174  -0.0241
0.0234  1 .
4415 CA    CA    . PHE PHE PHE B B 149 149 . 0.1222 0.1257 0.1003 0.0428  -0.0088
0.0028  1 .
4416 CB    CB    . PHE PHE PHE B B 149 149 . 0.1277 0.1125 0.1181 0.0528  -0.0092
0.0158  1 .
4417 CG    CG    . PHE PHE PHE B B 149 149 . 0.1599 0.1421 0.1124 0.0382  0.0026
0.0059  1 .
4418 CD1   CD1   . PHE PHE PHE B B 149 149 . 0.1562 0.0934 0.1084 0.0465  0.0152
0.0542  1 .
4419 CE1   CE1   . PHE PHE PHE B B 149 149 . 0.1444 0.1613 0.0795 0.0231  -0.0009
0.0018  1 .
4420 CZ    CZ    . PHE PHE PHE B B 149 149 . 0.1761 0.1530 0.1369 0.0602  0.0173
0.0099  1 .
4421 CE2   CE2   . PHE PHE PHE B B 149 149 . 0.1337 0.1315 0.1091 0.0230  -0.0077
0.0108  1 .
4422 CD2   CD2   . PHE PHE PHE B B 149 149 . 0.1913 0.1140 0.1269 0.0454  -0.0034 -
0.0178 1 .
4423 C     C     . PHE PHE PHE B B 149 149 . 0.1514 0.1453 0.1311 0.0345  0.0017
0.0063  1 .
4424 O     O     . PHE PHE PHE B B 149 149 . 0.1431 0.1344 0.1313 0.0533  0.0152
0.0053  1 .
4425 N     N     . ASN ASN ASN B B 150 150 . 0.1520 0.1254 0.1018 0.0256  0.0001
0.0039  1 .
4426 CA    CA    . ASN ASN ASN B B 150 150 . 0.1609 0.1775 0.1459 0.0218  0.0057  -
0.0008 1 .
4427 CB    CB    . ASN ASN ASN B B 150 150 . 0.2022 0.1748 0.1257 0.0114  0.0278  -
0.0041 1 .
4428 CG    CG    . ASN ASN ASN B B 150 150 . 0.2296 0.1974 0.1685 0.0256  0.0327
0.0093  1 .
4429 OD1   OD1   . ASN ASN ASN B B 150 150 . 0.4367 0.2517 0.2201 0.0825  0.0255
0.0370  1 .
4430 ND2   ND2   . ASN ASN ASN B B 150 150 . 0.1794 0.1530 0.1350 0.0594  0.0078
0.0507  1 .
4431 C     C     . ASN ASN ASN B B 150 150 . 0.1629 0.1954 0.1307 0.0103  -0.0026 -
0.0027 1 .
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4432 O     O     . ASN ASN ASN B B 150 150 . 0.1851 0.2569 0.1588 0.0089  0.0281
0.0217  1 .
4433 N     N     . VAL VAL VAL B B 151 151 . 0.1494 0.1685 0.1101 0.0409  -0.0101 -
0.0148 1 .
4434 CA    CA    . VAL VAL VAL B B 151 151 . 0.1685 0.1728 0.1372 0.0426  -0.0032 -
0.0092 1 .
4435 CB    CB    . VAL VAL VAL B B 151 151 . 0.1652 0.1813 0.1402 0.0453  -0.0210
0.0038  1 .
4436 CG1   CG1   . VAL VAL VAL B B 151 151 . 0.1962 0.1971 0.1740 0.0132  -0.0082
0.0281  1 .
4437 CG2   CG2   . VAL VAL VAL B B 151 151 . 0.1598 0.1954 0.1656 0.0630  0.0063  -
0.0046 1 .
4438 C     C     . VAL VAL VAL B B 151 151 . 0.1796 0.1985 0.1548 0.0562  -0.0012 -
0.0195 1 .
4439 O     O     . VAL VAL VAL B B 151 151 . 0.1820 0.2052 0.1421 0.0732  -0.0067 -
0.0517 1 .
4440 N     N     . ILE ILE ILE B B 152 152 . 0.1838 0.1690 0.1434 0.0531  -0.0015 -
0.0108 1 .
4441 CA    CA    . ILE ILE ILE B B 152 152 . 0.2229 0.2155 0.2069 0.0548  -0.0112 -
0.0204 1 .
4442 CB    CB    . ILE ILE ILE B B 152 152 . 0.2032 0.2006 0.2339 0.0459  -0.0169
0.0082  1 .
4443 CG1   CG1   . ILE ILE ILE B B 152 152 . 0.2469 0.2164 0.2405 0.0442  0.0532  -
0.0092 1 .
4444 CD1   CD1   . ILE ILE ILE B B 152 152 . 0.1811 0.1412 0.2550 -0.0183 0.0343
0.0608  1 .
4445 CG2   CG2   . ILE ILE ILE B B 152 152 . 0.2499 0.2270 0.2484 0.0393  -0.0138 -
0.0489 1 .
4446 C     C     . ILE ILE ILE B B 152 152 . 0.2475 0.2375 0.2369 0.0679  -0.0291 -
0.0150 1 .
4447 O     O     . ILE ILE ILE B B 152 152 . 0.2335 0.2037 0.2340 0.0501  -0.0821 -
0.0384 1 .
4448 N     N     . ASN ASN ASN B B 153 153 . 0.2769 0.2555 0.2499 0.0691  -0.0376 -
0.0409 1 .
4449 CA    CA    . ASN ASN ASN B B 153 153 . 0.3000 0.2847 0.2783 0.0632  -0.0248 -
0.0156 1 .
4450 CB    CB    . ASN ASN ASN B B 153 153 . 0.3076 0.2858 0.3044 0.0400  0.0012  -
0.0156 1 .
4451 CG    CG    . ASN ASN ASN B B 153 153 . 0.3379 0.3247 0.2848 0.0262  0.0034  -
0.0061 1 .
4452 OD1   OD1   . ASN ASN ASN B B 153 153 . 0.4022 0.3591 0.4124 0.0334  -0.0784 -
0.0213 1 .
4453 ND2   ND2   . ASN ASN ASN B B 153 153 . 0.0772 0.1432 0.1450 -0.0201 0.0607
0.0497  1 .
4454 C     C     . ASN ASN ASN B B 153 153 . 0.2729 0.2590 0.2714 0.0590  -0.0407 -
0.0235 1 .
4455 O     O     . ASN ASN ASN B B 153 153 . 0.2985 0.2693 0.2901 0.0828  -0.0479 -
0.0453 1 .
4456 N     N     . GLY GLY GLY B B 154 154 . 0.2546 0.2636 0.1987 0.0567  -0.0539 -
0.0248 1 .
4457 CA    CA    . GLY GLY GLY B B 154 154 . 0.1947 0.2259 0.1802 0.0696  -0.0502 -
0.0328 1 .
4458 C     C     . GLY GLY GLY B B 154 154 . 0.1844 0.2088 0.1630 0.0427  -0.0357 -
0.0333 1 .
4459 O     O     . GLY GLY GLY B B 154 154 . 0.1975 0.1728 0.1363 0.0840  -0.0351 -
0.0610 1 .
4460 N     N     . GLY GLY GLY B B 155 155 . 0.1815 0.1807 0.1385 0.0329  -0.0683 -
0.0693 1 .
4461 N     N     . GLY GLY GLY B B 159 159 . 0.2274 0.2860 0.2162 -0.0210 0.0407  -
0.0506 1 .
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4462 CA    CA    . GLY GLY GLY B B 159 159 . 0.2589 0.3237 0.2563 0.0045  0.0112  -
0.0293 1 .
4463 C     C     . GLY GLY GLY B B 159 159 . 0.2866 0.3255 0.2686 0.0050  0.0034  -
0.0146 1 .
4464 O     O     . GLY GLY GLY B B 159 159 . 0.2485 0.3047 0.2286 0.0186  -0.0134 -
0.0029 1 .
4465 N     N     . ASN ASN ASN B B 160 160 . 0.3051 0.3064 0.2898 0.0204  -0.0250
0.0091  1 .
4466 CA    CA    . ASN ASN ASN B B 160 160 . 0.2779 0.3028 0.2746 0.0167  -0.0332 -
0.0246 1 .
4467 CB    CB    . ASN ASN ASN B B 160 160 . 0.2868 0.3040 0.2845 0.0218  -0.0574 -
0.0383 1 .
4468 CG    CG    . ASN ASN ASN B B 160 160 . 0.3183 0.3107 0.3462 0.0506  -0.0741 -
0.0413 1 .
4469 OD1   OD1   . ASN ASN ASN B B 160 160 . 0.3212 0.3976 0.3316 0.1468  -0.1567 -
0.0806 1 .
4470 ND2   ND2   . ASN ASN ASN B B 160 160 . 0.3057 0.3469 0.3860 0.0679  -0.1480 -
0.1662 1 .
4471 C     C     . ASN ASN ASN B B 160 160 . 0.2850 0.2992 0.2876 -0.0013 -0.0286 -
0.0496 1 .
4472 O     O     . ASN ASN ASN B B 160 160 . 0.2904 0.3138 0.2617 0.0208  -0.0298 -
0.0843 1 .
4473 N     N     . LYS LYS LYS B B 161 161 . 0.2255 0.2929 0.2647 -0.0207 -0.0193 -
0.0599 1 .
4474 CA    CA    . LYS LYS LYS B B 161 161 . 0.2427 0.2965 0.2613 -0.0216 -0.0548 -
0.0554 1 .
4475 CB    CB    . LYS LYS LYS B B 161 161 . 0.2457 0.3181 0.2911 -0.0169 -0.0331 -
0.0662 1 .
4476 CG    CG    . LYS LYS LYS B B 161 161 . 0.3441 0.3570 0.3358 -0.0267 -0.0633 -
0.0687 1 .
4477 CD    CD    . LYS LYS LYS B B 161 161 . 0.4843 0.4134 0.4193 -0.0196 -0.0719 -
0.0221 1 .
4478 CE    CE    . LYS LYS LYS B B 161 161 . 0.5175 0.4844 0.4645 -0.0165 -0.0784 -
0.0400 1 .
4479 NZ    NZ    . LYS LYS LYS B B 161 161 . 0.5243 0.4742 0.4512 0.0243  -0.0736 -
0.0369 1 .
4480 C     C     . LYS LYS LYS B B 161 161 . 0.2530 0.2958 0.2619 -0.0102 -0.0428 -
0.0446 1 .
4481 O     O     . LYS LYS LYS B B 161 161 . 0.2602 0.3085 0.2941 -0.0111 -0.0760 -
0.0641 1 .
4482 N     N     . LEU LEU LEU B B 162 162 . 0.2440 0.2788 0.2320 0.0170  -0.0502 -
0.0462 1 .
4483 CA    CA    . LEU LEU LEU B B 162 162 . 0.2137 0.2508 0.2489 0.0252  -0.0624 -
0.0516 1 .
4484 CB    CB    . LEU LEU LEU B B 162 162 . 0.2231 0.2590 0.1896 0.0396  -0.0559 -
0.0512 1 .
4485 CG    CG    . LEU LEU LEU B B 162 162 . 0.1978 0.2447 0.2611 0.0082  -0.0825 -
0.0452 1 .
4486 CD1   CD1   . LEU LEU LEU B B 162 162 . 0.1807 0.2547 0.2693 0.0767  -0.0974 -
0.0906 1 .
4487 CD2   CD2   . LEU LEU LEU B B 162 162 . 0.2515 0.2504 0.2315 0.0600  -0.0653 -
0.0570 1 .
4488 C     C     . LEU LEU LEU B B 162 162 . 0.2015 0.2346 0.2339 0.0265  -0.0462 -
0.0412 1 .
4489 O     O     . LEU LEU LEU B B 162 162 . 0.2309 0.2292 0.2545 0.0305  -0.0832 -
0.0322 1 .
4490 N     N     . ALA ALA ALA B B 163 163 . 0.1814 0.1825 0.2617 0.0331  -0.0469 -
0.0574 1 .
4491 CA    CA    . ALA ALA ALA B B 163 163 . 0.1768 0.2070 0.2375 0.0178  -0.0454 -
0.0360 1 .
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4492 CB    CB    . ALA ALA ALA B B 163 163 . 0.1557 0.2185 0.2407 -0.0050 -0.0455 -
0.0224 1 .
4493 C     C     . ALA ALA ALA B B 163 163 . 0.1752 0.1900 0.2032 0.0122  -0.0271 -
0.0431 1 .
4494 O     O     . ALA ALA ALA B B 163 163 . 0.1928 0.2058 0.1926 0.0400  -0.0471 -
0.0303 1 .
4495 N     N     . MET MET MET B B 164 164 . 0.1753 0.1801 0.1670 0.0342  -0.0230 -
0.0541 1 .
4496 CA    CA    . MET MET MET B B 164 164 . 0.1625 0.1393 0.1402 0.0150  0.0024  -
0.0544 1 .
4497 CB    CB    . MET MET MET B B 164 164 . 0.2187 0.1789 0.1280 0.0222  0.0220  -
0.0370 1 .
4498 CG    CG    . MET MET MET B B 164 164 . 0.2145 0.1586 0.1380 0.0234  -0.0094 -
0.0523 1 .
4499 SD    SD    . MET MET MET B B 164 164 . 0.1828 0.1491 0.1763 0.0234  -0.0415 -
0.0388 1 .
4500 CE    CE    . MET MET MET B B 164 164 . 0.2063 0.1388 0.2004 0.0205  -0.0187 -
0.0118 1 .
4501 C     C     . MET MET MET B B 164 164 . 0.1662 0.1457 0.1373 0.0272  -0.0058 -
0.0437 1 .
4502 O     O     . MET MET MET B B 164 164 . 0.1796 0.1569 0.1702 0.0246  -0.0285 -
0.0334 1 .
4503 N     N     . GLN GLN GLN B B 165 165 . 0.1544 0.1058 0.1055 0.0123  -0.0053 -
0.0313 1 .
4504 CA    CA    . GLN GLN GLN B B 165 165 . 0.1404 0.1330 0.1491 0.0309  -0.0024 -
0.0161 1 .
4505 CB    CB    . GLN GLN GLN B B 165 165 . 0.1292 0.1378 0.1438 0.0445  0.0199  -
0.0132 1 .
4506 CG    CG    . GLN GLN GLN B B 165 165 . 0.1157 0.1631 0.1276 0.0457  0.0061
0.0165  1 .
4507 CD    CD    . GLN GLN GLN B B 165 165 . 0.1515 0.1632 0.1721 0.0284  -0.0080 -
0.0085 1 .
4508 OE1   OE1   . GLN GLN GLN B B 165 165 . 0.1680 0.1633 0.1340 0.0571  -0.0129
0.0063  1 .
4509 NE2   NE2   . GLN GLN GLN B B 165 165 . 0.2144 0.1341 0.1647 0.0189  0.0293  -
0.0590 1 .
4510 C     C     . GLN GLN GLN B B 165 165 . 0.1584 0.1295 0.1329 0.0340  -0.0065 -
0.0058 1 .
4511 O     O     . GLN GLN GLN B B 165 165 . 0.2041 0.1746 0.1249 0.0604  -0.0296 -
0.0237 1 .
4512 N     N     . GLU GLU GLU B B 166 166 . 0.1591 0.1363 0.1316 0.0317  -0.0151 -
0.0095 1 .
4513 CA    CA    . GLU GLU GLU B B 166 166 . 0.1555 0.1203 0.1021 0.0261  -0.0027 -
0.0056 1 .
4514 CB    CB    . GLU GLU GLU B B 166 166 . 0.1453 0.1133 0.0808 0.0353  0.0139  -
0.0004 1 .
4515 CG    CG    . GLU GLU GLU B B 166 166 . 0.1908 0.1365 0.1174 0.0195  0.0260  -
0.0164 1 .
4516 CD    CD    . GLU GLU GLU B B 166 166 . 0.2064 0.1541 0.1628 0.0110  -0.0044 -
0.0020 1 .
4517 OE1   OE1   . GLU GLU GLU B B 166 166 . 0.2513 0.1589 0.1387 -0.0042 0.0086  -
0.0190 1 .
4518 OE2   OE2   . GLU GLU GLU B B 166 166 . 0.2151 0.2016 0.1822 0.0556  0.0053
0.0188  1 .
4519 C     C     . GLU GLU GLU B B 166 166 . 0.1640 0.1370 0.1059 0.0384  -0.0094 -
0.0120 1 .
4520 O     O     . GLU GLU GLU B B 166 166 . 0.1509 0.1479 0.1030 0.0483  -0.0235 -
0.0039 1 .
4521 N     N     . PHE PHE PHE B B 167 167 . 0.1644 0.1404 0.0953 0.0387  -0.0187 -
0.0208 1 .
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4522 CA    CA    . PHE PHE PHE B B 167 167 . 0.1435 0.1406 0.1268 0.0258  -0.0055 -
0.0224 1 .
4523 CB    CB    . PHE PHE PHE B B 167 167 . 0.1530 0.1554 0.1397 0.0183  -0.0125 -
0.0298 1 .
4524 CG    CG    . PHE PHE PHE B B 167 167 . 0.1849 0.1245 0.1530 0.0456  -0.0256 -
0.0027 1 .
4525 CD1   CD1   . PHE PHE PHE B B 167 167 . 0.1901 0.1391 0.1909 0.0184  -0.0658 -
0.0094 1 .
4526 CE1   CE1   . PHE PHE PHE B B 167 167 . 0.1759 0.1574 0.1737 0.0044  -0.0473 -
0.0045 1 .
4527 CZ    CZ    . PHE PHE PHE B B 167 167 . 0.1441 0.1891 0.1924 0.0577  -0.0464 -
0.0149 1 .
4528 CE2   CE2   . PHE PHE PHE B B 167 167 . 0.1621 0.1819 0.2451 0.0450  -0.0465 -
0.0290 1 .
4529 CD2   CD2   . PHE PHE PHE B B 167 167 . 0.1644 0.1866 0.2182 0.0578  0.0016
0.0158  1 .
4530 C     C     . PHE PHE PHE B B 167 167 . 0.1748 0.1493 0.1276 0.0294  0.0008  -
0.0140 1 .
4531 O     O     . PHE PHE PHE B B 167 167 . 0.1978 0.1748 0.1269 0.0496  0.0134  -
0.0239 1 .
4532 N     N     . MET MET MET B B 168 168 . 0.1260 0.1198 0.0905 0.0186  0.0061  -
0.0115 1 .
4533 CA    CA    . MET MET MET B B 168 168 . 0.1347 0.1026 0.0872 0.0284  0.0075  -
0.0233 1 .
4534 CB    CB    . MET MET MET B B 168 168 . 0.1422 0.1304 0.0879 0.0376  0.0242  -
0.0048 1 .
4535 CG    CG    . MET MET MET B B 168 168 . 0.1292 0.1046 0.0957 0.0532  -0.0169 -
0.0126 1 .
4536 SD    SD    . MET MET MET B B 168 168 . 0.1787 0.1541 0.1594 0.0401  0.0016  -
0.0148 1 .
4537 CE    CE    . MET MET MET B B 168 168 . 0.1370 0.1455 0.1628 0.0352  0.0108
0.0572  1 .
4538 C     C     . MET MET MET B B 168 168 . 0.1452 0.1067 0.1165 0.0216  0.0130  -
0.0129 1 .
4539 O     O     . MET MET MET B B 168 168 . 0.1790 0.1064 0.1176 0.0367  0.0152
0.0097  1 .
4540 N     N     . ILE ILE ILE B B 169 169 . 0.1431 0.0726 0.0761 0.0269  -0.0012
0.0119  1 .
4541 CA    CA    . ILE ILE ILE B B 169 169 . 0.1336 0.1084 0.1144 0.0318  0.0012  -
0.0021 1 .
4542 CB    CB    . ILE ILE ILE B B 169 169 . 0.1139 0.1014 0.0585 0.0395  -0.0048
0.0171  1 .
4543 CG1   CG1   . ILE ILE ILE B B 169 169 . 0.1517 0.1266 0.0871 0.0369  0.0135
0.0234  1 .
4544 CD1   CD1   . ILE ILE ILE B B 169 169 . 0.1948 0.1440 0.0915 0.0626  0.0190
0.0341  1 .
4545 CG2   CG2   . ILE ILE ILE B B 169 169 . 0.1568 0.1468 0.1550 0.0332  -0.0062
0.0246  1 .
4546 C     C     . ILE ILE ILE B B 169 169 . 0.1443 0.1240 0.1232 0.0176  0.0025  -
0.0028 1 .
4547 O     O     . ILE ILE ILE B B 169 169 . 0.1554 0.1545 0.0982 0.0371  -0.0083
0.0266  1 .
4548 N     N     . LEU LEU LEU B B 170 170 . 0.1438 0.1080 0.1033 0.0282  -0.0001
0.0067  1 .
4549 CA    CA    . LEU LEU LEU B B 170 170 . 0.1673 0.1110 0.1183 0.0256  0.0095  -
0.0068 1 .
4550 CB    CB    . LEU LEU LEU B B 170 170 . 0.1878 0.0983 0.1108 0.0379  0.0126  -
0.0038 1 .
4551 CG    CG    . LEU LEU LEU B B 170 170 . 0.1334 0.0872 0.1363 0.0464  0.0000  -
0.0012 1 .
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4552 CD1   CD1   . LEU LEU LEU B B 170 170 . 0.1275 0.1251 0.1768 -0.0043 0.0480
0.0247  1 .
4553 CD2   CD2   . LEU LEU LEU B B 170 170 . 0.1722 0.1893 0.1511 0.0429  -0.0343 -
0.0134 1 .
4554 C     C     . LEU LEU LEU B B 170 170 . 0.1765 0.0953 0.1180 0.0315  0.0238  -
0.0052 1 .
4555 O     O     . LEU LEU LEU B B 170 170 . 0.1585 0.1171 0.1090 0.0137  0.0255
0.0096  1 .
4556 N     N     . PRO PRO PRO B B 171 171 . 0.1554 0.1161 0.1005 0.0204  0.0287  -
0.0022 1 .
4557 CA    CA    . PRO PRO PRO B B 171 171 . 0.1929 0.1225 0.1165 0.0213  0.0072
0.0129  1 .
4558 CB    CB    . PRO PRO PRO B B 171 171 . 0.2342 0.1417 0.1134 0.0105  0.0206
0.0163  1 .
4559 CG    CG    . PRO PRO PRO B B 171 171 . 0.2207 0.1317 0.1474 0.0219  0.0029  -
0.0064 1 .
4560 CD    CD    . PRO PRO PRO B B 171 171 . 0.1821 0.1187 0.0750 0.0364  0.0186
0.0090  1 .
4561 C     C     . PRO PRO PRO B B 171 171 . 0.1922 0.1401 0.1351 0.0132  0.0235  -
0.0063 1 .
4562 O     O     . PRO PRO PRO B B 171 171 . 0.2313 0.1436 0.1387 0.0089  0.0311  -
0.0153 1 .
4563 N     N     . VAL VAL VAL B B 172 172 . 0.1804 0.1407 0.1226 0.0295  0.0250
0.0015  1 .
4564 CA    CA    . VAL VAL VAL B B 172 172 . 0.2198 0.1499 0.1472 0.0105  0.0094
0.0064  1 .
4565 CB    CB    . VAL VAL VAL B B 172 172 . 0.2456 0.1511 0.1465 0.0181  0.0096
0.0101  1 .
4566 CG1   CG1   . VAL VAL VAL B B 172 172 . 0.2351 0.0894 0.1411 0.0243  0.0115
0.0234  1 .
4567 CG2   CG2   . VAL VAL VAL B B 172 172 . 0.2141 0.1967 0.1544 0.0324  -0.0231
0.0227  1 .
4568 C     C     . VAL VAL VAL B B 172 172 . 0.2004 0.1508 0.1278 0.0009  0.0212
0.0102  1 .
4569 O     O     . VAL VAL VAL B B 172 172 . 0.2412 0.1870 0.1317 0.0137  0.0266  -
0.0066 1 .
4570 N     N     . GLY GLY GLY B B 173 173 . 0.2301 0.1450 0.1674 0.0096  0.0255
0.0057  1 .
4571 CA    CA    . GLY GLY GLY B B 173 173 . 0.2484 0.1482 0.1430 0.0107  0.0270
0.0029  1 .
4572 C     C     . GLY GLY GLY B B 173 173 . 0.2559 0.1415 0.1568 0.0173  0.0497
0.0033  1 .
4573 O     O     . GLY GLY GLY B B 173 173 . 0.2979 0.1615 0.1530 0.0233  0.0579
0.0029  1 .
4574 N     N     . ALA ALA ALA B B 174 174 . 0.2139 0.1553 0.1341 0.0071  0.0200
0.0205  1 .
4575 CA    CA    . ALA ALA ALA B B 174 174 . 0.2409 0.1727 0.1524 0.0178  0.0370
0.0009  1 .
4576 CB    CB    . ALA ALA ALA B B 174 174 . 0.2319 0.1525 0.1139 0.0204  0.0128
0.0009  1 .
4577 C     C     . ALA ALA ALA B B 174 174 . 0.2358 0.1732 0.1597 0.0207  0.0245  -
0.0129 1 .
4578 O     O     . ALA ALA ALA B B 174 174 . 0.2485 0.1819 0.1738 0.0053  0.0412  -
0.0201 1 .
4579 N     N     . GLU GLU GLU B B 175 175 . 0.2643 0.1848 0.1779 0.0160  0.0185
0.0165  1 .
4580 CA    CA    . GLU GLU GLU B B 175 175 . 0.2627 0.2134 0.2171 0.0098  0.0035
0.0035  1 .
4581 CB    CB    . GLU GLU GLU B B 175 175 . 0.2860 0.2193 0.2720 0.0118  0.0119
0.0114  1 .
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4582 CG    CG    . GLU GLU GLU B B 175 175 . 0.3482 0.3514 0.3494 0.0076  0.0511
0.0245  1 .
4583 CD    CD    . GLU GLU GLU B B 175 175 . 0.5348 0.4353 0.4917 0.0057  0.0817
0.0055  1 .
4584 OE1   OE1   . GLU GLU GLU B B 175 175 . 0.6244 0.4974 0.4788 -0.0231 0.0728
0.0293  1 .
4585 OE2   OE2   . GLU GLU GLU B B 175 175 . 0.5634 0.5748 0.5027 -0.0230 0.1075
0.0186  1 .
4586 C     C     . GLU GLU GLU B B 175 175 . 0.2458 0.1964 0.1758 0.0033  -0.0061 -
0.0052 1 .
4587 O     O     . GLU GLU GLU B B 175 175 . 0.2902 0.2198 0.1507 -0.0167 0.0022  -
0.0192 1 .
4588 N     N     . SER SER SER B B 176 176 . 0.2263 0.1515 0.1560 0.0052  -0.0039 -
0.0098 1 .
4589 CA    CA    . SER SER SER B B 176 176 . 0.2011 0.1163 0.1357 0.0030  -0.0193 -
0.0216 1 .
4590 CB    CB    . SER SER SER B B 176 176 . 0.1900 0.1420 0.1661 -0.0042 -0.0296 -
0.0203 1 .
4591 OG    OG    . SER SER SER B B 176 176 . 0.1892 0.1385 0.1691 0.0196  -0.0124 -
0.0416 1 .
4592 C     C     . SER SER SER B B 176 176 . 0.1769 0.1069 0.1326 0.0004  -0.0128 -
0.0187 1 .
4593 O     O     . SER SER SER B B 176 176 . 0.2125 0.1089 0.1011 0.0145  -0.0135
0.0046  1 .
4594 N     N     . PHE PHE PHE B B 177 177 . 0.2042 0.1196 0.0978 0.0162  -0.0065 -
0.0305 1 .
4595 CA    CA    . PHE PHE PHE B B 177 177 . 0.1598 0.1068 0.1330 -0.0014 -0.0012 -
0.0223 1 .
4596 CB    CB    . PHE PHE PHE B B 177 177 . 0.1610 0.0898 0.1074 0.0187  0.0079  -
0.0167 1 .
4597 CG    CG    . PHE PHE PHE B B 177 177 . 0.1502 0.1037 0.0950 -0.0040 -0.0086 -
0.0266 1 .
4598 CD1   CD1   . PHE PHE PHE B B 177 177 . 0.1547 0.0819 0.0841 -0.0028 -0.0132 -
0.0156 1 .
4599 CE1   CE1   . PHE PHE PHE B B 177 177 . 0.1676 0.1101 0.1194 0.0181  -0.0319 -
0.0292 1 .
4600 CZ    CZ    . PHE PHE PHE B B 177 177 . 0.1802 0.1301 0.1115 0.0241  -0.0137 -
0.0309 1 .
4601 CE2   CE2   . PHE PHE PHE B B 177 177 . 0.1417 0.1358 0.1359 0.0029  0.0259  -
0.0188 1 .
4602 CD2   CD2   . PHE PHE PHE B B 177 177 . 0.1540 0.1692 0.1396 0.0216  -0.0299 -
0.0340 1 .
4603 C     C     . PHE PHE PHE B B 177 177 . 0.1669 0.0982 0.1200 0.0010  -0.0004 -
0.0011 1 .
4604 O     O     . PHE PHE PHE B B 177 177 . 0.1410 0.1005 0.1166 0.0197  0.0176
0.0084  1 .
4605 N     N     . ARG ARG ARG B B 178 178 . 0.1726 0.1162 0.1375 -0.0063 0.0047
0.0069  1 .
4606 CA    CA    . ARG ARG ARG B B 178 178 . 0.1643 0.1071 0.1246 0.0023  -0.0006
0.0161  1 .
4607 CB    CB    . ARG ARG ARG B B 178 178 . 0.1994 0.1263 0.1385 -0.0053 -0.0123
0.0212  1 .
4608 CG    CG    . ARG ARG ARG B B 178 178 . 0.1792 0.2189 0.2221 0.0181  -0.0364 -
0.0012 1 .
4609 C     C     . ARG ARG ARG B B 178 178 . 0.1661 0.1096 0.1240 -0.0096 -0.0015
0.0193  1 .
4610 O     O     . ARG ARG ARG B B 178 178 . 0.1674 0.1098 0.1119 -0.0044 0.0124  -
0.0041 1 .
4611 N     N     . ASP ASP ASP B B 179 179 . 0.1443 0.0911 0.1167 -0.0021 0.0072  -
0.0047 1 .
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4612 CA    CA    . ASP ASP ASP B B 179 179 . 0.1659 0.1492 0.1357 -0.0077 0.0093  -
0.0110 1 .
4613 CB    CB    . ASP ASP ASP B B 179 179 . 0.1707 0.1659 0.1210 -0.0020 0.0021  -
0.0133 1 .
4614 CG    CG    . ASP ASP ASP B B 179 179 . 0.2536 0.2439 0.2166 0.0198  0.0101
0.0102  1 .
4615 OD1   OD1   . ASP ASP ASP B B 179 179 . 0.3661 0.2817 0.3037 0.0146  -0.0068
0.0532  1 .
4616 OD2   OD2   . ASP ASP ASP B B 179 179 . 0.3088 0.3153 0.2248 0.0303  -0.0094 -
0.0141 1 .
4617 C     C     . ASP ASP ASP B B 179 179 . 0.1336 0.1289 0.1056 0.0025  0.0090
0.0025  1 .
4618 O     O     . ASP ASP ASP B B 179 179 . 0.1218 0.1357 0.0943 0.0117  0.0160  -
0.0026 1 .
4619 N     N     . ALA ALA ALA B B 180 180 . 0.1650 0.1277 0.0954 0.0241  0.0224  -
0.0099 1 .
4620 CA    CA    . ALA ALA ALA B B 180 180 . 0.1515 0.1329 0.1174 0.0124  0.0034  -
0.0021 1 .
4621 CB    CB    . ALA ALA ALA B B 180 180 . 0.1825 0.1191 0.1149 0.0421  -0.0144
0.0100  1 .
4622 C     C     . ALA ALA ALA B B 180 180 . 0.1440 0.1187 0.1055 0.0015  0.0066
0.0044  1 .
4623 O     O     . ALA ALA ALA B B 180 180 . 0.1342 0.1276 0.0885 0.0097  0.0142
0.0215  1 .
4624 N     N     . MET MET MET B B 181 181 . 0.1567 0.1072 0.1149 0.0069  0.0190
0.0005  1 .
4625 CA    CA    . MET MET MET B B 181 181 . 0.1452 0.1169 0.1096 0.0166  0.0081
0.0000  1 .
4626 CB    CB    . MET MET MET B B 181 181 . 0.1261 0.0986 0.1073 0.0008  0.0135
0.0162  1 .
4627 CG    CG    . MET MET MET B B 181 181 . 0.1171 0.0959 0.1272 0.0325  -0.0035 -
0.0278 1 .
4628 SD    SD    . MET MET MET B B 181 181 . 0.1881 0.1254 0.1111 0.0313  -0.0087 -
0.0176 1 .
4629 CE    CE    . MET MET MET B B 181 181 . 0.0966 0.1393 0.1095 0.0203  -0.0029 -
0.0216 1 .
4630 C     C     . MET MET MET B B 181 181 . 0.1448 0.1313 0.1111 0.0064  0.0076  -
0.0046 1 .
4631 O     O     . MET MET MET B B 181 181 . 0.1486 0.1171 0.0911 0.0090  0.0193  -
0.0112 1 .
4632 N     N     . ARG ARG ARG B B 182 182 . 0.1489 0.0929 0.0688 0.0307  0.0059
0.0061  1 .
4633 CA    CA    . ARG ARG ARG B B 182 182 . 0.1372 0.1187 0.1029 0.0121  0.0102  -
0.0116 1 .
4634 CB    CB    . ARG ARG ARG B B 182 182 . 0.1462 0.1091 0.1211 0.0318  -0.0135 -
0.0121 1 .
4635 CG    CG    . ARG ARG ARG B B 182 182 . 0.1459 0.1752 0.1847 0.0422  -0.0115 -
0.0158 1 .
4636 CD    CD    . ARG ARG ARG B B 182 182 . 0.2193 0.1958 0.2766 0.0051  -0.0003
0.0130  1 .
4637 NE    NE    . ARG ARG ARG B B 182 182 . 0.3260 0.2133 0.3191 0.0283  0.0401  -
0.0519 1 .
4638 CZ    CZ    . ARG ARG ARG B B 182 182 . 0.4087 0.3367 0.3744 0.0053  0.0179  -
0.0607 1 .
4639 NH1   NH1   . ARG ARG ARG B B 182 182 . 0.3885 0.3320 0.4338 -0.0002 0.0061  -
0.0868 1 .
4640 NH2   NH2   . ARG ARG ARG B B 182 182 . 0.5445 0.3152 0.3978 0.0035  -0.0274 -
0.1026 1 .
4641 C     C     . ARG ARG ARG B B 182 182 . 0.1519 0.1250 0.1352 0.0219  0.0009  -
0.0112 1 .
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4642 O     O     . ARG ARG ARG B B 182 182 . 0.1420 0.1196 0.1187 0.0171  0.0023  -
0.0076 1 .
4643 N     N     . LEU LEU LEU B B 183 183 . 0.1716 0.1527 0.1403 0.0251  0.0143
0.0029  1 .
4644 CA    CA    . LEU LEU LEU B B 183 183 . 0.1868 0.1475 0.1447 0.0161  0.0175  -
0.0045 1 .
4645 CB    CB    . LEU LEU LEU B B 183 183 . 0.1779 0.1503 0.1268 0.0170  0.0079  -
0.0114 1 .
4646 CG    CG    . LEU LEU LEU B B 183 183 . 0.3309 0.2099 0.1590 0.0256  0.0187  -
0.0189 1 .
4647 CD1   CD1   . LEU LEU LEU B B 183 183 . 0.2615 0.2040 0.1607 0.0077  0.0827  -
0.0500 1 .
4648 CD2   CD2   . LEU LEU LEU B B 183 183 . 0.2430 0.2014 0.1627 0.0779  0.0779  -
0.0492 1 .
4649 C     C     . LEU LEU LEU B B 183 183 . 0.1574 0.1491 0.1475 0.0188  0.0102  -
0.0096 1 .
4650 O     O     . LEU LEU LEU B B 183 183 . 0.1340 0.0941 0.1232 0.0250  0.0206  -
0.0107 1 .
4651 N     N     . GLY GLY GLY B B 184 184 . 0.1674 0.1398 0.1322 0.0334  0.0293  -
0.0232 1 .
4652 CA    CA    . GLY GLY GLY B B 184 184 . 0.1492 0.1300 0.1202 0.0024  0.0149
0.0034  1 .
4653 C     C     . GLY GLY GLY B B 184 184 . 0.1241 0.1027 0.1166 0.0197  0.0164  -
0.0175 1 .
4654 O     O     . GLY GLY GLY B B 184 184 . 0.1271 0.1164 0.1031 0.0311  0.0084  -
0.0098 1 .
4655 N     N     . ALA ALA ALA B B 185 185 . 0.1223 0.1071 0.0965 0.0244  0.0321  -
0.0022 1 .
4656 CA    CA    . ALA ALA ALA B B 185 185 . 0.1027 0.0914 0.0881 0.0225  0.0256
0.0060  1 .
4657 CB    CB    . ALA ALA ALA B B 185 185 . 0.0960 0.0948 0.1186 -0.0069 0.0272  -
0.0020 1 .
4658 C     C     . ALA ALA ALA B B 185 185 . 0.1189 0.1072 0.0945 0.0142  0.0190
0.0057  1 .
4659 O     O     . ALA ALA ALA B B 185 185 . 0.1469 0.1048 0.1148 0.0353  0.0320  -
0.0007 1 .
4660 N     N     . GLU GLU GLU B B 186 186 . 0.1566 0.1056 0.1083 0.0244  0.0244
0.0043  1 .
4661 CA    CA    . GLU GLU GLU B B 186 186 . 0.1356 0.1076 0.1167 0.0099  0.0167  -
0.0163 1 .
4662 CB    CB    . GLU GLU GLU B B 186 186 . 0.1793 0.1022 0.1532 0.0209  0.0301  -
0.0064 1 .
4663 CG    CG    . GLU GLU GLU B B 186 186 . 0.2008 0.1150 0.1170 0.0042  0.0628
0.0124  1 .
4664 CD    CD    . GLU GLU GLU B B 186 186 . 0.2493 0.1462 0.2036 0.0097  0.0916  -
0.0166 1 .
4665 OE1   OE1   . GLU GLU GLU B B 186 186 . 0.2829 0.1446 0.1607 0.0666  0.0609
0.0136  1 .
4666 OE2   OE2   . GLU GLU GLU B B 186 186 . 0.2676 0.1208 0.1892 0.0129  0.0524
0.0272  1 .
4667 C     C     . GLU GLU GLU B B 186 186 . 0.1321 0.1251 0.1219 0.0205  0.0133  -
0.0001 1 .
4668 O     O     . GLU GLU GLU B B 186 186 . 0.1384 0.1117 0.1156 0.0167  0.0045  -
0.0033 1 .
4669 N     N     . VAL VAL VAL B B 187 187 . 0.1256 0.1129 0.1293 0.0252  0.0218  -
0.0059 1 .
4670 CA    CA    . VAL VAL VAL B B 187 187 . 0.1406 0.1192 0.1310 0.0281  0.0187  -
0.0024 1 .
4671 CB    CB    . VAL VAL VAL B B 187 187 . 0.1164 0.1003 0.1011 0.0080  -0.0004 -
0.0020 1 .
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4672 CG1   CG1   . VAL VAL VAL B B 187 187 . 0.1689 0.0961 0.1251 0.0091  0.0321  -
0.0136 1 .
4673 CG2   CG2   . VAL VAL VAL B B 187 187 . 0.1834 0.1642 0.0418 0.0403  0.0315  -
0.0012 1 .
4674 C     C     . VAL VAL VAL B B 187 187 . 0.1201 0.1237 0.1080 0.0071  0.0073  -
0.0027 1 .
4675 O     O     . VAL VAL VAL B B 187 187 . 0.1189 0.0935 0.1006 0.0226  0.0257
0.0001  1 .
4676 N     N     . TYR TYR TYR B B 188 188 . 0.1361 0.1211 0.1282 0.0178  0.0174  -
0.0019 1 .
4677 CA    CA    . TYR TYR TYR B B 188 188 . 0.1092 0.1149 0.1056 0.0200  0.0154
0.0047  1 .
4678 CB    CB    . TYR TYR TYR B B 188 188 . 0.1226 0.1220 0.1166 0.0075  0.0236  -
0.0187 1 .
4679 CG    CG    . TYR TYR TYR B B 188 188 . 0.1049 0.0968 0.0905 0.0178  0.0046  -
0.0033 1 .
4680 CD1   CD1   . TYR TYR TYR B B 188 188 . 0.1334 0.1015 0.1096 0.0054  0.0057  -
0.0153 1 .
4681 CE1   CE1   . TYR TYR TYR B B 188 188 . 0.1051 0.0796 0.0689 0.0215  -0.0085
0.0002  1 .
4682 CZ    CZ    . TYR TYR TYR B B 188 188 . 0.1689 0.1343 0.1348 -0.0169 0.0123  -
0.0109 1 .
4683 OH    OH    . TYR TYR TYR B B 188 188 . 0.1382 0.1356 0.1586 0.0004  0.0617  -
0.0198 1 .
4684 CE2   CE2   . TYR TYR TYR B B 188 188 . 0.1424 0.1053 0.1264 0.0070  0.0039  -
0.0242 1 .
4685 CD2   CD2   . TYR TYR TYR B B 188 188 . 0.1358 0.1374 0.0909 0.0442  0.0097  -
0.0174 1 .
4686 C     C     . TYR TYR TYR B B 188 188 . 0.1068 0.1081 0.1265 0.0054  0.0092
0.0099  1 .
4687 O     O     . TYR TYR TYR B B 188 188 . 0.1163 0.1229 0.1074 0.0333  0.0327
0.0294  1 .
4688 N     N     . HIS HIS HIS B B 189 189 . 0.1143 0.1136 0.1356 0.0227  0.0271
0.0168  1 .
4689 CA    CA    . HIS HIS HIS B B 189 189 . 0.1051 0.1259 0.1235 0.0084  0.0156
0.0195  1 .
4690 CB    CB    . HIS HIS HIS B B 189 189 . 0.1238 0.1381 0.1397 0.0000  0.0267
0.0284  1 .
4691 CG    CG    . HIS HIS HIS B B 189 189 . 0.1420 0.1855 0.1221 0.0337  0.0313
0.0184  1 .
4692 ND1   ND1   . HIS HIS HIS B B 189 189 . 0.2547 0.2262 0.2548 0.0256  0.0179
0.0238  1 .
4693 CE1   CE1   . HIS HIS HIS B B 189 189 . 0.1698 0.1551 0.1180 0.0475  -0.0126
0.0371  1 .
4694 NE2   NE2   . HIS HIS HIS B B 189 189 . 0.2099 0.2393 0.2220 0.0486  0.0191  -
0.0071 1 .
4695 CD2   CD2   . HIS HIS HIS B B 189 189 . 0.1719 0.1489 0.1511 0.0458  0.0376
0.0175  1 .
4696 C     C     . HIS HIS HIS B B 189 189 . 0.1192 0.1419 0.1231 0.0057  0.0196
0.0058  1 .
4697 O     O     . HIS HIS HIS B B 189 189 . 0.1180 0.1625 0.1665 0.0202  0.0203
0.0120  1 .
4698 N     N     . THR THR THR B B 190 190 . 0.1369 0.1278 0.1410 0.0209  0.0331
0.0050  1 .
4699 CA    CA    . THR THR THR B B 190 190 . 0.1436 0.1412 0.1548 0.0196  0.0392
0.0061  1 .
4700 CB    CB    . THR THR THR B B 190 190 . 0.1309 0.1386 0.1331 0.0028  0.0402
0.0005  1 .
4701 OG1   OG1   . THR THR THR B B 190 190 . 0.1959 0.1549 0.1512 0.0512  0.0540
0.0159  1 .
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4702 CG2   CG2   . THR THR THR B B 190 190 . 0.1544 0.2053 0.1609 0.0367  0.0620
0.0066  1 .
4703 C     C     . THR THR THR B B 190 190 . 0.1293 0.1464 0.1535 0.0107  0.0274
0.0240  1 .
4704 O     O     . THR THR THR B B 190 190 . 0.1401 0.1438 0.1503 0.0075  0.0094
0.0182  1 .
4705 N     N     . LEU LEU LEU B B 191 191 . 0.1305 0.1184 0.1300 0.0362  0.0343
0.0295  1 .
4706 CA    CA    . LEU LEU LEU B B 191 191 . 0.1233 0.1240 0.1244 0.0319  0.0196
0.0218  1 .
4707 CB    CB    . LEU LEU LEU B B 191 191 . 0.1137 0.1016 0.1181 0.0433  0.0127
0.0090  1 .
4708 CG    CG    . LEU LEU LEU B B 191 191 . 0.1778 0.1387 0.1379 0.0329  0.0526
0.0141  1 .
4709 CD1   CD1   . LEU LEU LEU B B 191 191 . 0.2255 0.1531 0.1766 0.0006  0.0934
0.0491  1 .
4710 CD2   CD2   . LEU LEU LEU B B 191 191 . 0.1354 0.1806 0.1347 0.0379  0.0207  -
0.0146 1 .
4711 C     C     . LEU LEU LEU B B 191 191 . 0.1236 0.1173 0.1368 0.0244  0.0110
0.0182  1 .
4712 O     O     . LEU LEU LEU B B 191 191 . 0.1491 0.1786 0.1523 0.0471  0.0125
0.0377  1 .
4713 N     N     . LYS LYS LYS B B 192 192 . 0.1137 0.1155 0.1275 0.0308  0.0237
0.0167  1 .
4714 CA    CA    . LYS LYS LYS B B 192 192 . 0.1172 0.1510 0.1217 0.0196  0.0167
0.0312  1 .
4715 CB    CB    . LYS LYS LYS B B 192 192 . 0.1223 0.1233 0.1143 0.0115  0.0126
0.0212  1 .
4716 CG    CG    . LYS LYS LYS B B 192 192 . 0.1554 0.1708 0.1283 0.0046  0.0190  -
0.0042 1 .
4717 CD    CD    . LYS LYS LYS B B 192 192 . 0.1584 0.2241 0.1073 -0.0470 -0.0019 -
0.0086 1 .
4718 CE    CE    . LYS LYS LYS B B 192 192 . 0.2780 0.2665 0.1479 -0.0366 0.0582  -
0.0092 1 .
4719 NZ    NZ    . LYS LYS LYS B B 192 192 . 0.2842 0.4032 0.2055 -0.0123 0.1064
0.0676  1 .
4720 C     C     . LYS LYS LYS B B 192 192 . 0.1396 0.1696 0.1488 0.0058  0.0140
0.0181  1 .
4721 O     O     . LYS LYS LYS B B 192 192 . 0.1254 0.1922 0.1913 0.0040  0.0104
0.0343  1 .
4722 N     N     . GLY GLY GLY B B 193 193 . 0.1323 0.1673 0.1551 0.0408  0.0255
0.0255  1 .
4723 CA    CA    . GLY GLY GLY B B 193 193 . 0.1318 0.1839 0.2008 0.0182  0.0229
0.0247  1 .
4724 C     C     . GLY GLY GLY B B 193 193 . 0.1587 0.1746 0.2016 0.0092  0.0239
0.0177  1 .
4725 O     O     . GLY GLY GLY B B 193 193 . 0.1780 0.1867 0.2556 0.0041  0.0221
0.0139  1 .
4726 N     N     . VAL VAL VAL B B 194 194 . 0.1625 0.1769 0.2042 0.0074  0.0401
0.0187  1 .
4727 CA    CA    . VAL VAL VAL B B 194 194 . 0.1669 0.1899 0.1866 0.0186  0.0495
0.0225  1 .
4728 CB    CB    . VAL VAL VAL B B 194 194 . 0.1817 0.1880 0.1870 -0.0023 0.0686
0.0062  1 .
4729 CG1   CG1   . VAL VAL VAL B B 194 194 . 0.1738 0.2108 0.1764 0.0204  0.0637
0.0710  1 .
4730 CG2   CG2   . VAL VAL VAL B B 194 194 . 0.2534 0.1903 0.1933 0.0401  0.1118  -
0.0091 1 .
4731 C     C     . VAL VAL VAL B B 194 194 . 0.1641 0.1999 0.2113 0.0125  0.0415
0.0091  1 .
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4732 O     O     . VAL VAL VAL B B 194 194 . 0.1903 0.2230 0.2534 0.0165  0.0559
0.0130  1 .
4733 N     N     . ILE ILE ILE B B 195 195 . 0.1529 0.1807 0.1918 0.0338  0.0481
0.0037  1 .
4734 CA    CA    . ILE ILE ILE B B 195 195 . 0.1623 0.1833 0.1885 0.0264  0.0284
0.0016  1 .
4735 CB    CB    . ILE ILE ILE B B 195 195 . 0.1735 0.1507 0.1618 0.0413  0.0230  -
0.0169 1 .
4736 CG1   CG1   . ILE ILE ILE B B 195 195 . 0.1283 0.1656 0.2122 0.0458  0.0270
0.0035  1 .
4737 CD1   CD1   . ILE ILE ILE B B 195 195 . 0.1508 0.1934 0.2408 0.0699  0.0614  -
0.0499 1 .
4738 CG2   CG2   . ILE ILE ILE B B 195 195 . 0.1830 0.1636 0.1575 0.0026  -0.0235 -
0.0353 1 .
4739 C     C     . ILE ILE ILE B B 195 195 . 0.1819 0.1870 0.2259 0.0235  0.0233
0.0011  1 .
4740 O     O     . ILE ILE ILE B B 195 195 . 0.1815 0.2001 0.2372 0.0193  0.0406
0.0265  1 .
4741 N     N     . LYS LYS LYS B B 196 196 . 0.1775 0.2104 0.2103 0.0169  0.0399
0.0249  1 .
4742 CA    CA    . LYS LYS LYS B B 196 196 . 0.1925 0.2214 0.2249 0.0319  0.0320
0.0221  1 .
4743 CB    CB    . LYS LYS LYS B B 196 196 . 0.1997 0.2339 0.2111 0.0285  0.0392
0.0181  1 .
4744 CG    CG    . LYS LYS LYS B B 196 196 . 0.2519 0.2465 0.2311 0.0005  -0.0044
0.0470  1 .
4745 CD    CD    . LYS LYS LYS B B 196 196 . 0.3573 0.2456 0.2253 0.0000  -0.0106
0.0673  1 .
4746 C     C     . LYS LYS LYS B B 196 196 . 0.2041 0.2397 0.2365 0.0195  0.0283
0.0236  1 .
4747 O     O     . LYS LYS LYS B B 196 196 . 0.1878 0.2565 0.2505 0.0478  0.0339
0.0179  1 .
4748 N     N     . ASP ASP ASP B B 197 197 . 0.2079 0.2522 0.2300 0.0437  0.0293
0.0297  1 .
4749 CA    CA    . ASP ASP ASP B B 197 197 . 0.2229 0.2841 0.2781 0.0185  0.0160
0.0197  1 .
4750 CB    CB    . ASP ASP ASP B B 197 197 . 0.2384 0.2873 0.2963 0.0216  0.0222
0.0129  1 .
4751 CG    CG    . ASP ASP ASP B B 197 197 . 0.3190 0.3242 0.3369 0.0336  -0.0073
0.0050  1 .
4752 OD1   OD1   . ASP ASP ASP B B 197 197 . 0.3784 0.3118 0.3876 0.0410  0.0467  -
0.0368 1 .
4753 OD2   OD2   . ASP ASP ASP B B 197 197 . 0.3892 0.4067 0.3694 0.0313  0.0045
0.0247  1 .
4754 C     C     . ASP ASP ASP B B 197 197 . 0.2244 0.2802 0.2806 0.0145  0.0089
0.0332  1 .
4755 O     O     . ASP ASP ASP B B 197 197 . 0.1992 0.3012 0.3099 0.0034  0.0049
0.0358  1 .
4756 N     N     . LYS LYS LYS B B 198 198 . 0.1962 0.2596 0.2497 0.0193  0.0144
0.0166  1 .
4757 CA    CA    . LYS LYS LYS B B 198 198 . 0.2096 0.2251 0.2326 0.0173  0.0264  -
0.0032 1 .
4758 CB    CB    . LYS LYS LYS B B 198 198 . 0.2327 0.2278 0.2347 0.0111  0.0255
0.0115  1 .
4759 CG    CG    . LYS LYS LYS B B 198 198 . 0.2855 0.2368 0.2269 0.0112  0.0254
0.0050  1 .
4760 CD    CD    . LYS LYS LYS B B 198 198 . 0.2961 0.2887 0.2977 0.0422  0.0000
0.0519  1 .
4761 CE    CE    . LYS LYS LYS B B 198 198 . 0.3425 0.3604 0.3783 0.0041  -0.0075
0.0680  1 .
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4762 NZ    NZ    . LYS LYS LYS B B 198 198 . 0.3091 0.3977 0.4287 0.0473  -0.0077
0.0635  1 .
4763 C     C     . LYS LYS LYS B B 198 198 . 0.2137 0.2343 0.2332 0.0007  0.0160  -
0.0046 1 .
4764 O     O     . LYS LYS LYS B B 198 198 . 0.1804 0.2386 0.2533 0.0094  0.0476  -
0.0105 1 .
4765 N     N     . TYR TYR TYR B B 199 199 . 0.1739 0.2107 0.2117 0.0272  0.0114  -
0.0086 1 .
4766 CA    CA    . TYR TYR TYR B B 199 199 . 0.2049 0.2482 0.2088 0.0341  0.0083  -
0.0054 1 .
4767 CB    CB    . TYR TYR TYR B B 199 199 . 0.1899 0.2516 0.2206 0.0342  0.0065  -
0.0026 1 .
4768 CG    CG    . TYR TYR TYR B B 199 199 . 0.1702 0.2314 0.1792 0.0339  0.0191  -
0.0077 1 .
4769 CD1   CD1   . TYR TYR TYR B B 199 199 . 0.2038 0.2529 0.2116 0.0522  0.0563  -
0.0394 1 .
4770 CE1   CE1   . TYR TYR TYR B B 199 199 . 0.1345 0.2454 0.1984 0.0541  -0.0170 -
0.0184 1 .
4771 CZ    CZ    . TYR TYR TYR B B 199 199 . 0.2482 0.2515 0.2175 0.0442  0.0232
0.0035  1 .
4772 OH    OH    . TYR TYR TYR B B 199 199 . 0.3593 0.3245 0.2627 0.1085  0.0022  -
0.0185 1 .
4773 CE2   CE2   . TYR TYR TYR B B 199 199 . 0.2587 0.2801 0.2084 0.0492  0.0161
0.0129  1 .
4774 CD2   CD2   . TYR TYR TYR B B 199 199 . 0.2177 0.2583 0.1884 0.0389  0.0533  -
0.0044 1 .
4775 C     C     . TYR TYR TYR B B 199 199 . 0.2113 0.2572 0.2264 0.0263  0.0075  -
0.0071 1 .
4776 O     O     . TYR TYR TYR B B 199 199 . 0.2815 0.2826 0.2129 0.0344  -0.0025 -
0.0303 1 .
4777 N     N     . GLY GLY GLY B B 200 200 . 0.1747 0.2665 0.2105 0.0184  0.0344
0.0058  1 .
4778 CA    CA    . GLY GLY GLY B B 200 200 . 0.1787 0.2691 0.2204 0.0172  0.0121
0.0312  1 .
4779 C     C     . GLY GLY GLY B B 200 200 . 0.1923 0.2524 0.2098 0.0220  0.0205
0.0240  1 .
4780 O     O     . GLY GLY GLY B B 200 200 . 0.1727 0.2670 0.2183 0.0311  0.0317
0.0380  1 .
4781 N     N     . LYS LYS LYS B B 201 201 . 0.2037 0.2579 0.2079 0.0337  0.0260
0.0343  1 .
4782 CA    CA    . LYS LYS LYS B B 201 201 . 0.2324 0.2557 0.2411 0.0112  0.0259
0.0267  1 .
4783 CB    CB    . LYS LYS LYS B B 201 201 . 0.2766 0.2588 0.2345 0.0181  0.0111
0.0204  1 .
4784 CG    CG    . LYS LYS LYS B B 201 201 . 0.2535 0.3003 0.2730 0.0213  -0.0131
0.0499  1 .
4785 CD    CD    . LYS LYS LYS B B 201 201 . 0.3417 0.3637 0.2581 0.0429  0.0385
0.0545  1 .
4786 CE    CE    . LYS LYS LYS B B 201 201 . 0.3193 0.4039 0.3247 0.0074  0.0608
0.0128  1 .
4787 NZ    NZ    . LYS LYS LYS B B 201 201 . 0.3194 0.4193 0.3906 0.0440  0.0650
0.0187  1 .
4788 C     C     . LYS LYS LYS B B 201 201 . 0.2339 0.2336 0.2254 0.0050  0.0266
0.0054  1 .
4789 O     O     . LYS LYS LYS B B 201 201 . 0.2380 0.2224 0.2058 0.0179  0.0474
0.0215  1 .
4790 N     N     . ASP ASP ASP B B 202 202 . 0.2569 0.2358 0.2536 0.0029  0.0496
0.0139  1 .
4791 CA    CA    . ASP ASP ASP B B 202 202 . 0.2368 0.2411 0.2492 0.0074  0.0477  -
0.0018 1 .
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4792 CB    CB    . ASP ASP ASP B B 202 202 . 0.2426 0.2604 0.2742 -0.0056 0.0426
0.0012  1 .
4793 CG    CG    . ASP ASP ASP B B 202 202 . 0.2853 0.3052 0.3118 0.0008  0.0543  -
0.0040 1 .
4794 OD1   OD1   . ASP ASP ASP B B 202 202 . 0.3150 0.3717 0.3588 -0.0378 0.1294
0.0385  1 .
4795 OD2   OD2   . ASP ASP ASP B B 202 202 . 0.3296 0.3892 0.4188 -0.0514 0.1001
0.0118  1 .
4796 C     C     . ASP ASP ASP B B 202 202 . 0.2205 0.2211 0.2540 0.0004  0.0478  -
0.0098 1 .
4797 O     O     . ASP ASP ASP B B 202 202 . 0.2162 0.2347 0.2757 0.0069  0.0646  -
0.0255 1 .
4798 N     N     . ALA ALA ALA B B 203 203 . 0.1748 0.2103 0.2239 0.0132  0.0501  -
0.0024 1 .
4799 CA    CA    . ALA ALA ALA B B 203 203 . 0.1866 0.1728 0.1907 0.0176  0.0419  -
0.0104 1 .
4800 CB    CB    . ALA ALA ALA B B 203 203 . 0.2084 0.1773 0.2027 0.0225  0.0406
0.0162  1 .
4801 C     C     . ALA ALA ALA B B 203 203 . 0.1485 0.1755 0.1645 0.0177  0.0420  -
0.0012 1 .
4802 O     O     . ALA ALA ALA B B 203 203 . 0.1646 0.1898 0.2145 0.0135  0.0322  -
0.0069 1 .
4803 N     N     . THR THR THR B B 204 204 . 0.1412 0.1652 0.1784 0.0193  0.0449  -
0.0194 1 .
4804 CA    CA    . THR THR THR B B 204 204 . 0.1443 0.1586 0.1837 0.0108  0.0535  -
0.0063 1 .
4805 CB    CB    . THR THR THR B B 204 204 . 0.1523 0.1733 0.1884 0.0294  0.0569  -
0.0014 1 .
4806 OG1   OG1   . THR THR THR B B 204 204 . 0.1437 0.2181 0.2436 -0.0030 0.0586  -
0.0210 1 .
4807 CG2   CG2   . THR THR THR B B 204 204 . 0.1676 0.1806 0.2373 0.0325  0.0988  -
0.0102 1 .
4808 C     C     . THR THR THR B B 204 204 . 0.1359 0.1411 0.1618 0.0142  0.0392  -
0.0112 1 .
4809 O     O     . THR THR THR B B 204 204 . 0.1390 0.1294 0.1680 0.0165  0.0102  -
0.0225 1 .
4810 N     N     . ASN ASN ASN B B 205 205 . 0.1112 0.1393 0.1456 0.0154  0.0362  -
0.0129 1 .
4811 CA    CA    . ASN ASN ASN B B 205 205 . 0.0998 0.1174 0.1143 0.0214  0.0301  -
0.0125 1 .
4812 CB    CB    . ASN ASN ASN B B 205 205 . 0.0994 0.1404 0.1490 0.0044  0.0143
0.0006  1 .
4813 CG    CG    . ASN ASN ASN B B 205 205 . 0.1366 0.1583 0.1431 0.0007  0.0061  -
0.0096 1 .
4814 OD1   OD1   . ASN ASN ASN B B 205 205 . 0.1405 0.1804 0.2037 -0.0297 0.0226  -
0.0024 1 .
4815 ND2   ND2   . ASN ASN ASN B B 205 205 . 0.0697 0.1424 0.1723 0.0184  0.0333  -
0.0535 1 .
4816 C     C     . ASN ASN ASN B B 205 205 . 0.1221 0.1560 0.1382 0.0086  0.0243  -
0.0099 1 .
4817 O     O     . ASN ASN ASN B B 205 205 . 0.1045 0.1665 0.1449 0.0076  0.0403
0.0309  1 .
4818 N     N     . VAL VAL VAL B B 206 206 . 0.1045 0.1377 0.1395 -0.0099 0.0177  -
0.0045 1 .
4819 CA    CA    . VAL VAL VAL B B 206 206 . 0.1216 0.1145 0.1439 0.0028  0.0100
0.0050  1 .
4820 CB    CB    . VAL VAL VAL B B 206 206 . 0.1387 0.0851 0.1356 0.0082  0.0389  -
0.0040 1 .
4821 CG1   CG1   . VAL VAL VAL B B 206 206 . 0.1553 0.0812 0.1883 0.0485  0.0198  -
0.0227 1 .
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4822 CG2   CG2   . VAL VAL VAL B B 206 206 . 0.1677 0.0977 0.1026 0.0258  0.0505
0.0125  1 .
4823 C     C     . VAL VAL VAL B B 206 206 . 0.1193 0.1223 0.1149 -0.0028 0.0207
0.0048  1 .
4824 O     O     . VAL VAL VAL B B 206 206 . 0.1222 0.1285 0.1355 -0.0178 0.0243  -
0.0031 1 .
4825 N     N     . GLY GLY GLY B B 207 207 . 0.0960 0.1162 0.1247 0.0089  0.0180
0.0150  1 .
4826 CA    CA    . GLY GLY GLY B B 207 207 . 0.0883 0.1148 0.1099 0.0141  0.0404
0.0076  1 .
4827 C     C     . GLY GLY GLY B B 207 207 . 0.1025 0.1079 0.1324 0.0139  0.0220
0.0097  1 .
4828 O     O     . GLY GLY GLY B B 207 207 . 0.1149 0.1155 0.1297 -0.0119 0.0309  -
0.0006 1 .
4829 N     N     . ASP ASP ASP B B 208 208 . 0.1026 0.1400 0.1649 0.0163  0.0164
0.0127  1 .
4830 CA    CA    . ASP ASP ASP B B 208 208 . 0.0895 0.1088 0.1547 0.0022  0.0166
0.0013  1 .
4831 CB    CB    . ASP ASP ASP B B 208 208 . 0.1131 0.1044 0.1453 0.0082  0.0075
0.0039  1 .
4832 CG    CG    . ASP ASP ASP B B 208 208 . 0.1585 0.1339 0.1728 -0.0183 0.0103
0.0247  1 .
4833 OD1   OD1   . ASP ASP ASP B B 208 208 . 0.1837 0.1480 0.2220 -0.0202 0.0118  -
0.0244 1 .
4834 OD2   OD2   . ASP ASP ASP B B 208 208 . 0.1984 0.1189 0.2347 0.0019  0.0329  -
0.0146 1 .
4835 C     C     . ASP ASP ASP B B 208 208 . 0.1050 0.1140 0.1311 0.0102  0.0131  -
0.0097 1 .
4836 O     O     . ASP ASP ASP B B 208 208 . 0.1235 0.0988 0.1297 -0.0045 0.0203  -
0.0145 1 .
4837 N     N     . GLU GLU GLU B B 209 209 . 0.1039 0.1338 0.1233 0.0148  0.0051
0.0014  1 .
4838 CA    CA    . GLU GLU GLU B B 209 209 . 0.1300 0.1148 0.1090 0.0208  0.0055
0.0020  1 .
4839 CB    CB    . GLU GLU GLU B B 209 209 . 0.1252 0.1210 0.1417 0.0254  0.0012
0.0128  1 .
4840 CG    CG    . GLU GLU GLU B B 209 209 . 0.1755 0.1091 0.1607 0.0642  -0.0071 -
0.0157 1 .
4841 CD    CD    . GLU GLU GLU B B 209 209 . 0.2732 0.2773 0.2252 0.0855  -0.0074
0.0325  1 .
4842 OE1   OE1   . GLU GLU GLU B B 209 209 . 0.2724 0.2281 0.2029 0.0254  0.0020
0.0349  1 .
4843 OE2   OE2   . GLU GLU GLU B B 209 209 . 0.3565 0.2306 0.2567 0.0952  -0.0518
0.0014  1 .
4844 C     C     . GLU GLU GLU B B 209 209 . 0.1254 0.1067 0.0947 0.0147  0.0125
0.0043  1 .
4845 O     O     . GLU GLU GLU B B 209 209 . 0.1342 0.1130 0.1307 -0.0015 0.0117
0.0140  1 .
4846 N     N     . GLY GLY GLY B B 210 210 . 0.1145 0.0980 0.1169 0.0293  0.0290  -
0.0022 1 .
4847 CA    CA    . GLY GLY GLY B B 210 210 . 0.1175 0.1153 0.1230 0.0321  0.0375
0.0101  1 .
4848 C     C     . GLY GLY GLY B B 210 210 . 0.1677 0.1420 0.1247 0.0329  0.0173  -
0.0039 1 .
4849 O     O     . GLY GLY GLY B B 210 210 . 0.1863 0.1770 0.1291 0.0447  0.0304  -
0.0174 1 .
4850 N     N     . GLY GLY GLY B B 211 211 . 0.1767 0.1574 0.1263 0.0243  0.0318  -
0.0030 1 .
4851 CA    CA    . GLY GLY GLY B B 211 211 . 0.1614 0.1805 0.1582 0.0148  0.0090  -
0.0042 1 .
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4852 C     C     . GLY GLY GLY B B 211 211 . 0.1602 0.1860 0.1400 0.0370  -0.0025 -
0.0031 1 .
4853 O     O     . GLY GLY GLY B B 211 211 . 0.1687 0.1565 0.1454 0.0354  0.0409
0.0143  1 .
4854 N     N     . PHE PHE PHE B B 212 212 . 0.1725 0.2338 0.1618 0.0437  0.0142  -
0.0170 1 .
4855 CA    CA    . PHE PHE PHE B B 212 212 . 0.1837 0.2479 0.1900 0.0587  0.0237  -
0.0377 1 .
4856 CB    CB    . PHE PHE PHE B B 212 212 . 0.1611 0.2153 0.1673 0.0855  0.0338  -
0.0366 1 .
4857 CG    CG    . PHE PHE PHE B B 212 212 . 0.1338 0.2563 0.1874 0.0355  0.0576
0.0088  1 .
4858 CD1   CD1   . PHE PHE PHE B B 212 212 . 0.1695 0.2100 0.2024 0.0411  0.0391
0.0315  1 .
4859 CE1   CE1   . PHE PHE PHE B B 212 212 . 0.1199 0.2539 0.2494 0.0472  0.0011
0.0392  1 .
4860 CZ    CZ    . PHE PHE PHE B B 212 212 . 0.1812 0.2740 0.2193 0.0909  -0.0205
0.0083  1 .
4861 CE2   CE2   . PHE PHE PHE B B 212 212 . 0.1469 0.2219 0.2294 0.0502  0.0293
0.0055  1 .
4862 CD2   CD2   . PHE PHE PHE B B 212 212 . 0.1174 0.2222 0.2043 0.0978  0.0007
0.0182  1 .
4863 C     C     . PHE PHE PHE B B 212 212 . 0.2088 0.2477 0.2072 0.0558  0.0246  -
0.0520 1 .
4864 O     O     . PHE PHE PHE B B 212 212 . 0.2431 0.2380 0.2282 0.0838  -0.0218 -
0.0759 1 .
4865 N     N     . ALA ALA ALA B B 213 213 . 0.1954 0.2949 0.2354 0.0627  0.0080  -
0.0632 1 .
4866 CA    CA    . ALA ALA ALA B B 213 213 . 0.2317 0.3001 0.2671 0.0448  0.0007  -
0.0638 1 .
4867 CB    CB    . ALA ALA ALA B B 213 213 . 0.2342 0.3297 0.2540 0.0541  0.0012  -
0.0804 1 .
4868 C     C     . ALA ALA ALA B B 213 213 . 0.2610 0.3252 0.2749 0.0348  -0.0044 -
0.0643 1 .
4869 O     O     . ALA ALA ALA B B 213 213 . 0.2426 0.3559 0.2687 0.0258  -0.0115 -
0.0796 1 .
4870 N     N     . PRO PRO PRO B B 214 214 . 0.2717 0.3083 0.2587 0.0340  -0.0138 -
0.0585 1 .
4871 CA    CA    . PRO PRO PRO B B 214 214 . 0.2954 0.3028 0.2677 0.0311  -0.0144 -
0.0493 1 .
4872 CB    CB    . PRO PRO PRO B B 214 214 . 0.2928 0.3111 0.2578 0.0486  -0.0009 -
0.0453 1 .
4873 CG    CG    . PRO PRO PRO B B 214 214 . 0.2839 0.2739 0.2176 0.0030  -0.0182 -
0.0568 1 .
4874 CD    CD    . PRO PRO PRO B B 214 214 . 0.2826 0.2594 0.2682 0.0486  -0.0187 -
0.0723 1 .
4875 C     C     . PRO PRO PRO B B 214 214 . 0.2900 0.3197 0.2701 0.0200  -0.0204 -
0.0352 1 .
4876 O     O     . PRO PRO PRO B B 214 214 . 0.2580 0.3025 0.2876 0.0218  -0.0801 -
0.0643 1 .
4877 N     N     . ASN ASN ASN B B 215 215 . 0.2796 0.3481 0.2926 0.0249  -0.0226 -
0.0279 1 .
4878 CA    CA    . ASN ASN ASN B B 215 215 . 0.2935 0.3502 0.3329 0.0305  -0.0376 -
0.0201 1 .
4879 CB    CB    . ASN ASN ASN B B 215 215 . 0.2967 0.3709 0.3332 0.0174  -0.0454 -
0.0282 1 .
4880 CG    CG    . ASN ASN ASN B B 215 215 . 0.3049 0.3681 0.3889 -0.0015 -0.0549
0.0058  1 .
4881 OD1   OD1   . ASN ASN ASN B B 215 215 . 0.3465 0.4950 0.5003 -0.0829 -0.0861 -
0.0049 1 .
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4882 ND2   ND2   . ASN ASN ASN B B 215 215 . 0.1959 0.2529 0.2798 0.0173  -0.0967
0.0475  1 .
4883 C     C     . ASN ASN ASN B B 215 215 . 0.2877 0.3449 0.3156 0.0293  -0.0396 -
0.0141 1 .
4884 O     O     . ASN ASN ASN B B 215 215 . 0.2957 0.3769 0.3506 0.0303  -0.0677 -
0.0224 1 .
4885 N     N     . ILE ILE ILE B B 216 216 . 0.2829 0.3196 0.3385 0.0453  -0.0423 -
0.0228 1 .
4886 CA    CA    . ILE ILE ILE B B 216 216 . 0.2565 0.2776 0.3060 0.0506  -0.0415 -
0.0241 1 .
4887 CB    CB    . ILE ILE ILE B B 216 216 . 0.2638 0.2695 0.3190 0.0455  -0.0434 -
0.0205 1 .
4888 CG1   CG1   . ILE ILE ILE B B 216 216 . 0.2522 0.2675 0.2802 0.0502  -0.0655 -
0.0202 1 .
4889 CD1   CD1   . ILE ILE ILE B B 216 216 . 0.2441 0.2546 0.1600 0.0441  -0.0181 -
0.0251 1 .
4890 CG2   CG2   . ILE ILE ILE B B 216 216 . 0.2312 0.2294 0.2741 0.0906  -0.0534 -
0.0531 1 .
4891 C     C     . ILE ILE ILE B B 216 216 . 0.2844 0.2911 0.3186 0.0339  -0.0395 -
0.0268 1 .
4892 O     O     . ILE ILE ILE B B 216 216 . 0.2831 0.2866 0.3346 0.0576  -0.0544 -
0.0448 1 .
4893 N     N     . LEU LEU LEU B B 217 217 . 0.2959 0.2970 0.3120 0.0242  -0.0594 -
0.0267 1 .
4894 CA    CA    . LEU LEU LEU B B 217 217 . 0.3202 0.3096 0.3218 0.0220  -0.0454 -
0.0267 1 .
4895 CB    CB    . LEU LEU LEU B B 217 217 . 0.3266 0.3429 0.3364 0.0172  -0.0447 -
0.0249 1 .
4896 CG    CG    . LEU LEU LEU B B 217 217 . 0.3363 0.3553 0.3394 0.0125  -0.0593 -
0.0305 1 .
4897 CD1   CD1   . LEU LEU LEU B B 217 217 . 0.2986 0.3918 0.2999 0.0035  -0.1282 -
0.0935 1 .
4898 CD2   CD2   . LEU LEU LEU B B 217 217 . 0.3798 0.3768 0.3593 0.0065  -0.0441 -
0.0204 1 .
4899 C     C     . LEU LEU LEU B B 217 217 . 0.3250 0.3313 0.3266 0.0185  -0.0380 -
0.0281 1 .
4900 O     O     . LEU LEU LEU B B 217 217 . 0.3120 0.3034 0.3472 0.0400  -0.0306 -
0.0376 1 .
4901 N     N     . GLU GLU GLU B B 218 218 . 0.2897 0.3213 0.3116 0.0282  -0.0361 -
0.0288 1 .
4902 CA    CA    . GLU GLU GLU B B 218 218 . 0.2878 0.3240 0.3024 0.0161  -0.0347 -
0.0150 1 .
4903 CB    CB    . GLU GLU GLU B B 218 218 . 0.2899 0.3236 0.3050 0.0049  -0.0250 -
0.0141 1 .
4904 CG    CG    . GLU GLU GLU B B 218 218 . 0.3558 0.4029 0.3772 -0.0444 -0.0507 -
0.0014 1 .
4905 CD    CD    . GLU GLU GLU B B 218 218 . 0.4560 0.5048 0.4651 -0.0673 -0.0286
0.0519  1 .
4906 OE1   OE1   . GLU GLU GLU B B 218 218 . 0.4473 0.5083 0.5656 -0.0790 -0.0155
0.0750  1 .
4907 OE2   OE2   . GLU GLU GLU B B 218 218 . 0.4910 0.5771 0.4962 -0.0697 -0.0199
0.0299  1 .
4908 C     C     . GLU GLU GLU B B 218 218 . 0.2610 0.2776 0.2792 0.0173  -0.0424 -
0.0099 1 .
4909 O     O     . GLU GLU GLU B B 218 218 . 0.2404 0.2884 0.2613 0.0599  -0.0659 -
0.0365 1 .
4910 N     N     . ASN ASN ASN B B 219 219 . 0.2334 0.2516 0.2668 0.0189  -0.0413 -
0.0154 1 .
4911 CA    CA    . ASN ASN ASN B B 219 219 . 0.1929 0.2169 0.2359 0.0258  -0.0344 -
0.0150 1 .
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4912 CB    CB    . ASN ASN ASN B B 219 219 . 0.2016 0.2240 0.2102 0.0247  -0.0502 -
0.0213 1 .
4913 CG    CG    . ASN ASN ASN B B 219 219 . 0.1323 0.1571 0.1673 0.0193  -0.0182
0.0116  1 .
4914 OD1   OD1   . ASN ASN ASN B B 219 219 . 0.1460 0.1609 0.1686 -0.0052 -0.0431 -
0.0191 1 .
4915 ND2   ND2   . ASN ASN ASN B B 219 219 . 0.1667 0.1897 0.1839 -0.0087 -0.0675 -
0.0090 1 .
4916 C     C     . ASN ASN ASN B B 219 219 . 0.1978 0.2240 0.2239 0.0208  -0.0281 -
0.0084 1 .
4917 O     O     . ASN ASN ASN B B 219 219 . 0.2003 0.1884 0.2122 0.0182  -0.0248 -
0.0183 1 .
4918 N     N     . SER SER SER B B 220 220 . 0.2172 0.2124 0.2249 0.0112  -0.0215
0.0031  1 .
4919 CA    CA    . SER SER SER B B 220 220 . 0.2251 0.2249 0.2205 0.0190  -0.0186
0.0094  1 .
4920 CB    CB    . SER SER SER B B 220 220 . 0.2298 0.2366 0.2119 0.0172  -0.0299
0.0079  1 .
4921 OG    OG    . SER SER SER B B 220 220 . 0.2389 0.2638 0.2801 0.0097  -0.0020
0.0076  1 .
4922 C     C     . SER SER SER B B 220 220 . 0.2367 0.2186 0.2153 0.0167  -0.0140
0.0073  1 .
4923 O     O     . SER SER SER B B 220 220 . 0.2449 0.2036 0.1823 0.0007  -0.0018
0.0117  1 .
4924 N     N     . GLU GLU GLU B B 221 221 . 0.2527 0.2167 0.1957 0.0334  -0.0166 -
0.0005 1 .
4925 CA    CA    . GLU GLU GLU B B 221 221 . 0.2440 0.2239 0.2259 0.0396  -0.0131 -
0.0153 1 .
4926 CB    CB    . GLU GLU GLU B B 221 221 . 0.2443 0.2404 0.2296 0.0345  -0.0235 -
0.0066 1 .
4927 CG    CG    . GLU GLU GLU B B 221 221 . 0.3054 0.3216 0.2826 0.0528  -0.0356 -
0.0004 1 .
4928 CD    CD    . GLU GLU GLU B B 221 221 . 0.3573 0.4186 0.3519 0.0879  -0.0114 -
0.0028 1 .
4929 OE1   OE1   . GLU GLU GLU B B 221 221 . 0.3697 0.4801 0.3196 0.1450  0.0237  -
0.0129 1 .
4930 OE2   OE2   . GLU GLU GLU B B 221 221 . 0.3582 0.4277 0.3551 0.0877  0.0188
0.0197  1 .
4931 C     C     . GLU GLU GLU B B 221 221 . 0.2094 0.2053 0.2133 0.0398  -0.0100 -
0.0133 1 .
4932 O     O     . GLU GLU GLU B B 221 221 . 0.2008 0.1729 0.2170 0.0402  0.0044  -
0.0357 1 .
4933 N     N     . ALA ALA ALA B B 222 222 . 0.2014 0.1772 0.2014 0.0448  -0.0018 -
0.0129 1 .
4934 CA    CA    . ALA ALA ALA B B 222 222 . 0.1656 0.1779 0.1762 0.0498  -0.0112 -
0.0147 1 .
4935 CB    CB    . ALA ALA ALA B B 222 222 . 0.1516 0.2055 0.1851 0.0696  -0.0294 -
0.0287 1 .
4936 C     C     . ALA ALA ALA B B 222 222 . 0.1665 0.1730 0.1771 0.0343  -0.0063
0.0029  1 .
4937 O     O     . ALA ALA ALA B B 222 222 . 0.1769 0.1732 0.1690 0.0369  -0.0182
0.0153  1 .
4938 N     N     . LEU LEU LEU B B 223 223 . 0.1523 0.1526 0.1439 0.0463  -0.0105
0.0104  1 .
4939 CA    CA    . LEU LEU LEU B B 223 223 . 0.1735 0.1418 0.1190 0.0356  -0.0038
0.0185  1 .
4940 CB    CB    . LEU LEU LEU B B 223 223 . 0.1715 0.1357 0.1452 0.0325  -0.0093
0.0265  1 .
4941 CG    CG    . LEU LEU LEU B B 223 223 . 0.1960 0.1628 0.1434 0.0304  0.0102
0.0303  1 .
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4942 CD1   CD1   . LEU LEU LEU B B 223 223 . 0.2302 0.1760 0.1861 0.0340  0.0085
0.0516  1 .
4943 CD2   CD2   . LEU LEU LEU B B 223 223 . 0.1895 0.1862 0.1727 -0.0105 -0.0484
0.0162  1 .
4944 C     C     . LEU LEU LEU B B 223 223 . 0.1678 0.1405 0.1332 0.0212  -0.0077
0.0189  1 .
4945 O     O     . LEU LEU LEU B B 223 223 . 0.2008 0.1513 0.1491 0.0108  -0.0079
0.0122  1 .
4946 N     N     . GLU GLU GLU B B 224 224 . 0.1940 0.1618 0.1434 0.0287  -0.0047
0.0026  1 .
4947 CA    CA    . GLU GLU GLU B B 224 224 . 0.1918 0.1885 0.1684 0.0252  0.0053
0.0109  1 .
4948 CB    CB    . GLU GLU GLU B B 224 224 . 0.2061 0.1981 0.1757 0.0087  0.0178
0.0008  1 .
4949 CG    CG    . GLU GLU GLU B B 224 224 . 0.3100 0.2957 0.3218 0.0257  0.0319
0.0108  1 .
4950 CD    CD    . GLU GLU GLU B B 224 224 . 0.4048 0.4007 0.3439 -0.0330 0.0862  -
0.0227 1 .
4951 OE1   OE1   . GLU GLU GLU B B 224 224 . 0.5268 0.3908 0.4917 -0.0200 0.1656  -
0.0034 1 .
4952 OE2   OE2   . GLU GLU GLU B B 224 224 . 0.4929 0.4102 0.4783 -0.0347 0.0513  -
0.0068 1 .
4953 C     C     . GLU GLU GLU B B 224 224 . 0.1977 0.1812 0.1768 0.0203  0.0065
0.0006  1 .
4954 O     O     . GLU GLU GLU B B 224 224 . 0.2255 0.1747 0.1985 0.0447  0.0328
0.0115  1 .
4955 N     N     . LEU LEU LEU B B 225 225 . 0.1579 0.1833 0.1377 0.0467  0.0054
0.0030  1 .
4956 CA    CA    . LEU LEU LEU B B 225 225 . 0.1611 0.1668 0.1213 0.0493  0.0100
0.0014  1 .
4957 CB    CB    . LEU LEU LEU B B 225 225 . 0.1732 0.1723 0.1611 0.0558  0.0010  -
0.0118 1 .
4958 CG    CG    . LEU LEU LEU B B 225 225 . 0.2091 0.1822 0.1988 0.0552  0.0011
0.0029  1 .
4959 CD1   CD1   . LEU LEU LEU B B 225 225 . 0.2452 0.1822 0.1930 0.0650  0.0225  -
0.0465 1 .
4960 CD2   CD2   . LEU LEU LEU B B 225 225 . 0.1934 0.2856 0.3209 0.1042  -0.0427
0.0204  1 .
4961 C     C     . LEU LEU LEU B B 225 225 . 0.1593 0.1623 0.1213 0.0537  0.0143  -
0.0042 1 .
4962 O     O     . LEU LEU LEU B B 225 225 . 0.1638 0.1807 0.1509 0.0522  0.0117  -
0.0057 1 .
4963 N     N     . VAL VAL VAL B B 226 226 . 0.1423 0.1764 0.1061 0.0557  0.0088  -
0.0100 1 .
4964 CA    CA    . VAL VAL VAL B B 226 226 . 0.1628 0.1492 0.1098 0.0355  0.0201  -
0.0029 1 .
4965 CB    CB    . VAL VAL VAL B B 226 226 . 0.1389 0.1379 0.1226 0.0434  0.0026  -
0.0103 1 .
4966 CG1   CG1   . VAL VAL VAL B B 226 226 . 0.1377 0.1698 0.1310 0.0176  0.0066  -
0.0172 1 .
4967 CG2   CG2   . VAL VAL VAL B B 226 226 . 0.1529 0.1209 0.1006 0.0233  0.0363  -
0.0184 1 .
4968 C     C     . VAL VAL VAL B B 226 226 . 0.1908 0.1568 0.1311 0.0269  0.0187
0.0043  1 .
4969 O     O     . VAL VAL VAL B B 226 226 . 0.2254 0.1710 0.1132 0.0228  0.0162
0.0323  1 .
4970 N     N     . LYS LYS LYS B B 227 227 . 0.1963 0.1742 0.1326 0.0257  0.0221
0.0205  1 .
4971 CA    CA    . LYS LYS LYS B B 227 227 . 0.2282 0.1968 0.1636 0.0278  0.0328
0.0074  1 .
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4972 CB    CB    . LYS LYS LYS B B 227 227 . 0.2551 0.2391 0.1495 0.0221  0.0183
0.0023  1 .
4973 CG    CG    . LYS LYS LYS B B 227 227 . 0.3481 0.2804 0.2353 0.0584  0.0712  -
0.0534 1 .
4974 CD    CD    . LYS LYS LYS B B 227 227 . 0.4378 0.3934 0.3298 0.0531  0.0900  -
0.0138 1 .
4975 CE    CE    . LYS LYS LYS B B 227 227 . 0.4775 0.5495 0.4107 0.0473  0.0892  -
0.0821 1 .
4976 NZ    NZ    . LYS LYS LYS B B 227 227 . 0.5029 0.6145 0.5129 0.0700  0.0560  -
0.0544 1 .
4977 C     C     . LYS LYS LYS B B 227 227 . 0.2128 0.1974 0.1546 0.0216  0.0304
0.0125  1 .
4978 O     O     . LYS LYS LYS B B 227 227 . 0.2530 0.2504 0.1835 0.0311  0.0447
0.0236  1 .
4979 N     N     . GLU GLU GLU B B 228 228 . 0.2143 0.1958 0.1895 0.0422  0.0265
0.0198  1 .
4980 CA    CA    . GLU GLU GLU B B 228 228 . 0.2259 0.2096 0.1928 0.0427  0.0523
0.0209  1 .
4981 CB    CB    . GLU GLU GLU B B 228 228 . 0.1988 0.1946 0.1776 0.0286  0.0433
0.0230  1 .
4982 CG    CG    . GLU GLU GLU B B 228 228 . 0.2541 0.2662 0.2844 0.0633  0.0932
0.0326  1 .
4983 CD    CD    . GLU GLU GLU B B 228 228 . 0.4065 0.4649 0.4604 0.0173  0.0338
0.0123  1 .
4984 OE1   OE1   . GLU GLU GLU B B 228 228 . 0.4785 0.5458 0.5352 0.0698  0.0288
0.0441  1 .
4985 OE2   OE2   . GLU GLU GLU B B 228 228 . 0.4910 0.4655 0.5320 0.0099  0.1063
0.0185  1 .
4986 C     C     . GLU GLU GLU B B 228 228 . 0.2210 0.1995 0.1972 0.0420  0.0602
0.0221  1 .
4987 O     O     . GLU GLU GLU B B 228 228 . 0.2273 0.2121 0.1950 0.0688  0.0998
0.0199  1 .
4988 N     N     . ALA ALA ALA B B 229 229 . 0.2058 0.2021 0.1677 0.0329  0.0549
0.0104  1 .
4989 CA    CA    . ALA ALA ALA B B 229 229 . 0.2008 0.1972 0.1556 0.0364  0.0510
0.0074  1 .
4990 CB    CB    . ALA ALA ALA B B 229 229 . 0.1820 0.1900 0.1196 0.0358  0.0459  -
0.0066 1 .
4991 C     C     . ALA ALA ALA B B 229 229 . 0.1846 0.1999 0.1711 0.0374  0.0491
0.0084  1 .
4992 O     O     . ALA ALA ALA B B 229 229 . 0.2206 0.2109 0.1439 0.0569  0.0616
0.0280  1 .
4993 N     N     . ILE ILE ILE B B 230 230 . 0.1871 0.1839 0.1333 0.0356  0.0395
0.0201  1 .
4994 CA    CA    . ILE ILE ILE B B 230 230 . 0.1794 0.1706 0.1586 0.0417  0.0291
0.0068  1 .
4995 CB    CB    . ILE ILE ILE B B 230 230 . 0.1545 0.1781 0.1592 0.0427  0.0204  -
0.0071 1 .
4996 CG1   CG1   . ILE ILE ILE B B 230 230 . 0.1557 0.1333 0.1222 0.0588  0.0096  -
0.0244 1 .
4997 CD1   CD1   . ILE ILE ILE B B 230 230 . 0.1697 0.1230 0.1293 0.0622  -0.0144 -
0.0101 1 .
4998 CG2   CG2   . ILE ILE ILE B B 230 230 . 0.1585 0.1723 0.1979 0.0295  0.0179  -
0.0100 1 .
4999 C     C     . ILE ILE ILE B B 230 230 . 0.2026 0.1853 0.1835 0.0289  0.0357  -
0.0074 1 .
5000 O     O     . ILE ILE ILE B B 230 230 . 0.2406 0.1927 0.1592 0.0468  0.0456  -
0.0012 1 .
5001 N     N     . ASP ASP ASP B B 231 231 . 0.2337 0.2068 0.1859 0.0482  0.0539  -
0.0065 1 .
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5002 CA    CA    . ASP ASP ASP B B 231 231 . 0.2499 0.2110 0.2455 0.0414  0.0489  -
0.0115 1 .
5003 CB    CB    . ASP ASP ASP B B 231 231 . 0.2632 0.2429 0.2077 0.0381  0.0562  -
0.0310 1 .
5004 CG    CG    . ASP ASP ASP B B 231 231 . 0.3778 0.3805 0.3814 0.0442  0.0579  -
0.0294 1 .
5005 OD1   OD1   . ASP ASP ASP B B 231 231 . 0.4079 0.5552 0.5070 0.0470  0.0045  -
0.0281 1 .
5006 OD2   OD2   . ASP ASP ASP B B 231 231 . 0.5083 0.3968 0.4719 -0.0499 0.0669  -
0.0452 1 .
5007 C     C     . ASP ASP ASP B B 231 231 . 0.2441 0.2274 0.2385 0.0307  0.0498  -
0.0023 1 .
5008 O     O     . ASP ASP ASP B B 231 231 . 0.2808 0.1891 0.2397 0.0310  0.0715  -
0.0177 1 .
5009 N     N     . LYS LYS LYS B B 232 232 . 0.2354 0.2248 0.2264 0.0435  0.0620
0.0018  1 .
5010 CA    CA    . LYS LYS LYS B B 232 232 . 0.2464 0.2529 0.2693 0.0507  0.0375
0.0157  1 .
5011 CB    CB    . LYS LYS LYS B B 232 232 . 0.2589 0.2608 0.2895 0.0496  0.0172
0.0176  1 .
5012 CG    CG    . LYS LYS LYS B B 232 232 . 0.3543 0.3887 0.3597 0.0483  -0.0008
0.0264  1 .
5013 CD    CD    . LYS LYS LYS B B 232 232 . 0.4205 0.4703 0.4292 0.0513  -0.0155 -
0.0276 1 .
5014 CE    CE    . LYS LYS LYS B B 232 232 . 0.4797 0.5307 0.4337 0.0670  -0.0198 -
0.0160 1 .
5015 NZ    NZ    . LYS LYS LYS B B 232 232 . 0.5023 0.6362 0.5419 0.0533  -0.0278 -
0.0287 1 .
5016 C     C     . LYS LYS LYS B B 232 232 . 0.2289 0.2359 0.2576 0.0484  0.0329
0.0254  1 .
5017 O     O     . LYS LYS LYS B B 232 232 . 0.2315 0.2327 0.2673 0.0601  0.0731
0.0449  1 .
5018 N     N     . ALA ALA ALA B B 233 233 . 0.2124 0.2281 0.2155 0.0456  0.0540
0.0192  1 .
5019 CA    CA    . ALA ALA ALA B B 233 233 . 0.2115 0.2194 0.2121 0.0425  0.0430
0.0076  1 .
5020 CB    CB    . ALA ALA ALA B B 233 233 . 0.1902 0.2077 0.2132 0.0753  0.0597
0.0233  1 .
5021 C     C     . ALA ALA ALA B B 233 233 . 0.2121 0.2100 0.2207 0.0381  0.0381
0.0110  1 .
5022 O     O     . ALA ALA ALA B B 233 233 . 0.2500 0.2066 0.1771 0.0374  0.0409
0.0247  1 .
5023 N     N     . GLY GLY GLY B B 234 234 . 0.2340 0.1915 0.2033 0.0420  0.0350
0.0121  1 .
5024 CA    CA    . GLY GLY GLY B B 234 234 . 0.2454 0.1999 0.2089 0.0260  0.0353
0.0030  1 .
5025 C     C     . GLY GLY GLY B B 234 234 . 0.2590 0.1994 0.2122 0.0284  0.0348
0.0084  1 .
5026 O     O     . GLY GLY GLY B B 234 234 . 0.2917 0.1695 0.2306 0.0506  0.0345  -
0.0113 1 .
5027 N     N     . TYR TYR TYR B B 235 235 . 0.2493 0.1854 0.1824 0.0499  0.0553
0.0083  1 .
5028 CA    CA    . TYR TYR TYR B B 235 235 . 0.2222 0.1926 0.1510 0.0258  0.0454
0.0274  1 .
5029 CB    CB    . TYR TYR TYR B B 235 235 . 0.2215 0.1787 0.1441 0.0548  0.0554
0.0461  1 .
5030 CG    CG    . TYR TYR TYR B B 235 235 . 0.2419 0.1851 0.1677 0.0240  0.0225
0.0337  1 .
5031 CD1   CD1   . TYR TYR TYR B B 235 235 . 0.2467 0.2174 0.1627 0.0526  0.0526
0.0157  1 .
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5032 CE1   CE1   . TYR TYR TYR B B 235 235 . 0.2320 0.2126 0.1314 0.0280  0.0112
0.0280  1 .
5033 CZ    CZ    . TYR TYR TYR B B 235 235 . 0.2353 0.1905 0.1675 0.0267  0.0252
0.0325  1 .
5034 OH    OH    . TYR TYR TYR B B 235 235 . 0.3353 0.1863 0.2321 0.0387  0.0579
0.0545  1 .
5035 CE2   CE2   . TYR TYR TYR B B 235 235 . 0.2612 0.1985 0.1702 0.0136  0.0102
0.0517  1 .
5036 CD2   CD2   . TYR TYR TYR B B 235 235 . 0.2611 0.1526 0.1974 0.0341  0.0382
0.0264  1 .
5037 C     C     . TYR TYR TYR B B 235 235 . 0.2160 0.1977 0.1778 0.0344  0.0328
0.0262  1 .
5038 O     O     . TYR TYR TYR B B 235 235 . 0.2278 0.1812 0.1544 0.0490  0.0402
0.0038  1 .
5039 N     N     . THR THR THR B B 236 236 . 0.2201 0.1900 0.1676 0.0253  0.0423
0.0324  1 .
5040 CA    CA    . THR THR THR B B 236 236 . 0.2519 0.2161 0.2148 0.0125  0.0496
0.0251  1 .
5041 CB    CB    . THR THR THR B B 236 236 . 0.2644 0.2460 0.2076 0.0037  0.0472
0.0327  1 .
5042 OG1   OG1   . THR THR THR B B 236 236 . 0.2678 0.3374 0.2554 -0.0121 0.0485
0.0279  1 .
5043 CG2   CG2   . THR THR THR B B 236 236 . 0.2678 0.1990 0.2428 0.0001  0.0808
0.0194  1 .
5044 C     C     . THR THR THR B B 236 236 . 0.2705 0.2231 0.1872 0.0220  0.0517
0.0117  1 .
5045 O     O     . THR THR THR B B 236 236 . 0.3064 0.2397 0.2068 0.0479  0.0503  -
0.0092 1 .
5046 N     N     . GLU GLU GLU B B 237 237 . 0.2715 0.2292 0.2071 0.0063  0.0534
0.0111  1 .
5047 CA    CA    . GLU GLU GLU B B 237 237 . 0.2987 0.2693 0.2628 0.0158  0.0392  -
0.0132 1 .
5048 CB    CB    . GLU GLU GLU B B 237 237 . 0.3165 0.2880 0.2826 0.0194  0.0383  -
0.0222 1 .
5049 CG    CG    . GLU GLU GLU B B 237 237 . 0.3386 0.3368 0.3295 0.0468  0.0556  -
0.0402 1 .
5050 C     C     . GLU GLU GLU B B 237 237 . 0.2936 0.2618 0.2438 0.0116  0.0306  -
0.0118 1 .
5051 O     O     . GLU GLU GLU B B 237 237 . 0.3189 0.3105 0.2238 0.0178  0.0339  -
0.0184 1 .
5052 N     N     . LYS LYS LYS B B 238 238 . 0.2789 0.2008 0.2128 0.0104  0.0409  -
0.0230 1 .
5053 CA    CA    . LYS LYS LYS B B 238 238 . 0.2499 0.1479 0.1876 0.0090  0.0280  -
0.0231 1 .
5054 CB    CB    . LYS LYS LYS B B 238 238 . 0.2774 0.1293 0.1915 0.0192  0.0106  -
0.0277 1 .
5055 CG    CG    . LYS LYS LYS B B 238 238 . 0.3637 0.1254 0.2288 0.0006  -0.0156 -
0.0236 1 .
5056 CD    CD    . LYS LYS LYS B B 238 238 . 0.4474 0.1928 0.2197 0.0410  -0.0289
0.0245  1 .
5057 CE    CE    . LYS LYS LYS B B 238 238 . 0.5106 0.1997 0.3028 -0.0074 -0.0230 -
0.0412 1 .
5058 NZ    NZ    . LYS LYS LYS B B 238 238 . 0.5049 0.2531 0.3364 0.0043  -0.0442
0.0061  1 .
5059 C     C     . LYS LYS LYS B B 238 238 . 0.2159 0.1481 0.1439 0.0188  0.0242  -
0.0180 1 .
5060 O     O     . LYS LYS LYS B B 238 238 . 0.2361 0.1483 0.1083 0.0215  0.0384  -
0.0171 1 .
5061 N     N     . ILE ILE ILE B B 239 239 . 0.2110 0.1334 0.1171 0.0251  0.0378  -
0.0252 1 .
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5062 CA    CA    . ILE ILE ILE B B 239 239 . 0.2235 0.1200 0.1273 0.0145  0.0130  -
0.0150 1 .
5063 CB    CB    . ILE ILE ILE B B 239 239 . 0.2306 0.1267 0.1386 0.0133  0.0225  -
0.0333 1 .
5064 CG1   CG1   . ILE ILE ILE B B 239 239 . 0.2325 0.1435 0.1341 0.0319  -0.0459 -
0.0096 1 .
5065 CD1   CD1   . ILE ILE ILE B B 239 239 . 0.2571 0.2425 0.1370 0.0318  -0.0774 -
0.0703 1 .
5066 CG2   CG2   . ILE ILE ILE B B 239 239 . 0.2015 0.1230 0.1411 0.0622  0.0152  -
0.0650 1 .
5067 C     C     . ILE ILE ILE B B 239 239 . 0.2071 0.1544 0.1448 0.0100  0.0216
0.0036  1 .
5068 O     O     . ILE ILE ILE B B 239 239 . 0.2245 0.1772 0.1497 0.0162  0.0277
0.0319  1 .
5069 N     N     . VAL VAL VAL B B 240 240 . 0.1934 0.1164 0.1006 0.0175  0.0142
0.0141  1 .
5070 CA    CA    . VAL VAL VAL B B 240 240 . 0.2025 0.0969 0.1150 0.0049  0.0186  -
0.0102 1 .
5071 CB    CB    . VAL VAL VAL B B 240 240 . 0.1814 0.1014 0.1240 0.0038  -0.0003 -
0.0195 1 .
5072 CG1   CG1   . VAL VAL VAL B B 240 240 . 0.2567 0.0867 0.1503 0.0199  0.0119  -
0.0289 1 .
5073 CG2   CG2   . VAL VAL VAL B B 240 240 . 0.1978 0.0576 0.1082 0.0060  0.0032
0.0263  1 .
5074 C     C     . VAL VAL VAL B B 240 240 . 0.1786 0.1127 0.1187 0.0140  0.0124  -
0.0038 1 .
5075 O     O     . VAL VAL VAL B B 240 240 . 0.1902 0.1206 0.1167 0.0148  0.0341
0.0183  1 .
5076 N     N     . ILE ILE ILE B B 241 241 . 0.1709 0.1048 0.1090 0.0224  0.0072  -
0.0046 1 .
5077 CA    CA    . ILE ILE ILE B B 241 241 . 0.1492 0.1202 0.0977 0.0293  -0.0039 -
0.0130 1 .
5078 CB    CB    . ILE ILE ILE B B 241 241 . 0.1491 0.1241 0.1123 0.0244  -0.0099 -
0.0170 1 .
5079 CG1   CG1   . ILE ILE ILE B B 241 241 . 0.0921 0.1026 0.0859 0.0261  -0.0041
0.0150  1 .
5080 CD1   CD1   . ILE ILE ILE B B 241 241 . 0.0975 0.1482 0.1410 0.0437  0.0178
0.0206  1 .
5081 CG2   CG2   . ILE ILE ILE B B 241 241 . 0.1380 0.0826 0.1257 0.0275  0.0158  -
0.0271 1 .
5082 C     C     . ILE ILE ILE B B 241 241 . 0.1609 0.1315 0.1159 0.0366  -0.0047 -
0.0161 1 .
5083 O     O     . ILE ILE ILE B B 241 241 . 0.1703 0.1132 0.1147 0.0280  -0.0021 -
0.0178 1 .
5084 N     N     . GLY GLY GLY B B 242 242 . 0.1128 0.1242 0.1096 0.0376  0.0170  -
0.0182 1 .
5085 CA    CA    . GLY GLY GLY B B 242 242 . 0.1643 0.1027 0.1001 0.0234  -0.0130 -
0.0093 1 .
5086 C     C     . GLY GLY GLY B B 242 242 . 0.1535 0.1257 0.1288 0.0133  -0.0161 -
0.0076 1 .
5087 O     O     . GLY GLY GLY B B 242 242 . 0.1491 0.1321 0.1322 0.0256  -0.0094 -
0.0079 1 .
5088 N     N     . MET MET MET B B 243 243 . 0.1355 0.0970 0.1123 0.0286  -0.0124 -
0.0300 1 .
5089 CA    CA    . MET MET MET B B 243 243 . 0.1423 0.1259 0.1423 0.0178  0.0037  -
0.0189 1 .
5090 CB    CB    . MET MET MET B B 243 243 . 0.1126 0.1198 0.1112 0.0133  0.0044  -
0.0092 1 .
5091 CG    CG    . MET MET MET B B 243 243 . 0.1348 0.1118 0.1280 0.0211  -0.0074
0.0010  1 .
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5092 SD    SD    . MET MET MET B B 243 243 . 0.1911 0.1584 0.1610 0.0060  0.0206  -
0.0368 1 .
5093 CE    CE    . MET MET MET B B 243 243 . 0.1626 0.1665 0.2513 -0.0515 -0.0329 -
0.0561 1 .
5094 C     C     . MET MET MET B B 243 243 . 0.1285 0.1245 0.1330 0.0252  0.0011  -
0.0153 1 .
5095 O     O     . MET MET MET B B 243 243 . 0.1732 0.1280 0.0897 0.0076  -0.0020 -
0.0104 1 .
5096 N     N     . ASP ASP ASP B B 244 244 . 0.1450 0.1035 0.0717 0.0463  0.0056  -
0.0141 1 .
5097 CA    CA    . ASP ASP ASP B B 244 244 . 0.1181 0.1186 0.0885 0.0298  -0.0033
0.0065  1 .
5098 CB    CB    . ASP ASP ASP B B 244 244 . 0.1113 0.1057 0.0911 0.0420  0.0001  -
0.0164 1 .
5099 CG    CG    . ASP ASP ASP B B 244 244 . 0.1374 0.1052 0.1137 0.0377  0.0167
0.0071  1 .
5100 OD1   OD1   . ASP ASP ASP B B 244 244 . 0.1228 0.1338 0.0773 0.0355  0.0100
0.0300  1 .
5101 OD2   OD2   . ASP ASP ASP B B 244 244 . 0.1076 0.1312 0.0951 0.0048  -0.0142
0.0288  1 .
5102 C     C     . ASP ASP ASP B B 244 244 . 0.1336 0.1161 0.1152 0.0144  -0.0072
0.0032  1 .
5103 O     O     . ASP ASP ASP B B 244 244 . 0.1500 0.1332 0.1360 0.0199  -0.0171
0.0034  1 .
5104 N     N     . VAL VAL VAL B B 245 245 . 0.0978 0.1098 0.0911 0.0084  0.0079
0.0059  1 .
5105 CA    CA    . VAL VAL VAL B B 245 245 . 0.1500 0.1169 0.0914 0.0007  -0.0080 -
0.0078 1 .
5106 CB    CB    . VAL VAL VAL B B 245 245 . 0.1504 0.1101 0.1133 0.0009  0.0069
0.0034  1 .
5107 CG1   CG1   . VAL VAL VAL B B 245 245 . 0.1670 0.0798 0.0654 -0.0103 -0.0139
0.0037  1 .
5108 CG2   CG2   . VAL VAL VAL B B 245 245 . 0.1537 0.1302 0.0698 -0.0068 -0.0065 -
0.0090 1 .
5109 C     C     . VAL VAL VAL B B 245 245 . 0.1311 0.1121 0.1188 0.0113  -0.0006 -
0.0060 1 .
5110 O     O     . VAL VAL VAL B B 245 245 . 0.1176 0.1230 0.1106 0.0143  -0.0154 -
0.0009 1 .
5111 N     N     . ALA ALA ALA B B 246 246 . 0.1215 0.1091 0.0965 0.0067  0.0064  -
0.0068 1 .
5112 CA    CA    . ALA ALA ALA B B 246 246 . 0.1444 0.1048 0.0908 0.0084  -0.0044 -
0.0162 1 .
5113 CB    CB    . ALA ALA ALA B B 246 246 . 0.1366 0.0916 0.0631 -0.0044 -0.0012 -
0.0180 1 .
5114 C     C     . ALA ALA ALA B B 246 246 . 0.1467 0.1331 0.0978 -0.0015 -0.0062 -
0.0212 1 .
5115 O     O     . ALA ALA ALA B B 246 246 . 0.1594 0.1176 0.1052 0.0274  -0.0323 -
0.0351 1 .
5116 N     N     . ALA ALA ALA B B 247 247 . 0.1194 0.0912 0.0931 0.0092  -0.0210
0.0092  1 .
5117 CA    CA    . ALA ALA ALA B B 247 247 . 0.1125 0.1202 0.1010 0.0111  -0.0058 -
0.0073 1 .
5118 CB    CB    . ALA ALA ALA B B 247 247 . 0.0972 0.1002 0.0887 0.0091  0.0082  -
0.0212 1 .
5119 C     C     . ALA ALA ALA B B 247 247 . 0.1409 0.1264 0.1194 0.0059  -0.0028 -
0.0099 1 .
5120 O     O     . ALA ALA ALA B B 247 247 . 0.1389 0.1348 0.1303 0.0158  -0.0020 -
0.0072 1 .
5121 N     N     . SER SER SER B B 248 248 . 0.1335 0.1384 0.1323 0.0225  -0.0249 -
0.0353 1 .
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5122 CA    CA    . SER SER SER B B 248 248 . 0.1563 0.1573 0.1488 0.0155  -0.0307 -
0.0310 1 .
5123 CB    CB    . SER SER SER B B 248 248 . 0.1502 0.1346 0.1294 0.0165  -0.0137 -
0.0449 1 .
5124 OG    OG    . SER SER SER B B 248 248 . 0.1594 0.1655 0.1140 0.0070  -0.0351 -
0.0062 1 .
5125 C     C     . SER SER SER B B 248 248 . 0.1814 0.1591 0.1657 0.0165  -0.0432 -
0.0251 1 .
5126 O     O     . SER SER SER B B 248 248 . 0.2116 0.1442 0.1686 0.0175  -0.0613 -
0.0400 1 .
5127 N     N     . GLU GLU GLU B B 249 249 . 0.1984 0.1630 0.1695 0.0102  -0.0383 -
0.0040 1 .
5128 CA    CA    . GLU GLU GLU B B 249 249 . 0.1976 0.1767 0.1730 0.0077  -0.0293
0.0077  1 .
5129 CB    CB    . GLU GLU GLU B B 249 249 . 0.1734 0.1461 0.1568 0.0234  -0.0230
0.0276  1 .
5130 CG    CG    . GLU GLU GLU B B 249 249 . 0.1709 0.1767 0.1519 0.0370  -0.0127
0.0181  1 .
5131 CD    CD    . GLU GLU GLU B B 249 249 . 0.1983 0.1748 0.2284 0.0285  -0.0309 -
0.0492 1 .
5132 OE1   OE1   . GLU GLU GLU B B 249 249 . 0.3033 0.3575 0.1903 0.0504  -0.0226 -
0.1207 1 .
5133 OE2   OE2   . GLU GLU GLU B B 249 249 . 0.1845 0.1654 0.1304 -0.0163 -0.0109
0.0155  1 .
5134 C     C     . GLU GLU GLU B B 249 249 . 0.2061 0.1716 0.1920 0.0166  -0.0334 -
0.0047 1 .
5135 O     O     . GLU GLU GLU B B 249 249 . 0.2232 0.2149 0.1755 0.0165  -0.0617 -
0.0413 1 .
5136 N     N     . PHE PHE PHE B B 250 250 . 0.1623 0.1336 0.1720 0.0226  -0.0212 -
0.0011 1 .
5137 CA    CA    . PHE PHE PHE B B 250 250 . 0.1586 0.1489 0.1646 0.0247  -0.0171 -
0.0106 1 .
5138 CB    CB    . PHE PHE PHE B B 250 250 . 0.1560 0.1290 0.1804 0.0150  -0.0093 -
0.0239 1 .
5139 CG    CG    . PHE PHE PHE B B 250 250 . 0.1277 0.1528 0.1429 0.0192  -0.0160 -
0.0239 1 .
5140 CD1   CD1   . PHE PHE PHE B B 250 250 . 0.1640 0.1507 0.1369 0.0461  -0.0339 -
0.0096 1 .
5141 CE1   CE1   . PHE PHE PHE B B 250 250 . 0.1776 0.1721 0.1381 0.0349  -0.0338
0.0093  1 .
5142 CZ    CZ    . PHE PHE PHE B B 250 250 . 0.0985 0.1344 0.1667 -0.0181 -0.0413
0.0541  1 .
5143 CE2   CE2   . PHE PHE PHE B B 250 250 . 0.1311 0.1356 0.1776 -0.0085 -0.0242 -
0.0286 1 .
5144 CD2   CD2   . PHE PHE PHE B B 250 250 . 0.1493 0.1564 0.1381 0.0084  -0.0226 -
0.0417 1 .
5145 C     C     . PHE PHE PHE B B 250 250 . 0.1576 0.1518 0.1746 0.0145  -0.0054 -
0.0051 1 .
5146 O     O     . PHE PHE PHE B B 250 250 . 0.1464 0.1640 0.1938 0.0180  -0.0108 -
0.0038 1 .
5147 N     N     . TYR TYR TYR B B 251 251 . 0.1489 0.1640 0.1641 0.0255  -0.0261 -
0.0112 1 .
5148 CA    CA    . TYR TYR TYR B B 251 251 . 0.1360 0.1392 0.1445 -0.0036 -0.0120 -
0.0083 1 .
5149 CB    CB    . TYR TYR TYR B B 251 251 . 0.1164 0.1597 0.1354 0.0095  -0.0251
0.0019  1 .
5150 CG    CG    . TYR TYR TYR B B 251 251 . 0.1445 0.1367 0.1602 -0.0166 -0.0171 -
0.0044 1 .
5151 CD1   CD1   . TYR TYR TYR B B 251 251 . 0.1535 0.1094 0.1351 0.0036  -0.0141 -
0.0011 1 .
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5152 CE1   CE1   . TYR TYR TYR B B 251 251 . 0.1817 0.1681 0.1830 -0.0098 -0.0355
0.0051  1 .
5153 CZ    CZ    . TYR TYR TYR B B 251 251 . 0.1801 0.1322 0.1826 0.0097  -0.0069
0.0312  1 .
5154 OH    OH    . TYR TYR TYR B B 251 251 . 0.1423 0.1898 0.2335 0.0452  -0.0438
0.0478  1 .
5155 CE2   CE2   . TYR TYR TYR B B 251 251 . 0.2055 0.1767 0.1759 0.0096  -0.0157
0.0355  1 .
5156 CD2   CD2   . TYR TYR TYR B B 251 251 . 0.1996 0.1639 0.1600 0.0303  -0.0416 -
0.0033 1 .
5157 C     C     . TYR TYR TYR B B 251 251 . 0.1345 0.1563 0.1339 -0.0044 -0.0126 -
0.0116 1 .
5158 O     O     . TYR TYR TYR B B 251 251 . 0.1796 0.1633 0.1785 0.0020  -0.0360 -
0.0220 1 .
5159 N     N     . ARG ARG ARG B B 252 252 . 0.1607 0.1449 0.1632 -0.0131 -0.0445 -
0.0204 1 .
5160 CA    CA    . ARG ARG ARG B B 252 252 . 0.1672 0.1562 0.2019 -0.0005 -0.0384 -
0.0177 1 .
5161 CB    CB    . ARG ARG ARG B B 252 252 . 0.1718 0.1874 0.2154 -0.0079 -0.0380 -
0.0206 1 .
5162 CG    CG    . ARG ARG ARG B B 252 252 . 0.2029 0.2066 0.2281 -0.0271 -0.0029 -
0.0099 1 .
5163 CD    CD    . ARG ARG ARG B B 252 252 . 0.2981 0.2907 0.2711 -0.0062 0.0005
0.0064  1 .
5164 NE    NE    . ARG ARG ARG B B 252 252 . 0.2546 0.2541 0.3058 0.0223  -0.0456
0.0079  1 .
5165 CZ    CZ    . ARG ARG ARG B B 252 252 . 0.2901 0.2515 0.2624 0.0279  -0.0421
0.0066  1 .
5166 NH1   NH1   . ARG ARG ARG B B 252 252 . 0.2431 0.2857 0.2884 0.0534  -0.0414
0.0095  1 .
5167 NH2   NH2   . ARG ARG ARG B B 252 252 . 0.3274 0.2892 0.2558 0.0538  -0.0661
0.0034  1 .
5168 C     C     . ARG ARG ARG B B 252 252 . 0.1821 0.1858 0.1929 -0.0052 -0.0243 -
0.0213 1 .
5169 O     O     . ARG ARG ARG B B 252 252 . 0.1804 0.1776 0.2040 -0.0145 -0.0196 -
0.0249 1 .
5170 N     N     . ASP ASP ASP B B 253 253 . 0.2093 0.2043 0.2069 0.0054  -0.0265 -
0.0080 1 .
5171 CA    CA    . ASP ASP ASP B B 253 253 . 0.2105 0.1837 0.2461 -0.0038 -0.0233
0.0021  1 .
5172 CB    CB    . ASP ASP ASP B B 253 253 . 0.2194 0.2018 0.2535 -0.0036 -0.0265
0.0042  1 .
5173 CG    CG    . ASP ASP ASP B B 253 253 . 0.3077 0.3068 0.3185 -0.0090 -0.0192 -
0.0350 1 .
5174 OD1   OD1   . ASP ASP ASP B B 253 253 . 0.4174 0.4048 0.3975 -0.0618 -0.0714 -
0.1211 1 .
5175 OD2   OD2   . ASP ASP ASP B B 253 253 . 0.3378 0.3079 0.3543 0.0222  -0.0149 -
0.0281 1 .
5176 C     C     . ASP ASP ASP B B 253 253 . 0.1898 0.1756 0.2115 -0.0015 -0.0117
0.0163  1 .
5177 O     O     . ASP ASP ASP B B 253 253 . 0.1750 0.1520 0.3050 -0.0214 -0.0197
0.0185  1 .
5178 N     N     . GLY GLY GLY B B 254 254 . 0.1990 0.1696 0.1942 -0.0056 -0.0192 -
0.0050 1 .
5179 CA    CA    . GLY GLY GLY B B 254 254 . 0.1735 0.1473 0.1677 0.0111  0.0031
0.0088  1 .
5180 C     C     . GLY GLY GLY B B 254 254 . 0.1673 0.1468 0.1646 0.0032  -0.0004
0.0007  1 .
5181 O     O     . GLY GLY GLY B B 254 254 . 0.1707 0.1413 0.1877 0.0016  -0.0069 -
0.0029 1 .
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5182 N     N     . LYS LYS LYS B B 255 255 . 0.1490 0.1704 0.2030 0.0067  0.0020  -
0.0054 1 .
5183 CA    CA    . LYS LYS LYS B B 255 255 . 0.1337 0.1529 0.2159 0.0014  0.0072  -
0.0192 1 .
5184 CB    CB    . LYS LYS LYS B B 255 255 . 0.1521 0.1567 0.2449 -0.0167 0.0054  -
0.0083 1 .
5185 CG    CG    . LYS LYS LYS B B 255 255 . 0.1518 0.1953 0.2604 -0.0258 0.0057
0.0015  1 .
5186 CD    CD    . LYS LYS LYS B B 255 255 . 0.1929 0.2069 0.3304 -0.0663 0.0071
0.0279  1 .
5187 CE    CE    . LYS LYS LYS B B 255 255 . 0.1579 0.2211 0.3494 -0.0288 0.0438
0.0278  1 .
5188 NZ    NZ    . LYS LYS LYS B B 255 255 . 0.1761 0.3038 0.3815 -0.0436 0.0546
0.0281  1 .
5189 C     C     . LYS LYS LYS B B 255 255 . 0.1564 0.1609 0.1991 -0.0010 0.0014  -
0.0260 1 .
5190 O     O     . LYS LYS LYS B B 255 255 . 0.1502 0.1394 0.1892 0.0101  0.0147  -
0.0181 1 .
5191 N     N     . TYR TYR TYR B B 256 256 . 0.1263 0.1677 0.1987 0.0069  -0.0139 -
0.0192 1 .
5192 CA    CA    . TYR TYR TYR B B 256 256 . 0.1274 0.1509 0.1820 0.0037  -0.0313 -
0.0301 1 .
5193 CB    CB    . TYR TYR TYR B B 256 256 . 0.1130 0.1348 0.1886 -0.0030 -0.0280 -
0.0088 1 .
5194 CG    CG    . TYR TYR TYR B B 256 256 . 0.0902 0.1111 0.1271 -0.0083 -0.0193
0.0001  1 .
5195 CD1   CD1   . TYR TYR TYR B B 256 256 . 0.1118 0.1306 0.1861 0.0057  -0.0086 -
0.0441 1 .
5196 CE1   CE1   . TYR TYR TYR B B 256 256 . 0.0874 0.0732 0.1018 0.0136  -0.0286
0.0207  1 .
5197 CZ    CZ    . TYR TYR TYR B B 256 256 . 0.1075 0.0787 0.1020 0.0138  -0.0072
0.0024  1 .
5198 OH    OH    . TYR TYR TYR B B 256 256 . 0.1153 0.1115 0.1532 -0.0028 -0.0098
0.0021  1 .
5199 CE2   CE2   . TYR TYR TYR B B 256 256 . 0.0991 0.0794 0.1871 0.0248  -0.0174 -
0.0144 1 .
5200 CD2   CD2   . TYR TYR TYR B B 256 256 . 0.0972 0.1044 0.1570 0.0033  -0.0310 -
0.0371 1 .
5201 C     C     . TYR TYR TYR B B 256 256 . 0.1555 0.1667 0.2091 0.0096  -0.0265 -
0.0292 1 .
5202 O     O     . TYR TYR TYR B B 256 256 . 0.1825 0.1610 0.2274 0.0033  -0.0281 -
0.0409 1 .
5203 N     N     . ASP ASP ASP B B 257 257 . 0.1605 0.1628 0.2029 0.0164  -0.0544 -
0.0381 1 .
5204 CA    CA    . ASP ASP ASP B B 257 257 . 0.2038 0.2189 0.2360 0.0110  -0.0524 -
0.0423 1 .
5205 CB    CB    . ASP ASP ASP B B 257 257 . 0.2066 0.2225 0.2398 -0.0007 -0.0501 -
0.0562 1 .
5206 CG    CG    . ASP ASP ASP B B 257 257 . 0.2544 0.3328 0.2796 0.0323  -0.0633 -
0.0820 1 .
5207 OD1   OD1   . ASP ASP ASP B B 257 257 . 0.2062 0.3025 0.4175 0.0532  -0.0999 -
0.1182 1 .
5208 OD2   OD2   . ASP ASP ASP B B 257 257 . 0.2733 0.3051 0.3112 0.0469  -0.1120 -
0.1401 1 .
5209 C     C     . ASP ASP ASP B B 257 257 . 0.1845 0.2118 0.2148 0.0091  -0.0581 -
0.0307 1 .
5210 O     O     . ASP ASP ASP B B 257 257 . 0.1893 0.2050 0.2524 0.0213  -0.0465 -
0.0423 1 .
5211 N     N     . LEU LEU LEU B B 258 258 . 0.1974 0.2451 0.2477 -0.0011 -0.0625 -
0.0348 1 .
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5212 CA    CA    . LEU LEU LEU B B 258 258 . 0.2421 0.2453 0.2723 0.0134  -0.0570 -
0.0349 1 .
5213 CB    CB    . LEU LEU LEU B B 258 258 . 0.2509 0.2614 0.2765 0.0171  -0.0427 -
0.0300 1 .
5214 CG    CG    . LEU LEU LEU B B 258 258 . 0.2877 0.2683 0.2449 0.0197  -0.0343 -
0.0013 1 .
5215 CD1   CD1   . LEU LEU LEU B B 258 258 . 0.2561 0.2819 0.2940 0.0252  -0.0655 -
0.0960 1 .
5216 CD2   CD2   . LEU LEU LEU B B 258 258 . 0.2306 0.2668 0.2517 0.0339  -0.0570 -
0.0201 1 .
5217 C     C     . LEU LEU LEU B B 258 258 . 0.2803 0.2851 0.3150 0.0150  -0.0518 -
0.0267 1 .
5218 O     O     . LEU LEU LEU B B 258 258 . 0.2489 0.3051 0.3417 0.0135  -0.0785 -
0.0232 1 .
5219 N     N     . ASP ASP ASP B B 259 259 . 0.2994 0.3424 0.3537 0.0157  -0.0661 -
0.0429 1 .
5220 CA    CA    . ASP ASP ASP B B 259 259 . 0.3274 0.3667 0.3606 0.0253  -0.0550 -
0.0288 1 .
5221 CB    CB    . ASP ASP ASP B B 259 259 . 0.3195 0.3915 0.3899 0.0273  -0.0682 -
0.0324 1 .
5222 CG    CG    . ASP ASP ASP B B 259 259 . 0.3327 0.3994 0.3907 0.0475  -0.0681
0.0027  1 .
5223 OD1   OD1   . ASP ASP ASP B B 259 259 . 0.3180 0.4574 0.3953 0.1109  -0.0985 -
0.0240 1 .
5224 OD2   OD2   . ASP ASP ASP B B 259 259 . 0.2804 0.4666 0.4710 0.1347  -0.1053
0.0085  1 .
5225 C     C     . ASP ASP ASP B B 259 259 . 0.3392 0.3646 0.3788 0.0303  -0.0498 -
0.0352 1 .
5226 O     O     . ASP ASP ASP B B 259 259 . 0.3340 0.3554 0.3946 0.0621  -0.0787 -
0.0578 1 .
5227 N     N     . PHE PHE PHE B B 260 260 . 0.3257 0.3579 0.3502 0.0363  -0.0507 -
0.0373 1 .
5228 CA    CA    . PHE PHE PHE B B 260 260 . 0.3630 0.3792 0.3730 0.0423  -0.0347 -
0.0390 1 .
5229 CB    CB    . PHE PHE PHE B B 260 260 . 0.3419 0.3510 0.3537 0.0398  -0.0299 -
0.0503 1 .
5230 CG    CG    . PHE PHE PHE B B 260 260 . 0.2829 0.2989 0.2980 0.0443  -0.0429 -
0.0624 1 .
5231 CD1   CD1   . PHE PHE PHE B B 260 260 . 0.2851 0.3107 0.3142 0.0528  -0.0573 -
0.0535 1 .
5232 CE1   CE1   . PHE PHE PHE B B 260 260 . 0.2658 0.2825 0.2732 0.0749  -0.0441 -
0.0598 1 .
5233 CZ    CZ    . PHE PHE PHE B B 260 260 . 0.2396 0.3218 0.2573 0.0679  -0.0604 -
0.0333 1 .
5234 CE2   CE2   . PHE PHE PHE B B 260 260 . 0.1850 0.1723 0.1391 0.0742  -0.0683 -
0.0323 1 .
5235 CD2   CD2   . PHE PHE PHE B B 260 260 . 0.2159 0.2693 0.2870 0.0498  -0.0789 -
0.0457 1 .
5236 C     C     . PHE PHE PHE B B 260 260 . 0.4025 0.4140 0.3939 0.0441  -0.0410 -
0.0480 1 .
5237 O     O     . PHE PHE PHE B B 260 260 . 0.4129 0.4258 0.4149 0.0630  -0.0615 -
0.0750 1 .
5238 N     N     . LYS LYS LYS B B 261 261 . 0.4275 0.4261 0.4145 0.0511  -0.0368 -
0.0443 1 .
5239 CA    CA    . LYS LYS LYS B B 261 261 . 0.4417 0.4409 0.4210 0.0373  -0.0249 -
0.0315 1 .
5240 CB    CB    . LYS LYS LYS B B 261 261 . 0.4218 0.4334 0.3930 0.0272  -0.0256 -
0.0283 1 .
5241 CG    CG    . LYS LYS LYS B B 261 261 . 0.4160 0.3806 0.3266 0.0267  -0.0288 -
0.0432 1 .
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5242 CD    CD    . LYS LYS LYS B B 261 261 . 0.2945 0.3675 0.2630 -0.0291 -0.0415 -
0.1001 1 .
5243 CE    CE    . LYS LYS LYS B B 261 261 . 0.2776 0.3698 0.1827 -0.0172 -0.0331 -
0.0770 1 .
5244 NZ    NZ    . LYS LYS LYS B B 261 261 . 0.3160 0.3652 0.2288 0.0404  -0.0838 -
0.0936 1 .
5245 C     C     . LYS LYS LYS B B 261 261 . 0.4655 0.4596 0.4626 0.0344  -0.0279 -
0.0273 1 .
5246 O     O     . LYS LYS LYS B B 261 261 . 0.4613 0.4791 0.4733 0.0419  -0.0553 -
0.0384 1 .
5247 N     N     . SER SER SER B B 262 262 . 0.4755 0.4676 0.4944 0.0290  -0.0257 -
0.0268 1 .
5248 CA    CA    . SER SER SER B B 262 262 . 0.4955 0.4956 0.5363 0.0143  -0.0428 -
0.0263 1 .
5249 CB    CB    . SER SER SER B B 262 262 . 0.4957 0.4874 0.5272 0.0141  -0.0493 -
0.0284 1 .
5250 OG    OG    . SER SER SER B B 262 262 . 0.3902 0.5169 0.5345 0.0231  -0.1626 -
0.0330 1 .
5251 C     C     . SER SER SER B B 262 262 . 0.5263 0.5205 0.5748 0.0079  -0.0308 -
0.0208 1 .
5252 O     O     . SER SER SER B B 262 262 . 0.5151 0.5119 0.5755 0.0081  -0.0464 -
0.0271 1 .
5253 N     N     . PRO PRO PRO B B 263 263 . 0.5460 0.5336 0.5885 -0.0002 -0.0291 -
0.0190 1 .
5254 CA    CA    . PRO PRO PRO B B 263 263 . 0.5524 0.5404 0.5775 0.0022  -0.0248 -
0.0144 1 .
5255 CB    CB    . PRO PRO PRO B B 263 263 . 0.5604 0.5431 0.5872 -0.0005 -0.0282 -
0.0179 1 .
5256 CG    CG    . PRO PRO PRO B B 263 263 . 0.5515 0.5447 0.5854 -0.0018 -0.0301 -
0.0159 1 .
5257 CD    CD    . PRO PRO PRO B B 263 263 . 0.5486 0.5342 0.5931 0.0016  -0.0236 -
0.0210 1 .
5258 C     C     . PRO PRO PRO B B 263 263 . 0.5491 0.5440 0.5661 0.0008  -0.0267 -
0.0150 1 .
5259 O     O     . PRO PRO PRO B B 263 263 . 0.5409 0.5346 0.5513 -0.0049 -0.0386 -
0.0179 1 .
5260 N     N     . THR THR THR B B 264 264 . 0.5408 0.5291 0.5571 0.0052  -0.0247 -
0.0167 1 .
5261 CA    CA    . THR THR THR B B 264 264 . 0.5311 0.5190 0.5526 0.0065  -0.0243 -
0.0149 1 .
5262 CB    CB    . THR THR THR B B 264 264 . 0.5252 0.5066 0.5443 0.0085  -0.0233 -
0.0180 1 .
5263 OG1   OG1   . THR THR THR B B 264 264 . 0.4919 0.5074 0.5418 0.0286  -0.0455 -
0.0077 1 .
5264 CG2   CG2   . THR THR THR B B 264 264 . 0.5494 0.5076 0.5504 0.0137  -0.0221
0.0049  1 .
5265 C     C     . THR THR THR B B 264 264 . 0.5314 0.5105 0.5526 0.0053  -0.0215 -
0.0156 1 .
5266 O     O     . THR THR THR B B 264 264 . 0.5368 0.5121 0.5744 0.0109  -0.0382 -
0.0308 1 .
5267 N     N     . ASP ASP ASP B B 265 265 . 0.5170 0.4971 0.5397 0.0075  -0.0255 -
0.0197 1 .
5268 CA    CA    . ASP ASP ASP B B 265 265 . 0.5042 0.4972 0.5439 0.0034  -0.0179 -
0.0180 1 .
5269 CB    CB    . ASP ASP ASP B B 265 265 . 0.5089 0.5012 0.5510 0.0036  -0.0246 -
0.0274 1 .
5270 CG    CG    . ASP ASP ASP B B 265 265 . 0.4945 0.4993 0.5529 -0.0019 -0.0415 -
0.0275 1 .
5271 OD1   OD1   . ASP ASP ASP B B 265 265 . 0.4540 0.5334 0.5995 0.0342  -0.1174 -
0.0527 1 .
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5272 OD2   OD2   . ASP ASP ASP B B 265 265 . 0.5113 0.5431 0.6129 0.0052  -0.0592 -
0.0313 1 .
5273 C     C     . ASP ASP ASP B B 265 265 . 0.5034 0.4978 0.5420 0.0028  -0.0147 -
0.0170 1 .
5274 O     O     . ASP ASP ASP B B 265 265 . 0.4836 0.5031 0.5695 0.0048  -0.0185 -
0.0278 1 .
5275 N     N     . PRO PRO PRO B B 266 266 . 0.4899 0.4811 0.5286 0.0106  -0.0155 -
0.0113 1 .
5276 CA    CA    . PRO PRO PRO B B 266 266 . 0.4783 0.4703 0.5158 0.0031  -0.0131 -
0.0125 1 .
5277 CB    CB    . PRO PRO PRO B B 266 266 . 0.4866 0.4601 0.5097 0.0037  -0.0165 -
0.0042 1 .
5278 CG    CG    . PRO PRO PRO B B 266 266 . 0.5036 0.4652 0.5190 0.0201  -0.0011 -
0.0044 1 .
5279 CD    CD    . PRO PRO PRO B B 266 266 . 0.4870 0.4887 0.5234 0.0030  -0.0148 -
0.0183 1 .
5280 C     C     . PRO PRO PRO B B 266 266 . 0.4479 0.4540 0.5092 0.0000  -0.0172 -
0.0116 1 .
5281 O     O     . PRO PRO PRO B B 266 266 . 0.4139 0.4418 0.5338 0.0045  -0.0273 -
0.0104 1 .
5282 N     N     . SER SER SER B B 267 267 . 0.4273 0.4410 0.4993 -0.0165 -0.0299 -
0.0217 1 .
5283 CA    CA    . SER SER SER B B 267 267 . 0.4033 0.4341 0.4817 -0.0235 -0.0239 -
0.0160 1 .
5284 CB    CB    . SER SER SER B B 267 267 . 0.4102 0.4513 0.4880 -0.0248 -0.0305 -
0.0122 1 .
5285 OG    OG    . SER SER SER B B 267 267 . 0.3899 0.5154 0.5054 -0.0420 -0.0398
0.0081  1 .
5286 C     C     . SER SER SER B B 267 267 . 0.3899 0.4152 0.4577 -0.0176 -0.0238 -
0.0150 1 .
5287 O     O     . SER SER SER B B 267 267 . 0.3667 0.4119 0.4625 -0.0151 -0.0233 -
0.0266 1 .
5288 N     N     . ARG ARG ARG B B 268 268 . 0.3698 0.3973 0.4679 -0.0209 -0.0288 -
0.0231 1 .
5289 CA    CA    . ARG ARG ARG B B 268 268 . 0.3469 0.3765 0.4539 -0.0180 -0.0334 -
0.0240 1 .
5290 CB    CB    . ARG ARG ARG B B 268 268 . 0.3626 0.3851 0.4609 -0.0122 -0.0229 -
0.0249 1 .
5291 CG    CG    . ARG ARG ARG B B 268 268 . 0.3727 0.3695 0.4308 -0.0241 -0.0301 -
0.0144 1 .
5292 CD    CD    . ARG ARG ARG B B 268 268 . 0.3398 0.3671 0.4033 -0.0073 -0.0392 -
0.0327 1 .
5293 NE    NE    . ARG ARG ARG B B 268 268 . 0.3101 0.4389 0.4294 0.0203  -0.0795 -
0.0167 1 .
5294 CZ    CZ    . ARG ARG ARG B B 268 268 . 0.3553 0.4110 0.4756 0.0108  -0.0679 -
0.0770 1 .
5295 NH1   NH1   . ARG ARG ARG B B 268 268 . 0.3324 0.3330 0.5978 0.0136  -0.1073 -
0.0977 1 .
5296 NH2   NH2   . ARG ARG ARG B B 268 268 . 0.3617 0.4181 0.4912 0.0077  -0.0762 -
0.1001 1 .
5297 C     C     . ARG ARG ARG B B 268 268 . 0.3344 0.3599 0.4608 -0.0059 -0.0346 -
0.0340 1 .
5298 O     O     . ARG ARG ARG B B 268 268 . 0.3026 0.3467 0.4824 -0.0109 -0.0467 -
0.0459 1 .
5299 N     N     . TYR TYR TYR B B 269 269 . 0.2846 0.3317 0.4345 -0.0070 -0.0442 -
0.0367 1 .
5300 CA    CA    . TYR TYR TYR B B 269 269 . 0.2555 0.3023 0.3899 0.0018  -0.0184 -
0.0202 1 .
5301 CB    CB    . TYR TYR TYR B B 269 269 . 0.2421 0.2794 0.3996 -0.0018 -0.0131 -
0.0234 1 .
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5302 CG    CG    . TYR TYR TYR B B 269 269 . 0.2339 0.2452 0.3777 -0.0322 -0.0435 -
0.0314 1 .
5303 CD1   CD1   . TYR TYR TYR B B 269 269 . 0.1874 0.2790 0.4077 -0.0350 -0.0295 -
0.0604 1 .
5304 CE1   CE1   . TYR TYR TYR B B 269 269 . 0.2506 0.2741 0.3535 -0.0392 -0.0445 -
0.0612 1 .
5305 CZ    CZ    . TYR TYR TYR B B 269 269 . 0.3374 0.2972 0.3965 -0.0054 -0.0494 -
0.0579 1 .
5306 OH    OH    . TYR TYR TYR B B 269 269 . 0.4067 0.2597 0.4531 -0.0029 -0.0376 -
0.0834 1 .
5307 CE2   CE2   . TYR TYR TYR B B 269 269 . 0.3309 0.2891 0.3710 -0.0288 -0.0658 -
0.0639 1 .
5308 CD2   CD2   . TYR TYR TYR B B 269 269 . 0.2935 0.2571 0.3733 -0.0176 -0.0204 -
0.0493 1 .
5309 C     C     . TYR TYR TYR B B 269 269 . 0.2352 0.2701 0.3528 0.0075  -0.0051 -
0.0122 1 .
5310 O     O     . TYR TYR TYR B B 269 269 . 0.2142 0.2649 0.3676 -0.0121 0.0029  -
0.0126 1 .
5311 N     N     . ILE ILE ILE B B 270 270 . 0.2064 0.2270 0.3136 0.0101  0.0012  -
0.0081 1 .
5312 CA    CA    . ILE ILE ILE B B 270 270 . 0.1990 0.2098 0.2846 0.0100  0.0013  -
0.0015 1 .
5313 CB    CB    . ILE ILE ILE B B 270 270 . 0.1877 0.1996 0.2838 0.0254  -0.0019
0.0179  1 .
5314 CG1   CG1   . ILE ILE ILE B B 270 270 . 0.1966 0.2153 0.3000 0.0211  0.0018  -
0.0089 1 .
5315 CD1   CD1   . ILE ILE ILE B B 270 270 . 0.2039 0.1181 0.3238 -0.0096 -0.0377
0.0268  1 .
5316 CG2   CG2   . ILE ILE ILE B B 270 270 . 0.1703 0.2388 0.3190 0.0175  -0.0129 -
0.0243 1 .
5317 C     C     . ILE ILE ILE B B 270 270 . 0.2058 0.1770 0.2522 0.0054  -0.0017 -
0.0014 1 .
5318 O     O     . ILE ILE ILE B B 270 270 . 0.2114 0.1959 0.2489 0.0007  -0.0145 -
0.0030 1 .
5319 N     N     . THR THR THR B B 271 271 . 0.1943 0.1578 0.2324 0.0016  -0.0072
0.0054  1 .
5320 CA    CA    . THR THR THR B B 271 271 . 0.1993 0.1768 0.2263 0.0071  -0.0030
0.0031  1 .
5321 CB    CB    . THR THR THR B B 271 271 . 0.2083 0.1897 0.2105 -0.0133 0.0119  -
0.0007 1 .
5322 OG1   OG1   . THR THR THR B B 271 271 . 0.2711 0.2176 0.2608 0.0203  0.0213  -
0.0049 1 .
5323 CG2   CG2   . THR THR THR B B 271 271 . 0.2507 0.1820 0.3042 -0.0032 0.0067
0.0031  1 .
5324 C     C     . THR THR THR B B 271 271 . 0.1760 0.1731 0.1878 0.0137  -0.0076
0.0077  1 .
5325 O     O     . THR THR THR B B 271 271 . 0.1955 0.1607 0.1938 0.0222  -0.0062
0.0192  1 .
5326 N     N     . GLY GLY GLY B B 272 272 . 0.1792 0.1783 0.1783 0.0143  0.0000
0.0068  1 .
5327 CA    CA    . GLY GLY GLY B B 272 272 . 0.1739 0.1583 0.1973 0.0243  0.0020
0.0202  1 .
5328 C     C     . GLY GLY GLY B B 272 272 . 0.2051 0.1801 0.1984 0.0182  0.0162
0.0204  1 .
5329 O     O     . GLY GLY GLY B B 272 272 . 0.1798 0.1617 0.1818 0.0074  0.0290
0.0019  1 .
5330 N     N     . ASP ASP ASP B B 273 273 . 0.2054 0.1898 0.2104 0.0185  0.0239
0.0211  1 .
5331 CA    CA    . ASP ASP ASP B B 273 273 . 0.2302 0.2154 0.2295 0.0116  0.0167
0.0214  1 .
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5332 CB    CB    . ASP ASP ASP B B 273 273 . 0.2476 0.2156 0.2287 -0.0084 0.0160
0.0319  1 .
5333 CG    CG    . ASP ASP ASP B B 273 273 . 0.3227 0.2750 0.2838 -0.0098 0.0167
0.0357  1 .
5334 OD1   OD1   . ASP ASP ASP B B 273 273 . 0.3542 0.2838 0.3599 0.0125  0.0259
0.0529  1 .
5335 OD2   OD2   . ASP ASP ASP B B 273 273 . 0.3615 0.4539 0.2261 -0.0457 0.0657  -
0.0689 1 .
5336 C     C     . ASP ASP ASP B B 273 273 . 0.2150 0.2066 0.2174 0.0065  0.0109
0.0137  1 .
5337 O     O     . ASP ASP ASP B B 273 273 . 0.1866 0.1939 0.2081 0.0065  0.0132  -
0.0196 1 .
5338 N     N     . GLN GLN GLN B B 274 274 . 0.2066 0.2013 0.2123 0.0099  0.0129
0.0184  1 .
5339 CA    CA    . GLN GLN GLN B B 274 274 . 0.2033 0.2055 0.2412 0.0025  0.0153
0.0069  1 .
5340 CB    CB    . GLN GLN GLN B B 274 274 . 0.2119 0.2049 0.2199 0.0004  0.0316  -
0.0177 1 .
5341 CG    CG    . GLN GLN GLN B B 274 274 . 0.2340 0.2463 0.2440 -0.0031 0.0192
0.0079  1 .
5342 CD    CD    . GLN GLN GLN B B 274 274 . 0.2603 0.2322 0.3124 -0.0281 0.0528  -
0.0194 1 .
5343 OE1   OE1   . GLN GLN GLN B B 274 274 . 0.2384 0.2174 0.2643 -0.0232 0.0572  -
0.0284 1 .
5344 NE2   NE2   . GLN GLN GLN B B 274 274 . 0.2797 0.3122 0.3926 -0.0436 -0.0007 -
0.0203 1 .
5345 C     C     . GLN GLN GLN B B 274 274 . 0.1975 0.1910 0.2159 0.0042  0.0181
0.0121  1 .
5346 O     O     . GLN GLN GLN B B 274 274 . 0.1788 0.1657 0.2235 0.0093  0.0202  -
0.0106 1 .
5347 N     N     . LEU LEU LEU B B 275 275 . 0.1638 0.1716 0.2118 0.0095  0.0044
0.0148  1 .
5348 CA    CA    . LEU LEU LEU B B 275 275 . 0.1717 0.1781 0.1738 0.0049  0.0116
0.0114  1 .
5349 CB    CB    . LEU LEU LEU B B 275 275 . 0.1868 0.1718 0.2071 0.0178  0.0269
0.0018  1 .
5350 CG    CG    . LEU LEU LEU B B 275 275 . 0.1836 0.1870 0.1735 0.0475  0.0121
0.0169  1 .
5351 CD1   CD1   . LEU LEU LEU B B 275 275 . 0.2211 0.1409 0.2070 0.0399  -0.0329
0.0228  1 .
5352 CD2   CD2   . LEU LEU LEU B B 275 275 . 0.1989 0.1288 0.1239 0.0053  0.0207  -
0.0571 1 .
5353 C     C     . LEU LEU LEU B B 275 275 . 0.1685 0.1676 0.1851 0.0121  0.0121
0.0146  1 .
5354 O     O     . LEU LEU LEU B B 275 275 . 0.1595 0.1912 0.1836 0.0346  0.0290
0.0350  1 .
5355 N     N     . GLY GLY GLY B B 276 276 . 0.1758 0.1179 0.1451 0.0164  -0.0021
0.0327  1 .
5356 CA    CA    . GLY GLY GLY B B 276 276 . 0.1502 0.1458 0.1675 0.0129  0.0040
0.0185  1 .
5357 C     C     . GLY GLY GLY B B 276 276 . 0.1730 0.1644 0.1856 0.0027  0.0099
0.0095  1 .
5358 O     O     . GLY GLY GLY B B 276 276 . 0.1740 0.1645 0.1535 -0.0094 0.0042
0.0322  1 .
5359 N     N     . ALA ALA ALA B B 277 277 . 0.1804 0.1565 0.1980 0.0009  0.0364
0.0196  1 .
5360 CA    CA    . ALA ALA ALA B B 277 277 . 0.1459 0.1603 0.1958 0.0038  0.0331
0.0148  1 .
5361 CB    CB    . ALA ALA ALA B B 277 277 . 0.1587 0.1505 0.2242 -0.0059 0.0284
0.0232  1 .
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5362 C     C     . ALA ALA ALA B B 277 277 . 0.1593 0.1694 0.1651 -0.0070 0.0309
0.0059  1 .
5363 O     O     . ALA ALA ALA B B 277 277 . 0.1908 0.1736 0.1644 -0.0086 0.0163  -
0.0023 1 .
5364 N     N     . LEU LEU LEU B B 278 278 . 0.1550 0.1772 0.1901 0.0003  -0.0018 -
0.0062 1 .
5365 CA    CA    . LEU LEU LEU B B 278 278 . 0.1500 0.1618 0.1705 -0.0023 0.0048
0.0105  1 .
5366 CB    CB    . LEU LEU LEU B B 278 278 . 0.1605 0.1880 0.1809 0.0278  -0.0006
0.0076  1 .
5367 CG    CG    . LEU LEU LEU B B 278 278 . 0.1881 0.2273 0.2049 0.0377  0.0059
0.0181  1 .
5368 CD1   CD1   . LEU LEU LEU B B 278 278 . 0.2121 0.2460 0.2901 0.0369  0.0284
0.0120  1 .
5369 CD2   CD2   . LEU LEU LEU B B 278 278 . 0.2398 0.2210 0.2400 0.0220  0.0019  -
0.0267 1 .
5370 C     C     . LEU LEU LEU B B 278 278 . 0.1617 0.1640 0.1797 0.0101  0.0030
0.0010  1 .
5371 O     O     . LEU LEU LEU B B 278 278 . 0.1537 0.1542 0.1628 0.0127  0.0005  -
0.0077 1 .
5372 N     N     . TYR TYR TYR B B 279 279 . 0.1152 0.1297 0.1314 -0.0028 0.0120  -
0.0022 1 .
5373 CA    CA    . TYR TYR TYR B B 279 279 . 0.1269 0.1240 0.1317 0.0001  0.0096  -
0.0037 1 .
5374 CB    CB    . TYR TYR TYR B B 279 279 . 0.1103 0.1080 0.1029 0.0234  0.0083  -
0.0064 1 .
5375 CG    CG    . TYR TYR TYR B B 279 279 . 0.1154 0.0516 0.0743 0.0389  -0.0115
0.0010  1 .
5376 CD1   CD1   . TYR TYR TYR B B 279 279 . 0.0839 0.1066 0.1089 0.0208  -0.0158 -
0.0289 1 .
5377 CE1   CE1   . TYR TYR TYR B B 279 279 . 0.1230 0.0969 0.1085 0.0382  0.0200
0.0011  1 .
5378 CZ    CZ    . TYR TYR TYR B B 279 279 . 0.1216 0.1233 0.1099 0.0363  -0.0277 -
0.0059 1 .
5379 OH    OH    . TYR TYR TYR B B 279 279 . 0.1848 0.1141 0.1385 0.0129  0.0210  -
0.0007 1 .
5380 CE2   CE2   . TYR TYR TYR B B 279 279 . 0.1848 0.0997 0.1011 0.0425  0.0023
0.0194  1 .
5381 CD2   CD2   . TYR TYR TYR B B 279 279 . 0.0877 0.0948 0.1326 0.0245  0.0238  -
0.0062 1 .
5382 C     C     . TYR TYR TYR B B 279 279 . 0.1354 0.1350 0.1320 0.0047  0.0069
0.0001  1 .
5383 O     O     . TYR TYR TYR B B 279 279 . 0.1801 0.1369 0.1389 0.0112  0.0001  -
0.0121 1 .
5384 N     N     . GLN GLN GLN B B 280 280 . 0.1445 0.1464 0.1263 0.0094  0.0179
0.0019  1 .
5385 CA    CA    . GLN GLN GLN B B 280 280 . 0.1471 0.1634 0.1565 0.0216  0.0076
0.0007  1 .
5386 CB    CB    . GLN GLN GLN B B 280 280 . 0.1868 0.1789 0.1530 0.0240  0.0055
0.0099  1 .
5387 CG    CG    . GLN GLN GLN B B 280 280 . 0.2182 0.2084 0.2323 0.0452  -0.0071
0.0061  1 .
5388 CD    CD    . GLN GLN GLN B B 280 280 . 0.3044 0.3159 0.3887 0.0443  -0.0470 -
0.0145 1 .
5389 OE1   OE1   . GLN GLN GLN B B 280 280 . 0.3488 0.3900 0.4530 0.0368  -0.0302 -
0.0395 1 .
5390 NE2   NE2   . GLN GLN GLN B B 280 280 . 0.3738 0.2982 0.4184 0.0511  -0.0806
0.0688  1 .
5391 C     C     . GLN GLN GLN B B 280 280 . 0.1508 0.1470 0.1588 0.0196  0.0182
0.0012  1 .
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5392 O     O     . GLN GLN GLN B B 280 280 . 0.1624 0.1480 0.1526 0.0085  0.0298  -
0.0013 1 .
5393 N     N     . ASP ASP ASP B B 281 281 . 0.1506 0.1642 0.1631 0.0408  0.0068  -
0.0136 1 .
5394 CA    CA    . ASP ASP ASP B B 281 281 . 0.1722 0.1821 0.1844 0.0253  -0.0021
0.0105  1 .
5395 CB    CB    . ASP ASP ASP B B 281 281 . 0.2000 0.1820 0.1982 0.0131  0.0070
0.0086  1 .
5396 CG    CG    . ASP ASP ASP B B 281 281 . 0.2792 0.2705 0.2930 -0.0223 0.0095
0.0166  1 .
5397 OD1   OD1   . ASP ASP ASP B B 281 281 . 0.2811 0.3528 0.3407 -0.0197 0.0414
0.0150  1 .
5398 OD2   OD2   . ASP ASP ASP B B 281 281 . 0.3285 0.3195 0.4717 -0.0761 0.0186
0.0139  1 .
5399 C     C     . ASP ASP ASP B B 281 281 . 0.1608 0.1786 0.1717 0.0109  -0.0107
0.0051  1 .
5400 O     O     . ASP ASP ASP B B 281 281 . 0.1791 0.1759 0.1681 0.0188  0.0065
0.0036  1 .
5401 N     N     . PHE PHE PHE B B 282 282 . 0.1420 0.1698 0.1324 0.0023  -0.0187
0.0055  1 .
5402 CA    CA    . PHE PHE PHE B B 282 282 . 0.1567 0.1623 0.1546 0.0097  -0.0088 -
0.0027 1 .
5403 CB    CB    . PHE PHE PHE B B 282 282 . 0.1969 0.1857 0.1738 0.0111  -0.0070 -
0.0259 1 .
5404 CG    CG    . PHE PHE PHE B B 282 282 . 0.2005 0.2018 0.1811 0.0099  -0.0075 -
0.0291 1 .
5405 CD1   CD1   . PHE PHE PHE B B 282 282 . 0.2675 0.1660 0.1632 0.0408  -0.0153
0.0087  1 .
5406 CE1   CE1   . PHE PHE PHE B B 282 282 . 0.2433 0.1834 0.1820 -0.0159 -0.0089 -
0.0125 1 .
5407 CZ    CZ    . PHE PHE PHE B B 282 282 . 0.2583 0.1785 0.2397 0.0257  -0.0023 -
0.0149 1 .
5408 CE2   CE2   . PHE PHE PHE B B 282 282 . 0.2466 0.1305 0.1980 0.0306  -0.0152
0.0063  1 .
5409 CD2   CD2   . PHE PHE PHE B B 282 282 . 0.1792 0.1773 0.1847 0.0241  -0.0494 -
0.0283 1 .
5410 C     C     . PHE PHE PHE B B 282 282 . 0.1793 0.1543 0.1451 0.0136  -0.0089 -
0.0008 1 .
5411 O     O     . PHE PHE PHE B B 282 282 . 0.1722 0.1523 0.1258 0.0261  -0.0342 -
0.0025 1 .
5412 N     N     . VAL VAL VAL B B 283 283 . 0.1421 0.1435 0.1400 0.0176  -0.0040 -
0.0108 1 .
5413 CA    CA    . VAL VAL VAL B B 283 283 . 0.1444 0.1510 0.1392 0.0083  0.0217  -
0.0094 1 .
5414 CB    CB    . VAL VAL VAL B B 283 283 . 0.1536 0.1544 0.1319 0.0055  0.0053  -
0.0276 1 .
5415 CG1   CG1   . VAL VAL VAL B B 283 283 . 0.1579 0.1907 0.1399 -0.0116 -0.0095 -
0.0315 1 .
5416 CG2   CG2   . VAL VAL VAL B B 283 283 . 0.1496 0.1735 0.0943 -0.0096 0.0537
0.0079  1 .
5417 C     C     . VAL VAL VAL B B 283 283 . 0.1668 0.1567 0.1349 0.0014  0.0128  -
0.0129 1 .
5418 O     O     . VAL VAL VAL B B 283 283 . 0.1672 0.1255 0.1508 -0.0006 0.0215
0.0040  1 .
5419 N     N     . ARG ARG ARG B B 284 284 . 0.1654 0.1604 0.1335 0.0020  0.0198  -
0.0097 1 .
5420 CA    CA    . ARG ARG ARG B B 284 284 . 0.1462 0.1610 0.1599 0.0167  0.0185  -
0.0030 1 .
5421 CB    CB    . ARG ARG ARG B B 284 284 . 0.2009 0.1759 0.1726 0.0310  0.0309
0.0127  1 .
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5422 CG    CG    . ARG ARG ARG B B 284 284 . 0.1483 0.2056 0.1771 0.0550  -0.0047 -
0.0034 1 .
5423 CD    CD    . ARG ARG ARG B B 284 284 . 0.2191 0.2456 0.1941 0.0636  -0.0336 -
0.0031 1 .
5424 NE    NE    . ARG ARG ARG B B 284 284 . 0.2072 0.2168 0.1927 0.0441  -0.0316 -
0.0182 1 .
5425 CZ    CZ    . ARG ARG ARG B B 284 284 . 0.2221 0.2185 0.2440 0.0374  -0.0243 -
0.0080 1 .
5426 NH1   NH1   . ARG ARG ARG B B 284 284 . 0.2432 0.2217 0.2345 0.0414  0.0341  -
0.0449 1 .
5427 NH2   NH2   . ARG ARG ARG B B 284 284 . 0.3676 0.2769 0.2364 0.0649  -0.0190
0.0267  1 .
5428 C     C     . ARG ARG ARG B B 284 284 . 0.1668 0.1523 0.1669 0.0116  0.0129
0.0024  1 .
5429 O     O     . ARG ARG ARG B B 284 284 . 0.1736 0.1741 0.1816 0.0060  0.0233  -
0.0282 1 .
5430 N     N     . ASP ASP ASP B B 285 285 . 0.1725 0.1560 0.1450 0.0147  0.0057  -
0.0021 1 .
5431 CA    CA    . ASP ASP ASP B B 285 285 . 0.1638 0.1605 0.1623 0.0019  0.0110
0.0148  1 .
5432 CB    CB    . ASP ASP ASP B B 285 285 . 0.2071 0.1794 0.1708 0.0108  0.0049
0.0075  1 .
5433 CG    CG    . ASP ASP ASP B B 285 285 . 0.2783 0.1947 0.2130 -0.0183 0.0102
0.0221  1 .
5434 OD1   OD1   . ASP ASP ASP B B 285 285 . 0.2904 0.1966 0.2355 0.0127  0.0628
0.0335  1 .
5435 OD2   OD2   . ASP ASP ASP B B 285 285 . 0.2934 0.2472 0.2274 -0.0737 0.0117
0.0109  1 .
5436 C     C     . ASP ASP ASP B B 285 285 . 0.1735 0.1617 0.1303 0.0172  -0.0077
0.0007  1 .
5437 O     O     . ASP ASP ASP B B 285 285 . 0.1871 0.1689 0.1559 0.0461  0.0324
0.0207  1 .
5438 N     N     . TYR TYR TYR B B 286 286 . 0.1597 0.1244 0.1183 -0.0055 0.0154
0.0027  1 .
5439 CA    CA    . TYR TYR TYR B B 286 286 . 0.1691 0.1441 0.1389 0.0237  0.0072
0.0147  1 .
5440 CB    CB    . TYR TYR TYR B B 286 286 . 0.1665 0.1121 0.1364 0.0191  -0.0083
0.0086  1 .
5441 CG    CG    . TYR TYR TYR B B 286 286 . 0.1655 0.1773 0.1618 0.0358  -0.0208
0.0160  1 .
5442 CD1   CD1   . TYR TYR TYR B B 286 286 . 0.2047 0.2315 0.2376 0.0834  0.0058  -
0.0017 1 .
5443 CE1   CE1   . TYR TYR TYR B B 286 286 . 0.2961 0.2668 0.3009 -0.0048 -0.0279
0.0199  1 .
5444 CZ    CZ    . TYR TYR TYR B B 286 286 . 0.2979 0.2990 0.3092 -0.0059 -0.0341 -
0.0064 1 .
5445 OH    OH    . TYR TYR TYR B B 286 286 . 0.2409 0.3960 0.3477 0.0024  -0.0028 -
0.0202 1 .
5446 CE2   CE2   . TYR TYR TYR B B 286 286 . 0.2584 0.2638 0.2263 0.0014  -0.0251
0.0047  1 .
5447 CD2   CD2   . TYR TYR TYR B B 286 286 . 0.1736 0.1925 0.1476 0.0154  -0.0024
0.0046  1 .
5448 C     C     . TYR TYR TYR B B 286 286 . 0.1539 0.1437 0.1399 0.0200  0.0028
0.0181  1 .
5449 O     O     . TYR TYR TYR B B 286 286 . 0.1898 0.1492 0.1178 0.0350  0.0193
0.0257  1 .
5450 N     N     . PRO PRO PRO B B 287 287 . 0.1621 0.1383 0.1512 0.0392  -0.0125
0.0255  1 .
5451 CA    CA    . PRO PRO PRO B B 287 287 . 0.1575 0.1104 0.1445 0.0202  0.0114
0.0257  1 .
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5452 CB    CB    . PRO PRO PRO B B 287 287 . 0.1915 0.1335 0.1416 0.0262  -0.0088
0.0325  1 .
5453 CG    CG    . PRO PRO PRO B B 287 287 . 0.2029 0.1384 0.1737 0.0053  0.0032  -
0.0049 1 .
5454 CD    CD    . PRO PRO PRO B B 287 287 . 0.1725 0.1451 0.1487 0.0419  -0.0058
0.0383  1 .
5455 C     C     . PRO PRO PRO B B 287 287 . 0.1541 0.1394 0.1444 0.0101  0.0012
0.0102  1 .
5456 O     O     . PRO PRO PRO B B 287 287 . 0.1579 0.1297 0.1471 0.0093  0.0143  -
0.0052 1 .
5457 N     N     . VAL VAL VAL B B 288 288 . 0.1298 0.1169 0.1297 0.0190  0.0119  -
0.0104 1 .
5458 CA    CA    . VAL VAL VAL B B 288 288 . 0.1232 0.1165 0.1324 0.0271  0.0002  -
0.0029 1 .
5459 CB    CB    . VAL VAL VAL B B 288 288 . 0.1265 0.1095 0.1179 0.0227  -0.0034 -
0.0045 1 .
5460 CG1   CG1   . VAL VAL VAL B B 288 288 . 0.1436 0.1235 0.0553 0.0412  0.0209  -
0.0106 1 .
5461 CG2   CG2   . VAL VAL VAL B B 288 288 . 0.1395 0.1210 0.1592 0.0282  0.0278  -
0.0134 1 .
5462 C     C     . VAL VAL VAL B B 288 288 . 0.1420 0.1343 0.1127 0.0216  0.0134
0.0049  1 .
5463 O     O     . VAL VAL VAL B B 288 288 . 0.1573 0.1513 0.1098 0.0396  -0.0150
0.0182  1 .
5464 N     N     . VAL VAL VAL B B 289 289 . 0.1129 0.0815 0.1169 0.0080  -0.0060
0.0140  1 .
5465 CA    CA    . VAL VAL VAL B B 289 289 . 0.1575 0.1141 0.1195 0.0125  0.0025  -
0.0019 1 .
5466 CB    CB    . VAL VAL VAL B B 289 289 . 0.1542 0.1326 0.1330 -0.0023 0.0280
0.0173  1 .
5467 CG1   CG1   . VAL VAL VAL B B 289 289 . 0.1909 0.1176 0.1402 0.0555  -0.0080
0.0112  1 .
5468 CG2   CG2   . VAL VAL VAL B B 289 289 . 0.1747 0.1220 0.1216 0.0316  0.0255  -
0.0061 1 .
5469 C     C     . VAL VAL VAL B B 289 289 . 0.1314 0.1100 0.1062 0.0080  0.0055
0.0004  1 .
5470 O     O     . VAL VAL VAL B B 289 289 . 0.1392 0.1110 0.1051 0.0184  0.0087
0.0081  1 .
5471 N     N     . SER SER SER B B 290 290 . 0.1349 0.1088 0.1025 0.0135  0.0071  -
0.0057 1 .
5472 CA    CA    . SER SER SER B B 290 290 . 0.1185 0.0965 0.1218 0.0109  -0.0001 -
0.0164 1 .
5473 CB    CB    . SER SER SER B B 290 290 . 0.1255 0.1352 0.1177 0.0072  0.0270  -
0.0055 1 .
5474 OG    OG    . SER SER SER B B 290 290 . 0.1616 0.1089 0.1227 0.0148  0.0178
0.0083  1 .
5475 C     C     . SER SER SER B B 290 290 . 0.1094 0.0919 0.1259 0.0032  -0.0147 -
0.0206 1 .
5476 O     O     . SER SER SER B B 290 290 . 0.1471 0.1231 0.1147 0.0214  0.0102  -
0.0120 1 .
5477 N     N     . ILE ILE ILE B B 291 291 . 0.0968 0.0659 0.0904 0.0041  -0.0096 -
0.0161 1 .
5478 CA    CA    . ILE ILE ILE B B 291 291 . 0.0896 0.0674 0.0994 0.0018  -0.0014 -
0.0144 1 .
5479 CB    CB    . ILE ILE ILE B B 291 291 . 0.0797 0.0677 0.1038 0.0080  0.0128  -
0.0129 1 .
5480 CG1   CG1   . ILE ILE ILE B B 291 291 . 0.1178 0.0757 0.0826 -0.0086 0.0091  -
0.0180 1 .
5481 CD1   CD1   . ILE ILE ILE B B 291 291 . 0.1013 0.1146 0.1145 -0.0048 0.0143  -
0.0054 1 .
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5482 CG2   CG2   . ILE ILE ILE B B 291 291 . 0.1070 0.0753 0.0903 0.0086  -0.0133 -
0.0141 1 .
5483 C     C     . ILE ILE ILE B B 291 291 . 0.0994 0.0915 0.0866 0.0114  -0.0076 -
0.0185 1 .
5484 O     O     . ILE ILE ILE B B 291 291 . 0.1423 0.0983 0.0873 0.0287  -0.0070
0.0065  1 .
5485 N     N     . GLU GLU GLU B B 292 292 . 0.1061 0.0999 0.0672 0.0183  0.0188
0.0060  1 .
5486 CA    CA    . GLU GLU GLU B B 292 292 . 0.0985 0.0610 0.0688 0.0136  0.0114
0.0182  1 .
5487 CB    CB    . GLU GLU GLU B B 292 292 . 0.1197 0.1202 0.0638 0.0042  0.0186
0.0189  1 .
5488 CG    CG    . GLU GLU GLU B B 292 292 . 0.1280 0.1134 0.0610 0.0361  0.0099
0.0095  1 .
5489 CD    CD    . GLU GLU GLU B B 292 292 . 0.1525 0.1056 0.0969 0.0016  -0.0087 -
0.0049 1 .
5490 OE1   OE1   . GLU GLU GLU B B 292 292 . 0.1280 0.1159 0.1029 0.0098  0.0113
0.0169  1 .
5491 OE2   OE2   . GLU GLU GLU B B 292 292 . 0.1409 0.0869 0.0741 0.0238  0.0012
0.0043  1 .
5492 C     C     . GLU GLU GLU B B 292 292 . 0.0843 0.0665 0.0661 0.0021  -0.0068
0.0064  1 .
5493 O     O     . GLU GLU GLU B B 292 292 . 0.1165 0.0803 0.0601 0.0107  0.0166  -
0.0042 1 .
5494 N     N     . ASP ASP ASP B B 293 293 . 0.0962 0.0476 0.0540 0.0122  0.0076
0.0006  1 .
5495 CA    CA    . ASP ASP ASP B B 293 293 . 0.0918 0.0534 0.0618 -0.0005 0.0013  -
0.0128 1 .
5496 CB    CB    . ASP ASP ASP B B 293 293 . 0.0864 0.1170 0.0832 -0.0018 0.0115  -
0.0171 1 .
5497 CG    CG    . ASP ASP ASP B B 293 293 . 0.0984 0.1054 0.1063 0.0023  0.0094
0.0142  1 .
5498 OD1   OD1   . ASP ASP ASP B B 293 293 . 0.0892 0.1242 0.0643 0.0068  0.0191
0.0091  1 .
5499 OD2   OD2   . ASP ASP ASP B B 293 293 . 0.1274 0.0785 0.0808 0.0080  0.0023
0.0125  1 .
5500 C     C     . ASP ASP ASP B B 293 293 . 0.1062 0.0893 0.0821 0.0016  -0.0055 -
0.0122 1 .
5501 O     O     . ASP ASP ASP B B 293 293 . 0.1371 0.0924 0.0748 0.0078  -0.0081 -
0.0074 1 .
5502 N     N     . PRO PRO PRO B B 294 294 . 0.1009 0.0840 0.0730 -0.0047 -0.0034 -
0.0146 1 .
5503 CA    CA    . PRO PRO PRO B B 294 294 . 0.1026 0.0917 0.0878 0.0033  -0.0096 -
0.0221 1 .
5504 CB    CB    . PRO PRO PRO B B 294 294 . 0.0924 0.1213 0.0634 0.0056  -0.0123 -
0.0412 1 .
5505 CG    CG    . PRO PRO PRO B B 294 294 . 0.0552 0.0827 0.0496 -0.0174 0.0041
0.0003  1 .
5506 CD    CD    . PRO PRO PRO B B 294 294 . 0.1103 0.0953 0.0678 -0.0266 -0.0223 -
0.0107 1 .
5507 C     C     . PRO PRO PRO B B 294 294 . 0.0878 0.0698 0.1079 -0.0001 -0.0168 -
0.0137 1 .
5508 O     O     . PRO PRO PRO B B 294 294 . 0.1045 0.0800 0.0928 0.0040  -0.0024 -
0.0161 1 .
5509 N     N     . PHE PHE PHE B B 295 295 . 0.1170 0.0819 0.1005 0.0166  0.0044  -
0.0127 1 .
5510 CA    CA    . PHE PHE PHE B B 295 295 . 0.1246 0.0812 0.0792 0.0039  -0.0043 -
0.0042 1 .
5511 CB    CB    . PHE PHE PHE B B 295 295 . 0.1213 0.1010 0.0773 0.0028  0.0127
0.0176  1 .
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5512 CG    CG    . PHE PHE PHE B B 295 295 . 0.0800 0.0838 0.0764 -0.0006 -0.0092 -
0.0179 1 .
5513 CD1   CD1   . PHE PHE PHE B B 295 295 . 0.1024 0.1389 0.0931 0.0264  -0.0197
0.0153  1 .
5514 CE1   CE1   . PHE PHE PHE B B 295 295 . 0.1023 0.1195 0.1224 0.0422  -0.0062
0.0096  1 .
5515 CZ    CZ    . PHE PHE PHE B B 295 295 . 0.0586 0.1210 0.1106 0.0252  -0.0055 -
0.0009 1 .
5516 CE2   CE2   . PHE PHE PHE B B 295 295 . 0.1132 0.1122 0.0907 0.0110  0.0227
0.0358  1 .
5517 CD2   CD2   . PHE PHE PHE B B 295 295 . 0.1126 0.0500 0.0678 0.0160  -0.0172
0.0125  1 .
5518 C     C     . PHE PHE PHE B B 295 295 . 0.1107 0.1084 0.1025 0.0035  0.0014
0.0058  1 .
5519 O     O     . PHE PHE PHE B B 295 295 . 0.1048 0.1046 0.1138 -0.0020 -0.0094 -
0.0019 1 .
5520 N     N     . ASP ASP ASP B B 296 296 . 0.1105 0.0937 0.1034 -0.0014 -0.0029 -
0.0251 1 .
5521 CA    CA    . ASP ASP ASP B B 296 296 . 0.1098 0.0869 0.0957 -0.0062 0.0140  -
0.0134 1 .
5522 CB    CB    . ASP ASP ASP B B 296 296 . 0.1105 0.0876 0.0971 -0.0020 0.0132  -
0.0093 1 .
5523 CG    CG    . ASP ASP ASP B B 296 296 . 0.1493 0.1141 0.1295 0.0076  -0.0091 -
0.0056 1 .
5524 OD1   OD1   . ASP ASP ASP B B 296 296 . 0.1864 0.1112 0.1248 0.0217  -0.0292 -
0.0184 1 .
5525 OD2   OD2   . ASP ASP ASP B B 296 296 . 0.1200 0.1154 0.1234 0.0219  -0.0300 -
0.0224 1 .
5526 C     C     . ASP ASP ASP B B 296 296 . 0.1237 0.0761 0.1094 0.0025  0.0069  -
0.0041 1 .
5527 O     O     . ASP ASP ASP B B 296 296 . 0.1393 0.0953 0.1115 -0.0171 0.0041  -
0.0063 1 .
5528 N     N     . GLN GLN GLN B B 297 297 . 0.1063 0.0701 0.0841 -0.0071 0.0013  -
0.0078 1 .
5529 CA    CA    . GLN GLN GLN B B 297 297 . 0.1066 0.0749 0.0862 0.0132  -0.0098 -
0.0011 1 .
5530 CB    CB    . GLN GLN GLN B B 297 297 . 0.1227 0.0717 0.1052 -0.0039 0.0038
0.0102  1 .
5531 CG    CG    . GLN GLN GLN B B 297 297 . 0.1273 0.0953 0.0897 0.0133  -0.0305 -
0.0188 1 .
5532 CD    CD    . GLN GLN GLN B B 297 297 . 0.1075 0.1345 0.1113 0.0056  0.0000
0.0153  1 .
5533 OE1   OE1   . GLN GLN GLN B B 297 297 . 0.1328 0.0962 0.0926 0.0169  0.0177  -
0.0050 1 .
5534 NE2   NE2   . GLN GLN GLN B B 297 297 . 0.1611 0.1198 0.1475 0.0042  -0.0016
0.0054  1 .
5535 C     C     . GLN GLN GLN B B 297 297 . 0.1219 0.1086 0.0894 0.0053  -0.0041
0.0049  1 .
5536 O     O     . GLN GLN GLN B B 297 297 . 0.1166 0.1120 0.1014 0.0047  -0.0034
0.0050  1 .
5537 N     N     . ASP ASP ASP B B 298 298 . 0.1220 0.0818 0.0689 0.0016  0.0045
0.0061  1 .
5538 CA    CA    . ASP ASP ASP B B 298 298 . 0.1170 0.1043 0.1071 0.0111  0.0045
0.0060  1 .
5539 CB    CB    . ASP ASP ASP B B 298 298 . 0.1401 0.1139 0.1081 -0.0038 0.0180
0.0061  1 .
5540 CG    CG    . ASP ASP ASP B B 298 298 . 0.1463 0.1302 0.1283 0.0135  0.0038  -
0.0080 1 .
5541 OD1   OD1   . ASP ASP ASP B B 298 298 . 0.1653 0.1216 0.1578 0.0085  -0.0050
0.0058  1 .
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5542 OD2   OD2   . ASP ASP ASP B B 298 298 . 0.2216 0.1895 0.1890 0.0033  -0.0123 -
0.0064 1 .
5543 C     C     . ASP ASP ASP B B 298 298 . 0.1268 0.1128 0.1043 0.0144  -0.0077 -
0.0099 1 .
5544 O     O     . ASP ASP ASP B B 298 298 . 0.1297 0.0811 0.1144 0.0003  -0.0135 -
0.0009 1 .
5545 N     N     . ASP ASP ASP B B 299 299 . 0.1198 0.0982 0.1188 0.0136  0.0103
0.0043  1 .
5546 CA    CA    . ASP ASP ASP B B 299 299 . 0.0994 0.0720 0.1001 0.0046  -0.0110
0.0030  1 .
5547 CB    CB    . ASP ASP ASP B B 299 299 . 0.0886 0.0778 0.1071 -0.0023 -0.0081
0.0096  1 .
5548 CG    CG    . ASP ASP ASP B B 299 299 . 0.1159 0.0701 0.0958 -0.0052 -0.0102 -
0.0206 1 .
5549 OD1   OD1   . ASP ASP ASP B B 299 299 . 0.1250 0.1167 0.1223 0.0194  -0.0137
0.0018  1 .
5550 OD2   OD2   . ASP ASP ASP B B 299 299 . 0.1180 0.1062 0.1276 0.0188  -0.0056 -
0.0233 1 .
5551 C     C     . ASP ASP ASP B B 299 299 . 0.1149 0.0861 0.1248 0.0018  -0.0021
0.0058  1 .
5552 O     O     . ASP ASP ASP B B 299 299 . 0.1056 0.0986 0.1264 0.0017  -0.0099
0.0137  1 .
5553 N     N     . TRP TRP TRP B B 300 300 . 0.0921 0.0900 0.1112 -0.0121 -0.0192
0.0079  1 .
5554 CA    CA    . TRP TRP TRP B B 300 300 . 0.0817 0.0956 0.0826 -0.0027 -0.0150
0.0044  1 .
5555 CB    CB    . TRP TRP TRP B B 300 300 . 0.0972 0.0936 0.1040 0.0110  0.0029
0.0137  1 .
5556 CG    CG    . TRP TRP TRP B B 300 300 . 0.0815 0.1058 0.0876 0.0175  -0.0238 -
0.0038 1 .
5557 CD1   CD1   . TRP TRP TRP B B 300 300 . 0.1009 0.1114 0.1311 -0.0076 -0.0187
0.0046  1 .
5558 NE1   NE1   . TRP TRP TRP B B 300 300 . 0.1443 0.0949 0.1314 0.0049  0.0110
0.0098  1 .
5559 CE2   CE2   . TRP TRP TRP B B 300 300 . 0.1197 0.0914 0.0933 0.0000  -0.0184 -
0.0068 1 .
5560 CD2   CD2   . TRP TRP TRP B B 300 300 . 0.1444 0.1155 0.1287 0.0073  -0.0062 -
0.0169 1 .
5561 CE3   CE3   . TRP TRP TRP B B 300 300 . 0.1427 0.0777 0.1396 -0.0109 -0.0143 -
0.0186 1 .
5562 CZ3   CZ3   . TRP TRP TRP B B 300 300 . 0.1362 0.1359 0.1957 0.0016  0.0391  -
0.0191 1 .
5563 CH2   CH2   . TRP TRP TRP B B 300 300 . 0.1235 0.1256 0.1123 0.0135  -0.0317 -
0.0281 1 .
5564 CZ2   CZ2   . TRP TRP TRP B B 300 300 . 0.1323 0.0688 0.1328 0.0102  -0.0413 -
0.0074 1 .
5565 C     C     . TRP TRP TRP B B 300 300 . 0.1062 0.1121 0.1204 0.0004  -0.0153
0.0040  1 .
5566 O     O     . TRP TRP TRP B B 300 300 . 0.1215 0.0771 0.1013 -0.0060 -0.0074
0.0142  1 .
5567 N     N     . ALA ALA ALA B B 301 301 . 0.1210 0.0965 0.0999 -0.0074 0.0049
0.0145  1 .
5568 CA    CA    . ALA ALA ALA B B 301 301 . 0.1270 0.0910 0.1165 0.0047  0.0146
0.0130  1 .
5569 CB    CB    . ALA ALA ALA B B 301 301 . 0.1545 0.0892 0.0934 -0.0200 0.0280
0.0157  1 .
5570 C     C     . ALA ALA ALA B B 301 301 . 0.1036 0.1008 0.1093 -0.0012 -0.0001
0.0045  1 .
5571 O     O     . ALA ALA ALA B B 301 301 . 0.1377 0.1072 0.1130 -0.0070 -0.0088
0.0037  1 .
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5572 N     N     . ALA ALA ALA B B 302 302 . 0.1279 0.0936 0.1139 0.0088  -0.0053
0.0029  1 .
5573 CA    CA    . ALA ALA ALA B B 302 302 . 0.0930 0.0891 0.1168 0.0010  -0.0247
0.0051  1 .
5574 CB    CB    . ALA ALA ALA B B 302 302 . 0.1031 0.0902 0.0729 0.0198  -0.0413 -
0.0009 1 .
5575 C     C     . ALA ALA ALA B B 302 302 . 0.1125 0.0961 0.1355 0.0018  -0.0060
0.0079  1 .
5576 O     O     . ALA ALA ALA B B 302 302 . 0.1527 0.1026 0.1308 0.0043  0.0063  -
0.0054 1 .
5577 N     N     . TRP TRP TRP B B 303 303 . 0.1213 0.0723 0.1101 0.0086  0.0000
0.0027  1 .
5578 CA    CA    . TRP TRP TRP B B 303 303 . 0.1221 0.1080 0.0973 -0.0053 -0.0077
0.0051  1 .
5579 CB    CB    . TRP TRP TRP B B 303 303 . 0.1251 0.1054 0.0955 0.0110  0.0018
0.0064  1 .
5580 CG    CG    . TRP TRP TRP B B 303 303 . 0.0824 0.0491 0.0702 0.0140  0.0036  -
0.0021 1 .
5581 CD1   CD1   . TRP TRP TRP B B 303 303 . 0.0658 0.0735 0.0895 0.0165  -0.0063
0.0078  1 .
5582 NE1   NE1   . TRP TRP TRP B B 303 303 . 0.1227 0.0818 0.0881 0.0138  0.0169
0.0257  1 .
5583 CE2   CE2   . TRP TRP TRP B B 303 303 . 0.0828 0.0757 0.0985 -0.0040 -0.0127 -
0.0053 1 .
5584 CD2   CD2   . TRP TRP TRP B B 303 303 . 0.0989 0.0514 0.0554 0.0093  -0.0045
0.0136  1 .
5585 CE3   CE3   . TRP TRP TRP B B 303 303 . 0.0907 0.0654 0.1233 -0.0050 -0.0117
0.0488  1 .
5586 CZ3   CZ3   . TRP TRP TRP B B 303 303 . 0.0971 0.0875 0.0483 0.0021  -0.0351
0.0179  1 .
5587 CH2   CH2   . TRP TRP TRP B B 303 303 . 0.0454 0.0682 0.0677 0.0020  -0.0165 -
0.0322 1 .
5588 CZ2   CZ2   . TRP TRP TRP B B 303 303 . 0.0885 0.0657 0.1053 0.0046  0.0117  -
0.0058 1 .
5589 C     C     . TRP TRP TRP B B 303 303 . 0.1189 0.1032 0.0876 0.0094  -0.0112 -
0.0121 1 .
5590 O     O     . TRP TRP TRP B B 303 303 . 0.1481 0.0993 0.1017 -0.0144 -0.0027 -
0.0005 1 .
5591 N     N     . SER SER SER B B 304 304 . 0.1440 0.1095 0.0762 -0.0008 -0.0140 -
0.0027 1 .
5592 CA    CA    . SER SER SER B B 304 304 . 0.1297 0.1317 0.0820 0.0198  0.0007  -
0.0045 1 .
5593 CB    CB    . SER SER SER B B 304 304 . 0.0969 0.1255 0.0912 0.0284  0.0022  -
0.0070 1 .
5594 OG    OG    . SER SER SER B B 304 304 . 0.1228 0.1003 0.1204 0.0240  0.0035
0.0081  1 .
5595 C     C     . SER SER SER B B 304 304 . 0.1410 0.1324 0.1220 0.0084  0.0091  -
0.0071 1 .
5596 O     O     . SER SER SER B B 304 304 . 0.1808 0.1211 0.0977 0.0101  0.0158  -
0.0119 1 .
5597 N     N     . LYS LYS LYS B B 305 305 . 0.1424 0.1120 0.1243 0.0116  0.0168
0.0076  1 .
5598 CA    CA    . LYS LYS LYS B B 305 305 . 0.1384 0.1334 0.1601 0.0021  0.0248
0.0135  1 .
5599 CB    CB    . LYS LYS LYS B B 305 305 . 0.1714 0.1528 0.1535 -0.0043 0.0568
0.0012  1 .
5600 CG    CG    . LYS LYS LYS B B 305 305 . 0.1577 0.2066 0.2077 -0.0317 0.0490
0.0300  1 .
5601 CD    CD    . LYS LYS LYS B B 305 305 . 0.2336 0.2529 0.2778 -0.0800 0.0642  -
0.0323 1 .
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5602 CE    CE    . LYS LYS LYS B B 305 305 . 0.2752 0.3160 0.3718 -0.0999 0.0474
0.0310  1 .
5603 NZ    NZ    . LYS LYS LYS B B 305 305 . 0.3374 0.3164 0.4422 -0.0196 0.0090
0.1276  1 .
5604 C     C     . LYS LYS LYS B B 305 305 . 0.1636 0.1607 0.1490 0.0075  0.0227
0.0037  1 .
5605 O     O     . LYS LYS LYS B B 305 305 . 0.1610 0.1378 0.1294 -0.0055 0.0337  -
0.0205 1 .
5606 N     N     . PHE PHE PHE B B 306 306 . 0.1238 0.1312 0.1150 0.0195  0.0176
0.0250  1 .
5607 CA    CA    . PHE PHE PHE B B 306 306 . 0.1296 0.1352 0.0863 0.0023  -0.0112
0.0175  1 .
5608 CB    CB    . PHE PHE PHE B B 306 306 . 0.1151 0.1259 0.0792 -0.0026 -0.0102
0.0276  1 .
5609 CG    CG    . PHE PHE PHE B B 306 306 . 0.1469 0.1297 0.1150 0.0075  -0.0172 -
0.0080 1 .
5610 CD1   CD1   . PHE PHE PHE B B 306 306 . 0.1452 0.1753 0.1376 0.0350  -0.0325 -
0.0210 1 .
5611 CE1   CE1   . PHE PHE PHE B B 306 306 . 0.2140 0.1748 0.1649 0.0103  -0.0208 -
0.0294 1 .
5612 CZ    CZ    . PHE PHE PHE B B 306 306 . 0.2007 0.1489 0.1345 -0.0113 0.0060  -
0.0416 1 .
5613 CE2   CE2   . PHE PHE PHE B B 306 306 . 0.1883 0.1946 0.2105 0.0237  -0.0057 -
0.0382 1 .
5614 CD2   CD2   . PHE PHE PHE B B 306 306 . 0.2026 0.1413 0.1258 -0.0028 -0.0230 -
0.0060 1 .
5615 C     C     . PHE PHE PHE B B 306 306 . 0.1378 0.1280 0.0946 0.0033  -0.0021
0.0103  1 .
5616 O     O     . PHE PHE PHE B B 306 306 . 0.1339 0.1307 0.1172 0.0124  0.0061
0.0117  1 .
5617 N     N     . THR THR THR B B 307 307 . 0.1202 0.1118 0.0774 -0.0015 -0.0235
0.0087  1 .
5618 CA    CA    . THR THR THR B B 307 307 . 0.1609 0.1433 0.1067 -0.0071 -0.0106 -
0.0083 1 .
5619 CB    CB    . THR THR THR B B 307 307 . 0.1444 0.1635 0.0971 -0.0290 -0.0193 -
0.0158 1 .
5620 OG1   OG1   . THR THR THR B B 307 307 . 0.1800 0.1029 0.0891 0.0000  0.0034  -
0.0241 1 .
5621 CG2   CG2   . THR THR THR B B 307 307 . 0.1968 0.1046 0.1285 -0.0563 0.0070  -
0.0170 1 .
5622 C     C     . THR THR THR B B 307 307 . 0.2023 0.1300 0.0952 0.0035  -0.0105
0.0060  1 .
5623 O     O     . THR THR THR B B 307 307 . 0.1986 0.1254 0.1059 -0.0073 0.0082  -
0.0119 1 .
5624 N     N     . ALA ALA ALA B B 308 308 . 0.1679 0.1461 0.0965 0.0151  -0.0181
0.0083  1 .
5625 CA    CA    . ALA ALA ALA B B 308 308 . 0.1410 0.1185 0.0979 0.0272  0.0074  -
0.0019 1 .
5626 CB    CB    . ALA ALA ALA B B 308 308 . 0.2027 0.1197 0.1008 0.0386  0.0058
0.0175  1 .
5627 C     C     . ALA ALA ALA B B 308 308 . 0.1468 0.1333 0.1079 0.0122  0.0000  -
0.0012 1 .
5628 O     O     . ALA ALA ALA B B 308 308 . 0.1633 0.1883 0.1414 0.0362  -0.0114 -
0.0419 1 .
5629 N     N     . ASN ASN ASN B B 309 309 . 0.1227 0.1034 0.1187 -0.0039 0.0168  -
0.0002 1 .
5630 CA    CA    . ASN ASN ASN B B 309 309 . 0.1487 0.1279 0.1491 0.0022  0.0121  -
0.0007 1 .
5631 CB    CB    . ASN ASN ASN B B 309 309 . 0.1476 0.1516 0.1683 -0.0171 0.0201
0.0044  1 .
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5632 CG    CG    . ASN ASN ASN B B 309 309 . 0.3003 0.2077 0.2250 -0.0269 0.0013
0.0011  1 .
5633 OD1   OD1   . ASN ASN ASN B B 309 309 . 0.3536 0.3165 0.2924 -0.0429 -0.0331
0.0177  1 .
5634 ND2   ND2   . ASN ASN ASN B B 309 309 . 0.3863 0.2537 0.2743 -0.0594 0.0528  -
0.0159 1 .
5635 C     C     . ASN ASN ASN B B 309 309 . 0.1346 0.1386 0.1354 -0.0045 -0.0016 -
0.0017 1 .
5636 O     O     . ASN ASN ASN B B 309 309 . 0.1585 0.1365 0.1695 0.0077  0.0223
0.0108  1 .
5637 N     N     . VAL VAL VAL B B 310 310 . 0.1536 0.1257 0.1071 -0.0047 0.0016
0.0093  1 .
5638 CA    CA    . VAL VAL VAL B B 310 310 . 0.1458 0.1308 0.1189 -0.0061 -0.0107 -
0.0043 1 .
5639 CB    CB    . VAL VAL VAL B B 310 310 . 0.1561 0.1446 0.1117 -0.0198 -0.0005 -
0.0020 1 .
5640 CG1   CG1   . VAL VAL VAL B B 310 310 . 0.2180 0.2397 0.1786 -0.0339 -0.0052 -
0.0336 1 .
5641 CG2   CG2   . VAL VAL VAL B B 310 310 . 0.1739 0.0908 0.1128 0.0180  -0.0048 -
0.0032 1 .
5642 C     C     . VAL VAL VAL B B 310 310 . 0.1393 0.1296 0.1026 -0.0062 -0.0055
0.0084  1 .
5643 O     O     . VAL VAL VAL B B 310 310 . 0.1243 0.1239 0.1169 0.0068  0.0144  -
0.0021 1 .
5644 N     N     . GLY GLY GLY B B 311 311 . 0.1458 0.1075 0.1047 -0.0078 -0.0102 -
0.0037 1 .
5645 CA    CA    . GLY GLY GLY B B 311 311 . 0.1365 0.1075 0.0692 -0.0230 0.0026
0.0138  1 .
5646 C     C     . GLY GLY GLY B B 311 311 . 0.1445 0.1188 0.0998 -0.0147 -0.0042
0.0027  1 .
5647 O     O     . GLY GLY GLY B B 311 311 . 0.1557 0.1367 0.0777 -0.0053 0.0013
0.0042  1 .
5648 N     N     . ILE ILE ILE B B 312 312 . 0.1343 0.1105 0.0806 0.0088  0.0040  -
0.0069 1 .
5649 CA    CA    . ILE ILE ILE B B 312 312 . 0.1233 0.1123 0.0940 0.0071  -0.0015 -
0.0025 1 .
5650 CB    CB    . ILE ILE ILE B B 312 312 . 0.1120 0.1154 0.1031 0.0132  -0.0097 -
0.0020 1 .
5651 CG1   CG1   . ILE ILE ILE B B 312 312 . 0.1524 0.1089 0.0775 0.0020  -0.0129 -
0.0086 1 .
5652 CD1   CD1   . ILE ILE ILE B B 312 312 . 0.1316 0.1538 0.1162 -0.0200 -0.0212 -
0.0298 1 .
5653 CG2   CG2   . ILE ILE ILE B B 312 312 . 0.1078 0.1062 0.0994 0.0271  0.0167  -
0.0024 1 .
5654 C     C     . ILE ILE ILE B B 312 312 . 0.1240 0.1167 0.1022 0.0073  0.0005
0.0039  1 .
5655 O     O     . ILE ILE ILE B B 312 312 . 0.1409 0.1340 0.1011 0.0272  -0.0091
0.0067  1 .
5656 N     N     . GLN GLN GLN B B 313 313 . 0.1058 0.0869 0.0966 0.0066  0.0161
0.0301  1 .
5657 CA    CA    . GLN GLN GLN B B 313 313 . 0.1091 0.0486 0.0693 0.0052  0.0132
0.0266  1 .
5658 CB    CB    . GLN GLN GLN B B 313 313 . 0.1026 0.0627 0.0382 -0.0047 0.0247
0.0120  1 .
5659 CG    CG    . GLN GLN GLN B B 313 313 . 0.1258 0.1079 0.0866 -0.0257 0.0421
0.0222  1 .
5660 CD    CD    . GLN GLN GLN B B 313 313 . 0.1337 0.0879 0.1218 -0.0160 0.0009
0.0270  1 .
5661 OE1   OE1   . GLN GLN GLN B B 313 313 . 0.1729 0.1567 0.1559 -0.0124 0.0234
0.0095  1 .
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5662 NE2   NE2   . GLN GLN GLN B B 313 313 . 0.1450 0.0889 0.1042 -0.0064 -0.0293
0.0094  1 .
5663 C     C     . GLN GLN GLN B B 313 313 . 0.0908 0.0749 0.0901 0.0044  -0.0015
0.0099  1 .
5664 O     O     . GLN GLN GLN B B 313 313 . 0.1201 0.0914 0.0740 -0.0058 0.0013  -
0.0002 1 .
5665 N     N     . ILE ILE ILE B B 314 314 . 0.1234 0.0691 0.0753 0.0125  0.0119
0.0133  1 .
5666 CA    CA    . ILE ILE ILE B B 314 314 . 0.1150 0.0760 0.0688 -0.0017 -0.0022
0.0092  1 .
5667 CB    CB    . ILE ILE ILE B B 314 314 . 0.1028 0.0551 0.0783 0.0058  -0.0020
0.0074  1 .
5668 CG1   CG1   . ILE ILE ILE B B 314 314 . 0.1217 0.0750 0.1016 0.0376  0.0081  -
0.0069 1 .
5669 CD1   CD1   . ILE ILE ILE B B 314 314 . 0.1061 0.1085 0.1321 0.0055  0.0072  -
0.0142 1 .
5670 CG2   CG2   . ILE ILE ILE B B 314 314 . 0.1240 0.0332 0.1137 -0.0129 -0.0042 -
0.0229 1 .
5671 C     C     . ILE ILE ILE B B 314 314 . 0.1048 0.1062 0.0865 0.0025  -0.0072 -
0.0013 1 .
5672 O     O     . ILE ILE ILE B B 314 314 . 0.1240 0.0772 0.0737 0.0152  -0.0140 -
0.0111 1 .
5673 N     N     . VAL VAL VAL B B 315 315 . 0.1364 0.0998 0.0796 0.0138  0.0020
0.0086  1 .
5674 CA    CA    . VAL VAL VAL B B 315 315 . 0.1259 0.0686 0.0709 0.0090  0.0008  -
0.0005 1 .
5675 CB    CB    . VAL VAL VAL B B 315 315 . 0.1322 0.0824 0.0858 0.0222  0.0112
0.0096  1 .
5676 CG1   CG1   . VAL VAL VAL B B 315 315 . 0.1701 0.0779 0.0865 -0.0154 0.0492
0.0074  1 .
5677 CG2   CG2   . VAL VAL VAL B B 315 315 . 0.1595 0.0567 0.0569 0.0321  0.0072  -
0.0064 1 .
5678 C     C     . VAL VAL VAL B B 315 315 . 0.1186 0.0883 0.0985 0.0020  0.0106
0.0110  1 .
5679 O     O     . VAL VAL VAL B B 315 315 . 0.1218 0.1007 0.0724 0.0042  -0.0025
0.0137  1 .
5680 N     N     . GLY GLY GLY B B 316 316 . 0.1103 0.0672 0.0808 0.0142  -0.0087
0.0176  1 .
5681 CA    CA    . GLY GLY GLY B B 316 316 . 0.1164 0.0833 0.0636 0.0197  0.0092  -
0.0089 1 .
5682 C     C     . GLY GLY GLY B B 316 316 . 0.1271 0.0930 0.0906 0.0132  -0.0057 -
0.0035 1 .
5683 O     O     . GLY GLY GLY B B 316 316 . 0.1140 0.1098 0.1119 0.0127  0.0008
0.0069  1 .
5684 N     N     . ASP ASP ASP B B 317 317 . 0.1274 0.1160 0.0915 0.0104  -0.0174
0.0005  1 .
5685 CA    CA    . ASP ASP ASP B B 317 317 . 0.1113 0.0867 0.0797 0.0196  0.0024  -
0.0182 1 .
5686 CB    CB    . ASP ASP ASP B B 317 317 . 0.1133 0.1328 0.0570 0.0097  -0.0144 -
0.0089 1 .
5687 CG    CG    . ASP ASP ASP B B 317 317 . 0.1094 0.0937 0.0777 0.0077  -0.0008 -
0.0024 1 .
5688 OD1   OD1   . ASP ASP ASP B B 317 317 . 0.0864 0.1031 0.0757 0.0152  -0.0097 -
0.0091 1 .
5689 OD2   OD2   . ASP ASP ASP B B 317 317 . 0.1201 0.0985 0.0969 0.0033  -0.0014
0.0194  1 .
5690 C     C     . ASP ASP ASP B B 317 317 . 0.0980 0.0747 0.0618 0.0074  0.0150  -
0.0016 1 .
5691 O     O     . ASP ASP ASP B B 317 317 . 0.1072 0.0650 0.0759 0.0349  0.0057  -
0.0015 1 .
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5692 N     N     . ASP ASP ASP B B 318 318 . 0.1126 0.0648 0.0534 0.0123  0.0143
0.0000  1 .
5693 CA    CA    . ASP ASP ASP B B 318 318 . 0.0930 0.0672 0.0786 0.0170  -0.0063
0.0027  1 .
5694 CB    CB    . ASP ASP ASP B B 318 318 . 0.0983 0.0566 0.0846 0.0082  -0.0195
0.0282  1 .
5695 CG    CG    . ASP ASP ASP B B 318 318 . 0.0630 0.0552 0.0377 0.0019  -0.0062 -
0.0187 1 .
5696 OD1   OD1   . ASP ASP ASP B B 318 318 . 0.1179 0.1206 0.1013 0.0051  -0.0072 -
0.0103 1 .
5697 OD2   OD2   . ASP ASP ASP B B 318 318 . 0.1298 0.1292 0.1327 0.0101  -0.0207 -
0.0031 1 .
5698 C     C     . ASP ASP ASP B B 318 318 . 0.1148 0.1032 0.0805 0.0115  0.0002
0.0005  1 .
5699 O     O     . ASP ASP ASP B B 318 318 . 0.1149 0.0797 0.0665 0.0067  -0.0193
0.0030  1 .
5700 N     N     . LEU LEU LEU B B 319 319 . 0.0989 0.1072 0.0766 0.0062  -0.0149 -
0.0057 1 .
5701 CA    CA    . LEU LEU LEU B B 319 319 . 0.1158 0.1132 0.0768 0.0005  -0.0162 -
0.0138 1 .
5702 CB    CB    . LEU LEU LEU B B 319 319 . 0.1235 0.1372 0.0697 0.0174  -0.0146
0.0033  1 .
5703 CG    CG    . LEU LEU LEU B B 319 319 . 0.1160 0.0702 0.0597 0.0022  -0.0445
0.0041  1 .
5704 CD1   CD1   . LEU LEU LEU B B 319 319 . 0.1348 0.0796 0.1077 -0.0308 -0.0072 -
0.0001 1 .
5705 CD2   CD2   . LEU LEU LEU B B 319 319 . 0.1401 0.0711 0.0522 0.0384  0.0062
0.0083  1 .
5706 C     C     . LEU LEU LEU B B 319 319 . 0.1124 0.1077 0.0894 0.0152  -0.0080 -
0.0073 1 .
5707 O     O     . LEU LEU LEU B B 319 319 . 0.1396 0.1092 0.0832 0.0190  -0.0199 -
0.0028 1 .
5708 N     N     . THR THR THR B B 320 320 . 0.1039 0.1013 0.0926 -0.0091 -0.0056
0.0096  1 .
5709 CA    CA    . THR THR THR B B 320 320 . 0.0992 0.0893 0.0986 -0.0027 0.0025  -
0.0008 1 .
5710 CB    CB    . THR THR THR B B 320 320 . 0.0987 0.0908 0.0836 0.0172  -0.0174 -
0.0095 1 .
5711 OG1   OG1   . THR THR THR B B 320 320 . 0.1203 0.0879 0.1350 0.0072  -0.0093 -
0.0198 1 .
5712 CG2   CG2   . THR THR THR B B 320 320 . 0.1527 0.1291 0.0673 -0.0073 -0.0286
0.0052  1 .
5713 C     C     . THR THR THR B B 320 320 . 0.1027 0.0920 0.1006 0.0093  -0.0026
0.0030  1 .
5714 O     O     . THR THR THR B B 320 320 . 0.0797 0.0903 0.1128 0.0200  0.0112
0.0092  1 .
5715 N     N     . VAL VAL VAL B B 321 321 . 0.1207 0.0603 0.0898 0.0076  0.0007  -
0.0062 1 .
5716 CA    CA    . VAL VAL VAL B B 321 321 . 0.1117 0.0695 0.0964 0.0059  0.0121
0.0000  1 .
5717 CB    CB    . VAL VAL VAL B B 321 321 . 0.1036 0.0660 0.1096 0.0117  -0.0131 -
0.0039 1 .
5718 CG1   CG1   . VAL VAL VAL B B 321 321 . 0.0996 0.0461 0.1104 -0.0201 0.0099  -
0.0084 1 .
5719 CG2   CG2   . VAL VAL VAL B B 321 321 . 0.1691 0.0945 0.1400 0.0276  -0.0147
0.0053  1 .
5720 C     C     . VAL VAL VAL B B 321 321 . 0.1149 0.0868 0.0948 0.0090  -0.0014
0.0037  1 .
5721 O     O     . VAL VAL VAL B B 321 321 . 0.0992 0.0984 0.1116 0.0060  0.0037
0.0171  1 .
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5722 N     N     . THR THR THR B B 322 322 . 0.1229 0.0967 0.0644 -0.0019 -0.0145
0.0143  1 .
5723 CA    CA    . THR THR THR B B 322 322 . 0.0814 0.0867 0.0537 0.0023  -0.0159
0.0366  1 .
5724 CB    CB    . THR THR THR B B 322 322 . 0.0946 0.1072 0.0423 -0.0067 0.0022
0.0268  1 .
5725 OG1   OG1   . THR THR THR B B 322 322 . 0.1213 0.1232 0.0748 0.0060  -0.0106
0.0182  1 .
5726 CG2   CG2   . THR THR THR B B 322 322 . 0.0911 0.0978 0.0538 -0.0360 -0.0259
0.0347  1 .
5727 C     C     . THR THR THR B B 322 322 . 0.1123 0.1092 0.0921 0.0069  0.0070
0.0125  1 .
5728 O     O     . THR THR THR B B 322 322 . 0.1010 0.1052 0.0784 0.0019  0.0049
0.0053  1 .
5729 N     N     . ASN ASN ASN B B 323 323 . 0.1258 0.1196 0.1190 0.0123  -0.0061
0.0147  1 .
5730 CA    CA    . ASN ASN ASN B B 323 323 . 0.1153 0.0938 0.0995 0.0160  -0.0149 -
0.0040 1 .
5731 CB    CB    . ASN ASN ASN B B 323 323 . 0.1399 0.1146 0.1103 0.0154  -0.0246
0.0130  1 .
5732 CG    CG    . ASN ASN ASN B B 323 323 . 0.1739 0.1446 0.1709 0.0243  -0.0099 -
0.0145 1 .
5733 OD1   OD1   . ASN ASN ASN B B 323 323 . 0.2495 0.1757 0.1702 0.0413  -0.0396 -
0.0145 1 .
5734 ND2   ND2   . ASN ASN ASN B B 323 323 . 0.2079 0.1345 0.1291 0.0369  0.0090  -
0.0111 1 .
5735 C     C     . ASN ASN ASN B B 323 323 . 0.1170 0.0999 0.1072 -0.0057 -0.0060
0.0016  1 .
5736 O     O     . ASN ASN ASN B B 323 323 . 0.1044 0.0990 0.1083 0.0055  0.0028  -
0.0147 1 .
5737 N     N     . PRO PRO PRO B B 324 324 . 0.1241 0.1318 0.1098 -0.0035 -0.0157
0.0044  1 .
5738 CA    CA    . PRO PRO PRO B B 324 324 . 0.1121 0.1337 0.1013 -0.0027 -0.0194
0.0168  1 .
5739 CB    CB    . PRO PRO PRO B B 324 324 . 0.1270 0.0991 0.1205 -0.0144 -0.0104
0.0419  1 .
5740 CG    CG    . PRO PRO PRO B B 324 324 . 0.1624 0.1647 0.1140 -0.0113 -0.0404
0.0407  1 .
5741 CD    CD    . PRO PRO PRO B B 324 324 . 0.1306 0.1523 0.1078 -0.0291 -0.0170
0.0067  1 .
5742 C     C     . PRO PRO PRO B B 324 324 . 0.1119 0.1378 0.1255 0.0033  -0.0166
0.0110  1 .
5743 O     O     . PRO PRO PRO B B 324 324 . 0.1631 0.1503 0.1195 0.0211  -0.0009
0.0263  1 .
5744 N     N     . LYS LYS LYS B B 325 325 . 0.1106 0.1309 0.1241 0.0059  -0.0204
0.0141  1 .
5745 CA    CA    . LYS LYS LYS B B 325 325 . 0.1528 0.1391 0.1629 0.0092  -0.0080
0.0205  1 .
5746 CB    CB    . LYS LYS LYS B B 325 325 . 0.1633 0.1625 0.1744 0.0213  -0.0017
0.0025  1 .
5747 CG    CG    . LYS LYS LYS B B 325 325 . 0.2074 0.2623 0.3156 0.0234  -0.0169
0.0499  1 .
5748 C     C     . LYS LYS LYS B B 325 325 . 0.1413 0.1284 0.1429 -0.0108 -0.0152
0.0196  1 .
5749 O     O     . LYS LYS LYS B B 325 325 . 0.1248 0.1751 0.1471 -0.0101 -0.0120
0.0206  1 .
5750 N     N     . ARG ARG ARG B B 326 326 . 0.1230 0.1057 0.1421 0.0061  -0.0065
0.0203  1 .
5751 CA    CA    . ARG ARG ARG B B 326 326 . 0.1193 0.1184 0.1152 0.0083  -0.0101 -
0.0074 1 .
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5752 CB    CB    . ARG ARG ARG B B 326 326 . 0.1264 0.1026 0.1116 0.0129  -0.0157 -
0.0297 1 .
5753 CG    CG    . ARG ARG ARG B B 326 326 . 0.2032 0.1825 0.1592 0.0043  0.0314  -
0.0504 1 .
5754 CD    CD    . ARG ARG ARG B B 326 326 . 0.1796 0.1659 0.2117 -0.0045 0.1162  -
0.0306 1 .
5755 NE    NE    . ARG ARG ARG B B 326 326 . 0.1227 0.1333 0.1822 0.0105  0.0168  -
0.0229 1 .
5756 CZ    CZ    . ARG ARG ARG B B 326 326 . 0.1213 0.0998 0.1611 0.0165  0.0081  -
0.0043 1 .
5757 NH1   NH1   . ARG ARG ARG B B 326 326 . 0.1610 0.1549 0.2120 0.0354  -0.0586
0.0240  1 .
5758 NH2   NH2   . ARG ARG ARG B B 326 326 . 0.1059 0.0966 0.1196 -0.0201 0.0310
0.0253  1 .
5759 C     C     . ARG ARG ARG B B 326 326 . 0.1186 0.1267 0.1158 0.0038  -0.0201
0.0078  1 .
5760 O     O     . ARG ARG ARG B B 326 326 . 0.1560 0.1449 0.1164 -0.0021 -0.0060
0.0138  1 .
5761 N     N     . ILE ILE ILE B B 327 327 . 0.1216 0.1163 0.0877 0.0092  -0.0282
0.0217  1 .
5762 CA    CA    . ILE ILE ILE B B 327 327 . 0.1276 0.1225 0.0949 -0.0058 -0.0154
0.0145  1 .
5763 CB    CB    . ILE ILE ILE B B 327 327 . 0.1436 0.0940 0.0893 -0.0037 -0.0308
0.0071  1 .
5764 CG1   CG1   . ILE ILE ILE B B 327 327 . 0.1245 0.1508 0.1144 -0.0180 -0.0122
0.0540  1 .
5765 CD1   CD1   . ILE ILE ILE B B 327 327 . 0.1615 0.1474 0.0951 -0.0326 0.0019
0.0421  1 .
5766 CG2   CG2   . ILE ILE ILE B B 327 327 . 0.1509 0.1077 0.0953 0.0056  -0.0172 -
0.0230 1 .
5767 C     C     . ILE ILE ILE B B 327 327 . 0.1351 0.1348 0.1179 0.0006  -0.0098
0.0108  1 .
5768 O     O     . ILE ILE ILE B B 327 327 . 0.1353 0.1465 0.1033 -0.0021 -0.0024 -
0.0010 1 .
5769 N     N     . GLU GLU GLU B B 328 328 . 0.1293 0.1490 0.1421 0.0082  -0.0117
0.0149  1 .
5770 CA    CA    . GLU GLU GLU B B 328 328 . 0.1651 0.1676 0.1543 0.0070  -0.0061
0.0241  1 .
5771 CB    CB    . GLU GLU GLU B B 328 328 . 0.1682 0.1984 0.2046 0.0101  -0.0049
0.0186  1 .
5772 CG    CG    . GLU GLU GLU B B 328 328 . 0.2904 0.2776 0.2635 -0.0301 0.0070
0.0590  1 .
5773 CD    CD    . GLU GLU GLU B B 328 328 . 0.4047 0.4458 0.4149 -0.0510 -0.0318
0.0048  1 .
5774 OE1   OE1   . GLU GLU GLU B B 328 328 . 0.4390 0.5535 0.3985 -0.0646 -0.0586
0.0273  1 .
5775 OE2   OE2   . GLU GLU GLU B B 328 328 . 0.3880 0.4972 0.5244 -0.0568 -0.0520
0.0157  1 .
5776 C     C     . GLU GLU GLU B B 328 328 . 0.1642 0.1632 0.1649 0.0135  -0.0087
0.0124  1 .
5777 O     O     . GLU GLU GLU B B 328 328 . 0.1942 0.1695 0.1146 0.0172  -0.0092
0.0063  1 .
5778 N     N     . ARG ARG ARG B B 329 329 . 0.1630 0.1519 0.1502 0.0135  -0.0178
0.0199  1 .
5779 CA    CA    . ARG ARG ARG B B 329 329 . 0.1646 0.1364 0.1445 0.0091  -0.0059
0.0198  1 .
5780 CB    CB    . ARG ARG ARG B B 329 329 . 0.1791 0.1148 0.1464 -0.0093 -0.0043
0.0276  1 .
5781 CG    CG    . ARG ARG ARG B B 329 329 . 0.1587 0.1596 0.1616 -0.0151 0.0164
0.0141  1 .
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5782 CD    CD    . ARG ARG ARG B B 329 329 . 0.2362 0.1884 0.2048 -0.0154 0.0242
0.0085  1 .
5783 NE    NE    . ARG ARG ARG B B 329 329 . 0.1619 0.1589 0.2310 0.0307  0.0321
0.0036  1 .
5784 CZ    CZ    . ARG ARG ARG B B 329 329 . 0.2138 0.2138 0.2159 0.0209  0.0101
0.0277  1 .
5785 NH1   NH1   . ARG ARG ARG B B 329 329 . 0.2264 0.2081 0.2225 0.1107  0.0139
0.0210  1 .
5786 NH2   NH2   . ARG ARG ARG B B 329 329 . 0.1947 0.1974 0.2216 0.0137  -0.0098
0.0624  1 .
5787 C     C     . ARG ARG ARG B B 329 329 . 0.1661 0.1517 0.1551 0.0067  -0.0030
0.0315  1 .
5788 O     O     . ARG ARG ARG B B 329 329 . 0.1760 0.1340 0.1241 0.0160  -0.0128
0.0204  1 .
5789 N     N     . ALA ALA ALA B B 330 330 . 0.1339 0.1167 0.1400 0.0167  -0.0282
0.0172  1 .
5790 CA    CA    . ALA ALA ALA B B 330 330 . 0.1166 0.1181 0.1031 0.0092  -0.0217
0.0074  1 .
5791 CB    CB    . ALA ALA ALA B B 330 330 . 0.1234 0.1211 0.1060 0.0235  -0.0143
0.0050  1 .
5792 C     C     . ALA ALA ALA B B 330 330 . 0.1301 0.1214 0.1229 0.0002  -0.0030 -
0.0031 1 .
5793 O     O     . ALA ALA ALA B B 330 330 . 0.1463 0.1515 0.1174 0.0093  -0.0239 -
0.0164 1 .
5794 N     N     . VAL VAL VAL B B 331 331 . 0.1283 0.1418 0.1079 -0.0147 -0.0237 -
0.0170 1 .
5795 CA    CA    . VAL VAL VAL B B 331 331 . 0.1592 0.1658 0.1417 -0.0244 -0.0270 -
0.0108 1 .
5796 CB    CB    . VAL VAL VAL B B 331 331 . 0.1698 0.1726 0.1303 -0.0332 -0.0252 -
0.0077 1 .
5797 CG1   CG1   . VAL VAL VAL B B 331 331 . 0.2048 0.2502 0.1580 -0.0232 -0.0560 -
0.0425 1 .
5798 CG2   CG2   . VAL VAL VAL B B 331 331 . 0.1837 0.1701 0.1518 -0.0258 -0.0055
0.0294  1 .
5799 C     C     . VAL VAL VAL B B 331 331 . 0.1502 0.1795 0.1434 -0.0174 -0.0135 -
0.0087 1 .
5800 O     O     . VAL VAL VAL B B 331 331 . 0.2043 0.2310 0.1669 -0.0113 -0.0379 -
0.0157 1 .
5801 N     N     . GLU GLU GLU B B 332 332 . 0.1975 0.1915 0.1616 -0.0015 -0.0089
0.0154  1 .
5802 CA    CA    . GLU GLU GLU B B 332 332 . 0.2240 0.2245 0.1767 0.0099  0.0038
0.0293  1 .
5803 CB    CB    . GLU GLU GLU B B 332 332 . 0.2422 0.2425 0.2110 0.0102  -0.0028
0.0276  1 .
5804 CG    CG    . GLU GLU GLU B B 332 332 . 0.3738 0.3363 0.3084 0.0448  -0.0015
0.0474  1 .
5805 CD    CD    . GLU GLU GLU B B 332 332 . 0.5459 0.5058 0.4630 -0.0276 -0.0203
0.0502  1 .
5806 OE1   OE1   . GLU GLU GLU B B 332 332 . 0.6299 0.5400 0.3992 0.0175  -0.0154
0.1295  1 .
5807 OE2   OE2   . GLU GLU GLU B B 332 332 . 0.5987 0.6595 0.4572 -0.0023 0.0053
0.0766  1 .
5808 C     C     . GLU GLU GLU B B 332 332 . 0.2159 0.2173 0.1699 0.0140  0.0035
0.0169  1 .
5809 O     O     . GLU GLU GLU B B 332 332 . 0.2220 0.2556 0.1733 0.0201  0.0255
0.0321  1 .
5810 N     N     . GLU GLU GLU B B 333 333 . 0.1733 0.1829 0.1554 0.0136  0.0086
0.0253  1 .
5811 CA    CA    . GLU GLU GLU B B 333 333 . 0.1844 0.1720 0.1693 0.0029  0.0013
0.0067  1 .
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5812 CB    CB    . GLU GLU GLU B B 333 333 . 0.1813 0.1645 0.2208 0.0058  0.0095  -
0.0122 1 .
5813 CG    CG    . GLU GLU GLU B B 333 333 . 0.2316 0.1779 0.2710 0.0297  0.0325  -
0.0194 1 .
5814 CD    CD    . GLU GLU GLU B B 333 333 . 0.2438 0.2403 0.2398 0.0164  -0.0081 -
0.0271 1 .
5815 OE1   OE1   . GLU GLU GLU B B 333 333 . 0.2489 0.2088 0.2394 0.0096  -0.0282 -
0.0253 1 .
5816 OE2   OE2   . GLU GLU GLU B B 333 333 . 0.2818 0.2436 0.3284 0.0325  -0.0040 -
0.0180 1 .
5817 C     C     . GLU GLU GLU B B 333 333 . 0.1450 0.1469 0.1370 -0.0001 -0.0113
0.0110  1 .
5818 O     O     . GLU GLU GLU B B 333 333 . 0.1606 0.1401 0.1192 -0.0075 -0.0162
0.0363  1 .
5819 N     N     . LYS LYS LYS B B 334 334 . 0.1613 0.1592 0.1389 0.0070  -0.0117
0.0063  1 .
5820 CA    CA    . LYS LYS LYS B B 334 334 . 0.1418 0.1603 0.1151 0.0095  -0.0112 -
0.0147 1 .
5821 CB    CB    . LYS LYS LYS B B 334 334 . 0.1653 0.1838 0.1393 -0.0047 -0.0138 -
0.0198 1 .
5822 CG    CG    . LYS LYS LYS B B 334 334 . 0.2355 0.2403 0.1812 -0.0166 -0.0468 -
0.0198 1 .
5823 CD    CD    . LYS LYS LYS B B 334 334 . 0.3256 0.3822 0.2404 -0.0076 -0.0064 -
0.0528 1 .
5824 CE    CE    . LYS LYS LYS B B 334 334 . 0.4278 0.3998 0.3589 -0.1090 -0.0360 -
0.0114 1 .
5825 NZ    NZ    . LYS LYS LYS B B 334 334 . 0.5317 0.4231 0.3789 -0.0948 -0.0455
0.0160  1 .
5826 C     C     . LYS LYS LYS B B 334 334 . 0.1298 0.1435 0.1041 0.0115  -0.0147 -
0.0196 1 .
5827 O     O     . LYS LYS LYS B B 334 334 . 0.1422 0.1461 0.0881 0.0042  -0.0292 -
0.0310 1 .
5828 N     N     . ALA ALA ALA B B 335 335 . 0.1148 0.0978 0.0829 0.0137  -0.0091 -
0.0011 1 .
5829 CA    CA    . ALA ALA ALA B B 335 335 . 0.1251 0.1067 0.0900 0.0129  -0.0184 -
0.0152 1 .
5830 CB    CB    . ALA ALA ALA B B 335 335 . 0.1457 0.0935 0.0890 0.0087  0.0087  -
0.0274 1 .
5831 C     C     . ALA ALA ALA B B 335 335 . 0.1328 0.1125 0.1005 0.0061  -0.0113 -
0.0194 1 .
5832 O     O     . ALA ALA ALA B B 335 335 . 0.1346 0.1170 0.0841 0.0026  -0.0109 -
0.0310 1 .
5833 N     N     . CYS CYS CYS B B 336 336 . 0.1492 0.1049 0.1065 0.0068  0.0005  -
0.0007 1 .
5834 CA    CA    . CYS CYS CYS B B 336 336 . 0.1311 0.0973 0.0870 0.0047  -0.0153
0.0050  1 .
5835 CB    CB    . CYS CYS CYS B B 336 336 . 0.1129 0.1162 0.0860 -0.0032 -0.0017
0.0121  1 .
5836 SG    SG    . CYS CYS CYS B B 336 336 . 0.1561 0.1483 0.1211 -0.0022 -0.0065
0.0075  1 .
5837 C     C     . CYS CYS CYS B B 336 336 . 0.1323 0.1078 0.0902 0.0041  -0.0056 -
0.0003 1 .
5838 O     O     . CYS CYS CYS B B 336 336 . 0.1908 0.1062 0.1574 -0.0032 0.0007
0.0095  1 .
5839 N     N     . ASN ASN ASN B B 337 337 . 0.1465 0.1115 0.0977 -0.0014 0.0020  -
0.0057 1 .
5840 CA    CA    . ASN ASN ASN B B 337 337 . 0.1307 0.1172 0.0899 -0.0112 0.0080  -
0.0091 1 .
5841 CB    CB    . ASN ASN ASN B B 337 337 . 0.1320 0.1354 0.1167 0.0076  -0.0002 -
0.0259 1 .
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5842 CG    CG    . ASN ASN ASN B B 337 337 . 0.1046 0.0947 0.1182 -0.0135 -0.0016 -
0.0144 1 .
5843 OD1   OD1   . ASN ASN ASN B B 337 337 . 0.1465 0.1239 0.1019 0.0033  0.0077  -
0.0140 1 .
5844 ND2   ND2   . ASN ASN ASN B B 337 337 . 0.1678 0.1061 0.1317 0.0066  0.0584  -
0.0476 1 .
5845 C     C     . ASN ASN ASN B B 337 337 . 0.1391 0.1069 0.1046 -0.0003 -0.0029 -
0.0051 1 .
5846 O     O     . ASN ASN ASN B B 337 337 . 0.1702 0.0960 0.1122 -0.0241 -0.0130 -
0.0121 1 .
5847 N     N     . CYS CYS CYS B B 338 338 . 0.1109 0.0813 0.0782 -0.0146 -0.0005
0.0044  1 .
5848 CA    CA    . CYS CYS CYS B B 338 338 . 0.1194 0.1072 0.0731 0.0129  0.0009
0.0012  1 .
5849 CB    CB    . CYS CYS CYS B B 338 338 . 0.0857 0.0783 0.0630 0.0110  0.0005
0.0312  1 .
5850 SG    SG    . CYS CYS CYS B B 338 338 . 0.1360 0.1297 0.1094 0.0020  -0.0139
0.0253  1 .
5851 C     C     . CYS CYS CYS B B 338 338 . 0.1230 0.1089 0.0833 -0.0031 0.0095  -
0.0025 1 .
5852 O     O     . CYS CYS CYS B B 338 338 . 0.1277 0.1108 0.1000 -0.0064 0.0006
0.0051  1 .
5853 N     N     . LEU LEU LEU B B 339 339 . 0.1072 0.1064 0.0995 -0.0004 0.0014  -
0.0094 1 .
5854 CA    CA    . LEU LEU LEU B B 339 339 . 0.1006 0.0889 0.0665 0.0057  0.0049
0.0090  1 .
5855 CB    CB    . LEU LEU LEU B B 339 339 . 0.1130 0.0897 0.1046 0.0162  0.0064  -
0.0175 1 .
5856 CG    CG    . LEU LEU LEU B B 339 339 . 0.0890 0.0907 0.0425 0.0098  0.0255
0.0250  1 .
5857 CD1   CD1   . LEU LEU LEU B B 339 339 . 0.1236 0.0572 0.1191 0.0052  -0.0168 -
0.0491 1 .
5858 CD2   CD2   . LEU LEU LEU B B 339 339 . 0.1047 0.1096 0.0851 0.0306  0.0074
0.0308  1 .
5859 C     C     . LEU LEU LEU B B 339 339 . 0.1119 0.1025 0.0831 -0.0032 -0.0093
0.0032  1 .
5860 O     O     . LEU LEU LEU B B 339 339 . 0.1383 0.1150 0.0939 -0.0006 -0.0130 -
0.0041 1 .
5861 N     N     . LEU LEU LEU B B 340 340 . 0.1154 0.0914 0.0728 0.0018  -0.0178
0.0173  1 .
5862 CA    CA    . LEU LEU LEU B B 340 340 . 0.1197 0.0896 0.0860 0.0071  -0.0142
0.0230  1 .
5863 CB    CB    . LEU LEU LEU B B 340 340 . 0.1193 0.0926 0.0653 0.0040  -0.0362
0.0249  1 .
5864 CG    CG    . LEU LEU LEU B B 340 340 . 0.1223 0.0840 0.0836 0.0535  -0.0363
0.0085  1 .
5865 CD1   CD1   . LEU LEU LEU B B 340 340 . 0.1475 0.0915 0.1059 0.0432  0.0220
0.0057  1 .
5866 CD2   CD2   . LEU LEU LEU B B 340 340 . 0.0915 0.1022 0.0971 -0.0139 -0.0079 -
0.0053 1 .
5867 C     C     . LEU LEU LEU B B 340 340 . 0.1321 0.1085 0.1286 0.0021  -0.0079
0.0201  1 .
5868 O     O     . LEU LEU LEU B B 340 340 . 0.1566 0.1110 0.1497 0.0205  -0.0063
0.0162  1 .
5869 N     N     . LEU LEU LEU B B 341 341 . 0.1274 0.0961 0.1069 0.0000  -0.0208
0.0263  1 .
5870 CA    CA    . LEU LEU LEU B B 341 341 . 0.1326 0.0952 0.0952 0.0021  -0.0164
0.0167  1 .
5871 CB    CB    . LEU LEU LEU B B 341 341 . 0.1245 0.1011 0.0911 -0.0065 -0.0196
0.0011  1 .
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5872 CG    CG    . LEU LEU LEU B B 341 341 . 0.1258 0.0890 0.1461 0.0146  -0.0168
0.0469  1 .
5873 CD1   CD1   . LEU LEU LEU B B 341 341 . 0.2226 0.2142 0.1887 -0.0021 -0.1121
0.0056  1 .
5874 CD2   CD2   . LEU LEU LEU B B 341 341 . 0.1315 0.1711 0.2318 -0.0337 -0.0313
0.0083  1 .
5875 C     C     . LEU LEU LEU B B 341 341 . 0.1507 0.1019 0.1049 0.0107  -0.0191 -
0.0082 1 .
5876 O     O     . LEU LEU LEU B B 341 341 . 0.1798 0.1084 0.0778 0.0227  -0.0335
0.0148  1 .
5877 N     N     . LYS LYS LYS B B 342 342 . 0.1463 0.0999 0.1086 0.0015  -0.0062 -
0.0154 1 .
5878 CA    CA    . LYS LYS LYS B B 342 342 . 0.1383 0.1227 0.0968 0.0073  -0.0066
0.0118  1 .
5879 CB    CB    . LYS LYS LYS B B 342 342 . 0.1095 0.1107 0.0606 -0.0095 -0.0135
0.0136  1 .
5880 CG    CG    . LYS LYS LYS B B 342 342 . 0.1788 0.1292 0.0968 -0.0002 0.0174
0.0552  1 .
5881 CD    CD    . LYS LYS LYS B B 342 342 . 0.1288 0.1461 0.0803 -0.0141 -0.0175 -
0.0097 1 .
5882 CE    CE    . LYS LYS LYS B B 342 342 . 0.1579 0.1607 0.0772 0.0033  0.0280  -
0.0332 1 .
5883 NZ    NZ    . LYS LYS LYS B B 342 342 . 0.2229 0.1495 0.1290 0.0015  0.0183  -
0.0216 1 .
5884 C     C     . LYS LYS LYS B B 342 342 . 0.1376 0.1128 0.1046 0.0080  0.0061  -
0.0069 1 .
5885 O     O     . LYS LYS LYS B B 342 342 . 0.1805 0.1292 0.0995 0.0165  0.0005
0.0006  1 .
5886 N     N     . VAL VAL VAL B B 343 343 . 0.1373 0.1132 0.0920 0.0132  0.0063  -
0.0028 1 .
5887 CA    CA    . VAL VAL VAL B B 343 343 . 0.1099 0.1166 0.1140 0.0018  -0.0105 -
0.0063 1 .
5888 CB    CB    . VAL VAL VAL B B 343 343 . 0.0984 0.1250 0.1347 -0.0008 -0.0395 -
0.0087 1 .
5889 CG1   CG1   . VAL VAL VAL B B 343 343 . 0.1700 0.1265 0.1778 -0.0196 -0.0213 -
0.0005 1 .
5890 CG2   CG2   . VAL VAL VAL B B 343 343 . 0.1858 0.1533 0.1270 0.0499  -0.0499
0.0205  1 .
5891 C     C     . VAL VAL VAL B B 343 343 . 0.1071 0.1140 0.1226 -0.0039 -0.0043
0.0017  1 .
5892 O     O     . VAL VAL VAL B B 343 343 . 0.1349 0.1167 0.1296 0.0144  -0.0260
0.0055  1 .
5893 N     N     . ASN ASN ASN B B 344 344 . 0.1118 0.1021 0.0970 0.0091  -0.0257
0.0112  1 .
5894 CA    CA    . ASN ASN ASN B B 344 344 . 0.1148 0.0832 0.0910 0.0047  -0.0190
0.0155  1 .
5895 CB    CB    . ASN ASN ASN B B 344 344 . 0.0995 0.1071 0.0841 0.0006  0.0012
0.0175  1 .
5896 CG    CG    . ASN ASN ASN B B 344 344 . 0.1136 0.0987 0.0931 0.0010  -0.0287
0.0274  1 .
5897 OD1   OD1   . ASN ASN ASN B B 344 344 . 0.1347 0.1476 0.1727 0.0435  -0.0181 -
0.0023 1 .
5898 ND2   ND2   . ASN ASN ASN B B 344 344 . 0.1199 0.1286 0.0932 0.0121  0.0354  -
0.0227 1 .
5899 C     C     . ASN ASN ASN B B 344 344 . 0.1480 0.1097 0.1124 0.0074  -0.0131
0.0133  1 .
5900 O     O     . ASN ASN ASN B B 344 344 . 0.1589 0.1274 0.1257 0.0147  -0.0148
0.0092  1 .
5901 N     N     . GLN GLN GLN B B 345 345 . 0.1115 0.0948 0.0869 0.0172  0.0042
0.0307  1 .
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5902 CA    CA    . GLN GLN GLN B B 345 345 . 0.1200 0.1106 0.1065 0.0141  0.0055
0.0140  1 .
5903 CB    CB    . GLN GLN GLN B B 345 345 . 0.0991 0.0906 0.0727 0.0273  -0.0050 -
0.0007 1 .
5904 CG    CG    . GLN GLN GLN B B 345 345 . 0.0587 0.1375 0.0883 0.0066  0.0096  -
0.0183 1 .
5905 CD    CD    . GLN GLN GLN B B 345 345 . 0.0818 0.0714 0.0842 0.0103  0.0006
0.0049  1 .
5906 OE1   OE1   . GLN GLN GLN B B 345 345 . 0.1704 0.1423 0.2015 0.0107  0.0201
0.0056  1 .
5907 NE2   NE2   . GLN GLN GLN B B 345 345 . 0.0701 0.0342 0.0503 0.0121  -0.0020
0.0112  1 .
5908 C     C     . GLN GLN GLN B B 345 345 . 0.1150 0.1031 0.1041 0.0086  0.0024
0.0140  1 .
5909 O     O     . GLN GLN GLN B B 345 345 . 0.1545 0.1096 0.1258 0.0240  -0.0060
0.0077  1 .
5910 N     N     . ILE ILE ILE B B 346 346 . 0.1230 0.1202 0.1162 0.0068  -0.0058
0.0147  1 .
5911 CA    CA    . ILE ILE ILE B B 346 346 . 0.1276 0.1121 0.1120 0.0051  0.0071
0.0119  1 .
5912 CB    CB    . ILE ILE ILE B B 346 346 . 0.1187 0.0980 0.1070 0.0018  -0.0147 -
0.0031 1 .
5913 CG1   CG1   . ILE ILE ILE B B 346 346 . 0.1092 0.0954 0.0974 0.0156  0.0026
0.0164  1 .
5914 CD1   CD1   . ILE ILE ILE B B 346 346 . 0.1475 0.1304 0.1550 -0.0070 0.0423
0.0238  1 .
5915 CG2   CG2   . ILE ILE ILE B B 346 346 . 0.1109 0.1115 0.1453 -0.0090 0.0058  -
0.0101 1 .
5916 C     C     . ILE ILE ILE B B 346 346 . 0.1396 0.1244 0.1258 0.0216  0.0050  -
0.0011 1 .
5917 O     O     . ILE ILE ILE B B 346 346 . 0.1456 0.1567 0.1222 0.0359  0.0058
0.0005  1 .
5918 N     N     . GLY GLY GLY B B 347 347 . 0.1300 0.1138 0.1013 0.0119  0.0317
0.0196  1 .
5919 CA    CA    . GLY GLY GLY B B 347 347 . 0.1232 0.1131 0.1161 -0.0038 0.0154  -
0.0045 1 .
5920 C     C     . GLY GLY GLY B B 347 347 . 0.1148 0.1252 0.1141 -0.0053 0.0110
0.0013  1 .
5921 O     O     . GLY GLY GLY B B 347 347 . 0.1172 0.1482 0.1419 0.0025  0.0129  -
0.0234 1 .
5922 N     N     . SER SER SER B B 348 348 . 0.1218 0.1249 0.1220 -0.0021 0.0022
0.0053  1 .
5923 CA    CA    . SER SER SER B B 348 348 . 0.1097 0.1212 0.1263 -0.0029 0.0014
0.0000  1 .
5924 CB    CB    . SER SER SER B B 348 348 . 0.1214 0.1454 0.0986 0.0046  -0.0134
0.0179  1 .
5925 OG    OG    . SER SER SER B B 348 348 . 0.1418 0.1509 0.1282 -0.0036 -0.0054 -
0.0050 1 .
5926 C     C     . SER SER SER B B 348 348 . 0.1258 0.1342 0.1352 -0.0016 -0.0085 -
0.0009 1 .
5927 O     O     . SER SER SER B B 348 348 . 0.1389 0.1392 0.1239 0.0076  -0.0173
0.0032  1 .
5928 N     N     . VAL VAL VAL B B 349 349 . 0.1595 0.1308 0.1549 0.0114  -0.0109
0.0062  1 .
5929 CA    CA    . VAL VAL VAL B B 349 349 . 0.1296 0.1390 0.1259 -0.0007 -0.0097 -
0.0066 1 .
5930 CB    CB    . VAL VAL VAL B B 349 349 . 0.1654 0.1567 0.1302 0.0032  -0.0226 -
0.0101 1 .
5931 CG1   CG1   . VAL VAL VAL B B 349 349 . 0.2166 0.1098 0.1688 -0.0197 0.0013
0.0044  1 .
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5932 CG2   CG2   . VAL VAL VAL B B 349 349 . 0.1396 0.1643 0.1424 0.0266  -0.0270
0.0341  1 .
5933 C     C     . VAL VAL VAL B B 349 349 . 0.1381 0.1524 0.1343 0.0003  0.0042
0.0040  1 .
5934 O     O     . VAL VAL VAL B B 349 349 . 0.1261 0.1337 0.1250 -0.0033 -0.0003
0.0003  1 .
5935 N     N     . THR THR THR B B 350 350 . 0.1242 0.1337 0.1309 0.0183  -0.0249
0.0135  1 .
5936 CA    CA    . THR THR THR B B 350 350 . 0.1299 0.1456 0.1278 0.0084  -0.0135
0.0133  1 .
5937 CB    CB    . THR THR THR B B 350 350 . 0.1478 0.1772 0.1272 0.0009  -0.0271
0.0231  1 .
5938 OG1   OG1   . THR THR THR B B 350 350 . 0.1505 0.1538 0.1900 -0.0190 -0.0134
0.0028  1 .
5939 CG2   CG2   . THR THR THR B B 350 350 . 0.1031 0.1774 0.1855 0.0377  -0.0412
0.0347  1 .
5940 C     C     . THR THR THR B B 350 350 . 0.1319 0.1470 0.1311 0.0059  -0.0190
0.0169  1 .
5941 O     O     . THR THR THR B B 350 350 . 0.1230 0.1630 0.1347 -0.0085 -0.0097
0.0200  1 .
5942 N     N     . GLU GLU GLU B B 351 351 . 0.1355 0.1291 0.1335 -0.0035 0.0003
0.0215  1 .
5943 CA    CA    . GLU GLU GLU B B 351 351 . 0.1426 0.1413 0.1503 -0.0155 -0.0031
0.0002  1 .
5944 CB    CB    . GLU GLU GLU B B 351 351 . 0.1397 0.1349 0.1505 -0.0016 -0.0076 -
0.0022 1 .
5945 CG    CG    . GLU GLU GLU B B 351 351 . 0.1905 0.1695 0.1801 0.0376  0.0177  -
0.0088 1 .
5946 CD    CD    . GLU GLU GLU B B 351 351 . 0.2367 0.1886 0.2164 0.0332  -0.0201
0.0114  1 .
5947 OE1   OE1   . GLU GLU GLU B B 351 351 . 0.1748 0.1849 0.1753 0.0638  -0.0092 -
0.0351 1 .
5948 OE2   OE2   . GLU GLU GLU B B 351 351 . 0.2273 0.1613 0.1968 0.0311  -0.0093
0.0750  1 .
5949 C     C     . GLU GLU GLU B B 351 351 . 0.1309 0.1455 0.1493 -0.0182 -0.0093
0.0008  1 .
5950 O     O     . GLU GLU GLU B B 351 351 . 0.1409 0.1905 0.1701 -0.0063 -0.0221
0.0240  1 .
5951 N     N     . ALA ALA ALA B B 352 352 . 0.1402 0.1175 0.1378 -0.0006 -0.0059
0.0138  1 .
5952 CA    CA    . ALA ALA ALA B B 352 352 . 0.1372 0.1166 0.1133 0.0017  -0.0144
0.0131  1 .
5953 CB    CB    . ALA ALA ALA B B 352 352 . 0.1390 0.1434 0.1041 0.0203  0.0002
0.0272  1 .
5954 C     C     . ALA ALA ALA B B 352 352 . 0.1331 0.1412 0.1186 0.0043  -0.0116
0.0080  1 .
5955 O     O     . ALA ALA ALA B B 352 352 . 0.1131 0.1533 0.1078 -0.0026 -0.0111 -
0.0024 1 .
5956 N     N     . ILE ILE ILE B B 353 353 . 0.1340 0.1282 0.1212 0.0006  -0.0213
0.0073  1 .
5957 CA    CA    . ILE ILE ILE B B 353 353 . 0.1420 0.1461 0.1376 -0.0062 -0.0109
0.0150  1 .
5958 CB    CB    . ILE ILE ILE B B 353 353 . 0.1583 0.1709 0.1488 -0.0296 -0.0121
0.0122  1 .
5959 CG1   CG1   . ILE ILE ILE B B 353 353 . 0.1810 0.1646 0.1410 -0.0060 0.0328
0.0089  1 .
5960 CD1   CD1   . ILE ILE ILE B B 353 353 . 0.2127 0.1788 0.1094 -0.0438 0.0400  -
0.0166 1 .
5961 CG2   CG2   . ILE ILE ILE B B 353 353 . 0.2104 0.1780 0.1985 -0.0266 -0.0196
0.0094  1 .
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5962 C     C     . ILE ILE ILE B B 353 353 . 0.1242 0.1506 0.1243 -0.0135 -0.0033
0.0102  1 .
5963 O     O     . ILE ILE ILE B B 353 353 . 0.1522 0.1376 0.1216 -0.0174 -0.0021 -
0.0208 1 .
5964 N     N     . GLN GLN GLN B B 354 354 . 0.1707 0.1184 0.1199 -0.0066 -0.0136
0.0143  1 .
5965 CA    CA    . GLN GLN GLN B B 354 354 . 0.1836 0.1663 0.1417 0.0177  -0.0159
0.0154  1 .
5966 CB    CB    . GLN GLN GLN B B 354 354 . 0.2337 0.1929 0.1470 0.0572  -0.0290
0.0168  1 .
5967 CG    CG    . GLN GLN GLN B B 354 354 . 0.3142 0.2833 0.2825 0.0752  -0.0272
0.0284  1 .
5968 CD    CD    . GLN GLN GLN B B 354 354 . 0.4119 0.3625 0.3770 0.1026  0.0091
0.0153  1 .
5969 OE1   OE1   . GLN GLN GLN B B 354 354 . 0.3736 0.5108 0.4078 0.1413  0.0383  -
0.0415 1 .
5970 NE2   NE2   . GLN GLN GLN B B 354 354 . 0.4060 0.4478 0.3173 0.0919  -0.0070
0.0959  1 .
5971 C     C     . GLN GLN GLN B B 354 354 . 0.1786 0.1561 0.1454 0.0243  -0.0080
0.0087  1 .
5972 O     O     . GLN GLN GLN B B 354 354 . 0.1860 0.1661 0.1371 -0.0036 0.0185
0.0034  1 .
5973 N     N     . ALA ALA ALA B B 355 355 . 0.1151 0.1015 0.1233 0.0124  -0.0112 -
0.0072 1 .
5974 CA    CA    . ALA ALA ALA B B 355 355 . 0.1297 0.1042 0.1124 0.0072  -0.0106 -
0.0025 1 .
5975 CB    CB    . ALA ALA ALA B B 355 355 . 0.1404 0.1134 0.1160 0.0102  -0.0163
0.0145  1 .
5976 C     C     . ALA ALA ALA B B 355 355 . 0.1375 0.1205 0.1287 -0.0071 -0.0046
0.0064  1 .
5977 O     O     . ALA ALA ALA B B 355 355 . 0.1554 0.1331 0.1221 0.0049  -0.0382
0.0258  1 .
5978 N     N     . CYS CYS CYS B B 356 356 . 0.1666 0.1271 0.1302 0.0017  -0.0192
0.0213  1 .
5979 CA    CA    . CYS CYS CYS B B 356 356 . 0.1740 0.1361 0.1178 -0.0005 -0.0087
0.0034  1 .
5980 CB    CB    . CYS CYS CYS B B 356 356 . 0.1850 0.1438 0.1480 0.0038  -0.0079 -
0.0009 1 .
5981 SG    SG    . CYS CYS CYS B B 356 356 . 0.2125 0.1340 0.1243 -0.0095 -0.0100
0.0012  1 .
5982 C     C     . CYS CYS CYS B B 356 356 . 0.1652 0.1457 0.1401 -0.0098 -0.0096 -
0.0007 1 .
5983 O     O     . CYS CYS CYS B B 356 356 . 0.1894 0.1403 0.1284 0.0206  -0.0108
0.0178  1 .
5984 N     N     . LYS LYS LYS B B 357 357 . 0.1802 0.1376 0.1595 -0.0046 -0.0265
0.0067  1 .
5985 CA    CA    . LYS LYS LYS B B 357 357 . 0.1811 0.1751 0.1576 -0.0127 -0.0258
0.0211  1 .
5986 CB    CB    . LYS LYS LYS B B 357 357 . 0.1811 0.2041 0.1820 -0.0201 -0.0119
0.0382  1 .
5987 CG    CG    . LYS LYS LYS B B 357 357 . 0.2388 0.2736 0.2422 -0.0372 -0.0575
0.0411  1 .
5988 CD    CD    . LYS LYS LYS B B 357 357 . 0.2953 0.4231 0.3414 -0.0953 -0.0327
0.0284  1 .
5989 CE    CE    . LYS LYS LYS B B 357 357 . 0.3848 0.5517 0.3250 -0.1114 -0.0501
0.0387  1 .
5990 NZ    NZ    . LYS LYS LYS B B 357 357 . 0.4097 0.5750 0.3991 -0.0898 0.0293
0.1017  1 .
5991 C     C     . LYS LYS LYS B B 357 357 . 0.1844 0.1701 0.1705 -0.0111 -0.0181
0.0051  1 .
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5992 O     O     . LYS LYS LYS B B 357 357 . 0.1867 0.1751 0.1385 -0.0243 -0.0256
0.0011  1 .
5993 N     N     . LEU LEU LEU B B 358 358 . 0.1810 0.1586 0.1654 0.0134  -0.0239
0.0065  1 .
5994 CA    CA    . LEU LEU LEU B B 358 358 . 0.1714 0.1376 0.1730 -0.0029 -0.0112
0.0052  1 .
5995 CB    CB    . LEU LEU LEU B B 358 358 . 0.1854 0.1532 0.1567 -0.0007 -0.0195 -
0.0079 1 .
5996 CG    CG    . LEU LEU LEU B B 358 358 . 0.2144 0.1666 0.1901 -0.0026 -0.0440
0.0018  1 .
5997 CD1   CD1   . LEU LEU LEU B B 358 358 . 0.2983 0.1987 0.2181 0.0101  -0.0640
0.0209  1 .
5998 CD2   CD2   . LEU LEU LEU B B 358 358 . 0.2100 0.2056 0.1859 0.0186  -0.0531 -
0.0035 1 .
5999 C     C     . LEU LEU LEU B B 358 358 . 0.1835 0.1487 0.1636 -0.0012 -0.0144
0.0037  1 .
6000 O     O     . LEU LEU LEU B B 358 358 . 0.1965 0.1290 0.1635 0.0108  -0.0429
0.0010  1 .
6001 N     N     . ALA ALA ALA B B 359 359 . 0.1547 0.1263 0.1344 -0.0038 -0.0323
0.0145  1 .
6002 CA    CA    . ALA ALA ALA B B 359 359 . 0.1644 0.1436 0.1454 -0.0014 -0.0294 -
0.0001 1 .
6003 CB    CB    . ALA ALA ALA B B 359 359 . 0.1909 0.1477 0.1651 0.0028  -0.0458
0.0142  1 .
6004 C     C     . ALA ALA ALA B B 359 359 . 0.1819 0.1428 0.1590 0.0038  -0.0108
0.0057  1 .
6005 O     O     . ALA ALA ALA B B 359 359 . 0.1892 0.1424 0.1380 0.0130  -0.0240 -
0.0112 1 .
6006 N     N     . GLN GLN GLN B B 360 360 . 0.1910 0.1519 0.1498 -0.0157 -0.0221 -
0.0042 1 .
6007 CA    CA    . GLN GLN GLN B B 360 360 . 0.1865 0.1420 0.1431 -0.0045 -0.0341 -
0.0057 1 .
6008 CB    CB    . GLN GLN GLN B B 360 360 . 0.2094 0.1329 0.1276 0.0060  -0.0311 -
0.0243 1 .
6009 CG    CG    . GLN GLN GLN B B 360 360 . 0.1708 0.1697 0.1138 -0.0220 -0.0435
0.0301  1 .
6010 CD    CD    . GLN GLN GLN B B 360 360 . 0.2092 0.1930 0.1696 -0.0186 -0.0362
0.0093  1 .
6011 OE1   OE1   . GLN GLN GLN B B 360 360 . 0.2232 0.2399 0.1671 -0.0296 -0.0673
0.0306  1 .
6012 NE2   NE2   . GLN GLN GLN B B 360 360 . 0.2625 0.1820 0.1719 0.0246  -0.0451 -
0.0036 1 .
6013 C     C     . GLN GLN GLN B B 360 360 . 0.1974 0.1796 0.1627 -0.0072 -0.0308 -
0.0022 1 .
6014 O     O     . GLN GLN GLN B B 360 360 . 0.2066 0.1794 0.1621 -0.0137 -0.0334
0.0204  1 .
6015 N     N     . GLU GLU GLU B B 361 361 . 0.2035 0.1838 0.1900 -0.0150 -0.0382
0.0050  1 .
6016 CA    CA    . GLU GLU GLU B B 361 361 . 0.2359 0.2265 0.1881 -0.0171 -0.0321
0.0078  1 .
6017 CB    CB    . GLU GLU GLU B B 361 361 . 0.2083 0.2730 0.2039 -0.0168 -0.0201
0.0248  1 .
6018 CG    CG    . GLU GLU GLU B B 361 361 . 0.3325 0.4285 0.3606 -0.0281 -0.0119
0.0074  1 .
6019 CD    CD    . GLU GLU GLU B B 361 361 . 0.4282 0.5072 0.5480 0.0275  0.0054
0.0228  1 .
6020 OE1   OE1   . GLU GLU GLU B B 361 361 . 0.4611 0.6463 0.6400 0.0006  0.0174
0.0159  1 .
6021 OE2   OE2   . GLU GLU GLU B B 361 361 . 0.4014 0.5285 0.5769 -0.0053 -0.0173
0.0549  1 .
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6022 C     C     . GLU GLU GLU B B 361 361 . 0.2110 0.2121 0.1759 -0.0194 -0.0349
0.0053  1 .
6023 O     O     . GLU GLU GLU B B 361 361 . 0.2395 0.2228 0.1785 -0.0429 -0.0571
0.0046  1 .
6024 N     N     . ASN ASN ASN B B 362 362 . 0.2141 0.1736 0.1519 -0.0334 -0.0258
0.0090  1 .
6025 CA    CA    . ASN ASN ASN B B 362 362 . 0.2077 0.1846 0.1542 -0.0216 -0.0324 -
0.0115 1 .
6026 CB    CB    . ASN ASN ASN B B 362 362 . 0.2249 0.1624 0.1666 -0.0157 -0.0397
0.0006  1 .
6027 CG    CG    . ASN ASN ASN B B 362 362 . 0.2347 0.2255 0.1626 -0.0090 -0.0352
0.0030  1 .
6028 OD1   OD1   . ASN ASN ASN B B 362 362 . 0.3014 0.1971 0.1692 -0.0206 -0.0673
0.0597  1 .
6029 ND2   ND2   . ASN ASN ASN B B 362 362 . 0.2168 0.2378 0.1755 0.0131  -0.0566
0.0593  1 .
6030 C     C     . ASN ASN ASN B B 362 362 . 0.2073 0.1874 0.1574 -0.0256 -0.0228 -
0.0071 1 .
6031 O     O     . ASN ASN ASN B B 362 362 . 0.2001 0.2078 0.1357 -0.0228 -0.0109 -
0.0023 1 .
6032 N     N     . GLY GLY GLY B B 363 363 . 0.1934 0.1956 0.1171 -0.0006 -0.0470
0.0106  1 .
6033 CA    CA    . GLY GLY GLY B B 363 363 . 0.2016 0.2061 0.1240 0.0053  -0.0169 -
0.0297 1 .
6034 C     C     . GLY GLY GLY B B 363 363 . 0.1923 0.2003 0.1651 0.0204  -0.0098 -
0.0291 1 .
6035 O     O     . GLY GLY GLY B B 363 363 . 0.2339 0.2316 0.1910 0.0120  -0.0105 -
0.0442 1 .
6036 N     N     . TRP TRP TRP B B 364 364 . 0.1941 0.1395 0.1377 0.0079  -0.0335 -
0.0215 1 .
6037 CA    CA    . TRP TRP TRP B B 364 364 . 0.1835 0.1302 0.1384 0.0097  -0.0264 -
0.0043 1 .
6038 CB    CB    . TRP TRP TRP B B 364 364 . 0.1835 0.1001 0.1340 0.0048  -0.0204 -
0.0042 1 .
6039 CG    CG    . TRP TRP TRP B B 364 364 . 0.1808 0.1274 0.1113 0.0024  -0.0313
0.0147  1 .
6040 CD1   CD1   . TRP TRP TRP B B 364 364 . 0.1945 0.1668 0.1734 -0.0109 -0.0218
0.0092  1 .
6041 NE1   NE1   . TRP TRP TRP B B 364 364 . 0.1700 0.1477 0.1169 -0.0264 -0.0204 -
0.0016 1 .
6042 CE2   CE2   . TRP TRP TRP B B 364 364 . 0.1671 0.1517 0.1220 -0.0098 -0.0191 -
0.0057 1 .
6043 CD2   CD2   . TRP TRP TRP B B 364 364 . 0.1399 0.0877 0.0961 0.0306  -0.0296
0.0055  1 .
6044 CE3   CE3   . TRP TRP TRP B B 364 364 . 0.1293 0.1182 0.1021 -0.0159 -0.0306 -
0.0353 1 .
6045 CZ3   CZ3   . TRP TRP TRP B B 364 364 . 0.0980 0.1118 0.1573 0.0529  0.0185  -
0.0151 1 .
6046 CH2   CH2   . TRP TRP TRP B B 364 364 . 0.1571 0.0864 0.0904 0.0151  -0.0049 -
0.0206 1 .
6047 CZ2   CZ2   . TRP TRP TRP B B 364 364 . 0.1808 0.1578 0.1402 0.0206  -0.0224 -
0.0271 1 .
6048 C     C     . TRP TRP TRP B B 364 364 . 0.1765 0.1262 0.1293 -0.0084 -0.0172 -
0.0127 1 .
6049 O     O     . TRP TRP TRP B B 364 364 . 0.1909 0.1397 0.1141 -0.0201 -0.0197 -
0.0113 1 .
6050 N     N     . GLY GLY GLY B B 365 365 . 0.1857 0.1258 0.1489 0.0230  -0.0112
0.0051  1 .
6051 CA    CA    . GLY GLY GLY B B 365 365 . 0.1776 0.1332 0.1050 0.0184  -0.0205 -
0.0071 1 .
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6052 C     C     . GLY GLY GLY B B 365 365 . 0.1409 0.1150 0.0902 0.0078  -0.0106 -
0.0061 1 .
6053 O     O     . GLY GLY GLY B B 365 365 . 0.1578 0.1222 0.0764 -0.0119 -0.0359
0.0012  1 .
6054 N     N     . VAL VAL VAL B B 366 366 . 0.1401 0.1133 0.0910 0.0005  -0.0342 -
0.0115 1 .
6055 CA    CA    . VAL VAL VAL B B 366 366 . 0.1285 0.0991 0.0983 0.0222  -0.0213 -
0.0005 1 .
6056 CB    CB    . VAL VAL VAL B B 366 366 . 0.1416 0.1123 0.1024 0.0136  -0.0241
0.0026  1 .
6057 CG1   CG1   . VAL VAL VAL B B 366 366 . 0.1899 0.1415 0.0839 0.0111  0.0046
0.0033  1 .
6058 CG2   CG2   . VAL VAL VAL B B 366 366 . 0.1389 0.1431 0.1683 0.0230  -0.0358
0.0049  1 .
6059 C     C     . VAL VAL VAL B B 366 366 . 0.1332 0.1239 0.1105 0.0067  -0.0265
0.0015  1 .
6060 O     O     . VAL VAL VAL B B 366 366 . 0.1365 0.1095 0.1155 0.0076  -0.0343 -
0.0090 1 .
6061 N     N     . MET MET MET B B 367 367 . 0.1101 0.1159 0.0843 0.0115  -0.0184 -
0.0099 1 .
6062 CA    CA    . MET MET MET B B 367 367 . 0.1120 0.0948 0.0855 0.0082  -0.0132 -
0.0091 1 .
6063 CB    CB    . MET MET MET B B 367 367 . 0.0885 0.1127 0.0922 0.0215  -0.0132 -
0.0069 1 .
6064 CG    CG    . MET MET MET B B 367 367 . 0.1244 0.1061 0.0481 0.0338  -0.0167
0.0002  1 .
6065 SD    SD    . MET MET MET B B 367 367 . 0.1628 0.1183 0.1256 0.0179  -0.0003 -
0.0081 1 .
6066 CE    CE    . MET MET MET B B 367 367 . 0.1633 0.1811 0.1433 0.0205  0.0084  -
0.0577 1 .
6067 C     C     . MET MET MET B B 367 367 . 0.1097 0.1058 0.0987 0.0066  -0.0024
0.0072  1 .
6068 O     O     . MET MET MET B B 367 367 . 0.1146 0.0792 0.1092 -0.0034 -0.0032 -
0.0013 1 .
6069 N     N     . VAL VAL VAL B B 368 368 . 0.1052 0.1048 0.0653 -0.0008 0.0084  -
0.0040 1 .
6070 CA    CA    . VAL VAL VAL B B 368 368 . 0.1178 0.1039 0.0799 0.0018  0.0060  -
0.0004 1 .
6071 CB    CB    . VAL VAL VAL B B 368 368 . 0.1305 0.1224 0.0904 -0.0029 0.0105
0.0004  1 .
6072 CG1   CG1   . VAL VAL VAL B B 368 368 . 0.0943 0.1443 0.0409 -0.0070 0.0326
0.0005  1 .
6073 CG2   CG2   . VAL VAL VAL B B 368 368 . 0.1318 0.1304 0.1233 -0.0020 -0.0087 -
0.0162 1 .
6074 C     C     . VAL VAL VAL B B 368 368 . 0.1109 0.1075 0.0593 0.0088  0.0008  -
0.0047 1 .
6075 O     O     . VAL VAL VAL B B 368 368 . 0.1159 0.1001 0.0808 0.0099  -0.0188 -
0.0011 1 .
6076 N     N     . SER SER SER B B 369 369 . 0.1146 0.0611 0.0866 0.0015  -0.0238
0.0106  1 .
6077 CA    CA    . SER SER SER B B 369 369 . 0.1094 0.1102 0.0891 -0.0101 -0.0118 -
0.0003 1 .
6078 CB    CB    . SER SER SER B B 369 369 . 0.1005 0.1034 0.0822 -0.0123 -0.0152
0.0095  1 .
6079 OG    OG    . SER SER SER B B 369 369 . 0.1046 0.0990 0.0863 -0.0133 -0.0225
0.0183  1 .
6080 C     C     . SER SER SER B B 369 369 . 0.0931 0.0940 0.0741 0.0110  -0.0029
0.0099  1 .
6081 O     O     . SER SER SER B B 369 369 . 0.1074 0.1158 0.0823 0.0207  -0.0009
0.0128  1 .
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6082 N     N     . HIS HIS HIS B B 370 370 . 0.1148 0.0966 0.0694 0.0242  -0.0003 -
0.0089 1 .
6083 CA    CA    . HIS HIS HIS B B 370 370 . 0.1110 0.0767 0.0779 0.0205  -0.0087 -
0.0092 1 .
6084 CB    CB    . HIS HIS HIS B B 370 370 . 0.1184 0.0743 0.0632 0.0085  -0.0075 -
0.0004 1 .
6085 CG    CG    . HIS HIS HIS B B 370 370 . 0.1005 0.0493 0.0743 0.0293  -0.0109 -
0.0164 1 .
6086 ND1   ND1   . HIS HIS HIS B B 370 370 . 0.1213 0.1039 0.0497 0.0024  -0.0171 -
0.0196 1 .
6087 CE1   CE1   . HIS HIS HIS B B 370 370 . 0.1658 0.1572 0.1299 0.0463  0.0204  -
0.0153 1 .
6088 NE2   NE2   . HIS HIS HIS B B 370 370 . 0.1352 0.1110 0.1015 0.0480  0.0034
0.0166  1 .
6089 CD2   CD2   . HIS HIS HIS B B 370 370 . 0.1296 0.1326 0.1088 0.0074  0.0223  -
0.0068 1 .
6090 C     C     . HIS HIS HIS B B 370 370 . 0.1292 0.0866 0.0987 0.0136  0.0064  -
0.0011 1 .
6091 O     O     . HIS HIS HIS B B 370 370 . 0.1276 0.1003 0.0994 0.0286  -0.0046
0.0096  1 .
6092 N     N     . ARG ARG ARG B B 371 371 . 0.1224 0.0835 0.0743 0.0177  -0.0081
0.0024  1 .
6093 CA    CA    . ARG ARG ARG B B 371 371 . 0.0828 0.0912 0.0945 0.0145  -0.0031
0.0087  1 .
6094 CB    CB    . ARG ARG ARG B B 371 371 . 0.0743 0.0759 0.0540 0.0351  0.0002
0.0133  1 .
6095 CG    CG    . ARG ARG ARG B B 371 371 . 0.0914 0.1018 0.0489 0.0063  -0.0266
0.0286  1 .
6096 CD    CD    . ARG ARG ARG B B 371 371 . 0.0860 0.0677 0.0629 -0.0061 -0.0111
0.0289  1 .
6097 NE    NE    . ARG ARG ARG B B 371 371 . 0.1750 0.1002 0.0898 -0.0066 -0.0142
0.0348  1 .
6098 CZ    CZ    . ARG ARG ARG B B 371 371 . 0.0722 0.0758 0.1185 0.0264  -0.0057
0.0141  1 .
6099 NH1   NH1   . ARG ARG ARG B B 371 371 . 0.0928 0.0649 0.0817 0.0167  -0.0064 -
0.0030 1 .
6100 NH2   NH2   . ARG ARG ARG B B 371 371 . 0.1424 0.0591 0.0795 0.0190  -0.0098
0.0284  1 .
6101 C     C     . ARG ARG ARG B B 371 371 . 0.0919 0.1017 0.0834 0.0105  -0.0080
0.0075  1 .
6102 O     O     . ARG ARG ARG B B 371 371 . 0.1164 0.0936 0.0943 0.0104  -0.0086
0.0110  1 .
6103 N     N     . SER SER SER B B 372 372 . 0.0872 0.0809 0.0737 0.0065  -0.0170 -
0.0145 1 .
6104 CA    CA    . SER SER SER B B 372 372 . 0.1040 0.1009 0.1012 0.0259  -0.0146 -
0.0030 1 .
6105 CB    CB    . SER SER SER B B 372 372 . 0.1016 0.1056 0.0778 0.0271  -0.0209
0.0102  1 .
6106 OG    OG    . SER SER SER B B 372 372 . 0.1053 0.0989 0.1292 0.0071  -0.0245 -
0.0172 1 .
6107 C     C     . SER SER SER B B 372 372 . 0.1123 0.0939 0.0871 0.0229  -0.0053 -
0.0062 1 .
6108 O     O     . SER SER SER B B 372 372 . 0.1323 0.0998 0.1072 0.0183  -0.0124 -
0.0103 1 .
6109 N     N     . GLY GLY GLY B B 373 373 . 0.1220 0.1289 0.1014 0.0099  0.0053
0.0061  1 .
6110 CA    CA    . GLY GLY GLY B B 373 373 . 0.1459 0.0995 0.0968 -0.0030 0.0072  -
0.0133 1 .
6111 C     C     . GLY GLY GLY B B 373 373 . 0.1160 0.1035 0.1186 0.0103  -0.0099 -
0.0084 1 .
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6112 O     O     . GLY GLY GLY B B 373 373 . 0.1174 0.0985 0.1300 0.0130  -0.0170 -
0.0140 1 .
6113 N     N     . GLU GLU GLU B B 374 374 . 0.1189 0.0877 0.1054 0.0040  -0.0045 -
0.0117 1 .
6114 CA    CA    . GLU GLU GLU B B 374 374 . 0.0832 0.0839 0.0790 0.0003  0.0033  -
0.0087 1 .
6115 CB    CB    . GLU GLU GLU B B 374 374 . 0.0979 0.1004 0.0635 0.0157  -0.0004 -
0.0108 1 .
6116 CG    CG    . GLU GLU GLU B B 374 374 . 0.1094 0.0860 0.0510 0.0185  -0.0166
0.0002  1 .
6117 CD    CD    . GLU GLU GLU B B 374 374 . 0.1380 0.1189 0.0989 0.0121  -0.0090
0.0078  1 .
6118 OE1   OE1   . GLU GLU GLU B B 374 374 . 0.0956 0.1143 0.0941 -0.0064 -0.0033 -
0.0068 1 .
6119 OE2   OE2   . GLU GLU GLU B B 374 374 . 0.1635 0.1303 0.0980 0.0439  -0.0133
0.0115  1 .
6120 C     C     . GLU GLU GLU B B 374 374 . 0.0966 0.0856 0.0775 -0.0083 -0.0037
0.0055  1 .
6121 O     O     . GLU GLU GLU B B 374 374 . 0.1065 0.0820 0.0834 -0.0101 0.0074
0.0080  1 .
6122 N     N     . THR THR THR B B 375 375 . 0.0896 0.0931 0.0896 -0.0008 0.0137  -
0.0029 1 .
6123 CA    CA    . THR THR THR B B 375 375 . 0.1041 0.0744 0.1012 0.0032  0.0014
0.0032  1 .
6124 CB    CB    . THR THR THR B B 375 375 . 0.0918 0.0652 0.0880 0.0137  -0.0168
0.0042  1 .
6125 OG1   OG1   . THR THR THR B B 375 375 . 0.0946 0.0818 0.1119 -0.0001 -0.0145 -
0.0105 1 .
6126 CG2   CG2   . THR THR THR B B 375 375 . 0.1214 0.0769 0.1053 0.0007  0.0159  -
0.0058 1 .
6127 C     C     . THR THR THR B B 375 375 . 0.1124 0.0907 0.1031 0.0084  -0.0088
0.0049  1 .
6128 O     O     . THR THR THR B B 375 375 . 0.1286 0.1050 0.1226 0.0232  0.0069  -
0.0097 1 .
6129 N     N     . GLU GLU GLU B B 376 376 . 0.1019 0.0940 0.1063 0.0028  -0.0224
0.0174  1 .
6130 CA    CA    . GLU GLU GLU B B 376 376 . 0.1243 0.1034 0.1029 -0.0098 -0.0250
0.0243  1 .
6131 CB    CB    . GLU GLU GLU B B 376 376 . 0.1274 0.1254 0.1016 -0.0017 -0.0026
0.0483  1 .
6132 CG    CG    . GLU GLU GLU B B 376 376 . 0.1336 0.1530 0.1141 -0.0312 0.0136  -
0.0009 1 .
6133 CD    CD    . GLU GLU GLU B B 376 376 . 0.1801 0.1245 0.1292 -0.0125 0.0163  -
0.0096 1 .
6134 OE1   OE1   . GLU GLU GLU B B 376 376 . 0.1884 0.1483 0.1182 -0.0320 0.0208  -
0.0407 1 .
6135 OE2   OE2   . GLU GLU GLU B B 376 376 . 0.1426 0.1339 0.1389 0.0020  0.0274
0.0008  1 .
6136 C     C     . GLU GLU GLU B B 376 376 . 0.1472 0.1164 0.1112 -0.0065 -0.0289
0.0062  1 .
6137 O     O     . GLU GLU GLU B B 376 376 . 0.1919 0.1407 0.1337 -0.0182 -0.0442
0.0166  1 .
6138 N     N     . ASP ASP ASP B B 377 377 . 0.1108 0.1306 0.0989 0.0008  -0.0241 -
0.0123 1 .
6139 CA    CA    . ASP ASP ASP B B 377 377 . 0.1267 0.1372 0.1239 0.0085  -0.0160 -
0.0067 1 .
6140 CB    CB    . ASP ASP ASP B B 377 377 . 0.1095 0.1392 0.1540 0.0259  -0.0121 -
0.0097 1 .
6141 CG    CG    . ASP ASP ASP B B 377 377 . 0.1678 0.1643 0.1543 0.0068  -0.0172 -
0.0062 1 .
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6142 OD1   OD1   . ASP ASP ASP B B 377 377 . 0.1903 0.2017 0.1929 0.0613  -0.0374 -
0.0341 1 .
6143 OD2   OD2   . ASP ASP ASP B B 377 377 . 0.1489 0.2111 0.2212 -0.0337 0.0064  -
0.0097 1 .
6144 C     C     . ASP ASP ASP B B 377 377 . 0.1202 0.1315 0.1156 0.0010  -0.0062 -
0.0035 1 .
6145 O     O     . ASP ASP ASP B B 377 377 . 0.1046 0.1545 0.1142 -0.0008 0.0095  -
0.0282 1 .
6146 N     N     . THR THR THR B B 378 378 . 0.1257 0.1056 0.1132 0.0170  0.0025
0.0023  1 .
6147 CA    CA    . THR THR THR B B 378 378 . 0.1350 0.1065 0.1053 0.0086  -0.0127 -
0.0086 1 .
6148 CB    CB    . THR THR THR B B 378 378 . 0.1413 0.1083 0.1315 0.0159  -0.0097
0.0216  1 .
6149 OG1   OG1   . THR THR THR B B 378 378 . 0.1571 0.1228 0.1346 0.0195  -0.0295
0.0106  1 .
6150 CG2   CG2   . THR THR THR B B 378 378 . 0.1455 0.1611 0.0964 -0.0003 -0.0306 -
0.0367 1 .
6151 C     C     . THR THR THR B B 378 378 . 0.1396 0.1148 0.1196 0.0160  0.0008
0.0035  1 .
6152 O     O     . THR THR THR B B 378 378 . 0.1518 0.1046 0.0962 0.0025  -0.0229
0.0042  1 .
6153 N     N     . PHE PHE PHE B B 379 379 . 0.1455 0.1272 0.1238 0.0162  -0.0174
0.0043  1 .
6154 CA    CA    . PHE PHE PHE B B 379 379 . 0.1342 0.1143 0.1257 0.0034  -0.0164 -
0.0050 1 .
6155 CB    CB    . PHE PHE PHE B B 379 379 . 0.1310 0.1242 0.1545 0.0239  -0.0116
0.0064  1 .
6156 CG    CG    . PHE PHE PHE B B 379 379 . 0.1214 0.0729 0.1008 0.0038  0.0059  -
0.0220 1 .
6157 CD1   CD1   . PHE PHE PHE B B 379 379 . 0.1570 0.0971 0.1250 0.0381  -0.0191 -
0.0269 1 .
6158 CE1   CE1   . PHE PHE PHE B B 379 379 . 0.1291 0.1822 0.1299 0.0393  0.0004  -
0.0367 1 .
6159 CZ    CZ    . PHE PHE PHE B B 379 379 . 0.1638 0.1386 0.1440 0.0066  -0.0020 -
0.0339 1 .
6160 CE2   CE2   . PHE PHE PHE B B 379 379 . 0.1626 0.1140 0.2259 0.0326  -0.0299 -
0.0041 1 .
6161 CD2   CD2   . PHE PHE PHE B B 379 379 . 0.1351 0.1355 0.1962 0.0425  -0.0141 -
0.0057 1 .
6162 C     C     . PHE PHE PHE B B 379 379 . 0.1120 0.0986 0.1273 0.0062  -0.0126 -
0.0004 1 .
6163 O     O     . PHE PHE PHE B B 379 379 . 0.1570 0.1014 0.1210 0.0120  -0.0185 -
0.0061 1 .
6164 N     N     . ILE ILE ILE B B 380 380 . 0.0930 0.1057 0.1183 0.0162  -0.0095
0.0038  1 .
6165 CA    CA    . ILE ILE ILE B B 380 380 . 0.1170 0.0911 0.1219 0.0140  -0.0002 -
0.0025 1 .
6166 CB    CB    . ILE ILE ILE B B 380 380 . 0.0928 0.1115 0.1295 0.0076  0.0045
0.0146  1 .
6167 CG1   CG1   . ILE ILE ILE B B 380 380 . 0.1120 0.1292 0.1120 0.0096  -0.0024
0.0029  1 .
6168 CD1   CD1   . ILE ILE ILE B B 380 380 . 0.1338 0.0844 0.1111 -0.0171 0.0304
0.0070  1 .
6169 CG2   CG2   . ILE ILE ILE B B 380 380 . 0.1273 0.1096 0.1005 0.0113  -0.0294
0.0045  1 .
6170 C     C     . ILE ILE ILE B B 380 380 . 0.1319 0.0932 0.1218 0.0004  -0.0070 -
0.0052 1 .
6171 O     O     . ILE ILE ILE B B 380 380 . 0.1330 0.1032 0.1028 0.0226  -0.0278
0.0057  1 .
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6172 N     N     . ALA ALA ALA B B 381 381 . 0.1027 0.0639 0.0901 0.0143  -0.0206 -
0.0019 1 .
6173 CA    CA    . ALA ALA ALA B B 381 381 . 0.1232 0.0775 0.0963 0.0129  -0.0197
0.0001  1 .
6174 CB    CB    . ALA ALA ALA B B 381 381 . 0.1434 0.0678 0.0998 0.0499  -0.0175
0.0028  1 .
6175 C     C     . ALA ALA ALA B B 381 381 . 0.1227 0.0785 0.0947 -0.0011 -0.0043 -
0.0094 1 .
6176 O     O     . ALA ALA ALA B B 381 381 . 0.1484 0.0982 0.1062 0.0065  -0.0115 -
0.0082 1 .
6177 N     N     . ASP ASP ASP B B 382 382 . 0.1185 0.0762 0.1098 0.0202  -0.0154 -
0.0103 1 .
6178 CA    CA    . ASP ASP ASP B B 382 382 . 0.1235 0.0814 0.1206 0.0011  -0.0172
0.0224  1 .
6179 CB    CB    . ASP ASP ASP B B 382 382 . 0.1399 0.1202 0.1111 0.0106  -0.0059
0.0286  1 .
6180 CG    CG    . ASP ASP ASP B B 382 382 . 0.1391 0.1173 0.1535 -0.0075 0.0038
0.0218  1 .
6181 OD1   OD1   . ASP ASP ASP B B 382 382 . 0.1835 0.1668 0.1354 0.0130  -0.0392
0.0501  1 .
6182 OD2   OD2   . ASP ASP ASP B B 382 382 . 0.1914 0.1876 0.2054 -0.0395 -0.0192 -
0.0102 1 .
6183 C     C     . ASP ASP ASP B B 382 382 . 0.1445 0.0986 0.1087 -0.0046 -0.0234
0.0141  1 .
6184 O     O     . ASP ASP ASP B B 382 382 . 0.1568 0.1035 0.0975 0.0011  -0.0226
0.0114  1 .
6185 N     N     . LEU LEU LEU B B 383 383 . 0.1233 0.0803 0.1083 0.0111  -0.0039
0.0166  1 .
6186 CA    CA    . LEU LEU LEU B B 383 383 . 0.1150 0.0557 0.0801 0.0095  0.0014
0.0166  1 .
6187 CB    CB    . LEU LEU LEU B B 383 383 . 0.1096 0.0503 0.0627 0.0000  -0.0314
0.0087  1 .
6188 CG    CG    . LEU LEU LEU B B 383 383 . 0.0816 0.0617 0.0930 0.0201  -0.0183 -
0.0032 1 .
6189 CD1   CD1   . LEU LEU LEU B B 383 383 . 0.0972 0.1209 0.1029 0.0266  -0.0211
0.0524  1 .
6190 CD2   CD2   . LEU LEU LEU B B 383 383 . 0.1486 0.0844 0.1669 -0.0393 -0.0524
0.0215  1 .
6191 C     C     . LEU LEU LEU B B 383 383 . 0.1280 0.0749 0.1033 0.0008  -0.0150
0.0038  1 .
6192 O     O     . LEU LEU LEU B B 383 383 . 0.1574 0.1106 0.1032 0.0103  -0.0315 -
0.0030 1 .
6193 N     N     . VAL VAL VAL B B 384 384 . 0.1418 0.0913 0.1026 0.0104  -0.0036 -
0.0016 1 .
6194 CA    CA    . VAL VAL VAL B B 384 384 . 0.1313 0.0914 0.1188 0.0047  0.0127  -
0.0018 1 .
6195 CB    CB    . VAL VAL VAL B B 384 384 . 0.1178 0.1050 0.0894 0.0225  -0.0060
0.0177  1 .
6196 CG1   CG1   . VAL VAL VAL B B 384 384 . 0.0855 0.0791 0.1195 0.0333  0.0371  -
0.0154 1 .
6197 CG2   CG2   . VAL VAL VAL B B 384 384 . 0.1336 0.1285 0.1071 -0.0086 0.0094  -
0.0069 1 .
6198 C     C     . VAL VAL VAL B B 384 384 . 0.1480 0.1264 0.1239 -0.0134 -0.0086
0.0056  1 .
6199 O     O     . VAL VAL VAL B B 384 384 . 0.1734 0.1206 0.1252 -0.0010 -0.0165 -
0.0103 1 .
6200 N     N     . VAL VAL VAL B B 385 385 . 0.1440 0.0971 0.1571 0.0054  -0.0283
0.0012  1 .
6201 CA    CA    . VAL VAL VAL B B 385 385 . 0.1467 0.1211 0.1430 -0.0188 -0.0364
0.0040  1 .
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6202 CB    CB    . VAL VAL VAL B B 385 385 . 0.1384 0.1167 0.1505 -0.0128 -0.0381 -
0.0053 1 .
6203 CG1   CG1   . VAL VAL VAL B B 385 385 . 0.1531 0.1266 0.1707 -0.0588 -0.0589 -
0.0207 1 .
6204 CG2   CG2   . VAL VAL VAL B B 385 385 . 0.0860 0.1798 0.1398 0.0127  -0.0042
0.0040  1 .
6205 C     C     . VAL VAL VAL B B 385 385 . 0.1640 0.1142 0.1447 -0.0063 -0.0181
0.0129  1 .
6206 O     O     . VAL VAL VAL B B 385 385 . 0.1794 0.1077 0.1644 -0.0170 -0.0384 -
0.0026 1 .
6207 N     N     . GLY GLY GLY B B 386 386 . 0.1312 0.1049 0.1458 -0.0158 -0.0023
0.0328  1 .
6208 CA    CA    . GLY GLY GLY B B 386 386 . 0.1588 0.1245 0.1434 -0.0007 -0.0145
0.0225  1 .
6209 C     C     . GLY GLY GLY B B 386 386 . 0.1861 0.1411 0.1510 -0.0148 -0.0144
0.0244  1 .
6210 O     O     . GLY GLY GLY B B 386 386 . 0.1540 0.1482 0.1674 -0.0210 -0.0264
0.0258  1 .
6211 N     N     . LEU LEU LEU B B 387 387 . 0.1537 0.1614 0.1400 -0.0230 -0.0048
0.0249  1 .
6212 CA    CA    . LEU LEU LEU B B 387 387 . 0.1785 0.1459 0.1515 -0.0176 -0.0067
0.0071  1 .
6213 CB    CB    . LEU LEU LEU B B 387 387 . 0.1803 0.1267 0.1316 -0.0113 -0.0021
0.0217  1 .
6214 CG    CG    . LEU LEU LEU B B 387 387 . 0.1433 0.1613 0.1537 -0.0137 -0.0247 -
0.0139 1 .
6215 CD1   CD1   . LEU LEU LEU B B 387 387 . 0.2577 0.1584 0.1392 -0.0326 -0.0391 -
0.0071 1 .
6216 CD2   CD2   . LEU LEU LEU B B 387 387 . 0.1817 0.1755 0.0916 0.0458  -0.0284
0.0057  1 .
6217 C     C     . LEU LEU LEU B B 387 387 . 0.2144 0.1876 0.1773 -0.0162 -0.0036
0.0120  1 .
6218 O     O     . LEU LEU LEU B B 387 387 . 0.2517 0.1804 0.1788 -0.0062 -0.0129
0.0111  1 .
6219 N     N     . CYS CYS CYS B B 388 388 . 0.1984 0.1869 0.1727 -0.0072 -0.0007 -
0.0027 1 .
6220 CA    CA    . CYS CYS CYS B B 388 388 . 0.2456 0.2286 0.1992 -0.0177 -0.0092
0.0014  1 .
6221 CB    CB    . CYS CYS CYS B B 388 388 . 0.2808 0.2812 0.2088 -0.0080 -0.0156
0.0246  1 .
6222 SG    SG    . CYS CYS CYS B B 388 388 . 0.4877 0.4640 0.4228 -0.0596 -0.0712
0.0362  1 .
6223 C     C     . CYS CYS CYS B B 388 388 . 0.2411 0.2161 0.1841 -0.0166 -0.0093 -
0.0040 1 .
6224 O     O     . CYS CYS CYS B B 388 388 . 0.2755 0.2053 0.1634 -0.0228 -0.0075 -
0.0010 1 .
6225 N     N     . THR THR THR B B 389 389 . 0.2092 0.1705 0.1472 -0.0288 -0.0173 -
0.0150 1 .
6226 CA    CA    . THR THR THR B B 389 389 . 0.1930 0.1661 0.1542 -0.0183 -0.0126 -
0.0200 1 .
6227 CB    CB    . THR THR THR B B 389 389 . 0.1850 0.1390 0.1678 -0.0140 -0.0051 -
0.0083 1 .
6228 OG1   OG1   . THR THR THR B B 389 389 . 0.2351 0.1314 0.1822 0.0172  -0.0100 -
0.0005 1 .
6229 CG2   CG2   . THR THR THR B B 389 389 . 0.1600 0.1225 0.1820 -0.0152 0.0318  -
0.0234 1 .
6230 C     C     . THR THR THR B B 389 389 . 0.1820 0.1612 0.1489 -0.0205 -0.0110 -
0.0177 1 .
6231 O     O     . THR THR THR B B 389 389 . 0.2195 0.1787 0.1507 -0.0138 0.0043
0.0116  1 .
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6232 N     N     . GLY GLY GLY B B 390 390 . 0.1419 0.1327 0.1044 0.0050  -0.0125 -
0.0078 1 .
6233 CA    CA    . GLY GLY GLY B B 390 390 . 0.1670 0.1362 0.1132 0.0149  -0.0082 -
0.0039 1 .
6234 C     C     . GLY GLY GLY B B 390 390 . 0.1429 0.0993 0.0895 0.0147  0.0016  -
0.0038 1 .
6235 O     O     . GLY GLY GLY B B 390 390 . 0.1724 0.1153 0.1188 0.0098  -0.0083 -
0.0075 1 .
6236 N     N     . GLN GLN GLN B B 391 391 . 0.1740 0.1156 0.0910 0.0166  -0.0126 -
0.0047 1 .
6237 CA    CA    . GLN GLN GLN B B 391 391 . 0.1591 0.1337 0.0937 0.0134  0.0046  -
0.0224 1 .
6238 CB    CB    . GLN GLN GLN B B 391 391 . 0.1821 0.1478 0.1369 0.0115  -0.0164
0.0025  1 .
6239 CG    CG    . GLN GLN GLN B B 391 391 . 0.1770 0.1717 0.1674 0.0025  -0.0150
0.0073  1 .
6240 CD    CD    . GLN GLN GLN B B 391 391 . 0.1624 0.1536 0.1604 -0.0166 -0.0131
0.0239  1 .
6241 OE1   OE1   . GLN GLN GLN B B 391 391 . 0.1493 0.1621 0.1055 0.0073  0.0150
0.0075  1 .
6242 NE2   NE2   . GLN GLN GLN B B 391 391 . 0.2082 0.1529 0.1370 -0.0030 0.0200
0.0244  1 .
6243 C     C     . GLN GLN GLN B B 391 391 . 0.1607 0.1290 0.1199 0.0228  -0.0036 -
0.0312 1 .
6244 O     O     . GLN GLN GLN B B 391 391 . 0.1225 0.1210 0.0922 0.0157  0.0029  -
0.0249 1 .
6245 N     N     . ILE ILE ILE B B 392 392 . 0.1472 0.1057 0.0701 0.0016  0.0005  -
0.0267 1 .
6246 CA    CA    . ILE ILE ILE B B 392 392 . 0.1347 0.0988 0.0786 -0.0005 0.0025  -
0.0035 1 .
6247 CB    CB    . ILE ILE ILE B B 392 392 . 0.1426 0.0958 0.1005 0.0199  0.0077  -
0.0137 1 .
6248 CG1   CG1   . ILE ILE ILE B B 392 392 . 0.1240 0.0613 0.0623 -0.0052 0.0056  -
0.0060 1 .
6249 CD1   CD1   . ILE ILE ILE B B 392 392 . 0.1387 0.1407 0.0790 -0.0014 0.0584  -
0.0181 1 .
6250 CG2   CG2   . ILE ILE ILE B B 392 392 . 0.1509 0.0357 0.1244 0.0362  -0.0232 -
0.0074 1 .
6251 C     C     . ILE ILE ILE B B 392 392 . 0.1347 0.1208 0.0974 0.0052  0.0020
0.0011  1 .
6252 O     O     . ILE ILE ILE B B 392 392 . 0.1432 0.1037 0.0734 0.0161  0.0070  -
0.0079 1 .
6253 N     N     . LYS LYS LYS B B 393 393 . 0.1256 0.0844 0.0920 0.0015  0.0035
0.0147  1 .
6254 CA    CA    . LYS LYS LYS B B 393 393 . 0.0923 0.0847 0.0636 -0.0010 0.0178
0.0103  1 .
6255 CB    CB    . LYS LYS LYS B B 393 393 . 0.1263 0.0654 0.0385 0.0152  0.0219
0.0148  1 .
6256 CG    CG    . LYS LYS LYS B B 393 393 . 0.1460 0.0695 0.0451 0.0182  0.0191
0.0271  1 .
6257 CD    CD    . LYS LYS LYS B B 393 393 . 0.1550 0.0927 0.1405 0.0149  0.0127  -
0.0188 1 .
6258 CE    CE    . LYS LYS LYS B B 393 393 . 0.1490 0.0800 0.1157 -0.0017 0.0138  -
0.0317 1 .
6259 NZ    NZ    . LYS LYS LYS B B 393 393 . 0.1606 0.1072 0.1048 -0.0179 0.0012
0.0092  1 .
6260 C     C     . LYS LYS LYS B B 393 393 . 0.1307 0.1121 0.0918 0.0136  0.0068
0.0117  1 .
6261 O     O     . LYS LYS LYS B B 393 393 . 0.1201 0.1225 0.0744 0.0349  0.0101
0.0239  1 .
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6262 N     N     . THR THR THR B B 394 394 . 0.1244 0.1078 0.0902 0.0117  -0.0013
0.0150  1 .
6263 CA    CA    . THR THR THR B B 394 394 . 0.1120 0.0932 0.0898 0.0113  0.0080  -
0.0012 1 .
6264 CB    CB    . THR THR THR B B 394 394 . 0.1393 0.0935 0.1061 0.0213  0.0288  -
0.0047 1 .
6265 OG1   OG1   . THR THR THR B B 394 394 . 0.1601 0.1298 0.0760 0.0172  0.0267  -
0.0208 1 .
6266 CG2   CG2   . THR THR THR B B 394 394 . 0.0971 0.0858 0.1241 -0.0021 0.0005  -
0.0161 1 .
6267 C     C     . THR THR THR B B 394 394 . 0.1305 0.1032 0.0909 -0.0012 0.0006  -
0.0084 1 .
6268 O     O     . THR THR THR B B 394 394 . 0.1412 0.1005 0.1069 0.0002  0.0000
0.0065  1 .
6269 N     N     . GLY GLY GLY B B 395 395 . 0.1039 0.1081 0.0836 0.0160  -0.0049 -
0.0036 1 .
6270 CA    CA    . GLY GLY GLY B B 395 395 . 0.1053 0.1118 0.0871 0.0172  -0.0021 -
0.0137 1 .
6271 C     C     . GLY GLY GLY B B 395 395 . 0.1046 0.0994 0.0812 0.0147  -0.0067
0.0000  1 .
6272 O     O     . GLY GLY GLY B B 395 395 . 0.1455 0.0612 0.0995 0.0230  0.0039
0.0164  1 .
6273 N     N     . ALA ALA ALA B B 396 396 . 0.1166 0.1133 0.1125 0.0269  0.0009  -
0.0029 1 .
6274 CA    CA    . ALA ALA ALA B B 396 396 . 0.1068 0.0931 0.1110 0.0380  -0.0026 -
0.0117 1 .
6275 CB    CB    . ALA ALA ALA B B 396 396 . 0.1048 0.1259 0.1377 0.0292  -0.0050 -
0.0031 1 .
6276 C     C     . ALA ALA ALA B B 396 396 . 0.1022 0.1021 0.1258 0.0219  0.0142  -
0.0096 1 .
6277 O     O     . ALA ALA ALA B B 396 396 . 0.1080 0.1058 0.1210 0.0133  0.0206  -
0.0126 1 .
6278 N     N     . PRO PRO PRO B B 397 397 . 0.1097 0.0919 0.1157 0.0058  0.0094  -
0.0084 1 .
6279 CA    CA    . PRO PRO PRO B B 397 397 . 0.1292 0.0748 0.0972 0.0162  0.0062  -
0.0020 1 .
6280 CB    CB    . PRO PRO PRO B B 397 397 . 0.1377 0.0950 0.1166 0.0200  0.0267  -
0.0225 1 .
6281 CG    CG    . PRO PRO PRO B B 397 397 . 0.1474 0.0843 0.1586 0.0223  0.0446
0.0153  1 .
6282 CD    CD    . PRO PRO PRO B B 397 397 . 0.1032 0.0896 0.1209 0.0200  0.0184
0.0009  1 .
6283 C     C     . PRO PRO PRO B B 397 397 . 0.1357 0.0935 0.0948 0.0190  0.0018  -
0.0021 1 .
6284 O     O     . PRO PRO PRO B B 397 397 . 0.1478 0.1051 0.1054 0.0361  0.0054  -
0.0185 1 .
6285 N     N     . CYS CYS CYS B B 398 398 . 0.1320 0.0801 0.0676 0.0055  -0.0071 -
0.0027 1 .
6286 CA    CA    . CYS CYS CYS B B 398 398 . 0.1058 0.0931 0.0796 0.0147  -0.0048 -
0.0007 1 .
6287 CB    CB    . CYS CYS CYS B B 398 398 . 0.1352 0.0959 0.0787 -0.0091 -0.0010
0.0117  1 .
6288 SG    SG    . CYS CYS CYS B B 398 398 . 0.1088 0.1429 0.1328 0.0018  0.0093  -
0.0043 1 .
6289 C     C     . CYS CYS CYS B B 398 398 . 0.1221 0.0978 0.0872 0.0125  0.0009
0.0066  1 .
6290 O     O     . CYS CYS CYS B B 398 398 . 0.1071 0.0907 0.0908 0.0150  -0.0005 -
0.0049 1 .
6291 N     N     . ARG ARG ARG B B 399 399 . 0.1172 0.0861 0.0888 0.0024  0.0070  -
0.0009 1 .
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6292 CA    CA    . ARG ARG ARG B B 399 399 . 0.0923 0.0753 0.1138 -0.0044 0.0166
0.0011  1 .
6293 CB    CB    . ARG ARG ARG B B 399 399 . 0.0695 0.0468 0.0995 -0.0224 -0.0045
0.0008  1 .
6294 CG    CG    . ARG ARG ARG B B 399 399 . 0.0483 0.0852 0.1069 -0.0062 -0.0094
0.0137  1 .
6295 CD    CD    . ARG ARG ARG B B 399 399 . 0.0993 0.0689 0.1304 0.0295  0.0280
0.0163  1 .
6296 NE    NE    . ARG ARG ARG B B 399 399 . 0.1299 0.0733 0.0868 0.0077  0.0051  -
0.0036 1 .
6297 CZ    CZ    . ARG ARG ARG B B 399 399 . 0.0947 0.0905 0.0862 0.0176  0.0103
0.0046  1 .
6298 NH1   NH1   . ARG ARG ARG B B 399 399 . 0.1072 0.1208 0.0837 0.0190  -0.0135
0.0140  1 .
6299 NH2   NH2   . ARG ARG ARG B B 399 399 . 0.1014 0.0713 0.0883 0.0438  -0.0145 -
0.0201 1 .
6300 C     C     . ARG ARG ARG B B 399 399 . 0.0898 0.0910 0.0984 -0.0009 -0.0005
0.0100  1 .
6301 O     O     . ARG ARG ARG B B 399 399 . 0.1011 0.0620 0.0757 -0.0042 0.0032
0.0145  1 .
6302 N     N     . SER SER SER B B 400 400 . 0.0757 0.0803 0.0777 0.0074  0.0196
0.0110  1 .
6303 CA    CA    . SER SER SER B B 400 400 . 0.0724 0.0482 0.0705 0.0142  0.0170
0.0146  1 .
6304 CB    CB    . SER SER SER B B 400 400 . 0.1053 0.0898 0.0423 0.0359  0.0118
0.0248  1 .
6305 OG    OG    . SER SER SER B B 400 400 . 0.0981 0.0801 0.0849 0.0357  -0.0116 -
0.0072 1 .
6306 C     C     . SER SER SER B B 400 400 . 0.0707 0.0700 0.0478 -0.0019 0.0164
0.0033  1 .
6307 O     O     . SER SER SER B B 400 400 . 0.0755 0.0859 0.0871 0.0107  0.0170  -
0.0007 1 .
6308 N     N     . GLU GLU GLU B B 401 401 . 0.0916 0.0608 0.0629 0.0227  0.0053
0.0022  1 .
6309 CA    CA    . GLU GLU GLU B B 401 401 . 0.0974 0.0811 0.0828 0.0196  -0.0071 -
0.0155 1 .
6310 CB    CB    . GLU GLU GLU B B 401 401 . 0.0708 0.0552 0.0996 0.0175  0.0255  -
0.0066 1 .
6311 CG    CG    . GLU GLU GLU B B 401 401 . 0.0766 0.0895 0.0787 0.0043  0.0192  -
0.0058 1 .
6312 CD    CD    . GLU GLU GLU B B 401 401 . 0.0973 0.0930 0.0630 0.0110  0.0169  -
0.0168 1 .
6313 OE1   OE1   . GLU GLU GLU B B 401 401 . 0.0998 0.0772 0.1187 0.0120  -0.0100 -
0.0068 1 .
6314 OE2   OE2   . GLU GLU GLU B B 401 401 . 0.0967 0.0624 0.0891 0.0231  0.0157
0.0056  1 .
6315 C     C     . GLU GLU GLU B B 401 401 . 0.0952 0.0781 0.0757 0.0087  0.0067
0.0021  1 .
6316 O     O     . GLU GLU GLU B B 401 401 . 0.0868 0.0954 0.0630 -0.0001 -0.0149
0.0069  1 .
6317 N     N     . ARG ARG ARG B B 402 402 . 0.0745 0.0782 0.0717 -0.0012 0.0078  -
0.0045 1 .
6318 CA    CA    . ARG ARG ARG B B 402 402 . 0.0805 0.0658 0.0619 -0.0038 0.0028  -
0.0096 1 .
6319 CB    CB    . ARG ARG ARG B B 402 402 . 0.0682 0.0517 0.0605 0.0046  -0.0015 -
0.0117 1 .
6320 CG    CG    . ARG ARG ARG B B 402 402 . 0.0704 0.0503 0.0624 0.0279  -0.0085
0.0051  1 .
6321 CD    CD    . ARG ARG ARG B B 402 402 . 0.0582 0.0455 0.0554 0.0198  -0.0218 -
0.0245 1 .
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6322 NE    NE    . ARG ARG ARG B B 402 402 . 0.1177 0.0681 0.0554 0.0146  0.0146  -
0.0118 1 .
6323 CZ    CZ    . ARG ARG ARG B B 402 402 . 0.0973 0.0734 0.0990 0.0326  -0.0209 -
0.0083 1 .
6324 NH1   NH1   . ARG ARG ARG B B 402 402 . 0.0896 0.0814 0.0740 0.0214  -0.0016
0.0023  1 .
6325 NH2   NH2   . ARG ARG ARG B B 402 402 . 0.0502 0.0764 0.0630 0.0338  0.0015
0.0158  1 .
6326 C     C     . ARG ARG ARG B B 402 402 . 0.0743 0.0711 0.0678 0.0056  -0.0150 -
0.0113 1 .
6327 O     O     . ARG ARG ARG B B 402 402 . 0.1055 0.0705 0.0804 0.0067  -0.0139 -
0.0205 1 .
6328 N     N     . LEU LEU LEU B B 403 403 . 0.0872 0.0589 0.0734 0.0097  0.0134
0.0035  1 .
6329 CA    CA    . LEU LEU LEU B B 403 403 . 0.0788 0.0786 0.0894 0.0064  -0.0061
0.0024  1 .
6330 CB    CB    . LEU LEU LEU B B 403 403 . 0.0643 0.0895 0.0952 0.0321  -0.0091
0.0222  1 .
6331 CG    CG    . LEU LEU LEU B B 403 403 . 0.0876 0.1006 0.0757 -0.0026 0.0050
0.0016  1 .
6332 CD1   CD1   . LEU LEU LEU B B 403 403 . 0.1709 0.0794 0.0724 0.0286  0.0253  -
0.0144 1 .
6333 CD2   CD2   . LEU LEU LEU B B 403 403 . 0.1330 0.0856 0.1693 -0.0108 0.0239
0.0157  1 .
6334 C     C     . LEU LEU LEU B B 403 403 . 0.0718 0.0917 0.0952 0.0100  -0.0057 -
0.0075 1 .
6335 O     O     . LEU LEU LEU B B 403 403 . 0.0988 0.0756 0.1249 0.0240  -0.0082 -
0.0079 1 .
6336 N     N     . ALA ALA ALA B B 404 404 . 0.0698 0.0733 0.0781 0.0006  -0.0009
0.0037  1 .
6337 CA    CA    . ALA ALA ALA B B 404 404 . 0.0731 0.0903 0.0791 0.0011  0.0026  -
0.0013 1 .
6338 CB    CB    . ALA ALA ALA B B 404 404 . 0.0855 0.1020 0.0958 0.0013  0.0111  -
0.0004 1 .
6339 C     C     . ALA ALA ALA B B 404 404 . 0.1052 0.1108 0.1036 -0.0023 0.0069  -
0.0008 1 .
6340 O     O     . ALA ALA ALA B B 404 404 . 0.1320 0.1053 0.1095 0.0053  -0.0061 -
0.0077 1 .
6341 N     N     . LYS LYS LYS B B 405 405 . 0.1116 0.0832 0.0927 -0.0074 0.0085  -
0.0032 1 .
6342 CA    CA    . LYS LYS LYS B B 405 405 . 0.0971 0.0857 0.0854 0.0114  0.0047
0.0009  1 .
6343 CB    CB    . LYS LYS LYS B B 405 405 . 0.0996 0.0515 0.0919 0.0074  0.0000  -
0.0051 1 .
6344 CG    CG    . LYS LYS LYS B B 405 405 . 0.1278 0.1010 0.0920 0.0144  0.0069  -
0.0271 1 .
6345 CD    CD    . LYS LYS LYS B B 405 405 . 0.0999 0.0692 0.0820 0.0160  -0.0492 -
0.0297 1 .
6346 CE    CE    . LYS LYS LYS B B 405 405 . 0.0781 0.0643 0.0633 0.0242  -0.0293 -
0.0381 1 .
6347 NZ    NZ    . LYS LYS LYS B B 405 405 . 0.0975 0.0928 0.0480 0.0225  -0.0195
0.0012  1 .
6348 C     C     . LYS LYS LYS B B 405 405 . 0.1025 0.0884 0.0970 0.0026  -0.0035 -
0.0061 1 .
6349 O     O     . LYS LYS LYS B B 405 405 . 0.1077 0.0927 0.0817 -0.0010 0.0067  -
0.0024 1 .
6350 N     N     . TYR TYR TYR B B 406 406 . 0.0987 0.0656 0.0874 0.0194  0.0072  -
0.0067 1 .
6351 CA    CA    . TYR TYR TYR B B 406 406 . 0.1152 0.0850 0.0897 0.0063  0.0039
0.0066  1 .
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6352 CB    CB    . TYR TYR TYR B B 406 406 . 0.0919 0.0958 0.0919 -0.0125 0.0211
0.0147  1 .
6353 CG    CG    . TYR TYR TYR B B 406 406 . 0.1320 0.0920 0.0961 0.0096  -0.0043
0.0125  1 .
6354 CD1   CD1   . TYR TYR TYR B B 406 406 . 0.0945 0.0981 0.0955 -0.0067 -0.0034 -
0.0025 1 .
6355 CE1   CE1   . TYR TYR TYR B B 406 406 . 0.1353 0.0953 0.1375 -0.0049 0.0046  -
0.0030 1 .
6356 CZ    CZ    . TYR TYR TYR B B 406 406 . 0.0971 0.0783 0.0837 0.0043  0.0070
0.0006  1 .
6357 OH    OH    . TYR TYR TYR B B 406 406 . 0.1181 0.0909 0.0684 0.0198  0.0242
0.0044  1 .
6358 CE2   CE2   . TYR TYR TYR B B 406 406 . 0.0877 0.0927 0.0967 -0.0019 0.0133
0.0029  1 .
6359 CD2   CD2   . TYR TYR TYR B B 406 406 . 0.1139 0.0943 0.0927 -0.0055 0.0272  -
0.0144 1 .
6360 C     C     . TYR TYR TYR B B 406 406 . 0.1276 0.0962 0.1077 0.0111  -0.0089
0.0053  1 .
6361 O     O     . TYR TYR TYR B B 406 406 . 0.1447 0.0852 0.0504 0.0082  0.0044  -
0.0163 1 .
6362 N     N     . ASN ASN ASN B B 407 407 . 0.1124 0.0788 0.0752 0.0237  0.0075  -
0.0070 1 .
6363 CA    CA    . ASN ASN ASN B B 407 407 . 0.0786 0.0913 0.0604 0.0011  0.0079
0.0031  1 .
6364 CB    CB    . ASN ASN ASN B B 407 407 . 0.0959 0.0778 0.0694 -0.0025 -0.0152
0.0095  1 .
6365 CG    CG    . ASN ASN ASN B B 407 407 . 0.0669 0.0806 0.0625 0.0191  0.0025
0.0221  1 .
6366 OD1   OD1   . ASN ASN ASN B B 407 407 . 0.1376 0.0886 0.0995 0.0103  0.0246
0.0163  1 .
6367 ND2   ND2   . ASN ASN ASN B B 407 407 . 0.1383 0.0506 0.1019 -0.0010 0.0095  -
0.0057 1 .
6368 C     C     . ASN ASN ASN B B 407 407 . 0.0976 0.1064 0.0772 0.0015  0.0056  -
0.0093 1 .
6369 O     O     . ASN ASN ASN B B 407 407 . 0.0972 0.0895 0.1222 0.0079  -0.0048 -
0.0079 1 .
6370 N     N     . GLN GLN GLN B B 408 408 . 0.0970 0.1050 0.0751 0.0060  -0.0016
0.0150  1 .
6371 CA    CA    . GLN GLN GLN B B 408 408 . 0.1105 0.1168 0.1020 0.0100  -0.0043 -
0.0084 1 .
6372 CB    CB    . GLN GLN GLN B B 408 408 . 0.1202 0.1287 0.1168 0.0274  0.0060
0.0037  1 .
6373 CG    CG    . GLN GLN GLN B B 408 408 . 0.1262 0.1660 0.1290 -0.0201 -0.0211
0.0188  1 .
6374 CD    CD    . GLN GLN GLN B B 408 408 . 0.1463 0.1319 0.1798 0.0065  -0.0077
0.0058  1 .
6375 OE1   OE1   . GLN GLN GLN B B 408 408 . 0.1917 0.1648 0.1927 0.0034  0.0044
0.0213  1 .
6376 NE2   NE2   . GLN GLN GLN B B 408 408 . 0.1602 0.1715 0.1708 -0.0351 -0.0139
0.0147  1 .
6377 C     C     . GLN GLN GLN B B 408 408 . 0.1026 0.0980 0.0985 0.0084  0.0050
0.0004  1 .
6378 O     O     . GLN GLN GLN B B 408 408 . 0.1212 0.1112 0.0880 0.0120  -0.0142 -
0.0206 1 .
6379 N     N     . LEU LEU LEU B B 409 409 . 0.1411 0.1058 0.1058 0.0140  -0.0002
0.0045  1 .
6380 CA    CA    . LEU LEU LEU B B 409 409 . 0.1147 0.0702 0.1057 0.0163  0.0058  -
0.0054 1 .
6381 CB    CB    . LEU LEU LEU B B 409 409 . 0.1099 0.0877 0.1106 0.0079  -0.0113 -
0.0021 1 .
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6382 CG    CG    . LEU LEU LEU B B 409 409 . 0.1095 0.1136 0.1822 0.0007  0.0041
0.0086  1 .
6383 CD1   CD1   . LEU LEU LEU B B 409 409 . 0.1366 0.1683 0.1281 -0.0214 0.0086
0.0424  1 .
6384 CD2   CD2   . LEU LEU LEU B B 409 409 . 0.1494 0.0883 0.0919 0.0292  -0.0171 -
0.0002 1 .
6385 C     C     . LEU LEU LEU B B 409 409 . 0.1309 0.0931 0.1325 0.0087  -0.0128 -
0.0064 1 .
6386 O     O     . LEU LEU LEU B B 409 409 . 0.1230 0.0834 0.1347 -0.0007 -0.0019 -
0.0077 1 .
6387 N     N     . MET MET MET B B 410 410 . 0.1070 0.0713 0.0895 0.0171  -0.0216 -
0.0028 1 .
6388 CA    CA    . MET MET MET B B 410 410 . 0.1184 0.0849 0.1011 0.0128  -0.0220
0.0044  1 .
6389 CB    CB    . MET MET MET B B 410 410 . 0.1172 0.0966 0.1319 0.0403  -0.0199
0.0068  1 .
6390 CG    CG    . MET MET MET B B 410 410 . 0.1359 0.1590 0.1308 0.0163  -0.0389
0.0012  1 .
6391 SD    SD    . MET MET MET B B 410 410 . 0.2066 0.1733 0.1514 0.0115  -0.0187
0.0132  1 .
6392 CE    CE    . MET MET MET B B 410 410 . 0.1539 0.1857 0.1131 0.0129  0.0075  -
0.0565 1 .
6393 C     C     . MET MET MET B B 410 410 . 0.1252 0.1070 0.0967 0.0077  -0.0121
0.0092  1 .
6394 O     O     . MET MET MET B B 410 410 . 0.1770 0.1114 0.1099 0.0099  0.0000  -
0.0018 1 .
6395 N     N     . ARG ARG ARG B B 411 411 . 0.1346 0.1185 0.1144 0.0113  -0.0042
0.0160  1 .
6396 CA    CA    . ARG ARG ARG B B 411 411 . 0.1141 0.1232 0.0992 -0.0037 -0.0162
0.0176  1 .
6397 CB    CB    . ARG ARG ARG B B 411 411 . 0.1217 0.1202 0.0961 0.0048  -0.0180
0.0213  1 .
6398 CG    CG    . ARG ARG ARG B B 411 411 . 0.1205 0.1151 0.0939 0.0025  -0.0049 -
0.0032 1 .
6399 CD    CD    . ARG ARG ARG B B 411 411 . 0.1136 0.1934 0.0687 0.0162  0.0015
0.0145  1 .
6400 NE    NE    . ARG ARG ARG B B 411 411 . 0.1740 0.1505 0.0807 -0.0234 0.0233  -
0.0113 1 .
6401 CZ    CZ    . ARG ARG ARG B B 411 411 . 0.1868 0.1229 0.1139 0.0105  -0.0038
0.0069  1 .
6402 NH1   NH1   . ARG ARG ARG B B 411 411 . 0.1809 0.1064 0.1065 0.0163  -0.0545
0.0277  1 .
6403 NH2   NH2   . ARG ARG ARG B B 411 411 . 0.2043 0.1486 0.1763 0.0337  0.0075
0.0146  1 .
6404 C     C     . ARG ARG ARG B B 411 411 . 0.1546 0.1255 0.1100 -0.0139 -0.0201
0.0153  1 .
6405 O     O     . ARG ARG ARG B B 411 411 . 0.1626 0.1305 0.1235 -0.0105 -0.0043
0.0452  1 .
6406 N     N     . ILE ILE ILE B B 412 412 . 0.1252 0.1037 0.1124 0.0003  -0.0357
0.0186  1 .
6407 CA    CA    . ILE ILE ILE B B 412 412 . 0.1419 0.1074 0.1180 -0.0058 -0.0233
0.0197  1 .
6408 CB    CB    . ILE ILE ILE B B 412 412 . 0.1416 0.1125 0.1208 0.0033  -0.0315
0.0142  1 .
6409 CG1   CG1   . ILE ILE ILE B B 412 412 . 0.1214 0.1023 0.0962 -0.0016 -0.0241
0.0187  1 .
6410 CD1   CD1   . ILE ILE ILE B B 412 412 . 0.1849 0.0622 0.1537 0.0121  -0.0599
0.0160  1 .
6411 CG2   CG2   . ILE ILE ILE B B 412 412 . 0.1535 0.1444 0.1184 -0.0272 -0.0315
0.0320  1 .
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6412 C     C     . ILE ILE ILE B B 412 412 . 0.1371 0.1164 0.1116 -0.0050 -0.0112
0.0084  1 .
6413 O     O     . ILE ILE ILE B B 412 412 . 0.1836 0.1605 0.1503 0.0147  -0.0338
0.0153  1 .
6414 N     N     . GLU GLU GLU B B 413 413 . 0.1645 0.1205 0.1039 0.0125  0.0019
0.0091  1 .
6415 CA    CA    . GLU GLU GLU B B 413 413 . 0.1630 0.0992 0.1176 -0.0057 0.0013  -
0.0020 1 .
6416 CB    CB    . GLU GLU GLU B B 413 413 . 0.1625 0.1114 0.1208 0.0042  0.0165  -
0.0236 1 .
6417 CG    CG    . GLU GLU GLU B B 413 413 . 0.2027 0.1440 0.2041 -0.0053 0.0456
0.0024  1 .
6418 CD    CD    . GLU GLU GLU B B 413 413 . 0.1897 0.1451 0.2153 -0.0226 0.0040
0.0035  1 .
6419 OE1   OE1   . GLU GLU GLU B B 413 413 . 0.2461 0.1230 0.2414 -0.0484 -0.0117
0.0425  1 .
6420 OE2   OE2   . GLU GLU GLU B B 413 413 . 0.2848 0.1727 0.1895 0.0140  0.0005  -
0.0028 1 .
6421 C     C     . GLU GLU GLU B B 413 413 . 0.1840 0.1041 0.1112 -0.0134 -0.0179
0.0007  1 .
6422 O     O     . GLU GLU GLU B B 413 413 . 0.1871 0.1015 0.1739 -0.0148 -0.0006
0.0044  1 .
6423 N     N     . GLU GLU GLU B B 414 414 . 0.1938 0.1005 0.1137 -0.0261 -0.0180
0.0182  1 .
6424 CA    CA    . GLU GLU GLU B B 414 414 . 0.2083 0.1421 0.1301 -0.0230 -0.0190
0.0125  1 .
6425 CB    CB    . GLU GLU GLU B B 414 414 . 0.2494 0.1568 0.1359 -0.0210 -0.0204
0.0239  1 .
6426 CG    CG    . GLU GLU GLU B B 414 414 . 0.2974 0.2126 0.1854 0.0012  -0.0248
0.0350  1 .
6427 CD    CD    . GLU GLU GLU B B 414 414 . 0.2689 0.2507 0.1708 0.0146  -0.0185
0.0626  1 .
6428 OE1   OE1   . GLU GLU GLU B B 414 414 . 0.3263 0.2879 0.1652 0.0131  -0.0339 -
0.0230 1 .
6429 OE2   OE2   . GLU GLU GLU B B 414 414 . 0.3019 0.2618 0.2236 0.0302  0.0100
0.0752  1 .
6430 C     C     . GLU GLU GLU B B 414 414 . 0.2182 0.1672 0.1622 -0.0201 -0.0290 -
0.0053 1 .
6431 O     O     . GLU GLU GLU B B 414 414 . 0.2626 0.1913 0.2196 -0.0325 -0.0329 -
0.0067 1 .
6432 N     N     . GLU GLU GLU B B 415 415 . 0.2024 0.1746 0.1548 -0.0205 -0.0334
0.0013  1 .
6433 CA    CA    . GLU GLU GLU B B 415 415 . 0.2207 0.2283 0.1631 -0.0293 -0.0172 -
0.0118 1 .
6434 CB    CB    . GLU GLU GLU B B 415 415 . 0.2329 0.2322 0.1764 -0.0130 -0.0172
0.0117  1 .
6435 CG    CG    . GLU GLU GLU B B 415 415 . 0.2342 0.3538 0.1248 -0.0811 0.0282  -
0.0465 1 .
6436 CD    CD    . GLU GLU GLU B B 415 415 . 0.3337 0.3288 0.3221 -0.0408 0.0165  -
0.0256 1 .
6437 OE1   OE1   . GLU GLU GLU B B 415 415 . 0.3401 0.4285 0.5391 -0.0849 0.0248
0.0377  1 .
6438 OE2   OE2   . GLU GLU GLU B B 415 415 . 0.5379 0.4899 0.3235 -0.0445 -0.0242
0.0084  1 .
6439 C     C     . GLU GLU GLU B B 415 415 . 0.2382 0.2372 0.1948 -0.0286 -0.0213 -
0.0065 1 .
6440 O     O     . GLU GLU GLU B B 415 415 . 0.2495 0.2721 0.1914 -0.0502 -0.0324 -
0.0079 1 .
6441 N     N     . LEU LEU LEU B B 416 416 . 0.2659 0.2277 0.2106 -0.0222 -0.0112 -
0.0165 1 .
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6442 CA    CA    . LEU LEU LEU B B 416 416 . 0.2647 0.2432 0.2329 -0.0188 -0.0331 -
0.0165 1 .
6443 CB    CB    . LEU LEU LEU B B 416 416 . 0.2387 0.2263 0.2389 -0.0049 -0.0332 -
0.0055 1 .
6444 CG    CG    . LEU LEU LEU B B 416 416 . 0.2271 0.2432 0.2140 -0.0258 -0.0402 -
0.0330 1 .
6445 CD1   CD1   . LEU LEU LEU B B 416 416 . 0.2794 0.2253 0.1913 0.0022  -0.0287
0.0209  1 .
6446 CD2   CD2   . LEU LEU LEU B B 416 416 . 0.2847 0.3239 0.3211 0.0405  -0.0190 -
0.0486 1 .
6447 C     C     . LEU LEU LEU B B 416 416 . 0.2955 0.2525 0.2553 -0.0128 -0.0297 -
0.0176 1 .
6448 O     O     . LEU LEU LEU B B 416 416 . 0.2841 0.2586 0.2544 -0.0412 -0.0492 -
0.0209 1 .
6449 N     N     . GLY GLY GLY B B 417 417 . 0.3162 0.2726 0.2602 -0.0155 -0.0188 -
0.0304 1 .
6450 CA    CA    . GLY GLY GLY B B 417 417 . 0.3530 0.2881 0.2725 -0.0139 0.0028  -
0.0193 1 .
6451 C     C     . GLY GLY GLY B B 417 417 . 0.3746 0.3229 0.3024 -0.0262 0.0104  -
0.0216 1 .
6452 O     O     . GLY GLY GLY B B 417 417 . 0.3690 0.2820 0.2672 -0.0192 0.0250  -
0.0117 1 .
6453 N     N     . ASP ASP ASP B B 418 418 . 0.3927 0.3361 0.3247 -0.0462 0.0040  -
0.0249 1 .
6454 CA    CA    . ASP ASP ASP B B 418 418 . 0.4130 0.3655 0.3470 -0.0476 -0.0060 -
0.0182 1 .
6455 CB    CB    . ASP ASP ASP B B 418 418 . 0.4269 0.3775 0.3539 -0.0510 -0.0066 -
0.0247 1 .
6456 C     C     . ASP ASP ASP B B 418 418 . 0.4084 0.3777 0.3607 -0.0518 -0.0032 -
0.0151 1 .
6457 O     O     . ASP ASP ASP B B 418 418 . 0.4460 0.4068 0.3583 -0.0784 0.0013  -
0.0115 1 .
6458 N     N     . GLU GLU GLU B B 419 419 . 0.3847 0.3630 0.3441 -0.0435 -0.0246 -
0.0156 1 .
6459 CA    CA    . GLU GLU GLU B B 419 419 . 0.3762 0.3635 0.3513 -0.0330 -0.0174
0.0033  1 .
6460 CB    CB    . GLU GLU GLU B B 419 419 . 0.3736 0.3821 0.3477 -0.0303 -0.0227
0.0133  1 .
6461 C     C     . GLU GLU GLU B B 419 419 . 0.3689 0.3501 0.3556 -0.0187 -0.0141
0.0140  1 .
6462 O     O     . GLU GLU GLU B B 419 419 . 0.3889 0.3644 0.3729 0.0008  -0.0045
0.0307  1 .
6463 N     N     . ALA ALA ALA B B 420 420 . 0.3438 0.3231 0.3244 -0.0259 -0.0110
0.0085  1 .
6464 CA    CA    . ALA ALA ALA B B 420 420 . 0.3218 0.2766 0.2809 -0.0165 -0.0087
0.0036  1 .
6465 CB    CB    . ALA ALA ALA B B 420 420 . 0.3020 0.2767 0.2803 -0.0119 -0.0096
0.0194  1 .
6466 C     C     . ALA ALA ALA B B 420 420 . 0.3188 0.2666 0.2832 -0.0052 -0.0035
0.0024  1 .
6467 O     O     . ALA ALA ALA B B 420 420 . 0.3378 0.2392 0.2499 -0.0085 -0.0066
0.0006  1 .
6468 N     N     . ARG ARG ARG B B 421 421 . 0.3216 0.2493 0.2575 -0.0107 -0.0030 -
0.0147 1 .
6469 CA    CA    . ARG ARG ARG B B 421 421 . 0.3097 0.2542 0.2873 -0.0231 -0.0115 -
0.0161 1 .
6470 CB    CB    . ARG ARG ARG B B 421 421 . 0.3310 0.2460 0.2992 -0.0315 -0.0238
0.0027  1 .
6471 CG    CG    . ARG ARG ARG B B 421 421 . 0.3549 0.3242 0.3539 -0.0503 -0.0201 -
0.0426 1 .
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6472 C     C     . ARG ARG ARG B B 421 421 . 0.2779 0.2334 0.2562 -0.0107 -0.0073 -
0.0075 1 .
6473 O     O     . ARG ARG ARG B B 421 421 . 0.2888 0.2365 0.2536 -0.0172 -0.0017 -
0.0322 1 .
6474 N     N     . PHE PHE PHE B B 422 422 . 0.2637 0.1954 0.2153 0.0018  -0.0127
0.0122  1 .
6475 CA    CA    . PHE PHE PHE B B 422 422 . 0.2469 0.1807 0.1894 -0.0006 -0.0073
0.0013  1 .
6476 CB    CB    . PHE PHE PHE B B 422 422 . 0.2358 0.1833 0.1584 0.0099  -0.0122 -
0.0081 1 .
6477 CG    CG    . PHE PHE PHE B B 422 422 . 0.2265 0.1707 0.1240 0.0182  0.0060
0.0149  1 .
6478 CD1   CD1   . PHE PHE PHE B B 422 422 . 0.2432 0.1441 0.1123 -0.0126 -0.0067
0.0169  1 .
6479 CE1   CE1   . PHE PHE PHE B B 422 422 . 0.1530 0.1298 0.1087 -0.0105 0.0071
0.0153  1 .
6480 CZ    CZ    . PHE PHE PHE B B 422 422 . 0.1889 0.1721 0.1237 0.0458  -0.0181
0.0318  1 .
6481 CE2   CE2   . PHE PHE PHE B B 422 422 . 0.2441 0.1874 0.1403 0.0158  -0.0360 -
0.0057 1 .
6482 CD2   CD2   . PHE PHE PHE B B 422 422 . 0.1800 0.1717 0.1575 0.0293  0.0208
0.0095  1 .
6483 C     C     . PHE PHE PHE B B 422 422 . 0.2744 0.1639 0.1716 0.0000  -0.0013 -
0.0108 1 .
6484 O     O     . PHE PHE PHE B B 422 422 . 0.3276 0.1541 0.1735 -0.0137 -0.0077 -
0.0093 1 .
6485 N     N     . ALA ALA ALA B B 423 423 . 0.2626 0.1374 0.1681 -0.0096 -0.0070 -
0.0033 1 .
6486 CA    CA    . ALA ALA ALA B B 423 423 . 0.2731 0.1330 0.1597 -0.0099 -0.0001 -
0.0141 1 .
6487 CB    CB    . ALA ALA ALA B B 423 423 . 0.2578 0.1239 0.1871 -0.0018 -0.0085
0.0010  1 .
6488 C     C     . ALA ALA ALA B B 423 423 . 0.2566 0.1485 0.1736 -0.0036 -0.0068 -
0.0007 1 .
6489 O     O     . ALA ALA ALA B B 423 423 . 0.2822 0.1484 0.1437 -0.0033 0.0109  -
0.0142 1 .
6490 N     N     . GLY GLY GLY B B 424 424 . 0.2501 0.1364 0.1688 -0.0051 -0.0011 -
0.0074 1 .
6491 CA    CA    . GLY GLY GLY B B 424 424 . 0.2779 0.1678 0.1835 0.0008  0.0157
0.0082  1 .
6492 C     C     . GLY GLY GLY B B 424 424 . 0.2923 0.1961 0.1905 -0.0068 0.0203  -
0.0024 1 .
6493 O     O     . GLY GLY GLY B B 424 424 . 0.2868 0.1812 0.1468 -0.0067 0.0118  -
0.0296 1 .
6494 N     N     . HIS HIS HIS B B 425 425 . 0.2915 0.2027 0.1630 0.0024  0.0402  -
0.0148 1 .
6495 CA    CA    . HIS HIS HIS B B 425 425 . 0.3176 0.2159 0.1869 0.0030  0.0350  -
0.0132 1 .
6496 CB    CB    . HIS HIS HIS B B 425 425 . 0.3062 0.2125 0.1720 0.0203  0.0481  -
0.0056 1 .
6497 CG    CG    . HIS HIS HIS B B 425 425 . 0.3237 0.2984 0.2008 0.0243  0.0476  -
0.0200 1 .
6498 ND1   ND1   . HIS HIS HIS B B 425 425 . 0.3637 0.3432 0.2191 0.0275  0.0314
0.0033  1 .
6499 CE1   CE1   . HIS HIS HIS B B 425 425 . 0.3883 0.3621 0.2209 0.0374  0.0516  -
0.0062 1 .
6500 NE2   NE2   . HIS HIS HIS B B 425 425 . 0.4172 0.3867 0.1999 0.0210  0.0286  -
0.0022 1 .
6501 CD2   CD2   . HIS HIS HIS B B 425 425 . 0.3219 0.3013 0.2085 0.0387  0.0537  -
0.0367 1 .
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6502 C     C     . HIS HIS HIS B B 425 425 . 0.3193 0.2204 0.1987 -0.0009 0.0359  -
0.0286 1 .
6503 O     O     . HIS HIS HIS B B 425 425 . 0.3699 0.2252 0.2185 -0.0148 0.0475  -
0.0092 1 .
6504 N     N     . ASN ASN ASN B B 426 426 . 0.2880 0.2263 0.1844 -0.0024 0.0276  -
0.0304 1 .
6505 CA    CA    . ASN ASN ASN B B 426 426 . 0.3033 0.2480 0.2082 -0.0028 0.0055  -
0.0246 1 .
6506 CB    CB    . ASN ASN ASN B B 426 426 . 0.3193 0.2579 0.2242 -0.0183 0.0066  -
0.0381 1 .
6507 CG    CG    . ASN ASN ASN B B 426 426 . 0.4455 0.3205 0.2874 -0.0186 -0.0068 -
0.0672 1 .
6508 OD1   OD1   . ASN ASN ASN B B 426 426 . 0.5682 0.4791 0.3124 -0.0681 -0.0027 -
0.0905 1 .
6509 ND2   ND2   . ASN ASN ASN B B 426 426 . 0.5178 0.3123 0.3405 0.0304  -0.0314 -
0.1125 1 .
6510 C     C     . ASN ASN ASN B B 426 426 . 0.2535 0.1937 0.1948 -0.0055 0.0047  -
0.0082 1 .
6511 O     O     . ASN ASN ASN B B 426 426 . 0.2576 0.1936 0.1840 0.0002  -0.0194
0.0030  1 .
6512 N     N     . PHE PHE PHE B B 427 427 . 0.2301 0.1648 0.1596 0.0055  -0.0080
0.0167  1 .
6513 CA    CA    . PHE PHE PHE B B 427 427 . 0.1949 0.1578 0.1722 0.0235  0.0091  -
0.0004 1 .
6514 CB    CB    . PHE PHE PHE B B 427 427 . 0.1708 0.1285 0.1709 0.0003  0.0023  -
0.0065 1 .
6515 CG    CG    . PHE PHE PHE B B 427 427 . 0.1958 0.1787 0.1855 0.0023  0.0100  -
0.0108 1 .
6516 CD1   CD1   . PHE PHE PHE B B 427 427 . 0.2258 0.2130 0.2082 0.0055  0.0158
0.0168  1 .
6517 CE1   CE1   . PHE PHE PHE B B 427 427 . 0.1900 0.2224 0.2305 0.0144  0.0343  -
0.0098 1 .
6518 CZ    CZ    . PHE PHE PHE B B 427 427 . 0.2138 0.2014 0.1775 0.0332  -0.0050
0.0084  1 .
6519 CE2   CE2   . PHE PHE PHE B B 427 427 . 0.2065 0.1838 0.1577 -0.0104 -0.0018 -
0.0092 1 .
6520 CD2   CD2   . PHE PHE PHE B B 427 427 . 0.1955 0.1489 0.1549 -0.0318 -0.0374
0.0145  1 .
6521 C     C     . PHE PHE PHE B B 427 427 . 0.1881 0.1396 0.1690 0.0089  -0.0025
0.0073  1 .
6522 O     O     . PHE PHE PHE B B 427 427 . 0.1834 0.1443 0.1702 0.0080  0.0038
0.0084  1 .
6523 N     N     . ARG ARG ARG B B 428 428 . 0.1888 0.1696 0.1541 0.0068  -0.0047 -
0.0035 1 .
6524 CA    CA    . ARG ARG ARG B B 428 428 . 0.1995 0.1518 0.1646 -0.0049 -0.0109 -
0.0054 1 .
6525 CB    CB    . ARG ARG ARG B B 428 428 . 0.1675 0.1698 0.1452 -0.0011 0.0025  -
0.0024 1 .
6526 CG    CG    . ARG ARG ARG B B 428 428 . 0.1931 0.2084 0.1080 -0.0394 -0.0038
0.0367  1 .
6527 CD    CD    . ARG ARG ARG B B 428 428 . 0.2504 0.2025 0.1565 0.0043  0.0326
0.0123  1 .
6528 NE    NE    . ARG ARG ARG B B 428 428 . 0.2498 0.1760 0.1436 -0.0050 -0.0020
0.0003  1 .
6529 CZ    CZ    . ARG ARG ARG B B 428 428 . 0.1749 0.1251 0.1432 -0.0052 -0.0051 -
0.0129 1 .
6530 NH1   NH1   . ARG ARG ARG B B 428 428 . 0.1602 0.1477 0.0757 -0.0075 -0.0127 -
0.0423 1 .
6531 NH2   NH2   . ARG ARG ARG B B 428 428 . 0.2391 0.1629 0.1567 0.0253  -0.0524
0.0071  1 .
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6532 C     C     . ARG ARG ARG B B 428 428 . 0.2173 0.1829 0.2081 0.0030  0.0045  -
0.0082 1 .
6533 O     O     . ARG ARG ARG B B 428 428 . 0.2581 0.1846 0.2860 0.0122  -0.0045 -
0.0076 1 .
6534 N     N     . ASN ASN ASN B B 429 429 . 0.2594 0.2012 0.2040 -0.0202 -0.0087
0.0164  1 .
6535 CA    CA    . ASN ASN ASN B B 429 429 . 0.2874 0.2368 0.2194 -0.0301 -0.0008
0.0117  1 .
6536 CB    CB    . ASN ASN ASN B B 429 429 . 0.3433 0.2824 0.2548 -0.0207 -0.0027
0.0145  1 .
6537 CG    CG    . ASN ASN ASN B B 429 429 . 0.3825 0.3017 0.2896 -0.0210 0.0080
0.0111  1 .
6538 OD1   OD1   . ASN ASN ASN B B 429 429 . 0.4920 0.3458 0.3138 -0.0770 -0.0091
0.0331  1 .
6539 ND2   ND2   . ASN ASN ASN B B 429 429 . 0.3814 0.3234 0.2128 -0.0642 0.0437
0.0261  1 .
6540 C     C     . ASN ASN ASN B B 429 429 . 0.3121 0.2450 0.2346 -0.0293 -0.0052 -
0.0060 1 .
6541 O     O     . ASN ASN ASN B B 429 429 . 0.3587 0.2638 0.2202 -0.0390 -0.0073 -
0.0037 1 .
6542 N     N     . PRO PRO PRO B B 430 430 . 0.3169 0.2507 0.2141 -0.0333 -0.0082 -
0.0097 1 .
6543 CA    CA    . PRO PRO PRO B B 430 430 . 0.3401 0.2801 0.2466 -0.0355 -0.0004
0.0029  1 .
6544 CB    CB    . PRO PRO PRO B B 430 430 . 0.3531 0.2756 0.2414 -0.0237 0.0079
0.0015  1 .
6545 CG    CG    . PRO PRO PRO B B 430 430 . 0.3408 0.2617 0.1937 -0.0388 0.0005  -
0.0047 1 .
6546 CD    CD    . PRO PRO PRO B B 430 430 . 0.3202 0.2281 0.1996 -0.0225 0.0031  -
0.0160 1 .
6547 C     C     . PRO PRO PRO B B 430 430 . 0.3710 0.3273 0.3091 -0.0306 -0.0050
0.0003  1 .
6548 O     O     . PRO PRO PRO B B 430 430 . 0.3874 0.3285 0.3147 -0.0555 -0.0269 -
0.0075 1 .
6549 N     N     . SER SER SER B B 431 431 . 0.3953 0.3677 0.3447 -0.0204 -0.0014
0.0088  1 .
6550 CA    CA    . SER SER SER B B 431 431 . 0.4332 0.4266 0.4131 -0.0146 -0.0039 -
0.0067 1 .
6551 CB    CB    . SER SER SER B B 431 431 . 0.4383 0.4358 0.4126 -0.0146 -0.0060
0.0021  1 .
6552 OG    OG    . SER SER SER B B 431 431 . 0.4867 0.4999 0.4397 -0.0137 -0.0090
0.0090  1 .
6553 C     C     . SER SER SER B B 431 431 . 0.4605 0.4650 0.4434 -0.0098 -0.0028 -
0.0116 1 .
6554 O     O     . SER SER SER B B 431 431 . 0.4701 0.4718 0.4526 -0.0163 -0.0069 -
0.0216 1 .
6555 N     N     . VAL VAL VAL B B 432 432 . 0.4735 0.4939 0.4669 -0.0045 0.0068  -
0.0105 1 .
6556 CA    CA    . VAL VAL VAL B B 432 432 . 0.5019 0.5170 0.4751 -0.0077 0.0014  -
0.0085 1 .
6557 CB    CB    . VAL VAL VAL B B 432 432 . 0.5070 0.5290 0.4910 -0.0078 -0.0003 -
0.0062 1 .
6558 CG1   CG1   . VAL VAL VAL B B 432 432 . 0.5450 0.5284 0.4755 -0.0089 -0.0009 -
0.0086 1 .
6559 CG2   CG2   . VAL VAL VAL B B 432 432 . 0.5091 0.5397 0.4834 -0.0053 -0.0048 -
0.0032 1 .
6560 C     C     . VAL VAL VAL B B 432 432 . 0.5082 0.5309 0.4926 -0.0109 0.0007  -
0.0029 1 .
6561 O     O     . VAL VAL VAL B B 432 432 . 0.5272 0.5540 0.4840 -0.0107 -0.0131 -
0.0166 1 .
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6562 MG+2  MG+2  . MG2 MG2 MG2 B B 599 599 . 0.1405 0.1128 0.1064 0.0264  0.0065  -
0.0096 1 .
6563 MG+2  MG+2  . MG2 MG2 MG2 B B 600 600 . 0.1424 0.1038 0.1077 0.0070  -0.0012 -
0.0128 1 .
6564 O3P   O3P   . PEP PEP PEP B B 601 601 . 0.1358 0.0887 0.0989 0.0151  -0.0069
0.0126  1 .
6565 P     P     . PEP PEP PEP B B 601 601 . 0.1053 0.1024 0.1041 0.0281  0.0017
0.0130  1 .
6566 O1P   O1P   . PEP PEP PEP B B 601 601 . 0.1142 0.0773 0.0989 -0.0049 0.0134  -
0.0244 1 .
6567 O2P   O2P   . PEP PEP PEP B B 601 601 . 0.1164 0.1222 0.1379 0.0047  -0.0137 -
0.0230 1 .
6568 O2    O2    . PEP PEP PEP B B 601 601 . 0.1259 0.1292 0.1205 0.0607  -0.0227 -
0.0026 1 .
6569 C2    C2    . PEP PEP PEP B B 601 601 . 0.1406 0.1256 0.1101 0.0036  -0.0251
0.0044  1 .
6570 C3    C3    . PEP PEP PEP B B 601 601 . 0.3094 0.1767 0.1139 -0.0081 0.0055
0.0278  1 .
6571 C1    C1    . PEP PEP PEP B B 601 601 . 0.1349 0.1185 0.1214 -0.0027 -0.0112 -
0.0081 1 .
6572 O1    O1    . PEP PEP PEP B B 601 601 . 0.1516 0.0872 0.0925 0.0237  -0.0232 -
0.0219 1 .
6573 "O2'" "O2'" . PEP PEP PEP B B 601 601 . 0.1365 0.0993 0.1040 0.0373  0.0178
0.0128  1 .
6574 O     O     . HOH HOH HOH B B 800 800 . 0.1109 0.1132 0.0996 0.0080  -0.0053 -
0.0100 1 .
6575 O     O     . HOH HOH HOH B B 801 801 . 0.1181 0.0802 0.0924 -0.0077 0.0050  -
0.0036 1 .
6576 O     O     . HOH HOH HOH B B 802 802 . 0.1385 0.0987 0.0797 0.0103  0.0158
0.0017  1 .
6577 CA    CA    . GLY GLY GLY B B 155 155 . 0.0818 0.1770 0.0600 0.0924  -0.0365 -
0.0614 1 .
6578 C     C     . GLY GLY GLY B B 155 155 . 0.1298 0.2009 0.1329 0.0685  -0.0297 -
0.0590 1 .
6579 O     O     . GLY GLY GLY B B 155 155 . 0.1665 0.2091 0.1422 0.0889  -0.0443 -
0.0826 1 .
6580 N     N     . SER SER SER B B 156 156 . 0.1553 0.1860 0.1204 0.0820  -0.0248 -
0.0328 1 .
6581 CA    CA    . SER SER SER B B 156 156 . 0.1842 0.1935 0.1631 0.0515  -0.0106 -
0.0248 1 .
6582 CB    CB    . SER SER SER B B 156 156 . 0.1764 0.1594 0.1259 0.1032  -0.0055 -
0.0254 1 .
6583 OG    OG    . SER SER SER B B 156 156 . 0.2534 0.2475 0.2621 0.0714  0.0382
0.0026  1 .
6584 C     C     . SER SER SER B B 156 156 . 0.2071 0.2200 0.1819 0.0404  -0.0125 -
0.0208 1 .
6585 O     O     . SER SER SER B B 156 156 . 0.2518 0.2353 0.1889 0.0271  -0.0169 -
0.0449 1 .
6586 N     N     . HIS HIS HIS B B 157 157 . 0.1923 0.2124 0.1859 0.0370  0.0081  -
0.0078 1 .
6587 CA    CA    . HIS HIS HIS B B 157 157 . 0.2359 0.2619 0.2177 0.0376  -0.0053
0.0021  1 .
6588 CB    CB    . HIS HIS HIS B B 157 157 . 0.2353 0.2242 0.2048 0.0198  0.0097
0.0251  1 .
6589 CG    CG    . HIS HIS HIS B B 157 157 . 0.2259 0.2633 0.2309 0.0300  -0.0168
0.0063  1 .
6590 ND1   ND1   . HIS HIS HIS B B 157 157 . 0.2667 0.2522 0.2093 0.0281  -0.0079
0.0199  1 .
6591 CE1   CE1   . HIS HIS HIS B B 157 157 . 0.2318 0.2634 0.2440 0.0165  -0.0188
0.0218  1 .
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6592 NE2   NE2   . HIS HIS HIS B B 157 157 . 0.2879 0.2690 0.2591 0.0027  -0.0035 -
0.0238 1 .
6593 CD2   CD2   . HIS HIS HIS B B 157 157 . 0.2358 0.2660 0.2320 0.0114  -0.0388 -
0.0194 1 .
6594 C     C     . HIS HIS HIS B B 157 157 . 0.2630 0.2854 0.2254 0.0488  -0.0039
0.0030  1 .
6595 O     O     . HIS HIS HIS B B 157 157 . 0.3028 0.3023 0.2389 0.0530  -0.0014
0.0286  1 .
6596 N     N     . ALA ALA ALA B B 158 158 . 0.2715 0.2924 0.2172 0.0534  -0.0057 -
0.0056 1 .
6597 CA    CA    . ALA ALA ALA B B 158 158 . 0.2775 0.2760 0.2063 0.0580  0.0059  -
0.0249 1 .
6598 CB    CB    . ALA ALA ALA B B 158 158 . 0.2732 0.2715 0.1789 0.0585  0.0242  -
0.0132 1 .
6599 C     C     . ALA ALA ALA B B 158 158 . 0.2582 0.2770 0.1945 0.0610  0.0068  -
0.0191 1 .
6600 O     O     . ALA ALA ALA B B 158 158 . 0.2579 0.2977 0.1910 0.0506  -0.0254 -
0.0386 1 .
6601 O     O     . HOH HOH HOH S . 1   1   . 0.0865 0.0967 0.0995 -0.0007 0.0010  -
0.0069 1 .
6602 O     O     . HOH HOH HOH S . 2   2   . 0.0656 0.0926 0.1044 -0.0251 -0.0121 -
0.0179 1 .
6603 O     O     . HOH HOH HOH S . 3   3   . 0.0890 0.0943 0.1339 0.0109  0.0000
0.0121  1 .
6604 O     O     . HOH HOH HOH S . 4   4   . 0.1320 0.0941 0.1214 0.0134  0.0101
0.0009  1 .
6605 O     O     . HOH HOH HOH S . 5   5   . 0.0721 0.1105 0.1071 0.0389  -0.0155 -
0.0097 1 .
6606 O     O     . HOH HOH HOH S . 6   6   . 0.1119 0.1121 0.1395 0.0142  0.0026  -
0.0303 1 .
6607 O     O     . HOH HOH HOH S . 7   7   . 0.1415 0.1004 0.1289 0.0312  -0.0026
0.0001  1 .
6608 O     O     . HOH HOH HOH S . 8   8   . 0.1239 0.1014 0.1159 -0.0072 0.0038
0.0036  1 .
6609 O     O     . HOH HOH HOH S . 9   9   . 0.1003 0.0713 0.0915 0.0011  -0.0082 -
0.0141 1 .
6610 O     O     . HOH HOH HOH S . 10  10  . 0.0770 0.1941 0.2339 0.0650  0.0481
0.0948  1 .
6611 O     O     . HOH HOH HOH S . 11  11  . 0.1251 0.0834 0.2394 -0.0672 -0.0494
0.0350  1 .
6612 O     O     . HOH HOH HOH S . 12  12  . 0.1193 0.0687 0.1053 0.0531  0.0028
0.0013  1 .
6613 O     O     . HOH HOH HOH S . 13  13  . 0.1470 0.1178 0.1294 0.0382  0.0053
0.0095  1 .
6614 O     O     . HOH HOH HOH S . 14  14  . 0.1116 0.0925 0.0820 0.0133  -0.0236
0.0178  1 .
6615 O     O     . HOH HOH HOH S . 15  15  . 0.1545 0.1337 0.1522 0.0225  -0.0115 -
0.0134 1 .
6616 O     O     . HOH HOH HOH S . 16  16  . 0.1471 0.0967 0.0991 0.0252  0.0067  -
0.0013 1 .
6617 O     O     . HOH HOH HOH S . 17  17  . 0.1462 0.1276 0.1481 0.0286  -0.0050 -
0.0207 1 .
6618 O     O     . HOH HOH HOH S . 18  18  . 0.1288 0.0990 0.0895 -0.0085 -0.0212 -
0.0439 1 .
6619 O     O     . HOH HOH HOH S . 19  19  . 0.1365 0.0731 0.0837 0.0234  0.0087
0.0145  1 .
6620 O     O     . HOH HOH HOH S . 20  20  . 0.1377 0.0935 0.0918 0.0137  0.0362
0.0024  1 .
6621 O     O     . HOH HOH HOH S . 21  21  . 0.1820 0.1259 0.1485 0.0615  0.0378
0.0165  1 .
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6622 O     O     . HOH HOH HOH S . 22  22  . 0.1143 0.0971 0.0965 0.0293  -0.0199 -
0.0151 1 .
6623 O     O     . HOH HOH HOH S . 23  23  . 0.1805 0.1144 0.1453 0.0092  0.0192
0.0202  1 .
6624 O     O     . HOH HOH HOH S . 24  24  . 0.1372 0.1403 0.1323 0.0204  -0.0030 -
0.0040 1 .
6625 O     O     . HOH HOH HOH S . 25  25  . 0.0855 0.1029 0.1149 0.0039  -0.0158 -
0.0072 1 .
6626 O     O     . HOH HOH HOH S . 26  26  . 0.1757 0.1345 0.1191 0.0382  0.0118  -
0.0084 1 .
6627 O     O     . HOH HOH HOH S . 27  27  . 0.1548 0.1511 0.1220 0.0102  -0.0077 -
0.0110 1 .
6628 O     O     . HOH HOH HOH S . 28  28  . 0.1193 0.1016 0.2101 -0.0143 0.0357
0.0095  1 .
6629 O     O     . HOH HOH HOH S . 29  29  . 0.1109 0.1760 0.1858 0.0499  -0.0309
0.0047  1 .
6630 O     O     . HOH HOH HOH S . 30  30  . 0.1000 0.1066 0.1049 -0.0076 -0.0028 -
0.0089 1 .
6631 O     O     . HOH HOH HOH S . 31  31  . 0.2071 0.0907 0.1053 -0.0123 0.0569  -
0.0047 1 .
6632 O     O     . HOH HOH HOH S . 32  32  . 0.1229 0.0824 0.1984 -0.0096 0.0532  -
0.0162 1 .
6633 O     O     . HOH HOH HOH S . 33  33  . 0.1530 0.1069 0.1433 0.0203  0.0029  -
0.0350 1 .
6634 O     O     . HOH HOH HOH S . 34  34  . 0.1699 0.1014 0.1023 0.0425  -0.0115
0.0314  1 .
6635 O     O     . HOH HOH HOH S . 35  35  . 0.1782 0.1409 0.1151 0.0023  -0.0157 -
0.0111 1 .
6636 O     O     . HOH HOH HOH S . 36  36  . 0.1063 0.1143 0.1240 -0.0091 -0.0211
0.0093  1 .
6637 O     O     . HOH HOH HOH S . 37  37  . 0.1669 0.1818 0.1601 0.0687  -0.0579 -
0.0130 1 .
6638 O     O     . HOH HOH HOH S . 38  38  . 0.1718 0.1321 0.1508 0.0355  0.0336
0.0012  1 .
6639 O     O     . HOH HOH HOH S . 39  39  . 0.1547 0.1792 0.1883 -0.0056 -0.0528 -
0.0178 1 .
6640 O     O     . HOH HOH HOH S . 40  40  . 0.0964 0.1021 0.1062 -0.0123 0.0066  -
0.0338 1 .
6641 O     O     . HOH HOH HOH S . 41  41  . 0.0975 0.1435 0.1786 -0.0024 -0.0259 -
0.0111 1 .
6642 O     O     . HOH HOH HOH S . 42  42  . 0.1176 0.1188 0.1368 0.0098  -0.0069 -
0.0323 1 .
6643 O     O     . HOH HOH HOH S . 43  43  . 0.1373 0.1254 0.1188 0.0110  -0.0416
0.0254  1 .
6644 O     O     . HOH HOH HOH S . 44  44  . 0.1328 0.1116 0.0945 0.0403  -0.0084
0.0296  1 .
6645 O     O     . HOH HOH HOH S . 45  45  . 0.1250 0.1027 0.1163 -0.0212 -0.0046 -
0.0180 1 .
6646 O     O     . HOH HOH HOH S . 46  46  . 0.1234 0.0956 0.1577 0.0218  0.0079  -
0.0015 1 .
6647 O     O     . HOH HOH HOH S . 47  47  . 0.1764 0.1570 0.1203 0.0275  0.0231
0.0053  1 .
6648 O     O     . HOH HOH HOH S . 48  48  . 0.1162 0.0889 0.1158 0.0137  0.0071
0.0082  1 .
6649 O     O     . HOH HOH HOH S . 49  49  . 0.1633 0.1455 0.1325 -0.0079 0.0046
0.0316  1 .
6650 O     O     . HOH HOH HOH S . 50  50  . 0.1471 0.2110 0.1085 0.0197  -0.0159 -
0.0024 1 .
6651 O     O     . HOH HOH HOH S . 52  52  . 0.1515 0.1475 0.1185 -0.0033 -0.0052 -
0.0160 1 .
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6652 O     O     . HOH HOH HOH S . 53  53  . 0.1592 0.0900 0.1659 0.0227  0.0157
0.0345  1 .
6653 O     O     . HOH HOH HOH S . 54  54  . 0.1838 0.1387 0.1724 0.0122  0.0140
0.0052  1 .
6654 O     O     . HOH HOH HOH S . 55  55  . 0.1177 0.0980 0.1104 0.0097  -0.0274
0.0258  1 .
6655 O     O     . HOH HOH HOH S . 56  56  . 0.1921 0.1698 0.0864 0.0070  -0.0198 -
0.0044 1 .
6656 O     O     . HOH HOH HOH S . 57  57  . 0.1815 0.1278 0.1976 -0.0116 0.0374
0.0533  1 .
6657 O     O     . HOH HOH HOH S . 58  58  . 0.1196 0.1409 0.1177 0.0293  0.0010  -
0.0287 1 .
6658 O     O     . HOH HOH HOH S . 59  59  . 0.1852 0.1763 0.1480 0.0741  -0.0014
0.0025  1 .
6659 O     O     . HOH HOH HOH S . 60  60  . 0.1387 0.1145 0.0953 -0.0075 0.0005  -
0.0102 1 .
6660 O     O     . HOH HOH HOH S . 61  61  . 0.1231 0.1373 0.1530 -0.0138 -0.0023 -
0.0338 1 .
6661 O     O     . HOH HOH HOH S . 62  62  . 0.1964 0.1846 0.1204 0.0422  -0.0354 -
0.0407 1 .
6662 O     O     . HOH HOH HOH S . 63  63  . 0.0955 0.1364 0.1404 0.0134  -0.0115 -
0.0241 1 .
6663 O     O     . HOH HOH HOH S . 64  64  . 0.1758 0.1386 0.1253 0.0247  0.0102
0.0041  1 .
6664 O     O     . HOH HOH HOH S . 65  65  . 0.1376 0.1820 0.1750 0.0336  -0.0519
0.0019  1 .
6665 O     O     . HOH HOH HOH S . 66  66  . 0.1705 0.1671 0.1551 -0.0142 0.0085
0.0109  1 .
6666 O     O     . HOH HOH HOH S . 67  67  . 0.1645 0.1146 0.1505 0.0190  0.0077
0.0134  1 .
6667 O     O     . HOH HOH HOH S . 68  68  . 0.1473 0.1298 0.1397 0.0095  -0.0053 -
0.0074 1 .
6668 O     O     . HOH HOH HOH S . 69  69  . 0.1194 0.1114 0.1583 0.0334  0.0017  -
0.0073 1 .
6669 O     O     . HOH HOH HOH S . 70  70  . 0.2441 0.0855 0.1739 0.0286  0.1036
0.0258  1 .
6670 O     O     . HOH HOH HOH S . 71  71  . 0.1512 0.1071 0.0881 -0.0008 -0.0063
0.0085  1 .
6671 O     O     . HOH HOH HOH S . 72  72  . 0.1525 0.1894 0.2288 -0.0069 0.0564
0.0086  1 .
6672 O     O     . HOH HOH HOH S . 73  73  . 0.1945 0.1525 0.1918 0.0066  -0.0178 -
0.0149 1 .
6673 O     O     . HOH HOH HOH S . 74  74  . 0.1639 0.2159 0.1595 0.0119  0.0144
0.0051  1 .
6674 O     O     . HOH HOH HOH S . 75  75  . 0.1499 0.1186 0.1324 -0.0329 0.0233  -
0.0218 1 .
6675 O     O     . HOH HOH HOH S . 76  76  . 0.2591 0.2130 0.1717 0.0351  0.0061
0.0703  1 .
6676 O     O     . HOH HOH HOH S . 77  77  . 0.1218 0.1576 0.1738 -0.0228 0.0056  -
0.0126 1 .
6677 O     O     . HOH HOH HOH S . 78  78  . 0.1446 0.1385 0.1046 0.0476  0.0484
0.0393  1 .
6678 O     O     . HOH HOH HOH S . 79  79  . 0.1916 0.1552 0.1709 -0.0187 -0.0098
0.0091  1 .
6679 O     O     . HOH HOH HOH S . 80  80  . 0.1755 0.1351 0.2185 0.0725  -0.0459
0.0272  1 .
6680 O     O     . HOH HOH HOH S . 81  81  . 0.1919 0.1384 0.1293 0.0135  0.0177
0.0105  1 .
6681 O     O     . HOH HOH HOH S . 82  82  . 0.2025 0.1430 0.1126 -0.0090 -0.0568 -
0.0381 1 .
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6682 O     O     . HOH HOH HOH S . 83  83  . 0.1661 0.2034 0.3055 0.0671  -0.0741 -
0.0427 1 .
6683 O     O     . HOH HOH HOH S . 84  84  . 0.1644 0.2404 0.2212 0.0268  -0.0196
0.0080  1 .
6684 O     O     . HOH HOH HOH S . 85  85  . 0.1311 0.1646 0.1620 0.0320  0.0554
0.0416  1 .
6685 O     O     . HOH HOH HOH S . 86  86  . 0.2139 0.1178 0.1258 0.0148  -0.0445
0.0175  1 .
6686 O     O     . HOH HOH HOH S . 87  87  . 0.2115 0.2069 0.1901 -0.0316 0.0598  -
0.0006 1 .
6687 O     O     . HOH HOH HOH S . 88  88  . 0.1937 0.1802 0.1882 0.0488  -0.0742 -
0.0462 1 .
6688 O     O     . HOH HOH HOH S . 89  89  . 0.2030 0.1757 0.1441 0.0419  -0.0379 -
0.0445 1 .
6689 O     O     . HOH HOH HOH S . 90  90  . 0.1330 0.1657 0.2166 0.0160  0.0102  -
0.0487 1 .
6690 O     O     . HOH HOH HOH S . 91  91  . 0.1556 0.1787 0.2972 0.0157  -0.0096 -
0.0131 1 .
6691 O     O     . HOH HOH HOH S . 92  92  . 0.1421 0.2063 0.1934 -0.0356 0.0425  -
0.0131 1 .
6692 O     O     . HOH HOH HOH S . 93  93  . 0.2010 0.1862 0.1757 0.0000  -0.0025
0.0228  1 .
6693 O     O     . HOH HOH HOH S . 94  94  . 0.2191 0.1221 0.1767 -0.0699 0.0029  -
0.0357 1 .
6694 O     O     . HOH HOH HOH S . 95  95  . 0.2085 0.1427 0.2161 -0.0169 0.0645  -
0.0320 1 .
6695 O     O     . HOH HOH HOH S . 96  96  . 0.2595 0.2164 0.2361 0.0839  -0.1081 -
0.1048 1 .
6696 O     O     . HOH HOH HOH S . 97  97  . 0.1676 0.1161 0.1369 0.0137  -0.0148 -
0.0066 1 .
6697 O     O     . HOH HOH HOH S . 98  98  . 0.2194 0.1291 0.1541 -0.0156 -0.0328
0.0058  1 .
6698 O     O     . HOH HOH HOH S . 99  99  . 0.1787 0.3511 0.2984 0.0256  0.0192
0.0335  1 .
6699 O     O     . HOH HOH HOH S . 100 100 . 0.1081 0.2667 0.1932 -0.0087 -0.0060 -
0.0023 1 .
6700 O     O     . HOH HOH HOH S . 101 101 . 0.1951 0.1660 0.1193 -0.0001 0.0601
0.0305  1 .
6701 O     O     . HOH HOH HOH S . 102 102 . 0.1973 0.2218 0.1539 0.0178  -0.0246 -
0.0840 1 .
6702 O     O     . HOH HOH HOH S . 103 103 . 0.3201 0.1325 0.1552 0.0052  0.0016
0.0144  1 .
6703 O     O     . HOH HOH HOH S . 104 104 . 0.2815 0.2501 0.0865 -0.0639 0.0221  -
0.0779 1 .
6704 O     O     . HOH HOH HOH S . 105 105 . 0.2180 0.1756 0.1340 0.0127  -0.0349
0.0696  1 .
6705 O     O     . HOH HOH HOH S . 106 106 . 0.2383 0.2860 0.0940 0.0234  0.0753  -
0.0166 1 .
6706 O     O     . HOH HOH HOH S . 107 107 . 0.2119 0.2298 0.1673 -0.0330 0.0300  -
0.0163 1 .
6707 O     O     . HOH HOH HOH S . 108 108 . 0.2017 0.1639 0.2692 0.0613  -0.0075 -
0.0746 1 .
6708 O     O     . HOH HOH HOH S . 110 110 . 0.1600 0.2335 0.3480 0.0132  0.0685
0.0111  1 .
6709 O     O     . HOH HOH HOH S . 111 111 . 0.1802 0.2097 0.1879 0.0455  0.0111
0.0151  1 .
6710 O     O     . HOH HOH HOH S . 112 112 . 0.2116 0.2075 0.2051 0.0058  0.0110  -
0.0625 1 .
6711 O     O     . HOH HOH HOH S . 113 113 . 0.2291 0.3190 0.2612 0.0435  0.0074
0.0486  1 .
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6712 O     O     . HOH HOH HOH S . 114 114 . 0.1798 0.1097 0.1604 0.0313  0.0367  -
0.0076 1 .
6713 O     O     . HOH HOH HOH S . 115 115 . 0.2562 0.1712 0.2154 0.0357  0.0100
0.0220  1 .
6714 O     O     . HOH HOH HOH S . 116 116 . 0.2607 0.1798 0.1090 0.0075  0.0002  -
0.0108 1 .
6715 O     O     . HOH HOH HOH S . 117 117 . 0.2260 0.2336 0.2185 -0.0543 0.0137
0.0196  1 .
6716 O     O     . HOH HOH HOH S . 118 118 . 0.3143 0.1677 0.1651 0.0429  -0.0487 -
0.0200 1 .
6717 O     O     . HOH HOH HOH S . 119 119 . 0.2106 0.1575 0.1201 0.0270  0.0303
0.0426  1 .
6718 O     O     . HOH HOH HOH S . 120 120 . 0.1026 0.2393 0.1907 0.0092  0.0149  -
0.0003 1 .
6719 O     O     . HOH HOH HOH S . 121 121 . 0.1216 0.2444 0.2754 -0.0304 -0.0037
0.0558  1 .
6720 O     O     . HOH HOH HOH S . 122 122 . 0.1891 0.1784 0.1435 0.0320  -0.0044 -
0.0257 1 .
6721 O     O     . HOH HOH HOH S . 123 123 . 0.2869 0.2368 0.1745 0.0575  -0.0519
0.0051  1 .
6722 O     O     . HOH HOH HOH S . 124 124 . 0.1897 0.2249 0.1888 0.0603  -0.0326 -
0.0509 1 .
6723 O     O     . HOH HOH HOH S . 125 125 . 0.2056 0.2495 0.2713 -0.0104 -0.0819
0.0597  1 .
6724 O     O     . HOH HOH HOH S . 126 126 . 0.2368 0.2346 0.2874 -0.0252 -0.0620
0.0247  1 .
6725 O     O     . HOH HOH HOH S . 127 127 . 0.1684 0.1979 0.2785 -0.0353 0.1072  -
0.0242 1 .
6726 O     O     . HOH HOH HOH S . 128 128 . 0.3434 0.2801 0.1807 0.0274  -0.0748
0.0656  1 .
6727 O     O     . HOH HOH HOH S . 129 129 . 0.1879 0.1833 0.1928 -0.0051 0.0039  -
0.0083 1 .
6728 O     O     . HOH HOH HOH S . 130 130 . 0.1699 0.1255 0.1933 0.0035  -0.0407 -
0.0434 1 .
6729 O     O     . HOH HOH HOH S . 131 131 . 0.1291 0.1690 0.2677 -0.0556 0.0001  -
0.0241 1 .
6730 O     O     . HOH HOH HOH S . 132 132 . 0.1607 0.1708 0.2018 0.0048  0.0302  -
0.0205 1 .
6731 O     O     . HOH HOH HOH S . 133 133 . 0.2052 0.1217 0.2755 0.0388  -0.0065
0.0124  1 .
6732 O     O     . HOH HOH HOH S . 134 134 . 0.2067 0.2626 0.2337 0.0360  0.0437
0.0248  1 .
6733 O     O     . HOH HOH HOH S . 135 135 . 0.2450 0.1549 0.1984 0.0674  -0.0300 -
0.0112 1 .
6734 O     O     . HOH HOH HOH S . 136 136 . 0.2020 0.1936 0.1439 -0.0254 0.0434
0.0569  1 .
6735 O     O     . HOH HOH HOH S . 137 137 . 0.2863 0.3332 0.2719 0.0991  -0.1095 -
0.1115 1 .
6736 O     O     . HOH HOH HOH S . 138 138 . 0.1736 0.2100 0.2506 -0.0106 0.0451  -
0.0667 1 .
6737 O     O     . HOH HOH HOH S . 139 139 . 0.2036 0.1625 0.2335 -0.0935 0.0672  -
0.0306 1 .
6738 O     O     . HOH HOH HOH S . 140 140 . 0.3101 0.1450 0.2874 -0.0036 0.0802
0.0966  1 .
6739 O     O     . HOH HOH HOH S . 141 141 . 0.2345 0.1816 0.2318 0.0356  0.0362  -
0.0122 1 .
6740 O     O     . HOH HOH HOH S . 142 142 . 0.2150 0.2080 0.2860 0.0314  0.0025
0.0495  1 .
6741 O     O     . HOH HOH HOH S . 143 143 . 0.2489 0.1742 0.1880 -0.0102 0.0505
0.0035  1 .
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6742 O     O     . HOH HOH HOH S . 144 144 . 0.2598 0.1669 0.2620 -0.0586 -0.0252
0.0099  1 .
6743 O     O     . HOH HOH HOH S . 145 145 . 0.1602 0.2032 0.2237 -0.0362 0.1460  -
0.0625 1 .
6744 O     O     . HOH HOH HOH S . 146 146 . 0.1951 0.2484 0.1541 -0.0831 -0.0273
0.0355  1 .
6745 O     O     . HOH HOH HOH S . 147 147 . 0.1975 0.4003 0.2121 -0.0401 -0.0092 -
0.0929 1 .
6746 O     O     . HOH HOH HOH S . 148 148 . 0.2968 0.2755 0.2156 -0.0003 -0.0317
0.0978  1 .
6747 O     O     . HOH HOH HOH S . 149 149 . 0.2098 0.2567 0.1832 -0.0027 0.0174  -
0.0214 1 .
6748 O     O     . HOH HOH HOH S . 150 150 . 0.2072 0.2787 0.2691 -0.0125 -0.0171
0.0488  1 .
6749 O     O     . HOH HOH HOH S . 151 151 . 0.3585 0.2362 0.2907 0.0612  -0.0446 -
0.0066 1 .
6750 O     O     . HOH HOH HOH S . 152 152 . 0.2298 0.1708 0.1726 0.0059  0.0253
0.0474  1 .
6751 O     O     . HOH HOH HOH S . 153 153 . 0.2257 0.2672 0.2109 0.0133  -0.1244
0.0081  1 .
6752 O     O     . HOH HOH HOH S . 154 154 . 0.1689 0.2123 0.2244 0.0380  0.0427
0.0178  1 .
6753 O     O     . HOH HOH HOH S . 155 155 . 0.3305 0.1637 0.1156 0.0931  0.0306  -
0.0172 1 .
6754 O     O     . HOH HOH HOH S . 156 156 . 0.1708 0.2419 0.2415 -0.0150 0.0631  -
0.0295 1 .
6755 O     O     . HOH HOH HOH S . 157 157 . 0.1742 0.3215 0.1675 0.0421  -0.0512 -
0.0140 1 .
6756 O     O     . HOH HOH HOH S . 159 159 . 0.3459 0.1587 0.2685 -0.0185 -0.0338 -
0.0475 1 .
6757 O     O     . HOH HOH HOH S . 160 160 . 0.2012 0.1787 0.2638 -0.0187 -0.0070
0.0621  1 .
6758 O     O     . HOH HOH HOH S . 161 161 . 0.2565 0.1647 0.1911 0.0213  -0.0334
0.0246  1 .
6759 O     O     . HOH HOH HOH S . 162 162 . 0.2083 0.2279 0.2096 -0.0448 0.0202  -
0.0150 1 .
6760 O     O     . HOH HOH HOH S . 163 163 . 0.3593 0.2247 0.2763 0.0444  -0.0615
0.0753  1 .
6761 O     O     . HOH HOH HOH S . 164 164 . 0.2221 0.2530 0.2066 -0.0310 0.0063
0.0490  1 .
6762 O     O     . HOH HOH HOH S . 165 165 . 0.3225 0.1645 0.2310 -0.0205 0.0315  -
0.0314 1 .
6763 O     O     . HOH HOH HOH S . 166 166 . 0.2920 0.2302 0.1484 0.0208  0.0105  -
0.0527 1 .
6764 O     O     . HOH HOH HOH S . 167 167 . 0.2280 0.2414 0.2687 -0.0024 -0.0293
0.0217  1 .
6765 O     O     . HOH HOH HOH S . 168 168 . 0.2931 0.1658 0.2118 0.0151  0.0237  -
0.0360 1 .
6766 O     O     . HOH HOH HOH S . 169 169 . 0.2560 0.1804 0.2315 0.0349  -0.0054
0.0176  1 .
6767 O     O     . HOH HOH HOH S . 170 170 . 0.2744 0.1658 0.3619 -0.0539 0.0991
0.0038  1 .
6768 O     O     . HOH HOH HOH S . 171 171 . 0.2457 0.2259 0.2452 0.0113  -0.0130 -
0.0637 1 .
6769 O     O     . HOH HOH HOH S . 173 173 . 0.1958 0.1856 0.2786 0.0344  0.0098
0.0540  1 .
6770 O     O     . HOH HOH HOH S . 175 175 . 0.2804 0.1149 0.2015 -0.0074 0.0278  -
0.0123 1 .
6771 O     O     . HOH HOH HOH S . 176 176 . 0.2638 0.1886 0.2217 0.0708  -0.0020 -
0.0251 1 .
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6772 O     O     . HOH HOH HOH S . 177 177 . 0.2425 0.2460 0.2445 0.0961  -0.0325 -
0.0487 1 .
6773 O     O     . HOH HOH HOH S . 178 178 . 0.1847 0.2087 0.2924 -0.0391 -0.0063 -
0.0128 1 .
6774 O     O     . HOH HOH HOH S . 179 179 . 0.2524 0.2013 0.1214 -0.0362 -0.0041
0.0206  1 .
6775 O     O     . HOH HOH HOH S . 180 180 . 0.2286 0.1497 0.1207 -0.0255 -0.0267 -
0.0405 1 .
6776 O     O     . HOH HOH HOH S . 181 181 . 0.2741 0.1565 0.2718 0.0019  0.0138
0.0199  1 .
6777 O     O     . HOH HOH HOH S . 182 182 . 0.2718 0.2510 0.1876 -0.0239 -0.0243
0.0294  1 .
6778 O     O     . HOH HOH HOH S . 183 183 . 0.3981 0.1419 0.1761 0.0904  -0.0729 -
0.1028 1 .
6779 O     O     . HOH HOH HOH S . 184 184 . 0.2632 0.3339 0.1285 -0.0071 -0.0469 -
0.0203 1 .
6780 O     O     . HOH HOH HOH S . 185 185 . 0.2087 0.3358 0.2394 -0.0156 -0.0833
0.1259  1 .
6781 O     O     . HOH HOH HOH S . 186 186 . 0.2030 0.2577 0.2130 -0.0058 0.0183
0.0126  1 .
6782 O     O     . HOH HOH HOH S . 187 187 . 0.2044 0.1992 0.2550 0.0337  -0.0265 -
0.0180 1 .
6783 O     O     . HOH HOH HOH S . 189 189 . 0.1809 0.2376 0.3311 0.0445  0.0917  -
0.0952 1 .
6784 O     O     . HOH HOH HOH S . 190 190 . 0.2548 0.2190 0.1987 0.0038  -0.0093
0.0967  1 .
6785 O     O     . HOH HOH HOH S . 191 191 . 0.2415 0.1738 0.1623 0.0472  -0.0022 -
0.0496 1 .
6786 O     O     . HOH HOH HOH S . 192 192 . 0.2011 0.3688 0.4158 -0.0402 0.0398  -
0.1338 1 .
6787 O     O     . HOH HOH HOH S . 193 193 . 0.2590 0.2520 0.2219 0.0160  -0.0174
0.0466  1 .
6788 O     O     . HOH HOH HOH S . 194 194 . 0.3534 0.3179 0.2638 -0.0141 -0.0392 -
0.0013 1 .
6789 O     O     . HOH HOH HOH S . 195 195 . 0.2057 0.3082 0.2961 -0.0028 0.0651
0.1063  1 .
6790 O     O     . HOH HOH HOH S . 196 196 . 0.3103 0.2429 0.2502 -0.0650 0.0007
0.0299  1 .
6791 O     O     . HOH HOH HOH S . 197 197 . 0.0975 0.2328 0.3311 0.0045  -0.0642 -
0.0145 1 .
6792 O     O     . HOH HOH HOH S . 198 198 . 0.2124 0.2018 0.2553 0.0735  0.0318  -
0.0131 1 .
6793 O     O     . HOH HOH HOH S . 199 199 . 0.1526 0.2885 0.2190 0.0467  0.0316
0.0151  1 .
6794 O     O     . HOH HOH HOH S . 200 200 . 0.2985 0.1528 0.2305 0.0395  -0.0037
0.0209  1 .
6795 O     O     . HOH HOH HOH S . 201 201 . 0.2252 0.1508 0.3293 0.0353  0.0222  -
0.0191 1 .
6796 O     O     . HOH HOH HOH S . 202 202 . 0.2730 0.1990 0.1518 0.0056  -0.0004
0.0416  1 .
6797 O     O     . HOH HOH HOH S . 203 203 . 0.1181 0.2094 0.2725 -0.0259 0.0193
0.0485  1 .
6798 O     O     . HOH HOH HOH S . 204 204 . 0.1400 0.2189 0.2668 0.0093  0.0647  -
0.0359 1 .
6799 O     O     . HOH HOH HOH S . 205 205 . 0.3724 0.2411 0.2083 -0.0561 0.0103  -
0.0385 1 .
6800 O     O     . HOH HOH HOH S . 206 206 . 0.2535 0.1981 0.2725 0.0303  -0.0128
0.0392  1 .
6801 O     O     . HOH HOH HOH S . 207 207 . 0.1956 0.2468 0.2178 0.0069  -0.0712
0.0111  1 .
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6802 O     O     . HOH HOH HOH S . 208 208 . 0.3082 0.2564 0.2830 0.0449  -0.0158
0.0300  1 .
6803 O     O     . HOH HOH HOH S . 209 209 . 0.2888 0.2463 0.3126 0.0409  -0.0533
0.0217  1 .
6804 O     O     . HOH HOH HOH S . 210 210 . 0.2401 0.1755 0.2172 0.0022  -0.0241 -
0.0263 1 .
6805 O     O     . HOH HOH HOH S . 211 211 . 0.3381 0.2275 0.1663 0.0430  0.0765
0.0565  1 .
6806 O     O     . HOH HOH HOH S . 212 212 . 0.4170 0.2174 0.2890 -0.0566 0.0257
0.0583  1 .
6807 O     O     . HOH HOH HOH S . 213 213 . 0.1372 0.3442 0.1928 0.0390  -0.0287 -
0.0201 1 .
6808 O     O     . HOH HOH HOH S . 214 214 . 0.2724 0.2360 0.2028 0.0155  0.0029
0.0129  1 .
6809 O     O     . HOH HOH HOH S . 216 216 . 0.2099 0.3006 0.2273 0.0890  0.0532  -
0.0089 1 .
6810 O     O     . HOH HOH HOH S . 217 217 . 0.2694 0.2866 0.2041 0.0133  -0.0289
0.1067  1 .
6811 O     O     . HOH HOH HOH S . 218 218 . 0.1734 0.2368 0.2802 0.0351  0.1064  -
0.0323 1 .
6812 O     O     . HOH HOH HOH S . 219 219 . 0.1991 0.2081 0.2991 -0.0241 -0.0424
0.0436  1 .
6813 O     O     . HOH HOH HOH S . 220 220 . 0.2560 0.2022 0.2359 0.0160  -0.0075 -
0.0517 1 .
6814 O     O     . HOH HOH HOH S . 221 221 . 0.2550 0.2335 0.3131 0.0199  -0.0657
0.0690  1 .
6815 O     O     . HOH HOH HOH S . 222 222 . 0.4328 0.2323 0.2341 0.0386  0.1541
0.0467  1 .
6816 O     O     . HOH HOH HOH S . 223 223 . 0.2704 0.1809 0.2905 -0.0342 -0.0485 -
0.0066 1 .
6817 O     O     . HOH HOH HOH S . 224 224 . 0.2175 0.2210 0.1661 0.0080  0.0106  -
0.0238 1 .
6818 O     O     . HOH HOH HOH S . 225 225 . 0.2211 0.3330 0.2515 -0.0217 -0.0153
0.0830  1 .
6819 O     O     . HOH HOH HOH S . 226 226 . 0.3648 0.2413 0.2475 -0.1131 -0.0278 -
0.0071 1 .
6820 O     O     . HOH HOH HOH S . 227 227 . 0.1460 0.3332 0.4442 -0.0365 0.0651
0.1154  1 .
6821 O     O     . HOH HOH HOH S . 228 228 . 0.2579 0.2906 0.2242 0.0995  -0.0724
0.0065  1 .
6822 O     O     . HOH HOH HOH S . 229 229 . 0.3287 0.1708 0.2241 0.0009  -0.0349 -
0.0037 1 .
6823 O     O     . HOH HOH HOH S . 230 230 . 0.3106 0.3205 0.4227 0.0645  0.1237
0.1270  1 .
6824 O     O     . HOH HOH HOH S . 231 231 . 0.2354 0.1716 0.3800 -0.0055 0.0308  -
0.0265 1 .
6825 O     O     . HOH HOH HOH S . 232 232 . 0.1891 0.3270 0.3615 0.0872  -0.0054
0.0164  1 .
6826 O     O     . HOH HOH HOH S . 233 233 . 0.2019 0.2043 0.2359 0.0946  -0.0161
0.0175  1 .
6827 O     O     . HOH HOH HOH S . 234 234 . 0.4691 0.2818 0.4415 0.0406  0.0822  -
0.0513 1 .
6828 O     O     . HOH HOH HOH S . 235 235 . 0.3320 0.2854 0.2345 -0.0207 -0.0069 -
0.0078 1 .
6829 O     O     . HOH HOH HOH S . 236 236 . 0.4456 0.3232 0.1818 0.1086  -0.0472 -
0.0498 1 .
6830 O     O     . HOH HOH HOH S . 237 237 . 0.3532 0.4680 0.2296 -0.1424 0.0679
0.0491  1 .
6831 O     O     . HOH HOH HOH S . 238 238 . 0.3457 0.2915 0.3378 0.0757  -0.0619
0.1033  1 .
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6832 O     O     . HOH HOH HOH S . 239 239 . 0.4485 0.3127 0.2965 -0.0077 0.1520  -
0.0287 1 .
6833 O     O     . HOH HOH HOH S . 240 240 . 0.3355 0.4391 0.3411 0.1293  0.1178
0.1278  1 .
6834 O     O     . HOH HOH HOH S . 241 241 . 0.3500 0.2600 0.3988 -0.0348 0.0247
0.0778  1 .
6835 O     O     . HOH HOH HOH S . 242 242 . 0.2736 0.2209 0.1586 -0.0241 0.0647
0.0365  1 .
6836 O     O     . HOH HOH HOH S . 243 243 . 0.3012 0.3465 0.2621 -0.0125 -0.0845 -
0.0058 1 .
6837 O     O     . HOH HOH HOH S . 244 244 . 0.1854 0.2935 0.1658 0.0299  0.0303  -
0.0524 1 .
6838 O     O     . HOH HOH HOH S . 245 245 . 0.2233 0.1540 0.2224 0.0229  0.0180  -
0.0057 1 .
6839 O     O     . HOH HOH HOH S . 246 246 . 0.6373 0.3762 0.2484 0.1027  0.0983  -
0.0368 1 .
6840 O     O     . HOH HOH HOH S . 247 247 . 0.3791 0.2829 0.2837 0.0561  0.0836  -
0.0087 1 .
6841 O     O     . HOH HOH HOH S . 248 248 . 0.2678 0.2395 0.2834 0.0315  -0.1148 -
0.0890 1 .
6842 O     O     . HOH HOH HOH S . 249 249 . 0.4872 0.2766 0.2891 -0.0109 0.1064  -
0.0680 1 .
6843 O     O     . HOH HOH HOH S . 250 250 . 0.3779 0.3779 0.2899 0.0489  0.0288  -
0.0731 1 .
6844 O     O     . HOH HOH HOH S . 251 251 . 0.2636 0.2938 0.2671 -0.0529 0.0505
0.0023  1 .
6845 O     O     . HOH HOH HOH S . 252 252 . 0.3453 0.3403 0.3178 0.0412  0.2201
0.1549  1 .
6846 O     O     . HOH HOH HOH S . 253 253 . 0.2005 0.2281 0.2710 -0.0391 -0.0610
0.0459  1 .
6847 O     O     . HOH HOH HOH S . 254 254 . 0.2782 0.2349 0.2108 -0.0289 -0.0190
0.1262  1 .
6848 O     O     . HOH HOH HOH S . 255 255 . 0.1848 0.3164 0.5319 0.1445  -0.0079 -
0.1107 1 .
6849 O     O     . HOH HOH HOH S . 256 256 . 0.2516 0.5379 0.4968 0.0487  0.2354  -
0.0699 1 .
6850 O     O     . HOH HOH HOH S . 257 257 . 0.2642 0.3937 0.2183 0.1331  0.0012  -
0.0646 1 .
6851 O     O     . HOH HOH HOH S . 258 258 . 0.2063 0.2632 0.2950 0.0102  0.0736  -
0.0870 1 .
6852 O     O     . HOH HOH HOH S . 259 259 . 0.2077 0.3436 0.2646 -0.0199 -0.0564
0.0416  1 .
6853 O     O     . HOH HOH HOH S . 260 260 . 0.2585 0.2099 0.2835 -0.0140 -0.0123
0.0290  1 .
6854 O     O     . HOH HOH HOH S . 261 261 . 0.4541 0.3987 0.3277 -0.0727 -0.1997 -
0.0399 1 .
6855 O     O     . HOH HOH HOH S . 262 262 . 0.3289 0.2620 0.1809 -0.0143 0.0477  -
0.0119 1 .
6856 O     O     . HOH HOH HOH S . 263 263 . 0.3150 0.2154 0.3296 0.1299  0.0392  -
0.0468 1 .
6857 O     O     . HOH HOH HOH S . 264 264 . 0.3433 0.2788 0.2580 0.0473  0.0210  -
0.0419 1 .
6858 O     O     . HOH HOH HOH S . 265 265 . 0.2408 0.1974 0.4468 -0.0509 0.0284  -
0.0390 1 .
6859 O     O     . HOH HOH HOH S . 266 266 . 0.3163 0.2782 0.1927 -0.0286 -0.0135 -
0.0729 1 .
6860 O     O     . HOH HOH HOH S . 267 267 . 0.2717 0.3016 0.2578 0.0006  -0.0367 -
0.1066 1 .
6861 O     O     . HOH HOH HOH S . 268 268 . 0.3631 0.3021 0.3001 0.0417  0.0809  -
0.0086 1 .
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6862 O     O     . HOH HOH HOH S . 269 269 . 0.2882 0.3435 0.2417 0.0517  0.0495
0.0424  1 .
6863 O     O     . HOH HOH HOH S . 270 270 . 0.2464 0.1889 0.4076 -0.0107 0.0379  -
0.0205 1 .
6864 O     O     . HOH HOH HOH S . 271 271 . 0.2889 0.3041 0.3457 0.1442  -0.0695 -
0.0815 1 .
6865 O     O     . HOH HOH HOH S . 272 272 . 0.1636 0.3631 0.3308 0.0639  0.0181  -
0.0830 1 .
6866 O     O     . HOH HOH HOH S . 274 274 . 0.3349 0.2890 0.3972 -0.0771 0.0043  -
0.0199 1 .
6867 O     O     . HOH HOH HOH S . 275 275 . 0.5097 0.5391 0.1247 -0.1182 0.0008  -
0.0149 1 .
6868 O     O     . HOH HOH HOH S . 276 276 . 0.2320 0.3110 0.3720 -0.0015 -0.0559
0.0139  1 .
6869 O     O     . HOH HOH HOH S . 277 277 . 0.2122 0.3930 0.3604 -0.0485 0.0042
0.1413  1 .
6870 O     O     . HOH HOH HOH S . 278 278 . 0.2239 0.3990 0.4697 -0.1273 -0.0842
0.0494  1 .
6871 O     O     . HOH HOH HOH S . 279 279 . 0.3543 0.2978 0.2744 0.0211  0.0878
0.0589  1 .
6872 O     O     . HOH HOH HOH S . 280 280 . 0.2780 0.2279 0.2428 0.0260  0.0226  -
0.0845 1 .
6873 O     O     . HOH HOH HOH S . 281 281 . 0.5909 0.3438 0.1058 -0.0500 0.0893  -
0.0496 1 .
6874 O     O     . HOH HOH HOH S . 282 282 . 0.3396 0.3393 0.2733 0.1378  -0.0176
0.0185  1 .
6875 O     O     . HOH HOH HOH S . 283 283 . 0.2408 0.2527 0.1941 -0.0071 -0.0210
0.0664  1 .
6876 O     O     . HOH HOH HOH S . 284 284 . 0.2033 0.3899 0.3105 0.0105  0.0726
0.0967  1 .
6877 O     O     . HOH HOH HOH S . 285 285 . 0.4049 0.2681 0.2514 0.0709  -0.0485 -
0.0565 1 .
6878 O     O     . HOH HOH HOH S . 286 286 . 0.3043 0.3133 0.2920 0.1276  -0.1145
0.0969  1 .
6879 O     O     . HOH HOH HOH S . 287 287 . 0.2449 0.3918 0.3233 -0.0069 0.0180
0.0081  1 .
6880 O     O     . HOH HOH HOH S . 288 288 . 0.4375 0.3360 0.3530 -0.0808 0.1999  -
0.0107 1 .
6881 O     O     . HOH HOH HOH S . 289 289 . 0.4283 0.3674 0.1772 -0.0465 -0.0140
0.0031  1 .
6882 O     O     . HOH HOH HOH S . 290 290 . 0.2919 0.2614 0.3123 -0.1013 0.0999  -
0.0635 1 .
6883 O     O     . HOH HOH HOH S . 291 291 . 0.3534 0.3010 0.2958 -0.0528 -0.0882 -
0.0380 1 .
6884 O     O     . HOH HOH HOH S . 292 292 . 0.3297 0.2622 0.1407 -0.0415 -0.0477 -
0.0621 1 .
6885 O     O     . HOH HOH HOH S . 293 293 . 0.3325 0.1677 0.2481 -0.0147 -0.0616
0.0116  1 .
6886 O     O     . HOH HOH HOH S . 294 294 . 0.2252 0.3196 0.2241 0.0015  0.0015  -
0.0544 1 .
6887 O     O     . HOH HOH HOH S . 295 295 . 0.2625 0.3882 0.2245 0.0440  -0.0403
0.0055  1 .
6888 O     O     . HOH HOH HOH S . 296 296 . 0.1216 0.3319 0.2911 0.0369  -0.0363 -
0.0278 1 .
6889 O     O     . HOH HOH HOH S . 297 297 . 0.2015 0.1755 0.2776 -0.0396 -0.0197
0.0037  1 .
6890 O     O     . HOH HOH HOH S . 298 298 . 0.2114 0.2404 0.2548 0.0225  0.0061
0.0848  1 .
6891 O     O     . HOH HOH HOH S . 300 300 . 0.2045 0.1936 0.1487 -0.0186 -0.0166 -
0.0009 1 .
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6892 O     O     . HOH HOH HOH S . 301 301 . 0.4093 0.3082 0.1810 0.0857  0.0634
0.0098  1 .
6893 O     O     . HOH HOH HOH S . 302 302 . 0.2216 0.3495 0.3717 -0.0942 -0.0375
0.0485  1 .
6894 O     O     . HOH HOH HOH S . 303 303 . 0.2988 0.2544 0.2414 -0.0975 -0.0907
0.0542  1 .
6895 O     O     . HOH HOH HOH S . 304 304 . 0.2942 0.3401 0.3105 -0.0173 -0.0702
0.0783  1 .
6896 O     O     . HOH HOH HOH S . 305 305 . 0.2562 0.3033 0.2931 -0.0283 0.0658  -
0.0944 1 .
6897 O     O     . HOH HOH HOH S . 306 306 . 0.5194 0.3138 0.4095 0.0920  -0.0393 -
0.0606 1 .
6898 O     O     . HOH HOH HOH S . 307 307 . 0.2391 0.1593 0.2797 -0.0106 0.0048  -
0.0135 1 .
6899 O     O     . HOH HOH HOH S . 308 308 . 0.2203 0.3669 0.4235 0.0244  0.0022  -
0.0292 1 .
6900 O     O     . HOH HOH HOH S . 309 309 . 0.3883 0.2625 0.2446 -0.0244 0.0062
0.0251  1 .
6901 O     O     . HOH HOH HOH S . 310 310 . 0.1574 0.0878 0.0606 -0.0019 0.0480
0.0150  1 .
6902 O     O     . HOH HOH HOH S . 311 311 . 0.0820 0.2146 0.2439 -0.0325 -0.0844
0.0219  1 .
6903 O     O     . HOH HOH HOH S . 312 312 . 0.2461 0.1264 0.1782 -0.0330 -0.0122
0.0305  1 .
6904 O     O     . HOH HOH HOH S . 313 313 . 0.1554 0.1337 0.1507 0.0174  0.0138  -
0.0050 1 .
6905 O     O     . HOH HOH HOH S . 314 314 . 0.1598 0.1234 0.1508 0.0495  0.0433
0.0223  1 .
6906 O     O     . HOH HOH HOH S . 315 315 . 0.1375 0.1277 0.1245 0.0130  -0.0037 -
0.0028 1 .
6907 O     O     . HOH HOH HOH S . 317 317 . 0.2721 0.2314 0.2384 0.0124  -0.0675
0.0413  1 .
6908 O     O     . HOH HOH HOH S . 318 318 . 0.2107 0.2249 0.2431 0.0386  0.0374
0.0333  1 .
6909 O     O     . HOH HOH HOH S . 319 319 . 0.1611 0.1841 0.1968 0.0472  0.0045  -
0.0490 1 .
6910 O     O     . HOH HOH HOH S . 320 320 . 0.2158 0.2198 0.2335 -0.0425 0.0028
0.0002  1 .
6911 O     O     . HOH HOH HOH S . 321 321 . 0.1563 0.2119 0.2650 -0.0384 0.0373  -
0.0057 1 .
6912 O     O     . HOH HOH HOH S . 322 322 . 0.1543 0.2462 0.3155 0.0075  -0.0650
0.0106  1 .
6913 O     O     . HOH HOH HOH S . 323 323 . 0.2795 0.2094 0.2294 0.0904  -0.0084 -
0.0256 1 .
6914 O     O     . HOH HOH HOH S . 324 324 . 0.2353 0.2266 0.2955 0.0000  0.0658
0.0512  1 .
6915 O     O     . HOH HOH HOH S . 325 325 . 0.4760 0.1979 0.2420 0.0063  -0.0385
0.0818  1 .
6916 O     O     . HOH HOH HOH S . 326 326 . 0.3232 0.3331 0.2917 0.0299  -0.0940 -
0.1669 1 .
6917 O     O     . HOH HOH HOH S . 327 327 . 0.2879 0.3227 0.4192 0.0697  -0.1689 -
0.1177 1 .
6918 O     O     . HOH HOH HOH S . 328 328 . 0.2564 0.2195 0.5498 0.0304  0.2843
0.0256  1 .
6919 O     O     . HOH HOH HOH S . 329 329 . 0.3064 0.2612 0.3566 0.0035  0.0110  -
0.0101 1 .
6920 O     O     . HOH HOH HOH S . 330 330 . 0.2394 0.2090 0.2179 0.0045  -0.0157
0.0604  1 .
6921 O     O     . HOH HOH HOH S . 331 331 . 0.4004 0.1765 0.2197 0.0564  -0.0093 -
0.0086 1 .
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6922 O     O     . HOH HOH HOH S . 332 332 . 0.1692 0.1204 0.0946 -0.0035 -0.0558 -
0.0064 1 .
6923 O     O     . HOH HOH HOH S . 333 333 . 0.2894 0.2008 0.1430 -0.0526 0.0189  -
0.0529 1 .
6924 O     O     . HOH HOH HOH S . 334 334 . 0.2922 0.2602 0.4064 0.0352  -0.0132 -
0.0258 1 .
6925 O     O     . HOH HOH HOH S . 335 335 . 0.2534 0.2529 0.2989 -0.0013 -0.0040 -
0.1022 1 .
6926 O     O     . HOH HOH HOH S . 336 336 . 0.3767 0.3079 0.2314 0.0220  0.0217
0.0965  1 .
6927 O     O     . HOH HOH HOH S . 337 337 . 0.3029 0.2477 0.3012 0.0950  -0.0152 -
0.1030 1 .
6928 O     O     . HOH HOH HOH S . 338 338 . 0.3623 0.3639 0.2273 0.2097  0.0059  -
0.0869 1 .
6929 O     O     . HOH HOH HOH S . 339 339 . 0.4213 0.2425 0.3476 0.0098  -0.0331
0.0650  1 .
6930 O     O     . HOH HOH HOH S . 340 340 . 0.4097 0.2660 0.1940 -0.0011 0.0651  -
0.0692 1 .
6931 O     O     . HOH HOH HOH S . 341 341 . 0.3584 0.2866 0.2197 0.0220  -0.0695
0.0158  1 .
6932 O     O     . HOH HOH HOH S . 342 342 . 0.2754 0.2662 0.4231 -0.0483 -0.0333
0.0624  1 .
6933 O     O     . HOH HOH HOH S . 343 343 . 0.5017 0.2588 0.5027 -0.0250 -0.0592
0.1367  1 .
6934 O     O     . HOH HOH HOH S . 344 344 . 0.3651 0.2658 0.2728 0.0261  -0.0295
0.0085  1 .
6935 O     O     . HOH HOH HOH S . 345 345 . 0.2576 0.2708 0.2132 -0.0034 -0.0052 -
0.0175 1 .
6936 O     O     . HOH HOH HOH S . 346 346 . 0.2155 0.2963 0.2812 -0.0552 0.0344  -
0.1160 1 .
6937 O     O     . HOH HOH HOH S . 347 347 . 0.4420 0.3476 0.1810 0.0075  0.0362  -
0.1294 1 .
6938 O     O     . HOH HOH HOH S . 348 348 . 0.2727 0.3180 0.2758 0.0714  0.0504
0.0114  1 .
6939 O     O     . HOH HOH HOH S . 349 349 . 0.2717 0.2262 0.1617 -0.0059 -0.0095 -
0.0375 1 .
6940 O     O     . HOH HOH HOH S . 350 350 . 0.3702 0.2904 0.1857 0.0627  0.0642
0.0006  1 .
6941 O     O     . HOH HOH HOH S . 351 351 . 0.3737 0.3280 0.1580 -0.0017 -0.0613 -
0.0158 1 .
6942 O     O     . HOH HOH HOH S . 352 352 . 0.3143 0.3339 0.2398 -0.0280 -0.0089
0.0821  1 .
6943 O     O     . HOH HOH HOH S . 353 353 . 0.3457 0.2309 0.3025 0.0188  -0.0045 -
0.0059 1 .
6944 O     O     . HOH HOH HOH S . 354 354 . 0.4463 0.1856 0.3092 0.0618  0.1406  -
0.0438 1 .
6945 O     O     . HOH HOH HOH S . 356 356 . 0.1935 0.3885 0.3775 0.1054  -0.0703 -
0.0741 1 .
6946 O     O     . HOH HOH HOH S . 358 358 . 0.3976 0.3447 0.3010 0.1143  -0.0508 -
0.0752 1 .
6947 O     O     . HOH HOH HOH S . 359 359 . 0.3117 0.3500 0.2686 0.0351  -0.0077
0.0029  1 .
6948 O     O     . HOH HOH HOH S . 360 360 . 0.3892 0.3787 0.3599 0.2166  -0.1412 -
0.1497 1 .
6949 O     O     . HOH HOH HOH S . 361 361 . 0.2433 0.3988 0.3203 -0.0644 -0.0360
0.0494  1 .
6950 O     O     . HOH HOH HOH S . 362 362 . 0.2385 0.4270 0.2664 0.0163  -0.1060 -
0.0062 1 .
6951 O     O     . HOH HOH HOH S . 363 363 . 0.4257 0.3784 0.4307 -0.0716 0.0263
0.0667  1 .
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6952 O     O     . HOH HOH HOH S . 364 364 . 0.4419 0.2709 0.4163 0.0744  -0.0714 -
0.1457 1 .
6953 O     O     . HOH HOH HOH S . 365 365 . 0.4088 0.2327 0.1674 0.0918  -0.0361 -
0.0316 1 .
6954 O     O     . HOH HOH HOH S . 366 366 . 0.5658 0.6273 0.5311 -0.2291 -0.2566 -
0.0554 1 .
6955 O     O     . HOH HOH HOH S . 367 367 . 0.1506 0.2982 0.3283 0.0719  -0.0022
0.0003  1 .
6956 O     O     . HOH HOH HOH S . 368 368 . 0.4021 0.1994 0.5424 0.0788  0.0705
0.0575  1 .
6957 O     O     . HOH HOH HOH S . 369 369 . 0.3876 0.2722 0.3938 -0.0805 -0.0475
0.0687  1 .
6958 O     O     . HOH HOH HOH S . 370 370 . 0.6694 0.3029 0.4495 -0.0449 -0.1746
0.0658  1 .
6959 O     O     . HOH HOH HOH S . 371 371 . 0.5291 0.4249 0.2259 -0.0623 -0.1457 -
0.0542 1 .
6960 O     O     . HOH HOH HOH S . 372 372 . 0.2989 0.2710 0.2645 -0.0019 0.0050  -
0.0211 1 .
6961 O     O     . HOH HOH HOH S . 373 373 . 0.2005 0.2417 0.4209 0.0437  -0.1605
0.0267  1 .
6962 O     O     . HOH HOH HOH S . 374 374 . 0.4261 0.1706 0.3192 0.0763  0.1207
0.0335  1 .
6963 O     O     . HOH HOH HOH S . 375 375 . 0.3917 0.3576 0.3802 -0.0485 -0.1192
0.0708  1 .
6964 O     O     . HOH HOH HOH S . 376 376 . 0.3706 0.4571 0.3907 -0.0527 0.0639  -
0.0137 1 .
6965 O     O     . HOH HOH HOH S . 377 377 . 0.5054 0.3362 0.2491 0.0418  0.0890  -
0.0312 1 .
6966 O     O     . HOH HOH HOH S . 378 378 . 0.6013 0.2262 0.5605 0.1504  0.0869
0.0580  1 .
6967 O     O     . HOH HOH HOH S . 379 379 . 0.2884 0.3349 0.2843 -0.0160 -0.0444
0.0237  1 .
6968 O     O     . HOH HOH HOH S . 381 381 . 0.5152 0.3229 0.2563 0.0781  -0.1292 -
0.0092 1 .
6969 O     O     . HOH HOH HOH S . 382 382 . 0.4046 0.3098 0.3602 0.0596  -0.0429 -
0.0641 1 .
6970 O     O     . HOH HOH HOH S . 383 383 . 0.5420 0.2186 0.3246 0.1373  0.0544
0.1038  1 .
6971 O     O     . HOH HOH HOH S . 384 384 . 0.4127 0.1893 0.3941 -0.0160 -0.0019 -
0.0057 1 .
6972 O     O     . HOH HOH HOH S . 385 385 . 0.2315 0.1340 0.4166 0.0130  -0.0161
0.0265  1 .
6973 O     O     . HOH HOH HOH S . 386 386 . 0.5483 0.3195 0.4035 0.1200  0.1253  -
0.0792 1 .
6974 O     O     . HOH HOH HOH S . 387 387 . 0.2943 0.3980 0.3143 -0.0268 -0.0932 -
0.0582 1 .
6975 O     O     . HOH HOH HOH S . 388 388 . 0.4732 0.3858 0.3223 0.1468  0.0053  -
0.1330 1 .
6976 O     O     . HOH HOH HOH S . 389 389 . 0.4500 0.4334 0.4716 -0.1458 0.0072
0.1073  1 .
6977 O     O     . HOH HOH HOH S . 390 390 . 0.4975 0.4810 0.4445 -0.0379 -0.0703
0.0692  1 .
6978 O     O     . HOH HOH HOH S . 391 391 . 0.3132 0.3364 0.3516 -0.0017 -0.0651 -
0.0755 1 .
6979 O     O     . HOH HOH HOH S . 392 392 . 0.2627 0.3453 0.3413 0.1662  0.0910
0.0767  1 .
6980 O     O     . HOH HOH HOH S . 393 393 . 0.2290 0.1682 0.2834 -0.0225 -0.0711 -
0.0483 1 .
6981 O     O     . HOH HOH HOH S . 394 394 . 0.3374 0.5210 0.3354 0.1579  -0.0015 -
0.0150 1 .
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6982 O     O     . HOH HOH HOH S . 395 395 . 0.4366 0.2730 0.2067 0.1569  0.0400  -
0.0206 1 .
6983 O     O     . HOH HOH HOH S . 396 396 . 0.1909 0.3264 0.2310 0.0411  -0.0185 -
0.1049 1 .
6984 O     O     . HOH HOH HOH S . 397 397 . 0.2326 0.4078 0.4592 -0.0906 0.0471
0.0900  1 .
6985 O     O     . HOH HOH HOH S . 398 398 . 0.5538 0.3285 0.2055 -0.0236 -0.0116
0.0960  1 .
6986 O     O     . HOH HOH HOH S . 399 399 . 0.4494 0.3652 0.2866 -0.0343 -0.0148
0.0539  1 .
6987 O     O     . HOH HOH HOH S . 400 400 . 0.4482 0.3424 0.2680 -0.0460 0.0165
0.0747  1 .
6988 O     O     . HOH HOH HOH S . 401 401 . 0.3585 0.3310 0.2403 -0.0140 -0.0531 -
0.0071 1 .
6989 O     O     . HOH HOH HOH S . 402 402 . 0.3708 0.6557 0.2411 -0.0164 -0.0765 -
0.0647 1 .
6990 O     O     . HOH HOH HOH S . 403 403 . 0.2945 0.4452 0.4218 0.0117  0.0061  -
0.0702 1 .
6991 O     O     . HOH HOH HOH S . 404 404 . 0.3106 0.4372 0.5141 -0.0247 -0.0861
0.0444  1 .
6992 O     O     . HOH HOH HOH S . 405 405 . 0.6133 0.2974 0.3448 -0.1318 0.0022  -
0.0002 1 .
6993 O     O     . HOH HOH HOH S . 406 406 . 0.3474 0.5079 0.1812 0.1503  0.0197  -
0.0763 1 .
6994 O     O     . HOH HOH HOH S . 407 407 . 0.3913 0.3380 0.3188 0.0830  0.0199
0.1310  1 .
6995 O     O     . HOH HOH HOH S . 408 408 . 0.3682 0.4541 0.5900 -0.0019 -0.0820 -
0.0314 1 .
6996 O     O     . HOH HOH HOH S . 410 410 . 0.3089 0.2631 0.2882 -0.0127 -0.0101 -
0.0634 1 .
6997 O     O     . HOH HOH HOH S . 411 411 . 0.2866 0.2235 0.5058 -0.0204 -0.0447 -
0.1471 1 .
6998 O     O     . HOH HOH HOH S . 412 412 . 0.4066 0.3256 0.3919 0.0860  0.1047
0.0178  1 .
6999 O     O     . HOH HOH HOH S . 413 413 . 0.3079 0.3075 0.3143 -0.0115 -0.0409
0.0028  1 .
7000 O     O     . HOH HOH HOH S . 414 414 . 0.4983 0.3495 0.3976 -0.0475 -0.0813 -
0.0025 1 .
7001 O     O     . HOH HOH HOH S . 416 416 . 0.3889 0.2614 0.5280 0.0777  -0.1272
0.0340  1 .
7002 O     O     . HOH HOH HOH S . 417 417 . 0.4491 0.4272 0.3045 0.1006  0.0293  -
0.0405 1 .
7003 O     O     . HOH HOH HOH S . 418 418 . 0.4342 0.2787 0.1848 0.0468  0.0597  -
0.0421 1 .
7004 O     O     . HOH HOH HOH S . 419 419 . 0.2603 0.3746 0.3521 0.0737  -0.0194
0.0887  1 .
7005 O     O     . HOH HOH HOH S . 420 420 . 0.2026 0.5329 0.3559 -0.0076 0.0464  -
0.0803 1 .
7006 O     O     . HOH HOH HOH S . 421 421 . 0.3404 0.4454 0.3095 -0.1594 0.0092  -
0.0654 1 .
7007 O     O     . HOH HOH HOH S . 422 422 . 0.4027 0.5649 0.2735 -0.0860 -0.0263 -
0.0293 1 .
7008 O     O     . HOH HOH HOH S . 423 423 . 0.4546 0.3251 0.3064 -0.0458 0.1037
0.1194  1 .
7009 O     O     . HOH HOH HOH S . 424 424 . 0.4380 0.3269 0.3242 -0.0042 -0.0165
0.0221  1 .
7010 O     O     . HOH HOH HOH S . 425 425 . 0.5550 0.3400 0.3896 0.1519  0.0806
0.1297  1 .
7011 O     O     . HOH HOH HOH S . 426 426 . 0.2977 0.4170 0.4740 0.0737  0.0417  -
0.0527 1 .
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7012 O     O     . HOH HOH HOH S . 427 427 . 0.3451 0.5261 0.4284 -0.0208 0.0366  -
0.0321 1 .
7013 O     O     . HOH HOH HOH S . 428 428 . 0.3152 0.2439 0.3737 -0.0586 -0.0434 -
0.1174 1 .
7014 O     O     . HOH HOH HOH S . 429 429 . 0.3251 0.3460 0.3941 0.0083  -0.0889
0.0488  1 .
7015 O     O     . HOH HOH HOH S . 430 430 . 0.3822 0.4645 0.5005 -0.0102 0.0771
0.0521  1 .
7016 O     O     . HOH HOH HOH S . 431 431 . 0.4330 0.3593 0.5115 0.0266  0.1317  -
0.0177 1 .
7017 O     O     . HOH HOH HOH S . 432 432 . 0.5643 0.3384 0.3150 -0.1407 0.1718
0.0521  1 .
7018 O     O     . HOH HOH HOH S . 433 433 . 0.2879 0.4049 0.3040 0.1625  0.0370  -
0.0556 1 .
7019 O     O     . HOH HOH HOH S . 434 434 . 0.6063 0.5212 0.4393 -0.1118 -0.1240 -
0.0022 1 .
7020 O     O     . HOH HOH HOH S . 436 436 . 0.4045 0.2488 0.3567 -0.0330 0.0190
0.0296  1 .
7021 O     O     . HOH HOH HOH S . 437 437 . 0.2782 0.2951 0.2423 -0.0107 0.0347
0.0170  1 .
7022 O     O     . HOH HOH HOH S . 438 438 . 0.5780 0.2473 0.3100 0.0659  0.0467
0.1533  1 .
7023 O     O     . HOH HOH HOH S . 439 439 . 0.5649 0.4480 0.4679 0.0824  0.3345
0.2000  1 .
7024 O     O     . HOH HOH HOH S . 440 440 . 0.5283 0.3336 0.3351 -0.0128 0.1495  -
0.0101 1 .
7025 O     O     . HOH HOH HOH S . 441 441 . 0.7516 0.3958 0.8811 0.1272  -0.2037
0.1767  1 .
7026 O     O     . HOH HOH HOH S . 442 442 . 0.4034 0.2605 0.4041 -0.1188 -0.0116
0.0897  1 .
7027 O     O     . HOH HOH HOH S . 443 443 . 0.1345 0.2744 0.3033 0.0353  0.0602  -
0.0659 1 .
7028 O     O     . HOH HOH HOH S . 444 444 . 0.3225 0.4347 0.2460 -0.0787 0.0484  -
0.0793 1 .
7029 O     O     . HOH HOH HOH S . 445 445 . 0.3185 0.5496 0.5623 -0.0869 -0.0692 -
0.0618 1 .
7030 O     O     . HOH HOH HOH S . 446 446 . 0.2176 0.3966 0.2834 0.0381  -0.0134 -
0.0027 1 .
7031 O     O     . HOH HOH HOH S . 447 447 . 0.4690 0.3899 0.4103 0.0469  -0.0634 -
0.0121 1 .
7032 O     O     . HOH HOH HOH S . 448 448 . 0.2967 0.2484 0.2918 -0.0141 -0.0746
0.0705  1 .
7033 O     O     . HOH HOH HOH S . 449 449 . 0.4951 0.4306 0.3956 -0.0637 0.0049
0.0517  1 .
7034 O     O     . HOH HOH HOH S . 450 450 . 0.6887 0.3074 0.5172 0.1188  -0.0540 -
0.0649 1 .
7035 O     O     . HOH HOH HOH S . 451 451 . 0.2436 0.4604 0.4059 -0.0931 0.1239  -
0.0825 1 .
7036 O     O     . HOH HOH HOH S . 452 452 . 0.3828 0.4134 0.2152 -0.0507 -0.0560
0.0803  1 .
7037 O     O     . HOH HOH HOH S . 453 453 . 0.2564 0.3946 0.3732 -0.0053 -0.1622 -
0.0519 1 .
7038 O     O     . HOH HOH HOH S . 454 454 . 0.1728 0.2485 0.2853 0.0235  -0.0710 -
0.0490 1 .
7039 O     O     . HOH HOH HOH S . 455 455 . 0.2094 0.2661 0.4216 0.0983  -0.0755 -
0.0044 1 .
7040 O     O     . HOH HOH HOH S . 456 456 . 0.5084 0.4241 0.2469 0.0212  -0.1817 -
0.0011 1 .
7041 O     O     . HOH HOH HOH S . 457 457 . 0.7110 0.4635 0.4496 0.3630  0.2684
0.1474  1 .
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7042 O     O     . HOH HOH HOH S . 458 458 . 0.4082 0.3441 0.2271 -0.0084 0.0202
0.0163  1 .
7043 O     O     . HOH HOH HOH S . 459 459 . 0.3812 0.4774 0.3924 0.0889  -0.0296
0.0064  1 .
7044 O     O     . HOH HOH HOH S . 461 461 . 0.4178 0.4792 0.3677 0.0374  -0.2389 -
0.0372 1 .
7045 O     O     . HOH HOH HOH S . 462 462 . 0.2858 0.4235 0.2150 0.1118  0.0211
0.0150  1 .
7046 O     O     . HOH HOH HOH S . 463 463 . 0.3772 0.6396 0.5809 0.2123  0.1373
0.1925  1 .
7047 O     O     . HOH HOH HOH S . 464 464 . 0.6401 0.1935 0.5018 0.1074  0.0252  -
0.0939 1 .
7048 O     O     . HOH HOH HOH S . 465 465 . 0.3225 0.2290 0.2245 0.0695  0.0641  -
0.0074 1 .
7049 O     O     . HOH HOH HOH S . 466 466 . 0.4929 0.4670 0.2762 0.0201  0.0111  -
0.0803 1 .
7050 O     O     . HOH HOH HOH S . 467 467 . 0.3188 0.3042 0.2656 -0.0647 -0.0231 -
0.0653 1 .
7051 O     O     . HOH HOH HOH S . 468 468 . 0.4088 0.2420 0.2934 -0.0519 0.0247  -
0.0487 1 .
7052 O     O     . HOH HOH HOH S . 469 469 . 0.8377 0.1550 0.7461 0.2756  0.1653
0.1227  1 .
7053 O     O     . HOH HOH HOH S . 470 470 . 0.6933 0.3212 0.6793 0.1322  -0.1668 -
0.1613 1 .
7054 O     O     . HOH HOH HOH S . 471 471 . 0.3891 0.3778 0.3759 0.1356  0.0858  -
0.0202 1 .
7055 O     O     . HOH HOH HOH S . 472 472 . 0.4708 0.4220 0.3630 -0.0617 0.1840  -
0.1841 1 .
7056 O     O     . HOH HOH HOH S . 473 473 . 0.3120 0.3297 0.5308 -0.0365 -0.0416
0.1109  1 .
7057 O     O     . HOH HOH HOH S . 474 474 . 0.3692 0.1423 0.5134 0.0013  0.0976
0.1188  1 .
7058 O     O     . HOH HOH HOH S . 476 476 . 0.1720 0.2183 0.2662 0.0250  -0.0831 -
0.0217 1 .
7059 O     O     . HOH HOH HOH S . 477 477 . 0.3771 0.3103 0.2128 0.0063  0.0048  -
0.0093 1 .
7060 O     O     . HOH HOH HOH S . 478 478 . 0.4513 0.4356 0.1866 -0.0405 -0.0352
0.0689  1 .
7061 O     O     . HOH HOH HOH S . 479 479 . 0.3907 0.2474 0.5734 0.0115  -0.2072
0.0637  1 .
7062 O     O     . HOH HOH HOH S . 480 480 . 0.4682 0.2576 0.4637 -0.0708 -0.2373
0.0948  1 .
7063 O     O     . HOH HOH HOH S . 481 481 . 0.2971 0.5293 0.3892 -0.0426 -0.0965
0.0062  1 .
7064 O     O     . HOH HOH HOH S . 482 482 . 0.4839 0.3701 0.2399 -0.1096 0.0648  -
0.0608 1 .
7065 O     O     . HOH HOH HOH S . 483 483 . 0.3852 0.1633 0.4026 0.0892  0.1038
0.0922  1 .
7066 O     O     . HOH HOH HOH S . 484 484 . 0.2286 0.6898 0.6405 -0.0154 0.0104  -
0.0284 1 .
7067 O     O     . HOH HOH HOH S . 485 485 . 0.4677 0.3058 0.2759 0.0027  -0.0323
0.0207  1 .
7068 O     O     . HOH HOH HOH S . 486 486 . 0.3279 0.3754 0.4848 0.0569  0.0030  -
0.0719 1 .
7069 O     O     . HOH HOH HOH S . 487 487 . 0.2957 0.3975 0.2243 0.0208  0.0463  -
0.0472 1 .
7070 O     O     . HOH HOH HOH S . 488 488 . 0.1797 0.2820 0.4113 0.0477  -0.0389 -
0.0253 1 .
7071 O     O     . HOH HOH HOH S . 489 489 . 0.2696 0.3132 0.3531 -0.0140 -0.1760 -
0.1003 1 .
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7072 O     O     . HOH HOH HOH S . 490 490 . 0.3706 0.3823 0.3654 -0.0097 0.0601  -
0.0676 1 .
7073 O     O     . HOH HOH HOH S . 491 491 . 0.2414 0.2969 0.4661 0.0024  -0.0217 -
0.0320 1 .
7074 O     O     . HOH HOH HOH S . 492 492 . 0.4858 0.3981 0.5304 -0.1546 0.0051
0.0469  1 .
7075 O     O     . HOH HOH HOH S . 493 493 . 0.2788 0.3982 0.4676 0.1283  -0.0567 -
0.2299 1 .
7076 O     O     . HOH HOH HOH S . 494 494 . 0.3266 0.4248 0.2579 0.0928  0.1032
0.1061  1 .
7077 O     O     . HOH HOH HOH S . 495 495 . 0.5284 0.2674 0.2578 0.1135  -0.1010 -
0.0166 1 .
7078 O     O     . HOH HOH HOH S . 496 496 . 0.3497 0.2693 0.5744 0.0894  0.0348  -
0.0834 1 .
7079 O     O     . HOH HOH HOH S . 497 497 . 0.2751 0.3564 0.3391 0.0430  -0.0377 -
0.0008 1 .
7080 O     O     . HOH HOH HOH S . 498 498 . 0.2783 0.4256 0.4000 0.0751  0.0364
0.1020  1 .
7081 O     O     . HOH HOH HOH S . 499 499 . 0.3568 0.5191 0.6639 -0.0190 0.0856  -
0.1030 1 .
7082 O     O     . HOH HOH HOH S . 500 500 . 0.6940 0.3279 0.4344 0.1246  -0.1272 -
0.1815 1 .
7083 O     O     . HOH HOH HOH S . 501 501 . 0.2546 0.4048 0.3575 -0.0453 0.0388  -
0.0413 1 .
7084 O     O     . HOH HOH HOH S . 502 502 . 0.2773 0.2670 0.3331 0.0267  0.0128
0.0034  1 .
7085 O     O     . HOH HOH HOH S . 503 503 . 0.2311 0.3707 0.4643 -0.0100 -0.0009 -
0.0008 1 .
7086 O     O     . HOH HOH HOH S . 505 505 . 0.2093 0.2638 0.2345 -0.0378 -0.0535
0.0047  1 .
7087 O     O     . HOH HOH HOH S . 506 506 . 0.3165 0.4187 0.5350 0.0645  -0.0326 -
0.0844 1 .
7088 O     O     . HOH HOH HOH S . 507 507 . 0.4178 0.3163 0.3398 -0.0344 -0.0272
0.0673  1 .
7089 O     O     . HOH HOH HOH S . 508 508 . 0.4472 0.3653 0.2317 0.1372  -0.0089 -
0.0659 1 .
7090 O     O     . HOH HOH HOH S . 509 509 . 0.3119 0.7422 0.4169 0.0639  -0.0257
0.0031  1 .
7091 O     O     . HOH HOH HOH S . 510 510 . 0.5574 0.4537 0.4031 -0.0184 0.1153  -
0.2030 1 .
7092 O     O     . HOH HOH HOH S . 511 511 . 0.5759 0.4137 0.3615 0.1176  -0.0064
0.0321  1 .
7093 O     O     . HOH HOH HOH S . 512 512 . 0.4259 0.4234 0.2629 -0.0064 -0.0433
0.1122  1 .
7094 O     O     . HOH HOH HOH S . 513 513 . 0.4289 0.3566 0.3226 0.1256  0.0459  -
0.0864 1 .
7095 O     O     . HOH HOH HOH S . 514 514 . 0.3260 0.3826 0.3996 0.0331  -0.0406 -
0.0095 1 .
7096 O     O     . HOH HOH HOH S . 515 515 . 0.3120 0.6923 0.3583 0.0127  -0.0073 -
0.1508 1 .
7097 O     O     . HOH HOH HOH S . 516 516 . 0.3899 0.2984 0.6442 0.0258  -0.1281
0.2464  1 .
7098 O     O     . HOH HOH HOH S . 517 517 . 0.4108 0.3920 0.2494 0.0077  0.0577  -
0.0317 1 .
7099 O     O     . HOH HOH HOH S . 518 518 . 0.3386 0.4003 0.3507 -0.0133 0.0699  -
0.0384 1 .
7100 O     O     . HOH HOH HOH S . 519 519 . 0.3390 0.2135 0.3838 -0.0796 -0.0421 -
0.0247 1 .
7101 O     O     . HOH HOH HOH S . 520 520 . 0.3968 0.2323 0.4161 0.0690  -0.1717 -
0.0300 1 .
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7102 O     O     . HOH HOH HOH S . 521 521 . 0.2933 0.3306 0.3145 -0.0211 -0.0187
0.0558  1 .
7103 O     O     . HOH HOH HOH S . 522 522 . 0.2735 0.3456 0.1933 0.0663  0.0410  -
0.0043 1 .
7104 O     O     . HOH HOH HOH S . 523 523 . 0.3353 0.3074 0.4855 -0.0124 0.1771
0.0673  1 .
7105 O     O     . HOH HOH HOH S . 524 524 . 0.3583 0.4335 0.2719 0.1077  0.0015
0.0216  1 .
7106 O     O     . HOH HOH HOH S . 525 525 . 0.3809 0.3997 0.6046 0.1888  0.0172  -
0.1308 1 .
7107 O     O     . HOH HOH HOH S . 528 528 . 0.4282 0.4117 0.3603 -0.0153 -0.1376 -
0.1021 1 .
7108 O     O     . HOH HOH HOH S . 529 529 . 0.4286 0.2302 0.3680 0.0072  0.0478
0.1051  1 .
7109 O     O     . HOH HOH HOH S . 530 530 . 0.4273 0.2186 0.5239 -0.0863 0.1037
0.0090  1 .
7110 O     O     . HOH HOH HOH S . 531 531 . 0.3025 0.2401 0.2613 0.0597  0.1045  -
0.0020 1 .
7111 O     O     . HOH HOH HOH S . 532 532 . 0.4009 0.3583 0.3278 -0.0029 0.0152  -
0.0330 1 .
7112 O     O     . HOH HOH HOH S . 533 533 . 0.5652 0.7755 0.4621 0.1136  -0.2056
0.0766  1 .
7113 O     O     . HOH HOH HOH S . 534 534 . 0.3428 0.5070 0.6135 0.0376  0.1345
0.0077  1 .
7114 O     O     . HOH HOH HOH S . 535 535 . 0.5306 0.4050 0.2917 0.1939  -0.0291 -
0.1264 1 .
7115 O     O     . HOH HOH HOH S . 536 536 . 0.5715 0.3011 0.4777 0.1295  -0.0664 -
0.0183 1 .
7116 O     O     . HOH HOH HOH S . 537 537 . 0.6124 0.5144 0.3856 0.1152  0.1412
0.2330  1 .
7117 O     O     . HOH HOH HOH S . 538 538 . 0.3440 0.4091 0.2081 -0.0322 -0.1135
0.0139  1 .
7118 O     O     . HOH HOH HOH S . 539 539 . 0.3481 0.4816 0.6465 -0.0617 -0.1481 -
0.0348 1 .
7119 O     O     . HOH HOH HOH S . 540 540 . 0.4277 0.4883 0.3262 0.1038  -0.0779
0.0100  1 .
7120 O     O     . HOH HOH HOH S . 541 541 . 0.4335 0.4348 0.4009 0.1475  -0.0634 -
0.1460 1 .
7121 O     O     . HOH HOH HOH S . 542 542 . 0.1665 0.3489 0.3556 0.0048  -0.0447 -
0.0818 1 .
7122 O     O     . HOH HOH HOH S . 544 544 . 0.6650 0.3561 0.5047 -0.1138 -0.1984 -
0.1184 1 .
7123 O     O     . HOH HOH HOH S . 545 545 . 0.5439 0.3167 0.2526 -0.0421 0.0957
0.0034  1 .
7124 O     O     . HOH HOH HOH S . 546 546 . 0.3288 0.2463 0.2229 0.0377  -0.0374 -
0.0695 1 .
7125 O     O     . HOH HOH HOH S . 547 547 . 0.5253 0.5609 0.3450 -0.3184 0.0351  -
0.0637 1 .
7126 O     O     . HOH HOH HOH S . 548 548 . 0.4827 0.4129 0.4806 0.0602  -0.1099
0.0170  1 .
7127 O     O     . HOH HOH HOH S . 550 550 . 0.3595 0.5553 0.8088 0.0257  0.0335
0.1934  1 .
7128 O     O     . HOH HOH HOH S . 551 551 . 0.5067 0.4919 0.5003 -0.0457 -0.1194 -
0.0193 1 .
7129 O     O     . HOH HOH HOH S . 552 552 . 0.2452 0.3563 0.3547 0.0006  0.0301
0.1545  1 .
7130 O     O     . HOH HOH HOH S . 553 553 . 0.4430 0.4068 0.2517 0.1033  0.0570
0.0036  1 .
7131 O     O     . HOH HOH HOH S . 555 555 . 0.2691 0.3400 0.4792 -0.0036 -0.0041
0.0181  1 .
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7132 O     O     . HOH HOH HOH S . 556 556 . 0.1757 0.3785 0.5764 0.0659  0.0027
0.0487  1 .
7133 O     O     . HOH HOH HOH S . 557 557 . 0.3875 0.4439 0.4955 -0.0334 -0.0836
0.0294  1 .
7134 O     O     . HOH HOH HOH S . 558 558 . 0.3136 0.2328 0.2915 -0.0278 -0.0008 -
0.0614 1 .
7135 O     O     . HOH HOH HOH S . 559 559 . 0.5403 0.3071 0.3617 0.1206  0.0153
0.0163  1 .
7136 O     O     . HOH HOH HOH S . 560 560 . 0.2543 0.3414 0.3027 0.0176  0.0036
0.0499  1 .
7137 O     O     . HOH HOH HOH S . 561 561 . 0.3724 0.5623 0.5037 0.2635  0.0949
0.1838  1 .
7138 O     O     . HOH HOH HOH S . 562 562 . 0.4076 0.5336 0.3198 0.0894  0.0711  -
0.0225 1 .
7139 O     O     . HOH HOH HOH S . 563 563 . 0.7153 0.6024 0.2212 0.2455  0.0858
0.1132  1 .
7140 O     O     . HOH HOH HOH S . 564 564 . 0.3627 0.2747 0.3046 -0.0154 -0.0561
0.0565  1 .
7141 O     O     . HOH HOH HOH S . 565 565 . 0.3141 0.3686 0.3889 -0.0183 0.1286
0.0011  1 .
7142 O     O     . HOH HOH HOH S . 566 566 . 0.3623 0.2569 0.2803 0.0362  0.0245
0.0666  1 .
7143 O     O     . HOH HOH HOH S . 567 567 . 0.4243 0.3327 0.5734 0.0496  0.0039  -
0.0597 1 .
7144 O     O     . HOH HOH HOH S . 568 568 . 0.3654 0.4910 0.2791 0.0762  0.1274
0.1395  1 .
7145 O     O     . HOH HOH HOH S . 569 569 . 0.4709 0.2651 0.6286 -0.0184 -0.0104 -
0.1277 1 .
7146 O     O     . HOH HOH HOH S . 570 570 . 0.4463 0.4763 0.2813 0.1254  -0.0880 -
0.2020 1 .
7147 O     O     . HOH HOH HOH S . 571 571 . 0.8375 0.2434 0.6028 0.1490  0.2896
0.0772  1 .
7148 O     O     . HOH HOH HOH S . 572 572 . 0.5141 0.2286 0.4929 0.0093  0.0560  -
0.1735 1 .
7149 O     O     . HOH HOH HOH S . 573 573 . 0.6058 0.2804 0.3425 0.1223  0.0423
0.1314  1 .
7150 O     O     . HOH HOH HOH S . 575 575 . 0.3139 0.5227 0.5652 0.0009  0.0028  -
0.0255 1 .
7151 O     O     . HOH HOH HOH S . 576 576 . 0.8102 0.6768 0.1521 0.0110  0.1370
0.0292  1 .
7152 O     O     . HOH HOH HOH S . 577 577 . 0.3582 0.6284 0.3374 0.1154  0.0637
0.1359  1 .
7153 O     O     . HOH HOH HOH S . 579 579 . 0.2188 0.2955 0.5221 0.0840  0.0059
0.0501  1 .
7154 O     O     . HOH HOH HOH S . 580 580 . 0.4437 0.4258 0.3931 0.0050  -0.0932
0.0252  1 .
7155 O     O     . HOH HOH HOH S . 581 581 . 0.4012 0.4540 0.5589 0.2161  -0.0175
0.2386  1 .
7156 O     O     . HOH HOH HOH S . 583 583 . 0.3066 0.3825 0.2298 -0.0283 -0.0232
0.0344  1 .
7157 O     O     . HOH HOH HOH S . 584 584 . 0.4447 0.4439 0.2882 -0.0639 0.0267
0.0176  1 .
7158 O     O     . HOH HOH HOH S . 585 585 . 0.3595 0.4162 0.4278 -0.1488 0.0148  -
0.0698 1 .
7159 O     O     . HOH HOH HOH S . 586 586 . 0.4706 0.4140 0.4314 0.1163  -0.1196
0.0142  1 .
7160 O     O     . HOH HOH HOH S . 587 587 . 0.4879 0.2873 0.5400 0.0715  -0.1249 -
0.1215 1 .
7161 O     O     . HOH HOH HOH S . 588 588 . 0.2134 0.4156 0.3945 -0.0462 -0.1033
0.0814  1 .
```

```
7162 O     O     . HOH HOH HOH S . 589 589 . 0.4440 0.3543 0.3658 0.0113  0.0903
0.0766  1 .
7163 O     O     . HOH HOH HOH S . 590 590 . 0.5725 0.3275 0.4199 -0.0166 -0.0672
0.1781  1 .
7164 O     O     . HOH HOH HOH S . 591 591 . 0.5419 0.5149 0.3519 -0.2295 0.0059
0.0560  1 .
7165 O     O     . HOH HOH HOH S . 592 592 . 0.4797 0.3919 0.3495 -0.0120 -0.1839 -
0.0354 1 .
7166 O     O     . HOH HOH HOH S . 594 594 . 0.1094 0.8048 0.5371 0.0004  -0.0323 -
0.0354 1 .
7167 O     O     . HOH HOH HOH S . 595 595 . 0.4271 0.3830 0.5116 -0.0171 0.0306
0.0827  1 .
7168 O     O     . HOH HOH HOH S . 596 596 . 0.5284 0.7853 0.3361 0.2677  -0.0713
0.0426  1 .
7169 O     O     . HOH HOH HOH S . 597 597 . 0.3886 0.3420 0.2653 0.0252  -0.0075 -
0.0757 1 .
7170 O     O     . HOH HOH HOH S . 598 598 . 0.8460 0.4347 0.1856 0.0660  0.0716
0.0036  1 .
7171 O     O     . HOH HOH HOH S . 599 599 . 0.5687 0.2309 0.3564 -0.0082 0.1311  -
0.0255 1 .
7172 O     O     . HOH HOH HOH S . 600 600 . 0.4578 0.9939 0.3824 0.1378  0.0477  -
0.2263 1 .
7173 O     O     . HOH HOH HOH S . 601 601 . 0.3894 0.4979 0.3222 0.1552  -0.0241
0.0617  1 .
7174 O     O     . HOH HOH HOH S . 602 602 . 0.2223 0.3340 0.2954 0.0171  -0.0762
0.0067  1 .
7175 O     O     . HOH HOH HOH S . 603 603 . 0.3709 0.4577 0.6584 0.1155  0.1065
0.0351  1 .
7176 O     O     . HOH HOH HOH S . 604 604 . 0.3978 0.2873 0.3951 0.0485  0.0924
0.0958  1 .
7177 O     O     . HOH HOH HOH S . 605 605 . 0.6286 0.4839 0.3850 -0.1870 0.0198  -
0.1434 1 .
7178 O     O     . HOH HOH HOH S . 606 606 . 0.5086 0.4747 0.3336 0.1034  -0.0812
0.0867  1 .
7179 O     O     . HOH HOH HOH S . 607 607 . 0.3781 0.3348 0.3864 0.0419  -0.0128 -
0.0193 1 .
7180 O     O     . HOH HOH HOH S . 608 608 . 0.4794 0.5486 0.4394 -0.0723 0.0386  -
0.0861 1 .
7181 O     O     . HOH HOH HOH S . 609 609 . 0.3321 0.2872 0.3504 -0.0533 0.0524
0.0086  1 .
7182 O     O     . HOH HOH HOH S . 610 610 . 0.6104 0.3499 0.3132 -0.0352 -0.0550
0.0678  1 .
7183 O     O     . HOH HOH HOH S . 612 612 . 0.6409 0.4298 0.3376 -0.0637 0.0963  -
0.1885 1 .
7184 O     O     . HOH HOH HOH S . 614 614 . 0.5465 0.6284 0.2836 0.0703  -0.0056 -
0.1202 1 .
7185 O     O     . HOH HOH HOH S . 615 615 . 0.4008 0.5261 0.5493 -0.0688 0.0212  -
0.1132 1 .
7186 O     O     . HOH HOH HOH S . 616 616 . 0.5369 0.2806 0.4998 0.0323  -0.0386
0.0731  1 .
#
_atom_sites.entry_id                    UNNAMED
_atom_sites.fract_transf_matrix[1][1]   0.009124
_atom_sites.fract_transf_matrix[1][2]   0.000000
_atom_sites.fract_transf_matrix[1][3]   0.000000
_atom_sites.fract_transf_matrix[2][1]   0.000000
_atom_sites.fract_transf_matrix[2][2]   0.008352
_atom_sites.fract_transf_matrix[2][3]   0.000000
_atom_sites.fract_transf_matrix[3][1]   0.000000
_atom_sites.fract_transf_matrix[3][2]   0.000000
```

```
_atom_sites.fract_transf_matrix[3][3]   0.014697
_atom_sites.fract_transf_vector[1]      0.000000
_atom_sites.fract_transf_vector[2]      0.000000
_atom_sites.fract_transf_vector[3]      0.000000
#
_cell.length_a      109.604
_cell.length_b      119.727
_cell.length_c      68.040
_cell.angle_alpha   90.000
_cell.angle_beta    90.000
_cell.angle_gamma   90.000
_cell.entry_id      UNNAMED
#
_computing.entry_id                  UNNAMED
_computing.structure_refinement      'REFMAC 5.5.0109'
_computing.structure_solution        ?
_computing.pdbx_data_reduction_ds    HKL
_computing.pdbx_data_reduction_ii    HKL
_computing.cell_refinement           HKL
#
_data_extraction.software           pdb_extract
_data_extraction.extraction_date    'Fri Oct 21 15:22:49 2011'
_data_extraction.version            3.10
_data_extraction.release_date       'June 10, 2010'
_data_extraction.location           http://sw-tools.rcsb.org/apps/PDB_EXTRACT/
#
loop_
_database_2.database_id
_database_2.database_code
PDB  UNNAMED
RCSB UNNAMED
#
_database_PDB_remark.id     3
_database_PDB_remark.text
;
REMARK   3
REMARK   3 REFINEMENT.
REMARK   3   PROGRAM     : REFMAC 5.5.0109
REMARK   3   AUTHORS     : MURSHUDOV,VAGIN,DODSON
REMARK   3
REMARK   3    REFINEMENT TARGET : MAXIMUM LIKELIHOOD
REMARK   3
REMARK   3  DATA USED IN REFINEMENT.
REMARK   3   RESOLUTION RANGE HIGH (ANGSTROMS) :   1.70
REMARK   3   RESOLUTION RANGE LOW  (ANGSTROMS) :  80.84
REMARK   3   DATA CUTOFF            (SIGMA(F)) : NONE
REMARK   3   COMPLETENESS FOR RANGE        (%) :  96.69
REMARK   3   NUMBER OF REFLECTIONS             :   90209
REMARK   3
REMARK   3  FIT TO DATA USED IN REFINEMENT.
REMARK   3   CROSS-VALIDATION METHOD          : THROUGHOUT
REMARK   3   FREE R VALUE TEST SET SELECTION  : RANDOM
REMARK   3   R VALUE     (WORKING + TEST SET) : 0.14475
REMARK   3   R VALUE            (WORKING SET) :  0.14233
REMARK   3   FREE R VALUE                     :  0.19127
REMARK   3   FREE R VALUE TEST SET SIZE   (%) :  5.0
REMARK   3   FREE R VALUE TEST SET COUNT      :  4725
REMARK   3
REMARK   3  FIT IN THE HIGHEST RESOLUTION BIN.
REMARK   3   TOTAL NUMBER OF BINS USED           :      20
```

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REMARK   3   BIN RESOLUTION RANGE HIGH           :    1.705
REMARK   3   BIN RESOLUTION RANGE LOW            :    1.749
REMARK   3   REFLECTION IN BIN     (WORKING SET) :     5137
REMARK   3   BIN COMPLETENESS (WORKING+TEST) (%) :    76.22
REMARK   3   BIN R VALUE           (WORKING SET) :    0.166
REMARK   3   BIN FREE R VALUE SET COUNT          :      278
REMARK   3   BIN FREE R VALUE                    :    0.221
REMARK   3
REMARK   3  NUMBER OF NON-HYDROGEN ATOMS USED IN REFINEMENT.
REMARK   3   ALL ATOMS               :     7186
REMARK   3
REMARK   3  B VALUES.
REMARK   3   FROM WILSON PLOT           (A**2) : NULL
REMARK   3   MEAN B VALUE      (OVERALL, A**2) :  14.284
REMARK   3   OVERALL ANISOTROPIC B VALUE.
REMARK   3    B11 (A**2) :     1.03
REMARK   3    B22 (A**2) :    -0.54
REMARK   3    B33 (A**2) :    -0.49
REMARK   3    B12 (A**2) :     0.00
REMARK   3    B13 (A**2) :     0.00
REMARK   3    B23 (A**2) :     0.00
REMARK   3
REMARK   3  ESTIMATED OVERALL COORDINATE ERROR.
REMARK   3   ESU BASED ON R VALUE                            (A):   0.132
REMARK   3   ESU BASED ON FREE R VALUE                       (A):   0.095
REMARK   3   ESU BASED ON MAXIMUM LIKELIHOOD                 (A):   0.054
REMARK   3   ESU FOR B VALUES BASED ON MAXIMUM LIKELIHOOD (A**2):   3.526
REMARK   3
REMARK   3 CORRELATION COEFFICIENTS.
REMARK   3   CORRELATION COEFFICIENT FO-FC      :   0.963
REMARK   3   CORRELATION COEFFICIENT FO-FC FREE :   0.941
REMARK   3
REMARK   3  RMS DEVIATIONS FROM IDEAL VALUES         COUNT    RMS    WEIGHT
REMARK   3   BOND LENGTHS REFINED ATOMS        (A):  6695 ; 0.027 ; 0.022
REMARK   3   BOND ANGLES REFINED ATOMS   (DEGREES):  9067 ; 2.077 ; 1.970
REMARK   3   TORSION ANGLES, PERIOD 1    (DEGREES):   861 ; 6.123 ; 5.000
REMARK   3   TORSION ANGLES, PERIOD 2    (DEGREES):   298 ;38.349 ;24.966
REMARK   3   TORSION ANGLES, PERIOD 3    (DEGREES):  1125 ;13.672 ;15.000
REMARK   3   TORSION ANGLES, PERIOD 4    (DEGREES):    38 ;20.551 ;15.000
REMARK   3   CHIRAL-CENTER RESTRAINTS       (A**3):  1024 ; 0.196 ; 0.200
REMARK   3   GENERAL PLANES REFINED ATOMS      (A):  5066 ; 0.012 ; 0.021
REMARK   3
REMARK   3  ISOTROPIC THERMAL FACTOR RESTRAINTS.     COUNT   RMS    WEIGHT
REMARK   3   MAIN-CHAIN BOND REFINED ATOMS  (A**2):  4277 ; 2.041 ; 1.500
REMARK   3   MAIN-CHAIN ANGLE REFINED ATOMS (A**2):  6829 ; 2.947 ; 2.000
REMARK   3   SIDE-CHAIN BOND REFINED ATOMS  (A**2):  2418 ; 4.849 ; 3.000
REMARK   3   SIDE-CHAIN ANGLE REFINED ATOMS (A**2):  2238 ; 6.975 ; 4.500
REMARK   3
REMARK   3 ANISOTROPIC THERMAL FACTOR RESTRAINTS.    COUNT   RMS   WEIGHT
REMARK   3   RIGID-BOND RESTRAINTS          (A**2):  6695 ; 2.754 ; 3.000
REMARK   3
REMARK   3  NCS RESTRAINTS STATISTICS
REMARK   3   NUMBER OF NCS GROUPS : NULL
REMARK   3
REMARK   3  TWIN DETAILS
REMARK   3   NUMBER OF TWIN DOMAINS  : NULL
REMARK   3
REMARK   3
REMARK   3  TLS DETAILS
REMARK   3   NUMBER OF TLS GROUPS  : NULL
```

```
REMARK   3
REMARK   3
REMARK   3  BULK SOLVENT MODELLING.
REMARK   3   METHOD USED :  MASK
REMARK   3   PARAMETERS FOR MASK CALCULATION
REMARK   3   VDW PROBE RADIUS   :   1.40
REMARK   3   ION PROBE RADIUS   :   0.80
REMARK   3   SHRINKAGE RADIUS   :   0.80
REMARK   3
REMARK   3  OTHER REFINEMENT REMARKS:
REMARK   3  HYDROGENS HAVE BEEN ADDED IN THE RIDING POSITIONS
REMARK   3  U VALUES      : REFINED INDIVIDUALLY
REMARK   3
;
#
_entity_poly.entity_id                    1
_entity_poly.pdbx_seq_one_letter_code
;SIQKIWAREILDSRGNPTVEVDLYTAKGLFRAAVPSGASTGIYEALELRDGDKQRYLGKG
VLKAVDHINSTIAPALISSGLSVVEQEKLDNLMLELDGTENKSKFGANAILGVSLAVCKA
GAAERELPLYRHIAQLAGNSDLILPVPAFNVINGGSHAGNKLAMQEFMILPVGAESFRDA
MRLGAEVYHTLKGVIKDKYGKDATNVGDEGGFAPNILENSEALELVKEAIDKAGYTEKIV
IGMDVAASEFYRDGKYDLDFKSPTDPSRYITGDQLGALYQDFVRDYPVVSIEDPFDQDDW
AAWSKFTANVGIQIVGDDLTVTNPKRIERAVEEKACNCLLLKVNQIGSVTEAIQACKLAQ
ENGWGVMVSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEELGDEA
RFAGHNFRNPSVL
;
_entity_poly.pdbx_strand_id               A,B
_entity_poly.type                         'polypeptide(L)'
_entity_poly.pdbx_target_identifier       ?
#
_entry.id   UNNAMED
#
_exptl.crystals_number   1
_exptl.entry_id          UNNAMED
_exptl.method            'X-RAY DIFFRACTION'
#
_exptl_crystal.id                     1
_exptl_crystal.pdbx_mosaicity         0.435
_exptl_crystal.pdbx_mosaicity_esd     ?
_exptl_crystal.density_Matthews       ?
_exptl_crystal.density_diffrn         ?
_exptl_crystal.density_meas           ?
_exptl_crystal.density_meas_temp      ?
_exptl_crystal.density_percent_sol    ?
_exptl_crystal.size_max               ?
_exptl_crystal.size_mid               ?
_exptl_crystal.size_min               ?
_exptl_crystal.size_rad               ?
#
_refine.entry_id                                 UNNAMED
_refine.pdbx_refine_id                           'X-RAY DIFFRACTION'
_refine.ls_d_res_high                            1.7000
_refine.ls_d_res_low                             80.8400
_refine.pdbx_ls_sigma_F                          0.000
_refine.pdbx_data_cutoff_high_absF               ?
_refine.pdbx_data_cutoff_low_absF                ?
_refine.ls_percent_reflns_obs                    96.6900
_refine.ls_number_reflns_obs                     94934
_refine.ls_number_reflns_all                     ?
_refine.pdbx_ls_cross_valid_method               THROUGHOUT
```

```
_refine.ls_matrix_type                           ?
_refine.pdbx_R_Free_selection_details            RANDOM
_refine.details
' HYDROGENS HAVE BEEN ADDED IN THE RIDING POSITIONS U VALUES      : REFINED
INDIVIDUALLY '
_refine.ls_R_factor_all                          ?
_refine.ls_R_factor_obs                          0.1447
_refine.ls_R_factor_R_work                       0.1423
_refine.ls_wR_factor_R_work                      0.1423
_refine.ls_R_factor_R_free                       0.1913
_refine.ls_wR_factor_R_free                      0.1913
_refine.ls_percent_reflns_R_free                 5.0000
_refine.ls_number_reflns_R_free                  4725
_refine.ls_number_reflns_R_work                  90209
_refine.ls_R_factor_R_free_error                 ?
_refine.B_iso_mean                               14.4092
_refine.solvent_model_param_bsol                 ?
_refine.solvent_model_param_ksol                 ?
_refine.pdbx_isotropic_thermal_model             ?
_refine.aniso_B[1][1]                            1.0300
_refine.aniso_B[2][2]                            -0.5400
_refine.aniso_B[3][3]                            -0.4900
_refine.aniso_B[1][2]                            0.0000
_refine.aniso_B[1][3]                            0.0000
_refine.aniso_B[2][3]                            0.0000
_refine.correlation_coeff_Fo_to_Fc               0.9630
_refine.correlation_coeff_Fo_to_Fc_free          0.9410
_refine.overall_SU_R_Cruickshank_DPI             0.1324
_refine.pdbx_overall_SU_R_free_Cruickshank_DPI   ?
_refine.pdbx_overall_SU_R_Blow_DPI               ?
_refine.pdbx_overall_SU_R_free_Blow_DPI          ?
_refine.overall_SU_R_free                        0.0947
_refine.pdbx_overall_ESU_R                       0.1320
_refine.pdbx_overall_ESU_R_Free                  0.0950
_refine.overall_SU_ML                            0.0540
_refine.overall_SU_B                             3.5260
_refine.solvent_model_details                    MASK
_refine.pdbx_solvent_vdw_probe_radii             1.4000
_refine.pdbx_solvent_ion_probe_radii             0.8000
_refine.pdbx_solvent_shrinkage_radii             0.8000
_refine.ls_number_parameters                     ?
_refine.ls_number_restraints                     ?
_refine.pdbx_starting_model                      ?
_refine.pdbx_method_to_determine_struct          ?
_refine.pdbx_stereochemistry_target_values       'MAXIMUM LIKELIHOOD'
_refine.pdbx_stereochem_target_val_spec_case     ?
_refine.overall_FOM_work_R_set                   0.9036
_refine.B_iso_max                                53.390
_refine.B_iso_min                                3.550
_refine.pdbx_overall_phase_error                 ?
_refine.occupancy_max                            1.000
_refine.occupancy_min                            0.500
#
loop_
_refine_ls_restr.pdbx_refine_id
_refine_ls_restr.type
_refine_ls_restr.number
_refine_ls_restr.dev_ideal
_refine_ls_restr.dev_ideal_target
_refine_ls_restr.weight
```

```
_refine_ls_restr.pdbx_restraint_function
'X-RAY DIFFRACTION' r_bond_refined_d       6695 0.027  0.022  ? ?
'X-RAY DIFFRACTION' r_angle_refined_deg    9067 2.077  1.970  ? ?
'X-RAY DIFFRACTION' r_dihedral_angle_1_deg 861  6.123  5.000  ? ?
'X-RAY DIFFRACTION' r_dihedral_angle_2_deg 298  38.349 24.966 ? ?
'X-RAY DIFFRACTION' r_dihedral_angle_3_deg 1125 13.672 15.000 ? ?
'X-RAY DIFFRACTION' r_dihedral_angle_4_deg 38   20.551 15.000 ? ?
'X-RAY DIFFRACTION' r_chiral_restr         1024 0.196  0.200  ? ?
'X-RAY DIFFRACTION' r_gen_planes_refined   5066 0.012  0.021  ? ?
'X-RAY DIFFRACTION' r_mcbond_it            4277 2.041  1.500  ? ?
'X-RAY DIFFRACTION' r_mcangle_it           6829 2.947  2.000  ? ?
'X-RAY DIFFRACTION' r_scbond_it            2418 4.849  3.000  ? ?
'X-RAY DIFFRACTION' r_scangle_it           2238 6.975  4.500  ? ?
'X-RAY DIFFRACTION' r_rigid_bond_restr     6695 2.754  3.000  ? ?
#
_refine_ls_shell.d_res_high                          1.7050
_refine_ls_shell.d_res_low                           1.7490
_refine_ls_shell.pdbx_total_number_of_bins_used      20
_refine_ls_shell.percent_reflns_obs                  76.2200
_refine_ls_shell.number_reflns_R_work                5137
_refine_ls_shell.R_factor_all                        ?
_refine_ls_shell.R_factor_R_work                     0.1660
_refine_ls_shell.R_factor_R_free                     0.2210
_refine_ls_shell.percent_reflns_R_free               ?
_refine_ls_shell.number_reflns_R_free                278
_refine_ls_shell.R_factor_R_free_error               ?
_refine_ls_shell.number_reflns_all                   5415
_refine_ls_shell.number_reflns_obs                   ?
_refine_ls_shell.pdbx_refine_id                      'X-RAY DIFFRACTION'
#
_reflns.entry_id                     UNNAMED
_reflns.d_resolution_high            1.700
_reflns.d_resolution_low             50.000
_reflns.pdbx_number_measured_all     555923
_reflns.number_obs                   94960
_reflns.pdbx_Rmerge_I_obs            0.051
_reflns.pdbx_netI_over_av_sigmaI     37.571
_reflns.pdbx_netI_over_sigmaI        16.400
_reflns.pdbx_chi_squared             1.351
_reflns.pdbx_redundancy              5.900
_reflns.percent_possible_obs         96.800
_reflns.pdbx_Rmeas_mean              0.051
_reflns.pdbx_average_I_obs           3787.200
_reflns.pdbx_average_sigmaI_obs      100.800
#
loop_
_reflns_shell.d_res_high
_reflns_shell.d_res_low
_reflns_shell.number_measured_obs
_reflns_shell.number_measured_all
_reflns_shell.number_unique_obs
_reflns_shell.pdbx_rejects
_reflns_shell.Rmerge_I_obs
_reflns_shell.meanI_over_sigI_obs
_reflns_shell.pdbx_Rsym_value
_reflns_shell.pdbx_chi_squared
_reflns_shell.pdbx_redundancy
_reflns_shell.percent_possible_obs
_reflns_shell.pdbx_Rmeas_mean
_reflns_shell.pdbx_netI_over_sigmaI_obs
```

```
_reflns_shell.pdbx_number_centric
_reflns_shell.pdbx_number_anomalous
_reflns_shell.pdbx_Rmerge_I_anomalous
_reflns_shell.pdbx_meanI_over_sigI_anomalous
_reflns_shell.pdbx_PCV_mean
_reflns_shell.number_possible
_reflns_shell.number_unique_all
_reflns_shell.Rmerge_F_all
_reflns_shell.Rmerge_F_obs
_reflns_shell.Rmerge_I_all
_reflns_shell.meanI_over_sigI_all
_reflns_shell.percent_possible_all
_reflns_shell.pdbx_Rrim_I_all
_reflns_shell.pdbx_Rpim_I_all
1.700 1.760  ? ? ? ? 0.156 ? ? 0.832 4.000 ? ? ? ? ? ? ? ? 7763 ? ? ? ? 80.100 ? ?
1.760 1.830  ? ? ? ? 0.135 ? ? 0.897 4.700 ? ? ? ? ? ? ? ? 9282 ? ? ? ? 95.700 ? ?
1.830 1.910  ? ? ? ? 0.112 ? ? 0.927 5.700 ? ? ? ? ? ? ? ? 9596 ? ? ? ? 99.100 ? ?
1.910 2.020  ? ? ? ? 0.086 ? ? 0.990 5.900 ? ? ? ? ? ? ? ? 9661 ? ? ? ? 99.400 ? ?
2.020 2.140  ? ? ? ? 0.069 ? ? 1.100 6.100 ? ? ? ? ? ? ? ? 9675 ? ? ? ? 99.500 ? ?
2.140 2.310  ? ? ? ? 0.057 ? ? 1.197 6.300 ? ? ? ? ? ? ? ? 9730 ? ? ? ? 99.700 ? ?
2.310 2.540  ? ? ? ? 0.051 ? ? 1.297 6.400 ? ? ? ? ? ? ? ? 9767 ? ? ? ? 99.700 ? ?
2.540 2.910  ? ? ? ? 0.045 ? ? 1.453 6.500 ? ? ? ? ? ? ? ? 9762 ? ? ? ? 99.600 ? ?
2.910 3.660  ? ? ? ? 0.047 ? ? 2.175 6.400 ? ? ? ? ? ? ? ? 9830 ? ? ? ? 99.000 ? ?
3.660 50.000 ? ? ? ? 0.039 ? ? 2.085 6.300 ? ? ? ? ? ? ? ? 9894 ? ? ? ? 96.400 ? ?
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1 HKL         ?    ?              package 'Zbyszek Otwinowski' hkl@hkl-xray.com
'data reduction'  http://www.hkl-xray.com/                    ?
2 REFMAC5     ?    ?              program 'Garib N. Murshudov' garib@ysbl.york.ac.uk
refinement        http://www.ccp4.ac.uk/dist/html/refmac5.html Fortran_77
3 pdb_extract 3.10 'June 10, 2010' package PDB
deposit@deposit.rcsb.org
'data extraction' http://sw-tools.pdb.org/apps/PDB_EXTRACT/    C++
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CIF File(s) (REQUIRED if paper describes X-ray crystal structures)

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ATOM 122  CA    CA    . GLY GLY GLY A A 15  15  . 142.139 93.484  6.553   1.00 7.84
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ATOM 137  CD    CD    . PRO PRO PRO A A 17  17  . 142.494 87.227  6.769   1.00 7.12
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ATOM 138  C     C     . PRO PRO PRO A A 17  17  . 140.113 86.849  9.405   1.00 6.24
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ATOM 142  CB    CB    . THR THR THR A A 18  18  . 138.602 87.397  12.177  1.00 5.96
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ATOM 144  CG2   CG2   . THR THR THR A A 18  18  . 137.465 88.401  12.033  1.00 6.82
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ATOM 145  C     C     . THR THR THR A A 18  18  . 137.162 85.609  11.021  1.00 6.18
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ATOM 146  O     O     . THR THR THR A A 18  18  . 136.445 85.628  9.994   1.00 6.82
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ATOM 147  N     N     . VAL VAL VAL A A 19  19  . 136.788 85.014  12.162  1.00 6.28
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ATOM 148  CA    CA    . VAL VAL VAL A A 19  19  . 135.578 84.226  12.244  1.00 7.47
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ATOM 149  CB    CB    . VAL VAL VAL A A 19  19  . 135.762 83.133  13.323  1.00 7.58
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ATOM 150  CG1   CG1   . VAL VAL VAL A A 19  19  . 134.438 82.406  13.644  1.00 8.72
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ATOM 151  CG2   CG2   . VAL VAL VAL A A 19  19  . 136.896 82.176  12.848  1.00 8.69
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ATOM 158  CD    CD    . GLU GLU GLU A A 20  20  . 129.777 88.103  10.521  1.00 10.65
1 . .
ATOM 159  OE1   OE1   . GLU GLU GLU A A 20  20  . 129.302 87.870  9.401   1.00 11.22
1 . .
ATOM 160  OE2   OE2   . GLU GLU GLU A A 20  20  . 130.160 89.216  10.969  1.00 11.20
1 . .
ATOM 161  C     C     . GLU GLU GLU A A 20  20  . 130.948 84.254  12.317  1.00 6.86
1 . .
ATOM 162  O     O     . GLU GLU GLU A A 20  20  . 130.990 83.351  11.478  1.00 7.51
1 . .
ATOM 163  N     N     . VAL VAL VAL A A 21  21  . 130.047 84.318  13.297  1.00 7.40
1 . .
ATOM 164  CA    CA    . VAL VAL VAL A A 21  21  . 129.035 83.266  13.465  1.00 6.20
1 . .
ATOM 165  CB    CB    . VAL VAL VAL A A 21  21  . 129.221 82.526  14.816  1.00 6.87
1 . .
ATOM 166  CG1   CG1   . VAL VAL VAL A A 21  21  . 128.200 81.485  14.994  1.00 9.04
1 . .
ATOM 167  CG2   CG2   . VAL VAL VAL A A 21  21  . 130.614 81.876  14.794  1.00 9.10
1 . .
ATOM 168  C     C     . VAL VAL VAL A A 21  21  . 127.631 83.859  13.511  1.00 7.66
1 . .
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ATOM 169  O     O     . VAL VAL VAL A A 21  21  . 127.378 84.812  14.304  1.00 8.22
1 . .
ATOM 170  N     N     . ASP ASP ASP A A 22  22  . 126.760 83.362  12.637  1.00 7.44
1 . .
ATOM 171  CA    CA    . ASP ASP ASP A A 22  22  . 125.332 83.647  12.761  1.00 6.96
1 . .
ATOM 172  CB    CB    . ASP ASP ASP A A 22  22  . 124.699 83.664  11.365  1.00 8.39
1 . .
ATOM 173  CG    CG    . ASP ASP ASP A A 22  22  . 124.996 84.878  10.558  1.00 10.19
1 . .
ATOM 174  OD1   OD1   . ASP ASP ASP A A 22  22  . 124.591 84.859  9.362   1.00 13.53
1 . .
ATOM 175  OD2   OD2   . ASP ASP ASP A A 22  22  . 125.576 85.820  10.982  1.00 11.59
1 . .
ATOM 176  C     C     . ASP ASP ASP A A 22  22  . 124.704 82.476  13.519  1.00 8.06
1 . .
ATOM 177  O     O     . ASP ASP ASP A A 22  22  . 124.914 81.292  13.143  1.00 8.88
1 . .
ATOM 178  N     N     . LEU LEU LEU A A 23  23  . 123.813 82.762  14.442  1.00 7.75
1 . .
ATOM 179  CA    CA    . LEU LEU LEU A A 23  23  . 123.133 81.697  15.151  1.00 7.16
1 . .
ATOM 180  CB    CB    . LEU LEU LEU A A 23  23  . 123.700 81.606  16.602  1.00 8.89
1 . .
ATOM 181  CG    CG    . LEU LEU LEU A A 23  23  . 123.094 80.485  17.483  1.00 9.54
1 . .
ATOM 182  CD1   CD1   . LEU LEU LEU A A 23  23  . 124.103 80.158  18.607  1.00 12.88
1 . .
ATOM 183  CD2   CD2   . LEU LEU LEU A A 23  23  . 121.761 80.884  18.091  1.00 10.30
1 . .
ATOM 184  C     C     . LEU LEU LEU A A 23  23  . 121.659 82.058  15.148  1.00 8.76
1 . .
ATOM 185  O     O     . LEU LEU LEU A A 23  23  . 121.246 83.178  15.549  1.00 9.53
1 . .
ATOM 186  N     N     . TYR TYR TYR A A 24  24  . 120.843 81.102  14.765  1.00 10.30
1 . .
ATOM 187  CA    CA    . TYR TYR TYR A A 24  24  . 119.374 81.288  14.602  1.00 10.14
1 . .
ATOM 188  CB    CB    . TYR TYR TYR A A 24  24  . 118.866 80.699  13.284  1.00 9.64
1 . .
ATOM 189  CG    CG    . TYR TYR TYR A A 24  24  . 119.369 81.386  12.055  1.00 11.71
1 . .
ATOM 190  CD1   CD1   . TYR TYR TYR A A 24  24  . 120.688 81.174  11.603  1.00 14.13
1 . .
ATOM 191  CE1   CE1   . TYR TYR TYR A A 24  24  . 121.142 81.757  10.442  1.00 14.90
1 . .
ATOM 192  CZ    CZ    . TYR TYR TYR A A 24  24  . 120.273 82.624  9.711   1.00 16.96
1 . .
ATOM 193  OH    OH    . TYR TYR TYR A A 24  24  . 120.646 83.256  8.536   1.00 19.77
1 . .
ATOM 194  CE2   CE2   . TYR TYR TYR A A 24  24  . 118.977 82.842  10.162  1.00 19.26
1 . .
ATOM 195  CD2   CD2   . TYR TYR TYR A A 24  24  . 118.526 82.248  11.328  1.00 16.36
1 . .
ATOM 196  C     C     . TYR TYR TYR A A 24  24  . 118.604 80.594  15.727  1.00 10.16
1 . .
ATOM 197  O     O     . TYR TYR TYR A A 24  24  . 118.888 79.428  16.018  1.00 11.15
1 . .
ATOM 198  N     N     . THR THR THR A A 25  25  . 117.650 81.311  16.322  1.00 11.71
1 . .
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ATOM 199  CA    CA    . THR THR THR A A 25  25  . 116.688 80.675  17.278  1.00 12.82
1 . .
ATOM 200  CB    CB    . THR THR THR A A 25  25  . 116.904 81.201  18.695  1.00 12.46
1 . .
ATOM 201  OG1   OG1   . THR THR THR A A 25  25  . 116.570 82.593  18.731  1.00 13.74
1 . .
ATOM 202  CG2   CG2   . THR THR THR A A 25  25  . 118.342 80.953  19.202  1.00 12.92
1 . .
ATOM 203  C     C     . THR THR THR A A 25  25  . 115.329 81.188  16.805  1.00 16.39
1 . .
ATOM 204  O     O     . THR THR THR A A 25  25  . 115.189 81.919  15.803  1.00 16.66
1 . .
ATOM 205  N     N     . ALA ALA ALA A A 26  26  . 114.296 80.799  17.570  1.00 15.99
1 . .
ATOM 206  CA    CA    . ALA ALA ALA A A 26  26  . 113.003 81.286  17.234  1.00 19.04
1 . .
ATOM 207  CB    CB    . ALA ALA ALA A A 26  26  . 111.927 80.539  18.184  1.00 19.28
1 . .
ATOM 208  C     C     . ALA ALA ALA A A 26  26  . 112.894 82.814  17.359  1.00 19.65
1 . .
ATOM 209  O     O     . ALA ALA ALA A A 26  26  . 111.907 83.412  16.846  1.00 22.33
1 . .
ATOM 210  N     N     . LYS LYS LYS A A 27  27  . 113.785 83.440  18.101  1.00 19.83
1 . .
ATOM 211  CA    CA    . LYS LYS LYS A A 27  27  . 113.797 84.906  18.260  1.00 20.93
1 . .
ATOM 212  CB    CB    . LYS LYS LYS A A 27  27  . 114.542 85.307  19.567  1.00 22.14
1 . .
ATOM 213  CG    CG    . LYS LYS LYS A A 27  27  . 113.738 85.140  20.876  1.00 24.55
1 . .
ATOM 214  CD    CD    . LYS LYS LYS A A 27  27  . 112.798 86.328  20.990  1.00 34.01
1 . .
ATOM 215  CE    CE    . LYS LYS LYS A A 27  27  . 111.757 86.154  22.056  1.00 35.71
1 . .
ATOM 216  NZ    NZ    . LYS LYS LYS A A 27  27  . 112.504 85.621  23.202  1.00 37.26
1 . .
ATOM 217  C     C     . LYS LYS LYS A A 27  27  . 114.437 85.626  17.064  1.00 21.28
1 . .
ATOM 218  O     O     . LYS LYS LYS A A 27  27  . 114.374 86.882  16.999  1.00 24.97
1 . .
ATOM 219  N     N     . GLY GLY GLY A A 28  28  . 115.152 84.885  16.218  1.00 18.32
1 . .
ATOM 220  CA    CA    . GLY GLY GLY A A 28  28  . 115.757 85.477  15.035  1.00 17.60
1 . .
ATOM 221  C     C     . GLY GLY GLY A A 28  28  . 117.251 85.152  14.934  1.00 13.09
1 . .
ATOM 222  O     O     . GLY GLY GLY A A 28  28  . 117.711 84.094  15.349  1.00 12.72
1 . .
ATOM 223  N     N     . LEU LEU LEU A A 29  29  . 117.966 86.069  14.286  1.00 14.47
1 . .
ATOM 224  CA    CA    . LEU LEU LEU A A 29  29  . 119.361 85.847  13.936  1.00 13.36
1 . .
ATOM 225  CB    CB    . LEU LEU LEU A A 29  29  . 119.577 86.407  12.491  1.00 14.48
1 . .
ATOM 226  CG    CG    . LEU LEU LEU A A 29  29  . 120.928 86.038  11.830  1.00 17.77
1 . .
ATOM 227  CD1   CD1   . LEU LEU LEU A A 29  29  . 120.753 86.232  10.358  1.00 24.67
1 . .
ATOM 228  CD2   CD2   . LEU LEU LEU A A 29  29  . 122.026 86.868  12.328  1.00 22.22
1 . .
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ATOM 229  C     C     . LEU LEU LEU A A 29  29  . 120.253 86.619  14.882  1.00 12.73
1 . .
ATOM 230  O     O     . LEU LEU LEU A A 29  29  . 120.039 87.810  15.104  1.00 15.57
1 . .
ATOM 231  N     N     . PHE PHE PHE A A 30  30  . 121.280 86.014  15.410  1.00 10.42
1 . .
ATOM 232  CA    CA    . PHE PHE PHE A A 30  30  . 122.206 86.671  16.326  1.00 10.01
1 . .
ATOM 233  CB    CB    . PHE PHE PHE A A 30  30  . 122.055 86.065  17.712  1.00 10.67
1 . .
ATOM 234  CG    CG    . PHE PHE PHE A A 30  30  . 120.680 86.242  18.197  1.00 10.74
1 . .
ATOM 235  CD1   CD1   . PHE PHE PHE A A 30  30  . 120.318 87.493  18.698  1.00 12.26
1 . .
ATOM 236  CE1   CE1   . PHE PHE PHE A A 30  30  . 118.965 87.731  19.025  1.00 13.59
1 . .
ATOM 237  CZ    CZ    . PHE PHE PHE A A 30  30  . 118.003 86.711  18.861  1.00 13.93
1 . .
ATOM 238  CE2   CE2   . PHE PHE PHE A A 30  30  . 118.375 85.503  18.302  1.00 13.10
1 . .
ATOM 239  CD2   CD2   . PHE PHE PHE A A 30  30  . 119.729 85.275  18.031  1.00 12.15
1 . .
ATOM 240  C     C     . PHE PHE PHE A A 30  30  . 123.628 86.464  15.735  1.00 10.73
1 . .
ATOM 241  O     O     . PHE PHE PHE A A 30  30  . 123.961 85.332  15.321  1.00 14.86
1 . .
ATOM 242  N     N     . ARG ARG ARG A A 31  31  . 124.456 87.492  15.804  1.00 8.87
1 . .
ATOM 243  CA    CA    . ARG ARG ARG A A 31  31  . 125.722 87.451  15.072  1.00 8.22
1 . .
ATOM 244  CB    CB    . ARG ARG ARG A A 31  31  . 125.637 88.314  13.773  1.00 9.30
1 . .
ATOM 245  CG    CG    . ARG ARG ARG A A 31  31  . 126.895 88.289  12.933  1.00 9.30
1 . .
ATOM 246  CD    CD    . ARG ARG ARG A A 31  31  . 126.729 89.149  11.770  1.00 11.81
1 . .
ATOM 247  NE    NE    . ARG ARG ARG A A 31  31  . 125.658 88.762  10.899  1.00 11.10
1 . .
ATOM 248  CZ    CZ    . ARG ARG ARG A A 31  31  . 124.946 89.703  10.225  1.00 13.86
1 . .
ATOM 249  NH1   NH1   . ARG ARG ARG A A 31  31  . 125.242 91.016  10.358  1.00 15.18
1 . .
ATOM 250  NH2   NH2   . ARG ARG ARG A A 31  31  . 123.955 89.359  9.450   1.00 17.21
1 . .
ATOM 251  C     C     . ARG ARG ARG A A 31  31  . 126.831 87.924  15.950  1.00 7.53
1 . .
ATOM 252  O     O     . ARG ARG ARG A A 31  31  . 126.655 88.935  16.627  1.00 9.75
1 . .
ATOM 253  N     N     . ALA ALA ALA A A 32  32  . 127.980 87.236  15.916  1.00 7.36
1 . .
ATOM 254  CA    CA    . ALA ALA ALA A A 32  32  . 129.169 87.683  16.650  1.00 6.45
1 . .
ATOM 255  CB    CB    . ALA ALA ALA A A 32  32  . 129.302 86.947  18.013  1.00 9.00
1 . .
ATOM 256  C     C     . ALA ALA ALA A A 32  32  . 130.400 87.447  15.842  1.00 6.89
1 . .
ATOM 257  O     O     . ALA ALA ALA A A 32  32  . 130.425 86.567  14.998  1.00 8.30
1 . .
ATOM 258  N     N     . ALA ALA ALA A A 33  33  . 131.445 88.187  16.111  1.00 6.97
1 . .
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ATOM 259  CA    CA    . ALA ALA ALA A A 33  33  . 132.759 88.002  15.395  1.00 7.67
1 . .
ATOM 260  CB    CB    . ALA ALA ALA A A 33  33  . 132.971 89.079  14.301  1.00 8.31
1 . .
ATOM 261  C     C     . ALA ALA ALA A A 33  33  . 133.885 88.020  16.402  1.00 7.36
1 . .
ATOM 262  O     O     . ALA ALA ALA A A 33  33  . 133.754 88.588  17.511  1.00 8.04
1 . .
ATOM 263  N     N     . VAL VAL VAL A A 34  34  . 134.982 87.414  15.983  1.00 7.36
1 . .
ATOM 264  CA    CA    . VAL VAL VAL A A 34  34  . 136.108 87.152  16.849  1.00 7.88
1 . .
ATOM 265  CB    CB    . VAL VAL VAL A A 34  34  . 136.562 85.655  16.651  1.00 7.87
1 . .
ATOM 266  CG1   CG1   . VAL VAL VAL A A 34  34  . 137.865 85.307  17.491  1.00 7.63
1 . .
ATOM 267  CG2   CG2   . VAL VAL VAL A A 34  34  . 135.380 84.690  16.994  1.00 8.21
1 . .
ATOM 268  C     C     . VAL VAL VAL A A 34  34  . 137.230 88.098  16.527  1.00 7.08
1 . .
ATOM 269  O     O     . VAL VAL VAL A A 34  34  . 137.591 88.296  15.354  1.00 7.16
1 . .
ATOM 270  N     N     . PRO PRO PRO A A 35  35  . 137.865 88.685  17.517  1.00 6.74
1 . .
ATOM 271  CA    CA    . PRO PRO PRO A A 35  35  . 139.016 89.578  17.314  1.00 6.21
1 . .
ATOM 272  CB    CB    . PRO PRO PRO A A 35  35  . 139.009 90.427  18.594  1.00 6.72
1 . .
ATOM 273  CG    CG    . PRO PRO PRO A A 35  35  . 138.678 89.437  19.644  1.00 6.07
1 . .
ATOM 274  CD    CD    . PRO PRO PRO A A 35  35  . 137.466 88.650  18.953  1.00 7.02
1 . .
ATOM 275  C     C     . PRO PRO PRO A A 35  35  . 140.334 88.809  17.203  1.00 7.62
1 . .
ATOM 276  O     O     . PRO PRO PRO A A 35  35  . 140.343 87.555  17.377  1.00 9.06
1 . .
ATOM 277  N     N     . SER SER SER A A 36  36  . 141.409 89.544  16.886  1.00 8.01
1 . .
ATOM 278  CA    CA    . SER SER SER A A 36  36  . 142.734 88.893  16.690  1.00 8.05
1 . .
ATOM 279  CB    CB    . SER SER SER A A 36  36  . 142.879 88.493  15.199  1.00 9.03
1 . .
ATOM 280  OG    OG    . SER SER SER A A 36  36  . 144.172 87.895  15.046  1.00 9.45
1 . .
ATOM 281  C     C     . SER SER SER A A 36  36  . 143.858 89.812  17.116  1.00 7.07
1 . .
ATOM 282  O     O     . SER SER SER A A 36  36  . 143.919 90.983  16.698  1.00 7.31
1 . .
ATOM 283  N     N     . GLY GLY GLY A A 37  37  . 144.755 89.294  17.972  1.00 6.89
1 . .
ATOM 284  CA    CA    . GLY GLY GLY A A 37  37  . 145.881 90.121  18.436  1.00 7.25
1 . .
ATOM 285  C     C     . GLY GLY GLY A A 37  37  . 147.036 90.128  17.465  1.00 8.08
1 . .
ATOM 286  O     O     . GLY GLY GLY A A 37  37  . 147.161 89.252  16.567  1.00 9.16
1 . .
ATOM 287  N     N     . ALA ALA ALA A A 38  38  . 147.911 91.106  17.683  1.00 7.73
1 . .
ATOM 288  CA    CA    . ALA ALA ALA A A 38  38  . 149.235 91.166  17.015  1.00 6.55
1 . .
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ATOM 289  CB    CB    . ALA ALA ALA A A 38  38  . 149.494 92.587  16.427  1.00 7.97
1 . .
ATOM 290  C     C     . ALA ALA ALA A A 38  38  . 150.323 90.871  18.055  1.00 7.57
1 . .
ATOM 291  O     O     . ALA ALA ALA A A 38  38  . 151.130 89.911  17.821  1.00 9.69
1 . .
ATOM 292  N     N     . SER SER SER A A 39  39  . 150.298 91.593  19.183  1.00 6.85
1 . .
ATOM 293  CA    CA    . SER SER SER A A 39  39  . 151.300 91.286  20.250  1.00 7.25
1 . .
ATOM 294  CB    CB    . SER SER SER A A 39  39  . 151.648 92.517  21.053  1.00 7.86
1 . .
ATOM 295  OG    OG    . SER SER SER A A 39  39  . 150.486 93.144  21.502  1.00 7.55
1 . .
ATOM 296  C     C     . SER SER SER A A 39  39  . 150.687 90.146  21.133  1.00 7.49
1 . .
ATOM 297  O     O     . SER SER SER A A 39  39  . 150.237 90.378  22.264  1.00 7.56
1 . .
ATOM 298  N     N     . THR THR THR A A 40  40  . 150.691 88.914  20.579  1.00 8.47
1 . .
ATOM 299  CA    CA    . THR THR THR A A 40  40  . 150.037 87.792  21.220  1.00 8.82
1 . .
ATOM 300  CB    CB    . THR THR THR A A 40  40  . 149.488 86.838  20.147  1.00 9.66
1 . .
ATOM 301  OG1   OG1   . THR THR THR A A 40  40  . 150.534 86.606  19.205  1.00 11.16
1 . .
ATOM 302  CG2   CG2   . THR THR THR A A 40  40  . 148.232 87.421  19.511  1.00 9.40
1 . .
ATOM 303  C     C     . THR THR THR A A 40  40  . 150.998 87.074  22.168  1.00 9.54
1 . .
ATOM 304  O     O     . THR THR THR A A 40  40  . 152.092 86.679  21.804  1.00 10.72
1 . .
ATOM 305  N     N     . GLY GLY GLY A A 41  41  . 150.566 86.917  23.387  1.00 9.26
1 . .
ATOM 306  CA    CA    . GLY GLY GLY A A 41  41  . 151.327 86.206  24.380  1.00 10.52
1 . .
ATOM 307  C     C     . GLY GLY GLY A A 41  41  . 151.514 84.736  23.970  1.00 9.99
1 . .
ATOM 308  O     O     . GLY GLY GLY A A 41  41  . 150.630 84.100  23.387  1.00 10.06
1 . .
ATOM 309  N     N     . ILE ILE ILE A A 42  42  . 152.631 84.157  24.366  1.00 9.59
1 . .
ATOM 310  CA    CA    . ILE ILE ILE A A 42  42  . 152.844 82.723  24.049  1.00 9.64
1 . .
ATOM 311  CB    CB    . ILE ILE ILE A A 42  42  . 154.349 82.289  24.290  1.00 12.13
1 . .
ATOM 312  CG1   CG1   . ILE ILE ILE A A 42  42  . 154.701 82.443  25.772  1.00 11.17
1 . .
ATOM 313  CD    CD    . ILE ILE ILE A A 42  42  . 156.183 82.066  26.145  1.00 15.69
1 . .
ATOM 314  CG2   CG2   . ILE ILE ILE A A 42  42  . 155.285 83.101  23.397  1.00 14.80
1 . .
ATOM 315  C     C     . ILE ILE ILE A A 42  42  . 151.922 81.745  24.755  1.00 10.36
1 . .
ATOM 316  O     O     . ILE ILE ILE A A 42  42  . 151.773 80.612  24.256  1.00 12.38
1 . .
ATOM 317  N     N     . TYR TYR TYR A A 43  43  . 151.270 82.192  25.813  1.00 9.53
1 . .
ATOM 318  CA    CA    . TYR TYR TYR A A 43  43  . 150.365 81.299  26.562  1.00 8.11
1 . .
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ATOM 319  CB    CB    . TYR TYR TYR A A 43  43  . 150.534 81.495  28.065  1.00 9.17
1 . .
ATOM 320  CG    CG    . TYR TYR TYR A A 43  43  . 151.973 81.184  28.489  1.00 9.23
1 . .
ATOM 321  CD1   CD1   . TYR TYR TYR A A 43  43  . 152.817 82.171  28.968  1.00 10.22
1 . .
ATOM 322  CE1   CE1   . TYR TYR TYR A A 43  43  . 154.168 81.872  29.364  1.00 12.16
1 . .
ATOM 323  CZ    CZ    . TYR TYR TYR A A 43  43  . 154.612 80.543  29.238  1.00 13.22
1 . .
ATOM 324  OH    OH    . TYR TYR TYR A A 43  43  . 155.894 80.175  29.579  1.00 16.56
1 . .
ATOM 325  CE2   CE2   . TYR TYR TYR A A 43  43  . 153.767 79.546  28.759  1.00 14.38
1 . .
ATOM 326  CD2   CD2   . TYR TYR TYR A A 43  43  . 152.454 79.861  28.386  1.00 13.56
1 . .
ATOM 327  C     C     . TYR TYR TYR A A 43  43  . 148.881 81.443  26.154  1.00 7.99
1 . .
ATOM 328  O     O     . TYR TYR TYR A A 43  43  . 148.012 80.818  26.712  1.00 10.23
1 . .
ATOM 329  N     N     . GLU GLU GLU A A 44  44  . 148.615 82.252  25.111  1.00 8.68
1 . .
ATOM 330  CA    CA    . GLU GLU GLU A A 44  44  . 147.231 82.388  24.645  1.00 8.17
1 . .
ATOM 331  CB    CB    . GLU GLU GLU A A 44  44  . 147.116 83.488  23.589  1.00 9.08
1 . .
ATOM 332  CG    CG    . GLU GLU GLU A A 44  44  . 147.462 84.898  24.176  1.00 8.14
1 . .
ATOM 333  CD    CD    . GLU GLU GLU A A 44  44  . 147.091 86.083  23.309  1.00 9.16
1 . .
ATOM 334  OE1   OE1   . GLU GLU GLU A A 44  44  . 146.211 85.901  22.417  1.00 10.64
1 . .
ATOM 335  OE2   OE2   . GLU GLU GLU A A 44  44  . 147.609 87.195  23.618  1.00 8.77
1 . .
ATOM 336  C     C     . GLU GLU GLU A A 44  44  . 146.704 81.082  24.042  1.00 8.94
1 . .
ATOM 337  O     O     . GLU GLU GLU A A 44  44  . 147.466 80.293  23.411  1.00 9.91
1 . .
ATOM 338  N     N     . ALA ALA ALA A A 45  45  . 145.391 80.885  24.162  1.00 8.19
1 . .
ATOM 339  CA    CA    . ALA ALA ALA A A 45  45  . 144.715 79.766  23.485  1.00 8.12
1 . .
ATOM 340  CB    CB    . ALA ALA ALA A A 45  45  . 143.247 79.736  23.831  1.00 9.41
1 . .
ATOM 341  C     C     . ALA ALA ALA A A 45  45  . 144.914 79.870  21.935  1.00 9.32
1 . .
ATOM 342  O     O     . ALA ALA ALA A A 45  45  . 145.146 80.959  21.375  1.00 10.32
1 . .
ATOM 343  N     N     . LEU LEU LEU A A 46  46  . 144.910 78.729  21.260  1.00 8.36
1 . .
ATOM 344  CA    CA    . LEU LEU LEU A A 46  46  . 145.339 78.709  19.865  1.00 10.79
1 . .
ATOM 345  CB    CB    . LEU LEU LEU A A 46  46  . 145.469 77.253  19.431  1.00 12.20
1 . .
ATOM 346  CG    CG    . LEU LEU LEU A A 46  46  . 146.071 76.953  18.089  1.00 18.47
1 . .
ATOM 347  CD1   CD1   . LEU LEU LEU A A 46  46  . 145.068 76.690  17.133  1.00 22.58
1 . .
ATOM 348  CD2   CD2   . LEU LEU LEU A A 46  46  . 147.259 77.648  17.617  1.00 19.12
1 . .
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ATOM 349  C     C     . LEU LEU LEU A A 46  46  . 144.398 79.446  18.952  1.00 10.14
1 . .
ATOM 350  O     O     . LEU LEU LEU A A 46  46  . 143.191 79.204  18.952  1.00 10.51
1 . .
ATOM 351  N     N     . GLU GLU GLU A A 47  47  . 144.937 80.360  18.171  1.00 9.44
1 . .
ATOM 352  CA    CA    . GLU GLU GLU A A 47  47  . 144.158 80.965  17.065  1.00 8.32
1 . .
ATOM 353  CB    CB    . GLU GLU GLU A A 47  47  . 144.637 82.428  16.856  1.00 9.38
1 . .
ATOM 354  CG    CG    . GLU GLU GLU A A 47  47  . 143.982 83.104  15.657  1.00 8.97
1 . .
ATOM 355  CD    CD    . GLU GLU GLU A A 47  47  . 144.505 84.486  15.518  1.00 10.73
1 . .
ATOM 356  OE1   OE1   . GLU GLU GLU A A 47  47  . 143.918 85.389  16.168  1.00 11.29
1 . .
ATOM 357  OE2   OE2   . GLU GLU GLU A A 47  47  . 145.581 84.687  14.864  1.00 11.77
1 . .
ATOM 358  C     C     . GLU GLU GLU A A 47  47  . 144.455 80.142  15.813  1.00 7.91
1 . .
ATOM 359  O     O     . GLU GLU GLU A A 47  47  . 145.608 80.099  15.328  1.00 10.27
1 . .
ATOM 360  N     N     . LEU LEU LEU A A 48  48  . 143.457 79.434  15.335  1.00 7.88
1 . .
ATOM 361  CA    CA    . LEU LEU LEU A A 48  48  . 143.665 78.500  14.216  1.00 8.17
1 . .
ATOM 362  CB    CB    . LEU LEU LEU A A 48  48  . 142.611 77.374  14.293  1.00 10.13
1 . .
ATOM 363  CG    CG    . LEU LEU LEU A A 48  48  . 142.719 76.336  13.152  1.00 9.55
1 . .
ATOM 364  CD1   CD1   . LEU LEU LEU A A 48  48  . 144.095 75.604  13.250  1.00 12.78
1 . .
ATOM 365  CD2   CD2   . LEU LEU LEU A A 48  48  . 141.517 75.368  13.242  1.00 10.98
1 . .
ATOM 366  C     C     . LEU LEU LEU A A 48  48  . 143.581 79.281  12.893  1.00 8.71
1 . .
ATOM 367  O     O     . LEU LEU LEU A A 48  48  . 142.503 79.799  12.563  1.00 9.30
1 . .
ATOM 368  N     N     . ARG ARG ARG A A 49  49  . 144.670 79.263  12.119  1.00 10.80
1 . .
ATOM 369  CA    CA    . ARG ARG ARG A A 49  49  . 144.725 79.851  10.793  1.00 10.64
1 . .
ATOM 370  CB    CB    . ARG ARG ARG A A 49  49  . 145.870 80.854  10.674  1.00 12.65
1 . .
ATOM 371  CG    CG    . ARG ARG ARG A A 49  49  . 145.836 81.950  11.710  1.00 16.61
1 . .
ATOM 372  CD    CD    . ARG ARG ARG A A 49  49  . 145.194 83.097  11.073  1.00 15.15
1 . .
ATOM 373  NE    NE    . ARG ARG ARG A A 49  49  . 145.003 84.283  11.950  1.00 13.42
1 . .
ATOM 374  CZ    CZ    . ARG ARG ARG A A 49  49  . 144.156 85.278  11.684  1.00 12.41
1 . .
ATOM 375  NH1   NH1   . ARG ARG ARG A A 49  49  . 143.446 85.322  10.576  1.00 11.26
1 . .
ATOM 376  NH2   NH2   . ARG ARG ARG A A 49  49  . 143.999 86.224  12.587  1.00 11.21
1 . .
ATOM 377  C     C     . ARG ARG ARG A A 49  49  . 145.011 78.735  9.835   1.00 10.93
1 . .
ATOM 378  O     O     . ARG ARG ARG A A 49  49  . 145.575 77.663  10.201  1.00 12.11
1 . .
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ATOM 379  N     N     . ASP ASP ASP A A 50  50  . 144.690 78.957  8.590   1.00 10.01
1 . .
ATOM 380  CA    CA    . ASP ASP ASP A A 50  50  . 144.735 77.836  7.611   1.00 10.31
1 . .
ATOM 381  CB    CB    . ASP ASP ASP A A 50  50  . 143.918 78.232  6.423   1.00 10.19
1 . .
ATOM 382  CG    CG    . ASP ASP ASP A A 50  50  . 142.427 78.359  6.745   1.00 10.04
1 . .
ATOM 383  OD1   OD1   . ASP ASP ASP A A 50  50  . 141.978 77.848  7.799   1.00 10.70
1 . .
ATOM 384  OD2   OD2   . ASP ASP ASP A A 50  50  . 141.681 78.988  5.941   1.00 10.76
1 . .
ATOM 385  C     C     . ASP ASP ASP A A 50  50  . 146.127 77.520  7.143   1.00 11.04
1 . .
ATOM 386  O     O     . ASP ASP ASP A A 50  50  . 146.389 76.344  6.825   1.00 14.28
1 . .
ATOM 387  N     N     . GLY GLY GLY A A 51  51  . 146.972 78.530  7.011   1.00 11.84
1 . .
ATOM 388  CA    CA    . GLY GLY GLY A A 51  51  . 148.368 78.289  6.546   1.00 14.13
1 . .
ATOM 389  C     C     . GLY GLY GLY A A 51  51  . 148.481 78.070  5.066   1.00 17.57
1 . .
ATOM 390  O     O     . GLY GLY GLY A A 51  51  . 149.537 77.617  4.598   1.00 19.31
1 . .
ATOM 391  N     N     . ASP ASP ASP A A 52  52  . 147.463 78.406  4.294   1.00 14.81
1 . .
ATOM 392  CA    CA    . ASP ASP ASP A A 52  52  . 147.519 78.277  2.808   1.00 17.42
1 . .
ATOM 393  CB    CB    . ASP ASP ASP A A 52  52  . 146.104 78.034  2.264   1.00 17.13
1 . .
ATOM 394  CG    CG    . ASP ASP ASP A A 52  52  . 146.039 78.034  0.721   1.00 18.14
1 . .
ATOM 395  OD1   OD1   . ASP ASP ASP A A 52  52  . 144.978 77.707  0.159   1.00 21.36
1 . .
ATOM 396  OD2   OD2   . ASP ASP ASP A A 52  52  . 147.080 78.294  0.097   1.00 20.87
1 . .
ATOM 397  C     C     . ASP ASP ASP A A 52  52  . 148.154 79.554  2.283   1.00 18.22
1 . .
ATOM 398  O     O     . ASP ASP ASP A A 52  52  . 147.516 80.604  2.282   1.00 16.78
1 . .
ATOM 399  N     N     . LYS LYS LYS A A 53  53  . 149.422 79.491  1.831   1.00 22.06
1 . .
ATOM 400  CA    CA    . LYS LYS LYS A A 53  53  . 150.150 80.695  1.405   1.00 26.04
1 . .
ATOM 401  CB    CB    . LYS LYS LYS A A 53  53  . 151.631 80.341  1.156   1.00 27.01
1 . .
ATOM 402  CG    CG    . LYS LYS LYS A A 53  53  . 152.253 79.536  2.320   1.00 32.02
1 . .
ATOM 403  CD    CD    . LYS LYS LYS A A 53  53  . 153.139 80.400  3.199   1.00 37.66
1 . .
ATOM 404  CE    CE    . LYS LYS LYS A A 53  53  . 152.360 81.542  3.884   1.00 41.31
1 . .
ATOM 405  NZ    NZ    . LYS LYS LYS A A 53  53  . 153.228 82.251  4.891   1.00 46.23
1 . .
ATOM 406  C     C     . LYS LYS LYS A A 53  53  . 149.511 81.296  0.172   1.00 25.02
1 . .
ATOM 407  O     O     . LYS LYS LYS A A 53  53  . 149.729 82.451 -0.130   1.00 28.31
1 . .
ATOM 408  N     N     . GLN GLN GLN A A 54  54  . 148.663 80.543 -0.506   1.00 27.22
1 . .
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ATOM 409  CA    CA    . GLN GLN GLN A A 54  54  . 147.996 81.015  -1.749  1.00 28.93
1 . .
ATOM 410  CB    CB    . GLN GLN GLN A A 54  54  . 147.634 79.808  -2.659  1.00 31.15
1 . .
ATOM 411  CG    CG    . GLN GLN GLN A A 54  54  . 148.477 79.641  -3.964  1.00 35.86
1 . .
ATOM 412  CD    CD    . GLN GLN GLN A A 54  54  . 149.834 80.415  -3.931  1.00 39.98
1 . .
ATOM 413  OE1   OE1   . GLN GLN GLN A A 54  54  . 149.964 81.518  -4.491  1.00 43.26
1 . .
ATOM 414  NE2   NE2   . GLN GLN GLN A A 54  54  . 150.817 79.853  -3.243  1.00 38.11
1 . .
ATOM 415  C     C     . GLN GLN GLN A A 54  54  . 146.753 81.890  -1.435  1.00 26.87
1 . .
ATOM 416  O     O     . GLN GLN GLN A A 54  54  . 146.020 82.405  -2.344  1.00 28.80
1 . .
ATOM 417  N     N     . ARG ARG ARG A A 55  55  . 146.491 82.067  -0.140  1.00 22.58
1 . .
ATOM 418  CA    CA    . ARG ARG ARG A A 55  55  . 145.252 82.710  0.225   1.00 17.47
1 . .
ATOM 419  CB    CB    . ARG ARG ARG A A 55  55  . 144.332 81.610  0.507   1.00 19.59
1 . .
ATOM 420  CG    CG    . ARG ARG ARG A A 55  55  . 142.963 82.016  0.581   1.00 19.77
1 . .
ATOM 421  CD    CD    . ARG ARG ARG A A 55  55  . 141.895 80.867  0.404   1.00 15.91
1 . .
ATOM 422  NE    NE    . ARG ARG ARG A A 55  55  . 140.622 81.567  0.526   1.00 11.62
1 . .
ATOM 423  CZ    CZ    . ARG ARG ARG A A 55  55  . 140.070 82.020  1.657   1.00 8.88
1 . .
ATOM 424  NH1   NH1   . ARG ARG ARG A A 55  55  . 140.615 81.758  2.851   1.00 10.95
1 . .
ATOM 425  NH2   NH2   . ARG ARG ARG A A 55  55  . 138.998 82.759  1.552   1.00 11.34
1 . .
ATOM 426  C     C     . ARG ARG ARG A A 55  55  . 145.416 83.548  1.464   1.00 13.63
1 . .
ATOM 427  O     O     . ARG ARG ARG A A 55  55  . 145.685 83.013  2.543   1.00 13.37
1 . .
ATOM 428  N     N     . TYR TYR TYR A A 56  56  . 145.289 84.867  1.334   1.00 11.59
1 . .
ATOM 429  CA    CA    . TYR TYR TYR A A 56  56  . 145.495 85.708  2.506   1.00 10.43
1 . .
ATOM 430  CB    CB    . TYR TYR TYR A A 56  56  . 144.311 85.629  3.514   1.00 11.35
1 . .
ATOM 431  CG    CG    . TYR TYR TYR A A 56  56  . 143.049 86.169  2.981   1.00 9.67
1 . .
ATOM 432  CD1   CD1   . TYR TYR TYR A A 56  56  . 141.958 85.366  2.640   1.00 10.78
1 . .
ATOM 433  CE1   CE1   . TYR TYR TYR A A 56  56  . 140.743 85.962  2.243   1.00 10.17
1 . .
ATOM 434  CZ    CZ    . TYR TYR TYR A A 56  56  . 140.600 87.348  2.256   1.00 10.69
1 . .
ATOM 435  OH    OH    . TYR TYR TYR A A 56  56  . 139.474 87.964  1.885   1.00 12.91
1 . .
ATOM 436  CE2   CE2   . TYR TYR TYR A A 56  56  . 141.637 88.129  2.639   1.00 10.71
1 . .
ATOM 437  CD2   CD2   . TYR TYR TYR A A 56  56  . 142.835 87.600  2.994   1.00 11.34
1 . .
ATOM 438  C     C     . TYR TYR TYR A A 56  56  . 146.841 85.499  3.236   1.00 12.59
1 . .
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ATOM 439  O     O     . TYR TYR TYR A A 56  56  . 146.951 85.637  4.471   1.00 14.02
1 . .
ATOM 440  N     N     . LEU LEU LEU A A 57  57  . 147.879 85.135  2.463   1.00 17.30
1 . .
ATOM 441  CA    CA    . LEU LEU LEU A A 57  57  . 149.250 84.813  2.991   1.00 19.86
1 . .
ATOM 442  CB    CB    . LEU LEU LEU A A 57  57  . 149.966 86.077  3.417   1.00 23.22
1 . .
ATOM 443  CG    CG    . LEU LEU LEU A A 57  57  . 150.679 86.998  2.430   1.00 32.24
1 . .
ATOM 444  CD1   CD1   . LEU LEU LEU A A 57  57  . 150.905 88.346  3.212   1.00 35.83
1 . .
ATOM 445  CD2   CD2   . LEU LEU LEU A A 57  57  . 151.992 86.377  1.923   1.00 38.26
1 . .
ATOM 446  C     C     . LEU LEU LEU A A 57  57  . 149.181 83.926  4.204   1.00 18.29
1 . .
ATOM 447  O     O     . LEU LEU LEU A A 57  57  . 149.791 84.233  5.251   1.00 19.36
1 . .
ATOM 448  N     N     . GLY GLY GLY A A 58  58  . 148.335 82.901  4.107   1.00 15.83
1 . .
ATOM 449  CA    CA    . GLY GLY GLY A A 58  58  . 148.252 81.878  5.131   1.00 13.42
1 . .
ATOM 450  C     C     . GLY GLY GLY A A 58  58  . 147.313 82.195  6.304   1.00 13.00
1 . .
ATOM 451  O     O     . GLY GLY GLY A A 58  58  . 147.198 81.387  7.244   1.00 12.55
1 . .
ATOM 452  N     N     . LYS LYS LYS A A 59  59  . 146.611 83.323  6.219   1.00 10.90
1 . .
ATOM 453  CA    CA    . LYS LYS LYS A A 59  59  . 145.815 83.790  7.355   1.00 10.57
1 . .
ATOM 454  CB    CB    . LYS LYS LYS A A 59  59  . 146.076 85.294  7.614   1.00 12.88
1 . .
ATOM 455  CG    CG    . LYS LYS LYS A A 59  59  . 147.561 85.573  7.885   1.00 17.21
1 . .
ATOM 456  CD    CD    . LYS LYS LYS A A 59  59  . 147.817 85.680  9.356   1.00 32.86
1 . .
ATOM 457  CE    CE    . LYS LYS LYS A A 59  59  . 148.009 87.181  9.776   1.00 38.47
1 . .
ATOM 458  NZ    NZ    . LYS LYS LYS A A 59  59  . 146.987 87.767  10.837  1.00 34.97
1 . .
ATOM 459  C     C     . LYS LYS LYS A A 59  59  . 144.329 83.518  7.218   1.00 8.85
1 . .
ATOM 460  O     O     . LYS LYS LYS A A 59  59  . 143.548 84.025  8.023   1.00 9.84
1 . .
ATOM 461  N     N     . GLY GLY GLY A A 60  60  . 143.892 82.647  6.284   1.00 8.78
1 . .
ATOM 462  CA    CA    . GLY GLY GLY A A 60  60  . 142.477 82.347  6.224   1.00 9.40
1 . .
ATOM 463  C     C     . GLY GLY GLY A A 60  60  . 142.034 81.632  7.496   1.00 8.50
1 . .
ATOM 464  O     O     . GLY GLY GLY A A 60  60  . 142.860 81.064  8.231   1.00 9.38
1 . .
ATOM 465  N     N     . VAL VAL VAL A A 61  61  . 140.719 81.638  7.700   1.00 6.50
1 . .
ATOM 466  CA    CA    . VAL VAL VAL A A 61  61  . 140.194 80.887  8.841   1.00 7.90
1 . .
ATOM 467  CB    CB    . VAL VAL VAL A A 61  61  . 139.690 81.803  9.982   1.00 6.54
1 . .
ATOM 468  CG1   CG1   . VAL VAL VAL A A 61  61  . 140.846 82.567  10.617  1.00 6.92
1 . .
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ATOM 469  CG2   CG2   . VAL VAL VAL A A 61  61  . 138.618 82.735  9.484   1.00 8.17
1 . .
ATOM 470  C     C     . VAL VAL VAL A A 61  61  . 139.065 79.926  8.383   1.00 7.90
1 . .
ATOM 471  O     O     . VAL VAL VAL A A 61  61  . 138.121 79.632  9.135   1.00 9.03
1 . .
ATOM 472  N     N     . LEU LEU LEU A A 62  62  . 139.270 79.362  7.194   1.00 8.75
1 . .
ATOM 473  CA    CA    . LEU LEU LEU A A 62  62  . 138.299 78.377  6.650   1.00 8.69
1 . .
ATOM 474  CB    CB    . LEU LEU LEU A A 62  62  . 138.642 77.964  5.187   1.00 10.04
1 . .
ATOM 475  CG    CG    . LEU LEU LEU A A 62  62  . 138.741 79.112  4.201   1.00 10.80
1 . .
ATOM 476  CD1   CD1   . LEU LEU LEU A A 62  62  . 139.211 78.513  2.824   1.00 14.05
1 . .
ATOM 477  CD2   CD2   . LEU LEU LEU A A 62  62  . 137.439 79.879  4.075   1.00 14.93
1 . .
ATOM 478  C     C     . LEU LEU LEU A A 62  62  . 138.227 77.100  7.523   1.00 8.31
1 . .
ATOM 479  O     O     . LEU LEU LEU A A 62  62  . 137.145 76.555  7.689   1.00 9.64
1 . .
ATOM 480  N     N     . LYS LYS LYS A A 63  63  . 139.371 76.712  8.115   1.00 8.90
1 . .
ATOM 481  CA    CA    . LYS LYS LYS A A 63  63  . 139.384 75.521  8.983   1.00 8.43
1 . .
ATOM 482  CB    CB    . LYS LYS LYS A A 63  63  . 140.819 75.080  9.340   1.00 9.56
1 . .
ATOM 483  CG    CG    . LYS LYS LYS A A 63  63  . 141.581 74.555  8.138   1.00 11.03
1 . .
ATOM 484  CD    CD    . LYS LYS LYS A A 63  63  . 142.998 74.194  8.610   1.00 12.51
1 . .
ATOM 485  CE    CE    . LYS LYS LYS A A 63  63  . 143.816 73.857  7.381   1.00 16.89
1 . .
ATOM 486  NZ    NZ    . LYS LYS LYS A A 63  63  . 145.192 73.432  7.777   1.00 19.07
1 . .
ATOM 487  C     C     . LYS LYS LYS A A 63  63  . 138.523 75.779  10.219  1.00 8.91
1 . .
ATOM 488  O     O     . LYS LYS LYS A A 63  63  . 137.674 74.924  10.574  1.00 9.00
1 . .
ATOM 489  N     N     . ALA ALA ALA A A 64  64  . 138.704 76.947  10.858  1.00 7.60
1 . .
ATOM 490  CA    CA    . ALA ALA ALA A A 64  64  . 137.868 77.273  12.062  1.00 8.16
1 . .
ATOM 491  CB    CB    . ALA ALA ALA A A 64  64  . 138.341 78.563  12.680  1.00 9.79
1 . .
ATOM 492  C     C     . ALA ALA ALA A A 64  64  . 136.387 77.310  11.658  1.00 7.68
1 . .
ATOM 493  O     O     . ALA ALA ALA A A 64  64  . 135.501 76.811  12.387  1.00 9.08
1 . .
ATOM 494  N     N     . VAL VAL VAL A A 65  65  . 136.087 77.963  10.533  1.00 7.65
1 . .
ATOM 495  CA    CA    . VAL VAL VAL A A 65  65  . 134.718 78.059  10.036  1.00 7.28
1 . .
ATOM 496  CB    CB    . VAL VAL VAL A A 65  65  . 134.637 78.970  8.765   1.00 9.08
1 . .
ATOM 497  CG1   CG1   . VAL VAL VAL A A 65  65  . 133.294 78.816  8.046   1.00 10.38
1 . .
ATOM 498  CG2   CG2   . VAL VAL VAL A A 65  65  . 134.904 80.445  9.206   1.00 8.87
1 . .
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ATOM 499  C     C     . VAL VAL VAL A A 65  65  . 134.076 76.684  9.818   1.00 8.27
1 . .
ATOM 500  O     O     . VAL VAL VAL A A 65  65  . 132.958 76.469  10.212  1.00 9.05
1 . .
ATOM 501  N     N     . ASP ASP ASP A A 66  66  . 134.837 75.776  9.205   1.00 8.71
1 . .
ATOM 502  CA    CA    . ASP ASP ASP A A 66  66  . 134.304 74.449  8.952   1.00 9.93
1 . .
ATOM 503  CB    CB    . ASP ASP ASP A A 66  66  . 135.302 73.678  8.068   1.00 10.29
1 . .
ATOM 504  CG    CG    . ASP ASP ASP A A 66  66  . 134.747 72.322  7.670   1.00 23.98
1 . .
ATOM 505  OD1   OD1   . ASP ASP ASP A A 66  66  . 133.525 72.233  7.341   1.00 35.08
1 . .
ATOM 506  OD2   OD2   . ASP ASP ASP A A 66  66  . 135.536 71.328  7.646   1.00 36.69
1 . .
ATOM 507  C     C     . ASP ASP ASP A A 66  66  . 134.141 73.670  10.281  1.00 9.73
1 . .
ATOM 508  O     O     . ASP ASP ASP A A 66  66  . 133.164 72.960  10.402  1.00 9.46
1 . .
ATOM 509  N     N     . HIS HIS HIS A A 67  67  . 135.048 73.832  11.246  1.00 8.11
1 . .
ATOM 510  CA    CA    . HIS HIS HIS A A 67  67  . 134.798 73.157  12.545  1.00 7.67
1 . .
ATOM 511  CB    CB    . HIS HIS HIS A A 67  67  . 135.894 73.410  13.546  1.00 8.97
1 . .
ATOM 512  CG    CG    . HIS HIS HIS A A 67  67  . 137.185 72.760  13.194  1.00 8.67
1 . .
ATOM 513  ND1   ND1   . HIS HIS HIS A A 67  67  . 137.270 71.370  13.066  1.00 11.86
1 . .
ATOM 514  CE1   CE1   . HIS HIS HIS A A 67  67  . 138.534 71.059  12.817  1.00 10.99
1 . .
ATOM 515  NE2   NE2   . HIS HIS HIS A A 67  67  . 139.270 72.174  12.851  1.00 13.10
1 . .
ATOM 516  CD2   CD2   . HIS HIS HIS A A 67  67  . 138.458 73.242  13.156  1.00 8.52
1 . .
ATOM 517  C     C     . HIS HIS HIS A A 67  67  . 133.468 73.631  13.156  1.00 8.63
1 . .
ATOM 518  O     O     . HIS HIS HIS A A 67  67  . 132.660 72.866  13.705  1.00 8.59
1 . .
ATOM 519  N     N     . ILE ILE ILE A A 68  68  . 133.202 74.938  13.051  1.00 7.55
1 . .
ATOM 520  CA    CA    . ILE ILE ILE A A 68  68  . 131.896 75.431  13.544  1.00 7.98
1 . .
ATOM 521  CB    CB    . ILE ILE ILE A A 68  68  . 131.850 77.004  13.459  1.00 6.07
1 . .
ATOM 522  CG1   CG1   . ILE ILE ILE A A 68  68  . 132.869 77.590  14.412  1.00 8.19
1 . .
ATOM 523  CD    CD    . ILE ILE ILE A A 68  68  . 133.210 79.103  14.147  1.00 7.48
1 . .
ATOM 524  CG2   CG2   . ILE ILE ILE A A 68  68  . 130.444 77.460  13.794  1.00 6.61
1 . .
ATOM 525  C     C     . ILE ILE ILE A A 68  68  . 130.716 74.861  12.738  1.00 7.28
1 . .
ATOM 526  O     O     . ILE ILE ILE A A 68  68  . 129.769 74.329  13.348  1.00 9.12
1 . .
ATOM 527  N     N     . ASN ASN ASN A A 69  69  . 130.767 74.937  11.413  1.00 7.69
1 . .
ATOM 528  CA    CA    . ASN ASN ASN A A 69  69  . 129.611 74.646  10.637  1.00 7.81
1 . .
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ATOM 529  CB    CB    . ASN ASN ASN A A 69  69  . 129.869 75.114  9.215   1.00 8.30
1 . .
ATOM 530  CG    CG    . ASN ASN ASN A A 69  69  . 129.606 76.589  9.089   1.00 8.38
1 . .
ATOM 531  OD1   OD1   . ASN ASN ASN A A 69  69  . 128.930 77.160  9.945   1.00 9.45
1 . .
ATOM 532  ND2   ND2   . ASN ASN ASN A A 69  69  . 130.198 77.224  8.097   1.00 9.46
1 . .
ATOM 533  C     C     . ASN ASN ASN A A 69  69  . 129.227 73.159  10.672  1.00 9.10
1 . .
ATOM 534  O     O     . ASN ASN ASN A A 69  69  . 128.044 72.871  10.698  1.00 9.96
1 . .
ATOM 535  N     N     . SER SER SER A A 70  70  . 130.270 72.345  10.670  1.00 9.11
1 . .
ATOM 536  CA    CA    . SER SER SER A A 70  70  . 130.102 70.919  10.441  1.00 10.14
1 . .
ATOM 537  CB    CB    . SER SER SER A A 70  70  . 131.173 70.413  9.419   1.00 9.61
1 . .
ATOM 538  OG    OG    . SER SER SER A A 70  70  . 130.899 71.070  8.191   1.00 21.78
1 . .
ATOM 539  C     C     . SER SER SER A A 70  70  . 130.217 70.059  11.715  1.00 8.53
1 . .
ATOM 540  O     O     . SER SER SER A A 70  70  . 129.709 68.898  11.730  1.00 9.38
1 . .
ATOM 541  N     N     . THR THR THR A A 71  71  . 130.856 70.591  12.803  1.00 8.56
1 . .
ATOM 542  CA    CA    . THR THR THR A A 71  71  . 131.043 69.799  14.024  1.00 7.60
1 . .
ATOM 543  CB    CB    . THR THR THR A A 71  71  . 132.527 69.539  14.240  1.00 6.69
1 . .
ATOM 544  OG1   OG1   . THR THR THR A A 71  71  . 133.077 68.805  13.113  1.00 8.25
1 . .
ATOM 545  CG2   CG2   . THR THR THR A A 71  71  . 132.779 68.643  15.480  1.00 9.19
1 . .
ATOM 546  C     C     . THR THR THR A A 71  71  . 130.433 70.413  15.242  1.00 8.11
1 . .
ATOM 547  O     O     . THR THR THR A A 71  71  . 129.586 69.801  15.930  1.00 8.55
1 . .
ATOM 548  N     N     . ILE ILE ILE A A 72  72  . 130.724 71.713  15.472  1.00 7.05
1 . .
ATOM 549  CA    CA    . ILE ILE ILE A A 72  72  . 130.182 72.327  16.672  1.00 7.19
1 . .
ATOM 550  CB    CB    . ILE ILE ILE A A 72  72  . 130.898 73.659  16.998  1.00 7.33
1 . .
ATOM 551  CG1   CG1   . ILE ILE ILE A A 72  72  . 132.383 73.403  17.409  1.00 8.30
1 . .
ATOM 552  CD    CD    . ILE ILE ILE A A 72  72  . 133.236 74.699  17.498  1.00 9.49
1 . .
ATOM 553  CG2   CG2   . ILE ILE ILE A A 72  72  . 130.191 74.347  18.060  1.00 10.15
1 . .
ATOM 554  C     C     . ILE ILE ILE A A 72  72  . 128.670 72.531  16.507  1.00 7.86
1 . .
ATOM 555  O     O     . ILE ILE ILE A A 72  72  . 127.919 72.238  17.451  1.00 8.84
1 . .
ATOM 556  N     N     . ALA ALA ALA A A 73  73  . 128.215 73.068  15.370  1.00 7.60
1 . .
ATOM 557  CA    CA    . ALA ALA ALA A A 73  73  . 126.786 73.337  15.204  1.00 8.79
1 . .
ATOM 558  CB    CB    . ALA ALA ALA A A 73  73  . 126.537 73.938  13.810  1.00 10.50
1 . .
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ATOM 559  C     C     . ALA ALA ALA A A 73  73  . 125.897 72.108  15.453  1.00 8.67
1 . .
ATOM 560  O     O     . ALA ALA ALA A A 73  73  . 125.051 72.193  16.278  1.00 9.57
1 . .
ATOM 561  N     N     . PRO PRO PRO A A 74  74  . 126.120 70.951  14.789  1.00 7.85
1 . .
ATOM 562  CA    CA    . PRO PRO PRO A A 74  74  . 125.212 69.811  15.094  1.00 7.78
1 . .
ATOM 563  CB    CB    . PRO PRO PRO A A 74  74  . 125.597 68.703  14.073  1.00 9.34
1 . .
ATOM 564  CG    CG    . PRO PRO PRO A A 74  74  . 127.054 69.114  13.657  1.00 8.85
1 . .
ATOM 565  CD    CD    . PRO PRO PRO A A 74  74  . 126.996 70.647  13.638  1.00 7.64
1 . .
ATOM 566  C     C     . PRO PRO PRO A A 74  74  . 125.373 69.390  16.524  1.00 6.11
1 . .
ATOM 567  O     O     . PRO PRO PRO A A 74  74  . 124.375 68.968  17.097  1.00 7.69
1 . .
ATOM 568  N     N     . ALA ALA ALA A A 75  75  . 126.571 69.497  17.125  1.00 7.99
1 . .
ATOM 569  CA    CA    . ALA ALA ALA A A 75  75  . 126.706 69.127  18.566  1.00 7.03
1 . .
ATOM 570  CB    CB    . ALA ALA ALA A A 75  75  . 128.173 69.271  18.992  1.00 9.52
1 . .
ATOM 571  C     C     . ALA ALA ALA A A 75  75  . 125.744 69.917  19.474  1.00 8.37
1 . .
ATOM 572  O     O     . ALA ALA ALA A A 75  75  . 125.094 69.346  20.368  1.00 9.76
1 . .
ATOM 573  N     N     . LEU LEU LEU A A 76  76  . 125.685 71.236  19.222  1.00 8.41
1 . .
ATOM 574  CA    CA    . LEU LEU LEU A A 76  76  . 124.936 72.090  20.117  1.00 9.15
1 . .
ATOM 575  CB    CB    . LEU LEU LEU A A 76  76  . 125.363 73.542  19.938  1.00 9.80
1 . .
ATOM 576  CG    CG    . LEU LEU LEU A A 76  76  . 126.828 73.800  20.324  1.00 9.56
1 . .
ATOM 577  CD1   CD1   . LEU LEU LEU A A 76  76  . 127.029 75.346  20.327  1.00 10.26
1 . .
ATOM 578  CD2   CD2   . LEU LEU LEU A A 76  76  . 127.286 73.098  21.592  1.00 13.27
1 . .
ATOM 579  C     C     . LEU LEU LEU A A 76  76  . 123.471 71.959  19.789  1.00 8.03
1 . .
ATOM 580  O     O     . LEU LEU LEU A A 76  76  . 122.635 72.003  20.710  1.00 9.07
1 . .
ATOM 581  N     N     . ILE ILE ILE A A 77  77  . 123.103 71.728  18.523  1.00 8.96
1 . .
ATOM 582  CA    CA    . ILE ILE ILE A A 77  77  . 121.687 71.489  18.161  1.00 9.40
1 . .
ATOM 583  CB    CB    . ILE ILE ILE A A 77  77  . 121.527 71.500  16.622  1.00 9.33
1 . .
ATOM 584  CG1   CG1   . ILE ILE ILE A A 77  77  . 121.786 72.930  16.134  1.00 10.52
1 . .
ATOM 585  CD    CD    . ILE ILE ILE A A 77  77  . 121.991 73.020  14.650  1.00 12.85
1 . .
ATOM 586  CG2   CG2   . ILE ILE ILE A A 77  77  . 120.106 71.003  16.248  1.00 10.12
1 . .
ATOM 587  C     C     . ILE ILE ILE A A 77  77  . 121.270 70.136  18.761  1.00 9.58
1 . .
ATOM 588  O     O     . ILE ILE ILE A A 77  77  . 120.180 70.039  19.381  1.00 10.93
1 . .
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ATOM 589  N     N     . SER SER SER A A 78  78  . 122.113 69.118  18.611  1.00 9.78
1 . .
ATOM 590  CA    CA    . SER SER SER A A 78  78  . 121.755 67.813  19.205  1.00 9.28
1 . .
ATOM 591  CB    CB    . SER SER SER A A 78  78  . 122.875 66.807  18.940  1.00 8.17
1 . .
ATOM 592  OG    OG    . SER SER SER A A 78  78  . 122.911 66.383  17.565  1.00 11.70
1 . .
ATOM 593  C     C     . SER SER SER A A 78  78  . 121.461 67.934  20.720  1.00 11.35
1 . .
ATOM 594  O     O     . SER SER SER A A 78  78  . 120.561 67.210  21.225  1.00 12.50
1 . .
ATOM 595  N     N     . SER SER SER A A 79  79  . 122.230 68.783  21.428  1.00 8.39
1 . .
ATOM 596  CA    CA    . SER SER SER A A 79  79  . 122.073 68.876  22.904  1.00 10.09
1 . .
ATOM 597  CB    CB    . SER SER SER A A 79  79  . 123.077 69.862  23.486  1.00 10.08
1 . .
ATOM 598  OG    OG    . SER SER SER A A 79  79  . 122.655 71.247  23.309  1.00 10.02
1 . .
ATOM 599  C     C     . SER SER SER A A 79  79  . 120.644 69.270  23.318  1.00 10.68
1 . .
ATOM 600  O     O     . SER SER SER A A 79  79  . 120.174 68.944  24.455  1.00 12.26
1 . .
ATOM 601  N     N     . GLY GLY GLY A A 80  80  . 119.986 70.042  22.460  1.00 10.55
1 . .
ATOM 602  CA    CA    . GLY GLY GLY A A 80  80  . 118.661 70.608  22.786  1.00 11.65
1 . .
ATOM 603  C     C     . GLY GLY GLY A A 80  80  . 118.697 71.667  23.845  1.00 12.78
1 . .
ATOM 604  O     O     . GLY GLY GLY A A 80  80  . 117.610 72.117  24.253  1.00 14.77
1 . .
ATOM 605  N     N     . LEU LEU LEU A A 81  81  . 119.880 72.093  24.291  1.00 12.74
1 . .
ATOM 606  CA    CA    . LEU LEU LEU A A 81  81  . 119.982 73.144  25.337  1.00 12.56
1 . .
ATOM 607  CB    CB    . LEU LEU LEU A A 81  81  . 121.407 73.203  25.812  1.00 12.79
1 . .
ATOM 608  CG    CG    . LEU LEU LEU A A 81  81  . 121.984 72.005  26.566  1.00 12.42
1 . .
ATOM 609  CD1   CD1   . LEU LEU LEU A A 81  81  . 123.552 72.112  26.630  1.00 14.37
1 . .
ATOM 610  CD2   CD2   . LEU LEU LEU A A 81  81  . 121.350 71.923  27.961  1.00 18.24
1 . .
ATOM 611  C     C     . LEU LEU LEU A A 81  81  . 119.496 74.495  24.870  1.00 13.03
1 . .
ATOM 612  O     O     . LEU LEU LEU A A 81  81  . 119.722 74.901  23.727  1.00 12.93
1 . .
ATOM 613  N     N     . SER SER SER A A 82  82  . 118.741 75.193  25.726  1.00 11.85
1 . .
ATOM 614  CA    CA    . SER SER SER A A 82  82  . 118.473 76.605  25.487  1.00 12.02
1 . .
ATOM 615  CB    CB    . SER SER SER A A 82  82  . 117.645 77.066  26.628  1.00 13.51
1 . .
ATOM 616  OG    OG    . SER SER SER A A 82  82  . 117.337 78.472  26.532  1.00 14.87
1 . .
ATOM 617  C     C     . SER SER SER A A 82  82  . 119.737 77.446  25.409  1.00 10.62
1 . .
ATOM 618  O     O     . SER SER SER A A 82  82  . 120.710 77.245  26.096  1.00 11.23
1 . .
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ATOM 619  N     N     . VAL VAL VAL A A 83  83  . 119.638 78.458  24.542  1.00 11.36
1 . .
ATOM 620  CA    CA    . VAL VAL VAL A A 83  83  . 120.732 79.434  24.399  1.00 11.98
1 . .
ATOM 621  CB    CB    . VAL VAL VAL A A 83  83  . 120.568 80.426  23.197  1.00 9.87
1 . .
ATOM 622  CG1   CG1   . VAL VAL VAL A A 83  83  . 120.757 79.685  21.838  1.00 13.15
1 . .
ATOM 623  CG2   CG2   . VAL VAL VAL A A 83  83  . 119.206 81.086  23.279  1.00 11.59
1 . .
ATOM 624  C     C     . VAL VAL VAL A A 83  83  . 121.021 80.192  25.690  1.00 11.37
1 . .
ATOM 625  O     O     . VAL VAL VAL A A 83  83  . 122.089 80.824  25.820  1.00 11.63
1 . .
ATOM 626  N     N     . VAL VAL VAL A A 84  84  . 120.054 80.213  26.625  1.00 10.41
1 . .
ATOM 627  CA    CA    . VAL VAL VAL A A 84  84  . 120.321 80.834  27.917  1.00 10.13
1 . .
ATOM 628  CB    CB    . VAL VAL VAL A A 84  84  . 118.953 81.093  28.722  1.00 10.51
1 . .
ATOM 629  CG1   CG1   . VAL VAL VAL A A 84  84  . 117.932 81.856  27.861  1.00 11.27
1 . .
ATOM 630  CG2   CG2   . VAL VAL VAL A A 84  84  . 118.381 79.672  29.266  1.00 16.65
1 . .
ATOM 631  C     C     . VAL VAL VAL A A 84  84  . 121.371 80.088  28.742  1.00 12.41
1 . .
ATOM 632  O     O     . VAL VAL VAL A A 84  84  . 121.977 80.658  29.696  1.00 13.27
1 . .
ATOM 633  N     N     . GLU GLU GLU A A 85  85  . 121.530 78.806  28.439  1.00 11.77
1 . .
ATOM 634  CA    CA    . GLU GLU GLU A A 85  85  . 122.414 77.924  29.207  1.00 12.35
1 . .
ATOM 635  CB    CB    . GLU GLU GLU A A 85  85  . 121.939 76.447  29.041  1.00 12.87
1 . .
ATOM 636  CG    CG    . GLU GLU GLU A A 85  85  . 120.552 76.224  29.612  1.00 16.71
1 . .
ATOM 637  CD    CD    . GLU GLU GLU A A 85  85  . 120.508 76.450  31.167  1.00 24.33
1 . .
ATOM 638  OE1   OE1   . GLU GLU GLU A A 85  85  . 121.565 76.183  31.848  1.00 24.97
1 . .
ATOM 639  OE2   OE2   . GLU GLU GLU A A 85  85  . 119.419 76.915  31.707  1.00 29.23
1 . .
ATOM 640  C     C     . GLU GLU GLU A A 85  85  . 123.925 78.092  28.791  1.00 11.95
1 . .
ATOM 641  O     O     . GLU GLU GLU A A 85  85  . 124.539 77.172  28.249  1.00 11.62
1 . .
ATOM 642  N     N     . GLN GLN GLN A A 86  86  . 124.469 79.288  29.006  1.00 10.28
1 . .
ATOM 643  CA    CA    . GLN GLN GLN A A 86  86  . 125.816 79.586  28.523  1.00 9.18
1 . .
ATOM 644  CB    CB    . GLN GLN GLN A A 86  86  . 126.242 80.982  29.056  1.00 9.44
1 . .
ATOM 645  CG    CG    . GLN GLN GLN A A 86  86  . 127.572 81.420  28.419  1.00 10.03
1 . .
ATOM 646  CD    CD    . GLN GLN GLN A A 86  86  . 127.378 81.842  26.951  1.00 9.07
1 . .
ATOM 647  OE1   OE1   . GLN GLN GLN A A 86  86  . 126.367 82.438  26.572  1.00 10.52
1 . .
ATOM 648  NE2   NE2   . GLN GLN GLN A A 86  86  . 128.369 81.513  26.115  1.00 10.34
1 . .
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ATOM 649  C     C     . GLN GLN GLN A A 86  86  . 126.874 78.587  29.009  1.00 10.60
1 . .
ATOM 650  O     O     . GLN GLN GLN A A 86  86  . 127.744 78.074  28.224  1.00 10.60
1 . .
ATOM 651  N     N     . GLU GLU GLU A A 87  87  . 126.867 78.271  30.313  1.00 10.15
1 . .
ATOM 652  CA    CA    . GLU GLU GLU A A 87  87  . 127.902 77.396  30.845  1.00 11.63
1 . .
ATOM 653  CB    CB    . GLU GLU GLU A A 87  87  . 127.808 77.330  32.373  1.00 12.32
1 . .
ATOM 654  CG    CG    . GLU GLU GLU A A 87  87  . 128.884 76.417  32.935  1.00 19.69
1 . .
ATOM 655  CD    CD    . GLU GLU GLU A A 87  87  . 129.205 76.767  34.414  1.00 27.39
1 . .
ATOM 656  OE1   OE1   . GLU GLU GLU A A 87  87  . 130.276 76.343  34.897  1.00 32.57
1 . .
ATOM 657  OE2   OE2   . GLU GLU GLU A A 87  87  . 128.422 77.509  35.062  1.00 32.33
1 . .
ATOM 658  C     C     . GLU GLU GLU A A 87  87  . 127.771 75.973  30.280  1.00 10.19
1 . .
ATOM 659  O     O     . GLU GLU GLU A A 87  87  . 128.797 75.415  29.917  1.00 10.69
1 . .
ATOM 660  N     N     . LYS LYS LYS A A 88  88  . 126.553 75.456  30.154  1.00 10.70
1 . .
ATOM 661  CA    CA    . LYS LYS LYS A A 88  88  . 126.381 74.088  29.602  1.00 11.06
1 . .
ATOM 662  CB    CB    . LYS LYS LYS A A 88  88  . 124.918 73.626  29.753  1.00 12.11
1 . .
ATOM 663  CG    CG    . LYS LYS LYS A A 88  88  . 124.720 73.217  31.240  1.00 16.42
1 . .
ATOM 664  CD    CD    . LYS LYS LYS A A 88  88  . 124.129 74.299  32.145  1.00 28.04
1 . .
ATOM 665  CE    CE    . LYS LYS LYS A A 88  88  . 123.294 73.667  33.355  1.00 34.45
1 . .
ATOM 666  NZ    NZ    . LYS LYS LYS A A 88  88  . 122.493 72.525  32.911  1.00 36.29
1 . .
ATOM 667  C     C     . LYS LYS LYS A A 88  88  . 126.870 74.010  28.152  1.00 10.89
1 . .
ATOM 668  O     O     . LYS LYS LYS A A 88  88  . 127.551 73.047  27.740  1.00 10.90
1 . .
ATOM 669  N     N     . LEU LEU LEU A A 89  89  . 126.512 75.036  27.383  1.00 9.60
1 . .
ATOM 670  CA    CA    . LEU LEU LEU A A 89  89  . 126.861 75.018  25.946  1.00 9.07
1 . .
ATOM 671  CB    CB    . LEU LEU LEU A A 89  89  . 126.113 76.155  25.245  1.00 9.63
1 . .
ATOM 672  CG    CG    . LEU LEU LEU A A 89  89  . 124.618 75.734  24.990  1.00 9.48
1 . .
ATOM 673  CD1   CD1   . LEU LEU LEU A A 89  89  . 123.780 76.979  24.578  1.00 12.01
1 . .
ATOM 674  CD2   CD2   . LEU LEU LEU A A 89  89  . 124.471 74.604  23.920  1.00 11.56
1 . .
ATOM 675  C     C     . LEU LEU LEU A A 89  89  . 128.382 75.195  25.805  1.00 8.93
1 . .
ATOM 676  O     O     . LEU LEU LEU A A 89  89  . 129.014 74.488  24.992  1.00 10.31
1 . .
ATOM 677  N     N     . ASP ASP ASP A A 90  90  . 128.962 76.154  26.547  1.00 8.67
1 . .
ATOM 678  CA    CA    . ASP ASP ASP A A 90  90  . 130.434 76.303  26.510  1.00 9.44
1 . .
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ATOM 679  CB    CB    . ASP ASP ASP A A 90  90  . 130.911 77.494  27.395  1.00 7.90
1 . .
ATOM 680  CG    CG    . ASP ASP ASP A A 90  90  . 130.688 78.856  26.719  1.00 9.15
1 . .
ATOM 681  OD1   OD1   . ASP ASP ASP A A 90  90  . 130.582 78.951  25.469  1.00 10.63
1 . .
ATOM 682  OD2   OD2   . ASP ASP ASP A A 90  90  . 130.608 79.841  27.441  1.00 9.66
1 . .
ATOM 683  C     C     . ASP ASP ASP A A 90  90  . 131.162 75.028  26.924  1.00 10.88
1 . .
ATOM 684  O     O     . ASP ASP ASP A A 90  90  . 132.113 74.625  26.265  1.00 10.34
1 . .
ATOM 685  N     N     . ASN ASN ASN A A 91  91  . 130.668 74.411  27.995  1.00 10.99
1 . .
ATOM 686  CA    CA    . ASN ASN ASN A A 91  91  . 131.308 73.142  28.443  1.00 12.00
1 . .
ATOM 687  CB    CB    . ASN ASN ASN A A 91  91  . 130.798 72.722  29.833  1.00 12.34
1 . .
ATOM 688  CG    CG    . ASN ASN ASN A A 91  91  . 131.457 73.618  30.969  1.00 18.40
1 . .
ATOM 689  OD1   OD1   . ASN ASN ASN A A 91  91  . 132.641 74.023  30.868  1.00 25.19
1 . .
ATOM 690  ND2   ND2   . ASN ASN ASN A A 91  91  . 130.747 73.828  32.036  1.00 25.93
1 . .
ATOM 691  C     C     . ASN ASN ASN A A 91  91  . 131.210 72.023  27.397  1.00 10.91
1 . .
ATOM 692  O     O     . ASN ASN ASN A A 91  91  . 132.194 71.288  27.213  1.00 11.70
1 . .
ATOM 693  N     N     . LEU LEU LEU A A 92  92  . 130.083 71.969  26.680  1.00 10.34
1 . .
ATOM 694  CA    CA    . LEU LEU LEU A A 92  92  . 129.968 70.972  25.603  1.00 11.72
1 . .
ATOM 695  CB    CB    . LEU LEU LEU A A 92  92  . 128.585 71.061  24.946  1.00 14.21
1 . .
ATOM 696  CG    CG    . LEU LEU LEU A A 92  92  . 128.010 69.816  24.367  1.00 18.37
1 . .
ATOM 697  CD1   CD1   . LEU LEU LEU A A 92  92  . 127.953 68.726  25.484  1.00 25.16
1 . .
ATOM 698  CD2   CD2   . LEU LEU LEU A A 92  92  . 126.538 70.093  24.062  1.00 20.06
1 . .
ATOM 699  C     C     . LEU LEU LEU A A 92  92  . 131.066 71.192  24.578  1.00 11.20
1 . .
ATOM 700  O     O     . LEU LEU LEU A A 92  92  . 131.776 70.291  24.188  1.00 10.90
1 . .
ATOM 701  N     N     . MET MET MET A A 93  93  . 131.327 72.464  24.229  1.00 8.86
1 . .
ATOM 702  CA    CA    . MET MET MET A A 93  93  . 132.353 72.717  23.213  1.00 9.29
1 . .
ATOM 703  CB    CB    . MET MET MET A A 93  93  . 132.295 74.210  22.742  1.00 9.17
1 . .
ATOM 704  CG    CG    . MET MET MET A A 93  93  . 130.990 74.568  21.997  1.00 9.35
1 . .
ATOM 705  SD    SD    . MET MET MET A A 93  93  . 131.068 76.145  21.181  1.00 9.84
1 . .
ATOM 706  CE    CE    . MET MET MET A A 93  93  . 130.812 77.279  22.557  1.00 10.77
1 . .
ATOM 707  C     C     . MET MET MET A A 93  93  . 133.743 72.480  23.746  1.00 9.51
1 . .
ATOM 708  O     O     . MET MET MET A A 93  93  . 134.608 71.958  23.034  1.00 8.60
1 . .
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ATOM 709  N     N     . LEU LEU LEU A A 94  94  . 134.003 72.845  25.011  1.00 9.71
1 . .
ATOM 710  CA    CA    . LEU LEU LEU A A 94  94  . 135.381 72.632  25.586  1.00 8.99
1 . .
ATOM 711  CB    CB    . LEU LEU LEU A A 94  94  . 135.439 73.108  27.036  1.00 10.55
1 . .
ATOM 712  CG    CG    . LEU LEU LEU A A 94  94  . 135.259 74.623  27.124  1.00 14.60
1 . .
ATOM 713  CD1   CD1   . LEU LEU LEU A A 94  94  . 135.314 75.165  28.580  1.00 19.67
1 . .
ATOM 714  CD2   CD2   . LEU LEU LEU A A 94  94  . 136.173 75.351  26.272  1.00 19.18
1 . .
ATOM 715  C     C     . LEU LEU LEU A A 94  94  . 135.634 71.106  25.629  1.00 9.80
1 . .
ATOM 716  O     O     . LEU LEU LEU A A 94  94  . 136.757 70.713  25.299  1.00 10.81
1 . .
ATOM 717  N     N     . GLU GLU GLU A A 95  95  . 134.621 70.333  26.036  1.00 10.63
1 . .
ATOM 718  CA    CA    . GLU GLU GLU A A 95  95  . 134.812 68.834  26.116  1.00 12.38
1 . .
ATOM 719  CB    CB    . GLU GLU GLU A A 95  95  . 133.648 68.185  26.867  1.00 16.08
1 . .
ATOM 720  CG    CG    . GLU GLU GLU A A 95  95  . 133.676 68.540  28.394  1.00 20.24
1 . .
ATOM 721  CD    CD    . GLU GLU GLU A A 95  95  . 134.762 67.756  29.131  1.00 35.45
1 . .
ATOM 722  OE1   OE1   . GLU GLU GLU A A 95  95  . 135.071 66.622  28.695  1.00 42.94
1 . .
ATOM 723  OE2   OE2   . GLU GLU GLU A A 95  95  . 135.328 68.254  30.136  1.00 43.85
1 . .
ATOM 724  C     C     . GLU GLU GLU A A 95  95  . 135.006 68.240  24.738  1.00 11.26
1 . .
ATOM 725  O     O     . GLU GLU GLU A A 95  95  . 135.868 67.351  24.520  1.00 13.36
1 . .
ATOM 726  N     N     . LEU LEU LEU A A 96  96  . 134.305 68.805  23.733  1.00 9.25
1 . .
ATOM 727  CA    CA    . LEU LEU LEU A A 96  96  . 134.345 68.240  22.356  1.00 11.74
1 . .
ATOM 728  CB    CB    . LEU LEU LEU A A 96  96  . 133.114 68.771  21.583  1.00 10.61
1 . .
ATOM 729  CG    CG    . LEU LEU LEU A A 96  96  . 132.952 68.218  20.158  1.00 11.24
1 . .
ATOM 730  CD1   CD1   . LEU LEU LEU A A 96  96  . 132.689 66.666  20.149  1.00 10.46
1 . .
ATOM 731  CD2   CD2   . LEU LEU LEU A A 96  96  . 131.820 68.904  19.426  1.00 13.41
1 . .
ATOM 732  C     C     . LEU LEU LEU A A 96  96  . 135.687 68.576  21.685  1.00 11.48
1 . .
ATOM 733  O     O     . LEU LEU LEU A A 96  96  . 136.225 67.812  20.890  1.00 12.38
1 . .
ATOM 734  N     N     . ASP ASP ASP A A 97  97  . 136.213 69.752  21.956  1.00 10.53
1 . .
ATOM 735  CA    CA    . ASP ASP ASP A A 97  97  . 137.569 70.064  21.510  1.00 9.23
1 . .
ATOM 736  CB    CB    . ASP ASP ASP A A 97  97  . 137.899 71.589  21.721  1.00 9.75
1 . .
ATOM 737  CG    CG    . ASP ASP ASP A A 97  97  . 139.364 71.856  21.597  1.00 8.76
1 . .
ATOM 738  OD1   OD1   . ASP ASP ASP A A 97  97  . 139.775 72.278  20.502  1.00 10.61
1 . .
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ATOM 739  OD2   OD2   . ASP ASP ASP A A 97  97  . 140.094 71.714  22.590  1.00 10.82
1 . .
ATOM 740  C     C     . ASP ASP ASP A A 97  97  . 138.577 69.179  22.288  1.00 11.06
1 . .
ATOM 741  O     O     . ASP ASP ASP A A 97  97  . 139.499 68.552  21.655  1.00 13.64
1 . .
ATOM 742  N     N     . GLY GLY GLY A A 98  98  . 138.444 69.116  23.622  1.00 10.83
1 . .
ATOM 743  CA    CA    . GLY GLY GLY A A 98  98  . 139.183 68.095  24.403  1.00 12.20
1 . .
ATOM 744  C     C     . GLY GLY GLY A A 98  98  . 140.643 68.400  24.651  1.00 14.21
1 . .
ATOM 745  O     O     . GLY GLY GLY A A 98  98  . 141.356 67.534  25.209  1.00 15.89
1 . .
ATOM 746  N     N     . THR THR THR A A 99  99  . 141.104 69.591  24.268  1.00 13.17
1 . .
ATOM 747  CA    CA    . THR THR THR A A 99  99  . 142.529 69.921  24.479  1.00 14.08
1 . .
ATOM 748  CB    CB    . THR THR THR A A 99  99  . 143.209 70.290  23.143  1.00 12.13
1 . .
ATOM 749  OG1   OG1   . THR THR THR A A 99  99  . 142.715 71.569  22.652  1.00 13.61
1 . .
ATOM 750  CG2   CG2   . THR THR THR A A 99  99  . 142.967 69.262  22.101  1.00 14.68
1 . .
ATOM 751  C     C     . THR THR THR A A 99  99  . 142.617 71.081  25.427  1.00 14.04
1 . .
ATOM 752  O     O     . THR THR THR A A 99  99  . 141.746 71.905  25.481  1.00 16.39
1 . .
ATOM 753  N     N     . GLU GLU GLU A A 100 100 . 143.727 71.206  26.096  1.00 14.18
1 . .
ATOM 754  CA    CA    . GLU GLU GLU A A 100 100 . 143.952 72.309  26.980  1.00 15.15
1 . .
ATOM 755  CB    CB    . GLU GLU GLU A A 100 100 . 145.355 72.162  27.606  1.00 19.40
1 . .
ATOM 756  CG    CG    . GLU GLU GLU A A 100 100 . 145.550 73.002  28.877  1.00 26.94
1 . .
ATOM 757  CD    CD    . GLU GLU GLU A A 100 100 . 144.541 72.609  30.002  1.00 39.67
1 . .
ATOM 758  OE1   OE1   . GLU GLU GLU A A 100 100 . 144.321 71.401  30.251  1.00 44.00
1 . .
ATOM 759  OE2   OE2   . GLU GLU GLU A A 100 100 . 143.936 73.518  30.622  1.00 47.90
1 . .
ATOM 760  C     C     . GLU GLU GLU A A 100 100 . 143.866 73.683  26.318  1.00 14.08
1 . .
ATOM 761  O     O     . GLU GLU GLU A A 100 100 . 143.228 74.634  26.886  1.00 15.87
1 . .
ATOM 762  N     N     . ASN ASN ASN A A 101 101 . 144.515 73.821  25.191  1.00 11.44
1 . .
ATOM 763  CA    CA    . ASN ASN ASN A A 101 101 . 144.725 75.147  24.589  1.00 11.75
1 . .
ATOM 764  CB    CB    . ASN ASN ASN A A 101 101 . 146.181 75.288  24.140  1.00 16.17
1 . .
ATOM 765  CG    CG    . ASN ASN ASN A A 101 101 . 146.641 74.113  23.106  1.00 24.92
1 . .
ATOM 766  OD1   OD1   . ASN ASN ASN A A 101 101 . 147.445 74.451  22.162  1.00 37.39
1 . .
ATOM 767  ND2   ND2   . ASN ASN ASN A A 101 101 . 146.159 72.735  23.262  1.00 29.31
1 . .
ATOM 768  C     C     . ASN ASN ASN A A 101 101 . 143.766 75.384  23.408  1.00 10.33
1 . .
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ATOM 769  O     O     . ASN ASN ASN A A 101 101 . 144.010 76.308  22.593  1.00 11.51
1 . .
ATOM 770  N     N     . LYS LYS LYS A A 102 102 . 142.742 74.524  23.271  1.00 9.57
1 . .
ATOM 771  CA    CA    . LYS LYS LYS A A 102 102 . 141.767 74.639  22.149  1.00 10.93
1 . .
ATOM 772  CB    CB    . LYS LYS LYS A A 102 102 . 140.947 75.933  22.237  1.00 10.78
1 . .
ATOM 773  CG    CG    . LYS LYS LYS A A 102 102 . 140.131 75.973  23.600  1.00 9.30
1 . .
ATOM 774  CD    CD    . LYS LYS LYS A A 102 102 . 139.367 77.260  23.678  1.00 12.96
1 . .
ATOM 775  CE    CE    . LYS LYS LYS A A 102 102 . 138.520 77.327  24.942  1.00 12.85
1 . .
ATOM 776  NZ    NZ    . LYS LYS LYS A A 102 102 . 139.338 77.069  26.178  1.00 10.11
1 . .
ATOM 777  C     C     . LYS LYS LYS A A 102 102 . 142.471 74.451  20.811  1.00 10.96
1 . .
ATOM 778  O     O     . LYS LYS LYS A A 102 102 . 142.130 75.162  19.822  1.00 11.01
1 . .
ATOM 779  N     N     . SER SER SER A A 103 103 . 143.423 73.495  20.734  1.00 9.58
1 . .
ATOM 780  CA    CA    . SER SER SER A A 103 103 . 144.200 73.333  19.501  1.00 11.98
1 . .
ATOM 781  CB    CB    . SER SER SER A A 103 103 . 145.554 72.796  19.770  1.00 12.87
1 . .
ATOM 782  OG    OG    . SER SER SER A A 103 103 . 145.454 71.668  20.612  1.00 15.86
1 . .
ATOM 783  C     C     . SER SER SER A A 103 103 . 143.506 72.427  18.479  1.00 12.49
1 . .
ATOM 784  O     O     . SER SER SER A A 103 103 . 143.934 72.366  17.311  1.00 15.80
1 . .
ATOM 785  N     N     . LYS LYS LYS A A 104 104 . 142.353 71.834  18.847  1.00 11.06
1 . .
ATOM 786  CA    CA    . LYS LYS LYS A A 104 104 . 141.653 71.017  17.809  1.00 12.19
1 . .
ATOM 787  CB    CB    . LYS LYS LYS A A 104 104 . 140.794 69.896  18.466  1.00 12.56
1 . .
ATOM 788  CG    CG    . LYS LYS LYS A A 104 104 . 140.141 68.966  17.413  1.00 14.93
1 . .
ATOM 789  CD    CD    . LYS LYS LYS A A 104 104 . 139.229 67.997  18.105  1.00 19.59
1 . .
ATOM 790  CE    CE    . LYS LYS LYS A A 104 104 . 139.962 66.979  18.909  1.00 23.86
1 . .
ATOM 791  NZ    NZ    . LYS LYS LYS A A 104 104 . 138.848 66.275  19.676  1.00 26.30
1 . .
ATOM 792  C     C     . LYS LYS LYS A A 104 104 . 140.738 71.873  16.940  1.00 12.36
1 . .
ATOM 793  O     O     . LYS LYS LYS A A 104 104 . 140.782 71.829  15.686  1.00 14.86
1 . .
ATOM 794  N     N     . PHE PHE PHE A A 105 105 . 139.864 72.640  17.556  1.00 9.73
1 . .
ATOM 795  CA    CA    . PHE PHE PHE A A 105 105 . 139.023 73.536  16.771  1.00 9.27
1 . .
ATOM 796  CB    CB    . PHE PHE PHE A A 105 105 . 137.665 73.730  17.456  1.00 11.45
1 . .
ATOM 797  CG    CG    . PHE PHE PHE A A 105 105 . 136.856 72.462  17.611  1.00 9.50
1 . .
ATOM 798  CD1   CD1   . PHE PHE PHE A A 105 105 . 135.985 72.294  18.672  1.00 11.33
1 . .
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ATOM 799  CE1   CE1   . PHE PHE PHE A A 105 105 . 135.182 71.137  18.808  1.00 10.25
1 . .
ATOM 800  CZ    CZ    . PHE PHE PHE A A 105 105 . 135.240 70.134  17.849  1.00 12.68
1 . .
ATOM 801  CE2   CE2   . PHE PHE PHE A A 105 105 . 136.129 70.298  16.774  1.00 12.66
1 . .
ATOM 802  CD2   CD2   . PHE PHE PHE A A 105 105 . 136.905 71.498  16.635  1.00 12.16
1 . .
ATOM 803  C     C     . PHE PHE PHE A A 105 105 . 139.547 74.961  16.583  1.00 9.29
1 . .
ATOM 804  O     O     . PHE PHE PHE A A 105 105 . 139.117 75.660  15.632  1.00 9.84
1 . .
ATOM 805  N     N     . GLY GLY GLY A A 106 106 . 140.479 75.376  17.478  1.00 9.50
1 . .
ATOM 806  CA    CA    . GLY GLY GLY A A 106 106 . 140.837 76.776  17.537  1.00 9.16
1 . .
ATOM 807  C     C     . GLY GLY GLY A A 106 106 . 139.995 77.501  18.569  1.00 9.43
1 . .
ATOM 808  O     O     . GLY GLY GLY A A 106 106 . 138.749 77.334  18.594  1.00 8.60
1 . .
ATOM 809  N     N     . ALA ALA ALA A A 107 107 . 140.627 78.336  19.367  1.00 7.44
1 . .
ATOM 810  CA    CA    . ALA ALA ALA A A 107 107 . 139.863 79.198  20.291  1.00 7.83
1 . .
ATOM 811  CB    CB    . ALA ALA ALA A A 107 107 . 140.833 80.026  21.148  1.00 10.00
1 . .
ATOM 812  C     C     . ALA ALA ALA A A 107 107 . 138.965 80.146  19.490  1.00 9.04
1 . .
ATOM 813  O     O     . ALA ALA ALA A A 107 107 . 137.944 80.566  19.995  1.00 9.23
1 . .
ATOM 814  N     N     . ASN ASN ASN A A 108 108 . 139.356 80.481  18.268  1.00 8.61
1 . .
ATOM 815  CA    CA    . ASN ASN ASN A A 108 108 . 138.548 81.329  17.433  1.00 7.61
1 . .
ATOM 816  CB    CB    . ASN ASN ASN A A 108 108 . 139.342 81.958  16.262  1.00 7.97
1 . .
ATOM 817  CG    CG    . ASN ASN ASN A A 108 108 . 140.219 80.958  15.456  1.00 7.55
1 . .
ATOM 818  OD1   OD1   . ASN ASN ASN A A 108 108 . 140.623 79.884  15.925  1.00 9.06
1 . .
ATOM 819  ND2   ND2   . ASN ASN ASN A A 108 108 . 140.557 81.393  14.276  1.00 8.96
1 . .
ATOM 820  C     C     . ASN ASN ASN A A 108 108 . 137.251 80.679  17.004  1.00 8.65
1 . .
ATOM 821  O     O     . ASN ASN ASN A A 108 108 . 136.205 81.370  16.842  1.00 9.41
1 . .
ATOM 822  N     N     . ALA ALA ALA A A 109 109 . 137.297 79.374  16.758  1.00 7.85
1 . .
ATOM 823  CA    CA    . ALA ALA ALA A A 109 109 . 136.046 78.688  16.433  1.00 7.01
1 . .
ATOM 824  CB    CB    . ALA ALA ALA A A 109 109 . 136.382 77.210  15.989  1.00 9.10
1 . .
ATOM 825  C     C     . ALA ALA ALA A A 109 109 . 135.132 78.639  17.639  1.00 8.17
1 . .
ATOM 826  O     O     . ALA ALA ALA A A 109 109 . 133.933 78.971  17.530  1.00 8.79
1 . .
ATOM 827  N     N     . ILE ILE ILE A A 110 110 . 135.691 78.166  18.777  1.00 7.71
1 . .
ATOM 828  CA    CA    . ILE ILE ILE A A 110 110 . 134.861 78.022  19.985  1.00 7.74
1 . .
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ATOM 829  CB    CB    . ILE ILE ILE A A 110 110 . 135.643 77.333  21.125  1.00 7.48
1 . .
ATOM 830  CG1   CG1   . ILE ILE ILE A A 110 110 . 135.966 75.909  20.702  1.00 8.90
1 . .
ATOM 831  CD    CD    . ILE ILE ILE A A 110 110 . 137.032 75.235  21.588  1.00 11.43
1 . .
ATOM 832  CG2   CG2   . ILE ILE ILE A A 110 110 . 134.790 77.318  22.450  1.00 9.92
1 . .
ATOM 833  C     C     . ILE ILE ILE A A 110 110 . 134.296 79.363  20.443  1.00 6.20
1 . .
ATOM 834  O     O     . ILE ILE ILE A A 110 110 . 133.081 79.498  20.717  1.00 7.86
1 . .
ATOM 835  N     N     . LEU LEU LEU A A 111 111 . 135.144 80.410  20.430  1.00 6.94
1 . .
ATOM 836  CA    CA    . LEU LEU LEU A A 111 111 . 134.670 81.741  20.957  1.00 7.72
1 . .
ATOM 837  CB    CB    . LEU LEU LEU A A 111 111 . 135.816 82.694  21.062  1.00 7.50
1 . .
ATOM 838  CG    CG    . LEU LEU LEU A A 111 111 . 135.399 84.051  21.623  1.00 8.22
1 . .
ATOM 839  CD1   CD1   . LEU LEU LEU A A 111 111 . 134.848 83.974  23.076  1.00 9.23
1 . .
ATOM 840  CD2   CD2   . LEU LEU LEU A A 111 111 . 136.595 85.073  21.527  1.00 10.67
1 . .
ATOM 841  C     C     . LEU LEU LEU A A 111 111 . 133.572 82.313  20.056  1.00 7.27
1 . .
ATOM 842  O     O     . LEU LEU LEU A A 111 111 . 132.583 82.939  20.555  1.00 7.85
1 . .
ATOM 843  N     N     . GLY GLY GLY A A 112 112 . 133.755 82.148  18.732  1.00 6.81
1 . .
ATOM 844  CA    CA    . GLY GLY GLY A A 112 112 . 132.710 82.757  17.854  1.00 7.43
1 . .
ATOM 845  C     C     . GLY GLY GLY A A 112 112 . 131.336 82.199  18.169  1.00 6.54
1 . .
ATOM 846  O     O     . GLY GLY GLY A A 112 112 . 130.358 82.930  18.246  1.00 7.83
1 . .
ATOM 847  N     N     . VAL VAL VAL A A 113 113 . 131.268 80.883  18.383  1.00 8.15
1 . .
ATOM 848  CA    CA    . VAL VAL VAL A A 113 113 . 129.998 80.310  18.832  1.00 7.37
1 . .
ATOM 849  CB    CB    . VAL VAL VAL A A 113 113 . 130.004 78.742  18.665  1.00 8.01
1 . .
ATOM 850  CG1   CG1   . VAL VAL VAL A A 113 113 . 128.704 78.146  19.108  1.00 8.23
1 . .
ATOM 851  CG2   CG2   . VAL VAL VAL A A 113 113 . 130.361 78.347  17.239  1.00 8.86
1 . .
ATOM 852  C     C     . VAL VAL VAL A A 113 113 . 129.598 80.785  20.233  1.00 7.24
1 . .
ATOM 853  O     O     . VAL VAL VAL A A 113 113 . 128.393 81.072  20.443  1.00 8.84
1 . .
ATOM 854  N     N     . SER SER SER A A 114 114 . 130.550 80.772  21.166  1.00 7.23
1 . .
ATOM 855  CA    CA    . SER SER SER A A 114 114 . 130.252 81.166  22.549  1.00 6.35
1 . .
ATOM 856  CB    CB    . SER SER SER A A 114 114 . 131.550 81.064  23.343  1.00 8.08
1 . .
ATOM 857  OG    OG    . SER SER SER A A 114 114 . 131.271 81.359  24.697  1.00 9.94
1 . .
ATOM 858  C     C     . SER SER SER A A 114 114 . 129.606 82.562  22.591  1.00 8.27
1 . .
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ATOM 859  O     O     . SER SER SER A A 114 114 . 128.591 82.800  23.311  1.00 8.13
1 . .
ATOM 860  N     N     . LEU LEU LEU A A 115 115 . 130.170 83.480  21.800  1.00 7.78
1 . .
ATOM 861  CA    CA    . LEU LEU LEU A A 115 115 . 129.647 84.867  21.776  1.00 7.19
1 . .
ATOM 862  CB    CB    . LEU LEU LEU A A 115 115 . 130.622 85.677  20.901  1.00 8.58
1 . .
ATOM 863  CG    CG    . LEU LEU LEU A A 115 115 . 131.973 85.902  21.514  1.00 6.48
1 . .
ATOM 864  CD1   CD1   . LEU LEU LEU A A 115 115 . 132.846 86.582  20.405  1.00 8.86
1 . .
ATOM 865  CD2   CD2   . LEU LEU LEU A A 115 115 . 131.943 86.789  22.681  1.00 10.21
1 . .
ATOM 866  C     C     . LEU LEU LEU A A 115 115 . 128.250 84.908  21.149  1.00 6.21
1 . .
ATOM 867  O     O     . LEU LEU LEU A A 115 115 . 127.387 85.648  21.652  1.00 8.31
1 . .
ATOM 868  N     N     . ALA ALA ALA A A 116 116 . 128.016 84.182  20.031  1.00 8.31
1 . .
ATOM 869  CA    CA    . ALA ALA ALA A A 116 116 . 126.713 84.207  19.358  1.00 7.65
1 . .
ATOM 870  CB    CB    . ALA ALA ALA A A 116 116 . 126.804 83.518  18.026  1.00 8.22
1 . .
ATOM 871  C     C     . ALA ALA ALA A A 116 116 . 125.657 83.586  20.289  1.00 7.34
1 . .
ATOM 872  O     O     . ALA ALA ALA A A 116 116 . 124.517 84.069  20.359  1.00 8.42
1 . .
ATOM 873  N     N     . VAL VAL VAL A A 117 117 . 126.026 82.514  21.034  1.00 8.30
1 . .
ATOM 874  CA    CA    . VAL VAL VAL A A 117 117 . 125.106 81.900  21.998  1.00 8.04
1 . .
ATOM 875  CB    CB    . VAL VAL VAL A A 117 117 . 125.841 80.663  22.681  1.00 8.19
1 . .
ATOM 876  CG1   CG1   . VAL VAL VAL A A 117 117 . 125.115 80.238  23.958  1.00 11.26
1 . .
ATOM 877  CG2   CG2   . VAL VAL VAL A A 117 117 . 125.864 79.492  21.693  1.00 8.77
1 . .
ATOM 878  C     C     . VAL VAL VAL A A 117 117 . 124.746 82.919  23.063  1.00 7.97
1 . .
ATOM 879  O     O     . VAL VAL VAL A A 117 117 . 123.567 83.055  23.412  1.00 9.72
1 . .
ATOM 880  N     N     . CYS CYS CYS A A 118 118 . 125.747 83.706  23.524  1.00 8.17
1 . .
ATOM 881  CA    CA    . CYS CYS CYS A A 118 118 . 125.449 84.661  24.568  1.00 7.83
1 . .
ATOM 882  CB    CB    . CYS CYS CYS A A 118 118 . 126.760 85.231  25.080  1.00 8.35
1 . .
ATOM 883  SG    SG    . CYS CYS CYS A A 118 118 . 126.608 86.118  26.642  1.00 10.23
1 . .
ATOM 884  C     C     . CYS CYS CYS A A 118 118 . 124.478 85.750  24.109  1.00 8.28
1 . .
ATOM 885  O     O     . CYS CYS CYS A A 118 118 . 123.528 86.096  24.831  1.00 9.02
1 . .
ATOM 886  N     N     . LYS LYS LYS A A 119 119 . 124.658 86.268  22.891  1.00 8.03
1 . .
ATOM 887  CA    CA    . LYS LYS LYS A A 119 119 . 123.735 87.247  22.318  1.00 8.78
1 . .
ATOM 888  CB    CB    . LYS LYS LYS A A 119 119 . 124.250 87.767  20.983  1.00 9.55
1 . .
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ATOM 889  CG    CG    . LYS LYS LYS A A 119 119 . 125.561 88.542  21.185  1.00 10.88
1 . .
ATOM 890  CD    CD    . LYS LYS LYS A A 119 119 . 125.960 89.121  19.846  1.00 9.29
1 . .
ATOM 891  CE    CE    . LYS LYS LYS A A 119 119 . 127.424 89.731  19.957  1.00 13.61
1 . .
ATOM 892  NZ    NZ    . LYS LYS LYS A A 119 119 . 127.754 90.444  18.740  1.00 13.30
1 . .
ATOM 893  C     C     . LYS LYS LYS A A 119 119 . 122.342 86.655  22.154  1.00 8.92
1 . .
ATOM 894  O     O     . LYS LYS LYS A A 119 119 . 121.328 87.314  22.487  1.00 10.15
1 . .
ATOM 895  N     N     . ALA ALA ALA A A 120 120 . 122.261 85.420  21.628  1.00 7.95
1 . .
ATOM 896  CA    CA    . ALA ALA ALA A A 120 120 . 120.919 84.772  21.480  1.00 9.67
1 . .
ATOM 897  CB    CB    . ALA ALA ALA A A 120 120 . 121.126 83.485  20.720  1.00 9.26
1 . .
ATOM 898  C     C     . ALA ALA ALA A A 120 120 . 120.304 84.523  22.865  1.00 9.86
1 . .
ATOM 899  O     O     . ALA ALA ALA A A 120 120 . 119.063 84.675  22.940  1.00 10.45
1 . .
ATOM 900  N     N     . GLY GLY GLY A A 121 121 . 121.114 84.177  23.890  1.00 9.26
1 . .
ATOM 901  CA    CA    . GLY GLY GLY A A 121 121 . 120.614 83.947  25.251  1.00 9.97
1 . .
ATOM 902  C     C     . GLY GLY GLY A A 121 121 . 120.001 85.222  25.827  1.00 10.58
1 . .
ATOM 903  O     O     . GLY GLY GLY A A 121 121 . 118.914 85.167  26.439  1.00 11.69
1 . .
ATOM 904  N     N     . ALA ALA ALA A A 122 122 . 120.662 86.383  25.596  1.00 9.03
1 . .
ATOM 905  CA    CA    . ALA ALA ALA A A 122 122 . 120.118 87.628  26.132  1.00 9.34
1 . .
ATOM 906  CB    CB    . ALA ALA ALA A A 122 122 . 121.063 88.800  25.807  1.00 9.72
1 . .
ATOM 907  C     C     . ALA ALA ALA A A 122 122 . 118.759 87.838  25.455  1.00 10.08
1 . .
ATOM 908  O     O     . ALA ALA ALA A A 122 122 . 117.733 88.214  26.153  1.00 10.94
1 . .
ATOM 909  N     N     . ALA ALA ALA A A 123 123 . 118.660 87.692  24.124  1.00 9.49
1 . .
ATOM 910  CA    CA    . ALA ALA ALA A A 123 123 . 117.367 87.890  23.457  1.00 9.96
1 . .
ATOM 911  CB    CB    . ALA ALA ALA A A 123 123 . 117.531 87.804  21.963  1.00 10.88
1 . .
ATOM 912  C     C     . ALA ALA ALA A A 123 123 . 116.306 86.933  23.953  1.00 11.35
1 . .
ATOM 913  O     O     . ALA ALA ALA A A 123 123 . 115.090 87.321  24.101  1.00 13.70
1 . .
ATOM 914  N     N     . GLU GLU GLU A A 124 124 . 116.684 85.671  24.180  1.00 11.19
1 . .
ATOM 915  CA    CA    . GLU GLU GLU A A 124 124 . 115.752 84.668  24.697  1.00 11.54
1 . .
ATOM 916  CB    CB    . GLU GLU GLU A A 124 124 . 116.482 83.316  24.782  1.00 12.42
1 . .
ATOM 917  CG    CG    . GLU GLU GLU A A 124 124 . 115.550 82.133  25.088  1.00 14.70
1 . .
ATOM 918  CD    CD    . GLU GLU GLU A A 124 124 . 114.556 81.963  23.942  1.00 20.23
1 . .
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ATOM 919  OE1   OE1   . GLU GLU GLU A A 124 124 . 114.902 82.265  22.748  1.00 21.39
1 . .
ATOM 920  OE2   OE2   . GLU GLU GLU A A 124 124 . 113.431 81.486  24.188  1.00 28.77
1 . .
ATOM 921  C     C     . GLU GLU GLU A A 124 124 . 115.188 85.084  26.082  1.00 13.50
1 . .
ATOM 922  O     O     . GLU GLU GLU A A 124 124 . 113.981 84.838  26.367  1.00 15.06
1 . .
ATOM 923  N     N     . ARG ARG ARG A A 125 125 . 116.050 85.708  26.914  1.00 13.33
1 . .
ATOM 924  CA    CA    . ARG ARG ARG A A 125 125 . 115.601 86.258  28.234  1.00 14.77
1 . .
ATOM 925  CB    CB    . ARG ARG ARG A A 125 125 . 116.780 86.455  29.196  1.00 16.68
1 . .
ATOM 926  CG    CG    . ARG ARG ARG A A 125 125 . 117.556 85.189  29.658  1.00 18.92
1 . .
ATOM 927  CD    CD    . ARG ARG ARG A A 125 125 . 117.805 85.253  31.232  1.00 27.70
1 . .
ATOM 928  NE    NE    . ARG ARG ARG A A 125 125 . 119.136 84.658  31.603  1.00 48.30
1 . .
ATOM 929  CZ    CZ    . ARG ARG ARG A A 125 125 . 119.432 83.332  31.719  1.00 55.45
1 . .
ATOM 930  NH1   NH1   . ARG ARG ARG A A 125 125 . 120.681 82.942  32.078  1.00 59.29
1 . .
ATOM 931  NH2   NH2   . ARG ARG ARG A A 125 125 . 118.502 82.369  31.494  1.00 59.35
1 . .
ATOM 932  C     C     . ARG ARG ARG A A 125 125 . 114.836 87.588  28.098  1.00 15.71
1 . .
ATOM 933  O     O     . ARG ARG ARG A A 125 125 . 114.393 88.138  29.156  1.00 16.76
1 . .
ATOM 934  N     N     . GLU GLU GLU A A 126 126 . 114.755 88.179  26.887  1.00 15.73
1 . .
ATOM 935  CA    CA    . GLU GLU GLU A A 126 126 . 114.159 89.477  26.660  1.00 17.80
1 . .
ATOM 936  CB    CB    . GLU GLU GLU A A 126 126 . 112.676 89.422  27.182  1.00 20.14
1 . .
ATOM 937  CG    CG    . GLU GLU GLU A A 126 126 . 111.890 88.205  26.638  1.00 26.27
1 . .
ATOM 938  CD    CD    . GLU GLU GLU A A 126 126 . 111.385 88.531  25.233  1.00 31.14
1 . .
ATOM 939  OE1   OE1   . GLU GLU GLU A A 126 126 . 110.610 87.697  24.682  1.00 35.04
1 . .
ATOM 940  OE2   OE2   . GLU GLU GLU A A 126 126 . 111.765 89.640  24.696  1.00 31.52
1 . .
ATOM 941  C     C     . GLU GLU GLU A A 126 126 . 114.914 90.530  27.468  1.00 16.32
1 . .
ATOM 942  O     O     . GLU GLU GLU A A 126 126 . 114.318 91.392  28.115  1.00 16.28
1 . .
ATOM 943  N     N     . LEU LEU LEU A A 127 127 . 116.247 90.393  27.502  1.00 14.52
1 . .
ATOM 944  CA    CA    . LEU LEU LEU A A 127 127 . 117.095 91.319  28.276  1.00 12.28
1 . .
ATOM 945  CB    CB    . LEU LEU LEU A A 127 127 . 117.872 90.577  29.389  1.00 13.10
1 . .
ATOM 946  CG    CG    . LEU LEU LEU A A 127 127 . 117.023 90.066  30.557  1.00 14.35
1 . .
ATOM 947  CD1   CD1   . LEU LEU LEU A A 127 127 . 117.983 89.212  31.414  1.00 17.04
1 . .
ATOM 948  CD2   CD2   . LEU LEU LEU A A 127 127 . 116.391 91.223  31.310  1.00 16.79
1 . .
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ATOM 949  C     C     . LEU LEU LEU A A 127 127 . 118.177 91.887  27.402  1.00 12.03
1 . .
ATOM 950  O     O     . LEU LEU LEU A A 127 127 . 118.650 91.202  26.464  1.00 12.03
1 . .
ATOM 951  N     N     . PRO PRO PRO A A 128 128 . 118.577 93.123  27.674  1.00 10.96
1 . .
ATOM 952  CA    CA    . PRO PRO PRO A A 128 128 . 119.788 93.602  26.974  1.00 11.53
1 . .
ATOM 953  CB    CB    . PRO PRO PRO A A 128 128 . 120.003 95.007  27.543  1.00 13.83
1 . .
ATOM 954  CG    CG    . PRO PRO PRO A A 128 128 . 119.239 95.006  28.814  1.00 17.88
1 . .
ATOM 955  CD    CD    . PRO PRO PRO A A 128 128 . 118.092 94.046  28.736  1.00 13.33
1 . .
ATOM 956  C     C     . PRO PRO PRO A A 128 128 . 120.938 92.676  27.331  1.00 11.13
1 . .
ATOM 957  O     O     . PRO PRO PRO A A 128 128 . 121.005 92.133  28.407  1.00 11.08
1 . .
ATOM 958  N     N     . LEU LEU LEU A A 129 129 . 121.915 92.593  26.438  1.00 9.18
1 . .
ATOM 959  CA    CA    . LEU LEU LEU A A 129 129 . 123.054 91.703  26.627  1.00 9.29
1 . .
ATOM 960  CB    CB    . LEU LEU LEU A A 129 129 . 124.024 91.864  25.432  1.00 9.00
1 . .
ATOM 961  CG    CG    . LEU LEU LEU A A 129 129 . 125.256 90.984  25.488  1.00 9.32
1 . .
ATOM 962  CD1   CD1   . LEU LEU LEU A A 129 129 . 124.996 89.447  25.616  1.00 11.12
1 . .
ATOM 963  CD2   CD2   . LEU LEU LEU A A 129 129 . 126.104 91.258  24.269  1.00 10.50
1 . .
ATOM 964  C     C     . LEU LEU LEU A A 129 129 . 123.786 91.983  27.947  1.00 9.13
1 . .
ATOM 965  O     O     . LEU LEU LEU A A 129 129 . 124.172 91.055  28.652  1.00 8.93
1 . .
ATOM 966  N     N     . TYR TYR TYR A A 130 130 . 123.955 93.268  28.298  1.00 9.36
1 . .
ATOM 967  CA    CA    . TYR TYR TYR A A 130 130 . 124.761 93.540  29.527  1.00 9.54
1 . .
ATOM 968  CB    CB    . TYR TYR TYR A A 130 130 . 125.022 95.060  29.731  1.00 9.10
1 . .
ATOM 969  CG    CG    . TYR TYR TYR A A 130 130 . 123.748 95.950  29.761  1.00 8.48
1 . .
ATOM 970  CD1   CD1   . TYR TYR TYR A A 130 130 . 123.063 96.175  30.974  1.00 12.77
1 . .
ATOM 971  CE1   CE1   . TYR TYR TYR A A 130 130 . 121.896 96.972  30.966  1.00 12.96
1 . .
ATOM 972  CZ    CZ    . TYR TYR TYR A A 130 130 . 121.483 97.554  29.767  1.00 15.11
1 . .
ATOM 973  OH    OH    . TYR TYR TYR A A 130 130 . 120.329 98.332  29.688  1.00 18.69
1 . .
ATOM 974  CE2   CE2   . TYR TYR TYR A A 130 130 . 122.121 97.372  28.613  1.00 13.97
1 . .
ATOM 975  CD2   CD2   . TYR TYR TYR A A 130 130 . 123.280 96.562  28.576  1.00 11.19
1 . .
ATOM 976  C     C     . TYR TYR TYR A A 130 130 . 124.022 92.946  30.777  1.00 9.06
1 . .
ATOM 977  O     O     . TYR TYR TYR A A 130 130 . 124.681 92.557  31.760  1.00 9.44
1 . .
ATOM 978  N     N     . ARG ARG ARG A A 131 131 . 122.661 92.935  30.754  1.00 9.79
1 . .
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ATOM 979  CA    CA    . ARG ARG ARG A A 131 131 . 121.932 92.408  31.902  1.00 10.74
1 . .
ATOM 980  CB    CB    . ARG ARG ARG A A 131 131 . 120.460 92.874  31.830  1.00 12.45
1 . .
ATOM 981  CG    CG    . ARG ARG ARG A A 131 131 . 120.273 94.197  32.399  1.00 20.24
1 . .
ATOM 982  CD    CD    . ARG ARG ARG A A 131 131 . 119.698 94.024  33.889  1.00 27.86
1 . .
ATOM 983  NE    NE    . ARG ARG ARG A A 131 131 . 119.858 95.255  34.630  1.00 35.04
1 . .
ATOM 984  CZ    CZ    . ARG ARG ARG A A 131 131 . 120.507 95.345  35.785  1.00 36.62
1 . .
ATOM 985  NH1   NH1   . ARG ARG ARG A A 131 131 . 120.982 94.241  36.401  1.00 38.44
1 . .
ATOM 986  NH2   NH2   . ARG ARG ARG A A 131 131 . 120.655 96.535  36.327  1.00 39.70
1 . .
ATOM 987  C     C     . ARG ARG ARG A A 131 131 . 121.976 90.879  31.904  1.00 9.94
1 . .
ATOM 988  O     O     . ARG ARG ARG A A 131 131 . 122.065 90.268  32.964  1.00 10.06
1 . .
ATOM 989  N     N     . HIS HIS HIS A A 132 132 . 121.913 90.255  30.728  1.00 8.54
1 . .
ATOM 990  CA    CA    . HIS HIS HIS A A 132 132 . 122.103 88.808  30.679  1.00 9.63
1 . .
ATOM 991  CB    CB    . HIS HIS HIS A A 132 132 . 121.908 88.379  29.244  1.00 10.98
1 . .
ATOM 992  CG    CG    . HIS HIS HIS A A 132 132 . 122.154 86.928  29.012  1.00 10.95
1 . .
ATOM 993  ND1   ND1   . HIS HIS HIS A A 132 132 . 121.485 85.933  29.717  1.00 14.26
1 . .
ATOM 994  CE1   CE1   . HIS HIS HIS A A 132 132 . 121.849 84.753  29.217  1.00 14.35
1 . .
ATOM 995  NE2   NE2   . HIS HIS HIS A A 132 132 . 122.741 84.955  28.255  1.00 11.81
1 . .
ATOM 996  CD2   CD2   . HIS HIS HIS A A 132 132 . 122.939 86.301  28.096  1.00 10.96
1 . .
ATOM 997  C     C     . HIS HIS HIS A A 132 132 . 123.480 88.406  31.225  1.00 9.46
1 . .
ATOM 998  O     O     . HIS HIS HIS A A 132 132 . 123.584 87.489  32.044  1.00 10.58
1 . .
ATOM 999  N     N     . ILE ILE ILE A A 133 133 . 124.531 89.140  30.829  1.00 9.22
1 . .
ATOM 1000 CA    CA    . ILE ILE ILE A A 133 133 . 125.873 88.860  31.321  1.00 10.28
1 . .
ATOM 1001 CB    CB    . ILE ILE ILE A A 133 133 . 126.868 89.672  30.528  1.00 9.23
1 . .
ATOM 1002 CG1   CG1   . ILE ILE ILE A A 133 133 . 126.934 89.193  29.084  1.00 9.37
1 . .
ATOM 1003 CD    CD    . ILE ILE ILE A A 133 133 . 127.868 90.068  28.172  1.00 10.26
1 . .
ATOM 1004 CG2   CG2   . ILE ILE ILE A A 133 133 . 128.273 89.639  31.238  1.00 10.65
1 . .
ATOM 1005 C     C     . ILE ILE ILE A A 133 133 . 125.975 89.109  32.825  1.00 10.41
1 . .
ATOM 1006 O     O     . ILE ILE ILE A A 133 133 . 126.549 88.265  33.512  1.00 10.56
1 . .
ATOM 1007 N     N     . ALA ALA ALA A A 134 134 . 125.358 90.190  33.330  1.00 10.36
1 . .
ATOM 1008 CA    CA    . ALA ALA ALA A A 134 134 . 125.346 90.394  34.795  1.00 9.33
1 . .
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ATOM 1009 CB    CB    . ALA ALA ALA A A 134 134 . 124.558 91.644  35.106  1.00 11.64
1 . .
ATOM 1010 C     C     . ALA ALA ALA A A 134 134 . 124.731 89.178  35.495  1.00 13.25
1 . .
ATOM 1011 O     O     . ALA ALA ALA A A 134 134 . 125.312 88.705  36.462  1.00 13.08
1 . .
ATOM 1012 N     N     . GLN GLN GLN A A 135 135 . 123.631 88.641  34.977  1.00 13.44
1 . .
ATOM 1013 CA    CA    . GLN GLN GLN A A 135 135 . 123.013 87.452  35.644  1.00 15.88
1 . .
ATOM 1014 CB    CB    . GLN GLN GLN A A 135 135 . 121.661 87.174  35.046  1.00 16.84
1 . .
ATOM 1015 CG    CG    . GLN GLN GLN A A 135 135 . 120.760 88.244  35.338  1.00 20.25
1 . .
ATOM 1016 CD    CD    . GLN GLN GLN A A 135 135 . 119.247 87.898  34.983  1.00 22.49
1 . .
ATOM 1017 OE1   OE1   . GLN GLN GLN A A 135 135 . 118.377 88.497  35.658  1.00 26.90
1 . .
ATOM 1018 NE2   NE2   . GLN GLN GLN A A 135 135 . 118.942 86.959  33.903  1.00 21.56
1 . .
ATOM 1019 C     C     . GLN GLN GLN A A 135 135 . 123.864 86.212  35.530  1.00 16.55
1 . .
ATOM 1020 O     O     . GLN GLN GLN A A 135 135 . 123.966 85.391  36.502  1.00 16.87
1 . .
ATOM 1021 N     N     . LEU LEU LEU A A 136 136 . 124.502 86.012  34.372  1.00 15.82
1 . .
ATOM 1022 CA    CA    . LEU LEU LEU A A 136 136 . 125.453 84.903  34.246  1.00 15.05
1 . .
ATOM 1023 CB    CB    . LEU LEU LEU A A 136 136 . 126.124 84.857  32.862  1.00 16.78
1 . .
ATOM 1024 CG    CG    . LEU LEU LEU A A 136 136 . 125.138 84.522  31.763  1.00 13.95
1 . .
ATOM 1025 CD1   CD1   . LEU LEU LEU A A 136 136 . 125.882 84.619  30.392  1.00 14.36
1 . .
ATOM 1026 CD2   CD2   . LEU LEU LEU A A 136 136 . 124.494 83.037  31.915  1.00 16.26
1 . .
ATOM 1027 C     C     . LEU LEU LEU A A 136 136 . 126.571 85.008  35.312  1.00 17.79
1 . .
ATOM 1028 O     O     . LEU LEU LEU A A 136 136 . 127.081 83.968  35.822  1.00 19.88
1 . .
ATOM 1029 N     N     . ALA ALA ALA A A 137 137 . 126.959 86.234  35.639  1.00 14.81
1 . .
ATOM 1030 CA    CA    . ALA ALA ALA A A 137 137 . 128.119 86.469  36.519  1.00 17.39
1 . .
ATOM 1031 CB    CB    . ALA ALA ALA A A 137 137 . 128.943 87.666  36.055  1.00 15.91
1 . .
ATOM 1032 C     C     . ALA ALA ALA A A 137 137 . 127.707 86.632  37.978  1.00 18.50
1 . .
ATOM 1033 O     O     . ALA ALA ALA A A 137 137 . 128.586 86.722  38.864  1.00 21.49
1 . .
ATOM 1034 N     N     . GLY GLY GLY A A 138 138 . 126.403 86.673  38.233  1.00 19.97
1 . .
ATOM 1035 CA    CA    . GLY GLY GLY A A 138 138 . 125.954 86.904  39.604  1.00 23.08
1 . .
ATOM 1036 C     C     . GLY GLY GLY A A 138 138 . 126.036 88.354  40.093  1.00 25.46
1 . .
ATOM 1037 O     O     . GLY GLY GLY A A 138 138 . 126.089 88.587  41.325  1.00 27.83
1 . .
ATOM 1038 N     N     . ASN ASN ASN A A 139 139 . 126.027 89.355  39.194  1.00 25.90
1 . .
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ATOM 1039 CA    CA    . ASN ASN ASN A A 139 139 . 125.983 90.771  39.586  1.00 26.97
1 . .
ATOM 1040 CB    CB    . ASN ASN ASN A A 139 139 . 126.931 91.635  38.736  1.00 26.79
1 . .
ATOM 1041 CG    CG    . ASN ASN ASN A A 139 139 . 128.335 91.155  38.810  1.00 26.30
1 . .
ATOM 1042 OD1   OD1   . ASN ASN ASN A A 139 139 . 128.787 90.741  39.874  1.00 29.51
1 . .
ATOM 1043 ND2   ND2   . ASN ASN ASN A A 139 139 . 129.037 91.159  37.693  1.00 21.80
1 . .
ATOM 1044 C     C     . ASN ASN ASN A A 139 139 . 124.628 91.404  39.462  1.00 30.40
1 . .
ATOM 1045 O     O     . ASN ASN ASN A A 139 139 . 123.878 91.078  38.553  1.00 29.30
1 . .
ATOM 1046 N     N     . SER SER SER A A 140 140 . 124.340 92.329  40.381  1.00 33.78
1 . .
ATOM 1047 CA    CA    . SER SER SER A A 140 140 . 123.100 93.137  40.375  1.00 36.97
1 . .
ATOM 1048 CB    CB    . SER SER SER A A 140 140 . 122.486 93.201  41.773  1.00 37.61
1 . .
ATOM 1049 OG    OG    . SER SER SER A A 140 140 . 121.726 92.054  41.960  1.00 40.90
1 . .
ATOM 1050 C     C     . SER SER SER A A 140 140 . 123.248 94.571  39.911  1.00 38.30
1 . .
ATOM 1051 O     O     . SER SER SER A A 140 140 . 122.549 94.968  38.988  1.00 40.62
1 . .
ATOM 1052 N     N     . ASP ASP ASP A A 141 141 . 124.058 95.379  40.594  1.00 38.66
1 . .
ATOM 1053 CA    CA    . ASP ASP ASP A A 141 141 . 124.079 96.831  40.333  1.00 38.11
1 . .
ATOM 1054 CB    CB    . ASP ASP ASP A A 141 141 . 124.233 97.680  41.637  1.00 39.96
1 . .
ATOM 1055 CG    CG    . ASP ASP ASP A A 141 141 . 124.307 99.249  41.369  1.00 45.43
1 . .
ATOM 1056 OD1   OD1   . ASP ASP ASP A A 141 141 . 123.305 99.946  41.721  1.00 52.65
1 . .
ATOM 1057 OD2   OD2   . ASP ASP ASP A A 141 141 . 125.353 99.804  40.850  1.00 48.48
1 . .
ATOM 1058 C     C     . ASP ASP ASP A A 141 141 . 125.221 97.007  39.327  1.00 35.50
1 . .
ATOM 1059 O     O     . ASP ASP ASP A A 141 141 . 126.357 96.596  39.612  1.00 37.70
1 . .
ATOM 1060 N     N     . LEU LEU LEU A A 142 142 . 124.879 97.535  38.150  1.00 29.89
1 . .
ATOM 1061 CA    CA    . LEU LEU LEU A A 142 142 . 125.742 97.573  36.979  1.00 24.85
1 . .
ATOM 1062 CB    CB    . LEU LEU LEU A A 142 142 . 124.888 97.469  35.731  1.00 23.47
1 . .
ATOM 1063 CG    CG    . LEU LEU LEU A A 142 142 . 124.358 95.998  35.773  1.00 25.29
1 . .
ATOM 1064 CD1   CD1   . LEU LEU LEU A A 142 142 . 124.189 95.461  34.474  1.00 22.21
1 . .
ATOM 1065 CD2   CD2   . LEU LEU LEU A A 142 142 . 125.320 94.899  36.524  1.00 26.92
1 . .
ATOM 1066 C     C     . LEU LEU LEU A A 142 142 . 126.483 98.892  37.047  1.00 22.08
1 . .
ATOM 1067 O     O     . LEU LEU LEU A A 142 142 . 126.015 99.837  37.689  1.00 21.68
1 . .
ATOM 1068 N     N     . ILE ILE ILE A A 143 143 . 127.661 99.010  36.413  1.00 19.62
1 . .
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ATOM 1069 CA    CA    . ILE ILE ILE A A 143 143 . 128.300 100.365 36.484  1.00 16.76
1 . .
ATOM 1070 CB    CB    . ILE ILE ILE A A 143 143 . 129.308 100.604 37.653  1.00 20.82
1 . .
ATOM 1071 CG1   CG1   . ILE ILE ILE A A 143 143 . 130.459 99.720  37.387  1.00 22.92
1 . .
ATOM 1072 CD    CD    . ILE ILE ILE A A 143 143 . 131.519 100.540 36.894  1.00 25.86
1 . .
ATOM 1073 CG2   CG2   . ILE ILE ILE A A 143 143 . 128.727 100.479 39.175  1.00 21.26
1 . .
ATOM 1074 C     C     . ILE ILE ILE A A 143 143 . 128.985 100.529 35.085  1.00 13.08
1 . .
ATOM 1075 O     O     . ILE ILE ILE A A 143 143 . 129.491 99.582  34.460  1.00 13.85
1 . .
ATOM 1076 N     N     . LEU LEU LEU A A 144 144 . 128.958 101.770 34.605  1.00 10.27
1 . .
ATOM 1077 CA    CA    . LEU LEU LEU A A 144 144 . 129.717 102.093 33.386  1.00 9.17
1 . .
ATOM 1078 CB    CB    . LEU LEU LEU A A 144 144 . 129.211 103.440 32.831  1.00 10.30
1 . .
ATOM 1079 CG    CG    . LEU LEU LEU A A 144 144 . 127.918 103.406 31.925  1.00 9.72
1 . .
ATOM 1080 CD1   CD1   . LEU LEU LEU A A 144 144 . 128.134 102.723 30.581  1.00 12.22
1 . .
ATOM 1081 CD2   CD2   . LEU LEU LEU A A 144 144 . 126.724 102.701 32.640  1.00 15.97
1 . .
ATOM 1082 C     C     . LEU LEU LEU A A 144 144 . 131.202 102.248 33.714  1.00 9.87
1 . .
ATOM 1083 O     O     . LEU LEU LEU A A 144 144 . 131.572 102.890 34.695  1.00 11.13
1 . .
ATOM 1084 N     N     . PRO PRO PRO A A 145 145 . 132.055 101.783 32.823  1.00 7.08
1 . .
ATOM 1085 CA    CA    . PRO PRO PRO A A 145 145 . 133.480 101.820 33.073  1.00 7.94
1 . .
ATOM 1086 CB    CB    . PRO PRO PRO A A 145 145 . 133.989 100.751 32.124  1.00 8.32
1 . .
ATOM 1087 CG    CG    . PRO PRO PRO A A 145 145 . 133.036 100.889 30.921  1.00 8.28
1 . .
ATOM 1088 CD    CD    . PRO PRO PRO A A 145 145 . 131.681 101.090 31.565  1.00 7.71
1 . .
ATOM 1089 C     C     . PRO PRO PRO A A 145 145 . 134.090 103.133 32.682  1.00 8.20
1 . .
ATOM 1090 O     O     . PRO PRO PRO A A 145 145 . 133.583 103.867 31.845  1.00 8.51
1 . .
ATOM 1091 N     N     . VAL VAL VAL A A 146 146 . 135.232 103.404 33.293  1.00 7.54
1 . .
ATOM 1092 CA    CA    . VAL VAL VAL A A 146 146 . 136.093 104.446 32.744  1.00 6.20
1 . .
ATOM 1093 CB    CB    . VAL VAL VAL A A 146 146 . 137.234 104.826 33.704  1.00 8.32
1 . .
ATOM 1094 CG1   CG1   . VAL VAL VAL A A 146 146 . 138.112 105.920 33.146  1.00 8.76
1 . .
ATOM 1095 CG2   CG2   . VAL VAL VAL A A 146 146 . 136.620 105.290 35.039  1.00 10.56
1 . .
ATOM 1096 C     C     . VAL VAL VAL A A 146 146 . 136.729 103.879 31.453  1.00 7.32
1 . .
ATOM 1097 O     O     . VAL VAL VAL A A 146 146 . 137.290 102.786 31.506  1.00 8.80
1 . .
ATOM 1098 N     N     . PRO PRO PRO A A 147 147 . 136.665 104.631 30.343  1.00 7.21
1 . .
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ATOM 1099 CA    CA    . PRO PRO PRO A A 147 147 . 137.317 104.185 29.081  1.00 7.46
1 . .
ATOM 1100 CB    CB    . PRO PRO PRO A A 147 147 . 136.542 104.976 27.994  1.00 7.01
1 . .
ATOM 1101 CG    CG    . PRO PRO PRO A A 147 147 . 136.179 106.336 28.739  1.00 7.82
1 . .
ATOM 1102 CD    CD    . PRO PRO PRO A A 147 147 . 135.917 105.895 30.206  1.00 6.97
1 . .
ATOM 1103 C     C     . PRO PRO PRO A A 147 147 . 138.777 104.586 29.182  1.00 7.14
1 . .
ATOM 1104 O     O     . PRO PRO PRO A A 147 147 . 139.135 105.708 29.673  1.00 9.24
1 . .
ATOM 1105 N     N     . ALA ALA ALA A A 148 148 . 139.634 103.737 28.646  1.00 6.79
1 . .
ATOM 1106 CA    CA    . ALA ALA ALA A A 148 148 . 141.067 104.005 28.584  1.00 5.77
1 . .
ATOM 1107 CB    CB    . ALA ALA ALA A A 148 148 . 141.897 102.925 29.328  1.00 7.28
1 . .
ATOM 1108 C     C     . ALA ALA ALA A A 148 148 . 141.465 104.087 27.090  1.00 6.90
1 . .
ATOM 1109 O     O     . ALA ALA ALA A A 148 148 . 141.521 103.032 26.411  1.00 6.83
1 . .
ATOM 1110 N     N     . PHE PHE PHE A A 149 149 . 141.712 105.305 26.576  1.00 6.83
1 . .
ATOM 1111 CA    CA    . PHE PHE PHE A A 149 149 . 141.816 105.548 25.132  1.00 5.94
1 . .
ATOM 1112 CB    CB    . PHE PHE PHE A A 149 149 . 141.269 106.898 24.756  1.00 6.09
1 . .
ATOM 1113 CG    CG    . PHE PHE PHE A A 149 149 . 139.795 107.094 25.052  1.00 5.49
1 . .
ATOM 1114 CD1   CD1   . PHE PHE PHE A A 149 149 . 138.791 106.578 24.235  1.00 6.71
1 . .
ATOM 1115 CE1   CE1   . PHE PHE PHE A A 149 149 . 137.426 106.848 24.490  1.00 8.38
1 . .
ATOM 1116 CZ    CZ    . PHE PHE PHE A A 149 149 . 137.085 107.597 25.589  1.00 7.68
1 . .
ATOM 1117 CE2   CE2   . PHE PHE PHE A A 149 149 . 138.076 108.144 26.394  1.00 6.86
1 . .
ATOM 1118 CD2   CD2   . PHE PHE PHE A A 149 149 . 139.424 107.873 26.154  1.00 6.39
1 . .
ATOM 1119 C     C     . PHE PHE PHE A A 149 149 . 143.304 105.556 24.748  1.00 6.14
1 . .
ATOM 1120 O     O     . PHE PHE PHE A A 149 149 . 144.073 106.414 25.235  1.00 6.56
1 . .
ATOM 1121 N     N     . ASN ASN ASN A A 150 150 . 143.738 104.635 23.877  1.00 6.84
1 . .
ATOM 1122 CA    CA    . ASN ASN ASN A A 150 150 . 145.129 104.567 23.429  1.00 7.41
1 . .
ATOM 1123 CB    CB    . ASN ASN ASN A A 150 150 . 145.316 103.083 22.946  1.00 8.42
1 . .
ATOM 1124 CG    CG    . ASN ASN ASN A A 150 150 . 146.704 102.802 22.448  1.00 7.89
1 . .
ATOM 1125 OD1   OD1   . ASN ASN ASN A A 150 150 . 146.885 101.709 21.751  1.00 12.86
1 . .
ATOM 1126 ND2   ND2   . ASN ASN ASN A A 150 150 . 147.629 103.689 22.621  1.00 7.02
1 . .
ATOM 1127 C     C     . ASN ASN ASN A A 150 150 . 145.421 105.540 22.324  1.00 8.55
1 . .
ATOM 1128 O     O     . ASN ASN ASN A A 150 150 . 145.262 105.244 21.139  1.00 8.55
1 . .
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ATOM 1129 N     N     . VAL VAL VAL A A 151 151 . 145.841 106.739 22.725  1.00 6.86
1 . .
ATOM 1130 CA    CA    . VAL VAL VAL A A 151 151 . 145.990 107.871 21.832  1.00 6.96
1 . .
ATOM 1131 CB    CB    . VAL VAL VAL A A 151 151 . 145.531 109.175 22.515  1.00 6.69
1 . .
ATOM 1132 CG1   CG1   . VAL VAL VAL A A 151 151 . 144.072 109.075 22.990  1.00 9.19
1 . .
ATOM 1133 CG2   CG2   . VAL VAL VAL A A 151 151 . 146.426 109.488 23.665  1.00 9.10
1 . .
ATOM 1134 C     C     . VAL VAL VAL A A 151 151 . 147.320 108.052 21.155  1.00 6.24
1 . .
ATOM 1135 O     O     . VAL VAL VAL A A 151 151 . 147.346 108.847 20.195  1.00 8.32
1 . .
ATOM 1136 N     N     . ILE ILE ILE A A 152 152 . 148.408 107.417 21.614  1.00 7.01
1 . .
ATOM 1137 CA    CA    . ILE ILE ILE A A 152 152 . 149.664 107.388 20.865  1.00 7.93
1 . .
ATOM 1138 CB    CB    . ILE ILE ILE A A 152 152 . 150.782 108.138 21.527  1.00 7.52
1 . .
ATOM 1139 CG1   CG1   . ILE ILE ILE A A 152 152 . 150.443 109.633 21.466  1.00 8.38
1 . .
ATOM 1140 CD    CD    . ILE ILE ILE A A 152 152 . 151.586 110.539 21.982  1.00 11.00
1 . .
ATOM 1141 CG2   CG2   . ILE ILE ILE A A 152 152 . 152.067 107.848 20.749  1.00 9.26
1 . .
ATOM 1142 C     C     . ILE ILE ILE A A 152 152 . 150.010 105.889 20.791  1.00 9.07
1 . .
ATOM 1143 O     O     . ILE ILE ILE A A 152 152 . 150.066 105.201 21.808  1.00 8.81
1 . .
ATOM 1144 N     N     . ASN ASN ASN A A 153 153 . 150.187 105.371 19.592  1.00 7.80
1 . .
ATOM 1145 CA    CA    . ASN ASN ASN A A 153 153 . 150.458 103.896 19.387  1.00 8.33
1 . .
ATOM 1146 CB    CB    . ASN ASN ASN A A 153 153 . 149.613 103.329 18.207  1.00 8.12
1 . .
ATOM 1147 CG    CG    . ASN ASN ASN A A 153 153 . 148.098 103.358 18.508  1.00 8.46
1 . .
ATOM 1148 OD1   OD1   . ASN ASN ASN A A 153 153 . 147.638 103.770 19.649  1.00 13.60
1 . .
ATOM 1149 ND2   ND2   . ASN ASN ASN A A 153 153 . 147.333 103.042 17.545  1.00 6.09
1 . .
ATOM 1150 C     C     . ASN ASN ASN A A 153 153 . 151.963 103.757 19.092  1.00 8.38
1 . .
ATOM 1151 O     O     . ASN ASN ASN A A 153 153 . 152.525 104.498 18.266  1.00 8.63
1 . .
ATOM 1152 N     N     . GLY GLY GLY A A 154 154 . 152.546 102.688 19.641  1.00 7.99
1 . .
ATOM 1153 CA    CA    . GLY GLY GLY A A 154 154 . 153.921 102.318 19.441  1.00 8.96
1 . .
ATOM 1154 C     C     . GLY GLY GLY A A 154 154 . 153.959 100.783 19.363  1.00 8.19
1 . .
ATOM 1155 O     O     . GLY GLY GLY A A 154 154 . 152.974 100.084 19.012  1.00 8.89
1 . .
ATOM 1156 N     N     . GLY GLY GLY A A 155 155 . 155.191 100.281 19.598  1.00 9.01
1 . .
ATOM 1157 CA    CA    . GLY GLY GLY A A 155 155 . 155.358 98.813  19.577  1.00 9.58
1 . .
ATOM 1158 C     C     . GLY GLY GLY A A 155 155 . 154.979 98.187  18.268  1.00 10.48
1 . .
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ATOM 1159 O     O     . GLY GLY GLY A A 155 155 . 155.224 98.743  17.191  1.00 11.45
1 . .
ATOM 1160 N     N     . SER SER SER A A 156 156 . 154.368 97.011  18.372  1.00 11.14
1 . .
ATOM 1161 CA    CA    . SER SER SER A A 156 156 . 153.910 96.236  17.227  1.00 11.75
1 . .
ATOM 1162 CB    CB    . SER SER SER A A 156 156 . 153.695 94.806  17.700  1.00 12.40
1 . .
ATOM 1163 OG    OG    . SER SER SER A A 156 156 . 154.932 94.281  18.155  1.00 15.01
1 . .
ATOM 1164 C     C     . SER SER SER A A 156 156 . 152.624 96.737  16.595  1.00 10.81
1 . .
ATOM 1165 O     O     . SER SER SER A A 156 156 . 152.116 96.070  15.643  1.00 13.93
1 . .
ATOM 1166 N     N     . HIS HIS HIS A A 157 157 . 152.120 97.902  17.031  1.00 10.80
1 . .
ATOM 1167 CA    CA    . HIS HIS HIS A A 157 157 . 150.866 98.449  16.471  1.00 9.76
1 . .
ATOM 1168 CB    CB    . HIS HIS HIS A A 157 157 . 149.946 98.923  17.587  1.00 9.04
1 . .
ATOM 1169 CG    CG    . HIS HIS HIS A A 157 157 . 149.469 97.792  18.482  1.00 10.26
1 . .
ATOM 1170 ND1   ND1   . HIS HIS HIS A A 157 157 . 148.668 98.032  19.564  1.00 10.12
1 . .
ATOM 1171 CE1   CE1   . HIS HIS HIS A A 157 157 . 148.388 96.893  20.183  1.00 11.25
1 . .
ATOM 1172 NE2   NE2   . HIS HIS HIS A A 157 157 . 148.922 95.891  19.476  1.00 8.72
1 . .
ATOM 1173 CD2   CD2   . HIS HIS HIS A A 157 157 . 149.570 96.437  18.378  1.00 11.07
1 . .
ATOM 1174 C     C     . HIS HIS HIS A A 157 157 . 151.099 99.697  15.603  1.00 11.04
1 . .
ATOM 1175 O     O     . HIS HIS HIS A A 157 157 . 150.122 100.245 15.061  1.00 10.45
1 . .
ATOM 1176 N     N     . ALA ALA ALA A A 158 158 . 152.367 100.123 15.419  1.00 10.75
1 . .
ATOM 1177 CA    CA    . ALA ALA ALA A A 158 158 . 152.607 101.421 14.732  1.00 12.16
1 . .
ATOM 1178 CB    CB    . ALA ALA ALA A A 158 158 . 152.496 102.567 15.690  1.00 11.89
1 . .
ATOM 1179 C     C     . ALA ALA ALA A A 158 158 . 153.932 101.407 14.000  1.00 12.60
1 . .
ATOM 1180 O     O     . ALA ALA ALA A A 158 158 . 154.935 100.814 14.415  1.00 13.25
1 . .
ATOM 1181 N     N     . GLY GLY GLY A A 159 159 . 153.973 102.207 12.932  1.00 11.26
1 . .
ATOM 1182 CA    CA    . GLY GLY GLY A A 159 159 . 155.197 102.413 12.147  1.00 12.63
1 . .
ATOM 1183 C     C     . GLY GLY GLY A A 159 159 . 155.913 103.630 12.732  1.00 13.56
1 . .
ATOM 1184 O     O     . GLY GLY GLY A A 159 159 . 155.737 104.805 12.315  1.00 13.83
1 . .
ATOM 1185 N     N     . ASN ASN ASN A A 160 160 . 156.766 103.325 13.678  1.00 12.49
1 . .
ATOM 1186 CA    CA    . ASN ASN ASN A A 160 160 . 157.595 104.305 14.409  1.00 10.76
1 . .
ATOM 1187 CB    CB    . ASN ASN ASN A A 160 160 . 156.793 105.333 15.296  1.00 9.49
1 . .
ATOM 1188 CG    CG    . ASN ASN ASN A A 160 160 . 155.843 104.663 16.258  1.00 8.98
1 . .
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ATOM 1189 OD1   OD1   . ASN ASN ASN A A 160 160 . 155.957 103.461 16.536  1.00 11.11
1 . .
ATOM 1190 ND2   ND2   . ASN ASN ASN A A 160 160 . 154.926 105.440 16.808  1.00 9.60
1 . .
ATOM 1191 C     C     . ASN ASN ASN A A 160 160 . 158.623 103.531 15.198  1.00 10.81
1 . .
ATOM 1192 O     O     . ASN ASN ASN A A 160 160 . 158.542 102.301 15.264  1.00 10.79
1 . .
ATOM 1193 N     N     . LYS LYS LYS A A 161 161 . 159.612 104.238 15.750  1.00 12.65
1 . .
ATOM 1194 CA    CA    . LYS LYS LYS A A 161 161 . 160.592 103.554 16.612  1.00 11.18
1 . .
ATOM 1195 CB    CB    . LYS LYS LYS A A 161 161 . 161.917 104.318 16.704  1.00 12.80
1 . .
ATOM 1196 CG    CG    . LYS LYS LYS A A 161 161 . 162.688 104.420 15.376  1.00 14.18
1 . .
ATOM 1197 CD    CD    . LYS LYS LYS A A 161 161 . 163.963 105.239 15.659  1.00 19.61
1 . .
ATOM 1198 CE    CE    . LYS LYS LYS A A 161 161 . 164.803 105.430 14.361  1.00 24.59
1 . .
ATOM 1199 NZ    NZ    . LYS LYS LYS A A 161 161 . 166.074 106.134 14.709  1.00 29.11
1 . .
ATOM 1200 C     C     . LYS LYS LYS A A 161 161 . 160.076 103.264 18.051  1.00 12.14
1 . .
ATOM 1201 O     O     . LYS LYS LYS A A 161 161 . 160.502 102.266 18.693  1.00 13.79
1 . .
ATOM 1202 N     N     . LEU LEU LEU A A 162 162 . 159.143 104.068 18.530  1.00 9.56
1 . .
ATOM 1203 CA    CA    . LEU LEU LEU A A 162 162 . 158.563 104.048 19.896  1.00 9.24
1 . .
ATOM 1204 CB    CB    . LEU LEU LEU A A 162 162 . 157.255 104.834 19.792  1.00 10.44
1 . .
ATOM 1205 CG    CG    . LEU LEU LEU A A 162 162 . 156.591 105.114 21.119  1.00 9.62
1 . .
ATOM 1206 CD1   CD1   . LEU LEU LEU A A 162 162 . 157.474 105.944 22.054  1.00 12.03
1 . .
ATOM 1207 CD2   CD2   . LEU LEU LEU A A 162 162 . 155.271 105.774 20.804  1.00 9.15
1 . .
ATOM 1208 C     C     . LEU LEU LEU A A 162 162 . 158.304 102.565 20.287  1.00 9.28
1 . .
ATOM 1209 O     O     . LEU LEU LEU A A 162 162 . 157.514 101.899 19.642  1.00 9.43
1 . .
ATOM 1210 N     N     . ALA ALA ALA A A 163 163 . 159.017 102.095 21.325  1.00 10.38
1 . .
ATOM 1211 CA    CA    . ALA ALA ALA A A 163 163 . 158.972 100.654 21.623  1.00 10.90
1 . .
ATOM 1212 CB    CB    . ALA ALA ALA A A 163 163 . 160.215 100.205 22.438  1.00 10.33
1 . .
ATOM 1213 C     C     . ALA ALA ALA A A 163 163 . 157.706 100.352 22.439  1.00 8.52
1 . .
ATOM 1214 O     O     . ALA ALA ALA A A 163 163 . 157.127 99.259  22.265  1.00 9.61
1 . .
ATOM 1215 N     N     . MET MET MET A A 164 164 . 157.366 101.179 23.439  1.00 8.36
1 . .
ATOM 1216 CA    CA    . MET MET MET A A 164 164 . 156.243 100.797 24.282  1.00 8.18
1 . .
ATOM 1217 CB    CB    . MET MET MET A A 164 164 . 156.258 101.646 25.572  1.00 9.29
1 . .
ATOM 1218 CG    CG    . MET MET MET A A 164 164 . 157.545 101.366 26.384  1.00 8.88
1 . .
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ATOM 1219 SD    SD    . MET MET MET A A 164 164 . 157.567 102.300 27.872  1.00 10.50
1 . .
ATOM 1220 CE    CE    . MET MET MET A A 164 164 . 159.249 101.871 28.449  1.00 10.64
1 . .
ATOM 1221 C     C     . MET MET MET A A 164 164 . 154.909 100.911 23.489  1.00 8.38
1 . .
ATOM 1222 O     O     . MET MET MET A A 164 164 . 154.786 101.789 22.600  1.00 9.45
1 . .
ATOM 1223 N     N     . GLN GLN GLN A A 165 165 . 154.024 99.961  23.697  1.00 7.69
1 . .
ATOM 1224 CA    CA    . GLN GLN GLN A A 165 165 . 152.866 99.810  22.785  1.00 6.79
1 . .
ATOM 1225 CB    CB    . GLN GLN GLN A A 165 165 . 152.347 98.384  22.971  1.00 7.33
1 . .
ATOM 1226 CG    CG    . GLN GLN GLN A A 165 165 . 151.282 97.957  21.957  1.00 6.91
1 . .
ATOM 1227 CD    CD    . GLN GLN GLN A A 165 165 . 150.872 96.548  22.224  1.00 8.53
1 . .
ATOM 1228 OE1   OE1   . GLN GLN GLN A A 165 165 . 151.519 95.584  21.781  1.00 8.09
1 . .
ATOM 1229 NE2   NE2   . GLN GLN GLN A A 165 165 . 149.805 96.382  23.051  1.00 9.87
1 . .
ATOM 1230 C     C     . GLN GLN GLN A A 165 165 . 151.755 100.840 22.882  1.00 7.82
1 . .
ATOM 1231 O     O     . GLN GLN GLN A A 165 165 . 151.255 101.274 21.823  1.00 7.25
1 . .
ATOM 1232 N     N     . GLU GLU GLU A A 166 166 . 151.379 101.265 24.081  1.00 7.90
1 . .
ATOM 1233 CA    CA    . GLU GLU GLU A A 166 166 . 150.116 102.080 24.215  1.00 7.11
1 . .
ATOM 1234 CB    CB    . GLU GLU GLU A A 166 166 . 148.905 101.193 24.645  1.00 8.10
1 . .
ATOM 1235 CG    CG    . GLU GLU GLU A A 166 166 . 148.801 99.932  23.800  1.00 9.16
1 . .
ATOM 1236 CD    CD    . GLU GLU GLU A A 166 166 . 147.645 99.037  24.245  1.00 9.48
1 . .
ATOM 1237 OE1   OE1   . GLU GLU GLU A A 166 166 . 146.876 99.463  25.131  1.00 9.21
1 . .
ATOM 1238 OE2   OE2   . GLU GLU GLU A A 166 166 . 147.552 97.928  23.666  1.00 10.74
1 . .
ATOM 1239 C     C     . GLU GLU GLU A A 166 166 . 150.252 103.109 25.289  1.00 6.86
1 . .
ATOM 1240 O     O     . GLU GLU GLU A A 166 166 . 150.816 102.846 26.400  1.00 8.91
1 . .
ATOM 1241 N     N     . PHE PHE PHE A A 167 167 . 149.827 104.307 24.947  1.00 6.25
1 . .
ATOM 1242 CA    CA    . PHE PHE PHE A A 167 167 . 149.790 105.442 25.863  1.00 7.21
1 . .
ATOM 1243 CB    CB    . PHE PHE PHE A A 167 167 . 150.712 106.571 25.377  1.00 8.39
1 . .
ATOM 1244 CG    CG    . PHE PHE PHE A A 167 167 . 152.159 106.129 25.322  1.00 7.94
1 . .
ATOM 1245 CD1   CD1   . PHE PHE PHE A A 167 167 . 152.674 105.386 24.209  1.00 8.66
1 . .
ATOM 1246 CE1   CE1   . PHE PHE PHE A A 167 167 . 154.027 104.966 24.216  1.00 10.55
1 . .
ATOM 1247 CZ    CZ    . PHE PHE PHE A A 167 167 . 154.802 105.265 25.319  1.00 9.86
1 . .
ATOM 1248 CE2   CE2   . PHE PHE PHE A A 167 167 . 154.317 105.980 26.374  1.00 13.50
1 . .
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ATOM 1249 CD2   CD2   . PHE PHE PHE A A 167 167 . 152.985 106.404 26.397  1.00 11.55
1 . .
ATOM 1250 C     C     . PHE PHE PHE A A 167 167 . 148.361 105.898 25.916  1.00 7.73
1 . .
ATOM 1251 O     O     . PHE PHE PHE A A 167 167 . 147.812 106.428 24.908  1.00 7.23
1 . .
ATOM 1252 N     N     . MET MET MET A A 168 168 . 147.727 105.668 27.068  1.00 7.51
1 . .
ATOM 1253 CA    CA    . MET MET MET A A 168 168 . 146.262 105.784 27.179  1.00 7.38
1 . .
ATOM 1254 CB    CB    . MET MET MET A A 168 168 . 145.653 104.520 27.805  1.00 8.77
1 . .
ATOM 1255 CG    CG    . MET MET MET A A 168 168 . 145.710 103.339 26.861  1.00 7.83
1 . .
ATOM 1256 SD    SD    . MET MET MET A A 168 168 . 145.179 101.813 27.595  1.00 10.14
1 . .
ATOM 1257 CE    CE    . MET MET MET A A 168 168 . 146.764 101.176 28.203  1.00 9.80
1 . .
ATOM 1258 C     C     . MET MET MET A A 168 168 . 145.899 106.952 28.083  1.00 6.22
1 . .
ATOM 1259 O     O     . MET MET MET A A 168 168 . 146.634 107.310 29.005  1.00 7.55
1 . .
ATOM 1260 N     N     . ILE ILE ILE A A 169 169 . 144.732 107.571 27.827  1.00 6.48
1 . .
ATOM 1261 CA    CA    . ILE ILE ILE A A 169 169 . 144.140 108.550 28.715  1.00 6.88
1 . .
ATOM 1262 CB    CB    . ILE ILE ILE A A 169 169 . 143.868 109.920 28.021  1.00 6.89
1 . .
ATOM 1263 CG1   CG1   . ILE ILE ILE A A 169 169 . 142.988 109.777 26.784  1.00 6.95
1 . .
ATOM 1264 CD    CD    . ILE ILE ILE A A 169 169 . 142.620 111.074 26.097  1.00 9.98
1 . .
ATOM 1265 CG2   CG2   . ILE ILE ILE A A 169 169 . 145.229 110.569 27.742  1.00 9.89
1 . .
ATOM 1266 C     C     . ILE ILE ILE A A 169 169 . 142.864 107.987 29.305  1.00 6.62
1 . .
ATOM 1267 O     O     . ILE ILE ILE A A 169 169 . 142.034 107.351 28.633  1.00 8.07
1 . .
ATOM 1268 N     N     . LEU LEU LEU A A 170 170 . 142.676 108.225 30.617  1.00 8.29
1 . .
ATOM 1269 CA    CA    . LEU LEU LEU A A 170 170 . 141.466 107.696 31.367  1.00 6.65
1 . .
ATOM 1270 CB    CB    . LEU LEU LEU A A 170 170 . 141.922 106.748 32.481  1.00 7.93
1 . .
ATOM 1271 CG    CG    . LEU LEU LEU A A 170 170 . 142.428 105.355 32.059  1.00 8.82
1 . .
ATOM 1272 CD1   CD1   . LEU LEU LEU A A 170 170 . 143.881 105.397 31.419  1.00 10.86
1 . .
ATOM 1273 CD2   CD2   . LEU LEU LEU A A 170 170 . 142.377 104.454 33.272  1.00 12.79
1 . .
ATOM 1274 C     C     . LEU LEU LEU A A 170 170 . 140.749 108.878 31.997  1.00 6.75
1 . .
ATOM 1275 O     O     . LEU LEU LEU A A 170 170 . 141.347 109.495 32.908  1.00 7.52
1 . .
ATOM 1276 N     N     . PRO PRO PRO A A 171 171 . 139.546 109.206 31.539  1.00 7.29
1 . .
ATOM 1277 CA    CA    . PRO PRO PRO A A 171 171 . 138.821 110.345 32.144  1.00 7.34
1 . .
ATOM 1278 CB    CB    . PRO PRO PRO A A 171 171 . 137.851 110.821 31.044  1.00 8.74
1 . .
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ATOM 1279 CG    CG    . PRO PRO PRO A A 171 171 . 138.380 110.180 29.784  1.00 9.93
1 . .
ATOM 1280 CD    CD    . PRO PRO PRO A A 171 171 . 138.967 108.819 30.249  1.00 8.12
1 . .
ATOM 1281 C     C     . PRO PRO PRO A A 171 171 . 138.131 109.958 33.457  1.00 6.59
1 . .
ATOM 1282 O     O     . PRO PRO PRO A A 171 171 . 136.891 109.949 33.562  1.00 8.43
1 . .
ATOM 1283 N     N     . VAL VAL VAL A A 172 172 . 138.989 109.745 34.478  1.00 7.77
1 . .
ATOM 1284 CA    CA    . VAL VAL VAL A A 172 172 . 138.466 109.270 35.752  1.00 8.59
1 . .
ATOM 1285 CB    CB    . VAL VAL VAL A A 172 172 . 139.660 108.885 36.692  1.00 8.51
1 . .
ATOM 1286 CG1   CG1   . VAL VAL VAL A A 172 172 . 140.305 107.537 36.252  1.00 9.40
1 . .
ATOM 1287 CG2   CG2   . VAL VAL VAL A A 172 172 . 140.736 110.009 36.785  1.00 9.67
1 . .
ATOM 1288 C     C     . VAL VAL VAL A A 172 172 . 137.599 110.323 36.436  1.00 9.38
1 . .
ATOM 1289 O     O     . VAL VAL VAL A A 172 172 . 136.736 109.943 37.217  1.00 11.27
1 . .
ATOM 1290 N     N     . GLY GLY GLY A A 173 173 . 137.804 111.601 36.106  1.00 8.64
1 . .
ATOM 1291 CA    CA    . GLY GLY GLY A A 173 173 . 137.007 112.673 36.692  1.00 9.97
1 . .
ATOM 1292 C     C     . GLY GLY GLY A A 173 173 . 135.806 113.139 35.874  1.00 10.65
1 . .
ATOM 1293 O     O     . GLY GLY GLY A A 173 173 . 135.139 114.168 36.214  1.00 12.71
1 . .
ATOM 1294 N     N     . ALA ALA ALA A A 174 174 . 135.488 112.412 34.800  1.00 9.41
1 . .
ATOM 1295 CA    CA    . ALA ALA ALA A A 174 174 . 134.312 112.749 34.060  1.00 10.31
1 . .
ATOM 1296 CB    CB    . ALA ALA ALA A A 174 174 . 134.211 111.869 32.795  1.00 10.88
1 . .
ATOM 1297 C     C     . ALA ALA ALA A A 174 174 . 133.031 112.554 34.921  1.00 10.20
1 . .
ATOM 1298 O     O     . ALA ALA ALA A A 174 174 . 133.052 111.732 35.854  1.00 11.33
1 . .
ATOM 1299 N     N     . GLU GLU GLU A A 175 175 . 131.925 113.152 34.471  1.00 12.84
1 . .
ATOM 1300 CA    CA    . GLU GLU GLU A A 175 175 . 130.682 113.094 35.218  1.00 13.79
1 . .
ATOM 1301 CB    CB    . GLU GLU GLU A A 175 175 . 129.802 114.328 34.872  1.00 16.95
1 . .
ATOM 1302 CG    CG    . GLU GLU GLU A A 175 175 . 130.472 115.689 35.003  1.00 26.34
1 . .
ATOM 1303 CD    CD    . GLU GLU GLU A A 175 175 . 130.750 116.089 36.432  1.00 40.52
1 . .
ATOM 1304 OE1   OE1   . GLU GLU GLU A A 175 175 . 131.953 116.016 36.813  1.00 47.27
1 . .
ATOM 1305 OE2   OE2   . GLU GLU GLU A A 175 175 . 129.791 116.501 37.147  1.00 45.92
1 . .
ATOM 1306 C     C     . GLU GLU GLU A A 175 175 . 129.833 111.851 34.889  1.00 13.94
1 . .
ATOM 1307 O     O     . GLU GLU GLU A A 175 175 . 128.883 111.500 35.619  1.00 15.71
1 . .
ATOM 1308 N     N     . SER SER SER A A 176 176 . 130.122 111.219 33.756  1.00 10.07
1 . .
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ATOM 1309 CA    CA    . SER SER SER A A 176 176 . 129.303 110.154 33.202  1.00 9.97
1 . .
ATOM 1310 CB    CB    . SER SER SER A A 176 176 . 127.991 110.666 32.582  1.00 9.96
1 . .
ATOM 1311 OG    OG    . SER SER SER A A 176 176 . 128.257 111.513 31.457  1.00 10.51
1 . .
ATOM 1312 C     C     . SER SER SER A A 176 176 . 130.139 109.541 32.085  1.00 8.70
1 . .
ATOM 1313 O     O     . SER SER SER A A 176 176 . 131.181 110.060 31.694  1.00 9.42
1 . .
ATOM 1314 N     N     . PHE PHE PHE A A 177 177 . 129.643 108.416 31.550  1.00 9.54
1 . .
ATOM 1315 CA    CA    . PHE PHE PHE A A 177 177 . 130.360 107.825 30.439  1.00 9.32
1 . .
ATOM 1316 CB    CB    . PHE PHE PHE A A 177 177 . 129.804 106.391 30.107  1.00 8.87
1 . .
ATOM 1317 CG    CG    . PHE PHE PHE A A 177 177 . 130.660 105.714 29.107  1.00 7.82
1 . .
ATOM 1318 CD1   CD1   . PHE PHE PHE A A 177 177 . 131.820 105.059 29.553  1.00 10.44
1 . .
ATOM 1319 CE1   CE1   . PHE PHE PHE A A 177 177 . 132.714 104.519 28.665  1.00 8.84
1 . .
ATOM 1320 CZ    CZ    . PHE PHE PHE A A 177 177 . 132.548 104.689 27.326  1.00 8.44
1 . .
ATOM 1321 CE2   CE2   . PHE PHE PHE A A 177 177 . 131.418 105.393 26.833  1.00 8.33
1 . .
ATOM 1322 CD2   CD2   . PHE PHE PHE A A 177 177 . 130.472 105.900 27.731  1.00 7.36
1 . .
ATOM 1323 C     C     . PHE PHE PHE A A 177 177 . 130.295 108.753 29.204  1.00 8.77
1 . .
ATOM 1324 O     O     . PHE PHE PHE A A 177 177 . 131.342 108.897 28.505  1.00 8.73
1 . .
ATOM 1325 N     N     . ARG ARG ARG A A 178 178 . 129.108 109.289 28.896  1.00 9.42
1 . .
ATOM 1326 CA    CA    . ARG ARG ARG A A 178 178 . 129.020 110.230 27.818  1.00 8.77
1 . .
ATOM 1327 CB    CB    . ARG ARG ARG A A 178 178 . 127.559 110.685 27.663  1.00 10.10
1 . .
ATOM 1328 CG    CG    . ARG ARG ARG A A 178 178 . 127.376 111.682 26.561  1.00 14.76
1 . .
ATOM 1329 CD    CD    . ARG ARG ARG A A 178 178 . 125.893 112.151 26.640  1.00 22.73
1 . .
ATOM 1330 NE    NE    . ARG ARG ARG A A 178 178 . 125.545 112.724 25.359  1.00 29.78
1 . .
ATOM 1331 CZ    CZ    . ARG ARG ARG A A 178 178 . 125.357 114.015 25.099  1.00 32.20
1 . .
ATOM 1332 NH1   NH1   . ARG ARG ARG A A 178 178 . 125.546 114.949 26.079  1.00 31.94
1 . .
ATOM 1333 NH2   NH2   . ARG ARG ARG A A 178 178 . 124.968 114.352 23.835  1.00 29.58
1 . .
ATOM 1334 C     C     . ARG ARG ARG A A 178 178 . 130.020 111.415 27.942  1.00 8.82
1 . .
ATOM 1335 O     O     . ARG ARG ARG A A 178 178 . 130.663 111.832 26.951  1.00 7.22
1 . .
ATOM 1336 N     N     . ASP ASP ASP A A 179 179 . 130.160 111.934 29.168  1.00 9.35
1 . .
ATOM 1337 CA    CA    . ASP ASP ASP A A 179 179 . 131.135 113.020 29.400  1.00 7.81
1 . .
ATOM 1338 CB    CB    . ASP ASP ASP A A 179 179 . 130.883 113.576 30.804  1.00 9.41
1 . .
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ATOM 1339 CG    CG    . ASP ASP ASP A A 179 179 . 131.664 114.866 31.059  1.00 12.79
1 . .
ATOM 1340 OD1   OD1   . ASP ASP ASP A A 179 179 . 132.344 114.864 32.158  1.00 18.91
1 . .
ATOM 1341 OD2   OD2   . ASP ASP ASP A A 179 179 . 131.594 115.843 30.184  1.00 17.66
1 . .
ATOM 1342 C     C     . ASP ASP ASP A A 179 179 . 132.576 112.491 29.223  1.00 7.34
1 . .
ATOM 1343 O     O     . ASP ASP ASP A A 179 179 . 133.443 113.214 28.721  1.00 8.18
1 . .
ATOM 1344 N     N     . ALA ALA ALA A A 180 180 . 132.846 111.231 29.631  1.00 8.15
1 . .
ATOM 1345 CA    CA    . ALA ALA ALA A A 180 180 . 134.178 110.647 29.448  1.00 6.87
1 . .
ATOM 1346 CB    CB    . ALA ALA ALA A A 180 180 . 134.247 109.207 30.062  1.00 8.61
1 . .
ATOM 1347 C     C     . ALA ALA ALA A A 180 180 . 134.530 110.610 27.943  1.00 6.06
1 . .
ATOM 1348 O     O     . ALA ALA ALA A A 180 180 . 135.717 110.794 27.530  1.00 7.07
1 . .
ATOM 1349 N     N     . MET MET MET A A 181 181 . 133.512 110.308 27.115  1.00 7.15
1 . .
ATOM 1350 CA    CA    . MET MET MET A A 181 181 . 133.746 110.258 25.652  1.00 7.42
1 . .
ATOM 1351 CB    CB    . MET MET MET A A 181 181 . 132.524 109.742 24.890  1.00 8.04
1 . .
ATOM 1352 CG    CG    . MET MET MET A A 181 181 . 132.202 108.283 25.165  1.00 7.99
1 . .
ATOM 1353 SD    SD    . MET MET MET A A 181 181 . 133.619 107.193 24.792  1.00 8.49
1 . .
ATOM 1354 CE    CE    . MET MET MET A A 181 181 . 134.060 107.776 23.169  1.00 7.64
1 . .
ATOM 1355 C     C     . MET MET MET A A 181 181 . 134.138 111.677 25.137  1.00 7.02
1 . .
ATOM 1356 O     O     . MET MET MET A A 181 181 . 135.004 111.806 24.312  1.00 8.49
1 . .
ATOM 1357 N     N     . ARG ARG ARG A A 182 182 . 133.462 112.725 25.632  1.00 7.26
1 . .
ATOM 1358 CA    CA    . ARG ARG ARG A A 182 182 . 133.779 114.125 25.212  1.00 7.45
1 . .
ATOM 1359 CB    CB    . ARG ARG ARG A A 182 182 . 132.738 115.050 25.814  1.00 8.71
1 . .
ATOM 1360 CG    CG    . ARG ARG ARG A A 182 182 . 133.036 116.540 25.596  1.00 11.32
1 . .
ATOM 1361 CD    CD    . ARG ARG ARG A A 182 182 . 132.069 117.492 26.401  1.00 15.38
1 . .
ATOM 1362 NE    NE    . ARG ARG ARG A A 182 182 . 132.778 118.811 26.347  1.00 17.74
1 . .
ATOM 1363 CZ    CZ    . ARG ARG ARG A A 182 182 . 132.291 119.946 26.841  1.00 21.61
1 . .
ATOM 1364 NH1   NH1   . ARG ARG ARG A A 182 182 . 132.966 121.092 26.689  1.00 21.14
1 . .
ATOM 1365 NH2   NH2   . ARG ARG ARG A A 182 182 . 131.131 119.904 27.511  1.00 24.17
1 . .
ATOM 1366 C     C     . ARG ARG ARG A A 182 182 . 135.183 114.452 25.655  1.00 8.07
1 . .
ATOM 1367 O     O     . ARG ARG ARG A A 182 182 . 135.968 114.975 24.892  1.00 8.64
1 . .
ATOM 1368 N     N     . LEU LEU LEU A A 183 183 . 135.546 114.118 26.901  1.00 8.44
1 . .
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ATOM 1369 CA    CA    . LEU LEU LEU A A 183 183 . 136.881 114.469 27.404  1.00 8.44
1 . .
ATOM 1370 CB    CB    . LEU LEU LEU A A 183 183 . 136.969 114.077 28.916  1.00 9.27
1 . .
ATOM 1371 CG    CG    . LEU LEU LEU A A 183 183 . 136.665 115.276 29.853  1.00 10.03
1 . .
ATOM 1372 CD1   CD1   . LEU LEU LEU A A 183 183 . 135.295 115.876 29.645  1.00 12.87
1 . .
ATOM 1373 CD2   CD2   . LEU LEU LEU A A 183 183 . 136.872 114.820 31.284  1.00 11.90
1 . .
ATOM 1374 C     C     . LEU LEU LEU A A 183 183 . 137.923 113.763 26.551  1.00 8.82
1 . .
ATOM 1375 O     O     . LEU LEU LEU A A 183 183 . 138.949 114.365 26.123  1.00 9.24
1 . .
ATOM 1376 N     N     . GLY GLY GLY A A 184 184 . 137.679 112.463 26.322  1.00 8.81
1 . .
ATOM 1377 CA    CA    . GLY GLY GLY A A 184 184 . 138.663 111.681 25.607  1.00 8.13
1 . .
ATOM 1378 C     C     . GLY GLY GLY A A 184 184 . 138.851 112.201 24.157  1.00 8.82
1 . .
ATOM 1379 O     O     . GLY GLY GLY A A 184 184 . 139.981 112.340 23.656  1.00 8.58
1 . .
ATOM 1380 N     N     . ALA ALA ALA A A 185 185 . 137.747 112.484 23.486  1.00 7.80
1 . .
ATOM 1381 CA    CA    . ALA ALA ALA A A 185 185 . 137.838 112.971 22.102  1.00 5.99
1 . .
ATOM 1382 CB    CB    . ALA ALA ALA A A 185 185 . 136.416 113.027 21.482  1.00 7.58
1 . .
ATOM 1383 C     C     . ALA ALA ALA A A 185 185 . 138.440 114.366 22.047  1.00 7.73
1 . .
ATOM 1384 O     O     . ALA ALA ALA A A 185 185 . 139.218 114.628 21.136  1.00 7.94
1 . .
ATOM 1385 N     N     . GLU GLU GLU A A 186 186 . 138.054 115.232 23.011  1.00 8.60
1 . .
ATOM 1386 CA    CA    . GLU GLU GLU A A 186 186 . 138.661 116.567 22.971  1.00 8.37
1 . .
ATOM 1387 CB    CB    . GLU GLU GLU A A 186 186 . 138.017 117.497 23.975  1.00 8.69
1 . .
ATOM 1388 CG    CG    . GLU GLU GLU A A 186 186 . 136.625 118.029 23.538  1.00 9.55
1 . .
ATOM 1389 CD    CD    . GLU GLU GLU A A 186 186 . 135.994 118.876 24.603  1.00 11.51
1 . .
ATOM 1390 OE1   OE1   . GLU GLU GLU A A 186 186 . 136.671 119.250 25.598  1.00 12.31
1 . .
ATOM 1391 OE2   OE2   . GLU GLU GLU A A 186 186 . 134.768 119.057 24.481  1.00 10.87
1 . .
ATOM 1392 C     C     . GLU GLU GLU A A 186 186 . 140.168 116.505 23.173  1.00 8.09
1 . .
ATOM 1393 O     O     . GLU GLU GLU A A 186 186 . 140.931 117.204 22.483  1.00 8.91
1 . .
ATOM 1394 N     N     . VAL VAL VAL A A 187 187 . 140.639 115.638 24.084  1.00 7.76
1 . .
ATOM 1395 CA    CA    . VAL VAL VAL A A 187 187 . 142.094 115.516 24.257  1.00 7.58
1 . .
ATOM 1396 CB    CB    . VAL VAL VAL A A 187 187 . 142.472 114.678 25.533  1.00 6.73
1 . .
ATOM 1397 CG1   CG1   . VAL VAL VAL A A 187 187 . 143.964 114.471 25.609  1.00 7.00
1 . .
ATOM 1398 CG2   CG2   . VAL VAL VAL A A 187 187 . 142.001 115.416 26.752  1.00 7.88
1 . .
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ATOM 1399 C     C     . VAL VAL VAL A A 187 187 . 142.727 114.935 23.004  1.00 7.71
1 . .
ATOM 1400 O     O     . VAL VAL VAL A A 187 187 . 143.832 115.370 22.598  1.00 7.90
1 . .
ATOM 1401 N     N     . TYR TYR TYR A A 188 188 . 142.065 113.922 22.398  1.00 7.05
1 . .
ATOM 1402 CA    CA    . TYR TYR TYR A A 188 188 . 142.610 113.312 21.197  1.00 6.98
1 . .
ATOM 1403 CB    CB    . TYR TYR TYR A A 188 188 . 141.628 112.180 20.786  1.00 7.75
1 . .
ATOM 1404 CG    CG    . TYR TYR TYR A A 188 188 . 142.073 111.436 19.521  1.00 7.20
1 . .
ATOM 1405 CD1   CD1   . TYR TYR TYR A A 188 188 . 143.157 110.533 19.545  1.00 6.93
1 . .
ATOM 1406 CE1   CE1   . TYR TYR TYR A A 188 188 . 143.595 109.832 18.385  1.00 7.20
1 . .
ATOM 1407 CZ    CZ    . TYR TYR TYR A A 188 188 . 142.921 110.114 17.176  1.00 7.09
1 . .
ATOM 1408 OH    OH    . TYR TYR TYR A A 188 188 . 143.282 109.436 16.062  1.00 8.87
1 . .
ATOM 1409 CE2   CE2   . TYR TYR TYR A A 188 188 . 141.860 111.003 17.097  1.00 6.63
1 . .
ATOM 1410 CD2   CD2   . TYR TYR TYR A A 188 188 . 141.482 111.702 18.295  1.00 6.44
1 . .
ATOM 1411 C     C     . TYR TYR TYR A A 188 188 . 142.774 114.361 20.066  1.00 6.30
1 . .
ATOM 1412 O     O     . TYR TYR TYR A A 188 188 . 143.809 114.414 19.423  1.00 7.03
1 . .
ATOM 1413 N     N     . HIS HIS HIS A A 189 189 . 141.754 115.194 19.852  1.00 7.13
1 . .
ATOM 1414 CA    CA    . HIS HIS HIS A A 189 189 . 141.824 116.210 18.803  1.00 6.71
1 . .
ATOM 1415 CB    CB    . HIS HIS HIS A A 189 189 . 140.480 116.809 18.507  1.00 6.33
1 . .
ATOM 1416 CG    CG    . HIS HIS HIS A A 189 189 . 139.512 115.802 18.020  1.00 8.88
1 . .
ATOM 1417 ND1   ND1   . HIS HIS HIS A A 189 189 . 138.212 115.693 18.504  1.00 13.87
1 . .
ATOM 1418 CE1   CE1   . HIS HIS HIS A A 189 189 . 137.646 114.643 17.914  1.00 8.91
1 . .
ATOM 1419 NE2   NE2   . HIS HIS HIS A A 189 189 . 138.501 114.128 17.040  1.00 13.77
1 . .
ATOM 1420 CD2   CD2   . HIS HIS HIS A A 189 189 . 139.688 114.803 17.127  1.00 10.49
1 . .
ATOM 1421 C     C     . HIS HIS HIS A A 189 189 . 142.859 117.310 19.148  1.00 8.71
1 . .
ATOM 1422 O     O     . HIS HIS HIS A A 189 189 . 143.566 117.832 18.272  1.00 9.66
1 . .
ATOM 1423 N     N     . THR THR THR A A 190 190 . 142.939 117.604 20.452  1.00 8.66
1 . .
ATOM 1424 CA    CA    . THR THR THR A A 190 190 . 143.960 118.562 20.900  1.00 8.10
1 . .
ATOM 1425 CB    CB    . THR THR THR A A 190 190 . 143.763 118.872 22.378  1.00 9.01
1 . .
ATOM 1426 OG1   OG1   . THR THR THR A A 190 190 . 142.461 119.438 22.559  1.00 9.98
1 . .
ATOM 1427 CG2   CG2   . THR THR THR A A 190 190 . 144.772 119.869 22.905  1.00 9.03
1 . .
ATOM 1428 C     C     . THR THR THR A A 190 190 . 145.340 118.009 20.631  1.00 8.14
1 . .
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ATOM 1429 O     O     . THR THR THR A A 190 190 . 146.224 118.729 20.163  1.00 9.31
1 . .
ATOM 1430 N     N     . LEU LEU LEU A A 191 191 . 145.519 116.728 20.958  1.00 7.49
1 . .
ATOM 1431 CA    CA    . LEU LEU LEU A A 191 191 . 146.790 116.071 20.713  1.00 7.21
1 . .
ATOM 1432 CB    CB    . LEU LEU LEU A A 191 191 . 146.720 114.640 21.295  1.00 8.62
1 . .
ATOM 1433 CG    CG    . LEU LEU LEU A A 191 191 . 147.943 113.752 21.109  1.00 8.42
1 . .
ATOM 1434 CD1   CD1   . LEU LEU LEU A A 191 191 . 149.140 114.321 21.814  1.00 10.30
1 . .
ATOM 1435 CD2   CD2   . LEU LEU LEU A A 191 191 . 147.607 112.373 21.624  1.00 10.85
1 . .
ATOM 1436 C     C     . LEU LEU LEU A A 191 191 . 147.201 116.061 19.228  1.00 7.06
1 . .
ATOM 1437 O     O     . LEU LEU LEU A A 191 191 . 148.373 116.199 18.934  1.00 8.66
1 . .
ATOM 1438 N     N     . LYS LYS LYS A A 192 192 . 146.226 115.928 18.309  1.00 7.40
1 . .
ATOM 1439 CA    CA    . LYS LYS LYS A A 192 192 . 146.593 115.949 16.868  1.00 7.11
1 . .
ATOM 1440 CB    CB    . LYS LYS LYS A A 192 192 . 145.335 115.780 15.984  1.00 8.59
1 . .
ATOM 1441 CG    CG    . LYS LYS LYS A A 192 192 . 145.690 115.512 14.549  1.00 9.85
1 . .
ATOM 1442 CD    CD    . LYS LYS LYS A A 192 192 . 144.458 115.283 13.666  1.00 12.91
1 . .
ATOM 1443 CE    CE    . LYS LYS LYS A A 192 192 . 144.949 114.926 12.259  1.00 17.54
1 . .
ATOM 1444 NZ    NZ    . LYS LYS LYS A A 192 192 . 143.914 114.551 11.307  1.00 21.68
1 . .
ATOM 1445 C     C     . LYS LYS LYS A A 192 192 . 147.258 117.300 16.568  1.00 7.87
1 . .
ATOM 1446 O     O     . LYS LYS LYS A A 192 192 . 148.268 117.291 15.889  1.00 8.85
1 . .
ATOM 1447 N     N     . GLY GLY GLY A A 193 193 . 146.737 118.376 17.138  1.00 9.07
1 . .
ATOM 1448 CA    CA    . GLY GLY GLY A A 193 193 . 147.323 119.702 16.887  1.00 9.87
1 . .
ATOM 1449 C     C     . GLY GLY GLY A A 193 193 . 148.668 119.870 17.555  1.00 10.70
1 . .
ATOM 1450 O     O     . GLY GLY GLY A A 193 193 . 149.535 120.469 16.975  1.00 11.76
1 . .
ATOM 1451 N     N     . VAL VAL VAL A A 194 194 . 148.848 119.296 18.743  1.00 10.37
1 . .
ATOM 1452 CA    CA    . VAL VAL VAL A A 194 194 . 150.134 119.404 19.488  1.00 10.18
1 . .
ATOM 1453 CB    CB    . VAL VAL VAL A A 194 194 . 149.956 118.772 20.866  1.00 10.55
1 . .
ATOM 1454 CG1   CG1   . VAL VAL VAL A A 194 194 . 151.296 118.435 21.555  1.00 13.33
1 . .
ATOM 1455 CG2   CG2   . VAL VAL VAL A A 194 194 . 149.085 119.659 21.768  1.00 12.19
1 . .
ATOM 1456 C     C     . VAL VAL VAL A A 194 194 . 151.185 118.660 18.652  1.00 12.20
1 . .
ATOM 1457 O     O     . VAL VAL VAL A A 194 194 . 152.296 119.177 18.402  1.00 12.43
1 . .
ATOM 1458 N     N     . ILE ILE ILE A A 195 195 . 150.855 117.476 18.137  1.00 9.73
1 . .
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ATOM 1459 CA    CA    . ILE ILE ILE A A 195 195 . 151.790 116.734 17.336  1.00 10.26
1 . .
ATOM 1460 CB    CB    . ILE ILE ILE A A 195 195 . 151.280 115.266 17.148  1.00 10.89
1 . .
ATOM 1461 CG1   CG1   . ILE ILE ILE A A 195 195 . 151.334 114.533 18.510  1.00 11.97
1 . .
ATOM 1462 CD    CD    . ILE ILE ILE A A 195 195 . 150.676 113.115 18.412  1.00 11.80
1 . .
ATOM 1463 CG2   CG2   . ILE ILE ILE A A 195 195 . 152.139 114.530 16.043  1.00 11.43
1 . .
ATOM 1464 C     C     . ILE ILE ILE A A 195 195 . 152.068 117.429 16.020  1.00 9.65
1 . .
ATOM 1465 O     O     . ILE ILE ILE A A 195 195 . 153.247 117.548 15.599  1.00 11.66
1 . .
ATOM 1466 N     N     . LYS LYS LYS A A 196 196 . 151.006 117.842 15.319  1.00 10.52
1 . .
ATOM 1467 CA    CA    . LYS LYS LYS A A 196 196 . 151.175 118.542 14.002  1.00 11.85
1 . .
ATOM 1468 CB    CB    . LYS LYS LYS A A 196 196 . 149.807 119.016 13.511  1.00 13.11
1 . .
ATOM 1469 CG    CG    . LYS LYS LYS A A 196 196 . 149.966 119.712 12.195  1.00 17.31
1 . .
ATOM 1470 CD    CD    . LYS LYS LYS A A 196 196 . 148.586 120.159 11.655  1.00 24.66
1 . .
ATOM 1471 CE    CE    . LYS LYS LYS A A 196 196 . 148.684 120.975 10.331  1.00 32.24
1 . .
ATOM 1472 NZ    NZ    . LYS LYS LYS A A 196 196 . 149.538 122.245 10.397  1.00 38.06
1 . .
ATOM 1473 C     C     . LYS LYS LYS A A 196 196 . 152.104 119.756 14.177  1.00 13.16
1 . .
ATOM 1474 O     O     . LYS LYS LYS A A 196 196 . 153.038 119.976 13.339  1.00 14.73
1 . .
ATOM 1475 N     N     . ASP ASP ASP A A 197 197 . 151.882 120.546 15.229  1.00 12.94
1 . .
ATOM 1476 CA    CA    . ASP ASP ASP A A 197 197 . 152.684 121.799 15.418  1.00 16.65
1 . .
ATOM 1477 CB    CB    . ASP ASP ASP A A 197 197 . 152.168 122.668 16.571  1.00 17.83
1 . .
ATOM 1478 CG    CG    . ASP ASP ASP A A 197 197 . 150.797 123.304 16.269  1.00 20.77
1 . .
ATOM 1479 OD1   OD1   . ASP ASP ASP A A 197 197 . 150.107 123.788 17.225  1.00 23.41
1 . .
ATOM 1480 OD2   OD2   . ASP ASP ASP A A 197 197 . 150.362 123.310 15.105  1.00 26.86
1 . .
ATOM 1481 C     C     . ASP ASP ASP A A 197 197 . 154.142 121.505 15.677  1.00 15.95
1 . .
ATOM 1482 O     O     . ASP ASP ASP A A 197 197 . 155.049 122.318 15.324  1.00 20.52
1 . .
ATOM 1483 N     N     . LYS LYS LYS A A 198 198 . 154.432 120.399 16.344  1.00 14.50
1 . .
ATOM 1484 CA    CA    . LYS LYS LYS A A 198 198 . 155.816 120.001 16.656  1.00 15.31
1 . .
ATOM 1485 CB    CB    . LYS LYS LYS A A 198 198 . 155.819 119.329 18.045  1.00 15.93
1 . .
ATOM 1486 CG    CG    . LYS LYS LYS A A 198 198 . 157.106 119.001 18.517  1.00 24.13
1 . .
ATOM 1487 CD    CD    . LYS LYS LYS A A 198 198 . 157.201 119.294 20.020  1.00 33.72
1 . .
ATOM 1488 CE    CE    . LYS LYS LYS A A 198 198 . 155.992 119.107 20.903  1.00 33.68
1 . .
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ATOM 1489 NZ    NZ    . LYS LYS LYS A A 198 198 . 156.473 118.959 22.372  1.00 39.15
1 . .
ATOM 1490 C     C     . LYS LYS LYS A A 198 198 . 156.423 119.191 15.497  1.00 15.07
1 . .
ATOM 1491 O     O     . LYS LYS LYS A A 198 198 . 157.331 119.676 14.709  1.00 17.62
1 . .
ATOM 1492 N     N     . TYR TYR TYR A A 199 199 . 155.890 117.992 15.306  1.00 14.16
1 . .
ATOM 1493 CA    CA    . TYR TYR TYR A A 199 199 . 156.526 116.987 14.437  1.00 12.98
1 . .
ATOM 1494 CB    CB    . TYR TYR TYR A A 199 199 . 156.241 115.538 14.936  1.00 13.44
1 . .
ATOM 1495 CG    CG    . TYR TYR TYR A A 199 199 . 156.850 115.257 16.261  1.00 13.82
1 . .
ATOM 1496 CD1   CD1   . TYR TYR TYR A A 199 199 . 156.213 115.564 17.486  1.00 15.96
1 . .
ATOM 1497 CE1   CE1   . TYR TYR TYR A A 199 199 . 156.899 115.328 18.687  1.00 17.15
1 . .
ATOM 1498 CZ    CZ    . TYR TYR TYR A A 199 199 . 158.248 114.911 18.681  1.00 18.28
1 . .
ATOM 1499 OH    OH    . TYR TYR TYR A A 199 199 . 159.015 114.693 19.868  1.00 22.92
1 . .
ATOM 1500 CE2   CE2   . TYR TYR TYR A A 199 199 . 158.875 114.677 17.498  1.00 13.25
1 . .
ATOM 1501 CD2   CD2   . TYR TYR TYR A A 199 199 . 158.183 114.846 16.303  1.00 13.69
1 . .
ATOM 1502 C     C     . TYR TYR TYR A A 199 199 . 156.082 117.127 12.965  1.00 13.97
1 . .
ATOM 1503 O     O     . TYR TYR TYR A A 199 199 . 156.726 116.546 12.070  1.00 16.75
1 . .
ATOM 1504 N     N     . GLY GLY GLY A A 200 200 . 154.974 117.837 12.703  1.00 13.77
1 . .
ATOM 1505 CA    CA    . GLY GLY GLY A A 200 200 . 154.467 117.900 11.333  1.00 13.28
1 . .
ATOM 1506 C     C     . GLY GLY GLY A A 200 200 . 153.232 117.030 11.136  1.00 12.92
1 . .
ATOM 1507 O     O     . GLY GLY GLY A A 200 200 . 153.005 116.085 11.856  1.00 11.76
1 . .
ATOM 1508 N     N     . LYS LYS LYS A A 201 201 . 152.455 117.418 10.109  1.00 13.24
1 . .
ATOM 1509 CA    CA    . LYS LYS LYS A A 201 201 . 151.278 116.628 9.747   1.00 13.75
1 . .
ATOM 1510 CB    CB    . LYS LYS LYS A A 201 201 . 150.501 117.290 8.581   1.00 15.03
1 . .
ATOM 1511 CG    CG    . LYS LYS LYS A A 201 201 . 151.262 117.241 7.232   1.00 21.50
1 . .
ATOM 1512 CD    CD    . LYS LYS LYS A A 201 201 . 150.398 118.067 6.187   1.00 30.03
1 . .
ATOM 1513 CE    CE    . LYS LYS LYS A A 201 201 . 151.062 118.250 4.802   1.00 35.83
1 . .
ATOM 1514 NZ    NZ    . LYS LYS LYS A A 201 201 . 152.362 118.957 4.973   1.00 41.15
1 . .
ATOM 1515 C     C     . LYS LYS LYS A A 201 201 . 151.584 115.166 9.447   1.00 12.57
1 . .
ATOM 1516 O     O     . LYS LYS LYS A A 201 201 . 150.711 114.304 9.688   1.00 13.67
1 . .
ATOM 1517 N     N     . ASP ASP ASP A A 202 202 . 152.815 114.871 9.014   1.00 13.12
1 . .
ATOM 1518 CA    CA    . ASP ASP ASP A A 202 202 . 153.163 113.478 8.733   1.00 11.94
1 . .
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ATOM 1519 CB    CB    . ASP ASP ASP A A 202 202 . 154.450 113.404 7.871   1.00 13.04
1 . .
ATOM 1520 CG    CG    . ASP ASP ASP A A 202 202 . 155.597 114.251 8.407   1.00 19.14
1 . .
ATOM 1521 OD1   OD1   . ASP ASP ASP A A 202 202 . 155.451 115.515 8.602   1.00 23.09
1 . .
ATOM 1522 OD2   OD2   . ASP ASP ASP A A 202 202 . 156.666 113.643 8.689   1.00 25.54
1 . .
ATOM 1523 C     C     . ASP ASP ASP A A 202 202 . 153.327 112.613 9.988   1.00 13.05
1 . .
ATOM 1524 O     O     . ASP ASP ASP A A 202 202 . 153.498 111.381 9.872   1.00 14.63
1 . .
ATOM 1525 N     N     . ALA ALA ALA A A 203 203 . 153.279 113.207 11.173  1.00 10.09
1 . .
ATOM 1526 CA    CA    . ALA ALA ALA A A 203 203 . 153.355 112.473 12.403  1.00 9.97
1 . .
ATOM 1527 CB    CB    . ALA ALA ALA A A 203 203 . 154.227 113.256 13.393  1.00 10.90
1 . .
ATOM 1528 C     C     . ALA ALA ALA A A 203 203 . 151.943 112.218 12.976  1.00 10.06
1 . .
ATOM 1529 O     O     . ALA ALA ALA A A 203 203 . 151.809 111.713 14.085  1.00 11.74
1 . .
ATOM 1530 N     N     . THR THR THR A A 204 204 . 150.903 112.591 12.204  1.00 9.56
1 . .
ATOM 1531 CA    CA    . THR THR THR A A 204 204 . 149.516 112.562 12.690  1.00 10.62
1 . .
ATOM 1532 CB    CB    . THR THR THR A A 204 204 . 148.745 113.903 12.590  1.00 10.99
1 . .
ATOM 1533 OG1   OG1   . THR THR THR A A 204 204 . 148.568 114.292 11.236  1.00 13.85
1 . .
ATOM 1534 CG2   CG2   . THR THR THR A A 204 204 . 149.441 115.010 13.397  1.00 12.85
1 . .
ATOM 1535 C     C     . THR THR THR A A 204 204 . 148.660 111.475 11.949  1.00 8.87
1 . .
ATOM 1536 O     O     . THR THR THR A A 204 204 . 147.422 111.433 12.120  1.00 10.74
1 . .
ATOM 1537 N     N     . ASN ASN ASN A A 205 205 . 149.325 110.564 11.254  1.00 8.52
1 . .
ATOM 1538 CA    CA    . ASN ASN ASN A A 205 205 . 148.662 109.370 10.724  1.00 8.06
1 . .
ATOM 1539 CB    CB    . ASN ASN ASN A A 205 205 . 149.432 108.790 9.578   1.00 9.12
1 . .
ATOM 1540 CG    CG    . ASN ASN ASN A A 205 205 . 149.590 109.810 8.448   1.00 10.99
1 . .
ATOM 1541 OD1   OD1   . ASN ASN ASN A A 205 205 . 148.588 110.314 7.879   1.00 12.32
1 . .
ATOM 1542 ND2   ND2   . ASN ASN ASN A A 205 205 . 150.866 110.086 8.094   1.00 13.94
1 . .
ATOM 1543 C     C     . ASN ASN ASN A A 205 205 . 148.481 108.426 11.939  1.00 8.37
1 . .
ATOM 1544 O     O     . ASN ASN ASN A A 205 205 . 149.042 108.642 12.996  1.00 9.34
1 . .
ATOM 1545 N     N     . VAL VAL VAL A A 206 206 . 147.658 107.400 11.774  1.00 7.76
1 . .
ATOM 1546 CA    CA    . VAL VAL VAL A A 206 206 . 147.337 106.557 12.923  1.00 6.92
1 . .
ATOM 1547 CB    CB    . VAL VAL VAL A A 206 206 . 145.831 106.553 13.262  1.00 7.18
1 . .
ATOM 1548 CG1   CG1   . VAL VAL VAL A A 206 206 . 145.383 107.972 13.558  1.00 8.22
1 . .
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ATOM 1549 CG2   CG2   . VAL VAL VAL A A 206 206 . 144.944 105.873 12.157  1.00 8.52
1 . .
ATOM 1550 C     C     . VAL VAL VAL A A 206 206 . 147.876 105.111 12.796  1.00 7.03
1 . .
ATOM 1551 O     O     . VAL VAL VAL A A 206 206 . 148.096 104.572 11.692  1.00 7.20
1 . .
ATOM 1552 N     N     . GLY GLY GLY A A 207 207 . 148.055 104.518 13.979  1.00 7.95
1 . .
ATOM 1553 CA    CA    . GLY GLY GLY A A 207 207 . 148.394 103.144 14.139  1.00 7.58
1 . .
ATOM 1554 C     C     . GLY GLY GLY A A 207 207 . 147.158 102.263 14.197  1.00 6.93
1 . .
ATOM 1555 O     O     . GLY GLY GLY A A 207 207 . 145.993 102.683 13.977  1.00 7.44
1 . .
ATOM 1556 N     N     . ASP ASP ASP A A 208 208 . 147.401 100.964 14.524  1.00 8.13
1 . .
ATOM 1557 CA    CA    . ASP ASP ASP A A 208 208 . 146.380 99.982  14.379  1.00 7.61
1 . .
ATOM 1558 CB    CB    . ASP ASP ASP A A 208 208 . 146.930 98.585  14.736  1.00 7.43
1 . .
ATOM 1559 CG    CG    . ASP ASP ASP A A 208 208 . 147.784 97.996  13.638  1.00 9.58
1 . .
ATOM 1560 OD1   OD1   . ASP ASP ASP A A 208 208 . 147.755 98.451  12.439  1.00 12.15
1 . .
ATOM 1561 OD2   OD2   . ASP ASP ASP A A 208 208 . 148.526 97.009  13.964  1.00 11.41
1 . .
ATOM 1562 C     C     . ASP ASP ASP A A 208 208 . 145.147 100.265 15.261  1.00 6.84
1 . .
ATOM 1563 O     O     . ASP ASP ASP A A 208 208 . 144.024 99.824  14.939  1.00 7.33
1 . .
ATOM 1564 N     N     . GLU GLU GLU A A 209 209 . 145.373 100.880 16.425  1.00 6.64
1 . .
ATOM 1565 CA    CA    . GLU GLU GLU A A 209 209 . 144.303 101.120 17.391  1.00 6.38
1 . .
ATOM 1566 CB    CB    . GLU GLU GLU A A 209 209 . 144.799 100.790 18.838  1.00 7.87
1 . .
ATOM 1567 CG    CG    . GLU GLU GLU A A 209 209 . 145.054 99.249  18.889  1.00 9.24
1 . .
ATOM 1568 CD    CD    . GLU GLU GLU A A 209 209 . 145.142 98.708  20.279  1.00 11.09
1 . .
ATOM 1569 OE1   OE1   . GLU GLU GLU A A 209 209 . 145.147 99.494  21.259  1.00 10.67
1 . .
ATOM 1570 OE2   OE2   . GLU GLU GLU A A 209 209 . 145.168 97.458  20.413  1.00 10.87
1 . .
ATOM 1571 C     C     . GLU GLU GLU A A 209 209 . 143.756 102.549 17.338  1.00 6.95
1 . .
ATOM 1572 O     O     . GLU GLU GLU A A 209 209 . 142.968 102.955 18.244  1.00 7.00
1 . .
ATOM 1573 N     N     . GLY GLY GLY A A 210 210 . 144.129 103.292 16.302  1.00 6.28
1 . .
ATOM 1574 CA    CA    . GLY GLY GLY A A 210 210 . 143.612 104.655 16.112  1.00 6.83
1 . .
ATOM 1575 C     C     . GLY GLY GLY A A 210 210 . 144.378 105.741 16.797  1.00 6.14
1 . .
ATOM 1576 O     O     . GLY GLY GLY A A 210 210 . 144.039 106.906 16.646  1.00 8.05
1 . .
ATOM 1577 N     N     . GLY GLY GLY A A 211 211 . 145.416 105.387 17.565  1.00 6.57
1 . .
ATOM 1578 CA    CA    . GLY GLY GLY A A 211 211 . 146.261 106.462 18.170  1.00 7.59
1 . .
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ATOM 1579 C     C     . GLY GLY GLY A A 211 211 . 147.205 107.030 17.110  1.00 6.54
1 . .
ATOM 1580 O     O     . GLY GLY GLY A A 211 211 . 147.541 106.362 16.100  1.00 8.83
1 . .
ATOM 1581 N     N     . PHE PHE PHE A A 212 212 . 147.710 108.231 17.380  1.00 7.52
1 . .
ATOM 1582 CA    CA    . PHE PHE PHE A A 212 212 . 148.674 108.806 16.437  1.00 7.46
1 . .
ATOM 1583 CB    CB    . PHE PHE PHE A A 212 212 . 148.925 110.271 16.860  1.00 8.69
1 . .
ATOM 1584 CG    CG    . PHE PHE PHE A A 212 212 . 147.661 111.058 16.808  1.00 9.18
1 . .
ATOM 1585 CD1   CD1   . PHE PHE PHE A A 212 212 . 147.110 111.573 17.970  1.00 8.62
1 . .
ATOM 1586 CE1   CE1   . PHE PHE PHE A A 212 212 . 145.901 112.247 17.916  1.00 10.62
1 . .
ATOM 1587 CZ    CZ    . PHE PHE PHE A A 212 212 . 145.250 112.415 16.740  1.00 8.50
1 . .
ATOM 1588 CE2   CE2   . PHE PHE PHE A A 212 212 . 145.722 111.925 15.548  1.00 9.15
1 . .
ATOM 1589 CD2   CD2   . PHE PHE PHE A A 212 212 . 146.975 111.243 15.554  1.00 7.60
1 . .
ATOM 1590 C     C     . PHE PHE PHE A A 212 212 . 149.926 108.010 16.472  1.00 7.10
1 . .
ATOM 1591 O     O     . PHE PHE PHE A A 212 212 . 150.317 107.396 17.503  1.00 8.72
1 . .
ATOM 1592 N     N     . ALA ALA ALA A A 213 213 . 150.601 108.023 15.337  1.00 10.24
1 . .
ATOM 1593 CA    CA    . ALA ALA ALA A A 213 213 . 151.841 107.286 15.187  1.00 10.18
1 . .
ATOM 1594 CB    CB    . ALA ALA ALA A A 213 213 . 151.736 106.155 14.114  1.00 9.51
1 . .
ATOM 1595 C     C     . ALA ALA ALA A A 213 213 . 152.986 108.263 14.847  1.00 10.13
1 . .
ATOM 1596 O     O     . ALA ALA ALA A A 213 213 . 153.501 108.228 13.732  1.00 11.46
1 . .
ATOM 1597 N     N     . PRO PRO PRO A A 214 214 . 153.382 109.094 15.823  1.00 9.24
1 . .
ATOM 1598 CA    CA    . PRO PRO PRO A A 214 214 . 154.422 110.065 15.526  1.00 10.29
1 . .
ATOM 1599 CB    CB    . PRO PRO PRO A A 214 214 . 154.382 110.997 16.738  1.00 11.97
1 . .
ATOM 1600 CG    CG    . PRO PRO PRO A A 214 214 . 153.883 110.150 17.855  1.00 11.37
1 . .
ATOM 1601 CD    CD    . PRO PRO PRO A A 214 214 . 152.807 109.260 17.193  1.00 11.70
1 . .
ATOM 1602 C     C     . PRO PRO PRO A A 214 214 . 155.761 109.347 15.427  1.00 12.71
1 . .
ATOM 1603 O     O     . PRO PRO PRO A A 214 214 . 155.958 108.263 15.987  1.00 11.54
1 . .
ATOM 1604 N     N     . ASN ASN ASN A A 215 215 . 156.679 109.979 14.682  1.00 14.06
1 . .
ATOM 1605 CA    CA    . ASN ASN ASN A A 215 215 . 158.003 109.436 14.442  1.00 15.89
1 . .
ATOM 1606 CB    CB    . ASN ASN ASN A A 215 215 . 158.560 109.997 13.120  1.00 16.75
1 . .
ATOM 1607 CG    CG    . ASN ASN ASN A A 215 215 . 158.591 111.592 13.055  1.00 21.56
1 . .
ATOM 1608 OD1   OD1   . ASN ASN ASN A A 215 215 . 159.677 112.205 12.799  1.00 30.10
1 . .
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ATOM 1609 ND2   ND2   . ASN ASN ASN A A 215 215 . 157.476 112.242 13.260  1.00 15.59
1 . .
ATOM 1610 C     C     . ASN ASN ASN A A 215 215 . 158.919 109.799 15.602  1.00 14.08
1 . .
ATOM 1611 O     O     . ASN ASN ASN A A 215 215 . 159.811 110.694 15.487  1.00 16.77
1 . .
ATOM 1612 N     N     . ILE ILE ILE A A 216 216 . 158.727 109.120 16.734  1.00 12.05
1 . .
ATOM 1613 CA    CA    . ILE ILE ILE A A 216 216 . 159.520 109.351 17.930  1.00 11.47
1 . .
ATOM 1614 CB    CB    . ILE ILE ILE A A 216 216 . 158.702 110.043 19.024  1.00 13.53
1 . .
ATOM 1615 CG1   CG1   . ILE ILE ILE A A 216 216 . 157.438 109.227 19.342  1.00 10.48
1 . .
ATOM 1616 CD    CD    . ILE ILE ILE A A 216 216 . 156.697 109.771 20.531  1.00 14.30
1 . .
ATOM 1617 CG2   CG2   . ILE ILE ILE A A 216 216 . 158.361 111.496 18.635  1.00 16.45
1 . .
ATOM 1618 C     C     . ILE ILE ILE A A 216 216 . 159.995 108.002 18.431  1.00 12.09
1 . .
ATOM 1619 O     O     . ILE ILE ILE A A 216 216 . 159.422 106.975 18.097  1.00 12.23
1 . .
ATOM 1620 N     N     . LEU LEU LEU A A 217 217 . 161.103 108.034 19.183  1.00 11.72
1 . .
ATOM 1621 CA    CA    . LEU LEU LEU A A 217 217 . 161.719 106.890 19.837  1.00 12.55
1 . .
ATOM 1622 CB    CB    . LEU LEU LEU A A 217 217 . 163.229 106.929 19.597  1.00 15.53
1 . .
ATOM 1623 CG    CG    . LEU LEU LEU A A 217 217 . 164.095 105.942 20.402  1.00 13.72
1 . .
ATOM 1624 CD1   CD1   . LEU LEU LEU A A 217 217 . 163.701 104.529 20.043  1.00 15.29
1 . .
ATOM 1625 CD2   CD2   . LEU LEU LEU A A 217 217 . 165.581 106.153 20.142  1.00 14.93
1 . .
ATOM 1626 C     C     . LEU LEU LEU A A 217 217 . 161.441 106.885 21.345  1.00 13.07
1 . .
ATOM 1627 O     O     . LEU LEU LEU A A 217 217 . 161.147 105.821 21.927  1.00 13.87
1 . .
ATOM 1628 N     N     . GLU GLU GLU A A 218 218 . 161.553 108.052 22.003  1.00 12.79
1 . .
ATOM 1629 CA    CA    . GLU GLU GLU A A 218 218 . 161.583 108.098 23.466  1.00 13.32
1 . .
ATOM 1630 CB    CB    . GLU GLU GLU A A 218 218 . 162.210 109.442 23.893  1.00 15.99
1 . .
ATOM 1631 CG    CG    . GLU GLU GLU A A 218 218 . 163.679 109.529 23.511  1.00 23.79
1 . .
ATOM 1632 CD    CD    . GLU GLU GLU A A 218 218 . 164.564 109.660 24.686  1.00 36.86
1 . .
ATOM 1633 OE1   OE1   . GLU GLU GLU A A 218 218 . 165.343 110.649 24.693  1.00 42.93
1 . .
ATOM 1634 OE2   OE2   . GLU GLU GLU A A 218 218 . 164.463 108.785 25.587  1.00 40.86
1 . .
ATOM 1635 C     C     . GLU GLU GLU A A 218 218 . 160.169 107.997 24.054  1.00 13.29
1 . .
ATOM 1636 O     O     . GLU GLU GLU A A 218 218 . 159.242 108.759 23.702  1.00 12.72
1 . .
ATOM 1637 N     N     . ASN ASN ASN A A 219 219 . 159.970 107.008 24.921  1.00 12.33
1 . .
ATOM 1638 CA    CA    . ASN ASN ASN A A 219 219 . 158.656 106.852 25.563  1.00 10.56
1 . .
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ATOM 1639 CB    CB    . ASN ASN ASN A A 219 219 . 158.628 105.539 26.302  1.00 10.24
1 . .
ATOM 1640 CG    CG    . ASN ASN ASN A A 219 219 . 158.998 104.386 25.379  1.00 9.55
1 . .
ATOM 1641 OD1   OD1   . ASN ASN ASN A A 219 219 . 160.191 103.881 25.395  1.00 14.99
1 . .
ATOM 1642 ND2   ND2   . ASN ASN ASN A A 219 219 . 158.083 103.965 24.571  1.00 7.36
1 . .
ATOM 1643 C     C     . ASN ASN ASN A A 219 219 . 158.277 108.029 26.440  1.00 11.37
1 . .
ATOM 1644 O     O     . ASN ASN ASN A A 219 219 . 157.090 108.395 26.526  1.00 12.07
1 . .
ATOM 1645 N     N     . SER SER SER A A 220 220 . 159.268 108.678 27.058  1.00 11.72
1 . .
ATOM 1646 CA    CA    . SER SER SER A A 220 220 . 158.961 109.875 27.855  1.00 11.67
1 . .
ATOM 1647 CB    CB    . SER SER SER A A 220 220 . 160.188 110.341 28.663  1.00 13.84
1 . .
ATOM 1648 OG    OG    . SER SER SER A A 220 220 . 161.215 110.622 27.733  1.00 18.21
1 . .
ATOM 1649 C     C     . SER SER SER A A 220 220 . 158.378 110.964 26.955  1.00 12.01
1 . .
ATOM 1650 O     O     . SER SER SER A A 220 220 . 157.638 111.783 27.452  1.00 12.17
1 . .
ATOM 1651 N     N     . GLU GLU GLU A A 221 221 . 158.807 111.022 25.686  1.00 12.15
1 . .
ATOM 1652 CA    CA    . GLU GLU GLU A A 221 221 . 158.285 112.046 24.740  1.00 11.23
1 . .
ATOM 1653 CB    CB    . GLU GLU GLU A A 221 221 . 159.111 112.058 23.512  1.00 14.21
1 . .
ATOM 1654 CG    CG    . GLU GLU GLU A A 221 221 . 158.712 113.129 22.529  1.00 15.43
1 . .
ATOM 1655 CD    CD    . GLU GLU GLU A A 221 221 . 158.570 114.625 23.021  1.00 24.87
1 . .
ATOM 1656 OE1   OE1   . GLU GLU GLU A A 221 221 . 159.012 115.013 24.155  1.00 29.54
1 . .
ATOM 1657 OE2   OE2   . GLU GLU GLU A A 221 221 . 158.007 115.422 22.195  1.00 28.99
1 . .
ATOM 1658 C     C     . GLU GLU GLU A A 221 221 . 156.809 111.778 24.493  1.00 9.99
1 . .
ATOM 1659 O     O     . GLU GLU GLU A A 221 221 . 156.009 112.746 24.435  1.00 11.12
1 . .
ATOM 1660 N     N     . ALA ALA ALA A A 222 222 . 156.425 110.480 24.309  1.00 9.22
1 . .
ATOM 1661 CA    CA    . ALA ALA ALA A A 222 222 . 154.965 110.166 24.129  1.00 10.36
1 . .
ATOM 1662 CB    CB    . ALA ALA ALA A A 222 222 . 154.799 108.696 23.930  1.00 10.47
1 . .
ATOM 1663 C     C     . ALA ALA ALA A A 222 222 . 154.214 110.627 25.350  1.00 10.42
1 . .
ATOM 1664 O     O     . ALA ALA ALA A A 222 222 . 153.160 111.252 25.224  1.00 9.73
1 . .
ATOM 1665 N     N     . LEU LEU LEU A A 223 223 . 154.768 110.383 26.552  1.00 8.47
1 . .
ATOM 1666 CA    CA    . LEU LEU LEU A A 223 223 . 154.081 110.854 27.765  1.00 10.54
1 . .
ATOM 1667 CB    CB    . LEU LEU LEU A A 223 223 . 154.762 110.314 29.041  1.00 8.78
1 . .
ATOM 1668 CG    CG    . LEU LEU LEU A A 223 223 . 154.601 108.819 29.271  1.00 9.59
1 . .
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ATOM 1669 CD1   CD1   . LEU LEU LEU A A 223 223 . 155.636 108.239 30.223  1.00 12.00
1 . .
ATOM 1670 CD2   CD2   . LEU LEU LEU A A 223 223 . 153.132 108.499 29.757  1.00 11.84
1 . .
ATOM 1671 C     C     . LEU LEU LEU A A 223 223 . 153.972 112.391 27.822  1.00 9.86
1 . .
ATOM 1672 O     O     . LEU LEU LEU A A 223 223 . 152.944 112.938 28.201  1.00 10.95
1 . .
ATOM 1673 N     N     . GLU GLU GLU A A 224 224 . 155.041 113.082 27.417  1.00 9.76
1 . .
ATOM 1674 CA    CA    . GLU GLU GLU A A 224 224 . 155.033 114.543 27.429  1.00 12.52
1 . .
ATOM 1675 CB    CB    . GLU GLU GLU A A 224 224 . 156.407 115.046 27.001  1.00 13.82
1 . .
ATOM 1676 CG    CG    . GLU GLU GLU A A 224 224 . 156.524 116.529 27.166  1.00 21.25
1 . .
ATOM 1677 CD    CD    . GLU GLU GLU A A 224 224 . 156.738 116.968 28.616  1.00 28.01
1 . .
ATOM 1678 OE1   OE1   . GLU GLU GLU A A 224 224 . 156.468 118.188 28.804  1.00 39.08
1 . .
ATOM 1679 OE2   OE2   . GLU GLU GLU A A 224 224 . 157.159 116.165 29.525  1.00 30.06
1 . .
ATOM 1680 C     C     . GLU GLU GLU A A 224 224 . 153.967 115.124 26.487  1.00 10.02
1 . .
ATOM 1681 O     O     . GLU GLU GLU A A 224 224 . 153.254 116.053 26.871  1.00 11.51
1 . .
ATOM 1682 N     N     . LEU LEU LEU A A 225 225 . 153.794 114.471 25.332  1.00 10.67
1 . .
ATOM 1683 CA    CA    . LEU LEU LEU A A 225 225 . 152.801 114.933 24.330  1.00 9.80
1 . .
ATOM 1684 CB    CB    . LEU LEU LEU A A 225 225 . 152.899 114.160 23.019  1.00 9.90
1 . .
ATOM 1685 CG    CG    . LEU LEU LEU A A 225 225 . 154.203 114.498 22.236  1.00 12.79
1 . .
ATOM 1686 CD1   CD1   . LEU LEU LEU A A 225 225 . 154.449 113.485 21.110  1.00 11.42
1 . .
ATOM 1687 CD2   CD2   . LEU LEU LEU A A 225 225 . 154.125 115.914 21.618  1.00 15.02
1 . .
ATOM 1688 C     C     . LEU LEU LEU A A 225 225 . 151.406 114.705 24.902  1.00 9.87
1 . .
ATOM 1689 O     O     . LEU LEU LEU A A 225 225 . 150.541 115.573 24.770  1.00 9.63
1 . .
ATOM 1690 N     N     . VAL VAL VAL A A 226 226 . 151.192 113.535 25.525  1.00 8.62
1 . .
ATOM 1691 CA    CA    . VAL VAL VAL A A 226 226 . 149.844 113.283 26.097  1.00 9.01
1 . .
ATOM 1692 CB    CB    . VAL VAL VAL A A 226 226 . 149.733 111.770 26.601  1.00 8.58
1 . .
ATOM 1693 CG1   CG1   . VAL VAL VAL A A 226 226 . 148.399 111.541 27.297  1.00 10.60
1 . .
ATOM 1694 CG2   CG2   . VAL VAL VAL A A 226 226 . 149.852 110.835 25.414  1.00 10.32
1 . .
ATOM 1695 C     C     . VAL VAL VAL A A 226 226 . 149.510 114.271 27.242  1.00 8.99
1 . .
ATOM 1696 O     O     . VAL VAL VAL A A 226 226 . 148.388 114.821 27.302  1.00 9.48
1 . .
ATOM 1697 N     N     . LYS LYS LYS A A 227 227 . 150.510 114.490 28.115  1.00 9.74
1 . .
ATOM 1698 CA    CA    . LYS LYS LYS A A 227 227 . 150.261 115.404 29.212  1.00 11.94
1 . .
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ATOM 1699 CB    CB    . LYS LYS LYS A A 227 227 . 151.422 115.377 30.149  1.00 12.93
1 . .
ATOM 1700 CG    CG    . LYS LYS LYS A A 227 227 . 151.225 116.256 31.386  1.00 15.68
1 . .
ATOM 1701 CD    CD    . LYS LYS LYS A A 227 227 . 152.579 116.242 32.201  1.00 25.18
1 . .
ATOM 1702 CE    CE    . LYS LYS LYS A A 227 227 . 152.457 116.762 33.601  1.00 27.26
1 . .
ATOM 1703 NZ    NZ    . LYS LYS LYS A A 227 227 . 153.592 116.186 34.364  1.00 27.86
1 . .
ATOM 1704 C     C     . LYS LYS LYS A A 227 227 . 149.957 116.833 28.722  1.00 10.37
1 . .
ATOM 1705 O     O     . LYS LYS LYS A A 227 227 . 149.014 117.479 29.260  1.00 11.21
1 . .
ATOM 1706 N     N     . GLU GLU GLU A A 228 228 . 150.690 117.252 27.690  1.00 10.74
1 . .
ATOM 1707 CA    CA    . GLU GLU GLU A A 228 228 . 150.550 118.566 27.086  1.00 9.57
1 . .
ATOM 1708 CB    CB    . GLU GLU GLU A A 228 228 . 151.591 118.782 25.993  1.00 13.35
1 . .
ATOM 1709 CG    CG    . GLU GLU GLU A A 228 228 . 151.427 120.115 25.230  1.00 17.40
1 . .
ATOM 1710 CD    CD    . GLU GLU GLU A A 228 228 . 151.781 121.424 25.927  1.00 35.49
1 . .
ATOM 1711 OE1   OE1   . GLU GLU GLU A A 228 228 . 151.837 121.514 27.189  1.00 40.66
1 . .
ATOM 1712 OE2   OE2   . GLU GLU GLU A A 228 228 . 152.013 122.386 25.142  1.00 43.48
1 . .
ATOM 1713 C     C     . GLU GLU GLU A A 228 228 . 149.089 118.711 26.520  1.00 10.24
1 . .
ATOM 1714 O     O     . GLU GLU GLU A A 228 228 . 148.409 119.748 26.713  1.00 11.61
1 . .
ATOM 1715 N     N     . ALA ALA ALA A A 229 229 . 148.589 117.615 25.880  1.00 9.93
1 . .
ATOM 1716 CA    CA    . ALA ALA ALA A A 229 229 . 147.276 117.702 25.293  1.00 10.41
1 . .
ATOM 1717 CB    CB    . ALA ALA ALA A A 229 229 . 147.095 116.464 24.336  1.00 8.92
1 . .
ATOM 1718 C     C     . ALA ALA ALA A A 229 229 . 146.187 117.735 26.379  1.00 10.07
1 . .
ATOM 1719 O     O     . ALA ALA ALA A A 229 229 . 145.166 118.444 26.255  1.00 9.61
1 . .
ATOM 1720 N     N     . ILE ILE ILE A A 230 230 . 146.385 116.927 27.438  1.00 9.57
1 . .
ATOM 1721 CA    CA    . ILE ILE ILE A A 230 230 . 145.476 116.984 28.598  1.00 9.50
1 . .
ATOM 1722 CB    CB    . ILE ILE ILE A A 230 230 . 145.909 115.985 29.712  1.00 9.03
1 . .
ATOM 1723 CG1   CG1   . ILE ILE ILE A A 230 230 . 145.734 114.536 29.233  1.00 8.70
1 . .
ATOM 1724 CD    CD    . ILE ILE ILE A A 230 230 . 146.367 113.503 30.185  1.00 9.36
1 . .
ATOM 1725 CG2   CG2   . ILE ILE ILE A A 230 230 . 145.052 116.274 30.985  1.00 10.97
1 . .
ATOM 1726 C     C     . ILE ILE ILE A A 230 230 . 145.380 118.407 29.124  1.00 9.61
1 . .
ATOM 1727 O     O     . ILE ILE ILE A A 230 230 . 144.275 118.937 29.352  1.00 9.86
1 . .
ATOM 1728 N     N     . ASP ASP ASP A A 231 231 . 146.542 119.019 29.300  1.00 9.69
1 . .
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ATOM 1729 CA    CA    . ASP ASP ASP A A 231 231 . 146.535 120.332 29.926  1.00 12.18
1 . .
ATOM 1730 CB    CB    . ASP ASP ASP A A 231 231 . 148.009 120.692 30.289  1.00 13.28
1 . .
ATOM 1731 CG    CG    . ASP ASP ASP A A 231 231 . 148.573 119.817 31.432  1.00 19.26
1 . .
ATOM 1732 OD1   OD1   . ASP ASP ASP A A 231 231 . 149.796 119.954 31.725  1.00 24.30
1 . .
ATOM 1733 OD2   OD2   . ASP ASP ASP A A 231 231 . 147.861 119.010 32.107  1.00 22.43
1 . .
ATOM 1734 C     C     . ASP ASP ASP A A 231 231 . 145.940 121.384 28.981  1.00 11.85
1 . .
ATOM 1735 O     O     . ASP ASP ASP A A 231 231 . 145.161 122.258 29.433  1.00 13.36
1 . .
ATOM 1736 N     N     . LYS LYS LYS A A 232 232 . 146.380 121.334 27.713  1.00 11.96
1 . .
ATOM 1737 CA    CA    . LYS LYS LYS A A 232 232 . 145.846 122.266 26.713  1.00 11.52
1 . .
ATOM 1738 CB    CB    . LYS LYS LYS A A 232 232 . 146.591 122.110 25.386  1.00 13.76
1 . .
ATOM 1739 CG    CG    . LYS LYS LYS A A 232 232 . 146.259 123.201 24.397  1.00 24.05
1 . .
ATOM 1740 CD    CD    . LYS LYS LYS A A 232 232 . 147.210 123.152 23.150  1.00 29.62
1 . .
ATOM 1741 CE    CE    . LYS LYS LYS A A 232 232 . 146.406 123.639 21.914  1.00 32.81
1 . .
ATOM 1742 NZ    NZ    . LYS LYS LYS A A 232 232 . 147.289 123.689 20.724  1.00 34.08
1 . .
ATOM 1743 C     C     . LYS LYS LYS A A 232 232 . 144.293 122.156 26.537  1.00 10.77
1 . .
ATOM 1744 O     O     . LYS LYS LYS A A 232 232 . 143.602 123.168 26.377  1.00 13.85
1 . .
ATOM 1745 N     N     . ALA ALA ALA A A 233 233 . 143.734 120.931 26.615  1.00 10.53
1 . .
ATOM 1746 CA    CA    . ALA ALA ALA A A 233 233 . 142.282 120.766 26.574  1.00 10.50
1 . .
ATOM 1747 CB    CB    . ALA ALA ALA A A 233 233 . 141.965 119.267 26.343  1.00 11.87
1 . .
ATOM 1748 C     C     . ALA ALA ALA A A 233 233 . 141.599 121.229 27.849  1.00 10.83
1 . .
ATOM 1749 O     O     . ALA ALA ALA A A 233 233 . 140.352 121.305 27.901  1.00 13.09
1 . .
ATOM 1750 N     N     . GLY GLY GLY A A 234 234 . 142.376 121.488 28.915  1.00 10.56
1 . .
ATOM 1751 CA    CA    . GLY GLY GLY A A 234 234 . 141.802 121.986 30.202  1.00 11.08
1 . .
ATOM 1752 C     C     . GLY GLY GLY A A 234 234 . 141.297 120.924 31.147  1.00 11.52
1 . .
ATOM 1753 O     O     . GLY GLY GLY A A 234 234 . 140.451 121.184 32.028  1.00 14.24
1 . .
ATOM 1754 N     N     . TYR TYR TYR A A 235 235 . 141.917 119.735 31.075  1.00 10.29
1 . .
ATOM 1755 CA    CA    . TYR TYR TYR A A 235 235 . 141.399 118.625 31.879  1.00 10.18
1 . .
ATOM 1756 CB    CB    . TYR TYR TYR A A 235 235 . 140.776 117.540 30.974  1.00 9.93
1 . .
ATOM 1757 CG    CG    . TYR TYR TYR A A 235 235 . 139.557 118.011 30.217  1.00 10.05
1 . .
ATOM 1758 CD1   CD1   . TYR TYR TYR A A 235 235 . 139.471 117.924 28.820  1.00 10.12
1 . .
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ATOM 1759 CE1   CE1   . TYR TYR TYR A A 235 235 . 138.299 118.317 28.147  1.00 10.19
1 . .
ATOM 1760 CZ    CZ    . TYR TYR TYR A A 235 235 . 137.275 118.854 28.870  1.00 11.43
1 . .
ATOM 1761 OH    OH    . TYR TYR TYR A A 235 235 . 136.137 119.249 28.196  1.00 13.51
1 . .
ATOM 1762 CE2   CE2   . TYR TYR TYR A A 235 235 . 137.350 118.919 30.259  1.00 11.83
1 . .
ATOM 1763 CD2   CD2   . TYR TYR TYR A A 235 235 . 138.463 118.467 30.891  1.00 11.72
1 . .
ATOM 1764 C     C     . TYR TYR TYR A A 235 235 . 142.457 117.990 32.786  1.00 11.04
1 . .
ATOM 1765 O     O     . TYR TYR TYR A A 235 235 . 142.345 116.834 33.165  1.00 10.27
1 . .
ATOM 1766 N     N     . THR THR THR A A 236 236 . 143.438 118.776 33.217  1.00 11.70
1 . .
ATOM 1767 CA    CA    . THR THR THR A A 236 236 . 144.471 118.258 34.090  1.00 12.93
1 . .
ATOM 1768 CB    CB    . THR THR THR A A 236 236 . 145.377 119.402 34.536  1.00 12.95
1 . .
ATOM 1769 OG1   OG1   . THR THR THR A A 236 236 . 145.862 120.063 33.353  1.00 17.09
1 . .
ATOM 1770 CG2   CG2   . THR THR THR A A 236 236 . 146.618 118.872 35.317  1.00 14.01
1 . .
ATOM 1771 C     C     . THR THR THR A A 236 236 . 143.909 117.575 35.312  1.00 11.93
1 . .
ATOM 1772 O     O     . THR THR THR A A 236 236 . 144.440 116.533 35.753  1.00 13.21
1 . .
ATOM 1773 N     N     . GLU GLU GLU A A 237 237 . 142.848 118.127 35.894  1.00 14.29
1 . .
ATOM 1774 CA    CA    . GLU GLU GLU A A 237 237 . 142.377 117.432 37.122  1.00 17.72
1 . .
ATOM 1775 CB    CB    . GLU GLU GLU A A 237 237 . 141.544 118.421 38.013  1.00 19.57
1 . .
ATOM 1776 CG    CG    . GLU GLU GLU A A 237 237 . 142.417 119.569 38.559  1.00 30.56
1 . .
ATOM 1777 CD    CD    . GLU GLU GLU A A 237 237 . 143.649 119.069 39.355  1.00 40.97
1 . .
ATOM 1778 OE1   OE1   . GLU GLU GLU A A 237 237 . 144.792 119.117 38.805  1.00 46.13
1 . .
ATOM 1779 OE2   OE2   . GLU GLU GLU A A 237 237 . 143.481 118.625 40.523  1.00 45.56
1 . .
ATOM 1780 C     C     . GLU GLU GLU A A 237 237 . 141.591 116.137 36.910  1.00 18.23
1 . .
ATOM 1781 O     O     . GLU GLU GLU A A 237 237 . 141.300 115.418 37.874  1.00 20.99
1 . .
ATOM 1782 N     N     . LYS LYS LYS A A 238 238 . 141.187 115.877 35.659  1.00 12.98
1 . .
ATOM 1783 CA    CA    . LYS LYS LYS A A 238 238 . 140.121 114.895 35.419  1.00 11.61
1 . .
ATOM 1784 CB    CB    . LYS LYS LYS A A 238 238 . 138.898 115.563 34.692  1.00 11.23
1 . .
ATOM 1785 CG    CG    . LYS LYS LYS A A 238 238 . 138.123 116.578 35.574  1.00 15.32
1 . .
ATOM 1786 CD    CD    . LYS LYS LYS A A 238 238 . 136.838 117.077 34.753  1.00 19.48
1 . .
ATOM 1787 CE    CE    . LYS LYS LYS A A 238 238 . 135.655 117.565 35.586  1.00 26.73
1 . .
ATOM 1788 NZ    NZ    . LYS LYS LYS A A 238 238 . 136.339 118.570 36.383  1.00 33.68
1 . .
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ATOM 1789 C     C     . LYS LYS LYS A A 238 238 . 140.607 113.743 34.593  1.00 9.78
1 . .
ATOM 1790 O     O     . LYS LYS LYS A A 238 238 . 139.878 112.787 34.465  1.00 10.48
1 . .
ATOM 1791 N     N     . ILE ILE ILE A A 239 239 . 141.806 113.839 34.029  1.00 9.78
1 . .
ATOM 1792 CA    CA    . ILE ILE ILE A A 239 239 . 142.261 112.779 33.133  1.00 8.95
1 . .
ATOM 1793 CB    CB    . ILE ILE ILE A A 239 239 . 142.278 113.292 31.658  1.00 10.15
1 . .
ATOM 1794 CG1   CG1   . ILE ILE ILE A A 239 239 . 140.857 113.693 31.256  1.00 11.97
1 . .
ATOM 1795 CD    CD    . ILE ILE ILE A A 239 239 . 140.724 114.277 29.784  1.00 11.69
1 . .
ATOM 1796 CG2   CG2   . ILE ILE ILE A A 239 239 . 142.794 112.142 30.731  1.00 9.46
1 . .
ATOM 1797 C     C     . ILE ILE ILE A A 239 239 . 143.614 112.363 33.561  1.00 10.02
1 . .
ATOM 1798 O     O     . ILE ILE ILE A A 239 239 . 144.495 113.202 33.769  1.00 13.40
1 . .
ATOM 1799 N     N     . VAL VAL VAL A A 240 240 . 143.816 111.058 33.677  1.00 9.49
1 . .
ATOM 1800 CA    CA    . VAL VAL VAL A A 240 240 . 145.142 110.452 34.068  1.00 8.88
1 . .
ATOM 1801 CB    CB    . VAL VAL VAL A A 240 240 . 145.017 109.718 35.419  1.00 8.79
1 . .
ATOM 1802 CG1   CG1   . VAL VAL VAL A A 240 240 . 144.666 110.752 36.489  1.00 10.90
1 . .
ATOM 1803 CG2   CG2   . VAL VAL VAL A A 240 240 . 144.013 108.574 35.389  1.00 11.72
1 . .
ATOM 1804 C     C     . VAL VAL VAL A A 240 240 . 145.616 109.519 32.953  1.00 9.13
1 . .
ATOM 1805 O     O     . VAL VAL VAL A A 240 240 . 144.921 109.371 31.916  1.00 9.26
1 . .
ATOM 1806 N     N     . ILE ILE ILE A A 241 241 . 146.753 108.887 33.139  1.00 8.03
1 . .
ATOM 1807 CA    CA    . ILE ILE ILE A A 241 241 . 147.412 108.189 32.040  1.00 8.36
1 . .
ATOM 1808 CB    CB    . ILE ILE ILE A A 241 241 . 148.769 108.825 31.686  1.00 8.60
1 . .
ATOM 1809 CG1   CG1   . ILE ILE ILE A A 241 241 . 148.538 110.243 31.065  1.00 8.76
1 . .
ATOM 1810 CD    CD    . ILE ILE ILE A A 241 241 . 149.904 111.059 30.877  1.00 10.52
1 . .
ATOM 1811 CG2   CG2   . ILE ILE ILE A A 241 241 . 149.619 107.919 30.756  1.00 11.26
1 . .
ATOM 1812 C     C     . ILE ILE ILE A A 241 241 . 147.605 106.739 32.424  1.00 9.09
1 . .
ATOM 1813 O     O     . ILE ILE ILE A A 241 241 . 147.934 106.376 33.566  1.00 8.33
1 . .
ATOM 1814 N     N     . GLY GLY GLY A A 242 242 . 147.381 105.871 31.447  1.00 8.29
1 . .
ATOM 1815 CA    CA    . GLY GLY GLY A A 242 242 . 147.741 104.483 31.569  1.00 8.49
1 . .
ATOM 1816 C     C     . GLY GLY GLY A A 242 242 . 148.688 104.084 30.477  1.00 7.19
1 . .
ATOM 1817 O     O     . GLY GLY GLY A A 242 242 . 148.723 104.689 29.439  1.00 9.26
1 . .
ATOM 1818 N     N     . MET MET MET A A 243 243 . 149.469 103.029 30.666  1.00 7.73
1 . .
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ATOM 1819 CA    CA    . MET MET MET A A 243 243 . 150.357 102.513 29.633  1.00 7.80
1 . .
ATOM 1820 CB    CB    . MET MET MET A A 243 243 . 151.849 102.755 30.083  1.00 9.64
1 . .
ATOM 1821 CG    CG    . MET MET MET A A 243 243 . 152.139 104.195 30.261  1.00 9.91
1 . .
ATOM 1822 SD    SD    . MET MET MET A A 243 243 . 153.821 104.494 30.949  1.00 13.14
1 . .
ATOM 1823 CE    CE    . MET MET MET A A 243 243 . 154.755 103.782 29.574  1.00 13.29
1 . .
ATOM 1824 C     C     . MET MET MET A A 243 243 . 150.181 101.027 29.445  1.00 8.27
1 . .
ATOM 1825 O     O     . MET MET MET A A 243 243 . 149.963 100.337 30.431  1.00 9.32
1 . .
ATOM 1826 N     N     . ASP ASP ASP A A 244 244 . 150.401 100.546 28.234  1.00 8.17
1 . .
ATOM 1827 CA    CA    . ASP ASP ASP A A 244 244 . 150.663 99.094  28.001  1.00 8.08
1 . .
ATOM 1828 CB    CB    . ASP ASP ASP A A 244 244 . 149.583 98.445  27.134  1.00 8.82
1 . .
ATOM 1829 CG    CG    . ASP ASP ASP A A 244 244 . 149.856 96.976  26.909  1.00 9.05
1 . .
ATOM 1830 OD1   OD1   . ASP ASP ASP A A 244 244 . 149.070 96.331  26.198  1.00 7.78
1 . .
ATOM 1831 OD2   OD2   . ASP ASP ASP A A 244 244 . 150.889 96.439  27.442  1.00 7.93
1 . .
ATOM 1832 C     C     . ASP ASP ASP A A 244 244 . 152.014 99.008  27.320  1.00 8.16
1 . .
ATOM 1833 O     O     . ASP ASP ASP A A 244 244 . 152.206 99.437  26.153  1.00 8.23
1 . .
ATOM 1834 N     N     . VAL VAL VAL A A 245 245 . 153.010 98.617  28.118  1.00 7.25
1 . .
ATOM 1835 CA    CA    . VAL VAL VAL A A 245 245 . 154.388 98.494  27.633  1.00 8.17
1 . .
ATOM 1836 CB    CB    . VAL VAL VAL A A 245 245 . 155.305 98.248  28.850  1.00 8.59
1 . .
ATOM 1837 CG1   CG1   . VAL VAL VAL A A 245 245 . 156.766 97.933  28.345  1.00 9.90
1 . .
ATOM 1838 CG2   CG2   . VAL VAL VAL A A 245 245 . 155.282 99.521  29.765  1.00 9.65
1 . .
ATOM 1839 C     C     . VAL VAL VAL A A 245 245 . 154.497 97.357  26.600  1.00 9.50
1 . .
ATOM 1840 O     O     . VAL VAL VAL A A 245 245 . 155.246 97.473  25.613  1.00 9.55
1 . .
ATOM 1841 N     N     . ALA ALA ALA A A 246 246 . 153.753 96.263  26.858  1.00 8.10
1 . .
ATOM 1842 CA    CA    . ALA ALA ALA A A 246 246 . 153.849 95.012  26.056  1.00 8.60
1 . .
ATOM 1843 CB    CB    . ALA ALA ALA A A 246 246 . 153.217 95.163  24.623  1.00 8.53
1 . .
ATOM 1844 C     C     . ALA ALA ALA A A 246 246 . 155.314 94.601  25.988  1.00 8.00
1 . .
ATOM 1845 O     O     . ALA ALA ALA A A 246 246 . 155.835 94.253  24.940  1.00 10.35
1 . .
ATOM 1846 N     N     . ALA ALA ALA A A 247 247 . 155.935 94.491  27.169  1.00 9.11
1 . .
ATOM 1847 CA    CA    . ALA ALA ALA A A 247 247 . 157.388 94.249  27.206  1.00 9.68
1 . .
ATOM 1848 CB    CB    . ALA ALA ALA A A 247 247 . 157.890 94.362  28.663  1.00 10.56
1 . .
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ATOM 1849 C     C     . ALA ALA ALA A A 247 247 . 157.814 92.857  26.636  1.00 9.77
1 . .
ATOM 1850 O     O     . ALA ALA ALA A A 247 247 . 158.996 92.666  26.284  1.00 10.28
1 . .
ATOM 1851 N     N     . SER SER SER A A 248 248 . 156.910 91.875  26.572  1.00 8.71
1 . .
ATOM 1852 CA    CA    . SER SER SER A A 248 248 . 157.236 90.585  25.889  1.00 9.75
1 . .
ATOM 1853 CB    CB    . SER SER SER A A 248 248 . 156.080 89.569  25.964  1.00 9.34
1 . .
ATOM 1854 OG    OG    . SER SER SER A A 248 248 . 155.724 89.367  27.314  1.00 9.58
1 . .
ATOM 1855 C     C     . SER SER SER A A 248 248 . 157.638 90.787  24.469  1.00 9.87
1 . .
ATOM 1856 O     O     . SER SER SER A A 248 248 . 158.386 89.965  23.900  1.00 13.02
1 . .
ATOM 1857 N     N     . GLU GLU GLU A A 249 249 . 157.198 91.917  23.870  1.00 9.63
1 . .
ATOM 1858 CA    CA    . GLU GLU GLU A A 249 249 . 157.508 92.153  22.445  1.00 11.70
1 . .
ATOM 1859 CB    CB    . GLU GLU GLU A A 249 249 . 156.643 93.284  21.885  1.00 11.13
1 . .
ATOM 1860 CG    CG    . GLU GLU GLU A A 249 249 . 155.139 92.805  21.819  1.00 11.39
1 . .
ATOM 1861 CD    CD    . GLU GLU GLU A A 249 249 . 154.886 91.717  20.824  1.00 12.94
1 . .
ATOM 1862 OE1   OE1   . GLU GLU GLU A A 249 249 . 155.131 91.999  19.602  1.00 20.30
1 . .
ATOM 1863 OE2   OE2   . GLU GLU GLU A A 249 249 . 154.438 90.614  21.197  1.00 12.74
1 . .
ATOM 1864 C     C     . GLU GLU GLU A A 249 249 . 158.993 92.503  22.254  1.00 11.77
1 . .
ATOM 1865 O     O     . GLU GLU GLU A A 249 249 . 159.505 92.435  21.107  1.00 12.73
1 . .
ATOM 1866 N     N     . PHE PHE PHE A A 250 250 . 159.656 92.961  23.306  1.00 11.30
1 . .
ATOM 1867 CA    CA    . PHE PHE PHE A A 250 250 . 161.050 93.454  23.150  1.00 12.35
1 . .
ATOM 1868 CB    CB    . PHE PHE PHE A A 250 250 . 161.072 95.002  23.107  1.00 12.04
1 . .
ATOM 1869 CG    CG    . PHE PHE PHE A A 250 250 . 160.484 95.733  24.304  1.00 12.28
1 . .
ATOM 1870 CD1   CD1   . PHE PHE PHE A A 250 250 . 159.252 96.423  24.187  1.00 12.12
1 . .
ATOM 1871 CE1   CE1   . PHE PHE PHE A A 250 250 . 158.732 97.190  25.252  1.00 10.13
1 . .
ATOM 1872 CZ    CZ    . PHE PHE PHE A A 250 250 . 159.441 97.306  26.509  1.00 10.72
1 . .
ATOM 1873 CE2   CE2   . PHE PHE PHE A A 250 250 . 160.644 96.581  26.619  1.00 13.20
1 . .
ATOM 1874 CD2   CD2   . PHE PHE PHE A A 250 250 . 161.186 95.870  25.514  1.00 13.39
1 . .
ATOM 1875 C     C     . PHE PHE PHE A A 250 250 . 162.000 92.878  24.173  1.00 13.03
1 . .
ATOM 1876 O     O     . PHE PHE PHE A A 250 250 . 163.129 93.393  24.385  1.00 13.93
1 . .
ATOM 1877 N     N     . TYR TYR TYR A A 251 251 . 161.583 91.759  24.766  1.00 14.04
1 . .
ATOM 1878 CA    CA    . TYR TYR TYR A A 251 251 . 162.460 90.990  25.682  1.00 12.93
1 . .
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ATOM 1879 CB    CB    . TYR TYR TYR A A 251 251 . 161.574 90.015  26.469  1.00 13.55
1 . .
ATOM 1880 CG    CG    . TYR TYR TYR A A 251 251 . 162.338 89.195  27.439  1.00 14.66
1 . .
ATOM 1881 CD1   CD1   . TYR TYR TYR A A 251 251 . 162.974 89.791  28.530  1.00 14.57
1 . .
ATOM 1882 CE1   CE1   . TYR TYR TYR A A 251 251 . 163.654 89.031  29.536  1.00 14.63
1 . .
ATOM 1883 CZ    CZ    . TYR TYR TYR A A 251 251 . 163.659 87.672  29.417  1.00 17.97
1 . .
ATOM 1884 OH    OH    . TYR TYR TYR A A 251 251 . 164.318 86.906  30.403  1.00 25.21
1 . .
ATOM 1885 CE2   CE2   . TYR TYR TYR A A 251 251 . 163.015 87.034  28.354  1.00 19.05
1 . .
ATOM 1886 CD2   CD2   . TYR TYR TYR A A 251 251 . 162.315 87.803  27.365  1.00 15.92
1 . .
ATOM 1887 C     C     . TYR TYR TYR A A 251 251 . 163.476 90.220  24.821  1.00 15.09
1 . .
ATOM 1888 O     O     . TYR TYR TYR A A 251 251 . 163.055 89.480  23.896  1.00 14.98
1 . .
ATOM 1889 N     N     . ARG ARG ARG A A 252 252 . 164.768 90.402  25.137  1.00 16.08
1 . .
ATOM 1890 CA    CA    . ARG ARG ARG A A 252 252 . 165.816 89.727  24.346  1.00 18.73
1 . .
ATOM 1891 CB    CB    . ARG ARG ARG A A 252 252 . 166.441 90.700  23.351  1.00 18.96
1 . .
ATOM 1892 CG    CG    . ARG ARG ARG A A 252 252 . 165.514 91.396  22.426  1.00 18.57
1 . .
ATOM 1893 CD    CD    . ARG ARG ARG A A 252 252 . 165.096 90.513  21.262  1.00 21.13
1 . .
ATOM 1894 NE    NE    . ARG ARG ARG A A 252 252 . 164.222 91.286  20.331  1.00 21.33
1 . .
ATOM 1895 CZ    CZ    . ARG ARG ARG A A 252 252 . 162.873 91.306  20.426  1.00 21.18
1 . .
ATOM 1896 NH1   NH1   . ARG ARG ARG A A 252 252 . 162.258 90.562  21.362  1.00 18.12
1 . .
ATOM 1897 NH2   NH2   . ARG ARG ARG A A 252 252 . 162.133 92.058  19.591  1.00 20.19
1 . .
ATOM 1898 C     C     . ARG ARG ARG A A 252 252 . 166.940 89.247  25.270  1.00 21.42
1 . .
ATOM 1899 O     O     . ARG ARG ARG A A 252 252 . 167.593 90.084  25.911  1.00 23.01
1 . .
ATOM 1900 N     N     . ASP ASP ASP A A 253 253 . 167.150 87.948  25.279  1.00 25.90
1 . .
ATOM 1901 CA    CA    . ASP ASP ASP A A 253 253 . 168.239 87.306  26.106  1.00 28.35
1 . .
ATOM 1902 CB    CB    . ASP ASP ASP A A 253 253 . 169.614 87.150  25.378  1.00 29.83
1 . .
ATOM 1903 CG    CG    . ASP ASP ASP A A 253 253 . 170.088 88.401  24.585  1.00 34.28
1 . .
ATOM 1904 OD1   OD1   . ASP ASP ASP A A 253 253 . 170.305 89.495  25.203  1.00 37.09
1 . .
ATOM 1905 OD2   OD2   . ASP ASP ASP A A 253 253 . 170.321 88.234  23.333  1.00 37.88
1 . .
ATOM 1906 C     C     . ASP ASP ASP A A 253 253 . 168.394 87.917  27.530  1.00 27.83
1 . .
ATOM 1907 O     O     . ASP ASP ASP A A 253 253 . 169.467 88.483  27.919  1.00 29.12
1 . .
ATOM 1908 N     N     . GLY GLY GLY A A 254 254 . 167.277 87.869  28.258  1.00 23.99
1 . .
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ATOM 1909 CA    CA    . GLY GLY GLY A A 254 254 . 167.231 88.396  29.612  1.00 19.93
1 . .
ATOM 1910 C     C     . GLY GLY GLY A A 254 254 . 167.328 89.915  29.796  1.00 17.92
1 . .
ATOM 1911 O     O     . GLY GLY GLY A A 254 254 . 167.441 90.367  30.920  1.00 18.83
1 . .
ATOM 1912 N     N     . LYS LYS LYS A A 255 255 . 167.356 90.680  28.695  1.00 16.59
1 . .
ATOM 1913 CA    CA    . LYS LYS LYS A A 255 255 . 167.291 92.133  28.784  1.00 17.08
1 . .
ATOM 1914 CB    CB    . LYS LYS LYS A A 255 255 . 168.640 92.820  28.433  1.00 18.61
1 . .
ATOM 1915 CG    CG    . LYS LYS LYS A A 255 255 . 169.818 92.473  29.482  1.00 21.06
1 . .
ATOM 1916 CD    CD    . LYS LYS LYS A A 255 255 . 171.181 92.926  28.908  1.00 29.04
1 . .
ATOM 1917 CE    CE    . LYS LYS LYS A A 255 255 . 172.030 93.433  30.045  1.00 33.55
1 . .
ATOM 1918 NZ    NZ    . LYS LYS LYS A A 255 255 . 173.456 93.603  29.652  1.00 35.31
1 . .
ATOM 1919 C     C     . LYS LYS LYS A A 255 255 . 166.101 92.631  27.943  1.00 15.72
1 . .
ATOM 1920 O     O     . LYS LYS LYS A A 255 255 . 165.365 91.849  27.355  1.00 17.28
1 . .
ATOM 1921 N     N     . TYR TYR TYR A A 256 256 . 166.046 93.942  27.828  1.00 15.38
1 . .
ATOM 1922 CA    CA    . TYR TYR TYR A A 256 256 . 164.929 94.552  27.101  1.00 15.01
1 . .
ATOM 1923 CB    CB    . TYR TYR TYR A A 256 256 . 164.066 95.256  28.135  1.00 15.18
1 . .
ATOM 1924 CG    CG    . TYR TYR TYR A A 256 256 . 163.274 94.250  28.980  1.00 13.80
1 . .
ATOM 1925 CD1   CD1   . TYR TYR TYR A A 256 256 . 162.010 93.736  28.571  1.00 12.64
1 . .
ATOM 1926 CE1   CE1   . TYR TYR TYR A A 256 256 . 161.331 92.784  29.362  1.00 14.11
1 . .
ATOM 1927 CZ    CZ    . TYR TYR TYR A A 256 256 . 161.937 92.364  30.595  1.00 10.11
1 . .
ATOM 1928 OH    OH    . TYR TYR TYR A A 256 256 . 161.240 91.454  31.375  1.00 10.42
1 . .
ATOM 1929 CE2   CE2   . TYR TYR TYR A A 256 256 . 163.167 92.883  31.002  1.00 12.95
1 . .
ATOM 1930 CD2   CD2   . TYR TYR TYR A A 256 256 . 163.792 93.813  30.224  1.00 13.73
1 . .
ATOM 1931 C     C     . TYR TYR TYR A A 256 256 . 165.434 95.573  26.057  1.00 14.77
1 . .
ATOM 1932 O     O     . TYR TYR TYR A A 256 256 . 166.298 96.383  26.373  1.00 16.83
1 . .
ATOM 1933 N     N     . ASP ASP ASP A A 257 257 . 164.833 95.588  24.872  1.00 14.11
1 . .
ATOM 1934 CA    CA    . ASP ASP ASP A A 257 257 . 165.319 96.435  23.783  1.00 14.74
1 . .
ATOM 1935 CB    CB    . ASP ASP ASP A A 257 257 . 165.492 95.552  22.544  1.00 14.23
1 . .
ATOM 1936 CG    CG    . ASP ASP ASP A A 257 257 . 166.014 96.353  21.337  1.00 12.77
1 . .
ATOM 1937 OD1   OD1   . ASP ASP ASP A A 257 257 . 166.326 97.573  21.539  1.00 15.08
1 . .
ATOM 1938 OD2   OD2   . ASP ASP ASP A A 257 257 . 166.146 95.733  20.252  1.00 14.82
1 . .
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ATOM 1939 C     C     . ASP ASP ASP A A 257 257 . 164.281 97.544  23.472  1.00 13.03
1 . .
ATOM 1940 O     O     . ASP ASP ASP A A 257 257 . 163.247 97.297  22.775  1.00 13.61
1 . .
ATOM 1941 N     N     . LEU LEU LEU A A 258 258 . 164.585 98.728  23.985  1.00 12.73
1 . .
ATOM 1942 CA    CA    . LEU LEU LEU A A 258 258 . 163.733 99.897  23.734  1.00 12.83
1 . .
ATOM 1943 CB    CB    . LEU LEU LEU A A 258 258 . 163.811 100.986 24.779  1.00 13.93
1 . .
ATOM 1944 CG    CG    . LEU LEU LEU A A 258 258 . 163.326 100.506 26.181  1.00 14.33
1 . .
ATOM 1945 CD1   CD1   . LEU LEU LEU A A 258 258 . 163.380 101.719 27.156  1.00 16.95
1 . .
ATOM 1946 CD2   CD2   . LEU LEU LEU A A 258 258 . 161.852 99.999  26.136  1.00 16.09
1 . .
ATOM 1947 C     C     . LEU LEU LEU A A 258 258 . 163.871 100.490 22.319  1.00 13.21
1 . .
ATOM 1948 O     O     . LEU LEU LEU A A 258 258 . 163.223 101.511 22.002  1.00 13.24
1 . .
ATOM 1949 N     N     . ASP ASP ASP A A 259 259 . 164.600 99.832  21.438  1.00 15.46
1 . .
ATOM 1950 CA    CA    . ASP ASP ASP A A 259 259 . 164.656 100.313 20.062  1.00 15.07
1 . .
ATOM 1951 CB    CB    . ASP ASP ASP A A 259 259 . 165.930 101.144 19.865  1.00 14.90
1 . .
ATOM 1952 CG    CG    . ASP ASP ASP A A 259 259 . 165.955 101.966 18.583  1.00 16.92
1 . .
ATOM 1953 OD1   OD1   . ASP ASP ASP A A 259 259 . 164.978 102.035 17.815  1.00 17.73
1 . .
ATOM 1954 OD2   OD2   . ASP ASP ASP A A 259 259 . 167.083 102.431 18.263  1.00 24.54
1 . .
ATOM 1955 C     C     . ASP ASP ASP A A 259 259 . 164.510 99.080  19.149  1.00 14.22
1 . .
ATOM 1956 O     O     . ASP ASP ASP A A 259 259 . 165.214 98.912  18.156  1.00 16.33
1 . .
ATOM 1957 N     N     . PHE PHE PHE A A 260 260 . 163.557 98.173  19.494  1.00 15.23
1 . .
ATOM 1958 CA    CA    . PHE PHE PHE A A 260 260 . 163.513 96.843  18.890  1.00 14.48
1 . .
ATOM 1959 CB    CB    . PHE PHE PHE A A 260 260 . 162.651 95.888  19.756  1.00 14.34
1 . .
ATOM 1960 CG    CG    . PHE PHE PHE A A 260 260 . 161.146 96.044  19.608  1.00 13.70
1 . .
ATOM 1961 CD1   CD1   . PHE PHE PHE A A 260 260 . 160.439 96.993  20.369  1.00 12.39
1 . .
ATOM 1962 CE1   CE1   . PHE PHE PHE A A 260 260 . 159.074 97.117  20.234  1.00 13.40
1 . .
ATOM 1963 CZ    CZ    . PHE PHE PHE A A 260 260 . 158.365 96.267  19.312  1.00 12.35
1 . .
ATOM 1964 CE2   CE2   . PHE PHE PHE A A 260 260 . 159.049 95.356  18.521  1.00 13.62
1 . .
ATOM 1965 CD2   CD2   . PHE PHE PHE A A 260 260 . 160.486 95.260  18.668  1.00 12.67
1 . .
ATOM 1966 C     C     . PHE PHE PHE A A 260 260 . 163.072 96.841  17.405  1.00 15.97
1 . .
ATOM 1967 O     O     . PHE PHE PHE A A 260 260 . 163.118 95.806  16.720  1.00 16.82
1 . .
ATOM 1968 N     N     . LYS LYS LYS A A 261 261 . 162.558 97.990  16.941  1.00 16.91
1 . .
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ATOM 1969 CA    CA    . LYS LYS LYS A A 261 261 . 162.179 98.101  15.567  1.00 16.32
1 . .
ATOM 1970 CB    CB    . LYS LYS LYS A A 261 261 . 160.875 98.929  15.440  1.00 16.32
1 . .
ATOM 1971 CG    CG    . LYS LYS LYS A A 261 261 . 159.680 98.109  15.949  1.00 14.67
1 . .
ATOM 1972 CD    CD    . LYS LYS LYS A A 261 261 . 158.304 98.947  15.951  1.00 11.16
1 . .
ATOM 1973 CE    CE    . LYS LYS LYS A A 261 261 . 158.341 99.936  17.156  1.00 11.05
1 . .
ATOM 1974 NZ    NZ    . LYS LYS LYS A A 261 261 . 157.119 100.815 17.046  1.00 11.04
1 . .
ATOM 1975 C     C     . LYS LYS LYS A A 261 261 . 163.317 98.700  14.711  1.00 18.08
1 . .
ATOM 1976 O     O     . LYS LYS LYS A A 261 261 . 163.103 98.886  13.498  1.00 20.01
1 . .
ATOM 1977 N     N     . SER SER SER A A 262 262 . 164.491 98.947  15.321  1.00 18.39
1 . .
ATOM 1978 CA    CA    . SER SER SER A A 262 262 . 165.723 99.344  14.614  1.00 19.69
1 . .
ATOM 1979 CB    CB    . SER SER SER A A 262 262 . 166.471 100.428 15.391  1.00 19.96
1 . .
ATOM 1980 OG    OG    . SER SER SER A A 262 262 . 165.737 101.677 15.303  1.00 23.37
1 . .
ATOM 1981 C     C     . SER SER SER A A 262 262 . 166.587 98.097  14.417  1.00 20.84
1 . .
ATOM 1982 O     O     . SER SER SER A A 262 262 . 166.460 97.118  15.111  1.00 20.38
1 . .
ATOM 1983 N     N     . PRO PRO PRO A A 263 263 . 167.434 98.084  13.382  1.00 22.14
1 . .
ATOM 1984 CA    CA    . PRO PRO PRO A A 263 263 . 168.257 96.850  13.203  1.00 22.85
1 . .
ATOM 1985 CB    CB    . PRO PRO PRO A A 263 263 . 169.291 97.249  12.115  1.00 21.88
1 . .
ATOM 1986 CG    CG    . PRO PRO PRO A A 263 263 . 168.701 98.514  11.474  1.00 25.65
1 . .
ATOM 1987 CD    CD    . PRO PRO PRO A A 263 263 . 167.750 99.161  12.420  1.00 23.66
1 . .
ATOM 1988 C     C     . PRO PRO PRO A A 263 263 . 169.001 96.454  14.495  1.00 22.15
1 . .
ATOM 1989 O     O     . PRO PRO PRO A A 263 263 . 169.563 97.304  15.198  1.00 22.25
1 . .
ATOM 1990 N     N     . THR THR THR A A 264 264 . 168.984 95.152  14.775  1.00 24.47
1 . .
ATOM 1991 CA    CA    . THR THR THR A A 264 264 . 169.461 94.597  16.050  1.00 26.19
1 . .
ATOM 1992 CB    CB    . THR THR THR A A 264 264 . 169.415 93.081  15.997  1.00 26.47
1 . .
ATOM 1993 OG1   OG1   . THR THR THR A A 264 264 . 168.087 92.656  15.652  1.00 27.67
1 . .
ATOM 1994 CG2   CG2   . THR THR THR A A 264 264 . 169.868 92.442  17.329  1.00 26.78
1 . .
ATOM 1995 C     C     . THR THR THR A A 264 264 . 170.881 95.034  16.433  1.00 26.21
1 . .
ATOM 1996 O     O     . THR THR THR A A 264 264 . 171.792 94.937  15.616  1.00 26.00
1 . .
ATOM 1997 N     N     . ASP ASP ASP A A 265 265 . 171.027 95.547  17.650  1.00 26.11
1 . .
ATOM 1998 CA    CA    . ASP ASP ASP A A 265 265 . 172.256 96.011  18.229  1.00 27.74
1 . .
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ATOM 1999 CB    CB    . ASP ASP ASP A A 265 265 . 172.458 97.500  17.957  1.00 28.58
1 . .
ATOM 2000 CG    CG    . ASP ASP ASP A A 265 265 . 173.757 98.047  18.586  1.00 32.21
1 . .
ATOM 2001 OD1   OD1   . ASP ASP ASP A A 265 265 . 174.501 97.296  19.255  1.00 29.83
1 . .
ATOM 2002 OD2   OD2   . ASP ASP ASP A A 265 265 . 174.048 99.257  18.404  1.00 39.13
1 . .
ATOM 2003 C     C     . ASP ASP ASP A A 265 265 . 172.142 95.768  19.739  1.00 27.91
1 . .
ATOM 2004 O     O     . ASP ASP ASP A A 265 265 . 171.595 96.612  20.476  1.00 26.50
1 . .
ATOM 2005 N     N     . PRO PRO PRO A A 266 266 . 172.630 94.604  20.214  1.00 27.24
1 . .
ATOM 2006 CA    CA    . PRO PRO PRO A A 266 266 . 172.595 94.298  21.643  1.00 27.04
1 . .
ATOM 2007 CB    CB    . PRO PRO PRO A A 266 266 . 173.288 92.935  21.712  1.00 26.75
1 . .
ATOM 2008 CG    CG    . PRO PRO PRO A A 266 266 . 173.102 92.320  20.362  1.00 28.13
1 . .
ATOM 2009 CD    CD    . PRO PRO PRO A A 266 266 . 173.189 93.475  19.417  1.00 26.26
1 . .
ATOM 2010 C     C     . PRO PRO PRO A A 266 266 . 173.238 95.308  22.602  1.00 26.89
1 . .
ATOM 2011 O     O     . PRO PRO PRO A A 266 266 . 172.857 95.344  23.780  1.00 25.81
1 . .
ATOM 2012 N     N     . SER SER SER A A 267 267 . 174.182 96.158  22.142  1.00 25.92
1 . .
ATOM 2013 CA    CA    . SER SER SER A A 267 267 . 174.729 97.191  23.040  1.00 28.22
1 . .
ATOM 2014 CB    CB    . SER SER SER A A 267 267 . 175.893 97.962  22.380  1.00 30.04
1 . .
ATOM 2015 OG    OG    . SER SER SER A A 267 267 . 175.413 98.815  21.355  1.00 30.88
1 . .
ATOM 2016 C     C     . SER SER SER A A 267 267 . 173.683 98.189  23.607  1.00 27.60
1 . .
ATOM 2017 O     O     . SER SER SER A A 267 267 . 173.965 98.852  24.586  1.00 27.46
1 . .
ATOM 2018 N     N     . ARG ARG ARG A A 268 268 . 172.492 98.329  22.979  1.00 24.10
1 . .
ATOM 2019 CA    CA    . ARG ARG ARG A A 268 268 . 171.478 99.286  23.506  1.00 22.93
1 . .
ATOM 2020 CB    CB    . ARG ARG ARG A A 268 268 . 170.613 99.807  22.360  1.00 23.56
1 . .
ATOM 2021 CG    CG    . ARG ARG ARG A A 268 268 . 169.896 98.593  21.752  1.00 24.22
1 . .
ATOM 2022 CD    CD    . ARG ARG ARG A A 268 268 . 168.577 98.668  21.063  1.00 32.33
1 . .
ATOM 2023 NE    NE    . ARG ARG ARG A A 268 268 . 168.833 98.884  19.712  1.00 26.61
1 . .
ATOM 2024 CZ    CZ    . ARG ARG ARG A A 268 268 . 168.478 98.244  18.557  1.00 23.68
1 . .
ATOM 2025 NH1   NH1   . ARG ARG ARG A A 268 268 . 167.769 97.137  18.375  1.00 20.59
1 . .
ATOM 2026 NH2   NH2   . ARG ARG ARG A A 268 268 . 168.981 98.785  17.450  1.00 22.47
1 . .
ATOM 2027 C     C     . ARG ARG ARG A A 268 268 . 170.545 98.594  24.529  1.00 21.59
1 . .
ATOM 2028 O     O     . ARG ARG ARG A A 268 268 . 169.759 99.303  25.195  1.00 21.01
1 . .
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ATOM 2029 N     N     . TYR TYR TYR A A 269 269 . 170.643 97.259  24.685  1.00 19.92
1 . .
ATOM 2030 CA    CA    . TYR TYR TYR A A 269 269 . 169.633 96.568  25.538  1.00 20.17
1 . .
ATOM 2031 CB    CB    . TYR TYR TYR A A 269 269 . 169.678 95.012  25.475  1.00 18.62
1 . .
ATOM 2032 CG    CG    . TYR TYR TYR A A 269 269 . 169.546 94.349  24.153  1.00 20.13
1 . .
ATOM 2033 CD1   CD1   . TYR TYR TYR A A 269 269 . 169.096 95.053  23.032  1.00 17.24
1 . .
ATOM 2034 CE1   CE1   . TYR TYR TYR A A 269 269 . 168.882 94.430  21.826  1.00 17.92
1 . .
ATOM 2035 CZ    CZ    . TYR TYR TYR A A 269 269 . 169.065 93.051  21.693  1.00 18.99
1 . .
ATOM 2036 OH    OH    . TYR TYR TYR A A 269 269 . 168.880 92.412  20.473  1.00 24.03
1 . .
ATOM 2037 CE2   CE2   . TYR TYR TYR A A 269 269 . 169.516 92.306  22.822  1.00 20.20
1 . .
ATOM 2038 CD2   CD2   . TYR TYR TYR A A 269 269 . 169.734 92.956  24.034  1.00 19.35
1 . .
ATOM 2039 C     C     . TYR TYR TYR A A 269 269 . 169.855 97.029  26.960  1.00 18.88
1 . .
ATOM 2040 O     O     . TYR TYR TYR A A 269 269 . 171.022 97.321  27.399  1.00 21.63
1 . .
ATOM 2041 N     N     . ILE ILE ILE A A 270 270 . 168.791 97.040  27.736  1.00 16.28
1 . .
ATOM 2042 CA    CA    . ILE ILE ILE A A 270 270 . 168.807 97.438  29.128  1.00 16.17
1 . .
ATOM 2043 CB    CB    . ILE ILE ILE A A 270 270 . 168.073 98.801  29.418  1.00 16.09
1 . .
ATOM 2044 CG1   CG1   . ILE ILE ILE A A 270 270 . 166.541 98.711  29.109  1.00 17.09
1 . .
ATOM 2045 CD    CD    . ILE ILE ILE A A 270 270 . 165.696 99.871  29.646  1.00 18.23
1 . .
ATOM 2046 CG2   CG2   . ILE ILE ILE A A 270 270 . 168.656 99.944  28.606  1.00 17.51
1 . .
ATOM 2047 C     C     . ILE ILE ILE A A 270 270 . 168.295 96.334  30.050  1.00 17.78
1 . .
ATOM 2048 O     O     . ILE ILE ILE A A 270 270 . 167.513 95.446  29.647  1.00 19.08
1 . .
ATOM 2049 N     N     . THR THR THR A A 271 271 . 168.731 96.375  31.291  1.00 16.12
1 . .
ATOM 2050 CA    CA    . THR THR THR A A 271 271 . 168.209 95.423  32.289  1.00 17.19
1 . .
ATOM 2051 CB    CB    . THR THR THR A A 271 271 . 169.111 95.381  33.554  1.00 17.62
1 . .
ATOM 2052 OG1   OG1   . THR THR THR A A 271 271 . 169.071 96.642  34.250  1.00 18.37
1 . .
ATOM 2053 CG2   CG2   . THR THR THR A A 271 271 . 170.598 95.052  33.146  1.00 19.50
1 . .
ATOM 2054 C     C     . THR THR THR A A 271 271 . 166.792 95.780  32.736  1.00 14.63
1 . .
ATOM 2055 O     O     . THR THR THR A A 271 271 . 166.370 96.952  32.691  1.00 16.31
1 . .
ATOM 2056 N     N     . GLY GLY GLY A A 272 272 . 166.081 94.756  33.184  1.00 14.19
1 . .
ATOM 2057 CA    CA    . GLY GLY GLY A A 272 272 . 164.787 94.947  33.886  1.00 14.13
1 . .
ATOM 2058 C     C     . GLY GLY GLY A A 272 272 . 164.903 96.003  34.988  1.00 13.21
1 . .
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ATOM 2059 O     O     . GLY GLY GLY A A 272 272 . 163.918 96.726  35.305  1.00 14.03
1 . .
ATOM 2060 N     N     . ASP ASP ASP A A 273 273 . 166.047 96.079  35.710  1.00 13.90
1 . .
ATOM 2061 CA    CA    . ASP ASP ASP A A 273 273 . 166.201 97.083  36.758  1.00 14.04
1 . .
ATOM 2062 CB    CB    . ASP ASP ASP A A 273 273 . 167.480 96.803  37.613  1.00 14.90
1 . .
ATOM 2063 CG    CG    . ASP ASP ASP A A 273 273 . 167.149 95.854  38.657  1.00 22.74
1 . .
ATOM 2064 OD1   OD1   . ASP ASP ASP A A 273 273 . 166.996 96.346  39.799  1.00 35.27
1 . .
ATOM 2065 OD2   OD2   . ASP ASP ASP A A 273 273 . 166.890 94.645  38.276  1.00 31.60
1 . .
ATOM 2066 C     C     . ASP ASP ASP A A 273 273 . 166.206 98.508  36.219  1.00 14.80
1 . .
ATOM 2067 O     O     . ASP ASP ASP A A 273 273 . 165.575 99.384  36.849  1.00 15.62
1 . .
ATOM 2068 N     N     . GLN GLN GLN A A 274 274 . 166.889 98.681  35.097  1.00 15.50
1 . .
ATOM 2069 CA    CA    . GLN GLN GLN A A 274 274 . 166.955 100.007 34.430  1.00 17.73
1 . .
ATOM 2070 CB    CB    . GLN GLN GLN A A 274 274 . 167.882 99.960  33.231  1.00 18.82
1 . .
ATOM 2071 CG    CG    . GLN GLN GLN A A 274 274 . 169.271 99.604  33.556  1.00 26.14
1 . .
ATOM 2072 CD    CD    . GLN GLN GLN A A 274 274 . 170.161 99.615  32.342  1.00 28.10
1 . .
ATOM 2073 OE1   OE1   . GLN GLN GLN A A 274 274 . 170.718 98.570  31.908  1.00 26.49
1 . .
ATOM 2074 NE2   NE2   . GLN GLN GLN A A 274 274 . 170.352 100.804 31.813  1.00 26.35
1 . .
ATOM 2075 C     C     . GLN GLN GLN A A 274 274 . 165.504 100.366 33.981  1.00 15.78
1 . .
ATOM 2076 O     O     . GLN GLN GLN A A 274 274 . 165.048 101.490 34.149  1.00 16.44
1 . .
ATOM 2077 N     N     . LEU LEU LEU A A 275 275 . 164.834 99.367  33.443  1.00 13.25
1 . .
ATOM 2078 CA    CA    . LEU LEU LEU A A 275 275 . 163.499 99.579  32.897  1.00 11.95
1 . .
ATOM 2079 CB    CB    . LEU LEU LEU A A 275 275 . 163.118 98.350  32.089  1.00 12.02
1 . .
ATOM 2080 CG    CG    . LEU LEU LEU A A 275 275 . 161.694 98.265  31.488  1.00 12.85
1 . .
ATOM 2081 CD1   CD1   . LEU LEU LEU A A 275 275 . 161.555 99.459  30.487  1.00 16.63
1 . .
ATOM 2082 CD2   CD2   . LEU LEU LEU A A 275 275 . 161.492 96.912  30.807  1.00 14.53
1 . .
ATOM 2083 C     C     . LEU LEU LEU A A 275 275 . 162.519 99.914  34.012  1.00 11.78
1 . .
ATOM 2084 O     O     . LEU LEU LEU A A 275 275 . 161.734 100.890 33.885  1.00 11.93
1 . .
ATOM 2085 N     N     . GLY GLY GLY A A 276 276 . 162.586 99.231  35.140  1.00 11.34
1 . .
ATOM 2086 CA    CA    . GLY GLY GLY A A 276 276 . 161.819 99.623  36.300  1.00 10.81
1 . .
ATOM 2087 C     C     . GLY GLY GLY A A 276 276 . 162.062 100.978 36.852  1.00 12.71
1 . .
ATOM 2088 O     O     . GLY GLY GLY A A 276 276 . 161.169 101.679 37.235  1.00 14.08
1 . .
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ATOM 2089 N     N     . ALA ALA ALA A A 277 277 . 163.326 101.386 36.874  1.00 14.16
1 . .
ATOM 2090 CA    CA    . ALA ALA ALA A A 277 277 . 163.671 102.740 37.268  1.00 13.97
1 . .
ATOM 2091 CB    CB    . ALA ALA ALA A A 277 277 . 165.200 102.830 37.283  1.00 14.05
1 . .
ATOM 2092 C     C     . ALA ALA ALA A A 277 277 . 163.046 103.769 36.298  1.00 12.87
1 . .
ATOM 2093 O     O     . ALA ALA ALA A A 277 277 . 162.626 104.845 36.735  1.00 14.15
1 . .
ATOM 2094 N     N     . LEU LEU LEU A A 278 278 . 162.982 103.436 35.017  1.00 13.70
1 . .
ATOM 2095 CA    CA    . LEU LEU LEU A A 278 278 . 162.334 104.300 34.047  1.00 13.07
1 . .
ATOM 2096 CB    CB    . LEU LEU LEU A A 278 278 . 162.583 103.740 32.671  1.00 14.71
1 . .
ATOM 2097 CG    CG    . LEU LEU LEU A A 278 278 . 162.015 104.597 31.579  1.00 17.09
1 . .
ATOM 2098 CD1   CD1   . LEU LEU LEU A A 278 278 . 162.713 106.003 31.621  1.00 23.03
1 . .
ATOM 2099 CD2   CD2   . LEU LEU LEU A A 278 278 . 162.343 103.909 30.223  1.00 20.52
1 . .
ATOM 2100 C     C     . LEU LEU LEU A A 278 278 . 160.869 104.418 34.398  1.00 11.70
1 . .
ATOM 2101 O     O     . LEU LEU LEU A A 278 278 . 160.303 105.564 34.449  1.00 10.82
1 . .
ATOM 2102 N     N     . TYR TYR TYR A A 279 279 . 160.216 103.272 34.638  1.00 10.71
1 . .
ATOM 2103 CA    CA    . TYR TYR TYR A A 279 279 . 158.784 103.390 35.048  1.00 10.49
1 . .
ATOM 2104 CB    CB    . TYR TYR TYR A A 279 279 . 158.161 102.017 35.317  1.00 10.48
1 . .
ATOM 2105 CG    CG    . TYR TYR TYR A A 279 279 . 158.249 101.041 34.204  1.00 9.97
1 . .
ATOM 2106 CD1   CD1   . TYR TYR TYR A A 279 279 . 158.078 101.449 32.838  1.00 11.32
1 . .
ATOM 2107 CE1   CE1   . TYR TYR TYR A A 279 279 . 158.180 100.511 31.777  1.00 9.73
1 . .
ATOM 2108 CZ    CZ    . TYR TYR TYR A A 279 279 . 158.322 99.162  32.086  1.00 8.75
1 . .
ATOM 2109 OH    OH    . TYR TYR TYR A A 279 279 . 158.422 98.272  31.063  1.00 10.76
1 . .
ATOM 2110 CE2   CE2   . TYR TYR TYR A A 279 279 . 158.546 98.761  33.439  1.00 9.86
1 . .
ATOM 2111 CD2   CD2   . TYR TYR TYR A A 279 279 . 158.486 99.708  34.482  1.00 10.51
1 . .
ATOM 2112 C     C     . TYR TYR TYR A A 279 279 . 158.611 104.242 36.304  1.00 12.29
1 . .
ATOM 2113 O     O     . TYR TYR TYR A A 279 279 . 157.634 104.997 36.417  1.00 10.90
1 . .
ATOM 2114 N     N     . GLN GLN GLN A A 280 280 . 159.506 104.092 37.294  1.00 11.03
1 . .
ATOM 2115 CA    CA    . GLN GLN GLN A A 280 280 . 159.368 104.938 38.466  1.00 11.58
1 . .
ATOM 2116 CB    CB    . GLN GLN GLN A A 280 280 . 160.432 104.570 39.528  1.00 13.24
1 . .
ATOM 2117 CG    CG    . GLN GLN GLN A A 280 280 . 160.315 103.170 40.069  1.00 18.81
1 . .
ATOM 2118 CD    CD    . GLN GLN GLN A A 280 280 . 159.270 103.049 41.115  1.00 22.82
1 . .
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ATOM 2119 OE1   OE1   . GLN GLN GLN A A 280 280 . 158.623 104.049 41.480  1.00 26.67
1 . .
ATOM 2120 NE2   NE2   . GLN GLN GLN A A 280 280 . 159.069 101.832 41.636  1.00 24.07
1 . .
ATOM 2121 C     C     . GLN GLN GLN A A 280 280 . 159.507 106.420 38.160  1.00 13.42
1 . .
ATOM 2122 O     O     . GLN GLN GLN A A 280 280 . 158.748 107.263 38.705  1.00 11.97
1 . .
ATOM 2123 N     N     . ASP ASP ASP A A 281 281 . 160.363 106.734 37.204  1.00 11.31
1 . .
ATOM 2124 CA    CA    . ASP ASP ASP A A 281 281 . 160.464 108.163 36.737  1.00 12.74
1 . .
ATOM 2125 CB    CB    . ASP ASP ASP A A 281 281 . 161.621 108.342 35.748  1.00 14.42
1 . .
ATOM 2126 CG    CG    . ASP ASP ASP A A 281 281 . 162.989 108.219 36.359  1.00 19.64
1 . .
ATOM 2127 OD1   OD1   . ASP ASP ASP A A 281 281 . 163.144 108.288 37.613  1.00 24.19
1 . .
ATOM 2128 OD2   OD2   . ASP ASP ASP A A 281 281 . 163.895 108.109 35.495  1.00 25.12
1 . .
ATOM 2129 C     C     . ASP ASP ASP A A 281 281 . 159.154 108.598 36.091  1.00 11.17
1 . .
ATOM 2130 O     O     . ASP ASP ASP A A 281 281 . 158.720 109.699 36.285  1.00 13.11
1 . .
ATOM 2131 N     N     . PHE PHE PHE A A 282 282 . 158.549 107.736 35.275  1.00 9.89
1 . .
ATOM 2132 CA    CA    . PHE PHE PHE A A 282 282 . 157.286 108.092 34.641  1.00 10.22
1 . .
ATOM 2133 CB    CB    . PHE PHE PHE A A 282 282 . 156.820 106.948 33.693  1.00 12.00
1 . .
ATOM 2134 CG    CG    . PHE PHE PHE A A 282 282 . 157.721 106.730 32.494  1.00 10.84
1 . .
ATOM 2135 CD1   CD1   . PHE PHE PHE A A 282 282 . 157.544 105.549 31.741  1.00 11.59
1 . .
ATOM 2136 CE1   CE1   . PHE PHE PHE A A 282 282 . 158.325 105.315 30.589  1.00 14.34
1 . .
ATOM 2137 CZ    CZ    . PHE PHE PHE A A 282 282 . 159.294 106.231 30.194  1.00 15.30
1 . .
ATOM 2138 CE2   CE2   . PHE PHE PHE A A 282 282 . 159.545 107.387 30.974  1.00 14.56
1 . .
ATOM 2139 CD2   CD2   . PHE PHE PHE A A 282 282 . 158.726 107.667 32.112  1.00 11.56
1 . .
ATOM 2140 C     C     . PHE PHE PHE A A 282 282 . 156.195 108.333 35.641  1.00 10.53
1 . .
ATOM 2141 O     O     . PHE PHE PHE A A 282 282 . 155.425 109.276 35.485  1.00 11.77
1 . .
ATOM 2142 N     N     . VAL VAL VAL A A 283 283 . 156.142 107.493 36.671  1.00 10.64
1 . .
ATOM 2143 CA    CA    . VAL VAL VAL A A 283 283 . 155.109 107.639 37.687  1.00 11.09
1 . .
ATOM 2144 CB    CB    . VAL VAL VAL A A 283 283 . 155.085 106.409 38.602  1.00 11.55
1 . .
ATOM 2145 CG1   CG1   . VAL VAL VAL A A 283 283 . 154.158 106.597 39.771  1.00 13.98
1 . .
ATOM 2146 CG2   CG2   . VAL VAL VAL A A 283 283 . 154.589 105.165 37.759  1.00 12.60
1 . .
ATOM 2147 C     C     . VAL VAL VAL A A 283 283 . 155.325 108.953 38.490  1.00 11.94
1 . .
ATOM 2148 O     O     . VAL VAL VAL A A 283 283 . 154.365 109.574 38.963  1.00 14.38
1 . .
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ATOM 2149 N     N     . ARG ARG ARG A A 284 284 . 156.598 109.361 38.652  1.00 11.79
1 . .
ATOM 2150 CA    CA    . ARG ARG ARG A A 284 284 . 156.895 110.600 39.348  1.00 14.42
1 . .
ATOM 2151 CB    CB    . ARG ARG ARG A A 284 284 . 158.275 110.523 39.938  1.00 16.87
1 . .
ATOM 2152 CG    CG    . ARG ARG ARG A A 284 284 . 159.311 110.842 39.195  1.00 22.52
1 . .
ATOM 2153 CD    CD    . ARG ARG ARG A A 284 284 . 160.365 111.741 39.983  1.00 24.71
1 . .
ATOM 2154 NE    NE    . ARG ARG ARG A A 284 284 . 161.074 112.024 38.771  1.00 26.22
1 . .
ATOM 2155 CZ    CZ    . ARG ARG ARG A A 284 284 . 162.288 111.623 38.454  1.00 26.56
1 . .
ATOM 2156 NH1   NH1   . ARG ARG ARG A A 284 284 . 163.113 111.121 39.394  1.00 28.14
1 . .
ATOM 2157 NH2   NH2   . ARG ARG ARG A A 284 284 . 162.685 111.853 37.205  1.00 27.59
1 . .
ATOM 2158 C     C     . ARG ARG ARG A A 284 284 . 156.610 111.828 38.498  1.00 14.97
1 . .
ATOM 2159 O     O     . ARG ARG ARG A A 284 284 . 156.034 112.797 39.000  1.00 16.72
1 . .
ATOM 2160 N     N     . ASP ASP ASP A A 285 285 . 156.894 111.729 37.188  1.00 13.86
1 . .
ATOM 2161 CA    CA    . ASP ASP ASP A A 285 285 . 156.906 112.905 36.298  1.00 12.92
1 . .
ATOM 2162 CB    CB    . ASP ASP ASP A A 285 285 . 158.019 112.744 35.289  1.00 13.31
1 . .
ATOM 2163 CG    CG    . ASP ASP ASP A A 285 285 . 159.393 112.900 35.944  1.00 15.77
1 . .
ATOM 2164 OD1   OD1   . ASP ASP ASP A A 285 285 . 159.473 113.466 37.046  1.00 17.51
1 . .
ATOM 2165 OD2   OD2   . ASP ASP ASP A A 285 285 . 160.319 112.468 35.275  1.00 19.67
1 . .
ATOM 2166 C     C     . ASP ASP ASP A A 285 285 . 155.579 113.167 35.602  1.00 12.92
1 . .
ATOM 2167 O     O     . ASP ASP ASP A A 285 285 . 155.378 114.272 35.095  1.00 13.29
1 . .
ATOM 2168 N     N     . TYR TYR TYR A A 286 286 . 154.708 112.155 35.566  1.00 11.08
1 . .
ATOM 2169 CA    CA    . TYR TYR TYR A A 286 286 . 153.450 112.216 34.796  1.00 11.77
1 . .
ATOM 2170 CB    CB    . TYR TYR TYR A A 286 286 . 153.609 111.414 33.477  1.00 11.46
1 . .
ATOM 2171 CG    CG    . TYR TYR TYR A A 286 286 . 154.685 111.953 32.653  1.00 11.59
1 . .
ATOM 2172 CD1   CD1   . TYR TYR TYR A A 286 286 . 154.527 113.164 31.963  1.00 14.71
1 . .
ATOM 2173 CE1   CE1   . TYR TYR TYR A A 286 286 . 155.636 113.678 31.227  1.00 19.76
1 . .
ATOM 2174 CZ    CZ    . TYR TYR TYR A A 286 286 . 156.864 112.974 31.169  1.00 19.31
1 . .
ATOM 2175 OH    OH    . TYR TYR TYR A A 286 286 . 157.953 113.451 30.446  1.00 28.12
1 . .
ATOM 2176 CE2   CE2   . TYR TYR TYR A A 286 286 . 157.039 111.786 31.831  1.00 18.53
1 . .
ATOM 2177 CD2   CD2   . TYR TYR TYR A A 286 286 . 155.915 111.285 32.582  1.00 15.02
1 . .
ATOM 2178 C     C     . TYR TYR TYR A A 286 286 . 152.372 111.561 35.606  1.00 9.88
1 . .
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ATOM 2179 O     O     . TYR TYR TYR A A 286 286 . 152.654 110.760 36.519  1.00 11.45
1 . .
ATOM 2180 N     N     . PRO PRO PRO A A 287 287 . 151.100 111.825 35.276  1.00 11.45
1 . .
ATOM 2181 CA    CA    . PRO PRO PRO A A 287 287 . 149.984 111.241 36.069  1.00 9.18
1 . .
ATOM 2182 CB    CB    . PRO PRO PRO A A 287 287 . 148.781 112.172 35.755  1.00 12.15
1 . .
ATOM 2183 CG    CG    . PRO PRO PRO A A 287 287 . 149.080 112.695 34.406  1.00 12.94
1 . .
ATOM 2184 CD    CD    . PRO PRO PRO A A 287 287 . 150.614 112.873 34.354  1.00 12.45
1 . .
ATOM 2185 C     C     . PRO PRO PRO A A 287 287 . 149.699 109.800 35.641  1.00 10.42
1 . .
ATOM 2186 O     O     . PRO PRO PRO A A 287 287 . 148.556 109.463 35.285  1.00 10.09
1 . .
ATOM 2187 N     N     . VAL VAL VAL A A 288 288 . 150.716 108.949 35.685  1.00 9.70
1 . .
ATOM 2188 CA    CA    . VAL VAL VAL A A 288 288 . 150.538 107.537 35.251  1.00 9.63
1 . .
ATOM 2189 CB    CB    . VAL VAL VAL A A 288 288 . 151.932 106.976 34.803  1.00 9.73
1 . .
ATOM 2190 CG1   CG1   . VAL VAL VAL A A 288 288 . 151.828 105.481 34.521  1.00 10.41
1 . .
ATOM 2191 CG2   CG2   . VAL VAL VAL A A 288 288 . 152.409 107.646 33.559  1.00 10.38
1 . .
ATOM 2192 C     C     . VAL VAL VAL A A 288 288 . 150.034 106.741 36.449  1.00 9.76
1 . .
ATOM 2193 O     O     . VAL VAL VAL A A 288 288 . 150.632 106.697 37.541  1.00 12.04
1 . .
ATOM 2194 N     N     . VAL VAL VAL A A 289 289 . 148.884 106.129 36.292  1.00 8.52
1 . .
ATOM 2195 CA    CA    . VAL VAL VAL A A 289 289 . 148.181 105.439 37.377  1.00 9.72
1 . .
ATOM 2196 CB    CB    . VAL VAL VAL A A 289 289 . 146.746 105.999 37.618  1.00 9.57
1 . .
ATOM 2197 CG1   CG1   . VAL VAL VAL A A 289 289 . 146.861 107.501 37.971  1.00 11.41
1 . .
ATOM 2198 CG2   CG2   . VAL VAL VAL A A 289 289 . 145.712 105.703 36.457  1.00 10.85
1 . .
ATOM 2199 C     C     . VAL VAL VAL A A 289 289 . 148.039 103.933 37.084  1.00 9.34
1 . .
ATOM 2200 O     O     . VAL VAL VAL A A 289 289 . 147.532 103.176 37.936  1.00 10.14
1 . .
ATOM 2201 N     N     . SER SER SER A A 290 290 . 148.454 103.499 35.876  1.00 7.94
1 . .
ATOM 2202 CA    CA    . SER SER SER A A 290 290 . 148.319 102.081 35.483  1.00 9.21
1 . .
ATOM 2203 CB    CB    . SER SER SER A A 290 290 . 146.923 101.830 34.846  1.00 9.04
1 . .
ATOM 2204 OG    OG    . SER SER SER A A 290 290 . 146.687 100.446 34.558  1.00 9.50
1 . .
ATOM 2205 C     C     . SER SER SER A A 290 290 . 149.405 101.719 34.492  1.00 8.63
1 . .
ATOM 2206 O     O     . SER SER SER A A 290 290 . 149.601 102.507 33.515  1.00 8.85
1 . .
ATOM 2207 N     N     . ILE ILE ILE A A 291 291 . 150.117 100.593 34.721  1.00 7.32
1 . .
ATOM 2208 CA    CA    . ILE ILE ILE A A 291 291 . 151.093 100.098 33.756  1.00 6.31
1 . .
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ATOM 2209 CB    CB    . ILE ILE ILE A A 291 291 . 152.549 100.281 34.237  1.00 7.03
1 . .
ATOM 2210 CG1   CG1   . ILE ILE ILE A A 291 291 . 152.806 101.787 34.393  1.00 9.70
1 . .
ATOM 2211 CD    CD    . ILE ILE ILE A A 291 291 . 154.206 102.119 35.034  1.00 12.19
1 . .
ATOM 2212 CG2   CG2   . ILE ILE ILE A A 291 291 . 153.468 99.702  33.213  1.00 10.71
1 . .
ATOM 2213 C     C     . ILE ILE ILE A A 291 291 . 150.810 98.639  33.526  1.00 7.11
1 . .
ATOM 2214 O     O     . ILE ILE ILE A A 291 291 . 150.779 97.857  34.461  1.00 8.63
1 . .
ATOM 2215 N     N     . GLU GLU GLU A A 292 292 . 150.635 98.254  32.244  1.00 7.33
1 . .
ATOM 2216 CA    CA    . GLU GLU GLU A A 292 292 . 150.330 96.907  31.850  1.00 7.69
1 . .
ATOM 2217 CB    CB    . GLU GLU GLU A A 292 292 . 149.115 96.985  30.877  1.00 6.71
1 . .
ATOM 2218 CG    CG    . GLU GLU GLU A A 292 292 . 148.803 95.612  30.185  1.00 6.97
1 . .
ATOM 2219 CD    CD    . GLU GLU GLU A A 292 292 . 147.790 95.751  29.062  1.00 7.19
1 . .
ATOM 2220 OE1   OE1   . GLU GLU GLU A A 292 292 . 147.825 94.860  28.187  1.00 8.97
1 . .
ATOM 2221 OE2   OE2   . GLU GLU GLU A A 292 292 . 147.053 96.762  29.053  1.00 9.51
1 . .
ATOM 2222 C     C     . GLU GLU GLU A A 292 292 . 151.543 96.272  31.183  1.00 7.66
1 . .
ATOM 2223 O     O     . GLU GLU GLU A A 292 292 . 152.305 96.918  30.445  1.00 7.87
1 . .
ATOM 2224 N     N     . ASP ASP ASP A A 293 293 . 151.767 95.007  31.525  1.00 8.52
1 . .
ATOM 2225 CA    CA    . ASP ASP ASP A A 293 293 . 152.903 94.235  30.960  1.00 7.74
1 . .
ATOM 2226 CB    CB    . ASP ASP ASP A A 293 293 . 152.623 93.747  29.552  1.00 8.75
1 . .
ATOM 2227 CG    CG    . ASP ASP ASP A A 293 293 . 151.738 92.452  29.532  1.00 7.61
1 . .
ATOM 2228 OD1   OD1   . ASP ASP ASP A A 293 293 . 151.537 91.833  30.610  1.00 8.85
1 . .
ATOM 2229 OD2   OD2   . ASP ASP ASP A A 293 293 . 151.287 92.036  28.413  1.00 8.71
1 . .
ATOM 2230 C     C     . ASP ASP ASP A A 293 293 . 154.242 94.978  31.026  1.00 7.54
1 . .
ATOM 2231 O     O     . ASP ASP ASP A A 293 293 . 154.967 95.092  30.046  1.00 8.17
1 . .
ATOM 2232 N     N     . PRO PRO PRO A A 294 294 . 154.603 95.483  32.220  1.00 6.91
1 . .
ATOM 2233 CA    CA    . PRO PRO PRO A A 294 294 . 155.880 96.156  32.339  1.00 9.23
1 . .
ATOM 2234 CB    CB    . PRO PRO PRO A A 294 294 . 155.900 96.626  33.793  1.00 10.24
1 . .
ATOM 2235 CG    CG    . PRO PRO PRO A A 294 294 . 154.927 95.684  34.554  1.00 10.71
1 . .
ATOM 2236 CD    CD    . PRO PRO PRO A A 294 294 . 153.837 95.509  33.491  1.00 8.01
1 . .
ATOM 2237 C     C     . PRO PRO PRO A A 294 294 . 157.106 95.243  32.086  1.00 7.67
1 . .
ATOM 2238 O     O     . PRO PRO PRO A A 294 294 . 158.190 95.777  31.858  1.00 9.52
1 . .
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ATOM 2239 N     N     . PHE PHE PHE A A 295 295 . 156.926 93.926  32.214  1.00 8.66
1 . .
ATOM 2240 CA    CA    . PHE PHE PHE A A 295 295 . 158.031 92.961  32.054  1.00 8.67
1 . .
ATOM 2241 CB    CB    . PHE PHE PHE A A 295 295 . 158.616 92.506  33.442  1.00 9.24
1 . .
ATOM 2242 CG    CG    . PHE PHE PHE A A 295 295 . 159.118 93.637  34.247  1.00 9.38
1 . .
ATOM 2243 CD1   CD1   . PHE PHE PHE A A 295 295 . 160.359 94.276  33.930  1.00 11.62
1 . .
ATOM 2244 CE1   CE1   . PHE PHE PHE A A 295 295 . 160.797 95.337  34.655  1.00 11.44
1 . .
ATOM 2245 CZ    CZ    . PHE PHE PHE A A 295 295 . 160.004 95.905  35.643  1.00 12.09
1 . .
ATOM 2246 CE2   CE2   . PHE PHE PHE A A 295 295 . 158.795 95.328  35.949  1.00 9.67
1 . .
ATOM 2247 CD2   CD2   . PHE PHE PHE A A 295 295 . 158.338 94.175  35.254  1.00 10.90
1 . .
ATOM 2248 C     C     . PHE PHE PHE A A 295 295 . 157.517 91.789  31.201  1.00 8.28
1 . .
ATOM 2249 O     O     . PHE PHE PHE A A 295 295 . 156.281 91.625  30.990  1.00 9.47
1 . .
ATOM 2250 N     N     . ASP ASP ASP A A 296 296 . 158.437 90.963  30.724  1.00 9.05
1 . .
ATOM 2251 CA    CA    . ASP ASP ASP A A 296 296 . 158.073 89.835  29.918  1.00 8.97
1 . .
ATOM 2252 CB    CB    . ASP ASP ASP A A 296 296 . 159.392 89.064  29.543  1.00 10.69
1 . .
ATOM 2253 CG    CG    . ASP ASP ASP A A 296 296 . 159.147 87.914  28.675  1.00 11.24
1 . .
ATOM 2254 OD1   OD1   . ASP ASP ASP A A 296 296 . 158.834 88.170  27.494  1.00 12.46
1 . .
ATOM 2255 OD2   OD2   . ASP ASP ASP A A 296 296 . 159.316 86.726  29.128  1.00 13.26
1 . .
ATOM 2256 C     C     . ASP ASP ASP A A 296 296 . 157.165 88.833  30.636  1.00 8.46
1 . .
ATOM 2257 O     O     . ASP ASP ASP A A 296 296 . 157.156 88.747  31.882  1.00 9.65
1 . .
ATOM 2258 N     N     . GLN GLN GLN A A 297 297 . 156.397 88.095  29.831  1.00 9.36
1 . .
ATOM 2259 CA    CA    . GLN GLN GLN A A 297 297 . 155.395 87.158  30.321  1.00 10.04
1 . .
ATOM 2260 CB    CB    . GLN GLN GLN A A 297 297 . 154.606 86.546  29.112  1.00 10.85
1 . .
ATOM 2261 CG    CG    . GLN GLN GLN A A 297 297 . 155.579 85.755  28.178  1.00 9.68
1 . .
ATOM 2262 CD    CD    . GLN GLN GLN A A 297 297 . 155.208 85.878  26.750  1.00 11.57
1 . .
ATOM 2263 OE1   OE1   . GLN GLN GLN A A 297 297 . 154.032 85.814  26.426  1.00 11.01
1 . .
ATOM 2264 NE2   NE2   . GLN GLN GLN A A 297 297 . 156.176 85.998  25.889  1.00 13.68
1 . .
ATOM 2265 C     C     . GLN GLN GLN A A 297 297 . 156.007 86.060  31.205  1.00 10.79
1 . .
ATOM 2266 O     O     . GLN GLN GLN A A 297 297 . 155.248 85.415  31.913  1.00 11.94
1 . .
ATOM 2267 N     N     . ASP ASP ASP A A 298 298 . 157.340 85.810  31.132  1.00 9.97
1 . .
ATOM 2268 CA    CA    . ASP ASP ASP A A 298 298 . 157.986 84.816  31.993  1.00 12.59
1 . .
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ATOM 2269 CB    CB    . ASP ASP ASP A A 298 298 . 158.886 83.879  31.144  1.00 13.13
1 . .
ATOM 2270 CG    CG    . ASP ASP ASP A A 298 298 . 158.116 82.928  30.182  1.00 16.61
1 . .
ATOM 2271 OD1   OD1   . ASP ASP ASP A A 298 298 . 157.129 82.313  30.627  1.00 15.22
1 . .
ATOM 2272 OD2   OD2   . ASP ASP ASP A A 298 298 . 158.630 82.684  29.012  1.00 22.00
1 . .
ATOM 2273 C     C     . ASP ASP ASP A A 298 298 . 158.899 85.462  33.023  1.00 11.76
1 . .
ATOM 2274 O     O     . ASP ASP ASP A A 298 298 . 159.531 84.678  33.808  1.00 13.34
1 . .
ATOM 2275 N     N     . ASP ASP ASP A A 299 299 . 158.921 86.792  33.174  1.00 10.70
1 . .
ATOM 2276 CA    CA    . ASP ASP ASP A A 299 299 . 159.933 87.440  34.044  1.00 11.00
1 . .
ATOM 2277 CB    CB    . ASP ASP ASP A A 299 299 . 160.441 88.726  33.398  1.00 9.85
1 . .
ATOM 2278 CG    CG    . ASP ASP ASP A A 299 299 . 161.681 89.321  34.091  1.00 11.54
1 . .
ATOM 2279 OD1   OD1   . ASP ASP ASP A A 299 299 . 162.172 88.752  35.127  1.00 15.15
1 . .
ATOM 2280 OD2   OD2   . ASP ASP ASP A A 299 299 . 162.156 90.373  33.603  1.00 13.49
1 . .
ATOM 2281 C     C     . ASP ASP ASP A A 299 299 . 159.223 87.716  35.379  1.00 10.79
1 . .
ATOM 2282 O     O     . ASP ASP ASP A A 299 299 . 159.087 88.859  35.863  1.00 11.85
1 . .
ATOM 2283 N     N     . TRP TRP TRP A A 300 300 . 158.852 86.635  36.052  1.00 11.22
1 . .
ATOM 2284 CA    CA    . TRP TRP TRP A A 300 300 . 158.007 86.763  37.226  1.00 12.31
1 . .
ATOM 2285 CB    CB    . TRP TRP TRP A A 300 300 . 157.664 85.366  37.804  1.00 12.14
1 . .
ATOM 2286 CG    CG    . TRP TRP TRP A A 300 300 . 156.733 84.611  36.910  1.00 13.65
1 . .
ATOM 2287 CD1   CD1   . TRP TRP TRP A A 300 300 . 157.075 83.790  35.854  1.00 14.33
1 . .
ATOM 2288 NE1   NE1   . TRP TRP TRP A A 300 300 . 155.904 83.278  35.252  1.00 16.12
1 . .
ATOM 2289 CE2   CE2   . TRP TRP TRP A A 300 300 . 154.815 83.818  35.906  1.00 11.99
1 . .
ATOM 2290 CD2   CD2   . TRP TRP TRP A A 300 300 . 155.300 84.635  36.973  1.00 13.05
1 . .
ATOM 2291 CE3   CE3   . TRP TRP TRP A A 300 300 . 154.366 85.272  37.831  1.00 12.89
1 . .
ATOM 2292 CZ3   CZ3   . TRP TRP TRP A A 300 300 . 152.985 85.093  37.552  1.00 14.29
1 . .
ATOM 2293 CH2   CH2   . TRP TRP TRP A A 300 300 . 152.559 84.244  36.525  1.00 11.85
1 . .
ATOM 2294 CZ2   CZ2   . TRP TRP TRP A A 300 300 . 153.439 83.563  35.724  1.00 13.25
1 . .
ATOM 2295 C     C     . TRP TRP TRP A A 300 300 . 158.662 87.513  38.343  1.00 11.79
1 . .
ATOM 2296 O     O     . TRP TRP TRP A A 300 300 . 157.967 88.342  39.003  1.00 12.05
1 . .
ATOM 2297 N     N     . ALA ALA ALA A A 301 301 . 160.009 87.340  38.547  1.00 11.73
1 . .
ATOM 2298 CA    CA    . ALA ALA ALA A A 301 301 . 160.549 88.048  39.709  1.00 12.43
1 . .
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ATOM 2299 CB    CB    . ALA ALA ALA A A 301 301 . 162.013 87.621  39.971  1.00 15.70
1 . .
ATOM 2300 C     C     . ALA ALA ALA A A 301 301 . 160.475 89.592  39.510  1.00 11.47
1 . .
ATOM 2301 O     O     . ALA ALA ALA A A 301 301 . 160.336 90.330  40.459  1.00 11.96
1 . .
ATOM 2302 N     N     . ALA ALA ALA A A 302 302 . 160.572 90.077  38.268  1.00 11.37
1 . .
ATOM 2303 CA    CA    . ALA ALA ALA A A 302 302 . 160.577 91.547  37.989  1.00 10.39
1 . .
ATOM 2304 CB    CB    . ALA ALA ALA A A 302 302 . 160.929 91.812  36.570  1.00 12.56
1 . .
ATOM 2305 C     C     . ALA ALA ALA A A 302 302 . 159.177 92.108  38.282  1.00 9.89
1 . .
ATOM 2306 O     O     . ALA ALA ALA A A 302 302 . 159.050 93.175  38.847  1.00 11.44
1 . .
ATOM 2307 N     N     . TRP TRP TRP A A 303 303 . 158.165 91.363  37.869  1.00 11.43
1 . .
ATOM 2308 CA    CA    . TRP TRP TRP A A 303 303 . 156.749 91.762  38.176  1.00 11.02
1 . .
ATOM 2309 CB    CB    . TRP TRP TRP A A 303 303 . 155.799 90.723  37.660  1.00 10.14
1 . .
ATOM 2310 CG    CG    . TRP TRP TRP A A 303 303 . 155.555 90.743  36.160  1.00 10.29
1 . .
ATOM 2311 CD1   CD1   . TRP TRP TRP A A 303 303 . 156.307 90.142  35.186  1.00 10.48
1 . .
ATOM 2312 NE1   NE1   . TRP TRP TRP A A 303 303 . 155.755 90.364  33.942  1.00 9.62
1 . .
ATOM 2313 CE2   CE2   . TRP TRP TRP A A 303 303 . 154.599 91.087  34.107  1.00 7.18
1 . .
ATOM 2314 CD2   CD2   . TRP TRP TRP A A 303 303 . 154.438 91.323  35.509  1.00 10.02
1 . .
ATOM 2315 CE3   CE3   . TRP TRP TRP A A 303 303 . 153.332 92.047  35.964  1.00 8.62
1 . .
ATOM 2316 CZ3   CZ3   . TRP TRP TRP A A 303 303 . 152.356 92.433  35.037  1.00 6.97
1 . .
ATOM 2317 CH2   CH2   . TRP TRP TRP A A 303 303 . 152.469 92.111  33.639  1.00 8.44
1 . .
ATOM 2318 CZ2   CZ2   . TRP TRP TRP A A 303 303 . 153.588 91.463  33.144  1.00 7.41
1 . .
ATOM 2319 C     C     . TRP TRP TRP A A 303 303 . 156.544 91.862  39.655  1.00 11.00
1 . .
ATOM 2320 O     O     . TRP TRP TRP A A 303 303 . 156.045 92.892  40.110  1.00 11.22
1 . .
ATOM 2321 N     N     . SER SER SER A A 304 304 . 156.892 90.788  40.411  1.00 11.24
1 . .
ATOM 2322 CA    CA    . SER SER SER A A 304 304 . 156.589 90.843  41.868  1.00 13.28
1 . .
ATOM 2323 CB    CB    . SER SER SER A A 304 304 . 157.017 89.531  42.521  1.00 14.29
1 . .
ATOM 2324 OG    OG    . SER SER SER A A 304 304 . 156.256 88.506  41.973  1.00 17.83
1 . .
ATOM 2325 C     C     . SER SER SER A A 304 304 . 157.335 92.016  42.532  1.00 12.73
1 . .
ATOM 2326 O     O     . SER SER SER A A 304 304 . 156.800 92.720  43.395  1.00 14.52
1 . .
ATOM 2327 N     N     . LYS LYS LYS A A 305 305 . 158.559 92.224  42.123  1.00 12.96
1 . .
ATOM 2328 CA    CA    . LYS LYS LYS A A 305 305 . 159.370 93.304  42.716  1.00 13.84
1 . .
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ATOM 2329 CB    CB    . LYS LYS LYS A A 305 305 . 160.815 93.259  42.177  1.00 16.95
1 . .
ATOM 2330 CG    CG    . LYS LYS LYS A A 305 305 . 161.662 94.345  42.749  1.00 21.87
1 . .
ATOM 2331 CD    CD    . LYS LYS LYS A A 305 305 . 163.100 93.901  42.488  1.00 30.76
1 . .
ATOM 2332 CE    CE    . LYS LYS LYS A A 305 305 . 164.022 95.051  42.661  1.00 36.49
1 . .
ATOM 2333 NZ    NZ    . LYS LYS LYS A A 305 305 . 164.369 95.615  41.323  1.00 40.72
1 . .
ATOM 2334 C     C     . LYS LYS LYS A A 305 305 . 158.755 94.660  42.470  1.00 14.46
1 . .
ATOM 2335 O     O     . LYS LYS LYS A A 305 305 . 158.630 95.515  43.345  1.00 14.37
1 . .
ATOM 2336 N     N     . PHE PHE PHE A A 306 306 . 158.400 94.855  41.199  1.00 11.73
1 . .
ATOM 2337 CA    CA    . PHE PHE PHE A A 306 306 . 157.873 96.171  40.797  1.00 12.51
1 . .
ATOM 2338 CB    CB    . PHE PHE PHE A A 306 306 . 157.766 96.249  39.277  1.00 11.38
1 . .
ATOM 2339 CG    CG    . PHE PHE PHE A A 306 306 . 157.382 97.606  38.780  1.00 12.49
1 . .
ATOM 2340 CD1   CD1   . PHE PHE PHE A A 306 306 . 158.230 98.711  38.893  1.00 17.14
1 . .
ATOM 2341 CE1   CE1   . PHE PHE PHE A A 306 306 . 157.823 99.989  38.433  1.00 14.62
1 . .
ATOM 2342 CZ    CZ    . PHE PHE PHE A A 306 306 . 156.597 100.160 37.860  1.00 15.32
1 . .
ATOM 2343 CE2   CE2   . PHE PHE PHE A A 306 306 . 155.744 99.100  37.719  1.00 14.67
1 . .
ATOM 2344 CD2   CD2   . PHE PHE PHE A A 306 306 . 156.136 97.805  38.183  1.00 14.88
1 . .
ATOM 2345 C     C     . PHE PHE PHE A A 306 306 . 156.518 96.437  41.496  1.00 11.76
1 . .
ATOM 2346 O     O     . PHE PHE PHE A A 306 306 . 156.246 97.549  42.044  1.00 13.53
1 . .
ATOM 2347 N     N     . THR THR THR A A 307 307 . 155.610 95.459  41.460  1.00 13.03
1 . .
ATOM 2348 CA    CA    . THR THR THR A A 307 307 . 154.311 95.662  42.075  1.00 14.11
1 . .
ATOM 2349 CB    CB    . THR THR THR A A 307 307 . 153.489 94.395  41.842  1.00 12.97
1 . .
ATOM 2350 OG1   OG1   . THR THR THR A A 307 307 . 153.241 94.342  40.431  1.00 12.84
1 . .
ATOM 2351 CG2   CG2   . THR THR THR A A 307 307 . 152.160 94.389  42.557  1.00 13.14
1 . .
ATOM 2352 C     C     . THR THR THR A A 307 307 . 154.441 95.991  43.573  1.00 15.47
1 . .
ATOM 2353 O     O     . THR THR THR A A 307 307 . 153.674 96.805  44.073  1.00 15.11
1 . .
ATOM 2354 N     N     . ALA ALA ALA A A 308 308 . 155.437 95.359  44.241  1.00 15.04
1 . .
ATOM 2355 CA    CA    . ALA ALA ALA A A 308 308 . 155.643 95.605  45.673  1.00 15.79
1 . .
ATOM 2356 CB    CB    . ALA ALA ALA A A 308 308 . 156.523 94.555  46.248  1.00 16.53
1 . .
ATOM 2357 C     C     . ALA ALA ALA A A 308 308 . 156.190 97.032  45.933  1.00 15.59
1 . .
ATOM 2358 O     O     . ALA ALA ALA A A 308 308 . 156.106 97.537  47.041  1.00 18.12
1 . .
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ATOM 2359 N     N     . ASN ASN ASN A A 309 309 . 156.769 97.645  44.917  1.00 14.50
1 . .
ATOM 2360 CA    CA    . ASN ASN ASN A A 309 309 . 157.457 98.912  45.051  1.00 16.80
1 . .
ATOM 2361 CB    CB    . ASN ASN ASN A A 309 309 . 158.892 98.870  44.412  1.00 18.17
1 . .
ATOM 2362 CG    CG    . ASN ASN ASN A A 309 309 . 159.920 98.228  45.360  1.00 23.51
1 . .
ATOM 2363 OD1   OD1   . ASN ASN ASN A A 309 309 . 159.958 97.031  45.533  1.00 31.74
1 . .
ATOM 2364 ND2   ND2   . ASN ASN ASN A A 309 309 . 160.638 99.053  46.062  1.00 33.03
1 . .
ATOM 2365 C     C     . ASN ASN ASN A A 309 309 . 156.657 100.073 44.512  1.00 15.93
1 . .
ATOM 2366 O     O     . ASN ASN ASN A A 309 309 . 157.205 101.163 44.454  1.00 18.18
1 . .
ATOM 2367 N     N     . VAL VAL VAL A A 310 310 . 155.390 99.850  44.097  1.00 13.25
1 . .
ATOM 2368 CA    CA    . VAL VAL VAL A A 310 310 . 154.567 100.947 43.615  1.00 13.58
1 . .
ATOM 2369 CB    CB    . VAL VAL VAL A A 310 310 . 154.435 100.981 42.051  1.00 12.56
1 . .
ATOM 2370 CG1   CG1   . VAL VAL VAL A A 310 310 . 155.798 101.157 41.369  1.00 15.23
1 . .
ATOM 2371 CG2   CG2   . VAL VAL VAL A A 310 310 . 153.702 99.745  41.480  1.00 14.72
1 . .
ATOM 2372 C     C     . VAL VAL VAL A A 310 310 . 153.213 100.893 44.252  1.00 11.37
1 . .
ATOM 2373 O     O     . VAL VAL VAL A A 310 310 . 152.864 99.838  44.764  1.00 13.10
1 . .
ATOM 2374 N     N     . GLY GLY GLY A A 311 311 . 152.421 101.989 44.182  1.00 10.18
1 . .
ATOM 2375 CA    CA    . GLY GLY GLY A A 311 311 . 151.085 102.027 44.639  1.00 10.04
1 . .
ATOM 2376 C     C     . GLY GLY GLY A A 311 311 . 150.045 102.112 43.560  1.00 9.07
1 . .
ATOM 2377 O     O     . GLY GLY GLY A A 311 311 . 148.896 102.318 43.870  1.00 11.18
1 . .
ATOM 2378 N     N     . ILE ILE ILE A A 312 312 . 150.508 102.023 42.301  1.00 10.93
1 . .
ATOM 2379 CA    CA    . ILE ILE ILE A A 312 312 . 149.586 102.110 41.177  1.00 8.72
1 . .
ATOM 2380 CB    CB    . ILE ILE ILE A A 312 312 . 150.260 102.816 39.982  1.00 7.97
1 . .
ATOM 2381 CG1   CG1   . ILE ILE ILE A A 312 312 . 151.477 102.060 39.428  1.00 11.22
1 . .
ATOM 2382 CD    CD    . ILE ILE ILE A A 312 312 . 151.830 102.375 37.928  1.00 11.71
1 . .
ATOM 2383 CG2   CG2   . ILE ILE ILE A A 312 312 . 150.637 104.308 40.352  1.00 11.29
1 . .
ATOM 2384 C     C     . ILE ILE ILE A A 312 312 . 149.054 100.776 40.741  1.00 8.69
1 . .
ATOM 2385 O     O     . ILE ILE ILE A A 312 312 . 149.427 99.737  41.237  1.00 9.80
1 . .
ATOM 2386 N     N     . GLN GLN GLN A A 313 313 . 148.135 100.807 39.771  1.00 8.66
1 . .
ATOM 2387 CA    CA    . GLN GLN GLN A A 313 313 . 147.637 99.579  39.140  1.00 8.99
1 . .
ATOM 2388 CB    CB    . GLN GLN GLN A A 313 313 . 146.410 99.906  38.369  1.00 9.46
1 . .
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ATOM 2389 CG    CG    . GLN GLN GLN A A 313 313 . 145.901 98.690  37.523  1.00 10.12
1 . .
ATOM 2390 CD    CD    . GLN GLN GLN A A 313 313 . 144.453 98.932  37.087  1.00 9.43
1 . .
ATOM 2391 OE1   OE1   . GLN GLN GLN A A 313 313 . 143.491 98.544  37.798  1.00 9.03
1 . .
ATOM 2392 NE2   NE2   . GLN GLN GLN A A 313 313 . 144.297 99.535  35.898  1.00 10.41
1 . .
ATOM 2393 C     C     . GLN GLN GLN A A 313 313 . 148.691 98.980  38.190  1.00 8.41
1 . .
ATOM 2394 O     O     . GLN GLN GLN A A 313 313 . 149.330 99.689  37.366  1.00 8.82
1 . .
ATOM 2395 N     N     . ILE ILE ILE A A 314 314 . 148.876 97.647  38.312  1.00 8.11
1 . .
ATOM 2396 CA    CA    . ILE ILE ILE A A 314 314 . 149.834 96.909  37.510  1.00 8.96
1 . .
ATOM 2397 CB    CB    . ILE ILE ILE A A 314 314 . 151.009 96.280  38.374  1.00 7.71
1 . .
ATOM 2398 CG1   CG1   . ILE ILE ILE A A 314 314 . 151.830 97.386  39.049  1.00 11.31
1 . .
ATOM 2399 CD    CD    . ILE ILE ILE A A 314 314 . 152.554 98.383  38.049  1.00 10.60
1 . .
ATOM 2400 CG2   CG2   . ILE ILE ILE A A 314 314 . 151.875 95.319  37.480  1.00 10.98
1 . .
ATOM 2401 C     C     . ILE ILE ILE A A 314 314 . 149.054 95.784  36.857  1.00 8.53
1 . .
ATOM 2402 O     O     . ILE ILE ILE A A 314 314 . 148.473 94.929  37.564  1.00 8.44
1 . .
ATOM 2403 N     N     . VAL VAL VAL A A 315 315 . 148.961 95.832  35.512  1.00 7.70
1 . .
ATOM 2404 CA    CA    . VAL VAL VAL A A 315 315 . 147.990 94.937  34.786  1.00 8.13
1 . .
ATOM 2405 CB    CB    . VAL VAL VAL A A 315 315 . 147.267 95.766  33.712  1.00 8.42
1 . .
ATOM 2406 CG1   CG1   . VAL VAL VAL A A 315 315 . 146.203 94.913  33.063  1.00 7.77
1 . .
ATOM 2407 CG2   CG2   . VAL VAL VAL A A 315 315 . 146.669 97.011  34.339  1.00 7.14
1 . .
ATOM 2408 C     C     . VAL VAL VAL A A 315 315 . 148.716 93.786  34.096  1.00 8.35
1 . .
ATOM 2409 O     O     . VAL VAL VAL A A 315 315 . 149.653 93.984  33.291  1.00 8.65
1 . .
ATOM 2410 N     N     . GLY GLY GLY A A 316 316 . 148.290 92.562  34.431  1.00 7.62
1 . .
ATOM 2411 CA    CA    . GLY GLY GLY A A 316 316 . 148.729 91.376  33.716  1.00 6.90
1 . .
ATOM 2412 C     C     . GLY GLY GLY A A 316 316 . 147.955 91.233  32.399  1.00 6.20
1 . .
ATOM 2413 O     O     . GLY GLY GLY A A 316 316 . 146.737 91.307  32.406  1.00 7.87
1 . .
ATOM 2414 N     N     . ASP ASP ASP A A 317 317 . 148.671 91.041  31.282  1.00 7.29
1 . .
ATOM 2415 CA    CA    . ASP ASP ASP A A 317 317 . 148.026 90.745  30.014  1.00 6.56
1 . .
ATOM 2416 CB    CB    . ASP ASP ASP A A 317 317 . 148.116 91.970  29.081  1.00 7.36
1 . .
ATOM 2417 CG    CG    . ASP ASP ASP A A 317 317 . 147.672 91.638  27.660  1.00 7.07
1 . .
ATOM 2418 OD1   OD1   . ASP ASP ASP A A 317 317 . 148.047 92.393  26.700  1.00 8.31
1 . .
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ATOM 2419 OD2   OD2   . ASP ASP ASP A A 317 317 . 146.960 90.615  27.459  1.00 8.77
1 . .
ATOM 2420 C     C     . ASP ASP ASP A A 317 317 . 148.692 89.460  29.464  1.00 8.25
1 . .
ATOM 2421 O     O     . ASP ASP ASP A A 317 317 . 148.118 88.352  29.596  1.00 8.36
1 . .
ATOM 2422 N     N     . ASP ASP ASP A A 318 318 . 149.882 89.613  28.863  1.00 8.14
1 . .
ATOM 2423 CA    CA    . ASP ASP ASP A A 318 318 . 150.530 88.402  28.356  1.00 7.52
1 . .
ATOM 2424 CB    CB    . ASP ASP ASP A A 318 318 . 151.724 88.754  27.455  1.00 8.06
1 . .
ATOM 2425 CG    CG    . ASP ASP ASP A A 318 318 . 151.263 89.349  26.115  1.00 10.50
1 . .
ATOM 2426 OD1   OD1   . ASP ASP ASP A A 318 318 . 150.117 89.018  25.703  1.00 10.64
1 . .
ATOM 2427 OD2   OD2   . ASP ASP ASP A A 318 318 . 152.059 90.149  25.557  1.00 12.32
1 . .
ATOM 2428 C     C     . ASP ASP ASP A A 318 318 . 150.973 87.541  29.562  1.00 8.22
1 . .
ATOM 2429 O     O     . ASP ASP ASP A A 318 318 . 151.096 86.355  29.436  1.00 9.68
1 . .
ATOM 2430 N     N     . LEU LEU LEU A A 319 319 . 151.176 88.149  30.745  1.00 8.38
1 . .
ATOM 2431 CA    CA    . LEU LEU LEU A A 319 319 . 151.523 87.358  31.958  1.00 7.26
1 . .
ATOM 2432 CB    CB    . LEU LEU LEU A A 319 319 . 151.671 88.348  33.112  1.00 7.56
1 . .
ATOM 2433 CG    CG    . LEU LEU LEU A A 319 319 . 152.077 87.672  34.422  1.00 9.33
1 . .
ATOM 2434 CD1   CD1   . LEU LEU LEU A A 319 319 . 153.616 87.324  34.396  1.00 12.29
1 . .
ATOM 2435 CD2   CD2   . LEU LEU LEU A A 319 319 . 151.730 88.608  35.602  1.00 11.92
1 . .
ATOM 2436 C     C     . LEU LEU LEU A A 319 319 . 150.400 86.354  32.243  1.00 8.99
1 . .
ATOM 2437 O     O     . LEU LEU LEU A A 319 319 . 150.656 85.202  32.590  1.00 11.21
1 . .
ATOM 2438 N     N     . THR THR THR A A 320 320 . 149.156 86.824  32.180  1.00 8.34
1 . .
ATOM 2439 CA    CA    . THR THR THR A A 320 320 . 147.995 86.069  32.705  1.00 7.58
1 . .
ATOM 2440 CB    CB    . THR THR THR A A 320 320 . 147.098 87.039  33.548  1.00 8.75
1 . .
ATOM 2441 OG1   OG1   . THR THR THR A A 320 320 . 147.087 88.329  32.902  1.00 10.22
1 . .
ATOM 2442 CG2   CG2   . THR THR THR A A 320 320 . 147.697 87.203  34.966  1.00 11.72
1 . .
ATOM 2443 C     C     . THR THR THR A A 320 320 . 147.155 85.401  31.697  1.00 8.65
1 . .
ATOM 2444 O     O     . THR THR THR A A 320 320 . 146.456 84.392  32.023  1.00 9.79
1 . .
ATOM 2445 N     N     . VAL VAL VAL A A 321 321 . 147.178 85.946  30.465  1.00 8.51
1 . .
ATOM 2446 CA    CA    . VAL VAL VAL A A 321 321 . 146.339 85.411  29.344  1.00 9.33
1 . .
ATOM 2447 CB    CB    . VAL VAL VAL A A 321 321 . 147.155 84.392  28.436  1.00 9.59
1 . .
ATOM 2448 CG1   CG1   . VAL VAL VAL A A 321 321 . 148.352 85.102  27.788  1.00 10.00
1 . .
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ATOM 2449 CG2   CG2   . VAL VAL VAL A A 321 321 . 147.618 83.187  29.289  1.00 10.05
1 . .
ATOM 2450 C     C     . VAL VAL VAL A A 321 321 . 144.919 84.968  29.667  1.00 7.72
1 . .
ATOM 2451 O     O     . VAL VAL VAL A A 321 321 . 144.437 83.991  29.093  1.00 8.49
1 . .
ATOM 2452 N     N     . THR THR THR A A 322 322 . 144.240 85.744  30.526  1.00 7.66
1 . .
ATOM 2453 CA    CA    . THR THR THR A A 322 322 . 142.803 85.522  30.800  1.00 7.61
1 . .
ATOM 2454 CB    CB    . THR THR THR A A 322 322 . 141.871 85.945  29.654  1.00 7.44
1 . .
ATOM 2455 OG1   OG1   . THR THR THR A A 322 322 . 142.247 87.256  29.263  1.00 8.05
1 . .
ATOM 2456 CG2   CG2   . THR THR THR A A 322 322 . 140.431 86.004  30.128  1.00 10.08
1 . .
ATOM 2457 C     C     . THR THR THR A A 322 322 . 142.638 84.044  31.273  1.00 8.39
1 . .
ATOM 2458 O     O     . THR THR THR A A 322 322 . 141.637 83.447  31.019  1.00 9.30
1 . .
ATOM 2459 N     N     . ASN ASN ASN A A 323 323 . 143.639 83.521  31.983  1.00 9.94
1 . .
ATOM 2460 CA    CA    . ASN ASN ASN A A 323 323 . 143.689 82.076  32.165  1.00 11.96
1 . .
ATOM 2461 CB    CB    . ASN ASN ASN A A 323 323 . 144.953 81.481  31.438  1.00 11.15
1 . .
ATOM 2462 CG    CG    . ASN ASN ASN A A 323 323 . 144.910 79.967  31.450  1.00 11.39
1 . .
ATOM 2463 OD1   OD1   . ASN ASN ASN A A 323 323 . 144.615 79.370  32.493  1.00 17.69
1 . .
ATOM 2464 ND2   ND2   . ASN ASN ASN A A 323 323 . 145.244 79.329  30.355  1.00 14.10
1 . .
ATOM 2465 C     C     . ASN ASN ASN A A 323 323 . 143.768 81.760  33.680  1.00 11.07
1 . .
ATOM 2466 O     O     . ASN ASN ASN A A 323 323 . 144.739 82.118  34.318  1.00 11.68
1 . .
ATOM 2467 N     N     . PRO PRO PRO A A 324 324 . 142.735 81.160  34.264  1.00 13.09
1 . .
ATOM 2468 CA    CA    . PRO PRO PRO A A 324 324 . 142.729 80.893  35.710  1.00 13.58
1 . .
ATOM 2469 CB    CB    . PRO PRO PRO A A 324 324 . 141.495 79.981  35.866  1.00 15.52
1 . .
ATOM 2470 CG    CG    . PRO PRO PRO A A 324 324 . 140.576 80.555  34.855  1.00 15.79
1 . .
ATOM 2471 CD    CD    . PRO PRO PRO A A 324 324 . 141.478 80.727  33.626  1.00 13.62
1 . .
ATOM 2472 C     C     . PRO PRO PRO A A 324 324 . 144.054 80.299  36.247  1.00 13.66
1 . .
ATOM 2473 O     O     . PRO PRO PRO A A 324 324 . 144.495 80.662  37.363  1.00 14.72
1 . .
ATOM 2474 N     N     . LYS LYS LYS A A 325 325 . 144.669 79.355  35.520  1.00 14.58
1 . .
ATOM 2475 CA    CA    . LYS LYS LYS A A 325 325 . 145.912 78.755  36.011  1.00 15.44
1 . .
ATOM 2476 CB    CB    . LYS LYS LYS A A 325 325 . 146.347 77.647  35.055  1.00 17.67
1 . .
ATOM 2477 CG    CG    . LYS LYS LYS A A 325 325 . 147.527 76.880  35.633  1.00 28.21
1 . .
ATOM 2478 CD    CD    . LYS LYS LYS A A 325 325 . 148.813 76.671  34.723  1.00 40.51
1 . .
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ATOM 2479 CE    CE    . LYS LYS LYS A A 325 325 . 149.757 75.603  35.397  1.00 44.70
1 . .
ATOM 2480 NZ    NZ    . LYS LYS LYS A A 325 325 . 149.421 75.322  36.884  1.00 47.74
1 . .
ATOM 2481 C     C     . LYS LYS LYS A A 325 325 . 147.037 79.775  36.211  1.00 13.81
1 . .
ATOM 2482 O     O     . LYS LYS LYS A A 325 325 . 147.753 79.799  37.222  1.00 16.28
1 . .
ATOM 2483 N     N     . ARG ARG ARG A A 326 326 . 147.170 80.675  35.203  1.00 12.77
1 . .
ATOM 2484 CA    CA    . ARG ARG ARG A A 326 326 . 148.195 81.671  35.247  1.00 12.58
1 . .
ATOM 2485 CB    CB    . ARG ARG ARG A A 326 326 . 148.403 82.348  33.900  1.00 12.42
1 . .
ATOM 2486 CG    CG    . ARG ARG ARG A A 326 326 . 148.930 81.585  32.730  1.00 17.61
1 . .
ATOM 2487 CD    CD    . ARG ARG ARG A A 326 326 . 149.928 82.798  32.167  1.00 26.53
1 . .
ATOM 2488 NE    NE    . ARG ARG ARG A A 326 326 . 151.102 82.123  32.316  1.00 19.80
1 . .
ATOM 2489 CZ    CZ    . ARG ARG ARG A A 326 326 . 152.404 82.382  32.365  1.00 15.27
1 . .
ATOM 2490 NH1   NH1   . ARG ARG ARG A A 326 326 . 153.010 83.550  32.234  1.00 12.13
1 . .
ATOM 2491 NH2   NH2   . ARG ARG ARG A A 326 326 . 153.152 81.246  32.467  1.00 16.24
1 . .
ATOM 2492 C     C     . ARG ARG ARG A A 326 326 . 147.824 82.777  36.283  1.00 11.63
1 . .
ATOM 2493 O     O     . ARG ARG ARG A A 326 326 . 148.697 83.325  36.980  1.00 13.04
1 . .
ATOM 2494 N     N     . ILE ILE ILE A A 327 327 . 146.537 83.157  36.367  1.00 10.88
1 . .
ATOM 2495 CA    CA    . ILE ILE ILE A A 327 327 . 146.056 84.102  37.365  1.00 11.28
1 . .
ATOM 2496 CB    CB    . ILE ILE ILE A A 327 327 . 144.528 84.347  37.161  1.00 9.90
1 . .
ATOM 2497 CG1   CG1   . ILE ILE ILE A A 327 327 . 144.337 85.159  35.815  1.00 10.43
1 . .
ATOM 2498 CD    CD    . ILE ILE ILE A A 327 327 . 142.909 85.027  35.322  1.00 10.39
1 . .
ATOM 2499 CG2   CG2   . ILE ILE ILE A A 327 327 . 143.957 85.260  38.286  1.00 11.79
1 . .
ATOM 2500 C     C     . ILE ILE ILE A A 327 327 . 146.359 83.598  38.794  1.00 12.50
1 . .
ATOM 2501 O     O     . ILE ILE ILE A A 327 327 . 146.783 84.379  39.612  1.00 13.61
1 . .
ATOM 2502 N     N     . GLU GLU GLU A A 328 328 . 146.154 82.314  39.051  1.00 14.12
1 . .
ATOM 2503 CA    CA    . GLU GLU GLU A A 328 328 . 146.411 81.775  40.394  1.00 14.57
1 . .
ATOM 2504 CB    CB    . GLU GLU GLU A A 328 328 . 146.097 80.251  40.360  1.00 17.01
1 . .
ATOM 2505 CG    CG    . GLU GLU GLU A A 328 328 . 144.626 79.937  40.319  1.00 21.12
1 . .
ATOM 2506 CD    CD    . GLU GLU GLU A A 328 328 . 143.915 80.070  41.623  1.00 32.20
1 . .
ATOM 2507 OE1   OE1   . GLU GLU GLU A A 328 328 . 142.812 79.414  41.755  1.00 32.93
1 . .
ATOM 2508 OE2   OE2   . GLU GLU GLU A A 328 328 . 144.456 80.828  42.508  1.00 37.10
1 . .
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ATOM 2509 C     C     . GLU GLU GLU A A 328 328 . 147.852 81.961  40.784  1.00 15.35
1 . .
ATOM 2510 O     O     . GLU GLU GLU A A 328 328 . 148.171 82.330  41.933  1.00 17.40
1 . .
ATOM 2511 N     N     . ARG ARG ARG A A 329 329 . 148.748 81.721  39.819  1.00 13.00
1 . .
ATOM 2512 CA    CA    . ARG ARG ARG A A 329 329 . 150.164 81.875  40.070  1.00 13.69
1 . .
ATOM 2513 CB    CB    . ARG ARG ARG A A 329 329 . 150.945 81.306  38.912  1.00 14.83
1 . .
ATOM 2514 CG    CG    . ARG ARG ARG A A 329 329 . 152.410 81.498  39.114  1.00 16.97
1 . .
ATOM 2515 CD    CD    . ARG ARG ARG A A 329 329 . 153.218 80.746  38.052  1.00 23.37
1 . .
ATOM 2516 NE    NE    . ARG ARG ARG A A 329 329 . 154.640 81.013  38.214  1.00 23.80
1 . .
ATOM 2517 CZ    CZ    . ARG ARG ARG A A 329 329 . 155.565 80.643  37.324  1.00 24.09
1 . .
ATOM 2518 NH1   NH1   . ARG ARG ARG A A 329 329 . 155.233 79.944  36.248  1.00 22.36
1 . .
ATOM 2519 NH2   NH2   . ARG ARG ARG A A 329 329 . 156.823 80.971  37.512  1.00 25.36
1 . .
ATOM 2520 C     C     . ARG ARG ARG A A 329 329 . 150.479 83.372  40.300  1.00 14.01
1 . .
ATOM 2521 O     O     . ARG ARG ARG A A 329 329 . 151.254 83.714  41.166  1.00 14.99
1 . .
ATOM 2522 N     N     . ALA ALA ALA A A 330 330 . 149.914 84.273  39.488  1.00 13.26
1 . .
ATOM 2523 CA    CA    . ALA ALA ALA A A 330 330 . 150.156 85.670  39.681  1.00 12.85
1 . .
ATOM 2524 CB    CB    . ALA ALA ALA A A 330 330 . 149.519 86.424  38.479  1.00 11.54
1 . .
ATOM 2525 C     C     . ALA ALA ALA A A 330 330 . 149.603 86.177  41.025  1.00 14.33
1 . .
ATOM 2526 O     O     . ALA ALA ALA A A 330 330 . 150.222 87.017  41.664  1.00 13.87
1 . .
ATOM 2527 N     N     . VAL VAL VAL A A 331 331 . 148.485 85.623  41.481  1.00 14.14
1 . .
ATOM 2528 CA    CA    . VAL VAL VAL A A 331 331 . 147.954 85.960  42.825  1.00 16.00
1 . .
ATOM 2529 CB    CB    . VAL VAL VAL A A 331 331 . 146.548 85.338  43.038  1.00 15.40
1 . .
ATOM 2530 CG1   CG1   . VAL VAL VAL A A 331 331 . 146.147 85.316  44.526  1.00 16.83
1 . .
ATOM 2531 CG2   CG2   . VAL VAL VAL A A 331 331 . 145.497 86.032  42.168  1.00 16.59
1 . .
ATOM 2532 C     C     . VAL VAL VAL A A 331 331 . 148.946 85.495  43.908  1.00 15.49
1 . .
ATOM 2533 O     O     . VAL VAL VAL A A 331 331 . 149.364 86.270  44.794  1.00 16.50
1 . .
ATOM 2534 N     N     . GLU GLU GLU A A 332 332 . 149.405 84.260  43.779  1.00 15.93
1 . .
ATOM 2535 CA    CA    . GLU GLU GLU A A 332 332 . 150.298 83.643  44.796  1.00 19.49
1 . .
ATOM 2536 CB    CB    . GLU GLU GLU A A 332 332 . 150.596 82.174  44.426  1.00 20.23
1 . .
ATOM 2537 CG    CG    . GLU GLU GLU A A 332 332 . 151.399 81.386  45.473  1.00 29.63
1 . .
ATOM 2538 CD    CD    . GLU GLU GLU A A 332 332 . 150.858 81.569  46.939  1.00 40.40
1 . .
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ATOM 2539 OE1   OE1   . GLU GLU GLU A A 332 332 . 149.630 81.413  47.206  1.00 43.00
1 . .
ATOM 2540 OE2   OE2   . GLU GLU GLU A A 332 332 . 151.702 81.884  47.831  1.00 47.62
1 . .
ATOM 2541 C     C     . GLU GLU GLU A A 332 332 . 151.595 84.427  44.937  1.00 18.32
1 . .
ATOM 2542 O     O     . GLU GLU GLU A A 332 332 . 152.056 84.780  46.064  1.00 20.57
1 . .
ATOM 2543 N     N     . GLU GLU GLU A A 333 333 . 152.093 84.860  43.769  1.00 15.80
1 . .
ATOM 2544 CA    CA    . GLU GLU GLU A A 333 333 . 153.386 85.577  43.650  1.00 14.90
1 . .
ATOM 2545 CB    CB    . GLU GLU GLU A A 333 333 . 154.073 85.198  42.354  1.00 18.51
1 . .
ATOM 2546 CG    CG    . GLU GLU GLU A A 333 333 . 154.337 83.707  42.373  1.00 20.06
1 . .
ATOM 2547 CD    CD    . GLU GLU GLU A A 333 333 . 155.341 83.248  41.370  1.00 27.25
1 . .
ATOM 2548 OE1   OE1   . GLU GLU GLU A A 333 333 . 155.316 82.015  41.037  1.00 28.76
1 . .
ATOM 2549 OE2   OE2   . GLU GLU GLU A A 333 333 . 156.139 84.092  40.884  1.00 28.88
1 . .
ATOM 2550 C     C     . GLU GLU GLU A A 333 333 . 153.285 87.099  43.820  1.00 12.81
1 . .
ATOM 2551 O     O     . GLU GLU GLU A A 333 333 . 154.318 87.822  43.735  1.00 14.27
1 . .
ATOM 2552 N     N     . LYS LYS LYS A A 334 334 . 152.038 87.566  43.909  1.00 13.08
1 . .
ATOM 2553 CA    CA    . LYS LYS LYS A A 334 334 . 151.725 89.013  43.953  1.00 13.80
1 . .
ATOM 2554 CB    CB    . LYS LYS LYS A A 334 334 . 152.113 89.629  45.327  1.00 15.35
1 . .
ATOM 2555 CG    CG    . LYS LYS LYS A A 334 334 . 151.412 88.889  46.482  1.00 19.45
1 . .
ATOM 2556 CD    CD    . LYS LYS LYS A A 334 334 . 150.252 89.567  47.060  1.00 34.61
1 . .
ATOM 2557 CE    CE    . LYS LYS LYS A A 334 334 . 150.623 90.471  48.246  1.00 38.55
1 . .
ATOM 2558 NZ    NZ    . LYS LYS LYS A A 334 334 . 149.687 91.741  48.345  1.00 39.15
1 . .
ATOM 2559 C     C     . LYS LYS LYS A A 334 334 . 152.407 89.780  42.785  1.00 12.36
1 . .
ATOM 2560 O     O     . LYS LYS LYS A A 334 334 . 153.097 90.815  42.935  1.00 12.90
1 . .
ATOM 2561 N     N     . ALA ALA ALA A A 335 335 . 152.248 89.181  41.587  1.00 12.57
1 . .
ATOM 2562 CA    CA    . ALA ALA ALA A A 335 335 . 152.936 89.662  40.397  1.00 11.66
1 . .
ATOM 2563 CB    CB    . ALA ALA ALA A A 335 335 . 152.923 88.619  39.316  1.00 10.86
1 . .
ATOM 2564 C     C     . ALA ALA ALA A A 335 335 . 152.295 90.909  39.862  1.00 10.48
1 . .
ATOM 2565 O     O     . ALA ALA ALA A A 335 335 . 152.968 91.723  39.259  1.00 10.50
1 . .
ATOM 2566 N     N     . CYS CYS CYS A A 336 336 . 150.981 91.071  40.086  1.00 11.02
1 . .
ATOM 2567 CA    CA    . CYS CYS CYS A A 336 336 . 150.273 92.244  39.525  1.00 10.10
1 . .
ATOM 2568 CB    CB    . CYS CYS CYS A A 336 336 . 149.936 92.047  37.999  1.00 10.86
1 . .
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ATOM 2569 SG    SG    . CYS CYS CYS A A 336 336 . 148.979 90.508  37.690  1.00 11.29
1 . .
ATOM 2570 C     C     . CYS CYS CYS A A 336 336 . 149.015 92.408  40.361  1.00 11.10
1 . .
ATOM 2571 O     O     . CYS CYS CYS A A 336 336 . 148.754 91.646  41.284  1.00 12.24
1 . .
ATOM 2572 N     N     . ASN ASN ASN A A 337 337 . 148.228 93.418  40.047  1.00 8.87
1 . .
ATOM 2573 CA    CA    . ASN ASN ASN A A 337 337 . 147.016 93.640  40.820  1.00 8.72
1 . .
ATOM 2574 CB    CB    . ASN ASN ASN A A 337 337 . 147.278 94.703  41.908  1.00 9.55
1 . .
ATOM 2575 CG    CG    . ASN ASN ASN A A 337 337 . 147.722 96.027  41.351  1.00 8.77
1 . .
ATOM 2576 OD1   OD1   . ASN ASN ASN A A 337 337 . 148.613 96.734  41.966  1.00 13.81
1 . .
ATOM 2577 ND2   ND2   . ASN ASN ASN A A 337 337 . 147.196 96.409  40.219  1.00 6.70
1 . .
ATOM 2578 C     C     . ASN ASN ASN A A 337 337 . 145.787 93.967  40.000  1.00 9.17
1 . .
ATOM 2579 O     O     . ASN ASN ASN A A 337 337 . 144.747 94.435  40.512  1.00 10.38
1 . .
ATOM 2580 N     N     . CYS CYS CYS A A 338 338 . 145.893 93.645  38.687  1.00 9.25
1 . .
ATOM 2581 CA    CA    . CYS CYS CYS A A 338 338 . 144.762 93.816  37.790  1.00 8.49
1 . .
ATOM 2582 CB    CB    . CYS CYS CYS A A 338 338 . 144.794 95.255  37.186  1.00 8.89
1 . .
ATOM 2583 SG    SG    . CYS CYS CYS A A 338 338 . 143.355 95.687  36.113  1.00 10.05
1 . .
ATOM 2584 C     C     . CYS CYS CYS A A 338 338 . 144.913 92.809  36.671  1.00 7.62
1 . .
ATOM 2585 O     O     . CYS CYS CYS A A 338 338 . 146.026 92.559  36.206  1.00 8.99
1 . .
ATOM 2586 N     N     . LEU LEU LEU A A 339 339 . 143.775 92.290  36.205  1.00 7.38
1 . .
ATOM 2587 CA    CA    . LEU LEU LEU A A 339 339 . 143.748 91.350  35.065  1.00 7.72
1 . .
ATOM 2588 CB    CB    . LEU LEU LEU A A 339 339 . 142.784 90.225  35.397  1.00 7.10
1 . .
ATOM 2589 CG    CG    . LEU LEU LEU A A 339 339 . 142.440 89.284  34.261  1.00 8.55
1 . .
ATOM 2590 CD1   CD1   . LEU LEU LEU A A 339 339 . 143.685 88.511  33.862  1.00 8.96
1 . .
ATOM 2591 CD2   CD2   . LEU LEU LEU A A 339 339 . 141.350 88.349  34.732  1.00 8.56
1 . .
ATOM 2592 C     C     . LEU LEU LEU A A 339 339 . 143.251 92.078  33.808  1.00 6.49
1 . .
ATOM 2593 O     O     . LEU LEU LEU A A 339 339 . 142.207 92.732  33.879  1.00 7.76
1 . .
ATOM 2594 N     N     . LEU LEU LEU A A 340 340 . 143.961 91.923  32.687  1.00 7.42
1 . .
ATOM 2595 CA    CA    . LEU LEU LEU A A 340 340 . 143.371 92.401  31.400  1.00 6.50
1 . .
ATOM 2596 CB    CB    . LEU LEU LEU A A 340 340 . 144.465 92.718  30.412  1.00 5.66
1 . .
ATOM 2597 CG    CG    . LEU LEU LEU A A 340 340 . 143.935 93.596  29.256  1.00 6.47
1 . .
ATOM 2598 CD1   CD1   . LEU LEU LEU A A 340 340 . 143.805 95.071  29.640  1.00 7.51
1 . .
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ATOM 2599 CD2   CD2   . LEU LEU LEU A A 340 340 . 144.803 93.407  28.013  1.00 7.67
1 . .
ATOM 2600 C     C     . LEU LEU LEU A A 340 340 . 142.501 91.222  30.903  1.00 7.25
1 . .
ATOM 2601 O     O     . LEU LEU LEU A A 340 340 . 142.981 90.070  30.750  1.00 8.83
1 . .
ATOM 2602 N     N     . LEU LEU LEU A A 341 341 . 141.226 91.522  30.635  1.00 7.22
1 . .
ATOM 2603 CA    CA    . LEU LEU LEU A A 341 341 . 140.266 90.435  30.291  1.00 6.93
1 . .
ATOM 2604 CB    CB    . LEU LEU LEU A A 341 341 . 138.910 90.642  30.989  1.00 7.12
1 . .
ATOM 2605 CG    CG    . LEU LEU LEU A A 341 341 . 138.082 89.378  31.103  1.00 8.38
1 . .
ATOM 2606 CD1   CD1   . LEU LEU LEU A A 341 341 . 138.574 88.460  32.271  1.00 11.98
1 . .
ATOM 2607 CD2   CD2   . LEU LEU LEU A A 341 341 . 136.635 89.737  31.401  1.00 12.16
1 . .
ATOM 2608 C     C     . LEU LEU LEU A A 341 341 . 140.016 90.415  28.780  1.00 6.79
1 . .
ATOM 2609 O     O     . LEU LEU LEU A A 341 341 . 139.397 91.327  28.221  1.00 8.81
1 . .
ATOM 2610 N     N     . LYS LYS LYS A A 342 342 . 140.528 89.377  28.110  1.00 8.40
1 . .
ATOM 2611 CA    CA    . LYS LYS LYS A A 342 342 . 140.417 89.195  26.661  1.00 7.25
1 . .
ATOM 2612 CB    CB    . LYS LYS LYS A A 342 342 . 141.833 89.257  26.064  1.00 9.27
1 . .
ATOM 2613 CG    CG    . LYS LYS LYS A A 342 342 . 142.366 90.661  25.914  1.00 10.30
1 . .
ATOM 2614 CD    CD    . LYS LYS LYS A A 342 342 . 143.830 90.511  25.473  1.00 10.77
1 . .
ATOM 2615 CE    CE    . LYS LYS LYS A A 342 342 . 144.377 91.737  24.877  1.00 11.19
1 . .
ATOM 2616 NZ    NZ    . LYS LYS LYS A A 342 342 . 145.803 91.723  24.763  1.00 13.26
1 . .
ATOM 2617 C     C     . LYS LYS LYS A A 342 342 . 139.770 87.846  26.435  1.00 8.28
1 . .
ATOM 2618 O     O     . LYS LYS LYS A A 342 342 . 140.379 86.745  26.603  1.00 9.34
1 . .
ATOM 2619 N     N     . VAL VAL VAL A A 343 343 . 138.519 87.883  26.033  1.00 8.03
1 . .
ATOM 2620 CA    CA    . VAL VAL VAL A A 343 343 . 137.807 86.676  25.719  1.00 7.21
1 . .
ATOM 2621 CB    CB    . VAL VAL VAL A A 343 343 . 136.378 86.869  25.159  1.00 8.54
1 . .
ATOM 2622 CG1   CG1   . VAL VAL VAL A A 343 343 . 135.383 87.431  26.297  1.00 9.16
1 . .
ATOM 2623 CG2   CG2   . VAL VAL VAL A A 343 343 . 136.384 87.875  24.005  1.00 9.77
1 . .
ATOM 2624 C     C     . VAL VAL VAL A A 343 343 . 138.577 85.698  24.812  1.00 7.80
1 . .
ATOM 2625 O     O     . VAL VAL VAL A A 343 343 . 138.446 84.481  25.000  1.00 9.12
1 . .
ATOM 2626 N     N     . ASN ASN ASN A A 344 344 . 139.326 86.197  23.804  1.00 8.05
1 . .
ATOM 2627 CA    CA    . ASN ASN ASN A A 344 344 . 139.977 85.299  22.887  1.00 6.91
1 . .
ATOM 2628 CB    CB    . ASN ASN ASN A A 344 344 . 140.012 85.840  21.438  1.00 6.25
1 . .
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ATOM 2629 CG    CG    . ASN ASN ASN A A 344 344 . 141.282 86.583  21.121  1.00 6.53
1 . .
ATOM 2630 OD1   OD1   . ASN ASN ASN A A 344 344 . 141.648 87.548  21.810  1.00 8.27
1 . .
ATOM 2631 ND2   ND2   . ASN ASN ASN A A 344 344 . 141.958 86.159  20.059  1.00 7.89
1 . .
ATOM 2632 C     C     . ASN ASN ASN A A 344 344 . 141.345 84.838  23.340  1.00 7.73
1 . .
ATOM 2633 O     O     . ASN ASN ASN A A 344 344 . 141.907 83.982  22.677  1.00 9.42
1 . .
ATOM 2634 N     N     . GLN GLN GLN A A 345 345 . 141.826 85.277  24.494  1.00 6.77
1 . .
ATOM 2635 CA    CA    . GLN GLN GLN A A 345 345 . 142.998 84.654  25.099  1.00 7.34
1 . .
ATOM 2636 CB    CB    . GLN GLN GLN A A 345 345 . 143.685 85.533  26.180  1.00 8.05
1 . .
ATOM 2637 CG    CG    . GLN GLN GLN A A 345 345 . 144.419 86.698  25.515  1.00 7.80
1 . .
ATOM 2638 CD    CD    . GLN GLN GLN A A 345 345 . 145.158 87.511  26.577  1.00 6.74
1 . .
ATOM 2639 OE1   OE1   . GLN GLN GLN A A 345 345 . 144.622 87.748  27.693  1.00 7.98
1 . .
ATOM 2640 NE2   NE2   . GLN GLN GLN A A 345 345 . 146.332 88.027  26.229  1.00 9.37
1 . .
ATOM 2641 C     C     . GLN GLN GLN A A 345 345 . 142.692 83.320  25.727  1.00 8.26
1 . .
ATOM 2642 O     O     . GLN GLN GLN A A 345 345 . 143.610 82.494  25.851  1.00 9.62
1 . .
ATOM 2643 N     N     . ILE ILE ILE A A 346 346 . 141.428 83.101  26.108  1.00 7.73
1 . .
ATOM 2644 CA    CA    . ILE ILE ILE A A 346 346 . 141.026 81.893  26.767  1.00 7.90
1 . .
ATOM 2645 CB    CB    . ILE ILE ILE A A 346 346 . 140.503 82.124  28.216  1.00 7.96
1 . .
ATOM 2646 CG1   CG1   . ILE ILE ILE A A 346 346 . 140.413 80.817  29.044  1.00 10.88
1 . .
ATOM 2647 CD    CD    . ILE ILE ILE A A 346 346 . 141.847 80.145  29.144  1.00 11.82
1 . .
ATOM 2648 CG2   CG2   . ILE ILE ILE A A 346 346 . 139.158 82.875  28.206  1.00 9.56
1 . .
ATOM 2649 C     C     . ILE ILE ILE A A 346 346 . 140.053 81.103  25.893  1.00 8.16
1 . .
ATOM 2650 O     O     . ILE ILE ILE A A 346 346 . 140.143 79.850  25.893  1.00 9.97
1 . .
ATOM 2651 N     N     . GLY GLY GLY A A 347 347 . 139.125 81.763  25.149  1.00 7.44
1 . .
ATOM 2652 CA    CA    . GLY GLY GLY A A 347 347 . 138.353 81.041  24.113  1.00 9.48
1 . .
ATOM 2653 C     C     . GLY GLY GLY A A 347 347 . 136.886 80.811  24.406  1.00 9.05
1 . .
ATOM 2654 O     O     . GLY GLY GLY A A 347 347 . 136.255 80.199  23.565  1.00 9.10
1 . .
ATOM 2655 N     N     . SER SER SER A A 348 348 . 136.344 81.257  25.549  1.00 9.22
1 . .
ATOM 2656 CA    CA    . SER SER SER A A 348 348 . 134.896 81.090  25.767  1.00 8.66
1 . .
ATOM 2657 CB    CB    . SER SER SER A A 348 348 . 134.521 79.669  26.254  1.00 9.97
1 . .
ATOM 2658 OG    OG    . SER SER SER A A 348 348 . 134.908 79.511  27.624  1.00 10.14
1 . .
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ATOM 2659 C     C     . SER SER SER A A 348 348 . 134.391 82.183  26.674  1.00 8.38
1 . .
ATOM 2660 O     O     . SER SER SER A A 348 348 . 135.182 82.695  27.538  1.00 9.63
1 . .
ATOM 2661 N     N     . VAL VAL VAL A A 349 349 . 133.119 82.491  26.550  1.00 8.63
1 . .
ATOM 2662 CA    CA    . VAL VAL VAL A A 349 349 . 132.522 83.452  27.503  1.00 8.65
1 . .
ATOM 2663 CB    CB    . VAL VAL VAL A A 349 349 . 131.073 83.777  27.050  1.00 8.21
1 . .
ATOM 2664 CG1   CG1   . VAL VAL VAL A A 349 349 . 130.393 84.712  28.082  1.00 11.36
1 . .
ATOM 2665 CG2   CG2   . VAL VAL VAL A A 349 349 . 131.135 84.504  25.719  1.00 9.84
1 . .
ATOM 2666 C     C     . VAL VAL VAL A A 349 349 . 132.577 82.933  28.941  1.00 8.69
1 . .
ATOM 2667 O     O     . VAL VAL VAL A A 349 349 . 132.973 83.665  29.861  1.00 9.16
1 . .
ATOM 2668 N     N     . THR THR THR A A 350 350 . 132.191 81.667  29.109  1.00 9.01
1 . .
ATOM 2669 CA    CA    . THR THR THR A A 350 350 . 132.186 81.082  30.505  1.00 9.54
1 . .
ATOM 2670 CB    CB    . THR THR THR A A 350 350 . 131.720 79.612  30.453  1.00 9.67
1 . .
ATOM 2671 OG1   OG1   . THR THR THR A A 350 350 . 130.346 79.715  30.070  1.00 12.36
1 . .
ATOM 2672 CG2   CG2   . THR THR THR A A 350 350 . 131.784 78.977  31.827  1.00 11.11
1 . .
ATOM 2673 C     C     . THR THR THR A A 350 350 . 133.546 81.217  31.156  1.00 10.18
1 . .
ATOM 2674 O     O     . THR THR THR A A 350 350 . 133.635 81.670  32.312  1.00 10.53
1 . .
ATOM 2675 N     N     . GLU GLU GLU A A 351 351 . 134.595 80.851  30.435  1.00 9.12
1 . .
ATOM 2676 CA    CA    . GLU GLU GLU A A 351 351 . 135.919 80.914  31.016  1.00 9.43
1 . .
ATOM 2677 CB    CB    . GLU GLU GLU A A 351 351 . 136.930 80.209  30.128  1.00 10.33
1 . .
ATOM 2678 CG    CG    . GLU GLU GLU A A 351 351 . 136.739 78.660  30.085  1.00 10.97
1 . .
ATOM 2679 CD    CD    . GLU GLU GLU A A 351 351 . 137.626 78.058  28.989  1.00 12.76
1 . .
ATOM 2680 OE1   OE1   . GLU GLU GLU A A 351 351 . 137.366 78.373  27.826  1.00 13.01
1 . .
ATOM 2681 OE2   OE2   . GLU GLU GLU A A 351 351 . 138.584 77.310  29.339  1.00 15.91
1 . .
ATOM 2682 C     C     . GLU GLU GLU A A 351 351 . 136.365 82.335  31.287  1.00 9.69
1 . .
ATOM 2683 O     O     . GLU GLU GLU A A 351 351 . 137.090 82.577  32.277  1.00 10.31
1 . .
ATOM 2684 N     N     . ALA ALA ALA A A 352 352 . 135.998 83.249  30.405  1.00 9.32
1 . .
ATOM 2685 CA    CA    . ALA ALA ALA A A 352 352 . 136.332 84.642  30.669  1.00 9.26
1 . .
ATOM 2686 CB    CB    . ALA ALA ALA A A 352 352 . 136.019 85.478  29.501  1.00 9.73
1 . .
ATOM 2687 C     C     . ALA ALA ALA A A 352 352 . 135.641 85.178  31.945  1.00 10.21
1 . .
ATOM 2688 O     O     . ALA ALA ALA A A 352 352 . 136.264 85.910  32.705  1.00 9.56
1 . .
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ATOM 2689 N     N     . ILE ILE ILE A A 353 353 . 134.364 84.807  32.113  1.00 9.11
1 . .
ATOM 2690 CA    CA    . ILE ILE ILE A A 353 353 . 133.622 85.235  33.312  1.00 10.19
1 . .
ATOM 2691 CB    CB    . ILE ILE ILE A A 353 353 . 132.140 84.836  33.222  1.00 9.05
1 . .
ATOM 2692 CG1   CG1   . ILE ILE ILE A A 353 353 . 131.487 85.684  32.112  1.00 11.30
1 . .
ATOM 2693 CD    CD    . ILE ILE ILE A A 353 353 . 130.025 85.357  31.832  1.00 12.71
1 . .
ATOM 2694 CG2   CG2   . ILE ILE ILE A A 353 353 . 131.482 84.965  34.614  1.00 12.56
1 . .
ATOM 2695 C     C     . ILE ILE ILE A A 353 353 . 134.312 84.615  34.544  1.00 9.94
1 . .
ATOM 2696 O     O     . ILE ILE ILE A A 353 353 . 134.531 85.303  35.579  1.00 10.66
1 . .
ATOM 2697 N     N     . GLN GLN GLN A A 354 354 . 134.748 83.363  34.459  1.00 10.99
1 . .
ATOM 2698 CA    CA    . GLN GLN GLN A A 354 354 . 135.419 82.730  35.579  1.00 12.77
1 . .
ATOM 2699 CB    CB    . GLN GLN GLN A A 354 354 . 135.728 81.234  35.268  1.00 12.97
1 . .
ATOM 2700 CG    CG    . GLN GLN GLN A A 354 354 . 136.785 80.588  36.166  1.00 24.70
1 . .
ATOM 2701 CD    CD    . GLN GLN GLN A A 354 354 . 137.186 79.136  35.808  1.00 34.16
1 . .
ATOM 2702 OE1   OE1   . GLN GLN GLN A A 354 354 . 137.275 78.717  34.629  1.00 35.83
1 . .
ATOM 2703 NE2   NE2   . GLN GLN GLN A A 354 354 . 137.479 78.374  36.868  1.00 39.46
1 . .
ATOM 2704 C     C     . GLN GLN GLN A A 354 354 . 136.719 83.461  35.890  1.00 11.25
1 . .
ATOM 2705 O     O     . GLN GLN GLN A A 354 354 . 137.099 83.628  37.072  1.00 11.18
1 . .
ATOM 2706 N     N     . ALA ALA ALA A A 355 355 . 137.487 83.805  34.864  1.00 10.24
1 . .
ATOM 2707 CA    CA    . ALA ALA ALA A A 355 355 . 138.762 84.507  35.076  1.00 8.40
1 . .
ATOM 2708 CB    CB    . ALA ALA ALA A A 355 355 . 139.554 84.649  33.763  1.00 9.40
1 . .
ATOM 2709 C     C     . ALA ALA ALA A A 355 355 . 138.534 85.878  35.757  1.00 8.89
1 . .
ATOM 2710 O     O     . ALA ALA ALA A A 355 355 . 139.245 86.244  36.725  1.00 9.62
1 . .
ATOM 2711 N     N     . CYS CYS CYS A A 356 356 . 137.514 86.587  35.293  1.00 8.67
1 . .
ATOM 2712 CA    CA    . CYS CYS CYS A A 356 356 . 137.161 87.876  35.887  1.00 8.60
1 . .
ATOM 2713 CB    CB    . CYS CYS CYS A A 356 356 . 135.890 88.449  35.218  1.00 9.08
1 . .
ATOM 2714 SG    SG    . CYS CYS CYS A A 356 356 . 135.461 90.056  35.808  1.00 10.36
1 . .
ATOM 2715 C     C     . CYS CYS CYS A A 356 356 . 136.817 87.650  37.400  1.00 10.49
1 . .
ATOM 2716 O     O     . CYS CYS CYS A A 356 356 . 137.283 88.406  38.243  1.00 10.36
1 . .
ATOM 2717 N     N     . LYS LYS LYS A A 357 357 . 135.953 86.679  37.705  1.00 10.03
1 . .
ATOM 2718 CA    CA    . LYS LYS LYS A A 357 357 . 135.521 86.449  39.097  1.00 11.21
1 . .
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ATOM 2719 CB    CB    . LYS LYS LYS A A 357 357 . 134.324 85.450  39.125  1.00 12.41
1 . .
ATOM 2720 CG    CG    . LYS LYS LYS A A 357 357 . 133.050 86.115  38.463  1.00 18.30
1 . .
ATOM 2721 CD    CD    . LYS LYS LYS A A 357 357 . 131.782 85.167  38.376  1.00 25.76
1 . .
ATOM 2722 CE    CE    . LYS LYS LYS A A 357 357 . 131.175 84.775  39.754  1.00 33.09
1 . .
ATOM 2723 NZ    NZ    . LYS LYS LYS A A 357 357 . 131.214 85.997  40.626  1.00 31.96
1 . .
ATOM 2724 C     C     . LYS LYS LYS A A 357 357 . 136.710 86.061  39.959  1.00 9.87
1 . .
ATOM 2725 O     O     . LYS LYS LYS A A 357 357 . 136.807 86.514  41.138  1.00 11.04
1 . .
ATOM 2726 N     N     . LEU LEU LEU A A 358 358 . 137.638 85.271  39.442  1.00 10.57
1 . .
ATOM 2727 CA    CA    . LEU LEU LEU A A 358 358 . 138.822 84.863  40.177  1.00 11.03
1 . .
ATOM 2728 CB    CB    . LEU LEU LEU A A 358 358 . 139.643 83.817  39.377  1.00 10.62
1 . .
ATOM 2729 CG    CG    . LEU LEU LEU A A 358 358 . 140.949 83.396  39.992  1.00 14.04
1 . .
ATOM 2730 CD1   CD1   . LEU LEU LEU A A 358 358 . 140.697 82.670  41.322  1.00 17.73
1 . .
ATOM 2731 CD2   CD2   . LEU LEU LEU A A 358 358 . 141.624 82.484  39.059  1.00 16.62
1 . .
ATOM 2732 C     C     . LEU LEU LEU A A 358 358 . 139.700 86.058  40.545  1.00 11.10
1 . .
ATOM 2733 O     O     . LEU LEU LEU A A 358 358 . 140.137 86.240  41.704  1.00 12.80
1 . .
ATOM 2734 N     N     . ALA ALA ALA A A 359 359 . 139.910 86.967  39.592  1.00 10.82
1 . .
ATOM 2735 CA    CA    . ALA ALA ALA A A 359 359 . 140.690 88.159  39.888  1.00 9.95
1 . .
ATOM 2736 CB    CB    . ALA ALA ALA A A 359 359 . 140.852 88.938  38.572  1.00 9.15
1 . .
ATOM 2737 C     C     . ALA ALA ALA A A 359 359 . 139.928 89.020  40.934  1.00 10.11
1 . .
ATOM 2738 O     O     . ALA ALA ALA A A 359 359 . 140.535 89.513  41.906  1.00 12.00
1 . .
ATOM 2739 N     N     . GLN GLN GLN A A 360 360 . 138.623 89.231  40.738  1.00 10.33
1 . .
ATOM 2740 CA    CA    . GLN GLN GLN A A 360 360 . 137.826 90.096  41.664  1.00 10.31
1 . .
ATOM 2741 CB    CB    . GLN GLN GLN A A 360 360 . 136.418 90.304  41.136  1.00 11.07
1 . .
ATOM 2742 CG    CG    . GLN GLN GLN A A 360 360 . 136.392 91.185  39.839  1.00 10.89
1 . .
ATOM 2743 CD    CD    . GLN GLN GLN A A 360 360 . 135.022 91.352  39.206  1.00 13.19
1 . .
ATOM 2744 OE1   OE1   . GLN GLN GLN A A 360 360 . 134.702 92.406  38.538  1.00 17.92
1 . .
ATOM 2745 NE2   NE2   . GLN GLN GLN A A 360 360 . 134.240 90.317  39.259  1.00 12.32
1 . .
ATOM 2746 C     C     . GLN GLN GLN A A 360 360 . 137.805 89.513  43.092  1.00 11.52
1 . .
ATOM 2747 O     O     . GLN GLN GLN A A 360 360 . 137.913 90.303  44.049  1.00 12.57
1 . .
ATOM 2748 N     N     . GLU GLU GLU A A 361 361 . 137.693 88.207  43.208  1.00 12.31
1 . .
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ATOM 2749 CA    CA    . GLU GLU GLU A A 361 361 . 137.688 87.548  44.531  1.00 14.91
1 . .
ATOM 2750 CB    CB    . GLU GLU GLU A A 361 361 . 137.313 86.045  44.432  1.00 17.48
1 . .
ATOM 2751 CG    CG    . GLU GLU GLU A A 361 361 . 135.888 85.913  44.061  1.00 27.15
1 . .
ATOM 2752 CD    CD    . GLU GLU GLU A A 361 361 . 135.499 84.499  43.600  1.00 35.98
1 . .
ATOM 2753 OE1   OE1   . GLU GLU GLU A A 361 361 . 136.384 83.594  43.654  1.00 41.68
1 . .
ATOM 2754 OE2   OE2   . GLU GLU GLU A A 361 361 . 134.312 84.320  43.153  1.00 39.61
1 . .
ATOM 2755 C     C     . GLU GLU GLU A A 361 361 . 139.023 87.721  45.231  1.00 14.75
1 . .
ATOM 2756 O     O     . GLU GLU GLU A A 361 361 . 139.069 87.558  46.492  1.00 15.38
1 . .
ATOM 2757 N     N     . ASN ASN ASN A A 362 362 . 140.110 87.995  44.499  1.00 13.24
1 . .
ATOM 2758 CA    CA    . ASN ASN ASN A A 362 362 . 141.419 88.189  45.110  1.00 13.69
1 . .
ATOM 2759 CB    CB    . ASN ASN ASN A A 362 362 . 142.445 87.430  44.336  1.00 14.76
1 . .
ATOM 2760 CG    CG    . ASN ASN ASN A A 362 362 . 142.377 85.949  44.662  1.00 16.42
1 . .
ATOM 2761 OD1   OD1   . ASN ASN ASN A A 362 362 . 142.888 85.542  45.723  1.00 20.89
1 . .
ATOM 2762 ND2   ND2   . ASN ASN ASN A A 362 362 . 141.752 85.132  43.804  1.00 18.30
1 . .
ATOM 2763 C     C     . ASN ASN ASN A A 362 362 . 141.760 89.669  45.180  1.00 12.73
1 . .
ATOM 2764 O     O     . ASN ASN ASN A A 362 362 . 142.944 90.019  45.432  1.00 15.73
1 . .
ATOM 2765 N     N     . GLY GLY GLY A A 363 363 . 140.731 90.517  45.039  1.00 13.24
1 . .
ATOM 2766 CA    CA    . GLY GLY GLY A A 363 363 . 140.902 92.032  45.233  1.00 12.99
1 . .
ATOM 2767 C     C     . GLY GLY GLY A A 363 363 . 141.587 92.748  44.061  1.00 14.52
1 . .
ATOM 2768 O     O     . GLY GLY GLY A A 363 363 . 141.970 93.906  44.198  1.00 16.00
1 . .
ATOM 2769 N     N     . TRP TRP TRP A A 364 364 . 141.813 92.026  42.943  1.00 11.39
1 . .
ATOM 2770 CA    CA    . TRP TRP TRP A A 364 364 . 142.414 92.682  41.773  1.00 11.05
1 . .
ATOM 2771 CB    CB    . TRP TRP TRP A A 364 364 . 142.824 91.631  40.811  1.00 10.80
1 . .
ATOM 2772 CG    CG    . TRP TRP TRP A A 364 364 . 144.071 90.889  41.126  1.00 9.27
1 . .
ATOM 2773 CD1   CD1   . TRP TRP TRP A A 364 364 . 144.770 90.700  42.360  1.00 13.93
1 . .
ATOM 2774 NE1   NE1   . TRP TRP TRP A A 364 364 . 145.870 89.874  42.150  1.00 12.99
1 . .
ATOM 2775 CE2   CE2   . TRP TRP TRP A A 364 364 . 145.876 89.512  40.800  1.00 10.81
1 . .
ATOM 2776 CD2   CD2   . TRP TRP TRP A A 364 364 . 144.758 90.122  40.154  1.00 9.91
1 . .
ATOM 2777 CE3   CE3   . TRP TRP TRP A A 364 364 . 144.546 89.914  38.753  1.00 11.59
1 . .
ATOM 2778 CZ3   CZ3   . TRP TRP TRP A A 364 364 . 145.450 89.052  38.072  1.00 11.10
1 . .
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ATOM 2779 CH2   CH2   . TRP TRP TRP A A 364 364 . 146.520 88.460  38.751  1.00 12.82
1 . .
ATOM 2780 CZ2   CZ2   . TRP TRP TRP A A 364 364 . 146.721 88.684  40.132  1.00 10.69
1 . .
ATOM 2781 C     C     . TRP TRP TRP A A 364 364 . 141.381 93.549  41.053  1.00 11.48
1 . .
ATOM 2782 O     O     . TRP TRP TRP A A 364 364 . 140.168 93.262  41.113  1.00 12.65
1 . .
ATOM 2783 N     N     . GLY GLY GLY A A 365 365 . 141.879 94.500  40.272  1.00 10.50
1 . .
ATOM 2784 CA    CA    . GLY GLY GLY A A 365 365 . 141.027 95.139  39.243  1.00 10.27
1 . .
ATOM 2785 C     C     . GLY GLY GLY A A 365 365 . 140.939 94.203  38.042  1.00 9.97
1 . .
ATOM 2786 O     O     . GLY GLY GLY A A 365 365 . 141.622 93.195  37.908  1.00 8.77
1 . .
ATOM 2787 N     N     . VAL VAL VAL A A 366 366 . 139.986 94.553  37.190  1.00 9.02
1 . .
ATOM 2788 CA    CA    . VAL VAL VAL A A 366 366 . 139.871 93.887  35.872  1.00 8.43
1 . .
ATOM 2789 CB    CB    . VAL VAL VAL A A 366 366 . 138.715 92.781  35.873  1.00 7.51
1 . .
ATOM 2790 CG1   CG1   . VAL VAL VAL A A 366 366 . 138.581 92.180  34.537  1.00 7.87
1 . .
ATOM 2791 CG2   CG2   . VAL VAL VAL A A 366 366 . 138.903 91.765  36.966  1.00 9.42
1 . .
ATOM 2792 C     C     . VAL VAL VAL A A 366 366 . 139.570 94.920  34.824  1.00 6.58
1 . .
ATOM 2793 O     O     . VAL VAL VAL A A 366 366 . 138.593 95.680  34.953  1.00 8.54
1 . .
ATOM 2794 N     N     . MET MET MET A A 367 367 . 140.399 94.986  33.785  1.00 7.18
1 . .
ATOM 2795 CA    CA    . MET MET MET A A 367 367 . 140.154 95.882  32.664  1.00 6.94
1 . .
ATOM 2796 CB    CB    . MET MET MET A A 367 367 . 141.435 96.684  32.393  1.00 7.13
1 . .
ATOM 2797 CG    CG    . MET MET MET A A 367 367 . 141.196 97.601  31.182  1.00 8.26
1 . .
ATOM 2798 SD    SD    . MET MET MET A A 367 367 . 142.613 98.644  30.712  1.00 9.14
1 . .
ATOM 2799 CE    CE    . MET MET MET A A 367 367 . 142.548 99.985  31.890  1.00 15.04
1 . .
ATOM 2800 C     C     . MET MET MET A A 367 367 . 139.820 95.028  31.443  1.00 6.33
1 . .
ATOM 2801 O     O     . MET MET MET A A 367 367 . 140.631 94.255  30.999  1.00 7.74
1 . .
ATOM 2802 N     N     . VAL VAL VAL A A 368 368 . 138.577 95.198  30.976  1.00 6.85
1 . .
ATOM 2803 CA    CA    . VAL VAL VAL A A 368 368 . 138.190 94.473  29.761  1.00 7.30
1 . .
ATOM 2804 CB    CB    . VAL VAL VAL A A 368 368 . 136.628 94.569  29.576  1.00 6.67
1 . .
ATOM 2805 CG1   CG1   . VAL VAL VAL A A 368 368 . 136.105 94.016  28.187  1.00 8.26
1 . .
ATOM 2806 CG2   CG2   . VAL VAL VAL A A 368 368 . 135.972 93.773  30.735  1.00 8.43
1 . .
ATOM 2807 C     C     . VAL VAL VAL A A 368 368 . 138.957 95.076  28.586  1.00 7.07
1 . .
ATOM 2808 O     O     . VAL VAL VAL A A 368 368 . 139.181 96.290  28.566  1.00 7.83
1 . .
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ATOM 2809 N     N     . SER SER SER A A 369 369 . 139.320 94.241  27.598  1.00 6.77
1 . .
ATOM 2810 CA    CA    . SER SER SER A A 369 369 . 140.097 94.772  26.492  1.00 7.76
1 . .
ATOM 2811 CB    CB    . SER SER SER A A 369 369 . 141.567 94.386  26.747  1.00 6.93
1 . .
ATOM 2812 OG    OG    . SER SER SER A A 369 369 . 142.435 94.827  25.700  1.00 8.16
1 . .
ATOM 2813 C     C     . SER SER SER A A 369 369 . 139.640 94.221  25.158  1.00 6.69
1 . .
ATOM 2814 O     O     . SER SER SER A A 369 369 . 139.320 93.035  24.977  1.00 7.77
1 . .
ATOM 2815 N     N     . HIS HIS HIS A A 370 370 . 139.776 95.078  24.130  1.00 7.24
1 . .
ATOM 2816 CA    CA    . HIS HIS HIS A A 370 370 . 139.758 94.665  22.726  1.00 6.43
1 . .
ATOM 2817 CB    CB    . HIS HIS HIS A A 370 370 . 139.701 95.944  21.846  1.00 6.56
1 . .
ATOM 2818 CG    CG    . HIS HIS HIS A A 370 370 . 140.869 96.878  22.019  1.00 6.80
1 . .
ATOM 2819 ND1   ND1   . HIS HIS HIS A A 370 370 . 141.066 97.962  21.167  1.00 6.39
1 . .
ATOM 2820 CE1   CE1   . HIS HIS HIS A A 370 370 . 142.149 98.642  21.564  1.00 8.08
1 . .
ATOM 2821 NE2   NE2   . HIS HIS HIS A A 370 370 . 142.622 98.072  22.671  1.00 8.46
1 . .
ATOM 2822 CD2   CD2   . HIS HIS HIS A A 370 370 . 141.850 96.949  22.955  1.00 6.63
1 . .
ATOM 2823 C     C     . HIS HIS HIS A A 370 370 . 141.063 93.941  22.367  1.00 5.67
1 . .
ATOM 2824 O     O     . HIS HIS HIS A A 370 370 . 141.956 93.745  23.181  1.00 6.77
1 . .
ATOM 2825 N     N     . ARG ARG ARG A A 371 371 . 141.133 93.465  21.112  1.00 6.40
1 . .
ATOM 2826 CA    CA    . ARG ARG ARG A A 371 371 . 142.452 93.145  20.509  1.00 5.80
1 . .
ATOM 2827 CB    CB    . ARG ARG ARG A A 371 371 . 142.436 91.829  19.791  1.00 5.62
1 . .
ATOM 2828 CG    CG    . ARG ARG ARG A A 371 371 . 142.078 90.600  20.660  1.00 6.03
1 . .
ATOM 2829 CD    CD    . ARG ARG ARG A A 371 371 . 142.863 90.469  21.939  1.00 5.84
1 . .
ATOM 2830 NE    NE    . ARG ARG ARG A A 371 371 . 144.303 90.414  21.758  1.00 7.27
1 . .
ATOM 2831 CZ    CZ    . ARG ARG ARG A A 371 371 . 145.020 89.307  22.003  1.00 7.07
1 . .
ATOM 2832 NH1   NH1   . ARG ARG ARG A A 371 371 . 144.412 88.113  22.251  1.00 7.89
1 . .
ATOM 2833 NH2   NH2   . ARG ARG ARG A A 371 371 . 146.364 89.379  22.008  1.00 7.66
1 . .
ATOM 2834 C     C     . ARG ARG ARG A A 371 371 . 142.817 94.220  19.485  1.00 6.39
1 . .
ATOM 2835 O     O     . ARG ARG ARG A A 371 371 . 141.927 94.984  19.047  1.00 6.69
1 . .
ATOM 2836 N     N     . SER SER SER A A 372 372 . 144.079 94.256  19.074  1.00 5.97
1 . .
ATOM 2837 CA    CA    . SER SER SER A A 372 372 . 144.481 95.257  18.065  1.00 6.96
1 . .
ATOM 2838 CB    CB    . SER SER SER A A 372 372 . 146.013 95.384  17.957  1.00 7.48
1 . .
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ATOM 2839 OG    OG    . SER SER SER A A 372 372 . 146.541 94.113  17.568  1.00 6.58
1 . .
ATOM 2840 C     C     . SER SER SER A A 372 372 . 143.836 94.967  16.723  1.00 6.87
1 . .
ATOM 2841 O     O     . SER SER SER A A 372 372 . 143.677 95.910  15.945  1.00 7.26
1 . .
ATOM 2842 N     N     . GLY GLY GLY A A 373 373 . 143.447 93.719  16.421  1.00 6.51
1 . .
ATOM 2843 CA    CA    . GLY GLY GLY A A 373 373 . 142.609 93.388  15.234  1.00 6.94
1 . .
ATOM 2844 C     C     . GLY GLY GLY A A 373 373 . 141.190 93.237  15.733  1.00 6.79
1 . .
ATOM 2845 O     O     . GLY GLY GLY A A 373 373 . 140.883 92.272  16.409  1.00 7.80
1 . .
ATOM 2846 N     N     . GLU GLU GLU A A 374 374 . 140.354 94.221  15.511  1.00 6.34
1 . .
ATOM 2847 CA    CA    . GLU GLU GLU A A 374 374 . 138.988 94.178  15.981  1.00 6.15
1 . .
ATOM 2848 CB    CB    . GLU GLU GLU A A 374 374 . 138.662 95.434  16.833  1.00 8.09
1 . .
ATOM 2849 CG    CG    . GLU GLU GLU A A 374 374 . 138.877 95.280  18.350  1.00 7.13
1 . .
ATOM 2850 CD    CD    . GLU GLU GLU A A 374 374 . 137.972 94.192  18.913  1.00 8.05
1 . .
ATOM 2851 OE1   OE1   . GLU GLU GLU A A 374 374 . 136.840 93.972  18.398  1.00 7.93
1 . .
ATOM 2852 OE2   OE2   . GLU GLU GLU A A 374 374 . 138.440 93.552  19.934  1.00 8.12
1 . .
ATOM 2853 C     C     . GLU GLU GLU A A 374 374 . 138.013 94.096  14.824  1.00 6.45
1 . .
ATOM 2854 O     O     . GLU GLU GLU A A 374 374 . 138.416 94.105  13.634  1.00 8.17
1 . .
ATOM 2855 N     N     . THR THR THR A A 375 375 . 136.727 94.029  15.175  1.00 6.17
1 . .
ATOM 2856 CA    CA    . THR THR THR A A 375 375 . 135.688 94.036  14.173  1.00 7.16
1 . .
ATOM 2857 CB    CB    . THR THR THR A A 375 375 . 134.973 92.677  13.966  1.00 7.41
1 . .
ATOM 2858 OG1   OG1   . THR THR THR A A 375 375 . 134.228 92.357  15.146  1.00 8.23
1 . .
ATOM 2859 CG2   CG2   . THR THR THR A A 375 375 . 136.031 91.550  13.737  1.00 8.28
1 . .
ATOM 2860 C     C     . THR THR THR A A 375 375 . 134.635 95.024  14.610  1.00 6.96
1 . .
ATOM 2861 O     O     . THR THR THR A A 375 375 . 134.743 95.654  15.673  1.00 8.23
1 . .
ATOM 2862 N     N     . GLU GLU GLU A A 376 376 . 133.559 95.101  13.816  1.00 8.07
1 . .
ATOM 2863 CA    CA    . GLU GLU GLU A A 376 376 . 132.406 95.933  14.128  1.00 7.87
1 . .
ATOM 2864 CB    CB    . GLU GLU GLU A A 376 376 . 131.580 96.125  12.839  1.00 8.96
1 . .
ATOM 2865 CG    CG    . GLU GLU GLU A A 376 376 . 131.111 94.835  12.154  1.00 10.12
1 . .
ATOM 2866 CD    CD    . GLU GLU GLU A A 376 376 . 131.991 94.281  11.078  1.00 9.81
1 . .
ATOM 2867 OE1   OE1   . GLU GLU GLU A A 376 376 . 133.187 94.326  11.254  1.00 12.77
1 . .
ATOM 2868 OE2   OE2   . GLU GLU GLU A A 376 376 . 131.499 93.787  10.040  1.00 9.55
1 . .
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ATOM 2869 C     C     . GLU GLU GLU A A 376 376 . 131.604 95.376  15.334  1.00 8.36
1 . .
ATOM 2870 O     O     . GLU GLU GLU A A 376 376 . 130.647 96.025  15.776  1.00 9.53
1 . .
ATOM 2871 N     N     . ASP ASP ASP A A 377 377 . 131.959 94.177  15.813  1.00 7.43
1 . .
ATOM 2872 CA    CA    . ASP ASP ASP A A 377 377 . 131.254 93.590  16.979  1.00 8.25
1 . .
ATOM 2873 CB    CB    . ASP ASP ASP A A 377 377 . 131.935 92.259  17.216  1.00 9.70
1 . .
ATOM 2874 CG    CG    . ASP ASP ASP A A 377 377 . 131.251 91.366  18.238  1.00 11.89
1 . .
ATOM 2875 OD1   OD1   . ASP ASP ASP A A 377 377 . 131.613 91.536  19.440  1.00 14.53
1 . .
ATOM 2876 OD2   OD2   . ASP ASP ASP A A 377 377 . 130.494 90.467  17.829  1.00 13.37
1 . .
ATOM 2877 C     C     . ASP ASP ASP A A 377 377 . 131.352 94.506  18.205  1.00 8.02
1 . .
ATOM 2878 O     O     . ASP ASP ASP A A 377 377 . 132.376 95.122  18.427  1.00 9.16
1 . .
ATOM 2879 N     N     . THR THR THR A A 378 378 . 130.286 94.574  19.010  1.00 8.04
1 . .
ATOM 2880 CA    CA    . THR THR THR A A 378 378 . 130.324 95.377  20.215  1.00 7.95
1 . .
ATOM 2881 CB    CB    . THR THR THR A A 378 378 . 129.247 96.462  20.191  1.00 8.47
1 . .
ATOM 2882 OG1   OG1   . THR THR THR A A 378 378 . 127.937 95.854  20.115  1.00 10.76
1 . .
ATOM 2883 CG2   CG2   . THR THR THR A A 378 378 . 129.403 97.332  18.898  1.00 12.00
1 . .
ATOM 2884 C     C     . THR THR THR A A 378 378 . 130.190 94.609  21.494  1.00 7.86
1 . .
ATOM 2885 O     O     . THR THR THR A A 378 378 . 129.966 95.232  22.555  1.00 8.33
1 . .
ATOM 2886 N     N     . PHE PHE PHE A A 379 379 . 130.305 93.283  21.439  1.00 7.24
1 . .
ATOM 2887 CA    CA    . PHE PHE PHE A A 379 379 . 130.086 92.439  22.631  1.00 5.86
1 . .
ATOM 2888 CB    CB    . PHE PHE PHE A A 379 379 . 130.603 90.976  22.313  1.00 6.49
1 . .
ATOM 2889 CG    CG    . PHE PHE PHE A A 379 379 . 130.332 90.006  23.434  1.00 7.68
1 . .
ATOM 2890 CD1   CD1   . PHE PHE PHE A A 379 379 . 131.279 89.802  24.437  1.00 7.72
1 . .
ATOM 2891 CE1   CE1   . PHE PHE PHE A A 379 379 . 131.124 88.883  25.453  1.00 9.39
1 . .
ATOM 2892 CZ    CZ    . PHE PHE PHE A A 379 379 . 129.880 88.247  25.529  1.00 10.19
1 . .
ATOM 2893 CE2   CE2   . PHE PHE PHE A A 379 379 . 128.874 88.431  24.563  1.00 11.25
1 . .
ATOM 2894 CD2   CD2   . PHE PHE PHE A A 379 379 . 129.114 89.324  23.478  1.00 11.20
1 . .
ATOM 2895 C     C     . PHE PHE PHE A A 379 379 . 130.814 92.967  23.865  1.00 6.14
1 . .
ATOM 2896 O     O     . PHE PHE PHE A A 379 379 . 130.232 92.953  24.973  1.00 6.90
1 . .
ATOM 2897 N     N     . ILE ILE ILE A A 380 380 . 132.116 93.357  23.730  1.00 5.97
1 . .
ATOM 2898 CA    CA    . ILE ILE ILE A A 380 380 . 132.856 93.725  24.948  1.00 6.92
1 . .
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ATOM 2899 CB    CB    . ILE ILE ILE A A 380 380 . 134.387 93.843  24.754  1.00 6.31
1 . .
ATOM 2900 CG1   CG1   . ILE ILE ILE A A 380 380 . 134.773 94.972  23.817  1.00 6.73
1 . .
ATOM 2901 CD    CD    . ILE ILE ILE A A 380 380 . 136.309 95.155  23.755  1.00 8.95
1 . .
ATOM 2902 CG2   CG2   . ILE ILE ILE A A 380 380 . 134.931 92.478  24.285  1.00 7.57
1 . .
ATOM 2903 C     C     . ILE ILE ILE A A 380 380 . 132.286 94.942  25.697  1.00 6.24
1 . .
ATOM 2904 O     O     . ILE ILE ILE A A 380 380 . 132.577 95.119  26.877  1.00 6.87
1 . .
ATOM 2905 N     N     . ALA ALA ALA A A 381 381 . 131.530 95.796  24.999  1.00 5.60
1 . .
ATOM 2906 CA    CA    . ALA ALA ALA A A 381 381 . 130.863 96.892  25.659  1.00 5.11
1 . .
ATOM 2907 CB    CB    . ALA ALA ALA A A 381 381 . 130.152 97.813  24.600  1.00 6.41
1 . .
ATOM 2908 C     C     . ALA ALA ALA A A 381 381 . 129.838 96.339  26.661  1.00 6.42
1 . .
ATOM 2909 O     O     . ALA ALA ALA A A 381 381 . 129.835 96.768  27.850  1.00 7.32
1 . .
ATOM 2910 N     N     . ASP ASP ASP A A 382 382 . 128.974 95.412  26.251  1.00 6.11
1 . .
ATOM 2911 CA    CA    . ASP ASP ASP A A 382 382 . 128.035 94.840  27.236  1.00 7.95
1 . .
ATOM 2912 CB    CB    . ASP ASP ASP A A 382 382 . 127.028 94.008  26.483  1.00 8.42
1 . .
ATOM 2913 CG    CG    . ASP ASP ASP A A 382 382 . 126.062 94.950  25.670  1.00 11.04
1 . .
ATOM 2914 OD1   OD1   . ASP ASP ASP A A 382 382 . 126.462 95.485  24.602  1.00 11.32
1 . .
ATOM 2915 OD2   OD2   . ASP ASP ASP A A 382 382 . 124.921 95.135  26.152  1.00 12.36
1 . .
ATOM 2916 C     C     . ASP ASP ASP A A 382 382 . 128.770 93.987  28.238  1.00 8.21
1 . .
ATOM 2917 O     O     . ASP ASP ASP A A 382 382 . 128.326 93.970  29.402  1.00 9.07
1 . .
ATOM 2918 N     N     . LEU LEU LEU A A 383 383 . 129.894 93.336  27.853  1.00 6.93
1 . .
ATOM 2919 CA    CA    . LEU LEU LEU A A 383 383 . 130.608 92.527  28.786  1.00 6.78
1 . .
ATOM 2920 CB    CB    . LEU LEU LEU A A 383 383 . 131.744 91.830  28.063  1.00 6.82
1 . .
ATOM 2921 CG    CG    . LEU LEU LEU A A 383 383 . 132.613 90.854  28.902  1.00 7.64
1 . .
ATOM 2922 CD1   CD1   . LEU LEU LEU A A 383 383 . 131.829 89.612  29.312  1.00 7.92
1 . .
ATOM 2923 CD2   CD2   . LEU LEU LEU A A 383 383 . 133.892 90.463  28.128  1.00 8.42
1 . .
ATOM 2924 C     C     . LEU LEU LEU A A 383 383 . 131.147 93.344  29.966  1.00 6.44
1 . .
ATOM 2925 O     O     . LEU LEU LEU A A 383 383 . 130.988 92.921  31.132  1.00 8.49
1 . .
ATOM 2926 N     N     . VAL VAL VAL A A 384 384 . 131.807 94.486  29.721  1.00 6.91
1 . .
ATOM 2927 CA    CA    . VAL VAL VAL A A 384 384 . 132.382 95.219  30.863  1.00 7.04
1 . .
ATOM 2928 CB    CB    . VAL VAL VAL A A 384 384 . 133.332 96.373  30.319  1.00 6.97
1 . .
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ATOM 2929 CG1   CG1   . VAL VAL VAL A A 384 384 . 132.533 97.476  29.546  1.00 7.52
1 . .
ATOM 2930 CG2   CG2   . VAL VAL VAL A A 384 384 . 134.082 96.920  31.465  1.00 8.20
1 . .
ATOM 2931 C     C     . VAL VAL VAL A A 384 384 . 131.295 95.755  31.813  1.00 7.11
1 . .
ATOM 2932 O     O     . VAL VAL VAL A A 384 384 . 131.527 95.816  33.020  1.00 7.50
1 . .
ATOM 2933 N     N     . VAL VAL VAL A A 385 385 . 130.117 96.117  31.264  1.00 7.04
1 . .
ATOM 2934 CA    CA    . VAL VAL VAL A A 385 385 . 129.067 96.617  32.114  1.00 7.99
1 . .
ATOM 2935 CB    CB    . VAL VAL VAL A A 385 385 . 127.965 97.327  31.271  1.00 6.99
1 . .
ATOM 2936 CG1   CG1   . VAL VAL VAL A A 385 385 . 126.733 97.712  32.199  1.00 9.88
1 . .
ATOM 2937 CG2   CG2   . VAL VAL VAL A A 385 385 . 128.547 98.561  30.662  1.00 9.61
1 . .
ATOM 2938 C     C     . VAL VAL VAL A A 385 385 . 128.484 95.451  32.930  1.00 7.95
1 . .
ATOM 2939 O     O     . VAL VAL VAL A A 385 385 . 128.355 95.559  34.153  1.00 9.53
1 . .
ATOM 2940 N     N     . GLY GLY GLY A A 386 386 . 128.218 94.332  32.281  1.00 8.78
1 . .
ATOM 2941 CA    CA    . GLY GLY GLY A A 386 386 . 127.652 93.163  33.003  1.00 8.78
1 . .
ATOM 2942 C     C     . GLY GLY GLY A A 386 386 . 128.581 92.577  34.041  1.00 8.60
1 . .
ATOM 2943 O     O     . GLY GLY GLY A A 386 386 . 128.094 92.109  35.084  1.00 10.97
1 . .
ATOM 2944 N     N     . LEU LEU LEU A A 387 387 . 129.896 92.672  33.832  1.00 8.94
1 . .
ATOM 2945 CA    CA    . LEU LEU LEU A A 387 387 . 130.853 92.138  34.753  1.00 8.33
1 . .
ATOM 2946 CB    CB    . LEU LEU LEU A A 387 387 . 132.128 91.690  34.027  1.00 9.82
1 . .
ATOM 2947 CG    CG    . LEU LEU LEU A A 387 387 . 131.896 90.435  33.131  1.00 10.78
1 . .
ATOM 2948 CD1   CD1   . LEU LEU LEU A A 387 387 . 133.306 90.017  32.596  1.00 13.29
1 . .
ATOM 2949 CD2   CD2   . LEU LEU LEU A A 387 387 . 131.218 89.250  33.905  1.00 16.77
1 . .
ATOM 2950 C     C     . LEU LEU LEU A A 387 387 . 131.236 93.213  35.806  1.00 9.51
1 . .
ATOM 2951 O     O     . LEU LEU LEU A A 387 387 . 131.998 92.901  36.724  1.00 11.32
1 . .
ATOM 2952 N     N     . CYS CYS CYS A A 388 388 . 130.770 94.460  35.605  1.00 10.21
1 . .
ATOM 2953 CA    CA    . CYS CYS CYS A A 388 388 . 130.939 95.525  36.590  1.00 11.32
1 . .
ATOM 2954 CB    CB    . CYS CYS CYS A A 388 388 . 130.204 95.151  37.893  1.00 13.01
1 . .
ATOM 2955 SG    SG    . CYS CYS CYS A A 388 388 . 128.441 95.228  37.690  1.00 22.44
1 . .
ATOM 2956 C     C     . CYS CYS CYS A A 388 388 . 132.414 95.775  36.879  1.00 11.46
1 . .
ATOM 2957 O     O     . CYS CYS CYS A A 388 388 . 132.757 95.985  38.028  1.00 13.99
1 . .
ATOM 2958 N     N     . THR THR THR A A 389 389 . 133.288 95.739  35.860  1.00 8.99
1 . .
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ATOM 2959 CA    CA    . THR THR THR A A 389 389 . 134.685 95.814  36.162  1.00 9.60
1 . .
ATOM 2960 CB    CB    . THR THR THR A A 389 389 . 135.596 95.077  35.124  1.00 10.04
1 . .
ATOM 2961 OG1   OG1   . THR THR THR A A 389 389 . 135.978 95.978  34.023  1.00 10.06
1 . .
ATOM 2962 CG2   CG2   . THR THR THR A A 389 389 . 134.949 93.767  34.603  1.00 10.43
1 . .
ATOM 2963 C     C     . THR THR THR A A 389 389 . 135.132 97.249  36.309  1.00 9.61
1 . .
ATOM 2964 O     O     . THR THR THR A A 389 389 . 136.220 97.473  36.865  1.00 11.56
1 . .
ATOM 2965 N     N     . GLY GLY GLY A A 390 390 . 134.426 98.235  35.787  1.00 7.75
1 . .
ATOM 2966 CA    CA    . GLY GLY GLY A A 390 390 . 134.864 99.649  36.006  1.00 8.78
1 . .
ATOM 2967 C     C     . GLY GLY GLY A A 390 390 . 135.899 100.191 35.043  1.00 6.95
1 . .
ATOM 2968 O     O     . GLY GLY GLY A A 390 390 . 136.164 101.387 35.114  1.00 8.24
1 . .
ATOM 2969 N     N     . GLN GLN GLN A A 391 391 . 136.456 99.384  34.144  1.00 7.03
1 . .
ATOM 2970 CA    CA    . GLN GLN GLN A A 391 391 . 137.475 99.932  33.213  1.00 6.76
1 . .
ATOM 2971 CB    CB    . GLN GLN GLN A A 391 391 . 138.863 100.017 33.870  1.00 8.86
1 . .
ATOM 2972 CG    CG    . GLN GLN GLN A A 391 391 . 139.140 98.971  34.914  1.00 9.34
1 . .
ATOM 2973 CD    CD    . GLN GLN GLN A A 391 391 . 140.593 99.010  35.443  1.00 9.63
1 . .
ATOM 2974 OE1   OE1   . GLN GLN GLN A A 391 391 . 141.485 99.675  34.914  1.00 10.58
1 . .
ATOM 2975 NE2   NE2   . GLN GLN GLN A A 391 391 . 140.798 98.292  36.537  1.00 9.57
1 . .
ATOM 2976 C     C     . GLN GLN GLN A A 391 391 . 137.543 99.080  31.984  1.00 6.77
1 . .
ATOM 2977 O     O     . GLN GLN GLN A A 391 391 . 137.456 97.855  32.035  1.00 7.07
1 . .
ATOM 2978 N     N     . ILE ILE ILE A A 392 392 . 137.612 99.777  30.837  1.00 6.22
1 . .
ATOM 2979 CA    CA    . ILE ILE ILE A A 392 392 . 137.750 99.084  29.528  1.00 5.66
1 . .
ATOM 2980 CB    CB    . ILE ILE ILE A A 392 392 . 136.378 99.001  28.751  1.00 6.36
1 . .
ATOM 2981 CG1   CG1   . ILE ILE ILE A A 392 392 . 136.578 98.257  27.388  1.00 6.65
1 . .
ATOM 2982 CD    CD    . ILE ILE ILE A A 392 392 . 135.180 97.832  26.791  1.00 8.83
1 . .
ATOM 2983 CG2   CG2   . ILE ILE ILE A A 392 392 . 135.739 100.401 28.549  1.00 7.69
1 . .
ATOM 2984 C     C     . ILE ILE ILE A A 392 392 . 138.730 99.837  28.694  1.00 6.28
1 . .
ATOM 2985 O     O     . ILE ILE ILE A A 392 392 . 138.694 101.080 28.657  1.00 7.95
1 . .
ATOM 2986 N     N     . LYS LYS LYS A A 393 393 . 139.622 99.117  27.976  1.00 6.07
1 . .
ATOM 2987 CA    CA    . LYS LYS LYS A A 393 393 . 140.391 99.759  26.889  1.00 5.80
1 . .
ATOM 2988 CB    CB    . LYS LYS LYS A A 393 393 . 141.915 99.590  27.059  1.00 6.48
1 . .
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ATOM 2989 CG    CG    . LYS LYS LYS A A 393 393 . 142.430 98.165  26.923  1.00 7.29
1 . .
ATOM 2990 CD    CD    . LYS LYS LYS A A 393 393 . 144.002 98.236  27.088  1.00 7.58
1 . .
ATOM 2991 CE    CE    . LYS LYS LYS A A 393 393 . 144.619 97.079  26.333  1.00 9.14
1 . .
ATOM 2992 NZ    NZ    . LYS LYS LYS A A 393 393 . 146.125 97.126  26.481  1.00 8.66
1 . .
ATOM 2993 C     C     . LYS LYS LYS A A 393 393 . 139.903 99.142  25.555  1.00 5.52
1 . .
ATOM 2994 O     O     . LYS LYS LYS A A 393 393 . 139.858 97.929  25.400  1.00 6.16
1 . .
ATOM 2995 N     N     . THR THR THR A A 394 394 . 139.503 100.031 24.627  1.00 5.76
1 . .
ATOM 2996 CA    CA    . THR THR THR A A 394 394 . 139.041 99.513  23.339  1.00 6.16
1 . .
ATOM 2997 CB    CB    . THR THR THR A A 394 394 . 137.537 99.039  23.395  1.00 6.28
1 . .
ATOM 2998 OG1   OG1   . THR THR THR A A 394 394 . 137.181 98.419  22.162  1.00 7.01
1 . .
ATOM 2999 CG2   CG2   . THR THR THR A A 394 394 . 136.556 100.142 23.754  1.00 8.60
1 . .
ATOM 3000 C     C     . THR THR THR A A 394 394 . 139.358 100.464 22.233  1.00 5.39
1 . .
ATOM 3001 O     O     . THR THR THR A A 394 394 . 138.627 100.500 21.234  1.00 7.04
1 . .
ATOM 3002 N     N     . GLY GLY GLY A A 395 395 . 140.426 101.247 22.383  1.00 5.58
1 . .
ATOM 3003 CA    CA    . GLY GLY GLY A A 395 395 . 140.993 102.000 21.289  1.00 6.41
1 . .
ATOM 3004 C     C     . GLY GLY GLY A A 395 395 . 141.079 103.484 21.579  1.00 6.07
1 . .
ATOM 3005 O     O     . GLY GLY GLY A A 395 395 . 140.460 103.996 22.526  1.00 6.47
1 . .
ATOM 3006 N     N     . ALA ALA ALA A A 396 396 . 141.831 104.187 20.713  1.00 5.84
1 . .
ATOM 3007 CA    CA    . ALA ALA ALA A A 396 396 . 141.648 105.652 20.640  1.00 6.12
1 . .
ATOM 3008 CB    CB    . ALA ALA ALA A A 396 396 . 142.544 106.212 19.519  1.00 7.44
1 . .
ATOM 3009 C     C     . ALA ALA ALA A A 396 396 . 140.177 105.916 20.241  1.00 6.11
1 . .
ATOM 3010 O     O     . ALA ALA ALA A A 396 396 . 139.502 105.020 19.748  1.00 7.00
1 . .
ATOM 3011 N     N     . PRO PRO PRO A A 397 397 . 139.695 107.173 20.370  1.00 5.90
1 . .
ATOM 3012 CA    CA    . PRO PRO PRO A A 397 397 . 138.333 107.456 19.836  1.00 7.02
1 . .
ATOM 3013 CB    CB    . PRO PRO PRO A A 397 397 . 137.935 108.754 20.591  1.00 6.11
1 . .
ATOM 3014 CG    CG    . PRO PRO PRO A A 397 397 . 139.307 109.454 20.853  1.00 7.89
1 . .
ATOM 3015 CD    CD    . PRO PRO PRO A A 397 397 . 140.289 108.298 21.105  1.00 6.68
1 . .
ATOM 3016 C     C     . PRO PRO PRO A A 397 397 . 138.466 107.694 18.302  1.00 6.94
1 . .
ATOM 3017 O     O     . PRO PRO PRO A A 397 397 . 138.142 108.769 17.760  1.00 7.98
1 . .
ATOM 3018 N     N     . CYS CYS CYS A A 398 398 . 138.982 106.715 17.615  1.00 5.87
1 . .
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ATOM 3019 CA    CA    . CYS CYS CYS A A 398 398 . 139.332 106.822 16.191  1.00 7.38
1 . .
ATOM 3020 CB    CB    . CYS CYS CYS A A 398 398 . 140.724 107.486 16.023  1.00 7.80
1 . .
ATOM 3021 SG    SG    . CYS CYS CYS A A 398 398 . 141.243 107.512 14.268  1.00 8.44
1 . .
ATOM 3022 C     C     . CYS CYS CYS A A 398 398 . 139.373 105.378 15.626  1.00 6.03
1 . .
ATOM 3023 O     O     . CYS CYS CYS A A 398 398 . 139.956 104.493 16.276  1.00 7.41
1 . .
ATOM 3024 N     N     . ARG ARG ARG A A 399 399 . 138.719 105.180 14.459  1.00 5.50
1 . .
ATOM 3025 CA    CA    . ARG ARG ARG A A 399 399 . 138.499 103.873 13.788  1.00 5.86
1 . .
ATOM 3026 CB    CB    . ARG ARG ARG A A 399 399 . 139.714 102.919 13.850  1.00 6.64
1 . .
ATOM 3027 CG    CG    . ARG ARG ARG A A 399 399 . 140.974 103.572 13.251  1.00 5.55
1 . .
ATOM 3028 CD    CD    . ARG ARG ARG A A 399 399 . 142.262 102.710 13.496  1.00 6.80
1 . .
ATOM 3029 NE    NE    . ARG ARG ARG A A 399 399 . 142.171 101.417 12.872  1.00 6.14
1 . .
ATOM 3030 CZ    CZ    . ARG ARG ARG A A 399 399 . 143.145 100.898 12.099  1.00 6.64
1 . .
ATOM 3031 NH1   NH1   . ARG ARG ARG A A 399 399 . 144.289 101.548 11.855  1.00 6.96
1 . .
ATOM 3032 NH2   NH2   . ARG ARG ARG A A 399 399 . 142.993 99.663  11.585  1.00 7.30
1 . .
ATOM 3033 C     C     . ARG ARG ARG A A 399 399 . 137.277 103.223 14.395  1.00 6.08
1 . .
ATOM 3034 O     O     . ARG ARG ARG A A 399 399 . 137.246 103.005 15.610  1.00 5.88
1 . .
ATOM 3035 N     N     . SER SER SER A A 400 400 . 136.260 102.907 13.548  1.00 5.88
1 . .
ATOM 3036 CA    CA    . SER SER SER A A 400 400 . 135.037 102.494 14.161  1.00 5.04
1 . .
ATOM 3037 CB    CB    . SER SER SER A A 400 400 . 133.823 102.672 13.191  1.00 5.84
1 . .
ATOM 3038 OG    OG    . SER SER SER A A 400 400 . 133.678 104.058 12.870  1.00 6.97
1 . .
ATOM 3039 C     C     . SER SER SER A A 400 400 . 135.011 101.097 14.748  1.00 5.47
1 . .
ATOM 3040 O     O     . SER SER SER A A 400 400 . 134.047 100.784 15.440  1.00 6.41
1 . .
ATOM 3041 N     N     . GLU GLU GLU A A 401 401 . 136.024 100.257 14.521  1.00 5.28
1 . .
ATOM 3042 CA    CA    . GLU GLU GLU A A 401 401 . 136.115 99.019  15.342  1.00 5.58
1 . .
ATOM 3043 CB    CB    . GLU GLU GLU A A 401 401 . 137.219 98.086  14.839  1.00 6.02
1 . .
ATOM 3044 CG    CG    . GLU GLU GLU A A 401 401 . 138.656 98.489  15.043  1.00 6.21
1 . .
ATOM 3045 CD    CD    . GLU GLU GLU A A 401 401 . 139.194 99.474  14.041  1.00 5.92
1 . .
ATOM 3046 OE1   OE1   . GLU GLU GLU A A 401 401 . 138.488 99.928  13.106  1.00 5.80
1 . .
ATOM 3047 OE2   OE2   . GLU GLU GLU A A 401 401 . 140.439 99.717  14.162  1.00 7.01
1 . .
ATOM 3048 C     C     . GLU GLU GLU A A 401 401 . 136.324 99.416  16.838  1.00 5.80
1 . .
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ATOM 3049 O     O     . GLU GLU GLU A A 401 401 . 136.181 98.557  17.701  1.00 6.22
1 . .
ATOM 3050 N     N     . ARG ARG ARG A A 402 402 . 136.772 100.684 17.087  1.00 5.86
1 . .
ATOM 3051 CA    CA    . ARG ARG ARG A A 402 402 . 136.930 101.204 18.452  1.00 5.66
1 . .
ATOM 3052 CB    CB    . ARG ARG ARG A A 402 402 . 138.153 102.108 18.577  1.00 6.13
1 . .
ATOM 3053 CG    CG    . ARG ARG ARG A A 402 402 . 139.400 101.590 17.850  1.00 7.13
1 . .
ATOM 3054 CD    CD    . ARG ARG ARG A A 402 402 . 139.830 100.177 18.277  1.00 5.89
1 . .
ATOM 3055 NE    NE    . ARG ARG ARG A A 402 402 . 140.757 99.683  17.226  1.00 6.31
1 . .
ATOM 3056 CZ    CZ    . ARG ARG ARG A A 402 402 . 141.309 98.475  17.226  1.00 4.99
1 . .
ATOM 3057 NH1   NH1   . ARG ARG ARG A A 402 402 . 141.283 97.702  18.329  1.00 6.39
1 . .
ATOM 3058 NH2   NH2   . ARG ARG ARG A A 402 402 . 141.850 98.006  16.098  1.00 7.11
1 . .
ATOM 3059 C     C     . ARG ARG ARG A A 402 402 . 135.651 101.926 18.827  1.00 5.85
1 . .
ATOM 3060 O     O     . ARG ARG ARG A A 402 402 . 134.994 101.596 19.847  1.00 6.09
1 . .
ATOM 3061 N     N     . LEU LEU LEU A A 403 403 . 135.266 102.924 17.996  1.00 6.29
1 . .
ATOM 3062 CA    CA    . LEU LEU LEU A A 403 403 . 134.047 103.655 18.383  1.00 6.43
1 . .
ATOM 3063 CB    CB    . LEU LEU LEU A A 403 403 . 133.716 104.797 17.370  1.00 7.24
1 . .
ATOM 3064 CG    CG    . LEU LEU LEU A A 403 403 . 134.597 106.031 17.331  1.00 5.66
1 . .
ATOM 3065 CD1   CD1   . LEU LEU LEU A A 403 403 . 134.935 106.549 18.741  1.00 8.00
1 . .
ATOM 3066 CD2   CD2   . LEU LEU LEU A A 403 403 . 135.892 105.828 16.503  1.00 7.16
1 . .
ATOM 3067 C     C     . LEU LEU LEU A A 403 403 . 132.797 102.773 18.446  1.00 6.20
1 . .
ATOM 3068 O     O     . LEU LEU LEU A A 403 403 . 131.926 103.114 19.219  1.00 7.20
1 . .
ATOM 3069 N     N     . ALA ALA ALA A A 404 404 . 132.704 101.646 17.734  1.00 5.76
1 . .
ATOM 3070 CA    CA    . ALA ALA ALA A A 404 404 . 131.468 100.862 17.861  1.00 6.10
1 . .
ATOM 3071 CB    CB    . ALA ALA ALA A A 404 404 . 131.526 99.622  16.948  1.00 7.75
1 . .
ATOM 3072 C     C     . ALA ALA ALA A A 404 404 . 131.265 100.493 19.376  1.00 6.12
1 . .
ATOM 3073 O     O     . ALA ALA ALA A A 404 404 . 130.099 100.482 19.825  1.00 6.93
1 . .
ATOM 3074 N     N     . LYS LYS LYS A A 405 405 . 132.372 100.150 20.075  1.00 5.74
1 . .
ATOM 3075 CA    CA    . LYS LYS LYS A A 405 405 . 132.220 99.816  21.503  1.00 6.57
1 . .
ATOM 3076 CB    CB    . LYS LYS LYS A A 405 405 . 133.528 99.221  22.058  1.00 6.71
1 . .
ATOM 3077 CG    CG    . LYS LYS LYS A A 405 405 . 133.799 97.735  21.638  1.00 6.16
1 . .
ATOM 3078 CD    CD    . LYS LYS LYS A A 405 405 . 134.108 97.594  20.149  1.00 6.35
1 . .
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ATOM 3079 CE    CE    . LYS LYS LYS A A 405 405 . 134.881 96.295  19.882  1.00 6.37
1 . .
ATOM 3080 NZ    NZ    . LYS LYS LYS A A 405 405 . 135.014 96.052  18.395  1.00 6.17
1 . .
ATOM 3081 C     C     . LYS LYS LYS A A 405 405 . 131.890 101.021 22.345  1.00 6.24
1 . .
ATOM 3082 O     O     . LYS LYS LYS A A 405 405 . 130.995 100.961 23.190  1.00 6.51
1 . .
ATOM 3083 N     N     . TYR TYR TYR A A 406 406 . 132.617 102.133 22.092  1.00 6.44
1 . .
ATOM 3084 CA    CA    . TYR TYR TYR A A 406 406 . 132.354 103.361 22.867  1.00 5.88
1 . .
ATOM 3085 CB    CB    . TYR TYR TYR A A 406 406 . 133.377 104.429 22.579  1.00 6.91
1 . .
ATOM 3086 CG    CG    . TYR TYR TYR A A 406 406 . 134.780 104.050 22.966  1.00 5.91
1 . .
ATOM 3087 CD1   CD1   . TYR TYR TYR A A 406 406 . 135.026 103.632 24.306  1.00 6.20
1 . .
ATOM 3088 CE1   CE1   . TYR TYR TYR A A 406 406 . 136.299 103.321 24.718  1.00 5.99
1 . .
ATOM 3089 CZ    CZ    . TYR TYR TYR A A 406 406 . 137.374 103.416 23.810  1.00 6.31
1 . .
ATOM 3090 OH    OH    . TYR TYR TYR A A 406 406 . 138.648 103.012 24.249  1.00 6.66
1 . .
ATOM 3091 CE2   CE2   . TYR TYR TYR A A 406 406 . 137.169 103.803 22.464  1.00 6.81
1 . .
ATOM 3092 CD2   CD2   . TYR TYR TYR A A 406 406 . 135.862 104.112 22.092  1.00 5.41
1 . .
ATOM 3093 C     C     . TYR TYR TYR A A 406 406 . 130.935 103.891 22.678  1.00 5.88
1 . .
ATOM 3094 O     O     . TYR TYR TYR A A 406 406 . 130.251 104.312 23.620  1.00 7.48
1 . .
ATOM 3095 N     N     . ASN ASN ASN A A 407 407 . 130.473 103.839 21.422  1.00 5.90
1 . .
ATOM 3096 CA    CA    . ASN ASN ASN A A 407 407 . 129.104 104.240 21.105  1.00 7.10
1 . .
ATOM 3097 CB    CB    . ASN ASN ASN A A 407 407 . 128.828 104.218 19.601  1.00 7.04
1 . .
ATOM 3098 CG    CG    . ASN ASN ASN A A 407 407 . 129.564 105.351 18.874  1.00 5.70
1 . .
ATOM 3099 OD1   OD1   . ASN ASN ASN A A 407 407 . 129.928 106.381 19.480  1.00 6.78
1 . .
ATOM 3100 ND2   ND2   . ASN ASN ASN A A 407 407 . 129.835 105.168 17.574  1.00 6.73
1 . .
ATOM 3101 C     C     . ASN ASN ASN A A 407 407 . 128.100 103.350 21.816  1.00 6.88
1 . .
ATOM 3102 O     O     . ASN ASN ASN A A 407 407 . 127.064 103.824 22.342  1.00 7.22
1 . .
ATOM 3103 N     N     . GLN GLN GLN A A 408 408 . 128.354 102.050 21.834  1.00 6.83
1 . .
ATOM 3104 CA    CA    . GLN GLN GLN A A 408 408 . 127.454 101.113 22.524  1.00 5.94
1 . .
ATOM 3105 CB    CB    . GLN GLN GLN A A 408 408 . 127.819 99.663  22.208  1.00 6.49
1 . .
ATOM 3106 CG    CG    . GLN GLN GLN A A 408 408 . 127.042 98.614  22.999  1.00 5.71
1 . .
ATOM 3107 CD    CD    . GLN GLN GLN A A 408 408 . 125.565 98.532  22.624  1.00 11.88
1 . .
ATOM 3108 OE1   OE1   . GLN GLN GLN A A 408 408 . 125.057 99.273  21.743  1.00 13.08
1 . .
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ATOM 3109 NE2   NE2   . GLN GLN GLN A A 408 408 . 124.864 97.641  23.327  1.00 15.71
1 . .
ATOM 3110 C     C     . GLN GLN GLN A A 408 408 . 127.463 101.401 24.014  1.00 6.05
1 . .
ATOM 3111 O     O     . GLN GLN GLN A A 408 408 . 126.368 101.355 24.643  1.00 6.78
1 . .
ATOM 3112 N     N     . LEU LEU LEU A A 409 409 . 128.614 101.751 24.619  1.00 6.13
1 . .
ATOM 3113 CA    CA    . LEU LEU LEU A A 409 409 . 128.592 102.099 26.061  1.00 6.26
1 . .
ATOM 3114 CB    CB    . LEU LEU LEU A A 409 409 . 130.042 102.318 26.536  1.00 6.50
1 . .
ATOM 3115 CG    CG    . LEU LEU LEU A A 409 409 . 130.746 100.972 26.659  1.00 6.72
1 . .
ATOM 3116 CD1   CD1   . LEU LEU LEU A A 409 409 . 132.237 101.121 26.738  1.00 8.65
1 . .
ATOM 3117 CD2   CD2   . LEU LEU LEU A A 409 409 . 130.196 100.241 27.916  1.00 7.12
1 . .
ATOM 3118 C     C     . LEU LEU LEU A A 409 409 . 127.762 103.383 26.285  1.00 6.64
1 . .
ATOM 3119 O     O     . LEU LEU LEU A A 409 409 . 127.035 103.479 27.312  1.00 7.15
1 . .
ATOM 3120 N     N     . MET MET MET A A 410 410 . 127.807 104.331 25.348  1.00 7.63
1 . .
ATOM 3121 CA    CA    . MET MET MET A A 410 410 . 126.902 105.523 25.515  1.00 6.99
1 . .
ATOM 3122 CB    CB    . MET MET MET A A 410 410 . 127.160 106.586 24.461  1.00 8.16
1 . .
ATOM 3123 CG    CG    . MET MET MET A A 410 410 . 128.508 107.327 24.774  1.00 10.40
1 . .
ATOM 3124 SD    SD    . MET MET MET A A 410 410 . 128.748 108.837 23.865  1.00 12.03
1 . .
ATOM 3125 CE    CE    . MET MET MET A A 410 410 . 129.097 108.054 22.325  1.00 8.05
1 . .
ATOM 3126 C     C     . MET MET MET A A 410 410 . 125.432 105.101 25.457  1.00 7.84
1 . .
ATOM 3127 O     O     . MET MET MET A A 410 410 . 124.604 105.637 26.228  1.00 9.68
1 . .
ATOM 3128 N     N     . ARG ARG ARG A A 411 411 . 125.096 104.168 24.559  1.00 6.84
1 . .
ATOM 3129 CA    CA    . ARG ARG ARG A A 411 411 . 123.724 103.700 24.475  1.00 7.53
1 . .
ATOM 3130 CB    CB    . ARG ARG ARG A A 411 411 . 123.514 102.736 23.308  1.00 8.63
1 . .
ATOM 3131 CG    CG    . ARG ARG ARG A A 411 411 . 123.776 103.392 21.931  1.00 9.25
1 . .
ATOM 3132 CD    CD    . ARG ARG ARG A A 411 411 . 123.394 102.427 20.802  1.00 9.62
1 . .
ATOM 3133 NE    NE    . ARG ARG ARG A A 411 411 . 124.080 102.858 19.577  1.00 9.62
1 . .
ATOM 3134 CZ    CZ    . ARG ARG ARG A A 411 411 . 125.204 102.328 19.089  1.00 7.71
1 . .
ATOM 3135 NH1   NH1   . ARG ARG ARG A A 411 411 . 125.775 101.194 19.609  1.00 9.69
1 . .
ATOM 3136 NH2   NH2   . ARG ARG ARG A A 411 411 . 125.778 102.912 18.010  1.00 11.70
1 . .
ATOM 3137 C     C     . ARG ARG ARG A A 411 411 . 123.314 102.995 25.766  1.00 9.19
1 . .
ATOM 3138 O     O     . ARG ARG ARG A A 411 411 . 122.168 103.191 26.222  1.00 10.86
1 . .
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ATOM 3139 N     N     . ILE ILE ILE A A 412 412 . 124.179 102.160 26.321  1.00 8.05
1 . .
ATOM 3140 CA    CA    . ILE ILE ILE A A 412 412 . 123.856 101.414 27.548  1.00 7.94
1 . .
ATOM 3141 CB    CB    . ILE ILE ILE A A 412 412 . 125.036 100.476 27.914  1.00 8.75
1 . .
ATOM 3142 CG1   CG1   . ILE ILE ILE A A 412 412 . 125.068 99.339  26.890  1.00 7.49
1 . .
ATOM 3143 CD    CD    . ILE ILE ILE A A 412 412 . 126.312 98.439  26.994  1.00 9.46
1 . .
ATOM 3144 CG2   CG2   . ILE ILE ILE A A 412 412 . 124.820 99.909  29.343  1.00 11.01
1 . .
ATOM 3145 C     C     . ILE ILE ILE A A 412 412 . 123.627 102.414 28.657  1.00 8.20
1 . .
ATOM 3146 O     O     . ILE ILE ILE A A 412 412 . 122.663 102.301 29.436  1.00 10.64
1 . .
ATOM 3147 N     N     . GLU GLU GLU A A 413 413 . 124.493 103.420 28.780  1.00 8.87
1 . .
ATOM 3148 CA    CA    . GLU GLU GLU A A 413 413 . 124.306 104.458 29.844  1.00 8.14
1 . .
ATOM 3149 CB    CB    . GLU GLU GLU A A 413 413 . 125.394 105.522 29.769  1.00 8.34
1 . .
ATOM 3150 CG    CG    . GLU GLU GLU A A 413 413 . 125.180 106.609 30.869  1.00 9.43
1 . .
ATOM 3151 CD    CD    . GLU GLU GLU A A 413 413 . 126.488 107.451 30.964  1.00 9.02
1 . .
ATOM 3152 OE1   OE1   . GLU GLU GLU A A 413 413 . 126.723 108.204 29.987  1.00 11.87
1 . .
ATOM 3153 OE2   OE2   . GLU GLU GLU A A 413 413 . 127.195 107.292 31.980  1.00 12.01
1 . .
ATOM 3154 C     C     . GLU GLU GLU A A 413 413 . 122.931 105.100 29.672  1.00 10.42
1 . .
ATOM 3155 O     O     . GLU GLU GLU A A 413 413 . 122.194 105.322 30.655  1.00 10.74
1 . .
ATOM 3156 N     N     . GLU GLU GLU A A 414 414 . 122.561 105.439 28.445  1.00 10.20
1 . .
ATOM 3157 CA    CA    . GLU GLU GLU A A 414 414 . 121.272 106.108 28.183  1.00 13.53
1 . .
ATOM 3158 CB    CB    . GLU GLU GLU A A 414 414 . 121.217 106.522 26.695  1.00 14.83
1 . .
ATOM 3159 CG    CG    . GLU GLU GLU A A 414 414 . 119.851 106.990 26.258  1.00 19.48
1 . .
ATOM 3160 CD    CD    . GLU GLU GLU A A 414 414 . 119.724 106.977 24.740  1.00 21.25
1 . .
ATOM 3161 OE1   OE1   . GLU GLU GLU A A 414 414 . 120.421 107.768 24.144  1.00 25.94
1 . .
ATOM 3162 OE2   OE2   . GLU GLU GLU A A 414 414 . 118.936 106.161 24.180  1.00 30.77
1 . .
ATOM 3163 C     C     . GLU GLU GLU A A 414 414 . 120.140 105.177 28.618  1.00 13.17
1 . .
ATOM 3164 O     O     . GLU GLU GLU A A 414 414 . 119.145 105.657 29.270  1.00 15.36
1 . .
ATOM 3165 N     N     . GLU GLU GLU A A 415 415 . 120.266 103.882 28.311  1.00 13.87
1 . .
ATOM 3166 CA    CA    . GLU GLU GLU A A 415 415 . 119.220 102.877 28.556  1.00 16.21
1 . .
ATOM 3167 CB    CB    . GLU GLU GLU A A 415 415 . 119.524 101.471 27.929  1.00 17.69
1 . .
ATOM 3168 CG    CG    . GLU GLU GLU A A 415 415 . 118.233 100.398 28.009  1.00 27.22
1 . .
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ATOM 3169 CD    CD    . GLU GLU GLU A A 415 415 . 118.359 99.039  27.219  1.00 35.22
1 . .
ATOM 3170 OE1   OE1   . GLU GLU GLU A A 415 415 . 117.252 98.433  26.907  1.00 40.15
1 . .
ATOM 3171 OE2   OE2   . GLU GLU GLU A A 415 415 . 119.519 98.567  26.909  1.00 30.47
1 . .
ATOM 3172 C     C     . GLU GLU GLU A A 415 415 . 119.017 102.764 30.088  1.00 17.30
1 . .
ATOM 3173 O     O     . GLU GLU GLU A A 415 415 . 117.900 102.549 30.534  1.00 18.82
1 . .
ATOM 3174 N     N     . LEU LEU LEU A A 416 416 . 120.108 102.840 30.866  1.00 15.55
1 . .
ATOM 3175 CA    CA    . LEU LEU LEU A A 416 416 . 120.055 102.681 32.308  1.00 14.93
1 . .
ATOM 3176 CB    CB    . LEU LEU LEU A A 416 416 . 121.481 102.509 32.866  1.00 13.82
1 . .
ATOM 3177 CG    CG    . LEU LEU LEU A A 416 416 . 121.994 101.072 32.610  1.00 13.71
1 . .
ATOM 3178 CD1   CD1   . LEU LEU LEU A A 416 416 . 123.439 100.998 32.900  1.00 15.84
1 . .
ATOM 3179 CD2   CD2   . LEU LEU LEU A A 416 416 . 121.151 100.046 33.461  1.00 21.69
1 . .
ATOM 3180 C     C     . LEU LEU LEU A A 416 416 . 119.413 103.855 32.979  1.00 17.23
1 . .
ATOM 3181 O     O     . LEU LEU LEU A A 416 416 . 118.942 103.701 34.124  1.00 17.84
1 . .
ATOM 3182 N     N     . GLY GLY GLY A A 417 417 . 119.357 105.000 32.308  1.00 18.38
1 . .
ATOM 3183 CA    CA    . GLY GLY GLY A A 417 417 . 118.588 106.160 32.834  1.00 21.39
1 . .
ATOM 3184 C     C     . GLY GLY GLY A A 417 417 . 119.156 106.591 34.177  1.00 22.18
1 . .
ATOM 3185 O     O     . GLY GLY GLY A A 417 417 . 120.398 106.746 34.352  1.00 21.38
1 . .
ATOM 3186 N     N     . ASP ASP ASP A A 418 418 . 118.223 106.767 35.129  1.00 24.45
1 . .
ATOM 3187 CA    CA    . ASP ASP ASP A A 418 418 . 118.559 107.089 36.519  1.00 26.31
1 . .
ATOM 3188 CB    CB    . ASP ASP ASP A A 418 418 . 117.247 107.343 37.333  1.00 27.33
1 . .
ATOM 3189 CG    CG    . ASP ASP ASP A A 418 418 . 116.564 108.600 36.892  1.00 34.28
1 . .
ATOM 3190 OD1   OD1   . ASP ASP ASP A A 418 418 . 115.442 108.871 37.398  1.00 41.98
1 . .
ATOM 3191 OD2   OD2   . ASP ASP ASP A A 418 418 . 117.152 109.314 36.024  1.00 38.87
1 . .
ATOM 3192 C     C     . ASP ASP ASP A A 418 418 . 119.391 106.096 37.243  1.00 25.00
1 . .
ATOM 3193 O     O     . ASP ASP ASP A A 418 418 . 120.001 106.451 38.267  1.00 27.13
1 . .
ATOM 3194 N     N     . GLU GLU GLU A A 419 419 . 119.367 104.844 36.777  1.00 24.31
1 . .
ATOM 3195 CA    CA    . GLU GLU GLU A A 419 419 . 120.127 103.765 37.371  1.00 25.14
1 . .
ATOM 3196 CB    CB    . GLU GLU GLU A A 419 419 . 119.602 102.461 36.841  1.00 26.96
1 . .
ATOM 3197 CG    CG    . GLU GLU GLU A A 419 419 . 119.434 101.365 37.771  1.00 36.22
1 . .
ATOM 3198 CD    CD    . GLU GLU GLU A A 419 419 . 118.378 100.360 37.232  1.00 42.21
1 . .
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ATOM 3199 OE1   OE1   . GLU GLU GLU A A 419 419 . 118.762 99.448  36.432  1.00 40.73
1 . .
ATOM 3200 OE2   OE2   . GLU GLU GLU A A 419 419 . 117.175 100.505 37.609  1.00 47.64
1 . .
ATOM 3201 C     C     . GLU GLU GLU A A 419 419 . 121.615 103.813 36.986  1.00 23.59
1 . .
ATOM 3202 O     O     . GLU GLU GLU A A 419 419 . 122.396 103.033 37.537  1.00 25.01
1 . .
ATOM 3203 N     N     . ALA ALA ALA A A 420 420 . 121.978 104.631 35.978  1.00 20.42
1 . .
ATOM 3204 CA    CA    . ALA ALA ALA A A 420 420 . 123.363 104.628 35.513  1.00 18.07
1 . .
ATOM 3205 CB    CB    . ALA ALA ALA A A 420 420 . 123.476 105.429 34.230  1.00 18.28
1 . .
ATOM 3206 C     C     . ALA ALA ALA A A 420 420 . 124.290 105.208 36.577  1.00 17.91
1 . .
ATOM 3207 O     O     . ALA ALA ALA A A 420 420 . 123.996 106.307 37.144  1.00 19.70
1 . .
ATOM 3208 N     N     . ARG ARG ARG A A 421 421 . 125.423 104.512 36.770  1.00 15.81
1 . .
ATOM 3209 CA    CA    . ARG ARG ARG A A 421 421 . 126.500 105.025 37.631  1.00 15.63
1 . .
ATOM 3210 CB    CB    . ARG ARG ARG A A 421 421 . 126.593 104.169 38.882  1.00 18.75
1 . .
ATOM 3211 CG    CG    . ARG ARG ARG A A 421 421 . 125.221 104.175 39.746  1.00 23.25
1 . .
ATOM 3212 CD    CD    . ARG ARG ARG A A 421 421 . 125.013 105.482 40.499  1.00 34.94
1 . .
ATOM 3213 NE    NE    . ARG ARG ARG A A 421 421 . 126.165 105.727 41.399  1.00 46.47
1 . .
ATOM 3214 CZ    CZ    . ARG ARG ARG A A 421 421 . 126.779 106.913 41.561  1.00 50.18
1 . .
ATOM 3215 NH1   NH1   . ARG ARG ARG A A 421 421 . 126.344 108.001 40.897  1.00 53.21
1 . .
ATOM 3216 NH2   NH2   . ARG ARG ARG A A 421 421 . 127.826 107.017 42.384  1.00 50.23
1 . .
ATOM 3217 C     C     . ARG ARG ARG A A 421 421 . 127.791 104.895 36.852  1.00 15.83
1 . .
ATOM 3218 O     O     . ARG ARG ARG A A 421 421 . 127.905 103.991 36.100  1.00 18.55
1 . .
ATOM 3219 N     N     . PHE PHE PHE A A 422 422 . 128.706 105.798 37.004  1.00 11.87
1 . .
ATOM 3220 CA    CA    . PHE PHE PHE A A 422 422 . 130.000 105.795 36.278  1.00 10.58
1 . .
ATOM 3221 CB    CB    . PHE PHE PHE A A 422 422 . 130.217 107.190 35.696  1.00 10.29
1 . .
ATOM 3222 CG    CG    . PHE PHE PHE A A 422 422 . 131.544 107.403 34.998  1.00 9.61
1 . .
ATOM 3223 CD1   CD1   . PHE PHE PHE A A 422 422 . 131.865 106.646 33.876  1.00 8.31
1 . .
ATOM 3224 CE1   CE1   . PHE PHE PHE A A 422 422 . 133.076 106.819 33.245  1.00 8.64
1 . .
ATOM 3225 CZ    CZ    . PHE PHE PHE A A 422 422 . 133.952 107.772 33.659  1.00 9.75
1 . .
ATOM 3226 CE2   CE2   . PHE PHE PHE A A 422 422 . 133.628 108.578 34.817  1.00 9.31
1 . .
ATOM 3227 CD2   CD2   . PHE PHE PHE A A 422 422 . 132.375 108.363 35.453  1.00 10.41
1 . .
ATOM 3228 C     C     . PHE PHE PHE A A 422 422 . 131.067 105.483 37.298  1.00 10.56
1 . .
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ATOM 3229 O     O     . PHE PHE PHE A A 422 422 . 131.090 106.097 38.417  1.00 12.89
1 . .
ATOM 3230 N     N     . ALA ALA ALA A A 423 423 . 131.983 104.596 36.927  1.00 9.30
1 . .
ATOM 3231 CA    CA    . ALA ALA ALA A A 423 423 . 133.015 104.116 37.895  1.00 9.65
1 . .
ATOM 3232 CB    CB    . ALA ALA ALA A A 423 423 . 133.839 102.945 37.265  1.00 9.87
1 . .
ATOM 3233 C     C     . ALA ALA ALA A A 423 423 . 133.966 105.202 38.315  1.00 9.48
1 . .
ATOM 3234 O     O     . ALA ALA ALA A A 423 423 . 134.420 105.173 39.472  1.00 11.01
1 . .
ATOM 3235 N     N     . GLY GLY GLY A A 424 424 . 134.288 106.201 37.471  1.00 8.31
1 . .
ATOM 3236 CA    CA    . GLY GLY GLY A A 424 424 . 135.123 107.344 37.893  1.00 9.07
1 . .
ATOM 3237 C     C     . GLY GLY GLY A A 424 424 . 136.429 106.940 38.514  1.00 9.58
1 . .
ATOM 3238 O     O     . GLY GLY GLY A A 424 424 . 137.190 106.051 38.038  1.00 10.32
1 . .
ATOM 3239 N     N     . HIS HIS HIS A A 425 425 . 136.651 107.527 39.687  1.00 9.82
1 . .
ATOM 3240 CA    CA    . HIS HIS HIS A A 425 425 . 137.894 107.226 40.435  1.00 9.72
1 . .
ATOM 3241 CB    CB    . HIS HIS HIS A A 425 425 . 138.148 108.351 41.457  1.00 10.38
1 . .
ATOM 3242 CG    CG    . HIS HIS HIS A A 425 425 . 138.512 109.653 40.806  1.00 10.15
1 . .
ATOM 3243 ND1   ND1   . HIS HIS HIS A A 425 425 . 139.806 109.934 40.394  1.00 15.13
1 . .
ATOM 3244 CE1   CE1   . HIS HIS HIS A A 425 425 . 139.837 111.164 39.881  1.00 13.32
1 . .
ATOM 3245 NE2   NE2   . HIS HIS HIS A A 425 425 . 138.625 111.678 39.990  1.00 15.41
1 . .
ATOM 3246 CD2   CD2   . HIS HIS HIS A A 425 425 . 137.778 110.767 40.553  1.00 15.17
1 . .
ATOM 3247 C     C     . HIS HIS HIS A A 425 425 . 137.899 105.896 41.102  1.00 8.28
1 . .
ATOM 3248 O     O     . HIS HIS HIS A A 425 425 . 138.946 105.482 41.669  1.00 11.41
1 . .
ATOM 3249 N     N     . ASN ASN ASN A A 426 426 . 136.782 105.217 41.005  1.00 9.64
1 . .
ATOM 3250 CA    CA    . ASN ASN ASN A A 426 426 . 136.675 103.823 41.516  1.00 10.96
1 . .
ATOM 3251 CB    CB    . ASN ASN ASN A A 426 426 . 135.361 103.545 42.253  1.00 12.09
1 . .
ATOM 3252 CG    CG    . ASN ASN ASN A A 426 426 . 135.332 104.262 43.526  1.00 14.41
1 . .
ATOM 3253 OD1   OD1   . ASN ASN ASN A A 426 426 . 136.019 103.860 44.467  1.00 17.99
1 . .
ATOM 3254 ND2   ND2   . ASN ASN ASN A A 426 426 . 134.672 105.338 43.557  1.00 12.40
1 . .
ATOM 3255 C     C     . ASN ASN ASN A A 426 426 . 136.896 102.785 40.469  1.00 13.09
1 . .
ATOM 3256 O     O     . ASN ASN ASN A A 426 426 . 136.459 101.621 40.598  1.00 14.92
1 . .
ATOM 3257 N     N     . PHE PHE PHE A A 427 427 . 137.641 103.142 39.426  1.00 11.57
1 . .
ATOM 3258 CA    CA    . PHE PHE PHE A A 427 427 . 137.760 102.198 38.303  1.00 12.32
1 . .
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ATOM 3259 CB    CB    . PHE PHE PHE A A 427 427 . 138.555 102.879 37.170  1.00 12.06
1 . .
ATOM 3260 CG    CG    . PHE PHE PHE A A 427 427 . 140.010 103.186 37.508  1.00 9.96
1 . .
ATOM 3261 CD1   CD1   . PHE PHE PHE A A 427 427 . 140.298 104.417 38.107  1.00 10.54
1 . .
ATOM 3262 CE1   CE1   . PHE PHE PHE A A 427 427 . 141.660 104.743 38.415  1.00 13.38
1 . .
ATOM 3263 CZ    CZ    . PHE PHE PHE A A 427 427 . 142.687 103.927 38.027  1.00 12.35
1 . .
ATOM 3264 CE2   CE2   . PHE PHE PHE A A 427 427 . 142.432 102.743 37.373  1.00 15.59
1 . .
ATOM 3265 CD2   CD2   . PHE PHE PHE A A 427 427 . 141.097 102.388 37.084  1.00 15.28
1 . .
ATOM 3266 C     C     . PHE PHE PHE A A 427 427 . 138.503 100.931 38.769  1.00 12.44
1 . .
ATOM 3267 O     O     . PHE PHE PHE A A 427 427 . 138.233 99.827  38.223  1.00 13.23
1 . .
ATOM 3268 N     N     . ARG ARG ARG A A 428 428 . 139.393 101.016 39.776  1.00 12.80
1 . .
ATOM 3269 CA    CA    . ARG ARG ARG A A 428 428 . 140.084 99.777  40.219  1.00 15.01
1 . .
ATOM 3270 CB    CB    . ARG ARG ARG A A 428 428 . 141.340 100.062 41.065  1.00 15.26
1 . .
ATOM 3271 CG    CG    . ARG ARG ARG A A 428 428 . 142.389 100.728 40.238  1.00 15.02
1 . .
ATOM 3272 CD    CD    . ARG ARG ARG A A 428 428 . 143.609 101.099 41.120  1.00 17.43
1 . .
ATOM 3273 NE    NE    . ARG ARG ARG A A 428 428 . 144.337 99.902  41.604  1.00 17.98
1 . .
ATOM 3274 CZ    CZ    . ARG ARG ARG A A 428 428 . 145.443 99.922  42.354  1.00 21.69
1 . .
ATOM 3275 NH1   NH1   . ARG ARG ARG A A 428 428 . 146.069 101.091 42.626  1.00 21.79
1 . .
ATOM 3276 NH2   NH2   . ARG ARG ARG A A 428 428 . 145.926 98.751  42.752  1.00 22.26
1 . .
ATOM 3277 C     C     . ARG ARG ARG A A 428 428 . 139.181 98.813  40.951  1.00 18.15
1 . .
ATOM 3278 O     O     . ARG ARG ARG A A 428 428 . 139.446 97.600  40.961  1.00 19.92
1 . .
ATOM 3279 N     N     . ASN ASN ASN A A 429 429 . 138.117 99.340  41.559  1.00 17.53
1 . .
ATOM 3280 CA    CA    . ASN ASN ASN A A 429 429 . 137.252 98.553  42.482  1.00 21.02
1 . .
ATOM 3281 CB    CB    . ASN ASN ASN A A 429 429 . 137.866 98.590  43.940  1.00 24.77
1 . .
ATOM 3282 CG    CG    . ASN ASN ASN A A 429 429 . 137.773 100.047 44.729  1.00 31.28
1 . .
ATOM 3283 OD1   OD1   . ASN ASN ASN A A 429 429 . 137.681 101.168 44.150  1.00 31.26
1 . .
ATOM 3284 ND2   ND2   . ASN ASN ASN A A 429 429 . 137.814 99.960  46.095  1.00 36.29
1 . .
ATOM 3285 C     C     . ASN ASN ASN A A 429 429 . 135.855 99.136  42.503  1.00 18.87
1 . .
ATOM 3286 O     O     . ASN ASN ASN A A 429 429 . 135.465 99.783  43.521  1.00 21.04
1 . .
ATOM 3287 N     N     . PRO PRO PRO A A 430 430 . 135.048 99.011  41.424  1.00 18.12
1 . .
ATOM 3288 CA    CA    . PRO PRO PRO A A 430 430 . 133.735 99.700  41.447  1.00 18.08
1 . .
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ATOM 3289 CB    CB    . PRO PRO PRO A A 430 430 . 133.285 99.734  39.966  1.00 19.64
1 . .
ATOM 3290 CG    CG    . PRO PRO PRO A A 430 430 . 133.893 98.556  39.457  1.00 18.96
1 . .
ATOM 3291 CD    CD    . PRO PRO PRO A A 430 430 . 135.264 98.394  40.093  1.00 18.37
1 . .
ATOM 3292 C     C     . PRO PRO PRO A A 430 430 . 132.634 99.030  42.278  1.00 20.72
1 . .
ATOM 3293 O     O     . PRO PRO PRO A A 430 430 . 131.549 99.602  42.340  1.00 21.80
1 . .
ATOM 3294 N     N     . SER SER SER A A 431 431 . 132.941 97.900  42.924  1.00 21.97
1 . .
ATOM 3295 CA    CA    . SER SER SER A A 431 431 . 131.902 97.141  43.652  1.00 26.39
1 . .
ATOM 3296 CB    CB    . SER SER SER A A 431 431 . 132.427 95.754  44.121  1.00 27.85
1 . .
ATOM 3297 OG    OG    . SER SER SER A A 431 431 . 133.645 95.853  44.869  1.00 30.93
1 . .
ATOM 3298 C     C     . SER SER SER A A 431 431 . 131.403 97.971  44.830  1.00 26.99
1 . .
ATOM 3299 O     O     . SER SER SER A A 431 431 . 130.339 97.708  45.347  1.00 29.14
1 . .
ATOM 3300 N     N     . VAL VAL VAL A A 432 432 . 132.139 99.023  45.219  1.00 27.14
1 . .
ATOM 3301 CA    CA    . VAL VAL VAL A A 432 432 . 131.774 99.898  46.376  1.00 27.74
1 . .
ATOM 3302 CB    CB    . VAL VAL VAL A A 432 432 . 133.039 100.647 46.956  1.00 27.50
1 . .
ATOM 3303 CG1   CG1   . VAL VAL VAL A A 432 432 . 134.167 99.701  47.157  1.00 27.73
1 . .
ATOM 3304 CG2   CG2   . VAL VAL VAL A A 432 432 . 133.469 101.814 46.033  1.00 28.61
1 . .
ATOM 3305 C     C     . VAL VAL VAL A A 432 432 . 130.689 100.955 46.058  1.00 29.18
1 . .
ATOM 3306 O     O     . VAL VAL VAL A A 432 432 . 130.227 101.680 46.961  1.00 27.97
1 . .
ATOM 3307 N     N     . LEU LEU LEU A A 433 433 . 130.298 101.105 44.788  1.00 31.53
1 . .
ATOM 3308 CA    CA    . LEU LEU LEU A A 433 433 . 129.425 102.246 44.396  1.00 34.56
1 . .
ATOM 3309 CB    CB    . LEU LEU LEU A A 433 433 . 129.764 102.729 42.975  1.00 34.35
1 . .
ATOM 3310 CG    CG    . LEU LEU LEU A A 433 433 . 131.111 103.455 42.781  1.00 31.14
1 . .
ATOM 3311 CD1   CD1   . LEU LEU LEU A A 433 433 . 131.345 103.630 41.281  1.00 30.91
1 . .
ATOM 3312 CD2   CD2   . LEU LEU LEU A A 433 433 . 131.129 104.820 43.466  1.00 31.88
1 . .
ATOM 3313 C     C     . LEU LEU LEU A A 433 433 . 127.904 101.956 44.467  1.00 38.07
1 . .
ATOM 3314 O     O     . LEU LEU LEU A A 433 433 . 127.471 100.970 43.872  1.00 39.62
1 . .
ATOM 3315 MG+2  MG+2  . MG2 MG2 MG2 A . 440 440 . 148.529 94.340  26.425  1.00 7.39
1 . .
ATOM 3316 MG+2  MG+2  . MG2 MG2 MG2 A . 441 441 . 149.345 92.094  23.075  1.00 7.90
1 . .
ATOM 3317 O4P   O4P   . 2PG 2PG 2PG A . 442 442 . 145.672 92.571  20.595  1.00 6.47
1 . .
ATOM 3318 P     P     . 2PG 2PG 2PG A . 442 442 . 147.116 92.919  20.882  1.00 7.28
1 . .
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ATOM 3319 O2P   O2P   . 2PG 2PG 2PG A . 442 442 . 147.949 93.178  19.631  1.00 7.07
1 . .
ATOM 3320 O3P   O3P   . 2PG 2PG 2PG A . 442 442 . 147.730 91.923  21.834  1.00 7.94
1 . .
ATOM 3321 O1P   O1P   . 2PG 2PG 2PG A . 442 442 . 147.093 94.315  21.692  1.00 7.61
1 . .
ATOM 3322 C2    C2    . 2PG 2PG 2PG A . 442 442 . 146.389 94.324  22.938  1.00 8.30
1 . .
ATOM 3323 C1    C1    . 2PG 2PG 2PG A . 442 442 . 147.345 94.342  24.108  1.00 7.57
1 . .
ATOM 3324 O2    O2    . 2PG 2PG 2PG A . 442 442 . 146.905 94.693  25.192  1.00 7.37
1 . .
ATOM 3325 O1    O1    . 2PG 2PG 2PG A . 442 442 . 148.557 93.869  23.975  1.00 7.49
1 . .
ATOM 3326 C3    C3    . 2PG 2PG 2PG A . 442 442 . 145.212 95.241  23.016  1.00 8.88
1 . .
ATOM 3327 O3    O3    . 2PG 2PG 2PG A . 442 442 . 145.518 96.606  22.762  1.00 11.91
1 . .
ATOM 3328 O     O     . HOH HOH HOH A . 446 446 . 150.527 93.954  26.666  1.00 7.40
1 . .
ATOM 3329 O     O     . HOH HOH HOH A . 447 447 . 151.080 92.347  24.333  1.00 8.16
1 . .
ATOM 3330 O     O     . HOH HOH HOH A . 448 448 . 148.556 90.794  24.465  1.00 8.70
1 . .
ATOM 3331 N     N     . SER SER SER B B 1   1   . 102.369 102.430 11.700  1.00 22.61
1 . .
ATOM 3332 CA    CA    . SER SER SER B B 1   1   . 102.944 103.808 11.936  1.00 20.74
1 . .
ATOM 3333 CB    CB    . SER SER SER B B 1   1   . 101.882 104.747 12.513  1.00 21.64
1 . .
ATOM 3334 OG    OG    . SER SER SER B B 1   1   . 101.434 104.155 13.674  1.00 24.87
1 . .
ATOM 3335 C     C     . SER SER SER B B 1   1   . 104.144 103.756 12.896  1.00 19.50
1 . .
ATOM 3336 O     O     . SER SER SER B B 1   1   . 104.440 102.719 13.503  1.00 20.22
1 . .
ATOM 3337 N     N     . ILE ILE ILE B B 2   2   . 104.846 104.868 12.963  1.00 16.53
1 . .
ATOM 3338 CA    CA    . ILE ILE ILE B B 2   2   . 106.082 104.912 13.764  1.00 14.83
1 . .
ATOM 3339 CB    CB    . ILE ILE ILE B B 2   2   . 106.918 106.114 13.351  1.00 15.21
1 . .
ATOM 3340 CG1   CG1   . ILE ILE ILE B B 2   2   . 107.375 105.950 11.873  1.00 13.58
1 . .
ATOM 3341 CD    CD    . ILE ILE ILE B B 2   2   . 107.718 107.302 11.132  1.00 16.89
1 . .
ATOM 3342 CG2   CG2   . ILE ILE ILE B B 2   2   . 108.147 106.199 14.271  1.00 14.31
1 . .
ATOM 3343 C     C     . ILE ILE ILE B B 2   2   . 105.655 105.051 15.234  1.00 16.01
1 . .
ATOM 3344 O     O     . ILE ILE ILE B B 2   2   . 104.761 105.893 15.571  1.00 15.10
1 . .
ATOM 3345 N     N     . GLN GLN GLN B B 3   3   . 106.304 104.290 16.127  1.00 14.29
1 . .
ATOM 3346 CA    CA    . GLN GLN GLN B B 3   3   . 105.986 104.399 17.560  1.00 15.89
1 . .
ATOM 3347 CB    CB    . GLN GLN GLN B B 3   3   . 106.082 103.038 18.238  1.00 17.15
1 . .
ATOM 3348 CG    CG    . GLN GLN GLN B B 3   3   . 105.098 102.005 17.648  1.00 21.55
1 . .
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ATOM 3349 CD    CD    . GLN GLN GLN B B 3   3   . 105.213 100.624 18.402  1.00 29.55
1 . .
ATOM 3350 OE1   OE1   . GLN GLN GLN B B 3   3   . 106.275 100.268 18.963  1.00 33.74
1 . .
ATOM 3351 NE2   NE2   . GLN GLN GLN B B 3   3   . 104.120 99.856  18.384  1.00 34.19
1 . .
ATOM 3352 C     C     . GLN GLN GLN B B 3   3   . 106.829 105.386 18.298  1.00 13.86
1 . .
ATOM 3353 O     O     . GLN GLN GLN B B 3   3   . 106.346 106.049 19.265  1.00 17.39
1 . .
ATOM 3354 N     N     . LYS LYS LYS B B 4   4   . 108.147 105.433 17.958  1.00 13.55
1 . .
ATOM 3355 CA    CA    . LYS LYS LYS B B 4   4   . 109.075 106.255 18.760  1.00 13.34
1 . .
ATOM 3356 CB    CB    . LYS LYS LYS B B 4   4   . 109.502 105.543 20.076  1.00 14.70
1 . .
ATOM 3357 CG    CG    . LYS LYS LYS B B 4   4   . 110.628 106.278 20.791  1.00 19.51
1 . .
ATOM 3358 CD    CD    . LYS LYS LYS B B 4   4   . 110.776 105.666 22.194  1.00 22.69
1 . .
ATOM 3359 CE    CE    . LYS LYS LYS B B 4   4   . 111.821 106.391 23.060  1.00 31.08
1 . .
ATOM 3360 NZ    NZ    . LYS LYS LYS B B 4   4   . 111.252 107.661 23.498  1.00 37.56
1 . .
ATOM 3361 C     C     . LYS LYS LYS B B 4   4   . 110.245 106.526 17.849  1.00 11.83
1 . .
ATOM 3362 O     O     . LYS LYS LYS B B 4   4   . 110.575 105.678 17.050  1.00 12.97
1 . .
ATOM 3363 N     N     . ILE ILE ILE B B 5   5   . 110.743 107.760 17.864  1.00 13.04
1 . .
ATOM 3364 CA    CA    . ILE ILE ILE B B 5   5   . 112.021 108.083 17.230  1.00 13.96
1 . .
ATOM 3365 CB    CB    . ILE ILE ILE B B 5   5   . 111.803 109.021 16.014  1.00 13.10
1 . .
ATOM 3366 CG1   CG1   . ILE ILE ILE B B 5   5   . 111.194 108.272 14.841  1.00 15.78
1 . .
ATOM 3367 CD    CD    . ILE ILE ILE B B 5   5   . 110.547 109.158 13.810  1.00 16.57
1 . .
ATOM 3368 CG2   CG2   . ILE ILE ILE B B 5   5   . 113.123 109.640 15.589  1.00 14.18
1 . .
ATOM 3369 C     C     . ILE ILE ILE B B 5   5   . 112.878 108.799 18.265  1.00 15.55
1 . .
ATOM 3370 O     O     . ILE ILE ILE B B 5   5   . 112.430 109.778 18.858  1.00 16.61
1 . .
ATOM 3371 N     N     . TRP TRP TRP B B 6   6   . 114.140 108.336 18.453  1.00 12.53
1 . .
ATOM 3372 CA    CA    . TRP TRP TRP B B 6   6   . 114.997 108.976 19.364  1.00 9.39
1 . .
ATOM 3373 CB    CB    . TRP TRP TRP B B 6   6   . 115.133 108.108 20.652  1.00 13.43
1 . .
ATOM 3374 CG    CG    . TRP TRP TRP B B 6   6   . 116.046 108.744 21.660  1.00 12.51
1 . .
ATOM 3375 CD1   CD1   . TRP TRP TRP B B 6   6   . 117.284 108.281 22.056  1.00 16.42
1 . .
ATOM 3376 NE1   NE1   . TRP TRP TRP B B 6   6   . 117.824 109.119 22.963  1.00 16.98
1 . .
ATOM 3377 CE2   CE2   . TRP TRP TRP B B 6   6   . 116.947 110.152 23.232  1.00 16.26
1 . .
ATOM 3378 CD2   CD2   . TRP TRP TRP B B 6   6   . 115.811 109.941 22.422  1.00 15.59
1 . .
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ATOM 3379 CE3   CE3   . TRP TRP TRP B B 6   6   . 114.735 110.844 22.505  1.00 13.87
1 . .
ATOM 3380 CZ3   CZ3   . TRP TRP TRP B B 6   6   . 114.842 111.943 23.399  1.00 17.16
1 . .
ATOM 3381 CH2   CH2   . TRP TRP TRP B B 6   6   . 115.995 112.151 24.174  1.00 20.01
1 . .
ATOM 3382 CZ2   CZ2   . TRP TRP TRP B B 6   6   . 117.057 111.282 24.123  1.00 18.02
1 . .
ATOM 3383 C     C     . TRP TRP TRP B B 6   6   . 116.399 109.085 18.743  1.00 9.58
1 . .
ATOM 3384 O     O     . TRP TRP TRP B B 6   6   . 116.979 108.059 18.317  1.00 11.23
1 . .
ATOM 3385 N     N     . ALA ALA ALA B B 7   7   . 116.934 110.290 18.761  1.00 8.41
1 . .
ATOM 3386 CA    CA    . ALA ALA ALA B B 7   7   . 118.243 110.564 18.183  1.00 8.36
1 . .
ATOM 3387 CB    CB    . ALA ALA ALA B B 7   7   . 118.233 111.812 17.286  1.00 9.51
1 . .
ATOM 3388 C     C     . ALA ALA ALA B B 7   7   . 119.249 110.832 19.294  1.00 8.47
1 . .
ATOM 3389 O     O     . ALA ALA ALA B B 7   7   . 118.905 111.258 20.408  1.00 9.57
1 . .
ATOM 3390 N     N     . ARG ARG ARG B B 8   8   . 120.516 110.533 19.014  1.00 9.76
1 . .
ATOM 3391 CA    CA    . ARG ARG ARG B B 8   8   . 121.597 110.800 19.913  1.00 8.54
1 . .
ATOM 3392 CB    CB    . ARG ARG ARG B B 8   8   . 121.963 109.556 20.789  1.00 8.47
1 . .
ATOM 3393 CG    CG    . ARG ARG ARG B B 8   8   . 122.489 108.376 19.979  1.00 9.48
1 . .
ATOM 3394 CD    CD    . ARG ARG ARG B B 8   8   . 122.860 107.146 20.881  1.00 12.04
1 . .
ATOM 3395 NE    NE    . ARG ARG ARG B B 8   8   . 121.736 106.680 21.639  1.00 12.14
1 . .
ATOM 3396 CZ    CZ    . ARG ARG ARG B B 8   8   . 120.842 105.820 21.144  1.00 13.36
1 . .
ATOM 3397 NH1   NH1   . ARG ARG ARG B B 8   8   . 120.990 105.306 19.924  1.00 12.39
1 . .
ATOM 3398 NH2   NH2   . ARG ARG ARG B B 8   8   . 119.771 105.523 21.896  1.00 19.77
1 . .
ATOM 3399 C     C     . ARG ARG ARG B B 8   8   . 122.849 111.206 19.145  1.00 8.47
1 . .
ATOM 3400 O     O     . ARG ARG ARG B B 8   8   . 122.974 110.938 17.950  1.00 9.37
1 . .
ATOM 3401 N     N     . GLU GLU GLU B B 9   9   . 123.829 111.762 19.875  1.00 8.13
1 . .
ATOM 3402 CA    CA    . GLU GLU GLU B B 9   9   . 125.182 111.984 19.347  1.00 10.22
1 . .
ATOM 3403 CB    CB    . GLU GLU GLU B B 9   9   . 125.703 113.167 20.128  1.00 11.84
1 . .
ATOM 3404 CG    CG    . GLU GLU GLU B B 9   9   . 126.805 113.957 19.629  1.00 16.95
1 . .
ATOM 3405 CD    CD    . GLU GLU GLU B B 9   9   . 127.051 115.166 20.598  1.00 13.85
1 . .
ATOM 3406 OE1   OE1   . GLU GLU GLU B B 9   9   . 127.196 116.298 20.055  1.00 10.74
1 . .
ATOM 3407 OE2   OE2   . GLU GLU GLU B B 9   9   . 127.117 114.936 21.880  1.00 15.51
1 . .
ATOM 3408 C     C     . GLU GLU GLU B B 9   9   . 125.998 110.720 19.602  1.00 9.98
1 . .
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ATOM 3409 O     O     . GLU GLU GLU B B 9   9   . 126.108 110.295 20.763  1.00 15.15
1 . .
ATOM 3410 N     N     . ILE ILE ILE B B 10  10  . 126.618 110.189 18.548  1.00 8.51
1 . .
ATOM 3411 CA    CA    . ILE ILE ILE B B 10  10  . 127.628 109.176 18.707  1.00 7.99
1 . .
ATOM 3412 CB    CB    . ILE ILE ILE B B 10  10  . 127.251 107.862 17.944  1.00 7.93
1 . .
ATOM 3413 CG1   CG1   . ILE ILE ILE B B 10  10  . 127.047 108.098 16.411  1.00 8.17
1 . .
ATOM 3414 CD    CD    . ILE ILE ILE B B 10  10  . 126.978 106.821 15.614  1.00 10.16
1 . .
ATOM 3415 CG2   CG2   . ILE ILE ILE B B 10  10  . 126.017 107.187 18.641  1.00 10.40
1 . .
ATOM 3416 C     C     . ILE ILE ILE B B 10  10  . 128.907 109.719 18.079  1.00 6.85
1 . .
ATOM 3417 O     O     . ILE ILE ILE B B 10  10  . 128.928 110.861 17.585  1.00 7.53
1 . .
ATOM 3418 N     N     . LEU LEU LEU B B 11  11  . 130.028 108.970 18.112  1.00 7.00
1 . .
ATOM 3419 CA    CA    . LEU LEU LEU B B 11  11  . 131.246 109.466 17.427  1.00 6.36
1 . .
ATOM 3420 CB    CB    . LEU LEU LEU B B 11  11  . 132.523 109.317 18.316  1.00 6.29
1 . .
ATOM 3421 CG    CG    . LEU LEU LEU B B 11  11  . 132.414 110.107 19.676  1.00 6.68
1 . .
ATOM 3422 CD1   CD1   . LEU LEU LEU B B 11  11  . 133.772 110.047 20.386  1.00 8.68
1 . .
ATOM 3423 CD2   CD2   . LEU LEU LEU B B 11  11  . 131.995 111.640 19.453  1.00 8.81
1 . .
ATOM 3424 C     C     . LEU LEU LEU B B 11  11  . 131.498 108.676 16.143  1.00 5.77
1 . .
ATOM 3425 O     O     . LEU LEU LEU B B 11  11  . 131.349 107.459 16.090  1.00 6.54
1 . .
ATOM 3426 N     N     . ASP ASP ASP B B 12  12  . 131.978 109.413 15.150  1.00 6.23
1 . .
ATOM 3427 CA    CA    . ASP ASP ASP B B 12  12  . 132.359 108.827 13.854  1.00 5.94
1 . .
ATOM 3428 CB    CB    . ASP ASP ASP B B 12  12  . 132.082 109.812 12.720  1.00 6.04
1 . .
ATOM 3429 CG    CG    . ASP ASP ASP B B 12  12  . 133.139 110.944 12.581  1.00 9.48
1 . .
ATOM 3430 OD1   OD1   . ASP ASP ASP B B 12  12  . 134.186 110.957 13.235  1.00 6.45
1 . .
ATOM 3431 OD2   OD2   . ASP ASP ASP B B 12  12  . 132.911 111.825 11.707  1.00 10.05
1 . .
ATOM 3432 C     C     . ASP ASP ASP B B 12  12  . 133.801 108.382 13.893  1.00 6.40
1 . .
ATOM 3433 O     O     . ASP ASP ASP B B 12  12  . 134.407 108.325 14.966  1.00 7.11
1 . .
ATOM 3434 N     N     . SER SER SER B B 13  13  . 134.283 107.843 12.763  1.00 5.89
1 . .
ATOM 3435 CA    CA    . SER SER SER B B 13  13  . 135.557 107.181 12.721  1.00 6.28
1 . .
ATOM 3436 CB    CB    . SER SER SER B B 13  13  . 135.655 106.410 11.404  1.00 5.77
1 . .
ATOM 3437 OG    OG    . SER SER SER B B 13  13  . 135.577 107.306 10.286  1.00 5.91
1 . .
ATOM 3438 C     C     . SER SER SER B B 13  13  . 136.754 108.080 12.918  1.00 6.31
1 . .
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ATOM 3439 O     O     . SER SER SER B B 13  13  . 137.888 107.563 13.080  1.00 7.02
1 . .
ATOM 3440 N     N     . ARG ARG ARG B B 14  14  . 136.523 109.410 12.915  1.00 6.94
1 . .
ATOM 3441 CA    CA    . ARG ARG ARG B B 14  14  . 137.615 110.365 13.262  1.00 6.74
1 . .
ATOM 3442 CB    CB    . ARG ARG ARG B B 14  14  . 137.566 111.618 12.354  1.00 9.15
1 . .
ATOM 3443 CG    CG    . ARG ARG ARG B B 14  14  . 138.336 111.345 11.056  1.00 10.30
1 . .
ATOM 3444 CD    CD    . ARG ARG ARG B B 14  14  . 138.455 112.696 10.217  1.00 12.41
1 . .
ATOM 3445 NE    NE    . ARG ARG ARG B B 14  14  . 137.136 112.976 9.609   1.00 11.34
1 . .
ATOM 3446 CZ    CZ    . ARG ARG ARG B B 14  14  . 136.881 112.942 8.269   1.00 8.93
1 . .
ATOM 3447 NH1   NH1   . ARG ARG ARG B B 14  14  . 137.867 112.615 7.405   1.00 10.94
1 . .
ATOM 3448 NH2   NH2   . ARG ARG ARG B B 14  14  . 135.659 113.278 7.855   1.00 11.62
1 . .
ATOM 3449 C     C     . ARG ARG ARG B B 14  14  . 137.491 110.825 14.689  1.00 7.23
1 . .
ATOM 3450 O     O     . ARG ARG ARG B B 14  14  . 138.316 111.665 15.120  1.00 9.13
1 . .
ATOM 3451 N     N     . GLY GLY GLY B B 15  15  . 136.443 110.350 15.393  1.00 6.10
1 . .
ATOM 3452 CA    CA    . GLY GLY GLY B B 15  15  . 136.258 110.814 16.780  1.00 6.38
1 . .
ATOM 3453 C     C     . GLY GLY GLY B B 15  15  . 135.416 112.104 16.841  1.00 7.99
1 . .
ATOM 3454 O     O     . GLY GLY GLY B B 15  15  . 135.430 112.775 17.893  1.00 7.87
1 . .
ATOM 3455 N     N     . ASN ASN ASN B B 16  16  . 134.732 112.476 15.757  1.00 7.62
1 . .
ATOM 3456 CA    CA    . ASN ASN ASN B B 16  16  . 133.846 113.681 15.785  1.00 7.29
1 . .
ATOM 3457 CB    CB    . ASN ASN ASN B B 16  16  . 134.011 114.487 14.514  1.00 8.88
1 . .
ATOM 3458 CG    CG    . ASN ASN ASN B B 16  16  . 135.370 115.081 14.394  1.00 9.17
1 . .
ATOM 3459 OD1   OD1   . ASN ASN ASN B B 16  16  . 135.881 115.625 15.375  1.00 11.52
1 . .
ATOM 3460 ND2   ND2   . ASN ASN ASN B B 16  16  . 136.024 114.917 13.244  1.00 11.12
1 . .
ATOM 3461 C     C     . ASN ASN ASN B B 16  16  . 132.387 113.269 15.990  1.00 7.60
1 . .
ATOM 3462 O     O     . ASN ASN ASN B B 16  16  . 131.928 112.228 15.487  1.00 8.61
1 . .
ATOM 3463 N     N     . PRO PRO PRO B B 17  17  . 131.584 114.077 16.670  1.00 6.98
1 . .
ATOM 3464 CA    CA    . PRO PRO PRO B B 17  17  . 130.142 113.767 16.825  1.00 5.51
1 . .
ATOM 3465 CB    CB    . PRO PRO PRO B B 17  17  . 129.619 115.002 17.580  1.00 8.12
1 . .
ATOM 3466 CG    CG    . PRO PRO PRO B B 17  17  . 130.807 115.459 18.355  1.00 7.83
1 . .
ATOM 3467 CD    CD    . PRO PRO PRO B B 17  17  . 131.965 115.312 17.384  1.00 7.76
1 . .
ATOM 3468 C     C     . PRO PRO PRO B B 17  17  . 129.398 113.609 15.516  1.00 6.19
1 . .
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ATOM 3469 O     O     . PRO PRO PRO B B 17  17  . 129.709 114.300 14.536  1.00 7.53
1 . .
ATOM 3470 N     N     . THR THR THR B B 18  18  . 128.449 112.690 15.490  1.00 7.38
1 . .
ATOM 3471 CA    CA    . THR THR THR B B 18  18  . 127.525 112.629 14.398  1.00 6.83
1 . .
ATOM 3472 CB    CB    . THR THR THR B B 18  18  . 128.018 111.791 13.217  1.00 7.55
1 . .
ATOM 3473 OG1   OG1   . THR THR THR B B 18  18  . 127.168 112.080 12.089  1.00 8.83
1 . .
ATOM 3474 CG2   CG2   . THR THR THR B B 18  18  . 128.154 110.284 13.490  1.00 9.31
1 . .
ATOM 3475 C     C     . THR THR THR B B 18  18  . 126.190 112.119 14.906  1.00 6.06
1 . .
ATOM 3476 O     O     . THR THR THR B B 18  18  . 126.081 111.751 16.109  1.00 7.75
1 . .
ATOM 3477 N     N     . VAL VAL VAL B B 19  19  . 125.182 112.167 14.050  1.00 6.97
1 . .
ATOM 3478 CA    CA    . VAL VAL VAL B B 19  19  . 123.800 111.813 14.422  1.00 7.26
1 . .
ATOM 3479 CB    CB    . VAL VAL VAL B B 19  19  . 122.840 112.583 13.475  1.00 8.67
1 . .
ATOM 3480 CG1   CG1   . VAL VAL VAL B B 19  19  . 121.405 112.147 13.690  1.00 12.25
1 . .
ATOM 3481 CG2   CG2   . VAL VAL VAL B B 19  19  . 122.977 114.138 13.736  1.00 10.01
1 . .
ATOM 3482 C     C     . VAL VAL VAL B B 19  19  . 123.488 110.322 14.256  1.00 8.56
1 . .
ATOM 3483 O     O     . VAL VAL VAL B B 19  19  . 123.891 109.696 13.242  1.00 8.23
1 . .
ATOM 3484 N     N     . GLU GLU GLU B B 20  20  . 122.846 109.752 15.266  1.00 7.30
1 . .
ATOM 3485 CA    CA    . GLU GLU GLU B B 20  20  . 122.353 108.385 15.171  1.00 8.03
1 . .
ATOM 3486 CB    CB    . GLU GLU GLU B B 20  20  . 123.084 107.444 16.150  1.00 8.91
1 . .
ATOM 3487 CG    CG    . GLU GLU GLU B B 20  20  . 122.445 106.061 16.190  1.00 10.22
1 . .
ATOM 3488 CD    CD    . GLU GLU GLU B B 20  20  . 123.306 105.171 17.033  1.00 11.13
1 . .
ATOM 3489 OE1   OE1   . GLU GLU GLU B B 20  20  . 124.264 104.621 16.438  1.00 11.42
1 . .
ATOM 3490 OE2   OE2   . GLU GLU GLU B B 20  20  . 123.120 105.066 18.258  1.00 11.31
1 . .
ATOM 3491 C     C     . GLU GLU GLU B B 20  20  . 120.867 108.467 15.523  1.00 8.31
1 . .
ATOM 3492 O     O     . GLU GLU GLU B B 20  20  . 120.503 109.202 16.454  1.00 9.66
1 . .
ATOM 3493 N     N     . VAL VAL VAL B B 21  21  . 120.058 107.671 14.823  1.00 7.46
1 . .
ATOM 3494 CA    CA    . VAL VAL VAL B B 21  21  . 118.604 107.611 15.068  1.00 7.70
1 . .
ATOM 3495 CB    CB    . VAL VAL VAL B B 21  21  . 117.852 108.147 13.846  1.00 7.52
1 . .
ATOM 3496 CG1   CG1   . VAL VAL VAL B B 21  21  . 116.340 107.978 14.065  1.00 10.35
1 . .
ATOM 3497 CG2   CG2   . VAL VAL VAL B B 21  21  . 118.150 109.636 13.635  1.00 10.95
1 . .
ATOM 3498 C     C     . VAL VAL VAL B B 21  21  . 118.182 106.155 15.333  1.00 8.01
1 . .
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ATOM 3499 O     O     . VAL VAL VAL B B 21  21  . 118.452 105.263 14.556  1.00 9.09
1 . .
ATOM 3500 N     N     . ASP ASP ASP B B 22  22  . 117.424 105.996 16.429  1.00 9.58
1 . .
ATOM 3501 CA    CA    . ASP ASP ASP B B 22  22  . 116.680 104.787 16.716  1.00 9.84
1 . .
ATOM 3502 CB    CB    . ASP ASP ASP B B 22  22  . 116.735 104.442 18.231  1.00 10.36
1 . .
ATOM 3503 CG    CG    . ASP ASP ASP B B 22  22  . 118.119 103.963 18.701  1.00 13.17
1 . .
ATOM 3504 OD1   OD1   . ASP ASP ASP B B 22  22  . 118.289 103.861 19.945  1.00 15.93
1 . .
ATOM 3505 OD2   OD2   . ASP ASP ASP B B 22  22  . 118.956 103.570 17.829  1.00 13.82
1 . .
ATOM 3506 C     C     . ASP ASP ASP B B 22  22  . 115.220 105.031 16.340  1.00 9.20
1 . .
ATOM 3507 O     O     . ASP ASP ASP B B 22  22  . 114.610 105.961 16.847  1.00 11.15
1 . .
ATOM 3508 N     N     . LEU LEU LEU B B 23  23  . 114.660 104.168 15.525  1.00 8.56
1 . .
ATOM 3509 CA    CA    . LEU LEU LEU B B 23  23  . 113.218 104.299 15.196  1.00 8.79
1 . .
ATOM 3510 CB    CB    . LEU LEU LEU B B 23  23  . 113.108 104.661 13.679  1.00 8.65
1 . .
ATOM 3511 CG    CG    . LEU LEU LEU B B 23  23  . 111.692 104.900 13.135  1.00 10.22
1 . .
ATOM 3512 CD1   CD1   . LEU LEU LEU B B 23  23  . 111.792 105.855 11.993  1.00 13.16
1 . .
ATOM 3513 CD2   CD2   . LEU LEU LEU B B 23  23  . 110.984 103.599 12.781  1.00 11.91
1 . .
ATOM 3514 C     C     . LEU LEU LEU B B 23  23  . 112.526 102.973 15.524  1.00 9.94
1 . .
ATOM 3515 O     O     . LEU LEU LEU B B 23  23  . 112.974 101.882 15.143  1.00 10.44
1 . .
ATOM 3516 N     N     . TYR TYR TYR B B 24  24  . 111.419 103.085 16.262  1.00 11.33
1 . .
ATOM 3517 CA    CA    . TYR TYR TYR B B 24  24  . 110.736 101.886 16.709  1.00 11.49
1 . .
ATOM 3518 CB    CB    . TYR TYR TYR B B 24  24  . 110.480 101.974 18.190  1.00 12.61
1 . .
ATOM 3519 CG    CG    . TYR TYR TYR B B 24  24  . 111.667 101.976 19.073  1.00 14.61
1 . .
ATOM 3520 CD1   CD1   . TYR TYR TYR B B 24  24  . 112.375 103.159 19.340  1.00 15.93
1 . .
ATOM 3521 CE1   CE1   . TYR TYR TYR B B 24  24  . 113.518 103.147 20.213  1.00 18.08
1 . .
ATOM 3522 CZ    CZ    . TYR TYR TYR B B 24  24  . 113.860 101.955 20.830  1.00 18.81
1 . .
ATOM 3523 OH    OH    . TYR TYR TYR B B 24  24  . 114.900 101.949 21.699  1.00 21.31
1 . .
ATOM 3524 CE2   CE2   . TYR TYR TYR B B 24  24  . 113.176 100.772 20.595  1.00 19.64
1 . .
ATOM 3525 CD2   CD2   . TYR TYR TYR B B 24  24  . 112.027 100.777 19.762  1.00 17.60
1 . .
ATOM 3526 C     C     . TYR TYR TYR B B 24  24  . 109.375 101.750 16.015  1.00 11.86
1 . .
ATOM 3527 O     O     . TYR TYR TYR B B 24  24  . 108.607 102.727 15.892  1.00 13.02
1 . .
ATOM 3528 N     N     . THR THR THR B B 25  25  . 109.131 100.558 15.516  1.00 11.95
1 . .
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ATOM 3529 CA    CA    . THR THR THR B B 25  25  . 107.767 100.186 15.054  1.00 13.60
1 . .
ATOM 3530 CB    CB    . THR THR THR B B 25  25  . 107.748 99.915  13.552  1.00 13.08
1 . .
ATOM 3531 OG1   OG1   . THR THR THR B B 25  25  . 108.460 98.671  13.321  1.00 14.34
1 . .
ATOM 3532 CG2   CG2   . THR THR THR B B 25  25  . 108.330 101.113 12.734  1.00 15.04
1 . .
ATOM 3533 C     C     . THR THR THR B B 25  25  . 107.356 98.898  15.797  1.00 14.22
1 . .
ATOM 3534 O     O     . THR THR THR B B 25  25  . 108.103 98.380  16.650  1.00 15.38
1 . .
ATOM 3535 N     N     . ALA ALA ALA B B 26  26  . 106.132 98.425  15.487  1.00 15.28
1 . .
ATOM 3536 CA    CA    . ALA ALA ALA B B 26  26  . 105.721 97.077  15.914  1.00 18.20
1 . .
ATOM 3537 CB    CB    . ALA ALA ALA B B 26  26  . 104.351 96.647  15.297  1.00 19.73
1 . .
ATOM 3538 C     C     . ALA ALA ALA B B 26  26  . 106.731 95.993  15.594  1.00 18.19
1 . .
ATOM 3539 O     O     . ALA ALA ALA B B 26  26  . 106.728 94.972  16.283  1.00 20.70
1 . .
ATOM 3540 N     N     . LYS LYS LYS B B 27  27  . 107.594 96.180  14.571  1.00 18.48
1 . .
ATOM 3541 CA    CA    . LYS LYS LYS B B 27  27  . 108.559 95.155  14.193  1.00 19.82
1 . .
ATOM 3542 CB    CB    . LYS LYS LYS B B 27  27  . 108.845 95.194  12.681  1.00 21.26
1 . .
ATOM 3543 CG    CG    . LYS LYS LYS B B 27  27  . 107.606 94.944  11.876  1.00 24.07
1 . .
ATOM 3544 CD    CD    . LYS LYS LYS B B 27  27  . 107.562 93.524  11.330  1.00 26.95
1 . .
ATOM 3545 CE    CE    . LYS LYS LYS B B 27  27  . 106.555 93.434  10.184  1.00 25.85
1 . .
ATOM 3546 NZ    NZ    . LYS LYS LYS B B 27  27  . 105.161 93.531  10.743  1.00 32.79
1 . .
ATOM 3547 C     C     . LYS LYS LYS B B 27  27  . 109.855 95.279  14.982  1.00 19.28
1 . .
ATOM 3548 O     O     . LYS LYS LYS B B 27  27  . 110.724 94.416  14.819  1.00 22.17
1 . .
ATOM 3549 N     N     . GLY GLY GLY B B 28  28  . 110.017 96.321  15.796  1.00 16.81
1 . .
ATOM 3550 CA    CA    . GLY GLY GLY B B 28  28  . 111.235 96.404  16.623  1.00 16.37
1 . .
ATOM 3551 C     C     . GLY GLY GLY B B 28  28  . 111.991 97.707  16.393  1.00 15.31
1 . .
ATOM 3552 O     O     . GLY GLY GLY B B 28  28  . 111.430 98.700  16.008  1.00 13.79
1 . .
ATOM 3553 N     N     . LEU LEU LEU B B 29  29  . 113.293 97.671  16.641  1.00 15.49
1 . .
ATOM 3554 CA    CA    . LEU LEU LEU B B 29  29  . 114.134 98.845  16.630  1.00 14.58
1 . .
ATOM 3555 CB    CB    . LEU LEU LEU B B 29  29  . 115.049 98.770  17.849  1.00 15.00
1 . .
ATOM 3556 CG    CG    . LEU LEU LEU B B 29  29  . 116.354 99.586  17.739  1.00 20.13
1 . .
ATOM 3557 CD1   CD1   . LEU LEU LEU B B 29  29  . 116.024 101.029 17.903  1.00 23.51
1 . .
ATOM 3558 CD2   CD2   . LEU LEU LEU B B 29  29  . 117.294 99.167  18.852  1.00 25.34
1 . .
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ATOM 3559 C     C     . LEU LEU LEU B B 29  29  . 114.974 98.861  15.351  1.00 14.47
1 . .
ATOM 3560 O     O     . LEU LEU LEU B B 29  29  . 115.572 97.859  14.947  1.00 14.89
1 . .
ATOM 3561 N     N     . PHE PHE PHE B B 30  30  . 115.033 100.020 14.719  1.00 11.26
1 . .
ATOM 3562 CA    CA    . PHE PHE PHE B B 30  30  . 115.782 100.202 13.457  1.00 10.73
1 . .
ATOM 3563 CB    CB    . PHE PHE PHE B B 30  30  . 114.805 100.427 12.277  1.00 12.52
1 . .
ATOM 3564 CG    CG    . PHE PHE PHE B B 30  30  . 113.897 99.287  12.147  1.00 10.83
1 . .
ATOM 3565 CD1   CD1   . PHE PHE PHE B B 30  30  . 114.331 98.163  11.459  1.00 11.86
1 . .
ATOM 3566 CE1   CE1   . PHE PHE PHE B B 30  30  . 113.548 96.971  11.415  1.00 13.58
1 . .
ATOM 3567 CZ    CZ    . PHE PHE PHE B B 30  30  . 112.352 96.941  12.101  1.00 13.13
1 . .
ATOM 3568 CE2   CE2   . PHE PHE PHE B B 30  30  . 111.901 98.036  12.790  1.00 12.21
1 . .
ATOM 3569 CD2   CD2   . PHE PHE PHE B B 30  30  . 112.676 99.218  12.830  1.00 10.82
1 . .
ATOM 3570 C     C     . PHE PHE PHE B B 30  30  . 116.681 101.388 13.680  1.00 11.34
1 . .
ATOM 3571 O     O     . PHE PHE PHE B B 30  30  . 116.223 102.530 13.894  1.00 14.57
1 . .
ATOM 3572 N     N     . ARG ARG ARG B B 31  31  . 117.991 101.135 13.518  1.00 9.54
1 . .
ATOM 3573 CA    CA    . ARG ARG ARG B B 31  31  . 118.949 102.171 13.894  1.00 9.58
1 . .
ATOM 3574 CB    CB    . ARG ARG ARG B B 31  31  . 119.861 101.619 14.989  1.00 9.38
1 . .
ATOM 3575 CG    CG    . ARG ARG ARG B B 31  31  . 120.952 102.623 15.426  1.00 10.67
1 . .
ATOM 3576 CD    CD    . ARG ARG ARG B B 31  31  . 121.815 102.063 16.504  1.00 12.28
1 . .
ATOM 3577 NE    NE    . ARG ARG ARG B B 31  31  . 121.124 101.667 17.685  1.00 11.48
1 . .
ATOM 3578 CZ    CZ    . ARG ARG ARG B B 31  31  . 121.547 100.629 18.425  1.00 14.13
1 . .
ATOM 3579 NH1   NH1   . ARG ARG ARG B B 31  31  . 120.921 100.334 19.510  1.00 17.12
1 . .
ATOM 3580 NH2   NH2   . ARG ARG ARG B B 31  31  . 122.620 99.901  18.072  1.00 18.03
1 . .
ATOM 3581 C     C     . ARG ARG ARG B B 31  31  . 119.807 102.565 12.684  1.00 9.34
1 . .
ATOM 3582 O     O     . ARG ARG ARG B B 31  31  . 120.175 101.717 11.873  1.00 10.87
1 . .
ATOM 3583 N     N     . ALA ALA ALA B B 32  32  . 120.060 103.880 12.525  1.00 7.63
1 . .
ATOM 3584 CA    CA    . ALA ALA ALA B B 32  32  . 120.941 104.348 11.393  1.00 7.84
1 . .
ATOM 3585 CB    CB    . ALA ALA ALA B B 32  32  . 120.140 104.846 10.180  1.00 8.27
1 . .
ATOM 3586 C     C     . ALA ALA ALA B B 32  32  . 121.809 105.459 11.899  1.00 7.74
1 . .
ATOM 3587 O     O     . ALA ALA ALA B B 32  32  . 121.419 106.197 12.808  1.00 8.89
1 . .
ATOM 3588 N     N     . ALA ALA ALA B B 33  33  . 122.956 105.652 11.295  1.00 8.59
1 . .
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ATOM 3589 CA    CA    . ALA ALA ALA B B 33  33  . 123.830 106.796 11.656  1.00 8.15
1 . .
ATOM 3590 CB    CB    . ALA ALA ALA B B 33  33  . 125.020 106.341 12.506  1.00 8.98
1 . .
ATOM 3591 C     C     . ALA ALA ALA B B 33  33  . 124.310 107.511 10.407  1.00 6.59
1 . .
ATOM 3592 O     O     . ALA ALA ALA B B 33  33  . 124.295 106.927 9.292   1.00 9.49
1 . .
ATOM 3593 N     N     . VAL VAL VAL B B 34  34  . 124.696 108.792 10.592  1.00 7.18
1 . .
ATOM 3594 CA    CA    . VAL VAL VAL B B 34  34  . 124.967 109.659 9.469   1.00 6.14
1 . .
ATOM 3595 CB    CB    . VAL VAL VAL B B 34  34  . 124.296 111.042 9.737   1.00 6.37
1 . .
ATOM 3596 CG1   CG1   . VAL VAL VAL B B 34  34  . 124.627 112.013 8.604   1.00 8.81
1 . .
ATOM 3597 CG2   CG2   . VAL VAL VAL B B 34  34  . 122.751 110.848 9.840   1.00 9.44
1 . .
ATOM 3598 C     C     . VAL VAL VAL B B 34  34  . 126.514 109.816 9.334   1.00 6.72
1 . .
ATOM 3599 O     O     . VAL VAL VAL B B 34  34  . 127.202 110.104 10.345  1.00 8.58
1 . .
ATOM 3600 N     N     . PRO PRO PRO B B 35  35  . 127.064 109.747 8.116   1.00 6.30
1 . .
ATOM 3601 CA    CA    . PRO PRO PRO B B 35  35  . 128.520 109.939 7.915   1.00 7.13
1 . .
ATOM 3602 CB    CB    . PRO PRO PRO B B 35  35  . 128.766 109.215 6.576   1.00 7.59
1 . .
ATOM 3603 CG    CG    . PRO PRO PRO B B 35  35  . 127.422 109.459 5.771   1.00 7.77
1 . .
ATOM 3604 CD    CD    . PRO PRO PRO B B 35  35  . 126.369 109.356 6.870   1.00 6.68
1 . .
ATOM 3605 C     C     . PRO PRO PRO B B 35  35  . 128.849 111.422 7.822   1.00 6.85
1 . .
ATOM 3606 O     O     . PRO PRO PRO B B 35  35  . 127.929 112.270 7.771   1.00 8.41
1 . .
ATOM 3607 N     N     . SER SER SER B B 36  36  . 130.139 111.761 7.701   1.00 7.14
1 . .
ATOM 3608 CA    CA    . SER SER SER B B 36  36  . 130.509 113.166 7.535   1.00 6.52
1 . .
ATOM 3609 CB    CB    . SER SER SER B B 36  36  . 130.811 113.655 8.956   1.00 7.20
1 . .
ATOM 3610 OG    OG    . SER SER SER B B 36  36  . 131.247 115.047 8.890   1.00 9.45
1 . .
ATOM 3611 C     C     . SER SER SER B B 36  36  . 131.753 113.268 6.715   1.00 6.51
1 . .
ATOM 3612 O     O     . SER SER SER B B 36  36  . 132.747 112.608 6.946   1.00 6.77
1 . .
ATOM 3613 N     N     . GLY GLY GLY B B 37  37  . 131.690 114.139 5.719   1.00 6.55
1 . .
ATOM 3614 CA    CA    . GLY GLY GLY B B 37  37  . 132.859 114.399 4.900   1.00 7.36
1 . .
ATOM 3615 C     C     . GLY GLY GLY B B 37  37  . 133.879 115.396 5.468   1.00 7.29
1 . .
ATOM 3616 O     O     . GLY GLY GLY B B 37  37  . 133.582 116.131 6.408   1.00 9.53
1 . .
ATOM 3617 N     N     . ALA ALA ALA B B 38  38  . 135.086 115.382 4.880   1.00 8.58
1 . .
ATOM 3618 CA    CA    . ALA ALA ALA B B 38  38  . 136.164 116.345 5.136   1.00 7.66
1 . .
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ATOM 3619 CB    CB    . ALA ALA ALA B B 38  38  . 137.517 115.614 5.467   1.00 7.56
1 . .
ATOM 3620 C     C     . ALA ALA ALA B B 38  38  . 136.301 117.205 3.889   1.00 8.29
1 . .
ATOM 3621 O     O     . ALA ALA ALA B B 38  38  . 136.244 118.423 4.019   1.00 10.00
1 . .
ATOM 3622 N     N     . SER SER SER B B 39  39  . 136.488 116.575 2.708   1.00 6.99
1 . .
ATOM 3623 CA    CA    . SER SER SER B B 39  39  . 136.567 117.370 1.493   1.00 7.82
1 . .
ATOM 3624 CB    CB    . SER SER SER B B 39  39  . 137.477 116.727 0.502   1.00 7.91
1 . .
ATOM 3625 OG    OG    . SER SER SER B B 39  39  . 137.072 115.366 0.204   1.00 7.45
1 . .
ATOM 3626 C     C     . SER SER SER B B 39  39  . 135.153 117.569 0.933   1.00 6.55
1 . .
ATOM 3627 O     O     . SER SER SER B B 39  39  . 134.714 116.921 -0.009  1.00 7.08
1 . .
ATOM 3628 N     N     . THR THR THR B B 40  40  . 134.411 118.464 1.612   1.00 8.05
1 . .
ATOM 3629 CA    CA    . THR THR THR B B 40  40  . 132.988 118.611 1.345   1.00 7.52
1 . .
ATOM 3630 CB    CB    . THR THR THR B B 40  40  . 132.259 118.999 2.625   1.00 8.47
1 . .
ATOM 3631 OG1   OG1   . THR THR THR B B 40  40  . 132.985 120.067 3.276   1.00 11.15
1 . .
ATOM 3632 CG2   CG2   . THR THR THR B B 40  40  . 132.171 117.813 3.587   1.00 8.89
1 . .
ATOM 3633 C     C     . THR THR THR B B 40  40  . 132.790 119.690 0.265   1.00 6.48
1 . .
ATOM 3634 O     O     . THR THR THR B B 40  40  . 133.266 120.824 0.390   1.00 9.59
1 . .
ATOM 3635 N     N     . GLY GLY GLY B B 41  41  . 132.036 119.317 -0.748  1.00 7.32
1 . .
ATOM 3636 CA    CA    . GLY GLY GLY B B 41  41  . 131.697 120.265 -1.852  1.00 7.49
1 . .
ATOM 3637 C     C     . GLY GLY GLY B B 41  41  . 130.870 121.427 -1.328  1.00 7.59
1 . .
ATOM 3638 O     O     . GLY GLY GLY B B 41  41  . 130.024 121.267 -0.462  1.00 8.75
1 . .
ATOM 3639 N     N     . ILE ILE ILE B B 42  42  . 131.086 122.595 -1.924  1.00 7.86
1 . .
ATOM 3640 CA    CA    . ILE ILE ILE B B 42  42  . 130.249 123.752 -1.506  1.00 8.81
1 . .
ATOM 3641 CB    CB    . ILE ILE ILE B B 42  42  . 130.704 125.041 -2.169  1.00 9.35
1 . .
ATOM 3642 CG1   CG1   . ILE ILE ILE B B 42  42  . 130.535 125.039 -3.674  1.00 8.99
1 . .
ATOM 3643 CD    CD    . ILE ILE ILE B B 42  42  . 130.962 126.321 -4.262  1.00 16.68
1 . .
ATOM 3644 CG2   CG2   . ILE ILE ILE B B 42  42  . 132.132 125.314 -1.707  1.00 11.46
1 . .
ATOM 3645 C     C     . ILE ILE ILE B B 42  42  . 128.771 123.639 -1.776  1.00 8.50
1 . .
ATOM 3646 O     O     . ILE ILE ILE B B 42  42  . 127.970 124.350 -1.133  1.00 9.94
1 . .
ATOM 3647 N     N     . TYR TYR TYR B B 43  43  . 128.364 122.750 -2.654  1.00 8.16
1 . .
ATOM 3648 CA    CA    . TYR TYR TYR B B 43  43  . 126.959 122.577 -3.011  1.00 7.20
1 . .
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ATOM 3649 CB    CB    . TYR TYR TYR B B 43  43  . 126.796 122.354 -4.549  1.00 6.67
1 . .
ATOM 3650 CG    CG    . TYR TYR TYR B B 43  43  . 127.222 123.514 -5.324  1.00 7.67
1 . .
ATOM 3651 CD1   CD1   . TYR TYR TYR B B 43  43  . 128.335 123.418 -6.109  1.00 8.62
1 . .
ATOM 3652 CE1   CE1   . TYR TYR TYR B B 43  43  . 128.836 124.566 -6.839  1.00 7.81
1 . .
ATOM 3653 CZ    CZ    . TYR TYR TYR B B 43  43  . 128.139 125.752 -6.735  1.00 10.85
1 . .
ATOM 3654 OH    OH    . TYR TYR TYR B B 43  43  . 128.545 126.891 -7.393  1.00 12.56
1 . .
ATOM 3655 CE2   CE2   . TYR TYR TYR B B 43  43  . 127.043 125.858 -5.928  1.00 10.04
1 . .
ATOM 3656 CD2   CD2   . TYR TYR TYR B B 43  43  . 126.600 124.755 -5.185  1.00 11.20
1 . .
ATOM 3657 C     C     . TYR TYR TYR B B 43  43  . 126.284 121.441 -2.185  1.00 6.21
1 . .
ATOM 3658 O     O     . TYR TYR TYR B B 43  43  . 125.113 121.177 -2.400  1.00 8.54
1 . .
ATOM 3659 N     N     . GLU GLU GLU B B 44  44  . 127.037 120.791 -1.269  1.00 6.81
1 . .
ATOM 3660 CA    CA    . GLU GLU GLU B B 44  44  . 126.399 119.726 -0.419  1.00 7.03
1 . .
ATOM 3661 CB    CB    . GLU GLU GLU B B 44  44  . 127.482 119.056 0.469   1.00 7.48
1 . .
ATOM 3662 CG    CG    . GLU GLU GLU B B 44  44  . 128.529 118.298 -0.389  1.00 7.96
1 . .
ATOM 3663 CD    CD    . GLU GLU GLU B B 44  44  . 129.369 117.348 0.414   1.00 8.04
1 . .
ATOM 3664 OE1   OE1   . GLU GLU GLU B B 44  44  . 128.946 116.996 1.554   1.00 8.88
1 . .
ATOM 3665 OE2   OE2   . GLU GLU GLU B B 44  44  . 130.434 116.954 -0.151  1.00 8.50
1 . .
ATOM 3666 C     C     . GLU GLU GLU B B 44  44  . 125.295 120.355 0.444   1.00 6.50
1 . .
ATOM 3667 O     O     . GLU GLU GLU B B 44  44  . 125.448 121.512 0.938   1.00 8.66
1 . .
ATOM 3668 N     N     . ALA ALA ALA B B 45  45  . 124.261 119.564 0.700   1.00 8.20
1 . .
ATOM 3669 CA    CA    . ALA ALA ALA B B 45  45  . 123.254 119.974 1.666   1.00 7.50
1 . .
ATOM 3670 CB    CB    . ALA ALA ALA B B 45  45  . 122.220 118.827 1.827   1.00 9.29
1 . .
ATOM 3671 C     C     . ALA ALA ALA B B 45  45  . 123.940 120.258 3.015   1.00 8.15
1 . .
ATOM 3672 O     O     . ALA ALA ALA B B 45  45  . 124.955 119.643 3.329   1.00 9.31
1 . .
ATOM 3673 N     N     . LEU LEU LEU B B 46  46  . 123.376 121.152 3.830   1.00 8.36
1 . .
ATOM 3674 CA    CA    . LEU LEU LEU B B 46  46  . 124.126 121.603 5.039   1.00 8.63
1 . .
ATOM 3675 CB    CB    . LEU LEU LEU B B 46  46  . 123.363 122.786 5.656   1.00 12.80
1 . .
ATOM 3676 CG    CG    . LEU LEU LEU B B 46  46  . 124.097 123.351 6.926   1.00 17.12
1 . .
ATOM 3677 CD1   CD1   . LEU LEU LEU B B 46  46  . 125.338 124.091 6.713   1.00 23.65
1 . .
ATOM 3678 CD2   CD2   . LEU LEU LEU B B 46  46  . 123.109 124.035 7.906   1.00 22.01
1 . .
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ATOM 3679 C     C     . LEU LEU LEU B B 46  46  . 124.276 120.490 6.086   1.00 9.22
1 . .
ATOM 3680 O     O     . LEU LEU LEU B B 46  46  . 123.314 119.886 6.536   1.00 11.15
1 . .
ATOM 3681 N     N     . GLU GLU GLU B B 47  47  . 125.500 120.304 6.524   1.00 10.37
1 . .
ATOM 3682 CA    CA    . GLU GLU GLU B B 47  47  . 125.789 119.509 7.746   1.00 9.23
1 . .
ATOM 3683 CB    CB    . GLU GLU GLU B B 47  47  . 127.202 118.862 7.605   1.00 8.20
1 . .
ATOM 3684 CG    CG    . GLU GLU GLU B B 47  47  . 127.571 118.140 8.875   1.00 10.29
1 . .
ATOM 3685 CD    CD    . GLU GLU GLU B B 47  47  . 128.979 117.601 8.710   1.00 12.02
1 . .
ATOM 3686 OE1   OE1   . GLU GLU GLU B B 47  47  . 129.054 116.469 8.200   1.00 10.06
1 . .
ATOM 3687 OE2   OE2   . GLU GLU GLU B B 47  47  . 129.946 118.296 9.054   1.00 11.41
1 . .
ATOM 3688 C     C     . GLU GLU GLU B B 47  47  . 125.756 120.547 8.925   1.00 9.17
1 . .
ATOM 3689 O     O     . GLU GLU GLU B B 47  47  . 126.665 121.388 9.031   1.00 11.27
1 . .
ATOM 3690 N     N     . LEU LEU LEU B B 48  48  . 124.757 120.365 9.821   1.00 7.72
1 . .
ATOM 3691 CA    CA    . LEU LEU LEU B B 48  48  . 124.568 121.289 10.905  1.00 8.10
1 . .
ATOM 3692 CB    CB    . LEU LEU LEU B B 48  48  . 123.058 121.375 11.304  1.00 8.19
1 . .
ATOM 3693 CG    CG    . LEU LEU LEU B B 48  48  . 122.815 122.327 12.524  1.00 9.32
1 . .
ATOM 3694 CD1   CD1   . LEU LEU LEU B B 48  48  . 123.135 123.775 12.136  1.00 14.28
1 . .
ATOM 3695 CD2   CD2   . LEU LEU LEU B B 48  48  . 121.329 122.160 12.929  1.00 12.15
1 . .
ATOM 3696 C     C     . LEU LEU LEU B B 48  48  . 125.447 120.903 12.094  1.00 9.12
1 . .
ATOM 3697 O     O     . LEU LEU LEU B B 48  48  . 125.270 119.815 12.665  1.00 8.99
1 . .
ATOM 3698 N     N     . ARG ARG ARG B B 49  49  . 126.380 121.771 12.455  1.00 10.18
1 . .
ATOM 3699 CA    CA    . ARG ARG ARG B B 49  49  . 127.215 121.602 13.671  1.00 10.67
1 . .
ATOM 3700 CB    CB    . ARG ARG ARG B B 49  49  . 128.708 121.776 13.270  1.00 12.91
1 . .
ATOM 3701 CG    CG    . ARG ARG ARG B B 49  49  . 129.169 120.800 12.149  1.00 13.47
1 . .
ATOM 3702 CD    CD    . ARG ARG ARG B B 49  49  . 129.739 119.624 12.877  1.00 13.24
1 . .
ATOM 3703 NE    NE    . ARG ARG ARG B B 49  49  . 130.194 118.514 12.028  1.00 12.86
1 . .
ATOM 3704 CZ    CZ    . ARG ARG ARG B B 49  49  . 130.370 117.246 12.405  1.00 10.72
1 . .
ATOM 3705 NH1   NH1   . ARG ARG ARG B B 49  49  . 130.207 116.907 13.663  1.00 10.40
1 . .
ATOM 3706 NH2   NH2   . ARG ARG ARG B B 49  49  . 130.737 116.342 11.475  1.00 13.71
1 . .
ATOM 3707 C     C     . ARG ARG ARG B B 49  49  . 126.910 122.711 14.648  1.00 10.12
1 . .
ATOM 3708 O     O     . ARG ARG ARG B B 49  49  . 126.370 123.771 14.244  1.00 11.86
1 . .
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ATOM 3709 N     N     . ASP ASP ASP B B 50  50  . 127.196 122.460 15.921  1.00 9.55
1 . .
ATOM 3710 CA    CA    . ASP ASP ASP B B 50  50  . 126.727 123.390 16.941  1.00 10.45
1 . .
ATOM 3711 CB    CB    . ASP ASP ASP B B 50  50  . 126.826 122.703 18.311  1.00 11.10
1 . .
ATOM 3712 CG    CG    . ASP ASP ASP B B 50  50  . 125.869 121.500 18.434  1.00 12.35
1 . .
ATOM 3713 OD1   OD1   . ASP ASP ASP B B 50  50  . 124.933 121.425 17.623  1.00 10.62
1 . .
ATOM 3714 OD2   OD2   . ASP ASP ASP B B 50  50  . 126.089 120.632 19.350  1.00 10.94
1 . .
ATOM 3715 C     C     . ASP ASP ASP B B 50  50  . 127.529 124.682 17.006  1.00 12.42
1 . .
ATOM 3716 O     O     . ASP ASP ASP B B 50  50  . 127.001 125.755 17.384  1.00 14.04
1 . .
ATOM 3717 N     N     . GLY GLY GLY B B 51  51  . 128.816 124.585 16.692  1.00 11.43
1 . .
ATOM 3718 CA    CA    . GLY GLY GLY B B 51  51  . 129.701 125.762 16.701  1.00 13.79
1 . .
ATOM 3719 C     C     . GLY GLY GLY B B 51  51  . 130.074 126.201 18.104  1.00 15.94
1 . .
ATOM 3720 O     O     . GLY GLY GLY B B 51  51  . 130.433 127.356 18.268  1.00 18.95
1 . .
ATOM 3721 N     N     . ASP ASP ASP B B 52  52  . 129.871 125.371 19.125  1.00 14.48
1 . .
ATOM 3722 CA    CA    . ASP ASP ASP B B 52  52  . 130.230 125.725 20.507  1.00 15.25
1 . .
ATOM 3723 CB    CB    . ASP ASP ASP B B 52  52  . 129.350 124.999 21.509  1.00 14.91
1 . .
ATOM 3724 CG    CG    . ASP ASP ASP B B 52  52  . 129.775 125.231 22.946  1.00 17.18
1 . .
ATOM 3725 OD1   OD1   . ASP ASP ASP B B 52  52  . 130.881 125.849 23.168  1.00 20.19
1 . .
ATOM 3726 OD2   OD2   . ASP ASP ASP B B 52  52  . 129.025 124.763 23.834  1.00 21.29
1 . .
ATOM 3727 C     C     . ASP ASP ASP B B 52  52  . 131.728 125.353 20.657  1.00 17.77
1 . .
ATOM 3728 O     O     . ASP ASP ASP B B 52  52  . 132.072 124.151 20.752  1.00 16.46
1 . .
ATOM 3729 N     N     . LYS LYS LYS B B 53  53  . 132.621 126.355 20.634  1.00 18.19
1 . .
ATOM 3730 CA    CA    . LYS LYS LYS B B 53  53  . 134.078 126.136 20.464  1.00 20.77
1 . .
ATOM 3731 CB    CB    . LYS LYS LYS B B 53  53  . 134.742 127.514 20.204  1.00 22.81
1 . .
ATOM 3732 CG    CG    . LYS LYS LYS B B 53  53  . 134.803 127.928 18.685  1.00 30.67
1 . .
ATOM 3733 CD    CD    . LYS LYS LYS B B 53  53  . 134.381 129.444 18.324  1.00 41.35
1 . .
ATOM 3734 CE    CE    . LYS LYS LYS B B 53  53  . 135.334 130.601 18.756  1.00 45.21
1 . .
ATOM 3735 NZ    NZ    . LYS LYS LYS B B 53  53  . 136.527 130.821 17.874  1.00 49.00
1 . .
ATOM 3736 C     C     . LYS LYS LYS B B 53  53  . 134.654 125.422 21.673  1.00 20.55
1 . .
ATOM 3737 O     O     . LYS LYS LYS B B 53  53  . 135.764 124.867 21.607  1.00 22.73
1 . .
ATOM 3738 N     N     . GLN GLN GLN B B 54  54  . 133.869 125.372 22.732  1.00 19.31
1 . .
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ATOM 3739 CA    CA    . GLN GLN GLN B B 54  54  . 134.312 124.797 23.956  1.00 19.99
1 . .
ATOM 3740 CB    CB    . GLN GLN GLN B B 54  54  . 133.630 125.506 25.152  1.00 20.97
1 . .
ATOM 3741 CG    CG    . GLN GLN GLN B B 54  54  . 134.069 126.965 25.404  1.00 27.62
1 . .
ATOM 3742 CD    CD    . GLN GLN GLN B B 54  54  . 135.576 127.132 25.181  1.00 34.69
1 . .
ATOM 3743 OE1   OE1   . GLN GLN GLN B B 54  54  . 136.385 126.382 25.739  1.00 40.36
1 . .
ATOM 3744 NE2   NE2   . GLN GLN GLN B B 54  54  . 135.953 128.077 24.345  1.00 38.93
1 . .
ATOM 3745 C     C     . GLN GLN GLN B B 54  54  . 134.033 123.302 23.971  1.00 17.95
1 . .
ATOM 3746 O     O     . GLN GLN GLN B B 54  54  . 134.553 122.589 24.847  1.00 19.81
1 . .
ATOM 3747 N     N     . ARG ARG ARG B B 55  55  . 133.129 122.825 23.099  1.00 15.75
1 . .
ATOM 3748 CA    CA    . ARG ARG ARG B B 55  55  . 132.580 121.403 23.231  1.00 13.73
1 . .
ATOM 3749 CB    CB    . ARG ARG ARG B B 55  55  . 131.106 121.457 23.470  1.00 12.96
1 . .
ATOM 3750 CG    CG    . ARG ARG ARG B B 55  55  . 130.495 120.120 23.611  1.00 13.23
1 . .
ATOM 3751 CD    CD    . ARG ARG ARG B B 55  55  . 129.008 120.136 24.240  1.00 15.44
1 . .
ATOM 3752 NE    NE    . ARG ARG ARG B B 55  55  . 128.591 118.734 24.448  1.00 12.38
1 . .
ATOM 3753 CZ    CZ    . ARG ARG ARG B B 55  55  . 128.185 117.905 23.478  1.00 10.21
1 . .
ATOM 3754 NH1   NH1   . ARG ARG ARG B B 55  55  . 128.093 118.350 22.175  1.00 10.26
1 . .
ATOM 3755 NH2   NH2   . ARG ARG ARG B B 55  55  . 127.910 116.615 23.763  1.00 11.91
1 . .
ATOM 3756 C     C     . ARG ARG ARG B B 55  55  . 132.815 120.690 21.903  1.00 11.67
1 . .
ATOM 3757 O     O     . ARG ARG ARG B B 55  55  . 132.372 121.155 20.830  1.00 11.87
1 . .
ATOM 3758 N     N     . TYR TYR TYR B B 56  56  . 133.679 119.667 21.954  1.00 10.70
1 . .
ATOM 3759 CA    CA    . TYR TYR TYR B B 56  56  . 134.058 118.948 20.745  1.00 10.64
1 . .
ATOM 3760 CB    CB    . TYR TYR TYR B B 56  56  . 132.824 118.147 20.186  1.00 10.32
1 . .
ATOM 3761 CG    CG    . TYR TYR TYR B B 56  56  . 132.571 116.856 20.933  1.00 8.98
1 . .
ATOM 3762 CD1   CD1   . TYR TYR TYR B B 56  56  . 131.416 116.699 21.742  1.00 10.65
1 . .
ATOM 3763 CE1   CE1   . TYR TYR TYR B B 56  56  . 131.123 115.469 22.348  1.00 10.74
1 . .
ATOM 3764 CZ    CZ    . TYR TYR TYR B B 56  56  . 132.050 114.397 22.194  1.00 8.63
1 . .
ATOM 3765 OH    OH    . TYR TYR TYR B B 56  56  . 131.735 113.198 22.748  1.00 9.78
1 . .
ATOM 3766 CE2   CE2   . TYR TYR TYR B B 56  56  . 133.178 114.531 21.368  1.00 9.90
1 . .
ATOM 3767 CD2   CD2   . TYR TYR TYR B B 56  56  . 133.439 115.722 20.754  1.00 9.80
1 . .
ATOM 3768 C     C     . TYR TYR TYR B B 56  56  . 134.628 119.916 19.675  1.00 11.58
1 . .
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ATOM 3769 O     O     . TYR TYR TYR B B 56  56  . 134.471 119.676 18.476  1.00 11.45
1 . .
ATOM 3770 N     N     . LEU LEU LEU B B 57  57  . 135.301 121.004 20.116  1.00 13.62
1 . .
ATOM 3771 CA    CA    . LEU LEU LEU B B 57  57  . 135.994 121.935 19.209  1.00 16.60
1 . .
ATOM 3772 CB    CB    . LEU LEU LEU B B 57  57  . 137.172 121.251 18.472  1.00 17.47
1 . .
ATOM 3773 CG    CG    . LEU LEU LEU B B 57  57  . 138.404 120.814 19.302  1.00 20.37
1 . .
ATOM 3774 CD1   CD1   . LEU LEU LEU B B 57  57  . 138.224 119.596 20.280  1.00 22.52
1 . .
ATOM 3775 CD2   CD2   . LEU LEU LEU B B 57  57  . 139.666 120.634 18.383  1.00 20.51
1 . .
ATOM 3776 C     C     . LEU LEU LEU B B 57  57  . 134.987 122.489 18.190  1.00 15.24
1 . .
ATOM 3777 O     O     . LEU LEU LEU B B 57  57  . 135.315 122.693 17.052  1.00 17.98
1 . .
ATOM 3778 N     N     . GLY GLY GLY B B 58  58  . 133.756 122.704 18.630  1.00 13.80
1 . .
ATOM 3779 CA    CA    . GLY GLY GLY B B 58  58  . 132.657 123.244 17.819  1.00 14.74
1 . .
ATOM 3780 C     C     . GLY GLY GLY B B 58  58  . 131.961 122.276 16.914  1.00 12.92
1 . .
ATOM 3781 O     O     . GLY GLY GLY B B 58  58  . 131.109 122.695 16.117  1.00 11.47
1 . .
ATOM 3782 N     N     . LYS LYS LYS B B 59  59  . 132.281 120.958 17.058  1.00 11.01
1 . .
ATOM 3783 CA    CA    . LYS LYS LYS B B 59  59  . 131.724 119.962 16.139  1.00 10.16
1 . .
ATOM 3784 CB    CB    . LYS LYS LYS B B 59  59  . 132.849 119.027 15.663  1.00 11.65
1 . .
ATOM 3785 CG    CG    . LYS LYS LYS B B 59  59  . 133.939 119.865 14.942  1.00 14.29
1 . .
ATOM 3786 CD    CD    . LYS LYS LYS B B 59  59  . 134.971 118.957 14.244  1.00 23.08
1 . .
ATOM 3787 CE    CE    . LYS LYS LYS B B 59  59  . 135.860 119.707 13.243  1.00 27.15
1 . .
ATOM 3788 NZ    NZ    . LYS LYS LYS B B 59  59  . 136.624 118.692 12.364  1.00 31.92
1 . .
ATOM 3789 C     C     . LYS LYS LYS B B 59  59  . 130.580 119.160 16.769  1.00 8.98
1 . .
ATOM 3790 O     O     . LYS LYS LYS B B 59  59  . 130.174 118.135 16.217  1.00 10.00
1 . .
ATOM 3791 N     N     . GLY GLY GLY B B 60  60  . 130.027 119.590 17.917  1.00 9.55
1 . .
ATOM 3792 CA    CA    . GLY GLY GLY B B 60  60  . 128.833 118.892 18.437  1.00 10.19
1 . .
ATOM 3793 C     C     . GLY GLY GLY B B 60  60  . 127.651 118.874 17.441  1.00 8.28
1 . .
ATOM 3794 O     O     . GLY GLY GLY B B 60  60  . 127.591 119.706 16.504  1.00 9.36
1 . .
ATOM 3795 N     N     . VAL VAL VAL B B 61  61  . 126.765 117.878 17.585  1.00 7.63
1 . .
ATOM 3796 CA    CA    . VAL VAL VAL B B 61  61  . 125.540 117.861 16.827  1.00 8.01
1 . .
ATOM 3797 CB    CB    . VAL VAL VAL B B 61  61  . 125.511 116.701 15.716  1.00 8.76
1 . .
ATOM 3798 CG1   CG1   . VAL VAL VAL B B 61  61  . 126.643 116.939 14.677  1.00 9.12
1 . .
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ATOM 3799 CG2   CG2   . VAL VAL VAL B B 61  61  . 125.648 115.274 16.354  1.00 8.57
1 . .
ATOM 3800 C     C     . VAL VAL VAL B B 61  61  . 124.317 117.857 17.688  1.00 7.97
1 . .
ATOM 3801 O     O     . VAL VAL VAL B B 61  61  . 123.289 117.288 17.269  1.00 8.08
1 . .
ATOM 3802 N     N     . LEU LEU LEU B B 62  62  . 124.397 118.515 18.852  1.00 8.54
1 . .
ATOM 3803 CA    CA    . LEU LEU LEU B B 62  62  . 123.236 118.591 19.722  1.00 10.72
1 . .
ATOM 3804 CB    CB    . LEU LEU LEU B B 62  62  . 123.517 119.441 21.014  1.00 9.50
1 . .
ATOM 3805 CG    CG    . LEU LEU LEU B B 62  62  . 124.695 118.888 21.825  1.00 12.42
1 . .
ATOM 3806 CD1   CD1   . LEU LEU LEU B B 62  62  . 124.976 119.754 23.063  1.00 17.23
1 . .
ATOM 3807 CD2   CD2   . LEU LEU LEU B B 62  62  . 124.440 117.427 22.243  1.00 17.99
1 . .
ATOM 3808 C     C     . LEU LEU LEU B B 62  62  . 122.058 119.299 19.006  1.00 9.57
1 . .
ATOM 3809 O     O     . LEU LEU LEU B B 62  62  . 120.892 118.932 19.266  1.00 10.73
1 . .
ATOM 3810 N     N     . LYS LYS LYS B B 63  63  . 122.321 120.287 18.192  1.00 9.25
1 . .
ATOM 3811 CA    CA    . LYS LYS LYS B B 63  63  . 121.173 121.050 17.564  1.00 11.03
1 . .
ATOM 3812 CB    CB    . LYS LYS LYS B B 63  63  . 121.701 122.331 16.901  1.00 10.14
1 . .
ATOM 3813 CG    CG    . LYS LYS LYS B B 63  63  . 122.226 123.374 17.876  1.00 11.80
1 . .
ATOM 3814 CD    CD    . LYS LYS LYS B B 63  63  . 122.790 124.565 17.083  1.00 15.70
1 . .
ATOM 3815 CE    CE    . LYS LYS LYS B B 63  63  . 123.520 125.464 18.095  1.00 17.53
1 . .
ATOM 3816 NZ    NZ    . LYS LYS LYS B B 63  63  . 124.038 126.635 17.325  1.00 21.94
1 . .
ATOM 3817 C     C     . LYS LYS LYS B B 63  63  . 120.467 120.145 16.551  1.00 10.10
1 . .
ATOM 3818 O     O     . LYS LYS LYS B B 63  63  . 119.252 120.081 16.569  1.00 10.25
1 . .
ATOM 3819 N     N     . ALA ALA ALA B B 64  64  . 121.218 119.376 15.729  1.00 8.52
1 . .
ATOM 3820 CA    CA    . ALA ALA ALA B B 64  64  . 120.599 118.442 14.823  1.00 9.18
1 . .
ATOM 3821 CB    CB    . ALA ALA ALA B B 64  64  . 121.680 117.741 13.922  1.00 9.36
1 . .
ATOM 3822 C     C     . ALA ALA ALA B B 64  64  . 119.796 117.354 15.589  1.00 8.75
1 . .
ATOM 3823 O     O     . ALA ALA ALA B B 64  64  . 118.646 117.033 15.197  1.00 9.93
1 . .
ATOM 3824 N     N     . VAL VAL VAL B B 65  65  . 120.404 116.780 16.638  1.00 8.29
1 . .
ATOM 3825 CA    CA    . VAL VAL VAL B B 65  65  . 119.731 115.813 17.467  1.00 9.11
1 . .
ATOM 3826 CB    CB    . VAL VAL VAL B B 65  65  . 120.716 115.298 18.602  1.00 9.23
1 . .
ATOM 3827 CG1   CG1   . VAL VAL VAL B B 65  65  . 119.911 114.548 19.656  1.00 11.96
1 . .
ATOM 3828 CG2   CG2   . VAL VAL VAL B B 65  65  . 121.779 114.347 17.971  1.00 11.01
1 . .
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ATOM 3829 C     C     . VAL VAL VAL B B 65  65  . 118.424 116.407 18.011  1.00 9.09
1 . .
ATOM 3830 O     O     . VAL VAL VAL B B 65  65  . 117.415 115.700 18.052  1.00 10.14
1 . .
ATOM 3831 N     N     . ASP ASP ASP B B 66  66  . 118.513 117.624 18.521  1.00 10.02
1 . .
ATOM 3832 CA    CA    . ASP ASP ASP B B 66  66  . 117.290 118.259 19.091  1.00 11.29
1 . .
ATOM 3833 CB    CB    . ASP ASP ASP B B 66  66  . 117.629 119.552 19.790  1.00 12.74
1 . .
ATOM 3834 CG    CG    . ASP ASP ASP B B 66  66  . 116.372 120.264 20.342  1.00 19.54
1 . .
ATOM 3835 OD1   OD1   . ASP ASP ASP B B 66  66  . 116.018 121.350 19.795  1.00 29.86
1 . .
ATOM 3836 OD2   OD2   . ASP ASP ASP B B 66  66  . 115.767 119.688 21.284  1.00 24.18
1 . .
ATOM 3837 C     C     . ASP ASP ASP B B 66  66  . 116.192 118.508 18.014  1.00 11.15
1 . .
ATOM 3838 O     O     . ASP ASP ASP B B 66  66  . 114.973 118.332 18.250  1.00 12.55
1 . .
ATOM 3839 N     N     . HIS HIS HIS B B 67  67  . 116.628 118.897 16.798  1.00 11.27
1 . .
ATOM 3840 CA    CA    . HIS HIS HIS B B 67  67  . 115.659 119.031 15.701  1.00 10.00
1 . .
ATOM 3841 CB    CB    . HIS HIS HIS B B 67  67  . 116.255 119.538 14.383  1.00 10.94
1 . .
ATOM 3842 CG    CG    . HIS HIS HIS B B 67  67  . 116.726 120.951 14.455  1.00 12.79
1 . .
ATOM 3843 ND1   ND1   . HIS HIS HIS B B 67  67  . 115.910 121.978 14.912  1.00 13.29
1 . .
ATOM 3844 CE1   CE1   . HIS HIS HIS B B 67  67  . 116.584 123.118 14.829  1.00 13.29
1 . .
ATOM 3845 NE2   NE2   . HIS HIS HIS B B 67  67  . 117.812 122.871 14.387  1.00 13.11
1 . .
ATOM 3846 CD2   CD2   . HIS HIS HIS B B 67  67  . 117.915 121.517 14.122  1.00 12.09
1 . .
ATOM 3847 C     C     . HIS HIS HIS B B 67  67  . 114.938 117.678 15.486  1.00 10.72
1 . .
ATOM 3848 O     O     . HIS HIS HIS B B 67  67  . 113.709 117.639 15.219  1.00 12.34
1 . .
ATOM 3849 N     N     . ILE ILE ILE B B 68  68  . 115.668 116.555 15.586  1.00 10.03
1 . .
ATOM 3850 CA    CA    . ILE ILE ILE B B 68  68  . 114.996 115.288 15.393  1.00 10.20
1 . .
ATOM 3851 CB    CB    . ILE ILE ILE B B 68  68  . 115.984 114.138 15.284  1.00 9.07
1 . .
ATOM 3852 CG1   CG1   . ILE ILE ILE B B 68  68  . 116.850 114.368 14.014  1.00 10.03
1 . .
ATOM 3853 CD    CD    . ILE ILE ILE B B 68  68  . 118.064 113.451 13.987  1.00 9.90
1 . .
ATOM 3854 CG2   CG2   . ILE ILE ILE B B 68  68  . 115.295 112.778 15.370  1.00 10.34
1 . .
ATOM 3855 C     C     . ILE ILE ILE B B 68  68  . 114.058 115.066 16.613  1.00 10.22
1 . .
ATOM 3856 O     O     . ILE ILE ILE B B 68  68  . 112.870 114.757 16.474  1.00 11.62
1 . .
ATOM 3857 N     N     . ASN ASN ASN B B 69  69  . 114.606 115.180 17.821  1.00 9.69
1 . .
ATOM 3858 CA    CA    . ASN ASN ASN B B 69  69  . 113.812 114.768 19.022  1.00 12.01
1 . .
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ATOM 3859 CB    CB    . ASN ASN ASN B B 69  69  . 114.727 114.591 20.214  1.00 10.84
1 . .
ATOM 3860 CG    CG    . ASN ASN ASN B B 69  69  . 115.599 113.374 20.059  1.00 9.76
1 . .
ATOM 3861 OD1   OD1   . ASN ASN ASN B B 69  69  . 115.259 112.401 19.416  1.00 11.74
1 . .
ATOM 3862 ND2   ND2   . ASN ASN ASN B B 69  69  . 116.762 113.479 20.672  1.00 10.06
1 . .
ATOM 3863 C     C     . ASN ASN ASN B B 69  69  . 112.591 115.660 19.334  1.00 11.45
1 . .
ATOM 3864 O     O     . ASN ASN ASN B B 69  69  . 111.507 115.163 19.738  1.00 13.12
1 . .
ATOM 3865 N     N     . SER SER SER B B 70  70  . 112.771 116.922 19.067  1.00 11.17
1 . .
ATOM 3866 CA    CA    . SER SER SER B B 70  70  . 111.759 117.964 19.435  1.00 11.46
1 . .
ATOM 3867 CB    CB    . SER SER SER B B 70  70  . 112.475 119.270 19.766  1.00 14.92
1 . .
ATOM 3868 OG    OG    . SER SER SER B B 70  70  . 113.044 119.141 21.015  1.00 22.47
1 . .
ATOM 3869 C     C     . SER SER SER B B 70  70  . 110.803 118.271 18.270  1.00 12.53
1 . .
ATOM 3870 O     O     . SER SER SER B B 70  70  . 109.690 118.713 18.522  1.00 15.32
1 . .
ATOM 3871 N     N     . THR THR THR B B 71  71  . 111.188 118.017 17.028  1.00 11.64
1 . .
ATOM 3872 CA    CA    . THR THR THR B B 71  71  . 110.393 118.461 15.844  1.00 11.14
1 . .
ATOM 3873 CB    CB    . THR THR THR B B 71  71  . 111.112 119.661 15.096  1.00 11.54
1 . .
ATOM 3874 OG1   OG1   . THR THR THR B B 71  71  . 111.199 120.738 16.023  1.00 12.78
1 . .
ATOM 3875 CG2   CG2   . THR THR THR B B 71  71  . 110.340 120.079 13.854  1.00 14.88
1 . .
ATOM 3876 C     C     . THR THR THR B B 71  71  . 110.085 117.365 14.863  1.00 12.09
1 . .
ATOM 3877 O     O     . THR THR THR B B 71  71  . 108.946 117.084 14.516  1.00 11.59
1 . .
ATOM 3878 N     N     . ILE ILE ILE B B 72  72  . 111.114 116.749 14.290  1.00 9.58
1 . .
ATOM 3879 CA    CA    . ILE ILE ILE B B 72  72  . 110.875 115.731 13.261  1.00 10.06
1 . .
ATOM 3880 CB    CB    . ILE ILE ILE B B 72  72  . 112.172 115.267 12.577  1.00 9.28
1 . .
ATOM 3881 CG1   CG1   . ILE ILE ILE B B 72  72  . 112.808 116.472 11.874  1.00 10.63
1 . .
ATOM 3882 CD    CD    . ILE ILE ILE B B 72  72  . 114.331 116.312 11.425  1.00 11.45
1 . .
ATOM 3883 CG2   CG2   . ILE ILE ILE B B 72  72  . 111.920 114.225 11.587  1.00 12.37
1 . .
ATOM 3884 C     C     . ILE ILE ILE B B 72  72  . 110.184 114.508 13.812  1.00 10.34
1 . .
ATOM 3885 O     O     . ILE ILE ILE B B 72  72  . 109.176 114.073 13.179  1.00 12.06
1 . .
ATOM 3886 N     N     . ALA ALA ALA B B 73  73  . 110.630 113.978 14.978  1.00 9.45
1 . .
ATOM 3887 CA    CA    . ALA ALA ALA B B 73  73  . 110.017 112.776 15.531  1.00 11.17
1 . .
ATOM 3888 CB    CB    . ALA ALA ALA B B 73  73  . 110.806 112.386 16.828  1.00 12.80
1 . .
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ATOM 3889 C     C     . ALA ALA ALA B B 73  73  . 108.502 112.940 15.797  1.00 11.16
1 . .
ATOM 3890 O     O     . ALA ALA ALA B B 73  73  . 107.727 112.149 15.276  1.00 12.50
1 . .
ATOM 3891 N     N     . PRO PRO PRO B B 74  74  . 108.118 114.016 16.516  1.00 11.90
1 . .
ATOM 3892 CA    CA    . PRO PRO PRO B B 74  74  . 106.670 114.069 16.794  1.00 12.23
1 . .
ATOM 3893 CB    CB    . PRO PRO PRO B B 74  74  . 106.557 115.253 17.753  1.00 12.36
1 . .
ATOM 3894 CG    CG    . PRO PRO PRO B B 74  74  . 107.749 116.006 17.615  1.00 13.08
1 . .
ATOM 3895 CD    CD    . PRO PRO PRO B B 74  74  . 108.837 115.023 17.294  1.00 11.96
1 . .
ATOM 3896 C     C     . PRO PRO PRO B B 74  74  . 105.848 114.297 15.538  1.00 11.84
1 . .
ATOM 3897 O     O     . PRO PRO PRO B B 74  74  . 104.703 113.775 15.440  1.00 13.75
1 . .
ATOM 3898 N     N     . ALA ALA ALA B B 75  75  . 106.371 115.059 14.578  1.00 11.59
1 . .
ATOM 3899 CA    CA    . ALA ALA ALA B B 75  75  . 105.636 115.276 13.293  1.00 10.74
1 . .
ATOM 3900 CB    CB    . ALA ALA ALA B B 75  75  . 106.407 116.246 12.449  1.00 13.07
1 . .
ATOM 3901 C     C     . ALA ALA ALA B B 75  75  . 105.436 113.928 12.526  1.00 11.77
1 . .
ATOM 3902 O     O     . ALA ALA ALA B B 75  75  . 104.353 113.615 12.035  1.00 11.53
1 . .
ATOM 3903 N     N     . LEU LEU LEU B B 76  76  . 106.483 113.114 12.425  1.00 11.76
1 . .
ATOM 3904 CA    CA    . LEU LEU LEU B B 76  76  . 106.310 111.860 11.673  1.00 11.07
1 . .
ATOM 3905 CB    CB    . LEU LEU LEU B B 76  76  . 107.662 111.187 11.359  1.00 12.56
1 . .
ATOM 3906 CG    CG    . LEU LEU LEU B B 76  76  . 108.682 111.921 10.546  1.00 13.93
1 . .
ATOM 3907 CD1   CD1   . LEU LEU LEU B B 76  76  . 109.784 110.976 9.989   1.00 14.57
1 . .
ATOM 3908 CD2   CD2   . LEU LEU LEU B B 76  76  . 108.285 113.019 9.627   1.00 18.70
1 . .
ATOM 3909 C     C     . LEU LEU LEU B B 76  76  . 105.393 110.879 12.366  1.00 11.47
1 . .
ATOM 3910 O     O     . LEU LEU LEU B B 76  76  . 104.642 110.180 11.740  1.00 11.56
1 . .
ATOM 3911 N     N     . ILE ILE ILE B B 77  77  . 105.500 110.839 13.690  1.00 11.93
1 . .
ATOM 3912 CA    CA    . ILE ILE ILE B B 77  77  . 104.643 109.932 14.457  1.00 11.03
1 . .
ATOM 3913 CB    CB    . ILE ILE ILE B B 77  77  . 105.083 109.954 15.939  1.00 11.98
1 . .
ATOM 3914 CG1   CG1   . ILE ILE ILE B B 77  77  . 106.415 109.147 16.020  1.00 13.74
1 . .
ATOM 3915 CD    CD    . ILE ILE ILE B B 77  77  . 107.194 109.389 17.305  1.00 15.51
1 . .
ATOM 3916 CG2   CG2   . ILE ILE ILE B B 77  77  . 104.035 109.253 16.800  1.00 14.36
1 . .
ATOM 3917 C     C     . ILE ILE ILE B B 77  77  . 103.181 110.400 14.316  1.00 12.94
1 . .
ATOM 3918 O     O     . ILE ILE ILE B B 77  77  . 102.293 109.580 14.033  1.00 14.01
1 . .
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ATOM 3919 N     N     . SER SER SER B B 78  78  . 103.041 111.717 14.443  1.00 12.48
1 . .
ATOM 3920 CA    CA    . SER SER SER B B 78  78  . 101.653 112.231 14.401  1.00 13.28
1 . .
ATOM 3921 CB    CB    . SER SER SER B B 78  78  . 101.519 113.642 15.031  1.00 15.61
1 . .
ATOM 3922 OG    OG    . SER SER SER B B 78  78  . 102.242 114.526 14.326  1.00 29.00
1 . .
ATOM 3923 C     C     . SER SER SER B B 78  78  . 100.998 112.009 13.010  1.00 12.74
1 . .
ATOM 3924 O     O     . SER SER SER B B 78  78  . 99.712  111.866 12.880  1.00 15.31
1 . .
ATOM 3925 N     N     . SER SER SER B B 79  79  . 101.826 111.990 11.963  1.00 11.20
1 . .
ATOM 3926 CA    CA    . SER SER SER B B 79  79  . 101.300 111.783 10.634  1.00 13.06
1 . .
ATOM 3927 CB    CB    . SER SER SER B B 79  79  . 102.420 111.925 9.572   1.00 13.29
1 . .
ATOM 3928 OG    OG    . SER SER SER B B 79  79  . 103.130 110.687 9.491   1.00 13.79
1 . .
ATOM 3929 C     C     . SER SER SER B B 79  79  . 100.598 110.405 10.473  1.00 14.58
1 . .
ATOM 3930 O     O     . SER SER SER B B 79  79  . 99.709  110.246 9.643   1.00 15.19
1 . .
ATOM 3931 N     N     . GLY GLY GLY B B 80  80  . 101.038 109.416 11.267  1.00 13.78
1 . .
ATOM 3932 CA    CA    . GLY GLY GLY B B 80  80  . 100.507 108.016 11.116  1.00 13.48
1 . .
ATOM 3933 C     C     . GLY GLY GLY B B 80  80  . 100.910 107.346 9.815   1.00 14.93
1 . .
ATOM 3934 O     O     . GLY GLY GLY B B 80  80  . 100.419 106.289 9.496   1.00 16.34
1 . .
ATOM 3935 N     N     . LEU LEU LEU B B 81  81  . 101.851 107.940 9.065   1.00 13.25
1 . .
ATOM 3936 CA    CA    . LEU LEU LEU B B 81  81  . 102.313 107.317 7.820   1.00 12.67
1 . .
ATOM 3937 CB    CB    . LEU LEU LEU B B 81  81  . 103.291 108.270 7.085   1.00 13.36
1 . .
ATOM 3938 CG    CG    . LEU LEU LEU B B 81  81  . 102.545 109.436 6.367   1.00 14.95
1 . .
ATOM 3939 CD1   CD1   . LEU LEU LEU B B 81  81  . 103.489 110.619 6.051   1.00 17.45
1 . .
ATOM 3940 CD2   CD2   . LEU LEU LEU B B 81  81  . 101.738 108.989 5.120   1.00 15.52
1 . .
ATOM 3941 C     C     . LEU LEU LEU B B 81  81  . 103.039 105.991 8.142   1.00 13.68
1 . .
ATOM 3942 O     O     . LEU LEU LEU B B 81  81  . 103.793 105.923 9.102   1.00 13.88
1 . .
ATOM 3943 N     N     . SER SER SER B B 82  82  . 102.836 104.983 7.339   1.00 13.52
1 . .
ATOM 3944 CA    CA    . SER SER SER B B 82  82  . 103.550 103.742 7.461   1.00 14.75
1 . .
ATOM 3945 CB    CB    . SER SER SER B B 82  82  . 102.979 102.758 6.476   1.00 16.64
1 . .
ATOM 3946 OG    OG    . SER SER SER B B 82  82  . 103.792 101.571 6.500   1.00 17.90
1 . .
ATOM 3947 C     C     . SER SER SER B B 82  82  . 105.005 103.954 7.024   1.00 13.11
1 . .
ATOM 3948 O     O     . SER SER SER B B 82  82  . 105.241 104.709 6.075   1.00 13.30
1 . .
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ATOM 3949 N     N     . VAL VAL VAL B B 83  83  . 105.951 103.258 7.660   1.00 12.25
1 . .
ATOM 3950 CA    CA    . VAL VAL VAL B B 83  83  . 107.390 103.331 7.268   1.00 11.99
1 . .
ATOM 3951 CB    CB    . VAL VAL VAL B B 83  83  . 108.300 102.606 8.292   1.00 12.84
1 . .
ATOM 3952 CG1   CG1   . VAL VAL VAL B B 83  83  . 108.332 103.415 9.581   1.00 14.59
1 . .
ATOM 3953 CG2   CG2   . VAL VAL VAL B B 83  83  . 107.850 101.126 8.493   1.00 12.92
1 . .
ATOM 3954 C     C     . VAL VAL VAL B B 83  83  . 107.684 102.831 5.828   1.00 12.30
1 . .
ATOM 3955 O     O     . VAL VAL VAL B B 83  83  . 108.778 103.106 5.304   1.00 13.06
1 . .
ATOM 3956 N     N     . VAL VAL VAL B B 84  84  . 106.724 102.148 5.190   1.00 13.81
1 . .
ATOM 3957 CA    CA    . VAL VAL VAL B B 84  84  . 106.881 101.819 3.780   1.00 14.13
1 . .
ATOM 3958 CB    CB    . VAL VAL VAL B B 84  84  . 105.930 100.708 3.325   1.00 14.45
1 . .
ATOM 3959 CG1   CG1   . VAL VAL VAL B B 84  84  . 106.071 99.474  4.251   1.00 17.93
1 . .
ATOM 3960 CG2   CG2   . VAL VAL VAL B B 84  84  . 104.486 101.205 3.186   1.00 18.10
1 . .
ATOM 3961 C     C     . VAL VAL VAL B B 84  84  . 106.753 103.019 2.856   1.00 13.30
1 . .
ATOM 3962 O     O     . VAL VAL VAL B B 84  84  . 107.236 102.965 1.678   1.00 14.76
1 . .
ATOM 3963 N     N     . GLU GLU GLU B B 85  85  . 106.195 104.123 3.390   1.00 13.18
1 . .
ATOM 3964 CA    CA    . GLU GLU GLU B B 85  85  . 105.905 105.294 2.550   1.00 13.23
1 . .
ATOM 3965 CB    CB    . GLU GLU GLU B B 85  85  . 104.691 106.021 3.058   1.00 14.49
1 . .
ATOM 3966 CG    CG    . GLU GLU GLU B B 85  85  . 103.462 105.160 2.805   1.00 17.97
1 . .
ATOM 3967 CD    CD    . GLU GLU GLU B B 85  85  . 102.125 105.775 3.137   1.00 35.15
1 . .
ATOM 3968 OE1   OE1   . GLU GLU GLU B B 85  85  . 101.922 106.160 4.316   1.00 43.16
1 . .
ATOM 3969 OE2   OE2   . GLU GLU GLU B B 85  85  . 101.228 105.807 2.242   1.00 42.69
1 . .
ATOM 3970 C     C     . GLU GLU GLU B B 85  85  . 107.155 106.227 2.580   1.00 12.28
1 . .
ATOM 3971 O     O     . GLU GLU GLU B B 85  85  . 107.113 107.343 3.079   1.00 11.95
1 . .
ATOM 3972 N     N     . GLN GLN GLN B B 86  86  . 108.252 105.721 2.006   1.00 11.84
1 . .
ATOM 3973 CA    CA    . GLN GLN GLN B B 86  86  . 109.564 106.433 2.065   1.00 10.76
1 . .
ATOM 3974 CB    CB    . GLN GLN GLN B B 86  86  . 110.627 105.635 1.288   1.00 11.75
1 . .
ATOM 3975 CG    CG    . GLN GLN GLN B B 86  86  . 112.037 106.236 1.411   1.00 10.00
1 . .
ATOM 3976 CD    CD    . GLN GLN GLN B B 86  86  . 112.667 105.949 2.813   1.00 9.05
1 . .
ATOM 3977 OE1   OE1   . GLN GLN GLN B B 86  86  . 112.557 104.828 3.350   1.00 11.71
1 . .
ATOM 3978 NE2   NE2   . GLN GLN GLN B B 86  86  . 113.289 106.945 3.418   1.00 10.38
1 . .
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ATOM 3979 C     C     . GLN GLN GLN B B 86  86  . 109.427 107.863 1.477   1.00 10.71
1 . .
ATOM 3980 O     O     . GLN GLN GLN B B 86  86  . 109.900 108.830 2.095   1.00 11.19
1 . .
ATOM 3981 N     N     . GLU GLU GLU B B 87  87  . 108.746 107.961 0.328   1.00 11.20
1 . .
ATOM 3982 CA    CA    . GLU GLU GLU B B 87  87  . 108.702 109.252 -0.350  1.00 12.27
1 . .
ATOM 3983 CB    CB    . GLU GLU GLU B B 87  87  . 108.209 109.104 -1.771  1.00 13.14
1 . .
ATOM 3984 CG    CG    . GLU GLU GLU B B 87  87  . 108.249 110.419 -2.512  1.00 21.47
1 . .
ATOM 3985 CD    CD    . GLU GLU GLU B B 87  87  . 107.922 110.275 -3.992  1.00 30.42
1 . .
ATOM 3986 OE1   OE1   . GLU GLU GLU B B 87  87  . 108.486 111.046 -4.792  1.00 32.21
1 . .
ATOM 3987 OE2   OE2   . GLU GLU GLU B B 87  87  . 107.073 109.417 -4.321  1.00 34.44
1 . .
ATOM 3988 C     C     . GLU GLU GLU B B 87  87  . 107.858 110.235 0.465   1.00 12.79
1 . .
ATOM 3989 O     O     . GLU GLU GLU B B 87  87  . 108.214 111.382 0.571   1.00 12.17
1 . .
ATOM 3990 N     N     . LYS LYS LYS B B 88  88  . 106.670 109.802 0.945   1.00 11.00
1 . .
ATOM 3991 CA    CA    . LYS LYS LYS B B 88  88  . 105.870 110.739 1.766   1.00 10.98
1 . .
ATOM 3992 CB    CB    . LYS LYS LYS B B 88  88  . 104.499 110.073 2.132   1.00 13.92
1 . .
ATOM 3993 CG    CG    . LYS LYS LYS B B 88  88  . 103.614 109.771 0.918   1.00 16.96
1 . .
ATOM 3994 CD    CD    . LYS LYS LYS B B 88  88  . 102.257 109.211 1.462   1.00 18.78
1 . .
ATOM 3995 CE    CE    . LYS LYS LYS B B 88  88  . 101.299 109.012 0.314   1.00 26.27
1 . .
ATOM 3996 NZ    NZ    . LYS LYS LYS B B 88  88  . 100.353 110.172 0.278   1.00 33.23
1 . .
ATOM 3997 C     C     . LYS LYS LYS B B 88  88  . 106.563 111.168 3.016   1.00 11.06
1 . .
ATOM 3998 O     O     . LYS LYS LYS B B 88  88  . 106.466 112.350 3.387   1.00 12.56
1 . .
ATOM 3999 N     N     . LEU LEU LEU B B 89  89  . 107.252 110.227 3.713   1.00 9.99
1 . .
ATOM 4000 CA    CA    . LEU LEU LEU B B 89  89  . 107.947 110.635 4.923   1.00 9.31
1 . .
ATOM 4001 CB    CB    . LEU LEU LEU B B 89  89  . 108.412 109.382 5.680   1.00 10.83
1 . .
ATOM 4002 CG    CG    . LEU LEU LEU B B 89  89  . 107.268 108.678 6.403   1.00 10.31
1 . .
ATOM 4003 CD1   CD1   . LEU LEU LEU B B 89  89  . 107.637 107.203 6.695   1.00 11.33
1 . .
ATOM 4004 CD2   CD2   . LEU LEU LEU B B 89  89  . 106.939 109.461 7.651   1.00 12.66
1 . .
ATOM 4005 C     C     . LEU LEU LEU B B 89  89  . 109.179 111.531 4.640   1.00 8.88
1 . .
ATOM 4006 O     O     . LEU LEU LEU B B 89  89  . 109.347 112.544 5.340   1.00 11.34
1 . .
ATOM 4007 N     N     . ASP ASP ASP B B 90  90  . 109.895 111.257 3.537   1.00 10.62
1 . .
ATOM 4008 CA    CA    . ASP ASP ASP B B 90  90  . 111.038 112.138 3.217   1.00 10.49
1 . .
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ATOM 4009 CB    CB    . ASP ASP ASP B B 90  90  . 111.874 111.492 2.106   1.00 10.78
1 . .
ATOM 4010 CG    CG    . ASP ASP ASP B B 90  90  . 112.807 110.409 2.581   1.00 10.51
1 . .
ATOM 4011 OD1   OD1   . ASP ASP ASP B B 90  90  . 113.167 110.433 3.760   1.00 13.00
1 . .
ATOM 4012 OD2   OD2   . ASP ASP ASP B B 90  90  . 113.217 109.571 1.765   1.00 10.85
1 . .
ATOM 4013 C     C     . ASP ASP ASP B B 90  90  . 110.518 113.518 2.796   1.00 10.74
1 . .
ATOM 4014 O     O     . ASP ASP ASP B B 90  90  . 111.067 114.544 3.183   1.00 11.23
1 . .
ATOM 4015 N     N     . ASN ASN ASN B B 91  91  . 109.479 113.563 1.960   1.00 11.57
1 . .
ATOM 4016 CA    CA    . ASN ASN ASN B B 91  91  . 108.927 114.850 1.539   1.00 12.73
1 . .
ATOM 4017 CB    CB    . ASN ASN ASN B B 91  91  . 107.810 114.601 0.521   1.00 15.24
1 . .
ATOM 4018 CG    CG    . ASN ASN ASN B B 91  91  . 108.221 114.930 -0.838  1.00 24.24
1 . .
ATOM 4019 OD1   OD1   . ASN ASN ASN B B 91  91  . 109.188 114.435 -1.361  1.00 31.29
1 . .
ATOM 4020 ND2   ND2   . ASN ASN ASN B B 91  91  . 107.457 115.865 -1.451  1.00 37.20
1 . .
ATOM 4021 C     C     . ASN ASN ASN B B 91  91  . 108.395 115.669 2.708   1.00 12.09
1 . .
ATOM 4022 O     O     . ASN ASN ASN B B 91  91  . 108.592 116.891 2.749   1.00 13.33
1 . .
ATOM 4023 N     N     . LEU LEU LEU B B 92  92  . 107.778 115.012 3.674   1.00 10.77
1 . .
ATOM 4024 CA    CA    . LEU LEU LEU B B 92  92  . 107.375 115.686 4.902   1.00 11.48
1 . .
ATOM 4025 CB    CB    . LEU LEU LEU B B 92  92  . 106.607 114.719 5.805   1.00 11.91
1 . .
ATOM 4026 CG    CG    . LEU LEU LEU B B 92  92  . 106.183 115.175 7.210   1.00 15.00
1 . .
ATOM 4027 CD1   CD1   . LEU LEU LEU B B 92  92  . 105.455 116.509 7.124   1.00 18.81
1 . .
ATOM 4028 CD2   CD2   . LEU LEU LEU B B 92  92  . 105.292 114.190 7.926   1.00 11.49
1 . .
ATOM 4029 C     C     . LEU LEU LEU B B 92  92  . 108.566 116.359 5.597   1.00 12.27
1 . .
ATOM 4030 O     O     . LEU LEU LEU B B 92  92  . 108.525 117.550 5.933   1.00 11.68
1 . .
ATOM 4031 N     N     . MET MET MET B B 93  93  . 109.667 115.614 5.799   1.00 10.32
1 . .
ATOM 4032 CA    CA    . MET MET MET B B 93  93  . 110.848 116.228 6.379   1.00 9.60
1 . .
ATOM 4033 CB    CB    . MET MET MET B B 93  93  . 111.969 115.175 6.633   1.00 9.69
1 . .
ATOM 4034 CG    CG    . MET MET MET B B 93  93  . 111.524 114.187 7.700   1.00 10.40
1 . .
ATOM 4035 SD    SD    . MET MET MET B B 93  93  . 112.837 113.074 8.190   1.00 11.62
1 . .
ATOM 4036 CE    CE    . MET MET MET B B 93  93  . 112.930 111.973 6.825   1.00 12.78
1 . .
ATOM 4037 C     C     . MET MET MET B B 93  93  . 111.399 117.338 5.521   1.00 10.41
1 . .
ATOM 4038 O     O     . MET MET MET B B 93  93  . 111.832 118.323 6.102   1.00 10.51
1 . .
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ATOM 4039 N     N     . LEU LEU LEU B B 94  94  . 111.376 117.236 4.184   1.00 9.68
1 . .
ATOM 4040 CA    CA    . LEU LEU LEU B B 94  94  . 111.876 118.352 3.391   1.00 11.45
1 . .
ATOM 4041 CB    CB    . LEU LEU LEU B B 94  94  . 111.871 118.009 1.910   1.00 11.32
1 . .
ATOM 4042 CG    CG    . LEU LEU LEU B B 94  94  . 112.721 116.835 1.416   1.00 17.73
1 . .
ATOM 4043 CD1   CD1   . LEU LEU LEU B B 94  94  . 112.850 116.883 -0.103  1.00 18.65
1 . .
ATOM 4044 CD2   CD2   . LEU LEU LEU B B 94  94  . 113.929 116.416 2.132   1.00 17.76
1 . .
ATOM 4045 C     C     . LEU LEU LEU B B 94  94  . 111.053 119.641 3.609   1.00 10.10
1 . .
ATOM 4046 O     O     . LEU LEU LEU B B 94  94  . 111.621 120.708 3.720   1.00 10.98
1 . .
ATOM 4047 N     N     . GLU GLU GLU B B 95  95  . 109.708 119.457 3.725   1.00 12.29
1 . .
ATOM 4048 CA    CA    . GLU GLU GLU B B 95  95  . 108.845 120.587 3.886   1.00 12.19
1 . .
ATOM 4049 CB    CB    . GLU GLU GLU B B 95  95  . 107.416 120.243 3.514   1.00 14.26
1 . .
ATOM 4050 CG    CG    . GLU GLU GLU B B 95  95  . 107.228 119.935 2.018   1.00 20.98
1 . .
ATOM 4051 CD    CD    . GLU GLU GLU B B 95  95  . 107.662 121.026 1.172   1.00 32.48
1 . .
ATOM 4052 OE1   OE1   . GLU GLU GLU B B 95  95  . 106.890 122.011 1.046   1.00 39.57
1 . .
ATOM 4053 OE2   OE2   . GLU GLU GLU B B 95  95  . 108.805 120.965 0.702   1.00 31.49
1 . .
ATOM 4054 C     C     . GLU GLU GLU B B 95  95  . 108.932 121.153 5.328   1.00 12.01
1 . .
ATOM 4055 O     O     . GLU GLU GLU B B 95  95  . 108.764 122.362 5.507   1.00 13.71
1 . .
ATOM 4056 N     N     . LEU LEU LEU B B 96  96  . 109.238 120.304 6.337   1.00 10.81
1 . .
ATOM 4057 CA    CA    . LEU LEU LEU B B 96  96  . 109.351 120.742 7.694   1.00 12.07
1 . .
ATOM 4058 CB    CB    . LEU LEU LEU B B 96  96  . 109.478 119.563 8.618   1.00 13.50
1 . .
ATOM 4059 CG    CG    . LEU LEU LEU B B 96  96  . 108.258 118.827 9.142   1.00 19.88
1 . .
ATOM 4060 CD1   CD1   . LEU LEU LEU B B 96  96  . 108.632 117.436 9.755   1.00 23.68
1 . .
ATOM 4061 CD2   CD2   . LEU LEU LEU B B 96  96  . 107.512 119.858 10.157  1.00 23.08
1 . .
ATOM 4062 C     C     . LEU LEU LEU B B 96  96  . 110.594 121.616 7.826   1.00 12.04
1 . .
ATOM 4063 O     O     . LEU LEU LEU B B 96  96  . 110.557 122.641 8.520   1.00 13.00
1 . .
ATOM 4064 N     N     . ASP ASP ASP B B 97  97  . 111.689 121.263 7.122   1.00 11.26
1 . .
ATOM 4065 CA    CA    . ASP ASP ASP B B 97  97  . 112.868 122.098 7.180   1.00 10.63
1 . .
ATOM 4066 CB    CB    . ASP ASP ASP B B 97  97  . 114.033 121.268 6.618   1.00 9.61
1 . .
ATOM 4067 CG    CG    . ASP ASP ASP B B 97  97  . 115.246 122.163 6.225   1.00 11.47
1 . .
ATOM 4068 OD1   OD1   . ASP ASP ASP B B 97  97  . 116.271 122.283 6.979   1.00 11.33
1 . .
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ATOM 4069 OD2   OD2   . ASP ASP ASP B B 97  97  . 115.186 122.691 5.091   1.00 11.39
1 . .
ATOM 4070 C     C     . ASP ASP ASP B B 97  97  . 112.638 123.415 6.406   1.00 12.13
1 . .
ATOM 4071 O     O     . ASP ASP ASP B B 97  97  . 113.031 124.475 6.822   1.00 12.75
1 . .
ATOM 4072 N     N     . GLY GLY GLY B B 98  98  . 111.957 123.292 5.260   1.00 10.78
1 . .
ATOM 4073 CA    CA    . GLY GLY GLY B B 98  98  . 111.494 124.500 4.506   1.00 14.78
1 . .
ATOM 4074 C     C     . GLY GLY GLY B B 98  98  . 112.536 125.198 3.644   1.00 14.51
1 . .
ATOM 4075 O     O     . GLY GLY GLY B B 98  98  . 112.186 126.174 2.982   1.00 15.95
1 . .
ATOM 4076 N     N     . THR THR THR B B 99  99  . 113.785 124.704 3.598   1.00 11.45
1 . .
ATOM 4077 CA    CA    . THR THR THR B B 99  99  . 114.856 125.365 2.853   1.00 13.72
1 . .
ATOM 4078 CB    CB    . THR THR THR B B 99  99  . 116.042 125.740 3.723   1.00 13.54
1 . .
ATOM 4079 OG1   OG1   . THR THR THR B B 99  99  . 116.758 124.533 4.109   1.00 14.86
1 . .
ATOM 4080 CG2   CG2   . THR THR THR B B 99  99  . 115.560 126.447 4.997   1.00 13.84
1 . .
ATOM 4081 C     C     . THR THR THR B B 99  99  . 115.349 124.427 1.746   1.00 14.61
1 . .
ATOM 4082 O     O     . THR THR THR B B 99  99  . 115.227 123.201 1.818   1.00 16.80
1 . .
ATOM 4083 N     N     . GLU GLU GLU B B 100 100 . 115.895 124.979 0.704   1.00 13.92
1 . .
ATOM 4084 CA    CA    . GLU GLU GLU B B 100 100 . 116.427 124.138 -0.397  1.00 15.26
1 . .
ATOM 4085 CB    CB    . GLU GLU GLU B B 100 100 . 116.949 125.063 -1.514  1.00 16.33
1 . .
ATOM 4086 CG    CG    . GLU GLU GLU B B 100 100 . 117.358 124.345 -2.862  1.00 24.35
1 . .
ATOM 4087 CD    CD    . GLU GLU GLU B B 100 100 . 116.332 123.293 -3.396  1.00 32.89
1 . .
ATOM 4088 OE1   OE1   . GLU GLU GLU B B 100 100 . 115.086 123.578 -3.387  1.00 37.06
1 . .
ATOM 4089 OE2   OE2   . GLU GLU GLU B B 100 100 . 116.769 122.175 -3.841  1.00 37.86
1 . .
ATOM 4090 C     C     . GLU GLU GLU B B 100 100 . 117.563 123.206 0.030   1.00 13.06
1 . .
ATOM 4091 O     O     . GLU GLU GLU B B 100 100 . 117.581 122.044 -0.377  1.00 14.02
1 . .
ATOM 4092 N     N     . ASN ASN ASN B B 101 101 . 118.463 123.721 0.840   1.00 12.97
1 . .
ATOM 4093 CA    CA    . ASN ASN ASN B B 101 101 . 119.732 123.012 1.159   1.00 11.63
1 . .
ATOM 4094 CB    CB    . ASN ASN ASN B B 101 101 . 120.927 123.979 0.999   1.00 15.97
1 . .
ATOM 4095 CG    CG    . ASN ASN ASN B B 101 101 . 120.974 125.087 2.102   1.00 22.98
1 . .
ATOM 4096 OD1   OD1   . ASN ASN ASN B B 101 101 . 122.107 125.470 2.544   1.00 35.88
1 . .
ATOM 4097 ND2   ND2   . ASN ASN ASN B B 101 101 . 119.780 125.686 2.489   1.00 30.53
1 . .
ATOM 4098 C     C     . ASN ASN ASN B B 101 101 . 119.702 122.399 2.536   1.00 11.84
1 . .
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ATOM 4099 O     O     . ASN ASN ASN B B 101 101 . 120.761 122.048 3.066   1.00 11.40
1 . .
ATOM 4100 N     N     . LYS LYS LYS B B 102 102 . 118.506 122.279 3.132   1.00 9.67
1 . .
ATOM 4101 CA    CA    . LYS LYS LYS B B 102 102 . 118.355 121.657 4.442   1.00 8.62
1 . .
ATOM 4102 CB    CB    . LYS LYS LYS B B 102 102 . 118.695 120.144 4.382   1.00 8.59
1 . .
ATOM 4103 CG    CG    . LYS LYS LYS B B 102 102 . 117.772 119.385 3.450   1.00 9.24
1 . .
ATOM 4104 CD    CD    . LYS LYS LYS B B 102 102 . 118.167 117.901 3.349   1.00 10.17
1 . .
ATOM 4105 CE    CE    . LYS LYS LYS B B 102 102 . 117.222 117.116 2.455   1.00 9.28
1 . .
ATOM 4106 NZ    NZ    . LYS LYS LYS B B 102 102 . 117.231 117.597 1.011   1.00 9.98
1 . .
ATOM 4107 C     C     . LYS LYS LYS B B 102 102 . 119.159 122.439 5.503   1.00 10.43
1 . .
ATOM 4108 O     O     . LYS LYS LYS B B 102 102 . 119.713 121.840 6.441   1.00 10.19
1 . .
ATOM 4109 N     N     . SER SER SER B B 103 103 . 119.126 123.790 5.409   1.00 11.09
1 . .
ATOM 4110 CA    CA    . SER SER SER B B 103 103 . 119.922 124.598 6.321   1.00 14.57
1 . .
ATOM 4111 CB    CB    . SER SER SER B B 103 103 . 120.365 125.876 5.586   1.00 16.53
1 . .
ATOM 4112 OG    OG    . SER SER SER B B 103 103 . 119.194 126.578 5.135   1.00 18.26
1 . .
ATOM 4113 C     C     . SER SER SER B B 103 103 . 119.210 124.948 7.638   1.00 13.73
1 . .
ATOM 4114 O     O     . SER SER SER B B 103 103 . 119.822 125.566 8.503   1.00 17.24
1 . .
ATOM 4115 N     N     . LYS LYS LYS B B 104 104 . 117.946 124.564 7.771   1.00 11.42
1 . .
ATOM 4116 CA    CA    . LYS LYS LYS B B 104 104 . 117.287 124.878 9.034   1.00 11.80
1 . .
ATOM 4117 CB    CB    . LYS LYS LYS B B 104 104 . 115.744 125.045 8.794   1.00 13.10
1 . .
ATOM 4118 CG    CG    . LYS LYS LYS B B 104 104 . 114.899 125.274 10.052  1.00 13.91
1 . .
ATOM 4119 CD    CD    . LYS LYS LYS B B 104 104 . 115.248 126.660 10.666  1.00 16.11
1 . .
ATOM 4120 CE    CE    . LYS LYS LYS B B 104 104 . 114.419 126.887 11.912  1.00 20.56
1 . .
ATOM 4121 NZ    NZ    . LYS LYS LYS B B 104 104 . 114.886 128.263 12.342  1.00 26.35
1 . .
ATOM 4122 C     C     . LYS LYS LYS B B 104 104 . 117.590 123.716 10.027  1.00 12.74
1 . .
ATOM 4123 O     O     . LYS LYS LYS B B 104 104 . 117.967 123.982 11.167  1.00 13.74
1 . .
ATOM 4124 N     N     . PHE PHE PHE B B 105 105 . 117.311 122.450 9.661   1.00 10.89
1 . .
ATOM 4125 CA    CA    . PHE PHE PHE B B 105 105 . 117.554 121.337 10.593  1.00 11.87
1 . .
ATOM 4126 CB    CB    . PHE PHE PHE B B 105 105 . 116.524 120.224 10.442  1.00 13.18
1 . .
ATOM 4127 CG    CG    . PHE PHE PHE B B 105 105 . 115.085 120.686 10.751  1.00 12.75
1 . .
ATOM 4128 CD1   CD1   . PHE PHE PHE B B 105 105 . 114.022 119.996 10.185  1.00 15.95
1 . .
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ATOM 4129 CE1   CE1   . PHE PHE PHE B B 105 105 . 112.689 120.390 10.465  1.00 18.58
1 . .
ATOM 4130 CZ    CZ    . PHE PHE PHE B B 105 105 . 112.465 121.444 11.313  1.00 15.21
1 . .
ATOM 4131 CE2   CE2   . PHE PHE PHE B B 105 105 . 113.522 122.167 11.906  1.00 17.29
1 . .
ATOM 4132 CD2   CD2   . PHE PHE PHE B B 105 105 . 114.872 121.723 11.614  1.00 14.30
1 . .
ATOM 4133 C     C     . PHE PHE PHE B B 105 105 . 118.929 120.652 10.378  1.00 11.41
1 . .
ATOM 4134 O     O     . PHE PHE PHE B B 105 105 . 119.419 119.954 11.294  1.00 11.75
1 . .
ATOM 4135 N     N     . GLY GLY GLY B B 106 106 . 119.476 120.834 9.180   1.00 9.19
1 . .
ATOM 4136 CA    CA    . GLY GLY GLY B B 106 106 . 120.634 120.062 8.763   1.00 9.30
1 . .
ATOM 4137 C     C     . GLY GLY GLY B B 106 106 . 120.249 118.837 7.961   1.00 8.94
1 . .
ATOM 4138 O     O     . GLY GLY GLY B B 106 106 . 119.280 118.096 8.359   1.00 9.30
1 . .
ATOM 4139 N     N     . ALA ALA ALA B B 107 107 . 121.000 118.583 6.888   1.00 8.88
1 . .
ATOM 4140 CA    CA    . ALA ALA ALA B B 107 107 . 120.842 117.336 6.205   1.00 8.90
1 . .
ATOM 4141 CB    CB    . ALA ALA ALA B B 107 107 . 121.788 117.272 5.018   1.00 8.44
1 . .
ATOM 4142 C     C     . ALA ALA ALA B B 107 107 . 121.147 116.134 7.129   1.00 9.45
1 . .
ATOM 4143 O     O     . ALA ALA ALA B B 107 107 . 120.695 115.000 6.876   1.00 9.54
1 . .
ATOM 4144 N     N     . ASN ASN ASN B B 108 108 . 122.006 116.373 8.136   1.00 8.07
1 . .
ATOM 4145 CA    CA    . ASN ASN ASN B B 108 108 . 122.333 115.298 9.049   1.00 8.40
1 . .
ATOM 4146 CB    CB    . ASN ASN ASN B B 108 108 . 123.615 115.560 9.824   1.00 7.90
1 . .
ATOM 4147 CG    CG    . ASN ASN ASN B B 108 108 . 123.711 116.973 10.448  1.00 10.08
1 . .
ATOM 4148 OD1   OD1   . ASN ASN ASN B B 108 108 . 123.086 117.962 10.006  1.00 10.03
1 . .
ATOM 4149 ND2   ND2   . ASN ASN ASN B B 108 108 . 124.559 117.082 11.478  1.00 8.97
1 . .
ATOM 4150 C     C     . ASN ASN ASN B B 108 108 . 121.154 114.942 9.959   1.00 8.82
1 . .
ATOM 4151 O     O     . ASN ASN ASN B B 108 108 . 120.989 113.736 10.265  1.00 10.52
1 . .
ATOM 4152 N     N     . ALA ALA ALA B B 109 109 . 120.313 115.925 10.334  1.00 8.22
1 . .
ATOM 4153 CA    CA    . ALA ALA ALA B B 109 109 . 119.057 115.578 11.044  1.00 7.36
1 . .
ATOM 4154 CB    CB    . ALA ALA ALA B B 109 109 . 118.382 116.876 11.553  1.00 8.37
1 . .
ATOM 4155 C     C     . ALA ALA ALA B B 109 109 . 118.093 114.769 10.173  1.00 8.48
1 . .
ATOM 4156 O     O     . ALA ALA ALA B B 109 109 . 117.614 113.700 10.561  1.00 9.94
1 . .
ATOM 4157 N     N     . ILE ILE ILE B B 110 110 . 117.860 115.256 8.952   1.00 7.78
1 . .
ATOM 4158 CA    CA    . ILE ILE ILE B B 110 110 . 116.841 114.630 8.103   1.00 7.83
1 . .
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ATOM 4159 CB    CB    . ILE ILE ILE B B 110 110 . 116.557 115.529 6.870   1.00 9.28
1 . .
ATOM 4160 CG1   CG1   . ILE ILE ILE B B 110 110 . 115.856 116.833 7.387   1.00 9.52
1 . .
ATOM 4161 CD    CD    . ILE ILE ILE B B 110 110 . 115.800 117.813 6.233   1.00 12.67
1 . .
ATOM 4162 CG2   CG2   . ILE ILE ILE B B 110 110 . 115.755 114.755 5.822   1.00 8.87
1 . .
ATOM 4163 C     C     . ILE ILE ILE B B 110 110 . 117.342 113.254 7.664   1.00 7.88
1 . .
ATOM 4164 O     O     . ILE ILE ILE B B 110 110 . 116.578 112.280 7.685   1.00 9.66
1 . .
ATOM 4165 N     N     . LEU LEU LEU B B 111 111 . 118.613 113.115 7.281   1.00 8.33
1 . .
ATOM 4166 CA    CA    . LEU LEU LEU B B 111 111 . 119.056 111.838 6.709   1.00 7.63
1 . .
ATOM 4167 CB    CB    . LEU LEU LEU B B 111 111 . 120.484 111.960 6.142   1.00 7.71
1 . .
ATOM 4168 CG    CG    . LEU LEU LEU B B 111 111 . 120.989 110.644 5.556   1.00 7.23
1 . .
ATOM 4169 CD1   CD1   . LEU LEU LEU B B 111 111 . 120.142 110.174 4.310   1.00 8.36
1 . .
ATOM 4170 CD2   CD2   . LEU LEU LEU B B 111 111 . 122.496 110.780 5.148   1.00 10.49
1 . .
ATOM 4171 C     C     . LEU LEU LEU B B 111 111 . 119.030 110.741 7.767   1.00 8.20
1 . .
ATOM 4172 O     O     . LEU LEU LEU B B 111 111 . 118.709 109.607 7.413   1.00 8.58
1 . .
ATOM 4173 N     N     . GLY GLY GLY B B 112 112 . 119.364 111.070 9.033   1.00 9.54
1 . .
ATOM 4174 CA    CA    . GLY GLY GLY B B 112 112 . 119.391 110.020 10.061  1.00 9.50
1 . .
ATOM 4175 C     C     . GLY GLY GLY B B 112 112 . 118.026 109.335 10.125  1.00 10.04
1 . .
ATOM 4176 O     O     . GLY GLY GLY B B 112 112 . 117.870 108.115 10.210  1.00 9.59
1 . .
ATOM 4177 N     N     . VAL VAL VAL B B 113 113 . 117.007 110.174 10.082  1.00 8.90
1 . .
ATOM 4178 CA    CA    . VAL VAL VAL B B 113 113 . 115.649 109.637 10.158  1.00 8.55
1 . .
ATOM 4179 CB    CB    . VAL VAL VAL B B 113 113 . 114.661 110.776 10.466  1.00 7.96
1 . .
ATOM 4180 CG1   CG1   . VAL VAL VAL B B 113 113 . 113.164 110.247 10.537  1.00 9.58
1 . .
ATOM 4181 CG2   CG2   . VAL VAL VAL B B 113 113 . 114.981 111.420 11.796  1.00 8.84
1 . .
ATOM 4182 C     C     . VAL VAL VAL B B 113 113 . 115.283 108.901 8.864   1.00 9.33
1 . .
ATOM 4183 O     O     . VAL VAL VAL B B 113 113 . 114.648 107.846 8.904   1.00 9.56
1 . .
ATOM 4184 N     N     . SER SER SER B B 114 114 . 115.612 109.483 7.702   1.00 7.93
1 . .
ATOM 4185 CA    CA    . SER SER SER B B 114 114 . 115.299 108.885 6.403   1.00 8.00
1 . .
ATOM 4186 CB    CB    . SER SER SER B B 114 114 . 115.913 109.796 5.313   1.00 8.06
1 . .
ATOM 4187 OG    OG    . SER SER SER B B 114 114 . 115.520 109.344 4.053   1.00 9.45
1 . .
ATOM 4188 C     C     . SER SER SER B B 114 114 . 115.857 107.469 6.336   1.00 8.84
1 . .
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ATOM 4189 O     O     . SER SER SER B B 114 114 . 115.184 106.565 5.841   1.00 8.62
1 . .
ATOM 4190 N     N     . LEU LEU LEU B B 115 115 . 117.135 107.304 6.718   1.00 8.62
1 . .
ATOM 4191 CA    CA    . LEU LEU LEU B B 115 115 . 117.732 105.960 6.711   1.00 8.12
1 . .
ATOM 4192 CB    CB    . LEU LEU LEU B B 115 115 . 119.205 106.094 7.108   1.00 9.22
1 . .
ATOM 4193 CG    CG    . LEU LEU LEU B B 115 115 . 120.106 106.941 6.200   1.00 8.62
1 . .
ATOM 4194 CD1   CD1   . LEU LEU LEU B B 115 115 . 121.453 107.165 6.930   1.00 11.66
1 . .
ATOM 4195 CD2   CD2   . LEU LEU LEU B B 115 115 . 120.329 106.204 4.848   1.00 10.67
1 . .
ATOM 4196 C     C     . LEU LEU LEU B B 115 115 . 117.028 104.980 7.673   1.00 8.71
1 . .
ATOM 4197 O     O     . LEU LEU LEU B B 115 115 . 116.851 103.803 7.289   1.00 10.07
1 . .
ATOM 4198 N     N     . ALA ALA ALA B B 116 116 . 116.691 105.430 8.873   1.00 8.59
1 . .
ATOM 4199 CA    CA    . ALA ALA ALA B B 116 116 . 116.015 104.516 9.818   1.00 8.66
1 . .
ATOM 4200 CB    CB    . ALA ALA ALA B B 116 116 . 115.957 105.148 11.197  1.00 10.67
1 . .
ATOM 4201 C     C     . ALA ALA ALA B B 116 116 . 114.637 104.148 9.339   1.00 9.93
1 . .
ATOM 4202 O     O     . ALA ALA ALA B B 116 116 . 114.238 102.987 9.453   1.00 10.15
1 . .
ATOM 4203 N     N     . VAL VAL VAL B B 117 117 . 113.936 105.093 8.705   1.00 9.11
1 . .
ATOM 4204 CA    CA    . VAL VAL VAL B B 117 117 . 112.631 104.805 8.100   1.00 8.89
1 . .
ATOM 4205 CB    CB    . VAL VAL VAL B B 117 117 . 112.083 106.122 7.435   1.00 9.17
1 . .
ATOM 4206 CG1   CG1   . VAL VAL VAL B B 117 117 . 110.960 105.801 6.428   1.00 10.75
1 . .
ATOM 4207 CG2   CG2   . VAL VAL VAL B B 117 117 . 111.569 107.040 8.565   1.00 10.82
1 . .
ATOM 4208 C     C     . VAL VAL VAL B B 117 117 . 112.816 103.695 7.062   1.00 9.26
1 . .
ATOM 4209 O     O     . VAL VAL VAL B B 117 117 . 111.996 102.774 6.956   1.00 11.15
1 . .
ATOM 4210 N     N     . CYS CYS CYS B B 118 118 . 113.845 103.815 6.220   1.00 7.83
1 . .
ATOM 4211 CA    CA    . CYS CYS CYS B B 118 118 . 113.996 102.842 5.140   1.00 8.90
1 . .
ATOM 4212 CB    CB    . CYS CYS CYS B B 118 118 . 115.171 103.294 4.296   1.00 10.85
1 . .
ATOM 4213 SG    SG    . CYS CYS CYS B B 118 118 . 115.304 102.417 2.706   1.00 12.08
1 . .
ATOM 4214 C     C     . CYS CYS CYS B B 118 118 . 114.247 101.417 5.685   1.00 9.95
1 . .
ATOM 4215 O     O     . CYS CYS CYS B B 118 118 . 113.642 100.458 5.204   1.00 10.23
1 . .
ATOM 4216 N     N     . LYS LYS LYS B B 119 119 . 115.074 101.324 6.742   1.00 9.52
1 . .
ATOM 4217 CA    CA    . LYS LYS LYS B B 119 119 . 115.332 100.002 7.399   1.00 9.70
1 . .
ATOM 4218 CB    CB    . LYS LYS LYS B B 119 119 . 116.382 100.142 8.499   1.00 10.80
1 . .
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ATOM 4219 CG    CG    . LYS LYS LYS B B 119 119 . 117.750 100.494 7.902   1.00 10.09
1 . .
ATOM 4220 CD    CD    . LYS LYS LYS B B 119 119 . 118.860 100.592 8.983   1.00 11.56
1 . .
ATOM 4221 CE    CE    . LYS LYS LYS B B 119 119 . 120.217 101.158 8.433   1.00 14.16
1 . .
ATOM 4222 NZ    NZ    . LYS LYS LYS B B 119 119 . 121.394 101.262 9.422   1.00 15.82
1 . .
ATOM 4223 C     C     . LYS LYS LYS B B 119 119 . 114.002 99.485  7.952   1.00 10.37
1 . .
ATOM 4224 O     O     . LYS LYS LYS B B 119 119 . 113.701 98.265  7.775   1.00 11.79
1 . .
ATOM 4225 N     N     . ALA ALA ALA B B 120 120 . 113.222 100.337 8.648   1.00 11.59
1 . .
ATOM 4226 CA    CA    . ALA ALA ALA B B 120 120 . 111.955 99.875  9.251   1.00 10.83
1 . .
ATOM 4227 CB    CB    . ALA ALA ALA B B 120 120 . 111.365 100.992 10.049  1.00 10.22
1 . .
ATOM 4228 C     C     . ALA ALA ALA B B 120 120 . 110.978 99.456  8.111   1.00 11.28
1 . .
ATOM 4229 O     O     . ALA ALA ALA B B 120 120 . 110.236 98.462  8.272   1.00 12.08
1 . .
ATOM 4230 N     N     . GLY GLY GLY B B 121 121 . 110.980 100.208 6.992   1.00 10.03
1 . .
ATOM 4231 CA    CA    . GLY GLY GLY B B 121 121 . 110.132 99.883  5.823   1.00 10.63
1 . .
ATOM 4232 C     C     . GLY GLY GLY B B 121 121 . 110.423 98.483  5.299   1.00 10.96
1 . .
ATOM 4233 O     O     . GLY GLY GLY B B 121 121 . 109.523 97.729  4.936   1.00 11.63
1 . .
ATOM 4234 N     N     . ALA ALA ALA B B 122 122 . 111.730 98.154  5.181   1.00 10.71
1 . .
ATOM 4235 CA    CA    . ALA ALA ALA B B 122 122 . 112.101 96.839  4.705   1.00 10.49
1 . .
ATOM 4236 CB    CB    . ALA ALA ALA B B 122 122 . 113.635 96.698  4.634   1.00 11.82
1 . .
ATOM 4237 C     C     . ALA ALA ALA B B 122 122 . 111.501 95.758  5.619   1.00 12.13
1 . .
ATOM 4238 O     O     . ALA ALA ALA B B 122 122 . 110.914 94.763  5.139   1.00 13.10
1 . .
ATOM 4239 N     N     . ALA ALA ALA B B 123 123 . 111.636 95.966  6.919   1.00 12.30
1 . .
ATOM 4240 CA    CA    . ALA ALA ALA B B 123 123 . 111.017 95.009  7.885   1.00 11.09
1 . .
ATOM 4241 CB    CB    . ALA ALA ALA B B 123 123 . 111.406 95.385  9.322   1.00 13.01
1 . .
ATOM 4242 C     C     . ALA ALA ALA B B 123 123 . 109.500 94.921  7.744   1.00 13.19
1 . .
ATOM 4243 O     O     . ALA ALA ALA B B 123 123 . 108.941 93.781  7.796   1.00 15.43
1 . .
ATOM 4244 N     N     . GLU GLU GLU B B 124 124 . 108.814 96.048  7.554   1.00 13.37
1 . .
ATOM 4245 CA    CA    . GLU GLU GLU B B 124 124 . 107.377 96.002  7.371   1.00 14.51
1 . .
ATOM 4246 CB    CB    . GLU GLU GLU B B 124 124 . 106.840 97.448  7.280   1.00 14.29
1 . .
ATOM 4247 CG    CG    . GLU GLU GLU B B 124 124 . 105.293 97.526  6.978   1.00 21.21
1 . .
ATOM 4248 CD    CD    . GLU GLU GLU B B 124 124 . 104.408 96.771  7.955   1.00 25.24
1 . .
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ATOM 4249 OE1   OE1   . GLU GLU GLU B B 124 124 . 104.765 96.709  9.140   1.00 22.47
1 . .
ATOM 4250 OE2   OE2   . GLU GLU GLU B B 124 124 . 103.299 96.321  7.525   1.00 31.83
1 . .
ATOM 4251 C     C     . GLU GLU GLU B B 124 124 . 107.005 95.198  6.137   1.00 14.85
1 . .
ATOM 4252 O     O     . GLU GLU GLU B B 124 124 . 106.002 94.435  6.176   1.00 17.76
1 . .
ATOM 4253 N     N     . ARG ARG ARG B B 125 125 . 107.788 95.337  5.056   1.00 15.87
1 . .
ATOM 4254 CA    CA    . ARG ARG ARG B B 125 125 . 107.608 94.584  3.826   1.00 15.89
1 . .
ATOM 4255 CB    CB    . ARG ARG ARG B B 125 125 . 108.371 95.226  2.662   1.00 17.37
1 . .
ATOM 4256 CG    CG    . ARG ARG ARG B B 125 125 . 107.829 96.598  2.282   1.00 18.83
1 . .
ATOM 4257 CD    CD    . ARG ARG ARG B B 125 125 . 106.581 96.558  1.447   1.00 22.86
1 . .
ATOM 4258 NE    NE    . ARG ARG ARG B B 125 125 . 106.299 97.893  0.840   1.00 32.79
1 . .
ATOM 4259 CZ    CZ    . ARG ARG ARG B B 125 125 . 105.071 98.342  0.470   1.00 37.79
1 . .
ATOM 4260 NH1   NH1   . ARG ARG ARG B B 125 125 . 103.990 97.591  0.641   1.00 42.27
1 . .
ATOM 4261 NH2   NH2   . ARG ARG ARG B B 125 125 . 104.902 99.554  -0.053  1.00 36.22
1 . .
ATOM 4262 C     C     . ARG ARG ARG B B 125 125 . 108.065 93.111  3.954   1.00 15.67
1 . .
ATOM 4263 O     O     . ARG ARG ARG B B 125 125 . 107.887 92.328  3.009   1.00 18.53
1 . .
ATOM 4264 N     N     . GLU GLU GLU B B 126 126 . 108.714 92.751  5.079   1.00 16.88
1 . .
ATOM 4265 CA    CA    . GLU GLU GLU B B 126 126 . 109.360 91.425  5.271   1.00 18.14
1 . .
ATOM 4266 CB    CB    . GLU GLU GLU B B 126 126 . 108.335 90.289  5.313   1.00 20.48
1 . .
ATOM 4267 CG    CG    . GLU GLU GLU B B 126 126 . 107.174 90.655  6.165   1.00 28.35
1 . .
ATOM 4268 CD    CD    . GLU GLU GLU B B 126 126 . 106.729 89.479  6.956   1.00 39.71
1 . .
ATOM 4269 OE1   OE1   . GLU GLU GLU B B 126 126 . 107.427 89.111  7.926   1.00 48.34
1 . .
ATOM 4270 OE2   OE2   . GLU GLU GLU B B 126 126 . 105.703 88.921  6.590   1.00 44.59
1 . .
ATOM 4271 C     C     . GLU GLU GLU B B 126 126 . 110.366 91.134  4.163   1.00 19.02
1 . .
ATOM 4272 O     O     . GLU GLU GLU B B 126 126 . 110.413 90.024  3.566   1.00 19.48
1 . .
ATOM 4273 N     N     . LEU LEU LEU B B 127 127 . 111.183 92.149  3.874   1.00 16.58
1 . .
ATOM 4274 CA    CA    . LEU LEU LEU B B 127 127 . 112.242 92.033  2.858   1.00 15.61
1 . .
ATOM 4275 CB    CB    . LEU LEU LEU B B 127 127 . 111.990 93.053  1.719   1.00 15.41
1 . .
ATOM 4276 CG    CG    . LEU LEU LEU B B 127 127 . 110.804 92.804  0.817   1.00 17.69
1 . .
ATOM 4277 CD1   CD1   . LEU LEU LEU B B 127 127 . 110.636 93.986  -0.122  1.00 16.86
1 . .
ATOM 4278 CD2   CD2   . LEU LEU LEU B B 127 127 . 110.933 91.509  0.042   1.00 19.11
1 . .
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ATOM 4279 C     C     . LEU LEU LEU B B 127 127 . 113.588 92.367  3.453   1.00 14.34
1 . .
ATOM 4280 O     O     . LEU LEU LEU B B 127 127 . 113.674 93.257  4.278   1.00 14.82
1 . .
ATOM 4281 N     N     . PRO PRO PRO B B 128 128 . 114.669 91.770  2.926   1.00 14.09
1 . .
ATOM 4282 CA    CA    . PRO PRO PRO B B 128 128 . 115.942 92.381  3.309   1.00 13.55
1 . .
ATOM 4283 CB    CB    . PRO PRO PRO B B 128 128 . 116.991 91.492  2.674   1.00 13.87
1 . .
ATOM 4284 CG    CG    . PRO PRO PRO B B 128 128 . 116.283 90.655  1.648   1.00 17.18
1 . .
ATOM 4285 CD    CD    . PRO PRO PRO B B 128 128 . 114.803 90.671  1.975   1.00 13.48
1 . .
ATOM 4286 C     C     . PRO PRO PRO B B 128 128 . 116.055 93.792  2.770   1.00 12.18
1 . .
ATOM 4287 O     O     . PRO PRO PRO B B 128 128 . 115.481 94.125  1.712   1.00 11.84
1 . .
ATOM 4288 N     N     . LEU LEU LEU B B 129 129 . 116.845 94.608  3.470   1.00 11.05
1 . .
ATOM 4289 CA    CA    . LEU LEU LEU B B 129 129 . 116.944 96.022  3.090   1.00 11.19
1 . .
ATOM 4290 CB    CB    . LEU LEU LEU B B 129 129 . 118.039 96.673  3.916   1.00 11.95
1 . .
ATOM 4291 CG    CG    . LEU LEU LEU B B 129 129 . 118.293 98.166  3.616   1.00 10.67
1 . .
ATOM 4292 CD1   CD1   . LEU LEU LEU B B 129 129 . 117.024 98.985  3.747   1.00 14.19
1 . .
ATOM 4293 CD2   CD2   . LEU LEU LEU B B 129 129 . 119.262 98.680  4.658   1.00 11.29
1 . .
ATOM 4294 C     C     . LEU LEU LEU B B 129 129 . 117.288 96.174  1.587   1.00 9.94
1 . .
ATOM 4295 O     O     . LEU LEU LEU B B 129 129 . 116.675 97.041  0.914   1.00 9.89
1 . .
ATOM 4296 N     N     . TYR TYR TYR B B 130 130 . 118.273 95.431  1.053   1.00 10.64
1 . .
ATOM 4297 CA    CA    . TYR TYR TYR B B 130 130 . 118.658 95.630  -0.375  1.00 10.24
1 . .
ATOM 4298 CB    CB    . TYR TYR TYR B B 130 130 . 119.889 94.799  -0.794  1.00 11.93
1 . .
ATOM 4299 CG    CG    . TYR TYR TYR B B 130 130 . 119.729 93.293  -0.576  1.00 10.25
1 . .
ATOM 4300 CD1   CD1   . TYR TYR TYR B B 130 130 . 119.106 92.456  -1.505  1.00 14.09
1 . .
ATOM 4301 CE1   CE1   . TYR TYR TYR B B 130 130 . 118.992 91.082  -1.234  1.00 15.88
1 . .
ATOM 4302 CZ    CZ    . TYR TYR TYR B B 130 130 . 119.442 90.554  -0.016  1.00 14.93
1 . .
ATOM 4303 OH    OH    . TYR TYR TYR B B 130 130 . 119.332 89.186  0.274   1.00 19.06
1 . .
ATOM 4304 CE2   CE2   . TYR TYR TYR B B 130 130 . 120.040 91.357  0.892   1.00 13.75
1 . .
ATOM 4305 CD2   CD2   . TYR TYR TYR B B 130 130 . 120.173 92.716  0.626   1.00 11.21
1 . .
ATOM 4306 C     C     . TYR TYR TYR B B 130 130 . 117.452 95.384  -1.326  1.00 10.61
1 . .
ATOM 4307 O     O     . TYR TYR TYR B B 130 130 . 117.314 96.036  -2.355  1.00 10.87
1 . .
ATOM 4308 N     N     . ARG ARG ARG B B 131 131 . 116.573 94.418  -0.975  1.00 10.07
1 . .
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ATOM 4309 CA    CA    . ARG ARG ARG B B 131 131 . 115.416 94.136  -1.843  1.00 11.26
1 . .
ATOM 4310 CB    CB    . ARG ARG ARG B B 131 131 . 114.767 92.789  -1.474  1.00 12.55
1 . .
ATOM 4311 CG    CG    . ARG ARG ARG B B 131 131 . 115.619 91.624  -1.929  1.00 18.91
1 . .
ATOM 4312 CD    CD    . ARG ARG ARG B B 131 131 . 114.803 90.307  -1.997  1.00 27.26
1 . .
ATOM 4313 NE    NE    . ARG ARG ARG B B 131 131 . 115.629 89.167  -2.418  1.00 28.54
1 . .
ATOM 4314 CZ    CZ    . ARG ARG ARG B B 131 131 . 115.886 88.861  -3.704  1.00 31.18
1 . .
ATOM 4315 NH1   NH1   . ARG ARG ARG B B 131 131 . 116.632 87.797  -3.994  1.00 29.27
1 . .
ATOM 4316 NH2   NH2   . ARG ARG ARG B B 131 131 . 115.396 89.624  -4.705  1.00 36.33
1 . .
ATOM 4317 C     C     . ARG ARG ARG B B 131 131 . 114.359 95.283  -1.694  1.00 10.71
1 . .
ATOM 4318 O     O     . ARG ARG ARG B B 131 131 . 113.682 95.643  -2.668  1.00 11.42
1 . .
ATOM 4319 N     N     . HIS HIS HIS B B 132 132 . 114.147 95.815  -0.482  1.00 11.14
1 . .
ATOM 4320 CA    CA    . HIS HIS HIS B B 132 132 . 113.252 96.959  -0.299  1.00 11.33
1 . .
ATOM 4321 CB    CB    . HIS HIS HIS B B 132 132 . 113.175 97.326  1.181   1.00 10.64
1 . .
ATOM 4322 CG    CG    . HIS HIS HIS B B 132 132 . 112.266 98.474  1.500   1.00 11.51
1 . .
ATOM 4323 ND1   ND1   . HIS HIS HIS B B 132 132 . 110.950 98.574  1.046   1.00 14.03
1 . .
ATOM 4324 CE1   CE1   . HIS HIS HIS B B 132 132 . 110.451 99.722  1.468   1.00 13.52
1 . .
ATOM 4325 NE2   NE2   . HIS HIS HIS B B 132 132 . 111.358 100.353 2.208   1.00 12.74
1 . .
ATOM 4326 CD2   CD2   . HIS HIS HIS B B 132 132 . 112.506 99.594  2.235   1.00 12.47
1 . .
ATOM 4327 C     C     . HIS HIS HIS B B 132 132 . 113.760 98.158  -1.127  1.00 10.35
1 . .
ATOM 4328 O     O     . HIS HIS HIS B B 132 132 . 112.978 98.812  -1.814  1.00 11.97
1 . .
ATOM 4329 N     N     . ILE ILE ILE B B 133 133 . 115.058 98.457  -1.055  1.00 10.38
1 . .
ATOM 4330 CA    CA    . ILE ILE ILE B B 133 133 . 115.633 99.557  -1.837  1.00 10.57
1 . .
ATOM 4331 CB    CB    . ILE ILE ILE B B 133 133 . 117.119 99.762  -1.467  1.00 10.38
1 . .
ATOM 4332 CG1   CG1   . ILE ILE ILE B B 133 133 . 117.229 100.285 -0.040  1.00 12.76
1 . .
ATOM 4333 CD    CD    . ILE ILE ILE B B 133 133 . 118.666 100.307 0.494   1.00 10.60
1 . .
ATOM 4334 CG2   CG2   . ILE ILE ILE B B 133 133 . 117.780 100.720 -2.471  1.00 14.16
1 . .
ATOM 4335 C     C     . ILE ILE ILE B B 133 133 . 115.437 99.248  -3.332  1.00 11.18
1 . .
ATOM 4336 O     O     . ILE ILE ILE B B 133 133 . 115.038 100.168 -4.078  1.00 11.49
1 . .
ATOM 4337 N     N     . ALA ALA ALA B B 134 134 . 115.641 98.011  -3.772  1.00 11.31
1 . .
ATOM 4338 CA    CA    . ALA ALA ALA B B 134 134 . 115.395 97.725  -5.225  1.00 11.63
1 . .
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ATOM 4339 CB    CB    . ALA ALA ALA B B 134 134 . 115.632 96.265  -5.416  1.00 11.11
1 . .
ATOM 4340 C     C     . ALA ALA ALA B B 134 134 . 113.961 98.008  -5.593  1.00 12.91
1 . .
ATOM 4341 O     O     . ALA ALA ALA B B 134 134 . 113.684 98.603  -6.652  1.00 13.93
1 . .
ATOM 4342 N     N     . GLN GLN GLN B B 135 135 . 113.013 97.638  -4.714  1.00 11.36
1 . .
ATOM 4343 CA    CA    . GLN GLN GLN B B 135 135 . 111.549 97.956  -5.015  1.00 11.97
1 . .
ATOM 4344 CB    CB    . GLN GLN GLN B B 135 135 . 110.691 97.244  -4.000  1.00 14.69
1 . .
ATOM 4345 CG    CG    . GLN GLN GLN B B 135 135 . 110.777 95.699  -4.264  1.00 17.14
1 . .
ATOM 4346 CD    CD    . GLN GLN GLN B B 135 135 . 109.742 94.928  -3.451  1.00 25.97
1 . .
ATOM 4347 OE1   OE1   . GLN GLN GLN B B 135 135 . 109.020 95.500  -2.633  1.00 25.34
1 . .
ATOM 4348 NE2   NE2   . GLN GLN GLN B B 135 135 . 109.687 93.623  -3.658  1.00 29.69
1 . .
ATOM 4349 C     C     . GLN GLN GLN B B 135 135 . 111.296 99.455  -5.038  1.00 13.84
1 . .
ATOM 4350 O     O     . GLN GLN GLN B B 135 135 . 110.514 99.988  -5.875  1.00 14.67
1 . .
ATOM 4351 N     N     . LEU LEU LEU B B 136 136 . 111.929 100.175 -4.133  1.00 12.74
1 . .
ATOM 4352 CA    CA    . LEU LEU LEU B B 136 136 . 111.763 101.636 -4.127  1.00 13.85
1 . .
ATOM 4353 CB    CB    . LEU LEU LEU B B 136 136 . 112.449 102.236 -2.890  1.00 13.39
1 . .
ATOM 4354 CG    CG    . LEU LEU LEU B B 136 136 . 111.839 102.032 -1.501  1.00 12.20
1 . .
ATOM 4355 CD1   CD1   . LEU LEU LEU B B 136 136 . 112.743 102.732 -0.483  1.00 14.07
1 . .
ATOM 4356 CD2   CD2   . LEU LEU LEU B B 136 136 . 110.434 102.602 -1.443  1.00 14.30
1 . .
ATOM 4357 C     C     . LEU LEU LEU B B 136 136 . 112.286 102.270 -5.421  1.00 14.95
1 . .
ATOM 4358 O     O     . LEU LEU LEU B B 136 136 . 111.706 103.272 -5.902  1.00 17.13
1 . .
ATOM 4359 N     N     . ALA ALA ALA B B 137 137 . 113.339 101.665 -5.993  1.00 14.22
1 . .
ATOM 4360 CA    CA    . ALA ALA ALA B B 137 137 . 114.017 102.194 -7.161  1.00 14.98
1 . .
ATOM 4361 CB    CB    . ALA ALA ALA B B 137 137 . 115.578 101.884 -7.114  1.00 13.45
1 . .
ATOM 4362 C     C     . ALA ALA ALA B B 137 137 . 113.450 101.607 -8.431  1.00 17.49
1 . .
ATOM 4363 O     O     . ALA ALA ALA B B 137 137 . 113.809 102.066 -9.478  1.00 18.71
1 . .
ATOM 4364 N     N     . GLY GLY GLY B B 138 138 . 112.596 100.587 -8.341  1.00 18.73
1 . .
ATOM 4365 CA    CA    . GLY GLY GLY B B 138 138 . 112.082 99.958  -9.557  1.00 20.52
1 . .
ATOM 4366 C     C     . GLY GLY GLY B B 138 138 . 113.069 98.993  -10.182 1.00 21.36
1 . .
ATOM 4367 O     O     . GLY GLY GLY B B 138 138 . 113.017 98.798  -11.420 1.00 24.41
1 . .
ATOM 4368 N     N     . ASN ASN ASN B B 139 139 . 113.956 98.370  -9.394  1.00 22.96
1 . .
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ATOM 4369 CA    CA    . ASN ASN ASN B B 139 139 . 114.892 97.378  -9.911  1.00 24.12
1 . .
ATOM 4370 CB    CB    . ASN ASN ASN B B 139 139 . 116.306 97.568  -9.384  1.00 21.98
1 . .
ATOM 4371 CG    CG    . ASN ASN ASN B B 139 139 . 116.908 98.809  -9.870  1.00 24.38
1 . .
ATOM 4372 OD1   OD1   . ASN ASN ASN B B 139 139 . 116.724 99.161  -11.044 1.00 28.38
1 . .
ATOM 4373 ND2   ND2   . ASN ASN ASN B B 139 139 . 117.568 99.555  -8.987  1.00 22.95
1 . .
ATOM 4374 C     C     . ASN ASN ASN B B 139 139 . 114.444 95.990  -9.578  1.00 27.17
1 . .
ATOM 4375 O     O     . ASN ASN ASN B B 139 139 . 113.854 95.753  -8.529  1.00 26.73
1 . .
ATOM 4376 N     N     . SER SER SER B B 140 140 . 114.675 95.050  -10.479 1.00 31.36
1 . .
ATOM 4377 CA    CA    . SER SER SER B B 140 140 . 114.098 93.718  -10.237 1.00 34.33
1 . .
ATOM 4378 CB    CB    . SER SER SER B B 140 140 . 113.134 93.334  -11.343 1.00 34.82
1 . .
ATOM 4379 OG    OG    . SER SER SER B B 140 140 . 113.902 93.117  -12.500 1.00 37.07
1 . .
ATOM 4380 C     C     . SER SER SER B B 140 140 . 115.196 92.725  -10.134 1.00 36.30
1 . .
ATOM 4381 O     O     . SER SER SER B B 140 140 . 114.968 91.575  -9.702  1.00 38.71
1 . .
ATOM 4382 N     N     . ASP ASP ASP B B 141 141 . 116.397 93.125  -10.511 1.00 36.25
1 . .
ATOM 4383 CA    CA    . ASP ASP ASP B B 141 141 . 117.499 92.193  -10.246 1.00 36.09
1 . .
ATOM 4384 CB    CB    . ASP ASP ASP B B 141 141 . 117.875 91.327  -11.441 1.00 38.81
1 . .
ATOM 4385 CG    CG    . ASP ASP ASP B B 141 141 . 118.205 92.148  -12.639 1.00 42.04
1 . .
ATOM 4386 OD1   OD1   . ASP ASP ASP B B 141 141 . 119.243 92.878  -12.572 1.00 49.51
1 . .
ATOM 4387 OD2   OD2   . ASP ASP ASP B B 141 141 . 117.422 92.080  -13.597 1.00 43.65
1 . .
ATOM 4388 C     C     . ASP ASP ASP B B 141 141 . 118.688 92.912  -9.626  1.00 34.08
1 . .
ATOM 4389 O     O     . ASP ASP ASP B B 141 141 . 118.788 94.173  -9.646  1.00 35.28
1 . .
ATOM 4390 N     N     . LEU LEU LEU B B 142 142 . 119.527 92.112  -8.979  1.00 27.73
1 . .
ATOM 4391 CA    CA    . LEU LEU LEU B B 142 142 . 120.448 92.687  -8.023  1.00 22.85
1 . .
ATOM 4392 CB    CB    . LEU LEU LEU B B 142 142 . 120.236 92.043  -6.659  1.00 20.40
1 . .
ATOM 4393 CG    CG    . LEU LEU LEU B B 142 142 . 118.772 92.177  -6.158  1.00 18.56
1 . .
ATOM 4394 CD1   CD1   . LEU LEU LEU B B 142 142 . 118.516 91.252  -4.976  1.00 21.55
1 . .
ATOM 4395 CD2   CD2   . LEU LEU LEU B B 142 142 . 118.446 93.630  -5.868  1.00 20.85
1 . .
ATOM 4396 C     C     . LEU LEU LEU B B 142 142 . 121.782 92.292  -8.589  1.00 22.13
1 . .
ATOM 4397 O     O     . LEU LEU LEU B B 142 142 . 121.910 91.235  -9.175  1.00 22.97
1 . .
ATOM 4398 N     N     . ILE ILE ILE B B 143 143 . 122.784 93.090  -8.376  1.00 17.13
1 . .
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ATOM 4399 CA    CA    . ILE ILE ILE B B 143 143 . 124.111 92.708  -8.806  1.00 15.03
1 . .
ATOM 4400 CB    CB    . ILE ILE ILE B B 143 143 . 124.420 93.296  -10.210 1.00 17.08
1 . .
ATOM 4401 CG1   CG1   . ILE ILE ILE B B 143 143 . 124.068 94.823  -10.217 1.00 25.94
1 . .
ATOM 4402 CD    CD    . ILE ILE ILE B B 143 143 . 122.611 95.296  -11.114 1.00 30.66
1 . .
ATOM 4403 CG2   CG2   . ILE ILE ILE B B 143 143 . 123.503 92.614  -11.338 1.00 22.51
1 . .
ATOM 4404 C     C     . ILE ILE ILE B B 143 143 . 125.069 93.164  -7.700  1.00 12.49
1 . .
ATOM 4405 O     O     . ILE ILE ILE B B 143 143 . 124.924 94.235  -7.082  1.00 13.69
1 . .
ATOM 4406 N     N     . LEU LEU LEU B B 144 144 . 126.085 92.342  -7.441  1.00 12.30
1 . .
ATOM 4407 CA    CA    . LEU LEU LEU B B 144 144 . 127.139 92.753  -6.486  1.00 9.94
1 . .
ATOM 4408 CB    CB    . LEU LEU LEU B B 144 144 . 127.898 91.568  -5.901  1.00 11.05
1 . .
ATOM 4409 CG    CG    . LEU LEU LEU B B 144 144 . 127.319 90.805  -4.708  1.00 12.00
1 . .
ATOM 4410 CD1   CD1   . LEU LEU LEU B B 144 144 . 127.290 91.719  -3.473  1.00 12.26
1 . .
ATOM 4411 CD2   CD2   . LEU LEU LEU B B 144 144 . 125.896 90.344  -5.035  1.00 14.41
1 . .
ATOM 4412 C     C     . LEU LEU LEU B B 144 144 . 128.095 93.666  -7.216  1.00 9.66
1 . .
ATOM 4413 O     O     . LEU LEU LEU B B 144 144 . 128.504 93.399  -8.377  1.00 10.56
1 . .
ATOM 4414 N     N     . PRO PRO PRO B B 145 145 . 128.510 94.758  -6.526  1.00 8.23
1 . .
ATOM 4415 CA    CA    . PRO PRO PRO B B 145 145 . 129.415 95.727  -7.181  1.00 8.22
1 . .
ATOM 4416 CB    CB    . PRO PRO PRO B B 145 145 . 129.205 96.973  -6.273  1.00 8.55
1 . .
ATOM 4417 CG    CG    . PRO PRO PRO B B 145 145 . 129.086 96.327  -4.866  1.00 8.55
1 . .
ATOM 4418 CD    CD    . PRO PRO PRO B B 145 145 . 128.121 95.155  -5.158  1.00 8.99
1 . .
ATOM 4419 C     C     . PRO PRO PRO B B 145 145 . 130.882 95.358  -7.145  1.00 8.69
1 . .
ATOM 4420 O     O     . PRO PRO PRO B B 145 145 . 131.371 94.592  -6.260  1.00 8.53
1 . .
ATOM 4421 N     N     . VAL VAL VAL B B 146 146 . 131.663 95.920  -8.078  1.00 7.11
1 . .
ATOM 4422 CA    CA    . VAL VAL VAL B B 146 146 . 133.109 95.882  -7.895  1.00 6.44
1 . .
ATOM 4423 CB    CB    . VAL VAL VAL B B 146 146 . 133.826 96.238  -9.213  1.00 6.77
1 . .
ATOM 4424 CG1   CG1   . VAL VAL VAL B B 146 146 . 135.311 96.204  -8.987  1.00 10.05
1 . .
ATOM 4425 CG2   CG2   . VAL VAL VAL B B 146 146 . 133.509 95.264  -10.260 1.00 10.76
1 . .
ATOM 4426 C     C     . VAL VAL VAL B B 146 146 . 133.453 96.896  -6.783  1.00 7.12
1 . .
ATOM 4427 O     O     . VAL VAL VAL B B 146 146 . 133.032 98.048  -6.850  1.00 7.52
1 . .
ATOM 4428 N     N     . PRO PRO PRO B B 147 147 . 134.251 96.466  -5.798  1.00 7.20
1 . .
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ATOM 4429 CA    CA    . PRO PRO PRO B B 147 147 . 134.686 97.422  -4.775  1.00 6.60
1 . .
ATOM 4430 CB    CB    . PRO PRO PRO B B 147 147 . 135.023 96.514  -3.566  1.00 7.64
1 . .
ATOM 4431 CG    CG    . PRO PRO PRO B B 147 147 . 135.538 95.181  -4.251  1.00 8.26
1 . .
ATOM 4432 CD    CD    . PRO PRO PRO B B 147 147 . 134.680 95.061  -5.529  1.00 7.42
1 . .
ATOM 4433 C     C     . PRO PRO PRO B B 147 147 . 135.893 98.191  -5.277  1.00 7.90
1 . .
ATOM 4434 O     O     . PRO PRO PRO B B 147 147 . 136.788 97.609  -5.981  1.00 9.28
1 . .
ATOM 4435 N     N     . ALA ALA ALA B B 148 148 . 135.985 99.467  -4.849  1.00 8.67
1 . .
ATOM 4436 CA    CA    . ALA ALA ALA B B 148 148 . 137.120 100.336 -5.181  1.00 6.69
1 . .
ATOM 4437 CB    CB    . ALA ALA ALA B B 148 148 . 136.629 101.563 -5.935  1.00 8.55
1 . .
ATOM 4438 C     C     . ALA ALA ALA B B 148 148 . 137.752 100.699 -3.851  1.00 7.12
1 . .
ATOM 4439 O     O     . ALA ALA ALA B B 148 148 . 137.209 101.478 -3.090  1.00 7.86
1 . .
ATOM 4440 N     N     . PHE PHE PHE B B 149 149 . 138.925 100.154 -3.598  1.00 7.65
1 . .
ATOM 4441 CA    CA    . PHE PHE PHE B B 149 149 . 139.562 100.254 -2.283  1.00 6.88
1 . .
ATOM 4442 CB    CB    . PHE PHE PHE B B 149 149 . 140.346 98.953  -1.945  1.00 8.50
1 . .
ATOM 4443 CG    CG    . PHE PHE PHE B B 149 149 . 139.485 97.681  -1.839  1.00 6.15
1 . .
ATOM 4444 CD1   CD1   . PHE PHE PHE B B 149 149 . 138.653 97.443  -0.741  1.00 6.22
1 . .
ATOM 4445 CE1   CE1   . PHE PHE PHE B B 149 149 . 137.924 96.275  -0.652  1.00 7.55
1 . .
ATOM 4446 CZ    CZ    . PHE PHE PHE B B 149 149 . 137.935 95.320  -1.666  1.00 9.38
1 . .
ATOM 4447 CE2   CE2   . PHE PHE PHE B B 149 149 . 138.761 95.553  -2.820  1.00 7.75
1 . .
ATOM 4448 CD2   CD2   . PHE PHE PHE B B 149 149 . 139.516 96.749  -2.905  1.00 9.74
1 . .
ATOM 4449 C     C     . PHE PHE PHE B B 149 149 . 140.645 101.358 -2.279  1.00 6.77
1 . .
ATOM 4450 O     O     . PHE PHE PHE B B 149 149 . 141.648 101.248 -3.069  1.00 7.31
1 . .
ATOM 4451 N     N     . ASN ASN ASN B B 150 150 . 140.511 102.375 -1.442  1.00 7.61
1 . .
ATOM 4452 CA    CA    . ASN ASN ASN B B 150 150 . 141.488 103.468 -1.416  1.00 8.25
1 . .
ATOM 4453 CB    CB    . ASN ASN ASN B B 150 150 . 140.713 104.661 -0.823  1.00 10.14
1 . .
ATOM 4454 CG    CG    . ASN ASN ASN B B 150 150 . 141.462 105.851 -0.673  1.00 12.96
1 . .
ATOM 4455 OD1   OD1   . ASN ASN ASN B B 150 150 . 140.928 106.795 0.011   1.00 17.38
1 . .
ATOM 4456 ND2   ND2   . ASN ASN ASN B B 150 150 . 142.588 105.970 -1.369  1.00 8.76
1 . .
ATOM 4457 C     C     . ASN ASN ASN B B 150 150 . 142.678 103.092 -0.630  1.00 9.92
1 . .
ATOM 4458 O     O     . ASN ASN ASN B B 150 150 . 142.648 103.232 0.570   1.00 16.44
1 . .
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ATOM 4459 N     N     . VAL VAL VAL B B 151 151 . 143.763 102.705 -1.279  1.00 8.26
1 . .
ATOM 4460 CA    CA    . VAL VAL VAL B B 151 151 . 144.901 102.108 -0.607  1.00 7.82
1 . .
ATOM 4461 CB    CB    . VAL VAL VAL B B 151 151 . 145.382 100.845 -1.299  1.00 8.62
1 . .
ATOM 4462 CG1   CG1   . VAL VAL VAL B B 151 151 . 144.262 99.756  -1.330  1.00 10.44
1 . .
ATOM 4463 CG2   CG2   . VAL VAL VAL B B 151 151 . 145.889 101.182 -2.753  1.00 10.12
1 . .
ATOM 4464 C     C     . VAL VAL VAL B B 151 151 . 146.063 103.051 -0.351  1.00 6.99
1 . .
ATOM 4465 O     O     . VAL VAL VAL B B 151 151 . 146.943 102.729 0.465   1.00 9.46
1 . .
ATOM 4466 N     N     . ILE ILE ILE B B 152 152 . 146.123 104.231 -0.992  1.00 8.48
1 . .
ATOM 4467 CA    CA    . ILE ILE ILE B B 152 152 . 147.048 105.263 -0.609  1.00 7.67
1 . .
ATOM 4468 CB    CB    . ILE ILE ILE B B 152 152 . 148.182 105.457 -1.650  1.00 8.82
1 . .
ATOM 4469 CG1   CG1   . ILE ILE ILE B B 152 152 . 149.077 104.215 -1.651  1.00 12.04
1 . .
ATOM 4470 CD    CD    . ILE ILE ILE B B 152 152 . 150.329 104.375 -2.518  1.00 12.94
1 . .
ATOM 4471 CG2   CG2   . ILE ILE ILE B B 152 152 . 148.969 106.823 -1.272  1.00 10.68
1 . .
ATOM 4472 C     C     . ILE ILE ILE B B 152 152 . 146.199 106.544 -0.440  1.00 9.79
1 . .
ATOM 4473 O     O     . ILE ILE ILE B B 152 152 . 145.383 106.911 -1.299  1.00 11.93
1 . .
ATOM 4474 N     N     . ASN ASN ASN B B 153 153 . 146.353 107.144 0.721   1.00 10.58
1 . .
ATOM 4475 CA    CA    . ASN ASN ASN B B 153 153 . 145.488 108.302 1.021   1.00 12.62
1 . .
ATOM 4476 CB    CB    . ASN ASN ASN B B 153 153 . 144.814 108.179 2.423   1.00 13.37
1 . .
ATOM 4477 CG    CG    . ASN ASN ASN B B 153 153 . 143.807 107.025 2.525   1.00 14.67
1 . .
ATOM 4478 OD1   OD1   . ASN ASN ASN B B 153 153 . 143.496 106.238 1.531   1.00 17.30
1 . .
ATOM 4479 ND2   ND2   . ASN ASN ASN B B 153 153 . 143.266 106.940 3.670   1.00 6.34
1 . .
ATOM 4480 C     C     . ASN ASN ASN B B 153 153 . 146.354 109.561 0.943   1.00 12.62
1 . .
ATOM 4481 O     O     . ASN ASN ASN B B 153 153 . 147.515 109.579 1.407   1.00 14.12
1 . .
ATOM 4482 N     N     . GLY GLY GLY B B 154 154 . 145.800 110.627 0.396   1.00 10.48
1 . .
ATOM 4483 CA    CA    . GLY GLY GLY B B 154 154 . 146.446 111.915 0.150   1.00 8.97
1 . .
ATOM 4484 C     C     . GLY GLY GLY B B 154 154 . 145.406 113.049 0.390   1.00 9.34
1 . .
ATOM 4485 O     O     . GLY GLY GLY B B 154 154 . 144.352 112.845 0.993   1.00 9.63
1 . .
ATOM 4486 N     N     . GLY GLY GLY B B 155 155 . 145.729 114.260 -0.055  1.00 10.11
1 . .
ATOM 4487 CA    CA    . GLY GLY GLY B B 155 155 . 144.759 115.402 -0.021  1.00 11.82
1 . .
ATOM 4488 C     C     . GLY GLY GLY B B 155 155 . 144.507 115.788 1.414   1.00 17.52
1 . .
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ATOM 4489 O     O     . GLY GLY GLY B B 155 155 . 145.393 115.827 2.244   1.00 19.19
1 . .
ATOM 4490 N     N     . SER SER SER B B 156 156 . 143.210 115.980 1.710   1.00 19.48
1 . .
ATOM 4491 CA    CA    . SER SER SER B B 156 156 . 142.617 116.244 3.016   1.00 18.53
1 . .
ATOM 4492 CB    CB    . SER SER SER B B 156 156 . 141.292 116.965 2.729   1.00 20.77
1 . .
ATOM 4493 OG    OG    . SER SER SER B B 156 156 . 141.481 118.259 1.983   1.00 20.55
1 . .
ATOM 4494 C     C     . SER SER SER B B 156 156 . 142.346 115.005 3.881   1.00 20.09
1 . .
ATOM 4495 O     O     . SER SER SER B B 156 156 . 141.812 115.153 5.081   1.00 19.72
1 . .
ATOM 4496 N     N     . HIS HIS HIS B B 157 157 . 142.668 113.802 3.310   1.00 16.83
1 . .
ATOM 4497 CA    CA    . HIS HIS HIS B B 157 157 . 142.537 112.534 4.242   1.00 16.13
1 . .
ATOM 4498 CB    CB    . HIS HIS HIS B B 157 157 . 141.954 111.395 3.443   1.00 16.05
1 . .
ATOM 4499 CG    CG    . HIS HIS HIS B B 157 157 . 140.569 111.680 2.885   1.00 17.66
1 . .
ATOM 4500 ND1   ND1   . HIS HIS HIS B B 157 157 . 139.941 110.877 1.927   1.00 18.56
1 . .
ATOM 4501 CE1   CE1   . HIS HIS HIS B B 157 157 . 138.763 111.447 1.626   1.00 19.17
1 . .
ATOM 4502 NE2   NE2   . HIS HIS HIS B B 157 157 . 138.642 112.604 2.322   1.00 14.42
1 . .
ATOM 4503 CD2   CD2   . HIS HIS HIS B B 157 157 . 139.769 112.777 3.052   1.00 17.78
1 . .
ATOM 4504 C     C     . HIS HIS HIS B B 157 157 . 143.768 111.996 5.034   1.00 18.43
1 . .
ATOM 4505 O     O     . HIS HIS HIS B B 157 157 . 143.695 111.008 5.888   1.00 15.77
1 . .
ATOM 4506 N     N     . ALA ALA ALA B B 158 158 . 144.917 112.637 4.774   1.00 19.22
1 . .
ATOM 4507 CA    CA    . ALA ALA ALA B B 158 158 . 146.204 112.119 5.259   1.00 19.25
1 . .
ATOM 4508 CB    CB    . ALA ALA ALA B B 158 158 . 146.777 110.879 4.388   1.00 21.05
1 . .
ATOM 4509 C     C     . ALA ALA ALA B B 158 158 . 147.270 113.282 5.465   1.00 18.42
1 . .
ATOM 4510 O     O     . ALA ALA ALA B B 158 158 . 147.191 114.346 4.936   1.00 19.70
1 . .
ATOM 4511 N     N     . GLY GLY GLY B B 159 159 . 148.179 113.000 6.349   1.00 16.64
1 . .
ATOM 4512 CA    CA    . GLY GLY GLY B B 159 159 . 149.373 113.798 6.611   1.00 16.00
1 . .
ATOM 4513 C     C     . GLY GLY GLY B B 159 159 . 150.521 113.350 5.755   1.00 15.93
1 . .
ATOM 4514 O     O     . GLY GLY GLY B B 159 159 . 151.328 112.481 6.134   1.00 16.13
1 . .
ATOM 4515 N     N     . ASN ASN ASN B B 160 160 . 150.615 113.986 4.587   1.00 14.27
1 . .
ATOM 4516 CA    CA    . ASN ASN ASN B B 160 160 . 151.659 113.817 3.593   1.00 13.06
1 . .
ATOM 4517 CB    CB    . ASN ASN ASN B B 160 160 . 151.647 112.442 2.875   1.00 13.75
1 . .
ATOM 4518 CG    CG    . ASN ASN ASN B B 160 160 . 150.329 112.095 2.169   1.00 14.58
1 . .
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ATOM 4519 OD1   OD1   . ASN ASN ASN B B 160 160 . 149.499 112.971 1.904   1.00 17.84
1 . .
ATOM 4520 ND2   ND2   . ASN ASN ASN B B 160 160 . 150.166 110.807 1.873   1.00 12.92
1 . .
ATOM 4521 C     C     . ASN ASN ASN B B 160 160 . 151.527 115.004 2.620   1.00 10.83
1 . .
ATOM 4522 O     O     . ASN ASN ASN B B 160 160 . 150.694 115.907 2.778   1.00 13.50
1 . .
ATOM 4523 N     N     . LYS LYS LYS B B 161 161 . 152.382 114.992 1.604   1.00 13.68
1 . .
ATOM 4524 CA    CA    . LYS LYS LYS B B 161 161 . 152.416 116.083 0.633   1.00 14.58
1 . .
ATOM 4525 CB    CB    . LYS LYS LYS B B 161 161 . 153.852 116.367 0.234   1.00 18.79
1 . .
ATOM 4526 CG    CG    . LYS LYS LYS B B 161 161 . 154.618 116.819 1.480   1.00 21.57
1 . .
ATOM 4527 CD    CD    . LYS LYS LYS B B 161 161 . 155.943 117.578 1.145   1.00 31.02
1 . .
ATOM 4528 CE    CE    . LYS LYS LYS B B 161 161 . 156.319 118.824 2.137   1.00 35.26
1 . .
ATOM 4529 NZ    NZ    . LYS LYS LYS B B 161 161 . 155.432 120.094 2.462   1.00 22.50
1 . .
ATOM 4530 C     C     . LYS LYS LYS B B 161 161 . 151.593 115.826 -0.628  1.00 13.57
1 . .
ATOM 4531 O     O     . LYS LYS LYS B B 161 161 . 151.407 116.732 -1.475  1.00 15.67
1 . .
ATOM 4532 N     N     . LEU LEU LEU B B 162 162 . 151.020 114.635 -0.711  1.00 11.24
1 . .
ATOM 4533 CA    CA    . LEU LEU LEU B B 162 162 . 150.310 114.246 -1.923  1.00 13.49
1 . .
ATOM 4534 CB    CB    . LEU LEU LEU B B 162 162 . 149.885 112.811 -1.749  1.00 16.20
1 . .
ATOM 4535 CG    CG    . LEU LEU LEU B B 162 162 . 149.730 111.867 -2.840  1.00 19.63
1 . .
ATOM 4536 CD1   CD1   . LEU LEU LEU B B 162 162 . 151.017 112.013 -3.727  1.00 19.95
1 . .
ATOM 4537 CD2   CD2   . LEU LEU LEU B B 162 162 . 149.724 110.426 -2.174  1.00 15.57
1 . .
ATOM 4538 C     C     . LEU LEU LEU B B 162 162 . 149.056 115.080 -2.078  1.00 11.17
1 . .
ATOM 4539 O     O     . LEU LEU LEU B B 162 162 . 148.238 115.134 -1.150  1.00 12.40
1 . .
ATOM 4540 N     N     . ALA ALA ALA B B 163 163 . 148.829 115.748 -3.220  1.00 11.79
1 . .
ATOM 4541 CA    CA    . ALA ALA ALA B B 163 163 . 147.677 116.626 -3.365  1.00 11.32
1 . .
ATOM 4542 CB    CB    . ALA ALA ALA B B 163 163 . 147.965 117.601 -4.468  1.00 13.44
1 . .
ATOM 4543 C     C     . ALA ALA ALA B B 163 163 . 146.450 115.831 -3.691  1.00 11.36
1 . .
ATOM 4544 O     O     . ALA ALA ALA B B 163 163 . 145.374 116.210 -3.237  1.00 10.32
1 . .
ATOM 4545 N     N     . MET MET MET B B 164 164 . 146.575 114.762 -4.510  1.00 9.19
1 . .
ATOM 4546 CA    CA    . MET MET MET B B 164 164 . 145.378 114.026 -4.922  1.00 8.13
1 . .
ATOM 4547 CB    CB    . MET MET MET B B 164 164 . 145.665 113.286 -6.208  1.00 9.60
1 . .
ATOM 4548 CG    CG    . MET MET MET B B 164 164 . 146.073 114.337 -7.279  1.00 9.43
1 . .
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ATOM 4549 SD    SD    . MET MET MET B B 164 164 . 146.406 113.513 -8.879  1.00 11.42
1 . .
ATOM 4550 CE    CE    . MET MET MET B B 164 164 . 146.856 114.951 -9.887  1.00 10.37
1 . .
ATOM 4551 C     C     . MET MET MET B B 164 164 . 144.944 113.109 -3.760  1.00 7.18
1 . .
ATOM 4552 O     O     . MET MET MET B B 164 164 . 145.747 112.621 -2.971  1.00 9.64
1 . .
ATOM 4553 N     N     . GLN GLN GLN B B 165 165 . 143.632 112.962 -3.626  1.00 6.66
1 . .
ATOM 4554 CA    CA    . GLN GLN GLN B B 165 165 . 143.104 112.435 -2.385  1.00 7.54
1 . .
ATOM 4555 CB    CB    . GLN GLN GLN B B 165 165 . 141.641 112.947 -2.268  1.00 6.93
1 . .
ATOM 4556 CG    CG    . GLN GLN GLN B B 165 165 . 141.022 112.646 -0.929  1.00 8.42
1 . .
ATOM 4557 CD    CD    . GLN GLN GLN B B 165 165 . 139.609 113.243 -0.894  1.00 8.33
1 . .
ATOM 4558 OE1   OE1   . GLN GLN GLN B B 165 165 . 139.440 114.423 -0.594  1.00 9.19
1 . .
ATOM 4559 NE2   NE2   . GLN GLN GLN B B 165 165 . 138.613 112.481 -1.336  1.00 11.36
1 . .
ATOM 4560 C     C     . GLN GLN GLN B B 165 165 . 143.102 110.919 -2.282  1.00 7.13
1 . .
ATOM 4561 O     O     . GLN GLN GLN B B 165 165 . 143.358 110.362 -1.179  1.00 7.99
1 . .
ATOM 4562 N     N     . GLU GLU GLU B B 166 166 . 142.853 110.225 -3.390  1.00 7.77
1 . .
ATOM 4563 CA    CA    . GLU GLU GLU B B 166 166 . 142.622 108.749 -3.269  1.00 8.58
1 . .
ATOM 4564 CB    CB    . GLU GLU GLU B B 166 166 . 141.091 108.414 -3.291  1.00 8.45
1 . .
ATOM 4565 CG    CG    . GLU GLU GLU B B 166 166 . 140.342 109.165 -2.203  1.00 8.02
1 . .
ATOM 4566 CD    CD    . GLU GLU GLU B B 166 166 . 138.867 108.919 -2.208  1.00 9.52
1 . .
ATOM 4567 OE1   OE1   . GLU GLU GLU B B 166 166 . 138.420 108.052 -2.943  1.00 9.82
1 . .
ATOM 4568 OE2   OE2   . GLU GLU GLU B B 166 166 . 138.140 109.592 -1.452  1.00 12.41
1 . .
ATOM 4569 C     C     . GLU GLU GLU B B 166 166 . 143.217 108.030 -4.444  1.00 8.63
1 . .
ATOM 4570 O     O     . GLU GLU GLU B B 166 166 . 143.017 108.427 -5.595  1.00 7.84
1 . .
ATOM 4571 N     N     . PHE PHE PHE B B 167 167 . 143.882 106.908 -4.176  1.00 8.38
1 . .
ATOM 4572 CA    CA    . PHE PHE PHE B B 167 167 . 144.436 106.004 -5.178  1.00 7.40
1 . .
ATOM 4573 CB    CB    . PHE PHE PHE B B 167 167 . 145.965 106.014 -5.109  1.00 7.88
1 . .
ATOM 4574 CG    CG    . PHE PHE PHE B B 167 167 . 146.530 107.363 -5.372  1.00 8.50
1 . .
ATOM 4575 CD1   CD1   . PHE PHE PHE B B 167 167 . 146.641 108.299 -4.336  1.00 10.34
1 . .
ATOM 4576 CE1   CE1   . PHE PHE PHE B B 167 167 . 147.128 109.608 -4.628  1.00 13.11
1 . .
ATOM 4577 CZ    CZ    . PHE PHE PHE B B 167 167 . 147.565 109.952 -5.892  1.00 11.30
1 . .
ATOM 4578 CE2   CE2   . PHE PHE PHE B B 167 167 . 147.479 108.999 -6.934  1.00 13.17
1 . .
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ATOM 4579 CD2   CD2   . PHE PHE PHE B B 167 167 . 147.000 107.695 -6.634  1.00 8.82
1 . .
ATOM 4580 C     C     . PHE PHE PHE B B 167 167 . 143.858 104.625 -4.895  1.00 7.36
1 . .
ATOM 4581 O     O     . PHE PHE PHE B B 167 167 . 144.155 104.033 -3.838  1.00 8.43
1 . .
ATOM 4582 N     N     . MET MET MET B B 168 168 . 142.885 104.229 -5.722  1.00 7.76
1 . .
ATOM 4583 CA    CA    . MET MET MET B B 168 168 . 142.084 103.057 -5.456  1.00 7.37
1 . .
ATOM 4584 CB    CB    . MET MET MET B B 168 168 . 140.571 103.396 -5.663  1.00 8.26
1 . .
ATOM 4585 CG    CG    . MET MET MET B B 168 168 . 140.011 104.327 -4.589  1.00 10.44
1 . .
ATOM 4586 SD    SD    . MET MET MET B B 168 168 . 138.341 104.901 -5.042  1.00 10.84
1 . .
ATOM 4587 CE    CE    . MET MET MET B B 168 168 . 138.668 106.349 -6.090  1.00 11.06
1 . .
ATOM 4588 C     C     . MET MET MET B B 168 168 . 142.369 101.899 -6.354  1.00 7.19
1 . .
ATOM 4589 O     O     . MET MET MET B B 168 168 . 142.793 102.099 -7.494  1.00 8.00
1 . .
ATOM 4590 N     N     . ILE ILE ILE B B 169 169 . 142.190 100.675 -5.818  1.00 7.48
1 . .
ATOM 4591 CA    CA    . ILE ILE ILE B B 169 169 . 142.240 99.444  -6.632  1.00 7.69
1 . .
ATOM 4592 CB    CB    . ILE ILE ILE B B 169 169 . 143.267 98.450  -6.062  1.00 7.62
1 . .
ATOM 4593 CG1   CG1   . ILE ILE ILE B B 169 169 . 142.933 98.019  -4.633  1.00 8.49
1 . .
ATOM 4594 CD    CD    . ILE ILE ILE B B 169 169 . 143.896 96.913  -4.147  1.00 10.94
1 . .
ATOM 4595 CG2   CG2   . ILE ILE ILE B B 169 169 . 144.714 99.012  -6.149  1.00 8.08
1 . .
ATOM 4596 C     C     . ILE ILE ILE B B 169 169 . 140.880 98.817  -6.811  1.00 7.70
1 . .
ATOM 4597 O     O     . ILE ILE ILE B B 169 169 . 140.084 98.755  -5.867  1.00 9.10
1 . .
ATOM 4598 N     N     . LEU LEU LEU B B 170 170 . 140.617 98.374  -8.046  1.00 7.05
1 . .
ATOM 4599 CA    CA    . LEU LEU LEU B B 170 170 . 139.323 97.796  -8.372  1.00 7.65
1 . .
ATOM 4600 CB    CB    . LEU LEU LEU B B 170 170 . 138.605 98.616  -9.440  1.00 8.35
1 . .
ATOM 4601 CG    CG    . LEU LEU LEU B B 170 170 . 137.935 99.925  -8.996  1.00 8.27
1 . .
ATOM 4602 CD1   CD1   . LEU LEU LEU B B 170 170 . 138.985 101.014 -8.751  1.00 12.04
1 . .
ATOM 4603 CD2   CD2   . LEU LEU LEU B B 170 170 . 136.972 100.468 -10.015 1.00 12.44
1 . .
ATOM 4604 C     C     . LEU LEU LEU B B 170 170 . 139.537 96.400  -8.930  1.00 8.89
1 . .
ATOM 4605 O     O     . LEU LEU LEU B B 170 170 . 140.048 96.271  -10.052 1.00 8.72
1 . .
ATOM 4606 N     N     . PRO PRO PRO B B 171 171 . 139.147 95.328  -8.233  1.00 8.85
1 . .
ATOM 4607 CA    CA    . PRO PRO PRO B B 171 171 . 139.368 93.958  -8.756  1.00 8.90
1 . .
ATOM 4608 CB    CB    . PRO PRO PRO B B 171 171 . 139.357 93.087  -7.483  1.00 9.65
1 . .
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ATOM 4609 CG    CG    . PRO PRO PRO B B 171 171 . 139.417 94.014  -6.329  1.00 9.43
1 . .
ATOM 4610 CD    CD    . PRO PRO PRO B B 171 171 . 138.750 95.300  -6.805  1.00 8.55
1 . .
ATOM 4611 C     C     . PRO PRO PRO B B 171 171 . 138.276 93.539  -9.768  1.00 9.26
1 . .
ATOM 4612 O     O     . PRO PRO PRO B B 171 171 . 137.366 92.687  -9.508  1.00 9.81
1 . .
ATOM 4613 N     N     . VAL VAL VAL B B 172 172 . 138.300 94.183  -10.934 1.00 9.78
1 . .
ATOM 4614 CA    CA    . VAL VAL VAL B B 172 172 . 137.295 93.959  -11.958 1.00 10.46
1 . .
ATOM 4615 CB    CB    . VAL VAL VAL B B 172 172 . 137.526 95.001  -13.136 1.00 11.78
1 . .
ATOM 4616 CG1   CG1   . VAL VAL VAL B B 172 172 . 137.205 96.404  -12.641 1.00 11.88
1 . .
ATOM 4617 CG2   CG2   . VAL VAL VAL B B 172 172 . 139.018 94.953  -13.708 1.00 13.23
1 . .
ATOM 4618 C     C     . VAL VAL VAL B B 172 172 . 137.337 92.511  -12.510 1.00 9.64
1 . .
ATOM 4619 O     O     . VAL VAL VAL B B 172 172 . 136.323 92.062  -13.019 1.00 11.56
1 . .
ATOM 4620 N     N     . GLY GLY GLY B B 173 173 . 138.490 91.875  -12.431 1.00 11.31
1 . .
ATOM 4621 CA    CA    . GLY GLY GLY B B 173 173 . 138.597 90.472  -12.892 1.00 11.71
1 . .
ATOM 4622 C     C     . GLY GLY GLY B B 173 173 . 138.347 89.422  -11.832 1.00 13.77
1 . .
ATOM 4623 O     O     . GLY GLY GLY B B 173 173 . 138.579 88.230  -12.110 1.00 14.95
1 . .
ATOM 4624 N     N     . ALA ALA ALA B B 174 174 . 137.916 89.812  -10.623 1.00 13.73
1 . .
ATOM 4625 CA    CA    . ALA ALA ALA B B 174 174 . 137.618 88.798  -9.588  1.00 12.68
1 . .
ATOM 4626 CB    CB    . ALA ALA ALA B B 174 174 . 137.285 89.503  -8.267  1.00 10.96
1 . .
ATOM 4627 C     C     . ALA ALA ALA B B 174 174 . 136.448 87.929  -9.993  1.00 12.84
1 . .
ATOM 4628 O     O     . ALA ALA ALA B B 174 174 . 135.610 88.329  -10.788 1.00 12.89
1 . .
ATOM 4629 N     N     . GLU GLU GLU B B 175 175 . 136.355 86.754  -9.368  1.00 14.00
1 . .
ATOM 4630 CA    CA    . GLU GLU GLU B B 175 175 . 135.260 85.787  -9.679  1.00 16.00
1 . .
ATOM 4631 CB    CB    . GLU GLU GLU B B 175 175 . 135.719 84.402  -9.216  1.00 17.81
1 . .
ATOM 4632 CG    CG    . GLU GLU GLU B B 175 175 . 136.918 83.901  -10.108 1.00 27.14
1 . .
ATOM 4633 CD    CD    . GLU GLU GLU B B 175 175 . 137.375 82.450  -9.828  1.00 38.93
1 . .
ATOM 4634 OE1   OE1   . GLU GLU GLU B B 175 175 . 137.048 81.870  -8.767  1.00 43.04
1 . .
ATOM 4635 OE2   OE2   . GLU GLU GLU B B 175 175 . 138.076 81.897  -10.705 1.00 43.87
1 . .
ATOM 4636 C     C     . GLU GLU GLU B B 175 175 . 133.924 86.078  -9.046  1.00 13.85
1 . .
ATOM 4637 O     O     . GLU GLU GLU B B 175 175 . 132.856 85.604  -9.529  1.00 16.51
1 . .
ATOM 4638 N     N     . SER SER SER B B 176 176 . 133.947 86.883  -7.976  1.00 11.18
1 . .
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ATOM 4639 CA    CA    . SER SER SER B B 176 176 . 132.791 87.128  -7.115  1.00 11.61
1 . .
ATOM 4640 CB    CB    . SER SER SER B B 176 176 . 132.487 85.907  -6.219  1.00 11.39
1 . .
ATOM 4641 OG    OG    . SER SER SER B B 176 176 . 133.528 85.588  -5.310  1.00 12.08
1 . .
ATOM 4642 C     C     . SER SER SER B B 176 176 . 133.176 88.275  -6.174  1.00 9.97
1 . .
ATOM 4643 O     O     . SER SER SER B B 176 176 . 134.347 88.710  -6.148  1.00 9.53
1 . .
ATOM 4644 N     N     . PHE PHE PHE B B 177 177 . 132.195 88.736  -5.405  1.00 11.15
1 . .
ATOM 4645 CA    CA    . PHE PHE PHE B B 177 177 . 132.495 89.787  -4.450  1.00 9.95
1 . .
ATOM 4646 CB    CB    . PHE PHE PHE B B 177 177 . 131.224 90.373  -3.826  1.00 10.42
1 . .
ATOM 4647 CG    CG    . PHE PHE PHE B B 177 177 . 131.545 91.591  -3.028  1.00 8.91
1 . .
ATOM 4648 CD1   CD1   . PHE PHE PHE B B 177 177 . 131.668 92.794  -3.700  1.00 8.08
1 . .
ATOM 4649 CE1   CE1   . PHE PHE PHE B B 177 177 . 132.113 93.939  -3.043  1.00 9.68
1 . .
ATOM 4650 CZ    CZ    . PHE PHE PHE B B 177 177 . 132.454 93.883  -1.698  1.00 7.46
1 . .
ATOM 4651 CE2   CE2   . PHE PHE PHE B B 177 177 . 132.319 92.708  -1.016  1.00 8.59
1 . .
ATOM 4652 CD2   CD2   . PHE PHE PHE B B 177 177 . 131.894 91.525  -1.666  1.00 9.57
1 . .
ATOM 4653 C     C     . PHE PHE PHE B B 177 177 . 133.455 89.281  -3.353  1.00 10.41
1 . .
ATOM 4654 O     O     . PHE PHE PHE B B 177 177 . 134.450 89.958  -3.016  1.00 9.35
1 . .
ATOM 4655 N     N     . ARG ARG ARG B B 178 178 . 133.235 88.052  -2.836  1.00 9.76
1 . .
ATOM 4656 CA    CA    . ARG ARG ARG B B 178 178 . 134.097 87.523  -1.825  1.00 9.41
1 . .
ATOM 4657 CB    CB    . ARG ARG ARG B B 178 178 . 133.499 86.179  -1.307  1.00 12.51
1 . .
ATOM 4658 CG    CG    . ARG ARG ARG B B 178 178 . 132.293 86.552  -0.290  1.00 21.65
1 . .
ATOM 4659 CD    CD    . ARG ARG ARG B B 178 178 . 130.970 85.724  -0.047  1.00 25.00
1 . .
ATOM 4660 NE    NE    . ARG ARG ARG B B 178 178 . 130.588 85.091  -1.303  1.00 32.64
1 . .
ATOM 4661 CZ    CZ    . ARG ARG ARG B B 178 178 . 129.905 83.944  -1.418  1.00 35.46
1 . .
ATOM 4662 NH1   NH1   . ARG ARG ARG B B 178 178 . 129.627 83.475  -2.630  1.00 40.08
1 . .
ATOM 4663 NH2   NH2   . ARG ARG ARG B B 178 178 . 129.509 83.275  -0.337  1.00 32.20
1 . .
ATOM 4664 C     C     . ARG ARG ARG B B 178 178 . 135.539 87.412  -2.388  1.00 8.98
1 . .
ATOM 4665 O     O     . ARG ARG ARG B B 178 178 . 136.541 87.681  -1.708  1.00 8.45
1 . .
ATOM 4666 N     N     . ASP ASP ASP B B 179 179 . 135.634 87.016  -3.674  1.00 8.44
1 . .
ATOM 4667 CA    CA    . ASP ASP ASP B B 179 179 . 136.999 86.931  -4.256  1.00 9.02
1 . .
ATOM 4668 CB    CB    . ASP ASP ASP B B 179 179 . 136.918 86.171  -5.612  1.00 11.37
1 . .
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ATOM 4669 CG    CG    . ASP ASP ASP B B 179 179 . 138.262 85.846  -6.225  1.00 15.97
1 . .
ATOM 4670 OD1   OD1   . ASP ASP ASP B B 179 179 . 138.392 86.186  -7.446  1.00 19.51
1 . .
ATOM 4671 OD2   OD2   . ASP ASP ASP B B 179 179 . 139.132 85.225  -5.580  1.00 19.34
1 . .
ATOM 4672 C     C     . ASP ASP ASP B B 179 179 . 137.604 88.321  -4.433  1.00 7.74
1 . .
ATOM 4673 O     O     . ASP ASP ASP B B 179 179 . 138.826 88.501  -4.231  1.00 8.42
1 . .
ATOM 4674 N     N     . ALA ALA ALA B B 180 180 . 136.761 89.283  -4.806  1.00 9.11
1 . .
ATOM 4675 CA    CA    . ALA ALA ALA B B 180 180 . 137.257 90.676  -4.884  1.00 8.26
1 . .
ATOM 4676 CB    CB    . ALA ALA ALA B B 180 180 . 136.213 91.574  -5.338  1.00 9.48
1 . .
ATOM 4677 C     C     . ALA ALA ALA B B 180 180 . 137.821 91.170  -3.568  1.00 7.86
1 . .
ATOM 4678 O     O     . ALA ALA ALA B B 180 180 . 138.840 91.904  -3.511  1.00 9.04
1 . .
ATOM 4679 N     N     . MET MET MET B B 181 181 . 137.174 90.746  -2.449  1.00 8.37
1 . .
ATOM 4680 CA    CA    . MET MET MET B B 181 181 . 137.737 91.061  -1.123  1.00 8.69
1 . .
ATOM 4681 CB    CB    . MET MET MET B B 181 181 . 136.793 90.612  0.007   1.00 9.89
1 . .
ATOM 4682 CG    CG    . MET MET MET B B 181 181 . 135.471 91.425  0.041   1.00 6.80
1 . .
ATOM 4683 SD    SD    . MET MET MET B B 181 181 . 135.657 93.241  0.089   1.00 9.52
1 . .
ATOM 4684 CE    CE    . MET MET MET B B 181 181 . 136.816 93.430  1.468   1.00 9.48
1 . .
ATOM 4685 C     C     . MET MET MET B B 181 181 . 139.120 90.496  -0.881  1.00 8.28
1 . .
ATOM 4686 O     O     . MET MET MET B B 181 181 . 139.946 91.154  -0.322  1.00 8.68
1 . .
ATOM 4687 N     N     . ARG ARG ARG B B 182 182 . 139.316 89.233  -1.288  1.00 8.21
1 . .
ATOM 4688 CA    CA    . ARG ARG ARG B B 182 182 . 140.615 88.636  -1.076  1.00 8.93
1 . .
ATOM 4689 CB    CB    . ARG ARG ARG B B 182 182 . 140.547 87.142  -1.441  1.00 9.38
1 . .
ATOM 4690 CG    CG    . ARG ARG ARG B B 182 182 . 141.872 86.519  -1.217  1.00 12.16
1 . .
ATOM 4691 CD    CD    . ARG ARG ARG B B 182 182 . 141.744 84.947  -1.357  1.00 17.40
1 . .
ATOM 4692 NE    NE    . ARG ARG ARG B B 182 182 . 141.401 84.696  -2.735  1.00 22.11
1 . .
ATOM 4693 CZ    CZ    . ARG ARG ARG B B 182 182 . 142.314 84.719  -3.724  1.00 25.26
1 . .
ATOM 4694 NH1   NH1   . ARG ARG ARG B B 182 182 . 143.594 84.906  -3.413  1.00 26.90
1 . .
ATOM 4695 NH2   NH2   . ARG ARG ARG B B 182 182 . 141.974 84.529  -5.006  1.00 27.24
1 . .
ATOM 4696 C     C     . ARG ARG ARG B B 182 182 . 141.683 89.336  -1.932  1.00 9.04
1 . .
ATOM 4697 O     O     . ARG ARG ARG B B 182 182 . 142.786 89.611  -1.452  1.00 8.65
1 . .
ATOM 4698 N     N     . LEU LEU LEU B B 183 183 . 141.348 89.622  -3.193  1.00 7.52
1 . .
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ATOM 4699 CA    CA    . LEU LEU LEU B B 183 183 . 142.312 90.255  -4.087  1.00 8.57
1 . .
ATOM 4700 CB    CB    . LEU LEU LEU B B 183 183 . 141.684 90.425  -5.468  1.00 9.32
1 . .
ATOM 4701 CG    CG    . LEU LEU LEU B B 183 183 . 142.048 89.324  -6.453  1.00 11.36
1 . .
ATOM 4702 CD1   CD1   . LEU LEU LEU B B 183 183 . 141.361 89.585  -7.846  1.00 12.55
1 . .
ATOM 4703 CD2   CD2   . LEU LEU LEU B B 183 183 . 141.748 87.929  -5.881  1.00 12.97
1 . .
ATOM 4704 C     C     . LEU LEU LEU B B 183 183 . 142.677 91.669  -3.511  1.00 9.25
1 . .
ATOM 4705 O     O     . LEU LEU LEU B B 183 183 . 143.841 92.084  -3.457  1.00 8.74
1 . .
ATOM 4706 N     N     . GLY GLY GLY B B 184 184 . 141.635 92.422  -3.083  1.00 8.42
1 . .
ATOM 4707 CA    CA    . GLY GLY GLY B B 184 184 . 141.936 93.794  -2.493  1.00 9.49
1 . .
ATOM 4708 C     C     . GLY GLY GLY B B 184 184 . 142.794 93.701  -1.236  1.00 8.75
1 . .
ATOM 4709 O     O     . GLY GLY GLY B B 184 184 . 143.763 94.423  -1.052  1.00 8.29
1 . .
ATOM 4710 N     N     . ALA ALA ALA B B 185 185 . 142.447 92.747  -0.348  1.00 8.77
1 . .
ATOM 4711 CA    CA    . ALA ALA ALA B B 185 185 . 143.206 92.623  0.883   1.00 8.14
1 . .
ATOM 4712 CB    CB    . ALA ALA ALA B B 185 185 . 142.520 91.635  1.878   1.00 8.62
1 . .
ATOM 4713 C     C     . ALA ALA ALA B B 185 185 . 144.627 92.129  0.602   1.00 8.89
1 . .
ATOM 4714 O     O     . ALA ALA ALA B B 185 185 . 145.593 92.628  1.213   1.00 9.11
1 . .
ATOM 4715 N     N     . GLU GLU GLU B B 186 186 . 144.761 91.150  -0.296  1.00 7.90
1 . .
ATOM 4716 CA    CA    . GLU GLU GLU B B 186 186 . 146.161 90.698  -0.613  1.00 9.15
1 . .
ATOM 4717 CB    CB    . GLU GLU GLU B B 186 186 . 146.119 89.501  -1.524  1.00 10.73
1 . .
ATOM 4718 CG    CG    . GLU GLU GLU B B 186 186 . 145.664 88.190  -0.784  1.00 9.25
1 . .
ATOM 4719 CD    CD    . GLU GLU GLU B B 186 186 . 145.696 86.981  -1.675  1.00 10.51
1 . .
ATOM 4720 OE1   OE1   . GLU GLU GLU B B 186 186 . 146.156 87.025  -2.847  1.00 15.52
1 . .
ATOM 4721 OE2   OE2   . GLU GLU GLU B B 186 186 . 145.122 85.978  -1.247  1.00 11.99
1 . .
ATOM 4722 C     C     . GLU GLU GLU B B 186 186 . 147.006 91.797  -1.244  1.00 7.47
1 . .
ATOM 4723 O     O     . GLU GLU GLU B B 186 186 . 148.169 92.002  -0.843  1.00 9.97
1 . .
ATOM 4724 N     N     . VAL VAL VAL B B 187 187 . 146.370 92.596  -2.111  1.00 7.97
1 . .
ATOM 4725 CA    CA    . VAL VAL VAL B B 187 187 . 147.148 93.698  -2.686  1.00 8.63
1 . .
ATOM 4726 CB    CB    . VAL VAL VAL B B 187 187 . 146.437 94.355  -3.889  1.00 7.62
1 . .
ATOM 4727 CG1   CG1   . VAL VAL VAL B B 187 187 . 147.274 95.616  -4.319  1.00 11.13
1 . .
ATOM 4728 CG2   CG2   . VAL VAL VAL B B 187 187 . 146.324 93.346  -5.051  1.00 9.73
1 . .
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ATOM 4729 C     C     . VAL VAL VAL B B 187 187 . 147.540 94.772  -1.621  1.00 8.43
1 . .
ATOM 4730 O     O     . VAL VAL VAL B B 187 187 . 148.618 95.331  -1.539  1.00 8.99
1 . .
ATOM 4731 N     N     . TYR TYR TYR B B 188 188 . 146.555 95.083  -0.766  1.00 6.95
1 . .
ATOM 4732 CA    CA    . TYR TYR TYR B B 188 188 . 146.786 96.012  0.319   1.00 7.72
1 . .
ATOM 4733 CB    CB    . TYR TYR TYR B B 188 188 . 145.449 96.173  1.088   1.00 9.79
1 . .
ATOM 4734 CG    CG    . TYR TYR TYR B B 188 188 . 145.540 97.150  2.262   1.00 7.63
1 . .
ATOM 4735 CD1   CD1   . TYR TYR TYR B B 188 188 . 145.558 98.532  2.088   1.00 7.79
1 . .
ATOM 4736 CE1   CE1   . TYR TYR TYR B B 188 188 . 145.632 99.393  3.163   1.00 8.98
1 . .
ATOM 4737 CZ    CZ    . TYR TYR TYR B B 188 188 . 145.779 98.896  4.459   1.00 6.67
1 . .
ATOM 4738 OH    OH    . TYR TYR TYR B B 188 188 . 145.856 99.736  5.522   1.00 7.46
1 . .
ATOM 4739 CE2   CE2   . TYR TYR TYR B B 188 188 . 145.766 97.505  4.691   1.00 7.71
1 . .
ATOM 4740 CD2   CD2   . TYR TYR TYR B B 188 188 . 145.684 96.633  3.560   1.00 8.73
1 . .
ATOM 4741 C     C     . TYR TYR TYR B B 188 188 . 147.978 95.581  1.209   1.00 7.00
1 . .
ATOM 4742 O     O     . TYR TYR TYR B B 188 188 . 148.897 96.365  1.537   1.00 8.85
1 . .
ATOM 4743 N     N     . HIS HIS HIS B B 189 189 . 147.957 94.303  1.654   1.00 6.36
1 . .
ATOM 4744 CA    CA    . HIS HIS HIS B B 189 189 . 149.046 93.844  2.502   1.00 7.84
1 . .
ATOM 4745 CB    CB    . HIS HIS HIS B B 189 189 . 148.703 92.431  3.028   1.00 9.21
1 . .
ATOM 4746 CG    CG    . HIS HIS HIS B B 189 189 . 147.445 92.386  3.868   1.00 7.80
1 . .
ATOM 4747 ND1   ND1   . HIS HIS HIS B B 189 189 . 147.047 93.350  4.791   1.00 14.20
1 . .
ATOM 4748 CE1   CE1   . HIS HIS HIS B B 189 189 . 145.902 92.971  5.359   1.00 9.42
1 . .
ATOM 4749 NE2   NE2   . HIS HIS HIS B B 189 189 . 145.517 91.843  4.782   1.00 13.83
1 . .
ATOM 4750 CD2   CD2   . HIS HIS HIS B B 189 189 . 146.482 91.439  3.882   1.00 10.81
1 . .
ATOM 4751 C     C     . HIS HIS HIS B B 189 189 . 150.371 93.795  1.758   1.00 7.87
1 . .
ATOM 4752 O     O     . HIS HIS HIS B B 189 189 . 151.432 94.101  2.352   1.00 10.18
1 . .
ATOM 4753 N     N     . THR THR THR B B 190 190 . 150.284 93.492  0.466   1.00 8.73
1 . .
ATOM 4754 CA    CA    . THR THR THR B B 190 190 . 151.531 93.450  -0.363  1.00 9.87
1 . .
ATOM 4755 CB    CB    . THR THR THR B B 190 190 . 151.212 92.934  -1.733  1.00 9.99
1 . .
ATOM 4756 OG1   OG1   . THR THR THR B B 190 190 . 150.782 91.556  -1.672  1.00 11.83
1 . .
ATOM 4757 CG2   CG2   . THR THR THR B B 190 190 . 152.478 92.972  -2.640  1.00 11.18
1 . .
ATOM 4758 C     C     . THR THR THR B B 190 190 . 152.070 94.896  -0.461  1.00 10.72
1 . .
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ATOM 4759 O     O     . THR THR THR B B 190 190 . 153.287 95.148  -0.361  1.00 9.96
1 . .
ATOM 4760 N     N     . LEU LEU LEU B B 191 191 . 151.169 95.852  -0.669  1.00 9.14
1 . .
ATOM 4761 CA    CA    . LEU LEU LEU B B 191 191 . 151.542 97.278  -0.719  1.00 9.24
1 . .
ATOM 4762 CB    CB    . LEU LEU LEU B B 191 191 . 150.304 98.158  -0.953  1.00 9.84
1 . .
ATOM 4763 CG    CG    . LEU LEU LEU B B 191 191 . 150.565 99.670  -1.036  1.00 9.70
1 . .
ATOM 4764 CD1   CD1   . LEU LEU LEU B B 191 191 . 151.551 100.042 -2.205  1.00 8.81
1 . .
ATOM 4765 CD2   CD2   . LEU LEU LEU B B 191 191 . 149.177 100.337 -1.229  1.00 11.58
1 . .
ATOM 4766 C     C     . LEU LEU LEU B B 191 191 . 152.239 97.748  0.573   1.00 11.23
1 . .
ATOM 4767 O     O     . LEU LEU LEU B B 191 191 . 153.197 98.535  0.494   1.00 10.53
1 . .
ATOM 4768 N     N     . LYS LYS LYS B B 192 192 . 151.791 97.307  1.775   1.00 8.93
1 . .
ATOM 4769 CA    CA    . LYS LYS LYS B B 192 192 . 152.436 97.705  2.966   1.00 9.49
1 . .
ATOM 4770 CB    CB    . LYS LYS LYS B B 192 192 . 151.747 96.994  4.180   1.00 10.88
1 . .
ATOM 4771 CG    CG    . LYS LYS LYS B B 192 192 . 152.150 97.611  5.538   1.00 11.91
1 . .
ATOM 4772 CD    CD    . LYS LYS LYS B B 192 192 . 151.561 96.876  6.716   1.00 13.21
1 . .
ATOM 4773 CE    CE    . LYS LYS LYS B B 192 192 . 151.941 97.662  7.995   1.00 17.42
1 . .
ATOM 4774 NZ    NZ    . LYS LYS LYS B B 192 192 . 151.211 97.146  9.195   1.00 20.75
1 . .
ATOM 4775 C     C     . LYS LYS LYS B B 192 192 . 153.928 97.325  2.882   1.00 10.25
1 . .
ATOM 4776 O     O     . LYS LYS LYS B B 192 192 . 154.791 98.137  3.276   1.00 11.42
1 . .
ATOM 4777 N     N     . GLY GLY GLY B B 193 193 . 154.161 96.099  2.366   1.00 10.93
1 . .
ATOM 4778 CA    CA    . GLY GLY GLY B B 193 193 . 155.581 95.613  2.215   1.00 12.99
1 . .
ATOM 4779 C     C     . GLY GLY GLY B B 193 193 . 156.345 96.427  1.203   1.00 12.80
1 . .
ATOM 4780 O     O     . GLY GLY GLY B B 193 193 . 157.534 96.789  1.458   1.00 12.39
1 . .
ATOM 4781 N     N     . VAL VAL VAL B B 194 194 . 155.717 96.710  0.062   1.00 11.17
1 . .
ATOM 4782 CA    CA    . VAL VAL VAL B B 194 194 . 156.396 97.562  -0.972  1.00 11.92
1 . .
ATOM 4783 CB    CB    . VAL VAL VAL B B 194 194 . 155.490 97.766  -2.189  1.00 12.00
1 . .
ATOM 4784 CG1   CG1   . VAL VAL VAL B B 194 194 . 156.039 98.827  -3.131  1.00 12.26
1 . .
ATOM 4785 CG2   CG2   . VAL VAL VAL B B 194 194 . 155.280 96.437  -2.890  1.00 12.09
1 . .
ATOM 4786 C     C     . VAL VAL VAL B B 194 194 . 156.798 98.918  -0.373  1.00 12.11
1 . .
ATOM 4787 O     O     . VAL VAL VAL B B 194 194 . 157.968 99.395  -0.521  1.00 13.37
1 . .
ATOM 4788 N     N     . ILE ILE ILE B B 195 195 . 155.895 99.561  0.357   1.00 11.24
1 . .
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ATOM 4789 CA    CA    . ILE ILE ILE B B 195 195 . 156.167 100.858 0.934   1.00 12.19
1 . .
ATOM 4790 CB    CB    . ILE ILE ILE B B 195 195 . 154.863 101.463 1.518   1.00 11.37
1 . .
ATOM 4791 CG1   CG1   . ILE ILE ILE B B 195 195 . 153.948 101.842 0.355   1.00 10.96
1 . .
ATOM 4792 CD    CD    . ILE ILE ILE B B 195 195 . 152.591 102.275 0.798   1.00 9.53
1 . .
ATOM 4793 CG2   CG2   . ILE ILE ILE B B 195 195 . 155.159 102.703 2.383   1.00 13.53
1 . .
ATOM 4794 C     C     . ILE ILE ILE B B 195 195 . 157.222 100.729 2.058   1.00 13.12
1 . .
ATOM 4795 O     O     . ILE ILE ILE B B 195 195 . 158.209 101.560 2.103   1.00 14.83
1 . .
ATOM 4796 N     N     . LYS LYS LYS B B 196 196 . 157.044 99.734  2.934   1.00 14.22
1 . .
ATOM 4797 CA    CA    . LYS LYS LYS B B 196 196 . 158.054 99.579  4.027   1.00 15.32
1 . .
ATOM 4798 CB    CB    . LYS LYS LYS B B 196 196 . 157.663 98.399  4.922   1.00 15.46
1 . .
ATOM 4799 CG    CG    . LYS LYS LYS B B 196 196 . 158.506 98.352  6.221   1.00 18.56
1 . .
ATOM 4800 CD    CD    . LYS LYS LYS B B 196 196 . 158.104 97.215  7.109   1.00 25.34
1 . .
ATOM 4801 CE    CE    . LYS LYS LYS B B 196 196 . 158.708 97.461  8.536   1.00 30.85
1 . .
ATOM 4802 NZ    NZ    . LYS LYS LYS B B 196 196 . 158.245 96.403  9.486   1.00 36.63
1 . .
ATOM 4803 C     C     . LYS LYS LYS B B 196 196 . 159.465 99.341  3.414   1.00 16.31
1 . .
ATOM 4804 O     O     . LYS LYS LYS B B 196 196 . 160.440 99.867  3.917   1.00 17.26
1 . .
ATOM 4805 N     N     . ASP ASP ASP B B 197 197 . 159.555 98.482  2.413   1.00 14.12
1 . .
ATOM 4806 CA    CA    . ASP ASP ASP B B 197 197 . 160.872 98.186  1.736   1.00 16.34
1 . .
ATOM 4807 CB    CB    . ASP ASP ASP B B 197 197 . 160.705 97.153  0.615   1.00 17.44
1 . .
ATOM 4808 CG    CG    . ASP ASP ASP B B 197 197 . 160.469 95.740  1.129   1.00 18.92
1 . .
ATOM 4809 OD1   OD1   . ASP ASP ASP B B 197 197 . 160.123 94.827  0.298   1.00 27.33
1 . .
ATOM 4810 OD2   OD2   . ASP ASP ASP B B 197 197 . 160.590 95.499  2.347   1.00 24.11
1 . .
ATOM 4811 C     C     . ASP ASP ASP B B 197 197 . 161.524 99.459  1.218   1.00 17.13
1 . .
ATOM 4812 O     O     . ASP ASP ASP B B 197 197 . 162.783 99.656  1.301   1.00 20.10
1 . .
ATOM 4813 N     N     . LYS LYS LYS B B 198 198 . 160.737 100.358 0.663   1.00 16.54
1 . .
ATOM 4814 CA    CA    . LYS LYS LYS B B 198 198 . 161.329 101.565 0.060   1.00 15.66
1 . .
ATOM 4815 CB    CB    . LYS LYS LYS B B 198 198 . 160.438 102.033 -1.085  1.00 16.30
1 . .
ATOM 4816 CG    CG    . LYS LYS LYS B B 198 198 . 161.002 103.283 -1.836  1.00 16.82
1 . .
ATOM 4817 CD    CD    . LYS LYS LYS B B 198 198 . 160.348 103.315 -3.196  1.00 18.10
1 . .
ATOM 4818 CE    CE    . LYS LYS LYS B B 198 198 . 161.072 104.395 -4.044  1.00 18.65
1 . .
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ATOM 4819 NZ    NZ    . LYS LYS LYS B B 198 198 . 160.289 104.762 -5.312  1.00 20.46
1 . .
ATOM 4820 C     C     . LYS LYS LYS B B 198 198 . 161.508 102.754 1.022   1.00 17.74
1 . .
ATOM 4821 O     O     . LYS LYS LYS B B 198 198 . 162.538 103.471 1.012   1.00 20.44
1 . .
ATOM 4822 N     N     . TYR TYR TYR B B 199 199 . 160.527 102.963 1.898   1.00 16.76
1 . .
ATOM 4823 CA    CA    . TYR TYR TYR B B 199 199 . 160.437 104.183 2.735   1.00 13.82
1 . .
ATOM 4824 CB    CB    . TYR TYR TYR B B 199 199 . 159.111 104.932 2.498   1.00 15.66
1 . .
ATOM 4825 CG    CG    . TYR TYR TYR B B 199 199 . 159.032 105.503 1.117   1.00 16.51
1 . .
ATOM 4826 CD1   CD1   . TYR TYR TYR B B 199 199 . 158.167 104.938 0.161   1.00 14.08
1 . .
ATOM 4827 CE1   CE1   . TYR TYR TYR B B 199 199 . 158.136 105.469 -1.149  1.00 13.84
1 . .
ATOM 4828 CZ    CZ    . TYR TYR TYR B B 199 199 . 158.919 106.578 -1.464  1.00 18.36
1 . .
ATOM 4829 OH    OH    . TYR TYR TYR B B 199 199 . 158.850 107.084 -2.760  1.00 16.62
1 . .
ATOM 4830 CE2   CE2   . TYR TYR TYR B B 199 199 . 159.795 107.141 -0.525  1.00 18.99
1 . .
ATOM 4831 CD2   CD2   . TYR TYR TYR B B 199 199 . 159.827 106.612 0.758   1.00 20.61
1 . .
ATOM 4832 C     C     . TYR TYR TYR B B 199 199 . 160.579 103.896 4.236   1.00 14.50
1 . .
ATOM 4833 O     O     . TYR TYR TYR B B 199 199 . 160.680 104.861 5.020   1.00 16.41
1 . .
ATOM 4834 N     N     . GLY GLY GLY B B 200 200 . 160.604 102.602 4.586   1.00 14.49
1 . .
ATOM 4835 CA    CA    . GLY GLY GLY B B 200 200 . 160.698 102.253 6.027   1.00 14.48
1 . .
ATOM 4836 C     C     . GLY GLY GLY B B 200 200 . 159.358 102.305 6.775   1.00 16.75
1 . .
ATOM 4837 O     O     . GLY GLY GLY B B 200 200 . 158.312 102.633 6.215   1.00 14.57
1 . .
ATOM 4838 N     N     . LYS LYS LYS B B 201 201 . 159.440 101.858 8.025   1.00 17.52
1 . .
ATOM 4839 CA    CA    . LYS LYS LYS B B 201 201 . 158.233 101.611 8.807   1.00 18.61
1 . .
ATOM 4840 CB    CB    . LYS LYS LYS B B 201 201 . 158.593 100.958 10.167  1.00 20.37
1 . .
ATOM 4841 CG    CG    . LYS LYS LYS B B 201 201 . 159.490 101.847 11.038  1.00 23.93
1 . .
ATOM 4842 CD    CD    . LYS LYS LYS B B 201 201 . 160.103 101.054 12.221  1.00 26.55
1 . .
ATOM 4843 CE    CE    . LYS LYS LYS B B 201 201 . 161.197 101.894 12.915  1.00 27.79
1 . .
ATOM 4844 NZ    NZ    . LYS LYS LYS B B 201 201 . 162.512 101.817 12.216  1.00 33.24
1 . .
ATOM 4845 C     C     . LYS LYS LYS B B 201 201 . 157.423 102.895 9.019   1.00 16.69
1 . .
ATOM 4846 O     O     . LYS LYS LYS B B 201 201 . 156.151 102.836 9.065   1.00 16.07
1 . .
ATOM 4847 N     N     . ASP ASP ASP B B 202 202 . 158.065 104.058 9.066   1.00 16.26
1 . .
ATOM 4848 CA    CA    . ASP ASP ASP B B 202 202 . 157.326 105.337 9.340   1.00 15.94
1 . .
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ATOM 4849 CB    CB    . ASP ASP ASP B B 202 202 . 158.212 106.604 9.524   1.00 18.42
1 . .
ATOM 4850 CG    CG    . ASP ASP ASP B B 202 202 . 159.135 106.603 10.836  1.00 25.59
1 . .
ATOM 4851 OD1   OD1   . ASP ASP ASP B B 202 202 . 159.117 105.653 11.660  1.00 31.50
1 . .
ATOM 4852 OD2   OD2   . ASP ASP ASP B B 202 202 . 159.927 107.593 10.981  1.00 32.19
1 . .
ATOM 4853 C     C     . ASP ASP ASP B B 202 202 . 156.265 105.657 8.237   1.00 15.38
1 . .
ATOM 4854 O     O     . ASP ASP ASP B B 202 202 . 155.362 106.492 8.434   1.00 15.84
1 . .
ATOM 4855 N     N     . ALA ALA ALA B B 203 203 . 156.396 104.999 7.099   1.00 14.13
1 . .
ATOM 4856 CA    CA    . ALA ALA ALA B B 203 203 . 155.556 105.268 5.940   1.00 12.21
1 . .
ATOM 4857 CB    CB    . ALA ALA ALA B B 203 203 . 156.375 105.122 4.654   1.00 11.98
1 . .
ATOM 4858 C     C     . ALA ALA ALA B B 203 203 . 154.330 104.399 5.868   1.00 12.75
1 . .
ATOM 4859 O     O     . ALA ALA ALA B B 203 203 . 153.580 104.525 4.918   1.00 12.18
1 . .
ATOM 4860 N     N     . THR THR THR B B 204 204 . 154.202 103.482 6.829   1.00 12.54
1 . .
ATOM 4861 CA    CA    . THR THR THR B B 204 204 . 153.165 102.456 6.791   1.00 11.65
1 . .
ATOM 4862 CB    CB    . THR THR THR B B 204 204 . 153.754 101.036 7.137   1.00 13.00
1 . .
ATOM 4863 OG1   OG1   . THR THR THR B B 204 204 . 154.267 101.078 8.488   1.00 17.59
1 . .
ATOM 4864 CG2   CG2   . THR THR THR B B 204 204 . 154.806 100.679 6.049   1.00 18.35
1 . .
ATOM 4865 C     C     . THR THR THR B B 204 204 . 151.997 102.726 7.714   1.00 10.75
1 . .
ATOM 4866 O     O     . THR THR THR B B 204 204 . 151.184 101.808 7.904   1.00 11.56
1 . .
ATOM 4867 N     N     . ASN ASN ASN B B 205 205 . 151.886 103.920 8.278   1.00 8.78
1 . .
ATOM 4868 CA    CA    . ASN ASN ASN B B 205 205 . 150.661 104.246 9.089   1.00 8.20
1 . .
ATOM 4869 CB    CB    . ASN ASN ASN B B 205 205 . 150.971 105.355 10.077  1.00 8.94
1 . .
ATOM 4870 CG    CG    . ASN ASN ASN B B 205 205 . 152.146 104.942 10.957  1.00 8.85
1 . .
ATOM 4871 OD1   OD1   . ASN ASN ASN B B 205 205 . 152.063 103.944 11.682  1.00 10.48
1 . .
ATOM 4872 ND2   ND2   . ASN ASN ASN B B 205 205 . 153.219 105.716 10.909  1.00 11.57
1 . .
ATOM 4873 C     C     . ASN ASN ASN B B 205 205 . 149.549 104.659 8.138   1.00 8.28
1 . .
ATOM 4874 O     O     . ASN ASN ASN B B 205 205 . 149.760 104.687 6.902   1.00 10.07
1 . .
ATOM 4875 N     N     . VAL VAL VAL B B 206 206 . 148.325 104.813 8.672   1.00 7.23
1 . .
ATOM 4876 CA    CA    . VAL VAL VAL B B 206 206 . 147.169 104.950 7.754   1.00 8.52
1 . .
ATOM 4877 CB    CB    . VAL VAL VAL B B 206 206 . 146.114 103.805 7.827   1.00 8.18
1 . .
ATOM 4878 CG1   CG1   . VAL VAL VAL B B 206 206 . 146.808 102.471 7.492   1.00 8.53
1 . .
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ATOM 4879 CG2   CG2   . VAL VAL VAL B B 206 206 . 145.412 103.728 9.207   1.00 10.42
1 . .
ATOM 4880 C     C     . VAL VAL VAL B B 206 206 . 146.458 106.282 7.958   1.00 7.76
1 . .
ATOM 4881 O     O     . VAL VAL VAL B B 206 206 . 146.544 106.939 8.997   1.00 8.40
1 . .
ATOM 4882 N     N     . GLY GLY GLY B B 207 207 . 145.839 106.699 6.847   1.00 7.78
1 . .
ATOM 4883 CA    CA    . GLY GLY GLY B B 207 207 . 144.985 107.874 6.828   1.00 8.91
1 . .
ATOM 4884 C     C     . GLY GLY GLY B B 207 207 . 143.531 107.568 7.182   1.00 6.90
1 . .
ATOM 4885 O     O     . GLY GLY GLY B B 207 207 . 143.201 106.434 7.596   1.00 7.45
1 . .
ATOM 4886 N     N     . ASP ASP ASP B B 208 208 . 142.715 108.558 6.957   1.00 8.13
1 . .
ATOM 4887 CA    CA    . ASP ASP ASP B B 208 208 . 141.289 108.504 7.449   1.00 6.88
1 . .
ATOM 4888 CB    CB    . ASP ASP ASP B B 208 208 . 140.553 109.826 7.149   1.00 7.50
1 . .
ATOM 4889 CG    CG    . ASP ASP ASP B B 208 208 . 141.036 110.957 8.027   1.00 10.31
1 . .
ATOM 4890 OD1   OD1   . ASP ASP ASP B B 208 208 . 141.662 110.749 9.130   1.00 12.69
1 . .
ATOM 4891 OD2   OD2   . ASP ASP ASP B B 208 208 . 140.680 112.112 7.614   1.00 13.59
1 . .
ATOM 4892 C     C     . ASP ASP ASP B B 208 208 . 140.490 107.364 6.864   1.00 7.54
1 . .
ATOM 4893 O     O     . ASP ASP ASP B B 208 208 . 139.619 106.814 7.582   1.00 6.72
1 . .
ATOM 4894 N     N     . GLU GLU GLU B B 209 209 . 140.813 106.946 5.640   1.00 7.47
1 . .
ATOM 4895 CA    CA    . GLU GLU GLU B B 209 209 . 140.074 105.879 4.972   1.00 7.68
1 . .
ATOM 4896 CB    CB    . GLU GLU GLU B B 209 209 . 139.665 106.251 3.550   1.00 9.14
1 . .
ATOM 4897 CG    CG    . GLU GLU GLU B B 209 209 . 138.800 107.518 3.559   1.00 10.04
1 . .
ATOM 4898 CD    CD    . GLU GLU GLU B B 209 209 . 138.178 107.759 2.207   1.00 13.14
1 . .
ATOM 4899 OE1   OE1   . GLU GLU GLU B B 209 209 . 138.539 107.038 1.196   1.00 12.74
1 . .
ATOM 4900 OE2   OE2   . GLU GLU GLU B B 209 209 . 137.238 108.609 2.202   1.00 16.12
1 . .
ATOM 4901 C     C     . GLU GLU GLU B B 209 209 . 140.775 104.536 5.013   1.00 6.71
1 . .
ATOM 4902 O     O     . GLU GLU GLU B B 209 209 . 140.316 103.577 4.350   1.00 8.23
1 . .
ATOM 4903 N     N     . GLY GLY GLY B B 210 210 . 141.871 104.437 5.773   1.00 7.11
1 . .
ATOM 4904 CA    CA    . GLY GLY GLY B B 210 210 . 142.576 103.208 5.956   1.00 6.63
1 . .
ATOM 4905 C     C     . GLY GLY GLY B B 210 210 . 143.691 102.968 4.929   1.00 7.04
1 . .
ATOM 4906 O     O     . GLY GLY GLY B B 210 210 . 144.395 101.939 4.986   1.00 9.20
1 . .
ATOM 4907 N     N     . GLY GLY GLY B B 211 211 . 143.863 103.875 3.947   1.00 6.39
1 . .
ATOM 4908 CA    CA    . GLY GLY GLY B B 211 211 . 145.023 103.762 3.044   1.00 8.19
1 . .
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ATOM 4909 C     C     . GLY GLY GLY B B 211 211 . 146.314 104.142 3.694   1.00 7.33
1 . .
ATOM 4910 O     O     . GLY GLY GLY B B 211 211 . 146.319 104.902 4.685   1.00 7.64
1 . .
ATOM 4911 N     N     . PHE PHE PHE B B 212 212 . 147.444 103.625 3.155   1.00 6.93
1 . .
ATOM 4912 CA    CA    . PHE PHE PHE B B 212 212 . 148.694 104.058 3.719   1.00 7.37
1 . .
ATOM 4913 CB    CB    . PHE PHE PHE B B 212 212 . 149.820 103.148 3.164   1.00 8.33
1 . .
ATOM 4914 CG    CG    . PHE PHE PHE B B 212 212 . 149.601 101.741 3.499   1.00 8.77
1 . .
ATOM 4915 CD1   CD1   . PHE PHE PHE B B 212 212 . 149.268 100.843 2.499   1.00 9.73
1 . .
ATOM 4916 CE1   CE1   . PHE PHE PHE B B 212 212 . 149.022 99.495  2.803   1.00 11.01
1 . .
ATOM 4917 CZ    CZ    . PHE PHE PHE B B 212 212 . 149.067 99.085  4.090   1.00 7.77
1 . .
ATOM 4918 CE2   CE2   . PHE PHE PHE B B 212 212 . 149.400 99.987  5.132   1.00 9.28
1 . .
ATOM 4919 CD2   CD2   . PHE PHE PHE B B 212 212 . 149.675 101.329 4.813   1.00 9.17
1 . .
ATOM 4920 C     C     . PHE PHE PHE B B 212 212 . 148.966 105.497 3.412   1.00 8.76
1 . .
ATOM 4921 O     O     . PHE PHE PHE B B 212 212 . 148.522 106.065 2.364   1.00 9.87
1 . .
ATOM 4922 N     N     . ALA ALA ALA B B 213 213 . 149.746 106.064 4.315   1.00 9.25
1 . .
ATOM 4923 CA    CA    . ALA ALA ALA B B 213 213 . 150.070 107.488 4.191   1.00 10.89
1 . .
ATOM 4924 CB    CB    . ALA ALA ALA B B 213 213 . 149.457 108.252 5.415   1.00 12.97
1 . .
ATOM 4925 C     C     . ALA ALA ALA B B 213 213 . 151.546 107.689 4.165   1.00 11.54
1 . .
ATOM 4926 O     O     . ALA ALA ALA B B 213 213 . 152.123 108.250 5.133   1.00 12.72
1 . .
ATOM 4927 N     N     . PRO PRO PRO B B 214 214 . 152.200 107.263 3.078   1.00 10.90
1 . .
ATOM 4928 CA    CA    . PRO PRO PRO B B 214 214 . 153.650 107.519 2.956   1.00 10.44
1 . .
ATOM 4929 CB    CB    . PRO PRO PRO B B 214 214 . 154.067 106.646 1.773   1.00 11.36
1 . .
ATOM 4930 CG    CG    . PRO PRO PRO B B 214 214 . 152.811 106.592 0.880   1.00 9.89
1 . .
ATOM 4931 CD    CD    . PRO PRO PRO B B 214 214 . 151.698 106.487 1.942   1.00 10.77
1 . .
ATOM 4932 C     C     . PRO PRO PRO B B 214 214 . 153.867 108.986 2.666   1.00 10.87
1 . .
ATOM 4933 O     O     . PRO PRO PRO B B 214 214 . 153.016 109.634 2.064   1.00 11.81
1 . .
ATOM 4934 N     N     . ASN ASN ASN B B 215 215 . 154.978 109.542 3.175   1.00 10.59
1 . .
ATOM 4935 CA    CA    . ASN ASN ASN B B 215 215 . 155.234 111.009 2.964   1.00 12.79
1 . .
ATOM 4936 CB    CB    . ASN ASN ASN B B 215 215 . 156.127 111.531 4.083   1.00 15.05
1 . .
ATOM 4937 CG    CG    . ASN ASN ASN B B 215 215 . 157.530 110.718 4.237   1.00 29.27
1 . .
ATOM 4938 OD1   OD1   . ASN ASN ASN B B 215 215 . 158.487 111.202 4.930   1.00 41.17
1 . .
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ATOM 4939 ND2   ND2   . ASN ASN ASN B B 215 215 . 157.633 109.471 3.624   1.00 39.49
1 . .
ATOM 4940 C     C     . ASN ASN ASN B B 215 215 . 155.880 111.282 1.606   1.00 12.69
1 . .
ATOM 4941 O     O     . ASN ASN ASN B B 215 215 . 157.101 111.500 1.483   1.00 15.12
1 . .
ATOM 4942 N     N     . ILE ILE ILE B B 216 216 . 155.053 111.195 0.577   1.00 14.30
1 . .
ATOM 4943 CA    CA    . ILE ILE ILE B B 216 216 . 155.510 111.375 -0.822  1.00 16.14
1 . .
ATOM 4944 CB    CB    . ILE ILE ILE B B 216 216 . 155.290 110.056 -1.647  1.00 16.26
1 . .
ATOM 4945 CG1   CG1   . ILE ILE ILE B B 216 216 . 153.822 109.633 -1.533  1.00 16.13
1 . .
ATOM 4946 CD    CD    . ILE ILE ILE B B 216 216 . 153.482 108.518 -2.575  1.00 14.95
1 . .
ATOM 4947 CG2   CG2   . ILE ILE ILE B B 216 216 . 156.313 108.986 -1.269  1.00 17.36
1 . .
ATOM 4948 C     C     . ILE ILE ILE B B 216 216 . 154.789 112.602 -1.399  1.00 15.86
1 . .
ATOM 4949 O     O     . ILE ILE ILE B B 216 216 . 153.860 113.113 -0.780  1.00 16.80
1 . .
ATOM 4950 N     N     . LEU LEU LEU B B 217 217 . 155.318 113.180 -2.481  1.00 19.31
1 . .
ATOM 4951 CA    CA    . LEU LEU LEU B B 217 217 . 154.673 114.391 -3.092  1.00 19.37
1 . .
ATOM 4952 CB    CB    . LEU LEU LEU B B 217 217 . 155.597 115.551 -3.164  1.00 18.94
1 . .
ATOM 4953 CG    CG    . LEU LEU LEU B B 217 217 . 155.200 116.718 -4.078  1.00 18.01
1 . .
ATOM 4954 CD1   CD1   . LEU LEU LEU B B 217 217 . 153.912 117.489 -3.587  1.00 21.17
1 . .
ATOM 4955 CD2   CD2   . LEU LEU LEU B B 217 217 . 156.520 117.559 -4.050  1.00 22.19
1 . .
ATOM 4956 C     C     . LEU LEU LEU B B 217 217 . 154.157 114.178 -4.486  1.00 13.73
1 . .
ATOM 4957 O     O     . LEU LEU LEU B B 217 217 . 152.935 114.509 -4.741  1.00 18.42
1 . .
ATOM 4958 N     N     . GLU GLU GLU B B 218 218 . 154.872 113.297 -5.224  1.00 15.59
1 . .
ATOM 4959 CA    CA    . GLU GLU GLU B B 218 218 . 154.428 112.941 -6.596  1.00 15.39
1 . .
ATOM 4960 CB    CB    . GLU GLU GLU B B 218 218 . 155.538 112.322 -7.463  1.00 14.40
1 . .
ATOM 4961 CG    CG    . GLU GLU GLU B B 218 218 . 156.793 113.089 -7.651  1.00 17.79
1 . .
ATOM 4962 CD    CD    . GLU GLU GLU B B 218 218 . 156.632 114.417 -8.163  1.00 26.83
1 . .
ATOM 4963 OE1   OE1   . GLU GLU GLU B B 218 218 . 155.605 114.609 -8.842  1.00 30.60
1 . .
ATOM 4964 OE2   OE2   . GLU GLU GLU B B 218 218 . 157.597 115.247 -7.955  1.00 33.32
1 . .
ATOM 4965 C     C     . GLU GLU GLU B B 218 218 . 153.263 111.923 -6.620  1.00 12.87
1 . .
ATOM 4966 O     O     . GLU GLU GLU B B 218 218 . 153.359 110.756 -6.135  1.00 12.43
1 . .
ATOM 4967 N     N     . ASN ASN ASN B B 219 219 . 152.172 112.396 -7.225  1.00 11.69
1 . .
ATOM 4968 CA    CA    . ASN ASN ASN B B 219 219 . 151.029 111.552 -7.440  1.00 9.81
1 . .
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ATOM 4969 CB    CB    . ASN ASN ASN B B 219 219 . 149.891 112.335 -8.056  1.00 10.76
1 . .
ATOM 4970 CG    CG    . ASN ASN ASN B B 219 219 . 149.481 113.483 -7.133  1.00 9.69
1 . .
ATOM 4971 OD1   OD1   . ASN ASN ASN B B 219 219 . 148.896 113.239 -6.035  1.00 10.61
1 . .
ATOM 4972 ND2   ND2   . ASN ASN ASN B B 219 219 . 149.781 114.740 -7.555  1.00 11.01
1 . .
ATOM 4973 C     C     . ASN ASN ASN B B 219 219 . 151.378 110.354 -8.351  1.00 9.77
1 . .
ATOM 4974 O     O     . ASN ASN ASN B B 219 219 . 150.884 109.236 -8.087  1.00 10.37
1 . .
ATOM 4975 N     N     . SER SER SER B B 220 220 . 152.296 110.525 -9.317  1.00 10.06
1 . .
ATOM 4976 CA    CA    . SER SER SER B B 220 220 . 152.768 109.352 -10.071 1.00 11.25
1 . .
ATOM 4977 CB    CB    . SER SER SER B B 220 220 . 153.716 109.799 -11.227 1.00 12.32
1 . .
ATOM 4978 OG    OG    . SER SER SER B B 220 220 . 154.813 110.500 -10.678 1.00 16.36
1 . .
ATOM 4979 C     C     . SER SER SER B B 220 220 . 153.525 108.330 -9.199  1.00 10.14
1 . .
ATOM 4980 O     O     . SER SER SER B B 220 220 . 153.519 107.166 -9.561  1.00 10.23
1 . .
ATOM 4981 N     N     . GLU GLU GLU B B 221 221 . 154.182 108.752 -8.116  1.00 10.82
1 . .
ATOM 4982 CA    CA    . GLU GLU GLU B B 221 221 . 154.835 107.782 -7.223  1.00 10.28
1 . .
ATOM 4983 CB    CB    . GLU GLU GLU B B 221 221 . 155.767 108.496 -6.273  1.00 12.24
1 . .
ATOM 4984 CG    CG    . GLU GLU GLU B B 221 221 . 156.377 107.562 -5.158  1.00 14.30
1 . .
ATOM 4985 CD    CD    . GLU GLU GLU B B 221 221 . 157.267 106.368 -5.634  1.00 20.02
1 . .
ATOM 4986 OE1   OE1   . GLU GLU GLU B B 221 221 . 157.462 106.101 -6.870  1.00 23.74
1 . .
ATOM 4987 OE2   OE2   . GLU GLU GLU B B 221 221 . 157.842 105.682 -4.731  1.00 19.29
1 . .
ATOM 4988 C     C     . GLU GLU GLU B B 221 221 . 153.774 106.948 -6.461  1.00 10.63
1 . .
ATOM 4989 O     O     . GLU GLU GLU B B 221 221 . 153.957 105.757 -6.343  1.00 11.47
1 . .
ATOM 4990 N     N     . ALA ALA ALA B B 222 222 . 152.659 107.564 -6.041  1.00 10.24
1 . .
ATOM 4991 CA    CA    . ALA ALA ALA B B 222 222 . 151.562 106.770 -5.510  1.00 9.69
1 . .
ATOM 4992 CB    CB    . ALA ALA ALA B B 222 222 . 150.406 107.667 -5.073  1.00 9.47
1 . .
ATOM 4993 C     C     . ALA ALA ALA B B 222 222 . 151.093 105.711 -6.514  1.00 9.29
1 . .
ATOM 4994 O     O     . ALA ALA ALA B B 222 222 . 150.864 104.549 -6.161  1.00 9.86
1 . .
ATOM 4995 N     N     . LEU LEU LEU B B 223 223 . 150.869 106.118 -7.776  1.00 9.78
1 . .
ATOM 4996 CA    CA    . LEU LEU LEU B B 223 223 . 150.425 105.165 -8.830  1.00 8.59
1 . .
ATOM 4997 CB    CB    . LEU LEU LEU B B 223 223 . 150.235 105.954 -10.154 1.00 9.99
1 . .
ATOM 4998 CG    CG    . LEU LEU LEU B B 223 223 . 148.966 106.821 -10.056 1.00 9.83
1 . .
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ATOM 4999 CD1   CD1   . LEU LEU LEU B B 223 223 . 148.895 107.732 -11.235 1.00 11.97
1 . .
ATOM 5000 CD2   CD2   . LEU LEU LEU B B 223 223 . 147.668 106.041 -10.058 1.00 9.96
1 . .
ATOM 5001 C     C     . LEU LEU LEU B B 223 223 . 151.494 104.084 -9.015  1.00 9.72
1 . .
ATOM 5002 O     O     . LEU LEU LEU B B 223 223 . 151.109 102.910 -9.177  1.00 9.43
1 . .
ATOM 5003 N     N     . GLU GLU GLU B B 224 224 . 152.786 104.454 -9.026  1.00 9.58
1 . .
ATOM 5004 CA    CA    . GLU GLU GLU B B 224 224 . 153.837 103.467 -9.234  1.00 9.55
1 . .
ATOM 5005 CB    CB    . GLU GLU GLU B B 224 224 . 155.206 104.137 -9.241  1.00 10.52
1 . .
ATOM 5006 CG    CG    . GLU GLU GLU B B 224 224 . 156.168 103.121 -9.909  1.00 17.78
1 . .
ATOM 5007 CD    CD    . GLU GLU GLU B B 224 224 . 156.026 103.203 -11.492 1.00 27.05
1 . .
ATOM 5008 OE1   OE1   . GLU GLU GLU B B 224 224 . 155.680 102.193 -12.131 1.00 33.30
1 . .
ATOM 5009 OE2   OE2   . GLU GLU GLU B B 224 224 . 156.175 104.320 -12.111 1.00 32.76
1 . .
ATOM 5010 C     C     . GLU GLU GLU B B 224 224 . 153.807 102.400 -8.090  1.00 9.30
1 . .
ATOM 5011 O     O     . GLU GLU GLU B B 224 224 . 153.934 101.178 -8.368  1.00 12.10
1 . .
ATOM 5012 N     N     . LEU LEU LEU B B 225 225 . 153.631 102.856 -6.824  1.00 9.27
1 . .
ATOM 5013 CA    CA    . LEU LEU LEU B B 225 225 . 153.557 101.950 -5.710  1.00 11.15
1 . .
ATOM 5014 CB    CB    . LEU LEU LEU B B 225 225 . 153.472 102.757 -4.423  1.00 10.94
1 . .
ATOM 5015 CG    CG    . LEU LEU LEU B B 225 225 . 154.743 103.484 -4.044  1.00 12.39
1 . .
ATOM 5016 CD1   CD1   . LEU LEU LEU B B 225 225 . 154.384 104.584 -3.037  1.00 13.82
1 . .
ATOM 5017 CD2   CD2   . LEU LEU LEU B B 225 225 . 155.881 102.516 -3.557  1.00 14.80
1 . .
ATOM 5018 C     C     . LEU LEU LEU B B 225 225 . 152.381 101.016 -5.779  1.00 8.34
1 . .
ATOM 5019 O     O     . LEU LEU LEU B B 225 225 . 152.539 99.789  -5.587  1.00 10.23
1 . .
ATOM 5020 N     N     . VAL VAL VAL B B 226 226 . 151.197 101.554 -6.117  1.00 9.58
1 . .
ATOM 5021 CA    CA    . VAL VAL VAL B B 226 226 . 150.011 100.724 -6.294  1.00 8.73
1 . .
ATOM 5022 CB    CB    . VAL VAL VAL B B 226 226 . 148.787 101.601 -6.502  1.00 8.52
1 . .
ATOM 5023 CG1   CG1   . VAL VAL VAL B B 226 226 . 147.581 100.698 -6.736  1.00 9.95
1 . .
ATOM 5024 CG2   CG2   . VAL VAL VAL B B 226 226 . 148.567 102.441 -5.237  1.00 9.56
1 . .
ATOM 5025 C     C     . VAL VAL VAL B B 226 226 . 150.184 99.692  -7.399  1.00 9.28
1 . .
ATOM 5026 O     O     . VAL VAL VAL B B 226 226 . 149.875 98.486  -7.236  1.00 10.15
1 . .
ATOM 5027 N     N     . LYS LYS LYS B B 227 227 . 150.718 100.122 -8.544  1.00 9.88
1 . .
ATOM 5028 CA    CA    . LYS LYS LYS B B 227 227 . 150.936 99.224  -9.683  1.00 9.66
1 . .
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ATOM 5029 CB    CB    . LYS LYS LYS B B 227 227 . 151.449 100.070 -10.883 1.00 11.36
1 . .
ATOM 5030 CG    CG    . LYS LYS LYS B B 227 227 . 151.696 99.213  -12.195 1.00 12.91
1 . .
ATOM 5031 CD    CD    . LYS LYS LYS B B 227 227 . 152.153 100.157 -13.336 1.00 18.94
1 . .
ATOM 5032 CE    CE    . LYS LYS LYS B B 227 227 . 152.512 99.329  -14.502 1.00 29.44
1 . .
ATOM 5033 NZ    NZ    . LYS LYS LYS B B 227 227 . 153.964 99.071  -14.410 1.00 38.87
1 . .
ATOM 5034 C     C     . LYS LYS LYS B B 227 227 . 151.936 98.104  -9.326  1.00 9.38
1 . .
ATOM 5035 O     O     . LYS LYS LYS B B 227 227 . 151.703 96.932  -9.652  1.00 12.39
1 . .
ATOM 5036 N     N     . GLU GLU GLU B B 228 228 . 152.993 98.477  -8.622  1.00 10.95
1 . .
ATOM 5037 CA    CA    . GLU GLU GLU B B 228 228 . 154.011 97.511  -8.144  1.00 12.79
1 . .
ATOM 5038 CB    CB    . GLU GLU GLU B B 228 228 . 155.173 98.185  -7.414  1.00 12.62
1 . .
ATOM 5039 CG    CG    . GLU GLU GLU B B 228 228 . 156.176 97.139  -7.042  1.00 14.44
1 . .
ATOM 5040 CD    CD    . GLU GLU GLU B B 228 228 . 157.484 97.674  -6.500  1.00 28.28
1 . .
ATOM 5041 OE1   OE1   . GLU GLU GLU B B 228 228 . 158.314 96.805  -6.133  1.00 35.38
1 . .
ATOM 5042 OE2   OE2   . GLU GLU GLU B B 228 228 . 157.697 98.943  -6.436  1.00 34.22
1 . .
ATOM 5043 C     C     . GLU GLU GLU B B 228 228 . 153.335 96.461  -7.240  1.00 12.58
1 . .
ATOM 5044 O     O     . GLU GLU GLU B B 228 228 . 153.539 95.258  -7.374  1.00 12.77
1 . .
ATOM 5045 N     N     . ALA ALA ALA B B 229 229 . 152.525 96.952  -6.321  1.00 10.91
1 . .
ATOM 5046 CA    CA    . ALA ALA ALA B B 229 229 . 151.805 95.999  -5.391  1.00 10.54
1 . .
ATOM 5047 CB    CB    . ALA ALA ALA B B 229 229 . 151.029 96.808  -4.346  1.00 10.36
1 . .
ATOM 5048 C     C     . ALA ALA ALA B B 229 229 . 150.889 95.076  -6.136  1.00 10.65
1 . .
ATOM 5049 O     O     . ALA ALA ALA B B 229 229 . 150.810 93.875  -5.836  1.00 11.23
1 . .
ATOM 5050 N     N     . ILE ILE ILE B B 230 230 . 150.139 95.599  -7.098  1.00 9.81
1 . .
ATOM 5051 CA    CA    . ILE ILE ILE B B 230 230 . 149.241 94.740  -7.891  1.00 9.87
1 . .
ATOM 5052 CB    CB    . ILE ILE ILE B B 230 230 . 148.463 95.556  -8.992  1.00 9.91
1 . .
ATOM 5053 CG1   CG1   . ILE ILE ILE B B 230 230 . 147.425 96.464  -8.317  1.00 9.65
1 . .
ATOM 5054 CD    CD    . ILE ILE ILE B B 230 230 . 146.951 97.530  -9.264  1.00 9.55
1 . .
ATOM 5055 CG2   CG2   . ILE ILE ILE B B 230 230 . 147.846 94.611  -10.050 1.00 11.42
1 . .
ATOM 5056 C     C     . ILE ILE ILE B B 230 230 . 150.086 93.629  -8.577  1.00 12.42
1 . .
ATOM 5057 O     O     . ILE ILE ILE B B 230 230 . 149.674 92.454  -8.566  1.00 11.19
1 . .
ATOM 5058 N     N     . ASP ASP ASP B B 231 231 . 151.182 94.024  -9.200  1.00 13.32
1 . .
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ATOM 5059 CA    CA    . ASP ASP ASP B B 231 231 . 152.039 93.090  -9.892  1.00 13.33
1 . .
ATOM 5060 CB    CB    . ASP ASP ASP B B 231 231 . 153.129 93.823  -10.702 1.00 15.00
1 . .
ATOM 5061 CG    CG    . ASP ASP ASP B B 231 231 . 153.858 92.835  -11.693 1.00 26.74
1 . .
ATOM 5062 OD1   OD1   . ASP ASP ASP B B 231 231 . 153.198 92.301  -12.632 1.00 36.67
1 . .
ATOM 5063 OD2   OD2   . ASP ASP ASP B B 231 231 . 155.075 92.572  -11.517 1.00 37.41
1 . .
ATOM 5064 C     C     . ASP ASP ASP B B 231 231 . 152.665 92.057  -8.912  1.00 13.46
1 . .
ATOM 5065 O     O     . ASP ASP ASP B B 231 231 . 152.577 90.841  -9.237  1.00 15.23
1 . .
ATOM 5066 N     N     . LYS LYS LYS B B 232 232 . 153.187 92.520  -7.763  1.00 13.45
1 . .
ATOM 5067 CA    CA    . LYS LYS LYS B B 232 232 . 153.851 91.598  -6.831  1.00 14.28
1 . .
ATOM 5068 CB    CB    . LYS LYS LYS B B 232 232 . 154.554 92.374  -5.735  1.00 16.45
1 . .
ATOM 5069 CG    CG    . LYS LYS LYS B B 232 232 . 155.349 91.519  -4.777  1.00 20.72
1 . .
ATOM 5070 CD    CD    . LYS LYS LYS B B 232 232 . 156.201 92.349  -3.879  1.00 26.70
1 . .
ATOM 5071 CE    CE    . LYS LYS LYS B B 232 232 . 157.472 92.739  -4.614  1.00 37.72
1 . .
ATOM 5072 NZ    NZ    . LYS LYS LYS B B 232 232 . 157.313 93.757  -5.741  1.00 44.67
1 . .
ATOM 5073 C     C     . LYS LYS LYS B B 232 232 . 152.819 90.597  -6.218  1.00 14.76
1 . .
ATOM 5074 O     O     . LYS LYS LYS B B 232 232 . 153.165 89.418  -5.984  1.00 15.24
1 . .
ATOM 5075 N     N     . ALA ALA ALA B B 233 233 . 151.553 91.031  -6.050  1.00 12.73
1 . .
ATOM 5076 CA    CA    . ALA ALA ALA B B 233 233 . 150.474 90.127  -5.573  1.00 12.21
1 . .
ATOM 5077 CB    CB    . ALA ALA ALA B B 233 233 . 149.254 90.928  -5.149  1.00 12.55
1 . .
ATOM 5078 C     C     . ALA ALA ALA B B 233 233 . 150.057 89.131  -6.662  1.00 12.57
1 . .
ATOM 5079 O     O     . ALA ALA ALA B B 233 233 . 149.327 88.161  -6.398  1.00 15.92
1 . .
ATOM 5080 N     N     . GLY GLY GLY B B 234 234 . 150.473 89.353  -7.908  1.00 13.94
1 . .
ATOM 5081 CA    CA    . GLY GLY GLY B B 234 234 . 150.137 88.494  -9.047  1.00 15.52
1 . .
ATOM 5082 C     C     . GLY GLY GLY B B 234 234 . 148.826 88.749  -9.754  1.00 13.90
1 . .
ATOM 5083 O     O     . GLY GLY GLY B B 234 234 . 148.207 87.830  -10.371 1.00 15.25
1 . .
ATOM 5084 N     N     . TYR TYR TYR B B 235 235 . 148.340 90.015  -9.612  1.00 12.81
1 . .
ATOM 5085 CA    CA    . TYR TYR TYR B B 235 235 . 147.038 90.287  -10.074 1.00 11.44
1 . .
ATOM 5086 CB    CB    . TYR TYR TYR B B 235 235 . 146.095 90.669  -8.908  1.00 11.03
1 . .
ATOM 5087 CG    CG    . TYR TYR TYR B B 235 235 . 145.788 89.577  -7.974  1.00 11.59
1 . .
ATOM 5088 CD1   CD1   . TYR TYR TYR B B 235 235 . 146.060 89.747  -6.608  1.00 11.69
1 . .
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ATOM 5089 CE1   CE1   . TYR TYR TYR B B 235 235 . 145.870 88.704  -5.679  1.00 14.04
1 . .
ATOM 5090 CZ    CZ    . TYR TYR TYR B B 235 235 . 145.358 87.526  -6.124  1.00 13.68
1 . .
ATOM 5091 OH    OH    . TYR TYR TYR B B 235 235 . 145.106 86.478  -5.249  1.00 15.27
1 . .
ATOM 5092 CE2   CE2   . TYR TYR TYR B B 235 235 . 145.082 87.322  -7.469  1.00 14.62
1 . .
ATOM 5093 CD2   CD2   . TYR TYR TYR B B 235 235 . 145.285 88.344  -8.404  1.00 13.87
1 . .
ATOM 5094 C     C     . TYR TYR TYR B B 235 235 . 146.997 91.404  -11.158 1.00 11.73
1 . .
ATOM 5095 O     O     . TYR TYR TYR B B 235 235 . 145.936 91.974  -11.400 1.00 12.90
1 . .
ATOM 5096 N     N     . THR THR THR B B 236 236 . 148.089 91.574  -11.925 1.00 12.10
1 . .
ATOM 5097 CA    CA    . THR THR THR B B 236 236 . 148.051 92.517  -13.052 1.00 13.76
1 . .
ATOM 5098 CB    CB    . THR THR THR B B 236 236 . 149.421 92.480  -13.768 1.00 14.84
1 . .
ATOM 5099 OG1   OG1   . THR THR THR B B 236 236 . 150.390 92.737  -12.771 1.00 20.96
1 . .
ATOM 5100 CG2   CG2   . THR THR THR B B 236 236 . 149.516 93.511  -14.906 1.00 15.59
1 . .
ATOM 5101 C     C     . THR THR THR B B 236 236 . 146.867 92.366  -13.998 1.00 14.69
1 . .
ATOM 5102 O     O     . THR THR THR B B 236 236 . 146.331 93.367  -14.514 1.00 14.75
1 . .
ATOM 5103 N     N     . GLU GLU GLU B B 237 237 . 146.462 91.143  -14.298 1.00 15.03
1 . .
ATOM 5104 CA    CA    . GLU GLU GLU B B 237 237 . 145.405 90.996  -15.273 1.00 17.82
1 . .
ATOM 5105 CB    CB    . GLU GLU GLU B B 237 237 . 145.482 89.604  -15.957 1.00 20.98
1 . .
ATOM 5106 CG    CG    . GLU GLU GLU B B 237 237 . 146.779 89.428  -16.878 1.00 28.68
1 . .
ATOM 5107 CD    CD    . GLU GLU GLU B B 237 237 . 147.099 90.648  -17.832 1.00 36.46
1 . .
ATOM 5108 OE1   OE1   . GLU GLU GLU B B 237 237 . 146.279 91.062  -18.716 1.00 39.37
1 . .
ATOM 5109 OE2   OE2   . GLU GLU GLU B B 237 237 . 148.232 91.184  -17.708 1.00 40.44
1 . .
ATOM 5110 C     C     . GLU GLU GLU B B 237 237 . 143.998 91.215  -14.707 1.00 17.22
1 . .
ATOM 5111 O     O     . GLU GLU GLU B B 237 237 . 143.011 91.283  -15.468 1.00 19.46
1 . .
ATOM 5112 N     N     . LYS LYS LYS B B 238 238 . 143.888 91.381  -13.379 1.00 14.06
1 . .
ATOM 5113 CA    CA    . LYS LYS LYS B B 238 238 . 142.539 91.364  -12.743 1.00 12.43
1 . .
ATOM 5114 CB    CB    . LYS LYS LYS B B 238 238 . 142.502 90.156  -11.767 1.00 13.31
1 . .
ATOM 5115 CG    CG    . LYS LYS LYS B B 238 238 . 142.440 88.809  -12.559 1.00 17.08
1 . .
ATOM 5116 CD    CD    . LYS LYS LYS B B 238 238 . 142.075 87.680  -11.592 1.00 19.89
1 . .
ATOM 5117 CE    CE    . LYS LYS LYS B B 238 238 . 142.145 86.355  -12.356 1.00 22.60
1 . .
ATOM 5118 NZ    NZ    . LYS LYS LYS B B 238 238 . 141.605 85.379  -11.380 1.00 29.95
1 . .
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ATOM 5119 C     C     . LYS LYS LYS B B 238 238 . 142.201 92.669  -11.946 1.00 11.80
1 . .
ATOM 5120 O     O     . LYS LYS LYS B B 238 238 . 141.079 92.805  -11.507 1.00 11.29
1 . .
ATOM 5121 N     N     . ILE ILE ILE B B 239 239 . 143.168 93.548  -11.737 1.00 10.13
1 . .
ATOM 5122 CA    CA    . ILE ILE ILE B B 239 239 . 142.935 94.725  -10.841 1.00 10.75
1 . .
ATOM 5123 CB    CB    . ILE ILE ILE B B 239 239 . 143.703 94.524  -9.476  1.00 10.47
1 . .
ATOM 5124 CG1   CG1   . ILE ILE ILE B B 239 239 . 143.231 93.215  -8.771  1.00 10.94
1 . .
ATOM 5125 CD    CD    . ILE ILE ILE B B 239 239 . 143.909 93.015  -7.392  1.00 12.87
1 . .
ATOM 5126 CG2   CG2   . ILE ILE ILE B B 239 239 . 143.544 95.846  -8.621  1.00 12.23
1 . .
ATOM 5127 C     C     . ILE ILE ILE B B 239 239 . 143.438 95.957  -11.542 1.00 10.20
1 . .
ATOM 5128 O     O     . ILE ILE ILE B B 239 239 . 144.616 95.984  -12.044 1.00 13.23
1 . .
ATOM 5129 N     N     . VAL VAL VAL B B 240 240 . 142.574 96.978  -11.599 1.00 8.39
1 . .
ATOM 5130 CA    CA    . VAL VAL VAL B B 240 240 . 142.909 98.252  -12.244 1.00 9.50
1 . .
ATOM 5131 CB    CB    . VAL VAL VAL B B 240 240 . 141.938 98.516  -13.414 1.00 8.09
1 . .
ATOM 5132 CG1   CG1   . VAL VAL VAL B B 240 240 . 142.269 97.467  -14.540 1.00 11.10
1 . .
ATOM 5133 CG2   CG2   . VAL VAL VAL B B 240 240 . 140.494 98.562  -13.028 1.00 8.33
1 . .
ATOM 5134 C     C     . VAL VAL VAL B B 240 240 . 142.795 99.348  -11.210 1.00 7.88
1 . .
ATOM 5135 O     O     . VAL VAL VAL B B 240 240 . 142.478 99.081  -10.001 1.00 9.22
1 . .
ATOM 5136 N     N     . ILE ILE ILE B B 241 241 . 143.125 100.586 -11.589 1.00 7.74
1 . .
ATOM 5137 CA    CA    . ILE ILE ILE B B 241 241 . 143.197 101.677 -10.636 1.00 8.13
1 . .
ATOM 5138 CB    CB    . ILE ILE ILE B B 241 241 . 144.616 102.284 -10.700 1.00 8.55
1 . .
ATOM 5139 CG1   CG1   . ILE ILE ILE B B 241 241 . 145.686 101.285 -10.196 1.00 9.97
1 . .
ATOM 5140 CD    CD    . ILE ILE ILE B B 241 241 . 147.152 101.775 -10.437 1.00 11.22
1 . .
ATOM 5141 CG2   CG2   . ILE ILE ILE B B 241 241 . 144.698 103.612 -9.901  1.00 10.06
1 . .
ATOM 5142 C     C     . ILE ILE ILE B B 241 241 . 142.150 102.758 -10.888 1.00 7.77
1 . .
ATOM 5143 O     O     . ILE ILE ILE B B 241 241 . 141.838 103.090 -12.034 1.00 8.29
1 . .
ATOM 5144 N     N     . GLY GLY GLY B B 242 242 . 141.633 103.327 -9.781  1.00 8.18
1 . .
ATOM 5145 CA    CA    . GLY GLY GLY B B 242 242 . 140.810 104.563 -9.895  1.00 8.45
1 . .
ATOM 5146 C     C     . GLY GLY GLY B B 242 242 . 141.392 105.633 -9.041  1.00 7.39
1 . .
ATOM 5147 O     O     . GLY GLY GLY B B 242 242 . 142.114 105.344 -8.118  1.00 10.81
1 . .
ATOM 5148 N     N     . MET MET MET B B 243 243 . 141.114 106.875 -9.361  1.00 7.82
1 . .
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ATOM 5149 CA    CA    . MET MET MET B B 243 243 . 141.647 107.995 -8.543  1.00 8.26
1 . .
ATOM 5150 CB    CB    . MET MET MET B B 243 243 . 142.599 108.834 -9.392  1.00 9.44
1 . .
ATOM 5151 CG    CG    . MET MET MET B B 243 243 . 143.795 108.059 -9.798  1.00 9.39
1 . .
ATOM 5152 SD    SD    . MET MET MET B B 243 243 . 144.863 108.954 -10.959 1.00 11.24
1 . .
ATOM 5153 CE    CE    . MET MET MET B B 243 243 . 145.400 110.247 -9.824  1.00 12.17
1 . .
ATOM 5154 C     C     . MET MET MET B B 243 243 . 140.504 108.889 -8.124  1.00 6.94
1 . .
ATOM 5155 O     O     . MET MET MET B B 243 243 . 139.507 109.035 -8.859  1.00 8.42
1 . .
ATOM 5156 N     N     . ASP ASP ASP B B 244 244 . 140.630 109.558 -6.966  1.00 7.57
1 . .
ATOM 5157 CA    CA    . ASP ASP ASP B B 244 244 . 139.785 110.725 -6.660  1.00 7.26
1 . .
ATOM 5158 CB    CB    . ASP ASP ASP B B 244 244 . 138.858 110.470 -5.426  1.00 7.42
1 . .
ATOM 5159 CG    CG    . ASP ASP ASP B B 244 244 . 137.994 111.672 -5.119  1.00 6.42
1 . .
ATOM 5160 OD1   OD1   . ASP ASP ASP B B 244 244 . 137.214 111.636 -4.142  1.00 7.30
1 . .
ATOM 5161 OD2   OD2   . ASP ASP ASP B B 244 244 . 138.084 112.703 -5.855  1.00 7.70
1 . .
ATOM 5162 C     C     . ASP ASP ASP B B 244 244 . 140.762 111.820 -6.409  1.00 7.66
1 . .
ATOM 5163 O     O     . ASP ASP ASP B B 244 244 . 141.480 111.869 -5.430  1.00 8.34
1 . .
ATOM 5164 N     N     . VAL VAL VAL B B 245 245 . 140.799 112.773 -7.339  1.00 7.10
1 . .
ATOM 5165 CA    CA    . VAL VAL VAL B B 245 245 . 141.663 113.919 -7.296  1.00 7.98
1 . .
ATOM 5166 CB    CB    . VAL VAL VAL B B 245 245 . 141.812 114.602 -8.690  1.00 7.81
1 . .
ATOM 5167 CG1   CG1   . VAL VAL VAL B B 245 245 . 142.659 115.890 -8.594  1.00 8.53
1 . .
ATOM 5168 CG2   CG2   . VAL VAL VAL B B 245 245 . 142.405 113.556 -9.696  1.00 8.79
1 . .
ATOM 5169 C     C     . VAL VAL VAL B B 245 245 . 141.148 114.900 -6.218  1.00 6.84
1 . .
ATOM 5170 O     O     . VAL VAL VAL B B 245 245 . 141.968 115.529 -5.537  1.00 8.23
1 . .
ATOM 5171 N     N     . ALA ALA ALA B B 246 246 . 139.820 115.042 -6.134  1.00 6.94
1 . .
ATOM 5172 CA    CA    . ALA ALA ALA B B 246 246 . 139.228 116.067 -5.245  1.00 6.22
1 . .
ATOM 5173 CB    CB    . ALA ALA ALA B B 246 246 . 139.366 115.661 -3.733  1.00 7.99
1 . .
ATOM 5174 C     C     . ALA ALA ALA B B 246 246 . 139.822 117.424 -5.530  1.00 6.05
1 . .
ATOM 5175 O     O     . ALA ALA ALA B B 246 246 . 140.179 118.188 -4.653  1.00 8.09
1 . .
ATOM 5176 N     N     . ALA ALA ALA B B 247 247 . 139.783 117.826 -6.807  1.00 7.20
1 . .
ATOM 5177 CA    CA    . ALA ALA ALA B B 247 247 . 140.498 119.023 -7.256  1.00 7.23
1 . .
ATOM 5178 CB    CB    . ALA ALA ALA B B 247 247 . 140.489 119.107 -8.805  1.00 7.46
1 . .
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ATOM 5179 C     C     . ALA ALA ALA B B 247 247 . 139.877 120.327 -6.671  1.00 7.98
1 . .
ATOM 5180 O     O     . ALA ALA ALA B B 247 247 . 140.580 121.328 -6.644  1.00 8.02
1 . .
ATOM 5181 N     N     . SER SER SER B B 248 248 . 138.640 120.327 -6.197  1.00 8.57
1 . .
ATOM 5182 CA    CA    . SER SER SER B B 248 248 . 138.096 121.550 -5.522  1.00 8.02
1 . .
ATOM 5183 CB    CB    . SER SER SER B B 248 248 . 136.641 121.400 -5.116  1.00 7.51
1 . .
ATOM 5184 OG    OG    . SER SER SER B B 248 248 . 135.841 121.024 -6.233  1.00 7.91
1 . .
ATOM 5185 C     C     . SER SER SER B B 248 248 . 138.943 121.938 -4.312  1.00 8.51
1 . .
ATOM 5186 O     O     . SER SER SER B B 248 248 . 138.953 123.119 -3.924  1.00 10.48
1 . .
ATOM 5187 N     N     . GLU GLU GLU B B 249 249 . 139.593 120.955 -3.694  1.00 8.13
1 . .
ATOM 5188 CA    CA    . GLU GLU GLU B B 249 249 . 140.423 121.233 -2.525  1.00 9.30
1 . .
ATOM 5189 CB    CB    . GLU GLU GLU B B 249 249 . 140.830 119.898 -1.863  1.00 8.29
1 . .
ATOM 5190 CG    CG    . GLU GLU GLU B B 249 249 . 139.575 119.158 -1.349  1.00 10.93
1 . .
ATOM 5191 CD    CD    . GLU GLU GLU B B 249 249 . 138.887 119.901 -0.198  1.00 10.86
1 . .
ATOM 5192 OE1   OE1   . GLU GLU GLU B B 249 249 . 139.595 120.344 0.748   1.00 18.10
1 . .
ATOM 5193 OE2   OE2   . GLU GLU GLU B B 249 249 . 137.661 120.038 -0.177  1.00 10.84
1 . .
ATOM 5194 C     C     . GLU GLU GLU B B 249 249 . 141.679 121.995 -2.824  1.00 10.33
1 . .
ATOM 5195 O     O     . GLU GLU GLU B B 249 249 . 142.221 122.642 -1.912  1.00 12.73
1 . .
ATOM 5196 N     N     . PHE PHE PHE B B 250 250 . 142.076 122.060 -4.111  1.00 8.76
1 . .
ATOM 5197 CA    CA    . PHE PHE PHE B B 250 250 . 143.322 122.748 -4.453  1.00 9.27
1 . .
ATOM 5198 CB    CB    . PHE PHE PHE B B 250 250 . 144.476 121.769 -4.564  1.00 9.36
1 . .
ATOM 5199 CG    CG    . PHE PHE PHE B B 250 250 . 144.349 120.726 -5.672  1.00 8.00
1 . .
ATOM 5200 CD1   CD1   . PHE PHE PHE B B 250 250 . 144.070 119.415 -5.347  1.00 8.74
1 . .
ATOM 5201 CE1   CE1   . PHE PHE PHE B B 250 250 . 143.994 118.403 -6.331  1.00 8.13
1 . .
ATOM 5202 CZ    CZ    . PHE PHE PHE B B 250 250 . 144.199 118.696 -7.678  1.00 9.75
1 . .
ATOM 5203 CE2   CE2   . PHE PHE PHE B B 250 250 . 144.514 120.031 -8.035  1.00 10.87
1 . .
ATOM 5204 CD2   CD2   . PHE PHE PHE B B 250 250 . 144.578 121.027 -7.031  1.00 8.36
1 . .
ATOM 5205 C     C     . PHE PHE PHE B B 250 250 . 143.174 123.743 -5.628  1.00 9.15
1 . .
ATOM 5206 O     O     . PHE PHE PHE B B 250 250 . 144.147 124.259 -6.135  1.00 10.84
1 . .
ATOM 5207 N     N     . TYR TYR TYR B B 251 251 . 141.925 124.077 -5.926  1.00 9.03
1 . .
ATOM 5208 CA    CA    . TYR TYR TYR B B 251 251 . 141.662 125.165 -6.836  1.00 9.21
1 . .
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ATOM 5209 CB    CB    . TYR TYR TYR B B 251 251 . 140.152 125.120 -7.153  1.00 9.46
1 . .
ATOM 5210 CG    CG    . TYR TYR TYR B B 251 251 . 139.649 126.264 -7.990  1.00 9.43
1 . .
ATOM 5211 CD1   CD1   . TYR TYR TYR B B 251 251 . 139.792 126.266 -9.411  1.00 11.23
1 . .
ATOM 5212 CE1   CE1   . TYR TYR TYR B B 251 251 . 139.307 127.331 -10.174 1.00 10.81
1 . .
ATOM 5213 CZ    CZ    . TYR TYR TYR B B 251 251 . 138.727 128.439 -9.506  1.00 15.03
1 . .
ATOM 5214 OH    OH    . TYR TYR TYR B B 251 251 . 138.267 129.540 -10.242 1.00 15.15
1 . .
ATOM 5215 CE2   CE2   . TYR TYR TYR B B 251 251 . 138.608 128.469 -8.122  1.00 18.61
1 . .
ATOM 5216 CD2   CD2   . TYR TYR TYR B B 251 251 . 139.083 127.390 -7.365  1.00 15.81
1 . .
ATOM 5217 C     C     . TYR TYR TYR B B 251 251 . 141.993 126.488 -6.160  1.00 9.24
1 . .
ATOM 5218 O     O     . TYR TYR TYR B B 251 251 . 141.537 126.729 -5.022  1.00 12.44
1 . .
ATOM 5219 N     N     . ARG ARG ARG B B 252 252 . 142.735 127.353 -6.869  1.00 10.66
1 . .
ATOM 5220 CA    CA    . ARG ARG ARG B B 252 252 . 143.147 128.649 -6.317  1.00 12.33
1 . .
ATOM 5221 CB    CB    . ARG ARG ARG B B 252 252 . 144.621 128.588 -5.810  1.00 12.72
1 . .
ATOM 5222 CG    CG    . ARG ARG ARG B B 252 252 . 144.870 127.479 -4.759  1.00 16.10
1 . .
ATOM 5223 CD    CD    . ARG ARG ARG B B 252 252 . 144.471 127.911 -3.364  1.00 18.09
1 . .
ATOM 5224 NE    NE    . ARG ARG ARG B B 252 252 . 144.747 126.854 -2.374  1.00 19.36
1 . .
ATOM 5225 CZ    CZ    . ARG ARG ARG B B 252 252 . 143.891 125.909 -1.993  1.00 19.23
1 . .
ATOM 5226 NH1   NH1   . ARG ARG ARG B B 252 252 . 142.653 125.767 -2.555  1.00 16.52
1 . .
ATOM 5227 NH2   NH2   . ARG ARG ARG B B 252 252 . 144.296 125.053 -1.071  1.00 18.22
1 . .
ATOM 5228 C     C     . ARG ARG ARG B B 252 252 . 143.102 129.681 -7.451  1.00 12.61
1 . .
ATOM 5229 O     O     . ARG ARG ARG B B 252 252 . 143.902 129.607 -8.382  1.00 12.61
1 . .
ATOM 5230 N     N     . ASP ASP ASP B B 253 253 . 142.218 130.657 -7.299  1.00 14.46
1 . .
ATOM 5231 CA    CA    . ASP ASP ASP B B 253 253 . 142.202 131.866 -8.169  1.00 14.66
1 . .
ATOM 5232 CB    CB    . ASP ASP ASP B B 253 253 . 143.487 132.705 -7.869  1.00 17.67
1 . .
ATOM 5233 CG    CG    . ASP ASP ASP B B 253 253 . 143.438 133.384 -6.477  1.00 22.04
1 . .
ATOM 5234 OD1   OD1   . ASP ASP ASP B B 253 253 . 144.527 133.771 -6.012  1.00 32.48
1 . .
ATOM 5235 OD2   OD2   . ASP ASP ASP B B 253 253 . 142.334 133.526 -5.875  1.00 28.78
1 . .
ATOM 5236 C     C     . ASP ASP ASP B B 253 253 . 142.128 131.495 -9.685  1.00 13.12
1 . .
ATOM 5237 O     O     . ASP ASP ASP B B 253 253 . 142.720 132.150 -10.561 1.00 13.59
1 . .
ATOM 5238 N     N     . GLY GLY GLY B B 254 254 . 141.395 130.416 -9.998  1.00 11.97
1 . .
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ATOM 5239 CA    CA    . GLY GLY GLY B B 254 254 . 141.151 130.051 -11.402 1.00 11.99
1 . .
ATOM 5240 C     C     . GLY GLY GLY B B 254 254 . 142.177 129.036 -11.912 1.00 11.62
1 . .
ATOM 5241 O     O     . GLY GLY GLY B B 254 254 . 142.073 128.650 -13.090 1.00 11.56
1 . .
ATOM 5242 N     N     . LYS LYS LYS B B 255 255 . 143.142 128.591 -11.061 1.00 11.28
1 . .
ATOM 5243 CA    CA    . LYS LYS LYS B B 255 255 . 144.192 127.633 -11.402 1.00 10.65
1 . .
ATOM 5244 CB    CB    . LYS LYS LYS B B 255 255 . 145.560 128.326 -11.566 1.00 10.94
1 . .
ATOM 5245 CG    CG    . LYS LYS LYS B B 255 255 . 145.550 129.278 -12.783 1.00 12.14
1 . .
ATOM 5246 CD    CD    . LYS LYS LYS B B 255 255 . 147.026 129.790 -12.941 1.00 16.08
1 . .
ATOM 5247 CE    CE    . LYS LYS LYS B B 255 255 . 147.198 130.846 -13.988 1.00 20.36
1 . .
ATOM 5248 NZ    NZ    . LYS LYS LYS B B 255 255 . 148.630 131.263 -14.179 1.00 25.85
1 . .
ATOM 5249 C     C     . LYS LYS LYS B B 255 255 . 144.197 126.568 -10.308 1.00 11.58
1 . .
ATOM 5250 O     O     . LYS LYS LYS B B 255 255 . 143.313 126.559 -9.465  1.00 11.09
1 . .
ATOM 5251 N     N     . TYR TYR TYR B B 256 256 . 145.179 125.685 -10.350 1.00 9.97
1 . .
ATOM 5252 CA    CA    . TYR TYR TYR B B 256 256 . 145.248 124.521 -9.471  1.00 10.69
1 . .
ATOM 5253 CB    CB    . TYR TYR TYR B B 256 256 . 144.910 123.215 -10.255 1.00 8.58
1 . .
ATOM 5254 CG    CG    . TYR TYR TYR B B 256 256 . 143.493 123.259 -10.688 1.00 8.22
1 . .
ATOM 5255 CD1   CD1   . TYR TYR TYR B B 256 256 . 142.472 122.781 -9.837  1.00 8.14
1 . .
ATOM 5256 CE1   CE1   . TYR TYR TYR B B 256 256 . 141.141 122.746 -10.230 1.00 6.12
1 . .
ATOM 5257 CZ    CZ    . TYR TYR TYR B B 256 256 . 140.772 123.228 -11.475 1.00 6.81
1 . .
ATOM 5258 OH    OH    . TYR TYR TYR B B 256 256 . 139.469 123.280 -11.863 1.00 7.71
1 . .
ATOM 5259 CE2   CE2   . TYR TYR TYR B B 256 256 . 141.738 123.763 -12.334 1.00 9.05
1 . .
ATOM 5260 CD2   CD2   . TYR TYR TYR B B 256 256 . 143.109 123.770 -11.958 1.00 7.60
1 . .
ATOM 5261 C     C     . TYR TYR TYR B B 256 256 . 146.631 124.413 -8.849  1.00 10.51
1 . .
ATOM 5262 O     O     . TYR TYR TYR B B 256 256 . 147.652 124.503 -9.543  1.00 10.87
1 . .
ATOM 5263 N     N     . ASP ASP ASP B B 257 257 . 146.654 124.120 -7.544  1.00 13.50
1 . .
ATOM 5264 CA    CA    . ASP ASP ASP B B 257 257 . 147.926 124.029 -6.786  1.00 12.34
1 . .
ATOM 5265 CB    CB    . ASP ASP ASP B B 257 257 . 147.878 124.915 -5.564  1.00 12.74
1 . .
ATOM 5266 CG    CG    . ASP ASP ASP B B 257 257 . 149.189 124.910 -4.778  1.00 10.90
1 . .
ATOM 5267 OD1   OD1   . ASP ASP ASP B B 257 257 . 150.166 124.298 -5.315  1.00 12.81
1 . .
ATOM 5268 OD2   OD2   . ASP ASP ASP B B 257 257 . 149.214 125.586 -3.705  1.00 13.27
1 . .
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ATOM 5269 C     C     . ASP ASP ASP B B 257 257 . 148.220 122.565 -6.385  1.00 10.82
1 . .
ATOM 5270 O     O     . ASP ASP ASP B B 257 257 . 147.669 122.103 -5.331  1.00 12.29
1 . .
ATOM 5271 N     N     . LEU LEU LEU B B 258 258 . 149.028 121.834 -7.162  1.00 13.15
1 . .
ATOM 5272 CA    CA    . LEU LEU LEU B B 258 258 . 149.328 120.439 -6.828  1.00 13.68
1 . .
ATOM 5273 CB    CB    . LEU LEU LEU B B 258 258 . 149.925 119.628 -8.009  1.00 13.12
1 . .
ATOM 5274 CG    CG    . LEU LEU LEU B B 258 258 . 148.944 119.277 -9.090  1.00 14.72
1 . .
ATOM 5275 CD1   CD1   . LEU LEU LEU B B 258 258 . 149.606 118.503 -10.232 1.00 16.33
1 . .
ATOM 5276 CD2   CD2   . LEU LEU LEU B B 258 258 . 147.754 118.447 -8.534  1.00 15.46
1 . .
ATOM 5277 C     C     . LEU LEU LEU B B 258 258 . 150.352 120.336 -5.711  1.00 12.50
1 . .
ATOM 5278 O     O     . LEU LEU LEU B B 258 258 . 150.707 119.210 -5.292  1.00 15.24
1 . .
ATOM 5279 N     N     . ASP ASP ASP B B 259 259 . 150.845 121.479 -5.223  1.00 13.52
1 . .
ATOM 5280 CA    CA    . ASP ASP ASP B B 259 259 . 151.697 121.409 -4.028  1.00 15.13
1 . .
ATOM 5281 CB    CB    . ASP ASP ASP B B 259 259 . 153.197 121.906 -4.211  1.00 18.68
1 . .
ATOM 5282 CG    CG    . ASP ASP ASP B B 259 259 . 154.289 121.221 -3.079  1.00 22.84
1 . .
ATOM 5283 OD1   OD1   . ASP ASP ASP B B 259 259 . 153.839 120.600 -1.990  1.00 23.88
1 . .
ATOM 5284 OD2   OD2   . ASP ASP ASP B B 259 259 . 155.605 121.281 -3.313  1.00 26.20
1 . .
ATOM 5285 C     C     . ASP ASP ASP B B 259 259 . 151.048 122.063 -2.818  1.00 13.99
1 . .
ATOM 5286 O     O     . ASP ASP ASP B B 259 259 . 151.751 122.608 -1.981  1.00 14.03
1 . .
ATOM 5287 N     N     . PHE PHE PHE B B 260 260 . 149.721 122.052 -2.744  1.00 11.85
1 . .
ATOM 5288 CA    CA    . PHE PHE PHE B B 260 260 . 148.982 122.836 -1.715  1.00 14.13
1 . .
ATOM 5289 CB    CB    . PHE PHE PHE B B 260 260 . 147.491 122.936 -2.010  1.00 11.04
1 . .
ATOM 5290 CG    CG    . PHE PHE PHE B B 260 260 . 146.678 121.751 -1.545  1.00 10.67
1 . .
ATOM 5291 CD1   CD1   . PHE PHE PHE B B 260 260 . 145.920 121.840 -0.378  1.00 13.28
1 . .
ATOM 5292 CE1   CE1   . PHE PHE PHE B B 260 260 . 145.112 120.818 0.007   1.00 18.87
1 . .
ATOM 5293 CZ    CZ    . PHE PHE PHE B B 260 260 . 145.119 119.595 -0.752  1.00 18.09
1 . .
ATOM 5294 CE2   CE2   . PHE PHE PHE B B 260 260 . 145.856 119.517 -1.876  1.00 12.74
1 . .
ATOM 5295 CD2   CD2   . PHE PHE PHE B B 260 260 . 146.694 120.532 -2.248  1.00 9.84
1 . .
ATOM 5296 C     C     . PHE PHE PHE B B 260 260 . 149.194 122.715 -0.267  1.00 19.58
1 . .
ATOM 5297 O     O     . PHE PHE PHE B B 260 260 . 148.915 123.671 0.498   1.00 23.28
1 . .
ATOM 5298 N     N     . LYS LYS LYS B B 261 261 . 149.664 121.588 0.115   1.00 22.08
1 . .
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ATOM 5299 CA    CA    . LYS LYS LYS B B 261 261 . 150.036 121.435 1.539   1.00 24.27
1 . .
ATOM 5300 CB    CB    . LYS LYS LYS B B 261 261 . 149.822 119.983 1.876   1.00 23.80
1 . .
ATOM 5301 CG    CG    . LYS LYS LYS B B 261 261 . 148.273 119.680 2.093   1.00 25.59
1 . .
ATOM 5302 CD    CD    . LYS LYS LYS B B 261 261 . 147.971 118.185 2.409   1.00 25.19
1 . .
ATOM 5303 CE    CE    . LYS LYS LYS B B 261 261 . 148.322 117.274 1.223   1.00 24.14
1 . .
ATOM 5304 NZ    NZ    . LYS LYS LYS B B 261 261 . 148.219 115.792 1.706   1.00 22.88
1 . .
ATOM 5305 C     C     . LYS LYS LYS B B 261 261 . 151.433 122.013 1.935   1.00 25.78
1 . .
ATOM 5306 O     O     . LYS LYS LYS B B 261 261 . 151.935 121.841 3.074   1.00 28.51
1 . .
ATOM 5307 N     N     . SER SER SER B B 262 262 . 152.022 122.780 1.025   1.00 24.37
1 . .
ATOM 5308 CA    CA    . SER SER SER B B 262 262 . 153.288 123.467 1.301   1.00 26.37
1 . .
ATOM 5309 CB    CB    . SER SER SER B B 262 262 . 154.342 122.950 0.381   1.00 23.94
1 . .
ATOM 5310 OG    OG    . SER SER SER B B 262 262 . 154.506 121.612 0.638   1.00 27.00
1 . .
ATOM 5311 C     C     . SER SER SER B B 262 262 . 153.044 124.979 1.138   1.00 26.95
1 . .
ATOM 5312 O     O     . SER SER SER B B 262 262 . 152.018 125.372 0.471   1.00 26.12
1 . .
ATOM 5313 N     N     . PRO PRO PRO B B 263 263 . 153.936 125.845 1.735   1.00 28.55
1 . .
ATOM 5314 CA    CA    . PRO PRO PRO B B 263 263 . 153.596 127.287 1.696   1.00 29.42
1 . .
ATOM 5315 CB    CB    . PRO PRO PRO B B 263 263 . 154.855 127.989 2.254   1.00 30.53
1 . .
ATOM 5316 CG    CG    . PRO PRO PRO B B 263 263 . 155.543 126.908 3.122   1.00 29.20
1 . .
ATOM 5317 CD    CD    . PRO PRO PRO B B 263 263 . 155.248 125.599 2.396   1.00 28.81
1 . .
ATOM 5318 C     C     . PRO PRO PRO B B 263 263 . 153.265 127.851 0.311   1.00 28.95
1 . .
ATOM 5319 O     O     . PRO PRO PRO B B 263 263 . 154.016 127.603 -0.690  1.00 27.63
1 . .
ATOM 5320 N     N     . THR THR THR B B 264 264 . 152.163 128.621 0.280   1.00 28.54
1 . .
ATOM 5321 CA    CA    . THR THR THR B B 264 264 . 151.608 129.248 -0.938  1.00 27.40
1 . .
ATOM 5322 CB    CB    . THR THR THR B B 264 264 . 150.512 130.286 -0.533  1.00 28.21
1 . .
ATOM 5323 OG1   OG1   . THR THR THR B B 264 264 . 149.517 129.609 0.266   1.00 28.86
1 . .
ATOM 5324 CG2   CG2   . THR THR THR B B 264 264 . 149.862 130.900 -1.758  1.00 25.46
1 . .
ATOM 5325 C     C     . THR THR THR B B 264 264 . 152.633 129.831 -1.947  1.00 26.66
1 . .
ATOM 5326 O     O     . THR THR THR B B 264 264 . 153.537 130.626 -1.595  1.00 28.04
1 . .
ATOM 5327 N     N     . ASP ASP ASP B B 265 265 . 152.505 129.468 -3.229  1.00 23.15
1 . .
ATOM 5328 CA    CA    . ASP ASP ASP B B 265 265 . 153.481 129.950 -4.190  1.00 23.11
1 . .
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ATOM 5329 CB    CB    . ASP ASP ASP B B 265 265 . 154.716 129.003 -4.257  1.00 23.56
1 . .
ATOM 5330 CG    CG    . ASP ASP ASP B B 265 265 . 155.626 129.313 -5.413  1.00 20.51
1 . .
ATOM 5331 OD1   OD1   . ASP ASP ASP B B 265 265 . 155.407 130.312 -6.049  1.00 22.82
1 . .
ATOM 5332 OD2   OD2   . ASP ASP ASP B B 265 265 . 156.657 128.589 -5.665  1.00 28.30
1 . .
ATOM 5333 C     C     . ASP ASP ASP B B 265 265 . 152.739 129.885 -5.495  1.00 22.51
1 . .
ATOM 5334 O     O     . ASP ASP ASP B B 265 265 . 152.688 128.799 -6.137  1.00 20.30
1 . .
ATOM 5335 N     N     . PRO PRO PRO B B 266 266 . 152.141 131.019 -5.937  1.00 22.81
1 . .
ATOM 5336 CA    CA    . PRO PRO PRO B B 266 266 . 151.291 130.920 -7.161  1.00 23.20
1 . .
ATOM 5337 CB    CB    . PRO PRO PRO B B 266 266 . 150.742 132.365 -7.325  1.00 22.53
1 . .
ATOM 5338 CG    CG    . PRO PRO PRO B B 266 266 . 150.582 132.779 -5.886  1.00 23.31
1 . .
ATOM 5339 CD    CD    . PRO PRO PRO B B 266 266 . 151.941 132.322 -5.260  1.00 23.18
1 . .
ATOM 5340 C     C     . PRO PRO PRO B B 266 266 . 152.089 130.535 -8.388  1.00 24.22
1 . .
ATOM 5341 O     O     . PRO PRO PRO B B 266 266 . 151.521 130.248 -9.477  1.00 23.88
1 . .
ATOM 5342 N     N     . SER SER SER B B 267 267 . 153.388 130.501 -8.251  1.00 23.95
1 . .
ATOM 5343 CA    CA    . SER SER SER B B 267 267 . 154.187 130.390 -9.502  1.00 23.69
1 . .
ATOM 5344 CB    CB    . SER SER SER B B 267 267 . 155.604 130.973 -9.265  1.00 24.91
1 . .
ATOM 5345 OG    OG    . SER SER SER B B 267 267 . 156.465 130.050 -8.582  1.00 25.74
1 . .
ATOM 5346 C     C     . SER SER SER B B 267 267 . 154.180 128.893 -9.936  1.00 22.40
1 . .
ATOM 5347 O     O     . SER SER SER B B 267 267 . 154.562 128.550 -11.111 1.00 22.79
1 . .
ATOM 5348 N     N     . ARG ARG ARG B B 268 268 . 153.715 128.035 -9.019  1.00 18.85
1 . .
ATOM 5349 CA    CA    . ARG ARG ARG B B 268 268 . 153.739 126.644 -9.258  1.00 18.47
1 . .
ATOM 5350 CB    CB    . ARG ARG ARG B B 268 268 . 154.107 125.759 -8.012  1.00 19.37
1 . .
ATOM 5351 CG    CG    . ARG ARG ARG B B 268 268 . 152.919 125.491 -6.842  1.00 16.11
1 . .
ATOM 5352 CD    CD    . ARG ARG ARG B B 268 268 . 153.628 125.224 -5.490  1.00 18.68
1 . .
ATOM 5353 NE    NE    . ARG ARG ARG B B 268 268 . 152.573 125.328 -4.433  1.00 19.97
1 . .
ATOM 5354 CZ    CZ    . ARG ARG ARG B B 268 268 . 152.711 125.596 -3.151  1.00 13.85
1 . .
ATOM 5355 NH1   NH1   . ARG ARG ARG B B 268 268 . 153.964 125.589 -2.571  1.00 22.76
1 . .
ATOM 5356 NH2   NH2   . ARG ARG ARG B B 268 268 . 151.558 125.688 -2.385  1.00 16.08
1 . .
ATOM 5357 C     C     . ARG ARG ARG B B 268 268 . 152.298 126.316 -9.700  1.00 16.01
1 . .
ATOM 5358 O     O     . ARG ARG ARG B B 268 268 . 152.163 125.185 -10.046 1.00 18.41
1 . .
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ATOM 5359 N     N     . TYR TYR TYR B B 269 269 . 151.302 127.256 -9.709  1.00 16.52
1 . .
ATOM 5360 CA    CA    . TYR TYR TYR B B 269 269 . 149.876 126.856 -10.069 1.00 13.75
1 . .
ATOM 5361 CB    CB    . TYR TYR TYR B B 269 269 . 148.817 127.897 -9.799  1.00 13.77
1 . .
ATOM 5362 CG    CG    . TYR TYR TYR B B 269 269 . 148.684 128.396 -8.378  1.00 12.04
1 . .
ATOM 5363 CD1   CD1   . TYR TYR TYR B B 269 269 . 147.948 129.554 -8.125  1.00 12.59
1 . .
ATOM 5364 CE1   CE1   . TYR TYR TYR B B 269 269 . 147.765 130.028 -6.852  1.00 14.62
1 . .
ATOM 5365 CZ    CZ    . TYR TYR TYR B B 269 269 . 148.337 129.333 -5.781  1.00 14.50
1 . .
ATOM 5366 OH    OH    . TYR TYR TYR B B 269 269 . 148.146 129.895 -4.518  1.00 19.21
1 . .
ATOM 5367 CE2   CE2   . TYR TYR TYR B B 269 269 . 149.101 128.196 -5.970  1.00 14.83
1 . .
ATOM 5368 CD2   CD2   . TYR TYR TYR B B 269 269 . 149.305 127.733 -7.295  1.00 14.30
1 . .
ATOM 5369 C     C     . TYR TYR TYR B B 269 269 . 149.774 126.531 -11.540 1.00 13.62
1 . .
ATOM 5370 O     O     . TYR TYR TYR B B 269 269 . 150.472 127.103 -12.369 1.00 16.33
1 . .
ATOM 5371 N     N     . ILE ILE ILE B B 270 270 . 148.962 125.504 -11.841 1.00 12.02
1 . .
ATOM 5372 CA    CA    . ILE ILE ILE B B 270 270 . 148.793 125.069 -13.225 1.00 11.26
1 . .
ATOM 5373 CB    CB    . ILE ILE ILE B B 270 270 . 149.243 123.612 -13.433 1.00 11.25
1 . .
ATOM 5374 CG1   CG1   . ILE ILE ILE B B 270 270 . 148.422 122.579 -12.616 1.00 12.75
1 . .
ATOM 5375 CD    CD    . ILE ILE ILE B B 270 270 . 148.878 121.134 -12.945 1.00 13.24
1 . .
ATOM 5376 CG2   CG2   . ILE ILE ILE B B 270 270 . 150.803 123.524 -13.115 1.00 13.54
1 . .
ATOM 5377 C     C     . ILE ILE ILE B B 270 270 . 147.376 125.267 -13.684 1.00 10.64
1 . .
ATOM 5378 O     O     . ILE ILE ILE B B 270 270 . 146.446 125.313 -12.878 1.00 10.51
1 . .
ATOM 5379 N     N     . THR THR THR B B 271 271 . 147.190 125.311 -14.983 1.00 11.47
1 . .
ATOM 5380 CA    CA    . THR THR THR B B 271 271 . 145.809 125.444 -15.491 1.00 11.22
1 . .
ATOM 5381 CB    CB    . THR THR THR B B 271 271 . 145.765 126.114 -16.891 1.00 10.86
1 . .
ATOM 5382 OG1   OG1   . THR THR THR B B 271 271 . 146.210 125.148 -17.874 1.00 13.99
1 . .
ATOM 5383 CG2   CG2   . THR THR THR B B 271 271 . 146.735 127.367 -16.938 1.00 14.91
1 . .
ATOM 5384 C     C     . THR THR THR B B 271 271 . 145.068 124.144 -15.597 1.00 10.98
1 . .
ATOM 5385 O     O     . THR THR THR B B 271 271 . 145.675 123.041 -15.553 1.00 10.02
1 . .
ATOM 5386 N     N     . GLY GLY GLY B B 272 272 . 143.758 124.228 -15.806 1.00 12.48
1 . .
ATOM 5387 CA    CA    . GLY GLY GLY B B 272 272 . 142.994 123.015 -16.060 1.00 12.42
1 . .
ATOM 5388 C     C     . GLY GLY GLY B B 272 272 . 143.508 122.226 -17.261 1.00 11.63
1 . .
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ATOM 5389 O     O     . GLY GLY GLY B B 272 272 . 143.448 120.986 -17.256 1.00 12.43
1 . .
ATOM 5390 N     N     . ASP ASP ASP B B 273 273 . 143.980 122.901 -18.312 1.00 12.22
1 . .
ATOM 5391 CA    CA    . ASP ASP ASP B B 273 273 . 144.531 122.201 -19.487 1.00 13.55
1 . .
ATOM 5392 CB    CB    . ASP ASP ASP B B 273 273 . 144.898 123.205 -20.601 1.00 14.51
1 . .
ATOM 5393 CG    CG    . ASP ASP ASP B B 273 273 . 143.805 123.399 -21.639 1.00 20.08
1 . .
ATOM 5394 OD1   OD1   . ASP ASP ASP B B 273 273 . 142.589 123.340 -21.285 1.00 25.34
1 . .
ATOM 5395 OD2   OD2   . ASP ASP ASP B B 273 273 . 144.165 123.719 -22.836 1.00 24.26
1 . .
ATOM 5396 C     C     . ASP ASP ASP B B 273 273 . 145.799 121.446 -19.105 1.00 13.15
1 . .
ATOM 5397 O     O     . ASP ASP ASP B B 273 273 . 146.016 120.309 -19.536 1.00 12.43
1 . .
ATOM 5398 N     N     . GLN GLN GLN B B 274 274 . 146.648 122.040 -18.307 1.00 11.31
1 . .
ATOM 5399 CA    CA    . GLN GLN GLN B B 274 274 . 147.862 121.364 -17.866 1.00 11.85
1 . .
ATOM 5400 CB    CB    . GLN GLN GLN B B 274 274 . 148.769 122.332 -17.079 1.00 12.65
1 . .
ATOM 5401 CG    CG    . GLN GLN GLN B B 274 274 . 149.370 123.392 -18.000 1.00 15.78
1 . .
ATOM 5402 CD    CD    . GLN GLN GLN B B 274 274 . 150.149 124.393 -17.159 1.00 18.84
1 . .
ATOM 5403 OE1   OE1   . GLN GLN GLN B B 274 274 . 149.572 125.148 -16.414 1.00 15.56
1 . .
ATOM 5404 NE2   NE2   . GLN GLN GLN B B 274 274 . 151.481 124.318 -17.214 1.00 24.14
1 . .
ATOM 5405 C     C     . GLN GLN GLN B B 274 274 . 147.497 120.160 -16.973 1.00 11.52
1 . .
ATOM 5406 O     O     . GLN GLN GLN B B 274 274 . 148.125 119.098 -17.112 1.00 11.02
1 . .
ATOM 5407 N     N     . LEU LEU LEU B B 275 275 . 146.479 120.307 -16.102 1.00 9.31
1 . .
ATOM 5408 CA    CA    . LEU LEU LEU B B 275 275 . 146.070 119.217 -15.266 1.00 9.66
1 . .
ATOM 5409 CB    CB    . LEU LEU LEU B B 275 275 . 145.114 119.786 -14.245 1.00 12.15
1 . .
ATOM 5410 CG    CG    . LEU LEU LEU B B 275 275 . 144.703 118.964 -13.147 1.00 12.61
1 . .
ATOM 5411 CD1   CD1   . LEU LEU LEU B B 275 275 . 145.925 118.466 -12.318 1.00 13.44
1 . .
ATOM 5412 CD2   CD2   . LEU LEU LEU B B 275 275 . 143.787 119.886 -12.265 1.00 12.36
1 . .
ATOM 5413 C     C     . LEU LEU LEU B B 275 275 . 145.514 118.076 -16.106 1.00 11.49
1 . .
ATOM 5414 O     O     . LEU LEU LEU B B 275 275 . 145.885 116.910 -15.896 1.00 11.06
1 . .
ATOM 5415 N     N     . GLY GLY GLY B B 276 276 . 144.718 118.399 -17.109 1.00 9.22
1 . .
ATOM 5416 CA    CA    . GLY GLY GLY B B 276 276 . 144.243 117.338 -18.001 1.00 8.91
1 . .
ATOM 5417 C     C     . GLY GLY GLY B B 276 276 . 145.346 116.603 -18.755 1.00 10.07
1 . .
ATOM 5418 O     O     . GLY GLY GLY B B 276 276 . 145.264 115.378 -18.905 1.00 10.12
1 . .
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ATOM 5419 N     N     . ALA ALA ALA B B 277 277 . 146.376 117.315 -19.153 1.00 9.28
1 . .
ATOM 5420 CA    CA    . ALA ALA ALA B B 277 277 . 147.548 116.683 -19.745 1.00 8.83
1 . .
ATOM 5421 CB    CB    . ALA ALA ALA B B 277 277 . 148.483 117.761 -20.267 1.00 10.75
1 . .
ATOM 5422 C     C     . ALA ALA ALA B B 277 277 . 148.228 115.688 -18.807 1.00 9.97
1 . .
ATOM 5423 O     O     . ALA ALA ALA B B 277 277 . 148.687 114.590 -19.226 1.00 12.13
1 . .
ATOM 5424 N     N     . LEU LEU LEU B B 278 278 . 148.276 116.064 -17.538 1.00 8.89
1 . .
ATOM 5425 CA    CA    . LEU LEU LEU B B 278 278 . 148.908 115.207 -16.557 1.00 8.72
1 . .
ATOM 5426 CB    CB    . LEU LEU LEU B B 278 278 . 148.989 115.927 -15.228 1.00 10.00
1 . .
ATOM 5427 CG    CG    . LEU LEU LEU B B 278 278 . 149.569 115.147 -14.099 1.00 12.38
1 . .
ATOM 5428 CD1   CD1   . LEU LEU LEU B B 278 278 . 151.046 114.668 -14.387 1.00 16.11
1 . .
ATOM 5429 CD2   CD2   . LEU LEU LEU B B 278 278 . 149.478 116.076 -12.859 1.00 13.97
1 . .
ATOM 5430 C     C     . LEU LEU LEU B B 278 278 . 148.045 113.936 -16.381 1.00 8.60
1 . .
ATOM 5431 O     O     . LEU LEU LEU B B 278 278 . 148.569 112.825 -16.405 1.00 9.55
1 . .
ATOM 5432 N     N     . TYR TYR TYR B B 279 279 . 146.719 114.076 -16.355 1.00 8.29
1 . .
ATOM 5433 CA    CA    . TYR TYR TYR B B 279 279 . 145.858 112.889 -16.243 1.00 7.87
1 . .
ATOM 5434 CB    CB    . TYR TYR TYR B B 279 279 . 144.386 113.275 -16.159 1.00 8.17
1 . .
ATOM 5435 CG    CG    . TYR TYR TYR B B 279 279 . 144.006 114.148 -14.981 1.00 6.75
1 . .
ATOM 5436 CD1   CD1   . TYR TYR TYR B B 279 279 . 144.658 113.993 -13.741 1.00 8.29
1 . .
ATOM 5437 CE1   CE1   . TYR TYR TYR B B 279 279 . 144.289 114.816 -12.637 1.00 7.70
1 . .
ATOM 5438 CZ    CZ    . TYR TYR TYR B B 279 279 . 143.340 115.775 -12.824 1.00 8.80
1 . .
ATOM 5439 OH    OH    . TYR TYR TYR B B 279 279 . 143.011 116.578 -11.760 1.00 8.91
1 . .
ATOM 5440 CE2   CE2   . TYR TYR TYR B B 279 279 . 142.724 115.986 -14.018 1.00 7.32
1 . .
ATOM 5441 CD2   CD2   . TYR TYR TYR B B 279 279 . 143.065 115.162 -15.127 1.00 7.52
1 . .
ATOM 5442 C     C     . TYR TYR TYR B B 279 279 . 146.043 111.950 -17.473 1.00 8.53
1 . .
ATOM 5443 O     O     . TYR TYR TYR B B 279 279 . 145.981 110.731 -17.334 1.00 8.96
1 . .
ATOM 5444 N     N     . GLN GLN GLN B B 280 280 . 146.186 112.533 -18.678 1.00 9.34
1 . .
ATOM 5445 CA    CA    . GLN GLN GLN B B 280 280 . 146.349 111.696 -19.881 1.00 9.78
1 . .
ATOM 5446 CB    CB    . GLN GLN GLN B B 280 280 . 146.395 112.581 -21.141 1.00 10.54
1 . .
ATOM 5447 CG    CG    . GLN GLN GLN B B 280 280 . 145.063 113.208 -21.395 1.00 15.18
1 . .
ATOM 5448 CD    CD    . GLN GLN GLN B B 280 280 . 144.419 112.659 -22.471 1.00 31.99
1 . .
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ATOM 5449 OE1   OE1   . GLN GLN GLN B B 280 280 . 144.227 111.424 -22.528 1.00 38.56
1 . .
ATOM 5450 NE2   NE2   . GLN GLN GLN B B 280 280 . 144.078 113.519 -23.440 1.00 35.24
1 . .
ATOM 5451 C     C     . GLN GLN GLN B B 280 280 . 147.684 110.904 -19.751 1.00 9.67
1 . .
ATOM 5452 O     O     . GLN GLN GLN B B 280 280 . 147.723 109.759 -20.153 1.00 10.39
1 . .
ATOM 5453 N     N     . ASP ASP ASP B B 281 281 . 148.714 111.509 -19.170 1.00 9.93
1 . .
ATOM 5454 CA    CA    . ASP ASP ASP B B 281 281 . 149.991 110.787 -18.946 1.00 10.69
1 . .
ATOM 5455 CB    CB    . ASP ASP ASP B B 281 281 . 151.096 111.665 -18.418 1.00 11.28
1 . .
ATOM 5456 CG    CG    . ASP ASP ASP B B 281 281 . 151.617 112.685 -19.429 1.00 17.17
1 . .
ATOM 5457 OD1   OD1   . ASP ASP ASP B B 281 281 . 151.428 112.547 -20.653 1.00 20.40
1 . .
ATOM 5458 OD2   OD2   . ASP ASP ASP B B 281 281 . 152.216 113.686 -18.941 1.00 26.86
1 . .
ATOM 5459 C     C     . ASP ASP ASP B B 281 281 . 149.711 109.646 -17.948 1.00 10.64
1 . .
ATOM 5460 O     O     . ASP ASP ASP B B 281 281 . 150.184 108.493 -18.150 1.00 10.65
1 . .
ATOM 5461 N     N     . PHE PHE PHE B B 282 282 . 148.945 109.903 -16.863 1.00 8.63
1 . .
ATOM 5462 CA    CA    . PHE PHE PHE B B 282 282 . 148.644 108.778 -15.927 1.00 9.55
1 . .
ATOM 5463 CB    CB    . PHE PHE PHE B B 282 282 . 147.734 109.263 -14.802 1.00 9.52
1 . .
ATOM 5464 CG    CG    . PHE PHE PHE B B 282 282 . 148.385 110.262 -13.842 1.00 10.21
1 . .
ATOM 5465 CD1   CD1   . PHE PHE PHE B B 282 282 . 147.556 111.007 -12.960 1.00 12.77
1 . .
ATOM 5466 CE1   CE1   . PHE PHE PHE B B 282 282 . 148.178 111.924 -12.036 1.00 12.99
1 . .
ATOM 5467 CZ    CZ    . PHE PHE PHE B B 282 282 . 149.496 112.105 -12.068 1.00 12.67
1 . .
ATOM 5468 CE2   CE2   . PHE PHE PHE B B 282 282 . 150.322 111.419 -12.960 1.00 15.36
1 . .
ATOM 5469 CD2   CD2   . PHE PHE PHE B B 282 282 . 149.765 110.505 -13.828 1.00 9.52
1 . .
ATOM 5470 C     C     . PHE PHE PHE B B 282 282 . 147.907 107.637 -16.599 1.00 8.39
1 . .
ATOM 5471 O     O     . PHE PHE PHE B B 282 282 . 148.182 106.480 -16.296 1.00 9.21
1 . .
ATOM 5472 N     N     . VAL VAL VAL B B 283 283 . 146.950 107.973 -17.480 1.00 8.42
1 . .
ATOM 5473 CA    CA    . VAL VAL VAL B B 283 283 . 146.146 106.952 -18.144 1.00 7.53
1 . .
ATOM 5474 CB    CB    . VAL VAL VAL B B 283 283 . 144.938 107.593 -18.889 1.00 7.09
1 . .
ATOM 5475 CG1   CG1   . VAL VAL VAL B B 283 283 . 144.276 106.615 -19.805 1.00 10.72
1 . .
ATOM 5476 CG2   CG2   . VAL VAL VAL B B 283 283 . 143.934 108.112 -17.867 1.00 10.45
1 . .
ATOM 5477 C     C     . VAL VAL VAL B B 283 283 . 147.050 106.137 -19.110 1.00 7.51
1 . .
ATOM 5478 O     O     . VAL VAL VAL B B 283 283 . 146.871 104.938 -19.238 1.00 9.53
1 . .
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ATOM 5479 N     N     . ARG ARG ARG B B 284 284 . 148.028 106.793 -19.762 1.00 8.50
1 . .
ATOM 5480 CA    CA    . ARG ARG ARG B B 284 284 . 148.964 106.066 -20.642 1.00 9.35
1 . .
ATOM 5481 CB    CB    . ARG ARG ARG B B 284 284 . 149.761 107.105 -21.441 1.00 10.55
1 . .
ATOM 5482 CG    CG    . ARG ARG ARG B B 284 284 . 150.849 106.464 -22.339 1.00 11.25
1 . .
ATOM 5483 CD    CD    . ARG ARG ARG B B 284 284 . 150.214 105.720 -23.523 1.00 13.91
1 . .
ATOM 5484 NE    NE    . ARG ARG ARG B B 284 284 . 149.415 106.556 -24.422 1.00 12.53
1 . .
ATOM 5485 CZ    CZ    . ARG ARG ARG B B 284 284 . 149.901 107.312 -25.393 1.00 15.98
1 . .
ATOM 5486 NH1   NH1   . ARG ARG ARG B B 284 284 . 151.210 107.408 -25.578 1.00 19.16
1 . .
ATOM 5487 NH2   NH2   . ARG ARG ARG B B 284 284 . 149.005 107.971 -26.152 1.00 19.87
1 . .
ATOM 5488 C     C     . ARG ARG ARG B B 284 284 . 149.908 105.159 -19.843 1.00 8.71
1 . .
ATOM 5489 O     O     . ARG ARG ARG B B 284 284 . 150.189 104.018 -20.284 1.00 10.00
1 . .
ATOM 5490 N     N     . ASP ASP ASP B B 285 285 . 150.345 105.610 -18.676 1.00 8.65
1 . .
ATOM 5491 CA    CA    . ASP ASP ASP B B 285 285 . 151.475 104.962 -17.998 1.00 9.40
1 . .
ATOM 5492 CB    CB    . ASP ASP ASP B B 285 285 . 152.335 106.007 -17.357 1.00 9.24
1 . .
ATOM 5493 CG    CG    . ASP ASP ASP B B 285 285 . 153.077 106.922 -18.402 1.00 12.52
1 . .
ATOM 5494 OD1   OD1   . ASP ASP ASP B B 285 285 . 153.159 106.600 -19.607 1.00 15.87
1 . .
ATOM 5495 OD2   OD2   . ASP ASP ASP B B 285 285 . 153.571 108.035 -17.974 1.00 17.31
1 . .
ATOM 5496 C     C     . ASP ASP ASP B B 285 285 . 151.087 103.950 -16.902 1.00 9.00
1 . .
ATOM 5497 O     O     . ASP ASP ASP B B 285 285 . 151.958 103.179 -16.473 1.00 10.12
1 . .
ATOM 5498 N     N     . TYR TYR TYR B B 286 286 . 149.796 103.999 -16.495 1.00 8.91
1 . .
ATOM 5499 CA    CA    . TYR TYR TYR B B 286 286 . 149.275 103.187 -15.365 1.00 9.53
1 . .
ATOM 5500 CB    CB    . TYR TYR TYR B B 286 286 . 149.203 104.048 -14.085 1.00 8.77
1 . .
ATOM 5501 CG    CG    . TYR TYR TYR B B 286 286 . 150.561 104.643 -13.724 1.00 9.77
1 . .
ATOM 5502 CD1   CD1   . TYR TYR TYR B B 286 286 . 151.573 103.911 -13.074 1.00 13.82
1 . .
ATOM 5503 CE1   CE1   . TYR TYR TYR B B 286 286 . 152.766 104.537 -12.792 1.00 13.79
1 . .
ATOM 5504 CZ    CZ    . TYR TYR TYR B B 286 286 . 152.971 105.902 -13.138 1.00 17.51
1 . .
ATOM 5505 OH    OH    . TYR TYR TYR B B 286 286 . 154.195 106.593 -12.855 1.00 18.58
1 . .
ATOM 5506 CE2   CE2   . TYR TYR TYR B B 286 286 . 151.990 106.593 -13.768 1.00 16.19
1 . .
ATOM 5507 CD2   CD2   . TYR TYR TYR B B 286 286 . 150.800 105.990 -14.049 1.00 12.17
1 . .
ATOM 5508 C     C     . TYR TYR TYR B B 286 286 . 147.904 102.697 -15.760 1.00 9.51
1 . .
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ATOM 5509 O     O     . TYR TYR TYR B B 286 286 . 147.270 103.230 -16.677 1.00 8.96
1 . .
ATOM 5510 N     N     . PRO PRO PRO B B 287 287 . 147.403 101.637 -15.079 1.00 9.18
1 . .
ATOM 5511 CA    CA    . PRO PRO PRO B B 287 287 . 146.132 101.070 -15.447 1.00 9.19
1 . .
ATOM 5512 CB    CB    . PRO PRO PRO B B 287 287 . 146.257 99.618  -14.883 1.00 10.93
1 . .
ATOM 5513 CG    CG    . PRO PRO PRO B B 287 287 . 147.070 99.841  -13.619 1.00 12.66
1 . .
ATOM 5514 CD    CD    . PRO PRO PRO B B 287 287 . 148.147 100.815 -14.097 1.00 9.61
1 . .
ATOM 5515 C     C     . PRO PRO PRO B B 287 287 . 145.001 101.880 -14.799 1.00 10.22
1 . .
ATOM 5516 O     O     . PRO PRO PRO B B 287 287 . 144.115 101.321 -14.149 1.00 9.63
1 . .
ATOM 5517 N     N     . VAL VAL VAL B B 288 288 . 144.963 103.196 -15.074 1.00 9.78
1 . .
ATOM 5518 CA    CA    . VAL VAL VAL B B 288 288 . 143.927 104.066 -14.519 1.00 9.64
1 . .
ATOM 5519 CB    CB    . VAL VAL VAL B B 288 288 . 144.461 105.518 -14.379 1.00 9.39
1 . .
ATOM 5520 CG1   CG1   . VAL VAL VAL B B 288 288 . 143.324 106.455 -13.978 1.00 9.47
1 . .
ATOM 5521 CG2   CG2   . VAL VAL VAL B B 288 288 . 145.553 105.557 -13.356 1.00 10.36
1 . .
ATOM 5522 C     C     . VAL VAL VAL B B 288 288 . 142.724 104.007 -15.394 1.00 7.93
1 . .
ATOM 5523 O     O     . VAL VAL VAL B B 288 288 . 142.826 104.383 -16.598 1.00 11.14
1 . .
ATOM 5524 N     N     . VAL VAL VAL B B 289 289 . 141.561 103.661 -14.843 1.00 7.53
1 . .
ATOM 5525 CA    CA    . VAL VAL VAL B B 289 289 . 140.370 103.510 -15.600 1.00 7.98
1 . .
ATOM 5526 CB    CB    . VAL VAL VAL B B 289 289 . 139.830 102.042 -15.542 1.00 9.54
1 . .
ATOM 5527 CG1   CG1   . VAL VAL VAL B B 289 289 . 140.855 101.037 -16.110 1.00 11.22
1 . .
ATOM 5528 CG2   CG2   . VAL VAL VAL B B 289 289 . 139.406 101.702 -14.137 1.00 11.77
1 . .
ATOM 5529 C     C     . VAL VAL VAL B B 289 289 . 139.230 104.472 -15.245 1.00 7.12
1 . .
ATOM 5530 O     O     . VAL VAL VAL B B 289 289 . 138.164 104.474 -15.815 1.00 9.07
1 . .
ATOM 5531 N     N     . SER SER SER B B 290 290 . 139.501 105.213 -14.153 1.00 7.50
1 . .
ATOM 5532 CA    CA    . SER SER SER B B 290 290 . 138.453 106.099 -13.614 1.00 7.55
1 . .
ATOM 5533 CB    CB    . SER SER SER B B 290 290 . 137.565 105.306 -12.615 1.00 9.34
1 . .
ATOM 5534 OG    OG    . SER SER SER B B 290 290 . 136.523 106.115 -12.055 1.00 8.81
1 . .
ATOM 5535 C     C     . SER SER SER B B 290 290 . 139.154 107.246 -12.867 1.00 6.89
1 . .
ATOM 5536 O     O     . SER SER SER B B 290 290 . 140.076 106.974 -12.048 1.00 7.13
1 . .
ATOM 5537 N     N     . ILE ILE ILE B B 291 291 . 138.696 108.467 -13.080 1.00 6.65
1 . .
ATOM 5538 CA    CA    . ILE ILE ILE B B 291 291 . 139.174 109.652 -12.354 1.00 7.12
1 . .
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ATOM 5539 CB    CB    . ILE ILE ILE B B 291 291 . 140.118 110.527 -13.179 1.00 5.59
1 . .
ATOM 5540 CG1   CG1   . ILE ILE ILE B B 291 291 . 141.349 109.697 -13.583 1.00 7.65
1 . .
ATOM 5541 CD    CD    . ILE ILE ILE B B 291 291 . 142.414 110.521 -14.442 1.00 9.68
1 . .
ATOM 5542 CG2   CG2   . ILE ILE ILE B B 291 291 . 140.474 111.775 -12.410 1.00 7.83
1 . .
ATOM 5543 C     C     . ILE ILE ILE B B 291 291 . 137.945 110.430 -11.911 1.00 6.28
1 . .
ATOM 5544 O     O     . ILE ILE ILE B B 291 291 . 137.074 110.782 -12.673 1.00 6.58
1 . .
ATOM 5545 N     N     . GLU GLU GLU B B 292 292 . 137.935 110.649 -10.595 1.00 7.10
1 . .
ATOM 5546 CA    CA    . GLU GLU GLU B B 292 292 . 136.848 111.385 -9.912  1.00 5.64
1 . .
ATOM 5547 CB    CB    . GLU GLU GLU B B 292 292 . 136.410 110.576 -8.647  1.00 6.07
1 . .
ATOM 5548 CG    CG    . GLU GLU GLU B B 292 292 . 135.388 111.369 -7.750  1.00 6.46
1 . .
ATOM 5549 CD    CD    . GLU GLU GLU B B 292 292 . 135.189 110.657 -6.443  1.00 7.21
1 . .
ATOM 5550 OE1   OE1   . GLU GLU GLU B B 292 292 . 134.827 111.392 -5.502  1.00 8.16
1 . .
ATOM 5551 OE2   OE2   . GLU GLU GLU B B 292 292 . 135.454 109.438 -6.367  1.00 9.61
1 . .
ATOM 5552 C     C     . GLU GLU GLU B B 292 292 . 137.297 112.814 -9.559  1.00 5.99
1 . .
ATOM 5553 O     O     . GLU GLU GLU B B 292 292 . 138.480 113.024 -9.148  1.00 6.64
1 . .
ATOM 5554 N     N     . ASP ASP ASP B B 293 293 . 136.397 113.788 -9.759  1.00 5.23
1 . .
ATOM 5555 CA    CA    . ASP ASP ASP B B 293 293 . 136.665 115.226 -9.453  1.00 5.99
1 . .
ATOM 5556 CB    CB    . ASP ASP ASP B B 293 293 . 136.517 115.544 -7.959  1.00 6.85
1 . .
ATOM 5557 CG    CG    . ASP ASP ASP B B 293 293 . 135.063 115.705 -7.576  1.00 6.55
1 . .
ATOM 5558 OD1   OD1   . ASP ASP ASP B B 293 293 . 134.190 115.880 -8.446  1.00 7.84
1 . .
ATOM 5559 OD2   OD2   . ASP ASP ASP B B 293 293 . 134.804 115.747 -6.343  1.00 7.25
1 . .
ATOM 5560 C     C     . ASP ASP ASP B B 293 293 . 138.045 115.669 -10.015 1.00 6.13
1 . .
ATOM 5561 O     O     . ASP ASP ASP B B 293 293 . 138.853 116.256 -9.316  1.00 6.15
1 . .
ATOM 5562 N     N     . PRO PRO PRO B B 294 294 . 138.298 115.501 -11.322 1.00 6.58
1 . .
ATOM 5563 CA    CA    . PRO PRO PRO B B 294 294 . 139.569 115.876 -11.923 1.00 6.87
1 . .
ATOM 5564 CB    CB    . PRO PRO PRO B B 294 294 . 139.422 115.421 -13.395 1.00 7.24
1 . .
ATOM 5565 CG    CG    . PRO PRO PRO B B 294 294 . 137.870 115.241 -13.613 1.00 6.57
1 . .
ATOM 5566 CD    CD    . PRO PRO PRO B B 294 294 . 137.443 114.761 -12.280 1.00 8.02
1 . .
ATOM 5567 C     C     . PRO PRO PRO B B 294 294 . 139.650 117.451 -11.891 1.00 5.92
1 . .
ATOM 5568 O     O     . PRO PRO PRO B B 294 294 . 140.733 117.967 -12.005 1.00 7.28
1 . .
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ATOM 5569 N     N     . PHE PHE PHE B B 295 295 . 138.514 118.192 -11.805 1.00 6.66
1 . .
ATOM 5570 CA    CA    . PHE PHE PHE B B 295 295 . 138.575 119.692 -11.784 1.00 6.36
1 . .
ATOM 5571 CB    CB    . PHE PHE PHE B B 295 295 . 138.121 120.234 -13.171 1.00 7.66
1 . .
ATOM 5572 CG    CG    . PHE PHE PHE B B 295 295 . 138.958 119.623 -14.290 1.00 7.21
1 . .
ATOM 5573 CD1   CD1   . PHE PHE PHE B B 295 295 . 140.276 120.027 -14.467 1.00 9.35
1 . .
ATOM 5574 CE1   CE1   . PHE PHE PHE B B 295 295 . 141.057 119.495 -15.494 1.00 11.17
1 . .
ATOM 5575 CZ    CZ    . PHE PHE PHE B B 295 295 . 140.618 118.446 -16.216 1.00 10.11
1 . .
ATOM 5576 CE2   CE2   . PHE PHE PHE B B 295 295 . 139.283 118.044 -16.068 1.00 10.17
1 . .
ATOM 5577 CD2   CD2   . PHE PHE PHE B B 295 295 . 138.452 118.579 -15.082 1.00 7.94
1 . .
ATOM 5578 C     C     . PHE PHE PHE B B 295 295 . 137.621 120.149 -10.688 1.00 6.91
1 . .
ATOM 5579 O     O     . PHE PHE PHE B B 295 295 . 136.818 119.389 -10.115 1.00 6.95
1 . .
ATOM 5580 N     N     . ASP ASP ASP B B 296 296 . 137.689 121.471 -10.455 1.00 7.41
1 . .
ATOM 5581 CA    CA    . ASP ASP ASP B B 296 296 . 136.874 122.071 -9.419  1.00 5.51
1 . .
ATOM 5582 CB    CB    . ASP ASP ASP B B 296 296 . 137.184 123.566 -9.392  1.00 6.78
1 . .
ATOM 5583 CG    CG    . ASP ASP ASP B B 296 296 . 136.426 124.307 -8.262  1.00 7.43
1 . .
ATOM 5584 OD1   OD1   . ASP ASP ASP B B 296 296 . 136.815 124.124 -7.065  1.00 9.73
1 . .
ATOM 5585 OD2   OD2   . ASP ASP ASP B B 296 296 . 135.453 125.046 -8.595  1.00 9.12
1 . .
ATOM 5586 C     C     . ASP ASP ASP B B 296 296 . 135.398 121.913 -9.717  1.00 6.82
1 . .
ATOM 5587 O     O     . ASP ASP ASP B B 296 296 . 134.986 121.848 -10.900 1.00 7.31
1 . .
ATOM 5588 N     N     . GLN GLN GLN B B 297 297 . 134.586 121.962 -8.650  1.00 5.71
1 . .
ATOM 5589 CA    CA    . GLN GLN GLN B B 297 297 . 133.128 121.783 -8.725  1.00 6.26
1 . .
ATOM 5590 CB    CB    . GLN GLN GLN B B 297 297 . 132.564 121.794 -7.324  1.00 6.84
1 . .
ATOM 5591 CG    CG    . GLN GLN GLN B B 297 297 . 132.839 123.157 -6.577  1.00 7.40
1 . .
ATOM 5592 CD    CD    . GLN GLN GLN B B 297 297 . 133.129 123.013 -5.113  1.00 8.49
1 . .
ATOM 5593 OE1   OE1   . GLN GLN GLN B B 297 297 . 132.557 122.184 -4.426  1.00 8.40
1 . .
ATOM 5594 NE2   NE2   . GLN GLN GLN B B 297 297 . 134.098 123.822 -4.639  1.00 10.22
1 . .
ATOM 5595 C     C     . GLN GLN GLN B B 297 297 . 132.431 122.803 -9.594  1.00 6.23
1 . .
ATOM 5596 O     O     . GLN GLN GLN B B 297 297 . 131.254 122.594 -9.969  1.00 7.97
1 . .
ATOM 5597 N     N     . ASP ASP ASP B B 298 298 . 133.090 123.954 -9.866  1.00 7.36
1 . .
ATOM 5598 CA    CA    . ASP ASP ASP B B 298 298 . 132.471 124.972 -10.745 1.00 7.29
1 . .
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ATOM 5599 CB    CB    . ASP ASP ASP B B 298 298 . 132.577 126.368 -10.010 1.00 7.85
1 . .
ATOM 5600 CG    CG    . ASP ASP ASP B B 298 298 . 131.571 126.535 -8.886  1.00 9.33
1 . .
ATOM 5601 OD1   OD1   . ASP ASP ASP B B 298 298 . 130.386 126.281 -9.105  1.00 9.19
1 . .
ATOM 5602 OD2   OD2   . ASP ASP ASP B B 298 298 . 132.012 126.935 -7.773  1.00 13.76
1 . .
ATOM 5603 C     C     . ASP ASP ASP B B 298 298 . 133.160 125.070 -12.091 1.00 7.53
1 . .
ATOM 5604 O     O     . ASP ASP ASP B B 298 298 . 132.729 125.859 -12.965 1.00 7.29
1 . .
ATOM 5605 N     N     . ASP ASP ASP B B 299 299 . 134.193 124.291 -12.339 1.00 7.17
1 . .
ATOM 5606 CA    CA    . ASP ASP ASP B B 299 299 . 134.987 124.473 -13.580 1.00 6.58
1 . .
ATOM 5607 CB    CB    . ASP ASP ASP B B 299 299 . 136.464 124.162 -13.289 1.00 6.76
1 . .
ATOM 5608 CG    CG    . ASP ASP ASP B B 299 299 . 137.448 124.478 -14.375 1.00 8.29
1 . .
ATOM 5609 OD1   OD1   . ASP ASP ASP B B 299 299 . 137.069 125.021 -15.429 1.00 6.87
1 . .
ATOM 5610 OD2   OD2   . ASP ASP ASP B B 299 299 . 138.673 124.268 -14.110 1.00 8.92
1 . .
ATOM 5611 C     C     . ASP ASP ASP B B 299 299 . 134.424 123.617 -14.698 1.00 7.19
1 . .
ATOM 5612 O     O     . ASP ASP ASP B B 299 299 . 135.134 122.710 -15.243 1.00 8.14
1 . .
ATOM 5613 N     N     . TRP TRP TRP B B 300 300 . 133.152 123.877 -15.072 1.00 6.78
1 . .
ATOM 5614 CA    CA    . TRP TRP TRP B B 300 300 . 132.443 123.097 -16.050 1.00 7.46
1 . .
ATOM 5615 CB    CB    . TRP TRP TRP B B 300 300 . 131.052 123.729 -16.369 1.00 7.10
1 . .
ATOM 5616 CG    CG    . TRP TRP TRP B B 300 300 . 130.189 123.636 -15.155 1.00 7.63
1 . .
ATOM 5617 CD1   CD1   . TRP TRP TRP B B 300 300 . 129.974 124.607 -14.177 1.00 9.94
1 . .
ATOM 5618 NE1   NE1   . TRP TRP TRP B B 300 300 . 129.077 124.153 -13.235 1.00 10.56
1 . .
ATOM 5619 CE2   CE2   . TRP TRP TRP B B 300 300 . 128.676 122.882 -13.577 1.00 8.24
1 . .
ATOM 5620 CD2   CD2   . TRP TRP TRP B B 300 300 . 129.368 122.536 -14.793 1.00 9.03
1 . .
ATOM 5621 CE3   CE3   . TRP TRP TRP B B 300 300 . 129.114 121.311 -15.390 1.00 9.29
1 . .
ATOM 5622 CZ3   CZ3   . TRP TRP TRP B B 300 300 . 128.190 120.402 -14.714 1.00 10.71
1 . .
ATOM 5623 CH2   CH2   . TRP TRP TRP B B 300 300 . 127.533 120.786 -13.521 1.00 8.85
1 . .
ATOM 5624 CZ2   CZ2   . TRP TRP TRP B B 300 300 . 127.757 122.021 -12.934 1.00 9.60
1 . .
ATOM 5625 C     C     . TRP TRP TRP B B 300 300 . 133.217 122.965 -17.345 1.00 8.28
1 . .
ATOM 5626 O     O     . TRP TRP TRP B B 300 300 . 133.151 121.893 -17.941 1.00 7.88
1 . .
ATOM 5627 N     N     . ALA ALA ALA B B 301 301 . 133.887 124.026 -17.822 1.00 6.82
1 . .
ATOM 5628 CA    CA    . ALA ALA ALA B B 301 301 . 134.522 123.895 -19.116 1.00 7.23
1 . .
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ATOM 5629 CB    CB    . ALA ALA ALA B B 301 301 . 135.163 125.232 -19.498 1.00 7.07
1 . .
ATOM 5630 C     C     . ALA ALA ALA B B 301 301 . 135.572 122.801 -19.112 1.00 7.49
1 . .
ATOM 5631 O     O     . ALA ALA ALA B B 301 301 . 135.725 122.079 -20.126 1.00 7.60
1 . .
ATOM 5632 N     N     . ALA ALA ALA B B 302 302 . 136.307 122.690 -18.014 1.00 6.96
1 . .
ATOM 5633 CA    CA    . ALA ALA ALA B B 302 302 . 137.422 121.721 -17.996 1.00 7.89
1 . .
ATOM 5634 CB    CB    . ALA ALA ALA B B 302 302 . 138.403 121.959 -16.783 1.00 6.51
1 . .
ATOM 5635 C     C     . ALA ALA ALA B B 302 302 . 136.837 120.304 -17.966 1.00 8.30
1 . .
ATOM 5636 O     O     . ALA ALA ALA B B 302 302 . 137.398 119.381 -18.599 1.00 7.55
1 . .
ATOM 5637 N     N     . TRP TRP TRP B B 303 303 . 135.793 120.131 -17.205 1.00 7.30
1 . .
ATOM 5638 CA    CA    . TRP TRP TRP B B 303 303 . 135.150 118.827 -17.122 1.00 7.89
1 . .
ATOM 5639 CB    CB    . TRP TRP TRP B B 303 303 . 133.902 118.855 -16.251 1.00 6.48
1 . .
ATOM 5640 CG    CG    . TRP TRP TRP B B 303 303 . 134.222 118.845 -14.727 1.00 6.61
1 . .
ATOM 5641 CD1   CD1   . TRP TRP TRP B B 303 303 . 134.486 119.933 -13.909 1.00 6.46
1 . .
ATOM 5642 NE1   NE1   . TRP TRP TRP B B 303 303 . 134.679 119.503 -12.575 1.00 6.61
1 . .
ATOM 5643 CE2   CE2   . TRP TRP TRP B B 303 303 . 134.461 118.136 -12.551 1.00 5.64
1 . .
ATOM 5644 CD2   CD2   . TRP TRP TRP B B 303 303 . 134.197 117.700 -13.872 1.00 6.96
1 . .
ATOM 5645 CE3   CE3   . TRP TRP TRP B B 303 303 . 133.916 116.323 -14.100 1.00 6.87
1 . .
ATOM 5646 CZ3   CZ3   . TRP TRP TRP B B 303 303 . 133.874 115.483 -13.036 1.00 7.60
1 . .
ATOM 5647 CH2   CH2   . TRP TRP TRP B B 303 303 . 134.125 115.929 -11.737 1.00 5.95
1 . .
ATOM 5648 CZ2   CZ2   . TRP TRP TRP B B 303 303 . 134.443 117.243 -11.457 1.00 7.53
1 . .
ATOM 5649 C     C     . TRP TRP TRP B B 303 303 . 134.689 118.391 -18.518 1.00 7.78
1 . .
ATOM 5650 O     O     . TRP TRP TRP B B 303 303 . 134.985 117.230 -18.957 1.00 8.24
1 . .
ATOM 5651 N     N     . SER SER SER B B 304 304 . 133.969 119.244 -19.222 1.00 7.95
1 . .
ATOM 5652 CA    CA    . SER SER SER B B 304 304 . 133.354 118.792 -20.504 1.00 8.51
1 . .
ATOM 5653 CB    CB    . SER SER SER B B 304 304 . 132.415 119.855 -21.040 1.00 9.03
1 . .
ATOM 5654 OG    OG    . SER SER SER B B 304 304 . 131.345 119.977 -20.178 1.00 10.63
1 . .
ATOM 5655 C     C     . SER SER SER B B 304 304 . 134.483 118.627 -21.516 1.00 7.65
1 . .
ATOM 5656 O     O     . SER SER SER B B 304 304 . 134.424 117.640 -22.288 1.00 9.04
1 . .
ATOM 5657 N     N     . LYS LYS LYS B B 305 305 . 135.544 119.446 -21.505 1.00 7.64
1 . .
ATOM 5658 CA    CA    . LYS LYS LYS B B 305 305 . 136.604 119.271 -22.472 1.00 8.32
1 . .
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ATOM 5659 CB    CB    . LYS LYS LYS B B 305 305 . 137.584 120.458 -22.370 1.00 9.85
1 . .
ATOM 5660 CG    CG    . LYS LYS LYS B B 305 305 . 138.779 120.394 -23.305 1.00 14.83
1 . .
ATOM 5661 CD    CD    . LYS LYS LYS B B 305 305 . 139.631 121.752 -23.237 1.00 18.83
1 . .
ATOM 5662 CE    CE    . LYS LYS LYS B B 305 305 . 140.720 121.712 -24.336 1.00 28.07
1 . .
ATOM 5663 NZ    NZ    . LYS LYS LYS B B 305 305 . 141.574 122.888 -24.062 1.00 36.64
1 . .
ATOM 5664 C     C     . LYS LYS LYS B B 305 305 . 137.331 117.928 -22.223 1.00 8.65
1 . .
ATOM 5665 O     O     . LYS LYS LYS B B 305 305 . 137.598 117.153 -23.152 1.00 9.96
1 . .
ATOM 5666 N     N     . PHE PHE PHE B B 306 306 . 137.609 117.612 -20.962 1.00 8.44
1 . .
ATOM 5667 CA    CA    . PHE PHE PHE B B 306 306 . 138.380 116.434 -20.624 1.00 9.50
1 . .
ATOM 5668 CB    CB    . PHE PHE PHE B B 306 306 . 138.832 116.521 -19.171 1.00 9.37
1 . .
ATOM 5669 CG    CG    . PHE PHE PHE B B 306 306 . 139.697 115.350 -18.747 1.00 7.67
1 . .
ATOM 5670 CD1   CD1   . PHE PHE PHE B B 306 306 . 141.030 115.266 -19.201 1.00 8.84
1 . .
ATOM 5671 CE1   CE1   . PHE PHE PHE B B 306 306 . 141.897 114.206 -18.828 1.00 11.10
1 . .
ATOM 5672 CZ    CZ    . PHE PHE PHE B B 306 306 . 141.429 113.229 -17.925 1.00 11.11
1 . .
ATOM 5673 CE2   CE2   . PHE PHE PHE B B 306 306 . 140.158 113.351 -17.360 1.00 10.13
1 . .
ATOM 5674 CD2   CD2   . PHE PHE PHE B B 306 306 . 139.268 114.440 -17.809 1.00 10.20
1 . .
ATOM 5675 C     C     . PHE PHE PHE B B 306 306 . 137.538 115.180 -20.890 1.00 8.33
1 . .
ATOM 5676 O     O     . PHE PHE PHE B B 306 306 . 138.066 114.226 -21.520 1.00 8.88
1 . .
ATOM 5677 N     N     . THR THR THR B B 307 307 . 136.246 115.173 -20.544 1.00 8.40
1 . .
ATOM 5678 CA    CA    . THR THR THR B B 307 307 . 135.380 114.012 -20.782 1.00 7.85
1 . .
ATOM 5679 CB    CB    . THR THR THR B B 307 307 . 134.014 114.251 -20.126 1.00 9.03
1 . .
ATOM 5680 OG1   OG1   . THR THR THR B B 307 307 . 134.243 114.310 -18.714 1.00 9.12
1 . .
ATOM 5681 CG2   CG2   . THR THR THR B B 307 307 . 133.081 113.112 -20.467 1.00 10.28
1 . .
ATOM 5682 C     C     . THR THR THR B B 307 307 . 135.338 113.703 -22.273 1.00 8.09
1 . .
ATOM 5683 O     O     . THR THR THR B B 307 307 . 135.385 112.528 -22.676 1.00 9.17
1 . .
ATOM 5684 N     N     . ALA ALA ALA B B 308 308 . 135.325 114.736 -23.119 1.00 8.28
1 . .
ATOM 5685 CA    CA    . ALA ALA ALA B B 308 308 . 135.267 114.523 -24.560 1.00 8.82
1 . .
ATOM 5686 CB    CB    . ALA ALA ALA B B 308 308 . 134.846 115.832 -25.198 1.00 9.73
1 . .
ATOM 5687 C     C     . ALA ALA ALA B B 308 308 . 136.616 114.135 -25.116 1.00 9.74
1 . .
ATOM 5688 O     O     . ALA ALA ALA B B 308 308 . 136.658 113.702 -26.295 1.00 11.54
1 . .
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ATOM 5689 N     N     . ASN ASN ASN B B 309 309 . 137.685 114.177 -24.358 1.00 8.33
1 . .
ATOM 5690 CA    CA    . ASN ASN ASN B B 309 309 . 139.011 113.812 -24.875 1.00 10.07
1 . .
ATOM 5691 CB    CB    . ASN ASN ASN B B 309 309 . 139.975 114.936 -24.504 1.00 11.23
1 . .
ATOM 5692 CG    CG    . ASN ASN ASN B B 309 309 . 139.870 116.133 -25.456 1.00 18.34
1 . .
ATOM 5693 OD1   OD1   . ASN ASN ASN B B 309 309 . 139.332 116.030 -26.554 1.00 27.35
1 . .
ATOM 5694 ND2   ND2   . ASN ASN ASN B B 309 309 . 140.369 117.329 -24.975 1.00 23.86
1 . .
ATOM 5695 C     C     . ASN ASN ASN B B 309 309 . 139.616 112.527 -24.336 1.00 8.15
1 . .
ATOM 5696 O     O     . ASN ASN ASN B B 309 309 . 140.747 112.234 -24.655 1.00 12.17
1 . .
ATOM 5697 N     N     . VAL VAL VAL B B 310 310 . 138.844 111.785 -23.558 1.00 8.57
1 . .
ATOM 5698 CA    CA    . VAL VAL VAL B B 310 310 . 139.319 110.535 -22.918 1.00 8.64
1 . .
ATOM 5699 CB    CB    . VAL VAL VAL B B 310 310 . 139.725 110.746 -21.412 1.00 9.49
1 . .
ATOM 5700 CG1   CG1   . VAL VAL VAL B B 310 310 . 140.871 111.750 -21.362 1.00 14.43
1 . .
ATOM 5701 CG2   CG2   . VAL VAL VAL B B 310 310 . 138.490 111.076 -20.542 1.00 12.21
1 . .
ATOM 5702 C     C     . VAL VAL VAL B B 310 310 . 138.227 109.485 -22.962 1.00 8.33
1 . .
ATOM 5703 O     O     . VAL VAL VAL B B 310 310 . 137.053 109.789 -23.169 1.00 8.85
1 . .
ATOM 5704 N     N     . GLY GLY GLY B B 311 311 . 138.630 108.216 -22.726 1.00 8.93
1 . .
ATOM 5705 CA    CA    . GLY GLY GLY B B 311 311 . 137.635 107.127 -22.669 1.00 8.80
1 . .
ATOM 5706 C     C     . GLY GLY GLY B B 311 311 . 137.401 106.566 -21.271 1.00 9.21
1 . .
ATOM 5707 O     O     . GLY GLY GLY B B 311 311 . 136.539 105.699 -21.096 1.00 10.95
1 . .
ATOM 5708 N     N     . ILE ILE ILE B B 312 312 . 138.149 107.071 -20.280 1.00 7.87
1 . .
ATOM 5709 CA    CA    . ILE ILE ILE B B 312 312 . 138.010 106.503 -18.972 1.00 9.02
1 . .
ATOM 5710 CB    CB    . ILE ILE ILE B B 312 312 . 139.202 106.920 -18.091 1.00 8.15
1 . .
ATOM 5711 CG1   CG1   . ILE ILE ILE B B 312 312 . 139.405 108.415 -18.062 1.00 9.37
1 . .
ATOM 5712 CD    CD    . ILE ILE ILE B B 312 312 . 140.192 108.917 -16.778 1.00 12.82
1 . .
ATOM 5713 CG2   CG2   . ILE ILE ILE B B 312 312 . 140.510 106.218 -18.563 1.00 9.73
1 . .
ATOM 5714 C     C     . ILE ILE ILE B B 312 312 . 136.741 107.017 -18.320 1.00 7.79
1 . .
ATOM 5715 O     O     . ILE ILE ILE B B 312 312 . 136.059 107.960 -18.758 1.00 9.26
1 . .
ATOM 5716 N     N     . GLN GLN GLN B B 313 313 . 136.354 106.374 -17.219 1.00 6.74
1 . .
ATOM 5717 CA    CA    . GLN GLN GLN B B 313 313 . 135.226 106.858 -16.416 1.00 7.11
1 . .
ATOM 5718 CB    CB    . GLN GLN GLN B B 313 313 . 134.894 105.781 -15.369 1.00 6.93
1 . .
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ATOM 5719 CG    CG    . GLN GLN GLN B B 313 313 . 133.837 106.266 -14.399 1.00 9.88
1 . .
ATOM 5720 CD    CD    . GLN GLN GLN B B 313 313 . 133.250 105.128 -13.560 1.00 8.36
1 . .
ATOM 5721 OE1   OE1   . GLN GLN GLN B B 313 313 . 132.156 104.602 -13.916 1.00 11.37
1 . .
ATOM 5722 NE2   NE2   . GLN GLN GLN B B 313 313 . 133.900 104.755 -12.480 1.00 9.09
1 . .
ATOM 5723 C     C     . GLN GLN GLN B B 313 313 . 135.633 108.181 -15.753 1.00 6.76
1 . .
ATOM 5724 O     O     . GLN GLN GLN B B 313 313 . 136.747 108.329 -15.226 1.00 8.14
1 . .
ATOM 5725 N     N     . ILE ILE ILE B B 314 314 . 134.712 109.137 -15.793 1.00 7.06
1 . .
ATOM 5726 CA    CA    . ILE ILE ILE B B 314 314 . 134.938 110.509 -15.226 1.00 6.56
1 . .
ATOM 5727 CB    CB    . ILE ILE ILE B B 314 314 . 134.909 111.603 -16.285 1.00 5.01
1 . .
ATOM 5728 CG1   CG1   . ILE ILE ILE B B 314 314 . 136.078 111.371 -17.351 1.00 9.47
1 . .
ATOM 5729 CD    CD    . ILE ILE ILE B B 314 314 . 137.494 111.403 -16.724 1.00 9.47
1 . .
ATOM 5730 CG2   CG2   . ILE ILE ILE B B 314 314 . 134.942 112.995 -15.632 1.00 8.10
1 . .
ATOM 5731 C     C     . ILE ILE ILE B B 314 314 . 133.747 110.703 -14.246 1.00 5.97
1 . .
ATOM 5732 O     O     . ILE ILE ILE B B 314 314 . 132.567 110.726 -14.605 1.00 7.27
1 . .
ATOM 5733 N     N     . VAL VAL VAL B B 315 315 . 134.133 110.709 -12.946 1.00 7.33
1 . .
ATOM 5734 CA    CA    . VAL VAL VAL B B 315 315 . 133.133 110.641 -11.885 1.00 7.11
1 . .
ATOM 5735 CB    CB    . VAL VAL VAL B B 315 315 . 133.586 109.684 -10.735 1.00 6.42
1 . .
ATOM 5736 CG1   CG1   . VAL VAL VAL B B 315 315 . 132.402 109.588 -9.729  1.00 7.28
1 . .
ATOM 5737 CG2   CG2   . VAL VAL VAL B B 315 315 . 134.051 108.284 -11.216 1.00 8.53
1 . .
ATOM 5738 C     C     . VAL VAL VAL B B 315 315 . 132.902 112.045 -11.287 1.00 7.17
1 . .
ATOM 5739 O     O     . VAL VAL VAL B B 315 315 . 133.847 112.692 -10.793 1.00 7.71
1 . .
ATOM 5740 N     N     . GLY GLY GLY B B 316 316 . 131.633 112.498 -11.324 1.00 5.74
1 . .
ATOM 5741 CA    CA    . GLY GLY GLY B B 316 316 . 131.271 113.691 -10.588 1.00 7.04
1 . .
ATOM 5742 C     C     . GLY GLY GLY B B 316 316 . 131.004 113.374 -9.129  1.00 6.53
1 . .
ATOM 5743 O     O     . GLY GLY GLY B B 316 316 . 130.252 112.483 -8.791  1.00 7.33
1 . .
ATOM 5744 N     N     . ASP ASP ASP B B 317 317 . 131.620 114.169 -8.256  1.00 6.71
1 . .
ATOM 5745 CA    CA    . ASP ASP ASP B B 317 317 . 131.397 114.026 -6.811  1.00 6.61
1 . .
ATOM 5746 CB    CB    . ASP ASP ASP B B 317 317 . 132.635 113.445 -6.102  1.00 7.41
1 . .
ATOM 5747 CG    CG    . ASP ASP ASP B B 317 317 . 132.527 113.527 -4.552  1.00 6.43
1 . .
ATOM 5748 OD1   OD1   . ASP ASP ASP B B 317 317 . 133.610 113.417 -3.894  1.00 7.71
1 . .
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ATOM 5749 OD2   OD2   . ASP ASP ASP B B 317 317 . 131.387 113.620 -4.090  1.00 7.46
1 . .
ATOM 5750 C     C     . ASP ASP ASP B B 317 317 . 131.057 115.428 -6.275  1.00 5.67
1 . .
ATOM 5751 O     O     . ASP ASP ASP B B 317 317 . 129.807 115.699 -6.136  1.00 7.55
1 . .
ATOM 5752 N     N     . ASP ASP ASP B B 318 318 . 132.042 116.308 -6.069  1.00 6.53
1 . .
ATOM 5753 CA    CA    . ASP ASP ASP B B 318 318 . 131.663 117.691 -5.658  1.00 6.28
1 . .
ATOM 5754 CB    CB    . ASP ASP ASP B B 318 318 . 132.906 118.443 -5.146  1.00 6.57
1 . .
ATOM 5755 CG    CG    . ASP ASP ASP B B 318 318 . 133.437 117.841 -3.845  1.00 7.72
1 . .
ATOM 5756 OD1   OD1   . ASP ASP ASP B B 318 318 . 132.617 117.293 -3.094  1.00 7.32
1 . .
ATOM 5757 OD2   OD2   . ASP ASP ASP B B 318 318 . 134.635 117.956 -3.609  1.00 9.41
1 . .
ATOM 5758 C     C     . ASP ASP ASP B B 318 318 . 130.949 118.447 -6.813  1.00 6.39
1 . .
ATOM 5759 O     O     . ASP ASP ASP B B 318 318 . 130.187 119.375 -6.582  1.00 7.72
1 . .
ATOM 5760 N     N     . LEU LEU LEU B B 319 319 . 131.210 118.033 -8.064  1.00 7.59
1 . .
ATOM 5761 CA    CA    . LEU LEU LEU B B 319 319 . 130.507 118.654 -9.182  1.00 6.03
1 . .
ATOM 5762 CB    CB    . LEU LEU LEU B B 319 319 . 130.952 117.941 -10.469 1.00 6.50
1 . .
ATOM 5763 CG    CG    . LEU LEU LEU B B 319 319 . 130.303 118.501 -11.784 1.00 6.72
1 . .
ATOM 5764 CD1   CD1   . LEU LEU LEU B B 319 319 . 130.941 119.900 -12.063 1.00 7.92
1 . .
ATOM 5765 CD2   CD2   . LEU LEU LEU B B 319 319 . 130.579 117.542 -12.940 1.00 8.09
1 . .
ATOM 5766 C     C     . LEU LEU LEU B B 319 319 . 129.013 118.451 -9.046  1.00 6.59
1 . .
ATOM 5767 O     O     . LEU LEU LEU B B 319 319 . 128.234 119.379 -9.286  1.00 7.83
1 . .
ATOM 5768 N     N     . THR THR THR B B 320 320 . 128.603 117.233 -8.742  1.00 5.58
1 . .
ATOM 5769 CA    CA    . THR THR THR B B 320 320 . 127.183 116.832 -8.822  1.00 6.55
1 . .
ATOM 5770 CB    CB    . THR THR THR B B 320 320 . 127.080 115.453 -9.465  1.00 6.77
1 . .
ATOM 5771 OG1   OG1   . THR THR THR B B 320 320 . 128.152 114.615 -9.033  1.00 7.72
1 . .
ATOM 5772 CG2   CG2   . THR THR THR B B 320 320 . 127.241 115.648 -11.048 1.00 7.86
1 . .
ATOM 5773 C     C     . THR THR THR B B 320 320 . 126.418 116.765 -7.464  1.00 7.11
1 . .
ATOM 5774 O     O     . THR THR THR B B 320 320 . 125.185 116.925 -7.458  1.00 7.81
1 . .
ATOM 5775 N     N     . VAL VAL VAL B B 321 321 . 127.174 116.590 -6.365  1.00 6.33
1 . .
ATOM 5776 CA    CA    . VAL VAL VAL B B 321 321 . 126.699 116.511 -4.979  1.00 6.39
1 . .
ATOM 5777 CB    CB    . VAL VAL VAL B B 321 321 . 126.639 117.881 -4.263  1.00 7.85
1 . .
ATOM 5778 CG1   CG1   . VAL VAL VAL B B 321 321 . 128.105 118.326 -4.045  1.00 7.92
1 . .
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ATOM 5779 CG2   CG2   . VAL VAL VAL B B 321 321 . 125.845 118.938 -5.074  1.00 9.90
1 . .
ATOM 5780 C     C     . VAL VAL VAL B B 321 321 . 125.346 115.743 -4.867  1.00 7.59
1 . .
ATOM 5781 O     O     . VAL VAL VAL B B 321 321 . 124.476 116.085 -4.085  1.00 7.40
1 . .
ATOM 5782 N     N     . THR THR THR B B 322 322 . 125.264 114.608 -5.576  1.00 7.17
1 . .
ATOM 5783 CA    CA    . THR THR THR B B 322 322 . 124.104 113.704 -5.448  1.00 7.11
1 . .
ATOM 5784 CB    CB    . THR THR THR B B 322 322 . 124.159 112.855 -4.136  1.00 7.79
1 . .
ATOM 5785 OG1   OG1   . THR THR THR B B 322 322 . 125.488 112.306 -4.034  1.00 8.54
1 . .
ATOM 5786 CG2   CG2   . THR THR THR B B 322 322 . 123.187 111.718 -4.154  1.00 8.77
1 . .
ATOM 5787 C     C     . THR THR THR B B 322 322 . 122.786 114.490 -5.601  1.00 7.29
1 . .
ATOM 5788 O     O     . THR THR THR B B 322 322 . 121.777 114.167 -5.018  1.00 8.81
1 . .
ATOM 5789 N     N     . ASN ASN ASN B B 323 323 . 122.825 115.498 -6.465  1.00 7.81
1 . .
ATOM 5790 CA    CA    . ASN ASN ASN B B 323 323 . 121.726 116.481 -6.530  1.00 8.76
1 . .
ATOM 5791 CB    CB    . ASN ASN ASN B B 323 323 . 122.327 117.849 -6.125  1.00 8.93
1 . .
ATOM 5792 CG    CG    . ASN ASN ASN B B 323 323 . 121.259 118.919 -6.026  1.00 10.84
1 . .
ATOM 5793 OD1   OD1   . ASN ASN ASN B B 323 323 . 120.297 118.983 -6.832  1.00 14.44
1 . .
ATOM 5794 ND2   ND2   . ASN ASN ASN B B 323 323 . 121.357 119.691 -4.978  1.00 11.00
1 . .
ATOM 5795 C     C     . ASN ASN ASN B B 323 323 . 121.119 116.519 -7.920  1.00 8.35
1 . .
ATOM 5796 O     O     . ASN ASN ASN B B 323 323 . 121.789 116.920 -8.875  1.00 9.16
1 . .
ATOM 5797 N     N     . PRO PRO PRO B B 324 324 . 119.845 116.127 -8.068  1.00 9.06
1 . .
ATOM 5798 CA    CA    . PRO PRO PRO B B 324 324 . 119.268 116.026 -9.434  1.00 9.59
1 . .
ATOM 5799 CB    CB    . PRO PRO PRO B B 324 324 . 117.785 115.719 -9.122  1.00 9.55
1 . .
ATOM 5800 CG    CG    . PRO PRO PRO B B 324 324 . 117.867 114.828 -7.863  1.00 11.35
1 . .
ATOM 5801 CD    CD    . PRO PRO PRO B B 324 324 . 118.953 115.559 -7.018  1.00 10.16
1 . .
ATOM 5802 C     C     . PRO PRO PRO B B 324 324 . 119.464 117.325 -10.240 1.00 9.32
1 . .
ATOM 5803 O     O     . PRO PRO PRO B B 324 324 . 119.645 117.197 -11.456 1.00 10.66
1 . .
ATOM 5804 N     N     . LYS LYS LYS B B 325 325 . 119.369 118.521 -9.623  1.00 9.92
1 . .
ATOM 5805 CA    CA    . LYS LYS LYS B B 325 325 . 119.465 119.730 -10.448 1.00 11.39
1 . .
ATOM 5806 CB    CB    . LYS LYS LYS B B 325 325 . 119.149 120.966 -9.612  1.00 14.09
1 . .
ATOM 5807 CG    CG    . LYS LYS LYS B B 325 325 . 117.760 121.031 -9.106  1.00 21.03
1 . .
ATOM 5808 CD    CD    . LYS LYS LYS B B 325 325 . 117.619 122.393 -8.354  1.00 32.07
1 . .
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ATOM 5809 CE    CE    . LYS LYS LYS B B 325 325 . 117.771 122.299 -6.813  1.00 39.03
1 . .
ATOM 5810 NZ    NZ    . LYS LYS LYS B B 325 325 . 118.497 123.529 -6.180  1.00 44.37
1 . .
ATOM 5811 C     C     . LYS LYS LYS B B 325 325 . 120.878 119.869 -11.031 1.00 11.31
1 . .
ATOM 5812 O     O     . LYS LYS LYS B B 325 325 . 121.067 120.320 -12.170 1.00 12.33
1 . .
ATOM 5813 N     N     . ARG ARG ARG B B 326 326 . 121.902 119.563 -10.221 1.00 8.99
1 . .
ATOM 5814 CA    CA    . ARG ARG ARG B B 326 326 . 123.284 119.597 -10.772 1.00 9.84
1 . .
ATOM 5815 CB    CB    . ARG ARG ARG B B 326 326 . 124.362 119.657 -9.673  1.00 11.58
1 . .
ATOM 5816 CG    CG    . ARG ARG ARG B B 326 326 . 124.023 120.706 -8.608  1.00 16.43
1 . .
ATOM 5817 CD    CD    . ARG ARG ARG B B 326 326 . 125.036 121.623 -8.214  1.00 17.75
1 . .
ATOM 5818 NE    NE    . ARG ARG ARG B B 326 326 . 126.412 121.504 -8.616  1.00 9.95
1 . .
ATOM 5819 CZ    CZ    . ARG ARG ARG B B 326 326 . 127.143 122.504 -9.140  1.00 10.16
1 . .
ATOM 5820 NH1   NH1   . ARG ARG ARG B B 326 326 . 126.614 123.728 -9.266  1.00 13.80
1 . .
ATOM 5821 NH2   NH2   . ARG ARG ARG B B 326 326 . 128.373 122.307 -9.539  1.00 10.86
1 . .
ATOM 5822 C     C     . ARG ARG ARG B B 326 326 . 123.547 118.479 -11.756 1.00 8.78
1 . .
ATOM 5823 O     O     . ARG ARG ARG B B 326 326 . 124.298 118.670 -12.725 1.00 9.42
1 . .
ATOM 5824 N     N     . ILE ILE ILE B B 327 327 . 123.012 117.298 -11.488 1.00 8.42
1 . .
ATOM 5825 CA    CA    . ILE ILE ILE B B 327 327 . 123.203 116.202 -12.438 1.00 8.39
1 . .
ATOM 5826 CB    CB    . ILE ILE ILE B B 327 327 . 122.581 114.914 -11.858 1.00 9.02
1 . .
ATOM 5827 CG1   CG1   . ILE ILE ILE B B 327 327 . 123.346 114.474 -10.590 1.00 9.33
1 . .
ATOM 5828 CD    CD    . ILE ILE ILE B B 327 327 . 122.543 113.503 -9.717  1.00 11.82
1 . .
ATOM 5829 CG2   CG2   . ILE ILE ILE B B 327 327 . 122.527 113.821 -12.890 1.00 11.61
1 . .
ATOM 5830 C     C     . ILE ILE ILE B B 327 327 . 122.549 116.518 -13.813 1.00 9.41
1 . .
ATOM 5831 O     O     . ILE ILE ILE B B 327 327 . 123.170 116.284 -14.840 1.00 9.85
1 . .
ATOM 5832 N     N     . GLU GLU GLU B B 328 328 . 121.364 117.158 -13.817 1.00 11.60
1 . .
ATOM 5833 CA    CA    . GLU GLU GLU B B 328 328 . 120.724 117.594 -15.094 1.00 12.04
1 . .
ATOM 5834 CB    CB    . GLU GLU GLU B B 328 328 . 119.456 118.359 -14.760 1.00 12.26
1 . .
ATOM 5835 CG    CG    . GLU GLU GLU B B 328 328 . 118.335 117.453 -14.329 1.00 19.98
1 . .
ATOM 5836 CD    CD    . GLU GLU GLU B B 328 328 . 117.470 116.809 -15.426 1.00 32.86
1 . .
ATOM 5837 OE1   OE1   . GLU GLU GLU B B 328 328 . 118.004 116.507 -16.534 1.00 36.54
1 . .
ATOM 5838 OE2   OE2   . GLU GLU GLU B B 328 328 . 116.251 116.571 -15.143 1.00 35.17
1 . .
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ATOM 5839 C     C     . GLU GLU GLU B B 328 328 . 121.714 118.464 -15.858 1.00 10.51
1 . .
ATOM 5840 O     O     . GLU GLU GLU B B 328 328 . 121.867 118.278 -17.082 1.00 11.69
1 . .
ATOM 5841 N     N     . ARG ARG ARG B B 329 329 . 122.356 119.436 -15.184 1.00 10.38
1 . .
ATOM 5842 CA    CA    . ARG ARG ARG B B 329 329 . 123.309 120.321 -15.852 1.00 10.37
1 . .
ATOM 5843 CB    CB    . ARG ARG ARG B B 329 329 . 123.768 121.434 -14.891 1.00 10.29
1 . .
ATOM 5844 CG    CG    . ARG ARG ARG B B 329 329 . 124.804 122.393 -15.547 1.00 10.68
1 . .
ATOM 5845 CD    CD    . ARG ARG ARG B B 329 329 . 125.033 123.587 -14.709 1.00 11.71
1 . .
ATOM 5846 NE    NE    . ARG ARG ARG B B 329 329 . 126.024 124.457 -15.388 1.00 12.33
1 . .
ATOM 5847 CZ    CZ    . ARG ARG ARG B B 329 329 . 126.532 125.541 -14.798 1.00 12.08
1 . .
ATOM 5848 NH1   NH1   . ARG ARG ARG B B 329 329 . 126.144 125.854 -13.534 1.00 12.79
1 . .
ATOM 5849 NH2   NH2   . ARG ARG ARG B B 329 329 . 127.452 126.268 -15.446 1.00 12.50
1 . .
ATOM 5850 C     C     . ARG ARG ARG B B 329 329 . 124.500 119.514 -16.390 1.00 9.52
1 . .
ATOM 5851 O     O     . ARG ARG ARG B B 329 329 . 124.941 119.706 -17.526 1.00 9.91
1 . .
ATOM 5852 N     N     . ALA ALA ALA B B 330 330 . 125.026 118.583 -15.552 1.00 9.83
1 . .
ATOM 5853 CA    CA    . ALA ALA ALA B B 330 330 . 126.174 117.797 -15.967 1.00 9.22
1 . .
ATOM 5854 CB    CB    . ALA ALA ALA B B 330 330 . 126.651 116.964 -14.785 1.00 8.23
1 . .
ATOM 5855 C     C     . ALA ALA ALA B B 330 330 . 125.812 116.851 -17.171 1.00 9.72
1 . .
ATOM 5856 O     O     . ALA ALA ALA B B 330 330 . 126.670 116.645 -18.067 1.00 10.59
1 . .
ATOM 5857 N     N     . VAL VAL VAL B B 331 331 . 124.575 116.379 -17.223 1.00 9.41
1 . .
ATOM 5858 CA    CA    . VAL VAL VAL B B 331 331 . 124.114 115.504 -18.341 1.00 10.57
1 . .
ATOM 5859 CB    CB    . VAL VAL VAL B B 331 331 . 122.704 114.965 -18.102 1.00 11.37
1 . .
ATOM 5860 CG1   CG1   . VAL VAL VAL B B 331 331 . 122.091 114.359 -19.418 1.00 14.00
1 . .
ATOM 5861 CG2   CG2   . VAL VAL VAL B B 331 331 . 122.717 113.868 -17.074 1.00 11.30
1 . .
ATOM 5862 C     C     . VAL VAL VAL B B 331 331 . 124.102 116.418 -19.618 1.00 11.35
1 . .
ATOM 5863 O     O     . VAL VAL VAL B B 331 331 . 124.662 116.020 -20.652 1.00 12.61
1 . .
ATOM 5864 N     N     . GLU GLU GLU B B 332 332 . 123.507 117.623 -19.517 1.00 11.40
1 . .
ATOM 5865 CA    CA    . GLU GLU GLU B B 332 332 . 123.391 118.511 -20.675 1.00 11.59
1 . .
ATOM 5866 CB    CB    . GLU GLU GLU B B 332 332 . 122.570 119.747 -20.245 1.00 13.38
1 . .
ATOM 5867 CG    CG    . GLU GLU GLU B B 332 332 . 122.177 120.713 -21.394 1.00 22.14
1 . .
ATOM 5868 CD    CD    . GLU GLU GLU B B 332 332 . 122.914 122.014 -21.280 1.00 36.23
1 . .
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ATOM 5869 OE1   OE1   . GLU GLU GLU B B 332 332 . 124.177 122.035 -21.343 1.00 45.62
1 . .
ATOM 5870 OE2   OE2   . GLU GLU GLU B B 332 332 . 122.244 123.062 -21.134 1.00 41.86
1 . .
ATOM 5871 C     C     . GLU GLU GLU B B 332 332 . 124.741 118.943 -21.244 1.00 12.42
1 . .
ATOM 5872 O     O     . GLU GLU GLU B B 332 332 . 124.998 118.960 -22.476 1.00 15.07
1 . .
ATOM 5873 N     N     . GLU GLU GLU B B 333 333 . 125.675 119.204 -20.353 1.00 10.76
1 . .
ATOM 5874 CA    CA    . GLU GLU GLU B B 333 333 . 126.961 119.640 -20.766 1.00 11.48
1 . .
ATOM 5875 CB    CB    . GLU GLU GLU B B 333 333 . 127.514 120.620 -19.713 1.00 12.08
1 . .
ATOM 5876 CG    CG    . GLU GLU GLU B B 333 333 . 126.614 121.847 -19.542 1.00 13.85
1 . .
ATOM 5877 CD    CD    . GLU GLU GLU B B 333 333 . 127.186 122.961 -18.680 1.00 13.94
1 . .
ATOM 5878 OE1   OE1   . GLU GLU GLU B B 333 333 . 126.370 123.736 -18.113 1.00 14.39
1 . .
ATOM 5879 OE2   OE2   . GLU GLU GLU B B 333 333 . 128.388 123.163 -18.632 1.00 14.69
1 . .
ATOM 5880 C     C     . GLU GLU GLU B B 333 333 . 127.958 118.550 -20.967 1.00 10.15
1 . .
ATOM 5881 O     O     . GLU GLU GLU B B 333 333 . 129.114 118.858 -21.330 1.00 11.63
1 . .
ATOM 5882 N     N     . LYS LYS LYS B B 334 334 . 127.522 117.312 -20.761 1.00 9.89
1 . .
ATOM 5883 CA    CA    . LYS LYS LYS B B 334 334 . 128.404 116.161 -20.954 1.00 9.80
1 . .
ATOM 5884 CB    CB    . LYS LYS LYS B B 334 334 . 128.801 115.891 -22.449 1.00 9.85
1 . .
ATOM 5885 CG    CG    . LYS LYS LYS B B 334 334 . 127.534 115.469 -23.248 1.00 15.10
1 . .
ATOM 5886 CD    CD    . LYS LYS LYS B B 334 334 . 127.934 115.017 -24.663 1.00 16.85
1 . .
ATOM 5887 CE    CE    . LYS LYS LYS B B 334 334 . 126.716 114.761 -25.560 1.00 27.78
1 . .
ATOM 5888 NZ    NZ    . LYS LYS LYS B B 334 334 . 125.820 113.796 -24.935 1.00 33.30
1 . .
ATOM 5889 C     C     . LYS LYS LYS B B 334 334 . 129.644 116.357 -20.086 1.00 8.51
1 . .
ATOM 5890 O     O     . LYS LYS LYS B B 334 334 . 130.796 116.114 -20.510 1.00 9.22
1 . .
ATOM 5891 N     N     . ALA ALA ALA B B 335 335 . 129.413 116.773 -18.834 1.00 8.78
1 . .
ATOM 5892 CA    CA    . ALA ALA ALA B B 335 335 . 130.614 117.096 -18.006 1.00 8.30
1 . .
ATOM 5893 CB    CB    . ALA ALA ALA B B 335 335 . 130.155 117.972 -16.871 1.00 10.37
1 . .
ATOM 5894 C     C     . ALA ALA ALA B B 335 335 . 131.367 115.878 -17.438 1.00 8.00
1 . .
ATOM 5895 O     O     . ALA ALA ALA B B 335 335 . 132.583 115.959 -17.086 1.00 9.09
1 . .
ATOM 5896 N     N     . CYS CYS CYS B B 336 336 . 130.622 114.782 -17.314 1.00 8.39
1 . .
ATOM 5897 CA    CA    . CYS CYS CYS B B 336 336 . 131.137 113.519 -16.679 1.00 6.74
1 . .
ATOM 5898 CB    CB    . CYS CYS CYS B B 336 336 . 131.202 113.636 -15.133 1.00 7.67
1 . .
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ATOM 5899 SG    SG    . CYS CYS CYS B B 336 336 . 129.602 113.958 -14.391 1.00 9.94
1 . .
ATOM 5900 C     C     . CYS CYS CYS B B 336 336 . 130.310 112.392 -17.172 1.00 7.43
1 . .
ATOM 5901 O     O     . CYS CYS CYS B B 336 336 . 129.362 112.625 -17.917 1.00 10.59
1 . .
ATOM 5902 N     N     . ASN ASN ASN B B 337 337 . 130.618 111.162 -16.746 1.00 7.78
1 . .
ATOM 5903 CA    CA    . ASN ASN ASN B B 337 337 . 129.856 109.995 -17.227 1.00 6.97
1 . .
ATOM 5904 CB    CB    . ASN ASN ASN B B 337 337 . 130.587 109.329 -18.423 1.00 7.66
1 . .
ATOM 5905 CG    CG    . ASN ASN ASN B B 337 337 . 132.006 108.947 -18.099 1.00 7.43
1 . .
ATOM 5906 OD1   OD1   . ASN ASN ASN B B 337 337 . 132.298 108.477 -17.013 1.00 8.40
1 . .
ATOM 5907 ND2   ND2   . ASN ASN ASN B B 337 337 . 132.893 109.094 -19.078 1.00 11.15
1 . .
ATOM 5908 C     C     . ASN ASN ASN B B 337 337 . 129.625 109.003 -16.121 1.00 7.84
1 . .
ATOM 5909 O     O     . ASN ASN ASN B B 337 337 . 129.182 107.892 -16.363 1.00 10.28
1 . .
ATOM 5910 N     N     . CYS CYS CYS B B 338 338 . 129.788 109.466 -14.889 1.00 8.04
1 . .
ATOM 5911 CA    CA    . CYS CYS CYS B B 338 338 . 129.477 108.622 -13.730 1.00 7.95
1 . .
ATOM 5912 CB    CB    . CYS CYS CYS B B 338 338 . 130.692 107.739 -13.340 1.00 7.73
1 . .
ATOM 5913 SG    SG    . CYS CYS CYS B B 338 338 . 130.428 106.585 -11.944 1.00 10.21
1 . .
ATOM 5914 C     C     . CYS CYS CYS B B 338 338 . 129.140 109.554 -12.575 1.00 7.90
1 . .
ATOM 5915 O     O     . CYS CYS CYS B B 338 338 . 129.769 110.590 -12.431 1.00 8.23
1 . .
ATOM 5916 N     N     . LEU LEU LEU B B 339 339 . 128.182 109.161 -11.752 1.00 6.50
1 . .
ATOM 5917 CA    CA    . LEU LEU LEU B B 339 339 . 127.794 109.915 -10.537 1.00 7.17
1 . .
ATOM 5918 CB    CB    . LEU LEU LEU B B 339 339 . 126.244 109.933 -10.466 1.00 7.70
1 . .
ATOM 5919 CG    CG    . LEU LEU LEU B B 339 339 . 125.662 110.479 -9.157  1.00 7.24
1 . .
ATOM 5920 CD1   CD1   . LEU LEU LEU B B 339 339 . 125.993 111.979 -9.010  1.00 8.76
1 . .
ATOM 5921 CD2   CD2   . LEU LEU LEU B B 339 339 . 124.177 110.205 -9.168  1.00 9.41
1 . .
ATOM 5922 C     C     . LEU LEU LEU B B 339 339 . 128.324 109.229 -9.308  1.00 7.97
1 . .
ATOM 5923 O     O     . LEU LEU LEU B B 339 339 . 128.120 108.028 -9.153  1.00 8.18
1 . .
ATOM 5924 N     N     . LEU LEU LEU B B 340 340 . 128.993 109.986 -8.420  1.00 6.80
1 . .
ATOM 5925 CA    CA    . LEU LEU LEU B B 340 340 . 129.318 109.426 -7.077  1.00 6.99
1 . .
ATOM 5926 CB    CB    . LEU LEU LEU B B 340 340 . 130.514 110.156 -6.489  1.00 6.07
1 . .
ATOM 5927 CG    CG    . LEU LEU LEU B B 340 340 . 131.082 109.300 -5.356  1.00 7.01
1 . .
ATOM 5928 CD1   CD1   . LEU LEU LEU B B 340 340 . 132.004 108.116 -5.911  1.00 8.16
1 . .
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ATOM 5929 CD2   CD2   . LEU LEU LEU B B 340 340 . 131.915 110.156 -4.393  1.00 7.98
1 . .
ATOM 5930 C     C     . LEU LEU LEU B B 340 340 . 128.070 109.620 -6.202  1.00 7.13
1 . .
ATOM 5931 O     O     . LEU LEU LEU B B 340 340 . 127.547 110.735 -6.066  1.00 8.20
1 . .
ATOM 5932 N     N     . LEU LEU LEU B B 341 341 . 127.556 108.534 -5.631  1.00 6.39
1 . .
ATOM 5933 CA    CA    . LEU LEU LEU B B 341 341 . 126.271 108.654 -4.899  1.00 7.29
1 . .
ATOM 5934 CB    CB    . LEU LEU LEU B B 341 341 . 125.350 107.475 -5.300  1.00 7.53
1 . .
ATOM 5935 CG    CG    . LEU LEU LEU B B 341 341 . 123.909 107.720 -4.918  1.00 8.72
1 . .
ATOM 5936 CD1   CD1   . LEU LEU LEU B B 341 341 . 123.259 108.555 -6.097  1.00 13.14
1 . .
ATOM 5937 CD2   CD2   . LEU LEU LEU B B 341 341 . 123.083 106.394 -4.865  1.00 12.43
1 . .
ATOM 5938 C     C     . LEU LEU LEU B B 341 341 . 126.512 108.655 -3.378  1.00 7.47
1 . .
ATOM 5939 O     O     . LEU LEU LEU B B 341 341 . 126.905 107.644 -2.795  1.00 7.88
1 . .
ATOM 5940 N     N     . LYS LYS LYS B B 342 342 . 126.258 109.827 -2.767  1.00 6.90
1 . .
ATOM 5941 CA    CA    . LYS LYS LYS B B 342 342 . 126.465 110.036 -1.311  1.00 8.12
1 . .
ATOM 5942 CB    CB    . LYS LYS LYS B B 342 342 . 127.534 111.089 -1.057  1.00 7.92
1 . .
ATOM 5943 CG    CG    . LYS LYS LYS B B 342 342 . 128.960 110.592 -1.314  1.00 8.66
1 . .
ATOM 5944 CD    CD    . LYS LYS LYS B B 342 342 . 129.949 111.759 -1.252  1.00 9.28
1 . .
ATOM 5945 CE    CE    . LYS LYS LYS B B 342 342 . 131.332 111.274 -1.146  1.00 10.74
1 . .
ATOM 5946 NZ    NZ    . LYS LYS LYS B B 342 342 . 132.165 112.392 -1.423  1.00 11.53
1 . .
ATOM 5947 C     C     . LYS LYS LYS B B 342 342 . 125.157 110.515 -0.741  1.00 8.46
1 . .
ATOM 5948 O     O     . LYS LYS LYS B B 342 342 . 124.723 111.662 -0.968  1.00 8.77
1 . .
ATOM 5949 N     N     . VAL VAL VAL B B 343 343 . 124.465 109.665 0.003   1.00 9.07
1 . .
ATOM 5950 CA    CA    . VAL VAL VAL B B 343 343 . 123.176 110.076 0.516   1.00 9.00
1 . .
ATOM 5951 CB    CB    . VAL VAL VAL B B 343 343 . 122.570 108.919 1.429   1.00 9.48
1 . .
ATOM 5952 CG1   CG1   . VAL VAL VAL B B 343 343 . 122.044 107.735 0.517   1.00 12.74
1 . .
ATOM 5953 CG2   CG2   . VAL VAL VAL B B 343 343 . 123.576 108.392 2.478   1.00 10.15
1 . .
ATOM 5954 C     C     . VAL VAL VAL B B 343 343 . 123.254 111.372 1.321   1.00 8.87
1 . .
ATOM 5955 O     O     . VAL VAL VAL B B 343 343 . 122.270 112.141 1.341   1.00 8.79
1 . .
ATOM 5956 N     N     . ASN ASN ASN B B 344 344 . 124.375 111.621 2.044   1.00 8.31
1 . .
ATOM 5957 CA    CA    . ASN ASN ASN B B 344 344 . 124.431 112.808 2.904   1.00 8.01
1 . .
ATOM 5958 CB    CB    . ASN ASN ASN B B 344 344 . 125.290 112.593 4.167   1.00 8.26
1 . .
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ATOM 5959 CG    CG    . ASN ASN ASN B B 344 344 . 126.692 113.076 4.031   1.00 6.62
1 . .
ATOM 5960 OD1   OD1   . ASN ASN ASN B B 344 344 . 127.404 112.692 3.099   1.00 8.09
1 . .
ATOM 5961 ND2   ND2   . ASN ASN ASN B B 344 344 . 127.106 114.024 4.923   1.00 9.60
1 . .
ATOM 5962 C     C     . ASN ASN ASN B B 344 344 . 124.793 114.077 2.110   1.00 7.46
1 . .
ATOM 5963 O     O     . ASN ASN ASN B B 344 344 . 124.830 115.201 2.703   1.00 8.54
1 . .
ATOM 5964 N     N     . GLN GLN GLN B B 345 345 . 125.112 113.982 0.806   1.00 6.91
1 . .
ATOM 5965 CA    CA    . GLN GLN GLN B B 345 345 . 125.272 115.228 0.035   1.00 7.40
1 . .
ATOM 5966 CB    CB    . GLN GLN GLN B B 345 345 . 126.001 114.963 -1.309  1.00 6.96
1 . .
ATOM 5967 CG    CG    . GLN GLN GLN B B 345 345 . 127.491 114.805 -1.069  1.00 6.47
1 . .
ATOM 5968 CD    CD    . GLN GLN GLN B B 345 345 . 128.288 114.637 -2.341  1.00 8.25
1 . .
ATOM 5969 OE1   OE1   . GLN GLN GLN B B 345 345 . 129.481 115.133 -2.403  1.00 11.02
1 . .
ATOM 5970 NE2   NE2   . GLN GLN GLN B B 345 345 . 127.771 113.874 -3.292  1.00 4.94
1 . .
ATOM 5971 C     C     . GLN GLN GLN B B 345 345 . 123.940 115.821 -0.319  1.00 6.98
1 . .
ATOM 5972 O     O     . GLN GLN GLN B B 345 345 . 123.887 117.047 -0.624  1.00 8.74
1 . .
ATOM 5973 N     N     . ILE ILE ILE B B 346 346 . 122.876 115.021 -0.303  1.00 7.56
1 . .
ATOM 5974 CA    CA    . ILE ILE ILE B B 346 346 . 121.548 115.528 -0.649  1.00 8.66
1 . .
ATOM 5975 CB    CB    . ILE ILE ILE B B 346 346 . 121.030 114.864 -1.949  1.00 9.74
1 . .
ATOM 5976 CG1   CG1   . ILE ILE ILE B B 346 346 . 119.767 115.594 -2.524  1.00 9.45
1 . .
ATOM 5977 CD    CD    . ILE ILE ILE B B 346 346 . 120.068 117.001 -2.975  1.00 11.24
1 . .
ATOM 5978 CG2   CG2   . ILE ILE ILE B B 346 346 . 120.680 113.347 -1.740  1.00 7.99
1 . .
ATOM 5979 C     C     . ILE ILE ILE B B 346 346 . 120.581 115.440 0.517   1.00 7.02
1 . .
ATOM 5980 O     O     . ILE ILE ILE B B 346 346 . 119.766 116.356 0.707   1.00 9.33
1 . .
ATOM 5981 N     N     . GLY GLY GLY B B 347 347 . 120.705 114.414 1.392   1.00 9.07
1 . .
ATOM 5982 CA    CA    . GLY GLY GLY B B 347 347 . 120.029 114.504 2.655   1.00 9.37
1 . .
ATOM 5983 C     C     . GLY GLY GLY B B 347 347 . 118.803 113.581 2.851   1.00 8.39
1 . .
ATOM 5984 O     O     . GLY GLY GLY B B 347 347 . 118.238 113.539 3.986   1.00 9.62
1 . .
ATOM 5985 N     N     . SER SER SER B B 348 348 . 118.422 112.793 1.832   1.00 7.86
1 . .
ATOM 5986 CA    CA    . SER SER SER B B 348 348 . 117.333 111.850 2.062   1.00 9.00
1 . .
ATOM 5987 CB    CB    . SER SER SER B B 348 348 . 115.885 112.480 1.783   1.00 9.23
1 . .
ATOM 5988 OG    OG    . SER SER SER B B 348 348 . 115.697 112.743 0.392   1.00 10.50
1 . .
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ATOM 5989 C     C     . SER SER SER B B 348 348 . 117.503 110.682 1.144   1.00 8.21
1 . .
ATOM 5990 O     O     . SER SER SER B B 348 348 . 118.066 110.795 0.083   1.00 8.89
1 . .
ATOM 5991 N     N     . VAL VAL VAL B B 349 349 . 116.937 109.565 1.557   1.00 9.11
1 . .
ATOM 5992 CA    CA    . VAL VAL VAL B B 349 349 . 116.978 108.381 0.696   1.00 9.38
1 . .
ATOM 5993 CB    CB    . VAL VAL VAL B B 349 349 . 116.404 107.157 1.464   1.00 9.42
1 . .
ATOM 5994 CG1   CG1   . VAL VAL VAL B B 349 349 . 116.215 105.910 0.545   1.00 13.07
1 . .
ATOM 5995 CG2   CG2   . VAL VAL VAL B B 349 349 . 117.318 106.793 2.640   1.00 10.63
1 . .
ATOM 5996 C     C     . VAL VAL VAL B B 349 349 . 116.231 108.639 -0.622  1.00 9.26
1 . .
ATOM 5997 O     O     . VAL VAL VAL B B 349 349 . 116.678 108.285 -1.701  1.00 10.14
1 . .
ATOM 5998 N     N     . THR THR THR B B 350 350 . 115.016 109.208 -0.526  1.00 9.82
1 . .
ATOM 5999 CA    CA    . THR THR THR B B 350 350 . 114.254 109.451 -1.761  1.00 10.38
1 . .
ATOM 6000 CB    CB    . THR THR THR B B 350 350 . 112.946 110.172 -1.394  1.00 10.31
1 . .
ATOM 6001 OG1   OG1   . THR THR THR B B 350 350 . 112.144 109.226 -0.631  1.00 11.39
1 . .
ATOM 6002 CG2   CG2   . THR THR THR B B 350 350 . 112.182 110.574 -2.658  1.00 13.91
1 . .
ATOM 6003 C     C     . THR THR THR B B 350 350 . 115.030 110.275 -2.790  1.00 9.63
1 . .
ATOM 6004 O     O     . THR THR THR B B 350 350 . 115.054 109.912 -3.951  1.00 10.31
1 . .
ATOM 6005 N     N     . GLU GLU GLU B B 351 351 . 115.667 111.351 -2.360  1.00 9.10
1 . .
ATOM 6006 CA    CA    . GLU GLU GLU B B 351 351 . 116.395 112.157 -3.345  1.00 9.22
1 . .
ATOM 6007 CB    CB    . GLU GLU GLU B B 351 351 . 116.775 113.477 -2.680  1.00 9.40
1 . .
ATOM 6008 CG    CG    . GLU GLU GLU B B 351 351 . 115.611 114.393 -2.373  1.00 10.49
1 . .
ATOM 6009 CD    CD    . GLU GLU GLU B B 351 351 . 116.026 115.532 -1.462  1.00 10.62
1 . .
ATOM 6010 OE1   OE1   . GLU GLU GLU B B 351 351 . 116.385 115.315 -0.304  1.00 11.45
1 . .
ATOM 6011 OE2   OE2   . GLU GLU GLU B B 351 351 . 115.968 116.717 -1.902  1.00 14.63
1 . .
ATOM 6012 C     C     . GLU GLU GLU B B 351 351 . 117.648 111.455 -3.872  1.00 10.40
1 . .
ATOM 6013 O     O     . GLU GLU GLU B B 351 351 . 117.983 111.635 -5.054  1.00 9.78
1 . .
ATOM 6014 N     N     . ALA ALA ALA B B 352 352 . 118.340 110.647 -3.031  1.00 9.71
1 . .
ATOM 6015 CA    CA    . ALA ALA ALA B B 352 352 . 119.544 109.890 -3.519  1.00 8.82
1 . .
ATOM 6016 CB    CB    . ALA ALA ALA B B 352 352 . 120.191 109.182 -2.370  1.00 9.27
1 . .
ATOM 6017 C     C     . ALA ALA ALA B B 352 352 . 119.089 108.911 -4.556  1.00 9.08
1 . .
ATOM 6018 O     O     . ALA ALA ALA B B 352 352 . 119.760 108.713 -5.560  1.00 9.61
1 . .
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ATOM 6019 N     N     . ILE ILE ILE B B 353 353 . 117.927 108.254 -4.355  1.00 10.17
1 . .
ATOM 6020 CA    CA    . ILE ILE ILE B B 353 353 . 117.503 107.250 -5.364  1.00 9.00
1 . .
ATOM 6021 CB    CB    . ILE ILE ILE B B 353 353 . 116.282 106.489 -4.811  1.00 10.26
1 . .
ATOM 6022 CG1   CG1   . ILE ILE ILE B B 353 353 . 116.738 105.510 -3.702  1.00 12.01
1 . .
ATOM 6023 CD    CD    . ILE ILE ILE B B 353 353 . 115.621 104.708 -2.992  1.00 14.31
1 . .
ATOM 6024 CG2   CG2   . ILE ILE ILE B B 353 353 . 115.543 105.662 -5.967  1.00 12.45
1 . .
ATOM 6025 C     C     . ILE ILE ILE B B 353 353 . 117.103 107.995 -6.656  1.00 9.60
1 . .
ATOM 6026 O     O     . ILE ILE ILE B B 353 353 . 117.416 107.534 -7.747  1.00 10.04
1 . .
ATOM 6027 N     N     . GLN GLN GLN B B 354 354 . 116.425 109.145 -6.541  1.00 9.23
1 . .
ATOM 6028 CA    CA    . GLN GLN GLN B B 354 354 . 116.124 109.957 -7.735  1.00 10.01
1 . .
ATOM 6029 CB    CB    . GLN GLN GLN B B 354 354 . 115.338 111.220 -7.290  1.00 11.40
1 . .
ATOM 6030 CG    CG    . GLN GLN GLN B B 354 354 . 115.022 112.169 -8.444  1.00 19.78
1 . .
ATOM 6031 CD    CD    . GLN GLN GLN B B 354 354 . 114.575 113.628 -7.962  1.00 26.23
1 . .
ATOM 6032 OE1   OE1   . GLN GLN GLN B B 354 354 . 114.366 113.911 -6.721  1.00 33.12
1 . .
ATOM 6033 NE2   NE2   . GLN GLN GLN B B 354 354 . 114.475 114.559 -8.957  1.00 26.48
1 . .
ATOM 6034 C     C     . GLN GLN GLN B B 354 354 . 117.400 110.330 -8.486  1.00 11.81
1 . .
ATOM 6035 O     O     . GLN GLN GLN B B 354 354 . 117.445 110.252 -9.728  1.00 10.91
1 . .
ATOM 6036 N     N     . ALA ALA ALA B B 355 355 . 118.439 110.755 -7.762  1.00 10.07
1 . .
ATOM 6037 CA    CA    . ALA ALA ALA B B 355 355 . 119.702 111.106 -8.383  1.00 9.71
1 . .
ATOM 6038 CB    CB    . ALA ALA ALA B B 355 355 . 120.693 111.616 -7.321  1.00 8.44
1 . .
ATOM 6039 C     C     . ALA ALA ALA B B 355 355 . 120.303 109.908 -9.153  1.00 8.79
1 . .
ATOM 6040 O     O     . ALA ALA ALA B B 355 355 . 120.796 110.044 -10.276 1.00 8.95
1 . .
ATOM 6041 N     N     . CYS CYS CYS B B 356 356 . 120.261 108.718 -8.532  1.00 9.01
1 . .
ATOM 6042 CA    CA    . CYS CYS CYS B B 356 356 . 120.808 107.526 -9.093  1.00 8.81
1 . .
ATOM 6043 CB    CB    . CYS CYS CYS B B 356 356 . 120.653 106.381 -8.134  1.00 10.23
1 . .
ATOM 6044 SG    SG    . CYS CYS CYS B B 356 356 . 121.351 104.816 -8.797  1.00 11.19
1 . .
ATOM 6045 C     C     . CYS CYS CYS B B 356 356 . 120.053 107.244 -10.422 1.00 10.64
1 . .
ATOM 6046 O     O     . CYS CYS CYS B B 356 356 . 120.675 106.973 -11.451 1.00 10.28
1 . .
ATOM 6047 N     N     . LYS LYS LYS B B 357 357 . 118.728 107.290 -10.343 1.00 9.57
1 . .
ATOM 6048 CA    CA    . LYS LYS LYS B B 357 357 . 117.890 106.906 -11.486 1.00 11.98
1 . .
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ATOM 6049 CB    CB    . LYS LYS LYS B B 357 357 . 116.431 106.871 -11.081 1.00 11.67
1 . .
ATOM 6050 CG    CG    . LYS LYS LYS B B 357 357 . 116.169 105.711 -10.083 1.00 15.54
1 . .
ATOM 6051 CD    CD    . LYS LYS LYS B B 357 357 . 114.656 105.570 -9.784  1.00 20.83
1 . .
ATOM 6052 CE    CE    . LYS LYS LYS B B 357 357 . 113.966 104.970 -11.073 1.00 27.15
1 . .
ATOM 6053 NZ    NZ    . LYS LYS LYS B B 357 357 . 112.594 104.451 -10.807 1.00 29.22
1 . .
ATOM 6054 C     C     . LYS LYS LYS B B 357 357 . 118.144 107.907 -12.629 1.00 10.18
1 . .
ATOM 6055 O     O     . LYS LYS LYS B B 357 357 . 118.225 107.515 -13.807 1.00 12.69
1 . .
ATOM 6056 N     N     . LEU LEU LEU B B 358 358 . 118.325 109.182 -12.292 1.00 10.44
1 . .
ATOM 6057 CA    CA    . LEU LEU LEU B B 358 358 . 118.545 110.178 -13.328 1.00 11.46
1 . .
ATOM 6058 CB    CB    . LEU LEU LEU B B 358 358 . 118.547 111.581 -12.640 1.00 12.21
1 . .
ATOM 6059 CG    CG    . LEU LEU LEU B B 358 358 . 118.837 112.769 -13.587 1.00 12.47
1 . .
ATOM 6060 CD1   CD1   . LEU LEU LEU B B 358 358 . 117.703 112.900 -14.676 1.00 17.29
1 . .
ATOM 6061 CD2   CD2   . LEU LEU LEU B B 358 358 . 118.891 114.048 -12.795 1.00 15.24
1 . .
ATOM 6062 C     C     . LEU LEU LEU B B 358 358 . 119.844 109.905 -14.040 1.00 11.97
1 . .
ATOM 6063 O     O     . LEU LEU LEU B B 358 358 . 119.952 109.999 -15.301 1.00 12.16
1 . .
ATOM 6064 N     N     . ALA ALA ALA B B 359 359 . 120.896 109.629 -13.282 1.00 9.79
1 . .
ATOM 6065 CA    CA    . ALA ALA ALA B B 359 359 . 122.162 109.318 -13.904 1.00 10.39
1 . .
ATOM 6066 CB    CB    . ALA ALA ALA B B 359 359 . 123.216 109.111 -12.825 1.00 9.95
1 . .
ATOM 6067 C     C     . ALA ALA ALA B B 359 359 . 122.060 108.055 -14.775 1.00 10.09
1 . .
ATOM 6068 O     O     . ALA ALA ALA B B 359 359 . 122.512 108.031 -15.934 1.00 11.35
1 . .
ATOM 6069 N     N     . GLN GLN GLN B B 360 360 . 121.452 106.990 -14.248 1.00 10.44
1 . .
ATOM 6070 CA    CA    . GLN GLN GLN B B 360 360 . 121.367 105.739 -15.013 1.00 11.20
1 . .
ATOM 6071 CB    CB    . GLN GLN GLN B B 360 360 . 120.738 104.637 -14.131 1.00 11.07
1 . .
ATOM 6072 CG    CG    . GLN GLN GLN B B 360 360 . 121.710 104.179 -13.045 1.00 13.61
1 . .
ATOM 6073 CD    CD    . GLN GLN GLN B B 360 360 . 121.082 103.237 -12.028 1.00 12.89
1 . .
ATOM 6074 OE1   OE1   . GLN GLN GLN B B 360 360 . 119.890 103.319 -11.715 1.00 14.36
1 . .
ATOM 6075 NE2   NE2   . GLN GLN GLN B B 360 360 . 121.915 102.373 -11.453 1.00 14.21
1 . .
ATOM 6076 C     C     . GLN GLN GLN B B 360 360 . 120.538 105.904 -16.282 1.00 11.70
1 . .
ATOM 6077 O     O     . GLN GLN GLN B B 360 360 . 120.904 105.327 -17.327 1.00 12.62
1 . .
ATOM 6078 N     N     . GLU GLU GLU B B 361 361 . 119.434 106.678 -16.191 1.00 11.05
1 . .
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ATOM 6079 CA    CA    . GLU GLU GLU B B 361 361 . 118.576 106.919 -17.407 1.00 13.10
1 . .
ATOM 6080 CB    CB    . GLU GLU GLU B B 361 361 . 117.272 107.669 -17.075 1.00 15.62
1 . .
ATOM 6081 CG    CG    . GLU GLU GLU B B 361 361 . 116.311 106.774 -16.207 1.00 25.43
1 . .
ATOM 6082 CD    CD    . GLU GLU GLU B B 361 361 . 115.189 107.578 -15.461 1.00 36.33
1 . .
ATOM 6083 OE1   OE1   . GLU GLU GLU B B 361 361 . 115.053 108.825 -15.681 1.00 38.77
1 . .
ATOM 6084 OE2   OE2   . GLU GLU GLU B B 361 361 . 114.426 106.939 -14.640 1.00 39.72
1 . .
ATOM 6085 C     C     . GLU GLU GLU B B 361 361 . 119.355 107.611 -18.512 1.00 13.65
1 . .
ATOM 6086 O     O     . GLU GLU GLU B B 361 361 . 118.965 107.485 -19.691 1.00 15.80
1 . .
ATOM 6087 N     N     . ASN ASN ASN B B 362 362 . 120.388 108.361 -18.147 1.00 12.24
1 . .
ATOM 6088 CA    CA    . ASN ASN ASN B B 362 362 . 121.164 109.103 -19.076 1.00 12.63
1 . .
ATOM 6089 CB    CB    . ASN ASN ASN B B 362 362 . 121.407 110.519 -18.535 1.00 11.27
1 . .
ATOM 6090 CG    CG    . ASN ASN ASN B B 362 362 . 120.177 111.368 -18.694 1.00 13.13
1 . .
ATOM 6091 OD1   OD1   . ASN ASN ASN B B 362 362 . 119.836 111.760 -19.834 1.00 17.45
1 . .
ATOM 6092 ND2   ND2   . ASN ASN ASN B B 362 362 . 119.505 111.677 -17.622 1.00 18.35
1 . .
ATOM 6093 C     C     . ASN ASN ASN B B 362 362 . 122.460 108.429 -19.437 1.00 13.78
1 . .
ATOM 6094 O     O     . ASN ASN ASN B B 362 362 . 123.302 109.026 -20.039 1.00 17.87
1 . .
ATOM 6095 N     N     . GLY GLY GLY B B 363 363 . 122.578 107.129 -19.147 1.00 13.22
1 . .
ATOM 6096 CA    CA    . GLY GLY GLY B B 363 363 . 123.686 106.367 -19.605 1.00 16.16
1 . .
ATOM 6097 C     C     . GLY GLY GLY B B 363 363 . 124.933 106.413 -18.745 1.00 14.03
1 . .
ATOM 6098 O     O     . GLY GLY GLY B B 363 363 . 125.958 105.892 -19.171 1.00 16.00
1 . .
ATOM 6099 N     N     . TRP TRP TRP B B 364 364 . 124.882 107.112 -17.602 1.00 11.66
1 . .
ATOM 6100 CA    CA    . TRP TRP TRP B B 364 364 . 126.028 107.208 -16.722 1.00 9.44
1 . .
ATOM 6101 CB    CB    . TRP TRP TRP B B 364 364 . 125.804 108.362 -15.778 1.00 9.81
1 . .
ATOM 6102 CG    CG    . TRP TRP TRP B B 364 364 . 125.907 109.777 -16.310 1.00 9.99
1 . .
ATOM 6103 CD1   CD1   . TRP TRP TRP B B 364 364 . 125.858 110.203 -17.578 1.00 11.92
1 . .
ATOM 6104 NE1   NE1   . TRP TRP TRP B B 364 364 . 125.991 111.589 -17.586 1.00 10.99
1 . .
ATOM 6105 CE2   CE2   . TRP TRP TRP B B 364 364 . 126.068 112.052 -16.285 1.00 10.50
1 . .
ATOM 6106 CD2   CD2   . TRP TRP TRP B B 364 364 . 126.077 110.920 -15.463 1.00 9.47
1 . .
ATOM 6107 CE3   CE3   . TRP TRP TRP B B 364 364 . 126.135 111.056 -14.040 1.00 9.29
1 . .
ATOM 6108 CZ3   CZ3   . TRP TRP TRP B B 364 364 . 126.281 112.353 -13.499 1.00 10.50
1 . .
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ATOM 6109 CH2   CH2   . TRP TRP TRP B B 364 364 . 126.286 113.504 -14.390 1.00 10.31
1 . .
ATOM 6110 CZ2   CZ2   . TRP TRP TRP B B 364 364 . 126.209 113.345 -15.780 1.00 10.62
1 . .
ATOM 6111 C     C     . TRP TRP TRP B B 364 364 . 126.181 105.967 -15.816 1.00 9.52
1 . .
ATOM 6112 O     O     . TRP TRP TRP B B 364 364 . 125.204 105.275 -15.480 1.00 12.46
1 . .
ATOM 6113 N     N     . GLY GLY GLY B B 365 365 . 127.414 105.766 -15.375 1.00 8.16
1 . .
ATOM 6114 CA    CA    . GLY GLY GLY B B 365 365 . 127.634 104.870 -14.269 1.00 8.52
1 . .
ATOM 6115 C     C     . GLY GLY GLY B B 365 365 . 127.171 105.540 -12.993 1.00 8.34
1 . .
ATOM 6116 O     O     . GLY GLY GLY B B 365 365 . 126.994 106.773 -12.917 1.00 9.05
1 . .
ATOM 6117 N     N     . VAL VAL VAL B B 366 366 . 127.176 104.742 -11.928 1.00 8.03
1 . .
ATOM 6118 CA    CA    . VAL VAL VAL B B 366 366 . 126.940 105.289 -10.568 1.00 7.98
1 . .
ATOM 6119 CB    CB    . VAL VAL VAL B B 366 366 . 125.466 105.139 -10.099 1.00 8.59
1 . .
ATOM 6120 CG1   CG1   . VAL VAL VAL B B 366 366 . 125.276 105.670 -8.697  1.00 8.39
1 . .
ATOM 6121 CG2   CG2   . VAL VAL VAL B B 366 366 . 124.491 105.913 -11.058 1.00 9.85
1 . .
ATOM 6122 C     C     . VAL VAL VAL B B 366 366 . 127.854 104.503 -9.633  1.00 8.19
1 . .
ATOM 6123 O     O     . VAL VAL VAL B B 366 366 . 127.797 103.248 -9.640  1.00 8.88
1 . .
ATOM 6124 N     N     . MET MET MET B B 367 367 . 128.674 105.211 -8.868  1.00 6.62
1 . .
ATOM 6125 CA    CA    . MET MET MET B B 367 367 . 129.445 104.592 -7.815  1.00 6.76
1 . .
ATOM 6126 CB    CB    . MET MET MET B B 367 367 . 130.907 104.939 -7.983  1.00 7.34
1 . .
ATOM 6127 CG    CG    . MET MET MET B B 367 367 . 131.787 104.377 -6.858  1.00 6.61
1 . .
ATOM 6128 SD    SD    . MET MET MET B B 367 367 . 133.564 104.784 -6.964  1.00 8.74
1 . .
ATOM 6129 CE    CE    . MET MET MET B B 367 367 . 134.133 103.628 -8.163  1.00 12.98
1 . .
ATOM 6130 C     C     . MET MET MET B B 367 367 . 128.958 105.026 -6.475  1.00 6.15
1 . .
ATOM 6131 O     O     . MET MET MET B B 367 367 . 129.038 106.231 -6.142  1.00 7.88
1 . .
ATOM 6132 N     N     . VAL VAL VAL B B 368 368 . 128.406 104.077 -5.674  1.00 6.55
1 . .
ATOM 6133 CA    CA    . VAL VAL VAL B B 368 368 . 127.969 104.487 -4.330  1.00 7.24
1 . .
ATOM 6134 CB    CB    . VAL VAL VAL B B 368 368 . 127.171 103.353 -3.732  1.00 6.63
1 . .
ATOM 6135 CG1   CG1   . VAL VAL VAL B B 368 368 . 126.894 103.560 -2.169  1.00 8.38
1 . .
ATOM 6136 CG2   CG2   . VAL VAL VAL B B 368 368 . 125.883 103.187 -4.544  1.00 8.47
1 . .
ATOM 6137 C     C     . VAL VAL VAL B B 368 368 . 129.205 104.717 -3.442  1.00 6.82
1 . .
ATOM 6138 O     O     . VAL VAL VAL B B 368 368 . 130.306 104.104 -3.682  1.00 7.82
1 . .
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ATOM 6139 N     N     . SER SER SER B B 369 369 . 129.142 105.678 -2.533  1.00 5.25
1 . .
ATOM 6140 CA    CA    . SER SER SER B B 369 369 . 130.354 105.994 -1.799  1.00 6.01
1 . .
ATOM 6141 CB    CB    . SER SER SER B B 369 369 . 130.886 107.362 -2.370  1.00 7.42
1 . .
ATOM 6142 OG    OG    . SER SER SER B B 369 369 . 132.094 107.780 -1.698  1.00 7.74
1 . .
ATOM 6143 C     C     . SER SER SER B B 369 369 . 130.080 106.275 -0.321  1.00 6.67
1 . .
ATOM 6144 O     O     . SER SER SER B B 369 369 . 129.067 106.864 0.069   1.00 8.19
1 . .
ATOM 6145 N     N     . HIS HIS HIS B B 370 370 . 131.050 105.893 0.496   1.00 6.00
1 . .
ATOM 6146 CA    CA    . HIS HIS HIS B B 370 370 . 131.140 106.367 1.898   1.00 6.79
1 . .
ATOM 6147 CB    CB    . HIS HIS HIS B B 370 370 . 132.296 105.545 2.592   1.00 7.86
1 . .
ATOM 6148 CG    CG    . HIS HIS HIS B B 370 370 . 133.645 105.746 1.972   1.00 6.08
1 . .
ATOM 6149 ND1   ND1   . HIS HIS HIS B B 370 370 . 134.799 105.324 2.588   1.00 6.63
1 . .
ATOM 6150 CE1   CE1   . HIS HIS HIS B B 370 370 . 135.854 105.585 1.839   1.00 8.87
1 . .
ATOM 6151 NE2   NE2   . HIS HIS HIS B B 370 370 . 135.430 106.166 0.707   1.00 7.59
1 . .
ATOM 6152 CD2   CD2   . HIS HIS HIS B B 370 370 . 134.055 106.303 0.779   1.00 6.43
1 . .
ATOM 6153 C     C     . HIS HIS HIS B B 370 370 . 131.515 107.847 1.970   1.00 5.96
1 . .
ATOM 6154 O     O     . HIS HIS HIS B B 370 370 . 131.760 108.489 0.959   1.00 7.79
1 . .
ATOM 6155 N     N     . ARG ARG ARG B B 371 371 . 131.566 108.395 3.169   1.00 6.14
1 . .
ATOM 6156 CA    CA    . ARG ARG ARG B B 371 371 . 132.331 109.639 3.432   1.00 5.80
1 . .
ATOM 6157 CB    CB    . ARG ARG ARG B B 371 371 . 131.548 110.642 4.306   1.00 6.20
1 . .
ATOM 6158 CG    CG    . ARG ARG ARG B B 371 371 . 130.160 110.996 3.736   1.00 5.19
1 . .
ATOM 6159 CD    CD    . ARG ARG ARG B B 371 371 . 130.263 111.476 2.280   1.00 5.24
1 . .
ATOM 6160 NE    NE    . ARG ARG ARG B B 371 371 . 131.187 112.640 2.053   1.00 6.54
1 . .
ATOM 6161 CZ    CZ    . ARG ARG ARG B B 371 371 . 130.782 113.900 1.797   1.00 6.48
1 . .
ATOM 6162 NH1   NH1   . ARG ARG ARG B B 371 371 . 129.486 114.244 1.913   1.00 7.11
1 . .
ATOM 6163 NH2   NH2   . ARG ARG ARG B B 371 371 . 131.673 114.811 1.445   1.00 7.42
1 . .
ATOM 6164 C     C     . ARG ARG ARG B B 371 371 . 133.633 109.288 4.171   1.00 6.41
1 . .
ATOM 6165 O     O     . ARG ARG ARG B B 371 371 . 133.775 108.189 4.748   1.00 6.60
1 . .
ATOM 6166 N     N     . SER SER SER B B 372 372 . 134.570 110.229 4.208   1.00 6.75
1 . .
ATOM 6167 CA    CA    . SER SER SER B B 372 372 . 135.774 109.912 4.928   1.00 6.70
1 . .
ATOM 6168 CB    CB    . SER SER SER B B 372 372 . 136.822 110.950 4.590   1.00 7.23
1 . .
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ATOM 6169 OG    OG    . SER SER SER B B 372 372 . 136.398 112.266 4.963   1.00 6.99
1 . .
ATOM 6170 C     C     . SER SER SER B B 372 372 . 135.573 109.826 6.464   1.00 6.76
1 . .
ATOM 6171 O     O     . SER SER SER B B 372 372 . 136.394 109.182 7.139   1.00 6.62
1 . .
ATOM 6172 N     N     . GLY GLY GLY B B 373 373 . 134.523 110.470 6.990   1.00 6.42
1 . .
ATOM 6173 CA    CA    . GLY GLY GLY B B 373 373 . 134.114 110.216 8.412   1.00 7.94
1 . .
ATOM 6174 C     C     . GLY GLY GLY B B 373 373 . 132.965 109.211 8.290   1.00 6.50
1 . .
ATOM 6175 O     O     . GLY GLY GLY B B 373 373 . 131.856 109.579 7.858   1.00 7.33
1 . .
ATOM 6176 N     N     . GLU GLU GLU B B 374 374 . 133.192 107.938 8.683   1.00 6.51
1 . .
ATOM 6177 CA    CA    . GLU GLU GLU B B 374 374 . 132.137 106.940 8.600   1.00 6.15
1 . .
ATOM 6178 CB    CB    . GLU GLU GLU B B 374 374 . 132.580 105.753 7.739   1.00 6.15
1 . .
ATOM 6179 CG    CG    . GLU GLU GLU B B 374 374 . 132.199 105.922 6.294   1.00 6.63
1 . .
ATOM 6180 CD    CD    . GLU GLU GLU B B 374 374 . 130.673 105.927 6.084   1.00 7.14
1 . .
ATOM 6181 OE1   OE1   . GLU GLU GLU B B 374 374 . 129.947 105.302 6.932   1.00 8.25
1 . .
ATOM 6182 OE2   OE2   . GLU GLU GLU B B 374 374 . 130.225 106.444 5.040   1.00 7.77
1 . .
ATOM 6183 C     C     . GLU GLU GLU B B 374 374 . 131.766 106.422 9.977   1.00 6.64
1 . .
ATOM 6184 O     O     . GLU GLU GLU B B 374 374 . 132.324 106.924 10.995  1.00 7.75
1 . .
ATOM 6185 N     N     . THR THR THR B B 375 375 . 130.722 105.570 10.012  1.00 6.50
1 . .
ATOM 6186 CA    CA    . THR THR THR B B 375 375 . 130.343 104.894 11.288  1.00 6.00
1 . .
ATOM 6187 CB    CB    . THR THR THR B B 375 375 . 128.991 105.385 11.807  1.00 6.32
1 . .
ATOM 6188 OG1   OG1   . THR THR THR B B 375 375 . 127.963 104.906 10.940  1.00 9.77
1 . .
ATOM 6189 CG2   CG2   . THR THR THR B B 375 375 . 128.971 106.882 11.881  1.00 8.64
1 . .
ATOM 6190 C     C     . THR THR THR B B 375 375 . 130.304 103.422 11.014  1.00 6.89
1 . .
ATOM 6191 O     O     . THR THR THR B B 375 375 . 130.548 102.942 9.885   1.00 8.08
1 . .
ATOM 6192 N     N     . GLU GLU GLU B B 376 376 . 129.924 102.689 12.056  1.00 7.60
1 . .
ATOM 6193 CA    CA    . GLU GLU GLU B B 376 376 . 129.648 101.243 11.942  1.00 8.22
1 . .
ATOM 6194 CB    CB    . GLU GLU GLU B B 376 376 . 129.626 100.625 13.367  1.00 9.80
1 . .
ATOM 6195 CG    CG    . GLU GLU GLU B B 376 376 . 128.603 101.296 14.353  1.00 9.66
1 . .
ATOM 6196 CD    CD    . GLU GLU GLU B B 376 376 . 129.106 102.488 15.184  1.00 10.00
1 . .
ATOM 6197 OE1   OE1   . GLU GLU GLU B B 376 376 . 129.840 103.315 14.693  1.00 12.12
1 . .
ATOM 6198 OE2   OE2   . GLU GLU GLU B B 376 376 . 128.729 102.633 16.392  1.00 10.42
1 . .
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ATOM 6199 C     C     . GLU GLU GLU B B 376 376 . 128.368 100.903 11.172  1.00 8.69
1 . .
ATOM 6200 O     O     . GLU GLU GLU B B 376 376 . 128.100 99.697  10.924  1.00 10.75
1 . .
ATOM 6201 N     N     . ASP ASP ASP B B 377 377 . 127.637 101.930 10.710  1.00 8.12
1 . .
ATOM 6202 CA    CA    . ASP ASP ASP B B 377 377 . 126.448 101.686 9.851   1.00 7.83
1 . .
ATOM 6203 CB    CB    . ASP ASP ASP B B 377 377 . 125.905 103.061 9.540   1.00 9.46
1 . .
ATOM 6204 CG    CG    . ASP ASP ASP B B 377 377 . 124.546 103.019 8.904   1.00 10.94
1 . .
ATOM 6205 OD1   OD1   . ASP ASP ASP B B 377 377 . 124.513 102.999 7.626   1.00 11.98
1 . .
ATOM 6206 OD2   OD2   . ASP ASP ASP B B 377 377 . 123.558 103.134 9.661   1.00 12.60
1 . .
ATOM 6207 C     C     . ASP ASP ASP B B 377 377 . 126.842 100.971 8.564   1.00 7.98
1 . .
ATOM 6208 O     O     . ASP ASP ASP B B 377 377 . 127.928 101.237 8.001   1.00 10.35
1 . .
ATOM 6209 N     N     . THR THR THR B B 378 378 . 125.957 100.091 8.085   1.00 7.58
1 . .
ATOM 6210 CA    CA    . THR THR THR B B 378 378 . 126.238 99.395  6.790   1.00 6.87
1 . .
ATOM 6211 CB    CB    . THR THR THR B B 378 378 . 126.364 97.901  6.977   1.00 8.22
1 . .
ATOM 6212 OG1   OG1   . THR THR THR B B 378 378 . 125.136 97.358  7.482   1.00 10.97
1 . .
ATOM 6213 CG2   CG2   . THR THR THR B B 378 378 . 127.445 97.587  7.963   1.00 8.86
1 . .
ATOM 6214 C     C     . THR THR THR B B 378 378 . 125.179 99.670  5.702   1.00 7.59
1 . .
ATOM 6215 O     O     . THR THR THR B B 378 378 . 125.170 99.000  4.666   1.00 8.40
1 . .
ATOM 6216 N     N     . PHE PHE PHE B B 379 379 . 124.346 100.696 5.888   1.00 7.28
1 . .
ATOM 6217 CA    CA    . PHE PHE PHE B B 379 379 . 123.258 100.963 4.900   1.00 6.75
1 . .
ATOM 6218 CB    CB    . PHE PHE PHE B B 379 379 . 122.632 102.339 5.236   1.00 7.59
1 . .
ATOM 6219 CG    CG    . PHE PHE PHE B B 379 379 . 121.434 102.667 4.396   1.00 10.04
1 . .
ATOM 6220 CD1   CD1   . PHE PHE PHE B B 379 379 . 121.604 103.340 3.196   1.00 12.24
1 . .
ATOM 6221 CE1   CE1   . PHE PHE PHE B B 379 379 . 120.492 103.675 2.392   1.00 11.71
1 . .
ATOM 6222 CZ    CZ    . PHE PHE PHE B B 379 379 . 119.184 103.306 2.838   1.00 12.74
1 . .
ATOM 6223 CE2   CE2   . PHE PHE PHE B B 379 379 . 119.022 102.683 4.070   1.00 12.69
1 . .
ATOM 6224 CD2   CD2   . PHE PHE PHE B B 379 379 . 120.146 102.363 4.877   1.00 11.27
1 . .
ATOM 6225 C     C     . PHE PHE PHE B B 379 379 . 123.777 100.991 3.475   1.00 6.86
1 . .
ATOM 6226 O     O     . PHE PHE PHE B B 379 379 . 123.106 100.462 2.560   1.00 8.07
1 . .
ATOM 6227 N     N     . ILE ILE ILE B B 380 380 . 124.923 101.617 3.216   1.00 7.33
1 . .
ATOM 6228 CA    CA    . ILE ILE ILE B B 380 380 . 125.334 101.776 1.803   1.00 6.84
1 . .
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ATOM 6229 CB    CB    . ILE ILE ILE B B 380 380 . 126.428 102.822 1.555   1.00 7.12
1 . .
ATOM 6230 CG1   CG1   . ILE ILE ILE B B 380 380 . 127.743 102.384 2.287   1.00 6.84
1 . .
ATOM 6231 CD    CD    . ILE ILE ILE B B 380 380 . 128.908 103.346 1.945   1.00 8.16
1 . .
ATOM 6232 CG2   CG2   . ILE ILE ILE B B 380 380 . 125.946 104.236 2.023   1.00 7.91
1 . .
ATOM 6233 C     C     . ILE ILE ILE B B 380 380 . 125.722 100.469 1.119   1.00 7.44
1 . .
ATOM 6234 O     O     . ILE ILE ILE B B 380 380 . 125.671 100.422 -0.116  1.00 8.87
1 . .
ATOM 6235 N     N     . ALA ALA ALA B B 381 381 . 126.001 99.404  1.886   1.00 7.11
1 . .
ATOM 6236 CA    CA    . ALA ALA ALA B B 381 381 . 126.155 98.110  1.252   1.00 6.67
1 . .
ATOM 6237 CB    CB    . ALA ALA ALA B B 381 381 . 126.715 97.131  2.313   1.00 8.99
1 . .
ATOM 6238 C     C     . ALA ALA ALA B B 381 381 . 124.818 97.623  0.645   1.00 8.84
1 . .
ATOM 6239 O     O     . ALA ALA ALA B B 381 381 . 124.803 97.219  -0.503  1.00 7.93
1 . .
ATOM 6240 N     N     . ASP ASP ASP B B 382 382 . 123.749 97.676  1.410   1.00 8.32
1 . .
ATOM 6241 CA    CA    . ASP ASP ASP B B 382 382 . 122.444 97.306  0.850   1.00 8.04
1 . .
ATOM 6242 CB    CB    . ASP ASP ASP B B 382 382 . 121.406 97.286  1.933   1.00 9.29
1 . .
ATOM 6243 CG    CG    . ASP ASP ASP B B 382 382 . 121.626 96.102  2.905   1.00 12.85
1 . .
ATOM 6244 OD1   OD1   . ASP ASP ASP B B 382 382 . 122.601 96.090  3.697   1.00 12.24
1 . .
ATOM 6245 OD2   OD2   . ASP ASP ASP B B 382 382 . 120.812 95.149  2.842   1.00 13.80
1 . .
ATOM 6246 C     C     . ASP ASP ASP B B 382 382 . 122.015 98.262  -0.254  1.00 7.37
1 . .
ATOM 6247 O     O     . ASP ASP ASP B B 382 382 . 121.442 97.839  -1.249  1.00 9.00
1 . .
ATOM 6248 N     N     . LEU LEU LEU B B 383 383 . 122.346 99.550  -0.126  1.00 7.87
1 . .
ATOM 6249 CA    CA    . LEU LEU LEU B B 383 383 . 122.009 100.537 -1.148  1.00 7.56
1 . .
ATOM 6250 CB    CB    . LEU LEU LEU B B 383 383 . 122.508 101.904 -0.662  1.00 8.91
1 . .
ATOM 6251 CG    CG    . LEU LEU LEU B B 383 383 . 122.080 103.091 -1.565  1.00 8.05
1 . .
ATOM 6252 CD1   CD1   . LEU LEU LEU B B 383 383 . 120.593 103.386 -1.598  1.00 9.16
1 . .
ATOM 6253 CD2   CD2   . LEU LEU LEU B B 383 383 . 122.861 104.328 -1.033  1.00 10.52
1 . .
ATOM 6254 C     C     . LEU LEU LEU B B 383 383 . 122.641 100.228 -2.490  1.00 7.76
1 . .
ATOM 6255 O     O     . LEU LEU LEU B B 383 383 . 121.942 100.257 -3.529  1.00 9.78
1 . .
ATOM 6256 N     N     . VAL VAL VAL B B 384 384 . 123.915 99.871  -2.512  1.00 7.49
1 . .
ATOM 6257 CA    CA    . VAL VAL VAL B B 384 384 . 124.592 99.654  -3.811  1.00 7.50
1 . .
ATOM 6258 CB    CB    . VAL VAL VAL B B 384 384 . 126.130 99.623  -3.679  1.00 7.46
1 . .
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ATOM 6259 CG1   CG1   . VAL VAL VAL B B 384 384 . 126.599 98.372  -2.907  1.00 8.71
1 . .
ATOM 6260 CG2   CG2   . VAL VAL VAL B B 384 384 . 126.732 99.616  -5.127  1.00 8.96
1 . .
ATOM 6261 C     C     . VAL VAL VAL B B 384 384 . 124.052 98.422  -4.550  1.00 8.01
1 . .
ATOM 6262 O     O     . VAL VAL VAL B B 384 384 . 123.905 98.426  -5.774  1.00 9.69
1 . .
ATOM 6263 N     N     . VAL VAL VAL B B 385 385 . 123.674 97.413  -3.780  1.00 9.19
1 . .
ATOM 6264 CA    CA    . VAL VAL VAL B B 385 385 . 123.080 96.224  -4.372  1.00 9.10
1 . .
ATOM 6265 CB    CB    . VAL VAL VAL B B 385 385 . 123.080 95.047  -3.326  1.00 7.42
1 . .
ATOM 6266 CG1   CG1   . VAL VAL VAL B B 385 385 . 122.316 93.802  -3.889  1.00 9.86
1 . .
ATOM 6267 CG2   CG2   . VAL VAL VAL B B 385 385 . 124.498 94.727  -3.017  1.00 9.59
1 . .
ATOM 6268 C     C     . VAL VAL VAL B B 385 385 . 121.662 96.508  -4.832  1.00 9.25
1 . .
ATOM 6269 O     O     . VAL VAL VAL B B 385 385 . 121.312 96.156  -5.950  1.00 11.72
1 . .
ATOM 6270 N     N     . GLY GLY GLY B B 386 386 . 120.824 97.105  -4.002  1.00 9.92
1 . .
ATOM 6271 CA    CA    . GLY GLY GLY B B 386 386 . 119.463 97.401  -4.380  1.00 9.89
1 . .
ATOM 6272 C     C     . GLY GLY GLY B B 386 386 . 119.359 98.369  -5.559  1.00 10.08
1 . .
ATOM 6273 O     O     . GLY GLY GLY B B 386 386 . 118.366 98.282  -6.335  1.00 11.45
1 . .
ATOM 6274 N     N     . LEU LEU LEU B B 387 387 . 120.311 99.307  -5.720  1.00 9.49
1 . .
ATOM 6275 CA    CA    . LEU LEU LEU B B 387 387 . 120.260 100.208 -6.880  1.00 10.10
1 . .
ATOM 6276 CB    CB    . LEU LEU LEU B B 387 387 . 120.878 101.588 -6.460  1.00 11.76
1 . .
ATOM 6277 CG    CG    . LEU LEU LEU B B 387 387 . 120.121 102.366 -5.382  1.00 11.95
1 . .
ATOM 6278 CD1   CD1   . LEU LEU LEU B B 387 387 . 120.914 103.647 -5.160  1.00 14.28
1 . .
ATOM 6279 CD2   CD2   . LEU LEU LEU B B 387 387 . 118.654 102.598 -5.733  1.00 13.85
1 . .
ATOM 6280 C     C     . LEU LEU LEU B B 387 387 . 120.995 99.642  -8.083  1.00 10.73
1 . .
ATOM 6281 O     O     . LEU LEU LEU B B 387 387 . 121.034 100.304 -9.130  1.00 12.96
1 . .
ATOM 6282 N     N     . CYS CYS CYS B B 388 388 . 121.620 98.484  -7.921  1.00 11.92
1 . .
ATOM 6283 CA    CA    . CYS CYS CYS B B 388 388 . 122.301 97.770  -8.997  1.00 12.95
1 . .
ATOM 6284 CB    CB    . CYS CYS CYS B B 388 388 . 121.275 97.318  -10.025 1.00 15.67
1 . .
ATOM 6285 SG    SG    . CYS CYS CYS B B 388 388 . 120.089 96.115  -9.469  1.00 28.61
1 . .
ATOM 6286 C     C     . CYS CYS CYS B B 388 388 . 123.327 98.596  -9.692  1.00 12.80
1 . .
ATOM 6287 O     O     . CYS CYS CYS B B 388 388 . 123.459 98.584  -10.931 1.00 14.68
1 . .
ATOM 6288 N     N     . THR THR THR B B 389 389 . 124.150 99.288  -8.922  1.00 10.76
1 . .
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ATOM 6289 CA    CA    . THR THR THR B B 389 389 . 125.010 100.250 -9.602  1.00 11.59
1 . .
ATOM 6290 CB    CB    . THR THR THR B B 389 389 . 125.339 101.492 -8.780  1.00 10.71
1 . .
ATOM 6291 OG1   OG1   . THR THR THR B B 389 389 . 126.515 101.264 -7.982  1.00 10.36
1 . .
ATOM 6292 CG2   CG2   . THR THR THR B B 389 389 . 124.215 101.972 -7.980  1.00 12.59
1 . .
ATOM 6293 C     C     . THR THR THR B B 389 389 . 126.300 99.638  -10.129 1.00 10.88
1 . .
ATOM 6294 O     O     . THR THR THR B B 389 389 . 126.894 100.189 -11.083 1.00 13.41
1 . .
ATOM 6295 N     N     . GLY GLY GLY B B 390 390 . 126.716 98.497  -9.563  1.00 9.97
1 . .
ATOM 6296 CA    CA    . GLY GLY GLY B B 390 390 . 127.899 97.882  -10.087 1.00 9.64
1 . .
ATOM 6297 C     C     . GLY GLY GLY B B 390 390 . 129.234 98.311  -9.501  1.00 8.65
1 . .
ATOM 6298 O     O     . GLY GLY GLY B B 390 390 . 130.228 97.718  -9.810  1.00 8.27
1 . .
ATOM 6299 N     N     . GLN GLN GLN B B 391 391 . 129.275 99.415  -8.713  1.00 8.27
1 . .
ATOM 6300 CA    CA    . GLN GLN GLN B B 391 391 . 130.543 99.860  -8.143  1.00 7.01
1 . .
ATOM 6301 CB    CB    . GLN GLN GLN B B 391 391 . 131.368 100.825 -9.044  1.00 11.45
1 . .
ATOM 6302 CG    CG    . GLN GLN GLN B B 391 391 . 130.612 101.423 -10.148 1.00 14.82
1 . .
ATOM 6303 CD    CD    . GLN GLN GLN B B 391 391 . 131.420 102.381 -11.048 1.00 12.38
1 . .
ATOM 6304 OE1   OE1   . GLN GLN GLN B B 391 391 . 132.617 102.665 -10.845 1.00 11.96
1 . .
ATOM 6305 NE2   NE2   . GLN GLN GLN B B 391 391 . 130.731 102.887 -12.043 1.00 13.60
1 . .
ATOM 6306 C     C     . GLN GLN GLN B B 391 391 . 130.321 100.614 -6.842  1.00 6.27
1 . .
ATOM 6307 O     O     . GLN GLN GLN B B 391 391 . 129.329 101.360 -6.699  1.00 7.47
1 . .
ATOM 6308 N     N     . ILE ILE ILE B B 392 392 . 131.218 100.383 -5.848  1.00 7.52
1 . .
ATOM 6309 CA    CA    . ILE ILE ILE B B 392 392 . 131.150 101.060 -4.543  1.00 7.01
1 . .
ATOM 6310 CB    CB    . ILE ILE ILE B B 392 392 . 130.445 100.247 -3.469  1.00 6.80
1 . .
ATOM 6311 CG1   CG1   . ILE ILE ILE B B 392 392 . 130.440 101.048 -2.147  1.00 7.39
1 . .
ATOM 6312 CD    CD    . ILE ILE ILE B B 392 392 . 129.391 100.472 -1.121  1.00 9.41
1 . .
ATOM 6313 CG2   CG2   . ILE ILE ILE B B 392 392 . 131.091 98.830  -3.238  1.00 9.61
1 . .
ATOM 6314 C     C     . ILE ILE ILE B B 392 392 . 132.554 101.377 -4.136  1.00 6.87
1 . .
ATOM 6315 O     O     . ILE ILE ILE B B 392 392 . 133.447 100.542 -4.278  1.00 8.41
1 . .
ATOM 6316 N     N     . LYS LYS LYS B B 393 393 . 132.768 102.566 -3.566  1.00 5.46
1 . .
ATOM 6317 CA    CA    . LYS LYS LYS B B 393 393 . 134.048 102.830 -2.897  1.00 5.59
1 . .
ATOM 6318 CB    CB    . LYS LYS LYS B B 393 393 . 134.810 104.058 -3.440  1.00 7.41
1 . .
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ATOM 6319 CG    CG    . LYS LYS LYS B B 393 393 . 134.142 105.418 -3.193  1.00 6.66
1 . .
ATOM 6320 CD    CD    . LYS LYS LYS B B 393 393 . 135.100 106.492 -3.870  1.00 7.89
1 . .
ATOM 6321 CE    CE    . LYS LYS LYS B B 393 393 . 134.845 107.812 -3.179  1.00 7.84
1 . .
ATOM 6322 NZ    NZ    . LYS LYS LYS B B 393 393 . 135.855 108.832 -3.626  1.00 7.58
1 . .
ATOM 6323 C     C     . LYS LYS LYS B B 393 393 . 133.681 103.051 -1.395  1.00 6.39
1 . .
ATOM 6324 O     O     . LYS LYS LYS B B 393 393 . 132.788 103.880 -1.070  1.00 7.07
1 . .
ATOM 6325 N     N     . THR THR THR B B 394 394 . 134.271 102.261 -0.517  1.00 5.27
1 . .
ATOM 6326 CA    CA    . THR THR THR B B 394 394 . 133.916 102.432 0.936   1.00 5.87
1 . .
ATOM 6327 CB    CB    . THR THR THR B B 394 394 . 132.621 101.715 1.317   1.00 6.59
1 . .
ATOM 6328 OG1   OG1   . THR THR THR B B 394 394 . 132.329 102.020 2.686   1.00 6.40
1 . .
ATOM 6329 CG2   CG2   . THR THR THR B B 394 394 . 132.703 100.203 1.163   1.00 7.52
1 . .
ATOM 6330 C     C     . THR THR THR B B 394 394 . 135.127 102.174 1.795   1.00 5.60
1 . .
ATOM 6331 O     O     . THR THR THR B B 394 394 . 134.980 101.716 2.935   1.00 6.72
1 . .
ATOM 6332 N     N     . GLY GLY GLY B B 395 395 . 136.335 102.465 1.278   1.00 6.18
1 . .
ATOM 6333 CA    CA    . GLY GLY GLY B B 395 395 . 137.538 102.436 2.090   1.00 7.01
1 . .
ATOM 6334 C     C     . GLY GLY GLY B B 395 395 . 138.592 101.443 1.609   1.00 7.27
1 . .
ATOM 6335 O     O     . GLY GLY GLY B B 395 395 . 138.335 100.527 0.783   1.00 6.72
1 . .
ATOM 6336 N     N     . ALA ALA ALA B B 396 396 . 139.804 101.606 2.132   1.00 6.41
1 . .
ATOM 6337 CA    CA    . ALA ALA ALA B B 396 396 . 140.810 100.484 2.102   1.00 5.96
1 . .
ATOM 6338 CB    CB    . ALA ALA ALA B B 396 396 . 142.018 100.905 2.915   1.00 7.14
1 . .
ATOM 6339 C     C     . ALA ALA ALA B B 396 396 . 140.147 99.315  2.851   1.00 7.12
1 . .
ATOM 6340 O     O     . ALA ALA ALA B B 396 396 . 139.152 99.442  3.567   1.00 7.13
1 . .
ATOM 6341 N     N     . PRO PRO PRO B B 397 397 . 140.744 98.106  2.691   1.00 5.98
1 . .
ATOM 6342 CA    CA    . PRO PRO PRO B B 397 397 . 140.249 96.964  3.530   1.00 7.94
1 . .
ATOM 6343 CB    CB    . PRO PRO PRO B B 397 397 . 140.684 95.714  2.715   1.00 7.70
1 . .
ATOM 6344 CG    CG    . PRO PRO PRO B B 397 397 . 142.002 96.193  2.072   1.00 7.98
1 . .
ATOM 6345 CD    CD    . PRO PRO PRO B B 397 397 . 141.703 97.711  1.658   1.00 7.23
1 . .
ATOM 6346 C     C     . PRO PRO PRO B B 397 397 . 140.921 97.065  4.919   1.00 7.97
1 . .
ATOM 6347 O     O     . PRO PRO PRO B B 397 397 . 141.641 96.123  5.349   1.00 8.28
1 . .
ATOM 6348 N     N     . CYS CYS CYS B B 398 398 . 140.714 98.211  5.584   1.00 5.86
1 . .
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ATOM 6349 CA    CA    . CYS CYS CYS B B 398 398 . 141.413 98.514  6.806   1.00 6.18
1 . .
ATOM 6350 CB    CB    . CYS CYS CYS B B 398 398 . 142.837 99.052  6.528   1.00 7.33
1 . .
ATOM 6351 SG    SG    . CYS CYS CYS B B 398 398 . 143.644 99.665  8.015   1.00 8.74
1 . .
ATOM 6352 C     C     . CYS CYS CYS B B 398 398 . 140.519 99.571  7.471   1.00 6.22
1 . .
ATOM 6353 O     O     . CYS CYS CYS B B 398 398 . 140.104 100.518 6.794   1.00 7.57
1 . .
ATOM 6354 N     N     . ARG ARG ARG B B 399 399 . 140.273 99.384  8.780   1.00 5.31
1 . .
ATOM 6355 CA    CA    . ARG ARG ARG B B 399 399 . 139.417 100.226 9.649   1.00 5.39
1 . .
ATOM 6356 CB    CB    . ARG ARG ARG B B 399 399 . 139.474 101.766 9.388   1.00 5.42
1 . .
ATOM 6357 CG    CG    . ARG ARG ARG B B 399 399 . 140.953 102.299 9.504   1.00 6.48
1 . .
ATOM 6358 CD    CD    . ARG ARG ARG B B 399 399 . 141.053 103.742 9.053   1.00 5.44
1 . .
ATOM 6359 NE    NE    . ARG ARG ARG B B 399 399 . 140.218 104.648 9.836   1.00 5.08
1 . .
ATOM 6360 CZ    CZ    . ARG ARG ARG B B 399 399 . 140.649 105.796 10.376  1.00 4.84
1 . .
ATOM 6361 NH1   NH1   . ARG ARG ARG B B 399 399 . 141.940 106.217 10.250  1.00 7.10
1 . .
ATOM 6362 NH2   NH2   . ARG ARG ARG B B 399 399 . 139.786 106.575 11.058  1.00 6.91
1 . .
ATOM 6363 C     C     . ARG ARG ARG B B 399 399 . 137.982 99.730  9.486   1.00 5.65
1 . .
ATOM 6364 O     O     . ARG ARG ARG B B 399 399 . 137.445 99.679  8.364   1.00 6.32
1 . .
ATOM 6365 N     N     . SER SER SER B B 400 400 . 137.343 99.336  10.606  1.00 5.40
1 . .
ATOM 6366 CA    CA    . SER SER SER B B 400 400 . 136.055 98.619  10.413  1.00 4.89
1 . .
ATOM 6367 CB    CB    . SER SER SER B B 400 400 . 135.713 97.765  11.642  1.00 7.01
1 . .
ATOM 6368 OG    OG    . SER SER SER B B 400 400 . 136.763 96.779  11.859  1.00 6.83
1 . .
ATOM 6369 C     C     . SER SER SER B B 400 400 . 134.905 99.485  10.058  1.00 5.64
1 . .
ATOM 6370 O     O     . SER SER SER B B 400 400 . 133.874 98.910  9.704   1.00 7.09
1 . .
ATOM 6371 N     N     . GLU GLU GLU B B 401 401 . 135.008 100.843 10.066  1.00 6.30
1 . .
ATOM 6372 CA    CA    . GLU GLU GLU B B 401 401 . 133.920 101.580 9.417   1.00 5.77
1 . .
ATOM 6373 CB    CB    . GLU GLU GLU B B 401 401 . 134.070 103.087 9.741   1.00 6.18
1 . .
ATOM 6374 CG    CG    . GLU GLU GLU B B 401 401 . 135.230 103.846 9.044   1.00 6.64
1 . .
ATOM 6375 CD    CD    . GLU GLU GLU B B 401 401 . 136.600 103.720 9.737   1.00 7.08
1 . .
ATOM 6376 OE1   OE1   . GLU GLU GLU B B 401 401 . 136.734 102.978 10.781  1.00 6.37
1 . .
ATOM 6377 OE2   OE2   . GLU GLU GLU B B 401 401 . 137.526 104.407 9.290   1.00 6.99
1 . .
ATOM 6378 C     C     . GLU GLU GLU B B 401 401 . 133.936 101.361 7.912   1.00 6.94
1 . .
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ATOM 6379 O     O     . GLU GLU GLU B B 401 401 . 132.927 101.718 7.259   1.00 7.35
1 . .
ATOM 6380 N     N     . ARG ARG ARG B B 402 402 . 135.068 100.809 7.386   1.00 6.03
1 . .
ATOM 6381 CA    CA    . ARG ARG ARG B B 402 402 . 135.170 100.386 5.974   1.00 5.96
1 . .
ATOM 6382 CB    CB    . ARG ARG ARG B B 402 402 . 136.580 100.640 5.435   1.00 5.39
1 . .
ATOM 6383 CG    CG    . ARG ARG ARG B B 402 402 . 137.194 101.993 5.803   1.00 6.63
1 . .
ATOM 6384 CD    CD    . ARG ARG ARG B B 402 402 . 136.383 103.167 5.412   1.00 6.44
1 . .
ATOM 6385 NE    NE    . ARG ARG ARG B B 402 402 . 136.873 104.274 6.248   1.00 6.22
1 . .
ATOM 6386 CZ    CZ    . ARG ARG ARG B B 402 402 . 136.310 105.534 6.259   1.00 5.30
1 . .
ATOM 6387 NH1   NH1   . ARG ARG ARG B B 402 402 . 135.457 105.954 5.279   1.00 7.07
1 . .
ATOM 6388 NH2   NH2   . ARG ARG ARG B B 402 402 . 136.596 106.382 7.240   1.00 5.85
1 . .
ATOM 6389 C     C     . ARG ARG ARG B B 402 402 . 134.747 98.920  5.871   1.00 6.20
1 . .
ATOM 6390 O     O     . ARG ARG ARG B B 402 402 . 133.815 98.560  5.098   1.00 5.80
1 . .
ATOM 6391 N     N     . LEU LEU LEU B B 403 403 . 135.440 98.073  6.660   1.00 6.74
1 . .
ATOM 6392 CA    CA    . LEU LEU LEU B B 403 403 . 135.157 96.648  6.573   1.00 7.23
1 . .
ATOM 6393 CB    CB    . LEU LEU LEU B B 403 403 . 136.035 95.710  7.422   1.00 7.20
1 . .
ATOM 6394 CG    CG    . LEU LEU LEU B B 403 403 . 137.501 95.547  7.005   1.00 7.83
1 . .
ATOM 6395 CD1   CD1   . LEU LEU LEU B B 403 403 . 137.521 95.281  5.484   1.00 7.76
1 . .
ATOM 6396 CD2   CD2   . LEU LEU LEU B B 403 403 . 138.448 96.642  7.494   1.00 7.53
1 . .
ATOM 6397 C     C     . LEU LEU LEU B B 403 403 . 133.661 96.342  6.904   1.00 5.57
1 . .
ATOM 6398 O     O     . LEU LEU LEU B B 403 403 . 133.150 95.360  6.381   1.00 6.80
1 . .
ATOM 6399 N     N     . ALA ALA ALA B B 404 404 . 132.993 97.110  7.771   1.00 6.65
1 . .
ATOM 6400 CA    CA    . ALA ALA ALA B B 404 404 . 131.594 96.767  8.056   1.00 6.14
1 . .
ATOM 6401 CB    CB    . ALA ALA ALA B B 404 404 . 130.991 97.771  9.050   1.00 7.95
1 . .
ATOM 6402 C     C     . ALA ALA ALA B B 404 404 . 130.751 96.729  6.782   1.00 5.75
1 . .
ATOM 6403 O     O     . ALA ALA ALA B B 404 404 . 129.919 95.821  6.615   1.00 7.19
1 . .
ATOM 6404 N     N     . LYS LYS LYS B B 405 405 . 131.054 97.607  5.835   1.00 6.15
1 . .
ATOM 6405 CA    CA    . LYS LYS LYS B B 405 405 . 130.293 97.595  4.591   1.00 5.81
1 . .
ATOM 6406 CB    CB    . LYS LYS LYS B B 405 405 . 130.542 98.844  3.721   1.00 6.52
1 . .
ATOM 6407 CG    CG    . LYS LYS LYS B B 405 405 . 129.848 100.125 4.236   1.00 7.09
1 . .
ATOM 6408 CD    CD    . LYS LYS LYS B B 405 405 . 130.312 100.664 5.609   1.00 7.92
1 . .
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ATOM 6409 CE    CE    . LYS LYS LYS B B 405 405 . 129.898 102.122 5.766   1.00 6.46
1 . .
ATOM 6410 NZ    NZ    . LYS LYS LYS B B 405 405 . 130.204 102.558 7.226   1.00 6.77
1 . .
ATOM 6411 C     C     . LYS LYS LYS B B 405 405 . 130.728 96.426  3.711   1.00 5.79
1 . .
ATOM 6412 O     O     . LYS LYS LYS B B 405 405 . 129.886 95.744  3.095   1.00 6.24
1 . .
ATOM 6413 N     N     . TYR TYR TYR B B 406 406 . 132.074 96.228  3.575   1.00 5.78
1 . .
ATOM 6414 CA    CA    . TYR TYR TYR B B 406 406 . 132.537 95.105  2.732   1.00 5.56
1 . .
ATOM 6415 CB    CB    . TYR TYR TYR B B 406 406 . 134.075 95.136  2.623   1.00 6.62
1 . .
ATOM 6416 CG    CG    . TYR TYR TYR B B 406 406 . 134.551 96.391  1.926   1.00 4.38
1 . .
ATOM 6417 CD1   CD1   . TYR TYR TYR B B 406 406 . 134.161 96.652  0.617   1.00 5.92
1 . .
ATOM 6418 CE1   CE1   . TYR TYR TYR B B 406 406 . 134.628 97.761  -0.089  1.00 6.46
1 . .
ATOM 6419 CZ    CZ    . TYR TYR TYR B B 406 406 . 135.558 98.578  0.493   1.00 6.29
1 . .
ATOM 6420 OH    OH    . TYR TYR TYR B B 406 406 . 135.971 99.685  -0.218  1.00 7.24
1 . .
ATOM 6421 CE2   CE2   . TYR TYR TYR B B 406 406 . 136.047 98.322  1.768   1.00 7.09
1 . .
ATOM 6422 CD2   CD2   . TYR TYR TYR B B 406 406 . 135.535 97.181  2.478   1.00 7.51
1 . .
ATOM 6423 C     C     . TYR TYR TYR B B 406 406 . 132.044 93.749  3.285   1.00 6.76
1 . .
ATOM 6424 O     O     . TYR TYR TYR B B 406 406 . 131.681 92.865  2.484   1.00 7.40
1 . .
ATOM 6425 N     N     . ASN ASN ASN B B 407 407 . 132.062 93.583  4.615   1.00 6.63
1 . .
ATOM 6426 CA    CA    . ASN ASN ASN B B 407 407 . 131.603 92.356  5.222   1.00 5.47
1 . .
ATOM 6427 CB    CB    . ASN ASN ASN B B 407 407 . 131.894 92.317  6.740   1.00 6.03
1 . .
ATOM 6428 CG    CG    . ASN ASN ASN B B 407 407 . 133.355 92.193  7.033   1.00 5.70
1 . .
ATOM 6429 OD1   OD1   . ASN ASN ASN B B 407 407 . 134.120 91.668  6.234   1.00 6.32
1 . .
ATOM 6430 ND2   ND2   . ASN ASN ASN B B 407 407 . 133.753 92.673  8.251   1.00 7.35
1 . .
ATOM 6431 C     C     . ASN ASN ASN B B 407 407 . 130.129 92.168  4.935   1.00 6.21
1 . .
ATOM 6432 O     O     . ASN ASN ASN B B 407 407 . 129.694 91.040  4.624   1.00 7.13
1 . .
ATOM 6433 N     N     . GLN GLN GLN B B 408 408 . 129.362 93.240  5.005   1.00 6.37
1 . .
ATOM 6434 CA    CA    . GLN GLN GLN B B 408 408 . 127.918 93.123  4.718   1.00 6.54
1 . .
ATOM 6435 CB    CB    . GLN GLN GLN B B 408 408 . 127.267 94.462  5.064   1.00 6.35
1 . .
ATOM 6436 CG    CG    . GLN GLN GLN B B 408 408 . 125.741 94.488  4.721   1.00 8.43
1 . .
ATOM 6437 CD    CD    . GLN GLN GLN B B 408 408 . 124.838 93.568  5.466   1.00 10.70
1 . .
ATOM 6438 OE1   OE1   . GLN GLN GLN B B 408 408 . 125.252 92.732  6.257   1.00 12.14
1 . .
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ATOM 6439 NE2   NE2   . GLN GLN GLN B B 408 408 . 123.513 93.684  5.120   1.00 13.22
1 . .
ATOM 6440 C     C     . GLN GLN GLN B B 408 408 . 127.696 92.752  3.240   1.00 6.89
1 . .
ATOM 6441 O     O     . GLN GLN GLN B B 408 408 . 126.788 91.961  2.956   1.00 7.59
1 . .
ATOM 6442 N     N     . LEU LEU LEU B B 409 409 . 128.530 93.276  2.320   1.00 6.14
1 . .
ATOM 6443 CA    CA    . LEU LEU LEU B B 409 409 . 128.378 92.854  0.934   1.00 6.95
1 . .
ATOM 6444 CB    CB    . LEU LEU LEU B B 409 409 . 129.279 93.686  0.026   1.00 6.85
1 . .
ATOM 6445 CG    CG    . LEU LEU LEU B B 409 409 . 128.744 95.110  -0.158  1.00 7.15
1 . .
ATOM 6446 CD1   CD1   . LEU LEU LEU B B 409 409 . 129.798 96.080  -0.748  1.00 8.62
1 . .
ATOM 6447 CD2   CD2   . LEU LEU LEU B B 409 409 . 127.525 95.164  -1.076  1.00 8.46
1 . .
ATOM 6448 C     C     . LEU LEU LEU B B 409 409 . 128.700 91.358  0.779   1.00 7.36
1 . .
ATOM 6449 O     O     . LEU LEU LEU B B 409 409 . 128.029 90.710  -0.029  1.00 8.01
1 . .
ATOM 6450 N     N     . MET MET MET B B 410 410 . 129.719 90.857  1.485   1.00 8.30
1 . .
ATOM 6451 CA    CA    . MET MET MET B B 410 410 . 129.930 89.417  1.447   1.00 7.16
1 . .
ATOM 6452 CB    CB    . MET MET MET B B 410 410 . 131.153 88.980  2.236   1.00 8.36
1 . .
ATOM 6453 CG    CG    . MET MET MET B B 410 410 . 132.450 89.578  1.567   1.00 10.67
1 . .
ATOM 6454 SD    SD    . MET MET MET B B 410 410 . 133.952 88.725  2.115   1.00 11.80
1 . .
ATOM 6455 CE    CE    . MET MET MET B B 410 410 . 134.063 89.534  3.624   1.00 9.18
1 . .
ATOM 6456 C     C     . MET MET MET B B 410 410 . 128.706 88.637  1.952   1.00 7.94
1 . .
ATOM 6457 O     O     . MET MET MET B B 410 410 . 128.335 87.579  1.359   1.00 8.89
1 . .
ATOM 6458 N     N     . ARG ARG ARG B B 411 411 . 128.071 89.104  3.019   1.00 7.34
1 . .
ATOM 6459 CA    CA    . ARG ARG ARG B B 411 411 . 126.859 88.428  3.522   1.00 9.15
1 . .
ATOM 6460 CB    CB    . ARG ARG ARG B B 411 411 . 126.306 89.060  4.833   1.00 7.46
1 . .
ATOM 6461 CG    CG    . ARG ARG ARG B B 411 411 . 127.349 89.009  5.950   1.00 9.08
1 . .
ATOM 6462 CD    CD    . ARG ARG ARG B B 411 411 . 126.747 89.548  7.294   1.00 8.09
1 . .
ATOM 6463 NE    NE    . ARG ARG ARG B B 411 411 . 127.822 89.846  8.221   1.00 10.64
1 . .
ATOM 6464 CZ    CZ    . ARG ARG ARG B B 411 411 . 128.277 91.079  8.421   1.00 9.70
1 . .
ATOM 6465 NH1   NH1   . ARG ARG ARG B B 411 411 . 127.652 92.171  7.892   1.00 11.36
1 . .
ATOM 6466 NH2   NH2   . ARG ARG ARG B B 411 411 . 129.359 91.224  9.220   1.00 11.54
1 . .
ATOM 6467 C     C     . ARG ARG ARG B B 411 411 . 125.764 88.465  2.470   1.00 9.75
1 . .
ATOM 6468 O     O     . ARG ARG ARG B B 411 411 . 125.044 87.470  2.301   1.00 11.00
1 . .
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ATOM 6469 N     N     . ILE ILE ILE B B 412 412 . 125.588 89.619  1.799   1.00 8.56
1 . .
ATOM 6470 CA    CA    . ILE ILE ILE B B 412 412 . 124.521 89.731  0.819   1.00 8.57
1 . .
ATOM 6471 CB    CB    . ILE ILE ILE B B 412 412 . 124.400 91.155  0.308   1.00 7.93
1 . .
ATOM 6472 CG1   CG1   . ILE ILE ILE B B 412 412 . 123.867 92.110  1.410   1.00 9.33
1 . .
ATOM 6473 CD    CD    . ILE ILE ILE B B 412 412 . 124.063 93.597  1.118   1.00 9.18
1 . .
ATOM 6474 CG2   CG2   . ILE ILE ILE B B 412 412 . 123.457 91.221  -0.925  1.00 11.30
1 . .
ATOM 6475 C     C     . ILE ILE ILE B B 412 412 . 124.791 88.736  -0.321  1.00 9.53
1 . .
ATOM 6476 O     O     . ILE ILE ILE B B 412 412 . 123.851 88.047  -0.779  1.00 10.92
1 . .
ATOM 6477 N     N     . GLU GLU GLU B B 413 413 . 126.024 88.672  -0.794  1.00 9.19
1 . .
ATOM 6478 CA    CA    . GLU GLU GLU B B 413 413 . 126.323 87.734  -1.858  1.00 8.84
1 . .
ATOM 6479 CB    CB    . GLU GLU GLU B B 413 413 . 127.809 87.850  -2.286  1.00 10.16
1 . .
ATOM 6480 CG    CG    . GLU GLU GLU B B 413 413 . 128.208 86.886  -3.332  1.00 10.42
1 . .
ATOM 6481 CD    CD    . GLU GLU GLU B B 413 413 . 129.613 87.161  -3.852  1.00 11.58
1 . .
ATOM 6482 OE1   OE1   . GLU GLU GLU B B 413 413 . 130.575 86.930  -3.044  1.00 13.89
1 . .
ATOM 6483 OE2   OE2   . GLU GLU GLU B B 413 413 . 129.718 87.648  -5.003  1.00 12.68
1 . .
ATOM 6484 C     C     . GLU GLU GLU B B 413 413 . 125.998 86.291  -1.411  1.00 10.78
1 . .
ATOM 6485 O     O     . GLU GLU GLU B B 413 413 . 125.380 85.524  -2.173  1.00 10.53
1 . .
ATOM 6486 N     N     . GLU GLU GLU B B 414 414 . 126.450 85.932  -0.222  1.00 10.38
1 . .
ATOM 6487 CA    CA    . GLU GLU GLU B B 414 414 . 126.159 84.582  0.326   1.00 10.56
1 . .
ATOM 6488 CB    CB    . GLU GLU GLU B B 414 414 . 126.803 84.507  1.717   1.00 10.51
1 . .
ATOM 6489 CG    CG    . GLU GLU GLU B B 414 414 . 126.781 83.142  2.362   1.00 15.56
1 . .
ATOM 6490 CD    CD    . GLU GLU GLU B B 414 414 . 127.102 83.277  3.883   1.00 14.21
1 . .
ATOM 6491 OE1   OE1   . GLU GLU GLU B B 414 414 . 128.275 83.559  4.187   1.00 19.90
1 . .
ATOM 6492 OE2   OE2   . GLU GLU GLU B B 414 414 . 126.153 83.164  4.729   1.00 18.85
1 . .
ATOM 6493 C     C     . GLU GLU GLU B B 414 414 . 124.646 84.332  0.371   1.00 11.74
1 . .
ATOM 6494 O     O     . GLU GLU GLU B B 414 414 . 124.212 83.223  -0.022  1.00 14.32
1 . .
ATOM 6495 N     N     . GLU GLU GLU B B 415 415 . 123.824 85.292  0.824   1.00 12.98
1 . .
ATOM 6496 CA    CA    . GLU GLU GLU B B 415 415 . 122.391 85.157  0.955   1.00 14.48
1 . .
ATOM 6497 CB    CB    . GLU GLU GLU B B 415 415 . 121.792 86.417  1.636   1.00 15.86
1 . .
ATOM 6498 CG    CG    . GLU GLU GLU B B 415 415 . 120.258 86.425  1.818   1.00 29.21
1 . .
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ATOM 6499 CD    CD    . GLU GLU GLU B B 415 415 . 119.933 85.976  3.234   1.00 38.49
1 . .
ATOM 6500 OE1   OE1   . GLU GLU GLU B B 415 415 . 120.737 86.420  4.136   1.00 49.03
1 . .
ATOM 6501 OE2   OE2   . GLU GLU GLU B B 415 415 . 118.970 85.151  3.442   1.00 44.35
1 . .
ATOM 6502 C     C     . GLU GLU GLU B B 415 415 . 121.765 84.939  -0.438  1.00 15.72
1 . .
ATOM 6503 O     O     . GLU GLU GLU B B 415 415 . 120.751 84.225  -0.545  1.00 17.95
1 . .
ATOM 6504 N     N     . LEU LEU LEU B B 416 416 . 122.255 85.655  -1.453  1.00 14.99
1 . .
ATOM 6505 CA    CA    . LEU LEU LEU B B 416 416 . 121.666 85.533  -2.778  1.00 15.48
1 . .
ATOM 6506 CB    CB    . LEU LEU LEU B B 416 416 . 122.155 86.621  -3.730  1.00 15.29
1 . .
ATOM 6507 CG    CG    . LEU LEU LEU B B 416 416 . 121.654 87.998  -3.365  1.00 16.07
1 . .
ATOM 6508 CD1   CD1   . LEU LEU LEU B B 416 416 . 122.460 89.067  -4.121  1.00 19.00
1 . .
ATOM 6509 CD2   CD2   . LEU LEU LEU B B 416 416 . 120.143 88.135  -3.627  1.00 19.27
1 . .
ATOM 6510 C     C     . LEU LEU LEU B B 416 416 . 121.975 84.163  -3.426  1.00 16.99
1 . .
ATOM 6511 O     O     . LEU LEU LEU B B 416 416 . 121.264 83.797  -4.400  1.00 20.22
1 . .
ATOM 6512 N     N     . GLY GLY GLY B B 417 417 . 122.974 83.425  -2.933  1.00 17.63
1 . .
ATOM 6513 CA    CA    . GLY GLY GLY B B 417 417 . 123.261 82.025  -3.324  1.00 21.52
1 . .
ATOM 6514 C     C     . GLY GLY GLY B B 417 417 . 123.439 81.930  -4.825  1.00 24.75
1 . .
ATOM 6515 O     O     . GLY GLY GLY B B 417 417 . 124.155 82.720  -5.393  1.00 23.37
1 . .
ATOM 6516 N     N     . ASP ASP ASP B B 418 418 . 122.761 80.980  -5.482  1.00 28.10
1 . .
ATOM 6517 CA    CA    . ASP ASP ASP B B 418 418 . 122.925 80.824  -6.957  1.00 31.05
1 . .
ATOM 6518 CB    CB    . ASP ASP ASP B B 418 418 . 122.186 79.545  -7.434  1.00 33.12
1 . .
ATOM 6519 CG    CG    . ASP ASP ASP B B 418 418 . 122.247 79.368  -8.949  1.00 40.50
1 . .
ATOM 6520 OD1   OD1   . ASP ASP ASP B B 418 418 . 123.374 79.120  -9.458  1.00 46.66
1 . .
ATOM 6521 OD2   OD2   . ASP ASP ASP B B 418 418 . 121.179 79.489  -9.637  1.00 47.61
1 . .
ATOM 6522 C     C     . ASP ASP ASP B B 418 418 . 122.497 82.061  -7.794  1.00 30.18
1 . .
ATOM 6523 O     O     . ASP ASP ASP B B 418 418 . 122.960 82.252  -8.922  1.00 30.59
1 . .
ATOM 6524 N     N     . GLU GLU GLU B B 419 419 . 121.605 82.887  -7.238  1.00 28.49
1 . .
ATOM 6525 CA    CA    . GLU GLU GLU B B 419 419 . 121.183 84.097  -7.864  1.00 28.01
1 . .
ATOM 6526 CB    CB    . GLU GLU GLU B B 419 419 . 119.914 84.561  -7.147  1.00 30.55
1 . .
ATOM 6527 CG    CG    . GLU GLU GLU B B 419 419 . 119.317 85.860  -7.614  1.00 37.65
1 . .
ATOM 6528 CD    CD    . GLU GLU GLU B B 419 419 . 117.838 86.036  -7.197  1.00 45.00
1 . .
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ATOM 6529 OE1   OE1   . GLU GLU GLU B B 419 419 . 116.973 85.204  -7.614  1.00 47.92
1 . .
ATOM 6530 OE2   OE2   . GLU GLU GLU B B 419 419 . 117.564 87.026  -6.471  1.00 46.15
1 . .
ATOM 6531 C     C     . GLU GLU GLU B B 419 419 . 122.270 85.202  -7.880  1.00 25.98
1 . .
ATOM 6532 O     O     . GLU GLU GLU B B 419 419 . 122.127 86.216  -8.589  1.00 25.79
1 . .
ATOM 6533 N     N     . ALA ALA ALA B B 420 420 . 123.366 85.047  -7.139  1.00 23.27
1 . .
ATOM 6534 CA    CA    . ALA ALA ALA B B 420 420 . 124.314 86.175  -7.010  1.00 20.39
1 . .
ATOM 6535 CB    CB    . ALA ALA ALA B B 420 420 . 125.262 85.942  -5.852  1.00 19.54
1 . .
ATOM 6536 C     C     . ALA ALA ALA B B 420 420 . 125.070 86.406  -8.336  1.00 19.71
1 . .
ATOM 6537 O     O     . ALA ALA ALA B B 420 420 . 125.536 85.424  -8.961  1.00 20.43
1 . .
ATOM 6538 N     N     . ARG ARG ARG B B 421 421 . 125.160 87.660  -8.790  1.00 17.00
1 . .
ATOM 6539 CA    CA    . ARG ARG ARG B B 421 421 . 125.992 88.010  -9.951  1.00 17.71
1 . .
ATOM 6540 CB    CB    . ARG ARG ARG B B 421 421 . 125.148 88.547  -11.151 1.00 18.95
1 . .
ATOM 6541 CG    CG    . ARG ARG ARG B B 421 421 . 123.877 87.660  -11.658 1.00 26.43
1 . .
ATOM 6542 CD    CD    . ARG ARG ARG B B 421 421 . 122.477 88.531  -11.487 1.00 39.57
1 . .
ATOM 6543 NE    NE    . ARG ARG ARG B B 421 421 . 121.514 88.282  -10.319 1.00 45.55
1 . .
ATOM 6544 CZ    CZ    . ARG ARG ARG B B 421 421 . 121.673 88.530  -8.972  1.00 47.32
1 . .
ATOM 6545 NH1   NH1   . ARG ARG ARG B B 421 421 . 120.639 88.248  -8.127  1.00 45.94
1 . .
ATOM 6546 NH2   NH2   . ARG ARG ARG B B 421 421 . 122.818 89.026  -8.406  1.00 44.01
1 . .
ATOM 6547 C     C     . ARG ARG ARG B B 421 421 . 126.960 89.071  -9.512  1.00 14.55
1 . .
ATOM 6548 O     O     . ARG ARG ARG B B 421 421 . 126.634 89.885  -8.603  1.00 17.21
1 . .
ATOM 6549 N     N     . PHE PHE PHE B B 422 422 . 128.111 89.128  -10.156 1.00 12.16
1 . .
ATOM 6550 CA    CA    . PHE PHE PHE B B 422 422 . 129.195 90.122  -9.799  1.00 11.42
1 . .
ATOM 6551 CB    CB    . PHE PHE PHE B B 422 422 . 130.455 89.407  -9.365  1.00 12.91
1 . .
ATOM 6552 CG    CG    . PHE PHE PHE B B 422 422 . 131.634 90.284  -9.102  1.00 9.99
1 . .
ATOM 6553 CD1   CD1   . PHE PHE PHE B B 422 422 . 131.625 91.178  -8.048  1.00 8.88
1 . .
ATOM 6554 CE1   CE1   . PHE PHE PHE B B 422 422 . 132.736 91.973  -7.748  1.00 10.03
1 . .
ATOM 6555 CZ    CZ    . PHE PHE PHE B B 422 422 . 133.901 91.887  -8.520  1.00 10.75
1 . .
ATOM 6556 CE2   CE2   . PHE PHE PHE B B 422 422 . 133.894 90.972  -9.605  1.00 12.25
1 . .
ATOM 6557 CD2   CD2   . PHE PHE PHE B B 422 422 . 132.801 90.157  -9.861  1.00 11.26
1 . .
ATOM 6558 C     C     . PHE PHE PHE B B 422 422 . 129.424 91.003  -11.017 1.00 12.09
1 . .
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ATOM 6559 O     O     . PHE PHE PHE B B 422 422 . 129.612 90.449  -12.131 1.00 12.95
1 . .
ATOM 6560 N     N     . ALA ALA ALA B B 423 423 . 129.421 92.343  -10.850 1.00 9.96
1 . .
ATOM 6561 CA    CA    . ALA ALA ALA B B 423 423 . 129.468 93.214  -12.014 1.00 9.54
1 . .
ATOM 6562 CB    CB    . ALA ALA ALA B B 423 423 . 129.309 94.658  -11.555 1.00 11.61
1 . .
ATOM 6563 C     C     . ALA ALA ALA B B 423 423 . 130.789 93.031  -12.799 1.00 10.87
1 . .
ATOM 6564 O     O     . ALA ALA ALA B B 423 423 . 130.798 93.143  -14.041 1.00 11.74
1 . .
ATOM 6565 N     N     . GLY GLY GLY B B 424 424 . 131.902 92.803  -12.137 1.00 10.87
1 . .
ATOM 6566 CA    CA    . GLY GLY GLY B B 424 424 . 133.217 92.496  -12.775 1.00 11.81
1 . .
ATOM 6567 C     C     . GLY GLY GLY B B 424 424 . 133.570 93.541  -13.829 1.00 13.76
1 . .
ATOM 6568 O     O     . GLY GLY GLY B B 424 424 . 133.590 94.765  -13.542 1.00 14.35
1 . .
ATOM 6569 N     N     . HIS HIS HIS B B 425 425 . 133.800 93.086  -15.061 1.00 15.03
1 . .
ATOM 6570 CA    CA    . HIS HIS HIS B B 425 425 . 134.229 93.998  -16.120 1.00 15.29
1 . .
ATOM 6571 CB    CB    . HIS HIS HIS B B 425 425 . 134.801 93.149  -17.281 1.00 15.68
1 . .
ATOM 6572 CG    CG    . HIS HIS HIS B B 425 425 . 136.103 92.509  -16.912 1.00 17.56
1 . .
ATOM 6573 ND1   ND1   . HIS HIS HIS B B 425 425 . 136.268 91.140  -16.785 1.00 21.70
1 . .
ATOM 6574 CE1   CE1   . HIS HIS HIS B B 425 425 . 137.517 90.872  -16.435 1.00 21.51
1 . .
ATOM 6575 NE2   NE2   . HIS HIS HIS B B 425 425 . 138.176 92.009  -16.340 1.00 22.18
1 . .
ATOM 6576 CD2   CD2   . HIS HIS HIS B B 425 425 . 137.307 93.055  -16.598 1.00 18.98
1 . .
ATOM 6577 C     C     . HIS HIS HIS B B 425 425 . 133.147 94.947  -16.584 1.00 17.16
1 . .
ATOM 6578 O     O     . HIS HIS HIS B B 425 425 . 133.489 95.937  -17.288 1.00 19.11
1 . .
ATOM 6579 N     N     . ASN ASN ASN B B 426 426 . 131.907 94.661  -16.195 1.00 17.60
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ATOM 6580 CA    CA    . ASN ASN ASN B B 426 426 . 130.740 95.529  -16.502 1.00 17.32
1 . .
ATOM 6581 CB    CB    . ASN ASN ASN B B 426 426 . 129.502 94.740  -16.955 1.00 18.97
1 . .
ATOM 6582 CG    CG    . ASN ASN ASN B B 426 426 . 129.760 94.078  -18.316 1.00 24.72
1 . .
ATOM 6583 OD1   OD1   . ASN ASN ASN B B 426 426 . 129.889 94.759  -19.379 1.00 34.15
1 . .
ATOM 6584 ND2   ND2   . ASN ASN ASN B B 426 426 . 129.965 92.810  -18.277 1.00 29.14
1 . .
ATOM 6585 C     C     . ASN ASN ASN B B 426 426 . 130.425 96.523  -15.414 1.00 14.94
1 . .
ATOM 6586 O     O     . ASN ASN ASN B B 426 426 . 129.327 96.978  -15.282 1.00 15.80
1 . .
ATOM 6587 N     N     . PHE PHE PHE B B 427 427 . 131.412 96.835  -14.589 1.00 12.26
1 . .
ATOM 6588 CA    CA    . PHE PHE PHE B B 427 427 . 131.216 97.754  -13.459 1.00 12.48
1 . .
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ATOM 6589 CB    CB    . PHE PHE PHE B B 427 427 . 132.504 97.853  -12.579 1.00 12.26
1 . .
ATOM 6590 CG    CG    . PHE PHE PHE B B 427 427 . 133.602 98.716  -13.165 1.00 14.15
1 . .
ATOM 6591 CD1   CD1   . PHE PHE PHE B B 427 427 . 134.418 98.241  -14.208 1.00 18.09
1 . .
ATOM 6592 CE1   CE1   . PHE PHE PHE B B 427 427 . 135.476 99.037  -14.763 1.00 22.39
1 . .
ATOM 6593 CZ    CZ    . PHE PHE PHE B B 427 427 . 135.679 100.277 -14.248 1.00 18.35
1 . .
ATOM 6594 CE2   CE2   . PHE PHE PHE B B 427 427 . 134.869 100.799 -13.240 1.00 17.11
1 . .
ATOM 6595 CD2   CD2   . PHE PHE PHE B B 427 427 . 133.812 100.009 -12.689 1.00 16.25
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ATOM 6596 C     C     . PHE PHE PHE B B 427 427 . 130.703 99.153  -13.882 1.00 12.14
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ATOM 6597 O     O     . PHE PHE PHE B B 427 427 . 129.868 99.725  -13.181 1.00 12.31
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ATOM 6598 N     N     . ARG ARG ARG B B 428 428 . 131.140 99.637  -15.058 1.00 13.93
1 . .
ATOM 6599 CA    CA    . ARG ARG ARG B B 428 428 . 130.642 100.962 -15.477 1.00 14.02
1 . .
ATOM 6600 CB    CB    . ARG ARG ARG B B 428 428 . 131.507 101.540 -16.598 1.00 16.49
1 . .
ATOM 6601 CG    CG    . ARG ARG ARG B B 428 428 . 132.947 101.851 -16.146 1.00 15.52
1 . .
ATOM 6602 CD    CD    . ARG ARG ARG B B 428 428 . 133.812 102.527 -17.224 1.00 15.00
1 . .
ATOM 6603 NE    NE    . ARG ARG ARG B B 428 428 . 133.133 103.701 -17.830 1.00 15.95
1 . .
ATOM 6604 CZ    CZ    . ARG ARG ARG B B 428 428 . 133.677 104.418 -18.797 1.00 14.55
1 . .
ATOM 6605 NH1   NH1   . ARG ARG ARG B B 428 428 . 134.897 104.122 -19.192 1.00 12.30
1 . .
ATOM 6606 NH2   NH2   . ARG ARG ARG B B 428 428 . 133.017 105.439 -19.302 1.00 15.21
1 . .
ATOM 6607 C     C     . ARG ARG ARG B B 428 428 . 129.179 100.943 -15.924 1.00 15.84
1 . .
ATOM 6608 O     O     . ARG ARG ARG B B 428 428 . 128.485 101.964 -15.877 1.00 19.99
1 . .
ATOM 6609 N     N     . ASN ASN ASN B B 429 429 . 128.730 99.790  -16.440 1.00 16.54
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ATOM 6610 CA    CA    . ASN ASN ASN B B 429 429 . 127.400 99.669  -17.113 1.00 17.37
1 . .
ATOM 6611 CB    CB    . ASN ASN ASN B B 429 429 . 127.563 99.857  -18.627 1.00 19.59
1 . .
ATOM 6612 CG    CG    . ASN ASN ASN B B 429 429 . 128.538 98.819  -19.298 1.00 21.79
1 . .
ATOM 6613 OD1   OD1   . ASN ASN ASN B B 429 429 . 128.399 98.550  -20.519 1.00 27.30
1 . .
ATOM 6614 ND2   ND2   . ASN ASN ASN B B 429 429 . 129.492 98.219  -18.523 1.00 19.99
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ATOM 6615 C     C     . ASN ASN ASN B B 429 429 . 126.847 98.281  -16.859 1.00 19.04
1 . .
ATOM 6616 O     O     . ASN ASN ASN B B 429 429 . 126.853 97.409  -17.747 1.00 20.11
1 . .
ATOM 6617 N     N     . PRO PRO PRO B B 430 430 . 126.415 98.035  -15.650 1.00 18.22
1 . .
ATOM 6618 CA    CA    . PRO PRO PRO B B 430 430 . 125.958 96.721  -15.237 1.00 21.51
1 . .
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ATOM 6619 CB    CB    . PRO PRO PRO B B 430 430 . 125.893 96.878  -13.710 1.00 21.76
1 . .
ATOM 6620 CG    CG    . PRO PRO PRO B B 430 430 . 125.660 98.353  -13.543 1.00 18.48
1 . .
ATOM 6621 CD    CD    . PRO PRO PRO B B 430 430 . 126.594 98.938  -14.503 1.00 18.75
1 . .
ATOM 6622 C     C     . PRO PRO PRO B B 430 430 . 124.584 96.376  -15.897 1.00 23.43
1 . .
ATOM 6623 O     O     . PRO PRO PRO B B 430 430 . 124.183 95.206  -15.861 1.00 26.35
1 . .
ATOM 6624 N     N     . SER SER SER B B 431 431 . 123.894 97.339  -16.502 1.00 25.96
1 . .
ATOM 6625 CA    CA    . SER SER SER B B 431 431 . 122.547 97.093  -17.027 1.00 30.73
1 . .
ATOM 6626 CB    CB    . SER SER SER B B 431 431 . 121.835 98.404  -17.368 1.00 30.73
1 . .
ATOM 6627 OG    OG    . SER SER SER B B 431 431 . 122.450 99.059  -18.475 1.00 32.70
1 . .
ATOM 6628 C     C     . SER SER SER B B 431 431 . 122.623 96.134  -18.206 1.00 33.43
1 . .
ATOM 6629 O     O     . SER SER SER B B 431 431 . 121.585 95.555  -18.626 1.00 34.25
1 . .
ATOM 6630 N     N     . VAL VAL VAL B B 432 432 . 123.837 95.909  -18.718 1.00 35.12
1 . .
ATOM 6631 CA    CA    . VAL VAL VAL B B 432 432 . 124.006 94.934  -19.813 1.00 36.93
1 . .
ATOM 6632 CB    CB    . VAL VAL VAL B B 432 432 . 125.290 95.213  -20.673 1.00 37.45
1 . .
ATOM 6633 CG1   CG1   . VAL VAL VAL B B 432 432 . 125.250 96.630  -21.300 1.00 39.13
1 . .
ATOM 6634 CG2   CG2   . VAL VAL VAL B B 432 432 . 126.588 94.904  -19.867 1.00 37.89
1 . .
ATOM 6635 C     C     . VAL VAL VAL B B 432 432 . 123.929 93.453  -19.353 1.00 37.13
1 . .
ATOM 6636 O     O     . VAL VAL VAL B B 432 432 . 124.057 93.140  -18.144 1.00 38.20
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ATOM 6637 MG+2  MG+2  . MG2 MG2 MG2 B . 440 440 . 135.393 112.510 -4.006  1.00 6.98
1 . .
ATOM 6638 MG+2  MG+2  . MG2 MG2 MG2 B . 441 441 . 135.200 115.046 -0.738  1.00 6.76
1 . .
ATOM 6639 O3P   O3P   . PEP PEP PEP B . 442 442 . 134.396 114.135 0.904   1.00 7.65
1 . .
ATOM 6640 P     P     . PEP PEP PEP B . 442 442 . 135.006 113.109 1.858   1.00 6.80
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ATOM 6641 O1P   O1P   . PEP PEP PEP B . 442 442 . 133.933 112.342 2.536   1.00 6.73
1 . .
ATOM 6642 O2P   O2P   . PEP PEP PEP B . 442 442 . 136.039 113.660 2.804   1.00 7.24
1 . .
ATOM 6643 O2    O2    . PEP PEP PEP B . 442 442 . 135.890 112.113 0.937   1.00 7.88
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ATOM 6644 C2    C2    . PEP PEP PEP B . 442 442 . 135.150 111.367 -0.066  1.00 9.19
1 . .
ATOM 6645 C3    C3    . PEP PEP PEP B . 442 442 . 134.895 109.864 0.070   1.00 11.38
1 . .
ATOM 6646 C1    C1    . PEP PEP PEP B . 442 442 . 135.329 111.977 -1.430  1.00 6.46
1 . .
ATOM 6647 O1    O1    . PEP PEP PEP B . 442 442 . 135.724 113.187 -1.605  1.00 6.45
1 . .
ATOM 6648 "O2'" "O2'" . PEP PEP PEP B . 442 442 . 134.929 111.240 -2.349  1.00 6.62
1 . .
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ATOM 6649 O     O     . HOH HOH HOH B . 446 446 . 136.258 114.216 -4.708  1.00 6.04
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ATOM 6650 O     O     . HOH HOH HOH B . 447 447 . 136.048 115.968 -2.419  1.00 8.67
1 . .
ATOM 6651 O     O     . HOH HOH HOH B . 448 448 . 133.308 115.082 -1.697  1.00 7.47
1 . .
ATOM 6652 O     O     . HOH HOH HOH S . 1   1   . 153.679 104.721 43.219  1.00 5.63
1 . .
ATOM 6653 O     O     . HOH HOH HOH S . 2   2   . 127.789 113.485 -6.492  1.00 6.72
1 . .
ATOM 6654 O     O     . HOH HOH HOH S . 3   3   . 142.486 101.896 24.166  1.00 6.89
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ATOM 6655 O     O     . HOH HOH HOH S . 4   4   . 137.655 103.287 -1.051  1.00 7.44
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ATOM 6656 O     O     . HOH HOH HOH S . 5   5   . 137.940 108.361 9.343   1.00 7.61
1 . .
ATOM 6657 O     O     . HOH HOH HOH S . 6   6   . 130.077 121.099 -4.388  1.00 7.16
1 . .
ATOM 6658 O     O     . HOH HOH HOH S . 7   7   . 143.518 97.315  13.546  1.00 7.27
1 . .
ATOM 6659 O     O     . HOH HOH HOH S . 8   8   . 149.032 100.766 20.204  1.00 9.32
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ATOM 6660 O     O     . HOH HOH HOH S . 9   9   . 135.885 94.445  10.734  1.00 7.26
1 . .
ATOM 6661 O     O     . HOH HOH HOH S . 10  10  . 128.285 117.788 3.955   1.00 9.30
1 . .
ATOM 6662 O     O     . HOH HOH HOH S . 11  11  . 129.442 67.082  16.399  1.00 8.28
1 . .
ATOM 6663 O     O     . HOH HOH HOH S . 12  12  . 136.512 118.287 -5.614  1.00 8.25
1 . .
ATOM 6664 O     O     . HOH HOH HOH S . 13  13  . 129.368 115.822 5.505   1.00 7.78
1 . .
ATOM 6665 O     O     . HOH HOH HOH S . 14  14  . 131.832 105.185 14.463  1.00 8.56
1 . .
ATOM 6666 O     O     . HOH HOH HOH S . 15  15  . 128.005 100.624 17.988  1.00 9.30
1 . .
ATOM 6667 O     O     . HOH HOH HOH S . 16  16  . 144.489 99.907  23.956  1.00 8.54
1 . .
ATOM 6668 O     O     . HOH HOH HOH S . 17  17  . 126.393 102.972 5.503   1.00 9.18
1 . .
ATOM 6669 O     O     . HOH HOH HOH S . 18  18  . 125.264 66.066  17.429  1.00 9.61
1 . .
ATOM 6670 O     O     . HOH HOH HOH S . 19  19  . 142.670 116.909 -3.025  1.00 10.77
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ATOM 6671 O     O     . HOH HOH HOH S . 20  20  . 125.633 106.989 -0.211  1.00 9.38
1 . .
ATOM 6672 O     O     . HOH HOH HOH S . 21  21  . 139.768 88.877  23.288  1.00 9.37
1 . .
ATOM 6673 O     O     . HOH HOH HOH S . 22  22  . 154.132 95.929  20.923  1.00 9.41
1 . .
ATOM 6674 O     O     . HOH HOH HOH S . 23  23  . 140.784 112.362 13.939  1.00 11.30
1 . .
ATOM 6675 O     O     . HOH HOH HOH S . 24  24  . 137.533 106.953 -9.683  1.00 10.16
1 . .
ATOM 6676 O     O     . HOH HOH HOH S . 25  25  . 126.795 110.155 2.130   1.00 9.12
1 . .
ATOM 6677 O     O     . HOH HOH HOH S . 26  26  . 129.189 94.429  8.928   1.00 9.46
1 . .
ATOM 6678 O     O     . HOH HOH HOH S . 27  27  . 152.177 109.329 11.400  1.00 13.98
1 . .
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ATOM 6679 O     O     . HOH HOH HOH S . 28  28  . 145.239 88.545  30.766  1.00 9.55
1 . .
ATOM 6680 O     O     . HOH HOH HOH S . 29  29  . 127.015 114.742 8.494   1.00 10.18
1 . .
ATOM 6681 O     O     . HOH HOH HOH S . 30  30  . 133.414 93.187  21.017  1.00 10.36
1 . .
ATOM 6682 O     O     . HOH HOH HOH S . 31  31  . 123.978 120.253 15.237  1.00 9.86
1 . .
ATOM 6683 O     O     . HOH HOH HOH S . 32  32  . 125.592 117.259 4.454   1.00 9.82
1 . .
ATOM 6684 O     O     . HOH HOH HOH S . 33  33  . 144.531 86.526  18.629  1.00 9.11
1 . .
ATOM 6685 O     O     . HOH HOH HOH S . 34  34  . 139.982 84.369  14.197  1.00 10.51
1 . .
ATOM 6686 O     O     . HOH HOH HOH S . 35  35  . 147.369 100.268 31.920  1.00 9.80
1 . .
ATOM 6687 O     O     . HOH HOH HOH S . 36  36  . 123.671 65.859  15.634  1.00 9.86
1 . .
ATOM 6688 O     O     . HOH HOH HOH S . 37  37  . 123.707 82.595  27.131  1.00 10.80
1 . .
ATOM 6689 O     O     . HOH HOH HOH S . 38  38  . 132.050 98.356  34.115  1.00 10.88
1 . .
ATOM 6690 O     O     . HOH HOH HOH S . 39  39  . 145.739 99.163  10.633  1.00 10.64
1 . .
ATOM 6691 O     O     . HOH HOH HOH S . 40  40  . 135.432 107.306 -7.989  1.00 10.15
1 . .
ATOM 6692 O     O     . HOH HOH HOH S . 41  41  . 141.268 78.281  10.478  1.00 9.95
1 . .
ATOM 6693 O     O     . HOH HOH HOH S . 42  42  . 141.455 116.283 -0.578  1.00 10.03
1 . .
ATOM 6694 O     O     . HOH HOH HOH S . 43  43  . 142.725 110.529 13.388  1.00 9.98
1 . .
ATOM 6695 O     O     . HOH HOH HOH S . 44  44  . 130.027 122.041 19.539  1.00 11.34
1 . .
ATOM 6696 O     O     . HOH HOH HOH S . 45  45  . 138.231 91.197  23.313  1.00 10.22
1 . .
ATOM 6697 O     O     . HOH HOH HOH S . 46  46  . 134.889 118.812 -8.162  1.00 10.21
1 . .
ATOM 6698 O     O     . HOH HOH HOH S . 47  47  . 141.435 107.374 -22.278 1.00 11.31
1 . .
ATOM 6699 O     O     . HOH HOH HOH S . 48  48  . 137.568 106.043 -1.204  1.00 11.03
1 . .
ATOM 6700 O     O     . HOH HOH HOH S . 49  49  . 153.861 91.604  26.892  1.00 11.20
1 . .
ATOM 6701 O     O     . HOH HOH HOH S . 50  50  . 141.543 108.994 11.285  1.00 11.69
1 . .
ATOM 6702 O     O     . HOH HOH HOH S . 51  51  . 132.099 116.299 -22.894 1.00 11.57
1 . .
ATOM 6703 O     O     . HOH HOH HOH S . 52  52  . 167.240 93.155  36.195  1.00 10.34
1 . .
ATOM 6704 O     O     . HOH HOH HOH S . 53  53  . 142.728 79.739  3.592   1.00 12.47
1 . .
ATOM 6705 O     O     . HOH HOH HOH S . 54  54  . 127.966 121.116 21.163  1.00 11.72
1 . .
ATOM 6706 O     O     . HOH HOH HOH S . 55  55  . 104.616 101.308 10.043  1.00 14.10
1 . .
ATOM 6707 O     O     . HOH HOH HOH S . 56  56  . 155.953 96.806  22.830  1.00 9.98
1 . .
ATOM 6708 O     O     . HOH HOH HOH S . 57  57  . 134.386 126.388 -6.594  1.00 11.54
1 . .
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ATOM 6709 O     O     . HOH HOH HOH S . 58  58  . 141.295 85.125  16.651  1.00 10.95
1 . .
ATOM 6710 O     O     . HOH HOH HOH S . 59  59  . 145.854 98.323  30.896  1.00 11.24
1 . .
ATOM 6711 O     O     . HOH HOH HOH S . 60  60  . 135.054 108.892 -21.119 1.00 11.18
1 . .
ATOM 6712 O     O     . HOH HOH HOH S . 61  61  . 126.319 114.675 11.289  1.00 9.13
1 . .
ATOM 6713 O     O     . HOH HOH HOH S . 62  62  . 140.744 133.755 -11.860 1.00 11.83
1 . .
ATOM 6714 O     O     . HOH HOH HOH S . 63  63  . 131.073 113.776 12.221  1.00 12.04
1 . .
ATOM 6715 O     O     . HOH HOH HOH S . 64  64  . 134.734 113.558 10.993  1.00 13.47
1 . .
ATOM 6716 O     O     . HOH HOH HOH S . 65  65  . 138.436 96.875  38.072  1.00 12.13
1 . .
ATOM 6717 O     O     . HOH HOH HOH S . 66  66  . 137.378 90.557  26.209  1.00 9.04
1 . .
ATOM 6718 O     O     . HOH HOH HOH S . 67  67  . 142.222 88.360  12.037  1.00 12.33
1 . .
ATOM 6719 O     O     . HOH HOH HOH S . 68  68  . 151.594 84.740  27.258  1.00 9.67
1 . .
ATOM 6720 O     O     . HOH HOH HOH S . 69  69  . 161.235 103.260 22.663  1.00 12.46
1 . .
ATOM 6721 O     O     . HOH HOH HOH S . 70  70  . 143.498 82.967  20.621  1.00 10.48
1 . .
ATOM 6722 O     O     . HOH HOH HOH S . 71  71  . 136.565 91.926  21.175  1.00 12.09
1 . .
ATOM 6723 O     O     . HOH HOH HOH S . 72  72  . 141.210 83.468  18.906  1.00 11.82
1 . .
ATOM 6724 O     O     . HOH HOH HOH S . 73  73  . 127.419 107.579 2.119   1.00 10.68
1 . .
ATOM 6725 O     O     . HOH HOH HOH S . 74  74  . 145.695 84.613  20.192  1.00 10.30
1 . .
ATOM 6726 O     O     . HOH HOH HOH S . 75  75  . 150.719 116.468 -5.282  1.00 12.73
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ATOM 6727 O     O     . HOH HOH HOH S . 76  76  . 123.225 119.095 -2.697  1.00 11.93
1 . .
ATOM 6728 O     O     . HOH HOH HOH S . 77  77  . 133.632 106.729 45.732  1.00 12.44
1 . .
ATOM 6729 O     O     . HOH HOH HOH S . 78  78  . 140.358 103.126 41.583  1.00 13.37
1 . .
ATOM 6730 O     O     . HOH HOH HOH S . 79  79  . 106.963 119.097 15.008  1.00 14.11
1 . .
ATOM 6731 O     O     . HOH HOH HOH S . 80  80  . 145.361 80.963  27.764  1.00 12.35
1 . .
ATOM 6732 O     O     . HOH HOH HOH S . 81  81  . 125.735 96.878  -7.321  1.00 12.86
1 . .
ATOM 6733 O     O     . HOH HOH HOH S . 82  82  . 144.750 91.305  12.340  1.00 13.18
1 . .
ATOM 6734 O     O     . HOH HOH HOH S . 83  83  . 115.604 120.112 0.688   1.00 11.90
1 . .
ATOM 6735 O     O     . HOH HOH HOH S . 85  85  . 142.829 127.073 -15.219 1.00 13.19
1 . .
ATOM 6736 O     O     . HOH HOH HOH S . 86  86  . 108.703 98.140  10.651  1.00 14.88
1 . .
ATOM 6737 O     O     . HOH HOH HOH S . 87  87  . 125.054 115.453 6.589   1.00 12.10
1 . .
ATOM 6738 O     O     . HOH HOH HOH S . 88  88  . 110.736 102.766 3.337   1.00 13.01
1 . .
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ATOM 6739 O     O     . HOH HOH HOH S . 89  89  . 153.523 89.276  23.430  1.00 13.88
1 . .
ATOM 6740 O     O     . HOH HOH HOH S . 90  90  . 125.804 74.519  10.381  1.00 14.70
1 . .
ATOM 6741 O     O     . HOH HOH HOH S . 91  91  . 129.806 112.931 24.550  1.00 14.51
1 . .
ATOM 6742 O     O     . HOH HOH HOH S . 92  92  . 145.209 80.813  4.337   1.00 12.22
1 . .
ATOM 6743 O     O     . HOH HOH HOH S . 93  93  . 138.791 72.624  24.990  1.00 14.38
1 . .
ATOM 6744 O     O     . HOH HOH HOH S . 94  94  . 126.001 67.081  21.783  1.00 15.19
1 . .
ATOM 6745 O     O     . HOH HOH HOH S . 95  95  . 147.005 98.833  8.062   1.00 10.77
1 . .
ATOM 6746 O     O     . HOH HOH HOH S . 96  96  . 147.744 80.927  18.586  1.00 14.09
1 . .
ATOM 6747 O     O     . HOH HOH HOH S . 97  97  . 130.878 67.572  24.359  1.00 16.09
1 . .
ATOM 6748 O     O     . HOH HOH HOH S . 98  98  . 103.952 107.299 11.489  1.00 16.62
1 . .
ATOM 6749 O     O     . HOH HOH HOH S . 99  99  . 120.242 73.687  21.248  1.00 12.52
1 . .
ATOM 6750 O     O     . HOH HOH HOH S . 100 100 . 128.732 125.836 -18.062 1.00 14.42
1 . .
ATOM 6751 O     O     . HOH HOH HOH S . 101 101 . 135.531 91.290  17.321  1.00 12.92
1 . .
ATOM 6752 O     O     . HOH HOH HOH S . 102 102 . 158.936 84.885  27.274  1.00 17.42
1 . .
ATOM 6753 O     O     . HOH HOH HOH S . 103 103 . 120.141 111.864 22.832  1.00 18.04
1 . .
ATOM 6754 O     O     . HOH HOH HOH S . 104 104 . 135.886 68.929  13.415  1.00 13.69
1 . .
ATOM 6755 O     O     . HOH HOH HOH S . 105 105 . 127.841 101.960 -12.711 1.00 16.95
1 . .
ATOM 6756 O     O     . HOH HOH HOH S . 106 106 . 146.614 96.024  -13.878 1.00 17.47
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ATOM 6757 O     O     . HOH HOH HOH S . 107 107 . 130.738 122.741 -20.020 1.00 15.49
1 . .
ATOM 6758 O     O     . HOH HOH HOH S . 108 108 . 151.370 108.790 39.165  1.00 17.00
1 . .
ATOM 6759 O     O     . HOH HOH HOH S . 109 109 . 132.115 118.262 7.333   1.00 14.37
1 . .
ATOM 6760 O     O     . HOH HOH HOH S . 110 110 . 162.178 106.126 27.026  1.00 16.82
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ATOM 6761 O     O     . HOH HOH HOH S . 111 111 . 137.471 86.587  0.761   1.00 14.55
1 . .
ATOM 6762 O     O     . HOH HOH HOH S . 112 112 . 114.394 120.733 3.109   1.00 13.60
1 . .
ATOM 6763 O     O     . HOH HOH HOH S . 113 113 . 117.943 122.395 17.757  1.00 15.68
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ATOM 6764 O     O     . HOH HOH HOH S . 114 114 . 128.395 125.438 -10.716 1.00 13.87
1 . .
ATOM 6765 O     O     . HOH HOH HOH S . 115 115 . 134.309 110.966 38.135  1.00 13.02
1 . .
ATOM 6766 O     O     . HOH HOH HOH S . 116 116 . 128.445 97.339  14.882  1.00 16.73
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ATOM 6767 O     O     . HOH HOH HOH S . 117 117 . 147.377 86.617  15.781  1.00 17.80
1 . .
ATOM 6768 O     O     . HOH HOH HOH S . 118 118 . 116.748 78.567  22.977  1.00 17.45
1 . .
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ATOM 6769 O     O     . HOH HOH HOH S . 119 119 . 126.783 94.412  22.054  1.00 17.36
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ATOM 6770 O     O     . HOH HOH HOH S . 120 120 . 134.963 122.660 -2.012  1.00 14.03
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ATOM 6771 O     O     . HOH HOH HOH S . 121 121 . 125.015 79.483  32.480  1.00 19.55
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ATOM 6772 O     O     . HOH HOH HOH S . 122 122 . 146.959 96.006  7.771   1.00 14.47
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ATOM 6773 O     O     . HOH HOH HOH S . 123 123 . 155.046 87.090  23.315  1.00 13.33
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ATOM 6774 O     O     . HOH HOH HOH S . 124 124 . 134.682 123.138 -22.577 1.00 14.93
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ATOM 6775 O     O     . HOH HOH HOH S . 125 125 . 146.243 108.951 -22.274 1.00 12.65
1 . .
ATOM 6776 O     O     . HOH HOH HOH S . 126 126 . 154.656 91.974  44.770  1.00 15.15
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ATOM 6777 O     O     . HOH HOH HOH S . 127 127 . 140.176 119.936 -19.533 1.00 16.61
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ATOM 6778 O     O     . HOH HOH HOH S . 128 128 . 162.453 100.762 17.597  1.00 15.58
1 . .
ATOM 6779 O     O     . HOH HOH HOH S . 129 129 . 128.958 115.195 26.127  1.00 15.66
1 . .
ATOM 6780 O     O     . HOH HOH HOH S . 130 130 . 123.329 85.552  6.272   1.00 16.34
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ATOM 6781 O     O     . HOH HOH HOH S . 131 131 . 127.466 106.295 8.608   1.00 15.37
1 . .
ATOM 6782 O     O     . HOH HOH HOH S . 132 132 . 122.785 97.269  6.158   1.00 16.84
1 . .
ATOM 6783 O     O     . HOH HOH HOH S . 133 133 . 142.098 109.364 1.028   1.00 15.78
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ATOM 6784 O     O     . HOH HOH HOH S . 134 134 . 123.101 83.203  7.762   1.00 17.21
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ATOM 6785 O     O     . HOH HOH HOH S . 135 135 . 152.725 106.798 7.626   1.00 15.07
1 . .
ATOM 6786 O     O     . HOH HOH HOH S . 136 136 . 154.114 90.372  29.720  1.00 13.07
1 . .
ATOM 6787 O     O     . HOH HOH HOH S . 137 137 . 149.302 100.022 8.991   1.00 16.81
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ATOM 6788 O     O     . HOH HOH HOH S . 138 138 . 131.072 80.082  5.281   1.00 15.93
1 . .
ATOM 6789 O     O     . HOH HOH HOH S . 139 139 . 115.129 96.001  8.229   1.00 17.49
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ATOM 6790 O     O     . HOH HOH HOH S . 140 140 . 166.615 91.960  32.983  1.00 14.80
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ATOM 6791 O     O     . HOH HOH HOH S . 141 141 . 123.754 86.964  8.010   1.00 14.96
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ATOM 6792 O     O     . HOH HOH HOH S . 142 142 . 125.742 113.098 -20.283 1.00 17.78
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ATOM 6793 O     O     . HOH HOH HOH S . 143 143 . 151.826 114.819 -9.950  1.00 21.17
1 . .
ATOM 6794 O     O     . HOH HOH HOH S . 144 144 . 138.195 72.279  9.583   1.00 15.17
1 . .
ATOM 6795 O     O     . HOH HOH HOH S . 145 145 . 129.972 121.992 2.223   1.00 17.95
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ATOM 6796 O     O     . HOH HOH HOH S . 146 146 . 140.772 122.565 -19.670 1.00 17.64
1 . .
ATOM 6797 O     O     . HOH HOH HOH S . 147 147 . 159.172 87.436  24.909  1.00 15.82
1 . .
ATOM 6798 O     O     . HOH HOH HOH S . 148 148 . 142.206 71.824  11.917  1.00 20.20
1 . .
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ATOM 6799 O     O     . HOH HOH HOH S . 149 149 . 144.736 111.545 11.926  1.00 17.55
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ATOM 6800 O     O     . HOH HOH HOH S . 150 150 . 145.783 100.618 -18.915 1.00 35.43
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ATOM 6801 O     O     . HOH HOH HOH S . 151 151 . 160.009 106.786 14.276  1.00 17.28
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ATOM 6802 O     O     . HOH HOH HOH S . 152 152 . 117.932 93.824  6.084   1.00 18.14
1 . .
ATOM 6803 O     O     . HOH HOH HOH S . 153 153 . 148.769 92.346  10.059  1.00 20.02
1 . .
ATOM 6804 O     O     . HOH HOH HOH S . 154 154 . 123.015 112.603 22.613  1.00 18.51
1 . .
ATOM 6805 O     O     . HOH HOH HOH S . 155 155 . 107.924 124.004 3.465   1.00 17.52
1 . .
ATOM 6806 O     O     . HOH HOH HOH S . 156 156 . 105.491 107.143 -0.223  1.00 14.98
1 . .
ATOM 6807 O     O     . HOH HOH HOH S . 157 157 . 119.701 125.116 14.565  1.00 19.64
1 . .
ATOM 6808 O     O     . HOH HOH HOH S . 158 158 . 126.350 83.483  -3.803  1.00 23.95
1 . .
ATOM 6809 O     O     . HOH HOH HOH S . 159 159 . 120.270 117.586 21.678  1.00 18.85
1 . .
ATOM 6810 O     O     . HOH HOH HOH S . 160 160 . 127.981 97.287  12.153  1.00 15.54
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ATOM 6811 O     O     . HOH HOH HOH S . 161 161 . 140.067 74.358  26.752  1.00 15.28
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ATOM 6812 O     O     . HOH HOH HOH S . 162 162 . 146.662 106.346 -23.331 1.00 16.90
1 . .
ATOM 6813 O     O     . HOH HOH HOH S . 163 163 . 146.351 75.116  9.866   1.00 20.92
1 . .
ATOM 6814 O     O     . HOH HOH HOH S . 164 164 . 135.650 120.029 -2.025  1.00 14.43
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ATOM 6815 O     O     . HOH HOH HOH S . 165 165 . 127.866 108.154 38.776  1.00 21.46
1 . .
ATOM 6816 O     O     . HOH HOH HOH S . 166 166 . 164.058 89.256  36.801  1.00 18.35
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ATOM 6817 O     O     . HOH HOH HOH S . 167 167 . 135.351 89.493  -13.426 1.00 16.86
1 . .
ATOM 6818 O     O     . HOH HOH HOH S . 168 168 . 123.729 99.451  9.738   1.00 18.55
1 . .
ATOM 6819 O     O     . HOH HOH HOH S . 169 169 . 148.407 78.343  27.890  1.00 19.27
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ATOM 6820 O     O     . HOH HOH HOH S . 170 170 . 133.881 115.578 9.436   1.00 16.62
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ATOM 6821 O     O     . HOH HOH HOH S . 171 171 . 109.317 109.614 19.843  1.00 19.50
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ATOM 6822 O     O     . HOH HOH HOH S . 172 172 . 107.716 105.570 -1.374  1.00 18.71
1 . .
ATOM 6823 O     O     . HOH HOH HOH S . 173 173 . 127.479 106.117 4.626   1.00 14.61
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ATOM 6824 O     O     . HOH HOH HOH S . 174 174 . 118.851 119.592 -0.418  1.00 15.98
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ATOM 6825 O     O     . HOH HOH HOH S . 175 175 . 134.270 110.361 -24.640 1.00 36.42
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ATOM 6826 O     O     . HOH HOH HOH S . 176 176 . 146.171 121.446 19.674  1.00 17.75
1 . .
ATOM 6827 O     O     . HOH HOH HOH S . 177 177 . 156.605 108.373 5.251   1.00 17.65
1 . .
ATOM 6828 O     O     . HOH HOH HOH S . 178 178 . 116.913 83.589  21.275  1.00 14.88
1 . .
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ATOM 6829 O     O     . HOH HOH HOH S . 179 179 . 132.055 110.135 -21.772 1.00 16.10
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ATOM 6830 O     O     . HOH HOH HOH S . 180 180 . 162.252 110.652 20.430  1.00 17.45
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ATOM 6831 O     O     . HOH HOH HOH S . 181 181 . 147.098 78.079  13.334  1.00 21.36
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ATOM 6832 O     O     . HOH HOH HOH S . 182 182 . 157.858 107.088 41.307  1.00 18.73
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ATOM 6833 O     O     . HOH HOH HOH S . 183 183 . 161.528 85.136  37.495  1.00 19.66
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ATOM 6834 O     O     . HOH HOH HOH S . 184 184 . 146.420 115.027 34.551  1.00 16.76
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ATOM 6835 O     O     . HOH HOH HOH S . 185 185 . 112.823 127.162 7.181   1.00 16.95
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ATOM 6836 O     O     . HOH HOH HOH S . 186 186 . 119.374 101.907 21.193  1.00 22.76
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ATOM 6837 O     O     . HOH HOH HOH S . 188 188 . 148.980 91.332  43.995  1.00 21.82
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ATOM 6838 O     O     . HOH HOH HOH S . 189 189 . 117.567 71.040  19.330  1.00 20.33
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ATOM 6839 O     O     . HOH HOH HOH S . 190 190 . 136.272 121.570 22.746  1.00 18.08
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ATOM 6840 O     O     . HOH HOH HOH S . 191 191 . 124.995 126.155 14.778  1.00 21.02
1 . .
ATOM 6841 O     O     . HOH HOH HOH S . 192 192 . 155.843 107.620 12.387  1.00 16.66
1 . .
ATOM 6842 O     O     . HOH HOH HOH S . 193 193 . 146.033 89.378  13.601  1.00 18.94
1 . .
ATOM 6843 O     O     . HOH HOH HOH S . 194 194 . 138.650 120.996 25.653  1.00 19.46
1 . .
ATOM 6844 O     O     . HOH HOH HOH S . 195 195 . 150.274 98.733  43.728  1.00 18.92
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ATOM 6845 O     O     . HOH HOH HOH S . 196 196 . 127.436 70.653  29.169  1.00 17.54
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ATOM 6846 O     O     . HOH HOH HOH S . 197 197 . 147.469 89.109  44.570  1.00 21.64
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ATOM 6847 O     O     . HOH HOH HOH S . 198 198 . 143.825 97.345  40.242  1.00 17.22
1 . .
ATOM 6848 O     O     . HOH HOH HOH S . 199 199 . 128.529 112.695 -20.482 1.00 18.07
1 . .
ATOM 6849 O     O     . HOH HOH HOH S . 200 200 . 142.790 77.602  1.797   1.00 22.87
1 . .
ATOM 6850 O     O     . HOH HOH HOH S . 201 201 . 109.105 97.611  -0.885  1.00 21.53
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ATOM 6851 O     O     . HOH HOH HOH S . 202 202 . 113.528 122.163 16.261  1.00 16.83
1 . .
ATOM 6852 O     O     . HOH HOH HOH S . 203 203 . 116.509 86.339  33.703  1.00 21.41
1 . .
ATOM 6853 O     O     . HOH HOH HOH S . 204 204 . 153.391 113.185 -10.442 1.00 24.85
1 . .
ATOM 6854 O     O     . HOH HOH HOH S . 205 205 . 117.920 73.832  28.347  1.00 18.87
1 . .
ATOM 6855 O     O     . HOH HOH HOH S . 206 206 . 126.503 127.507 -10.884 1.00 19.70
1 . .
ATOM 6856 O     O     . HOH HOH HOH S . 207 207 . 155.420 93.301  -0.362  1.00 19.87
1 . .
ATOM 6857 O     O     . HOH HOH HOH S . 208 208 . 153.385 110.655 5.874   1.00 16.14
1 . .
ATOM 6858 O     O     . HOH HOH HOH S . 209 209 . 139.066 114.226 38.910  1.00 18.52
1 . .
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ATOM 6859 O     O     . HOH HOH HOH S . 210 210 . 150.243 83.133  20.872  1.00 18.25
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ATOM 6860 O     O     . HOH HOH HOH S . 211 211 . 124.966 105.698 6.959   1.00 21.76
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ATOM 6861 O     O     . HOH HOH HOH S . 212 212 . 142.148 77.177  26.674  1.00 18.17
1 . .
ATOM 6862 O     O     . HOH HOH HOH S . 213 213 . 125.938 96.716  18.432  1.00 24.70
1 . .
ATOM 6863 O     O     . HOH HOH HOH S . 214 214 . 138.730 116.021 11.961  1.00 21.28
1 . .
ATOM 6864 O     O     . HOH HOH HOH S . 215 215 . 149.321 95.594  44.627  1.00 18.26
1 . .
ATOM 6865 O     O     . HOH HOH HOH S . 216 216 . 127.624 122.038 5.424   1.00 19.32
1 . .
ATOM 6866 O     O     . HOH HOH HOH S . 217 217 . 112.575 91.029  30.206  1.00 22.80
1 . .
ATOM 6867 O     O     . HOH HOH HOH S . 218 218 . 138.154 84.196  -0.746  1.00 19.17
1 . .
ATOM 6868 O     O     . HOH HOH HOH S . 219 219 . 120.441 93.478  4.904   1.00 19.31
1 . .
ATOM 6869 O     O     . HOH HOH HOH S . 220 220 . 164.299 91.547  34.476  1.00 18.77
1 . .
ATOM 6870 O     O     . HOH HOH HOH S . 221 221 . 127.378 92.599  12.042  1.00 17.46
1 . .
ATOM 6871 O     O     . HOH HOH HOH S . 222 222 . 123.230 89.990  17.114  1.00 17.14
1 . .
ATOM 6872 O     O     . HOH HOH HOH S . 223 223 . 150.633 89.842  -12.135 1.00 26.15
1 . .
ATOM 6873 O     O     . HOH HOH HOH S . 224 224 . 133.416 81.803  4.523   1.00 16.76
1 . .
ATOM 6874 O     O     . HOH HOH HOH S . 225 225 . 135.144 116.725 17.837  1.00 17.12
1 . .
ATOM 6875 O     O     . HOH HOH HOH S . 226 226 . 118.840 73.281  11.148  1.00 21.55
1 . .
ATOM 6876 O     O     . HOH HOH HOH S . 227 227 . 145.422 88.514  5.262   1.00 17.42
1 . .
ATOM 6877 O     O     . HOH HOH HOH S . 228 228 . 153.872 116.013 4.934   1.00 20.97
1 . .
ATOM 6878 O     O     . HOH HOH HOH S . 229 229 . 119.715 117.501 -18.696 1.00 24.14
1 . .
ATOM 6879 O     O     . HOH HOH HOH S . 230 230 . 131.763 75.595  6.251   1.00 19.80
1 . .
ATOM 6880 O     O     . HOH HOH HOH S . 231 231 . 134.384 74.638  6.218   1.00 23.27
1 . .
ATOM 6881 O     O     . HOH HOH HOH S . 232 232 . 138.608 120.814 3.136   1.00 21.07
1 . .
ATOM 6882 O     O     . HOH HOH HOH S . 233 233 . 120.803 90.008  22.158  1.00 20.16
1 . .
ATOM 6883 O     O     . HOH HOH HOH S . 234 234 . 126.792 124.109 10.749  1.00 22.76
1 . .
ATOM 6884 O     O     . HOH HOH HOH S . 235 235 . 118.988 91.235  23.669  1.00 20.34
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ATOM 6885 O     O     . HOH HOH HOH S . 236 236 . 121.689 107.570 32.180  1.00 22.86
1 . .
ATOM 6886 O     O     . HOH HOH HOH S . 237 237 . 159.597 89.217  21.341  1.00 21.44
1 . .
ATOM 6887 O     O     . HOH HOH HOH S . 238 238 . 108.081 88.442  24.505  1.00 20.67
1 . .
ATOM 6888 O     O     . HOH HOH HOH S . 239 239 . 116.446 116.643 -4.844  1.00 23.10
1 . .
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ATOM 6889 O     O     . HOH HOH HOH S . 240 240 . 134.168 90.241  19.591  1.00 21.16
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ATOM 6890 O     O     . HOH HOH HOH S . 241 241 . 123.560 83.007  3.887   1.00 25.76
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ATOM 6891 O     O     . HOH HOH HOH S . 242 242 . 118.630 101.993 -9.644  1.00 22.75
1 . .
ATOM 6892 O     O     . HOH HOH HOH S . 243 243 . 124.652 100.184 15.713  1.00 17.82
1 . .
ATOM 6893 O     O     . HOH HOH HOH S . 244 244 . 160.639 110.364 -0.825  1.00 35.51
1 . .
ATOM 6894 O     O     . HOH HOH HOH S . 245 245 . 157.764 116.691 9.520   1.00 24.69
1 . .
ATOM 6895 O     O     . HOH HOH HOH S . 246 246 . 148.397 90.784  6.907   1.00 20.87
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ATOM 6896 O     O     . HOH HOH HOH S . 247 247 . 114.363 93.656  6.915   1.00 24.96
1 . .
ATOM 6897 O     O     . HOH HOH HOH S . 248 248 . 146.393 113.633 9.339   1.00 22.32
1 . .
ATOM 6898 O     O     . HOH HOH HOH S . 249 249 . 148.817 87.599  -3.527  1.00 18.96
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ATOM 6899 O     O     . HOH HOH HOH S . 250 250 . 128.574 118.323 27.300  1.00 20.90
1 . .
ATOM 6900 O     O     . HOH HOH HOH S . 251 251 . 126.358 107.670 34.529  1.00 25.12
1 . .
ATOM 6901 O     O     . HOH HOH HOH S . 252 252 . 136.398 94.750  39.086  1.00 18.86
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ATOM 6902 O     O     . HOH HOH HOH S . 253 253 . 127.119 122.770 2.722   1.00 22.67
1 . .
ATOM 6903 O     O     . HOH HOH HOH S . 254 254 . 125.131 102.752 14.549  1.00 21.27
1 . .
ATOM 6904 O     O     . HOH HOH HOH S . 255 255 . 149.511 116.686 -7.060  1.00 248.63
1 . .
ATOM 6905 O     O     . HOH HOH HOH S . 256 256 . 127.151 122.979 23.031  1.00 19.40
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ATOM 6906 O     O     . HOH HOH HOH S . 257 257 . 152.331 84.559  19.224  1.00 23.20
1 . .
ATOM 6907 O     O     . HOH HOH HOH S . 258 258 . 129.802 91.295  12.622  1.00 21.30
1 . .
ATOM 6908 O     O     . HOH HOH HOH S . 259 259 . 100.313 105.061 5.630   1.00 24.66
1 . .
ATOM 6909 O     O     . HOH HOH HOH S . 260 260 . 117.590 118.904 -6.310  1.00 21.77
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ATOM 6910 O     O     . HOH HOH HOH S . 261 261 . 131.780 90.129  37.718  1.00 21.64
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ATOM 6911 O     O     . HOH HOH HOH S . 262 262 . 123.826 115.532 -23.199 1.00 26.12
1 . .
ATOM 6912 O     O     . HOH HOH HOH S . 263 263 . 148.153 85.057  -0.369  1.00 25.33
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ATOM 6913 O     O     . HOH HOH HOH S . 264 264 . 121.600 93.984  23.647  1.00 23.14
1 . .
ATOM 6914 O     O     . HOH HOH HOH S . 265 265 . 142.885 110.822 -24.526 1.00 23.69
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ATOM 6915 O     O     . HOH HOH HOH S . 266 266 . 113.933 87.919  31.676  1.00 22.98
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ATOM 6916 O     O     . HOH HOH HOH S . 267 267 . 127.876 93.287  18.165  1.00 18.64
1 . .
ATOM 6917 O     O     . HOH HOH HOH S . 268 268 . 162.868 86.135  35.245  1.00 19.47
1 . .
ATOM 6918 O     O     . HOH HOH HOH S . 269 269 . 137.035 65.736  26.339  1.00 25.26
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ATOM 6919 O     O     . HOH HOH HOH S . 270 270 . 130.824 105.005 -16.173 1.00 25.14
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ATOM 6920 O     O     . HOH HOH HOH S . 271 271 . 106.721 123.844 -0.998  1.00 30.55
1 . .
ATOM 6921 O     O     . HOH HOH HOH S . 272 272 . 98.076  112.288 15.127  1.00 21.36
1 . .
ATOM 6922 O     O     . HOH HOH HOH S . 273 273 . 123.263 122.936 -3.430  1.00 20.30
1 . .
ATOM 6923 O     O     . HOH HOH HOH S . 274 274 . 115.043 110.601 -11.208 1.00 24.32
1 . .
ATOM 6924 O     O     . HOH HOH HOH S . 275 275 . 124.726 102.081 -12.515 1.00 24.99
1 . .
ATOM 6925 O     O     . HOH HOH HOH S . 276 276 . 138.060 117.572 15.336  1.00 25.00
1 . .
ATOM 6926 O     O     . HOH HOH HOH S . 277 277 . 163.768 105.757 39.153  1.00 26.22
1 . .
ATOM 6927 O     O     . HOH HOH HOH S . 278 278 . 122.803 96.032  24.852  1.00 23.73
1 . .
ATOM 6928 O     O     . HOH HOH HOH S . 279 279 . 152.811 120.243 8.981   1.00 24.39
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ATOM 6929 O     O     . HOH HOH HOH S . 280 280 . 138.407 83.821  -3.321  1.00 25.41
1 . .
ATOM 6930 O     O     . HOH HOH HOH S . 281 281 . 118.740 98.487  12.724  1.00 21.95
1 . .
ATOM 6931 O     O     . HOH HOH HOH S . 282 282 . 154.334 87.866  20.585  1.00 21.02
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ATOM 6932 O     O     . HOH HOH HOH S . 283 283 . 137.069 102.879 -17.797 1.00 18.12
1 . .
ATOM 6933 O     O     . HOH HOH HOH S . 284 284 . 111.730 106.761 -2.139  1.00 22.06
1 . .
ATOM 6934 O     O     . HOH HOH HOH S . 285 285 . 139.733 81.463  -2.335  1.00 22.73
1 . .
ATOM 6935 O     O     . HOH HOH HOH S . 286 286 . 167.096 99.826  24.986  1.00 21.34
1 . .
ATOM 6936 O     O     . HOH HOH HOH S . 287 287 . 146.430 103.757 40.531  1.00 24.09
1 . .
ATOM 6937 O     O     . HOH HOH HOH S . 288 288 . 136.386 81.925  39.169  1.00 23.40
1 . .
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0.0245  1 .
3    CB    CB    . SER SER SER A A 1   1   . 0.2157 0.2634 0.2686 0.0112  0.0089
0.0149  1 .
4    OG    OG    . SER SER SER A A 1   1   . 0.2515 0.3414 0.2832 0.0007  0.0017
0.0315  1 .
5    C     C     . SER SER SER A A 1   1   . 0.1853 0.2461 0.2471 0.0130  0.0454
0.0400  1 .
6    O     O     . SER SER SER A A 1   1   . 0.1927 0.2405 0.2649 0.0159  0.0811
0.0569  1 .
7    N     N     . ILE ILE ILE A A 2   2   . 0.1620 0.1809 0.1861 0.0065  0.0360
0.0312  1 .
8    CA    CA    . ILE ILE ILE A A 2   2   . 0.1451 0.1570 0.1543 -0.0164 0.0318
0.0272  1 .
9    CB    CB    . ILE ILE ILE A A 2   2   . 0.1622 0.1364 0.1550 0.0018  0.0008  -
0.0042 1 .
10   CG1   CG1   . ILE ILE ILE A A 2   2   . 0.1730 0.1571 0.1494 -0.0126 0.0015  -
0.0210 1 .
11   CD    CD    . ILE ILE ILE A A 2   2   . 0.1939 0.2056 0.2232 0.0066  -0.0046 -
0.0330 1 .
12   CG2   CG2   . ILE ILE ILE A A 2   2   . 0.1763 0.1436 0.1560 0.0077  0.0155
0.0254  1 .
13   C     C     . ILE ILE ILE A A 2   2   . 0.1242 0.1569 0.1700 -0.0151 0.0203
0.0121  1 .
14   O     O     . ILE ILE ILE A A 2   2   . 0.1793 0.1834 0.1852 -0.0176 0.0288
0.0032  1 .
15   N     N     . GLN GLN GLN A A 3   3   . 0.1262 0.1518 0.1691 -0.0319 0.0144  -
0.0043 1 .
16   CA    CA    . GLN GLN GLN A A 3   3   . 0.1678 0.1680 0.1763 -0.0127 0.0091  -
0.0158 1 .
17   CB    CB    . GLN GLN GLN A A 3   3   . 0.1640 0.1996 0.2244 0.0043  0.0120  -
0.0200 1 .
18   CG    CG    . GLN GLN GLN A A 3   3   . 0.2203 0.2220 0.2586 0.0031  0.0600
0.0020  1 .
19   CD    CD    . GLN GLN GLN A A 3   3   . 0.3047 0.3985 0.3820 -0.0067 0.0125
0.0315  1 .
20   OE1   OE1   . GLN GLN GLN A A 3   3   . 0.4256 0.4193 0.4853 0.0525  0.0161
0.0689  1 .
21   NE2   NE2   . GLN GLN GLN A A 3   3   . 0.2927 0.5140 0.4445 -0.0267 0.0510  -
0.0338 1 .
22   C     C     . GLN GLN GLN A A 3   3   . 0.1685 0.1753 0.1809 -0.0388 0.0206  -
0.0237 1 .
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23   O     O     . GLN GLN GLN A A 3   3   . 0.1734 0.1617 0.2119 -0.0434 0.0298  -
0.0331 1 .
24   N     N     . LYS LYS LYS A A 4   4   . 0.1552 0.1681 0.1610 -0.0301 0.0116
0.0092  1 .
25   CA    CA    . LYS LYS LYS A A 4   4   . 0.1416 0.1662 0.1543 -0.0201 0.0001  -
0.0118 1 .
26   CB    CB    . LYS LYS LYS A A 4   4   . 0.1748 0.2559 0.1832 -0.0339 -0.0106 -
0.0202 1 .
27   CG    CG    . LYS LYS LYS A A 4   4   . 0.2568 0.3004 0.2433 0.0258  -0.0347
0.0116  1 .
28   CD    CD    . LYS LYS LYS A A 4   4   . 0.3665 0.2778 0.2228 0.0295  -0.0834
0.0323  1 .
29   CE    CE    . LYS LYS LYS A A 4   4   . 0.4326 0.4382 0.2964 0.0365  -0.0298
0.0291  1 .
30   NZ    NZ    . LYS LYS LYS A A 4   4   . 0.5194 0.4476 0.3101 0.0147  -0.1185 -
0.0104 1 .
31   C     C     . LYS LYS LYS A A 4   4   . 0.1539 0.1477 0.1379 -0.0229 0.0152  -
0.0007 1 .
32   O     O     . LYS LYS LYS A A 4   4   . 0.1494 0.1247 0.1499 -0.0137 0.0110  -
0.0099 1 .
33   N     N     . ILE ILE ILE A A 5   5   . 0.1281 0.1042 0.1386 -0.0185 0.0134
0.0105  1 .
34   CA    CA    . ILE ILE ILE A A 5   5   . 0.1098 0.1261 0.1169 -0.0099 0.0139  -
0.0135 1 .
35   CB    CB    . ILE ILE ILE A A 5   5   . 0.0955 0.1027 0.1292 -0.0064 0.0079  -
0.0121 1 .
36   CG1   CG1   . ILE ILE ILE A A 5   5   . 0.1348 0.1510 0.1323 -0.0077 0.0019  -
0.0252 1 .
37   CD    CD    . ILE ILE ILE A A 5   5   . 0.1249 0.1644 0.1495 0.0118  0.0216  -
0.0006 1 .
38   CG2   CG2   . ILE ILE ILE A A 5   5   . 0.1229 0.1355 0.1851 -0.0513 0.0347  -
0.0170 1 .
39   C     C     . ILE ILE ILE A A 5   5   . 0.1394 0.1050 0.1172 -0.0036 0.0134
0.0032  1 .
40   O     O     . ILE ILE ILE A A 5   5   . 0.1534 0.1324 0.1676 -0.0139 0.0257  -
0.0231 1 .
41   N     N     . TRP TRP TRP A A 6   6   . 0.1133 0.1091 0.1376 -0.0149 0.0070
0.0074  1 .
42   CA    CA    . TRP TRP TRP A A 6   6   . 0.1306 0.1159 0.1177 -0.0044 0.0076
0.0090  1 .
43   CB    CB    . TRP TRP TRP A A 6   6   . 0.1151 0.1452 0.1260 0.0015  -0.0035
0.0072  1 .
44   CG    CG    . TRP TRP TRP A A 6   6   . 0.1423 0.1394 0.1307 -0.0022 -0.0243 -
0.0013 1 .
45   CD1   CD1   . TRP TRP TRP A A 6   6   . 0.1396 0.1657 0.1504 -0.0129 -0.0180
0.0180  1 .
46   NE1   NE1   . TRP TRP TRP A A 6   6   . 0.1749 0.1885 0.1532 0.0335  -0.0122
0.0099  1 .
47   CE2   CE2   . TRP TRP TRP A A 6   6   . 0.1614 0.1859 0.1364 0.0147  -0.0332
0.0027  1 .
48   CD2   CD2   . TRP TRP TRP A A 6   6   . 0.1310 0.1753 0.1494 0.0026  -0.0050
0.0077  1 .
49   CE3   CE3   . TRP TRP TRP A A 6   6   . 0.1718 0.1324 0.1157 0.0264  -0.0565 -
0.0204 1 .
50   CZ3   CZ3   . TRP TRP TRP A A 6   6   . 0.1953 0.1625 0.2112 0.0523  0.0034  -
0.0377 1 .
51   CH2   CH2   . TRP TRP TRP A A 6   6   . 0.1907 0.1799 0.1472 -0.0040 -0.0246 -
0.0413 1 .
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0.0216 1 .
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53   C     C     . TRP TRP TRP A A 6   6   . 0.1116 0.1026 0.1063 0.0011  -0.0120
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54   O     O     . TRP TRP TRP A A 6   6   . 0.0995 0.1081 0.1303 0.0099  0.0110  -
0.0222 1 .
55   N     N     . ALA ALA ALA A A 7   7   . 0.0910 0.0946 0.0923 -0.0136 0.0092
0.0066  1 .
56   CA    CA    . ALA ALA ALA A A 7   7   . 0.0854 0.0943 0.0806 -0.0073 -0.0036 -
0.0035 1 .
57   CB    CB    . ALA ALA ALA A A 7   7   . 0.1188 0.1229 0.0931 -0.0013 -0.0290
0.0249  1 .
58   C     C     . ALA ALA ALA A A 7   7   . 0.1011 0.0805 0.0766 -0.0105 -0.0119
0.0009  1 .
59   O     O     . ALA ALA ALA A A 7   7   . 0.1128 0.0873 0.0879 -0.0147 -0.0038 -
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0.0095 1 .
61   CA    CA    . ARG ARG ARG A A 8   8   . 0.1146 0.0986 0.0808 -0.0140 0.0017
0.0085  1 .
62   CB    CB    . ARG ARG ARG A A 8   8   . 0.1150 0.0742 0.1022 -0.0062 0.0056
0.0176  1 .
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0.0160  1 .
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0.0453  1 .
65   NE    NE    . ARG ARG ARG A A 8   8   . 0.0951 0.1192 0.1267 0.0058  0.0097
0.0137  1 .
66   CZ    CZ    . ARG ARG ARG A A 8   8   . 0.0846 0.1091 0.1278 0.0077  0.0055
0.0082  1 .
67   NH1   NH1   . ARG ARG ARG A A 8   8   . 0.1163 0.1320 0.1588 -0.0137 0.0187
0.0099  1 .
68   NH2   NH2   . ARG ARG ARG A A 8   8   . 0.1663 0.1565 0.2354 -0.0159 -0.0289 -
0.0312 1 .
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70   O     O     . ARG ARG ARG A A 8   8   . 0.0958 0.0854 0.0876 -0.0143 0.0002
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71   N     N     . GLU GLU GLU A A 9   9   . 0.1008 0.0996 0.1027 -0.0090 0.0097
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0.0136 1 .
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0.0152 1 .
75   CD    CD    . GLU GLU GLU A A 9   9   . 0.1860 0.2151 0.1884 0.0439  0.0069  -
0.0061 1 .
76   OE1   OE1   . GLU GLU GLU A A 9   9   . 0.1728 0.1564 0.1174 0.0449  0.0293
0.0060  1 .
77   OE2   OE2   . GLU GLU GLU A A 9   9   . 0.1979 0.2183 0.1739 0.0650  0.0071  -
0.0130 1 .
78   C     C     . GLU GLU GLU A A 9   9   . 0.1303 0.1121 0.1148 -0.0176 -0.0197
0.0161  1 .
79   O     O     . GLU GLU GLU A A 9   9   . 0.2552 0.1123 0.1790 -0.0282 -0.0797
0.0360  1 .
80   N     N     . ILE ILE ILE A A 10  10  . 0.1007 0.0770 0.0773 -0.0082 0.0004
0.0160  1 .
81   CA    CA    . ILE ILE ILE A A 10  10  . 0.0832 0.0871 0.0952 0.0060  -0.0069
0.0137  1 .
82   CB    CB    . ILE ILE ILE A A 10  10  . 0.0900 0.0859 0.0930 0.0223  -0.0143
0.0133  1 .
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83   CG1   CG1   . ILE ILE ILE A A 10  10  . 0.1141 0.1061 0.0919 0.0389  -0.0078
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85   CG2   CG2   . ILE ILE ILE A A 10  10  . 0.1166 0.1120 0.1423 -0.0025 0.0026
0.0153  1 .
86   C     C     . ILE ILE ILE A A 10  10  . 0.0855 0.0622 0.0968 -0.0008 -0.0003
0.0161  1 .
87   O     O     . ILE ILE ILE A A 10  10  . 0.1020 0.1038 0.1063 0.0011  0.0105
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88   N     N     . LEU LEU LEU A A 11  11  . 0.0936 0.0640 0.0828 -0.0198 0.0012
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89   CA    CA    . LEU LEU LEU A A 11  11  . 0.0715 0.0831 0.0727 -0.0206 0.0144
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0.0026  1 .
92   CD1   CD1   . LEU LEU LEU A A 11  11  . 0.0952 0.0993 0.1011 -0.0156 0.0325  -
0.0041 1 .
93   CD2   CD2   . LEU LEU LEU A A 11  11  . 0.1674 0.1125 0.1284 0.0262  0.0367
0.0072  1 .
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0.0116  1 .
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97   CA    CA    . ASP ASP ASP A A 12  12  . 0.0989 0.0715 0.0686 -0.0016 -0.0076 -
0.0084 1 .
98   CB    CB    . ASP ASP ASP A A 12  12  . 0.0838 0.0571 0.1063 0.0141  -0.0037
0.0225  1 .
99   CG    CG    . ASP ASP ASP A A 12  12  . 0.1407 0.1076 0.1070 -0.0047 0.0070  -
0.0061 1 .
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0.0033  1 .
101  OD2   OD2   . ASP ASP ASP A A 12  12  . 0.1092 0.1113 0.1266 0.0052  -0.0102
0.0065  1 .
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0.0008  1 .
103  O     O     . ASP ASP ASP A A 12  12  . 0.0794 0.0752 0.0844 0.0059  -0.0024 -
0.0058 1 .
104  N     N     . SER SER SER A A 13  13  . 0.0832 0.0650 0.0844 0.0113  0.0047  -
0.0032 1 .
105  CA    CA    . SER SER SER A A 13  13  . 0.0923 0.0737 0.0889 -0.0104 0.0245  -
0.0203 1 .
106  CB    CB    . SER SER SER A A 13  13  . 0.1219 0.0821 0.0674 0.0206  -0.0179 -
0.0216 1 .
107  OG    OG    . SER SER SER A A 13  13  . 0.0834 0.0903 0.0824 0.0119  -0.0051
0.0029  1 .
108  C     C     . SER SER SER A A 13  13  . 0.0855 0.0773 0.0898 0.0061  0.0007
0.0024  1 .
109  O     O     . SER SER SER A A 13  13  . 0.0947 0.0797 0.0880 -0.0050 -0.0030
0.0116  1 .
110  N     N     . ARG ARG ARG A A 14  14  . 0.0791 0.0841 0.0905 0.0061  0.0106  -
0.0029 1 .
111  CA    CA    . ARG ARG ARG A A 14  14  . 0.0598 0.0936 0.0695 0.0184  0.0065  -
0.0061 1 .
112  CB    CB    . ARG ARG ARG A A 14  14  . 0.1002 0.1541 0.1310 0.0073  -0.0140 -
0.0027 1 .
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113  CG    CG    . ARG ARG ARG A A 14  14  . 0.1685 0.1470 0.1460 0.0378  0.0037  -
0.0320 1 .
114  CD    CD    . ARG ARG ARG A A 14  14  . 0.1346 0.1505 0.1954 0.0099  0.0176
0.0190  1 .
115  NE    NE    . ARG ARG ARG A A 14  14  . 0.1499 0.1833 0.1290 0.0087  -0.0040
0.0011  1 .
116  CZ    CZ    . ARG ARG ARG A A 14  14  . 0.1193 0.1189 0.0900 0.0068  0.0220
0.0176  1 .
117  NH1   NH1   . ARG ARG ARG A A 14  14  . 0.1271 0.1280 0.1387 0.0322  0.0325  -
0.0028 1 .
118  NH2   NH2   . ARG ARG ARG A A 14  14  . 0.1016 0.1392 0.1811 0.0095  0.0297
0.0204  1 .
119  C     C     . ARG ARG ARG A A 14  14  . 0.0992 0.0966 0.1061 0.0122  0.0065
0.0006  1 .
120  O     O     . ARG ARG ARG A A 14  14  . 0.1137 0.1534 0.1168 0.0047  0.0129
0.0255  1 .
121  N     N     . GLY GLY GLY A A 15  15  . 0.1013 0.0748 0.0965 0.0110  -0.0053 -
0.0013 1 .
122  CA    CA    . GLY GLY GLY A A 15  15  . 0.1209 0.0955 0.0815 0.0026  0.0188  -
0.0012 1 .
123  C     C     . GLY GLY GLY A A 15  15  . 0.0820 0.0807 0.0748 0.0000  0.0220  -
0.0066 1 .
124  O     O     . GLY GLY GLY A A 15  15  . 0.1307 0.1022 0.0950 -0.0076 0.0149  -
0.0046 1 .
125  N     N     . ASN ASN ASN A A 16  16  . 0.0971 0.0811 0.1034 0.0059  0.0058
0.0158  1 .
126  CA    CA    . ASN ASN ASN A A 16  16  . 0.1025 0.0983 0.1147 -0.0088 0.0043
0.0002  1 .
127  CB    CB    . ASN ASN ASN A A 16  16  . 0.0769 0.1150 0.1411 0.0068  0.0009
0.0123  1 .
128  CG    CG    . ASN ASN ASN A A 16  16  . 0.0983 0.1163 0.1392 0.0139  0.0080  -
0.0113 1 .
129  OD1   OD1   . ASN ASN ASN A A 16  16  . 0.1334 0.1585 0.1522 0.0224  0.0134
0.0051  1 .
130  ND2   ND2   . ASN ASN ASN A A 16  16  . 0.1195 0.1384 0.1999 -0.0059 -0.0072 -
0.0189 1 .
131  C     C     . ASN ASN ASN A A 16  16  . 0.0909 0.0831 0.0913 0.0046  0.0169
0.0116  1 .
132  O     O     . ASN ASN ASN A A 16  16  . 0.0931 0.0766 0.0853 -0.0003 0.0114
0.0053  1 .
133  N     N     . PRO PRO PRO A A 17  17  . 0.1050 0.0959 0.0908 0.0002  0.0256  -
0.0013 1 .
134  CA    CA    . PRO PRO PRO A A 17  17  . 0.1018 0.0683 0.0749 -0.0011 0.0186  -
0.0056 1 .
135  CB    CB    . PRO PRO PRO A A 17  17  . 0.1359 0.0805 0.0732 -0.0086 0.0367  -
0.0180 1 .
136  CG    CG    . PRO PRO PRO A A 17  17  . 0.1151 0.0843 0.0967 -0.0143 0.0360
0.0127  1 .
137  CD    CD    . PRO PRO PRO A A 17  17  . 0.0717 0.1011 0.0977 0.0006  0.0333  -
0.0100 1 .
138  C     C     . PRO PRO PRO A A 17  17  . 0.0708 0.0804 0.0858 -0.0057 0.0035
0.0056  1 .
139  O     O     . PRO PRO PRO A A 17  17  . 0.1033 0.0813 0.0967 0.0008  0.0022
0.0033  1 .
140  N     N     . THR THR THR A A 18  18  . 0.0726 0.0643 0.0597 -0.0038 0.0138
0.0045  1 .
141  CA    CA    . THR THR THR A A 18  18  . 0.0784 0.0855 0.0638 -0.0239 0.0095
0.0021  1 .
142  CB    CB    . THR THR THR A A 18  18  . 0.0856 0.0803 0.0603 0.0093  0.0121
0.0008  1 .
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143  OG1   OG1   . THR THR THR A A 18  18  . 0.0890 0.0930 0.0948 -0.0020 -0.0037
0.0117  1 .
144  CG2   CG2   . THR THR THR A A 18  18  . 0.0952 0.0909 0.0727 0.0100  -0.0069 -
0.0165 1 .
145  C     C     . THR THR THR A A 18  18  . 0.0902 0.0715 0.0729 -0.0107 -0.0044
0.0013  1 .
146  O     O     . THR THR THR A A 18  18  . 0.0951 0.0706 0.0933 -0.0064 -0.0188
0.0030  1 .
147  N     N     . VAL VAL VAL A A 19  19  . 0.0956 0.0726 0.0703 -0.0147 0.0191
0.0041  1 .
148  CA    CA    . VAL VAL VAL A A 19  19  . 0.0814 0.1032 0.0991 0.0075  0.0008
0.0086  1 .
149  CB    CB    . VAL VAL VAL A A 19  19  . 0.0752 0.0927 0.1200 0.0075  0.0097
0.0208  1 .
150  CG1   CG1   . VAL VAL VAL A A 19  19  . 0.1127 0.0847 0.1336 0.0030  0.0167
0.0384  1 .
151  CG2   CG2   . VAL VAL VAL A A 19  19  . 0.1191 0.0965 0.1144 0.0140  0.0198  -
0.0313 1 .
152  C     C     . VAL VAL VAL A A 19  19  . 0.0706 0.0701 0.0706 -0.0016 0.0056
0.0000  1 .
153  O     O     . VAL VAL VAL A A 19  19  . 0.0950 0.0852 0.1031 -0.0062 0.0136  -
0.0129 1 .
154  N     N     . GLU GLU GLU A A 20  20  . 0.0762 0.0765 0.0743 0.0015  0.0087  -
0.0006 1 .
155  CA    CA    . GLU GLU GLU A A 20  20  . 0.0837 0.0715 0.1035 0.0014  0.0062
0.0171  1 .
156  CB    CB    . GLU GLU GLU A A 20  20  . 0.0838 0.0892 0.1039 0.0102  0.0139
0.0199  1 .
157  CG    CG    . GLU GLU GLU A A 20  20  . 0.0897 0.1247 0.1397 0.0204  0.0117
0.0469  1 .
158  CD    CD    . GLU GLU GLU A A 20  20  . 0.1402 0.1244 0.1398 -0.0025 0.0010
0.0233  1 .
159  OE1   OE1   . GLU GLU GLU A A 20  20  . 0.1413 0.1385 0.1465 -0.0044 -0.0099
0.0119  1 .
160  OE2   OE2   . GLU GLU GLU A A 20  20  . 0.1253 0.1288 0.1712 0.0083  -0.0008
0.0143  1 .
161  C     C     . GLU GLU GLU A A 20  20  . 0.0919 0.0847 0.0839 0.0123  -0.0055
0.0098  1 .
162  O     O     . GLU GLU GLU A A 20  20  . 0.1159 0.0733 0.0958 -0.0044 0.0279
0.0016  1 .
163  N     N     . VAL VAL VAL A A 21  21  . 0.0978 0.1012 0.0820 -0.0098 0.0085
0.0102  1 .
164  CA    CA    . VAL VAL VAL A A 21  21  . 0.0735 0.0674 0.0944 -0.0052 0.0103
0.0124  1 .
165  CB    CB    . VAL VAL VAL A A 21  21  . 0.0659 0.0886 0.1065 -0.0113 -0.0106
0.0271  1 .
166  CG1   CG1   . VAL VAL VAL A A 21  21  . 0.1019 0.1037 0.1377 -0.0335 0.0021
0.0268  1 .
167  CG2   CG2   . VAL VAL VAL A A 21  21  . 0.0971 0.1144 0.1341 0.0049  0.0091  -
0.0106 1 .
168  C     C     . VAL VAL VAL A A 21  21  . 0.0864 0.0853 0.1192 -0.0010 0.0038  -
0.0041 1 .
169  O     O     . VAL VAL VAL A A 21  21  . 0.1008 0.0894 0.1220 -0.0034 0.0045  -
0.0171 1 .
170  N     N     . ASP ASP ASP A A 22  22  . 0.0722 0.0995 0.1109 0.0028  0.0019
0.0087  1 .
171  CA    CA    . ASP ASP ASP A A 22  22  . 0.0786 0.0841 0.1018 -0.0044 0.0064  -
0.0025 1 .
172  CB    CB    . ASP ASP ASP A A 22  22  . 0.1069 0.1135 0.0982 -0.0097 -0.0043
0.0158  1 .
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173  CG    CG    . ASP ASP ASP A A 22  22  . 0.1140 0.1458 0.1271 0.0047  0.0367  -
0.0190 1 .
174  OD1   OD1   . ASP ASP ASP A A 22  22  . 0.1792 0.1907 0.1441 -0.0170 -0.0124
0.0055  1 .
175  OD2   OD2   . ASP ASP ASP A A 22  22  . 0.1601 0.1436 0.1367 -0.0091 0.0065
0.0095  1 .
176  C     C     . ASP ASP ASP A A 22  22  . 0.1043 0.0934 0.1084 0.0044  0.0186  -
0.0020 1 .
177  O     O     . ASP ASP ASP A A 22  22  . 0.1199 0.0816 0.1358 0.0074  0.0248  -
0.0224 1 .
178  N     N     . LEU LEU LEU A A 23  23  . 0.1002 0.1004 0.0938 0.0026  0.0169
0.0224  1 .
179  CA    CA    . LEU LEU LEU A A 23  23  . 0.0943 0.0724 0.1052 0.0044  0.0064
0.0163  1 .
180  CB    CB    . LEU LEU LEU A A 23  23  . 0.1259 0.1071 0.1047 -0.0129 -0.0133
0.0087  1 .
181  CG    CG    . LEU LEU LEU A A 23  23  . 0.1207 0.1314 0.1101 -0.0029 0.0190
0.0220  1 .
182  CD1   CD1   . LEU LEU LEU A A 23  23  . 0.1541 0.2015 0.1336 -0.0065 0.0153  -
0.0065 1 .
183  CD2   CD2   . LEU LEU LEU A A 23  23  . 0.1204 0.1129 0.1577 -0.0074 0.0393
0.0183  1 .
184  C     C     . LEU LEU LEU A A 23  23  . 0.1112 0.1185 0.1029 -0.0107 0.0099
0.0024  1 .
185  O     O     . LEU LEU LEU A A 23  23  . 0.1191 0.0954 0.1475 -0.0037 0.0045  -
0.0153 1 .
186  N     N     . TYR TYR TYR A A 24  24  . 0.1292 0.1239 0.1380 -0.0245 0.0075  -
0.0003 1 .
187  CA    CA    . TYR TYR TYR A A 24  24  . 0.1126 0.1390 0.1335 -0.0143 0.0104
0.0086  1 .
188  CB    CB    . TYR TYR TYR A A 24  24  . 0.1098 0.1399 0.1164 -0.0020 0.0134
0.0093  1 .
189  CG    CG    . TYR TYR TYR A A 24  24  . 0.1492 0.1284 0.1672 0.0002  -0.0047
0.0370  1 .
190  CD1   CD1   . TYR TYR TYR A A 24  24  . 0.1605 0.1936 0.1827 -0.0488 -0.0062
0.0169  1 .
191  CE1   CE1   . TYR TYR TYR A A 24  24  . 0.1896 0.1837 0.1928 -0.0019 -0.0059
0.0292  1 .
192  CZ    CZ    . TYR TYR TYR A A 24  24  . 0.1900 0.2333 0.2211 0.0068  0.0077
0.1068  1 .
193  OH    OH    . TYR TYR TYR A A 24  24  . 0.2540 0.2530 0.2441 -0.0164 -0.0093
0.1194  1 .
194  CE2   CE2   . TYR TYR TYR A A 24  24  . 0.2184 0.2744 0.2388 0.0192  0.0249
0.1099  1 .
195  CD2   CD2   . TYR TYR TYR A A 24  24  . 0.2101 0.2352 0.1761 0.0052  -0.0099
0.0711  1 .
196  C     C     . TYR TYR TYR A A 24  24  . 0.1098 0.1375 0.1386 -0.0048 0.0018
0.0100  1 .
197  O     O     . TYR TYR TYR A A 24  24  . 0.1288 0.1343 0.1604 -0.0185 -0.0034
0.0056  1 .
198  N     N     . THR THR THR A A 25  25  . 0.1290 0.1550 0.1609 -0.0371 0.0241  -
0.0129 1 .
199  CA    CA    . THR THR THR A A 25  25  . 0.1394 0.1769 0.1704 -0.0254 0.0169
0.0038  1 .
200  CB    CB    . THR THR THR A A 25  25  . 0.1364 0.1553 0.1815 -0.0221 0.0153  -
0.0031 1 .
201  OG1   OG1   . THR THR THR A A 25  25  . 0.1501 0.1743 0.1977 -0.0021 -0.0016 -
0.0025 1 .
202  CG2   CG2   . THR THR THR A A 25  25  . 0.1506 0.1598 0.1802 0.0043  -0.0032 -
0.0116 1 .
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203  C     C     . THR THR THR A A 25  25  . 0.1921 0.2229 0.2076 -0.0235 0.0214
0.0240  1 .
204  O     O     . THR THR THR A A 25  25  . 0.2016 0.2195 0.2118 -0.0459 0.0127
0.0159  1 .
205  N     N     . ALA ALA ALA A A 26  26  . 0.1375 0.2444 0.2254 -0.0347 0.0333
0.0102  1 .
206  CA    CA    . ALA ALA ALA A A 26  26  . 0.1788 0.2691 0.2756 -0.0105 0.0440
0.0209  1 .
207  CB    CB    . ALA ALA ALA A A 26  26  . 0.1925 0.2705 0.2694 -0.0193 0.0528
0.0494  1 .
208  C     C     . ALA ALA ALA A A 26  26  . 0.1939 0.2629 0.2896 0.0027  0.0265
0.0312  1 .
209  O     O     . ALA ALA ALA A A 26  26  . 0.2040 0.2848 0.3596 -0.0112 -0.0193
0.0277  1 .
210  N     N     . LYS LYS LYS A A 27  27  . 0.2152 0.2609 0.2772 0.0005  0.0547
0.0260  1 .
211  CA    CA    . LYS LYS LYS A A 27  27  . 0.2392 0.2671 0.2889 0.0113  0.0522
0.0291  1 .
212  CB    CB    . LYS LYS LYS A A 27  27  . 0.2559 0.2875 0.2977 -0.0072 0.0566
0.0168  1 .
213  CG    CG    . LYS LYS LYS A A 27  27  . 0.3126 0.3012 0.3188 -0.0014 0.0957
0.0244  1 .
214  CD    CD    . LYS LYS LYS A A 27  27  . 0.4146 0.4105 0.4669 0.0473  0.0481  -
0.0069 1 .
215  CE    CE    . LYS LYS LYS A A 27  27  . 0.5149 0.3988 0.4429 -0.0453 0.0379
0.0247  1 .
216  NZ    NZ    . LYS LYS LYS A A 27  27  . 0.4678 0.3914 0.5564 0.0346  0.0085
0.0090  1 .
217  C     C     . LYS LYS LYS A A 27  27  . 0.2378 0.2568 0.3139 0.0103  0.0474
0.0277  1 .
218  O     O     . LYS LYS LYS A A 27  27  . 0.2874 0.2867 0.3746 0.0304  0.0398
0.0441  1 .
219  N     N     . GLY GLY GLY A A 28  28  . 0.1964 0.2235 0.2761 -0.0026 0.0250
0.0402  1 .
220  CA    CA    . GLY GLY GLY A A 28  28  . 0.1616 0.2363 0.2708 0.0224  0.0371
0.0286  1 .
221  C     C     . GLY GLY GLY A A 28  28  . 0.1132 0.1821 0.2018 0.0174  0.0278
0.0413  1 .
222  O     O     . GLY GLY GLY A A 28  28  . 0.1451 0.1610 0.1770 -0.0062 0.0045
0.0088  1 .
223  N     N     . LEU LEU LEU A A 29  29  . 0.1557 0.1817 0.2121 -0.0005 0.0139
0.0361  1 .
224  CA    CA    . LEU LEU LEU A A 29  29  . 0.1498 0.1794 0.1785 -0.0115 0.0100
0.0258  1 .
225  CB    CB    . LEU LEU LEU A A 29  29  . 0.1920 0.1991 0.1589 0.0015  0.0155
0.0393  1 .
226  CG    CG    . LEU LEU LEU A A 29  29  . 0.2107 0.3145 0.1497 -0.0547 0.0258
0.0089  1 .
227  CD1   CD1   . LEU LEU LEU A A 29  29  . 0.3108 0.4212 0.2052 -0.0048 0.0325
0.0682  1 .
228  CD2   CD2   . LEU LEU LEU A A 29  29  . 0.3037 0.3384 0.2019 -0.0494 0.0032
0.0152  1 .
229  C     C     . LEU LEU LEU A A 29  29  . 0.1487 0.1538 0.1811 -0.0091 0.0136
0.0068  1 .
230  O     O     . LEU LEU LEU A A 29  29  . 0.1590 0.1958 0.2365 0.0182  -0.0003
0.0054  1 .
231  N     N     . PHE PHE PHE A A 30  30  . 0.1255 0.1346 0.1356 -0.0113 0.0110  -
0.0041 1 .
232  CA    CA    . PHE PHE PHE A A 30  30  . 0.1001 0.1163 0.1638 -0.0186 0.0342  -
0.0115 1 .
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233  CB    CB    . PHE PHE PHE A A 30  30  . 0.0900 0.1780 0.1371 -0.0087 0.0330  -
0.0157 1 .
234  CG    CG    . PHE PHE PHE A A 30  30  . 0.1284 0.1480 0.1315 0.0153  0.0465  -
0.0139 1 .
235  CD1   CD1   . PHE PHE PHE A A 30  30  . 0.1272 0.1532 0.1852 0.0372  0.0804  -
0.0498 1 .
236  CE1   CE1   . PHE PHE PHE A A 30  30  . 0.1079 0.2058 0.2027 0.0020  0.0752  -
0.0241 1 .
237  CZ    CZ    . PHE PHE PHE A A 30  30  . 0.1714 0.2042 0.1535 -0.0200 0.0537  -
0.0467 1 .
238  CE2   CE2   . PHE PHE PHE A A 30  30  . 0.1637 0.1930 0.1410 0.0217  0.0813  -
0.0202 1 .
239  CD2   CD2   . PHE PHE PHE A A 30  30  . 0.1503 0.2060 0.1053 -0.0092 0.0429  -
0.0229 1 .
240  C     C     . PHE PHE PHE A A 30  30  . 0.1130 0.1278 0.1669 0.0025  0.0350  -
0.0227 1 .
241  O     O     . PHE PHE PHE A A 30  30  . 0.1748 0.1292 0.2606 -0.0294 0.0635  -
0.0360 1 .
242  N     N     . ARG ARG ARG A A 31  31  . 0.0888 0.1211 0.1272 -0.0127 0.0230  -
0.0119 1 .
243  CA    CA    . ARG ARG ARG A A 31  31  . 0.0842 0.1105 0.1175 -0.0043 0.0205
0.0054  1 .
244  CB    CB    . ARG ARG ARG A A 31  31  . 0.1131 0.1057 0.1342 -0.0030 0.0243
0.0137  1 .
245  CG    CG    . ARG ARG ARG A A 31  31  . 0.1212 0.1539 0.0779 -0.0137 0.0111
0.0250  1 .
246  CD    CD    . ARG ARG ARG A A 31  31  . 0.1523 0.1228 0.1735 -0.0159 -0.0085
0.0253  1 .
247  NE    NE    . ARG ARG ARG A A 31  31  . 0.1303 0.1661 0.1253 0.0142  0.0093
0.0260  1 .
248  CZ    CZ    . ARG ARG ARG A A 31  31  . 0.1964 0.1815 0.1486 0.0120  0.0423
0.0121  1 .
249  NH1   NH1   . ARG ARG ARG A A 31  31  . 0.2334 0.1763 0.1669 0.0145  0.0377  -
0.0030 1 .
250  NH2   NH2   . ARG ARG ARG A A 31  31  . 0.2231 0.2799 0.1507 -0.0198 0.0063  -
0.0263 1 .
251  C     C     . ARG ARG ARG A A 31  31  . 0.0915 0.0899 0.1047 -0.0021 0.0146
0.0046  1 .
252  O     O     . ARG ARG ARG A A 31  31  . 0.1025 0.1387 0.1291 0.0056  0.0049  -
0.0036 1 .
253  N     N     . ALA ALA ALA A A 32  32  . 0.0870 0.0916 0.1010 -0.0217 0.0177
0.0093  1 .
254  CA    CA    . ALA ALA ALA A A 32  32  . 0.0702 0.0950 0.0795 0.0038  -0.0022
0.0228  1 .
255  CB    CB    . ALA ALA ALA A A 32  32  . 0.1150 0.1252 0.1015 -0.0028 0.0114
0.0370  1 .
256  C     C     . ALA ALA ALA A A 32  32  . 0.0947 0.0908 0.0763 0.0103  -0.0112
0.0061  1 .
257  O     O     . ALA ALA ALA A A 32  32  . 0.1099 0.0927 0.1127 -0.0115 0.0081  -
0.0328 1 .
258  N     N     . ALA ALA ALA A A 33  33  . 0.0908 0.0730 0.1007 0.0100  0.0032
0.0046  1 .
259  CA    CA    . ALA ALA ALA A A 33  33  . 0.0979 0.0980 0.0952 -0.0064 -0.0008
0.0140  1 .
260  CB    CB    . ALA ALA ALA A A 33  33  . 0.1307 0.0865 0.0983 -0.0023 0.0014
0.0155  1 .
261  C     C     . ALA ALA ALA A A 33  33  . 0.0935 0.0934 0.0925 -0.0061 -0.0015 -
0.0018 1 .
262  O     O     . ALA ALA ALA A A 33  33  . 0.0877 0.1150 0.1027 0.0060  -0.0051 -
0.0115 1 .
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263  N     N     . VAL VAL VAL A A 34  34  . 0.0868 0.0989 0.0937 0.0058  -0.0111
0.0037  1 .
264  CA    CA    . VAL VAL VAL A A 34  34  . 0.0930 0.0993 0.1071 0.0094  0.0005  -
0.0071 1 .
265  CB    CB    . VAL VAL VAL A A 34  34  . 0.0853 0.0860 0.1274 0.0158  0.0100  -
0.0170 1 .
266  CG1   CG1   . VAL VAL VAL A A 34  34  . 0.0930 0.0716 0.1253 0.0241  -0.0037
0.0030  1 .
267  CG2   CG2   . VAL VAL VAL A A 34  34  . 0.1098 0.0859 0.1161 -0.0182 0.0041  -
0.0113 1 .
268  C     C     . VAL VAL VAL A A 34  34  . 0.0939 0.0833 0.0917 0.0178  -0.0042 -
0.0030 1 .
269  O     O     . VAL VAL VAL A A 34  34  . 0.0858 0.1073 0.0788 -0.0025 0.0175  -
0.0063 1 .
270  N     N     . PRO PRO PRO A A 35  35  . 0.0880 0.0851 0.0830 0.0094  0.0032  -
0.0065 1 .
271  CA    CA    . PRO PRO PRO A A 35  35  . 0.0770 0.0674 0.0912 0.0069  0.0005  -
0.0138 1 .
272  CB    CB    . PRO PRO PRO A A 35  35  . 0.1032 0.0854 0.0666 0.0038  0.0052
0.0002  1 .
273  CG    CG    . PRO PRO PRO A A 35  35  . 0.0698 0.0738 0.0867 -0.0023 0.0124
0.0175  1 .
274  CD    CD    . PRO PRO PRO A A 35  35  . 0.1097 0.0939 0.0628 -0.0099 -0.0005 -
0.0152 1 .
275  C     C     . PRO PRO PRO A A 35  35  . 0.0806 0.0942 0.1146 -0.0039 0.0009
0.0079  1 .
276  O     O     . PRO PRO PRO A A 35  35  . 0.0949 0.1083 0.1408 -0.0052 0.0063
0.0044  1 .
277  N     N     . SER SER SER A A 36  36  . 0.0728 0.1236 0.1078 -0.0028 -0.0048
0.0122  1 .
278  CA    CA    . SER SER SER A A 36  36  . 0.1059 0.0898 0.1102 0.0066  0.0055  -
0.0003 1 .
279  CB    CB    . SER SER SER A A 36  36  . 0.1001 0.1302 0.1126 0.0407  0.0068  -
0.0207 1 .
280  OG    OG    . SER SER SER A A 36  36  . 0.0954 0.1229 0.1408 0.0076  0.0127  -
0.0365 1 .
281  C     C     . SER SER SER A A 36  36  . 0.0847 0.0844 0.0993 0.0141  -0.0023 -
0.0040 1 .
282  O     O     . SER SER SER A A 36  36  . 0.0874 0.0898 0.1005 0.0149  -0.0079
0.0066  1 .
283  N     N     . GLY GLY GLY A A 37  37  . 0.0874 0.0805 0.0937 -0.0016 -0.0113 -
0.0191 1 .
284  CA    CA    . GLY GLY GLY A A 37  37  . 0.0862 0.0853 0.1038 -0.0121 0.0097
0.0163  1 .
285  C     C     . GLY GLY GLY A A 37  37  . 0.0974 0.1095 0.1000 0.0128  -0.0033
0.0011  1 .
286  O     O     . GLY GLY GLY A A 37  37  . 0.1006 0.1266 0.1207 0.0085  0.0018
0.0018  1 .
287  N     N     . ALA ALA ALA A A 38  38  . 0.0944 0.0940 0.1051 0.0113  0.0117
0.0191  1 .
288  CA    CA    . ALA ALA ALA A A 38  38  . 0.0750 0.0928 0.0808 -0.0018 0.0128
0.0250  1 .
289  CB    CB    . ALA ALA ALA A A 38  38  . 0.1118 0.0996 0.0914 0.0098  0.0387
0.0245  1 .
290  C     C     . ALA ALA ALA A A 38  38  . 0.0897 0.1035 0.0943 0.0002  -0.0019 -
0.0140 1 .
291  O     O     . ALA ALA ALA A A 38  38  . 0.1406 0.1078 0.1194 0.0026  0.0086
0.0034  1 .
292  N     N     . SER SER SER A A 39  39  . 0.1010 0.0905 0.0685 -0.0023 -0.0015
0.0123  1 .
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293  CA    CA    . SER SER SER A A 39  39  . 0.0824 0.0907 0.1022 0.0006  0.0034  -
0.0049 1 .
294  CB    CB    . SER SER SER A A 39  39  . 0.0876 0.1039 0.1071 0.0118  0.0025  -
0.0008 1 .
295  OG    OG    . SER SER SER A A 39  39  . 0.0785 0.1074 0.1008 0.0166  0.0099
0.0086  1 .
296  C     C     . SER SER SER A A 39  39  . 0.0839 0.1041 0.0965 0.0071  0.0050  -
0.0005 1 .
297  O     O     . SER SER SER A A 39  39  . 0.1015 0.0936 0.0921 0.0171  0.0085
0.0078  1 .
298  N     N     . THR THR THR A A 40  40  . 0.1223 0.0945 0.1050 -0.0015 -0.0010
0.0045  1 .
299  CA    CA    . THR THR THR A A 40  40  . 0.1041 0.1115 0.1192 0.0025  -0.0126
0.0045  1 .
300  CB    CB    . THR THR THR A A 40  40  . 0.1161 0.1259 0.1250 0.0008  0.0039  -
0.0076 1 .
301  OG1   OG1   . THR THR THR A A 40  40  . 0.1252 0.1348 0.1638 0.0173  0.0241  -
0.0299 1 .
302  CG2   CG2   . THR THR THR A A 40  40  . 0.1150 0.1352 0.1066 -0.0034 -0.0204
0.0160  1 .
303  C     C     . THR THR THR A A 40  40  . 0.1225 0.1315 0.1083 0.0091  0.0041
0.0147  1 .
304  O     O     . THR THR THR A A 40  40  . 0.1250 0.1377 0.1445 0.0180  0.0029
0.0243  1 .
305  N     N     . GLY GLY GLY A A 41  41  . 0.1382 0.1091 0.1042 0.0102  -0.0037
0.0283  1 .
306  CA    CA    . GLY GLY GLY A A 41  41  . 0.1349 0.1257 0.1389 0.0093  -0.0294
0.0176  1 .
307  C     C     . GLY GLY GLY A A 41  41  . 0.1205 0.1147 0.1441 0.0007  -0.0064
0.0068  1 .
308  O     O     . GLY GLY GLY A A 41  41  . 0.1228 0.1245 0.1347 -0.0033 -0.0022 -
0.0001 1 .
309  N     N     . ILE ILE ILE A A 42  42  . 0.1107 0.1114 0.1420 0.0100  -0.0091
0.0109  1 .
310  CA    CA    . ILE ILE ILE A A 42  42  . 0.1016 0.1100 0.1546 0.0044  -0.0098
0.0024  1 .
311  CB    CB    . ILE ILE ILE A A 42  42  . 0.1181 0.1670 0.1758 0.0124  -0.0159
0.0339  1 .
312  CG1   CG1   . ILE ILE ILE A A 42  42  . 0.1241 0.1302 0.1698 0.0478  -0.0122 -
0.0168 1 .
313  CD    CD    . ILE ILE ILE A A 42  42  . 0.1128 0.1866 0.2964 0.0419  0.0111
0.0075  1 .
314  CG2   CG2   . ILE ILE ILE A A 42  42  . 0.1476 0.1891 0.2253 -0.0125 0.0073
0.0223  1 .
315  C     C     . ILE ILE ILE A A 42  42  . 0.1196 0.1290 0.1449 0.0118  -0.0054
0.0017  1 .
316  O     O     . ILE ILE ILE A A 42  42  . 0.1424 0.1537 0.1742 0.0110  0.0167  -
0.0031 1 .
317  N     N     . TYR TYR TYR A A 43  43  . 0.1200 0.1211 0.1208 0.0132  -0.0088
0.0248  1 .
318  CA    CA    . TYR TYR TYR A A 43  43  . 0.0935 0.1114 0.1031 0.0082  -0.0020
0.0097  1 .
319  CB    CB    . TYR TYR TYR A A 43  43  . 0.1241 0.1252 0.0988 0.0237  -0.0281 -
0.0086 1 .
320  CG    CG    . TYR TYR TYR A A 43  43  . 0.1261 0.1227 0.1017 0.0037  -0.0115
0.0075  1 .
321  CD1   CD1   . TYR TYR TYR A A 43  43  . 0.1187 0.1512 0.1184 -0.0187 -0.0106
0.0269  1 .
322  CE1   CE1   . TYR TYR TYR A A 43  43  . 0.1362 0.1371 0.1888 0.0306  -0.0318
0.0118  1 .
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323  CZ    CZ    . TYR TYR TYR A A 43  43  . 0.1259 0.1669 0.2093 0.0406  -0.0568 -
0.0175 1 .
324  OH    OH    . TYR TYR TYR A A 43  43  . 0.1372 0.2567 0.2352 0.0789  -0.1040
0.0085  1 .
325  CE2   CE2   . TYR TYR TYR A A 43  43  . 0.1437 0.1818 0.2204 0.0098  -0.0535 -
0.0009 1 .
326  CD2   CD2   . TYR TYR TYR A A 43  43  . 0.1462 0.1628 0.2060 0.0400  -0.0226
0.0072  1 .
327  C     C     . TYR TYR TYR A A 43  43  . 0.0898 0.1047 0.1091 0.0066  -0.0043
0.0036  1 .
328  O     O     . TYR TYR TYR A A 43  43  . 0.1370 0.1152 0.1364 0.0146  -0.0050
0.0265  1 .
329  N     N     . GLU GLU GLU A A 44  44  . 0.1028 0.1028 0.1240 0.0152  -0.0029
0.0154  1 .
330  CA    CA    . GLU GLU GLU A A 44  44  . 0.1037 0.0866 0.1201 0.0011  -0.0089
0.0258  1 .
331  CB    CB    . GLU GLU GLU A A 44  44  . 0.1115 0.1007 0.1324 -0.0064 -0.0139
0.0196  1 .
332  CG    CG    . GLU GLU GLU A A 44  44  . 0.0786 0.0941 0.1366 -0.0118 -0.0051
0.0131  1 .
333  CD    CD    . GLU GLU GLU A A 44  44  . 0.1038 0.1290 0.1152 0.0068  -0.0204 -
0.0002 1 .
334  OE1   OE1   . GLU GLU GLU A A 44  44  . 0.1304 0.1233 0.1504 0.0278  -0.0082
0.0218  1 .
335  OE2   OE2   . GLU GLU GLU A A 44  44  . 0.0994 0.1094 0.1241 0.0144  -0.0088
0.0114  1 .
336  C     C     . GLU GLU GLU A A 44  44  . 0.1208 0.1092 0.1095 0.0098  -0.0102
0.0135  1 .
337  O     O     . GLU GLU GLU A A 44  44  . 0.1296 0.1240 0.1229 0.0064  0.0020
0.0071  1 .
338  N     N     . ALA ALA ALA A A 45  45  . 0.1070 0.1002 0.1039 -0.0014 -0.0117
0.0114  1 .
339  CA    CA    . ALA ALA ALA A A 45  45  . 0.1047 0.1020 0.1017 0.0072  -0.0026
0.0014  1 .
340  CB    CB    . ALA ALA ALA A A 45  45  . 0.0934 0.1458 0.1183 0.0134  0.0035
0.0099  1 .
341  C     C     . ALA ALA ALA A A 45  45  . 0.1246 0.1150 0.1144 0.0040  0.0006
0.0013  1 .
342  O     O     . ALA ALA ALA A A 45  45  . 0.1397 0.1241 0.1281 0.0018  -0.0161
0.0119  1 .
343  N     N     . LEU LEU LEU A A 46  46  . 0.0957 0.1093 0.1124 -0.0066 -0.0105 -
0.0121 1 .
344  CA    CA    . LEU LEU LEU A A 46  46  . 0.1499 0.1213 0.1384 0.0019  0.0039  -
0.0029 1 .
345  CB    CB    . LEU LEU LEU A A 46  46  . 0.1781 0.1372 0.1480 -0.0018 0.0247  -
0.0046 1 .
346  CG    CG    . LEU LEU LEU A A 46  46  . 0.2477 0.2284 0.2256 -0.0306 0.0525  -
0.0442 1 .
347  CD1   CD1   . LEU LEU LEU A A 46  46  . 0.2642 0.4014 0.1922 0.0056  0.0225
0.0365  1 .
348  CD2   CD2   . LEU LEU LEU A A 46  46  . 0.2233 0.2070 0.2959 0.0017  0.0824
0.0296  1 .
349  C     C     . LEU LEU LEU A A 46  46  . 0.1325 0.1345 0.1180 -0.0032 0.0049  -
0.0081 1 .
350  O     O     . LEU LEU LEU A A 46  46  . 0.1113 0.1420 0.1459 -0.0130 -0.0051
0.0097  1 .
351  N     N     . GLU GLU GLU A A 47  47  . 0.1438 0.1140 0.1008 0.0133  0.0051
0.0096  1 .
352  CA    CA    . GLU GLU GLU A A 47  47  . 0.1030 0.0943 0.1186 0.0081  -0.0200 -
0.0127 1 .
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353  CB    CB    . GLU GLU GLU A A 47  47  . 0.1019 0.1155 0.1390 -0.0019 0.0020
0.0206  1 .
354  CG    CG    . GLU GLU GLU A A 47  47  . 0.1106 0.0903 0.1396 -0.0018 -0.0234
0.0246  1 .
355  CD    CD    . GLU GLU GLU A A 47  47  . 0.1218 0.1316 0.1541 0.0053  -0.0084
0.0335  1 .
356  OE1   OE1   . GLU GLU GLU A A 47  47  . 0.1519 0.1328 0.1441 0.0143  -0.0189
0.0103  1 .
357  OE2   OE2   . GLU GLU GLU A A 47  47  . 0.1476 0.1559 0.1437 0.0071  0.0309
0.0013  1 .
358  C     C     . GLU GLU GLU A A 47  47  . 0.1006 0.1036 0.0960 -0.0022 -0.0023
0.0071  1 .
359  O     O     . GLU GLU GLU A A 47  47  . 0.1190 0.1199 0.1511 0.0035  0.0101  -
0.0056 1 .
360  N     N     . LEU LEU LEU A A 48  48  . 0.1079 0.0919 0.0994 0.0085  -0.0031
0.0007  1 .
361  CA    CA    . LEU LEU LEU A A 48  48  . 0.1149 0.0951 0.1002 0.0139  0.0022
0.0001  1 .
362  CB    CB    . LEU LEU LEU A A 48  48  . 0.1423 0.1108 0.1317 0.0137  0.0090  -
0.0098 1 .
363  CG    CG    . LEU LEU LEU A A 48  48  . 0.1148 0.1255 0.1225 0.0077  0.0084  -
0.0164 1 .
364  CD1   CD1   . LEU LEU LEU A A 48  48  . 0.1420 0.1538 0.1895 0.0384  -0.0176 -
0.0507 1 .
365  CD2   CD2   . LEU LEU LEU A A 48  48  . 0.1424 0.0833 0.1913 -0.0393 -0.0014 -
0.0148 1 .
366  C     C     . LEU LEU LEU A A 48  48  . 0.1177 0.0925 0.1206 0.0123  0.0050  -
0.0087 1 .
367  O     O     . LEU LEU LEU A A 48  48  . 0.1104 0.1094 0.1335 0.0252  -0.0069 -
0.0001 1 .
368  N     N     . ARG ARG ARG A A 49  49  . 0.1639 0.1370 0.1092 0.0133  0.0164  -
0.0027 1 .
369  CA    CA    . ARG ARG ARG A A 49  49  . 0.1648 0.1218 0.1176 0.0067  0.0276
0.0089  1 .
370  CB    CB    . ARG ARG ARG A A 49  49  . 0.1963 0.1498 0.1344 -0.0200 0.0236  -
0.0265 1 .
371  CG    CG    . ARG ARG ARG A A 49  49  . 0.2990 0.1665 0.1655 0.0132  0.0113
0.0000  1 .
372  CD    CD    . ARG ARG ARG A A 49  49  . 0.2513 0.1904 0.1337 0.1521  -0.0119 -
0.0581 1 .
373  NE    NE    . ARG ARG ARG A A 49  49  . 0.2002 0.1436 0.1660 0.0623  -0.0188 -
0.0302 1 .
374  CZ    CZ    . ARG ARG ARG A A 49  49  . 0.1845 0.1475 0.1394 0.0253  -0.0063 -
0.0074 1 .
375  NH1   NH1   . ARG ARG ARG A A 49  49  . 0.1308 0.1427 0.1544 -0.0016 -0.0050 -
0.0244 1 .
376  NH2   NH2   . ARG ARG ARG A A 49  49  . 0.1819 0.1169 0.1272 0.0269  0.0191  -
0.0072 1 .
377  C     C     . ARG ARG ARG A A 49  49  . 0.1446 0.1436 0.1268 0.0111  0.0214  -
0.0039 1 .
378  O     O     . ARG ARG ARG A A 49  49  . 0.1762 0.1482 0.1354 0.0217  0.0115
0.0138  1 .
379  N     N     . ASP ASP ASP A A 50  50  . 0.1469 0.1143 0.1190 0.0202  0.0182  -
0.0070 1 .
380  CA    CA    . ASP ASP ASP A A 50  50  . 0.1302 0.1315 0.1299 0.0225  0.0087  -
0.0125 1 .
381  CB    CB    . ASP ASP ASP A A 50  50  . 0.1365 0.1282 0.1223 0.0424  0.0176
0.0038  1 .
382  CG    CG    . ASP ASP ASP A A 50  50  . 0.1229 0.1223 0.1360 0.0226  0.0306
0.0032  1 .
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383  OD1   OD1   . ASP ASP ASP A A 50  50  . 0.1452 0.1119 0.1494 0.0303  0.0145
0.0076  1 .
384  OD2   OD2   . ASP ASP ASP A A 50  50  . 0.1452 0.1338 0.1296 0.0082  0.0019  -
0.0136 1 .
385  C     C     . ASP ASP ASP A A 50  50  . 0.1569 0.1436 0.1187 0.0198  0.0282  -
0.0102 1 .
386  O     O     . ASP ASP ASP A A 50  50  . 0.2117 0.1529 0.1777 0.0280  0.0174
0.0114  1 .
387  N     N     . GLY GLY GLY A A 51  51  . 0.1488 0.1476 0.1534 0.0185  0.0257
0.0077  1 .
388  CA    CA    . GLY GLY GLY A A 51  51  . 0.1768 0.1704 0.1896 0.0495  0.0277
0.0083  1 .
389  C     C     . GLY GLY GLY A A 51  51  . 0.2114 0.2329 0.2230 0.0415  0.0374
0.0183  1 .
390  O     O     . GLY GLY GLY A A 51  51  . 0.2273 0.2728 0.2336 0.0888  0.0579
0.0284  1 .
391  N     N     . ASP ASP ASP A A 52  52  . 0.1954 0.2071 0.1600 0.0340  0.0396
0.0020  1 .
392  CA    CA    . ASP ASP ASP A A 52  52  . 0.2545 0.2155 0.1917 0.0294  0.0478
0.0002  1 .
393  CB    CB    . ASP ASP ASP A A 52  52  . 0.2811 0.1885 0.1810 0.0226  0.0412  -
0.0138 1 .
394  CG    CG    . ASP ASP ASP A A 52  52  . 0.2905 0.1876 0.2110 0.0095  0.0293
0.0003  1 .
395  OD1   OD1   . ASP ASP ASP A A 52  52  . 0.3131 0.2691 0.2291 0.0606  0.0380  -
0.0413 1 .
396  OD2   OD2   . ASP ASP ASP A A 52  52  . 0.2957 0.2417 0.2554 0.1015  0.0722
0.0269  1 .
397  C     C     . ASP ASP ASP A A 52  52  . 0.2525 0.2300 0.2097 0.0429  0.0658
0.0076  1 .
398  O     O     . ASP ASP ASP A A 52  52  . 0.2446 0.2262 0.1664 0.0664  0.0725
0.0289  1 .
399  N     N     . LYS LYS LYS A A 53  53  . 0.2703 0.2795 0.2881 0.0477  0.0731
0.0157  1 .
400  CA    CA    . LYS LYS LYS A A 53  53  . 0.3125 0.3422 0.3344 0.0422  0.0674
0.0058  1 .
401  CB    CB    . LYS LYS LYS A A 53  53  . 0.3130 0.3591 0.3541 0.0565  0.0527
0.0215  1 .
402  CG    CG    . LYS LYS LYS A A 53  53  . 0.3870 0.4647 0.3647 0.0380  0.0295
0.0220  1 .
403  CD    CD    . LYS LYS LYS A A 53  53  . 0.5047 0.4742 0.4519 0.0001  0.0154  -
0.0165 1 .
404  CE    CE    . LYS LYS LYS A A 53  53  . 0.5361 0.5389 0.4943 0.0137  0.0086  -
0.0532 1 .
405  NZ    NZ    . LYS LYS LYS A A 53  53  . 0.5815 0.5957 0.5792 -0.0369 -0.0327 -
0.0314 1 .
406  C     C     . LYS LYS LYS A A 53  53  . 0.3039 0.3184 0.3280 0.0497  0.0646
0.0013  1 .
407  O     O     . LYS LYS LYS A A 53  53  . 0.3192 0.3731 0.3832 0.0391  0.1117
0.0275  1 .
408  N     N     . GLN GLN GLN A A 54  54  . 0.3353 0.3547 0.3440 0.0452  0.0544
0.0144  1 .
409  CA    CA    . GLN GLN GLN A A 54  54  . 0.3895 0.3649 0.3446 0.0346  0.0279
0.0126  1 .
410  CB    CB    . GLN GLN GLN A A 54  54  . 0.4126 0.3917 0.3793 0.0161  0.0141
0.0062  1 .
411  CG    CG    . GLN GLN GLN A A 54  54  . 0.4477 0.4609 0.4537 0.0251  0.0303
0.0096  1 .
412  CD    CD    . GLN GLN GLN A A 54  54  . 0.4850 0.5016 0.5323 0.0214  0.0359
0.0416  1 .
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413  OE1   OE1   . GLN GLN GLN A A 54  54  . 0.5515 0.5280 0.5641 0.0622  0.0668
0.0776  1 .
414  NE2   NE2   . GLN GLN GLN A A 54  54  . 0.5085 0.4243 0.5150 0.0582  0.0099
0.0194  1 .
415  C     C     . GLN GLN GLN A A 54  54  . 0.3762 0.3495 0.2950 0.0381  0.0236
0.0109  1 .
416  O     O     . GLN GLN GLN A A 54  54  . 0.4399 0.3739 0.2803 0.0452  0.0400
0.0180  1 .
417  N     N     . ARG ARG ARG A A 55  55  . 0.3398 0.2773 0.2408 0.0263  0.0337
0.0177  1 .
418  CA    CA    . ARG ARG ARG A A 55  55  . 0.2639 0.2300 0.1696 0.0087  0.0135
0.0184  1 .
419  CB    CB    . ARG ARG ARG A A 55  55  . 0.2972 0.2558 0.1912 -0.0063 -0.0029 -
0.0040 1 .
420  CG    CG    . ARG ARG ARG A A 55  55  . 0.2490 0.2495 0.2524 -0.0084 0.0329
0.0318  1 .
421  CD    CD    . ARG ARG ARG A A 55  55  . 0.2116 0.1820 0.2106 0.0133  0.0391
0.0010  1 .
422  NE    NE    . ARG ARG ARG A A 55  55  . 0.1885 0.1303 0.1226 0.0446  0.0405  -
0.0209 1 .
423  CZ    CZ    . ARG ARG ARG A A 55  55  . 0.1403 0.1085 0.0885 0.0210  0.0088  -
0.0027 1 .
424  NH1   NH1   . ARG ARG ARG A A 55  55  . 0.1497 0.1402 0.1259 0.0001  0.0101
0.0090  1 .
425  NH2   NH2   . ARG ARG ARG A A 55  55  . 0.1449 0.1553 0.1306 0.0335  -0.0111
0.0015  1 .
426  C     C     . ARG ARG ARG A A 55  55  . 0.1907 0.1641 0.1631 0.0139  0.0332
0.0147  1 .
427  O     O     . ARG ARG ARG A A 55  55  . 0.1734 0.1659 0.1687 0.0273  0.0416
0.0099  1 .
428  N     N     . TYR TYR TYR A A 56  56  . 0.1539 0.1346 0.1515 0.0158  0.0433  -
0.0188 1 .
429  CA    CA    . TYR TYR TYR A A 56  56  . 0.1482 0.1136 0.1343 -0.0220 0.0511  -
0.0016 1 .
430  CB    CB    . TYR TYR TYR A A 56  56  . 0.1372 0.1539 0.1401 -0.0224 0.0510
0.0012  1 .
431  CG    CG    . TYR TYR TYR A A 56  56  . 0.1293 0.1204 0.1174 -0.0195 0.0494
0.0308  1 .
432  CD1   CD1   . TYR TYR TYR A A 56  56  . 0.1357 0.1674 0.1065 -0.0356 0.0327  -
0.0021 1 .
433  CE1   CE1   . TYR TYR TYR A A 56  56  . 0.1721 0.1106 0.1036 0.0036  0.0366  -
0.0233 1 .
434  CZ    CZ    . TYR TYR TYR A A 56  56  . 0.1426 0.1248 0.1387 0.0075  0.0309
0.0068  1 .
435  OH    OH    . TYR TYR TYR A A 56  56  . 0.1807 0.1704 0.1392 0.0262  0.0397
0.0109  1 .
436  CE2   CE2   . TYR TYR TYR A A 56  56  . 0.1471 0.1383 0.1214 -0.0026 0.0261
0.0124  1 .
437  CD2   CD2   . TYR TYR TYR A A 56  56  . 0.1919 0.1198 0.1190 0.0163  0.0266
0.0102  1 .
438  C     C     . TYR TYR TYR A A 56  56  . 0.1715 0.1363 0.1705 -0.0191 0.0282
0.0076  1 .
439  O     O     . TYR TYR TYR A A 56  56  . 0.1577 0.1791 0.1958 -0.0286 0.0196
0.0197  1 .
440  N     N     . LEU LEU LEU A A 57  57  . 0.2168 0.2148 0.2256 -0.0102 0.0290
0.0250  1 .
441  CA    CA    . LEU LEU LEU A A 57  57  . 0.2384 0.2633 0.2528 -0.0128 0.0196
0.0333  1 .
442  CB    CB    . LEU LEU LEU A A 57  57  . 0.2940 0.2920 0.2962 -0.0234 -0.0005
0.0338  1 .
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443  CG    CG    . LEU LEU LEU A A 57  57  . 0.4210 0.4362 0.3677 -0.0337 0.0291
0.0342  1 .
444  CD1   CD1   . LEU LEU LEU A A 57  57  . 0.4938 0.4439 0.4235 -0.0325 -0.0019
0.0132  1 .
445  CD2   CD2   . LEU LEU LEU A A 57  57  . 0.4554 0.5686 0.4296 0.0016  0.0297  -
0.0036 1 .
446  C     C     . LEU LEU LEU A A 57  57  . 0.2168 0.2526 0.2255 0.0089  0.0217
0.0104  1 .
447  O     O     . LEU LEU LEU A A 57  57  . 0.1834 0.2945 0.2578 -0.0087 0.0353
0.0120  1 .
448  N     N     . GLY GLY GLY A A 58  58  . 0.1892 0.2110 0.2011 0.0174  0.0447
0.0165  1 .
449  CA    CA    . GLY GLY GLY A A 58  58  . 0.1671 0.1750 0.1678 0.0375  0.0420
0.0248  1 .
450  C     C     . GLY GLY GLY A A 58  58  . 0.1707 0.1605 0.1626 0.0266  0.0418
0.0161  1 .
451  O     O     . GLY GLY GLY A A 58  58  . 0.1553 0.1724 0.1490 0.0360  0.0285
0.0175  1 .
452  N     N     . LYS LYS LYS A A 59  59  . 0.1212 0.1490 0.1439 0.0144  0.0335
0.0008  1 .
453  CA    CA    . LYS LYS LYS A A 59  59  . 0.1388 0.1216 0.1410 0.0004  0.0229  -
0.0118 1 .
454  CB    CB    . LYS LYS LYS A A 59  59  . 0.1399 0.1380 0.2113 0.0046  0.0165  -
0.0180 1 .
455  CG    CG    . LYS LYS LYS A A 59  59  . 0.1428 0.2390 0.2718 -0.0133 0.0171  -
0.0295 1 .
456  CD    CD    . LYS LYS LYS A A 59  59  . 0.3996 0.4415 0.4071 0.0122  -0.0069 -
0.0577 1 .
457  CE    CE    . LYS LYS LYS A A 59  59  . 0.4860 0.4095 0.5660 0.0533  0.0213  -
0.0616 1 .
458  NZ    NZ    . LYS LYS LYS A A 59  59  . 0.4160 0.3673 0.5453 0.0925  -0.0008 -
0.0383 1 .
459  C     C     . LYS LYS LYS A A 59  59  . 0.1138 0.0987 0.1234 -0.0017 0.0049  -
0.0131 1 .
460  O     O     . LYS LYS LYS A A 59  59  . 0.1336 0.1171 0.1231 0.0057  0.0049  -
0.0063 1 .
461  N     N     . GLY GLY GLY A A 60  60  . 0.1128 0.1053 0.1153 0.0047  -0.0011
0.0017  1 .
462  CA    CA    . GLY GLY GLY A A 60  60  . 0.1110 0.1168 0.1291 -0.0030 0.0171
0.0182  1 .
463  C     C     . GLY GLY GLY A A 60  60  . 0.1115 0.1132 0.0980 0.0226  -0.0007 -
0.0036 1 .
464  O     O     . GLY GLY GLY A A 60  60  . 0.1343 0.1303 0.0915 0.0148  0.0055  -
0.0136 1 .
465  N     N     . VAL VAL VAL A A 61  61  . 0.0856 0.0718 0.0893 0.0088  0.0162
0.0026  1 .
466  CA    CA    . VAL VAL VAL A A 61  61  . 0.0968 0.0920 0.1114 0.0021  0.0216
0.0035  1 .
467  CB    CB    . VAL VAL VAL A A 61  61  . 0.1075 0.0623 0.0784 -0.0003 -0.0185 -
0.0058 1 .
468  CG1   CG1   . VAL VAL VAL A A 61  61  . 0.1027 0.0896 0.0706 -0.0003 0.0000
0.0008  1 .
469  CG2   CG2   . VAL VAL VAL A A 61  61  . 0.0887 0.1027 0.1188 -0.0026 -0.0080 -
0.0071 1 .
470  C     C     . VAL VAL VAL A A 61  61  . 0.1134 0.0807 0.1061 0.0121  0.0118  -
0.0078 1 .
471  O     O     . VAL VAL VAL A A 61  61  . 0.1318 0.0982 0.1128 -0.0017 0.0145
0.0000  1 .
472  N     N     . LEU LEU LEU A A 62  62  . 0.1461 0.0933 0.0930 -0.0021 0.0069  -
0.0070 1 .
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473  CA    CA    . LEU LEU LEU A A 62  62  . 0.1532 0.0916 0.0855 -0.0073 0.0003
0.0054  1 .
474  CB    CB    . LEU LEU LEU A A 62  62  . 0.1707 0.1029 0.1076 -0.0031 0.0244  -
0.0152 1 .
475  CG    CG    . LEU LEU LEU A A 62  62  . 0.1794 0.1142 0.1166 0.0029  0.0301  -
0.0191 1 .
476  CD1   CD1   . LEU LEU LEU A A 62  62  . 0.1916 0.1853 0.1568 -0.0708 -0.0052 -
0.0728 1 .
477  CD2   CD2   . LEU LEU LEU A A 62  62  . 0.1768 0.1847 0.2058 -0.0258 0.0368  -
0.0037 1 .
478  C     C     . LEU LEU LEU A A 62  62  . 0.1132 0.0906 0.1117 -0.0025 0.0043
0.0037  1 .
479  O     O     . LEU LEU LEU A A 62  62  . 0.1359 0.1090 0.1214 -0.0061 0.0158  -
0.0075 1 .
480  N     N     . LYS LYS LYS A A 63  63  . 0.1349 0.1048 0.0983 0.0011  0.0006
0.0045  1 .
481  CA    CA    . LYS LYS LYS A A 63  63  . 0.1148 0.0844 0.1211 -0.0073 0.0184
0.0047  1 .
482  CB    CB    . LYS LYS LYS A A 63  63  . 0.1266 0.1076 0.1290 0.0079  0.0160
0.0084  1 .
483  CG    CG    . LYS LYS LYS A A 63  63  . 0.1373 0.1281 0.1534 0.0080  0.0203  -
0.0136 1 .
484  CD    CD    . LYS LYS LYS A A 63  63  . 0.1498 0.1705 0.1547 0.0327  -0.0022
0.0040  1 .
485  CE    CE    . LYS LYS LYS A A 63  63  . 0.1928 0.1904 0.2585 0.0455  0.0343
0.0162  1 .
486  NZ    NZ    . LYS LYS LYS A A 63  63  . 0.2225 0.2069 0.2949 0.0646  -0.0126 -
0.0250 1 .
487  C     C     . LYS LYS LYS A A 63  63  . 0.1264 0.0983 0.1136 -0.0029 0.0117
0.0018  1 .
488  O     O     . LYS LYS LYS A A 63  63  . 0.1238 0.0990 0.1190 -0.0069 0.0119  -
0.0002 1 .
489  N     N     . ALA ALA ALA A A 64  64  . 0.1138 0.0883 0.0865 0.0195  0.0241
0.0039  1 .
490  CA    CA    . ALA ALA ALA A A 64  64  . 0.1256 0.0936 0.0908 -0.0106 0.0184  -
0.0056 1 .
491  CB    CB    . ALA ALA ALA A A 64  64  . 0.1745 0.0825 0.1148 -0.0222 0.0170  -
0.0143 1 .
492  C     C     . ALA ALA ALA A A 64  64  . 0.1236 0.0713 0.0967 0.0005  0.0117  -
0.0184 1 .
493  O     O     . ALA ALA ALA A A 64  64  . 0.1347 0.0960 0.1141 -0.0197 0.0071
0.0114  1 .
494  N     N     . VAL VAL VAL A A 65  65  . 0.1179 0.0860 0.0866 0.0214  -0.0063 -
0.0051 1 .
495  CA    CA    . VAL VAL VAL A A 65  65  . 0.1008 0.0844 0.0911 -0.0020 0.0134
0.0075  1 .
496  CB    CB    . VAL VAL VAL A A 65  65  . 0.1334 0.0977 0.1136 -0.0006 0.0156
0.0138  1 .
497  CG1   CG1   . VAL VAL VAL A A 65  65  . 0.1517 0.1216 0.1211 0.0181  0.0143
0.0227  1 .
498  CG2   CG2   . VAL VAL VAL A A 65  65  . 0.1117 0.0677 0.1575 -0.0061 0.0133  -
0.0102 1 .
499  C     C     . VAL VAL VAL A A 65  65  . 0.1096 0.1039 0.1005 -0.0010 -0.0090 -
0.0174 1 .
500  O     O     . VAL VAL VAL A A 65  65  . 0.1278 0.0903 0.1255 0.0073  0.0120
0.0016  1 .
501  N     N     . ASP ASP ASP A A 66  66  . 0.1310 0.0811 0.1185 0.0012  -0.0028 -
0.0175 1 .
502  CA    CA    . ASP ASP ASP A A 66  66  . 0.1588 0.1036 0.1147 -0.0026 0.0216  -
0.0028 1 .
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503  CB    CB    . ASP ASP ASP A A 66  66  . 0.1488 0.1276 0.1145 -0.0019 0.0321
0.0065  1 .
504  CG    CG    . ASP ASP ASP A A 66  66  . 0.3594 0.2524 0.2993 0.0047  0.0351
0.0161  1 .
505  OD1   OD1   . ASP ASP ASP A A 66  66  . 0.4339 0.4256 0.4734 -0.0029 0.0265
0.0154  1 .
506  OD2   OD2   . ASP ASP ASP A A 66  66  . 0.4646 0.4373 0.4919 0.1241  0.0363
0.0672  1 .
507  C     C     . ASP ASP ASP A A 66  66  . 0.1456 0.1049 0.1189 0.0045  0.0035
0.0068  1 .
508  O     O     . ASP ASP ASP A A 66  66  . 0.1278 0.1010 0.1305 0.0136  0.0041
0.0042  1 .
509  N     N     . HIS HIS HIS A A 67  67  . 0.1026 0.1020 0.1034 -0.0005 0.0143
0.0057  1 .
510  CA    CA    . HIS HIS HIS A A 67  67  . 0.1040 0.0850 0.1022 -0.0002 0.0133
0.0143  1 .
511  CB    CB    . HIS HIS HIS A A 67  67  . 0.1129 0.1234 0.1044 0.0189  0.0184  -
0.0052 1 .
512  CG    CG    . HIS HIS HIS A A 67  67  . 0.0956 0.0934 0.1403 -0.0093 -0.0014 -
0.0267 1 .
513  ND1   ND1   . HIS HIS HIS A A 67  67  . 0.1629 0.1201 0.1675 0.0029  0.0098  -
0.0026 1 .
514  CE1   CE1   . HIS HIS HIS A A 67  67  . 0.1195 0.1392 0.1589 0.0227  0.0045
0.0006  1 .
515  NE2   NE2   . HIS HIS HIS A A 67  67  . 0.1869 0.1132 0.1975 0.0098  0.0276
0.0233  1 .
516  CD2   CD2   . HIS HIS HIS A A 67  67  . 0.0962 0.1104 0.1168 0.0117  0.0030
0.0418  1 .
517  C     C     . HIS HIS HIS A A 67  67  . 0.1336 0.0977 0.0965 0.0081  0.0230  -
0.0048 1 .
518  O     O     . HIS HIS HIS A A 67  67  . 0.1253 0.0865 0.1146 -0.0032 0.0011
0.0001  1 .
519  N     N     . ILE ILE ILE A A 68  68  . 0.1055 0.0804 0.1007 0.0175  0.0096
0.0040  1 .
520  CA    CA    . ILE ILE ILE A A 68  68  . 0.1022 0.0870 0.1137 -0.0040 0.0049
0.0014  1 .
521  CB    CB    . ILE ILE ILE A A 68  68  . 0.0915 0.0611 0.0778 -0.0024 0.0022
0.0106  1 .
522  CG1   CG1   . ILE ILE ILE A A 68  68  . 0.1287 0.0934 0.0890 -0.0183 -0.0009
0.0374  1 .
523  CD    CD    . ILE ILE ILE A A 68  68  . 0.1268 0.0670 0.0901 0.0071  -0.0059
0.0383  1 .
524  CG2   CG2   . ILE ILE ILE A A 68  68  . 0.0756 0.0742 0.1013 0.0304  0.0069
0.0085  1 .
525  C     C     . ILE ILE ILE A A 68  68  . 0.0968 0.0902 0.0895 -0.0005 0.0130  -
0.0083 1 .
526  O     O     . ILE ILE ILE A A 68  68  . 0.1199 0.1050 0.1216 0.0022  -0.0090
0.0227  1 .
527  N     N     . ASN ASN ASN A A 69  69  . 0.1044 0.0763 0.1112 0.0054  -0.0058 -
0.0100 1 .
528  CA    CA    . ASN ASN ASN A A 69  69  . 0.1133 0.0809 0.1023 -0.0065 -0.0069 -
0.0040 1 .
529  CB    CB    . ASN ASN ASN A A 69  69  . 0.1429 0.0799 0.0925 -0.0007 -0.0052
0.0078  1 .
530  CG    CG    . ASN ASN ASN A A 69  69  . 0.0962 0.0979 0.1243 -0.0038 0.0126  -
0.0176 1 .
531  OD1   OD1   . ASN ASN ASN A A 69  69  . 0.1380 0.0972 0.1235 -0.0227 0.0238  -
0.0099 1 .
532  ND2   ND2   . ASN ASN ASN A A 69  69  . 0.1438 0.1198 0.0958 0.0000  -0.0088 -
0.0026 1 .
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533  C     C     . ASN ASN ASN A A 69  69  . 0.1179 0.0969 0.1309 -0.0051 -0.0066 -
0.0080 1 .
534  O     O     . ASN ASN ASN A A 69  69  . 0.1404 0.0888 0.1491 -0.0130 -0.0112
0.0039  1 .
535  N     N     . SER SER SER A A 70  70  . 0.1421 0.0785 0.1255 0.0019  -0.0027 -
0.0044 1 .
536  CA    CA    . SER SER SER A A 70  70  . 0.1596 0.0801 0.1455 0.0164  -0.0042 -
0.0029 1 .
537  CB    CB    . SER SER SER A A 70  70  . 0.1842 0.1014 0.0794 -0.0060 0.0357
0.0200  1 .
538  OG    OG    . SER SER SER A A 70  70  . 0.3701 0.2483 0.2088 0.0145  0.0130  -
0.0031 1 .
539  C     C     . SER SER SER A A 70  70  . 0.1194 0.1072 0.0975 0.0054  -0.0192 -
0.0008 1 .
540  O     O     . SER SER SER A A 70  70  . 0.1342 0.1012 0.1208 0.0054  -0.0137 -
0.0068 1 .
541  N     N     . THR THR THR A A 71  71  . 0.1268 0.0865 0.1117 0.0046  -0.0029 -
0.0129 1 .
542  CA    CA    . THR THR THR A A 71  71  . 0.1034 0.0915 0.0937 0.0197  -0.0002
0.0044  1 .
543  CB    CB    . THR THR THR A A 71  71  . 0.0994 0.0857 0.0691 0.0369  -0.0090 -
0.0168 1 .
544  OG1   OG1   . THR THR THR A A 71  71  . 0.1233 0.0908 0.0992 0.0074  0.0082  -
0.0071 1 .
545  CG2   CG2   . THR THR THR A A 71  71  . 0.1408 0.0818 0.1265 0.0164  0.0073
0.0181  1 .
546  C     C     . THR THR THR A A 71  71  . 0.1176 0.0976 0.0929 -0.0102 -0.0021 -
0.0173 1 .
547  O     O     . THR THR THR A A 71  71  . 0.1348 0.0812 0.1086 -0.0038 0.0172
0.0007  1 .
548  N     N     . ILE ILE ILE A A 72  72  . 0.1088 0.0724 0.0864 -0.0061 0.0104  -
0.0035 1 .
549  CA    CA    . ILE ILE ILE A A 72  72  . 0.0885 0.0935 0.0913 -0.0122 0.0017  -
0.0079 1 .
550  CB    CB    . ILE ILE ILE A A 72  72  . 0.1055 0.0736 0.0992 -0.0088 0.0086  -
0.0093 1 .
551  CG1   CG1   . ILE ILE ILE A A 72  72  . 0.1107 0.0824 0.1222 -0.0302 -0.0030
0.0081  1 .
552  CD    CD    . ILE ILE ILE A A 72  72  . 0.0972 0.1165 0.1469 -0.0421 -0.0386
0.0059  1 .
553  CG2   CG2   . ILE ILE ILE A A 72  72  . 0.1403 0.1254 0.1198 -0.0246 0.0199  -
0.0330 1 .
554  C     C     . ILE ILE ILE A A 72  72  . 0.1024 0.0909 0.1053 0.0008  0.0024
0.0060  1 .
555  O     O     . ILE ILE ILE A A 72  72  . 0.1357 0.1060 0.0940 -0.0180 0.0222  -
0.0110 1 .
556  N     N     . ALA ALA ALA A A 73  73  . 0.1076 0.0815 0.0995 -0.0043 -0.0093
0.0044  1 .
557  CA    CA    . ALA ALA ALA A A 73  73  . 0.1158 0.0969 0.1211 -0.0089 0.0095
0.0094  1 .
558  CB    CB    . ALA ALA ALA A A 73  73  . 0.1437 0.1001 0.1551 -0.0119 -0.0136 -
0.0090 1 .
559  C     C     . ALA ALA ALA A A 73  73  . 0.1146 0.1015 0.1132 -0.0052 0.0005  -
0.0095 1 .
560  O     O     . ALA ALA ALA A A 73  73  . 0.1384 0.0879 0.1371 -0.0079 0.0155  -
0.0022 1 .
561  N     N     . PRO PRO PRO A A 74  74  . 0.1137 0.0923 0.0922 0.0001  0.0043
0.0008  1 .
562  CA    CA    . PRO PRO PRO A A 74  74  . 0.1181 0.0895 0.0880 -0.0109 -0.0006 -
0.0090 1 .
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563  CB    CB    . PRO PRO PRO A A 74  74  . 0.1075 0.1136 0.1338 -0.0053 0.0117  -
0.0162 1 .
564  CG    CG    . PRO PRO PRO A A 74  74  . 0.1051 0.0985 0.1326 0.0188  0.0077
0.0049  1 .
565  CD    CD    . PRO PRO PRO A A 74  74  . 0.0931 0.0926 0.1045 0.0169  0.0363
0.0053  1 .
566  C     C     . PRO PRO PRO A A 74  74  . 0.0887 0.0590 0.0842 -0.0161 0.0060  -
0.0084 1 .
567  O     O     . PRO PRO PRO A A 74  74  . 0.0867 0.1001 0.1052 0.0049  0.0202  -
0.0014 1 .
568  N     N     . ALA ALA ALA A A 75  75  . 0.1202 0.0910 0.0920 0.0085  -0.0085
0.0044  1 .
569  CA    CA    . ALA ALA ALA A A 75  75  . 0.1023 0.0698 0.0946 0.0055  0.0122  -
0.0102 1 .
570  CB    CB    . ALA ALA ALA A A 75  75  . 0.1259 0.1104 0.1252 -0.0017 0.0028  -
0.0072 1 .
571  C     C     . ALA ALA ALA A A 75  75  . 0.1270 0.0883 0.1027 0.0054  0.0209  -
0.0098 1 .
572  O     O     . ALA ALA ALA A A 75  75  . 0.1319 0.1181 0.1206 -0.0091 0.0118  -
0.0158 1 .
573  N     N     . LEU LEU LEU A A 76  76  . 0.1404 0.0907 0.0882 -0.0106 0.0169
0.0023  1 .
574  CA    CA    . LEU LEU LEU A A 76  76  . 0.1187 0.0833 0.1455 0.0007  -0.0016 -
0.0152 1 .
575  CB    CB    . LEU LEU LEU A A 76  76  . 0.1253 0.1017 0.1452 -0.0265 0.0185  -
0.0078 1 .
576  CG    CG    . LEU LEU LEU A A 76  76  . 0.1363 0.1068 0.1199 -0.0113 0.0068
0.0078  1 .
577  CD1   CD1   . LEU LEU LEU A A 76  76  . 0.1311 0.1022 0.1562 -0.0320 0.0304  -
0.0077 1 .
578  CD2   CD2   . LEU LEU LEU A A 76  76  . 0.1870 0.1532 0.1639 -0.0303 0.0018
0.0306  1 .
579  C     C     . LEU LEU LEU A A 76  76  . 0.1075 0.0846 0.1127 -0.0099 0.0081  -
0.0039 1 .
580  O     O     . LEU LEU LEU A A 76  76  . 0.1218 0.1097 0.1129 -0.0119 0.0109  -
0.0025 1 .
581  N     N     . ILE ILE ILE A A 77  77  . 0.1196 0.0912 0.1297 -0.0046 -0.0121 -
0.0143 1 .
582  CA    CA    . ILE ILE ILE A A 77  77  . 0.1277 0.1166 0.1127 -0.0059 0.0059
0.0007  1 .
583  CB    CB    . ILE ILE ILE A A 77  77  . 0.1333 0.1082 0.1128 -0.0353 -0.0146 -
0.0017 1 .
584  CG1   CG1   . ILE ILE ILE A A 77  77  . 0.1637 0.1089 0.1268 -0.0291 0.0131
0.0346  1 .
585  CD    CD    . ILE ILE ILE A A 77  77  . 0.2040 0.1231 0.1610 0.0232  0.0200
0.0289  1 .
586  CG2   CG2   . ILE ILE ILE A A 77  77  . 0.1032 0.1577 0.1234 0.0070  -0.0197
0.0111  1 .
587  C     C     . ILE ILE ILE A A 77  77  . 0.1184 0.1204 0.1251 -0.0153 -0.0021 -
0.0046 1 .
588  O     O     . ILE ILE ILE A A 77  77  . 0.1314 0.1338 0.1501 -0.0091 0.0245
0.0022  1 .
589  N     N     . SER SER SER A A 78  78  . 0.1441 0.1040 0.1233 -0.0283 -0.0072
0.0186  1 .
590  CA    CA    . SER SER SER A A 78  78  . 0.1438 0.0922 0.1164 -0.0238 0.0089
0.0078  1 .
591  CB    CB    . SER SER SER A A 78  78  . 0.1082 0.0937 0.1082 -0.0296 -0.0030
0.0074  1 .
592  OG    OG    . SER SER SER A A 78  78  . 0.1968 0.0945 0.1532 -0.0295 -0.0501
0.0029  1 .
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593  C     C     . SER SER SER A A 78  78  . 0.1473 0.1440 0.1400 -0.0185 0.0187  -
0.0163 1 .
594  O     O     . SER SER SER A A 78  78  . 0.1668 0.1454 0.1627 -0.0352 0.0267  -
0.0199 1 .
595  N     N     . SER SER SER A A 79  79  . 0.1315 0.0852 0.1018 -0.0059 0.0094  -
0.0113 1 .
596  CA    CA    . SER SER SER A A 79  79  . 0.1451 0.1291 0.1089 -0.0077 0.0093  -
0.0045 1 .
597  CB    CB    . SER SER SER A A 79  79  . 0.1382 0.0941 0.1507 -0.0085 -0.0048 -
0.0118 1 .
598  OG    OG    . SER SER SER A A 79  79  . 0.1366 0.1131 0.1308 -0.0049 0.0191  -
0.0080 1 .
599  C     C     . SER SER SER A A 79  79  . 0.1507 0.1164 0.1387 -0.0141 0.0103
0.0079  1 .
600  O     O     . SER SER SER A A 79  79  . 0.1640 0.1558 0.1458 -0.0310 0.0244
0.0069  1 .
601  N     N     . GLY GLY GLY A A 80  80  . 0.1228 0.1267 0.1510 -0.0101 0.0090  -
0.0073 1 .
602  CA    CA    . GLY GLY GLY A A 80  80  . 0.1323 0.1486 0.1618 -0.0043 0.0276  -
0.0245 1 .
603  C     C     . GLY GLY GLY A A 80  80  . 0.1513 0.1523 0.1818 -0.0070 0.0180  -
0.0078 1 .
604  O     O     . GLY GLY GLY A A 80  80  . 0.1522 0.1845 0.2242 0.0026  0.0239  -
0.0457 1 .
605  N     N     . LEU LEU LEU A A 81  81  . 0.1700 0.1571 0.1567 -0.0057 0.0156  -
0.0171 1 .
606  CA    CA    . LEU LEU LEU A A 81  81  . 0.1689 0.1469 0.1611 -0.0115 0.0158  -
0.0217 1 .
607  CB    CB    . LEU LEU LEU A A 81  81  . 0.1730 0.1587 0.1542 -0.0065 0.0081  -
0.0259 1 .
608  CG    CG    . LEU LEU LEU A A 81  81  . 0.2194 0.1232 0.1291 -0.0234 0.0248  -
0.0072 1 .
609  CD1   CD1   . LEU LEU LEU A A 81  81  . 0.2351 0.1478 0.1631 -0.0049 -0.0193 -
0.0035 1 .
610  CD2   CD2   . LEU LEU LEU A A 81  81  . 0.3248 0.1870 0.1811 0.0082  0.0605
0.0153  1 .
611  C     C     . LEU LEU LEU A A 81  81  . 0.1706 0.1664 0.1578 -0.0053 0.0355  -
0.0071 1 .
612  O     O     . LEU LEU LEU A A 81  81  . 0.1859 0.1576 0.1476 -0.0149 0.0074  -
0.0032 1 .
613  N     N     . SER SER SER A A 82  82  . 0.1581 0.1153 0.1765 -0.0062 0.0225  -
0.0192 1 .
614  CA    CA    . SER SER SER A A 82  82  . 0.1404 0.1267 0.1892 -0.0084 0.0416  -
0.0142 1 .
615  CB    CB    . SER SER SER A A 82  82  . 0.1689 0.1334 0.2111 0.0082  0.0841  -
0.0136 1 .
616  OG    OG    . SER SER SER A A 82  82  . 0.1862 0.1434 0.2353 -0.0126 0.0664
0.0182  1 .
617  C     C     . SER SER SER A A 82  82  . 0.1165 0.1431 0.1437 -0.0003 0.0236  -
0.0075 1 .
618  O     O     . SER SER SER A A 82  82  . 0.1618 0.1206 0.1442 -0.0041 0.0287
0.0178  1 .
619  N     N     . VAL VAL VAL A A 83  83  . 0.1514 0.1360 0.1439 -0.0023 0.0259
0.0052  1 .
620  CA    CA    . VAL VAL VAL A A 83  83  . 0.1433 0.1595 0.1524 -0.0049 0.0166
0.0075  1 .
621  CB    CB    . VAL VAL VAL A A 83  83  . 0.1127 0.1431 0.1190 0.0175  0.0040
0.0060  1 .
622  CG1   CG1   . VAL VAL VAL A A 83  83  . 0.1643 0.1917 0.1435 -0.0063 0.0468  -
0.0254 1 .
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623  CG2   CG2   . VAL VAL VAL A A 83  83  . 0.1157 0.1419 0.1826 0.0334  0.0166  -
0.0022 1 .
624  C     C     . VAL VAL VAL A A 83  83  . 0.1307 0.1501 0.1510 -0.0113 0.0139  -
0.0121 1 .
625  O     O     . VAL VAL VAL A A 83  83  . 0.1432 0.1381 0.1603 -0.0268 0.0311
0.0033  1 .
626  N     N     . VAL VAL VAL A A 84  84  . 0.1331 0.1323 0.1299 -0.0041 0.0197  -
0.0047 1 .
627  CA    CA    . VAL VAL VAL A A 84  84  . 0.0921 0.1489 0.1436 -0.0164 0.0185  -
0.0126 1 .
628  CB    CB    . VAL VAL VAL A A 84  84  . 0.1368 0.1239 0.1386 -0.0042 0.0496  -
0.0051 1 .
629  CG1   CG1   . VAL VAL VAL A A 84  84  . 0.1056 0.1444 0.1781 0.0047  0.0178  -
0.0136 1 .
630  CG2   CG2   . VAL VAL VAL A A 84  84  . 0.2501 0.1486 0.2337 -0.0234 0.0574
0.0371  1 .
631  C     C     . VAL VAL VAL A A 84  84  . 0.1608 0.1594 0.1512 -0.0139 0.0303  -
0.0027 1 .
632  O     O     . VAL VAL VAL A A 84  84  . 0.1629 0.1718 0.1694 -0.0279 0.0158
0.0051  1 .
633  N     N     . GLU GLU GLU A A 85  85  . 0.1387 0.1511 0.1571 -0.0197 0.0196
0.0130  1 .
634  CA    CA    . GLU GLU GLU A A 85  85  . 0.1460 0.1461 0.1769 -0.0048 0.0195
0.0037  1 .
635  CB    CB    . GLU GLU GLU A A 85  85  . 0.1531 0.1531 0.1828 -0.0262 0.0353
0.0107  1 .
636  CG    CG    . GLU GLU GLU A A 85  85  . 0.1792 0.2079 0.2475 -0.0435 0.0586
0.0283  1 .
637  CD    CD    . GLU GLU GLU A A 85  85  . 0.2870 0.3281 0.3093 -0.0434 0.0181
0.0168  1 .
638  OE1   OE1   . GLU GLU GLU A A 85  85  . 0.3300 0.3277 0.2909 -0.0277 0.0233
0.0944  1 .
639  OE2   OE2   . GLU GLU GLU A A 85  85  . 0.2770 0.4128 0.4205 -0.0153 0.0321
0.0550  1 .
640  C     C     . GLU GLU GLU A A 85  85  . 0.1500 0.1533 0.1506 -0.0116 0.0263
0.0013  1 .
641  O     O     . GLU GLU GLU A A 85  85  . 0.1767 0.1249 0.1397 -0.0283 0.0063
0.0123  1 .
642  N     N     . GLN GLN GLN A A 86  86  . 0.1238 0.1440 0.1227 -0.0292 0.0251
0.0091  1 .
643  CA    CA    . GLN GLN GLN A A 86  86  . 0.1028 0.1295 0.1164 -0.0176 0.0185  -
0.0126 1 .
644  CB    CB    . GLN GLN GLN A A 86  86  . 0.1067 0.1029 0.1490 -0.0339 0.0235
0.0085  1 .
645  CG    CG    . GLN GLN GLN A A 86  86  . 0.1275 0.1367 0.1167 -0.0423 0.0311
0.0479  1 .
646  CD    CD    . GLN GLN GLN A A 86  86  . 0.1151 0.1015 0.1280 -0.0147 0.0035
0.0257  1 .
647  OE1   OE1   . GLN GLN GLN A A 86  86  . 0.1374 0.1264 0.1356 -0.0068 0.0182
0.0271  1 .
648  NE2   NE2   . GLN GLN GLN A A 86  86  . 0.1429 0.1341 0.1157 -0.0174 0.0374
0.0100  1 .
649  C     C     . GLN GLN GLN A A 86  86  . 0.1432 0.1330 0.1263 -0.0060 0.0141
0.0120  1 .
650  O     O     . GLN GLN GLN A A 86  86  . 0.1435 0.1348 0.1242 -0.0142 0.0292
0.0088  1 .
651  N     N     . GLU GLU GLU A A 87  87  . 0.1304 0.1268 0.1284 -0.0058 0.0077
0.0056  1 .
652  CA    CA    . GLU GLU GLU A A 87  87  . 0.1637 0.1341 0.1440 0.0009  -0.0067
0.0025  1 .
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653  CB    CB    . GLU GLU GLU A A 87  87  . 0.1866 0.1438 0.1376 -0.0007 -0.0070
0.0098  1 .
654  CG    CG    . GLU GLU GLU A A 87  87  . 0.2747 0.2659 0.2072 0.0395  -0.0518
0.0004  1 .
655  CD    CD    . GLU GLU GLU A A 87  87  . 0.3887 0.4000 0.2521 0.0553  -0.0816 -
0.0181 1 .
656  OE1   OE1   . GLU GLU GLU A A 87  87  . 0.4876 0.5075 0.2421 0.0489  -0.1376
0.0053  1 .
657  OE2   OE2   . GLU GLU GLU A A 87  87  . 0.4696 0.5044 0.2543 0.0388  -0.0219 -
0.0335 1 .
658  C     C     . GLU GLU GLU A A 87  87  . 0.1354 0.1207 0.1308 -0.0069 0.0122
0.0059  1 .
659  O     O     . GLU GLU GLU A A 87  87  . 0.1364 0.1303 0.1391 0.0020  -0.0037
0.0067  1 .
660  N     N     . LYS LYS LYS A A 88  88  . 0.1406 0.1273 0.1385 -0.0068 0.0028
0.0050  1 .
661  CA    CA    . LYS LYS LYS A A 88  88  . 0.1541 0.1459 0.1201 -0.0242 0.0138  -
0.0056 1 .
662  CB    CB    . LYS LYS LYS A A 88  88  . 0.1874 0.1167 0.1558 -0.0261 0.0259  -
0.0049 1 .
663  CG    CG    . LYS LYS LYS A A 88  88  . 0.2363 0.2344 0.1529 -0.0197 -0.0165 -
0.0149 1 .
664  CD    CD    . LYS LYS LYS A A 88  88  . 0.3549 0.3386 0.3720 -0.0347 0.0333  -
0.0323 1 .
665  CE    CE    . LYS LYS LYS A A 88  88  . 0.4235 0.4699 0.4153 -0.0333 0.0660  -
0.0027 1 .
666  NZ    NZ    . LYS LYS LYS A A 88  88  . 0.4199 0.5119 0.4470 -0.0409 0.0283  -
0.0389 1 .
667  C     C     . LYS LYS LYS A A 88  88  . 0.1488 0.1291 0.1355 -0.0236 0.0108
0.0009  1 .
668  O     O     . LYS LYS LYS A A 88  88  . 0.1642 0.1162 0.1335 -0.0269 0.0230
0.0015  1 .
669  N     N     . LEU LEU LEU A A 89  89  . 0.1362 0.1151 0.1135 -0.0164 0.0054
0.0090  1 .
670  CA    CA    . LEU LEU LEU A A 89  89  . 0.1305 0.1086 0.1053 -0.0126 0.0123
0.0065  1 .
671  CB    CB    . LEU LEU LEU A A 89  89  . 0.1005 0.1172 0.1480 -0.0183 0.0083
0.0283  1 .
672  CG    CG    . LEU LEU LEU A A 89  89  . 0.1127 0.1344 0.1129 -0.0129 0.0218  -
0.0077 1 .
673  CD1   CD1   . LEU LEU LEU A A 89  89  . 0.1420 0.1489 0.1654 -0.0109 0.0331
0.0131  1 .
674  CD2   CD2   . LEU LEU LEU A A 89  89  . 0.1639 0.1305 0.1449 -0.0210 0.0229  -
0.0072 1 .
675  C     C     . LEU LEU LEU A A 89  89  . 0.1348 0.0925 0.1118 -0.0080 -0.0053
0.0129  1 .
676  O     O     . LEU LEU LEU A A 89  89  . 0.1323 0.1226 0.1369 -0.0047 0.0095
0.0123  1 .
677  N     N     . ASP ASP ASP A A 90  90  . 0.1313 0.1090 0.0891 -0.0154 0.0037
0.0089  1 .
678  CA    CA    . ASP ASP ASP A A 90  90  . 0.1272 0.1173 0.1139 0.0000  -0.0005
0.0023  1 .
679  CB    CB    . ASP ASP ASP A A 90  90  . 0.1153 0.0909 0.0939 -0.0106 0.0060
0.0018  1 .
680  CG    CG    . ASP ASP ASP A A 90  90  . 0.1392 0.1152 0.0931 -0.0279 0.0166
0.0043  1 .
681  OD1   OD1   . ASP ASP ASP A A 90  90  . 0.1490 0.1374 0.1173 0.0034  0.0128
0.0180  1 .
682  OD2   OD2   . ASP ASP ASP A A 90  90  . 0.1368 0.1162 0.1139 -0.0183 0.0117  -
0.0128 1 .
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683  C     C     . ASP ASP ASP A A 90  90  . 0.1490 0.1293 0.1350 -0.0009 0.0185
0.0105  1 .
684  O     O     . ASP ASP ASP A A 90  90  . 0.1290 0.1177 0.1458 0.0016  0.0098  -
0.0008 1 .
685  N     N     . ASN ASN ASN A A 91  91  . 0.1601 0.1185 0.1388 -0.0161 0.0039
0.0099  1 .
686  CA    CA    . ASN ASN ASN A A 91  91  . 0.1883 0.1369 0.1305 -0.0040 0.0100
0.0093  1 .
687  CB    CB    . ASN ASN ASN A A 91  91  . 0.2020 0.1405 0.1260 -0.0064 0.0026
0.0334  1 .
688  CG    CG    . ASN ASN ASN A A 91  91  . 0.2225 0.2572 0.2194 0.0043  -0.0208
0.0026  1 .
689  OD1   OD1   . ASN ASN ASN A A 91  91  . 0.3820 0.3401 0.2349 -0.0938 0.0220  -
0.0002 1 .
690  ND2   ND2   . ASN ASN ASN A A 91  91  . 0.2847 0.4099 0.2906 0.0432  0.0094
0.0310  1 .
691  C     C     . ASN ASN ASN A A 91  91  . 0.1604 0.1191 0.1348 -0.0084 -0.0019
0.0164  1 .
692  O     O     . ASN ASN ASN A A 91  91  . 0.1698 0.1347 0.1398 -0.0168 0.0168
0.0138  1 .
693  N     N     . LEU LEU LEU A A 92  92  . 0.1560 0.1008 0.1359 -0.0375 0.0096
0.0143  1 .
694  CA    CA    . LEU LEU LEU A A 92  92  . 0.1576 0.1437 0.1437 -0.0061 -0.0022
0.0066  1 .
695  CB    CB    . LEU LEU LEU A A 92  92  . 0.1532 0.1843 0.2021 0.0115  0.0001
0.0054  1 .
696  CG    CG    . LEU LEU LEU A A 92  92  . 0.2460 0.2081 0.2439 0.0158  -0.0387
0.0215  1 .
697  CD1   CD1   . LEU LEU LEU A A 92  92  . 0.3380 0.2405 0.3773 -0.0034 -0.0234
0.0913  1 .
698  CD2   CD2   . LEU LEU LEU A A 92  92  . 0.2124 0.2364 0.3132 -0.0103 -0.0960
0.0568  1 .
699  C     C     . LEU LEU LEU A A 92  92  . 0.1510 0.1212 0.1533 -0.0073 -0.0003
0.0131  1 .
700  O     O     . LEU LEU LEU A A 92  92  . 0.1423 0.1221 0.1496 -0.0070 -0.0057 -
0.0009 1 .
701  N     N     . MET MET MET A A 93  93  . 0.1215 0.0986 0.1165 -0.0263 -0.0069 -
0.0029 1 .
702  CA    CA    . MET MET MET A A 93  93  . 0.1273 0.1004 0.1250 -0.0033 0.0114
0.0088  1 .
703  CB    CB    . MET MET MET A A 93  93  . 0.1107 0.0947 0.1427 0.0265  0.0202
0.0084  1 .
704  CG    CG    . MET MET MET A A 93  93  . 0.1378 0.0909 0.1265 -0.0143 -0.0106
0.0323  1 .
705  SD    SD    . MET MET MET A A 93  93  . 0.1484 0.1093 0.1160 0.0078  0.0027
0.0059  1 .
706  CE    CE    . MET MET MET A A 93  93  . 0.1684 0.1493 0.0913 -0.0005 -0.0110 -
0.0095 1 .
707  C     C     . MET MET MET A A 93  93  . 0.1235 0.1025 0.1350 -0.0072 0.0139
0.0114  1 .
708  O     O     . MET MET MET A A 93  93  . 0.1288 0.0856 0.1121 -0.0031 0.0149  -
0.0027 1 .
709  N     N     . LEU LEU LEU A A 94  94  . 0.1202 0.1189 0.1299 -0.0098 0.0029
0.0149  1 .
710  CA    CA    . LEU LEU LEU A A 94  94  . 0.1248 0.0845 0.1322 -0.0111 -0.0150 -
0.0125 1 .
711  CB    CB    . LEU LEU LEU A A 94  94  . 0.1439 0.1258 0.1311 -0.0265 -0.0134 -
0.0047 1 .
712  CG    CG    . LEU LEU LEU A A 94  94  . 0.2263 0.1618 0.1664 -0.0346 -0.0033 -
0.0323 1 .
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713  CD1   CD1   . LEU LEU LEU A A 94  94  . 0.3501 0.2383 0.1588 -0.0621 0.0197  -
0.0294 1 .
714  CD2   CD2   . LEU LEU LEU A A 94  94  . 0.3059 0.1553 0.2674 -0.0633 0.0690  -
0.0350 1 .
715  C     C     . LEU LEU LEU A A 94  94  . 0.1185 0.1076 0.1460 -0.0002 -0.0119
0.0076  1 .
716  O     O     . LEU LEU LEU A A 94  94  . 0.1352 0.1091 0.1663 -0.0017 -0.0071
0.0052  1 .
717  N     N     . GLU GLU GLU A A 95  95  . 0.1585 0.1158 0.1293 -0.0024 -0.0155
0.0001  1 .
718  CA    CA    . GLU GLU GLU A A 95  95  . 0.1595 0.1380 0.1726 0.0184  -0.0078
0.0170  1 .
719  CB    CB    . GLU GLU GLU A A 95  95  . 0.2292 0.1750 0.2065 0.0081  -0.0006
0.0008  1 .
720  CG    CG    . GLU GLU GLU A A 95  95  . 0.3194 0.2038 0.2457 -0.0094 -0.0564 -
0.0157 1 .
721  CD    CD    . GLU GLU GLU A A 95  95  . 0.4688 0.3791 0.4989 0.0381  -0.0903 -
0.0408 1 .
722  OE1   OE1   . GLU GLU GLU A A 95  95  . 0.5947 0.4088 0.6278 0.0908  -0.0093 -
0.0839 1 .
723  OE2   OE2   . GLU GLU GLU A A 95  95  . 0.6066 0.4903 0.5689 0.0328  -0.1103 -
0.0892 1 .
724  C     C     . GLU GLU GLU A A 95  95  . 0.1380 0.1308 0.1590 0.0064  -0.0050
0.0185  1 .
725  O     O     . GLU GLU GLU A A 95  95  . 0.1608 0.1460 0.2007 -0.0042 -0.0071
0.0232  1 .
726  N     N     . LEU LEU LEU A A 96  96  . 0.1285 0.1023 0.1204 -0.0280 -0.0162
0.0017  1 .
727  CA    CA    . LEU LEU LEU A A 96  96  . 0.1469 0.1364 0.1625 0.0004  -0.0138 -
0.0127 1 .
728  CB    CB    . LEU LEU LEU A A 96  96  . 0.1225 0.1323 0.1482 0.0194  -0.0319
0.0027  1 .
729  CG    CG    . LEU LEU LEU A A 96  96  . 0.1680 0.0903 0.1687 0.0151  0.0116
0.0185  1 .
730  CD1   CD1   . LEU LEU LEU A A 96  96  . 0.1449 0.0779 0.1745 -0.0171 0.0073  -
0.0041 1 .
731  CD2   CD2   . LEU LEU LEU A A 96  96  . 0.2050 0.1696 0.1346 0.0141  -0.0268
0.0355  1 .
732  C     C     . LEU LEU LEU A A 96  96  . 0.1672 0.1331 0.1357 -0.0055 0.0074  -
0.0195 1 .
733  O     O     . LEU LEU LEU A A 96  96  . 0.1628 0.1254 0.1821 -0.0040 0.0116  -
0.0271 1 .
734  N     N     . ASP ASP ASP A A 97  97  . 0.1393 0.1263 0.1343 -0.0219 -0.0159
0.0140  1 .
735  CA    CA    . ASP ASP ASP A A 97  97  . 0.1290 0.0882 0.1332 -0.0092 -0.0117 -
0.0035 1 .
736  CB    CB    . ASP ASP ASP A A 97  97  . 0.1253 0.0898 0.1551 -0.0080 -0.0071
0.0095  1 .
737  CG    CG    . ASP ASP ASP A A 97  97  . 0.1184 0.0910 0.1233 0.0166  0.0080  -
0.0025 1 .
738  OD1   OD1   . ASP ASP ASP A A 97  97  . 0.1428 0.1238 0.1365 -0.0170 0.0010
0.0041  1 .
739  OD2   OD2   . ASP ASP ASP A A 97  97  . 0.1467 0.1367 0.1277 -0.0120 -0.0105
0.0085  1 .
740  C     C     . ASP ASP ASP A A 97  97  . 0.1424 0.1318 0.1460 -0.0032 -0.0150 -
0.0109 1 .
741  O     O     . ASP ASP ASP A A 97  97  . 0.1598 0.1568 0.2017 0.0216  -0.0333 -
0.0136 1 .
742  N     N     . GLY GLY GLY A A 98  98  . 0.1566 0.1015 0.1533 0.0003  -0.0195
0.0272  1 .
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743  CA    CA    . GLY GLY GLY A A 98  98  . 0.1485 0.1156 0.1993 -0.0011 -0.0293
0.0368  1 .
744  C     C     . GLY GLY GLY A A 98  98  . 0.1720 0.1576 0.2103 0.0007  -0.0376
0.0314  1 .
745  O     O     . GLY GLY GLY A A 98  98  . 0.1993 0.1503 0.2539 -0.0023 -0.0453
0.0601  1 .
746  N     N     . THR THR THR A A 99  99  . 0.1675 0.1635 0.1691 0.0033  -0.0211
0.0293  1 .
747  CA    CA    . THR THR THR A A 99  99  . 0.1872 0.1582 0.1893 -0.0017 -0.0196
0.0204  1 .
748  CB    CB    . THR THR THR A A 99  99  . 0.1529 0.1197 0.1882 0.0279  0.0000  -
0.0022 1 .
749  OG1   OG1   . THR THR THR A A 99  99  . 0.1773 0.1493 0.1906 0.0205  0.0155
0.0605  1 .
750  CG2   CG2   . THR THR THR A A 99  99  . 0.1820 0.2055 0.1700 0.0022  -0.0173 -
0.0356 1 .
751  C     C     . THR THR THR A A 99  99  . 0.1773 0.1738 0.1821 0.0146  -0.0124
0.0157  1 .
752  O     O     . THR THR THR A A 99  99  . 0.2014 0.1866 0.2346 0.0293  -0.0012 -
0.0031 1 .
753  N     N     . GLU GLU GLU A A 100 100 . 0.2085 0.1535 0.1767 -0.0007 -0.0168
0.0221  1 .
754  CA    CA    . GLU GLU GLU A A 100 100 . 0.2215 0.1540 0.2001 -0.0064 -0.0310 -
0.0010 1 .
755  CB    CB    . GLU GLU GLU A A 100 100 . 0.2730 0.2050 0.2588 0.0038  -0.0361
0.0106  1 .
756  CG    CG    . GLU GLU GLU A A 100 100 . 0.3961 0.2900 0.3375 -0.0004 -0.0439 -
0.0163 1 .
757  CD    CD    . GLU GLU GLU A A 100 100 . 0.5635 0.4758 0.4680 0.0208  0.0227
0.0135  1 .
758  OE1   OE1   . GLU GLU GLU A A 100 100 . 0.6460 0.4728 0.5531 0.0010  -0.0254
0.0624  1 .
759  OE2   OE2   . GLU GLU GLU A A 100 100 . 0.6960 0.5509 0.5728 0.0764  0.0308  -
0.0107 1 .
760  C     C     . GLU GLU GLU A A 100 100 . 0.1865 0.1614 0.1870 0.0052  -0.0149
0.0102  1 .
761  O     O     . GLU GLU GLU A A 100 100 . 0.2421 0.1598 0.2011 0.0026  0.0051
0.0096  1 .
762  N     N     . ASN ASN ASN A A 101 101 . 0.1373 0.1363 0.1609 0.0053  -0.0396
0.0161  1 .
763  CA    CA    . ASN ASN ASN A A 101 101 . 0.1376 0.1508 0.1580 0.0138  -0.0246
0.0199  1 .
764  CB    CB    . ASN ASN ASN A A 101 101 . 0.1747 0.1932 0.2463 0.0011  -0.0205
0.0408  1 .
765  CG    CG    . ASN ASN ASN A A 101 101 . 0.2900 0.3458 0.3109 -0.0222 -0.0086 -
0.0174 1 .
766  OD1   OD1   . ASN ASN ASN A A 101 101 . 0.4594 0.5087 0.4524 -0.0649 0.0032
0.0151  1 .
767  ND2   ND2   . ASN ASN ASN A A 101 101 . 0.2964 0.4470 0.3701 -0.1051 0.0340  -
0.0882 1 .
768  C     C     . ASN ASN ASN A A 101 101 . 0.1398 0.1233 0.1291 -0.0037 -0.0126
0.0145  1 .
769  O     O     . ASN ASN ASN A A 101 101 . 0.1617 0.1193 0.1563 -0.0121 -0.0007
0.0218  1 .
770  N     N     . LYS LYS LYS A A 102 102 . 0.1145 0.1326 0.1165 0.0029  -0.0054
0.0051  1 .
771  CA    CA    . LYS LYS LYS A A 102 102 . 0.1487 0.1294 0.1373 0.0077  -0.0071 -
0.0034 1 .
772  CB    CB    . LYS LYS LYS A A 102 102 . 0.1612 0.1135 0.1346 0.0082  0.0184
0.0197  1 .
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773  CG    CG    . LYS LYS LYS A A 102 102 . 0.1379 0.0879 0.1275 0.0143  -0.0036 -
0.0040 1 .
774  CD    CD    . LYS LYS LYS A A 102 102 . 0.1829 0.1348 0.1744 0.0234  0.0159  -
0.0118 1 .
775  CE    CE    . LYS LYS LYS A A 102 102 . 0.1819 0.1449 0.1613 -0.0269 -0.0022
0.0182  1 .
776  NZ    NZ    . LYS LYS LYS A A 102 102 . 0.1286 0.1333 0.1220 -0.0346 0.0079
0.0074  1 .
777  C     C     . LYS LYS LYS A A 102 102 . 0.1399 0.1315 0.1448 0.0064  0.0078
0.0106  1 .
778  O     O     . LYS LYS LYS A A 102 102 . 0.1432 0.1387 0.1363 0.0124  -0.0043
0.0022  1 .
779  N     N     . SER SER SER A A 103 103 . 0.1234 0.1053 0.1352 0.0120  -0.0029 -
0.0113 1 .
780  CA    CA    . SER SER SER A A 103 103 . 0.1447 0.1496 0.1607 -0.0001 0.0085
0.0013  1 .
781  CB    CB    . SER SER SER A A 103 103 . 0.1388 0.1772 0.1727 0.0002  -0.0132 -
0.0053 1 .
782  OG    OG    . SER SER SER A A 103 103 . 0.1606 0.1770 0.2647 0.0446  0.0091
0.0439  1 .
783  C     C     . SER SER SER A A 103 103 . 0.1493 0.1620 0.1632 0.0047  0.0140  -
0.0276 1 .
784  O     O     . SER SER SER A A 103 103 . 0.2188 0.1972 0.1840 -0.0129 0.0221  -
0.0242 1 .
785  N     N     . LYS LYS LYS A A 104 104 . 0.1613 0.1186 0.1402 0.0049  0.0008  -
0.0279 1 .
786  CA    CA    . LYS LYS LYS A A 104 104 . 0.1601 0.1494 0.1534 0.0287  -0.0224 -
0.0164 1 .
787  CB    CB    . LYS LYS LYS A A 104 104 . 0.1832 0.1502 0.1436 0.0194  -0.0108 -
0.0359 1 .
788  CG    CG    . LYS LYS LYS A A 104 104 . 0.1893 0.1682 0.2096 0.0036  -0.0643 -
0.0301 1 .
789  CD    CD    . LYS LYS LYS A A 104 104 . 0.2379 0.2148 0.2916 -0.0289 -0.0829 -
0.0220 1 .
790  CE    CE    . LYS LYS LYS A A 104 104 . 0.2888 0.2731 0.3445 -0.0652 -0.0916
0.0080  1 .
791  NZ    NZ    . LYS LYS LYS A A 104 104 . 0.3275 0.3013 0.3704 -0.1053 -0.0117 -
0.0128 1 .
792  C     C     . LYS LYS LYS A A 104 104 . 0.1663 0.1593 0.1438 0.0367  -0.0038 -
0.0036 1 .
793  O     O     . LYS LYS LYS A A 104 104 . 0.2114 0.1930 0.1602 0.0501  -0.0015
0.0022  1 .
794  N     N     . PHE PHE PHE A A 105 105 . 0.1537 0.1042 0.1118 0.0285  0.0057  -
0.0105 1 .
795  CA    CA    . PHE PHE PHE A A 105 105 . 0.1172 0.1143 0.1205 0.0018  0.0036
0.0002  1 .
796  CB    CB    . PHE PHE PHE A A 105 105 . 0.1271 0.1409 0.1669 -0.0011 0.0139
0.0011  1 .
797  CG    CG    . PHE PHE PHE A A 105 105 . 0.1281 0.1126 0.1200 -0.0176 -0.0176 -
0.0022 1 .
798  CD1   CD1   . PHE PHE PHE A A 105 105 . 0.1458 0.1220 0.1625 -0.0026 -0.0267
0.0239  1 .
799  CE1   CE1   . PHE PHE PHE A A 105 105 . 0.1084 0.1263 0.1546 -0.0064 0.0032
0.0126  1 .
800  CZ    CZ    . PHE PHE PHE A A 105 105 . 0.1655 0.1532 0.1629 -0.0060 -0.0055 -
0.0185 1 .
801  CE2   CE2   . PHE PHE PHE A A 105 105 . 0.1909 0.1357 0.1545 -0.0283 -0.0202 -
0.0141 1 .
802  CD2   CD2   . PHE PHE PHE A A 105 105 . 0.1647 0.1504 0.1469 -0.0114 -0.0376
0.0158  1 .
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803  C     C     . PHE PHE PHE A A 105 105 . 0.1210 0.1110 0.1208 0.0089  0.0053  -
0.0103 1 .
804  O     O     . PHE PHE PHE A A 105 105 . 0.1168 0.1311 0.1258 0.0135  -0.0043 -
0.0108 1 .
805  N     N     . GLY GLY GLY A A 106 106 . 0.1181 0.1007 0.1419 0.0088  -0.0080 -
0.0089 1 .
806  CA    CA    . GLY GLY GLY A A 106 106 . 0.1226 0.0971 0.1282 0.0116  0.0216  -
0.0146 1 .
807  C     C     . GLY GLY GLY A A 106 106 . 0.1209 0.1139 0.1235 0.0052  0.0071
0.0106  1 .
808  O     O     . GLY GLY GLY A A 106 106 . 0.1086 0.1028 0.1152 0.0078  0.0050
0.0291  1 .
809  N     N     . ALA ALA ALA A A 107 107 . 0.1156 0.0869 0.0802 -0.0056 0.0142
0.0062  1 .
810  CA    CA    . ALA ALA ALA A A 107 107 . 0.1002 0.0858 0.1114 0.0048  0.0024
0.0090  1 .
811  CB    CB    . ALA ALA ALA A A 107 107 . 0.1188 0.1427 0.1184 0.0100  -0.0271 -
0.0149 1 .
812  C     C     . ALA ALA ALA A A 107 107 . 0.1080 0.1099 0.1256 0.0009  -0.0009
0.0023  1 .
813  O     O     . ALA ALA ALA A A 107 107 . 0.1236 0.1140 0.1129 0.0080  0.0139
0.0075  1 .
814  N     N     . ASN ASN ASN A A 108 108 . 0.1293 0.0871 0.1106 0.0074  -0.0018 -
0.0060 1 .
815  CA    CA    . ASN ASN ASN A A 108 108 . 0.0889 0.0858 0.1143 0.0055  0.0117
0.0024  1 .
816  CB    CB    . ASN ASN ASN A A 108 108 . 0.1119 0.0940 0.0968 0.0200  0.0387  -
0.0054 1 .
817  CG    CG    . ASN ASN ASN A A 108 108 . 0.0919 0.0925 0.1023 -0.0022 0.0202
0.0100  1 .
818  OD1   OD1   . ASN ASN ASN A A 108 108 . 0.1226 0.1089 0.1124 0.0156  0.0239
0.0080  1 .
819  ND2   ND2   . ASN ASN ASN A A 108 108 . 0.1069 0.1338 0.0997 -0.0149 -0.0069
0.0022  1 .
820  C     C     . ASN ASN ASN A A 108 108 . 0.1168 0.0967 0.1149 0.0074  0.0101
0.0055  1 .
821  O     O     . ASN ASN ASN A A 108 108 . 0.1011 0.1123 0.1438 0.0038  -0.0034
0.0106  1 .
822  N     N     . ALA ALA ALA A A 109 109 . 0.1088 0.0963 0.0932 -0.0001 -0.0058 -
0.0157 1 .
823  CA    CA    . ALA ALA ALA A A 109 109 . 0.0872 0.0865 0.0927 0.0004  -0.0042 -
0.0025 1 .
824  CB    CB    . ALA ALA ALA A A 109 109 . 0.1132 0.0952 0.1373 0.0203  0.0080  -
0.0036 1 .
825  C     C     . ALA ALA ALA A A 109 109 . 0.1062 0.0884 0.1159 0.0136  -0.0127 -
0.0027 1 .
826  O     O     . ALA ALA ALA A A 109 109 . 0.1038 0.1190 0.1112 0.0072  0.0055
0.0036  1 .
827  N     N     . ILE ILE ILE A A 110 110 . 0.0979 0.0973 0.0977 0.0133  0.0083
0.0200  1 .
828  CA    CA    . ILE ILE ILE A A 110 110 . 0.1090 0.0872 0.0978 0.0024  0.0111  -
0.0029 1 .
829  CB    CB    . ILE ILE ILE A A 110 110 . 0.1085 0.0748 0.1006 0.0107  0.0115
0.0040  1 .
830  CG1   CG1   . ILE ILE ILE A A 110 110 . 0.1386 0.0997 0.0999 0.0030  -0.0387 -
0.0198 1 .
831  CD    CD    . ILE ILE ILE A A 110 110 . 0.1557 0.1101 0.1682 0.0209  -0.0717 -
0.0066 1 .
832  CG2   CG2   . ILE ILE ILE A A 110 110 . 0.1156 0.1460 0.1151 -0.0110 0.0054
0.0063  1 .
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833  C     C     . ILE ILE ILE A A 110 110 . 0.0732 0.0753 0.0870 -0.0066 0.0165
0.0065  1 .
834  O     O     . ILE ILE ILE A A 110 110 . 0.0912 0.0989 0.1086 0.0034  0.0058
0.0075  1 .
835  N     N     . LEU LEU LEU A A 111 111 . 0.0936 0.0706 0.0994 -0.0032 0.0003  -
0.0067 1 .
836  CA    CA    . LEU LEU LEU A A 111 111 . 0.0968 0.0805 0.1159 -0.0012 -0.0038 -
0.0097 1 .
837  CB    CB    . LEU LEU LEU A A 111 111 . 0.1025 0.0725 0.1096 -0.0152 0.0078  -
0.0150 1 .
838  CG    CG    . LEU LEU LEU A A 111 111 . 0.0965 0.1051 0.1106 0.0094  0.0161  -
0.0034 1 .
839  CD1   CD1   . LEU LEU LEU A A 111 111 . 0.1087 0.1225 0.1193 0.0203  0.0432  -
0.0294 1 .
840  CD2   CD2   . LEU LEU LEU A A 111 111 . 0.1232 0.1207 0.1612 -0.0289 -0.0137
0.0213  1 .
841  C     C     . LEU LEU LEU A A 111 111 . 0.0891 0.0879 0.0991 -0.0168 0.0034
0.0072  1 .
842  O     O     . LEU LEU LEU A A 111 111 . 0.0985 0.0929 0.1065 -0.0163 0.0021  -
0.0093 1 .
843  N     N     . GLY GLY GLY A A 112 112 . 0.0920 0.0788 0.0878 -0.0192 -0.0138
0.0044  1 .
844  CA    CA    . GLY GLY GLY A A 112 112 . 0.0620 0.0973 0.1229 0.0026  0.0043
0.0167  1 .
845  C     C     . GLY GLY GLY A A 112 112 . 0.0789 0.0670 0.1023 -0.0093 -0.0082 -
0.0066 1 .
846  O     O     . GLY GLY GLY A A 112 112 . 0.1116 0.0930 0.0929 0.0039  0.0091
0.0159  1 .
847  N     N     . VAL VAL VAL A A 113 113 . 0.1177 0.0831 0.1087 -0.0220 -0.0096 -
0.0112 1 .
848  CA    CA    . VAL VAL VAL A A 113 113 . 0.1017 0.0827 0.0954 0.0074  0.0147  -
0.0119 1 .
849  CB    CB    . VAL VAL VAL A A 113 113 . 0.1247 0.0779 0.1015 -0.0100 0.0254  -
0.0151 1 .
850  CG1   CG1   . VAL VAL VAL A A 113 113 . 0.1099 0.0847 0.1181 -0.0188 0.0000
0.0089  1 .
851  CG2   CG2   . VAL VAL VAL A A 113 113 . 0.1103 0.1133 0.1131 0.0094  0.0018  -
0.0312 1 .
852  C     C     . VAL VAL VAL A A 113 113 . 0.1073 0.0801 0.0874 -0.0089 -0.0009
0.0054  1 .
853  O     O     . VAL VAL VAL A A 113 113 . 0.1243 0.1078 0.1037 -0.0104 0.0075
0.0004  1 .
854  N     N     . SER SER SER A A 114 114 . 0.1033 0.0842 0.0869 -0.0244 0.0105
0.0010  1 .
855  CA    CA    . SER SER SER A A 114 114 . 0.0830 0.0728 0.0854 0.0040  0.0097  -
0.0052 1 .
856  CB    CB    . SER SER SER A A 114 114 . 0.1024 0.1206 0.0838 -0.0118 -0.0107 -
0.0103 1 .
857  OG    OG    . SER SER SER A A 114 114 . 0.1406 0.1254 0.1115 0.0053  0.0169
0.0036  1 .
858  C     C     . SER SER SER A A 114 114 . 0.1087 0.0950 0.1102 0.0018  0.0095
0.0070  1 .
859  O     O     . SER SER SER A A 114 114 . 0.0956 0.0909 0.1221 -0.0050 0.0208
0.0062  1 .
860  N     N     . LEU LEU LEU A A 115 115 . 0.1045 0.1018 0.0892 -0.0004 0.0024  -
0.0064 1 .
861  CA    CA    . LEU LEU LEU A A 115 115 . 0.1069 0.0867 0.0794 -0.0135 -0.0015
0.0123  1 .
862  CB    CB    . LEU LEU LEU A A 115 115 . 0.1005 0.1208 0.1046 -0.0146 -0.0025
0.0130  1 .
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863  CG    CG    . LEU LEU LEU A A 115 115 . 0.0656 0.1039 0.0765 -0.0123 0.0058  -
0.0101 1 .
864  CD1   CD1   . LEU LEU LEU A A 115 115 . 0.0997 0.1189 0.1177 -0.0238 0.0123
0.0498  1 .
865  CD2   CD2   . LEU LEU LEU A A 115 115 . 0.1185 0.1197 0.1496 0.0046  -0.0068 -
0.0424 1 .
866  C     C     . LEU LEU LEU A A 115 115 . 0.0749 0.0699 0.0910 -0.0093 0.0097  -
0.0006 1 .
867  O     O     . LEU LEU LEU A A 115 115 . 0.1122 0.0879 0.1156 -0.0051 0.0013  -
0.0127 1 .
868  N     N     . ALA ALA ALA A A 116 116 . 0.1046 0.1211 0.0900 -0.0099 0.0016
0.0152  1 .
869  CA    CA    . ALA ALA ALA A A 116 116 . 0.0859 0.1088 0.0958 -0.0034 0.0094  -
0.0151 1 .
870  CB    CB    . ALA ALA ALA A A 116 116 . 0.0986 0.1087 0.1048 0.0072  0.0085  -
0.0242 1 .
871  C     C     . ALA ALA ALA A A 116 116 . 0.1052 0.0976 0.0759 0.0017  0.0011
0.0028  1 .
872  O     O     . ALA ALA ALA A A 116 116 . 0.1069 0.1066 0.1064 -0.0108 0.0028  -
0.0083 1 .
873  N     N     . VAL VAL VAL A A 117 117 . 0.1032 0.0985 0.1135 -0.0215 0.0117  -
0.0010 1 .
874  CA    CA    . VAL VAL VAL A A 117 117 . 0.1111 0.1026 0.0917 -0.0164 0.0159
0.0055  1 .
875  CB    CB    . VAL VAL VAL A A 117 117 . 0.0965 0.0934 0.1209 -0.0291 0.0093
0.0044  1 .
876  CG1   CG1   . VAL VAL VAL A A 117 117 . 0.1523 0.1506 0.1246 -0.0321 0.0227
0.0106  1 .
877  CG2   CG2   . VAL VAL VAL A A 117 117 . 0.1311 0.0963 0.1056 0.0126  0.0284
0.0049  1 .
878  C     C     . VAL VAL VAL A A 117 117 . 0.1031 0.1043 0.0953 -0.0171 0.0108
0.0137  1 .
879  O     O     . VAL VAL VAL A A 117 117 . 0.1176 0.1257 0.1257 -0.0098 0.0065
0.0048  1 .
880  N     N     . CYS CYS CYS A A 118 118 . 0.1146 0.0904 0.1051 -0.0233 0.0099  -
0.0021 1 .
881  CA    CA    . CYS CYS CYS A A 118 118 . 0.1024 0.0935 0.1014 -0.0092 0.0059
0.0000  1 .
882  CB    CB    . CYS CYS CYS A A 118 118 . 0.1233 0.1017 0.0919 -0.0349 -0.0019 -
0.0120 1 .
883  SG    SG    . CYS CYS CYS A A 118 118 . 0.1341 0.1305 0.1239 0.0032  0.0152  -
0.0020 1 .
884  C     C     . CYS CYS CYS A A 118 118 . 0.1084 0.1048 0.1012 -0.0087 0.0010  -
0.0135 1 .
885  O     O     . CYS CYS CYS A A 118 118 . 0.1146 0.1038 0.1240 0.0028  0.0251
0.0027  1 .
886  N     N     . LYS LYS LYS A A 119 119 . 0.1017 0.0989 0.1045 -0.0214 -0.0035
0.0058  1 .
887  CA    CA    . LYS LYS LYS A A 119 119 . 0.0891 0.1267 0.1176 -0.0066 -0.0029
0.0189  1 .
888  CB    CB    . LYS LYS LYS A A 119 119 . 0.1021 0.1367 0.1240 -0.0132 0.0035
0.0033  1 .
889  CG    CG    . LYS LYS LYS A A 119 119 . 0.1075 0.1697 0.1361 -0.0120 -0.0014 -
0.0019 1 .
890  CD    CD    . LYS LYS LYS A A 119 119 . 0.1097 0.1352 0.1078 -0.0067 0.0302
0.0062  1 .
891  CE    CE    . LYS LYS LYS A A 119 119 . 0.1637 0.2089 0.1441 -0.0427 0.0583
0.0131  1 .
892  NZ    NZ    . LYS LYS LYS A A 119 119 . 0.1926 0.1514 0.1614 -0.0453 0.0611  -
0.0061 1 .
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893  C     C     . LYS LYS LYS A A 119 119 . 0.1178 0.1022 0.1187 -0.0185 0.0030  -
0.0201 1 .
894  O     O     . LYS LYS LYS A A 119 119 . 0.1276 0.1285 0.1293 -0.0095 0.0067  -
0.0167 1 .
895  N     N     . ALA ALA ALA A A 120 120 . 0.1024 0.0964 0.1030 -0.0322 0.0007  -
0.0241 1 .
896  CA    CA    . ALA ALA ALA A A 120 120 . 0.1170 0.1281 0.1222 -0.0093 0.0137  -
0.0205 1 .
897  CB    CB    . ALA ALA ALA A A 120 120 . 0.1254 0.0981 0.1281 -0.0150 0.0126  -
0.0386 1 .
898  C     C     . ALA ALA ALA A A 120 120 . 0.1120 0.1191 0.1433 -0.0166 0.0128  -
0.0063 1 .
899  O     O     . ALA ALA ALA A A 120 120 . 0.1004 0.1387 0.1578 -0.0209 0.0257  -
0.0165 1 .
900  N     N     . GLY GLY GLY A A 121 121 . 0.1220 0.1192 0.1105 -0.0118 0.0301  -
0.0147 1 .
901  CA    CA    . GLY GLY GLY A A 121 121 . 0.1458 0.1216 0.1113 -0.0006 0.0306
0.0035  1 .
902  C     C     . GLY GLY GLY A A 121 121 . 0.1528 0.1178 0.1312 -0.0127 0.0430  -
0.0008 1 .
903  O     O     . GLY GLY GLY A A 121 121 . 0.1498 0.1459 0.1484 -0.0286 0.0267  -
0.0093 1 .
904  N     N     . ALA ALA ALA A A 122 122 . 0.1114 0.1063 0.1253 -0.0122 0.0246  -
0.0096 1 .
905  CA    CA    . ALA ALA ALA A A 122 122 . 0.1119 0.1009 0.1420 -0.0108 0.0281  -
0.0118 1 .
906  CB    CB    . ALA ALA ALA A A 122 122 . 0.1273 0.0987 0.1431 -0.0316 0.0073  -
0.0280 1 .
907  C     C     . ALA ALA ALA A A 122 122 . 0.1193 0.1365 0.1271 0.0115  0.0235  -
0.0132 1 .
908  O     O     . ALA ALA ALA A A 122 122 . 0.1058 0.1357 0.1742 -0.0008 0.0458  -
0.0322 1 .
909  N     N     . ALA ALA ALA A A 123 123 . 0.1052 0.1323 0.1228 -0.0108 -0.0124
0.0027  1 .
910  CA    CA    . ALA ALA ALA A A 123 123 . 0.0964 0.1497 0.1322 -0.0097 -0.0033 -
0.0093 1 .
911  CB    CB    . ALA ALA ALA A A 123 123 . 0.1140 0.1722 0.1270 -0.0007 0.0051  -
0.0203 1 .
912  C     C     . ALA ALA ALA A A 123 123 . 0.1210 0.1411 0.1688 -0.0063 0.0035  -
0.0108 1 .
913  O     O     . ALA ALA ALA A A 123 123 . 0.1408 0.1647 0.2150 0.0282  -0.0033 -
0.0505 1 .
914  N     N     . GLU GLU GLU A A 124 124 . 0.1223 0.1246 0.1781 -0.0034 0.0213  -
0.0104 1 .
915  CA    CA    . GLU GLU GLU A A 124 124 . 0.1301 0.1447 0.1634 -0.0226 0.0281  -
0.0160 1 .
916  CB    CB    . GLU GLU GLU A A 124 124 . 0.1488 0.1336 0.1894 -0.0284 0.0428
0.0037  1 .
917  CG    CG    . GLU GLU GLU A A 124 124 . 0.1672 0.1825 0.2085 -0.0406 0.0588  -
0.0236 1 .
918  CD    CD    . GLU GLU GLU A A 124 124 . 0.2636 0.2804 0.2245 -0.0958 0.0171  -
0.0107 1 .
919  OE1   OE1   . GLU GLU GLU A A 124 124 . 0.2572 0.2499 0.3056 -0.1001 0.0301  -
0.0143 1 .
920  OE2   OE2   . GLU GLU GLU A A 124 124 . 0.2732 0.4171 0.4026 -0.0867 0.0464  -
0.0015 1 .
921  C     C     . GLU GLU GLU A A 124 124 . 0.1560 0.1711 0.1855 -0.0489 0.0391  -
0.0204 1 .
922  O     O     . GLU GLU GLU A A 124 124 . 0.1327 0.2062 0.2331 -0.0460 0.0345  -
0.0479 1 .
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923  N     N     . ARG ARG ARG A A 125 125 . 0.1407 0.1924 0.1733 -0.0513 0.0261  -
0.0342 1 .
924  CA    CA    . ARG ARG ARG A A 125 125 . 0.1746 0.1980 0.1885 -0.0392 0.0173  -
0.0165 1 .
925  CB    CB    . ARG ARG ARG A A 125 125 . 0.1920 0.2147 0.2267 -0.0412 0.0172  -
0.0158 1 .
926  CG    CG    . ARG ARG ARG A A 125 125 . 0.2220 0.2465 0.2503 -0.0026 0.0079
0.0149  1 .
927  CD    CD    . ARG ARG ARG A A 125 125 . 0.3876 0.2894 0.3755 0.0130  -0.2037
0.0582  1 .
928  NE    NE    . ARG ARG ARG A A 125 125 . 0.5488 0.6179 0.6686 0.0947  -0.0910
0.0366  1 .
929  CZ    CZ    . ARG ARG ARG A A 125 125 . 0.6666 0.6554 0.7848 0.0605  -0.0680
0.0011  1 .
930  NH1   NH1   . ARG ARG ARG A A 125 125 . 0.6551 0.7483 0.8494 0.0664  -0.0655
0.0024  1 .
931  NH2   NH2   . ARG ARG ARG A A 125 125 . 0.6818 0.7261 0.8470 0.0261  -0.0515 -
0.0456 1 .
932  C     C     . ARG ARG ARG A A 125 125 . 0.1532 0.2247 0.2187 -0.0264 0.0301  -
0.0318 1 .
933  O     O     . ARG ARG ARG A A 125 125 . 0.1869 0.2463 0.2035 -0.0145 0.0435  -
0.0608 1 .
934  N     N     . GLU GLU GLU A A 126 126 . 0.1488 0.2147 0.2338 -0.0197 0.0048  -
0.0518 1 .
935  CA    CA    . GLU GLU GLU A A 126 126 . 0.1553 0.2490 0.2721 -0.0118 0.0208  -
0.0463 1 .
936  CB    CB    . GLU GLU GLU A A 126 126 . 0.1611 0.2691 0.3348 -0.0232 0.0012  -
0.0720 1 .
937  CG    CG    . GLU GLU GLU A A 126 126 . 0.2825 0.3218 0.3936 -0.0216 0.0007  -
0.0834 1 .
938  CD    CD    . GLU GLU GLU A A 126 126 . 0.3779 0.4119 0.3930 -0.0297 -0.0031 -
0.0783 1 .
939  OE1   OE1   . GLU GLU GLU A A 126 126 . 0.3990 0.4310 0.5012 -0.0764 0.0270  -
0.1242 1 .
940  OE2   OE2   . GLU GLU GLU A A 126 126 . 0.4085 0.3842 0.4046 -0.0660 0.0041  -
0.1074 1 .
941  C     C     . GLU GLU GLU A A 126 126 . 0.1578 0.2105 0.2516 0.0012  0.0190  -
0.0450 1 .
942  O     O     . GLU GLU GLU A A 126 126 . 0.1488 0.2098 0.2599 0.0105  0.0237  -
0.0548 1 .
943  N     N     . LEU LEU LEU A A 127 127 . 0.1221 0.2200 0.2092 -0.0215 0.0217  -
0.0217 1 .
944  CA    CA    . LEU LEU LEU A A 127 127 . 0.1421 0.1581 0.1660 -0.0203 0.0123  -
0.0066 1 .
945  CB    CB    . LEU LEU LEU A A 127 127 . 0.1396 0.1713 0.1868 -0.0169 0.0329
0.0159  1 .
946  CG    CG    . LEU LEU LEU A A 127 127 . 0.1830 0.1897 0.1723 -0.0130 0.0588
0.0206  1 .
947  CD1   CD1   . LEU LEU LEU A A 127 127 . 0.2539 0.1809 0.2125 -0.0439 0.0589
0.0555  1 .
948  CD2   CD2   . LEU LEU LEU A A 127 127 . 0.2538 0.1838 0.2000 -0.0170 0.0646  -
0.0092 1 .
949  C     C     . LEU LEU LEU A A 127 127 . 0.1475 0.1571 0.1522 -0.0031 0.0114  -
0.0093 1 .
950  O     O     . LEU LEU LEU A A 127 127 . 0.1228 0.1680 0.1662 0.0014  0.0219  -
0.0240 1 .
951  N     N     . PRO PRO PRO A A 128 128 . 0.1223 0.1524 0.1417 -0.0092 0.0245  -
0.0194 1 .
952  CA    CA    . PRO PRO PRO A A 128 128 . 0.1152 0.1437 0.1790 -0.0132 0.0146  -
0.0109 1 .
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953  CB    CB    . PRO PRO PRO A A 128 128 . 0.1766 0.1658 0.1829 0.0085  0.0064  -
0.0036 1 .
954  CG    CG    . PRO PRO PRO A A 128 128 . 0.2311 0.2172 0.2310 -0.0711 0.0455  -
0.0097 1 .
955  CD    CD    . PRO PRO PRO A A 128 128 . 0.1560 0.1652 0.1853 -0.0294 0.0163  -
0.0366 1 .
956  C     C     . PRO PRO PRO A A 128 128 . 0.1422 0.1387 0.1420 0.0041  0.0143
0.0121  1 .
957  O     O     . PRO PRO PRO A A 128 128 . 0.1338 0.1455 0.1414 -0.0082 0.0166
0.0055  1 .
958  N     N     . LEU LEU LEU A A 129 129 . 0.0920 0.1340 0.1225 -0.0013 0.0238
0.0001  1 .
959  CA    CA    . LEU LEU LEU A A 129 129 . 0.1109 0.1357 0.1062 0.0089  0.0154  -
0.0040 1 .
960  CB    CB    . LEU LEU LEU A A 129 129 . 0.1104 0.1399 0.0916 0.0095  0.0291  -
0.0077 1 .
961  CG    CG    . LEU LEU LEU A A 129 129 . 0.1307 0.1017 0.1215 -0.0142 0.0358  -
0.0104 1 .
962  CD1   CD1   . LEU LEU LEU A A 129 129 . 0.1754 0.1158 0.1311 -0.0226 -0.0046
0.0307  1 .
963  CD2   CD2   . LEU LEU LEU A A 129 129 . 0.1687 0.1484 0.0819 -0.0403 0.0337  -
0.0039 1 .
964  C     C     . LEU LEU LEU A A 129 129 . 0.1017 0.1294 0.1155 0.0067  0.0351
0.0026  1 .
965  O     O     . LEU LEU LEU A A 129 129 . 0.0999 0.1229 0.1164 -0.0066 0.0325
0.0222  1 .
966  N     N     . TYR TYR TYR A A 130 130 . 0.1161 0.1223 0.1172 -0.0072 0.0183  -
0.0185 1 .
967  CA    CA    . TYR TYR TYR A A 130 130 . 0.1343 0.1257 0.1022 -0.0195 0.0202
0.0041  1 .
968  CB    CB    . TYR TYR TYR A A 130 130 . 0.0985 0.1177 0.1294 0.0039  0.0230
0.0074  1 .
969  CG    CG    . TYR TYR TYR A A 130 130 . 0.1048 0.1315 0.0856 -0.0082 0.0231  -
0.0007 1 .
970  CD1   CD1   . TYR TYR TYR A A 130 130 . 0.1848 0.1511 0.1490 -0.0137 0.0571
0.0321  1 .
971  CE1   CE1   . TYR TYR TYR A A 130 130 . 0.1265 0.1694 0.1964 0.0148  0.0505  -
0.0070 1 .
972  CZ    CZ    . TYR TYR TYR A A 130 130 . 0.1415 0.1860 0.2464 0.0314  0.0088
0.0055  1 .
973  OH    OH    . TYR TYR TYR A A 130 130 . 0.1586 0.1713 0.3799 0.0031  -0.0249 -
0.0217 1 .
974  CE2   CE2   . TYR TYR TYR A A 130 130 . 0.1062 0.1848 0.2397 -0.0016 0.0061
0.0174  1 .
975  CD2   CD2   . TYR TYR TYR A A 130 130 . 0.1081 0.1076 0.2094 0.0019  -0.0350
0.0223  1 .
976  C     C     . TYR TYR TYR A A 130 130 . 0.1141 0.1229 0.1072 -0.0078 0.0099  -
0.0043 1 .
977  O     O     . TYR TYR TYR A A 130 130 . 0.1228 0.1333 0.1023 0.0057  0.0220
0.0039  1 .
978  N     N     . ARG ARG ARG A A 131 131 . 0.1169 0.1373 0.1176 -0.0087 0.0197
0.0026  1 .
979  CA    CA    . ARG ARG ARG A A 131 131 . 0.1289 0.1545 0.1245 -0.0038 0.0175
0.0051  1 .
980  CB    CB    . ARG ARG ARG A A 131 131 . 0.1261 0.1741 0.1728 0.0091  0.0338  -
0.0018 1 .
981  CG    CG    . ARG ARG ARG A A 131 131 . 0.2727 0.2686 0.2276 0.0011  0.0560
0.0060  1 .
982  CD    CD    . ARG ARG ARG A A 131 131 . 0.3112 0.4659 0.2814 -0.0172 0.1102
0.0167  1 .
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983  NE    NE    . ARG ARG ARG A A 131 131 . 0.4090 0.5310 0.3911 -0.0391 0.0183
0.0136  1 .
984  CZ    CZ    . ARG ARG ARG A A 131 131 . 0.4365 0.5592 0.3957 0.0018  0.0351  -
0.0252 1 .
985  NH1   NH1   . ARG ARG ARG A A 131 131 . 0.4070 0.5941 0.4594 0.0235  0.0920  -
0.0051 1 .
986  NH2   NH2   . ARG ARG ARG A A 131 131 . 0.4088 0.5362 0.5632 0.0051  0.0417  -
0.0157 1 .
987  C     C     . ARG ARG ARG A A 131 131 . 0.1007 0.1519 0.1250 -0.0038 0.0062  -
0.0031 1 .
988  O     O     . ARG ARG ARG A A 131 131 . 0.1207 0.1394 0.1218 -0.0077 0.0042
0.0010  1 .
989  N     N     . HIS HIS HIS A A 132 132 . 0.0881 0.1201 0.1160 -0.0127 0.0300  -
0.0179 1 .
990  CA    CA    . HIS HIS HIS A A 132 132 . 0.1210 0.1249 0.1200 -0.0048 0.0029  -
0.0038 1 .
991  CB    CB    . HIS HIS HIS A A 132 132 . 0.1547 0.1364 0.1258 0.0003  0.0260  -
0.0057 1 .
992  CG    CG    . HIS HIS HIS A A 132 132 . 0.1412 0.1280 0.1466 0.0038  0.0224  -
0.0075 1 .
993  ND1   ND1   . HIS HIS HIS A A 132 132 . 0.1775 0.1505 0.2138 -0.0405 0.0481  -
0.0325 1 .
994  CE1   CE1   . HIS HIS HIS A A 132 132 . 0.1517 0.1779 0.2156 -0.0160 0.0309  -
0.0056 1 .
995  NE2   NE2   . HIS HIS HIS A A 132 132 . 0.1436 0.1599 0.1451 0.0170  0.0140  -
0.0128 1 .
996  CD2   CD2   . HIS HIS HIS A A 132 132 . 0.1269 0.1565 0.1328 0.0229  0.0082  -
0.0129 1 .
997  C     C     . HIS HIS HIS A A 132 132 . 0.1172 0.1116 0.1305 -0.0194 0.0020  -
0.0003 1 .
998  O     O     . HIS HIS HIS A A 132 132 . 0.1319 0.1463 0.1238 0.0073  0.0071
0.0145  1 .
999  N     N     . ILE ILE ILE A A 133 133 . 0.1097 0.1306 0.1098 -0.0095 0.0250
0.0123  1 .
1000 CA    CA    . ILE ILE ILE A A 133 133 . 0.1310 0.1398 0.1196 -0.0175 0.0198  -
0.0038 1 .
1001 CB    CB    . ILE ILE ILE A A 133 133 . 0.1177 0.1206 0.1122 -0.0279 0.0045  -
0.0133 1 .
1002 CG1   CG1   . ILE ILE ILE A A 133 133 . 0.1172 0.1367 0.1020 -0.0034 0.0344  -
0.0057 1 .
1003 CD    CD    . ILE ILE ILE A A 133 133 . 0.1450 0.1322 0.1124 -0.0587 0.0119
0.0224  1 .
1004 CG2   CG2   . ILE ILE ILE A A 133 133 . 0.1102 0.1483 0.1461 0.0164  0.0087
0.0016  1 .
1005 C     C     . ILE ILE ILE A A 133 133 . 0.1261 0.1372 0.1319 -0.0101 -0.0007
0.0176  1 .
1006 O     O     . ILE ILE ILE A A 133 133 . 0.1435 0.1340 0.1235 -0.0043 0.0317
0.0290  1 .
1007 N     N     . ALA ALA ALA A A 134 134 . 0.1198 0.1636 0.1102 -0.0196 0.0150
0.0049  1 .
1008 CA    CA    . ALA ALA ALA A A 134 134 . 0.1335 0.1306 0.0904 -0.0296 0.0316
0.0108  1 .
1009 CB    CB    . ALA ALA ALA A A 134 134 . 0.1633 0.1432 0.1355 -0.0062 0.0344
0.0108  1 .
1010 C     C     . ALA ALA ALA A A 134 134 . 0.1762 0.1801 0.1468 -0.0198 0.0138
0.0211  1 .
1011 O     O     . ALA ALA ALA A A 134 134 . 0.1846 0.1783 0.1338 0.0109  0.0192
0.0293  1 .
1012 N     N     . GLN GLN GLN A A 135 135 . 0.1746 0.1791 0.1567 -0.0321 0.0279
0.0263  1 .
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1013 CA    CA    . GLN GLN GLN A A 135 135 . 0.2054 0.2140 0.1840 -0.0485 0.0129
0.0585  1 .
1014 CB    CB    . GLN GLN GLN A A 135 135 . 0.1960 0.2250 0.2186 -0.0436 0.0137
0.0443  1 .
1015 CG    CG    . GLN GLN GLN A A 135 135 . 0.2220 0.2842 0.2630 -0.0380 0.0502
0.0708  1 .
1016 CD    CD    . GLN GLN GLN A A 135 135 . 0.2057 0.3396 0.3092 0.0213  0.0264  -
0.0082 1 .
1017 OE1   OE1   . GLN GLN GLN A A 135 135 . 0.3229 0.4011 0.2980 0.0399  0.1044  -
0.0710 1 .
1018 NE2   NE2   . GLN GLN GLN A A 135 135 . 0.2525 0.3105 0.2562 0.0049  0.0959
0.0922  1 .
1019 C     C     . GLN GLN GLN A A 135 135 . 0.2078 0.2210 0.1998 -0.0356 0.0208
0.0446  1 .
1020 O     O     . GLN GLN GLN A A 135 135 . 0.2447 0.2229 0.1733 -0.0455 0.0318
0.0642  1 .
1021 N     N     . LEU LEU LEU A A 136 136 . 0.2039 0.2061 0.1907 -0.0224 0.0219
0.0197  1 .
1022 CA    CA    . LEU LEU LEU A A 136 136 . 0.2048 0.1846 0.1822 -0.0158 -0.0038
0.0439  1 .
1023 CB    CB    . LEU LEU LEU A A 136 136 . 0.2432 0.2070 0.1871 -0.0092 0.0001
0.0215  1 .
1024 CG    CG    . LEU LEU LEU A A 136 136 . 0.1698 0.1646 0.1954 -0.0346 0.0013
0.0198  1 .
1025 CD1   CD1   . LEU LEU LEU A A 136 136 . 0.2086 0.1908 0.1460 0.0218  0.0199
0.0097  1 .
1026 CD2   CD2   . LEU LEU LEU A A 136 136 . 0.2170 0.2013 0.1995 -0.0627 -0.0007 -
0.0115 1 .
1027 C     C     . LEU LEU LEU A A 136 136 . 0.2514 0.2148 0.2097 -0.0146 -0.0212
0.0280  1 .
1028 O     O     . LEU LEU LEU A A 136 136 . 0.2984 0.2052 0.2517 -0.0244 -0.0395
0.0529  1 .
1029 N     N     . ALA ALA ALA A A 137 137 . 0.1880 0.1939 0.1806 -0.0517 -0.0075
0.0508  1 .
1030 CA    CA    . ALA ALA ALA A A 137 137 . 0.2234 0.2427 0.1946 -0.0387 -0.0062
0.0353  1 .
1031 CB    CB    . ALA ALA ALA A A 137 137 . 0.2166 0.1836 0.2041 -0.0398 0.0008
0.0041  1 .
1032 C     C     . ALA ALA ALA A A 137 137 . 0.2406 0.2563 0.2058 -0.0164 0.0000
0.0281  1 .
1033 O     O     . ALA ALA ALA A A 137 137 . 0.2806 0.2928 0.2430 -0.0068 -0.0125
0.0229  1 .
1034 N     N     . GLY GLY GLY A A 138 138 . 0.2677 0.2881 0.2027 -0.0129 0.0090
0.0454  1 .
1035 CA    CA    . GLY GLY GLY A A 138 138 . 0.3136 0.3511 0.2122 -0.0083 0.0195
0.0228  1 .
1036 C     C     . GLY GLY GLY A A 138 138 . 0.3441 0.3688 0.2542 -0.0063 0.0168
0.0146  1 .
1037 O     O     . GLY GLY GLY A A 138 138 . 0.3686 0.4357 0.2531 -0.0047 0.0129
0.0000  1 .
1038 N     N     . ASN ASN ASN A A 139 139 . 0.3391 0.3811 0.2637 -0.0044 0.0214
0.0312  1 .
1039 CA    CA    . ASN ASN ASN A A 139 139 . 0.3436 0.3928 0.2881 0.0010  0.0270
0.0089  1 .
1040 CB    CB    . ASN ASN ASN A A 139 139 . 0.3283 0.4058 0.2835 -0.0093 0.0039
0.0205  1 .
1041 CG    CG    . ASN ASN ASN A A 139 139 . 0.3212 0.4193 0.2587 -0.0098 0.0159
0.0322  1 .
1042 OD1   OD1   . ASN ASN ASN A A 139 139 . 0.4081 0.5014 0.2116 -0.0177 0.0015
0.0533  1 .
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1043 ND2   ND2   . ASN ASN ASN A A 139 139 . 0.2651 0.3597 0.2032 -0.0696 -0.0017
0.0117  1 .
1044 C     C     . ASN ASN ASN A A 139 139 . 0.3746 0.4297 0.3507 0.0047  0.0161
0.0023  1 .
1045 O     O     . ASN ASN ASN A A 139 139 . 0.3568 0.4385 0.3180 0.0294  0.0384  -
0.0202 1 .
1046 N     N     . SER SER SER A A 140 140 . 0.4329 0.4551 0.3954 0.0053  0.0157  -
0.0057 1 .
1047 CA    CA    . SER SER SER A A 140 140 . 0.4712 0.4869 0.4464 0.0047  0.0126
0.0080  1 .
1048 CB    CB    . SER SER SER A A 140 140 . 0.4725 0.4922 0.4642 -0.0047 0.0256
0.0089  1 .
1049 OG    OG    . SER SER SER A A 140 140 . 0.5100 0.5323 0.5116 -0.0168 0.0364
0.0423  1 .
1050 C     C     . SER SER SER A A 140 140 . 0.4957 0.4964 0.4629 0.0031  0.0047
0.0105  1 .
1051 O     O     . SER SER SER A A 140 140 . 0.5229 0.5253 0.4949 0.0131  0.0022
0.0293  1 .
1052 N     N     . ASP ASP ASP A A 141 141 . 0.4854 0.4956 0.4877 -0.0008 0.0069
0.0153  1 .
1053 CA    CA    . ASP ASP ASP A A 141 141 . 0.4694 0.4886 0.4898 -0.0044 0.0136
0.0071  1 .
1054 CB    CB    . ASP ASP ASP A A 141 141 . 0.4933 0.5128 0.5120 -0.0005 0.0139  -
0.0055 1 .
1055 CG    CG    . ASP ASP ASP A A 141 141 . 0.5606 0.5595 0.6061 0.0346  0.0151
0.0031  1 .
1056 OD1   OD1   . ASP ASP ASP A A 141 141 . 0.6090 0.6828 0.7084 0.0565  0.0478  -
0.0124 1 .
1057 OD2   OD2   . ASP ASP ASP A A 141 141 . 0.5989 0.5961 0.6470 0.0244  0.0239  -
0.0070 1 .
1058 C     C     . ASP ASP ASP A A 141 141 . 0.4264 0.4598 0.4626 -0.0034 0.0082
0.0095  1 .
1059 O     O     . ASP ASP ASP A A 141 141 . 0.4507 0.4853 0.4962 -0.0082 -0.0022
0.0016  1 .
1060 N     N     . LEU LEU LEU A A 142 142 . 0.3517 0.3958 0.3880 -0.0211 0.0247
0.0127  1 .
1061 CA    CA    . LEU LEU LEU A A 142 142 . 0.2873 0.3093 0.3476 -0.0125 0.0232
0.0110  1 .
1062 CB    CB    . LEU LEU LEU A A 142 142 . 0.3027 0.2769 0.3120 -0.0234 0.0606  -
0.0095 1 .
1063 CG    CG    . LEU LEU LEU A A 142 142 . 0.2918 0.3077 0.3612 -0.0708 0.0205  -
0.0132 1 .
1064 CD1   CD1   . LEU LEU LEU A A 142 142 . 0.2600 0.2818 0.3020 -0.0436 0.0115  -
0.0955 1 .
1065 CD2   CD2   . LEU LEU LEU A A 142 142 . 0.3084 0.2600 0.4542 0.0005  0.0515  -
0.0250 1 .
1066 C     C     . LEU LEU LEU A A 142 142 . 0.2391 0.3001 0.2994 -0.0116 0.0162
0.0005  1 .
1067 O     O     . LEU LEU LEU A A 142 142 . 0.2272 0.3060 0.2903 -0.0108 0.0460
0.0103  1 .
1068 N     N     . ILE ILE ILE A A 143 143 . 0.2214 0.2600 0.2640 0.0046  0.0177
0.0269  1 .
1069 CA    CA    . ILE ILE ILE A A 143 143 . 0.2004 0.2401 0.1963 -0.0085 0.0055
0.0238  1 .
1070 CB    CB    . ILE ILE ILE A A 143 143 . 0.2612 0.3161 0.2135 0.0201  0.0154
0.0355  1 .
1071 CG1   CG1   . ILE ILE ILE A A 143 143 . 0.3358 0.2840 0.2508 0.0453  -0.0032
0.0173  1 .
1072 CD    CD    . ILE ILE ILE A A 143 143 . 0.3589 0.3373 0.2861 -0.0040 -0.0341
0.0538  1 .
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1073 CG2   CG2   . ILE ILE ILE A A 143 143 . 0.2891 0.3371 0.1814 -0.0426 0.0010
0.0123  1 .
1074 C     C     . ILE ILE ILE A A 143 143 . 0.1747 0.1716 0.1505 0.0017  0.0138
0.0125  1 .
1075 O     O     . ILE ILE ILE A A 143 143 . 0.1717 0.1656 0.1889 -0.0099 -0.0017
0.0316  1 .
1076 N     N     . LEU LEU LEU A A 144 144 . 0.1432 0.1332 0.1137 -0.0058 0.0074
0.0230  1 .
1077 CA    CA    . LEU LEU LEU A A 144 144 . 0.1097 0.1143 0.1243 -0.0065 0.0214
0.0031  1 .
1078 CB    CB    . LEU LEU LEU A A 144 144 . 0.1222 0.1475 0.1214 0.0128  -0.0314
0.0161  1 .
1079 CG    CG    . LEU LEU LEU A A 144 144 . 0.1076 0.1378 0.1238 0.0350  -0.0135 -
0.0089 1 .
1080 CD1   CD1   . LEU LEU LEU A A 144 144 . 0.1680 0.1438 0.1522 0.0200  -0.0318 -
0.0227 1 .
1081 CD2   CD2   . LEU LEU LEU A A 144 144 . 0.1655 0.2433 0.1980 0.0156  -0.0267
0.0228  1 .
1082 C     C     . LEU LEU LEU A A 144 144 . 0.1230 0.1302 0.1218 -0.0028 0.0178  -
0.0068 1 .
1083 O     O     . LEU LEU LEU A A 144 144 . 0.1376 0.1549 0.1304 -0.0088 0.0145  -
0.0107 1 .
1084 N     N     . PRO PRO PRO A A 145 145 . 0.0893 0.1006 0.0790 -0.0125 0.0051  -
0.0127 1 .
1085 CA    CA    . PRO PRO PRO A A 145 145 . 0.0968 0.1092 0.0957 -0.0130 0.0123  -
0.0062 1 .
1086 CB    CB    . PRO PRO PRO A A 145 145 . 0.0991 0.1237 0.0934 -0.0034 -0.0081 -
0.0007 1 .
1087 CG    CG    . PRO PRO PRO A A 145 145 . 0.0880 0.1242 0.1021 -0.0107 -0.0049
0.0035  1 .
1088 CD    CD    . PRO PRO PRO A A 145 145 . 0.0999 0.1118 0.0810 -0.0191 0.0112  -
0.0140 1 .
1089 C     C     . PRO PRO PRO A A 145 145 . 0.1043 0.1143 0.0929 0.0158  0.0031
0.0039  1 .
1090 O     O     . PRO PRO PRO A A 145 145 . 0.1147 0.1115 0.0970 0.0150  -0.0025
0.0017  1 .
1091 N     N     . VAL VAL VAL A A 146 146 . 0.0917 0.0986 0.0959 -0.0221 -0.0021 -
0.0003 1 .
1092 CA    CA    . VAL VAL VAL A A 146 146 . 0.0729 0.0838 0.0786 -0.0228 0.0078  -
0.0099 1 .
1093 CB    CB    . VAL VAL VAL A A 146 146 . 0.1135 0.1266 0.0759 -0.0358 0.0004  -
0.0008 1 .
1094 CG1   CG1   . VAL VAL VAL A A 146 146 . 0.1140 0.1333 0.0854 -0.0315 0.0129
0.0052  1 .
1095 CG2   CG2   . VAL VAL VAL A A 146 146 . 0.1453 0.1520 0.1037 -0.0055 0.0331  -
0.0377 1 .
1096 C     C     . VAL VAL VAL A A 146 146 . 0.1003 0.0936 0.0842 0.0025  0.0065
0.0093  1 .
1097 O     O     . VAL VAL VAL A A 146 146 . 0.1299 0.0920 0.1123 0.0047  0.0080  -
0.0035 1 .
1098 N     N     . PRO PRO PRO A A 147 147 . 0.0889 0.1005 0.0846 0.0072  0.0083  -
0.0087 1 .
1099 CA    CA    . PRO PRO PRO A A 147 147 . 0.1102 0.1061 0.0669 0.0106  0.0127
0.0053  1 .
1100 CB    CB    . PRO PRO PRO A A 147 147 . 0.0952 0.1023 0.0687 0.0084  0.0027  -
0.0018 1 .
1101 CG    CG    . PRO PRO PRO A A 147 147 . 0.1294 0.1027 0.0651 0.0027  0.0282
0.0051  1 .
1102 CD    CD    . PRO PRO PRO A A 147 147 . 0.1079 0.0906 0.0661 0.0291  0.0148
0.0099  1 .
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1103 C     C     . PRO PRO PRO A A 147 147 . 0.1086 0.0871 0.0753 -0.0049 -0.0011
0.0064  1 .
1104 O     O     . PRO PRO PRO A A 147 147 . 0.1261 0.1123 0.1124 -0.0034 0.0038  -
0.0091 1 .
1105 N     N     . ALA ALA ALA A A 148 148 . 0.0832 0.1043 0.0703 -0.0036 0.0132  -
0.0050 1 .
1106 CA    CA    . ALA ALA ALA A A 148 148 . 0.0657 0.0861 0.0675 0.0000  -0.0109
0.0009  1 .
1107 CB    CB    . ALA ALA ALA A A 148 148 . 0.1111 0.0957 0.0698 -0.0008 -0.0048
0.0374  1 .
1108 C     C     . ALA ALA ALA A A 148 148 . 0.0936 0.0782 0.0900 -0.0062 0.0076
0.0059  1 .
1109 O     O     . ALA ALA ALA A A 148 148 . 0.0966 0.0796 0.0830 0.0023  0.0103
0.0077  1 .
1110 N     N     . PHE PHE PHE A A 149 149 . 0.0737 0.1001 0.0855 -0.0115 -0.0058
0.0068  1 .
1111 CA    CA    . PHE PHE PHE A A 149 149 . 0.0738 0.0838 0.0680 0.0007  -0.0022
0.0134  1 .
1112 CB    CB    . PHE PHE PHE A A 149 149 . 0.0665 0.0859 0.0787 0.0007  -0.0003
0.0057  1 .
1113 CG    CG    . PHE PHE PHE A A 149 149 . 0.0571 0.0744 0.0770 -0.0042 -0.0020 -
0.0011 1 .
1114 CD1   CD1   . PHE PHE PHE A A 149 149 . 0.0864 0.0716 0.0966 -0.0071 -0.0066
0.0074  1 .
1115 CE1   CE1   . PHE PHE PHE A A 149 149 . 0.1133 0.0800 0.1250 0.0133  0.0183  -
0.0060 1 .
1116 CZ    CZ    . PHE PHE PHE A A 149 149 . 0.1098 0.0846 0.0974 -0.0144 -0.0026
0.0075  1 .
1117 CE2   CE2   . PHE PHE PHE A A 149 149 . 0.0828 0.0948 0.0830 -0.0038 -0.0135
0.0093  1 .
1118 CD2   CD2   . PHE PHE PHE A A 149 149 . 0.0777 0.0851 0.0799 0.0071  0.0148
0.0182  1 .
1119 C     C     . PHE PHE PHE A A 149 149 . 0.0738 0.0852 0.0742 -0.0083 -0.0027
0.0033  1 .
1120 O     O     . PHE PHE PHE A A 149 149 . 0.0834 0.0779 0.0877 -0.0144 -0.0072 -
0.0037 1 .
1121 N     N     . ASN ASN ASN A A 150 150 . 0.0836 0.0889 0.0871 0.0044  -0.0058
0.0016  1 .
1122 CA    CA    . ASN ASN ASN A A 150 150 . 0.0964 0.0977 0.0875 0.0025  -0.0162 -
0.0011 1 .
1123 CB    CB    . ASN ASN ASN A A 150 150 . 0.0966 0.0984 0.1249 0.0051  0.0185  -
0.0046 1 .
1124 CG    CG    . ASN ASN ASN A A 150 150 . 0.0908 0.1068 0.1021 0.0189  -0.0125 -
0.0107 1 .
1125 OD1   OD1   . ASN ASN ASN A A 150 150 . 0.1623 0.1412 0.1850 0.0288  -0.0029 -
0.0368 1 .
1126 ND2   ND2   . ASN ASN ASN A A 150 150 . 0.0945 0.0969 0.0754 0.0017  -0.0040
0.0093  1 .
1127 C     C     . ASN ASN ASN A A 150 150 . 0.1135 0.1114 0.0997 -0.0072 -0.0122 -
0.0021 1 .
1128 O     O     . ASN ASN ASN A A 150 150 . 0.1005 0.1145 0.1098 0.0014  -0.0132 -
0.0116 1 .
1129 N     N     . VAL VAL VAL A A 151 151 . 0.0997 0.0710 0.0897 0.0028  -0.0112
0.0232  1 .
1130 CA    CA    . VAL VAL VAL A A 151 151 . 0.0996 0.0774 0.0871 -0.0005 0.0079
0.0239  1 .
1131 CB    CB    . VAL VAL VAL A A 151 151 . 0.0662 0.0974 0.0904 -0.0059 -0.0151
0.0021  1 .
1132 CG1   CG1   . VAL VAL VAL A A 151 151 . 0.0818 0.1275 0.1397 -0.0016 0.0113  -
0.0034 1 .
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1133 CG2   CG2   . VAL VAL VAL A A 151 151 . 0.1563 0.1022 0.0870 -0.0094 -0.0114 -
0.0247 1 .
1134 C     C     . VAL VAL VAL A A 151 151 . 0.0722 0.0763 0.0886 0.0012  -0.0177
0.0104  1 .
1135 O     O     . VAL VAL VAL A A 151 151 . 0.1094 0.1026 0.1040 -0.0041 -0.0005
0.0064  1 .
1136 N     N     . ILE ILE ILE A A 152 152 . 0.0857 0.1031 0.0774 0.0143  0.0000
0.0062  1 .
1137 CA    CA    . ILE ILE ILE A A 152 152 . 0.0896 0.0984 0.1132 0.0037  -0.0050
0.0014  1 .
1138 CB    CB    . ILE ILE ILE A A 152 152 . 0.1062 0.0875 0.0919 -0.0020 -0.0025
0.0045  1 .
1139 CG1   CG1   . ILE ILE ILE A A 152 152 . 0.1336 0.0899 0.0947 -0.0087 -0.0108 -
0.0033 1 .
1140 CD    CD    . ILE ILE ILE A A 152 152 . 0.1490 0.1142 0.1548 -0.0205 -0.0149
0.0109  1 .
1141 CG2   CG2   . ILE ILE ILE A A 152 152 . 0.0977 0.1208 0.1331 -0.0084 0.0220
0.0182  1 .
1142 C     C     . ILE ILE ILE A A 152 152 . 0.1125 0.1125 0.1197 0.0076  -0.0081
0.0089  1 .
1143 O     O     . ILE ILE ILE A A 152 152 . 0.1098 0.1196 0.1053 0.0133  -0.0029
0.0027  1 .
1144 N     N     . ASN ASN ASN A A 153 153 . 0.1017 0.0926 0.1020 0.0081  0.0049  -
0.0073 1 .
1145 CA    CA    . ASN ASN ASN A A 153 153 . 0.1058 0.1048 0.1058 0.0182  -0.0074
0.0007  1 .
1146 CB    CB    . ASN ASN ASN A A 153 153 . 0.0946 0.1066 0.1071 -0.0049 0.0028
0.0155  1 .
1147 CG    CG    . ASN ASN ASN A A 153 153 . 0.1161 0.1029 0.1022 -0.0017 -0.0006
0.0077  1 .
1148 OD1   OD1   . ASN ASN ASN A A 153 153 . 0.2210 0.1454 0.1503 -0.0089 0.0277
0.0321  1 .
1149 ND2   ND2   . ASN ASN ASN A A 153 153 . 0.0632 0.0716 0.0964 0.0060  0.0006  -
0.0061 1 .
1150 C     C     . ASN ASN ASN A A 153 153 . 0.1108 0.1018 0.1057 -0.0049 0.0070
0.0086  1 .
1151 O     O     . ASN ASN ASN A A 153 153 . 0.0940 0.1160 0.1178 0.0007  0.0007
0.0144  1 .
1152 N     N     . GLY GLY GLY A A 154 154 . 0.0959 0.0917 0.1158 0.0166  0.0241
0.0042  1 .
1153 CA    CA    . GLY GLY GLY A A 154 154 . 0.1066 0.0925 0.1413 0.0083  0.0108
0.0170  1 .
1154 C     C     . GLY GLY GLY A A 154 154 . 0.0987 0.1029 0.1092 0.0072  -0.0006 -
0.0062 1 .
1155 O     O     . GLY GLY GLY A A 154 154 . 0.1082 0.1036 0.1258 0.0039  0.0111
0.0161  1 .
1156 N     N     . GLY GLY GLY A A 155 155 . 0.1075 0.1168 0.1180 0.0248  0.0083
0.0095  1 .
1157 CA    CA    . GLY GLY GLY A A 155 155 . 0.1396 0.1185 0.1056 -0.0004 0.0068  -
0.0032 1 .
1158 C     C     . GLY GLY GLY A A 155 155 . 0.1381 0.1275 0.1323 -0.0010 -0.0054 -
0.0022 1 .
1159 O     O     . GLY GLY GLY A A 155 155 . 0.1546 0.1357 0.1445 -0.0066 0.0223
0.0135  1 .
1160 N     N     . SER SER SER A A 156 156 . 0.1478 0.1314 0.1440 0.0181  -0.0123
0.0020  1 .
1161 CA    CA    . SER SER SER A A 156 156 . 0.1349 0.1395 0.1719 0.0129  -0.0286 -
0.0165 1 .
1162 CB    CB    . SER SER SER A A 156 156 . 0.1486 0.1460 0.1765 0.0165  -0.0147 -
0.0093 1 .
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1163 OG    OG    . SER SER SER A A 156 156 . 0.2155 0.1537 0.2008 0.0225  -0.0497
0.0051  1 .
1164 C     C     . SER SER SER A A 156 156 . 0.1446 0.1280 0.1381 0.0228  -0.0291 -
0.0056 1 .
1165 O     O     . SER SER SER A A 156 156 . 0.1589 0.1713 0.1987 0.0287  -0.0433 -
0.0259 1 .
1166 N     N     . HIS HIS HIS A A 157 157 . 0.1284 0.1332 0.1486 0.0269  -0.0196
0.0155  1 .
1167 CA    CA    . HIS HIS HIS A A 157 157 . 0.1050 0.1363 0.1292 0.0039  -0.0019
0.0129  1 .
1168 CB    CB    . HIS HIS HIS A A 157 157 . 0.1202 0.1236 0.0994 0.0143  0.0045
0.0169  1 .
1169 CG    CG    . HIS HIS HIS A A 157 157 . 0.1406 0.1275 0.1217 -0.0034 0.0316
0.0077  1 .
1170 ND1   ND1   . HIS HIS HIS A A 157 157 . 0.1082 0.1564 0.1196 -0.0065 0.0181  -
0.0058 1 .
1171 CE1   CE1   . HIS HIS HIS A A 157 157 . 0.1297 0.1153 0.1823 0.0054  -0.0043
0.0008  1 .
1172 NE2   NE2   . HIS HIS HIS A A 157 157 . 0.1002 0.1293 0.1019 -0.0068 -0.0069 -
0.0125 1 .
1173 CD2   CD2   . HIS HIS HIS A A 157 157 . 0.1132 0.1615 0.1458 0.0098  -0.0007
0.0282  1 .
1174 C     C     . HIS HIS HIS A A 157 157 . 0.1265 0.1239 0.1689 -0.0032 -0.0048
0.0190  1 .
1175 O     O     . HIS HIS HIS A A 157 157 . 0.1107 0.1395 0.1468 0.0110  -0.0018
0.0294  1 .
1176 N     N     . ALA ALA ALA A A 158 158 . 0.1302 0.1353 0.1430 -0.0039 -0.0012
0.0114  1 .
1177 CA    CA    . ALA ALA ALA A A 158 158 . 0.1496 0.1575 0.1549 -0.0255 -0.0076
0.0025  1 .
1178 CB    CB    . ALA ALA ALA A A 158 158 . 0.1429 0.1477 0.1611 -0.0201 0.0334  -
0.0017 1 .
1179 C     C     . ALA ALA ALA A A 158 158 . 0.1546 0.1698 0.1543 -0.0187 -0.0079
0.0083  1 .
1180 O     O     . ALA ALA ALA A A 158 158 . 0.1823 0.1610 0.1598 -0.0017 -0.0168
0.0268  1 .
1181 N     N     . GLY GLY GLY A A 159 159 . 0.1402 0.1578 0.1296 -0.0108 0.0058
0.0341  1 .
1182 CA    CA    . GLY GLY GLY A A 159 159 . 0.1624 0.1647 0.1528 -0.0380 0.0137
0.0066  1 .
1183 C     C     . GLY GLY GLY A A 159 159 . 0.1769 0.1753 0.1631 -0.0227 0.0184
0.0098  1 .
1184 O     O     . GLY GLY GLY A A 159 159 . 0.1667 0.1941 0.1647 -0.0022 0.0061
0.0103  1 .
1185 N     N     . ASN ASN ASN A A 160 160 . 0.1530 0.1711 0.1504 -0.0055 0.0069
0.0185  1 .
1186 CA    CA    . ASN ASN ASN A A 160 160 . 0.1307 0.1376 0.1402 0.0016  -0.0064
0.0188  1 .
1187 CB    CB    . ASN ASN ASN A A 160 160 . 0.1006 0.1483 0.1115 -0.0138 0.0138
0.0112  1 .
1188 CG    CG    . ASN ASN ASN A A 160 160 . 0.1192 0.1063 0.1155 -0.0049 0.0082  -
0.0012 1 .
1189 OD1   OD1   . ASN ASN ASN A A 160 160 . 0.1401 0.1510 0.1307 -0.0054 0.0149
0.0238  1 .
1190 ND2   ND2   . ASN ASN ASN A A 160 160 . 0.0997 0.1318 0.1330 0.0031  0.0066  -
0.0094 1 .
1191 C     C     . ASN ASN ASN A A 160 160 . 0.1303 0.1369 0.1434 0.0066  0.0018
0.0113  1 .
1192 O     O     . ASN ASN ASN A A 160 160 . 0.1270 0.1464 0.1365 -0.0125 0.0030
0.0186  1 .
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1193 N     N     . LYS LYS LYS A A 161 161 . 0.1540 0.1820 0.1445 -0.0089 0.0260
0.0148  1 .
1194 CA    CA    . LYS LYS LYS A A 161 161 . 0.1181 0.1799 0.1267 -0.0056 0.0035
0.0051  1 .
1195 CB    CB    . LYS LYS LYS A A 161 161 . 0.1475 0.1917 0.1471 -0.0323 0.0317
0.0051  1 .
1196 CG    CG    . LYS LYS LYS A A 161 161 . 0.1421 0.2160 0.1804 -0.0390 0.0287
0.0332  1 .
1197 CD    CD    . LYS LYS LYS A A 161 161 . 0.2190 0.3416 0.1842 -0.0718 0.0008  -
0.0080 1 .
1198 CE    CE    . LYS LYS LYS A A 161 161 . 0.3190 0.4100 0.2050 -0.1172 0.0231
0.0558  1 .
1199 NZ    NZ    . LYS LYS LYS A A 161 161 . 0.3028 0.4015 0.4016 -0.0960 -0.0162
0.0175  1 .
1200 C     C     . LYS LYS LYS A A 161 161 . 0.1475 0.1554 0.1581 -0.0011 0.0053
0.0071  1 .
1201 O     O     . LYS LYS LYS A A 161 161 . 0.1566 0.1870 0.1803 0.0199  0.0251
0.0511  1 .
1202 N     N     . LEU LEU LEU A A 162 162 . 0.1086 0.1389 0.1156 0.0028  -0.0045
0.0083  1 .
1203 CA    CA    . LEU LEU LEU A A 162 162 . 0.0931 0.1326 0.1251 0.0113  -0.0079
0.0233  1 .
1204 CB    CB    . LEU LEU LEU A A 162 162 . 0.1093 0.1475 0.1396 0.0185  -0.0078
0.0231  1 .
1205 CG    CG    . LEU LEU LEU A A 162 162 . 0.1206 0.1341 0.1106 0.0185  0.0034
0.0089  1 .
1206 CD1   CD1   . LEU LEU LEU A A 162 162 . 0.1276 0.1578 0.1714 0.0023  0.0105  -
0.0156 1 .
1207 CD2   CD2   . LEU LEU LEU A A 162 162 . 0.0561 0.1352 0.1563 -0.0034 0.0121
0.0101  1 .
1208 C     C     . LEU LEU LEU A A 162 162 . 0.0987 0.1309 0.1229 0.0016  -0.0045
0.0136  1 .
1209 O     O     . LEU LEU LEU A A 162 162 . 0.1254 0.1203 0.1124 -0.0003 -0.0046
0.0094  1 .
1210 N     N     . ALA ALA ALA A A 163 163 . 0.1180 0.1391 0.1372 0.0122  0.0099
0.0316  1 .
1211 CA    CA    . ALA ALA ALA A A 163 163 . 0.1160 0.1498 0.1482 0.0203  0.0180
0.0220  1 .
1212 CB    CB    . ALA ALA ALA A A 163 163 . 0.1045 0.1305 0.1572 -0.0094 -0.0188
0.0205  1 .
1213 C     C     . ALA ALA ALA A A 163 163 . 0.0805 0.1170 0.1259 -0.0051 0.0016
0.0105  1 .
1214 O     O     . ALA ALA ALA A A 163 163 . 0.1197 0.1201 0.1253 0.0145  0.0030  -
0.0009 1 .
1215 N     N     . MET MET MET A A 164 164 . 0.1009 0.1081 0.1085 -0.0076 0.0035
0.0209  1 .
1216 CA    CA    . MET MET MET A A 164 164 . 0.0849 0.1291 0.0967 -0.0002 0.0141
0.0060  1 .
1217 CB    CB    . MET MET MET A A 164 164 . 0.0952 0.1337 0.1241 -0.0119 0.0024
0.0079  1 .
1218 CG    CG    . MET MET MET A A 164 164 . 0.0868 0.1267 0.1237 -0.0138 -0.0079 -
0.0056 1 .
1219 SD    SD    . MET MET MET A A 164 164 . 0.1129 0.1500 0.1360 0.0019  -0.0036
0.0107  1 .
1220 CE    CE    . MET MET MET A A 164 164 . 0.0961 0.1712 0.1367 0.0421  -0.0377 -
0.0201 1 .
1221 C     C     . MET MET MET A A 164 164 . 0.0876 0.1095 0.1210 -0.0079 0.0169
0.0068  1 .
1222 O     O     . MET MET MET A A 164 164 . 0.1212 0.1203 0.1173 -0.0002 0.0046
0.0270  1 .
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1223 N     N     . GLN GLN GLN A A 165 165 . 0.0818 0.1087 0.1017 -0.0192 -0.0062 -
0.0134 1 .
1224 CA    CA    . GLN GLN GLN A A 165 165 . 0.0995 0.0772 0.0812 -0.0047 -0.0128
0.0016  1 .
1225 CB    CB    . GLN GLN GLN A A 165 165 . 0.1049 0.0894 0.0839 -0.0175 -0.0015 -
0.0175 1 .
1226 CG    CG    . GLN GLN GLN A A 165 165 . 0.0874 0.0972 0.0777 -0.0090 -0.0169
0.0135  1 .
1227 CD    CD    . GLN GLN GLN A A 165 165 . 0.1173 0.1068 0.0997 -0.0024 -0.0145
0.0004  1 .
1228 OE1   OE1   . GLN GLN GLN A A 165 165 . 0.1117 0.0970 0.0986 0.0157  0.0070
0.0004  1 .
1229 NE2   NE2   . GLN GLN GLN A A 165 165 . 0.1063 0.1460 0.1225 -0.0127 -0.0008 -
0.0123 1 .
1230 C     C     . GLN GLN GLN A A 165 165 . 0.0908 0.1173 0.0888 -0.0056 0.0045  -
0.0037 1 .
1231 O     O     . GLN GLN GLN A A 165 165 . 0.0878 0.0984 0.0890 0.0192  0.0132
0.0091  1 .
1232 N     N     . GLU GLU GLU A A 166 166 . 0.0920 0.1080 0.1001 0.0041  0.0269
0.0015  1 .
1233 CA    CA    . GLU GLU GLU A A 166 166 . 0.0829 0.0941 0.0931 0.0052  -0.0101 -
0.0003 1 .
1234 CB    CB    . GLU GLU GLU A A 166 166 . 0.1055 0.1079 0.0942 -0.0095 -0.0029 -
0.0046 1 .
1235 CG    CG    . GLU GLU GLU A A 166 166 . 0.1014 0.1134 0.1332 -0.0253 -0.0181 -
0.0199 1 .
1236 CD    CD    . GLU GLU GLU A A 166 166 . 0.0894 0.1392 0.1314 0.0014  0.0071  -
0.0019 1 .
1237 OE1   OE1   . GLU GLU GLU A A 166 166 . 0.0982 0.1277 0.1239 0.0065  0.0108
0.0057  1 .
1238 OE2   OE2   . GLU GLU GLU A A 166 166 . 0.1093 0.1395 0.1591 -0.0025 0.0030  -
0.0129 1 .
1239 C     C     . GLU GLU GLU A A 166 166 . 0.0887 0.0849 0.0871 0.0023  -0.0025 -
0.0010 1 .
1240 O     O     . GLU GLU GLU A A 166 166 . 0.1042 0.1233 0.1111 0.0026  -0.0160
0.0054  1 .
1241 N     N     . PHE PHE PHE A A 167 167 . 0.0801 0.0773 0.0799 0.0097  -0.0009
0.0054  1 .
1242 CA    CA    . PHE PHE PHE A A 167 167 . 0.0777 0.0964 0.0998 0.0024  -0.0072 -
0.0068 1 .
1243 CB    CB    . PHE PHE PHE A A 167 167 . 0.0984 0.0989 0.1213 -0.0004 0.0125  -
0.0048 1 .
1244 CG    CG    . PHE PHE PHE A A 167 167 . 0.1102 0.0930 0.0984 0.0136  0.0072
0.0162  1 .
1245 CD1   CD1   . PHE PHE PHE A A 167 167 . 0.1178 0.0812 0.1300 0.0058  0.0182
0.0014  1 .
1246 CE1   CE1   . PHE PHE PHE A A 167 167 . 0.1161 0.1286 0.1559 -0.0235 0.0138
0.0158  1 .
1247 CZ    CZ    . PHE PHE PHE A A 167 167 . 0.0880 0.1500 0.1366 -0.0140 0.0043
0.0293  1 .
1248 CE2   CE2   . PHE PHE PHE A A 167 167 . 0.1209 0.1764 0.2154 0.0044  -0.0232
0.0174  1 .
1249 CD2   CD2   . PHE PHE PHE A A 167 167 . 0.1233 0.1288 0.1868 -0.0283 0.0142
0.0217  1 .
1250 C     C     . PHE PHE PHE A A 167 167 . 0.0812 0.1100 0.1022 0.0056  -0.0104
0.0117  1 .
1251 O     O     . PHE PHE PHE A A 167 167 . 0.0983 0.0975 0.0789 -0.0093 -0.0061
0.0101  1 .
1252 N     N     . MET MET MET A A 168 168 . 0.0798 0.1228 0.0825 -0.0014 -0.0089 -
0.0132 1 .
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1253 CA    CA    . MET MET MET A A 168 168 . 0.0704 0.0990 0.1108 -0.0228 0.0099  -
0.0021 1 .
1254 CB    CB    . MET MET MET A A 168 168 . 0.1108 0.1099 0.1122 -0.0084 0.0108  -
0.0054 1 .
1255 CG    CG    . MET MET MET A A 168 168 . 0.1080 0.0887 0.1007 -0.0053 0.0038
0.0072  1 .
1256 SD    SD    . MET MET MET A A 168 168 . 0.1224 0.1298 0.1331 0.0003  -0.0101
0.0053  1 .
1257 CE    CE    . MET MET MET A A 168 168 . 0.0623 0.1670 0.1429 0.0279  -0.0128
0.0000  1 .
1258 C     C     . MET MET MET A A 168 168 . 0.0752 0.0866 0.0744 -0.0103 -0.0130
0.0001  1 .
1259 O     O     . MET MET MET A A 168 168 . 0.1098 0.0940 0.0829 0.0064  -0.0236 -
0.0048 1 .
1260 N     N     . ILE ILE ILE A A 169 169 . 0.0772 0.0875 0.0815 0.0093  0.0140  -
0.0165 1 .
1261 CA    CA    . ILE ILE ILE A A 169 169 . 0.0963 0.0826 0.0824 0.0037  0.0030  -
0.0138 1 .
1262 CB    CB    . ILE ILE ILE A A 169 169 . 0.1085 0.0775 0.0755 -0.0287 -0.0206
0.0065  1 .
1263 CG1   CG1   . ILE ILE ILE A A 169 169 . 0.0964 0.0762 0.0913 -0.0059 -0.0136
0.0104  1 .
1264 CD    CD    . ILE ILE ILE A A 169 169 . 0.1511 0.0820 0.1458 -0.0142 -0.0102
0.0288  1 .
1265 CG2   CG2   . ILE ILE ILE A A 169 169 . 0.1162 0.1437 0.1156 -0.0236 0.0153  -
0.0287 1 .
1266 C     C     . ILE ILE ILE A A 169 169 . 0.0852 0.0912 0.0750 -0.0133 -0.0067
0.0021  1 .
1267 O     O     . ILE ILE ILE A A 169 169 . 0.1163 0.1087 0.0816 -0.0110 -0.0106 -
0.0039 1 .
1268 N     N     . LEU LEU LEU A A 170 170 . 0.1115 0.1204 0.0829 0.0019  0.0162  -
0.0064 1 .
1269 CA    CA    . LEU LEU LEU A A 170 170 . 0.0920 0.0784 0.0822 -0.0018 -0.0041 -
0.0018 1 .
1270 CB    CB    . LEU LEU LEU A A 170 170 . 0.1093 0.0963 0.0957 0.0058  -0.0183
0.0045  1 .
1271 CG    CG    . LEU LEU LEU A A 170 170 . 0.1084 0.1063 0.1201 0.0165  0.0049
0.0193  1 .
1272 CD1   CD1   . LEU LEU LEU A A 170 170 . 0.0997 0.1601 0.1525 0.0258  0.0223
0.0173  1 .
1273 CD2   CD2   . LEU LEU LEU A A 170 170 . 0.1944 0.1314 0.1600 0.0089  0.0297
0.0302  1 .
1274 C     C     . LEU LEU LEU A A 170 170 . 0.0912 0.0896 0.0755 0.0072  -0.0042 -
0.0014 1 .
1275 O     O     . LEU LEU LEU A A 170 170 . 0.0958 0.0985 0.0913 -0.0060 -0.0274
0.0038  1 .
1276 N     N     . PRO PRO PRO A A 171 171 . 0.1034 0.0902 0.0833 0.0039  -0.0046 -
0.0026 1 .
1277 CA    CA    . PRO PRO PRO A A 171 171 . 0.1027 0.0979 0.0781 0.0265  0.0052  -
0.0007 1 .
1278 CB    CB    . PRO PRO PRO A A 171 171 . 0.1053 0.1460 0.0808 0.0159  0.0026  -
0.0180 1 .
1279 CG    CG    . PRO PRO PRO A A 171 171 . 0.1320 0.1267 0.1183 0.0432  0.0014  -
0.0206 1 .
1280 CD    CD    . PRO PRO PRO A A 171 171 . 0.1398 0.1048 0.0637 0.0152  -0.0275
0.0007  1 .
1281 C     C     . PRO PRO PRO A A 171 171 . 0.0813 0.0860 0.0829 -0.0051 -0.0041 -
0.0138 1 .
1282 O     O     . PRO PRO PRO A A 171 171 . 0.1144 0.1120 0.0937 0.0066  -0.0039 -
0.0105 1 .
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1283 N     N     . VAL VAL VAL A A 172 172 . 0.1110 0.1091 0.0750 0.0038  -0.0052
0.0016  1 .
1284 CA    CA    . VAL VAL VAL A A 172 172 . 0.1189 0.1126 0.0946 0.0090  -0.0004
0.0052  1 .
1285 CB    CB    . VAL VAL VAL A A 172 172 . 0.1217 0.1105 0.0910 0.0031  -0.0120 -
0.0034 1 .
1286 CG1   CG1   . VAL VAL VAL A A 172 172 . 0.1487 0.0879 0.1206 0.0169  -0.0211 -
0.0008 1 .
1287 CG2   CG2   . VAL VAL VAL A A 172 172 . 0.1120 0.1349 0.1205 0.0031  -0.0178 -
0.0028 1 .
1288 C     C     . VAL VAL VAL A A 172 172 . 0.1217 0.1293 0.1051 -0.0168 -0.0136 -
0.0171 1 .
1289 O     O     . VAL VAL VAL A A 172 172 . 0.1568 0.1546 0.1165 -0.0054 0.0072  -
0.0223 1 .
1290 N     N     . GLY GLY GLY A A 173 173 . 0.1356 0.1046 0.0880 0.0267  -0.0047 -
0.0241 1 .
1291 CA    CA    . GLY GLY GLY A A 173 173 . 0.1256 0.1288 0.1243 0.0441  -0.0054 -
0.0383 1 .
1292 C     C     . GLY GLY GLY A A 173 173 . 0.1433 0.1332 0.1281 0.0178  -0.0154 -
0.0337 1 .
1293 O     O     . GLY GLY GLY A A 173 173 . 0.1486 0.1619 0.1722 0.0240  -0.0182 -
0.0368 1 .
1294 N     N     . ALA ALA ALA A A 174 174 . 0.1325 0.1319 0.0931 0.0077  0.0077  -
0.0219 1 .
1295 CA    CA    . ALA ALA ALA A A 174 174 . 0.1353 0.1311 0.1252 -0.0126 -0.0097 -
0.0114 1 .
1296 CB    CB    . ALA ALA ALA A A 174 174 . 0.1450 0.1408 0.1275 0.0048  -0.0352 -
0.0338 1 .
1297 C     C     . ALA ALA ALA A A 174 174 . 0.1490 0.1275 0.1108 -0.0058 -0.0105 -
0.0255 1 .
1298 O     O     . ALA ALA ALA A A 174 174 . 0.1648 0.1430 0.1227 -0.0004 -0.0134 -
0.0115 1 .
1299 N     N     . GLU GLU GLU A A 175 175 . 0.1550 0.1694 0.1635 -0.0040 -0.0054 -
0.0360 1 .
1300 CA    CA    . GLU GLU GLU A A 175 175 . 0.1323 0.1907 0.2009 -0.0136 0.0014  -
0.0217 1 .
1301 CB    CB    . GLU GLU GLU A A 175 175 . 0.1695 0.1964 0.2779 0.0070  0.0136  -
0.0545 1 .
1302 CG    CG    . GLU GLU GLU A A 175 175 . 0.3128 0.3178 0.3701 -0.0177 0.0062  -
0.0192 1 .
1303 CD    CD    . GLU GLU GLU A A 175 175 . 0.5002 0.5681 0.4711 0.0159  0.0035  -
0.0313 1 .
1304 OE1   OE1   . GLU GLU GLU A A 175 175 . 0.5815 0.6205 0.5938 0.0429  -0.0607
0.0155  1 .
1305 OE2   OE2   . GLU GLU GLU A A 175 175 . 0.5303 0.6176 0.5967 0.0690  0.0636  -
0.0186 1 .
1306 C     C     . GLU GLU GLU A A 175 175 . 0.1607 0.1937 0.1753 0.0005  0.0090  -
0.0234 1 .
1307 O     O     . GLU GLU GLU A A 175 175 . 0.1643 0.2536 0.1791 -0.0460 0.0188  -
0.0231 1 .
1308 N     N     . SER SER SER A A 176 176 . 0.1234 0.1505 0.1087 -0.0080 0.0019  -
0.0267 1 .
1309 CA    CA    . SER SER SER A A 176 176 . 0.1136 0.1401 0.1252 0.0088  0.0003  -
0.0143 1 .
1310 CB    CB    . SER SER SER A A 176 176 . 0.1079 0.1517 0.1186 0.0377  0.0329
0.0129  1 .
1311 OG    OG    . SER SER SER A A 176 176 . 0.1201 0.1597 0.1195 0.0083  -0.0017
0.0140  1 .
1312 C     C     . SER SER SER A A 176 176 . 0.1049 0.1227 0.1028 0.0002  0.0079  -
0.0052 1 .
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1313 O     O     . SER SER SER A A 176 176 . 0.1368 0.1144 0.1064 0.0147  0.0013  -
0.0031 1 .
1314 N     N     . PHE PHE PHE A A 177 177 . 0.1278 0.1201 0.1143 0.0082  0.0001  -
0.0139 1 .
1315 CA    CA    . PHE PHE PHE A A 177 177 . 0.1433 0.1013 0.1095 0.0059  0.0050  -
0.0039 1 .
1316 CB    CB    . PHE PHE PHE A A 177 177 . 0.1029 0.1070 0.1270 -0.0239 0.0044  -
0.0047 1 .
1317 CG    CG    . PHE PHE PHE A A 177 177 . 0.0922 0.1009 0.1037 -0.0073 -0.0014
0.0123  1 .
1318 CD1   CD1   . PHE PHE PHE A A 177 177 . 0.1255 0.1283 0.1427 -0.0049 -0.0130
0.0030  1 .
1319 CE1   CE1   . PHE PHE PHE A A 177 177 . 0.1108 0.1288 0.0961 0.0112  -0.0112 -
0.0140 1 .
1320 CZ    CZ    . PHE PHE PHE A A 177 177 . 0.1232 0.1048 0.0927 -0.0223 -0.0201 -
0.0138 1 .
1321 CE2   CE2   . PHE PHE PHE A A 177 177 . 0.1315 0.0714 0.1135 0.0053  0.0059  -
0.0297 1 .
1322 CD2   CD2   . PHE PHE PHE A A 177 177 . 0.0931 0.0974 0.0888 -0.0038 0.0053
0.0146  1 .
1323 C     C     . PHE PHE PHE A A 177 177 . 0.1124 0.1078 0.1131 -0.0057 0.0077  -
0.0109 1 .
1324 O     O     . PHE PHE PHE A A 177 177 . 0.1162 0.1014 0.1140 0.0015  0.0044
0.0053  1 .
1325 N     N     . ARG ARG ARG A A 178 178 . 0.1460 0.1023 0.1094 0.0056  -0.0092 -
0.0024 1 .
1326 CA    CA    . ARG ARG ARG A A 178 178 . 0.1195 0.1039 0.1098 -0.0008 -0.0078
0.0069  1 .
1327 CB    CB    . ARG ARG ARG A A 178 178 . 0.1378 0.1190 0.1266 0.0123  -0.0141
0.0356  1 .
1328 CG    CG    . ARG ARG ARG A A 178 178 . 0.1824 0.2204 0.1580 -0.0029 0.0146
0.0377  1 .
1329 CD    CD    . ARG ARG ARG A A 178 178 . 0.2127 0.3253 0.3256 0.0047  -0.0356
0.0416  1 .
1330 NE    NE    . ARG ARG ARG A A 178 178 . 0.3926 0.3568 0.3819 0.0296  -0.0345
0.0671  1 .
1331 CZ    CZ    . ARG ARG ARG A A 178 178 . 0.5083 0.3384 0.3768 -0.0465 0.0069  -
0.0056 1 .
1332 NH1   NH1   . ARG ARG ARG A A 178 178 . 0.4619 0.3895 0.3620 -0.0723 0.0215  -
0.0583 1 .
1333 NH2   NH2   . ARG ARG ARG A A 178 178 . 0.4327 0.3380 0.3529 -0.0479 -0.0003 -
0.0104 1 .
1334 C     C     . ARG ARG ARG A A 178 178 . 0.1165 0.1171 0.1014 0.0000  -0.0011
0.0079  1 .
1335 O     O     . ARG ARG ARG A A 178 178 . 0.0902 0.0919 0.0922 -0.0057 0.0048  -
0.0131 1 .
1336 N     N     . ASP ASP ASP A A 179 179 . 0.1265 0.1021 0.1263 0.0086  -0.0134 -
0.0061 1 .
1337 CA    CA    . ASP ASP ASP A A 179 179 . 0.1064 0.1120 0.0780 -0.0018 0.0056  -
0.0197 1 .
1338 CB    CB    . ASP ASP ASP A A 179 179 . 0.1457 0.1169 0.0948 0.0080  -0.0120 -
0.0142 1 .
1339 CG    CG    . ASP ASP ASP A A 179 179 . 0.1502 0.1588 0.1768 0.0179  0.0028  -
0.0125 1 .
1340 OD1   OD1   . ASP ASP ASP A A 179 179 . 0.2398 0.2234 0.2551 0.0258  -0.0263
0.0176  1 .
1341 OD2   OD2   . ASP ASP ASP A A 179 179 . 0.2602 0.2220 0.1887 0.0268  0.0182  -
0.0254 1 .
1342 C     C     . ASP ASP ASP A A 179 179 . 0.1080 0.0758 0.0951 -0.0072 0.0157  -
0.0052 1 .
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1343 O     O     . ASP ASP ASP A A 179 179 . 0.1045 0.0972 0.1089 -0.0088 0.0132  -
0.0102 1 .
1344 N     N     . ALA ALA ALA A A 180 180 . 0.1043 0.1007 0.1045 0.0151  -0.0109
0.0108  1 .
1345 CA    CA    . ALA ALA ALA A A 180 180 . 0.0919 0.0863 0.0827 0.0148  -0.0041
0.0184  1 .
1346 CB    CB    . ALA ALA ALA A A 180 180 . 0.1084 0.1052 0.1135 0.0086  0.0097
0.0197  1 .
1347 C     C     . ALA ALA ALA A A 180 180 . 0.0673 0.0852 0.0777 0.0076  0.0047
0.0026  1 .
1348 O     O     . ALA ALA ALA A A 180 180 . 0.0821 0.1035 0.0827 0.0070  -0.0098 -
0.0097 1 .
1349 N     N     . MET MET MET A A 181 181 . 0.0968 0.0927 0.0822 -0.0082 -0.0032 -
0.0156 1 .
1350 CA    CA    . MET MET MET A A 181 181 . 0.0915 0.0965 0.0936 -0.0124 -0.0027 -
0.0042 1 .
1351 CB    CB    . MET MET MET A A 181 181 . 0.0901 0.0998 0.1156 -0.0076 -0.0095 -
0.0012 1 .
1352 CG    CG    . MET MET MET A A 181 181 . 0.0914 0.0942 0.1178 0.0084  0.0202
0.0067  1 .
1353 SD    SD    . MET MET MET A A 181 181 . 0.1065 0.1092 0.1068 0.0075  0.0006  -
0.0022 1 .
1354 CE    CE    . MET MET MET A A 181 181 . 0.1146 0.0903 0.0852 -0.0031 0.0139  -
0.0068 1 .
1355 C     C     . MET MET MET A A 181 181 . 0.0878 0.0884 0.0903 -0.0102 -0.0142 -
0.0142 1 .
1356 O     O     . MET MET MET A A 181 181 . 0.0922 0.1190 0.1113 -0.0068 -0.0073 -
0.0041 1 .
1357 N     N     . ARG ARG ARG A A 182 182 . 0.0837 0.0944 0.0977 -0.0071 -0.0123 -
0.0166 1 .
1358 CA    CA    . ARG ARG ARG A A 182 182 . 0.0898 0.0809 0.1121 0.0142  -0.0078
0.0039  1 .
1359 CB    CB    . ARG ARG ARG A A 182 182 . 0.0987 0.0823 0.1499 0.0059  0.0143  -
0.0052 1 .
1360 CG    CG    . ARG ARG ARG A A 182 182 . 0.1684 0.1074 0.1541 -0.0178 0.0075
0.0134  1 .
1361 CD    CD    . ARG ARG ARG A A 182 182 . 0.1807 0.0745 0.3291 0.0391  0.0491
0.0331  1 .
1362 NE    NE    . ARG ARG ARG A A 182 182 . 0.2370 0.1536 0.2834 0.0426  0.0458  -
0.0311 1 .
1363 CZ    CZ    . ARG ARG ARG A A 182 182 . 0.2786 0.2290 0.3132 0.0048  0.0289  -
0.0462 1 .
1364 NH1   NH1   . ARG ARG ARG A A 182 182 . 0.2640 0.2083 0.3309 0.0015  -0.0123 -
0.0728 1 .
1365 NH2   NH2   . ARG ARG ARG A A 182 182 . 0.2833 0.3441 0.2909 0.0130  0.0440  -
0.0662 1 .
1366 C     C     . ARG ARG ARG A A 182 182 . 0.1152 0.0803 0.1108 -0.0078 0.0010
0.0000  1 .
1367 O     O     . ARG ARG ARG A A 182 182 . 0.1007 0.1147 0.1126 -0.0041 0.0060
0.0125  1 .
1368 N     N     . LEU LEU LEU A A 183 183 . 0.1218 0.0931 0.1055 -0.0109 -0.0121 -
0.0056 1 .
1369 CA    CA    . LEU LEU LEU A A 183 183 . 0.1102 0.1093 0.1011 0.0155  -0.0114
0.0025  1 .
1370 CB    CB    . LEU LEU LEU A A 183 183 . 0.1462 0.0883 0.1176 0.0021  -0.0118
0.0012  1 .
1371 CG    CG    . LEU LEU LEU A A 183 183 . 0.1355 0.1358 0.1097 0.0275  0.0110  -
0.0126 1 .
1372 CD1   CD1   . LEU LEU LEU A A 183 183 . 0.1672 0.1177 0.2038 0.0540  0.0226  -
0.0157 1 .
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1373 CD2   CD2   . LEU LEU LEU A A 183 183 . 0.2031 0.1555 0.0935 -0.0248 -0.0128 -
0.0031 1 .
1374 C     C     . LEU LEU LEU A A 183 183 . 0.1139 0.1082 0.1128 -0.0072 -0.0092 -
0.0078 1 .
1375 O     O     . LEU LEU LEU A A 183 183 . 0.1280 0.1013 0.1215 -0.0063 0.0000  -
0.0101 1 .
1376 N     N     . GLY GLY GLY A A 184 184 . 0.1396 0.0990 0.0959 0.0105  0.0070
0.0063  1 .
1377 CA    CA    . GLY GLY GLY A A 184 184 . 0.1022 0.1035 0.1030 0.0058  0.0008
0.0010  1 .
1378 C     C     . GLY GLY GLY A A 184 184 . 0.1129 0.1027 0.1195 -0.0024 -0.0023
0.0064  1 .
1379 O     O     . GLY GLY GLY A A 184 184 . 0.1107 0.1018 0.1134 0.0024  0.0051
0.0046  1 .
1380 N     N     . ALA ALA ALA A A 185 185 . 0.1029 0.0994 0.0939 -0.0005 -0.0138 -
0.0074 1 .
1381 CA    CA    . ALA ALA ALA A A 185 185 . 0.0640 0.0789 0.0844 -0.0044 -0.0228
0.0148  1 .
1382 CB    CB    . ALA ALA ALA A A 185 185 . 0.0770 0.1090 0.1017 0.0049  -0.0284
0.0069  1 .
1383 C     C     . ALA ALA ALA A A 185 185 . 0.1121 0.0887 0.0927 0.0008  0.0107
0.0055  1 .
1384 O     O     . ALA ALA ALA A A 185 185 . 0.1091 0.0918 0.1005 0.0077  0.0057  -
0.0144 1 .
1385 N     N     . GLU GLU GLU A A 186 186 . 0.1016 0.0980 0.1271 -0.0086 -0.0055
0.0002  1 .
1386 CA    CA    . GLU GLU GLU A A 186 186 . 0.1224 0.0769 0.1186 -0.0039 0.0038  -
0.0048 1 .
1387 CB    CB    . GLU GLU GLU A A 186 186 . 0.0950 0.1064 0.1288 0.0230  0.0053  -
0.0239 1 .
1388 CG    CG    . GLU GLU GLU A A 186 186 . 0.1060 0.1223 0.1344 0.0376  0.0100  -
0.0063 1 .
1389 CD    CD    . GLU GLU GLU A A 186 186 . 0.1468 0.1573 0.1331 -0.0034 -0.0020 -
0.0245 1 .
1390 OE1   OE1   . GLU GLU GLU A A 186 186 . 0.1550 0.1560 0.1566 0.0223  -0.0062 -
0.0492 1 .
1391 OE2   OE2   . GLU GLU GLU A A 186 186 . 0.1557 0.1184 0.1387 -0.0052 -0.0090 -
0.0176 1 .
1392 C     C     . GLU GLU GLU A A 186 186 . 0.1127 0.0983 0.0962 -0.0030 0.0026
0.0038  1 .
1393 O     O     . GLU GLU GLU A A 186 186 . 0.1048 0.1074 0.1264 0.0072  0.0112
0.0023  1 .
1394 N     N     . VAL VAL VAL A A 187 187 . 0.1133 0.0838 0.0977 -0.0064 -0.0079 -
0.0113 1 .
1395 CA    CA    . VAL VAL VAL A A 187 187 . 0.1003 0.0984 0.0892 -0.0021 0.0054
0.0020  1 .
1396 CB    CB    . VAL VAL VAL A A 187 187 . 0.0936 0.0937 0.0683 -0.0009 -0.0141
0.0049  1 .
1397 CG1   CG1   . VAL VAL VAL A A 187 187 . 0.0923 0.0900 0.0836 0.0091  -0.0153 -
0.0051 1 .
1398 CG2   CG2   . VAL VAL VAL A A 187 187 . 0.1033 0.1067 0.0893 -0.0007 0.0217  -
0.0078 1 .
1399 C     C     . VAL VAL VAL A A 187 187 . 0.0949 0.0997 0.0983 -0.0072 0.0024  -
0.0169 1 .
1400 O     O     . VAL VAL VAL A A 187 187 . 0.1006 0.1032 0.0963 0.0007  -0.0019
0.0047  1 .
1401 N     N     . TYR TYR TYR A A 188 188 . 0.0989 0.0947 0.0742 -0.0127 -0.0011 -
0.0124 1 .
1402 CA    CA    . TYR TYR TYR A A 188 188 . 0.1144 0.0795 0.0711 -0.0114 0.0059
0.0006  1 .
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1403 CB    CB    . TYR TYR TYR A A 188 188 . 0.1015 0.0830 0.1098 -0.0331 0.0277  -
0.0192 1 .
1404 CG    CG    . TYR TYR TYR A A 188 188 . 0.0921 0.0962 0.0851 0.0065  0.0082
0.0016  1 .
1405 CD1   CD1   . TYR TYR TYR A A 188 188 . 0.0783 0.0943 0.0905 -0.0147 0.0019  -
0.0094 1 .
1406 CE1   CE1   . TYR TYR TYR A A 188 188 . 0.0966 0.1041 0.0725 -0.0246 -0.0104 -
0.0040 1 .
1407 CZ    CZ    . TYR TYR TYR A A 188 188 . 0.0978 0.0726 0.0987 0.0067  -0.0110 -
0.0022 1 .
1408 OH    OH    . TYR TYR TYR A A 188 188 . 0.1264 0.0991 0.1114 0.0075  0.0201
0.0125  1 .
1409 CE2   CE2   . TYR TYR TYR A A 188 188 . 0.0788 0.0933 0.0798 -0.0002 -0.0114 -
0.0103 1 .
1410 CD2   CD2   . TYR TYR TYR A A 188 188 . 0.0962 0.0707 0.0777 -0.0106 -0.0115 -
0.0199 1 .
1411 C     C     . TYR TYR TYR A A 188 188 . 0.0777 0.0810 0.0804 0.0104  0.0024  -
0.0039 1 .
1412 O     O     . TYR TYR TYR A A 188 188 . 0.0873 0.0811 0.0985 -0.0080 0.0026  -
0.0008 1 .
1413 N     N     . HIS HIS HIS A A 189 189 . 0.1029 0.0861 0.0820 0.0149  -0.0193 -
0.0003 1 .
1414 CA    CA    . HIS HIS HIS A A 189 189 . 0.0810 0.0890 0.0850 -0.0028 -0.0056
0.0046  1 .
1415 CB    CB    . HIS HIS HIS A A 189 189 . 0.0717 0.0706 0.0978 0.0054  -0.0241 -
0.0137 1 .
1416 CG    CG    . HIS HIS HIS A A 189 189 . 0.1010 0.1055 0.1308 0.0164  -0.0103
0.0114  1 .
1417 ND1   ND1   . HIS HIS HIS A A 189 189 . 0.1513 0.1627 0.2129 0.0023  -0.0229
0.0112  1 .
1418 CE1   CE1   . HIS HIS HIS A A 189 189 . 0.1088 0.1203 0.1091 0.0100  -0.0162 -
0.0272 1 .
1419 NE2   NE2   . HIS HIS HIS A A 189 189 . 0.1366 0.1757 0.2106 0.0078  -0.0072
0.0174  1 .
1420 CD2   CD2   . HIS HIS HIS A A 189 189 . 0.1087 0.1309 0.1590 0.0150  -0.0436 -
0.0156 1 .
1421 C     C     . HIS HIS HIS A A 189 189 . 0.1058 0.1208 0.1042 -0.0129 -0.0058 -
0.0020 1 .
1422 O     O     . HIS HIS HIS A A 189 189 . 0.1381 0.1143 0.1145 -0.0057 0.0114  -
0.0046 1 .
1423 N     N     . THR THR THR A A 190 190 . 0.1200 0.1036 0.1053 -0.0073 -0.0085 -
0.0113 1 .
1424 CA    CA    . THR THR THR A A 190 190 . 0.0968 0.1024 0.1085 -0.0066 -0.0111
0.0091  1 .
1425 CB    CB    . THR THR THR A A 190 190 . 0.0818 0.1159 0.1446 -0.0039 -0.0085 -
0.0205 1 .
1426 OG1   OG1   . THR THR THR A A 190 190 . 0.1168 0.1185 0.1435 0.0203  0.0023  -
0.0245 1 .
1427 CG2   CG2   . THR THR THR A A 190 190 . 0.1047 0.1079 0.1302 -0.0366 -0.0151 -
0.0202 1 .
1428 C     C     . THR THR THR A A 190 190 . 0.1025 0.1052 0.1013 0.0003  -0.0030
0.0184  1 .
1429 O     O     . THR THR THR A A 190 190 . 0.1131 0.1105 0.1300 -0.0069 0.0018  -
0.0070 1 .
1430 N     N     . LEU LEU LEU A A 191 191 . 0.1127 0.0792 0.0925 0.0029  -0.0052 -
0.0018 1 .
1431 CA    CA    . LEU LEU LEU A A 191 191 . 0.0963 0.0940 0.0835 -0.0004 -0.0020
0.0113  1 .
1432 CB    CB    . LEU LEU LEU A A 191 191 . 0.1103 0.0872 0.1298 -0.0021 -0.0075
0.0214  1 .
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1433 CG    CG    . LEU LEU LEU A A 191 191 . 0.1053 0.0839 0.1306 -0.0059 -0.0176
0.0191  1 .
1434 CD1   CD1   . LEU LEU LEU A A 191 191 . 0.1267 0.1285 0.1360 0.0018  -0.0550 -
0.0127 1 .
1435 CD2   CD2   . LEU LEU LEU A A 191 191 . 0.1627 0.1206 0.1287 -0.0095 0.0127
0.0231  1 .
1436 C     C     . LEU LEU LEU A A 191 191 . 0.0855 0.0984 0.0842 -0.0107 -0.0111
0.0037  1 .
1437 O     O     . LEU LEU LEU A A 191 191 . 0.1111 0.0938 0.1239 -0.0099 0.0117  -
0.0058 1 .
1438 N     N     . LYS LYS LYS A A 192 192 . 0.1049 0.0841 0.0918 0.0020  -0.0099 -
0.0087 1 .
1439 CA    CA    . LYS LYS LYS A A 192 192 . 0.0830 0.1009 0.0861 -0.0188 -0.0027 -
0.0135 1 .
1440 CB    CB    . LYS LYS LYS A A 192 192 . 0.0925 0.1267 0.1072 -0.0104 -0.0128 -
0.0121 1 .
1441 CG    CG    . LYS LYS LYS A A 192 192 . 0.1219 0.1477 0.1045 -0.0174 -0.0169 -
0.0097 1 .
1442 CD    CD    . LYS LYS LYS A A 192 192 . 0.1459 0.1892 0.1552 -0.0458 -0.0092
0.0095  1 .
1443 CE    CE    . LYS LYS LYS A A 192 192 . 0.2418 0.2755 0.1491 -0.0395 -0.0433 -
0.0159 1 .
1444 NZ    NZ    . LYS LYS LYS A A 192 192 . 0.2771 0.3163 0.2303 -0.0415 -0.0850
0.0356  1 .
1445 C     C     . LYS LYS LYS A A 192 192 . 0.0986 0.1081 0.0920 -0.0077 0.0057
0.0007  1 .
1446 O     O     . LYS LYS LYS A A 192 192 . 0.1180 0.1027 0.1154 -0.0088 0.0184  -
0.0067 1 .
1447 N     N     . GLY GLY GLY A A 193 193 . 0.1119 0.1011 0.1315 -0.0238 -0.0120
0.0025  1 .
1448 CA    CA    . GLY GLY GLY A A 193 193 . 0.1446 0.0958 0.1346 -0.0127 0.0000
0.0269  1 .
1449 C     C     . GLY GLY GLY A A 193 193 . 0.1429 0.1223 0.1410 -0.0119 0.0056
0.0238  1 .
1450 O     O     . GLY GLY GLY A A 193 193 . 0.1414 0.1276 0.1776 -0.0288 0.0147
0.0193  1 .
1451 N     N     . VAL VAL VAL A A 194 194 . 0.1326 0.1307 0.1304 -0.0057 -0.0035 -
0.0197 1 .
1452 CA    CA    . VAL VAL VAL A A 194 194 . 0.1166 0.1267 0.1432 -0.0058 -0.0078 -
0.0137 1 .
1453 CB    CB    . VAL VAL VAL A A 194 194 . 0.1332 0.1413 0.1261 0.0104  -0.0209 -
0.0161 1 .
1454 CG1   CG1   . VAL VAL VAL A A 194 194 . 0.0871 0.2098 0.2095 0.0399  -0.0178 -
0.0321 1 .
1455 CG2   CG2   . VAL VAL VAL A A 194 194 . 0.1709 0.1501 0.1419 0.0004  -0.0007 -
0.0312 1 .
1456 C     C     . VAL VAL VAL A A 194 194 . 0.1388 0.1415 0.1833 -0.0190 0.0099  -
0.0089 1 .
1457 O     O     . VAL VAL VAL A A 194 194 . 0.1102 0.1427 0.2193 -0.0215 0.0177  -
0.0231 1 .
1458 N     N     . ILE ILE ILE A A 195 195 . 0.1248 0.1054 0.1394 -0.0181 0.0036  -
0.0263 1 .
1459 CA    CA    . ILE ILE ILE A A 195 195 . 0.1237 0.1147 0.1514 -0.0225 0.0049  -
0.0146 1 .
1460 CB    CB    . ILE ILE ILE A A 195 195 . 0.1483 0.1187 0.1467 -0.0183 0.0104  -
0.0089 1 .
1461 CG1   CG1   . ILE ILE ILE A A 195 195 . 0.1651 0.1039 0.1859 -0.0617 0.0038
0.0222  1 .
1462 CD    CD    . ILE ILE ILE A A 195 195 . 0.1318 0.1245 0.1919 -0.0507 0.0022  -
0.0354 1 .
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1463 CG2   CG2   . ILE ILE ILE A A 195 195 . 0.1470 0.1282 0.1589 0.0112  0.0114  -
0.0285 1 .
1464 C     C     . ILE ILE ILE A A 195 195 . 0.1056 0.1113 0.1498 -0.0080 0.0022  -
0.0088 1 .
1465 O     O     . ILE ILE ILE A A 195 195 . 0.1281 0.1404 0.1745 -0.0139 0.0371  -
0.0192 1 .
1466 N     N     . LYS LYS LYS A A 196 196 . 0.1356 0.1268 0.1374 -0.0159 -0.0261
0.0242  1 .
1467 CA    CA    . LYS LYS LYS A A 196 196 . 0.1439 0.1434 0.1629 -0.0193 -0.0157
0.0150  1 .
1468 CB    CB    . LYS LYS LYS A A 196 196 . 0.1431 0.1834 0.1714 -0.0183 -0.0213
0.0054  1 .
1469 CG    CG    . LYS LYS LYS A A 196 196 . 0.2053 0.2337 0.2188 0.0147  -0.0370
0.0506  1 .
1470 CD    CD    . LYS LYS LYS A A 196 196 . 0.2787 0.3623 0.2958 0.0249  -0.0613
0.0662  1 .
1471 CE    CE    . LYS LYS LYS A A 196 196 . 0.4477 0.4091 0.3679 -0.0383 0.0419
0.0779  1 .
1472 NZ    NZ    . LYS LYS LYS A A 196 196 . 0.4944 0.4298 0.5217 -0.0364 0.0375
0.0334  1 .
1473 C     C     . LYS LYS LYS A A 196 196 . 0.1624 0.1530 0.1846 -0.0265 0.0181
0.0067  1 .
1474 O     O     . LYS LYS LYS A A 196 196 . 0.2031 0.1601 0.1965 -0.0326 0.0261
0.0078  1 .
1475 N     N     . ASP ASP ASP A A 197 197 . 0.1524 0.1498 0.1893 -0.0392 0.0166
0.0129  1 .
1476 CA    CA    . ASP ASP ASP A A 197 197 . 0.2178 0.1735 0.2413 -0.0444 0.0224  -
0.0094 1 .
1477 CB    CB    . ASP ASP ASP A A 197 197 . 0.2248 0.2015 0.2510 -0.0523 0.0243  -
0.0225 1 .
1478 CG    CG    . ASP ASP ASP A A 197 197 . 0.2871 0.2177 0.2843 0.0071  0.0122  -
0.0250 1 .
1479 OD1   OD1   . ASP ASP ASP A A 197 197 . 0.2930 0.2348 0.3616 0.0091  0.0298  -
0.0280 1 .
1480 OD2   OD2   . ASP ASP ASP A A 197 197 . 0.3870 0.2629 0.3706 0.0158  0.0242
0.0305  1 .
1481 C     C     . ASP ASP ASP A A 197 197 . 0.1905 0.1803 0.2350 -0.0504 0.0327  -
0.0048 1 .
1482 O     O     . ASP ASP ASP A A 197 197 . 0.2347 0.2286 0.3163 -0.0664 0.0571
0.0151  1 .
1483 N     N     . LYS LYS LYS A A 198 198 . 0.1622 0.1713 0.2171 -0.0365 0.0133  -
0.0062 1 .
1484 CA    CA    . LYS LYS LYS A A 198 198 . 0.1831 0.1918 0.2068 -0.0340 0.0040
0.0092  1 .
1485 CB    CB    . LYS LYS LYS A A 198 198 . 0.1707 0.2255 0.2089 -0.0454 -0.0226
0.0376  1 .
1486 CG    CG    . LYS LYS LYS A A 198 198 . 0.2833 0.3159 0.3174 -0.0193 0.0006
0.0104  1 .
1487 CD    CD    . LYS LYS LYS A A 198 198 . 0.4468 0.4730 0.3613 -0.0559 -0.0359 -
0.0189 1 .
1488 CE    CE    . LYS LYS LYS A A 198 198 . 0.3789 0.4885 0.4122 -0.1224 -0.0676 -
0.0179 1 .
1489 NZ    NZ    . LYS LYS LYS A A 198 198 . 0.5018 0.5600 0.4255 -0.1085 -0.0849 -
0.0281 1 .
1490 C     C     . LYS LYS LYS A A 198 198 . 0.1800 0.1769 0.2156 -0.0283 0.0204
0.0208  1 .
1491 O     O     . LYS LYS LYS A A 198 198 . 0.1775 0.2248 0.2672 -0.0466 0.0196
0.0319  1 .
1492 N     N     . TYR TYR TYR A A 199 199 . 0.1713 0.1696 0.1970 -0.0350 -0.0116 -
0.0299 1 .
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1493 CA    CA    . TYR TYR TYR A A 199 199 . 0.1336 0.1868 0.1726 -0.0142 0.0179
0.0051  1 .
1494 CB    CB    . TYR TYR TYR A A 199 199 . 0.1360 0.1842 0.1903 -0.0176 0.0004
0.0008  1 .
1495 CG    CG    . TYR TYR TYR A A 199 199 . 0.2055 0.1565 0.1631 -0.0308 0.0124
0.0029  1 .
1496 CD1   CD1   . TYR TYR TYR A A 199 199 . 0.1890 0.1715 0.2457 -0.0615 0.0459
0.0042  1 .
1497 CE1   CE1   . TYR TYR TYR A A 199 199 . 0.2284 0.1692 0.2538 -0.0623 0.0228  -
0.0100 1 .
1498 CZ    CZ    . TYR TYR TYR A A 199 199 . 0.2619 0.1770 0.2555 -0.0723 0.0088
0.0130  1 .
1499 OH    OH    . TYR TYR TYR A A 199 199 . 0.3649 0.2262 0.2796 -0.0983 -0.0378
0.0022  1 .
1500 CE2   CE2   . TYR TYR TYR A A 199 199 . 0.1886 0.1252 0.1894 -0.0955 -0.0097
0.0096  1 .
1501 CD2   CD2   . TYR TYR TYR A A 199 199 . 0.1669 0.1508 0.2025 -0.0598 -0.0411
0.0117  1 .
1502 C     C     . TYR TYR TYR A A 199 199 . 0.1512 0.1999 0.1797 -0.0102 -0.0041 -
0.0200 1 .
1503 O     O     . TYR TYR TYR A A 199 199 . 0.1829 0.2608 0.1927 0.0018  0.0189  -
0.0383 1 .
1504 N     N     . GLY GLY GLY A A 200 200 . 0.1642 0.1780 0.1811 -0.0118 -0.0048 -
0.0065 1 .
1505 CA    CA    . GLY GLY GLY A A 200 200 . 0.1395 0.1763 0.1885 -0.0303 -0.0114 -
0.0129 1 .
1506 C     C     . GLY GLY GLY A A 200 200 . 0.1537 0.1671 0.1699 -0.0088 -0.0031 -
0.0133 1 .
1507 O     O     . GLY GLY GLY A A 200 200 . 0.1397 0.1674 0.1397 0.0011  -0.0178 -
0.0167 1 .
1508 N     N     . LYS LYS LYS A A 201 201 . 0.1563 0.1683 0.1783 -0.0134 -0.0263
0.0020  1 .
1509 CA    CA    . LYS LYS LYS A A 201 201 . 0.1770 0.1713 0.1740 -0.0095 -0.0143 -
0.0056 1 .
1510 CB    CB    . LYS LYS LYS A A 201 201 . 0.1778 0.1918 0.2015 -0.0140 -0.0088
0.0083  1 .
1511 CG    CG    . LYS LYS LYS A A 201 201 . 0.3005 0.2938 0.2224 0.0318  -0.0061
0.0187  1 .
1512 CD    CD    . LYS LYS LYS A A 201 201 . 0.3246 0.4614 0.3548 0.0056  -0.0328
0.1288  1 .
1513 CE    CE    . LYS LYS LYS A A 201 201 . 0.4566 0.5103 0.3943 -0.0323 -0.0195
0.1148  1 .
1514 NZ    NZ    . LYS LYS LYS A A 201 201 . 0.5100 0.5726 0.4809 -0.0718 0.0042
0.1397  1 .
1515 C     C     . LYS LYS LYS A A 201 201 . 0.1626 0.1633 0.1516 -0.0087 -0.0034 -
0.0016 1 .
1516 O     O     . LYS LYS LYS A A 201 201 . 0.1605 0.1650 0.1938 -0.0174 -0.0343 -
0.0001 1 .
1517 N     N     . ASP ASP ASP A A 202 202 . 0.1655 0.1527 0.1801 0.0020  -0.0245 -
0.0159 1 .
1518 CA    CA    . ASP ASP ASP A A 202 202 . 0.1570 0.1395 0.1568 0.0061  0.0010  -
0.0249 1 .
1519 CB    CB    . ASP ASP ASP A A 202 202 . 0.1397 0.1796 0.1760 -0.0039 0.0090  -
0.0235 1 .
1520 CG    CG    . ASP ASP ASP A A 202 202 . 0.2106 0.2665 0.2500 -0.0080 -0.0130 -
0.0539 1 .
1521 OD1   OD1   . ASP ASP ASP A A 202 202 . 0.2434 0.2873 0.3466 -0.0271 0.0096
0.0047  1 .
1522 OD2   OD2   . ASP ASP ASP A A 202 202 . 0.2817 0.3413 0.3471 0.0449  -0.0141 -
0.0938 1 .
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1523 C     C     . ASP ASP ASP A A 202 202 . 0.1609 0.1594 0.1753 -0.0158 0.0072  -
0.0213 1 .
1524 O     O     . ASP ASP ASP A A 202 202 . 0.1870 0.1658 0.2030 0.0042  0.0332  -
0.0212 1 .
1525 N     N     . ALA ALA ALA A A 203 203 . 0.1126 0.1389 0.1317 -0.0113 0.0032  -
0.0138 1 .
1526 CA    CA    . ALA ALA ALA A A 203 203 . 0.1105 0.1263 0.1418 -0.0286 -0.0043 -
0.0063 1 .
1527 CB    CB    . ALA ALA ALA A A 203 203 . 0.1183 0.1720 0.1236 -0.0223 -0.0324 -
0.0041 1 .
1528 C     C     . ALA ALA ALA A A 203 203 . 0.1093 0.1361 0.1366 -0.0009 -0.0068
0.0094  1 .
1529 O     O     . ALA ALA ALA A A 203 203 . 0.1395 0.1615 0.1448 -0.0064 -0.0160 -
0.0197 1 .
1530 N     N     . THR THR THR A A 204 204 . 0.1131 0.1143 0.1356 0.0000  -0.0244 -
0.0150 1 .
1531 CA    CA    . THR THR THR A A 204 204 . 0.1244 0.1302 0.1487 -0.0092 -0.0062 -
0.0096 1 .
1532 CB    CB    . THR THR THR A A 204 204 . 0.1196 0.1398 0.1578 -0.0195 -0.0041 -
0.0341 1 .
1533 OG1   OG1   . THR THR THR A A 204 204 . 0.1375 0.1673 0.2211 -0.0189 0.0020
0.0068  1 .
1534 CG2   CG2   . THR THR THR A A 204 204 . 0.1476 0.1430 0.1975 -0.0405 -0.0058 -
0.0356 1 .
1535 C     C     . THR THR THR A A 204 204 . 0.1059 0.0942 0.1367 -0.0085 -0.0016 -
0.0120 1 .
1536 O     O     . THR THR THR A A 204 204 . 0.1279 0.1413 0.1387 -0.0318 0.0039  -
0.0149 1 .
1537 N     N     . ASN ASN ASN A A 205 205 . 0.1071 0.1054 0.1110 -0.0300 0.0062
0.0016  1 .
1538 CA    CA    . ASN ASN ASN A A 205 205 . 0.1124 0.0902 0.1037 -0.0098 0.0107
0.0033  1 .
1539 CB    CB    . ASN ASN ASN A A 205 205 . 0.1380 0.1012 0.1073 -0.0159 0.0033  -
0.0099 1 .
1540 CG    CG    . ASN ASN ASN A A 205 205 . 0.1122 0.1752 0.1301 -0.0163 -0.0042
0.0098  1 .
1541 OD1   OD1   . ASN ASN ASN A A 205 205 . 0.1473 0.1713 0.1491 -0.0007 0.0071
0.0368  1 .
1542 ND2   ND2   . ASN ASN ASN A A 205 205 . 0.1523 0.1971 0.1801 -0.0398 0.0216  -
0.0186 1 .
1543 C     C     . ASN ASN ASN A A 205 205 . 0.1125 0.1066 0.0990 -0.0276 -0.0025 -
0.0029 1 .
1544 O     O     . ASN ASN ASN A A 205 205 . 0.1365 0.1239 0.0941 -0.0195 -0.0185
0.0080  1 .
1545 N     N     . VAL VAL VAL A A 206 206 . 0.1003 0.0820 0.1123 -0.0097 -0.0009
0.0017  1 .
1546 CA    CA    . VAL VAL VAL A A 206 206 . 0.0863 0.0908 0.0857 -0.0029 0.0290
0.0023  1 .
1547 CB    CB    . VAL VAL VAL A A 206 206 . 0.0850 0.0859 0.1017 -0.0101 -0.0025 -
0.0098 1 .
1548 CG1   CG1   . VAL VAL VAL A A 206 206 . 0.0972 0.0954 0.1197 0.0100  0.0262  -
0.0160 1 .
1549 CG2   CG2   . VAL VAL VAL A A 206 206 . 0.1022 0.1183 0.1031 0.0035  -0.0149
0.0135  1 .
1550 C     C     . VAL VAL VAL A A 206 206 . 0.0817 0.0990 0.0864 -0.0082 -0.0003 -
0.0059 1 .
1551 O     O     . VAL VAL VAL A A 206 206 . 0.0769 0.1034 0.0930 -0.0076 0.0175  -
0.0090 1 .
1552 N     N     . GLY GLY GLY A A 207 207 . 0.0884 0.1065 0.1071 0.0000  0.0171
0.0226  1 .
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1553 CA    CA    . GLY GLY GLY A A 207 207 . 0.1007 0.0813 0.1058 0.0091  0.0128  -
0.0006 1 .
1554 C     C     . GLY GLY GLY A A 207 207 . 0.0883 0.0993 0.0756 0.0150  0.0028  -
0.0057 1 .
1555 O     O     . GLY GLY GLY A A 207 207 . 0.0931 0.0902 0.0992 0.0023  -0.0063 -
0.0016 1 .
1556 N     N     . ASP ASP ASP A A 208 208 . 0.1143 0.0849 0.1095 -0.0195 0.0004
0.0105  1 .
1557 CA    CA    . ASP ASP ASP A A 208 208 . 0.0902 0.0891 0.1098 -0.0043 0.0011
0.0083  1 .
1558 CB    CB    . ASP ASP ASP A A 208 208 . 0.0895 0.0974 0.0954 0.0010  0.0083
0.0065  1 .
1559 CG    CG    . ASP ASP ASP A A 208 208 . 0.1252 0.1296 0.1089 0.0104  -0.0132 -
0.0082 1 .
1560 OD1   OD1   . ASP ASP ASP A A 208 208 . 0.1401 0.1605 0.1610 0.0167  0.0113
0.0163  1 .
1561 OD2   OD2   . ASP ASP ASP A A 208 208 . 0.1287 0.1380 0.1665 0.0258  -0.0048
0.0166  1 .
1562 C     C     . ASP ASP ASP A A 208 208 . 0.1054 0.0837 0.0705 0.0052  -0.0060
0.0086  1 .
1563 O     O     . ASP ASP ASP A A 208 208 . 0.0956 0.0961 0.0867 -0.0124 0.0089
0.0021  1 .
1564 N     N     . GLU GLU GLU A A 209 209 . 0.0986 0.0683 0.0853 0.0200  0.0100  -
0.0006 1 .
1565 CA    CA    . GLU GLU GLU A A 209 209 . 0.0839 0.0795 0.0789 0.0054  0.0073
0.0137  1 .
1566 CB    CB    . GLU GLU GLU A A 209 209 . 0.1275 0.0849 0.0866 0.0241  -0.0040
0.0026  1 .
1567 CG    CG    . GLU GLU GLU A A 209 209 . 0.1367 0.1082 0.1059 0.0133  0.0214
0.0161  1 .
1568 CD    CD    . GLU GLU GLU A A 209 209 . 0.1145 0.1618 0.1447 0.0069  0.0453
0.0096  1 .
1569 OE1   OE1   . GLU GLU GLU A A 209 209 . 0.1364 0.1290 0.1401 0.0018  -0.0129
0.0157  1 .
1570 OE2   OE2   . GLU GLU GLU A A 209 209 . 0.1317 0.1211 0.1600 0.0040  0.0173
0.0162  1 .
1571 C     C     . GLU GLU GLU A A 209 209 . 0.0875 0.0899 0.0866 -0.0070 0.0174  -
0.0037 1 .
1572 O     O     . GLU GLU GLU A A 209 209 . 0.0778 0.0936 0.0944 -0.0135 0.0176  -
0.0095 1 .
1573 N     N     . GLY GLY GLY A A 210 210 . 0.0939 0.0731 0.0713 -0.0081 -0.0222
0.0124  1 .
1574 CA    CA    . GLY GLY GLY A A 210 210 . 0.0883 0.0742 0.0969 -0.0077 -0.0034 -
0.0149 1 .
1575 C     C     . GLY GLY GLY A A 210 210 . 0.0786 0.0791 0.0754 0.0042  -0.0065 -
0.0132 1 .
1576 O     O     . GLY GLY GLY A A 210 210 . 0.1059 0.1051 0.0948 0.0179  -0.0077
0.0003  1 .
1577 N     N     . GLY GLY GLY A A 211 211 . 0.0652 0.0949 0.0895 -0.0219 -0.0038
0.0000  1 .
1578 CA    CA    . GLY GLY GLY A A 211 211 . 0.0793 0.1095 0.0993 -0.0410 0.0178
0.0010  1 .
1579 C     C     . GLY GLY GLY A A 211 211 . 0.0909 0.0790 0.0785 -0.0072 0.0078
0.0060  1 .
1580 O     O     . GLY GLY GLY A A 211 211 . 0.1097 0.1232 0.1024 -0.0027 0.0200
0.0004  1 .
1581 N     N     . PHE PHE PHE A A 212 212 . 0.1129 0.0863 0.0864 -0.0216 0.0062  -
0.0074 1 .
1582 CA    CA    . PHE PHE PHE A A 212 212 . 0.0905 0.0820 0.1110 -0.0022 0.0129  -
0.0094 1 .
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1583 CB    CB    . PHE PHE PHE A A 212 212 . 0.1121 0.0966 0.1214 -0.0192 -0.0066 -
0.0092 1 .
1584 CG    CG    . PHE PHE PHE A A 212 212 . 0.1417 0.0808 0.1262 -0.0180 0.0140
0.0093  1 .
1585 CD1   CD1   . PHE PHE PHE A A 212 212 . 0.1170 0.0905 0.1197 0.0144  0.0219
0.0034  1 .
1586 CE1   CE1   . PHE PHE PHE A A 212 212 . 0.1224 0.1175 0.1634 -0.0156 -0.0124
0.0019  1 .
1587 CZ    CZ    . PHE PHE PHE A A 212 212 . 0.0923 0.0910 0.1395 -0.0233 -0.0255 -
0.0099 1 .
1588 CE2   CE2   . PHE PHE PHE A A 212 212 . 0.0959 0.1063 0.1453 -0.0343 -0.0220 -
0.0077 1 .
1589 CD2   CD2   . PHE PHE PHE A A 212 212 . 0.0812 0.0915 0.1161 -0.0250 -0.0005
0.0326  1 .
1590 C     C     . PHE PHE PHE A A 212 212 . 0.0911 0.0794 0.0989 -0.0064 -0.0081
0.0028  1 .
1591 O     O     . PHE PHE PHE A A 212 212 . 0.1097 0.1246 0.0970 -0.0066 0.0056
0.0292  1 .
1592 N     N     . ALA ALA ALA A A 213 213 . 0.1261 0.1418 0.1211 -0.0052 0.0174  -
0.0125 1 .
1593 CA    CA    . ALA ALA ALA A A 213 213 . 0.1405 0.1344 0.1116 -0.0124 0.0130
0.0041  1 .
1594 CB    CB    . ALA ALA ALA A A 213 213 . 0.1245 0.1147 0.1220 0.0019  0.0043  -
0.0353 1 .
1595 C     C     . ALA ALA ALA A A 213 213 . 0.1320 0.1360 0.1166 -0.0112 0.0010  -
0.0044 1 .
1596 O     O     . ALA ALA ALA A A 213 213 . 0.1376 0.1674 0.1302 -0.0085 -0.0080
0.0028  1 .
1597 N     N     . PRO PRO PRO A A 214 214 . 0.1049 0.1210 0.1252 -0.0208 -0.0003
0.0026  1 .
1598 CA    CA    . PRO PRO PRO A A 214 214 . 0.1230 0.1398 0.1281 -0.0223 -0.0097
0.0114  1 .
1599 CB    CB    . PRO PRO PRO A A 214 214 . 0.1532 0.1422 0.1592 -0.0055 -0.0045
0.0014  1 .
1600 CG    CG    . PRO PRO PRO A A 214 214 . 0.1203 0.1566 0.1551 -0.0247 -0.0074 -
0.0197 1 .
1601 CD    CD    . PRO PRO PRO A A 214 214 . 0.1678 0.1483 0.1285 -0.0241 -0.0202 -
0.0136 1 .
1602 C     C     . PRO PRO PRO A A 214 214 . 0.1572 0.1724 0.1531 -0.0080 0.0067
0.0278  1 .
1603 O     O     . PRO PRO PRO A A 214 214 . 0.1196 0.1535 0.1654 -0.0107 0.0004
0.0049  1 .
1604 N     N     . ASN ASN ASN A A 215 215 . 0.1521 0.2034 0.1785 -0.0260 0.0049
0.0304  1 .
1605 CA    CA    . ASN ASN ASN A A 215 215 . 0.1851 0.2243 0.1942 -0.0259 0.0213
0.0323  1 .
1606 CB    CB    . ASN ASN ASN A A 215 215 . 0.1800 0.2685 0.1879 -0.0319 0.0456
0.0528  1 .
1607 CG    CG    . ASN ASN ASN A A 215 215 . 0.2162 0.2835 0.3192 -0.0087 0.0459
0.0499  1 .
1608 OD1   OD1   . ASN ASN ASN A A 215 215 . 0.2780 0.4444 0.4210 -0.0369 0.0733
0.1308  1 .
1609 ND2   ND2   . ASN ASN ASN A A 215 215 . 0.1603 0.1906 0.2412 -0.0385 0.0211
0.1033  1 .
1610 C     C     . ASN ASN ASN A A 215 215 . 0.1677 0.1882 0.1788 -0.0384 0.0032
0.0337  1 .
1611 O     O     . ASN ASN ASN A A 215 215 . 0.1938 0.2187 0.2243 -0.0546 0.0016
0.0380  1 .
1612 N     N     . ILE ILE ILE A A 216 216 . 0.1339 0.1768 0.1470 -0.0286 -0.0135
0.0334  1 .
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1613 CA    CA    . ILE ILE ILE A A 216 216 . 0.1452 0.1522 0.1382 -0.0267 -0.0022
0.0142  1 .
1614 CB    CB    . ILE ILE ILE A A 216 216 . 0.1802 0.1677 0.1659 -0.0091 -0.0075
0.0277  1 .
1615 CG1   CG1   . ILE ILE ILE A A 216 216 . 0.1405 0.1451 0.1125 -0.0223 0.0154
0.0019  1 .
1616 CD    CD    . ILE ILE ILE A A 216 216 . 0.2031 0.1434 0.1967 0.0031  -0.0057 -
0.0255 1 .
1617 CG2   CG2   . ILE ILE ILE A A 216 216 . 0.2291 0.1851 0.2107 0.0304  -0.0127
0.0407  1 .
1618 C     C     . ILE ILE ILE A A 216 216 . 0.1315 0.1668 0.1610 -0.0176 -0.0009
0.0097  1 .
1619 O     O     . ILE ILE ILE A A 216 216 . 0.1339 0.1633 0.1675 -0.0135 0.0109
0.0188  1 .
1620 N     N     . LEU LEU LEU A A 217 217 . 0.1379 0.1757 0.1318 -0.0150 -0.0153
0.0336  1 .
1621 CA    CA    . LEU LEU LEU A A 217 217 . 0.1282 0.1834 0.1652 0.0120  0.0067
0.0200  1 .
1622 CB    CB    . LEU LEU LEU A A 217 217 . 0.1453 0.2219 0.2226 0.0010  -0.0075
0.0495  1 .
1623 CG    CG    . LEU LEU LEU A A 217 217 . 0.1198 0.2198 0.1815 0.0167  0.0025
0.0255  1 .
1624 CD1   CD1   . LEU LEU LEU A A 217 217 . 0.1581 0.2377 0.1850 0.0231  -0.0025
0.0307  1 .
1625 CD2   CD2   . LEU LEU LEU A A 217 217 . 0.1062 0.1953 0.2655 0.0175  0.0147
0.0354  1 .
1626 C     C     . LEU LEU LEU A A 217 217 . 0.1420 0.1767 0.1779 0.0037  0.0162
0.0096  1 .
1627 O     O     . LEU LEU LEU A A 217 217 . 0.1580 0.1815 0.1875 -0.0169 0.0139
0.0299  1 .
1628 N     N     . GLU GLU GLU A A 218 218 . 0.1451 0.1597 0.1809 -0.0118 0.0070
0.0065  1 .
1629 CA    CA    . GLU GLU GLU A A 218 218 . 0.1480 0.1742 0.1838 -0.0067 0.0198
0.0024  1 .
1630 CB    CB    . GLU GLU GLU A A 218 218 . 0.1779 0.2093 0.2201 -0.0460 0.0275
0.0172  1 .
1631 CG    CG    . GLU GLU GLU A A 218 218 . 0.2148 0.3376 0.3516 -0.0333 -0.0104
0.0180  1 .
1632 CD    CD    . GLU GLU GLU A A 218 218 . 0.4144 0.5213 0.4648 -0.0685 -0.0542
0.0373  1 .
1633 OE1   OE1   . GLU GLU GLU A A 218 218 . 0.5201 0.5003 0.6106 -0.0800 -0.0054
0.0189  1 .
1634 OE2   OE2   . GLU GLU GLU A A 218 218 . 0.4458 0.5628 0.5436 -0.0630 -0.0043
0.0758  1 .
1635 C     C     . GLU GLU GLU A A 218 218 . 0.1601 0.1690 0.1756 -0.0020 0.0089
0.0157  1 .
1636 O     O     . GLU GLU GLU A A 218 218 . 0.1705 0.1535 0.1591 -0.0019 0.0057
0.0021  1 .
1637 N     N     . ASN ASN ASN A A 219 219 . 0.1451 0.1679 0.1553 -0.0115 -0.0044
0.0241  1 .
1638 CA    CA    . ASN ASN ASN A A 219 219 . 0.1262 0.1292 0.1458 -0.0039 -0.0079
0.0204  1 .
1639 CB    CB    . ASN ASN ASN A A 219 219 . 0.1546 0.1128 0.1215 0.0112  -0.0088
0.0167  1 .
1640 CG    CG    . ASN ASN ASN A A 219 219 . 0.1141 0.1229 0.1258 0.0039  0.0065
0.0035  1 .
1641 OD1   OD1   . ASN ASN ASN A A 219 219 . 0.1639 0.2014 0.2039 0.0633  0.0191
0.0480  1 .
1642 ND2   ND2   . ASN ASN ASN A A 219 219 . 0.0645 0.0954 0.1196 0.0004  -0.0077
0.0036  1 .
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1643 C     C     . ASN ASN ASN A A 219 219 . 0.1337 0.1462 0.1518 0.0019  -0.0035
0.0156  1 .
1644 O     O     . ASN ASN ASN A A 219 219 . 0.1264 0.1538 0.1784 -0.0070 -0.0205
0.0257  1 .
1645 N     N     . SER SER SER A A 220 220 . 0.1395 0.1494 0.1562 -0.0120 -0.0124
0.0041  1 .
1646 CA    CA    . SER SER SER A A 220 220 . 0.1361 0.1590 0.1483 -0.0019 -0.0333
0.0032  1 .
1647 CB    CB    . SER SER SER A A 220 220 . 0.1710 0.1817 0.1731 -0.0269 -0.0122 -
0.0303 1 .
1648 OG    OG    . SER SER SER A A 220 220 . 0.1981 0.2579 0.2356 -0.0539 -0.0284
0.0365  1 .
1649 C     C     . SER SER SER A A 220 220 . 0.1339 0.1611 0.1613 -0.0121 -0.0194 -
0.0014 1 .
1650 O     O     . SER SER SER A A 220 220 . 0.1549 0.1672 0.1399 0.0169  -0.0092
0.0100  1 .
1651 N     N     . GLU GLU GLU A A 221 221 . 0.1470 0.1567 0.1576 -0.0005 -0.0198
0.0210  1 .
1652 CA    CA    . GLU GLU GLU A A 221 221 . 0.1310 0.1534 0.1422 -0.0061 -0.0107
0.0104  1 .
1653 CB    CB    . GLU GLU GLU A A 221 221 . 0.1892 0.1824 0.1680 -0.0173 -0.0065
0.0288  1 .
1654 CG    CG    . GLU GLU GLU A A 221 221 . 0.1824 0.1855 0.2181 -0.0296 -0.0251
0.0328  1 .
1655 CD    CD    . GLU GLU GLU A A 221 221 . 0.3591 0.2522 0.3334 -0.0363 -0.0648 -
0.0157 1 .
1656 OE1   OE1   . GLU GLU GLU A A 221 221 . 0.4125 0.3913 0.3185 -0.0397 -0.0785
0.0217  1 .
1657 OE2   OE2   . GLU GLU GLU A A 221 221 . 0.3592 0.3618 0.3804 -0.0558 -0.1003
0.0165  1 .
1658 C     C     . GLU GLU GLU A A 221 221 . 0.1242 0.1227 0.1324 -0.0012 -0.0062
0.0009  1 .
1659 O     O     . GLU GLU GLU A A 221 221 . 0.1354 0.1339 0.1529 -0.0029 0.0028
0.0059  1 .
1660 N     N     . ALA ALA ALA A A 222 222 . 0.1098 0.1137 0.1267 0.0026  0.0074
0.0093  1 .
1661 CA    CA    . ALA ALA ALA A A 222 222 . 0.1268 0.1363 0.1305 -0.0117 -0.0038
0.0031  1 .
1662 CB    CB    . ALA ALA ALA A A 222 222 . 0.1413 0.1216 0.1348 -0.0106 -0.0086 -
0.0050 1 .
1663 C     C     . ALA ALA ALA A A 222 222 . 0.1357 0.1330 0.1271 0.0005  -0.0154
0.0110  1 .
1664 O     O     . ALA ALA ALA A A 222 222 . 0.1351 0.1235 0.1109 -0.0184 -0.0185
0.0100  1 .
1665 N     N     . LEU LEU LEU A A 223 223 . 0.1105 0.1163 0.0949 -0.0298 -0.0115
0.0112  1 .
1666 CA    CA    . LEU LEU LEU A A 223 223 . 0.1340 0.1387 0.1276 -0.0105 -0.0180
0.0130  1 .
1667 CB    CB    . LEU LEU LEU A A 223 223 . 0.0970 0.1271 0.1095 -0.0100 -0.0158
0.0278  1 .
1668 CG    CG    . LEU LEU LEU A A 223 223 . 0.1017 0.1325 0.1300 -0.0046 -0.0228
0.0155  1 .
1669 CD1   CD1   . LEU LEU LEU A A 223 223 . 0.1458 0.1746 0.1355 -0.0055 -0.0425
0.0570  1 .
1670 CD2   CD2   . LEU LEU LEU A A 223 223 . 0.1205 0.1710 0.1582 -0.0086 0.0202  -
0.0014 1 .
1671 C     C     . LEU LEU LEU A A 223 223 . 0.1192 0.1249 0.1305 -0.0051 -0.0075
0.0031  1 .
1672 O     O     . LEU LEU LEU A A 223 223 . 0.1319 0.1362 0.1478 0.0224  -0.0204 -
0.0165 1 .
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1673 N     N     . GLU GLU GLU A A 224 224 . 0.1160 0.1234 0.1311 -0.0102 -0.0173
0.0130  1 .
1674 CA    CA    . GLU GLU GLU A A 224 224 . 0.1479 0.1596 0.1678 -0.0048 -0.0112
0.0101  1 .
1675 CB    CB    . GLU GLU GLU A A 224 224 . 0.1462 0.1596 0.2190 -0.0189 -0.0169 -
0.0089 1 .
1676 CG    CG    . GLU GLU GLU A A 224 224 . 0.2846 0.2413 0.2815 -0.0160 -0.0259 -
0.0031 1 .
1677 CD    CD    . GLU GLU GLU A A 224 224 . 0.4286 0.3247 0.3106 -0.0308 0.0085  -
0.0597 1 .
1678 OE1   OE1   . GLU GLU GLU A A 224 224 . 0.6005 0.4032 0.4809 -0.0146 0.0127  -
0.0390 1 .
1679 OE2   OE2   . GLU GLU GLU A A 224 224 . 0.4379 0.3517 0.3522 -0.1340 0.0337
0.0130  1 .
1680 C     C     . GLU GLU GLU A A 224 224 . 0.1227 0.1237 0.1340 -0.0044 0.0016
0.0054  1 .
1681 O     O     . GLU GLU GLU A A 224 224 . 0.1386 0.1378 0.1607 -0.0045 -0.0230 -
0.0061 1 .
1682 N     N     . LEU LEU LEU A A 225 225 . 0.1442 0.1189 0.1423 -0.0120 -0.0110
0.0117  1 .
1683 CA    CA    . LEU LEU LEU A A 225 225 . 0.1158 0.1435 0.1129 -0.0123 -0.0040
0.0147  1 .
1684 CB    CB    . LEU LEU LEU A A 225 225 . 0.1204 0.1286 0.1271 -0.0167 0.0108  -
0.0109 1 .
1685 CG    CG    . LEU LEU LEU A A 225 225 . 0.1555 0.1582 0.1722 -0.0140 0.0165
0.0283  1 .
1686 CD1   CD1   . LEU LEU LEU A A 225 225 . 0.1342 0.1789 0.1205 0.0136  0.0036
0.0238  1 .
1687 CD2   CD2   . LEU LEU LEU A A 225 225 . 0.2148 0.1663 0.1897 -0.0515 0.0411
0.0525  1 .
1688 C     C     . LEU LEU LEU A A 225 225 . 0.1159 0.1340 0.1250 -0.0011 0.0080
0.0064  1 .
1689 O     O     . LEU LEU LEU A A 225 225 . 0.1247 0.1203 0.1207 -0.0015 -0.0051
0.0045  1 .
1690 N     N     . VAL VAL VAL A A 226 226 . 0.0974 0.1136 0.1164 -0.0051 -0.0105
0.0068  1 .
1691 CA    CA    . VAL VAL VAL A A 226 226 . 0.1074 0.1111 0.1236 -0.0136 -0.0149 -
0.0040 1 .
1692 CB    CB    . VAL VAL VAL A A 226 226 . 0.1176 0.1187 0.0896 -0.0184 -0.0078
0.0234  1 .
1693 CG1   CG1   . VAL VAL VAL A A 226 226 . 0.1256 0.1363 0.1407 -0.0192 0.0272
0.0135  1 .
1694 CG2   CG2   . VAL VAL VAL A A 226 226 . 0.1377 0.1508 0.1035 -0.0392 -0.0022 -
0.0184 1 .
1695 C     C     . VAL VAL VAL A A 226 226 . 0.0919 0.1222 0.1273 -0.0090 -0.0105
0.0033  1 .
1696 O     O     . VAL VAL VAL A A 226 226 . 0.1098 0.1129 0.1372 0.0212  -0.0171 -
0.0045 1 .
1697 N     N     . LYS LYS LYS A A 227 227 . 0.1191 0.1343 0.1165 -0.0015 -0.0232 -
0.0048 1 .
1698 CA    CA    . LYS LYS LYS A A 227 227 . 0.1554 0.1410 0.1573 -0.0012 -0.0328 -
0.0179 1 .
1699 CB    CB    . LYS LYS LYS A A 227 227 . 0.1870 0.1566 0.1474 0.0020  -0.0462 -
0.0239 1 .
1700 CG    CG    . LYS LYS LYS A A 227 227 . 0.2113 0.2112 0.1731 0.0089  -0.0601 -
0.0342 1 .
1701 CD    CD    . LYS LYS LYS A A 227 227 . 0.3126 0.3703 0.2736 0.0288  -0.0737 -
0.0115 1 .
1702 CE    CE    . LYS LYS LYS A A 227 227 . 0.3690 0.3720 0.2945 0.0517  -0.0739
0.0311  1 .
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1703 NZ    NZ    . LYS LYS LYS A A 227 227 . 0.3145 0.3237 0.4201 0.0387  -0.1502
0.0161  1 .
1704 C     C     . LYS LYS LYS A A 227 227 . 0.1336 0.1347 0.1254 -0.0103 -0.0193 -
0.0179 1 .
1705 O     O     . LYS LYS LYS A A 227 227 . 0.1297 0.1354 0.1609 -0.0026 -0.0085 -
0.0040 1 .
1706 N     N     . GLU GLU GLU A A 228 228 . 0.1273 0.1318 0.1487 -0.0107 -0.0199
0.0003  1 .
1707 CA    CA    . GLU GLU GLU A A 228 228 . 0.1120 0.1230 0.1285 -0.0115 -0.0276 -
0.0006 1 .
1708 CB    CB    . GLU GLU GLU A A 228 228 . 0.1738 0.1629 0.1705 -0.0094 -0.0070
0.0208  1 .
1709 CG    CG    . GLU GLU GLU A A 228 228 . 0.2498 0.1847 0.2265 -0.0238 -0.0637
0.0133  1 .
1710 CD    CD    . GLU GLU GLU A A 228 228 . 0.5220 0.3735 0.4529 -0.0857 -0.0303
0.0053  1 .
1711 OE1   OE1   . GLU GLU GLU A A 228 228 . 0.5862 0.4953 0.4631 -0.1100 0.0253
0.0158  1 .
1712 OE2   OE2   . GLU GLU GLU A A 228 228 . 0.6332 0.4721 0.5464 -0.0860 -0.0302
0.1006  1 .
1713 C     C     . GLU GLU GLU A A 228 228 . 0.1148 0.1296 0.1444 -0.0043 -0.0237 -
0.0095 1 .
1714 O     O     . GLU GLU GLU A A 228 228 . 0.1482 0.1368 0.1559 -0.0081 -0.0067 -
0.0150 1 .
1715 N     N     . ALA ALA ALA A A 229 229 . 0.1230 0.1224 0.1318 -0.0066 -0.0086 -
0.0073 1 .
1716 CA    CA    . ALA ALA ALA A A 229 229 . 0.1312 0.1358 0.1284 -0.0014 -0.0195 -
0.0108 1 .
1717 CB    CB    . ALA ALA ALA A A 229 229 . 0.1297 0.1064 0.1026 -0.0115 0.0022  -
0.0086 1 .
1718 C     C     . ALA ALA ALA A A 229 229 . 0.1341 0.1196 0.1287 -0.0025 -0.0186
0.0012  1 .
1719 O     O     . ALA ALA ALA A A 229 229 . 0.1289 0.1112 0.1247 -0.0043 -0.0160 -
0.0045 1 .
1720 N     N     . ILE ILE ILE A A 230 230 . 0.1424 0.1099 0.1114 -0.0126 -0.0072 -
0.0007 1 .
1721 CA    CA    . ILE ILE ILE A A 230 230 . 0.1438 0.1063 0.1107 -0.0085 -0.0101 -
0.0186 1 .
1722 CB    CB    . ILE ILE ILE A A 230 230 . 0.1246 0.0984 0.1198 -0.0084 -0.0016 -
0.0143 1 .
1723 CG1   CG1   . ILE ILE ILE A A 230 230 . 0.1302 0.1075 0.0926 0.0124  -0.0436 -
0.0049 1 .
1724 CD    CD    . ILE ILE ILE A A 230 230 . 0.1187 0.1266 0.1102 0.0135  0.0279
0.0198  1 .
1725 CG2   CG2   . ILE ILE ILE A A 230 230 . 0.1755 0.1147 0.1264 0.0207  0.0086  -
0.0189 1 .
1726 C     C     . ILE ILE ILE A A 230 230 . 0.1152 0.1215 0.1284 0.0040  -0.0157 -
0.0221 1 .
1727 O     O     . ILE ILE ILE A A 230 230 . 0.1233 0.1250 0.1262 0.0190  0.0012  -
0.0250 1 .
1728 N     N     . ASP ASP ASP A A 231 231 . 0.1191 0.1250 0.1239 -0.0164 -0.0201 -
0.0125 1 .
1729 CA    CA    . ASP ASP ASP A A 231 231 . 0.1451 0.1444 0.1733 0.0071  -0.0210 -
0.0239 1 .
1730 CB    CB    . ASP ASP ASP A A 231 231 . 0.1610 0.1524 0.1909 -0.0300 -0.0236 -
0.0440 1 .
1731 CG    CG    . ASP ASP ASP A A 231 231 . 0.2152 0.2561 0.2602 -0.0110 -0.0383 -
0.0276 1 .
1732 OD1   OD1   . ASP ASP ASP A A 231 231 . 0.2057 0.3261 0.3913 -0.0324 -0.0550 -
0.0374 1 .
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1733 OD2   OD2   . ASP ASP ASP A A 231 231 . 0.2774 0.3367 0.2378 -0.0643 -0.0499 -
0.0045 1 .
1734 C     C     . ASP ASP ASP A A 231 231 . 0.1545 0.1379 0.1575 -0.0189 -0.0080 -
0.0220 1 .
1735 O     O     . ASP ASP ASP A A 231 231 . 0.1757 0.1560 0.1757 -0.0155 -0.0192 -
0.0310 1 .
1736 N     N     . LYS LYS LYS A A 232 232 . 0.1823 0.1098 0.1622 -0.0330 -0.0096 -
0.0187 1 .
1737 CA    CA    . LYS LYS LYS A A 232 232 . 0.1377 0.1501 0.1499 -0.0110 -0.0043 -
0.0110 1 .
1738 CB    CB    . LYS LYS LYS A A 232 232 . 0.2066 0.1592 0.1569 -0.0177 0.0069  -
0.0326 1 .
1739 CG    CG    . LYS LYS LYS A A 232 232 . 0.3013 0.3358 0.2767 -0.0025 0.0196  -
0.0038 1 .
1740 CD    CD    . LYS LYS LYS A A 232 232 . 0.4131 0.3988 0.3134 -0.0185 0.0669  -
0.0182 1 .
1741 CE    CE    . LYS LYS LYS A A 232 232 . 0.4973 0.4569 0.2924 -0.0250 0.0861
0.0273  1 .
1742 NZ    NZ    . LYS LYS LYS A A 232 232 . 0.4564 0.4923 0.3460 -0.0444 0.0884  -
0.0052 1 .
1743 C     C     . LYS LYS LYS A A 232 232 . 0.1426 0.1076 0.1590 -0.0068 0.0021  -
0.0056 1 .
1744 O     O     . LYS LYS LYS A A 232 232 . 0.2130 0.1230 0.1901 0.0178  -0.0193
0.0001  1 .
1745 N     N     . ALA ALA ALA A A 233 233 . 0.1429 0.1104 0.1465 -0.0352 -0.0099 -
0.0018 1 .
1746 CA    CA    . ALA ALA ALA A A 233 233 . 0.1515 0.1030 0.1444 -0.0110 -0.0036
0.0074  1 .
1747 CB    CB    . ALA ALA ALA A A 233 233 . 0.1913 0.1105 0.1488 -0.0052 -0.0012 -
0.0215 1 .
1748 C     C     . ALA ALA ALA A A 233 233 . 0.1498 0.1277 0.1337 -0.0069 -0.0101 -
0.0116 1 .
1749 O     O     . ALA ALA ALA A A 233 233 . 0.1671 0.1471 0.1830 -0.0022 -0.0131 -
0.0034 1 .
1750 N     N     . GLY GLY GLY A A 234 234 . 0.1463 0.1209 0.1340 -0.0071 -0.0158 -
0.0024 1 .
1751 CA    CA    . GLY GLY GLY A A 234 234 . 0.1535 0.1263 0.1410 -0.0013 -0.0079 -
0.0159 1 .
1752 C     C     . GLY GLY GLY A A 234 234 . 0.1434 0.1566 0.1375 -0.0195 -0.0043 -
0.0214 1 .
1753 O     O     . GLY GLY GLY A A 234 234 . 0.1985 0.1655 0.1769 0.0242  0.0130  -
0.0187 1 .
1754 N     N     . TYR TYR TYR A A 235 235 . 0.1477 0.1189 0.1243 -0.0165 -0.0088 -
0.0148 1 .
1755 CA    CA    . TYR TYR TYR A A 235 235 . 0.1427 0.1095 0.1345 -0.0135 -0.0177 -
0.0026 1 .
1756 CB    CB    . TYR TYR TYR A A 235 235 . 0.1428 0.1268 0.1077 -0.0070 -0.0175 -
0.0234 1 .
1757 CG    CG    . TYR TYR TYR A A 235 235 . 0.1470 0.1203 0.1146 -0.0091 -0.0126
0.0024  1 .
1758 CD1   CD1   . TYR TYR TYR A A 235 235 . 0.1379 0.1303 0.1161 0.0151  -0.0234 -
0.0132 1 .
1759 CE1   CE1   . TYR TYR TYR A A 235 235 . 0.1124 0.1167 0.1579 -0.0087 -0.0242 -
0.0382 1 .
1760 CZ    CZ    . TYR TYR TYR A A 235 235 . 0.1245 0.1603 0.1494 0.0036  -0.0060 -
0.0155 1 .
1761 OH    OH    . TYR TYR TYR A A 235 235 . 0.1555 0.2046 0.1531 -0.0019 -0.0273
0.0065  1 .
1762 CE2   CE2   . TYR TYR TYR A A 235 235 . 0.1485 0.1436 0.1573 0.0249  -0.0074 -
0.0261 1 .
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1763 CD2   CD2   . TYR TYR TYR A A 235 235 . 0.1556 0.1673 0.1223 0.0030  -0.0391 -
0.0470 1 .
1764 C     C     . TYR TYR TYR A A 235 235 . 0.1493 0.1420 0.1280 -0.0096 -0.0230 -
0.0116 1 .
1765 O     O     . TYR TYR TYR A A 235 235 . 0.1511 0.1179 0.1209 -0.0024 -0.0058 -
0.0342 1 .
1766 N     N     . THR THR THR A A 236 236 . 0.1468 0.1524 0.1453 -0.0053 -0.0170 -
0.0194 1 .
1767 CA    CA    . THR THR THR A A 236 236 . 0.1679 0.1606 0.1625 -0.0147 -0.0264 -
0.0083 1 .
1768 CB    CB    . THR THR THR A A 236 236 . 0.1429 0.1731 0.1758 -0.0039 -0.0281 -
0.0030 1 .
1769 OG1   OG1   . THR THR THR A A 236 236 . 0.1890 0.2317 0.2286 -0.0673 -0.0431
0.0159  1 .
1770 CG2   CG2   . THR THR THR A A 236 236 . 0.1565 0.2032 0.1726 -0.0111 -0.0510
0.0345  1 .
1771 C     C     . THR THR THR A A 236 236 . 0.1492 0.1626 0.1413 -0.0167 -0.0301 -
0.0279 1 .
1772 O     O     . THR THR THR A A 236 236 . 0.1824 0.1584 0.1610 -0.0183 -0.0240 -
0.0065 1 .
1773 N     N     . GLU GLU GLU A A 237 237 . 0.1928 0.1952 0.1547 -0.0200 -0.0319 -
0.0441 1 .
1774 CA    CA    . GLU GLU GLU A A 237 237 . 0.2401 0.2308 0.2023 -0.0330 -0.0020 -
0.0413 1 .
1775 CB    CB    . GLU GLU GLU A A 237 237 . 0.2657 0.2568 0.2208 0.0004  -0.0159 -
0.0598 1 .
1776 CG    CG    . GLU GLU GLU A A 237 237 . 0.3960 0.3836 0.3813 -0.0338 0.0061  -
0.0625 1 .
1777 CD    CD    . GLU GLU GLU A A 237 237 . 0.4987 0.5673 0.4906 -0.0147 -0.0128 -
0.0318 1 .
1778 OE1   OE1   . GLU GLU GLU A A 237 237 . 0.5504 0.6628 0.5395 -0.0281 0.0351  -
0.0392 1 .
1779 OE2   OE2   . GLU GLU GLU A A 237 237 . 0.6032 0.6003 0.5273 -0.0246 0.0198
0.0060  1 .
1780 C     C     . GLU GLU GLU A A 237 237 . 0.2471 0.2564 0.1890 -0.0336 -0.0155 -
0.0080 1 .
1781 O     O     . GLU GLU GLU A A 237 237 . 0.2851 0.2933 0.2192 -0.0477 -0.0192
0.0217  1 .
1782 N     N     . LYS LYS LYS A A 238 238 . 0.1767 0.2002 0.1162 -0.0136 -0.0151 -
0.0476 1 .
1783 CA    CA    . LYS LYS LYS A A 238 238 . 0.1669 0.1604 0.1136 0.0044  -0.0009 -
0.0246 1 .
1784 CB    CB    . LYS LYS LYS A A 238 238 . 0.1724 0.1436 0.1104 0.0316  0.0088  -
0.0167 1 .
1785 CG    CG    . LYS LYS LYS A A 238 238 . 0.2216 0.1893 0.1711 0.0617  -0.0060 -
0.0573 1 .
1786 CD    CD    . LYS LYS LYS A A 238 238 . 0.2771 0.2458 0.2169 0.0857  0.0092  -
0.0259 1 .
1787 CE    CE    . LYS LYS LYS A A 238 238 . 0.3552 0.3310 0.3292 0.0698  0.0024  -
0.0927 1 .
1788 NZ    NZ    . LYS LYS LYS A A 238 238 . 0.5028 0.3287 0.4482 0.0786  0.0011  -
0.1140 1 .
1789 C     C     . LYS LYS LYS A A 238 238 . 0.1287 0.1253 0.1175 -0.0110 0.0060  -
0.0183 1 .
1790 O     O     . LYS LYS LYS A A 238 238 . 0.1390 0.1472 0.1118 -0.0198 0.0007  -
0.0140 1 .
1791 N     N     . ILE ILE ILE A A 239 239 . 0.1415 0.1215 0.1085 0.0063  0.0295  -
0.0150 1 .
1792 CA    CA    . ILE ILE ILE A A 239 239 . 0.1343 0.1042 0.1015 -0.0009 0.0041  -
0.0055 1 .
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1793 CB    CB    . ILE ILE ILE A A 239 239 . 0.1540 0.1167 0.1147 -0.0089 0.0231
0.0026  1 .
1794 CG1   CG1   . ILE ILE ILE A A 239 239 . 0.1928 0.1193 0.1428 -0.0193 0.0055  -
0.0102 1 .
1795 CD    CD    . ILE ILE ILE A A 239 239 . 0.2190 0.1290 0.0962 -0.0073 0.0123  -
0.0106 1 .
1796 CG2   CG2   . ILE ILE ILE A A 239 239 . 0.1424 0.1355 0.0815 -0.0282 0.0048  -
0.0351 1 .
1797 C     C     . ILE ILE ILE A A 239 239 . 0.1260 0.1223 0.1322 -0.0084 0.0037  -
0.0088 1 .
1798 O     O     . ILE ILE ILE A A 239 239 . 0.1721 0.1353 0.2015 -0.0163 0.0072  -
0.0278 1 .
1799 N     N     . VAL VAL VAL A A 240 240 . 0.1089 0.1285 0.1231 0.0075  0.0052  -
0.0102 1 .
1800 CA    CA    . VAL VAL VAL A A 240 240 . 0.1157 0.1264 0.0952 0.0186  -0.0032 -
0.0110 1 .
1801 CB    CB    . VAL VAL VAL A A 240 240 . 0.1284 0.1103 0.0951 0.0103  -0.0046 -
0.0049 1 .
1802 CG1   CG1   . VAL VAL VAL A A 240 240 . 0.1367 0.1418 0.1356 0.0035  -0.0123 -
0.0576 1 .
1803 CG2   CG2   . VAL VAL VAL A A 240 240 . 0.1094 0.1869 0.1487 -0.0119 0.0048
0.0150  1 .
1804 C     C     . VAL VAL VAL A A 240 240 . 0.1221 0.1183 0.1064 0.0048  -0.0116 -
0.0271 1 .
1805 O     O     . VAL VAL VAL A A 240 240 . 0.0996 0.1464 0.1058 0.0191  -0.0294 -
0.0176 1 .
1806 N     N     . ILE ILE ILE A A 241 241 . 0.1128 0.0947 0.0976 -0.0067 -0.0031 -
0.0157 1 .
1807 CA    CA    . ILE ILE ILE A A 241 241 . 0.1194 0.1037 0.0943 -0.0190 -0.0117 -
0.0141 1 .
1808 CB    CB    . ILE ILE ILE A A 241 241 . 0.1047 0.1220 0.0999 0.0101  -0.0085
0.0040  1 .
1809 CG1   CG1   . ILE ILE ILE A A 241 241 . 0.0925 0.1253 0.1148 -0.0095 -0.0284 -
0.0056 1 .
1810 CD    CD    . ILE ILE ILE A A 241 241 . 0.1318 0.1289 0.1390 -0.0407 -0.0195 -
0.0221 1 .
1811 CG2   CG2   . ILE ILE ILE A A 241 241 . 0.1373 0.1607 0.1297 -0.0278 0.0230  -
0.0134 1 .
1812 C     C     . ILE ILE ILE A A 241 241 . 0.1362 0.1113 0.0978 0.0080  -0.0217
0.0008  1 .
1813 O     O     . ILE ILE ILE A A 241 241 . 0.0909 0.1241 0.1011 -0.0062 -0.0285 -
0.0085 1 .
1814 N     N     . GLY GLY GLY A A 242 242 . 0.1116 0.0981 0.1052 0.0000  0.0003  -
0.0157 1 .
1815 CA    CA    . GLY GLY GLY A A 242 242 . 0.1101 0.0947 0.1177 0.0081  -0.0050 -
0.0165 1 .
1816 C     C     . GLY GLY GLY A A 242 242 . 0.0969 0.0870 0.0890 -0.0034 0.0063
0.0098  1 .
1817 O     O     . GLY GLY GLY A A 242 242 . 0.1436 0.1225 0.0855 0.0296  -0.0031
0.0071  1 .
1818 N     N     . MET MET MET A A 243 243 . 0.1099 0.1082 0.0756 0.0166  -0.0110 -
0.0014 1 .
1819 CA    CA    . MET MET MET A A 243 243 . 0.0997 0.0994 0.0972 0.0159  0.0018  -
0.0028 1 .
1820 CB    CB    . MET MET MET A A 243 243 . 0.1084 0.1274 0.1304 -0.0079 0.0131  -
0.0030 1 .
1821 CG    CG    . MET MET MET A A 243 243 . 0.1012 0.1396 0.1357 -0.0354 -0.0250 -
0.0274 1 .
1822 SD    SD    . MET MET MET A A 243 243 . 0.1432 0.1720 0.1838 -0.0136 -0.0158 -
0.0185 1 .
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1823 CE    CE    . MET MET MET A A 243 243 . 0.1415 0.1736 0.1897 -0.0204 0.0058  -
0.0250 1 .
1824 C     C     . MET MET MET A A 243 243 . 0.0960 0.1174 0.1008 -0.0042 -0.0023
0.0051  1 .
1825 O     O     . MET MET MET A A 243 243 . 0.1418 0.1100 0.1022 0.0100  -0.0113
0.0236  1 .
1826 N     N     . ASP ASP ASP A A 244 244 . 0.1018 0.0981 0.1105 0.0093  -0.0055
0.0040  1 .
1827 CA    CA    . ASP ASP ASP A A 244 244 . 0.0909 0.0934 0.1225 0.0077  -0.0036 -
0.0058 1 .
1828 CB    CB    . ASP ASP ASP A A 244 244 . 0.1086 0.1128 0.1134 0.0118  -0.0449
0.0068  1 .
1829 CG    CG    . ASP ASP ASP A A 244 244 . 0.1146 0.1105 0.1185 0.0006  -0.0102 -
0.0092 1 .
1830 OD1   OD1   . ASP ASP ASP A A 244 244 . 0.1031 0.0865 0.1059 0.0050  -0.0164
0.0043  1 .
1831 OD2   OD2   . ASP ASP ASP A A 244 244 . 0.1010 0.1047 0.0956 -0.0056 -0.0100 -
0.0037 1 .
1832 C     C     . ASP ASP ASP A A 244 244 . 0.1016 0.1101 0.0980 -0.0043 -0.0021
0.0127  1 .
1833 O     O     . ASP ASP ASP A A 244 244 . 0.1130 0.1011 0.0984 -0.0019 0.0003
0.0072  1 .
1834 N     N     . VAL VAL VAL A A 245 245 . 0.0844 0.0918 0.0993 0.0113  -0.0081
0.0011  1 .
1835 CA    CA    . VAL VAL VAL A A 245 245 . 0.1077 0.1141 0.0886 -0.0057 -0.0039 -
0.0081 1 .
1836 CB    CB    . VAL VAL VAL A A 245 245 . 0.0881 0.1165 0.1217 0.0253  -0.0197 -
0.0077 1 .
1837 CG1   CG1   . VAL VAL VAL A A 245 245 . 0.0910 0.1566 0.1284 0.0030  0.0095
0.0107  1 .
1838 CG2   CG2   . VAL VAL VAL A A 245 245 . 0.1059 0.1492 0.1115 0.0160  -0.0219 -
0.0281 1 .
1839 C     C     . VAL VAL VAL A A 245 245 . 0.1213 0.1211 0.1183 0.0025  -0.0172
0.0023  1 .
1840 O     O     . VAL VAL VAL A A 245 245 . 0.1075 0.1383 0.1171 0.0205  -0.0088
0.0105  1 .
1841 N     N     . ALA ALA ALA A A 246 246 . 0.1095 0.0952 0.1031 0.0026  -0.0161
0.0081  1 .
1842 CA    CA    . ALA ALA ALA A A 246 246 . 0.1085 0.1159 0.1023 0.0247  -0.0073 -
0.0036 1 .
1843 CB    CB    . ALA ALA ALA A A 246 246 . 0.1177 0.1168 0.0896 0.0116  -0.0153
0.0062  1 .
1844 C     C     . ALA ALA ALA A A 246 246 . 0.0891 0.1315 0.0831 0.0166  -0.0062
0.0080  1 .
1845 O     O     . ALA ALA ALA A A 246 246 . 0.1451 0.1369 0.1110 0.0267  -0.0057
0.0259  1 .
1846 N     N     . ALA ALA ALA A A 247 247 . 0.1076 0.1376 0.1007 0.0133  -0.0239
0.0085  1 .
1847 CA    CA    . ALA ALA ALA A A 247 247 . 0.1135 0.1400 0.1140 0.0249  -0.0116
0.0031  1 .
1848 CB    CB    . ALA ALA ALA A A 247 247 . 0.1199 0.1614 0.1199 0.0271  -0.0259
0.0343  1 .
1849 C     C     . ALA ALA ALA A A 247 247 . 0.1211 0.1324 0.1177 0.0155  -0.0068
0.0152  1 .
1850 O     O     . ALA ALA ALA A A 247 247 . 0.1047 0.1411 0.1446 0.0130  0.0066
0.0131  1 .
1851 N     N     . SER SER SER A A 248 248 . 0.1283 0.0954 0.1072 0.0139  -0.0276 -
0.0018 1 .
1852 CA    CA    . SER SER SER A A 248 248 . 0.1326 0.1026 0.1352 0.0341  0.0142
0.0098  1 .
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1853 CB    CB    . SER SER SER A A 248 248 . 0.1244 0.1212 0.1089 0.0085  -0.0039 -
0.0017 1 .
1854 OG    OG    . SER SER SER A A 248 248 . 0.1161 0.1241 0.1238 0.0044  -0.0138 -
0.0016 1 .
1855 C     C     . SER SER SER A A 248 248 . 0.1208 0.1228 0.1313 0.0260  0.0121
0.0027  1 .
1856 O     O     . SER SER SER A A 248 248 . 0.1839 0.1630 0.1477 0.0523  0.0085
0.0183  1 .
1857 N     N     . GLU GLU GLU A A 249 249 . 0.1096 0.1375 0.1185 0.0119  0.0089
0.0206  1 .
1858 CA    CA    . GLU GLU GLU A A 249 249 . 0.1333 0.1708 0.1403 0.0156  0.0110
0.0123  1 .
1859 CB    CB    . GLU GLU GLU A A 249 249 . 0.1037 0.1698 0.1492 0.0151  0.0188
0.0376  1 .
1860 CG    CG    . GLU GLU GLU A A 249 249 . 0.1667 0.1169 0.1490 -0.0363 0.0090
0.0064  1 .
1861 CD    CD    . GLU GLU GLU A A 249 249 . 0.1557 0.1714 0.1642 0.0022  0.0412  -
0.0122 1 .
1862 OE1   OE1   . GLU GLU GLU A A 249 249 . 0.2905 0.2822 0.1986 -0.0008 0.0124
0.0215  1 .
1863 OE2   OE2   . GLU GLU GLU A A 249 249 . 0.1540 0.1743 0.1556 0.0299  -0.0003 -
0.0092 1 .
1864 C     C     . GLU GLU GLU A A 249 249 . 0.1347 0.1789 0.1334 0.0031  0.0103
0.0085  1 .
1865 O     O     . GLU GLU GLU A A 249 249 . 0.1671 0.1771 0.1394 0.0169  0.0158
0.0177  1 .
1866 N     N     . PHE PHE PHE A A 250 250 . 0.1229 0.1388 0.1675 0.0149  0.0153
0.0097  1 .
1867 CA    CA    . PHE PHE PHE A A 250 250 . 0.1302 0.1585 0.1805 0.0186  0.0166
0.0171  1 .
1868 CB    CB    . PHE PHE PHE A A 250 250 . 0.1536 0.1678 0.1358 0.0127  0.0192
0.0147  1 .
1869 CG    CG    . PHE PHE PHE A A 250 250 . 0.1427 0.1842 0.1394 0.0292  -0.0008 -
0.0002 1 .
1870 CD1   CD1   . PHE PHE PHE A A 250 250 . 0.1336 0.1468 0.1800 -0.0141 -0.0056
0.0068  1 .
1871 CE1   CE1   . PHE PHE PHE A A 250 250 . 0.0817 0.1618 0.1412 -0.0337 0.0035
0.0038  1 .
1872 CZ    CZ    . PHE PHE PHE A A 250 250 . 0.1120 0.1613 0.1338 -0.0233 0.0144
0.0216  1 .
1873 CE2   CE2   . PHE PHE PHE A A 250 250 . 0.1340 0.1822 0.1851 -0.0023 0.0181
0.0111  1 .
1874 CD2   CD2   . PHE PHE PHE A A 250 250 . 0.1635 0.1882 0.1569 -0.0062 -0.0191
0.0057  1 .
1875 C     C     . PHE PHE PHE A A 250 250 . 0.1577 0.1583 0.1788 0.0066  0.0036
0.0149  1 .
1876 O     O     . PHE PHE PHE A A 250 250 . 0.1481 0.1498 0.2312 0.0358  -0.0021
0.0234  1 .
1877 N     N     . TYR TYR TYR A A 251 251 . 0.1513 0.1727 0.2094 0.0323  0.0062
0.0326  1 .
1878 CA    CA    . TYR TYR TYR A A 251 251 . 0.1549 0.1633 0.1731 0.0298  0.0051
0.0286  1 .
1879 CB    CB    . TYR TYR TYR A A 251 251 . 0.1624 0.1809 0.1712 0.0214  -0.0049
0.0490  1 .
1880 CG    CG    . TYR TYR TYR A A 251 251 . 0.1355 0.1934 0.2281 0.0179  0.0320
0.0389  1 .
1881 CD1   CD1   . TYR TYR TYR A A 251 251 . 0.1686 0.2069 0.1781 0.0295  0.0102
0.0506  1 .
1882 CE1   CE1   . TYR TYR TYR A A 251 251 . 0.1622 0.2116 0.1819 0.0573  0.0036
0.0348  1 .
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1883 CZ    CZ    . TYR TYR TYR A A 251 251 . 0.2717 0.2009 0.2100 0.0407  -0.0228
0.0803  1 .
1884 OH    OH    . TYR TYR TYR A A 251 251 . 0.3634 0.2819 0.3124 0.0576  -0.0393
0.1356  1 .
1885 CE2   CE2   . TYR TYR TYR A A 251 251 . 0.2395 0.2253 0.2589 0.0153  -0.0461
0.1073  1 .
1886 CD2   CD2   . TYR TYR TYR A A 251 251 . 0.1631 0.1920 0.2496 0.0287  -0.0176
0.0219  1 .
1887 C     C     . TYR TYR TYR A A 251 251 . 0.1720 0.2020 0.1992 0.0218  0.0077
0.0160  1 .
1888 O     O     . TYR TYR TYR A A 251 251 . 0.1728 0.1917 0.2045 0.0455  0.0235
0.0167  1 .
1889 N     N     . ARG ARG ARG A A 252 252 . 0.1724 0.2210 0.2176 0.0431  0.0228
0.0080  1 .
1890 CA    CA    . ARG ARG ARG A A 252 252 . 0.2127 0.2583 0.2403 0.0374  0.0173
0.0047  1 .
1891 CB    CB    . ARG ARG ARG A A 252 252 . 0.2178 0.2718 0.2307 0.0400  0.0276
0.0018  1 .
1892 CG    CG    . ARG ARG ARG A A 252 252 . 0.2134 0.2615 0.2303 0.0376  0.0326
0.0238  1 .
1893 CD    CD    . ARG ARG ARG A A 252 252 . 0.2497 0.2922 0.2609 0.0024  -0.0424
0.0344  1 .
1894 NE    NE    . ARG ARG ARG A A 252 252 . 0.2845 0.2778 0.2480 0.0189  -0.0173
0.0546  1 .
1895 CZ    CZ    . ARG ARG ARG A A 252 252 . 0.2548 0.2922 0.2576 0.0184  -0.0157
0.0736  1 .
1896 NH1   NH1   . ARG ARG ARG A A 252 252 . 0.1838 0.2907 0.2138 0.0273  0.0146
0.0413  1 .
1897 NH2   NH2   . ARG ARG ARG A A 252 252 . 0.1508 0.3247 0.2914 0.0360  -0.0182 -
0.0115 1 .
1898 C     C     . ARG ARG ARG A A 252 252 . 0.2555 0.3104 0.2476 0.0304  0.0081  -
0.0047 1 .
1899 O     O     . ARG ARG ARG A A 252 252 . 0.2116 0.3962 0.2665 0.0470  0.0253
0.0139  1 .
1900 N     N     . ASP ASP ASP A A 253 253 . 0.3175 0.3643 0.3021 0.0578  -0.0191
0.0058  1 .
1901 CA    CA    . ASP ASP ASP A A 253 253 . 0.3572 0.3935 0.3263 0.0550  -0.0137
0.0095  1 .
1902 CB    CB    . ASP ASP ASP A A 253 253 . 0.3773 0.4226 0.3334 0.0444  -0.0122
0.0161  1 .
1903 CG    CG    . ASP ASP ASP A A 253 253 . 0.4236 0.4645 0.4141 0.0246  0.0159
0.0091  1 .
1904 OD1   OD1   . ASP ASP ASP A A 253 253 . 0.4236 0.5182 0.4672 0.0363  0.0392  -
0.0118 1 .
1905 OD2   OD2   . ASP ASP ASP A A 253 253 . 0.4748 0.5577 0.4065 0.0956  0.0534  -
0.0439 1 .
1906 C     C     . ASP ASP ASP A A 253 253 . 0.3493 0.3827 0.3252 0.0409  -0.0141
0.0170  1 .
1907 O     O     . ASP ASP ASP A A 253 253 . 0.3661 0.3904 0.3496 0.0572  -0.0069
0.0068  1 .
1908 N     N     . GLY GLY GLY A A 254 254 . 0.2995 0.3132 0.2985 0.0550  -0.0139
0.0391  1 .
1909 CA    CA    . GLY GLY GLY A A 254 254 . 0.2505 0.2454 0.2610 0.0306  -0.0103
0.0308  1 .
1910 C     C     . GLY GLY GLY A A 254 254 . 0.2136 0.2380 0.2291 0.0263  -0.0119
0.0301  1 .
1911 O     O     . GLY GLY GLY A A 254 254 . 0.2445 0.2208 0.2501 0.0186  -0.0110
0.0383  1 .
1912 N     N     . LYS LYS LYS A A 255 255 . 0.1712 0.2380 0.2210 0.0383  -0.0163
0.0264  1 .
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1913 CA    CA    . LYS LYS LYS A A 255 255 . 0.1807 0.2496 0.2184 0.0138  -0.0383
0.0509  1 .
1914 CB    CB    . LYS LYS LYS A A 255 255 . 0.2053 0.2794 0.2222 0.0056  -0.0484
0.0565  1 .
1915 CG    CG    . LYS LYS LYS A A 255 255 . 0.2017 0.3513 0.2470 0.0129  -0.0404
0.0884  1 .
1916 CD    CD    . LYS LYS LYS A A 255 255 . 0.2116 0.4853 0.4064 -0.0287 -0.0241
0.0523  1 .
1917 CE    CE    . LYS LYS LYS A A 255 255 . 0.2779 0.5094 0.4871 -0.0410 0.0154
0.0090  1 .
1918 NZ    NZ    . LYS LYS LYS A A 255 255 . 0.2649 0.5374 0.5391 -0.0846 0.0434
0.0007  1 .
1919 C     C     . LYS LYS LYS A A 255 255 . 0.1651 0.2171 0.2149 0.0145  -0.0170
0.0329  1 .
1920 O     O     . LYS LYS LYS A A 255 255 . 0.1815 0.2336 0.2414 0.0273  -0.0172
0.0407  1 .
1921 N     N     . TYR TYR TYR A A 256 256 . 0.1669 0.2117 0.2058 0.0098  -0.0231
0.0657  1 .
1922 CA    CA    . TYR TYR TYR A A 256 256 . 0.1449 0.2055 0.2199 -0.0045 -0.0138
0.0563  1 .
1923 CB    CB    . TYR TYR TYR A A 256 256 . 0.1576 0.2093 0.2097 -0.0202 -0.0061
0.0331  1 .
1924 CG    CG    . TYR TYR TYR A A 256 256 . 0.1440 0.1806 0.1994 -0.0427 -0.0128
0.0525  1 .
1925 CD1   CD1   . TYR TYR TYR A A 256 256 . 0.1357 0.1798 0.1646 -0.0021 -0.0103
0.0145  1 .
1926 CE1   CE1   . TYR TYR TYR A A 256 256 . 0.1903 0.1700 0.1758 0.0427  0.0101
0.0688  1 .
1927 CZ    CZ    . TYR TYR TYR A A 256 256 . 0.0951 0.1384 0.1506 0.0037  -0.0086
0.0303  1 .
1928 OH    OH    . TYR TYR TYR A A 256 256 . 0.1224 0.1311 0.1421 0.0117  0.0082
0.0274  1 .
1929 CE2   CE2   . TYR TYR TYR A A 256 256 . 0.1280 0.1503 0.2137 0.0239  -0.0424
0.0463  1 .
1930 CD2   CD2   . TYR TYR TYR A A 256 256 . 0.1255 0.2192 0.1768 -0.0050 -0.0183
0.0670  1 .
1931 C     C     . TYR TYR TYR A A 256 256 . 0.1862 0.1906 0.1840 -0.0181 -0.0136
0.0405  1 .
1932 O     O     . TYR TYR TYR A A 256 256 . 0.1828 0.2315 0.2251 -0.0150 -0.0122
0.0533  1 .
1933 N     N     . ASP ASP ASP A A 257 257 . 0.1489 0.2068 0.1802 0.0100  0.0102
0.0402  1 .
1934 CA    CA    . ASP ASP ASP A A 257 257 . 0.1663 0.2008 0.1927 0.0263  0.0020
0.0337  1 .
1935 CB    CB    . ASP ASP ASP A A 257 257 . 0.1342 0.1964 0.2098 0.0011  0.0151
0.0300  1 .
1936 CG    CG    . ASP ASP ASP A A 257 257 . 0.1290 0.1846 0.1716 0.0263  -0.0070
0.0164  1 .
1937 OD1   OD1   . ASP ASP ASP A A 257 257 . 0.1160 0.2222 0.2346 0.0100  0.0285
0.0216  1 .
1938 OD2   OD2   . ASP ASP ASP A A 257 257 . 0.1538 0.1986 0.2107 0.0477  0.0265
0.0399  1 .
1939 C     C     . ASP ASP ASP A A 257 257 . 0.1293 0.1852 0.1804 0.0220  0.0111
0.0100  1 .
1940 O     O     . ASP ASP ASP A A 257 257 . 0.1684 0.1693 0.1792 0.0197  0.0149
0.0299  1 .
1941 N     N     . LEU LEU LEU A A 258 258 . 0.1331 0.1658 0.1845 0.0347  0.0179
0.0243  1 .
1942 CA    CA    . LEU LEU LEU A A 258 258 . 0.1472 0.1686 0.1717 0.0367  -0.0097
0.0203  1 .
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1943 CB    CB    . LEU LEU LEU A A 258 258 . 0.1751 0.1770 0.1770 0.0064  -0.0250
0.0146  1 .
1944 CG    CG    . LEU LEU LEU A A 258 258 . 0.1894 0.1735 0.1816 -0.0115 -0.0155
0.0144  1 .
1945 CD1   CD1   . LEU LEU LEU A A 258 258 . 0.2195 0.1960 0.2285 -0.0018 0.0270  -
0.0202 1 .
1946 CD2   CD2   . LEU LEU LEU A A 258 258 . 0.1911 0.2265 0.1937 -0.0204 0.0007
0.0380  1 .
1947 C     C     . LEU LEU LEU A A 258 258 . 0.1551 0.1712 0.1757 0.0115  0.0355
0.0290  1 .
1948 O     O     . LEU LEU LEU A A 258 258 . 0.1476 0.1720 0.1833 0.0226  0.0240
0.0359  1 .
1949 N     N     . ASP ASP ASP A A 259 259 . 0.1606 0.2166 0.2100 -0.0045 0.0208
0.0287  1 .
1950 CA    CA    . ASP ASP ASP A A 259 259 . 0.1635 0.2160 0.1929 -0.0041 0.0176
0.0319  1 .
1951 CB    CB    . ASP ASP ASP A A 259 259 . 0.1553 0.2214 0.1891 -0.0105 -0.0013
0.0014  1 .
1952 CG    CG    . ASP ASP ASP A A 259 259 . 0.1700 0.2302 0.2426 -0.0147 0.0221
0.0454  1 .
1953 OD1   OD1   . ASP ASP ASP A A 259 259 . 0.1976 0.2446 0.2312 -0.0061 0.0400
0.0546  1 .
1954 OD2   OD2   . ASP ASP ASP A A 259 259 . 0.2492 0.3477 0.3352 -0.0495 0.0499
0.1059  1 .
1955 C     C     . ASP ASP ASP A A 259 259 . 0.1574 0.1916 0.1911 -0.0082 0.0184
0.0245  1 .
1956 O     O     . ASP ASP ASP A A 259 259 . 0.1688 0.2462 0.2053 -0.0087 0.0199
0.0437  1 .
1957 N     N     . PHE PHE PHE A A 260 260 . 0.1634 0.1987 0.2166 -0.0023 0.0176
0.0318  1 .
1958 CA    CA    . PHE PHE PHE A A 260 260 . 0.1668 0.1886 0.1944 0.0138  0.0242
0.0143  1 .
1959 CB    CB    . PHE PHE PHE A A 260 260 . 0.1556 0.1878 0.2012 0.0090  0.0264
0.0357  1 .
1960 CG    CG    . PHE PHE PHE A A 260 260 . 0.1957 0.1686 0.1561 0.0189  0.0061
0.0275  1 .
1961 CD1   CD1   . PHE PHE PHE A A 260 260 . 0.1451 0.1652 0.1605 0.0005  0.0022
0.0341  1 .
1962 CE1   CE1   . PHE PHE PHE A A 260 260 . 0.1698 0.1602 0.1790 0.0161  -0.0092
0.0460  1 .
1963 CZ    CZ    . PHE PHE PHE A A 260 260 . 0.1949 0.1626 0.1116 0.0164  0.0271
0.0258  1 .
1964 CE2   CE2   . PHE PHE PHE A A 260 260 . 0.1425 0.1935 0.1813 0.0040  -0.0121
0.0059  1 .
1965 CD2   CD2   . PHE PHE PHE A A 260 260 . 0.1157 0.1850 0.1806 -0.0029 -0.0071
0.0422  1 .
1966 C     C     . PHE PHE PHE A A 260 260 . 0.2009 0.2025 0.2032 0.0229  0.0206
0.0112  1 .
1967 O     O     . PHE PHE PHE A A 260 260 . 0.2080 0.2073 0.2234 0.0586  0.0141
0.0002  1 .
1968 N     N     . LYS LYS LYS A A 261 261 . 0.2067 0.2312 0.2046 0.0491  0.0158
0.0190  1 .
1969 CA    CA    . LYS LYS LYS A A 261 261 . 0.1755 0.2423 0.2023 0.0528  0.0278
0.0135  1 .
1970 CB    CB    . LYS LYS LYS A A 261 261 . 0.1544 0.2366 0.2289 0.0429  -0.0040
0.0162  1 .
1971 CG    CG    . LYS LYS LYS A A 261 261 . 0.1542 0.2018 0.2012 0.0387  0.0375  -
0.0028 1 .
1972 CD    CD    . LYS LYS LYS A A 261 261 . 0.1363 0.1491 0.1387 0.0293  0.0277
0.0099  1 .
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1973 CE    CE    . LYS LYS LYS A A 261 261 . 0.1445 0.1469 0.1283 0.0312  0.0171
0.0031  1 .
1974 NZ    NZ    . LYS LYS LYS A A 261 261 . 0.1392 0.1426 0.1375 0.0549  0.0391
0.0329  1 .
1975 C     C     . LYS LYS LYS A A 261 261 . 0.1964 0.2737 0.2166 0.0162  0.0179
0.0239  1 .
1976 O     O     . LYS LYS LYS A A 261 261 . 0.2009 0.3275 0.2319 0.0590  0.0182
0.0360  1 .
1977 N     N     . SER SER SER A A 262 262 . 0.2061 0.2871 0.2053 0.0321  0.0413
0.0315  1 .
1978 CA    CA    . SER SER SER A A 262 262 . 0.2354 0.2735 0.2390 0.0180  0.0499
0.0397  1 .
1979 CB    CB    . SER SER SER A A 262 262 . 0.2492 0.2616 0.2474 0.0209  0.0315
0.0534  1 .
1980 OG    OG    . SER SER SER A A 262 262 . 0.3079 0.2730 0.3070 0.0210  0.0744
0.0716  1 .
1981 C     C     . SER SER SER A A 262 262 . 0.2461 0.2835 0.2620 0.0259  0.0481
0.0403  1 .
1982 O     O     . SER SER SER A A 262 262 . 0.2280 0.2945 0.2518 0.0180  0.0749
0.0558  1 .
1983 N     N     . PRO PRO PRO A A 263 263 . 0.2697 0.3027 0.2686 0.0303  0.0609
0.0393  1 .
1984 CA    CA    . PRO PRO PRO A A 263 263 . 0.2696 0.3234 0.2752 0.0308  0.0601
0.0405  1 .
1985 CB    CB    . PRO PRO PRO A A 263 263 . 0.2466 0.3368 0.2476 0.0300  0.0648
0.0531  1 .
1986 CG    CG    . PRO PRO PRO A A 263 263 . 0.3264 0.3357 0.3124 0.0678  0.0704
0.0134  1 .
1987 CD    CD    . PRO PRO PRO A A 263 263 . 0.2943 0.3148 0.2898 0.0280  0.0675
0.0350  1 .
1988 C     C     . PRO PRO PRO A A 263 263 . 0.2445 0.3188 0.2780 0.0206  0.0470
0.0157  1 .
1989 O     O     . PRO PRO PRO A A 263 263 . 0.2350 0.3281 0.2821 0.0262  0.0562
0.0093  1 .
1990 N     N     . THR THR THR A A 264 264 . 0.2886 0.3404 0.3006 0.0281  0.0442
0.0165  1 .
1991 CA    CA    . THR THR THR A A 264 264 . 0.3186 0.3450 0.3313 0.0139  0.0154
0.0076  1 .
1992 CB    CB    . THR THR THR A A 264 264 . 0.3256 0.3457 0.3344 0.0075  0.0116
0.0025  1 .
1993 OG1   OG1   . THR THR THR A A 264 264 . 0.3406 0.3596 0.3511 -0.0147 0.0340  -
0.0024 1 .
1994 CG2   CG2   . THR THR THR A A 264 264 . 0.3320 0.3670 0.3183 -0.0199 -0.0289 -
0.0003 1 .
1995 C     C     . THR THR THR A A 264 264 . 0.3114 0.3449 0.3395 0.0241  0.0254
0.0057  1 .
1996 O     O     . THR THR THR A A 264 264 . 0.3059 0.3577 0.3244 0.0442  0.0423
0.0064  1 .
1997 N     N     . ASP ASP ASP A A 265 265 . 0.3126 0.3474 0.3318 0.0192  0.0286
0.0079  1 .
1998 CA    CA    . ASP ASP ASP A A 265 265 . 0.3219 0.3736 0.3584 0.0194  0.0182
0.0141  1 .
1999 CB    CB    . ASP ASP ASP A A 265 265 . 0.3282 0.3745 0.3830 0.0148  0.0236
0.0121  1 .
2000 CG    CG    . ASP ASP ASP A A 265 265 . 0.3774 0.4047 0.4415 -0.0005 0.0039
0.0355  1 .
2001 OD1   OD1   . ASP ASP ASP A A 265 265 . 0.2303 0.4575 0.4453 0.0353  0.0469
0.0599  1 .
2002 OD2   OD2   . ASP ASP ASP A A 265 265 . 0.4633 0.4340 0.5892 -0.0189 0.0070
0.0413  1 .
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2003 C     C     . ASP ASP ASP A A 265 265 . 0.3305 0.3647 0.3650 0.0245  0.0195
0.0058  1 .
2004 O     O     . ASP ASP ASP A A 265 265 . 0.2639 0.3695 0.3735 0.0364  0.0305
0.0031  1 .
2005 N     N     . PRO PRO PRO A A 266 266 . 0.3109 0.3622 0.3617 0.0308  0.0163
0.0189  1 .
2006 CA    CA    . PRO PRO PRO A A 266 266 . 0.2943 0.3619 0.3712 0.0231  0.0113
0.0209  1 .
2007 CB    CB    . PRO PRO PRO A A 266 266 . 0.3108 0.3442 0.3613 0.0240  0.0117
0.0247  1 .
2008 CG    CG    . PRO PRO PRO A A 266 266 . 0.3387 0.3551 0.3749 0.0078  0.0047
0.0274  1 .
2009 CD    CD    . PRO PRO PRO A A 266 266 . 0.3225 0.3354 0.3396 0.0263  0.0053
0.0215  1 .
2010 C     C     . PRO PRO PRO A A 266 266 . 0.2839 0.3612 0.3765 0.0321  0.0103
0.0300  1 .
2011 O     O     . PRO PRO PRO A A 266 266 . 0.1965 0.3864 0.3977 0.0317  0.0124
0.0459  1 .
2012 N     N     . SER SER SER A A 267 267 . 0.2478 0.3560 0.3811 0.0183  0.0200
0.0246  1 .
2013 CA    CA    . SER SER SER A A 267 267 . 0.2972 0.3836 0.3914 0.0120  0.0181
0.0167  1 .
2014 CB    CB    . SER SER SER A A 267 267 . 0.3238 0.4086 0.4087 0.0035  0.0226
0.0145  1 .
2015 OG    OG    . SER SER SER A A 267 267 . 0.3195 0.4060 0.4476 0.0132  0.0571
0.0508  1 .
2016 C     C     . SER SER SER A A 267 267 . 0.2878 0.3829 0.3776 0.0068  -0.0028
0.0045  1 .
2017 O     O     . SER SER SER A A 267 267 . 0.2629 0.4019 0.3782 0.0159  -0.0231
0.0045  1 .
2018 N     N     . ARG ARG ARG A A 268 268 . 0.2221 0.3442 0.3491 -0.0137 -0.0119
0.0173  1 .
2019 CA    CA    . ARG ARG ARG A A 268 268 . 0.2450 0.3157 0.3103 -0.0144 0.0014
0.0202  1 .
2020 CB    CB    . ARG ARG ARG A A 268 268 . 0.2502 0.3044 0.3405 -0.0008 0.0033
0.0296  1 .
2021 CG    CG    . ARG ARG ARG A A 268 268 . 0.2330 0.3585 0.3287 -0.0123 0.0311  -
0.0249 1 .
2022 CD    CD    . ARG ARG ARG A A 268 268 . 0.3709 0.4258 0.4316 0.1325  0.0081
0.0230  1 .
2023 NE    NE    . ARG ARG ARG A A 268 268 . 0.3294 0.3701 0.3112 0.1652  -0.0123
0.1041  1 .
2024 CZ    CZ    . ARG ARG ARG A A 268 268 . 0.2026 0.2841 0.4129 0.0614  -0.0256
0.0343  1 .
2025 NH1   NH1   . ARG ARG ARG A A 268 268 . 0.1900 0.3037 0.2883 0.0941  0.0626
0.0578  1 .
2026 NH2   NH2   . ARG ARG ARG A A 268 268 . 0.2047 0.3143 0.3347 0.0533  -0.0302
0.0866  1 .
2027 C     C     . ARG ARG ARG A A 268 268 . 0.2233 0.2878 0.3088 -0.0179 -0.0067
0.0191  1 .
2028 O     O     . ARG ARG ARG A A 268 268 . 0.2089 0.2985 0.2907 -0.0284 -0.0151
0.0241  1 .
2029 N     N     . TYR TYR TYR A A 269 269 . 0.1896 0.2837 0.2834 -0.0177 -0.0136
0.0226  1 .
2030 CA    CA    . TYR TYR TYR A A 269 269 . 0.1996 0.2760 0.2904 0.0004  0.0015
0.0177  1 .
2031 CB    CB    . TYR TYR TYR A A 269 269 . 0.1560 0.2702 0.2811 -0.0195 -0.0092
0.0253  1 .
2032 CG    CG    . TYR TYR TYR A A 269 269 . 0.1780 0.2877 0.2991 0.0267  0.0318
0.0097  1 .
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2033 CD1   CD1   . TYR TYR TYR A A 269 269 . 0.1431 0.2503 0.2613 0.0194  0.0257
0.0118  1 .
2034 CE1   CE1   . TYR TYR TYR A A 269 269 . 0.1478 0.2770 0.2559 0.0432  0.0113
0.0151  1 .
2035 CZ    CZ    . TYR TYR TYR A A 269 269 . 0.1553 0.2855 0.2806 0.0425  0.0448
0.0058  1 .
2036 OH    OH    . TYR TYR TYR A A 269 269 . 0.2092 0.4115 0.2920 0.0145  0.0558
0.0044  1 .
2037 CE2   CE2   . TYR TYR TYR A A 269 269 . 0.1957 0.2875 0.2840 0.0002  0.0688
0.0346  1 .
2038 CD2   CD2   . TYR TYR TYR A A 269 269 . 0.1425 0.2727 0.3200 -0.0084 0.0365
0.0177  1 .
2039 C     C     . TYR TYR TYR A A 269 269 . 0.1835 0.2691 0.2647 -0.0127 -0.0018
0.0272  1 .
2040 O     O     . TYR TYR TYR A A 269 269 . 0.1747 0.3357 0.3113 -0.0193 -0.0155
0.0002  1 .
2041 N     N     . ILE ILE ILE A A 270 270 . 0.1516 0.2061 0.2608 0.0022  0.0069
0.0204  1 .
2042 CA    CA    . ILE ILE ILE A A 270 270 . 0.1500 0.2145 0.2497 -0.0066 -0.0078
0.0377  1 .
2043 CB    CB    . ILE ILE ILE A A 270 270 . 0.1445 0.2105 0.2560 -0.0096 0.0034
0.0412  1 .
2044 CG1   CG1   . ILE ILE ILE A A 270 270 . 0.1313 0.2443 0.2737 0.0175  -0.0255
0.0197  1 .
2045 CD    CD    . ILE ILE ILE A A 270 270 . 0.2034 0.1981 0.2909 0.0050  -0.0163
0.0491  1 .
2046 CG2   CG2   . ILE ILE ILE A A 270 270 . 0.1826 0.2189 0.2638 -0.0232 0.0213
0.0481  1 .
2047 C     C     . ILE ILE ILE A A 270 270 . 0.2000 0.2142 0.2612 0.0035  -0.0188
0.0303  1 .
2048 O     O     . ILE ILE ILE A A 270 270 . 0.1890 0.2195 0.3161 0.0091  -0.0389
0.0465  1 .
2049 N     N     . THR THR THR A A 271 271 . 0.1774 0.2048 0.2302 0.0032  -0.0144
0.0462  1 .
2050 CA    CA    . THR THR THR A A 271 271 . 0.1649 0.2445 0.2436 0.0107  -0.0041
0.0470  1 .
2051 CB    CB    . THR THR THR A A 271 271 . 0.1816 0.2593 0.2284 0.0101  -0.0005
0.0426  1 .
2052 OG1   OG1   . THR THR THR A A 271 271 . 0.1334 0.2930 0.2717 0.0350  -0.0253
0.0625  1 .
2053 CG2   CG2   . THR THR THR A A 271 271 . 0.1414 0.2683 0.3310 0.0266  0.0010
0.0450  1 .
2054 C     C     . THR THR THR A A 271 271 . 0.1543 0.1972 0.2044 0.0197  -0.0029
0.0208  1 .
2055 O     O     . THR THR THR A A 271 271 . 0.1653 0.2228 0.2313 0.0236  -0.0211
0.0187  1 .
2056 N     N     . GLY GLY GLY A A 272 272 . 0.1516 0.1911 0.1961 0.0327  -0.0156
0.0266  1 .
2057 CA    CA    . GLY GLY GLY A A 272 272 . 0.1412 0.1968 0.1988 0.0420  -0.0126
0.0237  1 .
2058 C     C     . GLY GLY GLY A A 272 272 . 0.1272 0.1995 0.1752 0.0221  -0.0123
0.0250  1 .
2059 O     O     . GLY GLY GLY A A 272 272 . 0.1447 0.1817 0.2064 0.0295  0.0032
0.0439  1 .
2060 N     N     . ASP ASP ASP A A 273 273 . 0.1409 0.2002 0.1868 0.0331  -0.0535
0.0168  1 .
2061 CA    CA    . ASP ASP ASP A A 273 273 . 0.1609 0.1737 0.1989 0.0384  -0.0452
0.0297  1 .
2062 CB    CB    . ASP ASP ASP A A 273 273 . 0.1785 0.1821 0.2053 0.0562  -0.0482
0.0106  1 .
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2063 CG    CG    . ASP ASP ASP A A 273 273 . 0.3131 0.2474 0.3035 0.0380  -0.0220
0.0046  1 .
2064 OD1   OD1   . ASP ASP ASP A A 273 273 . 0.4685 0.5722 0.2992 0.0783  -0.0153 -
0.0046 1 .
2065 OD2   OD2   . ASP ASP ASP A A 273 273 . 0.4610 0.3310 0.4083 0.0562  -0.0488 -
0.0406 1 .
2066 C     C     . ASP ASP ASP A A 273 273 . 0.1619 0.1867 0.2135 0.0277  -0.0467
0.0147  1 .
2067 O     O     . ASP ASP ASP A A 273 273 . 0.1642 0.1829 0.2463 0.0370  -0.0615 -
0.0037 1 .
2068 N     N     . GLN GLN GLN A A 274 274 . 0.1530 0.1931 0.2424 0.0199  -0.0650
0.0279  1 .
2069 CA    CA    . GLN GLN GLN A A 274 274 . 0.1836 0.2252 0.2649 0.0134  -0.0325
0.0376  1 .
2070 CB    CB    . GLN GLN GLN A A 274 274 . 0.2108 0.2396 0.2647 0.0061  -0.0302
0.0193  1 .
2071 CG    CG    . GLN GLN GLN A A 274 274 . 0.3055 0.3355 0.3522 -0.0100 -0.0080
0.0245  1 .
2072 CD    CD    . GLN GLN GLN A A 274 274 . 0.3528 0.3303 0.3843 -0.0403 0.0321  -
0.0015 1 .
2073 OE1   OE1   . GLN GLN GLN A A 274 274 . 0.2770 0.3442 0.3851 -0.0018 0.0479  -
0.0234 1 .
2074 NE2   NE2   . GLN GLN GLN A A 274 274 . 0.3892 0.3140 0.2980 -0.0453 -0.0121
0.0777  1 .
2075 C     C     . GLN GLN GLN A A 274 274 . 0.1618 0.1970 0.2405 0.0077  -0.0378
0.0080  1 .
2076 O     O     . GLN GLN GLN A A 274 274 . 0.1329 0.2111 0.2804 0.0310  -0.0120
0.0299  1 .
2077 N     N     . LEU LEU LEU A A 275 275 . 0.1248 0.1660 0.2125 0.0101  -0.0322
0.0244  1 .
2078 CA    CA    . LEU LEU LEU A A 275 275 . 0.1248 0.1470 0.1819 0.0156  -0.0434
0.0209  1 .
2079 CB    CB    . LEU LEU LEU A A 275 275 . 0.1272 0.1651 0.1641 0.0092  -0.0370
0.0212  1 .
2080 CG    CG    . LEU LEU LEU A A 275 275 . 0.1343 0.1801 0.1738 0.0271  -0.0633
0.0570  1 .
2081 CD1   CD1   . LEU LEU LEU A A 275 275 . 0.1982 0.2377 0.1957 0.0020  -0.0616
0.1187  1 .
2082 CD2   CD2   . LEU LEU LEU A A 275 275 . 0.1861 0.1945 0.1712 0.0255  -0.0381
0.0394  1 .
2083 C     C     . LEU LEU LEU A A 275 275 . 0.1310 0.1485 0.1680 0.0036  -0.0332
0.0196  1 .
2084 O     O     . LEU LEU LEU A A 275 275 . 0.1225 0.1440 0.1868 0.0294  -0.0241
0.0072  1 .
2085 N     N     . GLY GLY GLY A A 276 276 . 0.1298 0.1605 0.1405 -0.0145 -0.0177
0.0143  1 .
2086 CA    CA    . GLY GLY GLY A A 276 276 . 0.1117 0.1544 0.1444 -0.0010 -0.0185
0.0161  1 .
2087 C     C     . GLY GLY GLY A A 276 276 . 0.1297 0.1855 0.1674 -0.0111 -0.0186
0.0143  1 .
2088 O     O     . GLY GLY GLY A A 276 276 . 0.1635 0.1943 0.1768 -0.0040 -0.0230
0.0069  1 .
2089 N     N     . ALA ALA ALA A A 277 277 . 0.1396 0.1884 0.2100 -0.0071 -0.0351
0.0441  1 .
2090 CA    CA    . ALA ALA ALA A A 277 277 . 0.1403 0.1923 0.1981 0.0252  -0.0417
0.0168  1 .
2091 CB    CB    . ALA ALA ALA A A 277 277 . 0.1299 0.1829 0.2210 0.0163  -0.0735
0.0122  1 .
2092 C     C     . ALA ALA ALA A A 277 277 . 0.1441 0.1657 0.1791 0.0006  -0.0310
0.0074  1 .
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2093 O     O     . ALA ALA ALA A A 277 277 . 0.1761 0.1557 0.2057 0.0145  -0.0461
0.0145  1 .
2094 N     N     . LEU LEU LEU A A 278 278 . 0.1617 0.1688 0.1900 0.0286  -0.0088
0.0317  1 .
2095 CA    CA    . LEU LEU LEU A A 278 278 . 0.1602 0.1605 0.1758 0.0163  -0.0209
0.0153  1 .
2096 CB    CB    . LEU LEU LEU A A 278 278 . 0.1846 0.1789 0.1953 0.0204  -0.0074
0.0140  1 .
2097 CG    CG    . LEU LEU LEU A A 278 278 . 0.2436 0.2332 0.1723 -0.0166 -0.0291
0.0210  1 .
2098 CD1   CD1   . LEU LEU LEU A A 278 278 . 0.3354 0.2512 0.2882 -0.0436 0.0104
0.0435  1 .
2099 CD2   CD2   . LEU LEU LEU A A 278 278 . 0.2997 0.2858 0.1939 -0.0223 -0.0132 -
0.0235 1 .
2100 C     C     . LEU LEU LEU A A 278 278 . 0.1508 0.1305 0.1631 -0.0047 -0.0128
0.0054  1 .
2101 O     O     . LEU LEU LEU A A 278 278 . 0.1178 0.1312 0.1619 0.0081  -0.0246 -
0.0009 1 .
2102 N     N     . TYR TYR TYR A A 279 279 . 0.1288 0.1558 0.1223 -0.0130 -0.0048
0.0023  1 .
2103 CA    CA    . TYR TYR TYR A A 279 279 . 0.1112 0.1429 0.1444 -0.0004 -0.0077
0.0000  1 .
2104 CB    CB    . TYR TYR TYR A A 279 279 . 0.1276 0.1175 0.1530 0.0062  -0.0084 -
0.0132 1 .
2105 CG    CG    . TYR TYR TYR A A 279 279 . 0.1062 0.1478 0.1247 0.0315  -0.0182
0.0016  1 .
2106 CD1   CD1   . TYR TYR TYR A A 279 279 . 0.1049 0.1867 0.1385 0.0053  -0.0247 -
0.0073 1 .
2107 CE1   CE1   . TYR TYR TYR A A 279 279 . 0.0905 0.1226 0.1566 0.0101  -0.0172
0.0006  1 .
2108 CZ    CZ    . TYR TYR TYR A A 279 279 . 0.0881 0.1332 0.1109 0.0104  -0.0193
0.0135  1 .
2109 OH    OH    . TYR TYR TYR A A 279 279 . 0.1247 0.1555 0.1283 -0.0080 -0.0166 -
0.0056 1 .
2110 CE2   CE2   . TYR TYR TYR A A 279 279 . 0.1151 0.1408 0.1184 -0.0004 -0.0112
0.0101  1 .
2111 CD2   CD2   . TYR TYR TYR A A 279 279 . 0.1054 0.1272 0.1665 -0.0190 -0.0076 -
0.0004 1 .
2112 C     C     . TYR TYR TYR A A 279 279 . 0.1545 0.1526 0.1597 0.0146  -0.0169
0.0054  1 .
2113 O     O     . TYR TYR TYR A A 279 279 . 0.1381 0.1372 0.1385 0.0155  -0.0201
0.0133  1 .
2114 N     N     . GLN GLN GLN A A 280 280 . 0.1323 0.1588 0.1277 -0.0135 -0.0277 -
0.0068 1 .
2115 CA    CA    . GLN GLN GLN A A 280 280 . 0.1542 0.1455 0.1403 0.0023  -0.0451
0.0043  1 .
2116 CB    CB    . GLN GLN GLN A A 280 280 . 0.1589 0.1761 0.1680 0.0083  -0.0625
0.0096  1 .
2117 CG    CG    . GLN GLN GLN A A 280 280 . 0.2620 0.2191 0.2334 -0.0309 -0.0358
0.0076  1 .
2118 CD    CD    . GLN GLN GLN A A 280 280 . 0.2849 0.2694 0.3125 -0.0300 0.0070  -
0.0121 1 .
2119 OE1   OE1   . GLN GLN GLN A A 280 280 . 0.3830 0.2920 0.3384 -0.0148 0.0337  -
0.0093 1 .
2120 NE2   NE2   . GLN GLN GLN A A 280 280 . 0.3253 0.3098 0.2794 -0.0516 -0.0641
0.0216  1 .
2121 C     C     . GLN GLN GLN A A 280 280 . 0.1778 0.1771 0.1549 0.0177  -0.0358
0.0073  1 .
2122 O     O     . GLN GLN GLN A A 280 280 . 0.1542 0.1746 0.1259 0.0316  -0.0315 -
0.0060 1 .
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2123 N     N     . ASP ASP ASP A A 281 281 . 0.1295 0.1510 0.1491 0.0008  -0.0447
0.0183  1 .
2124 CA    CA    . ASP ASP ASP A A 281 281 . 0.1519 0.1553 0.1767 -0.0031 -0.0379
0.0204  1 .
2125 CB    CB    . ASP ASP ASP A A 281 281 . 0.1708 0.1847 0.1924 0.0044  -0.0449
0.0246  1 .
2126 CG    CG    . ASP ASP ASP A A 281 281 . 0.2175 0.2641 0.2646 -0.0019 -0.0311
0.0098  1 .
2127 OD1   OD1   . ASP ASP ASP A A 281 281 . 0.2600 0.3365 0.3222 -0.0466 -0.0925 -
0.0184 1 .
2128 OD2   OD2   . ASP ASP ASP A A 281 281 . 0.1976 0.3878 0.3688 -0.0446 -0.0132
0.0064  1 .
2129 C     C     . ASP ASP ASP A A 281 281 . 0.1414 0.1498 0.1331 0.0000  -0.0037
0.0082  1 .
2130 O     O     . ASP ASP ASP A A 281 281 . 0.1579 0.1573 0.1827 0.0081  -0.0422
0.0036  1 .
2131 N     N     . PHE PHE PHE A A 282 282 . 0.0935 0.1281 0.1540 0.0004  -0.0119
0.0061  1 .
2132 CA    CA    . PHE PHE PHE A A 282 282 . 0.1011 0.1520 0.1350 0.0070  -0.0222
0.0000  1 .
2133 CB    CB    . PHE PHE PHE A A 282 282 . 0.1439 0.1654 0.1466 0.0231  -0.0057 -
0.0001 1 .
2134 CG    CG    . PHE PHE PHE A A 282 282 . 0.1266 0.1654 0.1199 0.0134  -0.0397
0.0289  1 .
2135 CD1   CD1   . PHE PHE PHE A A 282 282 . 0.1490 0.1715 0.1199 0.0310  -0.0307
0.0038  1 .
2136 CE1   CE1   . PHE PHE PHE A A 282 282 . 0.1667 0.2379 0.1403 -0.0016 -0.0466
0.0028  1 .
2137 CZ    CZ    . PHE PHE PHE A A 282 282 . 0.1507 0.2168 0.2136 0.0282  -0.0541
0.0069  1 .
2138 CE2   CE2   . PHE PHE PHE A A 282 282 . 0.1999 0.2133 0.1398 -0.0033 -0.0221
0.0116  1 .
2139 CD2   CD2   . PHE PHE PHE A A 282 282 . 0.1486 0.1747 0.1157 0.0226  -0.0145
0.0363  1 .
2140 C     C     . PHE PHE PHE A A 282 282 . 0.1319 0.1265 0.1415 0.0075  -0.0099 -
0.0019 1 .
2141 O     O     . PHE PHE PHE A A 282 282 . 0.1293 0.1691 0.1486 0.0052  -0.0310 -
0.0040 1 .
2142 N     N     . VAL VAL VAL A A 283 283 . 0.1061 0.1658 0.1321 -0.0036 -0.0165 -
0.0005 1 .
2143 CA    CA    . VAL VAL VAL A A 283 283 . 0.1371 0.1456 0.1385 0.0045  -0.0063
0.0066  1 .
2144 CB    CB    . VAL VAL VAL A A 283 283 . 0.1655 0.1475 0.1257 -0.0205 -0.0018
0.0038  1 .
2145 CG1   CG1   . VAL VAL VAL A A 283 283 . 0.1953 0.1656 0.1701 -0.0092 0.0295  -
0.0181 1 .
2146 CG2   CG2   . VAL VAL VAL A A 283 283 . 0.1599 0.1517 0.1668 -0.0302 -0.0484 -
0.0224 1 .
2147 C     C     . VAL VAL VAL A A 283 283 . 0.1526 0.1492 0.1519 0.0124  -0.0166
0.0050  1 .
2148 O     O     . VAL VAL VAL A A 283 283 . 0.1544 0.1946 0.1973 0.0180  -0.0379 -
0.0283 1 .
2149 N     N     . ARG ARG ARG A A 284 284 . 0.1541 0.1419 0.1519 -0.0063 -0.0111 -
0.0174 1 .
2150 CA    CA    . ARG ARG ARG A A 284 284 . 0.1810 0.1910 0.1759 0.0053  -0.0091 -
0.0044 1 .
2151 CB    CB    . ARG ARG ARG A A 284 284 . 0.1868 0.2305 0.2234 0.0115  -0.0026
0.0238  1 .
2152 CG    CG    . ARG ARG ARG A A 284 284 . 0.3008 0.2907 0.2640 -0.0196 -0.0401
0.0214  1 .
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2153 CD    CD    . ARG ARG ARG A A 284 284 . 0.3671 0.2038 0.3680 -0.0562 -0.0670 -
0.0643 1 .
2154 NE    NE    . ARG ARG ARG A A 284 284 . 0.2841 0.3396 0.3723 -0.0110 -0.0753 -
0.0304 1 .
2155 CZ    CZ    . ARG ARG ARG A A 284 284 . 0.2998 0.3065 0.4028 0.0072  -0.0519
0.0135  1 .
2156 NH1   NH1   . ARG ARG ARG A A 284 284 . 0.3176 0.3584 0.3932 -0.0032 -0.1083
0.0491  1 .
2157 NH2   NH2   . ARG ARG ARG A A 284 284 . 0.3249 0.3382 0.3850 -0.0010 -0.0767
0.0512  1 .
2158 C     C     . ARG ARG ARG A A 284 284 . 0.1911 0.1922 0.1855 0.0085  -0.0022 -
0.0127 1 .
2159 O     O     . ARG ARG ARG A A 284 284 . 0.2162 0.2184 0.2003 0.0349  -0.0050 -
0.0407 1 .
2160 N     N     . ASP ASP ASP A A 285 285 . 0.1734 0.1833 0.1698 0.0024  -0.0191
0.0023  1 .
2161 CA    CA    . ASP ASP ASP A A 285 285 . 0.1648 0.1578 0.1681 -0.0001 -0.0283
0.0153  1 .
2162 CB    CB    . ASP ASP ASP A A 285 285 . 0.1423 0.1740 0.1892 -0.0315 -0.0437
0.0066  1 .
2163 CG    CG    . ASP ASP ASP A A 285 285 . 0.1749 0.2016 0.2227 0.0048  -0.0224 -
0.0139 1 .
2164 OD1   OD1   . ASP ASP ASP A A 285 285 . 0.1807 0.2382 0.2461 -0.0005 -0.0442 -
0.0168 1 .
2165 OD2   OD2   . ASP ASP ASP A A 285 285 . 0.1258 0.2980 0.3236 0.0058  -0.0068
0.0031  1 .
2166 C     C     . ASP ASP ASP A A 285 285 . 0.1457 0.1504 0.1947 -0.0168 -0.0318
0.0070  1 .
2167 O     O     . ASP ASP ASP A A 285 285 . 0.1553 0.1504 0.1989 -0.0095 -0.0480
0.0176  1 .
2168 N     N     . TYR TYR TYR A A 286 286 . 0.1239 0.1357 0.1614 -0.0237 -0.0314
0.0061  1 .
2169 CA    CA    . TYR TYR TYR A A 286 286 . 0.1440 0.1494 0.1536 -0.0134 -0.0257 -
0.0119 1 .
2170 CB    CB    . TYR TYR TYR A A 286 286 . 0.1470 0.1457 0.1427 -0.0118 -0.0212 -
0.0318 1 .
2171 CG    CG    . TYR TYR TYR A A 286 286 . 0.1619 0.1297 0.1486 -0.0286 -0.0373 -
0.0100 1 .
2172 CD1   CD1   . TYR TYR TYR A A 286 286 . 0.1975 0.1576 0.2038 -0.0526 -0.0186 -
0.0058 1 .
2173 CE1   CE1   . TYR TYR TYR A A 286 286 . 0.2771 0.2542 0.2193 -0.0731 0.0503  -
0.0070 1 .
2174 CZ    CZ    . TYR TYR TYR A A 286 286 . 0.2461 0.2842 0.2033 -0.0973 0.0148  -
0.0193 1 .
2175 OH    OH    . TYR TYR TYR A A 286 286 . 0.3585 0.4340 0.2758 -0.1688 0.0470  -
0.0469 1 .
2176 CE2   CE2   . TYR TYR TYR A A 286 286 . 0.2109 0.2975 0.1954 -0.0606 -0.0090 -
0.0205 1 .
2177 CD2   CD2   . TYR TYR TYR A A 286 286 . 0.1704 0.2248 0.1752 -0.0242 0.0348
0.0071  1 .
2178 C     C     . TYR TYR TYR A A 286 286 . 0.1373 0.1010 0.1370 -0.0019 -0.0148 -
0.0270 1 .
2179 O     O     . TYR TYR TYR A A 286 286 . 0.1553 0.1334 0.1462 -0.0105 -0.0031 -
0.0027 1 .
2180 N     N     . PRO PRO PRO A A 287 287 . 0.1517 0.1212 0.1619 0.0130  -0.0221
0.0026  1 .
2181 CA    CA    . PRO PRO PRO A A 287 287 . 0.1218 0.0980 0.1290 0.0094  -0.0145 -
0.0010 1 .
2182 CB    CB    . PRO PRO PRO A A 287 287 . 0.1219 0.1667 0.1728 0.0153  -0.0020 -
0.0155 1 .
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2183 CG    CG    . PRO PRO PRO A A 287 287 . 0.1433 0.1655 0.1827 -0.0017 -0.0145
0.0195  1 .
2184 CD    CD    . PRO PRO PRO A A 287 287 . 0.1693 0.1180 0.1856 0.0056  -0.0364
0.0192  1 .
2185 C     C     . PRO PRO PRO A A 287 287 . 0.1374 0.1325 0.1258 0.0135  0.0044  -
0.0214 1 .
2186 O     O     . PRO PRO PRO A A 287 287 . 0.1187 0.1383 0.1263 0.0006  -0.0017 -
0.0018 1 .
2187 N     N     . VAL VAL VAL A A 288 288 . 0.1162 0.1278 0.1243 0.0013  -0.0059 -
0.0038 1 .
2188 CA    CA    . VAL VAL VAL A A 288 288 . 0.1151 0.1231 0.1274 -0.0121 0.0044  -
0.0054 1 .
2189 CB    CB    . VAL VAL VAL A A 288 288 . 0.1099 0.1261 0.1337 0.0065  0.0006  -
0.0051 1 .
2190 CG1   CG1   . VAL VAL VAL A A 288 288 . 0.1457 0.0967 0.1529 -0.0382 -0.0344 -
0.0191 1 .
2191 CG2   CG2   . VAL VAL VAL A A 288 288 . 0.1140 0.1378 0.1423 -0.0164 -0.0228
0.0295  1 .
2192 C     C     . VAL VAL VAL A A 288 288 . 0.1314 0.1180 0.1213 -0.0161 -0.0171
0.0151  1 .
2193 O     O     . VAL VAL VAL A A 288 288 . 0.1833 0.1594 0.1146 -0.0198 -0.0389 -
0.0001 1 .
2194 N     N     . VAL VAL VAL A A 289 289 . 0.1179 0.1087 0.0970 -0.0275 -0.0160 -
0.0069 1 .
2195 CA    CA    . VAL VAL VAL A A 289 289 . 0.1233 0.1310 0.1150 -0.0019 0.0068
0.0043  1 .
2196 CB    CB    . VAL VAL VAL A A 289 289 . 0.1319 0.1248 0.1068 -0.0129 0.0101  -
0.0215 1 .
2197 CG1   CG1   . VAL VAL VAL A A 289 289 . 0.1900 0.1199 0.1234 0.0024  0.0341  -
0.0159 1 .
2198 CG2   CG2   . VAL VAL VAL A A 289 289 . 0.1142 0.1459 0.1520 -0.0276 -0.0213
0.0096  1 .
2199 C     C     . VAL VAL VAL A A 289 289 . 0.1213 0.1190 0.1145 -0.0168 0.0026
0.0050  1 .
2200 O     O     . VAL VAL VAL A A 289 289 . 0.1597 0.1072 0.1182 0.0020  0.0058
0.0238  1 .
2201 N     N     . SER SER SER A A 290 290 . 0.1050 0.1046 0.0919 0.0015  -0.0113 -
0.0054 1 .
2202 CA    CA    . SER SER SER A A 290 290 . 0.1186 0.1166 0.1144 0.0016  -0.0177
0.0014  1 .
2203 CB    CB    . SER SER SER A A 290 290 . 0.1151 0.1225 0.1055 -0.0035 -0.0205 -
0.0001 1 .
2204 OG    OG    . SER SER SER A A 290 290 . 0.1258 0.1111 0.1238 -0.0044 -0.0101 -
0.0105 1 .
2205 C     C     . SER SER SER A A 290 290 . 0.1203 0.0988 0.1088 0.0030  -0.0012
0.0081  1 .
2206 O     O     . SER SER SER A A 290 290 . 0.1146 0.1186 0.1030 0.0011  -0.0066
0.0242  1 .
2207 N     N     . ILE ILE ILE A A 291 291 . 0.1031 0.0958 0.0788 0.0101  -0.0273
0.0016  1 .
2208 CA    CA    . ILE ILE ILE A A 291 291 . 0.0641 0.0804 0.0952 0.0050  -0.0195 -
0.0149 1 .
2209 CB    CB    . ILE ILE ILE A A 291 291 . 0.0741 0.0917 0.1010 -0.0059 -0.0026 -
0.0097 1 .
2210 CG1   CG1   . ILE ILE ILE A A 291 291 . 0.1051 0.1060 0.1574 -0.0219 -0.0270 -
0.0260 1 .
2211 CD    CD    . ILE ILE ILE A A 291 291 . 0.1281 0.2027 0.1321 -0.0163 -0.0474 -
0.0248 1 .
2212 CG2   CG2   . ILE ILE ILE A A 291 291 . 0.1505 0.1365 0.1199 0.0159  0.0236  -
0.0036 1 .
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2213 C     C     . ILE ILE ILE A A 291 291 . 0.1010 0.0957 0.0733 0.0118  -0.0059
0.0101  1 .
2214 O     O     . ILE ILE ILE A A 291 291 . 0.1154 0.1067 0.1056 0.0032  -0.0144
0.0190  1 .
2215 N     N     . GLU GLU GLU A A 292 292 . 0.0891 0.1044 0.0848 0.0019  -0.0042 -
0.0104 1 .
2216 CA    CA    . GLU GLU GLU A A 292 292 . 0.0925 0.1142 0.0855 0.0192  -0.0246 -
0.0141 1 .
2217 CB    CB    . GLU GLU GLU A A 292 292 . 0.0779 0.0864 0.0904 0.0005  -0.0238
0.0040  1 .
2218 CG    CG    . GLU GLU GLU A A 292 292 . 0.1201 0.0726 0.0719 0.0073  -0.0329 -
0.0030 1 .
2219 CD    CD    . GLU GLU GLU A A 292 292 . 0.1050 0.0873 0.0808 0.0102  -0.0195 -
0.0030 1 .
2220 OE1   OE1   . GLU GLU GLU A A 292 292 . 0.1220 0.0988 0.1197 0.0088  -0.0142
0.0034  1 .
2221 OE2   OE2   . GLU GLU GLU A A 292 292 . 0.1211 0.1189 0.1211 0.0056  -0.0180 -
0.0027 1 .
2222 C     C     . GLU GLU GLU A A 292 292 . 0.0919 0.1100 0.0891 0.0034  -0.0147
0.0119  1 .
2223 O     O     . GLU GLU GLU A A 292 292 . 0.0969 0.1055 0.0963 0.0062  -0.0091
0.0185  1 .
2224 N     N     . ASP ASP ASP A A 293 293 . 0.1041 0.1054 0.1140 0.0191  -0.0209
0.0023  1 .
2225 CA    CA    . ASP ASP ASP A A 293 293 . 0.0941 0.1159 0.0840 0.0001  -0.0027 -
0.0034 1 .
2226 CB    CB    . ASP ASP ASP A A 293 293 . 0.1120 0.1186 0.1017 -0.0109 -0.0266
0.0008  1 .
2227 CG    CG    . ASP ASP ASP A A 293 293 . 0.1023 0.0890 0.0977 0.0022  -0.0126
0.0176  1 .
2228 OD1   OD1   . ASP ASP ASP A A 293 293 . 0.1200 0.1132 0.1027 -0.0152 -0.0017
0.0401  1 .
2229 OD2   OD2   . ASP ASP ASP A A 293 293 . 0.1061 0.1178 0.1069 0.0081  -0.0176
0.0029  1 .
2230 C     C     . ASP ASP ASP A A 293 293 . 0.0832 0.1173 0.0857 -0.0043 -0.0122
0.0048  1 .
2231 O     O     . ASP ASP ASP A A 293 293 . 0.0974 0.1209 0.0918 -0.0017 -0.0235
0.0112  1 .
2232 N     N     . PRO PRO PRO A A 294 294 . 0.0828 0.1079 0.0719 -0.0056 -0.0138
0.0004  1 .
2233 CA    CA    . PRO PRO PRO A A 294 294 . 0.1043 0.1252 0.1208 0.0007  -0.0191 -
0.0018 1 .
2234 CB    CB    . PRO PRO PRO A A 294 294 . 0.1286 0.1333 0.1272 -0.0120 -0.0224
0.0083  1 .
2235 CG    CG    . PRO PRO PRO A A 294 294 . 0.1305 0.1606 0.1159 0.0000  -0.0444
0.0173  1 .
2236 CD    CD    . PRO PRO PRO A A 294 294 . 0.0781 0.1404 0.0857 -0.0154 -0.0112 -
0.0005 1 .
2237 C     C     . PRO PRO PRO A A 294 294 . 0.0953 0.1063 0.0897 -0.0066 -0.0367
0.0148  1 .
2238 O     O     . PRO PRO PRO A A 294 294 . 0.0907 0.1227 0.1483 0.0129  -0.0006
0.0194  1 .
2239 N     N     . PHE PHE PHE A A 295 295 . 0.1100 0.1102 0.1088 0.0192  -0.0192
0.0056  1 .
2240 CA    CA    . PHE PHE PHE A A 295 295 . 0.1111 0.1101 0.1081 0.0015  -0.0146
0.0063  1 .
2241 CB    CB    . PHE PHE PHE A A 295 295 . 0.1271 0.1198 0.1039 -0.0113 -0.0338
0.0050  1 .
2242 CG    CG    . PHE PHE PHE A A 295 295 . 0.1201 0.1276 0.1086 0.0073  -0.0200 -
0.0055 1 .
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2243 CD1   CD1   . PHE PHE PHE A A 295 295 . 0.1314 0.1505 0.1594 0.0054  -0.0300 -
0.0103 1 .
2244 CE1   CE1   . PHE PHE PHE A A 295 295 . 0.1260 0.1610 0.1476 -0.0120 -0.0352
0.0095  1 .
2245 CZ    CZ    . PHE PHE PHE A A 295 295 . 0.1505 0.1510 0.1576 -0.0040 -0.0348
0.0116  1 .
2246 CE2   CE2   . PHE PHE PHE A A 295 295 . 0.1184 0.1416 0.1074 -0.0115 -0.0205
0.0135  1 .
2247 CD2   CD2   . PHE PHE PHE A A 295 295 . 0.1299 0.1733 0.1107 0.0322  -0.0262
0.0042  1 .
2248 C     C     . PHE PHE PHE A A 295 295 . 0.1115 0.0950 0.1079 -0.0088 -0.0096
0.0133  1 .
2249 O     O     . PHE PHE PHE A A 295 295 . 0.1038 0.1198 0.1362 0.0064  -0.0060
0.0182  1 .
2250 N     N     . ASP ASP ASP A A 296 296 . 0.1166 0.1066 0.1205 0.0146  0.0006
0.0089  1 .
2251 CA    CA    . ASP ASP ASP A A 296 296 . 0.1005 0.1094 0.1308 0.0101  0.0108
0.0018  1 .
2252 CB    CB    . ASP ASP ASP A A 296 296 . 0.1323 0.1229 0.1508 0.0164  0.0286
0.0118  1 .
2253 CG    CG    . ASP ASP ASP A A 296 296 . 0.1428 0.1500 0.1343 0.0224  0.0085
0.0114  1 .
2254 OD1   OD1   . ASP ASP ASP A A 296 296 . 0.1379 0.1786 0.1568 0.0358  -0.0165 -
0.0012 1 .
2255 OD2   OD2   . ASP ASP ASP A A 296 296 . 0.1580 0.1690 0.1768 0.0176  0.0210
0.0149  1 .
2256 C     C     . ASP ASP ASP A A 296 296 . 0.0869 0.1195 0.1147 0.0210  -0.0033
0.0049  1 .
2257 O     O     . ASP ASP ASP A A 296 296 . 0.1156 0.1185 0.1323 0.0096  -0.0188
0.0131  1 .
2258 N     N     . GLN GLN GLN A A 297 297 . 0.1072 0.1163 0.1320 0.0017  -0.0024
0.0035  1 .
2259 CA    CA    . GLN GLN GLN A A 297 297 . 0.1258 0.1297 0.1258 0.0046  -0.0197
0.0133  1 .
2260 CB    CB    . GLN GLN GLN A A 297 297 . 0.1468 0.1374 0.1279 0.0190  -0.0111 -
0.0269 1 .
2261 CG    CG    . GLN GLN GLN A A 297 297 . 0.1285 0.1378 0.1013 0.0215  -0.0290
0.0064  1 .
2262 CD    CD    . GLN GLN GLN A A 297 297 . 0.1467 0.1445 0.1483 0.0122  -0.0305
0.0126  1 .
2263 OE1   OE1   . GLN GLN GLN A A 297 297 . 0.1157 0.1503 0.1522 -0.0042 -0.0161
0.0094  1 .
2264 NE2   NE2   . GLN GLN GLN A A 297 297 . 0.2001 0.1657 0.1538 0.0054  0.0067  -
0.0021 1 .
2265 C     C     . GLN GLN GLN A A 297 297 . 0.1114 0.1384 0.1602 0.0123  -0.0091
0.0328  1 .
2266 O     O     . GLN GLN GLN A A 297 297 . 0.1175 0.1777 0.1583 0.0006  -0.0148
0.0345  1 .
2267 N     N     . ASP ASP ASP A A 298 298 . 0.1146 0.1279 0.1361 0.0223  -0.0271
0.0130  1 .
2268 CA    CA    . ASP ASP ASP A A 298 298 . 0.1800 0.1385 0.1595 0.0118  -0.0419
0.0123  1 .
2269 CB    CB    . ASP ASP ASP A A 298 298 . 0.1911 0.1448 0.1630 0.0283  -0.0438 -
0.0010 1 .
2270 CG    CG    . ASP ASP ASP A A 298 298 . 0.2090 0.2065 0.2155 -0.0011 -0.0345
0.0263  1 .
2271 OD1   OD1   . ASP ASP ASP A A 298 298 . 0.1260 0.2122 0.2399 -0.0121 -0.0475
0.0242  1 .
2272 OD2   OD2   . ASP ASP ASP A A 298 298 . 0.3295 0.2341 0.2721 -0.0091 -0.0243
0.0438  1 .
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2273 C     C     . ASP ASP ASP A A 298 298 . 0.1428 0.1354 0.1685 0.0134  -0.0396
0.0194  1 .
2274 O     O     . ASP ASP ASP A A 298 298 . 0.1817 0.1629 0.1623 0.0306  -0.0511
0.0177  1 .
2275 N     N     . ASP ASP ASP A A 299 299 . 0.1367 0.1344 0.1354 -0.0067 -0.0405
0.0147  1 .
2276 CA    CA    . ASP ASP ASP A A 299 299 . 0.1198 0.1541 0.1438 -0.0058 -0.0278
0.0211  1 .
2277 CB    CB    . ASP ASP ASP A A 299 299 . 0.0953 0.1411 0.1378 -0.0155 -0.0218
0.0192  1 .
2278 CG    CG    . ASP ASP ASP A A 299 299 . 0.1296 0.1735 0.1352 -0.0132 -0.0253
0.0370  1 .
2279 OD1   OD1   . ASP ASP ASP A A 299 299 . 0.1761 0.2064 0.1929 0.0462  -0.0439
0.0572  1 .
2280 OD2   OD2   . ASP ASP ASP A A 299 299 . 0.1559 0.1789 0.1777 0.0133  -0.0127
0.0383  1 .
2281 C     C     . ASP ASP ASP A A 299 299 . 0.1196 0.1558 0.1343 0.0054  -0.0491
0.0178  1 .
2282 O     O     . ASP ASP ASP A A 299 299 . 0.1248 0.1588 0.1665 0.0067  -0.0293
0.0034  1 .
2283 N     N     . TRP TRP TRP A A 300 300 . 0.1252 0.1494 0.1517 0.0108  -0.0392
0.0391  1 .
2284 CA    CA    . TRP TRP TRP A A 300 300 . 0.1510 0.1628 0.1538 0.0001  -0.0112
0.0273  1 .
2285 CB    CB    . TRP TRP TRP A A 300 300 . 0.1549 0.1477 0.1584 -0.0020 -0.0139
0.0322  1 .
2286 CG    CG    . TRP TRP TRP A A 300 300 . 0.1976 0.1492 0.1716 -0.0111 -0.0015
0.0395  1 .
2287 CD1   CD1   . TRP TRP TRP A A 300 300 . 0.1956 0.1798 0.1689 -0.0016 -0.0022
0.0406  1 .
2288 NE1   NE1   . TRP TRP TRP A A 300 300 . 0.1785 0.2113 0.2224 0.0224  -0.0005
0.0045  1 .
2289 CE2   CE2   . TRP TRP TRP A A 300 300 . 0.1640 0.1447 0.1466 0.0023  0.0150
0.0177  1 .
2290 CD2   CD2   . TRP TRP TRP A A 300 300 . 0.1859 0.1778 0.1318 0.0011  -0.0043
0.0352  1 .
2291 CE3   CE3   . TRP TRP TRP A A 300 300 . 0.1356 0.1826 0.1713 0.0096  -0.0097
0.0277  1 .
2292 CZ3   CZ3   . TRP TRP TRP A A 300 300 . 0.1871 0.1788 0.1769 -0.0019 -0.0161
0.0155  1 .
2293 CH2   CH2   . TRP TRP TRP A A 300 300 . 0.1619 0.1245 0.1637 -0.0270 0.0019
0.0445  1 .
2294 CZ2   CZ2   . TRP TRP TRP A A 300 300 . 0.1799 0.1600 0.1633 0.0033  0.0206
0.0230  1 .
2295 C     C     . TRP TRP TRP A A 300 300 . 0.1401 0.1619 0.1457 0.0067  -0.0003
0.0073  1 .
2296 O     O     . TRP TRP TRP A A 300 300 . 0.1600 0.1518 0.1460 0.0056  -0.0152
0.0242  1 .
2297 N     N     . ALA ALA ALA A A 301 301 . 0.1461 0.1658 0.1338 -0.0040 -0.0204
0.0080  1 .
2298 CA    CA    . ALA ALA ALA A A 301 301 . 0.1372 0.1821 0.1527 0.0033  -0.0148
0.0088  1 .
2299 CB    CB    . ALA ALA ALA A A 301 301 . 0.1515 0.2061 0.2386 0.0227  -0.0307
0.0002  1 .
2300 C     C     . ALA ALA ALA A A 301 301 . 0.1110 0.1652 0.1595 0.0019  -0.0094 -
0.0070 1 .
2301 O     O     . ALA ALA ALA A A 301 301 . 0.1145 0.1949 0.1448 0.0275  -0.0251
0.0011  1 .
2302 N     N     . ALA ALA ALA A A 302 302 . 0.1039 0.1670 0.1609 0.0156  -0.0165
0.0156  1 .
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2303 CA    CA    . ALA ALA ALA A A 302 302 . 0.0985 0.1559 0.1404 0.0091  -0.0028
0.0019  1 .
2304 CB    CB    . ALA ALA ALA A A 302 302 . 0.1370 0.2047 0.1353 0.0381  -0.0217
0.0304  1 .
2305 C     C     . ALA ALA ALA A A 302 302 . 0.1098 0.1376 0.1283 0.0112  -0.0052 -
0.0102 1 .
2306 O     O     . ALA ALA ALA A A 302 302 . 0.1264 0.1688 0.1392 0.0191  -0.0383 -
0.0099 1 .
2307 N     N     . TRP TRP TRP A A 303 303 . 0.1461 0.1733 0.1146 0.0025  -0.0260 -
0.0077 1 .
2308 CA    CA    . TRP TRP TRP A A 303 303 . 0.1439 0.1403 0.1344 0.0005  -0.0054 -
0.0087 1 .
2309 CB    CB    . TRP TRP TRP A A 303 303 . 0.1142 0.1511 0.1199 0.0103  -0.0153
0.0230  1 .
2310 CG    CG    . TRP TRP TRP A A 303 303 . 0.1249 0.1357 0.1304 0.0087  -0.0219
0.0019  1 .
2311 CD1   CD1   . TRP TRP TRP A A 303 303 . 0.1552 0.1509 0.0918 -0.0159 -0.0094
0.0162  1 .
2312 NE1   NE1   . TRP TRP TRP A A 303 303 . 0.1279 0.1253 0.1122 0.0167  -0.0091
0.0216  1 .
2313 CE2   CE2   . TRP TRP TRP A A 303 303 . 0.0852 0.0918 0.0957 0.0317  -0.0052
0.0198  1 .
2314 CD2   CD2   . TRP TRP TRP A A 303 303 . 0.1129 0.1378 0.1297 0.0353  -0.0031
0.0230  1 .
2315 CE3   CE3   . TRP TRP TRP A A 303 303 . 0.0921 0.1136 0.1216 0.0051  -0.0191
0.0003  1 .
2316 CZ3   CZ3   . TRP TRP TRP A A 303 303 . 0.0800 0.1013 0.0832 0.0050  -0.0074
0.0022  1 .
2317 CH2   CH2   . TRP TRP TRP A A 303 303 . 0.1082 0.1184 0.0937 -0.0310 0.0088
0.0143  1 .
2318 CZ2   CZ2   . TRP TRP TRP A A 303 303 . 0.0931 0.0859 0.1023 0.0147  -0.0156
0.0235  1 .
2319 C     C     . TRP TRP TRP A A 303 303 . 0.1484 0.1385 0.1308 0.0221  -0.0143
0.0227  1 .
2320 O     O     . TRP TRP TRP A A 303 303 . 0.1525 0.1588 0.1150 0.0191  -0.0209
0.0137  1 .
2321 N     N     . SER SER SER A A 304 304 . 0.1336 0.1694 0.1239 0.0133  -0.0190
0.0261  1 .
2322 CA    CA    . SER SER SER A A 304 304 . 0.1608 0.1884 0.1553 0.0240  -0.0066
0.0157  1 .
2323 CB    CB    . SER SER SER A A 304 304 . 0.2188 0.1646 0.1592 0.0119  -0.0141
0.0258  1 .
2324 OG    OG    . SER SER SER A A 304 304 . 0.2268 0.2463 0.2043 0.0339  -0.0233
0.0441  1 .
2325 C     C     . SER SER SER A A 304 304 . 0.1659 0.1743 0.1433 0.0252  -0.0173
0.0133  1 .
2326 O     O     . SER SER SER A A 304 304 . 0.1879 0.2015 0.1624 0.0131  -0.0348
0.0083  1 .
2327 N     N     . LYS LYS LYS A A 305 305 . 0.1672 0.1926 0.1323 0.0140  -0.0460
0.0301  1 .
2328 CA    CA    . LYS LYS LYS A A 305 305 . 0.1627 0.1970 0.1659 -0.0016 -0.0279
0.0115  1 .
2329 CB    CB    . LYS LYS LYS A A 305 305 . 0.1792 0.2502 0.2145 -0.0059 -0.0326
0.0072  1 .
2330 CG    CG    . LYS LYS LYS A A 305 305 . 0.2582 0.3176 0.2548 -0.0186 -0.0408
0.0112  1 .
2331 CD    CD    . LYS LYS LYS A A 305 305 . 0.3078 0.4531 0.4078 0.0346  -0.0598
0.0024  1 .
2332 CE    CE    . LYS LYS LYS A A 305 305 . 0.4798 0.4562 0.4504 0.0142  -0.0517
0.0614  1 .
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2333 NZ    NZ    . LYS LYS LYS A A 305 305 . 0.6159 0.5563 0.3747 0.0702  -0.1375
0.0849  1 .
2334 C     C     . LYS LYS LYS A A 305 305 . 0.1766 0.1986 0.1741 -0.0064 -0.0190
0.0069  1 .
2335 O     O     . LYS LYS LYS A A 305 305 . 0.1825 0.1893 0.1739 0.0267  -0.0451
0.0055  1 .
2336 N     N     . PHE PHE PHE A A 306 306 . 0.1374 0.1637 0.1442 -0.0152 -0.0276
0.0187  1 .
2337 CA    CA    . PHE PHE PHE A A 306 306 . 0.1827 0.1671 0.1254 0.0067  -0.0212
0.0066  1 .
2338 CB    CB    . PHE PHE PHE A A 306 306 . 0.1699 0.1489 0.1136 0.0119  -0.0196 -
0.0017 1 .
2339 CG    CG    . PHE PHE PHE A A 306 306 . 0.1895 0.1472 0.1376 -0.0128 -0.0053
0.0196  1 .
2340 CD1   CD1   . PHE PHE PHE A A 306 306 . 0.2544 0.2100 0.1865 -0.0145 -0.0375 -
0.0226 1 .
2341 CE1   CE1   . PHE PHE PHE A A 306 306 . 0.2238 0.2116 0.1198 -0.0052 0.0000
0.0187  1 .
2342 CZ    CZ    . PHE PHE PHE A A 306 306 . 0.2173 0.1983 0.1663 -0.0105 0.0121  -
0.0086 1 .
2343 CE2   CE2   . PHE PHE PHE A A 306 306 . 0.1466 0.1987 0.2119 -0.0035 0.0086
0.0223  1 .
2344 CD2   CD2   . PHE PHE PHE A A 306 306 . 0.1895 0.1862 0.1894 0.0011  -0.0040
0.0139  1 .
2345 C     C     . PHE PHE PHE A A 306 306 . 0.1654 0.1656 0.1159 -0.0141 -0.0142
0.0156  1 .
2346 O     O     . PHE PHE PHE A A 306 306 . 0.1839 0.1872 0.1429 -0.0155 -0.0186
0.0149  1 .
2347 N     N     . THR THR THR A A 307 307 . 0.1793 0.1800 0.1357 -0.0122 -0.0220
0.0096  1 .
2348 CA    CA    . THR THR THR A A 307 307 . 0.1925 0.1965 0.1467 -0.0025 -0.0218 -
0.0008 1 .
2349 CB    CB    . THR THR THR A A 307 307 . 0.1671 0.1781 0.1473 -0.0113 -0.0139 -
0.0022 1 .
2350 OG1   OG1   . THR THR THR A A 307 307 . 0.1685 0.1887 0.1304 -0.0018 -0.0329 -
0.0075 1 .
2351 CG2   CG2   . THR THR THR A A 307 307 . 0.1517 0.1823 0.1652 -0.0115 -0.0207
0.0132  1 .
2352 C     C     . THR THR THR A A 307 307 . 0.1996 0.2150 0.1731 0.0220  -0.0193 -
0.0162 1 .
2353 O     O     . THR THR THR A A 307 307 . 0.1731 0.2285 0.1724 0.0139  -0.0383 -
0.0176 1 .
2354 N     N     . ALA ALA ALA A A 308 308 . 0.2121 0.2024 0.1568 0.0131  -0.0467
0.0000  1 .
2355 CA    CA    . ALA ALA ALA A A 308 308 . 0.2345 0.1930 0.1723 0.0121  -0.0067
0.0027  1 .
2356 CB    CB    . ALA ALA ALA A A 308 308 . 0.2283 0.2280 0.1716 0.0083  -0.0246
0.0136  1 .
2357 C     C     . ALA ALA ALA A A 308 308 . 0.2056 0.2015 0.1852 0.0268  -0.0188 -
0.0064 1 .
2358 O     O     . ALA ALA ALA A A 308 308 . 0.2594 0.2299 0.1990 0.0285  -0.0285 -
0.0206 1 .
2359 N     N     . ASN ASN ASN A A 309 309 . 0.1897 0.1732 0.1880 0.0173  -0.0181 -
0.0007 1 .
2360 CA    CA    . ASN ASN ASN A A 309 309 . 0.2045 0.2180 0.2157 0.0082  -0.0364 -
0.0017 1 .
2361 CB    CB    . ASN ASN ASN A A 309 309 . 0.2214 0.2432 0.2258 0.0138  -0.0429
0.0036  1 .
2362 CG    CG    . ASN ASN ASN A A 309 309 . 0.2374 0.2905 0.3651 -0.0144 -0.1046 -
0.0062 1 .
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2363 OD1   OD1   . ASN ASN ASN A A 309 309 . 0.3919 0.3986 0.4154 0.0284  -0.1722
0.0082  1 .
2364 ND2   ND2   . ASN ASN ASN A A 309 309 . 0.4190 0.4567 0.3792 -0.0183 -0.1450 -
0.0493 1 .
2365 C     C     . ASN ASN ASN A A 309 309 . 0.1857 0.2012 0.2181 0.0023  -0.0231
0.0088  1 .
2366 O     O     . ASN ASN ASN A A 309 309 . 0.2027 0.2197 0.2681 -0.0059 -0.0625
0.0035  1 .
2367 N     N     . VAL VAL VAL A A 310 310 . 0.1734 0.1872 0.1425 0.0077  -0.0282 -
0.0067 1 .
2368 CA    CA    . VAL VAL VAL A A 310 310 . 0.1828 0.1871 0.1461 0.0003  -0.0137 -
0.0014 1 .
2369 CB    CB    . VAL VAL VAL A A 310 310 . 0.1477 0.1872 0.1422 -0.0090 -0.0202
0.0127  1 .
2370 CG1   CG1   . VAL VAL VAL A A 310 310 . 0.1792 0.2109 0.1886 0.0493  -0.0072 -
0.0033 1 .
2371 CG2   CG2   . VAL VAL VAL A A 310 310 . 0.2326 0.1835 0.1428 0.0117  -0.0140 -
0.0593 1 .
2372 C     C     . VAL VAL VAL A A 310 310 . 0.1458 0.1599 0.1262 0.0093  -0.0362
0.0011  1 .
2373 O     O     . VAL VAL VAL A A 310 310 . 0.1799 0.1510 0.1665 -0.0093 -0.0215 -
0.0023 1 .
2374 N     N     . GLY GLY GLY A A 311 311 . 0.1455 0.1362 0.1051 0.0121  -0.0309 -
0.0154 1 .
2375 CA    CA    . GLY GLY GLY A A 311 311 . 0.1435 0.1411 0.0968 -0.0019 -0.0299 -
0.0145 1 .
2376 C     C     . GLY GLY GLY A A 311 311 . 0.1179 0.1109 0.1156 0.0054  0.0024  -
0.0179 1 .
2377 O     O     . GLY GLY GLY A A 311 311 . 0.1487 0.1448 0.1312 0.0157  -0.0078 -
0.0024 1 .
2378 N     N     . ILE ILE ILE A A 312 312 . 0.1687 0.1287 0.1178 -0.0005 -0.0196
0.0115  1 .
2379 CA    CA    . ILE ILE ILE A A 312 312 . 0.1175 0.1132 0.1004 -0.0048 -0.0167 -
0.0023 1 .
2380 CB    CB    . ILE ILE ILE A A 312 312 . 0.1129 0.0946 0.0953 -0.0127 -0.0045 -
0.0173 1 .
2381 CG1   CG1   . ILE ILE ILE A A 312 312 . 0.1296 0.1752 0.1214 0.0025  0.0116
0.0066  1 .
2382 CD    CD    . ILE ILE ILE A A 312 312 . 0.1675 0.1679 0.1094 -0.0308 0.0168
0.0061  1 .
2383 CG2   CG2   . ILE ILE ILE A A 312 312 . 0.1904 0.1178 0.1207 -0.0275 -0.0322 -
0.0164 1 .
2384 C     C     . ILE ILE ILE A A 312 312 . 0.1275 0.1071 0.0955 0.0011  -0.0202
0.0047  1 .
2385 O     O     . ILE ILE ILE A A 312 312 . 0.1274 0.1231 0.1217 -0.0032 -0.0145 -
0.0018 1 .
2386 N     N     . GLN GLN GLN A A 313 313 . 0.1136 0.1130 0.1022 -0.0013 -0.0278 -
0.0056 1 .
2387 CA    CA    . GLN GLN GLN A A 313 313 . 0.1307 0.1055 0.1052 0.0074  -0.0143
0.0010  1 .
2388 CB    CB    . GLN GLN GLN A A 313 313 . 0.1368 0.1280 0.0944 0.0073  -0.0103 -
0.0259 1 .
2389 CG    CG    . GLN GLN GLN A A 313 313 . 0.1294 0.1433 0.1118 -0.0048 -0.0307 -
0.0355 1 .
2390 CD    CD    . GLN GLN GLN A A 313 313 . 0.1284 0.1303 0.0993 -0.0081 0.0056
0.0121  1 .
2391 OE1   OE1   . GLN GLN GLN A A 313 313 . 0.1095 0.1402 0.0931 0.0084  -0.0039 -
0.0015 1 .
2392 NE2   NE2   . GLN GLN GLN A A 313 313 . 0.1699 0.1172 0.1082 0.0034  -0.0344
0.0127  1 .
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2393 C     C     . GLN GLN GLN A A 313 313 . 0.1120 0.1081 0.0993 0.0001  -0.0098
0.0062  1 .
2394 O     O     . GLN GLN GLN A A 313 313 . 0.1150 0.1277 0.0923 -0.0035 -0.0195 -
0.0032 1 .
2395 N     N     . ILE ILE ILE A A 314 314 . 0.1289 0.1057 0.0734 0.0104  -0.0230 -
0.0038 1 .
2396 CA    CA    . ILE ILE ILE A A 314 314 . 0.1088 0.1190 0.1124 0.0063  -0.0170
0.0041  1 .
2397 CB    CB    . ILE ILE ILE A A 314 314 . 0.1232 0.1062 0.0634 -0.0027 -0.0189
0.0025  1 .
2398 CG1   CG1   . ILE ILE ILE A A 314 314 . 0.1455 0.1437 0.1403 -0.0231 -0.0431
0.0158  1 .
2399 CD    CD    . ILE ILE ILE A A 314 314 . 0.1405 0.1281 0.1342 -0.0258 -0.0107
0.0020  1 .
2400 CG2   CG2   . ILE ILE ILE A A 314 314 . 0.1236 0.1605 0.1331 0.0195  0.0113  -
0.0102 1 .
2401 C     C     . ILE ILE ILE A A 314 314 . 0.1090 0.1225 0.0924 0.0026  -0.0110
0.0040  1 .
2402 O     O     . ILE ILE ILE A A 314 314 . 0.1187 0.1099 0.0918 -0.0028 -0.0286
0.0058  1 .
2403 N     N     . VAL VAL VAL A A 315 315 . 0.1070 0.1080 0.0773 -0.0097 -0.0154
0.0120  1 .
2404 CA    CA    . VAL VAL VAL A A 315 315 . 0.1224 0.0974 0.0888 -0.0019 -0.0185
0.0126  1 .
2405 CB    CB    . VAL VAL VAL A A 315 315 . 0.1285 0.1159 0.0753 0.0013  -0.0231 -
0.0075 1 .
2406 CG1   CG1   . VAL VAL VAL A A 315 315 . 0.0872 0.1104 0.0975 -0.0221 -0.0281 -
0.0042 1 .
2407 CG2   CG2   . VAL VAL VAL A A 315 315 . 0.1133 0.0842 0.0736 0.0302  0.0032  -
0.0028 1 .
2408 C     C     . VAL VAL VAL A A 315 315 . 0.1163 0.1098 0.0910 0.0001  -0.0090
0.0136  1 .
2409 O     O     . VAL VAL VAL A A 315 315 . 0.1039 0.1133 0.1113 0.0053  -0.0066 -
0.0069 1 .
2410 N     N     . GLY GLY GLY A A 316 316 . 0.1117 0.0960 0.0819 -0.0018 -0.0007
0.0010  1 .
2411 CA    CA    . GLY GLY GLY A A 316 316 . 0.1078 0.0855 0.0689 0.0052  -0.0110
0.0061  1 .
2412 C     C     . GLY GLY GLY A A 316 316 . 0.0684 0.0852 0.0819 0.0162  -0.0111
0.0095  1 .
2413 O     O     . GLY GLY GLY A A 316 316 . 0.0935 0.1087 0.0968 0.0100  -0.0033
0.0106  1 .
2414 N     N     . ASP ASP ASP A A 317 317 . 0.0953 0.1045 0.0771 0.0122  -0.0238
0.0007  1 .
2415 CA    CA    . ASP ASP ASP A A 317 317 . 0.0943 0.0782 0.0768 0.0157  -0.0133
0.0047  1 .
2416 CB    CB    . ASP ASP ASP A A 317 317 . 0.1253 0.0825 0.0718 -0.0183 -0.0062
0.0153  1 .
2417 CG    CG    . ASP ASP ASP A A 317 317 . 0.0916 0.0861 0.0908 -0.0173 -0.0130 -
0.0118 1 .
2418 OD1   OD1   . ASP ASP ASP A A 317 317 . 0.1134 0.0998 0.1024 -0.0116 -0.0120
0.0145  1 .
2419 OD2   OD2   . ASP ASP ASP A A 317 317 . 0.1062 0.1064 0.1204 0.0000  -0.0333
0.0086  1 .
2420 C     C     . ASP ASP ASP A A 317 317 . 0.0998 0.0981 0.1153 0.0013  0.0016  -
0.0029 1 .
2421 O     O     . ASP ASP ASP A A 317 317 . 0.1248 0.0923 0.1002 0.0047  -0.0054
0.0182  1 .
2422 N     N     . ASP ASP ASP A A 318 318 . 0.0958 0.1222 0.0912 0.0112  -0.0160 -
0.0006 1 .
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2423 CA    CA    . ASP ASP ASP A A 318 318 . 0.0944 0.0912 0.1000 0.0240  0.0025
0.0089  1 .
2424 CB    CB    . ASP ASP ASP A A 318 318 . 0.1290 0.0931 0.0841 0.0212  0.0034
0.0156  1 .
2425 CG    CG    . ASP ASP ASP A A 318 318 . 0.1351 0.1320 0.1318 -0.0007 -0.0042
0.0012  1 .
2426 OD1   OD1   . ASP ASP ASP A A 318 318 . 0.1283 0.1473 0.1286 0.0021  -0.0108
0.0140  1 .
2427 OD2   OD2   . ASP ASP ASP A A 318 318 . 0.1481 0.1486 0.1711 0.0060  -0.0023 -
0.0042 1 .
2428 C     C     . ASP ASP ASP A A 318 318 . 0.1105 0.1072 0.0946 0.0105  -0.0061 -
0.0079 1 .
2429 O     O     . ASP ASP ASP A A 318 318 . 0.1281 0.1269 0.1125 0.0202  -0.0241
0.0008  1 .
2430 N     N     . LEU LEU LEU A A 319 319 . 0.1084 0.1192 0.0905 0.0159  -0.0106
0.0021  1 .
2431 CA    CA    . LEU LEU LEU A A 319 319 . 0.1144 0.0839 0.0773 0.0043  -0.0060 -
0.0066 1 .
2432 CB    CB    . LEU LEU LEU A A 319 319 . 0.1269 0.0843 0.0760 0.0270  -0.0146 -
0.0202 1 .
2433 CG    CG    . LEU LEU LEU A A 319 319 . 0.1186 0.1332 0.1027 0.0021  -0.0195
0.0113  1 .
2434 CD1   CD1   . LEU LEU LEU A A 319 319 . 0.1188 0.2095 0.1387 -0.0015 -0.0354
0.0060  1 .
2435 CD2   CD2   . LEU LEU LEU A A 319 319 . 0.1543 0.1795 0.1188 -0.0017 -0.0293 -
0.0133 1 .
2436 C     C     . LEU LEU LEU A A 319 319 . 0.1248 0.1185 0.0982 0.0071  0.0000
0.0008  1 .
2437 O     O     . LEU LEU LEU A A 319 319 . 0.1502 0.1462 0.1294 0.0218  -0.0029
0.0309  1 .
2438 N     N     . THR THR THR A A 320 320 . 0.1026 0.1137 0.1003 -0.0085 -0.0044 -
0.0010 1 .
2439 CA    CA    . THR THR THR A A 320 320 . 0.0913 0.1112 0.0854 -0.0005 0.0006  -
0.0086 1 .
2440 CB    CB    . THR THR THR A A 320 320 . 0.1155 0.1160 0.1009 0.0110  0.0143
0.0134  1 .
2441 OG1   OG1   . THR THR THR A A 320 320 . 0.1401 0.1137 0.1343 0.0073  -0.0059 -
0.0022 1 .
2442 CG2   CG2   . THR THR THR A A 320 320 . 0.1409 0.1698 0.1344 -0.0204 0.0146
0.0032  1 .
2443 C     C     . THR THR THR A A 320 320 . 0.1178 0.1086 0.1022 -0.0002 -0.0058
0.0047  1 .
2444 O     O     . THR THR THR A A 320 320 . 0.1220 0.1356 0.1143 -0.0128 -0.0108
0.0220  1 .
2445 N     N     . VAL VAL VAL A A 321 321 . 0.1241 0.0971 0.1020 0.0085  -0.0097
0.0048  1 .
2446 CA    CA    . VAL VAL VAL A A 321 321 . 0.1256 0.1164 0.1124 0.0093  -0.0033
0.0035  1 .
2447 CB    CB    . VAL VAL VAL A A 321 321 . 0.1260 0.0993 0.1388 0.0278  -0.0089 -
0.0025 1 .
2448 CG1   CG1   . VAL VAL VAL A A 321 321 . 0.1563 0.1172 0.1065 -0.0109 -0.0098
0.0047  1 .
2449 CG2   CG2   . VAL VAL VAL A A 321 321 . 0.1336 0.0941 0.1538 -0.0141 -0.0267
0.0381  1 .
2450 C     C     . VAL VAL VAL A A 321 321 . 0.1196 0.0898 0.0838 0.0077  -0.0051
0.0179  1 .
2451 O     O     . VAL VAL VAL A A 321 321 . 0.1079 0.1113 0.1035 0.0012  -0.0054
0.0102  1 .
2452 N     N     . THR THR THR A A 322 322 . 0.0760 0.1144 0.1005 0.0057  -0.0069
0.0023  1 .
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2453 CA    CA    . THR THR THR A A 322 322 . 0.0841 0.0999 0.1051 0.0026  -0.0184
0.0172  1 .
2454 CB    CB    . THR THR THR A A 322 322 . 0.1020 0.0890 0.0913 -0.0065 -0.0116
0.0251  1 .
2455 OG1   OG1   . THR THR THR A A 322 322 . 0.1118 0.0971 0.0968 -0.0147 -0.0219
0.0261  1 .
2456 CG2   CG2   . THR THR THR A A 322 322 . 0.1269 0.1195 0.1363 -0.0141 0.0337
0.0073  1 .
2457 C     C     . THR THR THR A A 322 322 . 0.1096 0.1129 0.0961 -0.0148 -0.0060
0.0091  1 .
2458 O     O     . THR THR THR A A 322 322 . 0.1183 0.1107 0.1242 -0.0077 -0.0158
0.0107  1 .
2459 N     N     . ASN ASN ASN A A 323 323 . 0.1370 0.1060 0.1347 -0.0019 -0.0050
0.0308  1 .
2460 CA    CA    . ASN ASN ASN A A 323 323 . 0.1696 0.1322 0.1526 -0.0017 -0.0072
0.0194  1 .
2461 CB    CB    . ASN ASN ASN A A 323 323 . 0.1564 0.1119 0.1552 0.0122  0.0004
0.0074  1 .
2462 CG    CG    . ASN ASN ASN A A 323 323 . 0.1867 0.1029 0.1431 -0.0197 0.0067
0.0128  1 .
2463 OD1   OD1   . ASN ASN ASN A A 323 323 . 0.3124 0.1649 0.1947 0.0337  0.0252
0.0274  1 .
2464 ND2   ND2   . ASN ASN ASN A A 323 323 . 0.2089 0.1871 0.1396 0.0148  -0.0007
0.0292  1 .
2465 C     C     . ASN ASN ASN A A 323 323 . 0.1412 0.1465 0.1328 -0.0172 0.0047
0.0123  1 .
2466 O     O     . ASN ASN ASN A A 323 323 . 0.1524 0.1508 0.1403 -0.0099 -0.0198
0.0231  1 .
2467 N     N     . PRO PRO PRO A A 324 324 . 0.1664 0.1785 0.1524 -0.0142 0.0023
0.0167  1 .
2468 CA    CA    . PRO PRO PRO A A 324 324 . 0.1747 0.1852 0.1560 -0.0220 0.0013
0.0331  1 .
2469 CB    CB    . PRO PRO PRO A A 324 324 . 0.1807 0.2236 0.1854 -0.0229 0.0176
0.0343  1 .
2470 CG    CG    . PRO PRO PRO A A 324 324 . 0.1635 0.2152 0.2210 -0.0181 0.0348
0.0187  1 .
2471 CD    CD    . PRO PRO PRO A A 324 324 . 0.1663 0.1905 0.1605 -0.0186 0.0010
0.0337  1 .
2472 C     C     . PRO PRO PRO A A 324 324 . 0.1908 0.1574 0.1709 -0.0246 0.0019
0.0142  1 .
2473 O     O     . PRO PRO PRO A A 324 324 . 0.2273 0.1801 0.1516 -0.0002 -0.0096
0.0491  1 .
2474 N     N     . LYS LYS LYS A A 325 325 . 0.1908 0.1810 0.1822 0.0085  0.0144
0.0407  1 .
2475 CA    CA    . LYS LYS LYS A A 325 325 . 0.2081 0.1817 0.1966 0.0034  -0.0065
0.0246  1 .
2476 CB    CB    . LYS LYS LYS A A 325 325 . 0.2248 0.2066 0.2397 0.0293  0.0081
0.0033  1 .
2477 CG    CG    . LYS LYS LYS A A 325 325 . 0.3306 0.3638 0.3771 0.0070  -0.0351
0.0151  1 .
2478 CD    CD    . LYS LYS LYS A A 325 325 . 0.4676 0.5462 0.5252 0.0300  0.0047  -
0.0199 1 .
2479 CE    CE    . LYS LYS LYS A A 325 325 . 0.5861 0.5622 0.5500 0.0323  -0.0118
0.0398  1 .
2480 NZ    NZ    . LYS LYS LYS A A 325 325 . 0.6537 0.6040 0.5560 0.0235  -0.0238
0.0301  1 .
2481 C     C     . LYS LYS LYS A A 325 325 . 0.1875 0.1667 0.1704 0.0120  -0.0172
0.0339  1 .
2482 O     O     . LYS LYS LYS A A 325 325 . 0.2394 0.1856 0.1935 0.0183  -0.0085
0.0346  1 .
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2483 N     N     . ARG ARG ARG A A 326 326 . 0.1820 0.1531 0.1501 0.0133  -0.0124
0.0561  1 .
2484 CA    CA    . ARG ARG ARG A A 326 326 . 0.1701 0.1554 0.1523 -0.0044 -0.0181
0.0266  1 .
2485 CB    CB    . ARG ARG ARG A A 326 326 . 0.1641 0.1539 0.1538 -0.0203 0.0046
0.0087  1 .
2486 CG    CG    . ARG ARG ARG A A 326 326 . 0.2663 0.1792 0.2235 -0.0462 -0.0384 -
0.0233 1 .
2487 CD    CD    . ARG ARG ARG A A 326 326 . 0.3422 0.3428 0.3229 -0.0050 -0.0098
0.0253  1 .
2488 NE    NE    . ARG ARG ARG A A 326 326 . 0.2480 0.2474 0.2567 0.0971  -0.0278 -
0.0236 1 .
2489 CZ    CZ    . ARG ARG ARG A A 326 326 . 0.2703 0.1219 0.1878 0.0019  -0.0014
0.0163  1 .
2490 NH1   NH1   . ARG ARG ARG A A 326 326 . 0.1189 0.1548 0.1870 -0.0073 -0.0010
0.0171  1 .
2491 NH2   NH2   . ARG ARG ARG A A 326 326 . 0.2405 0.1561 0.2203 0.0712  0.0200
0.0421  1 .
2492 C     C     . ARG ARG ARG A A 326 326 . 0.1443 0.1481 0.1492 -0.0151 -0.0095
0.0245  1 .
2493 O     O     . ARG ARG ARG A A 326 326 . 0.1816 0.1800 0.1335 0.0166  -0.0470
0.0313  1 .
2494 N     N     . ILE ILE ILE A A 327 327 . 0.1499 0.1351 0.1282 0.0148  -0.0023
0.0341  1 .
2495 CA    CA    . ILE ILE ILE A A 327 327 . 0.1482 0.1502 0.1299 0.0102  -0.0100
0.0186  1 .
2496 CB    CB    . ILE ILE ILE A A 327 327 . 0.1303 0.1298 0.1158 -0.0150 -0.0083
0.0000  1 .
2497 CG1   CG1   . ILE ILE ILE A A 327 327 . 0.1180 0.1301 0.1481 0.0048  -0.0233
0.0104  1 .
2498 CD    CD    . ILE ILE ILE A A 327 327 . 0.1075 0.1358 0.1514 -0.0150 -0.0467
0.0227  1 .
2499 CG2   CG2   . ILE ILE ILE A A 327 327 . 0.1585 0.1423 0.1469 0.0175  -0.0065 -
0.0261 1 .
2500 C     C     . ILE ILE ILE A A 327 327 . 0.1890 0.1391 0.1466 -0.0003 -0.0125
0.0185  1 .
2501 O     O     . ILE ILE ILE A A 327 327 . 0.2041 0.1794 0.1334 0.0101  -0.0059
0.0179  1 .
2502 N     N     . GLU GLU GLU A A 328 328 . 0.2287 0.1597 0.1479 0.0041  -0.0199
0.0188  1 .
2503 CA    CA    . GLU GLU GLU A A 328 328 . 0.2120 0.1797 0.1619 -0.0078 -0.0207
0.0398  1 .
2504 CB    CB    . GLU GLU GLU A A 328 328 . 0.2277 0.1885 0.2298 -0.0224 -0.0399
0.0436  1 .
2505 CG    CG    . GLU GLU GLU A A 328 328 . 0.2473 0.2953 0.2595 -0.0191 -0.0129
0.0282  1 .
2506 CD    CD    . GLU GLU GLU A A 328 328 . 0.3942 0.4594 0.3697 -0.0780 0.0051  -
0.0012 1 .
2507 OE1   OE1   . GLU GLU GLU A A 328 328 . 0.3861 0.4417 0.4233 -0.1192 0.0118
0.0640  1 .
2508 OE2   OE2   . GLU GLU GLU A A 328 328 . 0.5292 0.5273 0.3529 -0.0830 -0.0546
0.0000  1 .
2509 C     C     . GLU GLU GLU A A 328 328 . 0.2249 0.1652 0.1929 -0.0017 -0.0074
0.0399  1 .
2510 O     O     . GLU GLU GLU A A 328 328 . 0.2677 0.2182 0.1751 -0.0137 -0.0141
0.0358  1 .
2511 N     N     . ARG ARG ARG A A 329 329 . 0.1998 0.1421 0.1518 0.0081  -0.0082
0.0237  1 .
2512 CA    CA    . ARG ARG ARG A A 329 329 . 0.1965 0.1553 0.1683 0.0194  -0.0058
0.0298  1 .
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2513 CB    CB    . ARG ARG ARG A A 329 329 . 0.2095 0.1625 0.1912 0.0157  -0.0156
0.0259  1 .
2514 CG    CG    . ARG ARG ARG A A 329 329 . 0.2181 0.2177 0.2090 0.0204  -0.0014
0.0243  1 .
2515 CD    CD    . ARG ARG ARG A A 329 329 . 0.3331 0.2516 0.3031 0.0397  0.0463
0.0186  1 .
2516 NE    NE    . ARG ARG ARG A A 329 329 . 0.3401 0.2347 0.3294 0.0511  0.0449
0.0407  1 .
2517 CZ    CZ    . ARG ARG ARG A A 329 329 . 0.2970 0.2769 0.3412 0.0634  0.0054
0.0229  1 .
2518 NH1   NH1   . ARG ARG ARG A A 329 329 . 0.2805 0.2544 0.3144 0.0584  0.0152
0.0287  1 .
2519 NH2   NH2   . ARG ARG ARG A A 329 329 . 0.2783 0.2315 0.4535 0.0734  -0.0066
0.0392  1 .
2520 C     C     . ARG ARG ARG A A 329 329 . 0.1925 0.1707 0.1690 0.0223  -0.0166
0.0094  1 .
2521 O     O     . ARG ARG ARG A A 329 329 . 0.2141 0.1854 0.1701 0.0134  -0.0320
0.0338  1 .
2522 N     N     . ALA ALA ALA A A 330 330 . 0.1795 0.1665 0.1575 0.0188  -0.0015
0.0286  1 .
2523 CA    CA    . ALA ALA ALA A A 330 330 . 0.1571 0.1747 0.1563 0.0210  -0.0134
0.0245  1 .
2524 CB    CB    . ALA ALA ALA A A 330 330 . 0.1336 0.1682 0.1363 0.0115  -0.0259
0.0697  1 .
2525 C     C     . ALA ALA ALA A A 330 330 . 0.1915 0.1856 0.1672 -0.0028 -0.0036
0.0099  1 .
2526 O     O     . ALA ALA ALA A A 330 330 . 0.2026 0.1823 0.1420 -0.0034 0.0012
0.0056  1 .
2527 N     N     . VAL VAL VAL A A 331 331 . 0.1891 0.1913 0.1567 0.0014  0.0057
0.0053  1 .
2528 CA    CA    . VAL VAL VAL A A 331 331 . 0.2212 0.2090 0.1775 -0.0049 0.0130  -
0.0045 1 .
2529 CB    CB    . VAL VAL VAL A A 331 331 . 0.2044 0.2166 0.1641 -0.0087 0.0044  -
0.0075 1 .
2530 CG1   CG1   . VAL VAL VAL A A 331 331 . 0.2149 0.2369 0.1876 0.0141  0.0294
0.0206  1 .
2531 CG2   CG2   . VAL VAL VAL A A 331 331 . 0.2603 0.1894 0.1805 0.0195  0.0222
0.0040  1 .
2532 C     C     . VAL VAL VAL A A 331 331 . 0.2140 0.2023 0.1721 -0.0048 0.0160
0.0067  1 .
2533 O     O     . VAL VAL VAL A A 331 331 . 0.2680 0.2038 0.1552 -0.0253 0.0088
0.0257  1 .
2534 N     N     . GLU GLU GLU A A 332 332 . 0.2333 0.1979 0.1739 0.0053  -0.0113
0.0201  1 .
2535 CA    CA    . GLU GLU GLU A A 332 332 . 0.2826 0.2582 0.1995 0.0035  -0.0210
0.0396  1 .
2536 CB    CB    . GLU GLU GLU A A 332 332 . 0.2912 0.2618 0.2156 0.0080  -0.0261
0.0489  1 .
2537 CG    CG    . GLU GLU GLU A A 332 332 . 0.4586 0.3916 0.2756 0.0144  -0.0588
0.0541  1 .
2538 CD    CD    . GLU GLU GLU A A 332 332 . 0.5421 0.5901 0.4028 -0.0304 0.0007
0.0378  1 .
2539 OE1   OE1   . GLU GLU GLU A A 332 332 . 0.5292 0.6292 0.4752 -0.0844 -0.0126
0.0790  1 .
2540 OE2   OE2   . GLU GLU GLU A A 332 332 . 0.6523 0.6845 0.4724 -0.0513 -0.0679
0.0535  1 .
2541 C     C     . GLU GLU GLU A A 332 332 . 0.2718 0.2382 0.1859 -0.0120 -0.0236
0.0351  1 .
2542 O     O     . GLU GLU GLU A A 332 332 . 0.3126 0.2576 0.2112 -0.0097 -0.0385
0.0536  1 .
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2543 N     N     . GLU GLU GLU A A 333 333 . 0.2225 0.2098 0.1680 -0.0067 -0.0049
0.0442  1 .
2544 CA    CA    . GLU GLU GLU A A 333 333 . 0.1974 0.1931 0.1754 0.0006  -0.0319
0.0221  1 .
2545 CB    CB    . GLU GLU GLU A A 333 333 . 0.2477 0.2179 0.2376 0.0020  -0.0261
0.0018  1 .
2546 CG    CG    . GLU GLU GLU A A 333 333 . 0.2580 0.2411 0.2629 0.0385  -0.0527 -
0.0081 1 .
2547 CD    CD    . GLU GLU GLU A A 333 333 . 0.3115 0.3599 0.3639 -0.0088 0.0010  -
0.0212 1 .
2548 OE1   OE1   . GLU GLU GLU A A 333 333 . 0.2758 0.3463 0.4707 -0.0071 0.0206
0.0348  1 .
2549 OE2   OE2   . GLU GLU GLU A A 333 333 . 0.4111 0.4032 0.2828 -0.0078 -0.0556
0.0238  1 .
2550 C     C     . GLU GLU GLU A A 333 333 . 0.1662 0.1780 0.1423 0.0034  -0.0241
0.0194  1 .
2551 O     O     . GLU GLU GLU A A 333 333 . 0.1941 0.1815 0.1666 -0.0069 -0.0479
0.0164  1 .
2552 N     N     . LYS LYS LYS A A 334 334 . 0.1693 0.1908 0.1366 0.0050  -0.0201
0.0173  1 .
2553 CA    CA    . LYS LYS LYS A A 334 334 . 0.2004 0.1733 0.1503 -0.0155 -0.0118 -
0.0118 1 .
2554 CB    CB    . LYS LYS LYS A A 334 334 . 0.2371 0.1852 0.1608 -0.0246 -0.0127 -
0.0144 1 .
2555 CG    CG    . LYS LYS LYS A A 334 334 . 0.2911 0.2485 0.1992 -0.0367 0.0156  -
0.0146 1 .
2556 CD    CD    . LYS LYS LYS A A 334 334 . 0.4442 0.4647 0.4062 0.0075  0.0308  -
0.0357 1 .
2557 CE    CE    . LYS LYS LYS A A 334 334 . 0.4970 0.5061 0.4613 -0.0315 -0.0428 -
0.0437 1 .
2558 NZ    NZ    . LYS LYS LYS A A 334 334 . 0.4977 0.5419 0.4480 0.0066  -0.0140
0.0051  1 .
2559 C     C     . LYS LYS LYS A A 334 334 . 0.1798 0.1498 0.1398 -0.0049 -0.0045 -
0.0036 1 .
2560 O     O     . LYS LYS LYS A A 334 334 . 0.1858 0.1624 0.1419 0.0115  -0.0257
0.0000  1 .
2561 N     N     . ALA ALA ALA A A 335 335 . 0.1870 0.1677 0.1226 0.0078  -0.0200
0.0190  1 .
2562 CA    CA    . ALA ALA ALA A A 335 335 . 0.1475 0.1613 0.1340 0.0161  0.0052
0.0135  1 .
2563 CB    CB    . ALA ALA ALA A A 335 335 . 0.1482 0.1336 0.1307 0.0166  0.0041
0.0035  1 .
2564 C     C     . ALA ALA ALA A A 335 335 . 0.1309 0.1383 0.1287 0.0060  -0.0081
0.0025  1 .
2565 O     O     . ALA ALA ALA A A 335 335 . 0.1067 0.1575 0.1347 -0.0009 -0.0100
0.0064  1 .
2566 N     N     . CYS CYS CYS A A 336 336 . 0.1321 0.1422 0.1442 0.0331  -0.0249 -
0.0031 1 .
2567 CA    CA    . CYS CYS CYS A A 336 336 . 0.1450 0.1190 0.1194 0.0160  -0.0004
0.0040  1 .
2568 CB    CB    . CYS CYS CYS A A 336 336 . 0.1504 0.1346 0.1273 -0.0237 -0.0092 -
0.0049 1 .
2569 SG    SG    . CYS CYS CYS A A 336 336 . 0.1511 0.1449 0.1327 0.0033  -0.0156
0.0124  1 .
2570 C     C     . CYS CYS CYS A A 336 336 . 0.1415 0.1360 0.1442 -0.0008 -0.0077
0.0021  1 .
2571 O     O     . CYS CYS CYS A A 336 336 . 0.1475 0.1604 0.1570 0.0036  -0.0040
0.0192  1 .
2572 N     N     . ASN ASN ASN A A 337 337 . 0.1141 0.1007 0.1220 0.0081  -0.0211 -
0.0069 1 .
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2573 CA    CA    . ASN ASN ASN A A 337 337 . 0.1177 0.1027 0.1108 -0.0010 -0.0081
0.0048  1 .
2574 CB    CB    . ASN ASN ASN A A 337 337 . 0.1336 0.1173 0.1117 -0.0045 -0.0086
0.0079  1 .
2575 CG    CG    . ASN ASN ASN A A 337 337 . 0.1196 0.1051 0.1084 0.0036  -0.0200
0.0118  1 .
2576 OD1   OD1   . ASN ASN ASN A A 337 337 . 0.1970 0.1638 0.1637 -0.0144 -0.0597 -
0.0007 1 .
2577 ND2   ND2   . ASN ASN ASN A A 337 337 . 0.0960 0.0944 0.0639 0.0067  -0.0119 -
0.0123 1 .
2578 C     C     . ASN ASN ASN A A 337 337 . 0.1483 0.1038 0.0962 0.0090  -0.0111
0.0046  1 .
2579 O     O     . ASN ASN ASN A A 337 337 . 0.1310 0.1480 0.1151 0.0113  -0.0280
0.0157  1 .
2580 N     N     . CYS CYS CYS A A 338 338 . 0.1353 0.1298 0.0864 -0.0084 -0.0142 -
0.0050 1 .
2581 CA    CA    . CYS CYS CYS A A 338 338 . 0.1069 0.1057 0.1098 0.0144  -0.0158 -
0.0121 1 .
2582 CB    CB    . CYS CYS CYS A A 338 338 . 0.1072 0.1208 0.1099 -0.0012 -0.0171
0.0063  1 .
2583 SG    SG    . CYS CYS CYS A A 338 338 . 0.1245 0.1396 0.1179 0.0098  -0.0093
0.0144  1 .
2584 C     C     . CYS CYS CYS A A 338 338 . 0.1010 0.0970 0.0913 0.0064  -0.0092
0.0108  1 .
2585 O     O     . CYS CYS CYS A A 338 338 . 0.1155 0.1199 0.1059 -0.0051 -0.0090
0.0145  1 .
2586 N     N     . LEU LEU LEU A A 339 339 . 0.1000 0.1034 0.0766 0.0004  -0.0113 -
0.0007 1 .
2587 CA    CA    . LEU LEU LEU A A 339 339 . 0.1176 0.0917 0.0837 0.0121  -0.0080
0.0088  1 .
2588 CB    CB    . LEU LEU LEU A A 339 339 . 0.1040 0.0764 0.0891 0.0009  -0.0085 -
0.0193 1 .
2589 CG    CG    . LEU LEU LEU A A 339 339 . 0.1456 0.0997 0.0794 -0.0136 0.0176  -
0.0265 1 .
2590 CD1   CD1   . LEU LEU LEU A A 339 339 . 0.1022 0.1116 0.1264 0.0149  -0.0035
0.0005  1 .
2591 CD2   CD2   . LEU LEU LEU A A 339 339 . 0.1228 0.0908 0.1116 -0.0241 -0.0027 -
0.0024 1 .
2592 C     C     . LEU LEU LEU A A 339 339 . 0.0952 0.0842 0.0670 0.0181  0.0049
0.0262  1 .
2593 O     O     . LEU LEU LEU A A 339 339 . 0.1116 0.1044 0.0785 0.0102  -0.0001
0.0205  1 .
2594 N     N     . LEU LEU LEU A A 340 340 . 0.1102 0.0848 0.0869 0.0231  -0.0085
0.0131  1 .
2595 CA    CA    . LEU LEU LEU A A 340 340 . 0.0763 0.1026 0.0680 0.0009  -0.0170
0.0165  1 .
2596 CB    CB    . LEU LEU LEU A A 340 340 . 0.0784 0.0958 0.0406 0.0009  -0.0236
0.0129  1 .
2597 CG    CG    . LEU LEU LEU A A 340 340 . 0.0966 0.0729 0.0762 0.0034  0.0090
0.0187  1 .
2598 CD1   CD1   . LEU LEU LEU A A 340 340 . 0.0942 0.0726 0.1185 -0.0102 0.0258  -
0.0117 1 .
2599 CD2   CD2   . LEU LEU LEU A A 340 340 . 0.0830 0.1294 0.0790 -0.0051 0.0078
0.0044  1 .
2600 C     C     . LEU LEU LEU A A 340 340 . 0.0940 0.0930 0.0885 0.0124  -0.0028
0.0039  1 .
2601 O     O     . LEU LEU LEU A A 340 340 . 0.1113 0.1076 0.1163 0.0097  0.0015  -
0.0014 1 .
2602 N     N     . LEU LEU LEU A A 341 341 . 0.0897 0.1088 0.0756 -0.0102 -0.0079 -
0.0016 1 .
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2603 CA    CA    . LEU LEU LEU A A 341 341 . 0.0972 0.0916 0.0742 -0.0069 -0.0021
0.0075  1 .
2604 CB    CB    . LEU LEU LEU A A 341 341 . 0.0916 0.0996 0.0792 -0.0150 0.0129
0.0056  1 .
2605 CG    CG    . LEU LEU LEU A A 341 341 . 0.1041 0.0794 0.1348 0.0065  -0.0185
0.0303  1 .
2606 CD1   CD1   . LEU LEU LEU A A 341 341 . 0.1852 0.1540 0.1160 0.0032  -0.0347
0.0597  1 .
2607 CD2   CD2   . LEU LEU LEU A A 341 341 . 0.1253 0.1696 0.1671 0.0465  0.0316  -
0.0046 1 .
2608 C     C     . LEU LEU LEU A A 341 341 . 0.0973 0.0835 0.0771 0.0087  -0.0002
0.0009  1 .
2609 O     O     . LEU LEU LEU A A 341 341 . 0.1262 0.0979 0.1104 0.0025  -0.0042
0.0010  1 .
2610 N     N     . LYS LYS LYS A A 342 342 . 0.1327 0.0959 0.0904 0.0020  -0.0103 -
0.0071 1 .
2611 CA    CA    . LYS LYS LYS A A 342 342 . 0.0890 0.1116 0.0747 -0.0100 0.0037  -
0.0032 1 .
2612 CB    CB    . LYS LYS LYS A A 342 342 . 0.0969 0.1154 0.1398 -0.0002 0.0115  -
0.0182 1 .
2613 CG    CG    . LYS LYS LYS A A 342 342 . 0.1159 0.1329 0.1423 -0.0017 -0.0014
0.0024  1 .
2614 CD    CD    . LYS LYS LYS A A 342 342 . 0.1302 0.1239 0.1549 0.0109  -0.0109
0.0136  1 .
2615 CE    CE    . LYS LYS LYS A A 342 342 . 0.1534 0.1723 0.0995 -0.0184 -0.0277 -
0.0002 1 .
2616 NZ    NZ    . LYS LYS LYS A A 342 342 . 0.1446 0.1700 0.1891 -0.0131 -0.0323
0.0316  1 .
2617 C     C     . LYS LYS LYS A A 342 342 . 0.1107 0.1037 0.0998 0.0146  0.0009  -
0.0005 1 .
2618 O     O     . LYS LYS LYS A A 342 342 . 0.1199 0.1131 0.1217 0.0220  -0.0154 -
0.0020 1 .
2619 N     N     . VAL VAL VAL A A 343 343 . 0.1033 0.1048 0.0969 -0.0010 -0.0122
0.0019  1 .
2620 CA    CA    . VAL VAL VAL A A 343 343 . 0.1117 0.0924 0.0696 0.0147  -0.0004
0.0059  1 .
2621 CB    CB    . VAL VAL VAL A A 343 343 . 0.1079 0.1074 0.1089 0.0280  0.0081  -
0.0063 1 .
2622 CG1   CG1   . VAL VAL VAL A A 343 343 . 0.1256 0.1436 0.0786 0.0066  0.0360  -
0.0110 1 .
2623 CG2   CG2   . VAL VAL VAL A A 343 343 . 0.1125 0.1286 0.1302 -0.0070 0.0021
0.0323  1 .
2624 C     C     . VAL VAL VAL A A 343 343 . 0.1048 0.0986 0.0927 0.0126  0.0062
0.0137  1 .
2625 O     O     . VAL VAL VAL A A 343 343 . 0.1367 0.1061 0.1035 -0.0061 0.0159
0.0085  1 .
2626 N     N     . ASN ASN ASN A A 344 344 . 0.0953 0.1077 0.1028 0.0000  0.0121
0.0060  1 .
2627 CA    CA    . ASN ASN ASN A A 344 344 . 0.0906 0.0960 0.0759 0.0131  0.0146
0.0143  1 .
2628 CB    CB    . ASN ASN ASN A A 344 344 . 0.0846 0.0863 0.0663 -0.0112 0.0075
0.0009  1 .
2629 CG    CG    . ASN ASN ASN A A 344 344 . 0.0933 0.0812 0.0733 -0.0049 0.0053  -
0.0070 1 .
2630 OD1   OD1   . ASN ASN ASN A A 344 344 . 0.1003 0.0893 0.1247 -0.0004 0.0024  -
0.0056 1 .
2631 ND2   ND2   . ASN ASN ASN A A 344 344 . 0.1168 0.0884 0.0943 0.0238  0.0065
0.0165  1 .
2632 C     C     . ASN ASN ASN A A 344 344 . 0.0960 0.1045 0.0930 0.0019  -0.0029 -
0.0074 1 .
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2633 O     O     . ASN ASN ASN A A 344 344 . 0.1354 0.1179 0.1046 0.0372  0.0109  -
0.0053 1 .
2634 N     N     . GLN GLN GLN A A 345 345 . 0.0884 0.0964 0.0723 0.0095  -0.0001
0.0034  1 .
2635 CA    CA    . GLN GLN GLN A A 345 345 . 0.0979 0.0904 0.0906 0.0020  -0.0239
0.0083  1 .
2636 CB    CB    . GLN GLN GLN A A 345 345 . 0.1017 0.1046 0.0994 -0.0085 -0.0329
0.0109  1 .
2637 CG    CG    . GLN GLN GLN A A 345 345 . 0.1060 0.0666 0.1236 -0.0078 -0.0270 -
0.0026 1 .
2638 CD    CD    . GLN GLN GLN A A 345 345 . 0.0876 0.0916 0.0769 -0.0080 -0.0083 -
0.0165 1 .
2639 OE1   OE1   . GLN GLN GLN A A 345 345 . 0.0902 0.1168 0.0960 0.0051  -0.0114
0.0244  1 .
2640 NE2   NE2   . GLN GLN GLN A A 345 345 . 0.1070 0.1187 0.1301 -0.0146 -0.0051
0.0189  1 .
2641 C     C     . GLN GLN GLN A A 345 345 . 0.1054 0.1150 0.0933 0.0037  -0.0056
0.0186  1 .
2642 O     O     . GLN GLN GLN A A 345 345 . 0.1114 0.1228 0.1312 0.0050  0.0022
0.0039  1 .
2643 N     N     . ILE ILE ILE A A 346 346 . 0.0990 0.0831 0.1114 -0.0035 -0.0039
0.0019  1 .
2644 CA    CA    . ILE ILE ILE A A 346 346 . 0.1039 0.1039 0.0922 -0.0043 0.0027
0.0147  1 .
2645 CB    CB    . ILE ILE ILE A A 346 346 . 0.1189 0.0948 0.0885 0.0064  -0.0010
0.0052  1 .
2646 CG1   CG1   . ILE ILE ILE A A 346 346 . 0.1373 0.1338 0.1421 0.0143  0.0152
0.0377  1 .
2647 CD    CD    . ILE ILE ILE A A 346 346 . 0.1469 0.1513 0.1510 0.0295  -0.0365
0.0149  1 .
2648 CG2   CG2   . ILE ILE ILE A A 346 346 . 0.1180 0.1353 0.1098 0.0239  0.0305
0.0050  1 .
2649 C     C     . ILE ILE ILE A A 346 346 . 0.1050 0.0931 0.1116 0.0155  -0.0152
0.0004  1 .
2650 O     O     . ILE ILE ILE A A 346 346 . 0.1412 0.1038 0.1336 -0.0056 -0.0046
0.0035  1 .
2651 N     N     . GLY GLY GLY A A 347 347 . 0.0958 0.1026 0.0841 0.0097  -0.0181
0.0034  1 .
2652 CA    CA    . GLY GLY GLY A A 347 347 . 0.1220 0.1192 0.1189 -0.0102 -0.0019
0.0042  1 .
2653 C     C     . GLY GLY GLY A A 347 347 . 0.1219 0.1019 0.1198 -0.0015 -0.0048
0.0030  1 .
2654 O     O     . GLY GLY GLY A A 347 347 . 0.1175 0.1201 0.1082 -0.0192 0.0003
0.0054  1 .
2655 N     N     . SER SER SER A A 348 348 . 0.1098 0.1160 0.1245 -0.0067 0.0028
0.0101  1 .
2656 CA    CA    . SER SER SER A A 348 348 . 0.1155 0.0998 0.1135 -0.0046 0.0148
0.0029  1 .
2657 CB    CB    . SER SER SER A A 348 348 . 0.1223 0.1272 0.1293 0.0087  -0.0030
0.0236  1 .
2658 OG    OG    . SER SER SER A A 348 348 . 0.1516 0.1344 0.0993 -0.0224 -0.0187
0.0046  1 .
2659 C     C     . SER SER SER A A 348 348 . 0.1186 0.0950 0.1047 -0.0030 -0.0005
0.0108  1 .
2660 O     O     . SER SER SER A A 348 348 . 0.1199 0.1230 0.1227 0.0071  -0.0258
0.0028  1 .
2661 N     N     . VAL VAL VAL A A 349 349 . 0.1230 0.0815 0.1231 0.0129  0.0072  -
0.0059 1 .
2662 CA    CA    . VAL VAL VAL A A 349 349 . 0.1384 0.1074 0.0827 -0.0042 0.0185
0.0147  1 .
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2663 CB    CB    . VAL VAL VAL A A 349 349 . 0.1076 0.1055 0.0989 -0.0025 0.0280
0.0106  1 .
2664 CG1   CG1   . VAL VAL VAL A A 349 349 . 0.1595 0.1350 0.1369 0.0133  0.0123
0.0025  1 .
2665 CG2   CG2   . VAL VAL VAL A A 349 349 . 0.1446 0.1014 0.1277 0.0010  -0.0260
0.0103  1 .
2666 C     C     . VAL VAL VAL A A 349 349 . 0.1402 0.1013 0.0885 -0.0206 0.0148
0.0039  1 .
2667 O     O     . VAL VAL VAL A A 349 349 . 0.1186 0.1109 0.1184 -0.0119 -0.0032 -
0.0023 1 .
2668 N     N     . THR THR THR A A 350 350 . 0.1330 0.1004 0.1090 -0.0176 0.0035
0.0176  1 .
2669 CA    CA    . THR THR THR A A 350 350 . 0.1465 0.1080 0.1077 -0.0336 -0.0071
0.0082  1 .
2670 CB    CB    . THR THR THR A A 350 350 . 0.1349 0.1166 0.1157 -0.0209 0.0113
0.0332  1 .
2671 OG1   OG1   . THR THR THR A A 350 350 . 0.1454 0.1608 0.1633 -0.0234 0.0216
0.0003  1 .
2672 CG2   CG2   . THR THR THR A A 350 350 . 0.1336 0.1557 0.1328 -0.0146 0.0116
0.0503  1 .
2673 C     C     . THR THR THR A A 350 350 . 0.1411 0.1189 0.1268 -0.0124 0.0139
0.0114  1 .
2674 O     O     . THR THR THR A A 350 350 . 0.1616 0.1310 0.1075 -0.0180 -0.0080 -
0.0027 1 .
2675 N     N     . GLU GLU GLU A A 351 351 . 0.1137 0.1194 0.1132 0.0041  0.0053
0.0188  1 .
2676 CA    CA    . GLU GLU GLU A A 351 351 . 0.1231 0.1063 0.1286 -0.0018 0.0072  -
0.0028 1 .
2677 CB    CB    . GLU GLU GLU A A 351 351 . 0.1340 0.1077 0.1507 -0.0103 0.0321  -
0.0015 1 .
2678 CG    CG    . GLU GLU GLU A A 351 351 . 0.1544 0.1289 0.1334 -0.0193 0.0112
0.0041  1 .
2679 CD    CD    . GLU GLU GLU A A 351 351 . 0.1458 0.1733 0.1657 0.0056  0.0077
0.0089  1 .
2680 OE1   OE1   . GLU GLU GLU A A 351 351 . 0.1605 0.1609 0.1727 0.0050  0.0175  -
0.0269 1 .
2681 OE2   OE2   . GLU GLU GLU A A 351 351 . 0.1897 0.1872 0.2276 0.0403  0.0029
0.0310  1 .
2682 C     C     . GLU GLU GLU A A 351 351 . 0.1292 0.1112 0.1275 -0.0187 -0.0064
0.0005  1 .
2683 O     O     . GLU GLU GLU A A 351 351 . 0.1386 0.1324 0.1205 -0.0090 -0.0070
0.0265  1 .
2684 N     N     . ALA ALA ALA A A 352 352 . 0.1341 0.1004 0.1195 -0.0284 0.0038
0.0001  1 .
2685 CA    CA    . ALA ALA ALA A A 352 352 . 0.1282 0.1074 0.1160 -0.0120 0.0072  -
0.0079 1 .
2686 CB    CB    . ALA ALA ALA A A 352 352 . 0.1368 0.1260 0.1066 0.0066  -0.0123
0.0124  1 .
2687 C     C     . ALA ALA ALA A A 352 352 . 0.1305 0.1334 0.1239 -0.0088 0.0000  -
0.0072 1 .
2688 O     O     . ALA ALA ALA A A 352 352 . 0.1408 0.1222 0.1001 -0.0040 -0.0137
0.0167  1 .
2689 N     N     . ILE ILE ILE A A 353 353 . 0.1227 0.1265 0.0968 -0.0056 0.0071  -
0.0001 1 .
2690 CA    CA    . ILE ILE ILE A A 353 353 . 0.1209 0.1377 0.1283 -0.0059 0.0032  -
0.0040 1 .
2691 CB    CB    . ILE ILE ILE A A 353 353 . 0.1000 0.1335 0.1105 -0.0030 -0.0002
0.0055  1 .
2692 CG1   CG1   . ILE ILE ILE A A 353 353 . 0.1509 0.1237 0.1546 -0.0288 -0.0162 -
0.0021 1 .
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2693 CD    CD    . ILE ILE ILE A A 353 353 . 0.1208 0.1673 0.1949 0.0028  0.0380  -
0.0441 1 .
2694 CG2   CG2   . ILE ILE ILE A A 353 353 . 0.1458 0.1651 0.1662 -0.0270 0.0437  -
0.0181 1 .
2695 C     C     . ILE ILE ILE A A 353 353 . 0.1484 0.1321 0.0971 -0.0091 0.0043  -
0.0027 1 .
2696 O     O     . ILE ILE ILE A A 353 353 . 0.1600 0.1323 0.1127 -0.0185 0.0090  -
0.0129 1 .
2697 N     N     . GLN GLN GLN A A 354 354 . 0.1494 0.1485 0.1197 -0.0144 -0.0049
0.0161  1 .
2698 CA    CA    . GLN GLN GLN A A 354 354 . 0.1845 0.1575 0.1432 -0.0234 -0.0179
0.0192  1 .
2699 CB    CB    . GLN GLN GLN A A 354 354 . 0.1723 0.1506 0.1697 -0.0205 -0.0362
0.0311  1 .
2700 CG    CG    . GLN GLN GLN A A 354 354 . 0.3396 0.2870 0.3117 0.0198  -0.0270
0.0397  1 .
2701 CD    CD    . GLN GLN GLN A A 354 354 . 0.5330 0.3233 0.4414 -0.0129 0.0051
0.0317  1 .
2702 OE1   OE1   . GLN GLN GLN A A 354 354 . 0.5580 0.3554 0.4479 -0.0457 0.0178
0.0162  1 .
2703 NE2   NE2   . GLN GLN GLN A A 354 354 . 0.6531 0.3725 0.4736 0.0019  -0.0390
0.0625  1 .
2704 C     C     . GLN GLN GLN A A 354 354 . 0.1490 0.1511 0.1270 -0.0036 -0.0206
0.0120  1 .
2705 O     O     . GLN GLN GLN A A 354 354 . 0.1927 0.1306 0.1013 -0.0180 -0.0075
0.0188  1 .
2706 N     N     . ALA ALA ALA A A 355 355 . 0.1436 0.1142 0.1312 -0.0060 0.0015
0.0177  1 .
2707 CA    CA    . ALA ALA ALA A A 355 355 . 0.1158 0.1012 0.1019 -0.0016 0.0012
0.0185  1 .
2708 CB    CB    . ALA ALA ALA A A 355 355 . 0.1197 0.1331 0.1044 0.0293  0.0088  -
0.0035 1 .
2709 C     C     . ALA ALA ALA A A 355 355 . 0.1097 0.1116 0.1161 -0.0054 -0.0029
0.0073  1 .
2710 O     O     . ALA ALA ALA A A 355 355 . 0.1461 0.1220 0.0973 0.0008  -0.0043
0.0255  1 .
2711 N     N     . CYS CYS CYS A A 356 356 . 0.1300 0.0983 0.1008 0.0175  0.0026
0.0107  1 .
2712 CA    CA    . CYS CYS CYS A A 356 356 . 0.1156 0.1096 0.1014 0.0105  -0.0070 -
0.0113 1 .
2713 CB    CB    . CYS CYS CYS A A 356 356 . 0.1338 0.1171 0.0938 0.0288  -0.0326 -
0.0046 1 .
2714 SG    SG    . CYS CYS CYS A A 356 356 . 0.1363 0.1293 0.1276 -0.0002 0.0004
0.0050  1 .
2715 C     C     . CYS CYS CYS A A 356 356 . 0.1464 0.1351 0.1167 0.0065  -0.0058 -
0.0045 1 .
2716 O     O     . CYS CYS CYS A A 356 356 . 0.1442 0.1226 0.1267 -0.0009 -0.0098 -
0.0157 1 .
2717 N     N     . LYS LYS LYS A A 357 357 . 0.1496 0.1314 0.1001 -0.0010 0.0152  -
0.0043 1 .
2718 CA    CA    . LYS LYS LYS A A 357 357 . 0.1473 0.1685 0.1101 -0.0284 0.0032
0.0113  1 .
2719 CB    CB    . LYS LYS LYS A A 357 357 . 0.1796 0.1691 0.1228 -0.0328 0.0094  -
0.0053 1 .
2720 CG    CG    . LYS LYS LYS A A 357 357 . 0.2221 0.2799 0.1932 -0.0682 0.0017
0.0096  1 .
2721 CD    CD    . LYS LYS LYS A A 357 357 . 0.3832 0.3514 0.2441 -0.0970 0.0165  -
0.0219 1 .
2722 CE    CE    . LYS LYS LYS A A 357 357 . 0.4811 0.4572 0.3189 -0.0183 0.0224  -
0.0017 1 .
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2723 NZ    NZ    . LYS LYS LYS A A 357 357 . 0.5053 0.4633 0.2457 -0.0260 -0.0314
0.0128  1 .
2724 C     C     . LYS LYS LYS A A 357 357 . 0.1233 0.1357 0.1159 -0.0178 0.0109  -
0.0138 1 .
2725 O     O     . LYS LYS LYS A A 357 357 . 0.1646 0.1573 0.0973 -0.0192 0.0028  -
0.0037 1 .
2726 N     N     . LEU LEU LEU A A 358 358 . 0.1429 0.1290 0.1296 -0.0034 0.0160
0.0135  1 .
2727 CA    CA    . LEU LEU LEU A A 358 358 . 0.1567 0.1367 0.1253 -0.0075 0.0174
0.0062  1 .
2728 CB    CB    . LEU LEU LEU A A 358 358 . 0.1490 0.1149 0.1396 -0.0006 0.0231
0.0017  1 .
2729 CG    CG    . LEU LEU LEU A A 358 358 . 0.1820 0.1841 0.1672 -0.0063 0.0145  -
0.0010 1 .
2730 CD1   CD1   . LEU LEU LEU A A 358 358 . 0.2646 0.2596 0.1491 0.0164  -0.0072
0.0421  1 .
2731 CD2   CD2   . LEU LEU LEU A A 358 358 . 0.2133 0.2064 0.2117 0.0070  0.0041  -
0.0049 1 .
2732 C     C     . LEU LEU LEU A A 358 358 . 0.1575 0.1370 0.1272 -0.0083 -0.0121 -
0.0036 1 .
2733 O     O     . LEU LEU LEU A A 358 358 . 0.2092 0.1693 0.1078 0.0021  -0.0074
0.0151  1 .
2734 N     N     . ALA ALA ALA A A 359 359 . 0.1593 0.1264 0.1255 -0.0157 0.0085  -
0.0039 1 .
2735 CA    CA    . ALA ALA ALA A A 359 359 . 0.1260 0.1384 0.1135 -0.0129 0.0150
0.0050  1 .
2736 CB    CB    . ALA ALA ALA A A 359 359 . 0.1415 0.1390 0.0672 -0.0162 -0.0058
0.0186  1 .
2737 C     C     . ALA ALA ALA A A 359 359 . 0.1332 0.1422 0.1087 -0.0134 0.0017  -
0.0011 1 .
2738 O     O     . ALA ALA ALA A A 359 359 . 0.1899 0.1561 0.1100 -0.0216 -0.0028
0.0112  1 .
2739 N     N     . GLN GLN GLN A A 360 360 . 0.1328 0.1374 0.1223 -0.0059 0.0151  -
0.0040 1 .
2740 CA    CA    . GLN GLN GLN A A 360 360 . 0.1446 0.1394 0.1076 -0.0058 0.0142
0.0028  1 .
2741 CB    CB    . GLN GLN GLN A A 360 360 . 0.1449 0.1526 0.1230 0.0083  0.0079
0.0175  1 .
2742 CG    CG    . GLN GLN GLN A A 360 360 . 0.1663 0.1313 0.1160 0.0221  0.0322
0.0302  1 .
2743 CD    CD    . GLN GLN GLN A A 360 360 . 0.1801 0.1759 0.1451 0.0151  0.0045
0.0321  1 .
2744 OE1   OE1   . GLN GLN GLN A A 360 360 . 0.3014 0.1925 0.1869 0.0400  -0.0032
0.0375  1 .
2745 NE2   NE2   . GLN GLN GLN A A 360 360 . 0.1637 0.1582 0.1461 -0.0086 0.0026
0.0070  1 .
2746 C     C     . GLN GLN GLN A A 360 360 . 0.1747 0.1497 0.1130 -0.0048 0.0068  -
0.0010 1 .
2747 O     O     . GLN GLN GLN A A 360 360 . 0.1920 0.1641 0.1213 -0.0058 0.0068  -
0.0231 1 .
2748 N     N     . GLU GLU GLU A A 361 361 . 0.1767 0.1752 0.1156 -0.0103 0.0012
0.0132  1 .
2749 CA    CA    . GLU GLU GLU A A 361 361 . 0.2434 0.1952 0.1279 -0.0151 -0.0070
0.0155  1 .
2750 CB    CB    . GLU GLU GLU A A 361 361 . 0.2680 0.2289 0.1670 -0.0407 -0.0119
0.0537  1 .
2751 CG    CG    . GLU GLU GLU A A 361 361 . 0.3418 0.3261 0.3635 -0.0286 -0.0168
0.0394  1 .
2752 CD    CD    . GLU GLU GLU A A 361 361 . 0.4622 0.3872 0.5177 -0.0494 -0.0158 -
0.0084 1 .
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2753 OE1   OE1   . GLU GLU GLU A A 361 361 . 0.5740 0.3955 0.6140 -0.0159 -0.0249
0.0332  1 .
2754 OE2   OE2   . GLU GLU GLU A A 361 361 . 0.4694 0.4695 0.5659 -0.0392 -0.0421
0.0068  1 .
2755 C     C     . GLU GLU GLU A A 361 361 . 0.2026 0.2132 0.1446 -0.0142 0.0101
0.0125  1 .
2756 O     O     . GLU GLU GLU A A 361 361 . 0.2454 0.2184 0.1205 -0.0112 0.0012  -
0.0007 1 .
2757 N     N     . ASN ASN ASN A A 362 362 . 0.1689 0.1978 0.1361 -0.0203 -0.0169
0.0072  1 .
2758 CA    CA    . ASN ASN ASN A A 362 362 . 0.1782 0.1939 0.1479 -0.0003 -0.0044
0.0032  1 .
2759 CB    CB    . ASN ASN ASN A A 362 362 . 0.2019 0.1998 0.1587 0.0195  -0.0125
0.0199  1 .
2760 CG    CG    . ASN ASN ASN A A 362 362 . 0.2492 0.1795 0.1951 0.0159  -0.0621
0.0268  1 .
2761 OD1   OD1   . ASN ASN ASN A A 362 362 . 0.3557 0.3059 0.1321 0.0475  -0.0819
0.0738  1 .
2762 ND2   ND2   . ASN ASN ASN A A 362 362 . 0.2695 0.2558 0.1698 0.0149  -0.0706
0.0308  1 .
2763 C     C     . ASN ASN ASN A A 362 362 . 0.1744 0.1839 0.1252 -0.0134 -0.0031
0.0083  1 .
2764 O     O     . ASN ASN ASN A A 362 362 . 0.1978 0.2398 0.1601 -0.0399 -0.0238
0.0217  1 .
2765 N     N     . GLY GLY GLY A A 363 363 . 0.2011 0.1814 0.1205 -0.0160 0.0204
0.0055  1 .
2766 CA    CA    . GLY GLY GLY A A 363 363 . 0.2008 0.1735 0.1193 -0.0302 0.0352
0.0092  1 .
2767 C     C     . GLY GLY GLY A A 363 363 . 0.2208 0.1888 0.1420 -0.0236 0.0262
0.0009  1 .
2768 O     O     . GLY GLY GLY A A 363 363 . 0.2530 0.2173 0.1374 -0.0288 0.0388  -
0.0025 1 .
2769 N     N     . TRP TRP TRP A A 364 364 . 0.1574 0.1464 0.1288 0.0006  0.0044  -
0.0054 1 .
2770 CA    CA    . TRP TRP TRP A A 364 364 . 0.1487 0.1370 0.1340 0.0180  0.0043
0.0117  1 .
2771 CB    CB    . TRP TRP TRP A A 364 364 . 0.1330 0.1331 0.1442 0.0028  -0.0019
0.0083  1 .
2772 CG    CG    . TRP TRP TRP A A 364 364 . 0.1243 0.1306 0.0970 -0.0067 -0.0062
0.0286  1 .
2773 CD1   CD1   . TRP TRP TRP A A 364 364 . 0.1721 0.2035 0.1536 0.0151  -0.0110
0.0109  1 .
2774 NE1   NE1   . TRP TRP TRP A A 364 364 . 0.2045 0.1668 0.1221 0.0058  0.0091  -
0.0133 1 .
2775 CE2   CE2   . TRP TRP TRP A A 364 364 . 0.1368 0.1589 0.1149 0.0045  0.0085
0.0200  1 .
2776 CD2   CD2   . TRP TRP TRP A A 364 364 . 0.1264 0.1453 0.1045 -0.0047 -0.0072
0.0125  1 .
2777 CE3   CE3   . TRP TRP TRP A A 364 364 . 0.1782 0.1754 0.0868 -0.0124 0.0230  -
0.0156 1 .
2778 CZ3   CZ3   . TRP TRP TRP A A 364 364 . 0.1398 0.1442 0.1377 0.0139  0.0310
0.0401  1 .
2779 CH2   CH2   . TRP TRP TRP A A 364 364 . 0.1813 0.1567 0.1488 0.0415  -0.0099 -
0.0168 1 .
2780 CZ2   CZ2   . TRP TRP TRP A A 364 364 . 0.1471 0.1197 0.1392 -0.0038 -0.0179 -
0.0088 1 .
2781 C     C     . TRP TRP TRP A A 364 364 . 0.1509 0.1547 0.1306 0.0068  0.0025  -
0.0064 1 .
2782 O     O     . TRP TRP TRP A A 364 364 . 0.1520 0.1749 0.1536 -0.0030 0.0038
0.0078  1 .
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2783 N     N     . GLY GLY GLY A A 365 365 . 0.1376 0.1494 0.1116 0.0165  -0.0047
0.0018  1 .
2784 CA    CA    . GLY GLY GLY A A 365 365 . 0.1521 0.1477 0.0904 0.0231  0.0080  -
0.0126 1 .
2785 C     C     . GLY GLY GLY A A 365 365 . 0.1237 0.1359 0.1191 0.0008  0.0068  -
0.0020 1 .
2786 O     O     . GLY GLY GLY A A 365 365 . 0.1153 0.1339 0.0841 0.0014  0.0173
0.0260  1 .
2787 N     N     . VAL VAL VAL A A 366 366 . 0.1133 0.1347 0.0947 0.0126  -0.0210 -
0.0060 1 .
2788 CA    CA    . VAL VAL VAL A A 366 366 . 0.1188 0.1185 0.0830 -0.0001 -0.0055 -
0.0010 1 .
2789 CB    CB    . VAL VAL VAL A A 366 366 . 0.1221 0.0876 0.0753 -0.0056 -0.0124
0.0007  1 .
2790 CG1   CG1   . VAL VAL VAL A A 366 366 . 0.1115 0.1153 0.0720 -0.0088 -0.0219 -
0.0141 1 .
2791 CG2   CG2   . VAL VAL VAL A A 366 366 . 0.1126 0.1054 0.1399 0.0007  0.0088
0.0221  1 .
2792 C     C     . VAL VAL VAL A A 366 366 . 0.0846 0.0939 0.0715 -0.0011 0.0015  -
0.0045 1 .
2793 O     O     . VAL VAL VAL A A 366 366 . 0.1242 0.1239 0.0761 0.0234  -0.0006
0.0073  1 .
2794 N     N     . MET MET MET A A 367 367 . 0.0879 0.1092 0.0757 0.0002  -0.0106
0.0036  1 .
2795 CA    CA    . MET MET MET A A 367 367 . 0.1030 0.0883 0.0723 -0.0078 -0.0221
0.0101  1 .
2796 CB    CB    . MET MET MET A A 367 367 . 0.1227 0.1001 0.0477 -0.0145 0.0086
0.0128  1 .
2797 CG    CG    . MET MET MET A A 367 367 . 0.0958 0.1104 0.1074 0.0139  -0.0125
0.0184  1 .
2798 SD    SD    . MET MET MET A A 367 367 . 0.1125 0.1206 0.1140 -0.0034 -0.0010
0.0069  1 .
2799 CE    CE    . MET MET MET A A 367 367 . 0.2196 0.1594 0.1922 -0.0523 0.0137  -
0.0572 1 .
2800 C     C     . MET MET MET A A 367 367 . 0.0890 0.0840 0.0674 0.0033  0.0081
0.0113  1 .
2801 O     O     . MET MET MET A A 367 367 . 0.1060 0.1040 0.0842 -0.0017 0.0024
0.0026  1 .
2802 N     N     . VAL VAL VAL A A 368 368 . 0.0929 0.0825 0.0846 -0.0097 -0.0096 -
0.0021 1 .
2803 CA    CA    . VAL VAL VAL A A 368 368 . 0.0996 0.1126 0.0648 -0.0145 -0.0121
0.0024  1 .
2804 CB    CB    . VAL VAL VAL A A 368 368 . 0.0897 0.1017 0.0619 0.0029  -0.0087
0.0135  1 .
2805 CG1   CG1   . VAL VAL VAL A A 368 368 . 0.0910 0.1355 0.0872 -0.0215 0.0084  -
0.0248 1 .
2806 CG2   CG2   . VAL VAL VAL A A 368 368 . 0.0725 0.1232 0.1247 -0.0125 0.0124
0.0460  1 .
2807 C     C     . VAL VAL VAL A A 368 368 . 0.1035 0.0890 0.0759 -0.0002 -0.0053 -
0.0008 1 .
2808 O     O     . VAL VAL VAL A A 368 368 . 0.1099 0.0850 0.1024 0.0056  0.0017
0.0022  1 .
2809 N     N     . SER SER SER A A 369 369 . 0.0810 0.1065 0.0694 -0.0118 0.0014  -
0.0074 1 .
2810 CA    CA    . SER SER SER A A 369 369 . 0.0948 0.1032 0.0967 0.0036  -0.0015
0.0142  1 .
2811 CB    CB    . SER SER SER A A 369 369 . 0.0674 0.1026 0.0930 -0.0074 0.0010  -
0.0044 1 .
2812 OG    OG    . SER SER SER A A 369 369 . 0.0961 0.1101 0.1036 -0.0024 -0.0002
0.0038  1 .
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2813 C     C     . SER SER SER A A 369 369 . 0.0905 0.0722 0.0916 0.0041  -0.0029 -
0.0076 1 .
2814 O     O     . SER SER SER A A 369 369 . 0.1166 0.0896 0.0887 -0.0035 0.0129
0.0092  1 .
2815 N     N     . HIS HIS HIS A A 370 370 . 0.0931 0.0988 0.0828 0.0033  0.0188  -
0.0090 1 .
2816 CA    CA    . HIS HIS HIS A A 370 370 . 0.0797 0.0818 0.0827 0.0131  -0.0059
0.0009  1 .
2817 CB    CB    . HIS HIS HIS A A 370 370 . 0.0829 0.0816 0.0845 0.0009  -0.0103
0.0242  1 .
2818 CG    CG    . HIS HIS HIS A A 370 370 . 0.1079 0.0854 0.0648 -0.0018 -0.0001
0.0154  1 .
2819 ND1   ND1   . HIS HIS HIS A A 370 370 . 0.0890 0.0820 0.0716 0.0022  0.0098
0.0090  1 .
2820 CE1   CE1   . HIS HIS HIS A A 370 370 . 0.0980 0.1180 0.0908 0.0127  -0.0011 -
0.0028 1 .
2821 NE2   NE2   . HIS HIS HIS A A 370 370 . 0.1242 0.0918 0.1053 -0.0029 -0.0101
0.0210  1 .
2822 CD2   CD2   . HIS HIS HIS A A 370 370 . 0.0639 0.0927 0.0952 0.0082  0.0149  -
0.0120 1 .
2823 C     C     . HIS HIS HIS A A 370 370 . 0.0572 0.0772 0.0809 -0.0134 0.0005
0.0011  1 .
2824 O     O     . HIS HIS HIS A A 370 370 . 0.0880 0.0969 0.0724 0.0048  0.0044  -
0.0019 1 .
2825 N     N     . ARG ARG ARG A A 371 371 . 0.0790 0.0949 0.0690 -0.0019 0.0228
0.0013  1 .
2826 CA    CA    . ARG ARG ARG A A 371 371 . 0.0682 0.0822 0.0697 0.0024  0.0123  -
0.0026 1 .
2827 CB    CB    . ARG ARG ARG A A 371 371 . 0.0805 0.0572 0.0758 -0.0106 0.0224
0.0113  1 .
2828 CG    CG    . ARG ARG ARG A A 371 371 . 0.0981 0.0652 0.0656 -0.0110 -0.0104
0.0180  1 .
2829 CD    CD    . ARG ARG ARG A A 371 371 . 0.0401 0.0866 0.0951 0.0152  -0.0270
0.0024  1 .
2830 NE    NE    . ARG ARG ARG A A 371 371 . 0.0810 0.0938 0.1013 0.0031  -0.0082
0.0171  1 .
2831 CZ    CZ    . ARG ARG ARG A A 371 371 . 0.0905 0.0860 0.0921 0.0078  0.0017  -
0.0062 1 .
2832 NH1   NH1   . ARG ARG ARG A A 371 371 . 0.1088 0.0915 0.0994 -0.0014 0.0014  -
0.0007 1 .
2833 NH2   NH2   . ARG ARG ARG A A 371 371 . 0.0910 0.1097 0.0902 -0.0038 0.0063
0.0187  1 .
2834 C     C     . ARG ARG ARG A A 371 371 . 0.0908 0.0808 0.0708 0.0020  0.0039  -
0.0081 1 .
2835 O     O     . ARG ARG ARG A A 371 371 . 0.0786 0.0939 0.0814 0.0069  -0.0107
0.0075  1 .
2836 N     N     . SER SER SER A A 372 372 . 0.0790 0.0669 0.0808 0.0107  0.0143
0.0078  1 .
2837 CA    CA    . SER SER SER A A 372 372 . 0.0831 0.0987 0.0823 -0.0091 0.0053
0.0180  1 .
2838 CB    CB    . SER SER SER A A 372 372 . 0.0857 0.0749 0.1236 0.0012  0.0106
0.0008  1 .
2839 OG    OG    . SER SER SER A A 372 372 . 0.0788 0.0753 0.0956 0.0039  0.0153  -
0.0071 1 .
2840 C     C     . SER SER SER A A 372 372 . 0.0646 0.0952 0.1012 0.0000  0.0034
0.0072  1 .
2841 O     O     . SER SER SER A A 372 372 . 0.1032 0.0803 0.0921 0.0041  0.0047
0.0220  1 .
2842 N     N     . GLY GLY GLY A A 373 373 . 0.0878 0.0798 0.0796 0.0146  -0.0030 -
0.0096 1 .
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2843 CA    CA    . GLY GLY GLY A A 373 373 . 0.0852 0.0921 0.0863 -0.0081 0.0046  -
0.0014 1 .
2844 C     C     . GLY GLY GLY A A 373 373 . 0.0921 0.0777 0.0882 0.0004  0.0079
0.0141  1 .
2845 O     O     . GLY GLY GLY A A 373 373 . 0.0995 0.0730 0.1237 0.0025  0.0144
0.0183  1 .
2846 N     N     . GLU GLU GLU A A 374 374 . 0.0784 0.0745 0.0879 0.0015  0.0054  -
0.0116 1 .
2847 CA    CA    . GLU GLU GLU A A 374 374 . 0.0655 0.0788 0.0894 0.0026  0.0124  -
0.0037 1 .
2848 CB    CB    . GLU GLU GLU A A 374 374 . 0.1336 0.0969 0.0766 -0.0093 0.0044  -
0.0182 1 .
2849 CG    CG    . GLU GLU GLU A A 374 374 . 0.0838 0.1138 0.0734 -0.0407 0.0162
0.0005  1 .
2850 CD    CD    . GLU GLU GLU A A 374 374 . 0.0963 0.0938 0.1157 0.0150  0.0064
0.0065  1 .
2851 OE1   OE1   . GLU GLU GLU A A 374 374 . 0.0993 0.1006 0.1014 -0.0027 0.0075
0.0215  1 .
2852 OE2   OE2   . GLU GLU GLU A A 374 374 . 0.1141 0.1043 0.0902 0.0092  0.0041
0.0001  1 .
2853 C     C     . GLU GLU GLU A A 374 374 . 0.0766 0.0982 0.0702 -0.0001 0.0035
0.0049  1 .
2854 O     O     . GLU GLU GLU A A 374 374 . 0.0903 0.1238 0.0961 0.0063  0.0029  -
0.0067 1 .
2855 N     N     . THR THR THR A A 375 375 . 0.0781 0.0690 0.0874 -0.0008 0.0059
0.0040  1 .
2856 CA    CA    . THR THR THR A A 375 375 . 0.0903 0.0926 0.0889 -0.0062 -0.0018
0.0044  1 .
2857 CB    CB    . THR THR THR A A 375 375 . 0.0821 0.1104 0.0891 -0.0048 0.0208  -
0.0050 1 .
2858 OG1   OG1   . THR THR THR A A 375 375 . 0.1178 0.0951 0.0996 -0.0046 0.0212  -
0.0084 1 .
2859 CG2   CG2   . THR THR THR A A 375 375 . 0.0960 0.0784 0.1402 -0.0088 0.0050  -
0.0226 1 .
2860 C     C     . THR THR THR A A 375 375 . 0.0971 0.0819 0.0854 -0.0075 0.0027
0.0053  1 .
2861 O     O     . THR THR THR A A 375 375 . 0.1087 0.0921 0.1116 0.0096  -0.0053 -
0.0036 1 .
2862 N     N     . GLU GLU GLU A A 376 376 . 0.0842 0.1053 0.1170 0.0086  -0.0063
0.0085  1 .
2863 CA    CA    . GLU GLU GLU A A 376 376 . 0.0900 0.1068 0.1020 0.0024  -0.0004
0.0111  1 .
2864 CB    CB    . GLU GLU GLU A A 376 376 . 0.1239 0.1176 0.0990 0.0268  -0.0185 -
0.0031 1 .
2865 CG    CG    . GLU GLU GLU A A 376 376 . 0.1181 0.1309 0.1355 0.0185  0.0026  -
0.0233 1 .
2866 CD    CD    . GLU GLU GLU A A 376 376 . 0.1390 0.1265 0.1072 0.0115  -0.0224
0.0025  1 .
2867 OE1   OE1   . GLU GLU GLU A A 376 376 . 0.1325 0.2112 0.1413 0.0149  -0.0032 -
0.0269 1 .
2868 OE2   OE2   . GLU GLU GLU A A 376 376 . 0.1323 0.1191 0.1112 -0.0078 0.0025
0.0044  1 .
2869 C     C     . GLU GLU GLU A A 376 376 . 0.0987 0.1092 0.1094 0.0039  0.0017
0.0015  1 .
2870 O     O     . GLU GLU GLU A A 376 376 . 0.1149 0.1216 0.1256 0.0037  0.0021
0.0046  1 .
2871 N     N     . ASP ASP ASP A A 377 377 . 0.0916 0.1060 0.0846 0.0028  -0.0083
0.0084  1 .
2872 CA    CA    . ASP ASP ASP A A 377 377 . 0.1035 0.1068 0.1029 0.0063  0.0007
0.0028  1 .
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2873 CB    CB    . ASP ASP ASP A A 377 377 . 0.1327 0.1245 0.1112 0.0062  0.0167
0.0136  1 .
2874 CG    CG    . ASP ASP ASP A A 377 377 . 0.1678 0.1562 0.1276 -0.0115 0.0068
0.0121  1 .
2875 OD1   OD1   . ASP ASP ASP A A 377 377 . 0.2236 0.1562 0.1720 0.0052  0.0380  -
0.0042 1 .
2876 OD2   OD2   . ASP ASP ASP A A 377 377 . 0.1665 0.1631 0.1781 -0.0241 0.0527  -
0.0378 1 .
2877 C     C     . ASP ASP ASP A A 377 377 . 0.0867 0.0988 0.1192 0.0050  -0.0033 -
0.0064 1 .
2878 O     O     . ASP ASP ASP A A 377 377 . 0.1232 0.1079 0.1168 -0.0145 0.0125  -
0.0110 1 .
2879 N     N     . THR THR THR A A 378 378 . 0.1131 0.0907 0.1014 -0.0033 0.0095  -
0.0143 1 .
2880 CA    CA    . THR THR THR A A 378 378 . 0.1224 0.0888 0.0909 -0.0044 0.0084  -
0.0001 1 .
2881 CB    CB    . THR THR THR A A 378 378 . 0.1131 0.1202 0.0884 -0.0072 0.0025
0.0027  1 .
2882 OG1   OG1   . THR THR THR A A 378 378 . 0.1235 0.1497 0.1354 -0.0039 -0.0056
0.0253  1 .
2883 CG2   CG2   . THR THR THR A A 378 378 . 0.1942 0.1422 0.1196 -0.0138 0.0191
0.0228  1 .
2884 C     C     . THR THR THR A A 378 378 . 0.1162 0.0911 0.0912 -0.0002 0.0017
0.0117  1 .
2885 O     O     . THR THR THR A A 378 378 . 0.1084 0.1085 0.0994 -0.0029 0.0003  -
0.0046 1 .
2886 N     N     . PHE PHE PHE A A 379 379 . 0.0956 0.0866 0.0926 -0.0189 0.0150
0.0084  1 .
2887 CA    CA    . PHE PHE PHE A A 379 379 . 0.0876 0.0773 0.0578 -0.0052 0.0076  -
0.0004 1 .
2888 CB    CB    . PHE PHE PHE A A 379 379 . 0.0967 0.0768 0.0729 -0.0109 0.0116
0.0029  1 .
2889 CG    CG    . PHE PHE PHE A A 379 379 . 0.1040 0.0892 0.0986 -0.0026 0.0052  -
0.0140 1 .
2890 CD1   CD1   . PHE PHE PHE A A 379 379 . 0.1093 0.0919 0.0918 0.0058  0.0077
0.0011  1 .
2891 CE1   CE1   . PHE PHE PHE A A 379 379 . 0.1335 0.1161 0.1071 -0.0114 -0.0089 -
0.0294 1 .
2892 CZ    CZ    . PHE PHE PHE A A 379 379 . 0.1469 0.1288 0.1113 0.0014  0.0329  -
0.0181 1 .
2893 CE2   CE2   . PHE PHE PHE A A 379 379 . 0.1205 0.1414 0.1654 0.0043  0.0398
0.0116  1 .
2894 CD2   CD2   . PHE PHE PHE A A 379 379 . 0.1082 0.1391 0.1780 -0.0028 0.0145
0.0307  1 .
2895 C     C     . PHE PHE PHE A A 379 379 . 0.0634 0.0986 0.0712 -0.0282 0.0200  -
0.0040 1 .
2896 O     O     . PHE PHE PHE A A 379 379 . 0.0863 0.0906 0.0851 -0.0144 0.0121  -
0.0107 1 .
2897 N     N     . ILE ILE ILE A A 380 380 . 0.0651 0.0845 0.0770 -0.0133 -0.0052
0.0004  1 .
2898 CA    CA    . ILE ILE ILE A A 380 380 . 0.0920 0.0870 0.0839 -0.0086 0.0054  -
0.0118 1 .
2899 CB    CB    . ILE ILE ILE A A 380 380 . 0.0769 0.0741 0.0887 -0.0031 -0.0052
0.0019  1 .
2900 CG1   CG1   . ILE ILE ILE A A 380 380 . 0.0702 0.0964 0.0889 -0.0078 -0.0141
0.0166  1 .
2901 CD    CD    . ILE ILE ILE A A 380 380 . 0.0734 0.1268 0.1397 -0.0274 0.0112
0.0242  1 .
2902 CG2   CG2   . ILE ILE ILE A A 380 380 . 0.1138 0.0772 0.0967 0.0451  0.0345
0.0132  1 .
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2903 C     C     . ILE ILE ILE A A 380 380 . 0.0718 0.0873 0.0780 0.0003  0.0134
0.0035  1 .
2904 O     O     . ILE ILE ILE A A 380 380 . 0.0861 0.0917 0.0830 0.0028  0.0109
0.0039  1 .
2905 N     N     . ALA ALA ALA A A 381 381 . 0.0778 0.0685 0.0665 0.0160  0.0099  -
0.0024 1 .
2906 CA    CA    . ALA ALA ALA A A 381 381 . 0.0799 0.0495 0.0647 -0.0013 0.0180
0.0043  1 .
2907 CB    CB    . ALA ALA ALA A A 381 381 . 0.0795 0.0651 0.0988 0.0291  -0.0199
0.0073  1 .
2908 C     C     . ALA ALA ALA A A 381 381 . 0.0838 0.0659 0.0943 0.0012  0.0055  -
0.0091 1 .
2909 O     O     . ALA ALA ALA A A 381 381 . 0.0926 0.1082 0.0771 -0.0054 0.0047  -
0.0080 1 .
2910 N     N     . ASP ASP ASP A A 382 382 . 0.0807 0.0719 0.0794 -0.0164 -0.0047 -
0.0084 1 .
2911 CA    CA    . ASP ASP ASP A A 382 382 . 0.0955 0.0965 0.1100 -0.0218 0.0000
0.0044  1 .
2912 CB    CB    . ASP ASP ASP A A 382 382 . 0.0867 0.1211 0.1119 0.0019  -0.0142
0.0005  1 .
2913 CG    CG    . ASP ASP ASP A A 382 382 . 0.1421 0.1514 0.1260 0.0093  0.0012
0.0375  1 .
2914 OD1   OD1   . ASP ASP ASP A A 382 382 . 0.1174 0.1568 0.1556 -0.0133 -0.0060
0.0387  1 .
2915 OD2   OD2   . ASP ASP ASP A A 382 382 . 0.1448 0.1668 0.1578 -0.0008 0.0434
0.0245  1 .
2916 C     C     . ASP ASP ASP A A 382 382 . 0.0812 0.1220 0.1088 -0.0048 0.0115
0.0082  1 .
2917 O     O     . ASP ASP ASP A A 382 382 . 0.0969 0.1324 0.1151 0.0035  0.0091
0.0015  1 .
2918 N     N     . LEU LEU LEU A A 383 383 . 0.0817 0.0819 0.0993 -0.0022 0.0066
0.0103  1 .
2919 CA    CA    . LEU LEU LEU A A 383 383 . 0.1037 0.0741 0.0798 0.0127  0.0066  -
0.0180 1 .
2920 CB    CB    . LEU LEU LEU A A 383 383 . 0.0811 0.0865 0.0912 0.0154  0.0222  -
0.0027 1 .
2921 CG    CG    . LEU LEU LEU A A 383 383 . 0.1115 0.0814 0.0971 0.0078  0.0308
0.0233  1 .
2922 CD1   CD1   . LEU LEU LEU A A 383 383 . 0.0957 0.0915 0.1136 -0.0104 0.0305  -
0.0154 1 .
2923 CD2   CD2   . LEU LEU LEU A A 383 383 . 0.1043 0.1037 0.1119 -0.0055 0.0179  -
0.0236 1 .
2924 C     C     . LEU LEU LEU A A 383 383 . 0.1009 0.0762 0.0675 -0.0224 0.0046  -
0.0039 1 .
2925 O     O     . LEU LEU LEU A A 383 383 . 0.1270 0.1099 0.0856 -0.0035 -0.0021
0.0031  1 .
2926 N     N     . VAL VAL VAL A A 384 384 . 0.0849 0.0870 0.0906 -0.0108 0.0055
0.0008  1 .
2927 CA    CA    . VAL VAL VAL A A 384 384 . 0.0941 0.0898 0.0832 -0.0172 0.0151  -
0.0063 1 .
2928 CB    CB    . VAL VAL VAL A A 384 384 . 0.0948 0.0827 0.0871 -0.0122 -0.0193
0.0174  1 .
2929 CG1   CG1   . VAL VAL VAL A A 384 384 . 0.1042 0.1084 0.0731 0.0067  -0.0021
0.0010  1 .
2930 CG2   CG2   . VAL VAL VAL A A 384 384 . 0.1138 0.1164 0.0814 -0.0082 0.0036
0.0030  1 .
2931 C     C     . VAL VAL VAL A A 384 384 . 0.0853 0.0997 0.0850 -0.0024 -0.0070
0.0064  1 .
2932 O     O     . VAL VAL VAL A A 384 384 . 0.0948 0.0984 0.0915 -0.0033 0.0072  -
0.0045 1 .
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2933 N     N     . VAL VAL VAL A A 385 385 . 0.0749 0.0997 0.0929 0.0037  0.0033  -
0.0111 1 .
2934 CA    CA    . VAL VAL VAL A A 385 385 . 0.0972 0.1090 0.0973 0.0118  0.0219
0.0161  1 .
2935 CB    CB    . VAL VAL VAL A A 385 385 . 0.0762 0.1095 0.0798 0.0113  0.0111
0.0069  1 .
2936 CG1   CG1   . VAL VAL VAL A A 385 385 . 0.1048 0.1365 0.1340 0.0143  0.0374
0.0071  1 .
2937 CG2   CG2   . VAL VAL VAL A A 385 385 . 0.1134 0.1183 0.1334 0.0038  0.0311
0.0254  1 .
2938 C     C     . VAL VAL VAL A A 385 385 . 0.0861 0.1161 0.0997 -0.0032 0.0156  -
0.0009 1 .
2939 O     O     . VAL VAL VAL A A 385 385 . 0.1061 0.1441 0.1117 -0.0003 0.0213
0.0043  1 .
2940 N     N     . GLY GLY GLY A A 386 386 . 0.1044 0.1088 0.1202 -0.0132 0.0294
0.0128  1 .
2941 CA    CA    . GLY GLY GLY A A 386 386 . 0.1001 0.1117 0.1218 -0.0013 0.0215
0.0253  1 .
2942 C     C     . GLY GLY GLY A A 386 386 . 0.1108 0.1168 0.0990 -0.0157 0.0155
0.0119  1 .
2943 O     O     . GLY GLY GLY A A 386 386 . 0.1424 0.1533 0.1208 -0.0291 0.0171
0.0343  1 .
2944 N     N     . LEU LEU LEU A A 387 387 . 0.1029 0.1180 0.1185 0.0055  -0.0027
0.0107  1 .
2945 CA    CA    . LEU LEU LEU A A 387 387 . 0.1079 0.1197 0.0889 0.0175  0.0100  -
0.0011 1 .
2946 CB    CB    . LEU LEU LEU A A 387 387 . 0.1298 0.1393 0.1038 0.0188  0.0189
0.0104  1 .
2947 CG    CG    . LEU LEU LEU A A 387 387 . 0.1374 0.1313 0.1408 -0.0180 0.0172  -
0.0192 1 .
2948 CD1   CD1   . LEU LEU LEU A A 387 387 . 0.1280 0.2057 0.1710 0.0384  -0.0022 -
0.0374 1 .
2949 CD2   CD2   . LEU LEU LEU A A 387 387 . 0.2734 0.1852 0.1784 -0.0261 0.0117
0.0009  1 .
2950 C     C     . LEU LEU LEU A A 387 387 . 0.1357 0.1290 0.0965 0.0021  0.0099
0.0060  1 .
2951 O     O     . LEU LEU LEU A A 387 387 . 0.1397 0.1585 0.1318 -0.0023 0.0150
0.0240  1 .
2952 N     N     . CYS CYS CYS A A 388 388 . 0.1254 0.1393 0.1229 -0.0129 0.0335  -
0.0100 1 .
2953 CA    CA    . CYS CYS CYS A A 388 388 . 0.1535 0.1387 0.1376 -0.0018 0.0135
0.0010  1 .
2954 CB    CB    . CYS CYS CYS A A 388 388 . 0.1428 0.1932 0.1582 0.0160  0.0197  -
0.0141 1 .
2955 SG    SG    . CYS CYS CYS A A 388 388 . 0.2491 0.3390 0.2641 -0.0002 0.0430
0.0011  1 .
2956 C     C     . CYS CYS CYS A A 388 388 . 0.1437 0.1618 0.1297 0.0012  0.0013
0.0024  1 .
2957 O     O     . CYS CYS CYS A A 388 388 . 0.1578 0.2168 0.1567 -0.0158 0.0064  -
0.0276 1 .
2958 N     N     . THR THR THR A A 389 389 . 0.1111 0.1013 0.1290 -0.0039 0.0019
0.0029  1 .
2959 CA    CA    . THR THR THR A A 389 389 . 0.1160 0.1345 0.1142 0.0009  0.0053
0.0045  1 .
2960 CB    CB    . THR THR THR A A 389 389 . 0.1347 0.1182 0.1284 -0.0043 0.0226
0.0190  1 .
2961 OG1   OG1   . THR THR THR A A 389 389 . 0.1354 0.1370 0.1097 0.0166  0.0006
0.0290  1 .
2962 CG2   CG2   . THR THR THR A A 389 389 . 0.1544 0.0966 0.1451 -0.0158 0.0161  -
0.0050 1 .
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2963 C     C     . THR THR THR A A 389 389 . 0.1161 0.1365 0.1125 0.0047  0.0108
0.0088  1 .
2964 O     O     . THR THR THR A A 389 389 . 0.1299 0.1781 0.1312 -0.0014 -0.0019 -
0.0124 1 .
2965 N     N     . GLY GLY GLY A A 390 390 . 0.1060 0.0977 0.0907 0.0032  0.0260
0.0010  1 .
2966 CA    CA    . GLY GLY GLY A A 390 390 . 0.1214 0.1085 0.1035 -0.0220 0.0166
0.0036  1 .
2967 C     C     . GLY GLY GLY A A 390 390 . 0.0971 0.0768 0.0902 0.0180  0.0001
0.0009  1 .
2968 O     O     . GLY GLY GLY A A 390 390 . 0.1228 0.1015 0.0885 -0.0109 -0.0072
0.0092  1 .
2969 N     N     . GLN GLN GLN A A 391 391 . 0.0868 0.1114 0.0688 0.0174  -0.0032
0.0033  1 .
2970 CA    CA    . GLN GLN GLN A A 391 391 . 0.0934 0.0985 0.0650 0.0098  0.0012  -
0.0049 1 .
2971 CB    CB    . GLN GLN GLN A A 391 391 . 0.1217 0.1148 0.1001 0.0116  0.0030
0.0303  1 .
2972 CG    CG    . GLN GLN GLN A A 391 391 . 0.0952 0.1251 0.1344 0.0294  -0.0036
0.0329  1 .
2973 CD    CD    . GLN GLN GLN A A 391 391 . 0.1008 0.1491 0.1159 0.0096  -0.0027
0.0258  1 .
2974 OE1   OE1   . GLN GLN GLN A A 391 391 . 0.1236 0.1663 0.1120 0.0255  -0.0230
0.0082  1 .
2975 NE2   NE2   . GLN GLN GLN A A 391 391 . 0.1279 0.1516 0.0841 0.0053  -0.0013
0.0243  1 .
2976 C     C     . GLN GLN GLN A A 391 391 . 0.1026 0.0704 0.0839 0.0060  0.0028  -
0.0109 1 .
2977 O     O     . GLN GLN GLN A A 391 391 . 0.0979 0.0849 0.0857 -0.0051 0.0076
0.0017  1 .
2978 N     N     . ILE ILE ILE A A 392 392 . 0.0809 0.0869 0.0685 -0.0011 -0.0007
0.0003  1 .
2979 CA    CA    . ILE ILE ILE A A 392 392 . 0.0741 0.0776 0.0630 -0.0084 -0.0109 -
0.0008 1 .
2980 CB    CB    . ILE ILE ILE A A 392 392 . 0.0804 0.0754 0.0857 -0.0039 0.0172  -
0.0083 1 .
2981 CG1   CG1   . ILE ILE ILE A A 392 392 . 0.0927 0.0846 0.0755 0.0027  -0.0049 -
0.0173 1 .
2982 CD    CD    . ILE ILE ILE A A 392 392 . 0.0863 0.1476 0.1014 -0.0170 -0.0091
0.0147  1 .
2983 CG2   CG2   . ILE ILE ILE A A 392 392 . 0.0983 0.0807 0.1132 0.0018  0.0166
0.0210  1 .
2984 C     C     . ILE ILE ILE A A 392 392 . 0.0810 0.0797 0.0779 0.0162  0.0016
0.0085  1 .
2985 O     O     . ILE ILE ILE A A 392 392 . 0.1014 0.0864 0.1140 -0.0017 -0.0022 -
0.0111 1 .
2986 N     N     . LYS LYS LYS A A 393 393 . 0.0737 0.0897 0.0670 0.0067  -0.0015 -
0.0008 1 .
2987 CA    CA    . LYS LYS LYS A A 393 393 . 0.0651 0.0809 0.0741 -0.0089 -0.0013 -
0.0033 1 .
2988 CB    CB    . LYS LYS LYS A A 393 393 . 0.0669 0.0794 0.0999 0.0042  -0.0066 -
0.0059 1 .
2989 CG    CG    . LYS LYS LYS A A 393 393 . 0.0586 0.1039 0.1142 0.0096  -0.0108 -
0.0045 1 .
2990 CD    CD    . LYS LYS LYS A A 393 393 . 0.0741 0.0973 0.1165 -0.0058 -0.0044 -
0.0158 1 .
2991 CE    CE    . LYS LYS LYS A A 393 393 . 0.0534 0.1302 0.1635 0.0137  -0.0021 -
0.0101 1 .
2992 NZ    NZ    . LYS LYS LYS A A 393 393 . 0.0838 0.1285 0.1165 -0.0109 0.0034
0.0130  1 .
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2993 C     C     . LYS LYS LYS A A 393 393 . 0.0749 0.0719 0.0629 -0.0079 0.0067
0.0016  1 .
2994 O     O     . LYS LYS LYS A A 393 393 . 0.0885 0.0750 0.0703 0.0096  -0.0020 -
0.0072 1 .
2995 N     N     . THR THR THR A A 394 394 . 0.0746 0.0808 0.0632 -0.0056 -0.0143
0.0039  1 .
2996 CA    CA    . THR THR THR A A 394 394 . 0.0745 0.0943 0.0650 -0.0086 0.0087
0.0030  1 .
2997 CB    CB    . THR THR THR A A 394 394 . 0.0615 0.1155 0.0615 0.0070  0.0124  -
0.0104 1 .
2998 OG1   OG1   . THR THR THR A A 394 394 . 0.0909 0.0899 0.0854 -0.0099 -0.0055 -
0.0036 1 .
2999 CG2   CG2   . THR THR THR A A 394 394 . 0.0835 0.1037 0.1394 0.0106  -0.0075 -
0.0031 1 .
3000 C     C     . THR THR THR A A 394 394 . 0.0730 0.0616 0.0701 -0.0045 -0.0026
0.0023  1 .
3001 O     O     . THR THR THR A A 394 394 . 0.0875 0.0962 0.0835 -0.0210 -0.0102
0.0101  1 .
3002 N     N     . GLY GLY GLY A A 395 395 . 0.0666 0.0739 0.0712 0.0009  0.0136
0.0051  1 .
3003 CA    CA    . GLY GLY GLY A A 395 395 . 0.1000 0.0796 0.0638 -0.0090 0.0003
0.0062  1 .
3004 C     C     . GLY GLY GLY A A 395 395 . 0.0747 0.0808 0.0751 0.0135  -0.0048
0.0026  1 .
3005 O     O     . GLY GLY GLY A A 395 395 . 0.0925 0.0768 0.0764 0.0111  0.0026  -
0.0051 1 .
3006 N     N     . ALA ALA ALA A A 396 396 . 0.0832 0.0643 0.0744 -0.0027 -0.0028
0.0061  1 .
3007 CA    CA    . ALA ALA ALA A A 396 396 . 0.0690 0.0706 0.0929 0.0056  -0.0072
0.0213  1 .
3008 CB    CB    . ALA ALA ALA A A 396 396 . 0.0750 0.1085 0.0990 -0.0153 0.0008
0.0150  1 .
3009 C     C     . ALA ALA ALA A A 396 396 . 0.0820 0.0670 0.0828 0.0056  -0.0171
0.0032  1 .
3010 O     O     . ALA ALA ALA A A 396 396 . 0.0979 0.0844 0.0836 -0.0096 0.0008
0.0125  1 .
3011 N     N     . PRO PRO PRO A A 397 397 . 0.0825 0.0712 0.0702 0.0097  -0.0116 -
0.0038 1 .
3012 CA    CA    . PRO PRO PRO A A 397 397 . 0.0903 0.0947 0.0817 0.0098  -0.0073 -
0.0056 1 .
3013 CB    CB    . PRO PRO PRO A A 397 397 . 0.0732 0.0785 0.0803 -0.0053 0.0161  -
0.0049 1 .
3014 CG    CG    . PRO PRO PRO A A 397 397 . 0.0837 0.1019 0.1138 -0.0034 0.0035
0.0195  1 .
3015 CD    CD    . PRO PRO PRO A A 397 397 . 0.0796 0.0735 0.1007 -0.0167 -0.0117 -
0.0098 1 .
3016 C     C     . PRO PRO PRO A A 397 397 . 0.0845 0.0909 0.0882 0.0008  -0.0019
0.0076  1 .
3017 O     O     . PRO PRO PRO A A 397 397 . 0.1115 0.0925 0.0991 0.0074  -0.0094
0.0084  1 .
3018 N     N     . CYS CYS CYS A A 398 398 . 0.0794 0.0788 0.0647 -0.0005 0.0013
0.0040  1 .
3019 CA    CA    . CYS CYS CYS A A 398 398 . 0.1014 0.0950 0.0839 0.0004  0.0310  -
0.0121 1 .
3020 CB    CB    . CYS CYS CYS A A 398 398 . 0.1114 0.0958 0.0889 -0.0209 0.0119  -
0.0212 1 .
3021 SG    SG    . CYS CYS CYS A A 398 398 . 0.1153 0.1114 0.0939 -0.0115 -0.0006
0.0066  1 .
3022 C     C     . CYS CYS CYS A A 398 398 . 0.0776 0.0698 0.0816 0.0090  -0.0037
0.0009  1 .
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3023 O    O    . CYS CYS CYS A A 398 398 . 0.0940 0.0859 0.1015 0.0047  -0.0045
0.0030  1 .
3024 N    N    . ARG ARG ARG A A 399 399 . 0.0745 0.0669 0.0676 -0.0062 0.0006  -
0.0184 1 .
3025 CA   CA   . ARG ARG ARG A A 399 399 . 0.0619 0.0761 0.0845 0.0052  0.0038  -
0.0060 1 .
3026 CB   CB   . ARG ARG ARG A A 399 399 . 0.0776 0.0778 0.0967 0.0145  0.0156  -
0.0147 1 .
3027 CG   CG   . ARG ARG ARG A A 399 399 . 0.0521 0.0773 0.0813 0.0007  -0.0072
0.0182  1 .
3028 CD   CD   . ARG ARG ARG A A 399 399 . 0.0730 0.0681 0.1173 0.0154  -0.0211 -
0.0210 1 .
3029 NE   NE   . ARG ARG ARG A A 399 399 . 0.0800 0.0686 0.0845 0.0145  0.0026  -
0.0046 1 .
3030 CZ   CZ   . ARG ARG ARG A A 399 399 . 0.0750 0.0839 0.0933 0.0048  0.0118
0.0003  1 .
3031 NH1  NH1  . ARG ARG ARG A A 399 399 . 0.0958 0.0806 0.0880 -0.0063 -0.0062
0.0093  1 .
3032 NH2  NH2  . ARG ARG ARG A A 399 399 . 0.0943 0.0938 0.0891 -0.0103 -0.0031
0.0057  1 .
3033 C    C    . ARG ARG ARG A A 399 399 . 0.0692 0.0810 0.0807 -0.0114 -0.0016
0.0087  1 .
3034 O    O    . ARG ARG ARG A A 399 399 . 0.0847 0.0663 0.0722 -0.0033 0.0015  -
0.0007 1 .
3035 N    N    . SER SER SER A A 400 400 . 0.0806 0.0680 0.0746 0.0018  0.0000
0.0026  1 .
3036 CA   CA   . SER SER SER A A 400 400 . 0.0654 0.0725 0.0535 -0.0018 0.0077
0.0052  1 .
3037 CB   CB   . SER SER SER A A 400 400 . 0.0818 0.0633 0.0766 0.0121  -0.0109
0.0182  1 .
3038 OG   OG   . SER SER SER A A 400 400 . 0.1051 0.0744 0.0852 0.0087  0.0063
0.0068  1 .
3039 C    C    . SER SER SER A A 400 400 . 0.0682 0.0718 0.0676 0.0198  0.0056  -
0.0011 1 .
3040 O    O    . SER SER SER A A 400 400 . 0.0882 0.0732 0.0822 -0.0039 0.0017  -
0.0038 1 .
3041 N    N    . GLU GLU GLU A A 401 401 . 0.0585 0.0582 0.0837 0.0112  0.0073
0.0060  1 .
3042 CA   CA   . GLU GLU GLU A A 401 401 . 0.0723 0.0693 0.0703 0.0211  0.0134
0.0000  1 .
3043 CB   CB   . GLU GLU GLU A A 401 401 . 0.0535 0.0830 0.0920 0.0229  0.0064
0.0002  1 .
3044 CG   CG   . GLU GLU GLU A A 401 401 . 0.0792 0.0749 0.0819 -0.0208 0.0183
0.0148  1 .
3045 CD   CD   . GLU GLU GLU A A 401 401 . 0.0771 0.0750 0.0725 0.0204  0.0006  -
0.0101 1 .
3046 OE1  OE1  . GLU GLU GLU A A 401 401 . 0.0822 0.0778 0.0604 -0.0069 -0.0010 -
0.0016 1 .
3047 OE2  OE2  . GLU GLU GLU A A 401 401 . 0.0821 0.1010 0.0831 -0.0014 0.0073
0.0126  1 .
3048 C    C    . GLU GLU GLU A A 401 401 . 0.0559 0.0894 0.0749 -0.0093 -0.0046
0.0012  1 .
3049 O    O    . GLU GLU GLU A A 401 401 . 0.0807 0.0735 0.0821 -0.0036 -0.0016 -
0.0041 1 .
3050 N    N    . ARG ARG ARG A A 402 402 . 0.0793 0.0698 0.0734 -0.0010 -0.0055 -
0.0138 1 .
3051 CA   CA   . ARG ARG ARG A A 402 402 . 0.0605 0.0790 0.0756 -0.0053 -0.0039 -
0.0031 1 .
3052 CB   CB   . ARG ARG ARG A A 402 402 . 0.0695 0.0628 0.1003 -0.0121 0.0044  -
0.0022 1 .
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3053 CG    CG    . ARG ARG ARG A A 402 402 . 0.1090 0.0743 0.0875 0.0208  0.0250
0.0112  1 .
3054 CD    CD    . ARG ARG ARG A A 402 402 . 0.0853 0.0629 0.0755 0.0361  0.0311
0.0015  1 .
3055 NE    NE    . ARG ARG ARG A A 402 402 . 0.0755 0.0800 0.0840 0.0052  0.0133  -
0.0153 1 .
3056 CZ    CZ    . ARG ARG ARG A A 402 402 . 0.0829 0.0633 0.0431 0.0207  0.0009  -
0.0052 1 .
3057 NH1   NH1   . ARG ARG ARG A A 402 402 . 0.0933 0.0721 0.0771 -0.0024 0.0073
0.0276  1 .
3058 NH2   NH2   . ARG ARG ARG A A 402 402 . 0.1017 0.0945 0.0739 -0.0048 0.0239  -
0.0113 1 .
3059 C     C     . ARG ARG ARG A A 402 402 . 0.0751 0.0715 0.0755 0.0131  0.0067
0.0117  1 .
3060 O     O     . ARG ARG ARG A A 402 402 . 0.0751 0.0841 0.0720 0.0146  0.0038  -
0.0015 1 .
3061 N     N     . LEU LEU LEU A A 403 403 . 0.0790 0.0852 0.0748 0.0046  -0.0004
0.0135  1 .
3062 CA    CA    . LEU LEU LEU A A 403 403 . 0.0783 0.0789 0.0869 0.0065  0.0086
0.0168  1 .
3063 CB    CB    . LEU LEU LEU A A 403 403 . 0.0838 0.0997 0.0916 -0.0038 -0.0079
0.0217  1 .
3064 CG    CG    . LEU LEU LEU A A 403 403 . 0.0852 0.0734 0.0562 -0.0199 0.0033  -
0.0176 1 .
3065 CD1   CD1   . LEU LEU LEU A A 403 403 . 0.1255 0.0878 0.0906 -0.0104 0.0103
0.0098  1 .
3066 CD2   CD2   . LEU LEU LEU A A 403 403 . 0.0734 0.0921 0.1066 0.0053  -0.0018
0.0056  1 .
3067 C     C     . LEU LEU LEU A A 403 403 . 0.0827 0.0708 0.0818 -0.0038 0.0012
0.0061  1 .
3068 O     O     . LEU LEU LEU A A 403 403 . 0.1006 0.0933 0.0796 0.0142  0.0136
0.0014  1 .
3069 N     N     . ALA ALA ALA A A 404 404 . 0.0730 0.0749 0.0707 -0.0103 -0.0006
0.0069  1 .
3070 CA    CA    . ALA ALA ALA A A 404 404 . 0.0793 0.0850 0.0675 -0.0104 0.0063
0.0034  1 .
3071 CB    CB    . ALA ALA ALA A A 404 404 . 0.1015 0.0968 0.0961 -0.0154 -0.0025 -
0.0020 1 .
3072 C     C     . ALA ALA ALA A A 404 404 . 0.0780 0.0829 0.0714 -0.0034 -0.0044
0.0021  1 .
3073 O     O     . ALA ALA ALA A A 404 404 . 0.0914 0.1070 0.0647 -0.0067 0.0078
0.0022  1 .
3074 N     N     . LYS LYS LYS A A 405 405 . 0.0723 0.0824 0.0632 -0.0138 -0.0187
0.0012  1 .
3075 CA    CA    . LYS LYS LYS A A 405 405 . 0.0788 0.0906 0.0800 0.0073  0.0146
0.0188  1 .
3076 CB    CB    . LYS LYS LYS A A 405 405 . 0.0607 0.0971 0.0969 -0.0071 0.0025
0.0069  1 .
3077 CG    CG    . LYS LYS LYS A A 405 405 . 0.0739 0.0880 0.0718 0.0076  0.0044  -
0.0129 1 .
3078 CD    CD    . LYS LYS LYS A A 405 405 . 0.0908 0.0801 0.0702 0.0142  -0.0055 -
0.0078 1 .
3079 CE    CE    . LYS LYS LYS A A 405 405 . 0.0996 0.0899 0.0524 0.0160  0.0007  -
0.0198 1 .
3080 NZ    NZ    . LYS LYS LYS A A 405 405 . 0.0832 0.0998 0.0512 0.0009  0.0066  -
0.0156 1 .
3081 C     C     . LYS LYS LYS A A 405 405 . 0.0729 0.0809 0.0830 -0.0041 0.0131
0.0062  1 .
3082 O     O     . LYS LYS LYS A A 405 405 . 0.0876 0.0776 0.0818 -0.0036 0.0067
0.0044  1 .
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3083 N     N     . TYR TYR TYR A A 406 406 . 0.1045 0.0578 0.0821 0.0005  0.0039
0.0111  1 .
3084 CA    CA    . TYR TYR TYR A A 406 406 . 0.0820 0.0755 0.0658 -0.0025 0.0126  -
0.0003 1 .
3085 CB    CB    . TYR TYR TYR A A 406 406 . 0.0871 0.0830 0.0923 -0.0088 -0.0058
0.0044  1 .
3086 CG    CG    . TYR TYR TYR A A 406 406 . 0.0831 0.0650 0.0761 0.0211  -0.0056
0.0057  1 .
3087 CD1   CD1   . TYR TYR TYR A A 406 406 . 0.0892 0.0603 0.0857 0.0015  -0.0153 -
0.0093 1 .
3088 CE1   CE1   . TYR TYR TYR A A 406 406 . 0.0639 0.0792 0.0842 0.0132  0.0069  -
0.0089 1 .
3089 CZ    CZ    . TYR TYR TYR A A 406 406 . 0.0764 0.0849 0.0784 0.0072  -0.0048 -
0.0041 1 .
3090 OH    OH    . TYR TYR TYR A A 406 406 . 0.0854 0.0900 0.0776 -0.0026 -0.0095 -
0.0034 1 .
3091 CE2   CE2   . TYR TYR TYR A A 406 406 . 0.0902 0.0739 0.0944 0.0025  -0.0042
0.0019  1 .
3092 CD2   CD2   . TYR TYR TYR A A 406 406 . 0.0658 0.0598 0.0797 0.0070  -0.0120
0.0097  1 .
3093 C     C     . TYR TYR TYR A A 406 406 . 0.0747 0.0783 0.0701 -0.0158 0.0036  -
0.0023 1 .
3094 O     O     . TYR TYR TYR A A 406 406 . 0.0857 0.0958 0.1025 -0.0056 0.0062
0.0002  1 .
3095 N     N     . ASN ASN ASN A A 407 407 . 0.0893 0.0706 0.0641 0.0059  -0.0142 -
0.0042 1 .
3096 CA    CA    . ASN ASN ASN A A 407 407 . 0.0832 0.1131 0.0732 -0.0036 0.0038
0.0159  1 .
3097 CB    CB    . ASN ASN ASN A A 407 407 . 0.1076 0.0841 0.0757 -0.0019 0.0013
0.0140  1 .
3098 CG    CG    . ASN ASN ASN A A 407 407 . 0.0626 0.0737 0.0799 -0.0176 0.0035  -
0.0026 1 .
3099 OD1   OD1   . ASN ASN ASN A A 407 407 . 0.0905 0.0867 0.0802 -0.0188 -0.0015
0.0128  1 .
3100 ND2   ND2   . ASN ASN ASN A A 407 407 . 0.0756 0.1019 0.0781 0.0195  0.0101  -
0.0019 1 .
3101 C     C     . ASN ASN ASN A A 407 407 . 0.0920 0.0916 0.0778 -0.0012 0.0103
0.0136  1 .
3102 O     O     . ASN ASN ASN A A 407 407 . 0.0854 0.1063 0.0825 0.0081  0.0192
0.0019  1 .
3103 N     N     . GLN GLN GLN A A 408 408 . 0.0821 0.0938 0.0834 -0.0036 0.0105  -
0.0059 1 .
3104 CA    CA    . GLN GLN GLN A A 408 408 . 0.0702 0.0849 0.0703 0.0042  0.0200
0.0023  1 .
3105 CB    CB    . GLN GLN GLN A A 408 408 . 0.0935 0.0728 0.0802 0.0019  0.0242
0.0063  1 .
3106 CG    CG    . GLN GLN GLN A A 408 408 . 0.0726 0.0620 0.0821 -0.0171 -0.0024
0.0032  1 .
3107 CD    CD    . GLN GLN GLN A A 408 408 . 0.1306 0.1520 0.1685 -0.0140 -0.0107
0.0084  1 .
3108 OE1   OE1   . GLN GLN GLN A A 408 408 . 0.1344 0.1811 0.1811 -0.0183 -0.0119
0.0334  1 .
3109 NE2   NE2   . GLN GLN GLN A A 408 408 . 0.1966 0.1780 0.2223 -0.0441 -0.0211
0.0501  1 .
3110 C     C     . GLN GLN GLN A A 408 408 . 0.0752 0.0777 0.0767 0.0017  0.0109  -
0.0002 1 .
3111 O     O     . GLN GLN GLN A A 408 408 . 0.0717 0.0947 0.0911 -0.0075 0.0118
0.0020  1 .
3112 N     N     . LEU LEU LEU A A 409 409 . 0.0894 0.0772 0.0663 0.0016  -0.0060 -
0.0116 1 .
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3113 CA    CA    . LEU LEU LEU A A 409 409 . 0.0601 0.0938 0.0837 0.0120  0.0013  -
0.0045 1 .
3114 CB    CB    . LEU LEU LEU A A 409 409 . 0.0689 0.0998 0.0779 0.0018  -0.0191 -
0.0106 1 .
3115 CG    CG    . LEU LEU LEU A A 409 409 . 0.0822 0.0771 0.0958 -0.0181 -0.0066
0.0030  1 .
3116 CD1   CD1   . LEU LEU LEU A A 409 409 . 0.0980 0.1239 0.1065 -0.0028 -0.0154
0.0217  1 .
3117 CD2   CD2   . LEU LEU LEU A A 409 409 . 0.0890 0.0909 0.0904 0.0032  0.0011  -
0.0090 1 .
3118 C     C     . LEU LEU LEU A A 409 409 . 0.0760 0.0954 0.0807 0.0015  -0.0030 -
0.0047 1 .
3119 O     O     . LEU LEU LEU A A 409 409 . 0.0777 0.1067 0.0873 0.0029  0.0119
0.0087  1 .
3120 N     N     . MET MET MET A A 410 410 . 0.0781 0.0916 0.1203 0.0201  -0.0043
0.0023  1 .
3121 CA    CA    . MET MET MET A A 410 410 . 0.0953 0.0766 0.0934 0.0141  0.0013  -
0.0050 1 .
3122 CB    CB    . MET MET MET A A 410 410 . 0.0981 0.0955 0.1161 -0.0054 -0.0058
0.0164  1 .
3123 CG    CG    . MET MET MET A A 410 410 . 0.1383 0.1237 0.1330 -0.0190 -0.0191
0.0552  1 .
3124 SD    SD    . MET MET MET A A 410 410 . 0.1564 0.1409 0.1597 -0.0001 -0.0086
0.0098  1 .
3125 CE    CE    . MET MET MET A A 410 410 . 0.1166 0.1255 0.0637 -0.0113 0.0180  -
0.0087 1 .
3126 C     C     . MET MET MET A A 410 410 . 0.0924 0.1090 0.0963 0.0019  0.0049  -
0.0081 1 .
3127 O     O     . MET MET MET A A 410 410 . 0.1137 0.1386 0.1152 -0.0005 0.0255  -
0.0001 1 .
3128 N     N     . ARG ARG ARG A A 411 411 . 0.0840 0.0934 0.0824 -0.0063 -0.0118 -
0.0006 1 .
3129 CA    CA    . ARG ARG ARG A A 411 411 . 0.0964 0.1094 0.0801 -0.0074 0.0015  -
0.0059 1 .
3130 CB    CB    . ARG ARG ARG A A 411 411 . 0.1023 0.1177 0.1079 -0.0201 -0.0027 -
0.0026 1 .
3131 CG    CG    . ARG ARG ARG A A 411 411 . 0.1478 0.1049 0.0986 0.0001  -0.0087
0.0092  1 .
3132 CD    CD    . ARG ARG ARG A A 411 411 . 0.1358 0.1454 0.0841 -0.0335 -0.0231
0.0224  1 .
3133 NE    NE    . ARG ARG ARG A A 411 411 . 0.0883 0.1473 0.1296 -0.0004 0.0179  -
0.0081 1 .
3134 CZ    CZ    . ARG ARG ARG A A 411 411 . 0.0781 0.1100 0.1047 0.0149  0.0092
0.0071  1 .
3135 NH1   NH1   . ARG ARG ARG A A 411 411 . 0.1130 0.1231 0.1319 0.0130  -0.0146
0.0196  1 .
3136 NH2   NH2   . ARG ARG ARG A A 411 411 . 0.1476 0.1411 0.1556 -0.0184 0.0071
0.0243  1 .
3137 C     C     . ARG ARG ARG A A 411 411 . 0.1143 0.1426 0.0920 0.0073  0.0041  -
0.0149 1 .
3138 O     O     . ARG ARG ARG A A 411 411 . 0.1088 0.1895 0.1140 0.0126  0.0319
0.0018  1 .
3139 N     N     . ILE ILE ILE A A 412 412 . 0.1117 0.1006 0.0935 0.0021  0.0019
0.0049  1 .
3140 CA    CA    . ILE ILE ILE A A 412 412 . 0.1004 0.1146 0.0866 0.0046  0.0035  -
0.0051 1 .
3141 CB    CB    . ILE ILE ILE A A 412 412 . 0.1235 0.1260 0.0827 0.0153  0.0150
0.0083  1 .
3142 CG1   CG1   . ILE ILE ILE A A 412 412 . 0.0952 0.0956 0.0936 -0.0045 0.0159
0.0028  1 .
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3143 CD    CD    . ILE ILE ILE A A 412 412 . 0.0823 0.1293 0.1478 -0.0111 0.0059  -
0.0176 1 .
3144 CG2   CG2   . ILE ILE ILE A A 412 412 . 0.1481 0.1739 0.0961 -0.0351 0.0145
0.0270  1 .
3145 C     C     . ILE ILE ILE A A 412 412 . 0.1014 0.1160 0.0939 0.0038  0.0233  -
0.0007 1 .
3146 O     O     . ILE ILE ILE A A 412 412 . 0.1129 0.1622 0.1289 -0.0020 0.0400
0.0052  1 .
3147 N     N     . GLU GLU GLU A A 413 413 . 0.1286 0.1192 0.0890 -0.0056 0.0070  -
0.0138 1 .
3148 CA    CA    . GLU GLU GLU A A 413 413 . 0.1144 0.1001 0.0946 0.0033  0.0036  -
0.0225 1 .
3149 CB    CB    . GLU GLU GLU A A 413 413 . 0.1072 0.1032 0.1062 0.0052  0.0045  -
0.0300 1 .
3150 CG    CG    . GLU GLU GLU A A 413 413 . 0.0953 0.1453 0.1175 -0.0179 0.0237  -
0.0355 1 .
3151 CD    CD    . GLU GLU GLU A A 413 413 . 0.0881 0.1404 0.1140 -0.0025 0.0190
0.0091  1 .
3152 OE1   OE1   . GLU GLU GLU A A 413 413 . 0.1398 0.1222 0.1889 0.0131  0.0306
0.0221  1 .
3153 OE2   OE2   . GLU GLU GLU A A 413 413 . 0.1406 0.1719 0.1435 -0.0128 0.0063  -
0.0321 1 .
3154 C     C     . GLU GLU GLU A A 413 413 . 0.1236 0.1589 0.1133 0.0231  0.0130  -
0.0037 1 .
3155 O     O     . GLU GLU GLU A A 413 413 . 0.1174 0.1854 0.1050 0.0165  0.0033
0.0021  1 .
3156 N     N     . GLU GLU GLU A A 414 414 . 0.0980 0.1744 0.1151 0.0456  -0.0022
0.0175  1 .
3157 CA    CA    . GLU GLU GLU A A 414 414 . 0.1438 0.2268 0.1434 0.0415  0.0058
0.0106  1 .
3158 CB    CB    . GLU GLU GLU A A 414 414 . 0.1546 0.2690 0.1398 0.0701  -0.0297
0.0099  1 .
3159 CG    CG    . GLU GLU GLU A A 414 414 . 0.1708 0.3765 0.1928 0.0512  -0.0323
0.0295  1 .
3160 CD    CD    . GLU GLU GLU A A 414 414 . 0.2419 0.3510 0.2143 0.0363  -0.0076
0.0153  1 .
3161 OE1   OE1   . GLU GLU GLU A A 414 414 . 0.3930 0.2977 0.2946 0.0288  0.0226
0.0095  1 .
3162 OE2   OE2   . GLU GLU GLU A A 414 414 . 0.3902 0.4501 0.3286 0.0580  -0.0932
0.0174  1 .
3163 C     C     . GLU GLU GLU A A 414 414 . 0.1490 0.2166 0.1345 0.0361  -0.0050
0.0095  1 .
3164 O     O     . GLU GLU GLU A A 414 414 . 0.1687 0.2829 0.1318 0.0478  0.0095  -
0.0142 1 .
3165 N     N     . GLU GLU GLU A A 415 415 . 0.1554 0.2163 0.1553 -0.0032 -0.0039 -
0.0051 1 .
3166 CA    CA    . GLU GLU GLU A A 415 415 . 0.1887 0.2434 0.1836 -0.0237 0.0352  -
0.0102 1 .
3167 CB    CB    . GLU GLU GLU A A 415 415 . 0.2264 0.2652 0.1804 -0.0407 0.0447  -
0.0224 1 .
3168 CG    CG    . GLU GLU GLU A A 415 415 . 0.3535 0.3178 0.3627 -0.0618 0.0543  -
0.0188 1 .
3169 CD    CD    . GLU GLU GLU A A 415 415 . 0.4266 0.4188 0.4927 -0.0274 0.0550  -
0.0305 1 .
3170 OE1   OE1   . GLU GLU GLU A A 415 415 . 0.4374 0.5221 0.5657 -0.0305 0.0311
0.0033  1 .
3171 OE2   OE2   . GLU GLU GLU A A 415 415 . 0.3769 0.3320 0.4487 0.0439  0.0087
0.0019  1 .
3172 C     C     . GLU GLU GLU A A 415 415 . 0.1866 0.2892 0.1813 -0.0257 0.0330  -
0.0157 1 .
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3173 O     O     . GLU GLU GLU A A 415 415 . 0.1650 0.3351 0.2149 -0.0084 0.0475  -
0.0547 1 .
3174 N     N     . LEU LEU LEU A A 416 416 . 0.1871 0.2702 0.1335 -0.0239 0.0247  -
0.0135 1 .
3175 CA    CA    . LEU LEU LEU A A 416 416 . 0.1950 0.2253 0.1470 -0.0178 0.0237  -
0.0082 1 .
3176 CB    CB    . LEU LEU LEU A A 416 416 . 0.1880 0.1961 0.1409 -0.0192 0.0227
0.0122  1 .
3177 CG    CG    . LEU LEU LEU A A 416 416 . 0.1742 0.1816 0.1648 -0.0180 0.0215
0.0052  1 .
3178 CD1   CD1   . LEU LEU LEU A A 416 416 . 0.2306 0.1866 0.1846 0.0982  -0.0025
0.0637  1 .
3179 CD2   CD2   . LEU LEU LEU A A 416 416 . 0.3188 0.2341 0.2712 -0.0429 0.0933
0.0156  1 .
3180 C     C     . LEU LEU LEU A A 416 416 . 0.2009 0.2629 0.1908 -0.0004 0.0286  -
0.0054 1 .
3181 O     O     . LEU LEU LEU A A 416 416 . 0.1992 0.3050 0.1734 -0.0100 0.0338  -
0.0179 1 .
3182 N     N     . GLY GLY GLY A A 417 417 . 0.2220 0.2730 0.2034 0.0157  0.0434  -
0.0244 1 .
3183 CA    CA    . GLY GLY GLY A A 417 417 . 0.2753 0.2999 0.2372 0.0358  0.0132  -
0.0272 1 .
3184 C     C     . GLY GLY GLY A A 417 417 . 0.2710 0.3207 0.2508 0.0183  0.0234  -
0.0241 1 .
3185 O     O     . GLY GLY GLY A A 417 417 . 0.2512 0.3098 0.2513 0.0481  0.0335  -
0.0384 1 .
3186 N     N     . ASP ASP ASP A A 418 418 . 0.2876 0.3536 0.2876 0.0415  0.0327  -
0.0315 1 .
3187 CA    CA    . ASP ASP ASP A A 418 418 . 0.3119 0.3761 0.3115 0.0250  0.0389  -
0.0238 1 .
3188 CB    CB    . ASP ASP ASP A A 418 418 . 0.3169 0.4054 0.3159 0.0349  0.0526  -
0.0313 1 .
3189 CG    CG    . ASP ASP ASP A A 418 418 . 0.4120 0.4465 0.4437 0.0391  0.0613  -
0.0278 1 .
3190 OD1   OD1   . ASP ASP ASP A A 418 418 . 0.4843 0.5533 0.5573 0.0873  0.1202  -
0.0835 1 .
3191 OD2   OD2   . ASP ASP ASP A A 418 418 . 0.5104 0.4481 0.5180 0.0139  0.0697  -
0.0283 1 .
3192 C     C     . ASP ASP ASP A A 418 418 . 0.2665 0.3816 0.3016 0.0126  0.0262  -
0.0198 1 .
3193 O     O     . ASP ASP ASP A A 418 418 . 0.3113 0.4168 0.3025 0.0029  0.0244  -
0.0184 1 .
3194 N     N     . GLU GLU GLU A A 419 419 . 0.2687 0.3784 0.2765 0.0115  0.0328  -
0.0020 1 .
3195 CA    CA    . GLU GLU GLU A A 419 419 . 0.2858 0.3732 0.2961 0.0080  0.0378
0.0107  1 .
3196 CB    CB    . GLU GLU GLU A A 419 419 . 0.3015 0.3889 0.3339 -0.0110 0.0531
0.0182  1 .
3197 CG    CG    . GLU GLU GLU A A 419 419 . 0.4627 0.4588 0.4545 -0.0051 0.0234
0.0217  1 .
3198 CD    CD    . GLU GLU GLU A A 419 419 . 0.5332 0.5186 0.5517 -0.0375 0.0464  -
0.0362 1 .
3199 OE1   OE1   . GLU GLU GLU A A 419 419 . 0.5791 0.4509 0.5172 -0.0867 0.1301  -
0.0461 1 .
3200 OE2   OE2   . GLU GLU GLU A A 419 419 . 0.5507 0.6137 0.6456 0.0107  0.0342  -
0.0018 1 .
3201 C     C     . GLU GLU GLU A A 419 419 . 0.2648 0.3514 0.2800 -0.0019 0.0199
0.0290  1 .
3202 O     O     . GLU GLU GLU A A 419 419 . 0.2729 0.3791 0.2979 0.0074  0.0391
0.0517  1 .
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3203 N     N     . ALA ALA ALA A A 420 420 . 0.2314 0.3126 0.2319 -0.0036 0.0032
0.0136  1 .
3204 CA    CA    . ALA ALA ALA A A 420 420 . 0.2173 0.2720 0.1971 -0.0163 -0.0144 -
0.0012 1 .
3205 CB    CB    . ALA ALA ALA A A 420 420 . 0.2342 0.2548 0.2053 -0.0078 0.0219
0.0018  1 .
3206 C     C     . ALA ALA ALA A A 420 420 . 0.2133 0.2561 0.2109 0.0038  -0.0096 -
0.0302 1 .
3207 O     O     . ALA ALA ALA A A 420 420 . 0.2265 0.2858 0.2361 -0.0035 -0.0329 -
0.0377 1 .
3208 N     N     . ARG ARG ARG A A 421 421 . 0.1835 0.2532 0.1639 0.0044  0.0118  -
0.0159 1 .
3209 CA    CA    . ARG ARG ARG A A 421 421 . 0.1579 0.2483 0.1874 -0.0167 0.0291  -
0.0161 1 .
3210 CB    CB    . ARG ARG ARG A A 421 421 . 0.1974 0.3163 0.1984 0.0051  0.0563  -
0.0020 1 .
3211 CG    CG    . ARG ARG ARG A A 421 421 . 0.2447 0.3880 0.2505 -0.0087 0.0689
0.0085  1 .
3212 CD    CD    . ARG ARG ARG A A 421 421 . 0.4589 0.4010 0.4675 0.0063  -0.0061 -
0.0458 1 .
3213 NE    NE    . ARG ARG ARG A A 421 421 . 0.5764 0.5922 0.5970 -0.0125 -0.0278 -
0.0474 1 .
3214 CZ    CZ    . ARG ARG ARG A A 421 421 . 0.6421 0.6130 0.6512 -0.0211 -0.0391 -
0.0316 1 .
3215 NH1   NH1   . ARG ARG ARG A A 421 421 . 0.7075 0.6481 0.6659 -0.0013 -0.0039
0.0011  1 .
3216 NH2   NH2   . ARG ARG ARG A A 421 421 . 0.6385 0.6527 0.6173 -0.0082 -0.0720 -
0.0344 1 .
3217 C     C     . ARG ARG ARG A A 421 421 . 0.1749 0.2310 0.1954 -0.0038 0.0363  -
0.0252 1 .
3218 O     O     . ARG ARG ARG A A 421 421 . 0.1951 0.2628 0.2465 -0.0294 0.0765  -
0.0578 1 .
3219 N     N     . PHE PHE PHE A A 422 422 . 0.1499 0.1708 0.1302 0.0020  0.0161  -
0.0075 1 .
3220 CA    CA    . PHE PHE PHE A A 422 422 . 0.1173 0.1594 0.1253 0.0190  0.0055
0.0102  1 .
3221 CB    CB    . PHE PHE PHE A A 422 422 . 0.1018 0.1457 0.1433 0.0012  0.0292  -
0.0196 1 .
3222 CG    CG    . PHE PHE PHE A A 422 422 . 0.1252 0.1303 0.1094 0.0047  0.0211
0.0094  1 .
3223 CD1   CD1   . PHE PHE PHE A A 422 422 . 0.0858 0.1320 0.0980 0.0112  -0.0081 -
0.0096 1 .
3224 CE1   CE1   . PHE PHE PHE A A 422 422 . 0.1063 0.1323 0.0895 0.0027  0.0323  -
0.0189 1 .
3225 CZ    CZ    . PHE PHE PHE A A 422 422 . 0.1500 0.1328 0.0876 0.0000  -0.0196
0.0180  1 .
3226 CE2   CE2   . PHE PHE PHE A A 422 422 . 0.1223 0.1055 0.1259 0.0163  0.0054
0.0139  1 .
3227 CD2   CD2   . PHE PHE PHE A A 422 422 . 0.1475 0.1469 0.1011 0.0170  -0.0117
0.0036  1 .
3228 C     C     . PHE PHE PHE A A 422 422 . 0.1125 0.1513 0.1373 0.0127  -0.0120 -
0.0178 1 .
3229 O     O     . PHE PHE PHE A A 422 422 . 0.1588 0.2073 0.1235 0.0209  -0.0117 -
0.0158 1 .
3230 N     N     . ALA ALA ALA A A 423 423 . 0.1160 0.1211 0.1160 0.0082  -0.0085 -
0.0003 1 .
3231 CA    CA    . ALA ALA ALA A A 423 423 . 0.1374 0.1138 0.1153 0.0072  -0.0165
0.0025  1 .
3232 CB    CB    . ALA ALA ALA A A 423 423 . 0.1343 0.1302 0.1104 0.0175  -0.0109 -
0.0247 1 .
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3233 C     C     . ALA ALA ALA A A 423 423 . 0.1154 0.1293 0.1155 -0.0075 -0.0225
0.0117  1 .
3234 O     O     . ALA ALA ALA A A 423 423 . 0.1485 0.1685 0.1011 -0.0103 -0.0074
0.0172  1 .
3235 N     N     . GLY GLY GLY A A 424 424 . 0.1171 0.1124 0.0862 -0.0080 -0.0015 -
0.0090 1 .
3236 CA    CA    . GLY GLY GLY A A 424 424 . 0.1147 0.1322 0.0977 -0.0219 -0.0097
0.0025  1 .
3237 C     C     . GLY GLY GLY A A 424 424 . 0.1143 0.1314 0.1181 -0.0162 -0.0096 -
0.0071 1 .
3238 O     O     . GLY GLY GLY A A 424 424 . 0.1309 0.1312 0.1298 -0.0050 -0.0041 -
0.0038 1 .
3239 N     N     . HIS HIS HIS A A 425 425 . 0.1431 0.1355 0.0942 0.0029  -0.0235 -
0.0196 1 .
3240 CA    CA    . HIS HIS HIS A A 425 425 . 0.1243 0.1208 0.1242 -0.0053 -0.0136 -
0.0172 1 .
3241 CB    CB    . HIS HIS HIS A A 425 425 . 0.1730 0.1379 0.0831 -0.0101 -0.0092 -
0.0317 1 .
3242 CG    CG    . HIS HIS HIS A A 425 425 . 0.1466 0.1103 0.1288 0.0192  -0.0348 -
0.0495 1 .
3243 ND1   ND1   . HIS HIS HIS A A 425 425 . 0.2319 0.1540 0.1887 0.0051  0.0128  -
0.0020 1 .
3244 CE1   CE1   . HIS HIS HIS A A 425 425 . 0.2606 0.1346 0.1108 -0.0089 -0.0281 -
0.0458 1 .
3245 NE2   NE2   . HIS HIS HIS A A 425 425 . 0.2602 0.1686 0.1567 -0.0048 -0.0206 -
0.0269 1 .
3246 CD2   CD2   . HIS HIS HIS A A 425 425 . 0.2312 0.1873 0.1576 0.0069  -0.0387 -
0.0352 1 .
3247 C     C     . HIS HIS HIS A A 425 425 . 0.1010 0.1154 0.0981 0.0007  -0.0006 -
0.0085 1 .
3248 O     O     . HIS HIS HIS A A 425 425 . 0.1558 0.1379 0.1399 0.0136  -0.0082
0.0188  1 .
3249 N     N     . ASN ASN ASN A A 426 426 . 0.1401 0.1208 0.1050 -0.0165 0.0053  -
0.0050 1 .
3250 CA    CA    . ASN ASN ASN A A 426 426 . 0.1404 0.1291 0.1466 0.0092  0.0005
0.0073  1 .
3251 CB    CB    . ASN ASN ASN A A 426 426 . 0.1681 0.1570 0.1341 0.0108  0.0054  -
0.0226 1 .
3252 CG    CG    . ASN ASN ASN A A 426 426 . 0.1924 0.1936 0.1615 0.0089  -0.0128 -
0.0101 1 .
3253 OD1   OD1   . ASN ASN ASN A A 426 426 . 0.2724 0.2296 0.1813 -0.0277 -0.0322
0.0445  1 .
3254 ND2   ND2   . ASN ASN ASN A A 426 426 . 0.1679 0.1689 0.1340 -0.0053 0.0228  -
0.0282 1 .
3255 C     C     . ASN ASN ASN A A 426 426 . 0.1778 0.1648 0.1544 -0.0265 0.0119  -
0.0189 1 .
3256 O     O     . ASN ASN ASN A A 426 426 . 0.2191 0.1735 0.1743 -0.0281 0.0344  -
0.0106 1 .
3257 N     N     . PHE PHE PHE A A 427 427 . 0.1551 0.1497 0.1347 -0.0267 0.0130  -
0.0212 1 .
3258 CA    CA    . PHE PHE PHE A A 427 427 . 0.1878 0.1485 0.1318 -0.0180 0.0154  -
0.0260 1 .
3259 CB    CB    . PHE PHE PHE A A 427 427 . 0.1601 0.1746 0.1232 -0.0397 0.0109  -
0.0265 1 .
3260 CG    CG    . PHE PHE PHE A A 427 427 . 0.1290 0.1249 0.1245 0.0156  -0.0216
0.0079  1 .
3261 CD1   CD1   . PHE PHE PHE A A 427 427 . 0.1519 0.1306 0.1180 0.0056  0.0026  -
0.0028 1 .
3262 CE1   CE1   . PHE PHE PHE A A 427 427 . 0.1626 0.1667 0.1787 0.0175  0.0211  -
0.0013 1 .
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3263 CZ    CZ    . PHE PHE PHE A A 427 427 . 0.1524 0.1547 0.1621 -0.0133 0.0323
0.0031  1 .
3264 CE2   CE2   . PHE PHE PHE A A 427 427 . 0.1993 0.2001 0.1930 -0.0057 0.0027  -
0.0001 1 .
3265 CD2   CD2   . PHE PHE PHE A A 427 427 . 0.1828 0.1819 0.2155 -0.0026 -0.0208 -
0.0120 1 .
3266 C     C     . PHE PHE PHE A A 427 427 . 0.1694 0.1428 0.1603 -0.0204 0.0015  -
0.0231 1 .
3267 O     O     . PHE PHE PHE A A 427 427 . 0.2034 0.1484 0.1507 -0.0024 0.0018  -
0.0396 1 .
3268 N     N     . ARG ARG ARG A A 428 428 . 0.1696 0.1637 0.1529 0.0179  0.0094  -
0.0117 1 .
3269 CA    CA    . ARG ARG ARG A A 428 428 . 0.1919 0.1775 0.2009 0.0067  0.0042  -
0.0146 1 .
3270 CB    CB    . ARG ARG ARG A A 428 428 . 0.1986 0.1855 0.1956 0.0147  -0.0099 -
0.0202 1 .
3271 CG    CG    . ARG ARG ARG A A 428 428 . 0.1987 0.1797 0.1922 0.0075  -0.0070
0.0000  1 .
3272 CD    CD    . ARG ARG ARG A A 428 428 . 0.1877 0.2553 0.2189 0.0524  0.0000  -
0.0074 1 .
3273 NE    NE    . ARG ARG ARG A A 428 428 . 0.2191 0.2713 0.1924 0.0372  0.0101  -
0.0147 1 .
3274 CZ    CZ    . ARG ARG ARG A A 428 428 . 0.2610 0.2817 0.2814 0.0450  -0.0044 -
0.0533 1 .
3275 NH1   NH1   . ARG ARG ARG A A 428 428 . 0.2148 0.3577 0.2552 0.0108  -0.0318 -
0.0992 1 .
3276 NH2   NH2   . ARG ARG ARG A A 428 428 . 0.2942 0.3469 0.2044 0.0814  -0.0022 -
0.0388 1 .
3277 C     C     . ARG ARG ARG A A 428 428 . 0.2508 0.2035 0.2352 -0.0060 0.0116  -
0.0036 1 .
3278 O     O     . ARG ARG ARG A A 428 428 . 0.2850 0.2000 0.2717 0.0144  0.0213
0.0094  1 .
3279 N     N     . ASN ASN ASN A A 429 429 . 0.2254 0.2232 0.2173 -0.0313 0.0155  -
0.0050 1 .
3280 CA    CA    . ASN ASN ASN A A 429 429 . 0.3031 0.2690 0.2265 -0.0381 0.0212
0.0104  1 .
3281 CB    CB    . ASN ASN ASN A A 429 429 . 0.3142 0.3337 0.2931 -0.0368 -0.0039
0.0191  1 .
3282 CG    CG    . ASN ASN ASN A A 429 429 . 0.4258 0.3899 0.3725 -0.0237 0.0002
0.0231  1 .
3283 OD1   OD1   . ASN ASN ASN A A 429 429 . 0.4774 0.3113 0.3989 0.0359  -0.0793 -
0.0030 1 .
3284 ND2   ND2   . ASN ASN ASN A A 429 429 . 0.4620 0.4900 0.4265 -0.0091 -0.0180 -
0.0479 1 .
3285 C     C     . ASN ASN ASN A A 429 429 . 0.2606 0.2401 0.2161 -0.0487 0.0258
0.0008  1 .
3286 O     O     . ASN ASN ASN A A 429 429 . 0.3194 0.2670 0.2128 -0.0607 0.0165  -
0.0006 1 .
3287 N     N     . PRO PRO PRO A A 430 430 . 0.2729 0.2222 0.1933 -0.0432 0.0306  -
0.0156 1 .
3288 CA    CA    . PRO PRO PRO A A 430 430 . 0.2625 0.2310 0.1934 -0.0411 0.0314  -
0.0273 1 .
3289 CB    CB    . PRO PRO PRO A A 430 430 . 0.2527 0.2599 0.2333 -0.0464 0.0119  -
0.0172 1 .
3290 CG    CG    . PRO PRO PRO A A 430 430 . 0.2917 0.2143 0.2143 -0.0370 0.0317  -
0.0161 1 .
3291 CD    CD    . PRO PRO PRO A A 430 430 . 0.2809 0.2268 0.1900 -0.0323 0.0511  -
0.0263 1 .
3292 C     C     . PRO PRO PRO A A 430 430 . 0.2779 0.2737 0.2354 -0.0356 0.0151  -
0.0415 1 .
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3293 O     O     . PRO PRO PRO A A 430 430 . 0.2929 0.3016 0.2338 -0.0436 0.0261  -
0.0568 1 .
3294 N     N     . SER SER SER A A 431 431 . 0.3204 0.2939 0.2202 -0.0518 0.0312  -
0.0271 1 .
3295 CA    CA    . SER SER SER A A 431 431 . 0.3448 0.3482 0.3095 -0.0526 0.0255  -
0.0059 1 .
3296 CB    CB    . SER SER SER A A 431 431 . 0.3709 0.3599 0.3271 -0.0509 0.0079
0.0001  1 .
3297 OG    OG    . SER SER SER A A 431 431 . 0.4069 0.4351 0.3331 -0.0350 0.0327
0.0765  1 .
3298 C     C     . SER SER SER A A 431 431 . 0.3450 0.3642 0.3160 -0.0547 0.0291  -
0.0221 1 .
3299 O     O     . SER SER SER A A 431 431 . 0.3593 0.4235 0.3240 -0.0645 0.0350  -
0.0158 1 .
3300 N     N     . VAL VAL VAL A A 432 432 . 0.3463 0.3713 0.3135 -0.0459 0.0230  -
0.0285 1 .
3301 CA    CA    . VAL VAL VAL A A 432 432 . 0.3523 0.3866 0.3148 -0.0363 0.0208  -
0.0399 1 .
3302 CB    CB    . VAL VAL VAL A A 432 432 . 0.3610 0.3729 0.3108 -0.0411 0.0193  -
0.0437 1 .
3303 CG1   CG1   . VAL VAL VAL A A 432 432 . 0.3407 0.4145 0.2981 -0.0504 -0.0147 -
0.0650 1 .
3304 CG2   CG2   . VAL VAL VAL A A 432 432 . 0.3802 0.3896 0.3170 -0.0358 0.0348  -
0.0707 1 .
3305 C     C     . VAL VAL VAL A A 432 432 . 0.3643 0.3993 0.3449 -0.0295 0.0281  -
0.0273 1 .
3306 O     O     . VAL VAL VAL A A 432 432 . 0.3337 0.4209 0.3081 -0.0466 0.0567  -
0.0160 1 .
3307 N     N     . LEU LEU LEU A A 433 433 . 0.3825 0.4392 0.3762 -0.0385 0.0245  -
0.0179 1 .
3308 CA    CA    . LEU LEU LEU A A 433 433 . 0.4259 0.4559 0.4313 -0.0301 0.0255  -
0.0209 1 .
3309 CB    CB    . LEU LEU LEU A A 433 433 . 0.4297 0.4529 0.4225 -0.0454 0.0309  -
0.0203 1 .
3310 CG    CG    . LEU LEU LEU A A 433 433 . 0.4090 0.4046 0.3695 -0.0543 0.0571  -
0.0510 1 .
3311 CD1   CD1   . LEU LEU LEU A A 433 433 . 0.4380 0.3674 0.3688 -0.0833 0.0519  -
0.0184 1 .
3312 CD2   CD2   . LEU LEU LEU A A 433 433 . 0.4350 0.3756 0.4007 -0.0789 0.0406  -
0.0564 1 .
3313 C     C     . LEU LEU LEU A A 433 433 . 0.4607 0.4960 0.4897 -0.0252 0.0229  -
0.0220 1 .
3314 O     O     . LEU LEU LEU A A 433 433 . 0.4896 0.5008 0.5149 -0.0258 0.0286  -
0.0425 1 .
3315 MG+2  MG+2  . MG2 MG2 MG2 A . 440 440 . 0.1034 0.0892 0.0882 0.0090  -0.0063
0.0054  1 .
3316 MG+2  MG+2  . MG2 MG2 MG2 A . 441 441 . 0.0915 0.1023 0.1062 0.0034  -0.0069
0.0010  1 .
3317 O4P   O4P   . 2PG 2PG 2PG A . 442 442 . 0.0807 0.0708 0.0942 -0.0104 -0.0266
0.0226  1 .
3318 P     P     . 2PG 2PG 2PG A . 442 442 . 0.0877 0.0952 0.0936 0.0054  -0.0063
0.0069  1 .
3319 O2P   O2P   . 2PG 2PG 2PG A . 442 442 . 0.0956 0.0949 0.0781 -0.0113 -0.0038
0.0014  1 .
3320 O3P   O3P   . 2PG 2PG 2PG A . 442 442 . 0.1055 0.0878 0.1083 0.0086  0.0074
0.0236  1 .
3321 O1P   O1P   . 2PG 2PG 2PG A . 442 442 . 0.1040 0.0953 0.0896 -0.0019 -0.0024
0.0101  1 .
3322 C2    C2    . 2PG 2PG 2PG A . 442 442 . 0.1177 0.1258 0.0718 0.0290  -0.0018 -
0.0272 1 .
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3323 C1    C1    . 2PG 2PG 2PG A . 442 442 . 0.0823 0.0919 0.1131 -0.0153 0.0114  -
0.0161 1 .
3324 O2    O2    . 2PG 2PG 2PG A . 442 442 . 0.0901 0.0857 0.1043 -0.0004 -0.0080 -
0.0022 1 .
3325 O1    O1    . 2PG 2PG 2PG A . 442 442 . 0.0827 0.0912 0.1106 0.0048  -0.0089
0.0197  1 .
3326 C3    C3    . 2PG 2PG 2PG A . 442 442 . 0.1021 0.1052 0.1300 0.0207  -0.0138
0.0107  1 .
3327 O3    O3    . 2PG 2PG 2PG A . 442 442 . 0.1407 0.1442 0.1676 0.0035  -0.0224
0.0429  1 .
3328 O     O     . HOH HOH HOH A . 446 446 . 0.0851 0.0986 0.0975 -0.0072 -0.0098
0.0033  1 .
3329 O     O     . HOH HOH HOH A . 447 447 . 0.1024 0.0995 0.1081 0.0045  -0.0040 -
0.0063 1 .
3330 O     O     . HOH HOH HOH A . 448 448 . 0.0905 0.1354 0.1047 -0.0078 -0.0073
0.0030  1 .
3331 N     N     . SER SER SER B B 1   1   . 0.2414 0.3021 0.3155 -0.0108 0.0182
0.0135  1 .
3332 CA    CA    . SER SER SER B B 1   1   . 0.2087 0.2852 0.2938 -0.0101 -0.0225
0.0042  1 .
3333 CB    CB    . SER SER SER B B 1   1   . 0.2416 0.2850 0.2956 -0.0130 -0.0051
0.0041  1 .
3334 OG    OG    . SER SER SER B B 1   1   . 0.2389 0.3634 0.3424 -0.0275 0.0033  -
0.0255 1 .
3335 C     C     . SER SER SER B B 1   1   . 0.2160 0.2566 0.2682 -0.0128 -0.0226
0.0219  1 .
3336 O     O     . SER SER SER B B 1   1   . 0.2063 0.2585 0.3034 -0.0141 -0.0319
0.0463  1 .
3337 N     N     . ILE ILE ILE B B 2   2   . 0.1708 0.2353 0.2218 0.0023  -0.0275
0.0146  1 .
3338 CA    CA    . ILE ILE ILE B B 2   2   . 0.1479 0.2060 0.2094 0.0167  -0.0267
0.0174  1 .
3339 CB    CB    . ILE ILE ILE B B 2   2   . 0.1633 0.2046 0.2100 0.0222  -0.0202
0.0263  1 .
3340 CG1   CG1   . ILE ILE ILE B B 2   2   . 0.1922 0.1279 0.1957 0.0605  -0.0117 -
0.0086 1 .
3341 CD    CD    . ILE ILE ILE B B 2   2   . 0.2424 0.2195 0.1797 0.0477  0.0585
0.0053  1 .
3342 CG2   CG2   . ILE ILE ILE B B 2   2   . 0.1388 0.1870 0.2179 0.0361  -0.0211 -
0.0234 1 .
3343 C     C     . ILE ILE ILE B B 2   2   . 0.1721 0.2126 0.2236 0.0071  0.0005
0.0184  1 .
3344 O     O     . ILE ILE ILE B B 2   2   . 0.1593 0.2015 0.2129 0.0432  -0.0170 -
0.0036 1 .
3345 N     N     . GLN GLN GLN B B 3   3   . 0.1423 0.2084 0.1921 -0.0001 0.0102
0.0178  1 .
3346 CA    CA    . GLN GLN GLN B B 3   3   . 0.1595 0.2289 0.2151 0.0008  0.0173
0.0100  1 .
3347 CB    CB    . GLN GLN GLN B B 3   3   . 0.1791 0.2309 0.2413 -0.0049 0.0067
0.0142  1 .
3348 CG    CG    . GLN GLN GLN B B 3   3   . 0.2521 0.2678 0.2988 -0.0362 0.0333
0.0346  1 .
3349 CD    CD    . GLN GLN GLN B B 3   3   . 0.4005 0.3393 0.3829 -0.0099 0.0321
0.0434  1 .
3350 OE1   OE1   . GLN GLN GLN B B 3   3   . 0.4691 0.3492 0.4635 0.0131  0.0091
0.0561  1 .
3351 NE2   NE2   . GLN GLN GLN B B 3   3   . 0.4581 0.3799 0.4607 -0.0265 0.0643  -
0.0234 1 .
3352 C     C     . GLN GLN GLN B B 3   3   . 0.1425 0.2033 0.1807 0.0178  0.0231  -
0.0007 1 .
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3353 O     O     . GLN GLN GLN B B 3   3   . 0.1975 0.2607 0.2025 0.0044  0.0274  -
0.0113 1 .
3354 N     N     . LYS LYS LYS B B 4   4   . 0.1192 0.2083 0.1874 0.0246  0.0248
0.0106  1 .
3355 CA    CA    . LYS LYS LYS B B 4   4   . 0.1408 0.1911 0.1747 0.0174  0.0241
0.0095  1 .
3356 CB    CB    . LYS LYS LYS B B 4   4   . 0.1741 0.2174 0.1669 0.0010  0.0101
0.0095  1 .
3357 CG    CG    . LYS LYS LYS B B 4   4   . 0.2269 0.2850 0.2293 0.0117  -0.0254
0.0097  1 .
3358 CD    CD    . LYS LYS LYS B B 4   4   . 0.3289 0.3075 0.2254 -0.0207 -0.0711
0.0268  1 .
3359 CE    CE    . LYS LYS LYS B B 4   4   . 0.3956 0.3767 0.4084 -0.0643 -0.0179 -
0.0579 1 .
3360 NZ    NZ    . LYS LYS LYS B B 4   4   . 0.5024 0.4242 0.5006 -0.0305 0.0321  -
0.0745 1 .
3361 C     C     . LYS LYS LYS B B 4   4   . 0.1131 0.1634 0.1729 0.0111  0.0120
0.0052  1 .
3362 O     O     . LYS LYS LYS B B 4   4   . 0.1340 0.1803 0.1782 -0.0100 0.0056
0.0170  1 .
3363 N     N     . ILE ILE ILE B B 5   5   . 0.1360 0.1806 0.1788 -0.0167 0.0330  -
0.0051 1 .
3364 CA    CA    . ILE ILE ILE B B 5   5   . 0.1352 0.1863 0.2086 -0.0009 0.0223
0.0022  1 .
3365 CB    CB    . ILE ILE ILE B B 5   5   . 0.1403 0.1611 0.1963 0.0017  0.0423  -
0.0006 1 .
3366 CG1   CG1   . ILE ILE ILE B B 5   5   . 0.2031 0.2363 0.1600 0.0119  0.0173
0.0120  1 .
3367 CD    CD    . ILE ILE ILE B B 5   5   . 0.2329 0.2270 0.1695 0.0066  0.0501
0.0547  1 .
3368 CG2   CG2   . ILE ILE ILE B B 5   5   . 0.1538 0.1552 0.2296 -0.0236 0.0527  -
0.0102 1 .
3369 C     C     . ILE ILE ILE B B 5   5   . 0.1703 0.2063 0.2143 0.0198  0.0161  -
0.0207 1 .
3370 O     O     . ILE ILE ILE B B 5   5   . 0.1503 0.2198 0.2608 0.0232  0.0208  -
0.0322 1 .
3371 N     N     . TRP TRP TRP B B 6   6   . 0.1227 0.1716 0.1817 0.0106  0.0060
0.0080  1 .
3372 CA    CA    . TRP TRP TRP B B 6   6   . 0.0957 0.1249 0.1362 0.0122  0.0126
0.0079  1 .
3373 CB    CB    . TRP TRP TRP B B 6   6   . 0.1599 0.1732 0.1770 0.0217  0.0104
0.0195  1 .
3374 CG    CG    . TRP TRP TRP B B 6   6   . 0.1501 0.1691 0.1560 0.0136  0.0293
0.0281  1 .
3375 CD1   CD1   . TRP TRP TRP B B 6   6   . 0.2170 0.2126 0.1939 0.0279  0.0000
0.0616  1 .
3376 NE1   NE1   . TRP TRP TRP B B 6   6   . 0.2048 0.2472 0.1930 -0.0130 0.0053
0.0351  1 .
3377 CE2   CE2   . TRP TRP TRP B B 6   6   . 0.2171 0.2523 0.1484 -0.0147 0.0584
0.0178  1 .
3378 CD2   CD2   . TRP TRP TRP B B 6   6   . 0.1984 0.2370 0.1570 0.0107  0.0229
0.0066  1 .
3379 CE3   CE3   . TRP TRP TRP B B 6   6   . 0.2220 0.1888 0.1162 0.0239  0.0617
0.0181  1 .
3380 CZ3   CZ3   . TRP TRP TRP B B 6   6   . 0.2703 0.1853 0.1962 0.0044  0.0178  -
0.0065 1 .
3381 CH2   CH2   . TRP TRP TRP B B 6   6   . 0.3081 0.2792 0.1729 0.0285  0.0250
0.0252  1 .
3382 CZ2   CZ2   . TRP TRP TRP B B 6   6   . 0.2486 0.2584 0.1777 -0.0090 0.0405
0.0391  1 .
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3383 C     C     . TRP TRP TRP B B 6   6   . 0.1139 0.1210 0.1291 0.0074  0.0179  -
0.0027 1 .
3384 O     O     . TRP TRP TRP B B 6   6   . 0.1376 0.1243 0.1646 -0.0275 0.0159  -
0.0108 1 .
3385 N     N     . ALA ALA ALA B B 7   7   . 0.0936 0.1154 0.1103 -0.0053 0.0004
0.0079  1 .
3386 CA    CA    . ALA ALA ALA B B 7   7   . 0.0898 0.1162 0.1116 -0.0012 0.0051
0.0176  1 .
3387 CB    CB    . ALA ALA ALA B B 7   7   . 0.1349 0.1339 0.0926 0.0098  -0.0075
0.0208  1 .
3388 C     C     . ALA ALA ALA B B 7   7   . 0.1134 0.1211 0.0873 -0.0060 0.0045  -
0.0044 1 .
3389 O     O     . ALA ALA ALA B B 7   7   . 0.1023 0.1514 0.1099 0.0119  0.0112  -
0.0095 1 .
3390 N     N     . ARG ARG ARG B B 8   8   . 0.1086 0.1385 0.1234 0.0116  -0.0084
0.0140  1 .
3391 CA    CA    . ARG ARG ARG B B 8   8   . 0.1045 0.1284 0.0913 -0.0103 0.0066  -
0.0012 1 .
3392 CB    CB    . ARG ARG ARG B B 8   8   . 0.1021 0.1167 0.1029 0.0014  0.0200
0.0032  1 .
3393 CG    CG    . ARG ARG ARG B B 8   8   . 0.0994 0.1356 0.1252 0.0217  0.0163  -
0.0093 1 .
3394 CD    CD    . ARG ARG ARG B B 8   8   . 0.1361 0.1334 0.1878 -0.0244 0.0127
0.0408  1 .
3395 NE    NE    . ARG ARG ARG B B 8   8   . 0.1471 0.1668 0.1471 0.0180  0.0104
0.0334  1 .
3396 CZ    CZ    . ARG ARG ARG B B 8   8   . 0.1537 0.1555 0.1983 0.0103  0.0286
0.0249  1 .
3397 NH1   NH1   . ARG ARG ARG B B 8   8   . 0.1316 0.1543 0.1847 0.0056  -0.0018
0.0094  1 .
3398 NH2   NH2   . ARG ARG ARG B B 8   8   . 0.2036 0.2352 0.3122 -0.0109 0.1033
0.0281  1 .
3399 C     C     . ARG ARG ARG B B 8   8   . 0.1050 0.1116 0.1049 0.0013  0.0020  -
0.0019 1 .
3400 O     O     . ARG ARG ARG B B 8   8   . 0.1094 0.1558 0.0905 0.0041  -0.0026 -
0.0150 1 .
3401 N     N     . GLU GLU GLU B B 9   9   . 0.0973 0.0985 0.1128 -0.0029 -0.0095 -
0.0036 1 .
3402 CA    CA    . GLU GLU GLU B B 9   9   . 0.1347 0.1229 0.1307 0.0107  0.0049
0.0014  1 .
3403 CB    CB    . GLU GLU GLU B B 9   9   . 0.1432 0.1814 0.1252 -0.0509 0.0027  -
0.0320 1 .
3404 CG    CG    . GLU GLU GLU B B 9   9   . 0.2376 0.2059 0.2003 -0.0337 -0.0082 -
0.0262 1 .
3405 CD    CD    . GLU GLU GLU B B 9   9   . 0.2193 0.1421 0.1649 -0.0583 -0.0326 -
0.0090 1 .
3406 OE1   OE1   . GLU GLU GLU B B 9   9   . 0.1610 0.1169 0.1299 -0.0076 -0.0050
0.0230  1 .
3407 OE2   OE2   . GLU GLU GLU B B 9   9   . 0.2412 0.1876 0.1605 -0.0181 -0.0310 -
0.0286 1 .
3408 C     C     . GLU GLU GLU B B 9   9   . 0.1139 0.1517 0.1136 0.0278  0.0001
0.0000  1 .
3409 O     O     . GLU GLU GLU B B 9   9   . 0.1758 0.2313 0.1686 0.0615  0.0428
0.0568  1 .
3410 N     N     . ILE ILE ILE B B 10  10  . 0.1147 0.0998 0.1088 0.0046  0.0100
0.0186  1 .
3411 CA    CA    . ILE ILE ILE B B 10  10  . 0.0946 0.1023 0.1065 0.0098  0.0045
0.0166  1 .
3412 CB    CB    . ILE ILE ILE B B 10  10  . 0.1010 0.1170 0.0830 -0.0152 -0.0034
0.0169  1 .
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3413 CG1   CG1   . ILE ILE ILE B B 10  10  . 0.1105 0.1074 0.0925 0.0030  -0.0017
0.0161  1 .
3414 CD    CD    . ILE ILE ILE B B 10  10  . 0.1150 0.1577 0.1133 0.0168  -0.0048 -
0.0326 1 .
3415 CG2   CG2   . ILE ILE ILE B B 10  10  . 0.0872 0.1571 0.1509 -0.0242 0.0144
0.0133  1 .
3416 C     C     . ILE ILE ILE B B 10  10  . 0.0738 0.0856 0.1008 0.0121  -0.0028
0.0093  1 .
3417 O     O     . ILE ILE ILE B B 10  10  . 0.0816 0.0960 0.1085 0.0099  0.0086
0.0246  1 .
3418 N     N     . LEU LEU LEU B B 11  11  . 0.0646 0.1119 0.0894 0.0123  0.0006  -
0.0028 1 .
3419 CA    CA    . LEU LEU LEU B B 11  11  . 0.0712 0.0961 0.0744 0.0001  0.0001  -
0.0125 1 .
3420 CB    CB    . LEU LEU LEU B B 11  11  . 0.0996 0.0824 0.0569 -0.0093 0.0031  -
0.0045 1 .
3421 CG    CG    . LEU LEU LEU B B 11  11  . 0.0810 0.0898 0.0827 0.0102  -0.0074
0.0052  1 .
3422 CD1   CD1   . LEU LEU LEU B B 11  11  . 0.0973 0.1224 0.1098 0.0225  -0.0085 -
0.0022 1 .
3423 CD2   CD2   . LEU LEU LEU B B 11  11  . 0.1144 0.0693 0.1510 0.0070  -0.0139
0.0121  1 .
3424 C     C     . LEU LEU LEU B B 11  11  . 0.0681 0.0741 0.0767 -0.0064 -0.0037 -
0.0071 1 .
3425 O     O     . LEU LEU LEU B B 11  11  . 0.0905 0.0810 0.0767 -0.0089 0.0066
0.0130  1 .
3426 N     N     . ASP ASP ASP B B 12  12  . 0.0877 0.0853 0.0634 0.0054  0.0090
0.0072  1 .
3427 CA    CA    . ASP ASP ASP B B 12  12  . 0.0851 0.0668 0.0737 0.0055  0.0052
0.0037  1 .
3428 CB    CB    . ASP ASP ASP B B 12  12  . 0.0754 0.0866 0.0673 -0.0118 0.0040
0.0291  1 .
3429 CG    CG    . ASP ASP ASP B B 12  12  . 0.0942 0.1380 0.1279 0.0116  -0.0140
0.0059  1 .
3430 OD1   OD1   . ASP ASP ASP B B 12  12  . 0.0848 0.0801 0.0801 0.0002  -0.0009 -
0.0136 1 .
3431 OD2   OD2   . ASP ASP ASP B B 12  12  . 0.1338 0.1131 0.1350 0.0043  0.0037
0.0166  1 .
3432 C     C     . ASP ASP ASP B B 12  12  . 0.0969 0.0593 0.0866 -0.0078 -0.0057
0.0013  1 .
3433 O     O     . ASP ASP ASP B B 12  12  . 0.0987 0.0824 0.0889 -0.0031 0.0049
0.0132  1 .
3434 N     N     . SER SER SER B B 13  13  . 0.0727 0.0683 0.0825 0.0007  0.0094
0.0018  1 .
3435 CA    CA    . SER SER SER B B 13  13  . 0.0803 0.0743 0.0837 -0.0005 0.0107  -
0.0171 1 .
3436 CB    CB    . SER SER SER B B 13  13  . 0.1152 0.0546 0.0493 0.0184  0.0017
0.0039  1 .
3437 OG    OG    . SER SER SER B B 13  13  . 0.0792 0.0767 0.0684 0.0135  -0.0009
0.0070  1 .
3438 C     C     . SER SER SER B B 13  13  . 0.0812 0.0865 0.0719 0.0081  -0.0130 -
0.0103 1 .
3439 O     O     . SER SER SER B B 13  13  . 0.0847 0.0842 0.0975 0.0075  0.0047
0.0090  1 .
3440 N     N     . ARG ARG ARG B B 14  14  . 0.0831 0.0734 0.1068 -0.0012 -0.0041 -
0.0006 1 .
3441 CA    CA    . ARG ARG ARG B B 14  14  . 0.0856 0.0890 0.0812 -0.0026 -0.0086
0.0057  1 .
3442 CB    CB    . ARG ARG ARG B B 14  14  . 0.1250 0.0997 0.1228 0.0005  0.0170
0.0165  1 .
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3443 CG    CG    . ARG ARG ARG B B 14  14  . 0.1433 0.1319 0.1159 0.0224  -0.0133
0.0036  1 .
3444 CD    CD    . ARG ARG ARG B B 14  14  . 0.1283 0.1509 0.1921 -0.0131 -0.0246
0.0174  1 .
3445 NE    NE    . ARG ARG ARG B B 14  14  . 0.1444 0.1575 0.1288 -0.0068 -0.0220
0.0141  1 .
3446 CZ    CZ    . ARG ARG ARG B B 14  14  . 0.1308 0.1130 0.0954 0.0038  -0.0075
0.0295  1 .
3447 NH1   NH1   . ARG ARG ARG B B 14  14  . 0.1835 0.1051 0.1270 0.0236  -0.0031 -
0.0004 1 .
3448 NH2   NH2   . ARG ARG ARG B B 14  14  . 0.1400 0.1425 0.1590 -0.0025 -0.0044 -
0.0049 1 .
3449 C     C     . ARG ARG ARG B B 14  14  . 0.0806 0.1006 0.0933 -0.0032 0.0006  -
0.0074 1 .
3450 O     O     . ARG ARG ARG B B 14  14  . 0.1195 0.1257 0.1017 -0.0194 0.0134  -
0.0121 1 .
3451 N     N     . GLY GLY GLY B B 15  15  . 0.0752 0.0919 0.0645 0.0149  0.0001  -
0.0006 1 .
3452 CA    CA    . GLY GLY GLY B B 15  15  . 0.0745 0.0850 0.0829 0.0196  0.0142  -
0.0023 1 .
3453 C     C     . GLY GLY GLY B B 15  15  . 0.1068 0.0925 0.1041 0.0112  -0.0032 -
0.0062 1 .
3454 O     O     . GLY GLY GLY B B 15  15  . 0.1015 0.1012 0.0962 0.0063  0.0010  -
0.0133 1 .
3455 N     N     . ASN ASN ASN B B 16  16  . 0.1017 0.0811 0.1065 0.0213  -0.0087
0.0074  1 .
3456 CA    CA    . ASN ASN ASN B B 16  16  . 0.1062 0.0745 0.0962 0.0214  0.0008  -
0.0061 1 .
3457 CB    CB    . ASN ASN ASN B B 16  16  . 0.1212 0.1014 0.1146 0.0084  0.0127
0.0259  1 .
3458 CG    CG    . ASN ASN ASN B B 16  16  . 0.1348 0.0982 0.1151 0.0268  0.0022  -
0.0004 1 .
3459 OD1   OD1   . ASN ASN ASN B B 16  16  . 0.1369 0.1490 0.1519 -0.0118 -0.0114
0.0088  1 .
3460 ND2   ND2   . ASN ASN ASN B B 16  16  . 0.1616 0.1218 0.1388 0.0155  0.0284
0.0293  1 .
3461 C     C     . ASN ASN ASN B B 16  16  . 0.0818 0.0939 0.1129 0.0226  -0.0164 -
0.0124 1 .
3462 O     O     . ASN ASN ASN B B 16  16  . 0.1050 0.0997 0.1224 0.0100  0.0023  -
0.0023 1 .
3463 N     N     . PRO PRO PRO B B 17  17  . 0.0939 0.0822 0.0889 -0.0059 0.0057  -
0.0188 1 .
3464 CA    CA    . PRO PRO PRO B B 17  17  . 0.0558 0.0847 0.0688 0.0073  -0.0006 -
0.0175 1 .
3465 CB    CB    . PRO PRO PRO B B 17  17  . 0.1193 0.1001 0.0888 0.0118  -0.0335 -
0.0399 1 .
3466 CG    CG    . PRO PRO PRO B B 17  17  . 0.0765 0.1260 0.0948 -0.0012 -0.0041 -
0.0190 1 .
3467 CD    CD    . PRO PRO PRO B B 17  17  . 0.0992 0.0906 0.1051 0.0030  0.0029  -
0.0383 1 .
3468 C     C     . PRO PRO PRO B B 17  17  . 0.0670 0.0823 0.0859 0.0074  0.0021
0.0014  1 .
3469 O     O     . PRO PRO PRO B B 17  17  . 0.1040 0.0809 0.1011 0.0043  0.0041
0.0051  1 .
3470 N     N     . THR THR THR B B 18  18  . 0.0967 0.0895 0.0942 0.0067  -0.0060 -
0.0064 1 .
3471 CA    CA    . THR THR THR B B 18  18  . 0.0901 0.1007 0.0685 0.0049  0.0099  -
0.0023 1 .
3472 CB    CB    . THR THR THR B B 18  18  . 0.1135 0.0937 0.0794 0.0318  -0.0083 -
0.0161 1 .
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3473 OG1   OG1   . THR THR THR B B 18  18  . 0.1134 0.1178 0.1044 -0.0064 -0.0090
0.0166  1 .
3474 CG2   CG2   . THR THR THR B B 18  18  . 0.1270 0.0921 0.1346 0.0174  -0.0146
0.0240  1 .
3475 C     C     . THR THR THR B B 18  18  . 0.0688 0.0762 0.0852 0.0050  0.0017
0.0089  1 .
3476 O     O     . THR THR THR B B 18  18  . 0.1034 0.1045 0.0862 0.0210  -0.0021
0.0008  1 .
3477 N     N     . VAL VAL VAL B B 19  19  . 0.0860 0.0889 0.0900 0.0011  0.0000  -
0.0004 1 .
3478 CA    CA    . VAL VAL VAL B B 19  19  . 0.0958 0.0878 0.0921 -0.0034 0.0087
0.0160  1 .
3479 CB    CB    . VAL VAL VAL B B 19  19  . 0.1007 0.1014 0.1273 -0.0020 -0.0044
0.0107  1 .
3480 CG1   CG1   . VAL VAL VAL B B 19  19  . 0.1055 0.1713 0.1887 0.0048  -0.0048
0.0344  1 .
3481 CG2   CG2   . VAL VAL VAL B B 19  19  . 0.1509 0.1034 0.1260 0.0547  0.0299  -
0.0094 1 .
3482 C     C     . VAL VAL VAL B B 19  19  . 0.1224 0.1150 0.0877 0.0002  0.0020  -
0.0121 1 .
3483 O     O     . VAL VAL VAL B B 19  19  . 0.0952 0.1098 0.1075 0.0135  0.0152  -
0.0128 1 .
3484 N     N     . GLU GLU GLU B B 20  20  . 0.0819 0.0974 0.0978 -0.0076 -0.0144
0.0161  1 .
3485 CA    CA    . GLU GLU GLU B B 20  20  . 0.0926 0.1005 0.1118 0.0079  -0.0089
0.0138  1 .
3486 CB    CB    . GLU GLU GLU B B 20  20  . 0.0958 0.1034 0.1393 0.0012  -0.0040
0.0056  1 .
3487 CG    CG    . GLU GLU GLU B B 20  20  . 0.1022 0.1219 0.1639 0.0006  -0.0061
0.0251  1 .
3488 CD    CD    . GLU GLU GLU B B 20  20  . 0.1374 0.1570 0.1283 0.0469  0.0146
0.0100  1 .
3489 OE1   OE1   . GLU GLU GLU B B 20  20  . 0.1189 0.1539 0.1610 0.0037  0.0253
0.0135  1 .
3490 OE2   OE2   . GLU GLU GLU B B 20  20  . 0.1281 0.1439 0.1576 0.0122  -0.0054
0.0177  1 .
3491 C     C     . GLU GLU GLU B B 20  20  . 0.0992 0.1134 0.1031 -0.0009 0.0125  -
0.0131 1 .
3492 O     O     . GLU GLU GLU B B 20  20  . 0.1066 0.1270 0.1335 0.0041  0.0103
0.0000  1 .
3493 N     N     . VAL VAL VAL B B 21  21  . 0.0821 0.0972 0.1040 -0.0023 0.0158
0.0150  1 .
3494 CA    CA    . VAL VAL VAL B B 21  21  . 0.0783 0.0960 0.1180 0.0061  0.0056
0.0116  1 .
3495 CB    CB    . VAL VAL VAL B B 21  21  . 0.0736 0.1084 0.1036 -0.0059 0.0004
0.0017  1 .
3496 CG1   CG1   . VAL VAL VAL B B 21  21  . 0.0860 0.1561 0.1511 0.0019  0.0439
0.0191  1 .
3497 CG2   CG2   . VAL VAL VAL B B 21  21  . 0.1380 0.1323 0.1455 -0.0138 0.0304
0.0156  1 .
3498 C     C     . VAL VAL VAL B B 21  21  . 0.0837 0.1106 0.1101 -0.0077 0.0039
0.0026  1 .
3499 O     O     . VAL VAL VAL B B 21  21  . 0.0943 0.1263 0.1245 -0.0095 0.0082
0.0093  1 .
3500 N     N     . ASP ASP ASP B B 22  22  . 0.1140 0.1386 0.1112 0.0117  0.0100
0.0102  1 .
3501 CA    CA    . ASP ASP ASP B B 22  22  . 0.0892 0.1458 0.1386 -0.0059 0.0054
0.0007  1 .
3502 CB    CB    . ASP ASP ASP B B 22  22  . 0.0958 0.1561 0.1417 -0.0217 0.0042
0.0129  1 .
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3503 CG    CG    . ASP ASP ASP B B 22  22  . 0.1457 0.1788 0.1760 -0.0059 0.0020
0.0186  1 .
3504 OD1   OD1   . ASP ASP ASP B B 22  22  . 0.1932 0.1977 0.2142 -0.0064 -0.0072
0.0198  1 .
3505 OD2   OD2   . ASP ASP ASP B B 22  22  . 0.1465 0.2063 0.1722 0.0322  -0.0182
0.0267  1 .
3506 C     C     . ASP ASP ASP B B 22  22  . 0.1039 0.1105 0.1349 0.0169  -0.0053
0.0086  1 .
3507 O     O     . ASP ASP ASP B B 22  22  . 0.1250 0.1381 0.1605 0.0161  0.0048
0.0023  1 .
3508 N     N     . LEU LEU LEU B B 23  23  . 0.0834 0.1056 0.1360 0.0006  -0.0125
0.0167  1 .
3509 CA    CA    . LEU LEU LEU B B 23  23  . 0.0791 0.1247 0.1301 -0.0086 -0.0090
0.0326  1 .
3510 CB    CB    . LEU LEU LEU B B 23  23  . 0.0981 0.1222 0.1082 0.0114  -0.0260
0.0279  1 .
3511 CG    CG    . LEU LEU LEU B B 23  23  . 0.0883 0.1569 0.1431 0.0166  -0.0095
0.0351  1 .
3512 CD1   CD1   . LEU LEU LEU B B 23  23  . 0.0872 0.2407 0.1719 -0.0075 0.0226
0.0372  1 .
3513 CD2   CD2   . LEU LEU LEU B B 23  23  . 0.1570 0.1395 0.1558 0.0071  0.0007
0.0235  1 .
3514 C     C     . LEU LEU LEU B B 23  23  . 0.1101 0.1288 0.1384 0.0021  0.0100
0.0024  1 .
3515 O     O     . LEU LEU LEU B B 23  23  . 0.1113 0.1260 0.1594 -0.0061 0.0091
0.0056  1 .
3516 N     N     . TYR TYR TYR B B 24  24  . 0.1178 0.1666 0.1461 -0.0106 0.0186
0.0178  1 .
3517 CA    CA    . TYR TYR TYR B B 24  24  . 0.1265 0.1695 0.1405 -0.0138 0.0036
0.0147  1 .
3518 CB    CB    . TYR TYR TYR B B 24  24  . 0.1385 0.1972 0.1433 0.0034  0.0163
0.0197  1 .
3519 CG    CG    . TYR TYR TYR B B 24  24  . 0.1723 0.2045 0.1780 0.0103  0.0118
0.0147  1 .
3520 CD1   CD1   . TYR TYR TYR B B 24  24  . 0.1780 0.2495 0.1775 0.0018  0.0049  -
0.0066 1 .
3521 CE1   CE1   . TYR TYR TYR B B 24  24  . 0.1650 0.2597 0.2624 -0.0326 -0.0147
0.0219  1 .
3522 CZ    CZ    . TYR TYR TYR B B 24  24  . 0.1735 0.2837 0.2573 -0.0097 -0.0385
0.0686  1 .
3523 OH    OH    . TYR TYR TYR B B 24  24  . 0.1910 0.3314 0.2871 -0.0332 -0.0460
0.0891  1 .
3524 CE2   CE2   . TYR TYR TYR B B 24  24  . 0.2106 0.2832 0.2523 0.0061  -0.0225
0.0484  1 .
3525 CD2   CD2   . TYR TYR TYR B B 24  24  . 0.1773 0.2389 0.2525 0.0048  0.0005
0.0766  1 .
3526 C     C     . TYR TYR TYR B B 24  24  . 0.1348 0.1699 0.1459 0.0027  0.0115
0.0112  1 .
3527 O     O     . TYR TYR TYR B B 24  24  . 0.1214 0.1770 0.1961 -0.0010 0.0153  -
0.0007 1 .
3528 N     N     . THR THR THR B B 25  25  . 0.1185 0.1873 0.1481 -0.0041 0.0038
0.0094  1 .
3529 CA    CA    . THR THR THR B B 25  25  . 0.1386 0.1984 0.1797 -0.0305 0.0132  -
0.0079 1 .
3530 CB    CB    . THR THR THR B B 25  25  . 0.1337 0.1756 0.1876 -0.0217 0.0172  -
0.0008 1 .
3531 OG1   OG1   . THR THR THR B B 25  25  . 0.1556 0.1840 0.2050 0.0028  0.0172
0.0193  1 .
3532 CG2   CG2   . THR THR THR B B 25  25  . 0.2030 0.1697 0.1987 -0.0299 0.0200
0.0158  1 .
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3533 C     C     . THR THR THR B B 25  25  . 0.1703 0.1908 0.1791 -0.0026 -0.0011
0.0056  1 .
3534 O     O     . THR THR THR B B 25  25  . 0.1628 0.2223 0.1990 -0.0188 0.0169
0.0052  1 .
3535 N     N     . ALA ALA ALA B B 26  26  . 0.1587 0.2020 0.2199 -0.0235 0.0190
0.0017  1 .
3536 CA    CA    . ALA ALA ALA B B 26  26  . 0.1849 0.2344 0.2720 -0.0302 0.0054
0.0240  1 .
3537 CB    CB    . ALA ALA ALA B B 26  26  . 0.1712 0.2791 0.2993 -0.0342 -0.0075
0.0189  1 .
3538 C     C     . ALA ALA ALA B B 26  26  . 0.1914 0.2309 0.2686 -0.0225 -0.0008
0.0314  1 .
3539 O     O     . ALA ALA ALA B B 26  26  . 0.2161 0.2473 0.3229 -0.0547 0.0168
0.0626  1 .
3540 N     N     . LYS LYS LYS B B 27  27  . 0.2006 0.2347 0.2669 -0.0393 0.0000
0.0255  1 .
3541 CA    CA    . LYS LYS LYS B B 27  27  . 0.2401 0.2283 0.2843 -0.0217 -0.0050
0.0160  1 .
3542 CB    CB    . LYS LYS LYS B B 27  27  . 0.2686 0.2432 0.2959 -0.0303 -0.0110
0.0150  1 .
3543 CG    CG    . LYS LYS LYS B B 27  27  . 0.2909 0.2942 0.3295 0.0024  -0.0414
0.0211  1 .
3544 CD    CD    . LYS LYS LYS B B 27  27  . 0.3179 0.3392 0.3666 -0.0441 -0.0671
0.0288  1 .
3545 CE    CE    . LYS LYS LYS B B 27  27  . 0.2775 0.3405 0.3639 -0.0256 -0.0407
0.0773  1 .
3546 NZ    NZ    . LYS LYS LYS B B 27  27  . 0.3005 0.5307 0.4145 -0.0556 -0.0361
0.0882  1 .
3547 C     C     . LYS LYS LYS B B 27  27  . 0.2286 0.2280 0.2756 -0.0071 0.0045
0.0153  1 .
3548 O     O     . LYS LYS LYS B B 27  27  . 0.2443 0.2581 0.3397 0.0216  -0.0133
0.0125  1 .
3549 N     N     . GLY GLY GLY B B 28  28  . 0.1891 0.2045 0.2448 -0.0354 -0.0131
0.0253  1 .
3550 CA    CA    . GLY GLY GLY B B 28  28  . 0.1866 0.1987 0.2367 -0.0468 0.0068
0.0218  1 .
3551 C     C     . GLY GLY GLY B B 28  28  . 0.1803 0.1811 0.2200 -0.0217 0.0116
0.0415  1 .
3552 O     O     . GLY GLY GLY B B 28  28  . 0.1281 0.1868 0.2090 -0.0003 0.0129
0.0176  1 .
3553 N     N     . LEU LEU LEU B B 29  29  . 0.1572 0.1834 0.2476 -0.0059 -0.0004
0.0251  1 .
3554 CA    CA    . LEU LEU LEU B B 29  29  . 0.1770 0.1830 0.1939 -0.0091 -0.0016
0.0090  1 .
3555 CB    CB    . LEU LEU LEU B B 29  29  . 0.1758 0.1915 0.2025 0.0013  -0.0180
0.0117  1 .
3556 CG    CG    . LEU LEU LEU B B 29  29  . 0.2222 0.2624 0.2802 -0.0360 -0.0786
0.0138  1 .
3557 CD1   CD1   . LEU LEU LEU B B 29  29  . 0.2771 0.3056 0.3105 -0.0510 -0.1160 -
0.0133 1 .
3558 CD2   CD2   . LEU LEU LEU B B 29  29  . 0.2772 0.3414 0.3439 -0.0311 -0.0961
0.0588  1 .
3559 C     C     . LEU LEU LEU B B 29  29  . 0.1648 0.1743 0.2105 -0.0009 0.0043
0.0043  1 .
3560 O     O     . LEU LEU LEU B B 29  29  . 0.1747 0.1636 0.2274 0.0013  0.0078
0.0101  1 .
3561 N     N     . PHE PHE PHE B B 30  30  . 0.1202 0.1479 0.1595 0.0009  -0.0003
0.0169  1 .
3562 CA    CA    . PHE PHE PHE B B 30  30  . 0.1165 0.1427 0.1485 0.0033  -0.0004
0.0008  1 .
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3563 CB    CB    . PHE PHE PHE B B 30  30  . 0.1613 0.1537 0.1605 -0.0116 -0.0229
0.0117  1 .
3564 CG    CG    . PHE PHE PHE B B 30  30  . 0.1208 0.1478 0.1427 -0.0217 0.0139  -
0.0144 1 .
3565 CD1   CD1   . PHE PHE PHE B B 30  30  . 0.1626 0.1087 0.1792 -0.0176 0.0128  -
0.0342 1 .
3566 CE1   CE1   . PHE PHE PHE B B 30  30  . 0.1574 0.1459 0.2125 -0.0393 0.0007
0.0283  1 .
3567 CZ    CZ    . PHE PHE PHE B B 30  30  . 0.1413 0.1620 0.1956 -0.0345 0.0009  -
0.0106 1 .
3568 CE2   CE2   . PHE PHE PHE B B 30  30  . 0.1604 0.1453 0.1580 -0.0245 -0.0121 -
0.0152 1 .
3569 CD2   CD2   . PHE PHE PHE B B 30  30  . 0.1393 0.1537 0.1178 -0.0136 0.0066
0.0014  1 .
3570 C     C     . PHE PHE PHE B B 30  30  . 0.1232 0.1396 0.1680 0.0007  -0.0055 -
0.0123 1 .
3571 O     O     . PHE PHE PHE B B 30  30  . 0.1243 0.1897 0.2394 -0.0071 0.0225  -
0.0072 1 .
3572 N     N     . ARG ARG ARG B B 31  31  . 0.0896 0.1302 0.1426 0.0060  0.0046  -
0.0031 1 .
3573 CA    CA    . ARG ARG ARG B B 31  31  . 0.1093 0.1199 0.1347 -0.0048 -0.0039
0.0166  1 .
3574 CB    CB    . ARG ARG ARG B B 31  31  . 0.1044 0.1190 0.1328 0.0028  -0.0038
0.0161  1 .
3575 CG    CG    . ARG ARG ARG B B 31  31  . 0.1378 0.1199 0.1475 -0.0332 -0.0387
0.0378  1 .
3576 CD    CD    . ARG ARG ARG B B 31  31  . 0.1304 0.1339 0.2020 -0.0083 -0.0015
0.0232  1 .
3577 NE    NE    . ARG ARG ARG B B 31  31  . 0.1210 0.1298 0.1850 -0.0189 -0.0366
0.0413  1 .
3578 CZ    CZ    . ARG ARG ARG B B 31  31  . 0.1674 0.1816 0.1877 -0.0196 -0.0356
0.0185  1 .
3579 NH1   NH1   . ARG ARG ARG B B 31  31  . 0.1869 0.2829 0.1805 -0.1023 -0.0197
0.0038  1 .
3580 NH2   NH2   . ARG ARG ARG B B 31  31  . 0.2085 0.2083 0.2682 -0.0079 -0.0144 -
0.0068 1 .
3581 C     C     . ARG ARG ARG B B 31  31  . 0.1137 0.1146 0.1263 0.0015  0.0011
0.0079  1 .
3582 O     O     . ARG ARG ARG B B 31  31  . 0.1429 0.1295 0.1405 -0.0080 0.0162
0.0139  1 .
3583 N     N     . ALA ALA ALA B B 32  32  . 0.0956 0.0882 0.1059 0.0084  0.0088
0.0281  1 .
3584 CA    CA    . ALA ALA ALA B B 32  32  . 0.0872 0.0987 0.1117 0.0085  0.0000
0.0050  1 .
3585 CB    CB    . ALA ALA ALA B B 32  32  . 0.0815 0.1295 0.1029 -0.0048 -0.0263
0.0383  1 .
3586 C     C     . ALA ALA ALA B B 32  32  . 0.0804 0.1000 0.1137 0.0109  -0.0054
0.0225  1 .
3587 O     O     . ALA ALA ALA B B 32  32  . 0.1219 0.1039 0.1117 -0.0137 0.0183
0.0003  1 .
3588 N     N     . ALA ALA ALA B B 33  33  . 0.0981 0.1063 0.1220 0.0102  0.0214
0.0147  1 .
3589 CA    CA    . ALA ALA ALA B B 33  33  . 0.1110 0.0973 0.1012 0.0112  0.0083
0.0154  1 .
3590 CB    CB    . ALA ALA ALA B B 33  33  . 0.0888 0.1415 0.1110 -0.0019 -0.0116
0.0129  1 .
3591 C     C     . ALA ALA ALA B B 33  33  . 0.0765 0.0864 0.0872 -0.0055 0.0137  -
0.0060 1 .
3592 O     O     . ALA ALA ALA B B 33  33  . 0.1216 0.1274 0.1113 -0.0156 0.0206  -
0.0088 1 .
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3593 N     N     . VAL VAL VAL B B 34  34  . 0.1077 0.0832 0.0819 -0.0038 0.0179
0.0000  1 .
3594 CA    CA    . VAL VAL VAL B B 34  34  . 0.0704 0.0759 0.0867 0.0018  0.0102
0.0120  1 .
3595 CB    CB    . VAL VAL VAL B B 34  34  . 0.0735 0.0789 0.0896 0.0015  0.0102
0.0029  1 .
3596 CG1   CG1   . VAL VAL VAL B B 34  34  . 0.0858 0.1161 0.1325 0.0023  0.0176
0.0271  1 .
3597 CG2   CG2   . VAL VAL VAL B B 34  34  . 0.0743 0.1473 0.1368 0.0183  0.0263
0.0023  1 .
3598 C     C     . VAL VAL VAL B B 34  34  . 0.0832 0.0775 0.0945 -0.0177 0.0033  -
0.0048 1 .
3599 O     O     . VAL VAL VAL B B 34  34  . 0.1107 0.1133 0.1017 -0.0100 -0.0116 -
0.0081 1 .
3600 N     N     . PRO PRO PRO B B 35  35  . 0.0839 0.0746 0.0805 -0.0080 -0.0048
0.0024  1 .
3601 CA    CA    . PRO PRO PRO B B 35  35  . 0.0998 0.0872 0.0839 -0.0102 0.0163  -
0.0092 1 .
3602 CB    CB    . PRO PRO PRO B B 35  35  . 0.1044 0.1120 0.0717 0.0066  0.0108  -
0.0059 1 .
3603 CG    CG    . PRO PRO PRO B B 35  35  . 0.0952 0.1062 0.0937 -0.0107 0.0132  -
0.0004 1 .
3604 CD    CD    . PRO PRO PRO B B 35  35  . 0.0936 0.1001 0.0599 -0.0249 0.0059
0.0000  1 .
3605 C     C     . PRO PRO PRO B B 35  35  . 0.0941 0.0921 0.0739 0.0069  0.0027  -
0.0068 1 .
3606 O     O     . PRO PRO PRO B B 35  35  . 0.0831 0.1073 0.1289 0.0069  0.0217
0.0144  1 .
3607 N     N     . SER SER SER B B 36  36  . 0.0931 0.0808 0.0972 -0.0178 0.0163  -
0.0005 1 .
3608 CA    CA    . SER SER SER B B 36  36  . 0.0845 0.0734 0.0898 -0.0138 0.0208  -
0.0171 1 .
3609 CB    CB    . SER SER SER B B 36  36  . 0.1081 0.0731 0.0922 -0.0088 -0.0185 -
0.0088 1 .
3610 OG    OG    . SER SER SER B B 36  36  . 0.1266 0.1098 0.1226 -0.0082 0.0216  -
0.0333 1 .
3611 C     C     . SER SER SER B B 36  36  . 0.0819 0.0701 0.0954 0.0040  0.0044  -
0.0024 1 .
3612 O     O     . SER SER SER B B 36  36  . 0.0952 0.0700 0.0918 0.0072  -0.0030
0.0100  1 .
3613 N     N     . GLY GLY GLY B B 37  37  . 0.0896 0.0839 0.0751 -0.0099 0.0024
0.0111  1 .
3614 CA    CA    . GLY GLY GLY B B 37  37  . 0.0763 0.0992 0.1042 -0.0141 0.0072
0.0056  1 .
3615 C     C     . GLY GLY GLY B B 37  37  . 0.0974 0.0869 0.0925 -0.0045 -0.0081
0.0012  1 .
3616 O     O     . GLY GLY GLY B B 37  37  . 0.1072 0.1149 0.1399 -0.0139 0.0357  -
0.0086 1 .
3617 N     N     . ALA ALA ALA B B 38  38  . 0.1106 0.1050 0.1101 -0.0045 -0.0064
0.0003  1 .
3618 CA    CA    . ALA ALA ALA B B 38  38  . 0.1060 0.0854 0.0995 0.0039  0.0069  -
0.0009 1 .
3619 CB    CB    . ALA ALA ALA B B 38  38  . 0.1022 0.0988 0.0862 0.0082  -0.0260
0.0281  1 .
3620 C     C     . ALA ALA ALA B B 38  38  . 0.1176 0.1053 0.0920 0.0049  0.0038  -
0.0077 1 .
3621 O     O     . ALA ALA ALA B B 38  38  . 0.1331 0.1321 0.1145 0.0009  0.0061  -
0.0058 1 .
3622 N     N     . SER SER SER B B 39  39  . 0.1030 0.0772 0.0853 -0.0008 -0.0110 -
0.0002 1 .
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3623 CA    CA    . SER SER SER B B 39  39  . 0.1155 0.1099 0.0714 0.0162  -0.0055
0.0020  1 .
3624 CB    CB    . SER SER SER B B 39  39  . 0.1221 0.0905 0.0879 -0.0022 0.0152  -
0.0135 1 .
3625 OG    OG    . SER SER SER B B 39  39  . 0.1189 0.0691 0.0950 -0.0157 -0.0212
0.0119  1 .
3626 C     C     . SER SER SER B B 39  39  . 0.0881 0.0650 0.0955 0.0006  0.0085
0.0005  1 .
3627 O     O     . SER SER SER B B 39  39  . 0.1069 0.0845 0.0772 0.0038  0.0062  -
0.0001 1 .
3628 N     N     . THR THR THR B B 40  40  . 0.1232 0.0873 0.0952 0.0192  0.0064  -
0.0045 1 .
3629 CA    CA    . THR THR THR B B 40  40  . 0.1051 0.0937 0.0867 0.0133  0.0180
0.0009  1 .
3630 CB    CB    . THR THR THR B B 40  40  . 0.1211 0.0844 0.1161 -0.0045 0.0254
0.0041  1 .
3631 OG1   OG1   . THR THR THR B B 40  40  . 0.1549 0.1400 0.1288 -0.0210 0.0099  -
0.0094 1 .
3632 CG2   CG2   . THR THR THR B B 40  40  . 0.1325 0.0933 0.1116 -0.0148 0.0241
0.0411  1 .
3633 C     C     . THR THR THR B B 40  40  . 0.0832 0.0731 0.0896 -0.0106 0.0003  -
0.0122 1 .
3634 O     O     . THR THR THR B B 40  40  . 0.1477 0.0927 0.1241 -0.0178 -0.0083 -
0.0028 1 .
3635 N     N     . GLY GLY GLY B B 41  41  . 0.0968 0.0966 0.0845 0.0168  -0.0049
0.0056  1 .
3636 CA    CA    . GLY GLY GLY B B 41  41  . 0.1179 0.0889 0.0776 0.0211  0.0036
0.0034  1 .
3637 C     C     . GLY GLY GLY B B 41  41  . 0.1137 0.0777 0.0970 0.0068  0.0093
0.0000  1 .
3638 O     O     . GLY GLY GLY B B 41  41  . 0.1133 0.0948 0.1242 0.0147  -0.0030
0.0094  1 .
3639 N     N     . ILE ILE ILE B B 42  42  . 0.1161 0.0854 0.0968 0.0016  0.0015  -
0.0014 1 .
3640 CA    CA    . ILE ILE ILE B B 42  42  . 0.1216 0.1007 0.1124 0.0109  -0.0013 -
0.0016 1 .
3641 CB    CB    . ILE ILE ILE B B 42  42  . 0.1268 0.1153 0.1129 -0.0171 0.0092  -
0.0010 1 .
3642 CG1   CG1   . ILE ILE ILE B B 42  42  . 0.1390 0.0814 0.1210 -0.0043 -0.0096
0.0334  1 .
3643 CD    CD    . ILE ILE ILE B B 42  42  . 0.2720 0.2007 0.1609 -0.0128 -0.0063
0.1077  1 .
3644 CG2   CG2   . ILE ILE ILE B B 42  42  . 0.1225 0.1384 0.1745 -0.0028 0.0151
0.0262  1 .
3645 C     C     . ILE ILE ILE B B 42  42  . 0.1080 0.1121 0.1029 0.0037  0.0112  -
0.0005 1 .
3646 O     O     . ILE ILE ILE B B 42  42  . 0.1300 0.1078 0.1397 0.0145  0.0040  -
0.0380 1 .
3647 N     N     . TYR TYR TYR B B 43  43  . 0.1043 0.1081 0.0975 0.0033  -0.0122
0.0064  1 .
3648 CA    CA    . TYR TYR TYR B B 43  43  . 0.0894 0.0984 0.0858 -0.0093 0.0016
0.0017  1 .
3649 CB    CB    . TYR TYR TYR B B 43  43  . 0.0903 0.0978 0.0653 -0.0079 0.0028
0.0086  1 .
3650 CG    CG    . TYR TYR TYR B B 43  43  . 0.1049 0.0888 0.0975 0.0267  0.0036
0.0129  1 .
3651 CD1   CD1   . TYR TYR TYR B B 43  43  . 0.0906 0.1174 0.1195 -0.0119 0.0006
0.0255  1 .
3652 CE1   CE1   . TYR TYR TYR B B 43  43  . 0.1256 0.0785 0.0927 0.0223  0.0018
0.0109  1 .
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3653 CZ    CZ    . TYR TYR TYR B B 43  43  . 0.1574 0.1116 0.1433 0.0394  0.0485
0.0400  1 .
3654 OH    OH    . TYR TYR TYR B B 43  43  . 0.1931 0.1270 0.1570 0.0043  0.0447
0.0302  1 .
3655 CE2   CE2   . TYR TYR TYR B B 43  43  . 0.1335 0.1193 0.1287 0.0112  0.0491
0.0311  1 .
3656 CD2   CD2   . TYR TYR TYR B B 43  43  . 0.1740 0.1156 0.1359 0.0186  0.0432
0.0306  1 .
3657 C     C     . TYR TYR TYR B B 43  43  . 0.0777 0.0757 0.0824 0.0078  0.0000
0.0081  1 .
3658 O     O     . TYR TYR TYR B B 43  43  . 0.1177 0.1040 0.1027 0.0107  0.0017
0.0196  1 .
3659 N     N     . GLU GLU GLU B B 44  44  . 0.1077 0.0849 0.0661 0.0213  0.0158
0.0028  1 .
3660 CA    CA    . GLU GLU GLU B B 44  44  . 0.0880 0.0878 0.0911 0.0244  0.0137
0.0187  1 .
3661 CB    CB    . GLU GLU GLU B B 44  44  . 0.0984 0.1039 0.0817 0.0334  0.0118
0.0163  1 .
3662 CG    CG    . GLU GLU GLU B B 44  44  . 0.1099 0.0943 0.0980 0.0273  0.0174
0.0125  1 .
3663 CD    CD    . GLU GLU GLU B B 44  44  . 0.1089 0.0982 0.0982 -0.0162 0.0107
0.0037  1 .
3664 OE1   OE1   . GLU GLU GLU B B 44  44  . 0.1365 0.0891 0.1116 0.0146  0.0159
0.0003  1 .
3665 OE2   OE2   . GLU GLU GLU B B 44  44  . 0.1194 0.1007 0.1027 0.0107  0.0023
0.0201  1 .
3666 C     C     . GLU GLU GLU B B 44  44  . 0.0913 0.0772 0.0782 0.0053  0.0061
0.0083  1 .
3667 O     O     . GLU GLU GLU B B 44  44  . 0.1205 0.1076 0.1009 0.0064  0.0067
0.0034  1 .
3668 N     N     . ALA ALA ALA B B 45  45  . 0.0912 0.1122 0.1080 0.0183  -0.0075
0.0254  1 .
3669 CA    CA    . ALA ALA ALA B B 45  45  . 0.0910 0.1101 0.0837 -0.0067 -0.0064
0.0018  1 .
3670 CB    CB    . ALA ALA ALA B B 45  45  . 0.1055 0.1218 0.1256 -0.0171 0.0067
0.0062  1 .
3671 C     C     . ALA ALA ALA B B 45  45  . 0.0965 0.1037 0.1094 0.0148  -0.0079 -
0.0046 1 .
3672 O     O     . ALA ALA ALA B B 45  45  . 0.1100 0.1263 0.1171 0.0240  0.0108
0.0247  1 .
3673 N     N     . LEU LEU LEU B B 46  46  . 0.1291 0.1001 0.0884 0.0095  -0.0040 -
0.0051 1 .
3674 CA    CA    . LEU LEU LEU B B 46  46  . 0.0971 0.1115 0.1190 0.0145  -0.0028 -
0.0010 1 .
3675 CB    CB    . LEU LEU LEU B B 46  46  . 0.1883 0.1335 0.1643 0.0314  -0.0118 -
0.0152 1 .
3676 CG    CG    . LEU LEU LEU B B 46  46  . 0.2202 0.2107 0.2192 0.0452  -0.0469 -
0.0484 1 .
3677 CD1   CD1   . LEU LEU LEU B B 46  46  . 0.3359 0.2526 0.3100 -0.0283 -0.0302 -
0.0450 1 .
3678 CD2   CD2   . LEU LEU LEU B B 46  46  . 0.2763 0.3281 0.2318 0.0173  0.0059  -
0.0699 1 .
3679 C     C     . LEU LEU LEU B B 46  46  . 0.1183 0.1165 0.1154 0.0025  0.0100  -
0.0047 1 .
3680 O     O     . LEU LEU LEU B B 46  46  . 0.1210 0.1376 0.1650 0.0011  0.0039
0.0205  1 .
3681 N     N     . GLU GLU GLU B B 47  47  . 0.1477 0.1287 0.1172 0.0151  -0.0135
0.0082  1 .
3682 CA    CA    . GLU GLU GLU B B 47  47  . 0.1155 0.1272 0.1077 0.0166  0.0118
0.0056  1 .
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3683 CB    CB    . GLU GLU GLU B B 47  47  . 0.1065 0.0949 0.1098 0.0216  -0.0285
0.0080  1 .
3684 CG    CG    . GLU GLU GLU B B 47  47  . 0.1405 0.1375 0.1128 0.0316  0.0082
0.0163  1 .
3685 CD    CD    . GLU GLU GLU B B 47  47  . 0.1425 0.1484 0.1658 0.0019  -0.0036 -
0.0042 1 .
3686 OE1   OE1   . GLU GLU GLU B B 47  47  . 0.1394 0.1301 0.1125 -0.0134 0.0068  -
0.0035 1 .
3687 OE2   OE2   . GLU GLU GLU B B 47  47  . 0.1434 0.1630 0.1269 0.0085  -0.0013
0.0234  1 .
3688 C     C     . GLU GLU GLU B B 47  47  . 0.1030 0.1107 0.1347 0.0133  -0.0057
0.0000  1 .
3689 O     O     . GLU GLU GLU B B 47  47  . 0.1499 0.1273 0.1510 0.0089  0.0152  -
0.0101 1 .
3690 N     N     . LEU LEU LEU B B 48  48  . 0.1161 0.0797 0.0972 0.0050  0.0050  -
0.0157 1 .
3691 CA    CA    . LEU LEU LEU B B 48  48  . 0.1046 0.1145 0.0885 0.0227  0.0010  -
0.0199 1 .
3692 CB    CB    . LEU LEU LEU B B 48  48  . 0.1068 0.1063 0.0981 0.0073  0.0140  -
0.0201 1 .
3693 CG    CG    . LEU LEU LEU B B 48  48  . 0.1311 0.1080 0.1150 0.0309  -0.0059 -
0.0123 1 .
3694 CD1   CD1   . LEU LEU LEU B B 48  48  . 0.1825 0.1352 0.2249 0.0349  0.0247  -
0.0180 1 .
3695 CD2   CD2   . LEU LEU LEU B B 48  48  . 0.1104 0.1671 0.1842 0.0490  -0.0115 -
0.0432 1 .
3696 C     C     . LEU LEU LEU B B 48  48  . 0.1000 0.1253 0.1213 0.0105  0.0067
0.0034  1 .
3697 O     O     . LEU LEU LEU B B 48  48  . 0.1329 0.0975 0.1109 0.0181  -0.0024 -
0.0128 1 .
3698 N     N     . ARG ARG ARG B B 49  49  . 0.1406 0.1292 0.1169 -0.0032 -0.0133 -
0.0132 1 .
3699 CA    CA    . ARG ARG ARG B B 49  49  . 0.1347 0.1395 0.1310 0.0094  -0.0053 -
0.0124 1 .
3700 CB    CB    . ARG ARG ARG B B 49  49  . 0.1329 0.1771 0.1805 0.0141  0.0159  -
0.0335 1 .
3701 CG    CG    . ARG ARG ARG B B 49  49  . 0.1410 0.1659 0.2048 0.0601  -0.0139 -
0.0345 1 .
3702 CD    CD    . ARG ARG ARG B B 49  49  . 0.2916 0.1087 0.1025 0.0283  -0.0342 -
0.0216 1 .
3703 NE    NE    . ARG ARG ARG B B 49  49  . 0.2166 0.1209 0.1510 0.0202  0.0212  -
0.0013 1 .
3704 CZ    CZ    . ARG ARG ARG B B 49  49  . 0.1516 0.1255 0.1302 0.0285  0.0299
0.0088  1 .
3705 NH1   NH1   . ARG ARG ARG B B 49  49  . 0.1475 0.1371 0.1103 -0.0162 0.0057  -
0.0034 1 .
3706 NH2   NH2   . ARG ARG ARG B B 49  49  . 0.2190 0.1681 0.1337 0.0355  0.0085  -
0.0156 1 .
3707 C     C     . ARG ARG ARG B B 49  49  . 0.1536 0.1172 0.1136 0.0181  0.0029
0.0034  1 .
3708 O     O     . ARG ARG ARG B B 49  49  . 0.1826 0.1163 0.1516 0.0466  -0.0181 -
0.0186 1 .
3709 N     N     . ASP ASP ASP B B 50  50  . 0.1359 0.1271 0.0999 0.0261  -0.0124 -
0.0237 1 .
3710 CA    CA    . ASP ASP ASP B B 50  50  . 0.1414 0.1202 0.1353 0.0222  0.0028  -
0.0008 1 .
3711 CB    CB    . ASP ASP ASP B B 50  50  . 0.1523 0.1467 0.1226 0.0063  0.0033
0.0034  1 .
3712 CG    CG    . ASP ASP ASP B B 50  50  . 0.1644 0.1521 0.1525 0.0291  0.0181  -
0.0302 1 .
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3713 OD1   OD1   . ASP ASP ASP B B 50  50  . 0.1449 0.1199 0.1386 0.0127  0.0121  -
0.0153 1 .
3714 OD2   OD2   . ASP ASP ASP B B 50  50  . 0.1430 0.1353 0.1372 0.0345  -0.0020 -
0.0089 1 .
3715 C     C     . ASP ASP ASP B B 50  50  . 0.1484 0.1572 0.1662 0.0047  0.0022  -
0.0072 1 .
3716 O     O     . ASP ASP ASP B B 50  50  . 0.1901 0.1432 0.2002 0.0070  -0.0134 -
0.0194 1 .
3717 N     N     . GLY GLY GLY B B 51  51  . 0.1154 0.1386 0.1801 0.0028  -0.0026 -
0.0208 1 .
3718 CA    CA    . GLY GLY GLY B B 51  51  . 0.1863 0.1608 0.1766 -0.0200 -0.0135 -
0.0088 1 .
3719 C     C     . GLY GLY GLY B B 51  51  . 0.2210 0.1713 0.2133 -0.0327 -0.0132 -
0.0273 1 .
3720 O     O     . GLY GLY GLY B B 51  51  . 0.2918 0.1353 0.2928 -0.0252 -0.0344 -
0.0114 1 .
3721 N     N     . ASP ASP ASP B B 52  52  . 0.1983 0.1576 0.1943 -0.0072 -0.0302 -
0.0315 1 .
3722 CA    CA    . ASP ASP ASP B B 52  52  . 0.2029 0.1733 0.2032 -0.0071 -0.0368 -
0.0399 1 .
3723 CB    CB    . ASP ASP ASP B B 52  52  . 0.2310 0.1547 0.1806 0.0320  -0.0360 -
0.0505 1 .
3724 CG    CG    . ASP ASP ASP B B 52  52  . 0.2153 0.2168 0.2205 0.0161  -0.0166 -
0.0401 1 .
3725 OD1   OD1   . ASP ASP ASP B B 52  52  . 0.2496 0.2356 0.2818 0.0073  -0.0481 -
0.0428 1 .
3726 OD2   OD2   . ASP ASP ASP B B 52  52  . 0.3378 0.2427 0.2285 0.0164  -0.0260 -
0.0879 1 .
3727 C     C     . ASP ASP ASP B B 52  52  . 0.2155 0.2030 0.2565 -0.0126 -0.0289 -
0.0104 1 .
3728 O     O     . ASP ASP ASP B B 52  52  . 0.1992 0.1814 0.2445 0.0024  -0.0323 -
0.0343 1 .
3729 N     N     . LYS LYS LYS B B 53  53  . 0.2319 0.2124 0.2469 -0.0204 -0.0239
0.0047  1 .
3730 CA    CA    . LYS LYS LYS B B 53  53  . 0.2676 0.2287 0.2928 -0.0080 -0.0345
0.0179  1 .
3731 CB    CB    . LYS LYS LYS B B 53  53  . 0.2812 0.2492 0.3362 -0.0401 -0.0202
0.0221  1 .
3732 CG    CG    . LYS LYS LYS B B 53  53  . 0.4120 0.3746 0.3787 0.0023  -0.0253
0.0149  1 .
3733 CD    CD    . LYS LYS LYS B B 53  53  . 0.5649 0.4519 0.5543 -0.0145 -0.0059
0.0375  1 .
3734 CE    CE    . LYS LYS LYS B B 53  53  . 0.5558 0.5589 0.6028 -0.0405 0.0060  -
0.0019 1 .
3735 NZ    NZ    . LYS LYS LYS B B 53  53  . 0.6550 0.6043 0.6021 -0.0597 0.0628
0.0305  1 .
3736 C     C     . LYS LYS LYS B B 53  53  . 0.2637 0.2214 0.2958 -0.0049 -0.0287
0.0019  1 .
3737 O     O     . LYS LYS LYS B B 53  53  . 0.2487 0.2675 0.3472 -0.0093 -0.0538
0.0030  1 .
3738 N     N     . GLN GLN GLN B B 54  54  . 0.2758 0.1822 0.2756 -0.0061 -0.0517 -
0.0112 1 .
3739 CA    CA    . GLN GLN GLN B B 54  54  . 0.2972 0.2060 0.2563 0.0031  -0.0331 -
0.0123 1 .
3740 CB    CB    . GLN GLN GLN B B 54  54  . 0.3172 0.2359 0.2436 -0.0001 -0.0286
0.0000  1 .
3741 CG    CG    . GLN GLN GLN B B 54  54  . 0.4188 0.2811 0.3494 0.0045  -0.0495 -
0.0332 1 .
3742 CD    CD    . GLN GLN GLN B B 54  54  . 0.4613 0.3996 0.4569 -0.0467 -0.0565 -
0.0038 1 .
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3743 OE1   OE1   . GLN GLN GLN B B 54  54  . 0.5457 0.4483 0.5394 0.0029  -0.0713 -
0.0287 1 .
3744 NE2   NE2   . GLN GLN GLN B B 54  54  . 0.5453 0.4499 0.4836 -0.0444 -0.0276
0.0217  1 .
3745 C     C     . GLN GLN GLN B B 54  54  . 0.2535 0.1947 0.2335 -0.0037 -0.0481 -
0.0011 1 .
3746 O     O     . GLN GLN GLN B B 54  54  . 0.2709 0.2061 0.2755 0.0276  -0.0563 -
0.0150 1 .
3747 N     N     . ARG ARG ARG B B 55  55  . 0.2011 0.1848 0.2123 0.0037  -0.0440 -
0.0161 1 .
3748 CA    CA    . ARG ARG ARG B B 55  55  . 0.1820 0.1668 0.1727 0.0156  -0.0335 -
0.0137 1 .
3749 CB    CB    . ARG ARG ARG B B 55  55  . 0.1638 0.1589 0.1696 0.0032  -0.0110 -
0.0253 1 .
3750 CG    CG    . ARG ARG ARG B B 55  55  . 0.1340 0.1664 0.2021 -0.0211 -0.0184 -
0.0164 1 .
3751 CD    CD    . ARG ARG ARG B B 55  55  . 0.2144 0.1600 0.2121 0.0265  0.0380
0.0244  1 .
3752 NE    NE    . ARG ARG ARG B B 55  55  . 0.1628 0.1249 0.1825 -0.0031 -0.0402 -
0.0294 1 .
3753 CZ    CZ    . ARG ARG ARG B B 55  55  . 0.1274 0.1401 0.1202 -0.0192 -0.0226 -
0.0138 1 .
3754 NH1   NH1   . ARG ARG ARG B B 55  55  . 0.1172 0.1445 0.1280 0.0342  0.0109
0.0256  1 .
3755 NH2   NH2   . ARG ARG ARG B B 55  55  . 0.1692 0.1334 0.1499 0.0137  -0.0065
0.0099  1 .
3756 C     C     . ARG ARG ARG B B 55  55  . 0.1584 0.1268 0.1579 0.0064  -0.0165 -
0.0126 1 .
3757 O     O     . ARG ARG ARG B B 55  55  . 0.1478 0.1342 0.1688 0.0061  -0.0199 -
0.0259 1 .
3758 N     N     . TYR TYR TYR B B 56  56  . 0.1400 0.1144 0.1518 0.0215  -0.0068 -
0.0163 1 .
3759 CA    CA    . TYR TYR TYR B B 56  56  . 0.1370 0.1369 0.1303 -0.0057 -0.0062 -
0.0225 1 .
3760 CB    CB    . TYR TYR TYR B B 56  56  . 0.1375 0.1128 0.1416 -0.0183 -0.0026 -
0.0029 1 .
3761 CG    CG    . TYR TYR TYR B B 56  56  . 0.1103 0.1173 0.1134 0.0112  -0.0118 -
0.0194 1 .
3762 CD1   CD1   . TYR TYR TYR B B 56  56  . 0.1575 0.1274 0.1196 0.0047  0.0104  -
0.0386 1 .
3763 CE1   CE1   . TYR TYR TYR B B 56  56  . 0.1369 0.1536 0.1174 0.0128  -0.0037 -
0.0195 1 .
3764 CZ    CZ    . TYR TYR TYR B B 56  56  . 0.1220 0.1083 0.0974 -0.0101 -0.0099 -
0.0020 1 .
3765 OH    OH    . TYR TYR TYR B B 56  56  . 0.1561 0.1148 0.1008 -0.0089 -0.0181 -
0.0008 1 .
3766 CE2   CE2   . TYR TYR TYR B B 56  56  . 0.1124 0.1355 0.1282 -0.0203 -0.0264 -
0.0306 1 .
3767 CD2   CD2   . TYR TYR TYR B B 56  56  . 0.1541 0.0877 0.1303 0.0215  -0.0242 -
0.0330 1 .
3768 C     C     . TYR TYR TYR B B 56  56  . 0.1629 0.1303 0.1468 0.0077  0.0055  -
0.0214 1 .
3769 O     O     . TYR TYR TYR B B 56  56  . 0.1397 0.1492 0.1460 0.0030  -0.0137 -
0.0005 1 .
3770 N     N     . LEU LEU LEU B B 57  57  . 0.1497 0.1805 0.1871 -0.0039 -0.0169
0.0005  1 .
3771 CA    CA    . LEU LEU LEU B B 57  57  . 0.2060 0.2102 0.2143 -0.0023 -0.0075
0.0024  1 .
3772 CB    CB    . LEU LEU LEU B B 57  57  . 0.2046 0.2436 0.2153 -0.0048 -0.0023
0.0147  1 .
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3773 CG    CG    . LEU LEU LEU B B 57  57  . 0.2505 0.2462 0.2770 0.0084  -0.0016
0.0308  1 .
3774 CD1   CD1   . LEU LEU LEU B B 57  57  . 0.2916 0.2313 0.3327 0.0157  0.0256
0.0570  1 .
3775 CD2   CD2   . LEU LEU LEU B B 57  57  . 0.2033 0.2434 0.3323 0.0014  -0.0178
0.0434  1 .
3776 C     C     . LEU LEU LEU B B 57  57  . 0.1998 0.1821 0.1970 0.0003  -0.0013 -
0.0028 1 .
3777 O     O     . LEU LEU LEU B B 57  57  . 0.2236 0.2265 0.2329 0.0064  -0.0020 -
0.0025 1 .
3778 N     N     . GLY GLY GLY B B 58  58  . 0.1711 0.1368 0.2165 -0.0152 -0.0203 -
0.0321 1 .
3779 CA    CA    . GLY GLY GLY B B 58  58  . 0.1874 0.1447 0.2278 0.0050  -0.0292 -
0.0220 1 .
3780 C     C     . GLY GLY GLY B B 58  58  . 0.1691 0.1434 0.1782 0.0109  -0.0123 -
0.0088 1 .
3781 O     O     . GLY GLY GLY B B 58  58  . 0.1604 0.1120 0.1634 0.0220  -0.0056 -
0.0309 1 .
3782 N     N     . LYS LYS LYS B B 59  59  . 0.1430 0.1215 0.1536 -0.0013 -0.0085 -
0.0133 1 .
3783 CA    CA    . LYS LYS LYS B B 59  59  . 0.1295 0.1111 0.1451 0.0025  -0.0018 -
0.0115 1 .
3784 CB    CB    . LYS LYS LYS B B 59  59  . 0.1379 0.1420 0.1626 -0.0110 0.0421  -
0.0287 1 .
3785 CG    CG    . LYS LYS LYS B B 59  59  . 0.1487 0.1731 0.2211 0.0044  0.0455
0.0033  1 .
3786 CD    CD    . LYS LYS LYS B B 59  59  . 0.2180 0.2868 0.3721 0.0435  0.1182  -
0.0293 1 .
3787 CE    CE    . LYS LYS LYS B B 59  59  . 0.2927 0.3521 0.3865 -0.0064 0.1011
0.0072  1 .
3788 NZ    NZ    . LYS LYS LYS B B 59  59  . 0.3689 0.4228 0.4211 0.0250  0.1119
0.0057  1 .
3789 C     C     . LYS LYS LYS B B 59  59  . 0.1160 0.1185 0.1066 0.0038  0.0099  -
0.0052 1 .
3790 O     O     . LYS LYS LYS B B 59  59  . 0.1648 0.1036 0.1114 0.0080  0.0089  -
0.0155 1 .
3791 N     N     . GLY GLY GLY B B 60  60  . 0.1311 0.1182 0.1134 0.0228  0.0011
0.0065  1 .
3792 CA    CA    . GLY GLY GLY B B 60  60  . 0.1367 0.1430 0.1073 0.0073  -0.0140
0.0005  1 .
3793 C     C     . GLY GLY GLY B B 60  60  . 0.1070 0.0978 0.1097 -0.0020 -0.0049 -
0.0082 1 .
3794 O     O     . GLY GLY GLY B B 60  60  . 0.1410 0.0980 0.1166 0.0223  -0.0025 -
0.0123 1 .
3795 N     N     . VAL VAL VAL B B 61  61  . 0.0828 0.0964 0.1107 0.0093  -0.0078
0.0044  1 .
3796 CA    CA    . VAL VAL VAL B B 61  61  . 0.0820 0.1152 0.1069 0.0065  -0.0017 -
0.0199 1 .
3797 CB    CB    . VAL VAL VAL B B 61  61  . 0.1199 0.0989 0.1138 0.0047  0.0069  -
0.0050 1 .
3798 CG1   CG1   . VAL VAL VAL B B 61  61  . 0.1338 0.1185 0.0939 -0.0043 0.0430
0.0034  1 .
3799 CG2   CG2   . VAL VAL VAL B B 61  61  . 0.1142 0.0839 0.1275 0.0086  0.0111
0.0157  1 .
3800 C     C     . VAL VAL VAL B B 61  61  . 0.1128 0.0965 0.0934 0.0069  0.0023  -
0.0029 1 .
3801 O     O     . VAL VAL VAL B B 61  61  . 0.0864 0.1055 0.1150 0.0140  0.0170  -
0.0228 1 .
3802 N     N     . LEU LEU LEU B B 62  62  . 0.1137 0.1056 0.1051 0.0222  0.0066  -
0.0057 1 .
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3803 CA    CA    . LEU LEU LEU B B 62  62  . 0.1254 0.1516 0.1302 0.0151  0.0066  -
0.0250 1 .
3804 CB    CB    . LEU LEU LEU B B 62  62  . 0.1210 0.1384 0.1015 0.0236  -0.0076 -
0.0320 1 .
3805 CG    CG    . LEU LEU LEU B B 62  62  . 0.1289 0.1904 0.1525 0.0527  0.0081  -
0.0269 1 .
3806 CD1   CD1   . LEU LEU LEU B B 62  62  . 0.1952 0.2812 0.1782 0.0391  0.0206  -
0.0807 1 .
3807 CD2   CD2   . LEU LEU LEU B B 62  62  . 0.2069 0.2597 0.2167 0.0293  0.0207
0.0359  1 .
3808 C     C     . LEU LEU LEU B B 62  62  . 0.1243 0.1202 0.1191 0.0214  0.0052  -
0.0122 1 .
3809 O     O     . LEU LEU LEU B B 62  62  . 0.1369 0.1466 0.1241 0.0182  0.0103  -
0.0122 1 .
3810 N     N     . LYS LYS LYS B B 63  63  . 0.1190 0.1154 0.1170 0.0346  -0.0036 -
0.0042 1 .
3811 CA    CA    . LYS LYS LYS B B 63  63  . 0.1460 0.1357 0.1372 0.0211  -0.0110
0.0005  1 .
3812 CB    CB    . LYS LYS LYS B B 63  63  . 0.1495 0.1043 0.1314 0.0343  -0.0030
0.0086  1 .
3813 CG    CG    . LYS LYS LYS B B 63  63  . 0.1614 0.1247 0.1621 -0.0046 -0.0178
0.0180  1 .
3814 CD    CD    . LYS LYS LYS B B 63  63  . 0.2134 0.1626 0.2205 0.0246  -0.0018 -
0.0002 1 .
3815 CE    CE    . LYS LYS LYS B B 63  63  . 0.2189 0.1934 0.2536 -0.0266 0.0182  -
0.0122 1 .
3816 NZ    NZ    . LYS LYS LYS B B 63  63  . 0.2920 0.1754 0.3661 -0.0060 0.0462  -
0.0110 1 .
3817 C     C     . LYS LYS LYS B B 63  63  . 0.1273 0.1374 0.1187 0.0131  0.0084  -
0.0011 1 .
3818 O     O     . LYS LYS LYS B B 63  63  . 0.1141 0.1405 0.1349 0.0149  -0.0077 -
0.0091 1 .
3819 N     N     . ALA ALA ALA B B 64  64  . 0.1198 0.0996 0.1042 0.0181  0.0044  -
0.0101 1 .
3820 CA    CA    . ALA ALA ALA B B 64  64  . 0.0953 0.1353 0.1179 0.0033  0.0113  -
0.0075 1 .
3821 CB    CB    . ALA ALA ALA B B 64  64  . 0.1214 0.1183 0.1156 -0.0037 0.0234  -
0.0111 1 .
3822 C     C     . ALA ALA ALA B B 64  64  . 0.1123 0.1192 0.1006 0.0116  0.0081  -
0.0060 1 .
3823 O     O     . ALA ALA ALA B B 64  64  . 0.1169 0.1370 0.1232 0.0131  0.0039  -
0.0038 1 .
3824 N     N     . VAL VAL VAL B B 65  65  . 0.1084 0.1034 0.1030 0.0177  0.0077
0.0004  1 .
3825 CA    CA    . VAL VAL VAL B B 65  65  . 0.1116 0.1158 0.1187 0.0163  0.0066
0.0006  1 .
3826 CB    CB    . VAL VAL VAL B B 65  65  . 0.0938 0.1336 0.1229 0.0175  0.0055  -
0.0074 1 .
3827 CG1   CG1   . VAL VAL VAL B B 65  65  . 0.1426 0.1637 0.1478 -0.0026 -0.0126
0.0226  1 .
3828 CG2   CG2   . VAL VAL VAL B B 65  65  . 0.1037 0.1589 0.1554 0.0327  0.0025  -
0.0135 1 .
3829 C     C     . VAL VAL VAL B B 65  65  . 0.1164 0.1147 0.1142 -0.0009 0.0032  -
0.0027 1 .
3830 O     O     . VAL VAL VAL B B 65  65  . 0.1184 0.1289 0.1377 0.0187  0.0052  -
0.0070 1 .
3831 N     N     . ASP ASP ASP B B 66  66  . 0.1207 0.1348 0.1251 0.0317  0.0136  -
0.0013 1 .
3832 CA    CA    . ASP ASP ASP B B 66  66  . 0.1232 0.1592 0.1464 0.0346  0.0119  -
0.0133 1 .
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3833 CB    CB    . ASP ASP ASP B B 66  66  . 0.1369 0.1689 0.1782 0.0281  0.0096  -
0.0380 1 .
3834 CG    CG    . ASP ASP ASP B B 66  66  . 0.1908 0.2914 0.2601 0.0306  -0.0157 -
0.0177 1 .
3835 OD1   OD1   . ASP ASP ASP B B 66  66  . 0.3655 0.3293 0.4394 0.0717  0.0185  -
0.0463 1 .
3836 OD2   OD2   . ASP ASP ASP B B 66  66  . 0.2053 0.4590 0.2541 0.0138  0.0542  -
0.0531 1 .
3837 C     C     . ASP ASP ASP B B 66  66  . 0.1327 0.1405 0.1504 0.0014  -0.0005
0.0123  1 .
3838 O     O     . ASP ASP ASP B B 66  66  . 0.1489 0.1686 0.1592 0.0073  0.0007
0.0052  1 .
3839 N     N     . HIS HIS HIS B B 67  67  . 0.1471 0.1570 0.1240 0.0121  0.0198  -
0.0144 1 .
3840 CA    CA    . HIS HIS HIS B B 67  67  . 0.1348 0.1175 0.1275 0.0044  -0.0006 -
0.0062 1 .
3841 CB    CB    . HIS HIS HIS B B 67  67  . 0.1202 0.1272 0.1681 0.0033  0.0218  -
0.0128 1 .
3842 CG    CG    . HIS HIS HIS B B 67  67  . 0.1727 0.1335 0.1797 0.0192  0.0079  -
0.0092 1 .
3843 ND1   ND1   . HIS HIS HIS B B 67  67  . 0.1415 0.1791 0.1842 0.0297  -0.0187
0.0000  1 .
3844 CE1   CE1   . HIS HIS HIS B B 67  67  . 0.1617 0.1456 0.1975 0.0178  -0.0092
0.0217  1 .
3845 NE2   NE2   . HIS HIS HIS B B 67  67  . 0.1447 0.1426 0.2104 0.0130  -0.0194 -
0.0131 1 .
3846 CD2   CD2   . HIS HIS HIS B B 67  67  . 0.1631 0.1198 0.1765 0.0099  -0.0074
0.0121  1 .
3847 C     C     . HIS HIS HIS B B 67  67  . 0.1321 0.1148 0.1603 0.0130  -0.0166
0.0042  1 .
3848 O     O     . HIS HIS HIS B B 67  67  . 0.1351 0.1542 0.1793 0.0240  -0.0015
0.0105  1 .
3849 N     N     . ILE ILE ILE B B 68  68  . 0.1208 0.1322 0.1280 0.0304  -0.0038 -
0.0114 1 .
3850 CA    CA    . ILE ILE ILE B B 68  68  . 0.1107 0.1374 0.1392 0.0346  0.0062
0.0144  1 .
3851 CB    CB    . ILE ILE ILE B B 68  68  . 0.1123 0.1284 0.1038 0.0307  0.0042
0.0082  1 .
3852 CG1   CG1   . ILE ILE ILE B B 68  68  . 0.1251 0.1352 0.1208 0.0248  0.0236
0.0374  1 .
3853 CD    CD    . ILE ILE ILE B B 68  68  . 0.1163 0.1243 0.1354 0.0083  0.0243
0.0159  1 .
3854 CG2   CG2   . ILE ILE ILE B B 68  68  . 0.1334 0.1370 0.1222 0.0073  -0.0202
0.0266  1 .
3855 C     C     . ILE ILE ILE B B 68  68  . 0.1315 0.1286 0.1280 -0.0123 0.0059  -
0.0014 1 .
3856 O     O     . ILE ILE ILE B B 68  68  . 0.1310 0.1645 0.1458 0.0131  0.0008
0.0127  1 .
3857 N     N     . ASN ASN ASN B B 69  69  . 0.1219 0.1332 0.1129 0.0149  -0.0008
0.0122  1 .
3858 CA    CA    . ASN ASN ASN B B 69  69  . 0.1381 0.1638 0.1543 0.0244  -0.0050
0.0191  1 .
3859 CB    CB    . ASN ASN ASN B B 69  69  . 0.1302 0.1635 0.1180 0.0096  0.0195
0.0101  1 .
3860 CG    CG    . ASN ASN ASN B B 69  69  . 0.1300 0.1353 0.1055 0.0032  0.0076  -
0.0019 1 .
3861 OD1   OD1   . ASN ASN ASN B B 69  69  . 0.1130 0.1721 0.1610 0.0194  -0.0103
0.0055  1 .
3862 ND2   ND2   . ASN ASN ASN B B 69  69  . 0.1162 0.1529 0.1128 0.0089  0.0027
0.0190  1 .
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3863 C     C     . ASN ASN ASN B B 69  69  . 0.1248 0.1579 0.1523 0.0202  0.0026
0.0139  1 .
3864 O     O     . ASN ASN ASN B B 69  69  . 0.1286 0.1917 0.1781 0.0168  0.0059
0.0182  1 .
3865 N     N     . SER SER SER B B 70  70  . 0.1379 0.1572 0.1291 0.0326  -0.0047
0.0013  1 .
3866 CA    CA    . SER SER SER B B 70  70  . 0.1158 0.1680 0.1516 0.0477  0.0063
0.0021  1 .
3867 CB    CB    . SER SER SER B B 70  70  . 0.1586 0.2212 0.1870 0.0616  -0.0298 -
0.0308 1 .
3868 OG    OG    . SER SER SER B B 70  70  . 0.2667 0.3458 0.2412 0.0148  -0.0036
0.0134  1 .
3869 C     C     . SER SER SER B B 70  70  . 0.1237 0.1940 0.1582 0.0388  0.0092  -
0.0034 1 .
3870 O     O     . SER SER SER B B 70  70  . 0.1382 0.2439 0.1997 0.0537  0.0334  -
0.0108 1 .
3871 N     N     . THR THR THR B B 71  71  . 0.1323 0.1732 0.1365 0.0273  -0.0204 -
0.0179 1 .
3872 CA    CA    . THR THR THR B B 71  71  . 0.1207 0.1456 0.1568 0.0339  -0.0130 -
0.0022 1 .
3873 CB    CB    . THR THR THR B B 71  71  . 0.1442 0.1485 0.1458 0.0364  -0.0215 -
0.0122 1 .
3874 OG1   OG1   . THR THR THR B B 71  71  . 0.1501 0.1623 0.1729 0.0141  0.0159  -
0.0043 1 .
3875 CG2   CG2   . THR THR THR B B 71  71  . 0.1938 0.1757 0.1958 0.0749  -0.0502
0.0101  1 .
3876 C     C     . THR THR THR B B 71  71  . 0.1254 0.1604 0.1732 0.0272  -0.0176 -
0.0191 1 .
3877 O     O     . THR THR THR B B 71  71  . 0.1069 0.1562 0.1773 0.0130  0.0011
0.0025  1 .
3878 N     N     . ILE ILE ILE B B 72  72  . 0.1014 0.1260 0.1363 0.0360  0.0206  -
0.0128 1 .
3879 CA    CA    . ILE ILE ILE B B 72  72  . 0.0894 0.1481 0.1447 0.0089  0.0024  -
0.0071 1 .
3880 CB    CB    . ILE ILE ILE B B 72  72  . 0.0910 0.1219 0.1396 0.0226  0.0165  -
0.0125 1 .
3881 CG1   CG1   . ILE ILE ILE B B 72  72  . 0.0958 0.1349 0.1730 0.0335  0.0424
0.0074  1 .
3882 CD    CD    . ILE ILE ILE B B 72  72  . 0.0889 0.1877 0.1583 0.0505  0.0220
0.0792  1 .
3883 CG2   CG2   . ILE ILE ILE B B 72  72  . 0.1359 0.1910 0.1428 0.0117  0.0014  -
0.0056 1 .
3884 C     C     . ILE ILE ILE B B 72  72  . 0.1282 0.1411 0.1233 0.0043  0.0054
0.0025  1 .
3885 O     O     . ILE ILE ILE B B 72  72  . 0.1056 0.2018 0.1507 0.0226  -0.0072
0.0098  1 .
3886 N     N     . ALA ALA ALA B B 73  73  . 0.1030 0.1161 0.1397 0.0334  0.0115
0.0068  1 .
3887 CA    CA    . ALA ALA ALA B B 73  73  . 0.1153 0.1551 0.1538 0.0184  0.0146
0.0067  1 .
3888 CB    CB    . ALA ALA ALA B B 73  73  . 0.1417 0.1784 0.1660 0.0237  0.0052  -
0.0078 1 .
3889 C     C     . ALA ALA ALA B B 73  73  . 0.1300 0.1473 0.1465 0.0134  0.0170  -
0.0151 1 .
3890 O     O     . ALA ALA ALA B B 73  73  . 0.1198 0.1732 0.1816 0.0063  0.0286  -
0.0033 1 .
3891 N     N     . PRO PRO PRO B B 74  74  . 0.1379 0.1568 0.1574 0.0191  0.0128
0.0109  1 .
3892 CA    CA    . PRO PRO PRO B B 74  74  . 0.1332 0.1674 0.1638 0.0137  0.0199
0.0019  1 .
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3893 CB    CB    . PRO PRO PRO B B 74  74  . 0.1299 0.1632 0.1764 0.0198  0.0035
0.0014  1 .
3894 CG    CG    . PRO PRO PRO B B 74  74  . 0.1410 0.1742 0.1816 0.0294  0.0445  -
0.0133 1 .
3895 CD    CD    . PRO PRO PRO B B 74  74  . 0.1396 0.1332 0.1815 0.0110  0.0436
0.0029  1 .
3896 C     C     . PRO PRO PRO B B 74  74  . 0.1389 0.1463 0.1646 0.0222  0.0092
0.0071  1 .
3897 O     O     . PRO PRO PRO B B 74  74  . 0.1560 0.1835 0.1826 0.0103  -0.0024
0.0045  1 .
3898 N     N     . ALA ALA ALA B B 75  75  . 0.1213 0.1644 0.1545 0.0340  0.0073
0.0042  1 .
3899 CA    CA    . ALA ALA ALA B B 75  75  . 0.1118 0.1481 0.1478 0.0051  -0.0091
0.0110  1 .
3900 CB    CB    . ALA ALA ALA B B 75  75  . 0.1675 0.1553 0.1738 -0.0006 0.0107
0.0329  1 .
3901 C     C     . ALA ALA ALA B B 75  75  . 0.1289 0.1439 0.1743 0.0188  -0.0099 -
0.0019 1 .
3902 O     O     . ALA ALA ALA B B 75  75  . 0.1231 0.1413 0.1733 0.0114  0.0000  -
0.0135 1 .
3903 N     N     . LEU LEU LEU B B 76  76  . 0.1352 0.1542 0.1572 0.0294  0.0065
0.0047  1 .
3904 CA    CA    . LEU LEU LEU B B 76  76  . 0.1139 0.1487 0.1577 0.0452  0.0122  -
0.0053 1 .
3905 CB    CB    . LEU LEU LEU B B 76  76  . 0.1231 0.1683 0.1855 0.0449  0.0176
0.0201  1 .
3906 CG    CG    . LEU LEU LEU B B 76  76  . 0.1381 0.1858 0.2050 0.0588  0.0330
0.0378  1 .
3907 CD1   CD1   . LEU LEU LEU B B 76  76  . 0.1008 0.2144 0.2382 0.0606  0.0519
0.0293  1 .
3908 CD2   CD2   . LEU LEU LEU B B 76  76  . 0.1406 0.2783 0.2913 0.1045  0.0053
0.0994  1 .
3909 C     C     . LEU LEU LEU B B 76  76  . 0.1358 0.1464 0.1534 0.0234  -0.0160 -
0.0010 1 .
3910 O     O     . LEU LEU LEU B B 76  76  . 0.1179 0.1559 0.1653 0.0148  0.0009
0.0246  1 .
3911 N     N     . ILE ILE ILE B B 77  77  . 0.1297 0.1573 0.1661 0.0241  0.0274
0.0130  1 .
3912 CA    CA    . ILE ILE ILE B B 77  77  . 0.1112 0.1613 0.1464 0.0249  0.0203
0.0281  1 .
3913 CB    CB    . ILE ILE ILE B B 77  77  . 0.1332 0.1655 0.1564 0.0258  0.0297
0.0103  1 .
3914 CG1   CG1   . ILE ILE ILE B B 77  77  . 0.1510 0.1799 0.1912 0.0610  -0.0061
0.0154  1 .
3915 CD    CD    . ILE ILE ILE B B 77  77  . 0.2032 0.1806 0.2053 0.0216  -0.0344
0.0405  1 .
3916 CG2   CG2   . ILE ILE ILE B B 77  77  . 0.1178 0.2127 0.2150 -0.0032 0.0452
0.0599  1 .
3917 C     C     . ILE ILE ILE B B 77  77  . 0.1414 0.1765 0.1735 0.0258  0.0041
0.0071  1 .
3918 O     O     . ILE ILE ILE B B 77  77  . 0.1342 0.2021 0.1958 0.0246  -0.0092
0.0188  1 .
3919 N     N     . SER SER SER B B 78  78  . 0.1186 0.1610 0.1944 0.0235  -0.0028
0.0053  1 .
3920 CA    CA    . SER SER SER B B 78  78  . 0.1208 0.1761 0.2076 0.0137  0.0116  -
0.0038 1 .
3921 CB    CB    . SER SER SER B B 78  78  . 0.1100 0.1711 0.3117 0.0452  0.0436
0.0173  1 .
3922 OG    OG    . SER SER SER B B 78  78  . 0.3546 0.3508 0.3962 0.0038  -0.0118
0.0101  1 .
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3923 C     C     . SER SER SER B B 78  78  . 0.1404 0.1621 0.1813 0.0024  0.0266  -
0.0030 1 .
3924 O     O     . SER SER SER B B 78  78  . 0.1418 0.2097 0.2302 0.0332  0.0274
0.0165  1 .
3925 N     N     . SER SER SER B B 79  79  . 0.1365 0.1370 0.1519 0.0270  0.0234
0.0033  1 .
3926 CA    CA    . SER SER SER B B 79  79  . 0.1608 0.1561 0.1790 0.0153  0.0138
0.0121  1 .
3927 CB    CB    . SER SER SER B B 79  79  . 0.1477 0.1507 0.2064 0.0346  0.0244
0.0209  1 .
3928 OG    OG    . SER SER SER B B 79  79  . 0.1516 0.1662 0.2060 0.0163  0.0150
0.0195  1 .
3929 C     C     . SER SER SER B B 79  79  . 0.1802 0.1838 0.1900 0.0087  0.0070  -
0.0011 1 .
3930 O     O     . SER SER SER B B 79  79  . 0.1421 0.2259 0.2091 0.0260  -0.0108
0.0044  1 .
3931 N     N     . GLY GLY GLY B B 80  80  . 0.1615 0.1555 0.2066 0.0127  0.0096
0.0191  1 .
3932 CA    CA    . GLY GLY GLY B B 80  80  . 0.1732 0.1495 0.1894 0.0010  0.0057  -
0.0032 1 .
3933 C     C     . GLY GLY GLY B B 80  80  . 0.1778 0.1825 0.2067 -0.0002 0.0036
0.0099  1 .
3934 O     O     . GLY GLY GLY B B 80  80  . 0.2018 0.1750 0.2439 -0.0059 0.0235  -
0.0037 1 .
3935 N     N     . LEU LEU LEU B B 81  81  . 0.1484 0.1797 0.1751 0.0015  0.0012
0.0140  1 .
3936 CA    CA    . LEU LEU LEU B B 81  81  . 0.1466 0.1655 0.1693 0.0243  0.0008
0.0194  1 .
3937 CB    CB    . LEU LEU LEU B B 81  81  . 0.1508 0.1838 0.1728 0.0201  -0.0146
0.0243  1 .
3938 CG    CG    . LEU LEU LEU B B 81  81  . 0.1951 0.1618 0.2111 0.0353  -0.0336
0.0349  1 .
3939 CD1   CD1   . LEU LEU LEU B B 81  81  . 0.2056 0.1659 0.2914 0.0417  0.0119
0.0200  1 .
3940 CD2   CD2   . LEU LEU LEU B B 81  81  . 0.2039 0.2038 0.1816 0.0397  -0.0236
0.0085  1 .
3941 C     C     . LEU LEU LEU B B 81  81  . 0.1583 0.1806 0.1806 0.0210  -0.0026
0.0118  1 .
3942 O     O     . LEU LEU LEU B B 81  81  . 0.1686 0.1748 0.1838 0.0337  -0.0349
0.0185  1 .
3943 N     N     . SER SER SER B B 82  82  . 0.1438 0.1826 0.1869 0.0051  -0.0084
0.0002  1 .
3944 CA    CA    . SER SER SER B B 82  82  . 0.1591 0.1802 0.2211 0.0003  0.0167
0.0021  1 .
3945 CB    CB    . SER SER SER B B 82  82  . 0.1705 0.2041 0.2575 0.0062  -0.0018 -
0.0067 1 .
3946 OG    OG    . SER SER SER B B 82  82  . 0.1887 0.2222 0.2692 -0.0077 0.0278
0.0003  1 .
3947 C     C     . SER SER SER B B 82  82  . 0.1416 0.1624 0.1938 -0.0087 0.0081
0.0148  1 .
3948 O     O     . SER SER SER B B 82  82  . 0.1415 0.1777 0.1860 0.0104  -0.0037
0.0419  1 .
3949 N     N     . VAL VAL VAL B B 83  83  . 0.1301 0.1684 0.1669 -0.0077 0.0118
0.0101  1 .
3950 CA    CA    . VAL VAL VAL B B 83  83  . 0.1400 0.1632 0.1524 0.0102  0.0109
0.0193  1 .
3951 CB    CB    . VAL VAL VAL B B 83  83  . 0.1486 0.1573 0.1819 0.0127  0.0020
0.0251  1 .
3952 CG1   CG1   . VAL VAL VAL B B 83  83  . 0.1703 0.1735 0.2103 0.0142  -0.0134
0.0337  1 .
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3953 CG2   CG2   . VAL VAL VAL B B 83  83  . 0.1695 0.1433 0.1781 -0.0157 0.0081
0.0038  1 .
3954 C     C     . VAL VAL VAL B B 83  83  . 0.1500 0.1514 0.1658 0.0074  -0.0042
0.0109  1 .
3955 O     O     . VAL VAL VAL B B 83  83  . 0.1649 0.1662 0.1648 -0.0108 0.0192
0.0261  1 .
3956 N     N     . VAL VAL VAL B B 84  84  . 0.1898 0.1692 0.1653 -0.0195 0.0069  -
0.0002 1 .
3957 CA    CA    . VAL VAL VAL B B 84  84  . 0.1767 0.1749 0.1852 -0.0279 -0.0124 -
0.0044 1 .
3958 CB    CB    . VAL VAL VAL B B 84  84  . 0.1642 0.1754 0.2095 -0.0189 -0.0469 -
0.0140 1 .
3959 CG1   CG1   . VAL VAL VAL B B 84  84  . 0.2368 0.2054 0.2389 -0.0095 -0.0016
0.0053  1 .
3960 CG2   CG2   . VAL VAL VAL B B 84  84  . 0.2033 0.2187 0.2655 0.0140  -0.0076
0.0244  1 .
3961 C     C     . VAL VAL VAL B B 84  84  . 0.1712 0.1639 0.1702 -0.0128 -0.0129 -
0.0113 1 .
3962 O     O     . VAL VAL VAL B B 84  84  . 0.1791 0.1863 0.1954 -0.0052 0.0117
0.0075  1 .
3963 N     N     . GLU GLU GLU B B 85  85  . 0.1598 0.1634 0.1773 -0.0092 -0.0181 -
0.0033 1 .
3964 CA    CA    . GLU GLU GLU B B 85  85  . 0.1547 0.1482 0.1996 -0.0095 -0.0113
0.0115  1 .
3965 CB    CB    . GLU GLU GLU B B 85  85  . 0.1469 0.1885 0.2151 -0.0220 0.0003
0.0316  1 .
3966 CG    CG    . GLU GLU GLU B B 85  85  . 0.1695 0.2381 0.2750 -0.0633 0.0007  -
0.0082 1 .
3967 CD    CD    . GLU GLU GLU B B 85  85  . 0.3904 0.5048 0.4401 0.0147  -0.0350 -
0.0376 1 .
3968 OE1   OE1   . GLU GLU GLU B B 85  85  . 0.5560 0.6245 0.4590 0.0067  -0.0413 -
0.0518 1 .
3969 OE2   OE2   . GLU GLU GLU B B 85  85  . 0.5966 0.6110 0.4143 -0.0516 -0.1344 -
0.0059 1 .
3970 C     C     . GLU GLU GLU B B 85  85  . 0.1381 0.1564 0.1720 -0.0091 -0.0078 -
0.0001 1 .
3971 O     O     . GLU GLU GLU B B 85  85  . 0.1391 0.1506 0.1641 0.0158  0.0079
0.0111  1 .
3972 N     N     . GLN GLN GLN B B 86  86  . 0.1432 0.1553 0.1511 0.0017  -0.0037
0.0141  1 .
3973 CA    CA    . GLN GLN GLN B B 86  86  . 0.1243 0.1258 0.1586 0.0036  0.0044
0.0141  1 .
3974 CB    CB    . GLN GLN GLN B B 86  86  . 0.1496 0.1269 0.1698 -0.0068 0.0126  -
0.0013 1 .
3975 CG    CG    . GLN GLN GLN B B 86  86  . 0.0958 0.1394 0.1446 0.0001  -0.0124 -
0.0059 1 .
3976 CD    CD    . GLN GLN GLN B B 86  86  . 0.0946 0.1181 0.1309 0.0131  0.0117
0.0062  1 .
3977 OE1   OE1   . GLN GLN GLN B B 86  86  . 0.1494 0.1302 0.1651 0.0049  -0.0065
0.0117  1 .
3978 NE2   NE2   . GLN GLN GLN B B 86  86  . 0.1410 0.1097 0.1437 0.0063  0.0052  -
0.0111 1 .
3979 C     C     . GLN GLN GLN B B 86  86  . 0.1272 0.1293 0.1503 0.0040  -0.0026
0.0018  1 .
3980 O     O     . GLN GLN GLN B B 86  86  . 0.1173 0.1413 0.1662 0.0130  0.0046  -
0.0009 1 .
3981 N     N     . GLU GLU GLU B B 87  87  . 0.1134 0.1532 0.1589 0.0072  0.0068
0.0122  1 .
3982 CA    CA    . GLU GLU GLU B B 87  87  . 0.1534 0.1614 0.1514 0.0004  -0.0118
0.0064  1 .
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3983 CB    CB    . GLU GLU GLU B B 87  87  . 0.1912 0.1497 0.1583 -0.0171 -0.0239
0.0045  1 .
3984 CG    CG    . GLU GLU GLU B B 87  87  . 0.3197 0.2652 0.2309 -0.0124 -0.0270
0.0222  1 .
3985 CD    CD    . GLU GLU GLU B B 87  87  . 0.4433 0.4267 0.2856 -0.0359 -0.0438
0.0247  1 .
3986 OE1   OE1   . GLU GLU GLU B B 87  87  . 0.3945 0.4946 0.3346 -0.0106 0.0173
0.0507  1 .
3987 OE2   OE2   . GLU GLU GLU B B 87  87  . 0.5367 0.4738 0.2980 -0.0439 -0.0825 -
0.0029 1 .
3988 C     C     . GLU GLU GLU B B 87  87  . 0.1557 0.1698 0.1605 -0.0059 -0.0106 -
0.0049 1 .
3989 O     O     . GLU GLU GLU B B 87  87  . 0.1294 0.1706 0.1624 0.0023  -0.0206
0.0168  1 .
3990 N     N     . LYS LYS LYS B B 88  88  . 0.1248 0.1476 0.1454 0.0197  -0.0065
0.0107  1 .
3991 CA    CA    . LYS LYS LYS B B 88  88  . 0.1282 0.1496 0.1392 0.0014  0.0019
0.0028  1 .
3992 CB    CB    . LYS LYS LYS B B 88  88  . 0.1186 0.2131 0.1972 0.0272  0.0003
0.0266  1 .
3993 CG    CG    . LYS LYS LYS B B 88  88  . 0.2002 0.2372 0.2069 0.0044  -0.0041
0.0160  1 .
3994 CD    CD    . LYS LYS LYS B B 88  88  . 0.1531 0.2902 0.2699 -0.0236 -0.0246
0.0163  1 .
3995 CE    CE    . LYS LYS LYS B B 88  88  . 0.2014 0.4370 0.3595 0.0196  -0.0431 -
0.0009 1 .
3996 NZ    NZ    . LYS LYS LYS B B 88  88  . 0.4014 0.4438 0.4174 0.0278  -0.0528 -
0.0286 1 .
3997 C     C     . LYS LYS LYS B B 88  88  . 0.1338 0.1280 0.1582 0.0236  -0.0211
0.0167  1 .
3998 O     O     . LYS LYS LYS B B 88  88  . 0.1479 0.1561 0.1729 0.0122  -0.0193
0.0013  1 .
3999 N     N     . LEU LEU LEU B B 89  89  . 0.1160 0.1318 0.1316 0.0149  -0.0051
0.0134  1 .
4000 CA    CA    . LEU LEU LEU B B 89  89  . 0.0929 0.1293 0.1314 0.0050  -0.0120
0.0295  1 .
4001 CB    CB    . LEU LEU LEU B B 89  89  . 0.1281 0.1157 0.1676 0.0044  0.0042
0.0459  1 .
4002 CG    CG    . LEU LEU LEU B B 89  89  . 0.1148 0.1296 0.1473 0.0031  -0.0082 -
0.0034 1 .
4003 CD1   CD1   . LEU LEU LEU B B 89  89  . 0.0987 0.1428 0.1889 0.0058  -0.0053
0.0259  1 .
4004 CD2   CD2   . LEU LEU LEU B B 89  89  . 0.1617 0.1912 0.1281 0.0072  0.0115
0.0198  1 .
4005 C     C     . LEU LEU LEU B B 89  89  . 0.0931 0.1241 0.1200 0.0063  -0.0210
0.0048  1 .
4006 O     O     . LEU LEU LEU B B 89  89  . 0.1136 0.1540 0.1631 0.0114  -0.0233
0.0045  1 .
4007 N     N     . ASP ASP ASP B B 90  90  . 0.1128 0.1412 0.1495 0.0091  -0.0131
0.0097  1 .
4008 CA    CA    . ASP ASP ASP B B 90  90  . 0.1340 0.1141 0.1505 0.0023  -0.0007
0.0120  1 .
4009 CB    CB    . ASP ASP ASP B B 90  90  . 0.1242 0.1331 0.1522 0.0302  -0.0090
0.0189  1 .
4010 CG    CG    . ASP ASP ASP B B 90  90  . 0.1142 0.1319 0.1532 -0.0011 -0.0216 -
0.0122 1 .
4011 OD1   OD1   . ASP ASP ASP B B 90  90  . 0.1490 0.1923 0.1525 0.0236  -0.0039
0.0002  1 .
4012 OD2   OD2   . ASP ASP ASP B B 90  90  . 0.1368 0.1448 0.1304 0.0211  0.0133  -
0.0066 1 .
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4013 C     C     . ASP ASP ASP B B 90  90  . 0.1327 0.1357 0.1394 0.0068  -0.0109
0.0072  1 .
4014 O     O     . ASP ASP ASP B B 90  90  . 0.1072 0.1385 0.1808 0.0142  -0.0078 -
0.0017 1 .
4015 N     N     . ASN ASN ASN B B 91  91  . 0.1296 0.1461 0.1637 0.0045  -0.0038
0.0014  1 .
4016 CA    CA    . ASN ASN ASN B B 91  91  . 0.1596 0.1591 0.1650 0.0011  -0.0245
0.0072  1 .
4017 CB    CB    . ASN ASN ASN B B 91  91  . 0.1823 0.1771 0.2193 0.0334  -0.0581
0.0516  1 .
4018 CG    CG    . ASN ASN ASN B B 91  91  . 0.3050 0.3702 0.2456 0.0822  -0.0192
0.0266  1 .
4019 OD1   OD1   . ASN ASN ASN B B 91  91  . 0.3494 0.4899 0.3492 0.1641  -0.0322
0.0556  1 .
4020 ND2   ND2   . ASN ASN ASN B B 91  91  . 0.4449 0.4897 0.4789 0.1230  -0.0306
0.0428  1 .
4021 C     C     . ASN ASN ASN B B 91  91  . 0.1474 0.1494 0.1625 0.0036  -0.0182
0.0192  1 .
4022 O     O     . ASN ASN ASN B B 91  91  . 0.1593 0.1438 0.2033 0.0017  -0.0150
0.0094  1 .
4023 N     N     . LEU LEU LEU B B 92  92  . 0.1020 0.1523 0.1548 0.0055  -0.0121 -
0.0003 1 .
4024 CA    CA    . LEU LEU LEU B B 92  92  . 0.1419 0.1394 0.1546 0.0151  -0.0066
0.0141  1 .
4025 CB    CB    . LEU LEU LEU B B 92  92  . 0.1293 0.1485 0.1745 0.0068  0.0105
0.0108  1 .
4026 CG    CG    . LEU LEU LEU B B 92  92  . 0.1978 0.1743 0.1977 0.0156  0.0203
0.0309  1 .
4027 CD1   CD1   . LEU LEU LEU B B 92  92  . 0.2037 0.1873 0.3237 0.0258  0.0166
0.0040  1 .
4028 CD2   CD2   . LEU LEU LEU B B 92  92  . 0.1070 0.1378 0.1916 -0.0088 0.0280
0.0117  1 .
4029 C     C     . LEU LEU LEU B B 92  92  . 0.1358 0.1469 0.1833 0.0116  0.0124
0.0086  1 .
4030 O     O     . LEU LEU LEU B B 92  92  . 0.1374 0.1382 0.1679 0.0123  0.0013
0.0007  1 .
4031 N     N     . MET MET MET B B 93  93  . 0.0996 0.1442 0.1480 0.0220  0.0073
0.0186  1 .
4032 CA    CA    . MET MET MET B B 93  93  . 0.1074 0.1120 0.1453 0.0175  -0.0077
0.0089  1 .
4033 CB    CB    . MET MET MET B B 93  93  . 0.1118 0.1250 0.1311 0.0358  0.0165
0.0151  1 .
4034 CG    CG    . MET MET MET B B 93  93  . 0.1177 0.1273 0.1500 0.0349  0.0008
0.0079  1 .
4035 SD    SD    . MET MET MET B B 93  93  . 0.1270 0.1581 0.1564 0.0302  -0.0022
0.0084  1 .
4036 CE    CE    . MET MET MET B B 93  93  . 0.1412 0.1539 0.1905 0.0480  -0.0115 -
0.0133 1 .
4037 C     C     . MET MET MET B B 93  93  . 0.1188 0.1427 0.1339 0.0076  -0.0009 -
0.0055 1 .
4038 O     O     . MET MET MET B B 93  93  . 0.1375 0.1222 0.1396 0.0067  0.0050  -
0.0147 1 .
4039 N     N     . LEU LEU LEU B B 94  94  . 0.1107 0.1239 0.1329 0.0392  0.0065
0.0117  1 .
4040 CA    CA    . LEU LEU LEU B B 94  94  . 0.1458 0.1321 0.1569 0.0353  0.0143
0.0063  1 .
4041 CB    CB    . LEU LEU LEU B B 94  94  . 0.1259 0.1433 0.1607 0.0541  0.0304  -
0.0313 1 .
4042 CG    CG    . LEU LEU LEU B B 94  94  . 0.2655 0.2251 0.1829 0.1120  -0.0052 -
0.0127 1 .
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4043 CD1   CD1   . LEU LEU LEU B B 94  94  . 0.2136 0.3232 0.1715 0.0929  -0.0035
0.0030  1 .
4044 CD2   CD2   . LEU LEU LEU B B 94  94  . 0.2007 0.2543 0.2195 0.0618  0.0128  -
0.0312 1 .
4045 C     C     . LEU LEU LEU B B 94  94  . 0.1110 0.1159 0.1565 0.0070  0.0115  -
0.0040 1 .
4046 O     O     . LEU LEU LEU B B 94  94  . 0.1312 0.1229 0.1631 0.0123  0.0168
0.0053  1 .
4047 N     N     . GLU GLU GLU B B 95  95  . 0.1348 0.1601 0.1719 0.0203  0.0276
0.0128  1 .
4048 CA    CA    . GLU GLU GLU B B 95  95  . 0.1474 0.1443 0.1711 0.0350  0.0059
0.0013  1 .
4049 CB    CB    . GLU GLU GLU B B 95  95  . 0.1672 0.1541 0.2205 0.0285  -0.0075
0.0016  1 .
4050 CG    CG    . GLU GLU GLU B B 95  95  . 0.2634 0.2585 0.2753 0.0474  -0.0254
0.0119  1 .
4051 CD    CD    . GLU GLU GLU B B 95  95  . 0.4026 0.3828 0.4486 0.0582  0.0136
0.0384  1 .
4052 OE1   OE1   . GLU GLU GLU B B 95  95  . 0.4427 0.4737 0.5868 0.1012  0.0019
0.0343  1 .
4053 OE2   OE2   . GLU GLU GLU B B 95  95  . 0.4415 0.3532 0.4015 0.0631  0.0190  -
0.0447 1 .
4054 C     C     . GLU GLU GLU B B 95  95  . 0.1226 0.1554 0.1783 0.0123  0.0151
0.0067  1 .
4055 O     O     . GLU GLU GLU B B 95  95  . 0.1732 0.1473 0.2004 0.0377  0.0152
0.0062  1 .
4056 N     N     . LEU LEU LEU B B 96  96  . 0.0908 0.1703 0.1494 0.0305  0.0191
0.0057  1 .
4057 CA    CA    . LEU LEU LEU B B 96  96  . 0.1250 0.1632 0.1701 0.0218  0.0078  -
0.0046 1 .
4058 CB    CB    . LEU LEU LEU B B 96  96  . 0.1433 0.1726 0.1970 0.0226  0.0101
0.0230  1 .
4059 CG    CG    . LEU LEU LEU B B 96  96  . 0.2076 0.2328 0.3149 0.0616  0.0304
0.0326  1 .
4060 CD1   CD1   . LEU LEU LEU B B 96  96  . 0.2876 0.2562 0.3557 0.0528  0.0704
0.0311  1 .
4061 CD2   CD2   . LEU LEU LEU B B 96  96  . 0.1753 0.4055 0.2961 0.1615  0.0767
0.0553  1 .
4062 C     C     . LEU LEU LEU B B 96  96  . 0.1390 0.1538 0.1647 0.0107  0.0054  -
0.0117 1 .
4063 O     O     . LEU LEU LEU B B 96  96  . 0.1364 0.1559 0.2015 0.0173  0.0060  -
0.0242 1 .
4064 N     N     . ASP ASP ASP B B 97  97  . 0.1202 0.1517 0.1556 0.0049  0.0026
0.0028  1 .
4065 CA    CA    . ASP ASP ASP B B 97  97  . 0.1255 0.1390 0.1392 0.0306  0.0081
0.0066  1 .
4066 CB    CB    . ASP ASP ASP B B 97  97  . 0.1006 0.1294 0.1349 0.0359  0.0049
0.0086  1 .
4067 CG    CG    . ASP ASP ASP B B 97  97  . 0.1400 0.1281 0.1674 0.0149  -0.0038
0.0056  1 .
4068 OD1   OD1   . ASP ASP ASP B B 97  97  . 0.1456 0.1342 0.1505 -0.0039 0.0054
0.0124  1 .
4069 OD2   OD2   . ASP ASP ASP B B 97  97  . 0.1237 0.1551 0.1538 0.0232  0.0051
0.0252  1 .
4070 C     C     . ASP ASP ASP B B 97  97  . 0.1363 0.1569 0.1676 0.0174  0.0153
0.0041  1 .
4071 O     O     . ASP ASP ASP B B 97  97  . 0.1369 0.1669 0.1805 0.0327  0.0045  -
0.0011 1 .
4072 N     N     . GLY GLY GLY B B 98  98  . 0.1251 0.1471 0.1373 0.0356  -0.0002
0.0161  1 .
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4073 CA    CA    . GLY GLY GLY B B 98  98  . 0.1817 0.1875 0.1922 0.0041  0.0016
0.0297  1 .
4074 C     C     . GLY GLY GLY B B 98  98  . 0.1752 0.1852 0.1907 0.0216  0.0078
0.0275  1 .
4075 O     O     . GLY GLY GLY B B 98  98  . 0.1863 0.1812 0.2383 0.0339  -0.0096
0.0570  1 .
4076 N     N     . THR THR THR B B 99  99  . 0.1262 0.1517 0.1569 0.0271  0.0106
0.0080  1 .
4077 CA    CA    . THR THR THR B B 99  99  . 0.1785 0.1692 0.1735 0.0201  0.0079
0.0092  1 .
4078 CB    CB    . THR THR THR B B 99  99  . 0.1610 0.1757 0.1775 0.0226  0.0092  -
0.0122 1 .
4079 OG1   OG1   . THR THR THR B B 99  99  . 0.1722 0.1727 0.2197 0.0191  0.0300
0.0329  1 .
4080 CG2   CG2   . THR THR THR B B 99  99  . 0.1971 0.1806 0.1480 0.0271  0.0230  -
0.0171 1 .
4081 C     C     . THR THR THR B B 99  99  . 0.1720 0.1852 0.1976 0.0299  0.0155
0.0021  1 .
4082 O     O     . THR THR THR B B 99  99  . 0.2267 0.1854 0.2260 0.0106  0.0639
0.0041  1 .
4083 N     N     . GLU GLU GLU B B 100 100 . 0.1799 0.1746 0.1742 0.0418  0.0098
0.0128  1 .
4084 CA    CA    . GLU GLU GLU B B 100 100 . 0.1916 0.1971 0.1910 0.0483  0.0174
0.0028  1 .
4085 CB    CB    . GLU GLU GLU B B 100 100 . 0.2183 0.2084 0.1937 0.0500  -0.0105
0.0293  1 .
4086 CG    CG    . GLU GLU GLU B B 100 100 . 0.2950 0.3533 0.2767 0.0558  0.0424  -
0.0148 1 .
4087 CD    CD    . GLU GLU GLU B B 100 100 . 0.3607 0.4702 0.4185 0.0390  -0.0263 -
0.0209 1 .
4088 OE1   OE1   . GLU GLU GLU B B 100 100 . 0.3802 0.5469 0.4810 0.0555  -0.0190
0.0014  1 .
4089 OE2   OE2   . GLU GLU GLU B B 100 100 . 0.3702 0.5360 0.5323 0.0425  -0.0030 -
0.0423 1 .
4090 C     C     . GLU GLU GLU B B 100 100 . 0.1731 0.1623 0.1605 0.0268  0.0098
0.0108  1 .
4091 O     O     . GLU GLU GLU B B 100 100 . 0.1678 0.1894 0.1753 0.0328  0.0179  -
0.0239 1 .
4092 N     N     . ASN ASN ASN B B 101 101 . 0.1413 0.1860 0.1652 0.0531  -0.0105
0.0164  1 .
4093 CA    CA    . ASN ASN ASN B B 101 101 . 0.1291 0.1516 0.1612 0.0478  -0.0085
0.0152  1 .
4094 CB    CB    . ASN ASN ASN B B 101 101 . 0.1694 0.2257 0.2116 0.0211  -0.0006
0.0127  1 .
4095 CG    CG    . ASN ASN ASN B B 101 101 . 0.2794 0.2910 0.3024 -0.0094 -0.0052
0.0152  1 .
4096 OD1   OD1   . ASN ASN ASN B B 101 101 . 0.3907 0.5239 0.4484 -0.0553 -0.0394 -
0.0112 1 .
4097 ND2   ND2   . ASN ASN ASN B B 101 101 . 0.2911 0.4649 0.4039 -0.1246 0.1290  -
0.0537 1 .
4098 C     C     . ASN ASN ASN B B 101 101 . 0.1312 0.1596 0.1589 0.0092  0.0155
0.0022  1 .
4099 O     O     . ASN ASN ASN B B 101 101 . 0.1339 0.1333 0.1658 0.0219  0.0098  -
0.0093 1 .
4100 N     N     . LYS LYS LYS B B 102 102 . 0.1269 0.1104 0.1298 0.0209  0.0315
0.0092  1 .
4101 CA    CA    . LYS LYS LYS B B 102 102 . 0.1267 0.0977 0.1029 0.0197  -0.0069
0.0102  1 .
4102 CB    CB    . LYS LYS LYS B B 102 102 . 0.1101 0.1072 0.1088 0.0123  0.0138
0.0209  1 .
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4103 CG    CG    . LYS LYS LYS B B 102 102 . 0.1342 0.0690 0.1478 0.0078  -0.0110
0.0027  1 .
4104 CD    CD    . LYS LYS LYS B B 102 102 . 0.1192 0.1169 0.1501 0.0235  -0.0114 -
0.0069 1 .
4105 CE    CE    . LYS LYS LYS B B 102 102 . 0.0855 0.1385 0.1285 -0.0074 -0.0005
0.0297  1 .
4106 NZ    NZ    . LYS LYS LYS B B 102 102 . 0.1461 0.1414 0.0917 0.0018  0.0123
0.0129  1 .
4107 C     C     . LYS LYS LYS B B 102 102 . 0.1332 0.1184 0.1445 0.0019  0.0028  -
0.0083 1 .
4108 O     O     . LYS LYS LYS B B 102 102 . 0.1234 0.1295 0.1340 0.0043  0.0061  -
0.0102 1 .
4109 N     N     . SER SER SER B B 103 103 . 0.1275 0.1438 0.1500 0.0220  0.0088  -
0.0158 1 .
4110 CA    CA    . SER SER SER B B 103 103 . 0.1869 0.1707 0.1958 0.0052  0.0183  -
0.0253 1 .
4111 CB    CB    . SER SER SER B B 103 103 . 0.1915 0.2055 0.2307 0.0071  -0.0020
0.0039  1 .
4112 OG    OG    . SER SER SER B B 103 103 . 0.2064 0.2038 0.2833 -0.0053 -0.0120 -
0.0120 1 .
4113 C     C     . SER SER SER B B 103 103 . 0.1559 0.1815 0.1839 0.0149  0.0030  -
0.0243 1 .
4114 O     O     . SER SER SER B B 103 103 . 0.2087 0.2232 0.2231 0.0184  0.0467  -
0.0668 1 .
4115 N     N     . LYS LYS LYS B B 104 104 . 0.1517 0.1381 0.1438 0.0162  0.0250  -
0.0096 1 .
4116 CA    CA    . LYS LYS LYS B B 104 104 . 0.1267 0.1747 0.1467 0.0091  0.0063  -
0.0059 1 .
4117 CB    CB    . LYS LYS LYS B B 104 104 . 0.1250 0.1973 0.1751 0.0264  0.0151  -
0.0057 1 .
4118 CG    CG    . LYS LYS LYS B B 104 104 . 0.1785 0.1832 0.1666 0.0096  0.0065  -
0.0262 1 .
4119 CD    CD    . LYS LYS LYS B B 104 104 . 0.0946 0.2448 0.2726 -0.0207 0.0210  -
0.0788 1 .
4120 CE    CE    . LYS LYS LYS B B 104 104 . 0.2311 0.2742 0.2757 -0.0175 0.0722  -
0.0262 1 .
4121 NZ    NZ    . LYS LYS LYS B B 104 104 . 0.2851 0.3226 0.3932 -0.0032 0.0515  -
0.0698 1 .
4122 C     C     . LYS LYS LYS B B 104 104 . 0.1575 0.1558 0.1707 0.0040  -0.0040 -
0.0019 1 .
4123 O     O     . LYS LYS LYS B B 104 104 . 0.1687 0.1835 0.1698 0.0058  -0.0034 -
0.0001 1 .
4124 N     N     . PHE PHE PHE B B 105 105 . 0.1304 0.1321 0.1512 0.0239  0.0131  -
0.0117 1 .
4125 CA    CA    . PHE PHE PHE B B 105 105 . 0.1111 0.1726 0.1673 0.0209  -0.0087
0.0210  1 .
4126 CB    CB    . PHE PHE PHE B B 105 105 . 0.1124 0.1677 0.2205 0.0285  0.0048
0.0079  1 .
4127 CG    CG    . PHE PHE PHE B B 105 105 . 0.1535 0.1653 0.1654 0.0205  -0.0006
0.0360  1 .
4128 CD1   CD1   . PHE PHE PHE B B 105 105 . 0.1339 0.2509 0.2213 0.0497  -0.0250 -
0.0044 1 .
4129 CE1   CE1   . PHE PHE PHE B B 105 105 . 0.1654 0.2561 0.2844 0.0868  -0.0155
0.0363  1 .
4130 CZ    CZ    . PHE PHE PHE B B 105 105 . 0.1704 0.2304 0.1770 0.0510  0.0037
0.0074  1 .
4131 CE2   CE2   . PHE PHE PHE B B 105 105 . 0.1640 0.2666 0.2260 0.0332  0.0537
0.0346  1 .
4132 CD2   CD2   . PHE PHE PHE B B 105 105 . 0.1668 0.1820 0.1945 0.0872  0.0380
0.0320  1 .
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4133 C     C     . PHE PHE PHE B B 105 105 . 0.1385 0.1467 0.1481 0.0312  0.0097
0.0070  1 .
4134 O     O     . PHE PHE PHE B B 105 105 . 0.1455 0.1521 0.1486 0.0156  0.0028
0.0184  1 .
4135 N     N     . GLY GLY GLY B B 106 106 . 0.0987 0.1146 0.1358 0.0184  0.0159  -
0.0062 1 .
4136 CA    CA    . GLY GLY GLY B B 106 106 . 0.0971 0.1085 0.1475 0.0400  0.0174
0.0043  1 .
4137 C     C     . GLY GLY GLY B B 106 106 . 0.1097 0.1298 0.1002 0.0049  0.0074  -
0.0017 1 .
4138 O     O     . GLY GLY GLY B B 106 106 . 0.1083 0.1180 0.1270 0.0219  0.0059  -
0.0065 1 .
4139 N     N     . ALA ALA ALA B B 107 107 . 0.1065 0.1123 0.1182 0.0295  0.0009
0.0114  1 .
4140 CA    CA    . ALA ALA ALA B B 107 107 . 0.1082 0.1309 0.0987 0.0077  0.0136
0.0052  1 .
4141 CB    CB    . ALA ALA ALA B B 107 107 . 0.0935 0.1378 0.0892 0.0078  0.0425
0.0324  1 .
4142 C     C     . ALA ALA ALA B B 107 107 . 0.1194 0.1093 0.1300 0.0060  -0.0066
0.0055  1 .
4143 O     O     . ALA ALA ALA B B 107 107 . 0.1241 0.1116 0.1268 0.0048  -0.0088
0.0054  1 .
4144 N     N     . ASN ASN ASN B B 108 108 . 0.1064 0.1045 0.0957 0.0189  0.0126
0.0118  1 .
4145 CA    CA    . ASN ASN ASN B B 108 108 . 0.1063 0.1130 0.0999 0.0087  0.0021
0.0157  1 .
4146 CB    CB    . ASN ASN ASN B B 108 108 . 0.0881 0.0768 0.1350 0.0013  -0.0141
0.0000  1 .
4147 CG    CG    . ASN ASN ASN B B 108 108 . 0.1325 0.1129 0.1374 0.0019  0.0035
0.0031  1 .
4148 OD1   OD1   . ASN ASN ASN B B 108 108 . 0.1270 0.1236 0.1302 0.0266  -0.0139 -
0.0058 1 .
4149 ND2   ND2   . ASN ASN ASN B B 108 108 . 0.1173 0.1018 0.1217 0.0027  0.0000
0.0044  1 .
4150 C     C     . ASN ASN ASN B B 108 108 . 0.0892 0.1039 0.1420 0.0139  0.0138
0.0089  1 .
4151 O     O     . ASN ASN ASN B B 108 108 . 0.1168 0.1268 0.1560 0.0090  0.0291
0.0512  1 .
4152 N     N     . ALA ALA ALA B B 109 109 . 0.1028 0.1027 0.1068 0.0078  0.0188
0.0044  1 .
4153 CA    CA    . ALA ALA ALA B B 109 109 . 0.0950 0.0909 0.0936 0.0075  0.0045
0.0054  1 .
4154 CB    CB    . ALA ALA ALA B B 109 109 . 0.1034 0.0898 0.1246 0.0167  0.0049  -
0.0031 1 .
4155 C     C     . ALA ALA ALA B B 109 109 . 0.1047 0.1063 0.1111 0.0048  -0.0004
0.0129  1 .
4156 O     O     . ALA ALA ALA B B 109 109 . 0.1169 0.1262 0.1344 -0.0024 -0.0127
0.0189  1 .
4157 N     N     . ILE ILE ILE B B 110 110 . 0.0919 0.1044 0.0990 0.0096  -0.0017 -
0.0010 1 .
4158 CA    CA    . ILE ILE ILE B B 110 110 . 0.1183 0.0981 0.0809 0.0042  -0.0105
0.0132  1 .
4159 CB    CB    . ILE ILE ILE B B 110 110 . 0.1345 0.1300 0.0879 0.0330  -0.0040
0.0062  1 .
4160 CG1   CG1   . ILE ILE ILE B B 110 110 . 0.1268 0.1035 0.1312 0.0458  -0.0105
0.0076  1 .
4161 CD    CD    . ILE ILE ILE B B 110 110 . 0.1731 0.1257 0.1825 0.0559  -0.0016
0.0342  1 .
4162 CG2   CG2   . ILE ILE ILE B B 110 110 . 0.0966 0.1257 0.1147 -0.0065 -0.0145
0.0031  1 .
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4163 C     C     . ILE ILE ILE B B 110 110 . 0.0968 0.1063 0.0961 0.0087  0.0042
0.0103  1 .
4164 O     O     . ILE ILE ILE B B 110 110 . 0.1117 0.1241 0.1310 0.0153  -0.0066
0.0120  1 .
4165 N     N     . LEU LEU LEU B B 111 111 . 0.1000 0.1126 0.1036 0.0100  0.0108  -
0.0027 1 .
4166 CA    CA    . LEU LEU LEU B B 111 111 . 0.0849 0.0847 0.1202 -0.0021 0.0196
0.0156  1 .
4167 CB    CB    . LEU LEU LEU B B 111 111 . 0.0810 0.0937 0.1182 0.0007  0.0255  -
0.0033 1 .
4168 CG    CG    . LEU LEU LEU B B 111 111 . 0.0724 0.1010 0.1013 0.0091  -0.0090 -
0.0208 1 .
4169 CD1   CD1   . LEU LEU LEU B B 111 111 . 0.0745 0.1120 0.1311 0.0196  -0.0288 -
0.0218 1 .
4170 CD2   CD2   . LEU LEU LEU B B 111 111 . 0.1088 0.1222 0.1673 0.0026  0.0444
0.0061  1 .
4171 C     C     . LEU LEU LEU B B 111 111 . 0.0983 0.1095 0.1037 0.0055  0.0270  -
0.0077 1 .
4172 O     O     . LEU LEU LEU B B 111 111 . 0.0859 0.1164 0.1236 0.0086  0.0106  -
0.0027 1 .
4173 N     N     . GLY GLY GLY B B 112 112 . 0.1065 0.1320 0.1239 0.0136  0.0106
0.0203  1 .
4174 CA    CA    . GLY GLY GLY B B 112 112 . 0.1040 0.1326 0.1244 0.0223  0.0118
0.0441  1 .
4175 C     C     . GLY GLY GLY B B 112 112 . 0.1310 0.1275 0.1230 0.0129  0.0178
0.0132  1 .
4176 O     O     . GLY GLY GLY B B 112 112 . 0.1042 0.1238 0.1360 0.0091  0.0105
0.0224  1 .
4177 N     N     . VAL VAL VAL B B 113 113 . 0.1060 0.1307 0.1015 0.0116  -0.0066
0.0205  1 .
4178 CA    CA    . VAL VAL VAL B B 113 113 . 0.0789 0.1188 0.1268 0.0110  0.0018  -
0.0057 1 .
4179 CB    CB    . VAL VAL VAL B B 113 113 . 0.0835 0.1020 0.1166 0.0238  0.0001  -
0.0035 1 .
4180 CG1   CG1   . VAL VAL VAL B B 113 113 . 0.0998 0.1299 0.1339 -0.0233 -0.0078
0.0115  1 .
4181 CG2   CG2   . VAL VAL VAL B B 113 113 . 0.0555 0.1380 0.1421 0.0026  0.0045  -
0.0141 1 .
4182 C     C     . VAL VAL VAL B B 113 113 . 0.1147 0.1289 0.1109 0.0080  0.0091
0.0123  1 .
4183 O     O     . VAL VAL VAL B B 113 113 . 0.1198 0.1239 0.1196 -0.0075 0.0033
0.0133  1 .
4184 N     N     . SER SER SER B B 114 114 . 0.0811 0.1204 0.0996 0.0147  0.0077
0.0112  1 .
4185 CA    CA    . SER SER SER B B 114 114 . 0.0990 0.0988 0.1060 0.0045  0.0067  -
0.0030 1 .
4186 CB    CB    . SER SER SER B B 114 114 . 0.1152 0.1116 0.0792 -0.0026 -0.0212
0.0195  1 .
4187 OG    OG    . SER SER SER B B 114 114 . 0.1266 0.1210 0.1112 -0.0062 -0.0265 -
0.0024 1 .
4188 C     C     . SER SER SER B B 114 114 . 0.1034 0.1155 0.1169 0.0078  -0.0034 -
0.0058 1 .
4189 O     O     . SER SER SER B B 114 114 . 0.1002 0.1058 0.1215 0.0075  -0.0113
0.0187  1 .
4190 N     N     . LEU LEU LEU B B 115 115 . 0.1107 0.1157 0.1011 0.0137  0.0102
0.0330  1 .
4191 CA    CA    . LEU LEU LEU B B 115 115 . 0.0775 0.0951 0.1359 -0.0026 -0.0038
0.0404  1 .
4192 CB    CB    . LEU LEU LEU B B 115 115 . 0.0842 0.1183 0.1477 -0.0069 -0.0029
0.0344  1 .
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4193 CG    CG    . LEU LEU LEU B B 115 115 . 0.1199 0.1193 0.0883 -0.0249 0.0122
0.0172  1 .
4194 CD1   CD1   . LEU LEU LEU B B 115 115 . 0.1327 0.1514 0.1587 -0.0188 0.0017
0.0489  1 .
4195 CD2   CD2   . LEU LEU LEU B B 115 115 . 0.1323 0.1374 0.1355 0.0046  0.0188
0.0041  1 .
4196 C     C     . LEU LEU LEU B B 115 115 . 0.0920 0.1206 0.1181 0.0045  -0.0080
0.0140  1 .
4197 O     O     . LEU LEU LEU B B 115 115 . 0.1112 0.1278 0.1435 0.0089  -0.0016
0.0260  1 .
4198 N     N     . ALA ALA ALA B B 116 116 . 0.0868 0.1208 0.1184 0.0007  0.0031
0.0262  1 .
4199 CA    CA    . ALA ALA ALA B B 116 116 . 0.1132 0.1023 0.1133 -0.0026 -0.0012
0.0176  1 .
4200 CB    CB    . ALA ALA ALA B B 116 116 . 0.1247 0.1679 0.1125 -0.0091 -0.0072 -
0.0047 1 .
4201 C     C     . ALA ALA ALA B B 116 116 . 0.1303 0.1224 0.1243 0.0039  0.0022
0.0153  1 .
4202 O     O     . ALA ALA ALA B B 116 116 . 0.1239 0.1209 0.1407 0.0024  0.0044
0.0013  1 .
4203 N     N     . VAL VAL VAL B B 117 117 . 0.0970 0.1145 0.1345 0.0147  0.0054
0.0125  1 .
4204 CA    CA    . VAL VAL VAL B B 117 117 . 0.1002 0.1089 0.1286 -0.0001 -0.0197
0.0077  1 .
4205 CB    CB    . VAL VAL VAL B B 117 117 . 0.1022 0.1279 0.1184 0.0114  -0.0109
0.0127  1 .
4206 CG1   CG1   . VAL VAL VAL B B 117 117 . 0.1124 0.1418 0.1542 0.0459  -0.0256
0.0092  1 .
4207 CG2   CG2   . VAL VAL VAL B B 117 117 . 0.1467 0.1292 0.1352 0.0095  0.0229  -
0.0094 1 .
4208 C     C     . VAL VAL VAL B B 117 117 . 0.0973 0.1304 0.1242 -0.0034 0.0006
0.0066  1 .
4209 O     O     . VAL VAL VAL B B 117 117 . 0.1278 0.1333 0.1625 -0.0027 0.0052
0.0160  1 .
4210 N     N     . CYS CYS CYS B B 118 118 . 0.0853 0.1121 0.0999 0.0037  0.0075
0.0063  1 .
4211 CA    CA    . CYS CYS CYS B B 118 118 . 0.1093 0.1087 0.1198 -0.0068 0.0083
0.0080  1 .
4212 CB    CB    . CYS CYS CYS B B 118 118 . 0.1177 0.1626 0.1318 -0.0122 0.0118  -
0.0015 1 .
4213 SG    SG    . CYS CYS CYS B B 118 118 . 0.1497 0.1474 0.1617 -0.0021 0.0097
0.0069  1 .
4214 C     C     . CYS CYS CYS B B 118 118 . 0.1188 0.1276 0.1313 -0.0051 -0.0032 -
0.0048 1 .
4215 O     O     . CYS CYS CYS B B 118 118 . 0.1191 0.1337 0.1360 -0.0104 -0.0003
0.0116  1 .
4216 N     N     . LYS LYS LYS B B 119 119 . 0.1132 0.1290 0.1194 0.0012  -0.0019
0.0225  1 .
4217 CA    CA    . LYS LYS LYS B B 119 119 . 0.1113 0.1254 0.1318 -0.0022 0.0155
0.0241  1 .
4218 CB    CB    . LYS LYS LYS B B 119 119 . 0.1235 0.1373 0.1495 0.0087  0.0100
0.0122  1 .
4219 CG    CG    . LYS LYS LYS B B 119 119 . 0.1358 0.1066 0.1408 0.0159  0.0071
0.0015  1 .
4220 CD    CD    . LYS LYS LYS B B 119 119 . 0.1385 0.1596 0.1410 -0.0243 0.0120
0.0018  1 .
4221 CE    CE    . LYS LYS LYS B B 119 119 . 0.1052 0.2470 0.1857 -0.0177 -0.0126 -
0.0107 1 .
4222 NZ    NZ    . LYS LYS LYS B B 119 119 . 0.1557 0.2570 0.1883 0.0095  -0.0266 -
0.0666 1 .
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4223 C     C     . LYS LYS LYS B B 119 119 . 0.1048 0.1319 0.1573 -0.0006 0.0189  -
0.0027 1 .
4224 O     O     . LYS LYS LYS B B 119 119 . 0.1299 0.1347 0.1833 -0.0113 0.0129
0.0141  1 .
4225 N     N     . ALA ALA ALA B B 120 120 . 0.1424 0.1309 0.1669 -0.0082 0.0383
0.0034  1 .
4226 CA    CA    . ALA ALA ALA B B 120 120 . 0.1293 0.1317 0.1505 -0.0048 0.0069
0.0016  1 .
4227 CB    CB    . ALA ALA ALA B B 120 120 . 0.1357 0.1221 0.1304 0.0029  0.0399  -
0.0005 1 .
4228 C     C     . ALA ALA ALA B B 120 120 . 0.1502 0.1424 0.1359 -0.0114 0.0104
0.0035  1 .
4229 O     O     . ALA ALA ALA B B 120 120 . 0.1471 0.1463 0.1654 -0.0118 0.0171  -
0.0028 1 .
4230 N     N     . GLY GLY GLY B B 121 121 . 0.1300 0.1249 0.1258 -0.0029 -0.0029
0.0086  1 .
4231 CA    CA    . GLY GLY GLY B B 121 121 . 0.1141 0.1460 0.1436 0.0156  0.0077  -
0.0034 1 .
4232 C     C     . GLY GLY GLY B B 121 121 . 0.1332 0.1303 0.1527 -0.0018 -0.0151
0.0144  1 .
4233 O     O     . GLY GLY GLY B B 121 121 . 0.1228 0.1478 0.1711 -0.0098 0.0032
0.0121  1 .
4234 N     N     . ALA ALA ALA B B 122 122 . 0.1121 0.1336 0.1611 0.0092  0.0192
0.0030  1 .
4235 CA    CA    . ALA ALA ALA B B 122 122 . 0.1133 0.1190 0.1662 -0.0158 0.0091
0.0147  1 .
4236 CB    CB    . ALA ALA ALA B B 122 122 . 0.0948 0.1565 0.1976 -0.0239 0.0228  -
0.0078 1 .
4237 C     C     . ALA ALA ALA B B 122 122 . 0.1471 0.1583 0.1554 -0.0256 0.0182
0.0031  1 .
4238 O     O     . ALA ALA ALA B B 122 122 . 0.1624 0.1702 0.1648 -0.0136 0.0029  -
0.0012 1 .
4239 N     N     . ALA ALA ALA B B 123 123 . 0.1606 0.1568 0.1497 -0.0205 0.0134
0.0259  1 .
4240 CA    CA    . ALA ALA ALA B B 123 123 . 0.1448 0.1308 0.1454 -0.0237 0.0006
0.0192  1 .
4241 CB    CB    . ALA ALA ALA B B 123 123 . 0.1691 0.1602 0.1647 0.0126  -0.0217
0.0305  1 .
4242 C     C     . ALA ALA ALA B B 123 123 . 0.1528 0.1487 0.1994 -0.0110 0.0037
0.0184  1 .
4243 O     O     . ALA ALA ALA B B 123 123 . 0.2163 0.1581 0.2116 -0.0447 0.0283
0.0272  1 .
4244 N     N     . GLU GLU GLU B B 124 124 . 0.1545 0.1586 0.1948 -0.0302 0.0015  -
0.0018 1 .
4245 CA    CA    . GLU GLU GLU B B 124 124 . 0.1594 0.1767 0.2149 -0.0094 -0.0021
0.0105  1 .
4246 CB    CB    . GLU GLU GLU B B 124 124 . 0.1606 0.1404 0.2418 -0.0059 -0.0032
0.0136  1 .
4247 CG    CG    . GLU GLU GLU B B 124 124 . 0.1954 0.2991 0.3112 0.0219  0.0262
0.0127  1 .
4248 CD    CD    . GLU GLU GLU B B 124 124 . 0.2789 0.3333 0.3466 -0.0036 -0.0173
0.0499  1 .
4249 OE1   OE1   . GLU GLU GLU B B 124 124 . 0.3202 0.2553 0.2780 -0.0076 0.0450
0.0200  1 .
4250 OE2   OE2   . GLU GLU GLU B B 124 124 . 0.3065 0.4543 0.4483 -0.0367 0.0242  -
0.0173 1 .
4251 C     C     . GLU GLU GLU B B 124 124 . 0.1529 0.1853 0.2258 -0.0286 0.0148  -
0.0028 1 .
4252 O     O     . GLU GLU GLU B B 124 124 . 0.1644 0.2259 0.2843 -0.0565 0.0209
0.0014  1 .
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4253 N     N     . ARG ARG ARG B B 125 125 . 0.1864 0.1988 0.2178 -0.0165 0.0164
0.0104  1 .
4254 CA    CA    . ARG ARG ARG B B 125 125 . 0.1777 0.2148 0.2111 -0.0264 0.0167
0.0107  1 .
4255 CB    CB    . ARG ARG ARG B B 125 125 . 0.2034 0.2099 0.2465 -0.0172 0.0308
0.0071  1 .
4256 CG    CG    . ARG ARG ARG B B 125 125 . 0.2304 0.2145 0.2703 0.0145  0.0239
0.0106  1 .
4257 CD    CD    . ARG ARG ARG B B 125 125 . 0.2175 0.2762 0.3747 0.0533  -0.0178
0.0695  1 .
4258 NE    NE    . ARG ARG ARG B B 125 125 . 0.4678 0.3685 0.4093 0.0331  0.0018
0.0618  1 .
4259 CZ    CZ    . ARG ARG ARG B B 125 125 . 0.4727 0.4587 0.5042 0.0062  -0.0295
0.0669  1 .
4260 NH1   NH1   . ARG ARG ARG B B 125 125 . 0.5126 0.5436 0.5496 -0.0526 -0.0422
0.0317  1 .
4261 NH2   NH2   . ARG ARG ARG B B 125 125 . 0.4591 0.4159 0.5010 0.0460  -0.0582
0.0664  1 .
4262 C     C     . ARG ARG ARG B B 125 125 . 0.1752 0.2082 0.2120 -0.0462 0.0354
0.0023  1 .
4263 O     O     . ARG ARG ARG B B 125 125 . 0.1913 0.2508 0.2620 -0.0420 -0.0023 -
0.0115 1 .
4264 N     N     . GLU GLU GLU B B 126 126 . 0.1913 0.2094 0.2407 -0.0386 0.0208
0.0134  1 .
4265 CA    CA    . GLU GLU GLU B B 126 126 . 0.2099 0.2100 0.2693 -0.0380 0.0225
0.0039  1 .
4266 CB    CB    . GLU GLU GLU B B 126 126 . 0.2529 0.2193 0.3057 -0.0372 0.0282  -
0.0145 1 .
4267 CG    CG    . GLU GLU GLU B B 126 126 . 0.3144 0.3569 0.4056 -0.0425 0.0347
0.0085  1 .
4268 CD    CD    . GLU GLU GLU B B 126 126 . 0.5001 0.4727 0.5360 -0.0654 -0.0007
0.0514  1 .
4269 OE1   OE1   . GLU GLU GLU B B 126 126 . 0.5969 0.6077 0.6318 0.0008  -0.0436
0.0266  1 .
4270 OE2   OE2   . GLU GLU GLU B B 126 126 . 0.5152 0.5649 0.6140 -0.1098 -0.0161
0.0412  1 .
4271 C     C     . GLU GLU GLU B B 126 126 . 0.2352 0.2201 0.2670 -0.0281 0.0168  -
0.0114 1 .
4272 O     O     . GLU GLU GLU B B 126 126 . 0.2590 0.1878 0.2932 -0.0422 0.0388  -
0.0329 1 .
4273 N     N     . LEU LEU LEU B B 127 127 . 0.2042 0.1939 0.2318 -0.0323 0.0254
0.0181  1 .
4274 CA    CA    . LEU LEU LEU B B 127 127 . 0.1865 0.2066 0.1999 -0.0109 0.0057
0.0087  1 .
4275 CB    CB    . LEU LEU LEU B B 127 127 . 0.1712 0.2084 0.2059 -0.0190 0.0009
0.0250  1 .
4276 CG    CG    . LEU LEU LEU B B 127 127 . 0.1998 0.2263 0.2459 -0.0285 -0.0112 -
0.0258 1 .
4277 CD1   CD1   . LEU LEU LEU B B 127 127 . 0.1618 0.2351 0.2437 -0.0249 -0.0232
0.0008  1 .
4278 CD2   CD2   . LEU LEU LEU B B 127 127 . 0.2091 0.2215 0.2952 -0.0015 -0.0465 -
0.0310 1 .
4279 C     C     . LEU LEU LEU B B 127 127 . 0.1799 0.1759 0.1889 -0.0114 0.0179
0.0020  1 .
4280 O     O     . LEU LEU LEU B B 127 127 . 0.1792 0.1665 0.2171 -0.0111 0.0271
0.0014  1 .
4281 N     N     . PRO PRO PRO B B 128 128 . 0.1619 0.1617 0.2117 -0.0195 0.0003
0.0041  1 .
4282 CA    CA    . PRO PRO PRO B B 128 128 . 0.1548 0.1645 0.1956 -0.0114 -0.0076
0.0174  1 .
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4283 CB    CB    . PRO PRO PRO B B 128 128 . 0.1701 0.1465 0.2101 -0.0289 0.0212  -
0.0012 1 .
4284 CG    CG    . PRO PRO PRO B B 128 128 . 0.1919 0.2395 0.2214 0.0247  -0.0134 -
0.0068 1 .
4285 CD    CD    . PRO PRO PRO B B 128 128 . 0.1612 0.1741 0.1769 -0.0109 -0.0174 -
0.0049 1 .
4286 C     C     . PRO PRO PRO B B 128 128 . 0.1668 0.1435 0.1523 -0.0225 -0.0194
0.0126  1 .
4287 O     O     . PRO PRO PRO B B 128 128 . 0.1190 0.1553 0.1752 -0.0096 -0.0045
0.0006  1 .
4288 N     N     . LEU LEU LEU B B 129 129 . 0.1014 0.1371 0.1811 -0.0296 -0.0079
0.0279  1 .
4289 CA    CA    . LEU LEU LEU B B 129 129 . 0.1288 0.1312 0.1651 -0.0136 -0.0025
0.0068  1 .
4290 CB    CB    . LEU LEU LEU B B 129 129 . 0.1680 0.1333 0.1527 -0.0175 -0.0244
0.0195  1 .
4291 CG    CG    . LEU LEU LEU B B 129 129 . 0.1304 0.1163 0.1585 -0.0045 -0.0177
0.0092  1 .
4292 CD1   CD1   . LEU LEU LEU B B 129 129 . 0.1562 0.1922 0.1906 0.0357  -0.0248 -
0.0271 1 .
4293 CD2   CD2   . LEU LEU LEU B B 129 129 . 0.1525 0.1568 0.1196 -0.0210 -0.0415 -
0.0039 1 .
4294 C     C     . LEU LEU LEU B B 129 129 . 0.1206 0.1158 0.1412 -0.0158 -0.0078
0.0022  1 .
4295 O     O     . LEU LEU LEU B B 129 129 . 0.1170 0.1155 0.1430 -0.0164 -0.0155
0.0029  1 .
4296 N     N     . TYR TYR TYR B B 130 130 . 0.1268 0.1288 0.1487 -0.0198 0.0119  -
0.0025 1 .
4297 CA    CA    . TYR TYR TYR B B 130 130 . 0.1415 0.1140 0.1333 -0.0169 -0.0140 -
0.0085 1 .
4298 CB    CB    . TYR TYR TYR B B 130 130 . 0.1569 0.1240 0.1724 -0.0082 -0.0015
0.0136  1 .
4299 CG    CG    . TYR TYR TYR B B 130 130 . 0.1248 0.1288 0.1359 -0.0160 -0.0196
0.0092  1 .
4300 CD1   CD1   . TYR TYR TYR B B 130 130 . 0.1909 0.1516 0.1929 -0.0073 -0.0058
0.0109  1 .
4301 CE1   CE1   . TYR TYR TYR B B 130 130 . 0.1705 0.1875 0.2454 -0.0012 -0.0041
0.0175  1 .
4302 CZ    CZ    . TYR TYR TYR B B 130 130 . 0.1983 0.1580 0.2107 -0.0083 0.0173  -
0.0016 1 .
4303 OH    OH    . TYR TYR TYR B B 130 130 . 0.2184 0.1586 0.3473 -0.0346 0.0382
0.0140  1 .
4304 CE2   CE2   . TYR TYR TYR B B 130 130 . 0.1257 0.1792 0.2173 -0.0002 0.0262
0.0125  1 .
4305 CD2   CD2   . TYR TYR TYR B B 130 130 . 0.1397 0.1380 0.1480 -0.0217 0.0166
0.0366  1 .
4306 C     C     . TYR TYR TYR B B 130 130 . 0.1375 0.1255 0.1401 -0.0089 -0.0146
0.0125  1 .
4307 O     O     . TYR TYR TYR B B 130 130 . 0.1362 0.1258 0.1507 -0.0164 -0.0110
0.0076  1 .
4308 N     N     . ARG ARG ARG B B 131 131 . 0.1242 0.1340 0.1243 -0.0256 -0.0102 -
0.0105 1 .
4309 CA    CA    . ARG ARG ARG B B 131 131 . 0.1449 0.1184 0.1644 -0.0177 -0.0152 -
0.0045 1 .
4310 CB    CB    . ARG ARG ARG B B 131 131 . 0.1600 0.1342 0.1826 -0.0203 -0.0165
0.0031  1 .
4311 CG    CG    . ARG ARG ARG B B 131 131 . 0.2173 0.2124 0.2887 -0.0357 0.0043  -
0.0079 1 .
4312 CD    CD    . ARG ARG ARG B B 131 131 . 0.3538 0.2701 0.4118 -0.0782 0.0148  -
0.0226 1 .
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4313 NE    NE    . ARG ARG ARG B B 131 131 . 0.3567 0.3347 0.3927 -0.0583 0.0203  -
0.0472 1 .
4314 CZ    CZ    . ARG ARG ARG B B 131 131 . 0.4022 0.3761 0.4063 -0.0382 -0.0132 -
0.0332 1 .
4315 NH1   NH1   . ARG ARG ARG B B 131 131 . 0.3121 0.4074 0.3926 -0.0140 -0.0630 -
0.0541 1 .
4316 NH2   NH2   . ARG ARG ARG B B 131 131 . 0.4370 0.4612 0.4818 0.0345  -0.0601 -
0.0119 1 .
4317 C     C     . ARG ARG ARG B B 131 131 . 0.1292 0.1285 0.1492 -0.0072 -0.0178
0.0097  1 .
4318 O     O     . ARG ARG ARG B B 131 131 . 0.1358 0.1512 0.1466 -0.0144 -0.0312
0.0132  1 .
4319 N     N     . HIS HIS HIS B B 132 132 . 0.1368 0.1307 0.1557 -0.0109 -0.0074
0.0022  1 .
4320 CA    CA    . HIS HIS HIS B B 132 132 . 0.1369 0.1443 0.1492 -0.0037 0.0018
0.0096  1 .
4321 CB    CB    . HIS HIS HIS B B 132 132 . 0.1379 0.1192 0.1471 -0.0036 0.0154  -
0.0026 1 .
4322 CG    CG    . HIS HIS HIS B B 132 132 . 0.1380 0.1487 0.1506 0.0038  -0.0026
0.0216  1 .
4323 ND1   ND1   . HIS HIS HIS B B 132 132 . 0.1434 0.1790 0.2105 0.0151  -0.0016 -
0.0116 1 .
4324 CE1   CE1   . HIS HIS HIS B B 132 132 . 0.1455 0.1897 0.1785 0.0192  -0.0409 -
0.0171 1 .
4325 NE2   NE2   . HIS HIS HIS B B 132 132 . 0.1602 0.1436 0.1802 -0.0171 0.0140
0.0136  1 .
4326 CD2   CD2   . HIS HIS HIS B B 132 132 . 0.1568 0.1609 0.1560 0.0002  -0.0050
0.0212  1 .
4327 C     C     . HIS HIS HIS B B 132 132 . 0.1188 0.1273 0.1471 -0.0201 -0.0164 -
0.0056 1 .
4328 O     O     . HIS HIS HIS B B 132 132 . 0.1464 0.1593 0.1488 -0.0169 -0.0188
0.0046  1 .
4329 N     N     . ILE ILE ILE B B 133 133 . 0.1232 0.1407 0.1302 -0.0115 -0.0151
0.0108  1 .
4330 CA    CA    . ILE ILE ILE B B 133 133 . 0.1245 0.1423 0.1346 -0.0113 -0.0066
0.0105  1 .
4331 CB    CB    . ILE ILE ILE B B 133 133 . 0.1340 0.1240 0.1364 -0.0052 -0.0040
0.0103  1 .
4332 CG1   CG1   . ILE ILE ILE B B 133 133 . 0.1456 0.1618 0.1773 -0.0016 -0.0393
0.0106  1 .
4333 CD    CD    . ILE ILE ILE B B 133 133 . 0.0929 0.1501 0.1598 0.0189  -0.0041
0.0088  1 .
4334 CG2   CG2   . ILE ILE ILE B B 133 133 . 0.1896 0.1817 0.1668 -0.0278 0.0096
0.0200  1 .
4335 C     C     . ILE ILE ILE B B 133 133 . 0.1341 0.1434 0.1471 -0.0036 -0.0048
0.0076  1 .
4336 O     O     . ILE ILE ILE B B 133 133 . 0.1506 0.1509 0.1348 -0.0206 -0.0273
0.0276  1 .
4337 N     N     . ALA ALA ALA B B 134 134 . 0.1317 0.1649 0.1330 -0.0141 -0.0117 -
0.0072 1 .
4338 CA    CA    . ALA ALA ALA B B 134 134 . 0.1512 0.1554 0.1351 -0.0092 -0.0207 -
0.0308 1 .
4339 CB    CB    . ALA ALA ALA B B 134 134 . 0.1323 0.1336 0.1561 -0.0008 -0.0322 -
0.0253 1 .
4340 C     C     . ALA ALA ALA B B 134 134 . 0.1725 0.1627 0.1551 -0.0102 -0.0096 -
0.0111 1 .
4341 O     O     . ALA ALA ALA B B 134 134 . 0.1390 0.2114 0.1788 -0.0073 -0.0222
0.0107  1 .
4342 N     N     . GLN GLN GLN B B 135 135 . 0.1185 0.1571 0.1558 -0.0215 -0.0226 -
0.0001 1 .
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4343 CA    CA    . GLN GLN GLN B B 135 135 . 0.1209 0.1694 0.1645 -0.0129 -0.0262
0.0053  1 .
4344 CB    CB    . GLN GLN GLN B B 135 135 . 0.1506 0.1925 0.2148 -0.0022 -0.0305
0.0206  1 .
4345 CG    CG    . GLN GLN GLN B B 135 135 . 0.1825 0.2359 0.2329 -0.0227 -0.0326 -
0.0024 1 .
4346 CD    CD    . GLN GLN GLN B B 135 135 . 0.2918 0.3143 0.3805 -0.0629 -0.0054
0.0072  1 .
4347 OE1   OE1   . GLN GLN GLN B B 135 135 . 0.2884 0.3508 0.3235 -0.0611 -0.0236 -
0.0344 1 .
4348 NE2   NE2   . GLN GLN GLN B B 135 135 . 0.3946 0.3462 0.3873 -0.0556 -0.0393 -
0.0796 1 .
4349 C     C     . GLN GLN GLN B B 135 135 . 0.1515 0.1907 0.1837 -0.0039 -0.0296
0.0013  1 .
4350 O     O     . GLN GLN GLN B B 135 135 . 0.1829 0.1941 0.1804 0.0025  -0.0478
0.0122  1 .
4351 N     N     . LEU LEU LEU B B 136 136 . 0.1368 0.1662 0.1810 0.0020  -0.0277 -
0.0120 1 .
4352 CA    CA    . LEU LEU LEU B B 136 136 . 0.1632 0.1826 0.1803 0.0018  0.0034
0.0066  1 .
4353 CB    CB    . LEU LEU LEU B B 136 136 . 0.1494 0.1945 0.1647 0.0042  -0.0120
0.0110  1 .
4354 CG    CG    . LEU LEU LEU B B 136 136 . 0.1278 0.1801 0.1557 0.0393  -0.0325
0.0037  1 .
4355 CD1   CD1   . LEU LEU LEU B B 136 136 . 0.1638 0.2095 0.1610 -0.0141 -0.0036 -
0.0129 1 .
4356 CD2   CD2   . LEU LEU LEU B B 136 136 . 0.1331 0.2019 0.2083 0.0388  -0.0061 -
0.0130 1 .
4357 C     C     . LEU LEU LEU B B 136 136 . 0.1953 0.1814 0.1911 0.0109  -0.0131
0.0204  1 .
4358 O     O     . LEU LEU LEU B B 136 136 . 0.1988 0.2200 0.2317 0.0345  -0.0164
0.0357  1 .
4359 N     N     . ALA ALA ALA B B 137 137 . 0.1525 0.2038 0.1841 -0.0158 -0.0163
0.0140  1 .
4360 CA    CA    . ALA ALA ALA B B 137 137 . 0.1715 0.2228 0.1749 -0.0010 -0.0233
0.0276  1 .
4361 CB    CB    . ALA ALA ALA B B 137 137 . 0.1492 0.2131 0.1485 0.0033  -0.0117
0.0122  1 .
4362 C     C     . ALA ALA ALA B B 137 137 . 0.2133 0.2497 0.2015 -0.0321 -0.0150
0.0198  1 .
4363 O     O     . ALA ALA ALA B B 137 137 . 0.2533 0.2384 0.2191 -0.0215 -0.0169
0.0338  1 .
4364 N     N     . GLY GLY GLY B B 138 138 . 0.2529 0.2489 0.2096 -0.0228 -0.0591 -
0.0011 1 .
4365 CA    CA    . GLY GLY GLY B B 138 138 . 0.2777 0.2839 0.2180 -0.0339 -0.0366 -
0.0208 1 .
4366 C     C     . GLY GLY GLY B B 138 138 . 0.2876 0.2883 0.2355 -0.0194 -0.0415 -
0.0260 1 .
4367 O     O     . GLY GLY GLY B B 138 138 . 0.3310 0.3299 0.2666 -0.0440 -0.0250 -
0.0200 1 .
4368 N     N     . ASN ASN ASN B B 139 139 . 0.3136 0.3038 0.2548 -0.0250 -0.0302 -
0.0030 1 .
4369 CA    CA    . ASN ASN ASN B B 139 139 . 0.3304 0.3172 0.2686 -0.0312 -0.0257 -
0.0096 1 .
4370 CB    CB    . ASN ASN ASN B B 139 139 . 0.3140 0.2944 0.2264 -0.0255 -0.0272 -
0.0020 1 .
4371 CG    CG    . ASN ASN ASN B B 139 139 . 0.3179 0.3488 0.2594 -0.0362 -0.0392 -
0.0071 1 .
4372 OD1   OD1   . ASN ASN ASN B B 139 139 . 0.3205 0.4631 0.2946 -0.0686 -0.0770 -
0.0001 1 .
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4373 ND2   ND2   . ASN ASN ASN B B 139 139 . 0.2917 0.3184 0.2619 -0.0083 -0.0211 -
0.0348 1 .
4374 C     C     . ASN ASN ASN B B 139 139 . 0.3588 0.3495 0.3238 -0.0399 -0.0130 -
0.0106 1 .
4375 O     O     . ASN ASN ASN B B 139 139 . 0.3775 0.3396 0.2985 -0.0504 -0.0164 -
0.0084 1 .
4376 N     N     . SER SER SER B B 140 140 . 0.3995 0.3953 0.3965 -0.0358 -0.0050 -
0.0117 1 .
4377 CA    CA    . SER SER SER B B 140 140 . 0.4433 0.4169 0.4440 -0.0206 -0.0095 -
0.0034 1 .
4378 CB    CB    . SER SER SER B B 140 140 . 0.4492 0.4226 0.4511 -0.0305 -0.0093 -
0.0158 1 .
4379 OG    OG    . SER SER SER B B 140 140 . 0.4571 0.4820 0.4693 -0.0452 -0.0200 -
0.0291 1 .
4380 C     C     . SER SER SER B B 140 140 . 0.4609 0.4500 0.4682 -0.0116 -0.0033
0.0007  1 .
4381 O     O     . SER SER SER B B 140 140 . 0.5002 0.4575 0.5127 -0.0161 -0.0008
0.0098  1 .
4382 N     N     . ASP ASP ASP B B 141 141 . 0.4559 0.4655 0.4558 -0.0095 -0.0148
0.0014  1 .
4383 CA    CA    . ASP ASP ASP B B 141 141 . 0.4443 0.4658 0.4610 -0.0026 -0.0192 -
0.0040 1 .
4384 CB    CB    . ASP ASP ASP B B 141 141 . 0.4758 0.5010 0.4976 -0.0019 0.0009
0.0058  1 .
4385 CG    CG    . ASP ASP ASP B B 141 141 . 0.5242 0.5534 0.5194 0.0072  -0.0040
0.0129  1 .
4386 OD1   OD1   . ASP ASP ASP B B 141 141 . 0.5981 0.5989 0.6841 -0.0206 0.0358
0.0040  1 .
4387 OD2   OD2   . ASP ASP ASP B B 141 141 . 0.5473 0.6258 0.4853 0.0226  -0.0306 -
0.0233 1 .
4388 C     C     . ASP ASP ASP B B 141 141 . 0.4120 0.4270 0.4560 -0.0072 -0.0144
0.0091  1 .
4389 O     O     . ASP ASP ASP B B 141 141 . 0.4493 0.4258 0.4651 -0.0009 -0.0280
0.0011  1 .
4390 N     N     . LEU LEU LEU B B 142 142 . 0.3100 0.3769 0.3665 -0.0103 -0.0044
0.0078  1 .
4391 CA    CA    . LEU LEU LEU B B 142 142 . 0.2481 0.3006 0.3194 -0.0102 0.0067  -
0.0116 1 .
4392 CB    CB    . LEU LEU LEU B B 142 142 . 0.1952 0.2745 0.3054 -0.0071 -0.0061 -
0.0237 1 .
4393 CG    CG    . LEU LEU LEU B B 142 142 . 0.1916 0.2458 0.2677 -0.0623 0.0176  -
0.0138 1 .
4394 CD1   CD1   . LEU LEU LEU B B 142 142 . 0.2604 0.2640 0.2943 0.0084  -0.0036
0.0374  1 .
4395 CD2   CD2   . LEU LEU LEU B B 142 142 . 0.1625 0.2442 0.3853 -0.0559 0.0116  -
0.0307 1 .
4396 C     C     . LEU LEU LEU B B 142 142 . 0.2536 0.2843 0.3029 -0.0101 0.0053  -
0.0197 1 .
4397 O     O     . LEU LEU LEU B B 142 142 . 0.2473 0.3023 0.3229 -0.0089 0.0044  -
0.0625 1 .
4398 N     N     . ILE ILE ILE B B 143 143 . 0.2044 0.2242 0.2222 -0.0144 -0.0043
0.0112  1 .
4399 CA    CA    . ILE ILE ILE B B 143 143 . 0.1979 0.2067 0.1664 -0.0142 -0.0077
0.0156  1 .
4400 CB    CB    . ILE ILE ILE B B 143 143 . 0.2233 0.2403 0.1852 -0.0301 -0.0165
0.0223  1 .
4401 CG1   CG1   . ILE ILE ILE B B 143 143 . 0.3892 0.3203 0.2759 -0.0230 -0.0575
0.0018  1 .
4402 CD    CD    . ILE ILE ILE B B 143 143 . 0.4718 0.4855 0.2077 -0.1441 -0.1786 -
0.0297 1 .
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4403 CG2   CG2   . ILE ILE ILE B B 143 143 . 0.2758 0.3236 0.2555 -0.0300 -0.0623
0.0110  1 .
4404 C     C     . ILE ILE ILE B B 143 143 . 0.1496 0.1628 0.1620 -0.0203 0.0047
0.0011  1 .
4405 O     O     . ILE ILE ILE B B 143 143 . 0.1716 0.1625 0.1858 0.0115  -0.0069
0.0114  1 .
4406 N     N     . LEU LEU LEU B B 144 144 . 0.1740 0.1435 0.1497 -0.0272 -0.0137
0.0174  1 .
4407 CA    CA    . LEU LEU LEU B B 144 144 . 0.1445 0.1231 0.1098 -0.0222 0.0020
0.0087  1 .
4408 CB    CB    . LEU LEU LEU B B 144 144 . 0.1629 0.1387 0.1181 -0.0118 -0.0016
0.0244  1 .
4409 CG    CG    . LEU LEU LEU B B 144 144 . 0.1759 0.1645 0.1156 -0.0330 0.0109
0.0036  1 .
4410 CD1   CD1   . LEU LEU LEU B B 144 144 . 0.1916 0.1416 0.1324 0.0156  0.0155  -
0.0096 1 .
4411 CD2   CD2   . LEU LEU LEU B B 144 144 . 0.1734 0.1836 0.1903 -0.0512 0.0035
0.0352  1 .
4412 C     C     . LEU LEU LEU B B 144 144 . 0.1416 0.1103 0.1149 -0.0293 0.0036  -
0.0002 1 .
4413 O     O     . LEU LEU LEU B B 144 144 . 0.1556 0.1230 0.1226 -0.0227 0.0127  -
0.0099 1 .
4414 N     N     . PRO PRO PRO B B 145 145 . 0.1124 0.0985 0.1016 -0.0226 -0.0016
0.0040  1 .
4415 CA    CA    . PRO PRO PRO B B 145 145 . 0.1247 0.0769 0.1107 -0.0159 0.0153
0.0055  1 .
4416 CB    CB    . PRO PRO PRO B B 145 145 . 0.1281 0.1004 0.0964 -0.0032 0.0113  -
0.0071 1 .
4417 CG    CG    . PRO PRO PRO B B 145 145 . 0.1252 0.0944 0.1051 -0.0353 0.0125
0.0147  1 .
4418 CD    CD    . PRO PRO PRO B B 145 145 . 0.1188 0.1090 0.1138 -0.0176 -0.0054 -
0.0254 1 .
4419 C     C     . PRO PRO PRO B B 145 145 . 0.1286 0.0863 0.1151 -0.0192 -0.0012
0.0000  1 .
4420 O     O     . PRO PRO PRO B B 145 145 . 0.1168 0.1149 0.0922 0.0046  0.0147
0.0024  1 .
4421 N     N     . VAL VAL VAL B B 146 146 . 0.0875 0.0938 0.0889 -0.0090 0.0136
0.0021  1 .
4422 CA    CA    . VAL VAL VAL B B 146 146 . 0.0929 0.0749 0.0769 -0.0108 0.0000  -
0.0015 1 .
4423 CB    CB    . VAL VAL VAL B B 146 146 . 0.1027 0.0754 0.0790 -0.0068 0.0175  -
0.0054 1 .
4424 CG1   CG1   . VAL VAL VAL B B 146 146 . 0.1279 0.1440 0.1099 -0.0165 -0.0057 -
0.0170 1 .
4425 CG2   CG2   . VAL VAL VAL B B 146 146 . 0.1752 0.1124 0.1211 0.0051  0.0466  -
0.0188 1 .
4426 C     C     . VAL VAL VAL B B 146 146 . 0.0957 0.0772 0.0976 0.0117  0.0101
0.0035  1 .
4427 O     O     . VAL VAL VAL B B 146 146 . 0.1052 0.0846 0.0959 0.0090  0.0024  -
0.0121 1 .
4428 N     N     . PRO PRO PRO B B 147 147 . 0.1134 0.0776 0.0823 0.0004  -0.0050 -
0.0006 1 .
4429 CA    CA    . PRO PRO PRO B B 147 147 . 0.0890 0.0833 0.0782 0.0040  -0.0048 -
0.0091 1 .
4430 CB    CB    . PRO PRO PRO B B 147 147 . 0.1275 0.0807 0.0819 0.0081  0.0127  -
0.0066 1 .
4431 CG    CG    . PRO PRO PRO B B 147 147 . 0.1187 0.0954 0.0996 0.0147  -0.0107 -
0.0081 1 .
4432 CD    CD    . PRO PRO PRO B B 147 147 . 0.1173 0.0780 0.0863 0.0365  -0.0140 -
0.0036 1 .
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4433 C     C     . PRO PRO PRO B B 147 147 . 0.0986 0.0942 0.1073 0.0024  -0.0046 -
0.0113 1 .
4434 O     O     . PRO PRO PRO B B 147 147 . 0.1279 0.0928 0.1318 0.0106  0.0229  -
0.0084 1 .
4435 N     N     . ALA ALA ALA B B 148 148 . 0.1232 0.0973 0.1088 -0.0098 0.0027
0.0005  1 .
4436 CA    CA    . ALA ALA ALA B B 148 148 . 0.0827 0.0945 0.0770 0.0130  -0.0007
0.0115  1 .
4437 CB    CB    . ALA ALA ALA B B 148 148 . 0.1320 0.1038 0.0889 0.0140  -0.0010
0.0185  1 .
4438 C     C     . ALA ALA ALA B B 148 148 . 0.0953 0.0919 0.0830 0.0000  0.0032  -
0.0068 1 .
4439 O     O     . ALA ALA ALA B B 148 148 . 0.0914 0.0997 0.1074 0.0231  -0.0059
0.0075  1 .
4440 N     N     . PHE PHE PHE B B 149 149 . 0.0978 0.1090 0.0836 0.0127  0.0066
0.0034  1 .
4441 CA    CA    . PHE PHE PHE B B 149 149 . 0.0852 0.0996 0.0763 0.0013  0.0020
0.0127  1 .
4442 CB    CB    . PHE PHE PHE B B 149 149 . 0.1094 0.1015 0.1121 -0.0001 0.0035
0.0047  1 .
4443 CG    CG    . PHE PHE PHE B B 149 149 . 0.0710 0.0908 0.0718 -0.0046 0.0086
0.0143  1 .
4444 CD1   CD1   . PHE PHE PHE B B 149 149 . 0.0826 0.0798 0.0737 -0.0028 0.0124
0.0043  1 .
4445 CE1   CE1   . PHE PHE PHE B B 149 149 . 0.1121 0.0754 0.0991 0.0039  0.0141
0.0228  1 .
4446 CZ    CZ    . PHE PHE PHE B B 149 149 . 0.1406 0.1137 0.1019 -0.0053 0.0262
0.0055  1 .
4447 CE2   CE2   . PHE PHE PHE B B 149 149 . 0.0860 0.0809 0.1275 -0.0137 0.0144  -
0.0192 1 .
4448 CD2   CD2   . PHE PHE PHE B B 149 149 . 0.1122 0.1194 0.1385 -0.0240 -0.0122 -
0.0126 1 .
4449 C     C     . PHE PHE PHE B B 149 149 . 0.0843 0.0921 0.0807 0.0020  0.0128
0.0037  1 .
4450 O     O     . PHE PHE PHE B B 149 149 . 0.0985 0.0911 0.0881 0.0097  0.0207
0.0076  1 .
4451 N     N     . ASN ASN ASN B B 150 150 . 0.1042 0.0836 0.1013 0.0056  0.0110
0.0002  1 .
4452 CA    CA    . ASN ASN ASN B B 150 150 . 0.0895 0.1088 0.1152 0.0198  0.0094  -
0.0104 1 .
4453 CB    CB    . ASN ASN ASN B B 150 150 . 0.1342 0.1058 0.1452 -0.0062 0.0465  -
0.0086 1 .
4454 CG    CG    . ASN ASN ASN B B 150 150 . 0.2117 0.1440 0.1364 0.0003  0.0427  -
0.0092 1 .
4455 OD1   OD1   . ASN ASN ASN B B 150 150 . 0.2004 0.2241 0.2357 0.0627  0.0127  -
0.0322 1 .
4456 ND2   ND2   . ASN ASN ASN B B 150 150 . 0.0800 0.1000 0.1529 0.0182  -0.0030
0.0266  1 .
4457 C     C     . ASN ASN ASN B B 150 150 . 0.1239 0.1504 0.1025 0.0100  0.0068
0.0083  1 .
4458 O     O     . ASN ASN ASN B B 150 150 . 0.1861 0.2755 0.1630 0.0111  0.0218
0.0104  1 .
4459 N     N     . VAL VAL VAL B B 151 151 . 0.1068 0.1113 0.0957 0.0147  -0.0005
0.0099  1 .
4460 CA    CA    . VAL VAL VAL B B 151 151 . 0.1121 0.1086 0.0762 0.0010  -0.0100
0.0034  1 .
4461 CB    CB    . VAL VAL VAL B B 151 151 . 0.1054 0.1081 0.1139 0.0022  0.0064
0.0108  1 .
4462 CG1   CG1   . VAL VAL VAL B B 151 151 . 0.1165 0.1346 0.1453 -0.0161 -0.0154
0.0000  1 .
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4463 CG2   CG2   . VAL VAL VAL B B 151 151 . 0.1587 0.1213 0.1042 0.0128  0.0011  -
0.0053 1 .
4464 C     C     . VAL VAL VAL B B 151 151 . 0.0942 0.1078 0.0635 0.0129  0.0102
0.0056  1 .
4465 O     O     . VAL VAL VAL B B 151 151 . 0.1296 0.1332 0.0967 0.0415  -0.0112 -
0.0049 1 .
4466 N     N     . ILE ILE ILE B B 152 152 . 0.1315 0.0936 0.0969 -0.0051 0.0127
0.0121  1 .
4467 CA    CA    . ILE ILE ILE B B 152 152 . 0.0886 0.1200 0.0828 0.0092  0.0221
0.0205  1 .
4468 CB    CB    . ILE ILE ILE B B 152 152 . 0.0874 0.1411 0.1063 -0.0207 0.0068
0.0076  1 .
4469 CG1   CG1   . ILE ILE ILE B B 152 152 . 0.1553 0.1492 0.1530 0.0025  0.0576  -
0.0195 1 .
4470 CD    CD    . ILE ILE ILE B B 152 152 . 0.1579 0.1954 0.1383 0.0100  0.0197
0.0079  1 .
4471 CG2   CG2   . ILE ILE ILE B B 152 152 . 0.0993 0.1483 0.1582 -0.0267 0.0042  -
0.0167 1 .
4472 C     C     . ILE ILE ILE B B 152 152 . 0.1178 0.1318 0.1221 0.0017  0.0029
0.0108  1 .
4473 O     O     . ILE ILE ILE B B 152 152 . 0.1494 0.1632 0.1405 0.0218  -0.0024
0.0255  1 .
4474 N     N     . ASN ASN ASN B B 153 153 . 0.1357 0.1202 0.1458 0.0366  0.0316  -
0.0027 1 .
4475 CA    CA    . ASN ASN ASN B B 153 153 . 0.1720 0.1489 0.1583 0.0324  0.0378  -
0.0072 1 .
4476 CB    CB    . ASN ASN ASN B B 153 153 . 0.1579 0.1646 0.1853 0.0127  0.0368  -
0.0061 1 .
4477 CG    CG    . ASN ASN ASN B B 153 153 . 0.2187 0.1537 0.1851 0.0059  -0.0032 -
0.0107 1 .
4478 OD1   OD1   . ASN ASN ASN B B 153 153 . 0.2116 0.2160 0.2294 0.0114  -0.0292 -
0.0373 1 .
4479 ND2   ND2   . ASN ASN ASN B B 153 153 . 0.0806 0.0649 0.0951 -0.0359 0.0319  -
0.0173 1 .
4480 C     C     . ASN ASN ASN B B 153 153 . 0.1409 0.1613 0.1770 0.0237  0.0188  -
0.0083 1 .
4481 O     O     . ASN ASN ASN B B 153 153 . 0.1652 0.1710 0.2000 0.0219  -0.0141 -
0.0092 1 .
4482 N     N     . GLY GLY GLY B B 154 154 . 0.1317 0.1330 0.1335 0.0253  0.0197
0.0020  1 .
4483 CA    CA    . GLY GLY GLY B B 154 154 . 0.0955 0.1195 0.1257 0.0067  0.0023  -
0.0136 1 .
4484 C     C     . GLY GLY GLY B B 154 154 . 0.1106 0.1310 0.1129 -0.0021 -0.0068 -
0.0195 1 .
4485 O     O     . GLY GLY GLY B B 154 154 . 0.1172 0.1128 0.1359 -0.0088 -0.0047 -
0.0103 1 .
4486 N     N     . GLY GLY GLY B B 155 155 . 0.1185 0.1260 0.1394 0.0099  -0.0215 -
0.0077 1 .
4487 CA    CA    . GLY GLY GLY B B 155 155 . 0.1569 0.1341 0.1580 0.0219  -0.0002 -
0.0148 1 .
4488 C     C     . GLY GLY GLY B B 155 155 . 0.2041 0.2548 0.2066 0.0289  -0.0242 -
0.0385 1 .
4489 O     O     . GLY GLY GLY B B 155 155 . 0.1979 0.2678 0.2634 0.0746  -0.0541 -
0.0818 1 .
4490 N     N     . SER SER SER B B 156 156 . 0.2286 0.2994 0.2122 0.0464  -0.0056 -
0.0508 1 .
4491 CA    CA    . SER SER SER B B 156 156 . 0.2463 0.2303 0.2273 0.0180  0.0609  -
0.0025 1 .
4492 CB    CB    . SER SER SER B B 156 156 . 0.2802 0.2776 0.2314 0.0439  0.0264  -
0.0206 1 .
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4493 OG    OG    . SER SER SER B B 156 156 . 0.3025 0.2794 0.1988 0.0987  0.0393  -
0.0073 1 .
4494 C     C     . SER SER SER B B 156 156 . 0.2593 0.2393 0.2648 0.0107  0.0328  -
0.0105 1 .
4495 O     O     . SER SER SER B B 156 156 . 0.2433 0.2303 0.2757 -0.0168 0.0660
0.0231  1 .
4496 N     N     . HIS HIS HIS B B 157 157 . 0.1809 0.1794 0.2789 0.0063  0.0224  -
0.0188 1 .
4497 CA    CA    . HIS HIS HIS B B 157 157 . 0.1762 0.1855 0.2511 -0.0050 0.0044  -
0.0016 1 .
4498 CB    CB    . HIS HIS HIS B B 157 157 . 0.1910 0.1944 0.2244 -0.0160 -0.0056 -
0.0255 1 .
4499 CG    CG    . HIS HIS HIS B B 157 157 . 0.2009 0.2240 0.2458 0.0328  0.0030  -
0.0246 1 .
4500 ND1   ND1   . HIS HIS HIS B B 157 157 . 0.2122 0.2033 0.2895 -0.0101 0.0459
0.0197  1 .
4501 CE1   CE1   . HIS HIS HIS B B 157 157 . 0.1835 0.2684 0.2763 -0.0020 0.0087  -
0.0318 1 .
4502 NE2   NE2   . HIS HIS HIS B B 157 157 . 0.1956 0.1985 0.1538 0.0201  0.0209
0.0032  1 .
4503 CD2   CD2   . HIS HIS HIS B B 157 157 . 0.2340 0.2467 0.1948 -0.0164 0.0385  -
0.0434 1 .
4504 C     C     . HIS HIS HIS B B 157 157 . 0.2253 0.2288 0.2459 -0.0064 0.0100
0.0071  1 .
4505 O     O     . HIS HIS HIS B B 157 157 . 0.1785 0.1777 0.2428 -0.0036 0.0179
0.0455  1 .
4506 N     N     . ALA ALA ALA B B 158 158 . 0.2310 0.2429 0.2562 -0.0108 -0.0052 -
0.0100 1 .
4507 CA    CA    . ALA ALA ALA B B 158 158 . 0.2405 0.2399 0.2510 0.0087  -0.0238 -
0.0174 1 .
4508 CB    CB    . ALA ALA ALA B B 158 158 . 0.2638 0.2963 0.2394 0.0092  -0.0311 -
0.0455 1 .
4509 C     C     . ALA ALA ALA B B 158 158 . 0.2430 0.2352 0.2213 -0.0009 0.0068  -
0.0127 1 .
4510 O     O     . ALA ALA ALA B B 158 158 . 0.2898 0.2171 0.2413 0.0745  -0.0026
0.0010  1 .
4511 N     N     . GLY GLY GLY B B 159 159 . 0.1950 0.2203 0.2168 0.0194  -0.0044 -
0.0101 1 .
4512 CA    CA    . GLY GLY GLY B B 159 159 . 0.1960 0.2302 0.1816 0.0046  -0.0180 -
0.0017 1 .
4513 C     C     . GLY GLY GLY B B 159 159 . 0.1896 0.2359 0.1797 0.0128  -0.0191
0.0125  1 .
4514 O     O     . GLY GLY GLY B B 159 159 . 0.2441 0.2021 0.1667 -0.0097 -0.0301
0.0180  1 .
4515 N     N     . ASN ASN ASN B B 160 160 . 0.1793 0.1997 0.1630 0.0182  -0.0171
0.0351  1 .
4516 CA    CA    . ASN ASN ASN B B 160 160 . 0.1697 0.1696 0.1569 0.0022  -0.0179
0.0136  1 .
4517 CB    CB    . ASN ASN ASN B B 160 160 . 0.1494 0.1899 0.1829 0.0123  -0.0338 -
0.0051 1 .
4518 CG    CG    . ASN ASN ASN B B 160 160 . 0.1703 0.1874 0.1962 0.0107  -0.0489
0.0094  1 .
4519 OD1   OD1   . ASN ASN ASN B B 160 160 . 0.2033 0.2431 0.2311 0.0102  -0.0728
0.0302  1 .
4520 ND2   ND2   . ASN ASN ASN B B 160 160 . 0.1565 0.2095 0.1249 0.0139  -0.0215
0.0017  1 .
4521 C     C     . ASN ASN ASN B B 160 160 . 0.1246 0.1472 0.1395 -0.0119 -0.0294 -
0.0028 1 .
4522 O     O     . ASN ASN ASN B B 160 160 . 0.1622 0.1792 0.1716 -0.0028 -0.0137 -
0.0090 1 .
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4523 N     N     . LYS LYS LYS B B 161 161 . 0.1511 0.2026 0.1658 0.0009  -0.0165
0.0010  1 .
4524 CA    CA    . LYS LYS LYS B B 161 161 . 0.1794 0.2008 0.1737 -0.0258 -0.0325
0.0109  1 .
4525 CB    CB    . LYS LYS LYS B B 161 161 . 0.2227 0.2893 0.2018 -0.0378 -0.0227
0.0107  1 .
4526 CG    CG    . LYS LYS LYS B B 161 161 . 0.2494 0.3606 0.2095 -0.0550 -0.0669
0.0037  1 .
4527 CD    CD    . LYS LYS LYS B B 161 161 . 0.3904 0.4381 0.3500 -0.0932 -0.0251
0.0184  1 .
4528 CE    CE    . LYS LYS LYS B B 161 161 . 0.4479 0.4773 0.4144 -0.0400 -0.0058 -
0.0540 1 .
4529 NZ    NZ    . LYS LYS LYS B B 161 161 . 0.2634 0.3799 0.2115 -0.0809 -0.0883 -
0.0920 1 .
4530 C     C     . LYS LYS LYS B B 161 161 . 0.1649 0.1812 0.1693 -0.0171 -0.0224
0.0046  1 .
4531 O     O     . LYS LYS LYS B B 161 161 . 0.2240 0.1734 0.1980 -0.0348 -0.0279 -
0.0102 1 .
4532 N     N     . LEU LEU LEU B B 162 162 . 0.1717 0.1220 0.1334 0.0182  0.0034  -
0.0021 1 .
4533 CA    CA    . LEU LEU LEU B B 162 162 . 0.1769 0.1673 0.1683 -0.0151 0.0124
0.0069  1 .
4534 CB    CB    . LEU LEU LEU B B 162 162 . 0.2255 0.1592 0.2308 0.0107  0.0275
0.0068  1 .
4535 CG    CG    . LEU LEU LEU B B 162 162 . 0.3086 0.1905 0.2468 -0.0305 0.0600
0.0157  1 .
4536 CD1   CD1   . LEU LEU LEU B B 162 162 . 0.3063 0.2475 0.2040 0.0577  0.1078
0.0007  1 .
4537 CD2   CD2   . LEU LEU LEU B B 162 162 . 0.2800 0.1348 0.1765 -0.0106 0.0228
0.0319  1 .
4538 C     C     . LEU LEU LEU B B 162 162 . 0.1538 0.1451 0.1252 -0.0123 -0.0144
0.0018  1 .
4539 O     O     . LEU LEU LEU B B 162 162 . 0.1536 0.1720 0.1455 -0.0081 -0.0114 -
0.0014 1 .
4540 N     N     . ALA ALA ALA B B 163 163 . 0.1625 0.1470 0.1381 -0.0172 -0.0157 -
0.0109 1 .
4541 CA    CA    . ALA ALA ALA B B 163 163 . 0.1365 0.1539 0.1397 -0.0231 -0.0068 -
0.0045 1 .
4542 CB    CB    . ALA ALA ALA B B 163 163 . 0.1744 0.1822 0.1537 0.0083  0.0023
0.0061  1 .
4543 C     C     . ALA ALA ALA B B 163 163 . 0.1536 0.1470 0.1308 -0.0087 0.0115  -
0.0053 1 .
4544 O     O     . ALA ALA ALA B B 163 163 . 0.1293 0.1284 0.1342 0.0180  -0.0014 -
0.0097 1 .
4545 N     N     . MET MET MET B B 164 164 . 0.1394 0.1091 0.1003 -0.0126 0.0072
0.0062  1 .
4546 CA    CA    . MET MET MET B B 164 164 . 0.1019 0.1144 0.0925 -0.0129 0.0150  -
0.0040 1 .
4547 CB    CB    . MET MET MET B B 164 164 . 0.1483 0.1133 0.1029 -0.0101 -0.0118 -
0.0239 1 .
4548 CG    CG    . MET MET MET B B 164 164 . 0.1445 0.1111 0.1025 0.0055  0.0068  -
0.0215 1 .
4549 SD    SD    . MET MET MET B B 164 164 . 0.1583 0.1428 0.1327 -0.0113 -0.0044 -
0.0253 1 .
4550 CE    CE    . MET MET MET B B 164 164 . 0.1042 0.1620 0.1275 -0.0380 0.0133  -
0.0156 1 .
4551 C     C     . MET MET MET B B 164 164 . 0.0885 0.0855 0.0986 -0.0059 -0.0098
0.0078  1 .
4552 O     O     . MET MET MET B B 164 164 . 0.1076 0.1206 0.1377 -0.0204 -0.0190
0.0170  1 .
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4553 N     N     . GLN GLN GLN B B 165 165 . 0.0781 0.0989 0.0758 -0.0036 0.0013  -
0.0092 1 .
4554 CA    CA    . GLN GLN GLN B B 165 165 . 0.0680 0.0972 0.1210 0.0121  0.0159
0.0169  1 .
4555 CB    CB    . GLN GLN GLN B B 165 165 . 0.0650 0.1030 0.0951 0.0313  0.0214
0.0170  1 .
4556 CG    CG    . GLN GLN GLN B B 165 165 . 0.1183 0.1085 0.0929 0.0046  0.0123  -
0.0016 1 .
4557 CD    CD    . GLN GLN GLN B B 165 165 . 0.0991 0.0928 0.1244 -0.0034 0.0086  -
0.0060 1 .
4558 OE1   OE1   . GLN GLN GLN B B 165 165 . 0.1139 0.1191 0.1160 0.0179  0.0018  -
0.0179 1 .
4559 NE2   NE2   . GLN GLN GLN B B 165 165 . 0.1374 0.1578 0.1363 -0.0160 -0.0044 -
0.0259 1 .
4560 C     C     . GLN GLN GLN B B 165 165 . 0.0994 0.0883 0.0833 -0.0052 -0.0010
0.0083  1 .
4561 O     O     . GLN GLN GLN B B 165 165 . 0.1099 0.1011 0.0922 0.0199  -0.0147
0.0015  1 .
4562 N     N     . GLU GLU GLU B B 166 166 . 0.1011 0.0974 0.0967 0.0130  0.0020  -
0.0060 1 .
4563 CA    CA    . GLU GLU GLU B B 166 166 . 0.1132 0.0994 0.1134 -0.0019 0.0061  -
0.0157 1 .
4564 CB    CB    . GLU GLU GLU B B 166 166 . 0.1133 0.1090 0.0987 -0.0113 0.0090  -
0.0053 1 .
4565 CG    CG    . GLU GLU GLU B B 166 166 . 0.0884 0.1189 0.0974 0.0047  0.0033
0.0041  1 .
4566 CD    CD    . GLU GLU GLU B B 166 166 . 0.1147 0.1499 0.0969 -0.0107 0.0288  -
0.0012 1 .
4567 OE1   OE1   . GLU GLU GLU B B 166 166 . 0.1163 0.1357 0.1208 -0.0188 0.0122  -
0.0079 1 .
4568 OE2   OE2   . GLU GLU GLU B B 166 166 . 0.1507 0.1627 0.1579 0.0013  0.0198  -
0.0296 1 .
4569 C     C     . GLU GLU GLU B B 166 166 . 0.1344 0.1028 0.0905 -0.0013 -0.0130 -
0.0114 1 .
4570 O     O     . GLU GLU GLU B B 166 166 . 0.1214 0.0942 0.0821 0.0154  -0.0213
0.0013  1 .
4571 N     N     . PHE PHE PHE B B 167 167 . 0.1247 0.0964 0.0971 0.0146  -0.0073 -
0.0112 1 .
4572 CA    CA    . PHE PHE PHE B B 167 167 . 0.1016 0.0741 0.1054 0.0092  0.0076  -
0.0022 1 .
4573 CB    CB    . PHE PHE PHE B B 167 167 . 0.0977 0.0774 0.1244 0.0067  -0.0051 -
0.0146 1 .
4574 CG    CG    . PHE PHE PHE B B 167 167 . 0.1234 0.0957 0.1037 -0.0082 0.0220  -
0.0097 1 .
4575 CD1   CD1   . PHE PHE PHE B B 167 167 . 0.1528 0.1108 0.1292 0.0137  -0.0171 -
0.0193 1 .
4576 CE1   CE1   . PHE PHE PHE B B 167 167 . 0.1453 0.1600 0.1927 -0.0224 0.0126  -
0.0200 1 .
4577 CZ    CZ    . PHE PHE PHE B B 167 167 . 0.1179 0.1386 0.1726 -0.0187 0.0088  -
0.0309 1 .
4578 CE2   CE2   . PHE PHE PHE B B 167 167 . 0.1587 0.1725 0.1692 -0.0043 0.0211  -
0.0050 1 .
4579 CD2   CD2   . PHE PHE PHE B B 167 167 . 0.0816 0.1446 0.1088 0.0024  0.0147  -
0.0077 1 .
4580 C     C     . PHE PHE PHE B B 167 167 . 0.0834 0.0989 0.0971 0.0016  -0.0087
0.0099  1 .
4581 O     O     . PHE PHE PHE B B 167 167 . 0.1104 0.1238 0.0862 0.0037  0.0087
0.0302  1 .
4582 N     N     . MET MET MET B B 168 168 . 0.1197 0.0867 0.0882 0.0007  -0.0173 -
0.0115 1 .
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4583 CA    CA    . MET MET MET B B 168 168 . 0.0926 0.0883 0.0990 -0.0051 0.0085  -
0.0017 1 .
4584 CB    CB    . MET MET MET B B 168 168 . 0.1136 0.1104 0.0898 0.0150  0.0013  -
0.0115 1 .
4585 CG    CG    . MET MET MET B B 168 168 . 0.1216 0.1470 0.1281 0.0300  0.0093  -
0.0326 1 .
4586 SD    SD    . MET MET MET B B 168 168 . 0.1227 0.1254 0.1636 0.0053  0.0075
0.0095  1 .
4587 CE    CE    . MET MET MET B B 168 168 . 0.1393 0.1195 0.1615 0.0374  0.0217
0.0228  1 .
4588 C     C     . MET MET MET B B 168 168 . 0.1092 0.0827 0.0813 -0.0069 0.0173
0.0115  1 .
4589 O     O     . MET MET MET B B 168 168 . 0.1294 0.0763 0.0978 0.0067  0.0178  -
0.0001 1 .
4590 N     N     . ILE ILE ILE B B 169 169 . 0.1270 0.0654 0.0915 0.0132  0.0034
0.0062  1 .
4591 CA    CA    . ILE ILE ILE B B 169 169 . 0.1003 0.0974 0.0944 0.0073  -0.0013 -
0.0114 1 .
4592 CB    CB    . ILE ILE ILE B B 169 169 . 0.0998 0.1079 0.0817 0.0122  0.0260
0.0217  1 .
4593 CG1   CG1   . ILE ILE ILE B B 169 169 . 0.1217 0.1194 0.0814 0.0118  0.0028
0.0140  1 .
4594 CD    CD    . ILE ILE ILE B B 169 169 . 0.1209 0.1568 0.1379 0.0402  0.0446
0.0329  1 .
4595 CG2   CG2   . ILE ILE ILE B B 169 169 . 0.1177 0.1042 0.0852 -0.0232 0.0405  -
0.0020 1 .
4596 C     C     . ILE ILE ILE B B 169 169 . 0.1084 0.0860 0.0980 -0.0004 0.0188  -
0.0036 1 .
4597 O     O     . ILE ILE ILE B B 169 169 . 0.1243 0.1269 0.0946 -0.0080 0.0209
0.0116  1 .
4598 N     N     . LEU LEU LEU B B 170 170 . 0.1028 0.0790 0.0858 0.0020  -0.0039
0.0095  1 .
4599 CA    CA    . LEU LEU LEU B B 170 170 . 0.1035 0.0843 0.1029 -0.0063 0.0133
0.0162  1 .
4600 CB    CB    . LEU LEU LEU B B 170 170 . 0.1378 0.0961 0.0832 0.0072  0.0261
0.0161  1 .
4601 CG    CG    . LEU LEU LEU B B 170 170 . 0.1186 0.0813 0.1141 0.0101  -0.0114 -
0.0135 1 .
4602 CD1   CD1   . LEU LEU LEU B B 170 170 . 0.1581 0.1438 0.1555 -0.0173 -0.0041
0.0028  1 .
4603 CD2   CD2   . LEU LEU LEU B B 170 170 . 0.1681 0.1402 0.1641 0.0323  -0.0529
0.0149  1 .
4604 C     C     . LEU LEU LEU B B 170 170 . 0.1403 0.0994 0.0979 0.0048  0.0264  -
0.0021 1 .
4605 O     O     . LEU LEU LEU B B 170 170 . 0.1391 0.1006 0.0914 -0.0132 0.0373
0.0056  1 .
4606 N     N     . PRO PRO PRO B B 171 171 . 0.1362 0.1103 0.0895 -0.0069 0.0213  -
0.0039 1 .
4607 CA    CA    . PRO PRO PRO B B 171 171 . 0.1407 0.1046 0.0926 -0.0001 0.0109  -
0.0023 1 .
4608 CB    CB    . PRO PRO PRO B B 171 171 . 0.1446 0.1263 0.0956 -0.0187 0.0204  -
0.0150 1 .
4609 CG    CG    . PRO PRO PRO B B 171 171 . 0.1531 0.0766 0.1287 -0.0021 -0.0036 -
0.0278 1 .
4610 CD    CD    . PRO PRO PRO B B 171 171 . 0.1235 0.1167 0.0845 -0.0039 0.0175
0.0033  1 .
4611 C     C     . PRO PRO PRO B B 171 171 . 0.1458 0.0953 0.1106 -0.0113 0.0151  -
0.0092 1 .
4612 O     O     . PRO PRO PRO B B 171 171 . 0.1488 0.1140 0.1097 -0.0273 0.0289  -
0.0219 1 .
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4613 N     N     . VAL VAL VAL B B 172 172 . 0.1522 0.1160 0.1034 -0.0074 0.0155  -
0.0097 1 .
4614 CA    CA    . VAL VAL VAL B B 172 172 . 0.1755 0.1092 0.1126 -0.0019 0.0095  -
0.0072 1 .
4615 CB    CB    . VAL VAL VAL B B 172 172 . 0.1817 0.1234 0.1422 -0.0205 0.0186
0.0002  1 .
4616 CG1   CG1   . VAL VAL VAL B B 172 172 . 0.1561 0.1471 0.1481 0.0011  0.0149  -
0.0263 1 .
4617 CG2   CG2   . VAL VAL VAL B B 172 172 . 0.2067 0.1552 0.1406 -0.0042 0.0403
0.0244  1 .
4618 C     C     . VAL VAL VAL B B 172 172 . 0.1334 0.1122 0.1207 -0.0076 0.0115  -
0.0074 1 .
4619 O     O     . VAL VAL VAL B B 172 172 . 0.1588 0.1568 0.1234 -0.0079 0.0324  -
0.0208 1 .
4620 N     N     . GLY GLY GLY B B 173 173 . 0.1946 0.1165 0.1184 -0.0059 0.0385  -
0.0219 1 .
4621 CA    CA    . GLY GLY GLY B B 173 173 . 0.1943 0.0922 0.1584 -0.0064 0.0515  -
0.0157 1 .
4622 C     C     . GLY GLY GLY B B 173 173 . 0.2324 0.1337 0.1570 -0.0050 0.0303  -
0.0134 1 .
4623 O     O     . GLY GLY GLY B B 173 173 . 0.2497 0.1316 0.1866 -0.0039 0.0415  -
0.0302 1 .
4624 N     N     . ALA ALA ALA B B 174 174 . 0.2421 0.1335 0.1459 -0.0208 0.0339  -
0.0035 1 .
4625 CA    CA    . ALA ALA ALA B B 174 174 . 0.2083 0.1435 0.1297 -0.0133 0.0107  -
0.0084 1 .
4626 CB    CB    . ALA ALA ALA B B 174 174 . 0.2019 0.1284 0.0860 -0.0126 0.0171
0.0014  1 .
4627 C     C     . ALA ALA ALA B B 174 174 . 0.1969 0.1492 0.1415 -0.0019 0.0100  -
0.0199 1 .
4628 O     O     . ALA ALA ALA B B 174 174 . 0.2007 0.1458 0.1430 -0.0123 0.0147  -
0.0211 1 .
4629 N     N     . GLU GLU GLU B B 175 175 . 0.2071 0.1680 0.1567 -0.0142 0.0402  -
0.0085 1 .
4630 CA    CA    . GLU GLU GLU B B 175 175 . 0.2188 0.1945 0.1945 -0.0188 0.0283  -
0.0178 1 .
4631 CB    CB    . GLU GLU GLU B B 175 175 . 0.2245 0.1948 0.2573 -0.0153 0.0440  -
0.0065 1 .
4632 CG    CG    . GLU GLU GLU B B 175 175 . 0.3693 0.2934 0.3684 0.0338  0.0742  -
0.0187 1 .
4633 CD    CD    . GLU GLU GLU B B 175 175 . 0.5826 0.3715 0.5248 0.0600  0.0742  -
0.0134 1 .
4634 OE1   OE1   . GLU GLU GLU B B 175 175 . 0.6437 0.4608 0.5307 0.0419  0.0900  -
0.0173 1 .
4635 OE2   OE2   . GLU GLU GLU B B 175 175 . 0.5678 0.5104 0.5886 0.0528  0.1063  -
0.0326 1 .
4636 C     C     . GLU GLU GLU B B 175 175 . 0.1806 0.1819 0.1635 -0.0327 0.0109  -
0.0172 1 .
4637 O     O     . GLU GLU GLU B B 175 175 . 0.2066 0.2328 0.1877 -0.0526 0.0186  -
0.0301 1 .
4638 N     N     . SER SER SER B B 176 176 . 0.1690 0.1392 0.1163 -0.0220 0.0058
0.0006  1 .
4639 CA    CA    . SER SER SER B B 176 176 . 0.1499 0.1327 0.1581 -0.0246 0.0091  -
0.0013 1 .
4640 CB    CB    . SER SER SER B B 176 176 . 0.1534 0.1120 0.1673 -0.0293 0.0006
0.0139  1 .
4641 OG    OG    . SER SER SER B B 176 176 . 0.1735 0.1514 0.1341 0.0024  -0.0113 -
0.0145 1 .
4642 C     C     . SER SER SER B B 176 176 . 0.1263 0.1414 0.1110 -0.0065 0.0145  -
0.0149 1 .
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4643 O     O     . SER SER SER B B 176 176 . 0.1270 0.1154 0.1194 -0.0127 0.0003  -
0.0022 1 .
4644 N     N     . PHE PHE PHE B B 177 177 . 0.1634 0.1321 0.1278 0.0039  0.0014  -
0.0105 1 .
4645 CA    CA    . PHE PHE PHE B B 177 177 . 0.1346 0.1212 0.1221 -0.0175 -0.0034 -
0.0153 1 .
4646 CB    CB    . PHE PHE PHE B B 177 177 . 0.1719 0.1091 0.1147 -0.0285 -0.0030 -
0.0127 1 .
4647 CG    CG    . PHE PHE PHE B B 177 177 . 0.1498 0.1021 0.0865 -0.0188 -0.0025 -
0.0142 1 .
4648 CD1   CD1   . PHE PHE PHE B B 177 177 . 0.1051 0.0823 0.1195 0.0227  0.0138  -
0.0173 1 .
4649 CE1   CE1   . PHE PHE PHE B B 177 177 . 0.1495 0.1097 0.1086 -0.0187 0.0047  -
0.0251 1 .
4650 CZ    CZ    . PHE PHE PHE B B 177 177 . 0.0822 0.0878 0.1134 -0.0081 -0.0125 -
0.0047 1 .
4651 CE2   CE2   . PHE PHE PHE B B 177 177 . 0.1038 0.1153 0.1070 0.0049  0.0072
0.0061  1 .
4652 CD2   CD2   . PHE PHE PHE B B 177 177 . 0.1138 0.1568 0.0928 -0.0224 0.0082  -
0.0095 1 .
4653 C     C     . PHE PHE PHE B B 177 177 . 0.1465 0.1217 0.1271 0.0024  0.0033  -
0.0051 1 .
4654 O     O     . PHE PHE PHE B B 177 177 . 0.1401 0.0955 0.1193 0.0002  0.0150  -
0.0049 1 .
4655 N     N     . ARG ARG ARG B B 178 178 . 0.1466 0.1141 0.1100 -0.0065 0.0112  -
0.0095 1 .
4656 CA    CA    . ARG ARG ARG B B 178 178 . 0.1139 0.1061 0.1374 0.0103  0.0035  -
0.0071 1 .
4657 CB    CB    . ARG ARG ARG B B 178 178 . 0.1445 0.1626 0.1682 -0.0285 0.0258  -
0.0003 1 .
4658 CG    CG    . ARG ARG ARG B B 178 178 . 0.2539 0.2510 0.3175 -0.0185 0.0377  -
0.0306 1 .
4659 CD    CD    . ARG ARG ARG B B 178 178 . 0.4466 0.2688 0.2345 -0.1696 0.0541
0.0029  1 .
4660 NE    NE    . ARG ARG ARG B B 178 178 . 0.4613 0.4055 0.3732 -0.1269 -0.0266
0.0099  1 .
4661 CZ    CZ    . ARG ARG ARG B B 178 178 . 0.5019 0.3896 0.4557 -0.0810 -0.0202 -
0.0148 1 .
4662 NH1   NH1   . ARG ARG ARG B B 178 178 . 0.5742 0.4440 0.5043 -0.0145 -0.0485 -
0.0579 1 .
4663 NH2   NH2   . ARG ARG ARG B B 178 178 . 0.3985 0.3649 0.4600 -0.0491 0.0375  -
0.0227 1 .
4664 C     C     . ARG ARG ARG B B 178 178 . 0.1211 0.1106 0.1094 0.0064  0.0023  -
0.0020 1 .
4665 O     O     . ARG ARG ARG B B 178 178 . 0.1220 0.0917 0.1072 0.0033  0.0100  -
0.0121 1 .
4666 N     N     . ASP ASP ASP B B 179 179 . 0.1127 0.0908 0.1170 0.0246  0.0062  -
0.0005 1 .
4667 CA    CA    . ASP ASP ASP B B 179 179 . 0.1252 0.0962 0.1212 -0.0187 0.0136  -
0.0079 1 .
4668 CB    CB    . ASP ASP ASP B B 179 179 . 0.1638 0.1281 0.1398 0.0069  0.0107  -
0.0186 1 .
4669 CG    CG    . ASP ASP ASP B B 179 179 . 0.2059 0.1891 0.2115 -0.0111 -0.0002 -
0.0055 1 .
4670 OD1   OD1   . ASP ASP ASP B B 179 179 . 0.2783 0.2275 0.2354 0.0430  0.0179
0.0057  1 .
4671 OD2   OD2   . ASP ASP ASP B B 179 179 . 0.2913 0.2118 0.2314 0.0211  0.0111  -
0.0060 1 .
4672 C     C     . ASP ASP ASP B B 179 179 . 0.1023 0.0840 0.1076 -0.0009 0.0076
0.0022  1 .
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4673 O     O     . ASP ASP ASP B B 179 179 . 0.1050 0.1051 0.1097 0.0045  0.0081
0.0069  1 .
4674 N     N     . ALA ALA ALA B B 180 180 . 0.1378 0.1053 0.1027 -0.0119 -0.0011
0.0064  1 .
4675 CA    CA    . ALA ALA ALA B B 180 180 . 0.1198 0.0797 0.1140 -0.0129 0.0027
0.0068  1 .
4676 CB    CB    . ALA ALA ALA B B 180 180 . 0.1241 0.1250 0.1110 0.0034  -0.0116
0.0021  1 .
4677 C     C     . ALA ALA ALA B B 180 180 . 0.0945 0.1031 0.1009 -0.0124 0.0097  -
0.0015 1 .
4678 O     O     . ALA ALA ALA B B 180 180 . 0.1301 0.1043 0.1090 -0.0074 0.0231  -
0.0026 1 .
4679 N     N     . MET MET MET B B 181 181 . 0.1305 0.0980 0.0892 -0.0057 0.0103
0.0083  1 .
4680 CA    CA    . MET MET MET B B 181 181 . 0.1141 0.1149 0.1012 0.0013  0.0024
0.0038  1 .
4681 CB    CB    . MET MET MET B B 181 181 . 0.1400 0.1088 0.1267 0.0055  0.0199
0.0166  1 .
4682 CG    CG    . MET MET MET B B 181 181 . 0.0864 0.0888 0.0831 0.0061  0.0186  -
0.0029 1 .
4683 SD    SD    . MET MET MET B B 181 181 . 0.1287 0.1147 0.1181 0.0000  0.0153  -
0.0009 1 .
4684 CE    CE    . MET MET MET B B 181 181 . 0.1453 0.1030 0.1117 -0.0214 -0.0005
0.0088  1 .
4685 C     C     . MET MET MET B B 181 181 . 0.1260 0.1160 0.0726 0.0042  0.0161  -
0.0095 1 .
4686 O     O     . MET MET MET B B 181 181 . 0.1197 0.0996 0.1103 0.0066  0.0183
0.0072  1 .
4687 N     N     . ARG ARG ARG B B 182 182 . 0.1222 0.0909 0.0987 0.0122  0.0221  -
0.0044 1 .
4688 CA    CA    . ARG ARG ARG B B 182 182 . 0.1238 0.1041 0.1111 0.0095  0.0298
0.0045  1 .
4689 CB    CB    . ARG ARG ARG B B 182 182 . 0.1303 0.1054 0.1205 0.0101  0.0127  -
0.0012 1 .
4690 CG    CG    . ARG ARG ARG B B 182 182 . 0.1610 0.1119 0.1891 0.0251  0.0055  -
0.0113 1 .
4691 CD    CD    . ARG ARG ARG B B 182 182 . 0.2326 0.1598 0.2685 -0.0183 -0.0048
0.0247  1 .
4692 NE    NE    . ARG ARG ARG B B 182 182 . 0.3101 0.2044 0.3255 0.0257  0.0126  -
0.0551 1 .
4693 CZ    CZ    . ARG ARG ARG B B 182 182 . 0.3543 0.2501 0.3552 -0.0005 0.0057  -
0.0333 1 .
4694 NH1   NH1   . ARG ARG ARG B B 182 182 . 0.3291 0.2879 0.4048 0.0061  -0.0009 -
0.0284 1 .
4695 NH2   NH2   . ARG ARG ARG B B 182 182 . 0.4345 0.2303 0.3703 0.0339  -0.0203 -
0.0547 1 .
4696 C     C     . ARG ARG ARG B B 182 182 . 0.1302 0.1021 0.1112 0.0010  0.0181
0.0111  1 .
4697 O     O     . ARG ARG ARG B B 182 182 . 0.1216 0.1051 0.1019 0.0011  0.0092
0.0172  1 .
4698 N     N     . LEU LEU LEU B B 183 183 . 0.1106 0.0853 0.0898 0.0369  0.0143  -
0.0065 1 .
4699 CA    CA    . LEU LEU LEU B B 183 183 . 0.1086 0.1035 0.1135 -0.0008 0.0043  -
0.0134 1 .
4700 CB    CB    . LEU LEU LEU B B 183 183 . 0.1476 0.1017 0.1044 0.0270  0.0275  -
0.0157 1 .
4701 CG    CG    . LEU LEU LEU B B 183 183 . 0.1840 0.1218 0.1257 -0.0097 0.0125  -
0.0320 1 .
4702 CD1   CD1   . LEU LEU LEU B B 183 183 . 0.1975 0.1386 0.1404 -0.0049 0.0223  -
0.0048 1 .
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4703 CD2   CD2   . LEU LEU LEU B B 183 183 . 0.2000 0.1245 0.1681 -0.0113 0.0794  -
0.0101 1 .
4704 C     C     . LEU LEU LEU B B 183 183 . 0.1256 0.1074 0.1183 0.0023  0.0091
0.0018  1 .
4705 O     O     . LEU LEU LEU B B 183 183 . 0.1289 0.1029 0.1000 0.0109  0.0218
0.0095  1 .
4706 N     N     . GLY GLY GLY B B 184 184 . 0.1323 0.0947 0.0930 0.0123  0.0211  -
0.0026 1 .
4707 CA    CA    . GLY GLY GLY B B 184 184 . 0.1277 0.1106 0.1221 0.0018  -0.0026 -
0.0040 1 .
4708 C     C     . GLY GLY GLY B B 184 184 . 0.1077 0.1024 0.1221 0.0067  -0.0026
0.0120  1 .
4709 O     O     . GLY GLY GLY B B 184 184 . 0.1159 0.0998 0.0990 0.0101  0.0066
0.0188  1 .
4710 N     N     . ALA ALA ALA B B 185 185 . 0.1110 0.1109 0.1113 0.0116  0.0136
0.0125  1 .
4711 CA    CA    . ALA ALA ALA B B 185 185 . 0.0961 0.1120 0.1009 -0.0008 0.0115
0.0216  1 .
4712 CB    CB    . ALA ALA ALA B B 185 185 . 0.1045 0.1082 0.1149 0.0008  0.0159
0.0271  1 .
4713 C     C     . ALA ALA ALA B B 185 185 . 0.1273 0.0983 0.1121 -0.0018 0.0132
0.0062  1 .
4714 O     O     . ALA ALA ALA B B 185 185 . 0.1105 0.1157 0.1198 0.0002  0.0263
0.0130  1 .
4715 N     N     . GLU GLU GLU B B 186 186 . 0.1054 0.0851 0.1094 0.0106  0.0164
0.0181  1 .
4716 CA    CA    . GLU GLU GLU B B 186 186 . 0.1055 0.1180 0.1239 0.0175  0.0326
0.0149  1 .
4717 CB    CB    . GLU GLU GLU B B 186 186 . 0.1566 0.0954 0.1556 0.0109  0.0293
0.0214  1 .
4718 CG    CG    . GLU GLU GLU B B 186 186 . 0.1480 0.0749 0.1286 -0.0040 0.0199
0.0152  1 .
4719 CD    CD    . GLU GLU GLU B B 186 186 . 0.1332 0.1430 0.1231 -0.0094 0.0316  -
0.0099 1 .
4720 OE1   OE1   . GLU GLU GLU B B 186 186 . 0.2496 0.1852 0.1548 0.0017  0.0586  -
0.0089 1 .
4721 OE2   OE2   . GLU GLU GLU B B 186 186 . 0.1886 0.1247 0.1422 0.0178  0.0376
0.0030  1 .
4722 C     C     . GLU GLU GLU B B 186 186 . 0.1029 0.0921 0.0885 0.0288  0.0220  -
0.0009 1 .
4723 O     O     . GLU GLU GLU B B 186 186 . 0.1331 0.1207 0.1249 0.0105  0.0163
0.0096  1 .
4724 N     N     . VAL VAL VAL B B 187 187 . 0.1045 0.1060 0.0920 0.0161  0.0245  -
0.0050 1 .
4725 CA    CA    . VAL VAL VAL B B 187 187 . 0.1070 0.1075 0.1133 -0.0073 0.0137
0.0042  1 .
4726 CB    CB    . VAL VAL VAL B B 187 187 . 0.1119 0.0783 0.0993 -0.0038 0.0133
0.0018  1 .
4727 CG1   CG1   . VAL VAL VAL B B 187 187 . 0.1619 0.1372 0.1236 -0.0015 0.0440
0.0171  1 .
4728 CG2   CG2   . VAL VAL VAL B B 187 187 . 0.1465 0.1291 0.0939 0.0167  0.0059  -
0.0291 1 .
4729 C     C     . VAL VAL VAL B B 187 187 . 0.1056 0.1077 0.1068 0.0041  0.0197
0.0018  1 .
4730 O     O     . VAL VAL VAL B B 187 187 . 0.1001 0.1313 0.1101 0.0207  0.0219
0.0122  1 .
4731 N     N     . TYR TYR TYR B B 188 188 . 0.1041 0.0744 0.0853 0.0195  0.0178
0.0105  1 .
4732 CA    CA    . TYR TYR TYR B B 188 188 . 0.0904 0.1059 0.0969 -0.0025 0.0091  -
0.0018 1 .
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4733 CB    CB    . TYR TYR TYR B B 188 188 . 0.1262 0.1389 0.1069 -0.0062 0.0348  -
0.0287 1 .
4734 CG    CG    . TYR TYR TYR B B 188 188 . 0.0867 0.0928 0.1104 0.0116  -0.0056 -
0.0072 1 .
4735 CD1   CD1   . TYR TYR TYR B B 188 188 . 0.0744 0.0954 0.1260 -0.0064 0.0017  -
0.0009 1 .
4736 CE1   CE1   . TYR TYR TYR B B 188 188 . 0.1042 0.1300 0.1069 -0.0054 0.0226
0.0262  1 .
4737 CZ    CZ    . TYR TYR TYR B B 188 188 . 0.0986 0.0727 0.0821 0.0102  -0.0120 -
0.0144 1 .
4738 OH    OH    . TYR TYR TYR B B 188 188 . 0.0966 0.1130 0.0737 0.0024  -0.0040 -
0.0189 1 .
4739 CE2   CE2   . TYR TYR TYR B B 188 188 . 0.1044 0.0753 0.1131 0.0020  0.0224
0.0175  1 .
4740 CD2   CD2   . TYR TYR TYR B B 188 188 . 0.1155 0.1270 0.0889 -0.0092 0.0129
0.0119  1 .
4741 C     C     . TYR TYR TYR B B 188 188 . 0.0851 0.0796 0.1011 -0.0062 0.0155
0.0058  1 .
4742 O     O     . TYR TYR TYR B B 188 188 . 0.1111 0.1204 0.1044 -0.0043 0.0033
0.0190  1 .
4743 N     N     . HIS HIS HIS B B 189 189 . 0.0894 0.0688 0.0833 0.0131  0.0061
0.0106  1 .
4744 CA    CA    . HIS HIS HIS B B 189 189 . 0.0981 0.0957 0.1038 0.0075  0.0088
0.0202  1 .
4745 CB    CB    . HIS HIS HIS B B 189 189 . 0.1459 0.0813 0.1226 0.0041  0.0264
0.0232  1 .
4746 CG    CG    . HIS HIS HIS B B 189 189 . 0.1273 0.0869 0.0818 0.0257  0.0008
0.0152  1 .
4747 ND1   ND1   . HIS HIS HIS B B 189 189 . 0.1937 0.1531 0.1926 0.0148  0.0569
0.0227  1 .
4748 CE1   CE1   . HIS HIS HIS B B 189 189 . 0.1096 0.1006 0.1476 0.0098  0.0230
0.0231  1 .
4749 NE2   NE2   . HIS HIS HIS B B 189 189 . 0.2101 0.1894 0.1258 -0.0016 0.0314
0.0421  1 .
4750 CD2   CD2   . HIS HIS HIS B B 189 189 . 0.1149 0.1593 0.1364 -0.0292 0.0585
0.0607  1 .
4751 C     C     . HIS HIS HIS B B 189 189 . 0.1007 0.0879 0.1102 0.0160  0.0014
0.0148  1 .
4752 O     O     . HIS HIS HIS B B 189 189 . 0.1320 0.1390 0.1157 -0.0015 0.0011
0.0223  1 .
4753 N     N     . THR THR THR B B 190 190 . 0.1060 0.1058 0.1198 0.0179  0.0143
0.0163  1 .
4754 CA    CA    . THR THR THR B B 190 190 . 0.1088 0.1277 0.1384 0.0085  0.0230
0.0069  1 .
4755 CB    CB    . THR THR THR B B 190 190 . 0.1190 0.1321 0.1284 0.0149  0.0339  -
0.0133 1 .
4756 OG1   OG1   . THR THR THR B B 190 190 . 0.1490 0.1492 0.1511 0.0157  0.0370  -
0.0028 1 .
4757 CG2   CG2   . THR THR THR B B 190 190 . 0.1035 0.1386 0.1825 -0.0013 0.0581
0.0057  1 .
4758 C     C     . THR THR THR B B 190 190 . 0.1310 0.1336 0.1427 -0.0005 0.0121
0.0032  1 .
4759 O     O     . THR THR THR B B 190 190 . 0.1042 0.1361 0.1380 0.0188  0.0222
0.0290  1 .
4760 N     N     . LEU LEU LEU B B 191 191 . 0.1110 0.1217 0.1142 0.0006  0.0219
0.0086  1 .
4761 CA    CA    . LEU LEU LEU B B 191 191 . 0.1055 0.1180 0.1275 0.0152  0.0286
0.0286  1 .
4762 CB    CB    . LEU LEU LEU B B 191 191 . 0.1004 0.1194 0.1539 0.0301  0.0134
0.0194  1 .
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4763 CG    CG    . LEU LEU LEU B B 191 191 . 0.1019 0.1387 0.1276 -0.0093 0.0129
0.0350  1 .
4764 CD1   CD1   . LEU LEU LEU B B 191 191 . 0.1116 0.1155 0.1077 0.0070  0.0499
0.0312  1 .
4765 CD2   CD2   . LEU LEU LEU B B 191 191 . 0.1299 0.1485 0.1613 0.0198  -0.0142
0.0280  1 .
4766 C     C     . LEU LEU LEU B B 191 191 . 0.1311 0.1434 0.1522 0.0062  0.0181
0.0213  1 .
4767 O     O     . LEU LEU LEU B B 191 191 . 0.1091 0.1432 0.1476 0.0139  0.0128
0.0376  1 .
4768 N     N     . LYS LYS LYS B B 192 192 . 0.1112 0.1296 0.0984 0.0160  0.0214
0.0209  1 .
4769 CA    CA    . LYS LYS LYS B B 192 192 . 0.0889 0.1418 0.1296 0.0180  0.0290
0.0206  1 .
4770 CB    CB    . LYS LYS LYS B B 192 192 . 0.1769 0.1302 0.1061 -0.0061 0.0257
0.0360  1 .
4771 CG    CG    . LYS LYS LYS B B 192 192 . 0.1524 0.1518 0.1483 -0.0193 0.0114
0.0304  1 .
4772 CD    CD    . LYS LYS LYS B B 192 192 . 0.1693 0.1949 0.1375 -0.0458 -0.0034
0.0324  1 .
4773 CE    CE    . LYS LYS LYS B B 192 192 . 0.2550 0.2272 0.1795 -0.0509 0.0244
0.0070  1 .
4774 NZ    NZ    . LYS LYS LYS B B 192 192 . 0.2438 0.3070 0.2374 -0.0766 0.0230
0.0453  1 .
4775 C     C     . LYS LYS LYS B B 192 192 . 0.1252 0.1437 0.1202 0.0115  0.0077
0.0169  1 .
4776 O     O     . LYS LYS LYS B B 192 192 . 0.1502 0.1551 0.1285 0.0118  0.0236
0.0190  1 .
4777 N     N     . GLY GLY GLY B B 193 193 . 0.1231 0.1596 0.1324 0.0094  0.0107
0.0275  1 .
4778 CA    CA    . GLY GLY GLY B B 193 193 . 0.1308 0.1716 0.1910 0.0326  0.0161
0.0367  1 .
4779 C     C     . GLY GLY GLY B B 193 193 . 0.1443 0.1563 0.1855 0.0145  0.0024
0.0232  1 .
4780 O     O     . GLY GLY GLY B B 193 193 . 0.1166 0.1775 0.1763 0.0203  -0.0024
0.0510  1 .
4781 N     N     . VAL VAL VAL B B 194 194 . 0.1318 0.1476 0.1448 0.0216  0.0399
0.0357  1 .
4782 CA    CA    . VAL VAL VAL B B 194 194 . 0.1259 0.1818 0.1452 -0.0002 0.0243
0.0330  1 .
4783 CB    CB    . VAL VAL VAL B B 194 194 . 0.1404 0.1736 0.1418 0.0123  0.0093
0.0336  1 .
4784 CG1   CG1   . VAL VAL VAL B B 194 194 . 0.1128 0.2027 0.1500 -0.0075 0.0059
0.0452  1 .
4785 CG2   CG2   . VAL VAL VAL B B 194 194 . 0.1405 0.1646 0.1542 0.0502  0.0325
0.0163  1 .
4786 C     C     . VAL VAL VAL B B 194 194 . 0.1359 0.1714 0.1529 0.0098  0.0242
0.0215  1 .
4787 O     O     . VAL VAL VAL B B 194 194 . 0.1314 0.2030 0.1735 -0.0051 0.0174
0.0343  1 .
4788 N     N     . ILE ILE ILE B B 195 195 . 0.1428 0.1644 0.1196 0.0210  0.0318
0.0207  1 .
4789 CA    CA    . ILE ILE ILE B B 195 195 . 0.1317 0.1991 0.1320 0.0068  0.0328
0.0086  1 .
4790 CB    CB    . ILE ILE ILE B B 195 195 . 0.1148 0.1595 0.1578 0.0360  0.0041
0.0176  1 .
4791 CG1   CG1   . ILE ILE ILE B B 195 195 . 0.0963 0.1696 0.1504 0.0334  0.0037
0.0687  1 .
4792 CD    CD    . ILE ILE ILE B B 195 195 . 0.0939 0.1493 0.1187 0.0251  0.0358
0.0252  1 .
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4793 CG2   CG2   . ILE ILE ILE B B 195 195 . 0.1902 0.1782 0.1454 0.0104  0.0340
0.0199  1 .
4794 C     C     . ILE ILE ILE B B 195 195 . 0.1407 0.1899 0.1677 0.0115  0.0132
0.0157  1 .
4795 O     O     . ILE ILE ILE B B 195 195 . 0.1375 0.2356 0.1901 -0.0198 0.0213
0.0249  1 .
4796 N     N     . LYS LYS LYS B B 196 196 . 0.1685 0.2052 0.1665 0.0313  -0.0016
0.0158  1 .
4797 CA    CA    . LYS LYS LYS B B 196 196 . 0.1449 0.2244 0.2126 0.0279  -0.0156
0.0318  1 .
4798 CB    CB    . LYS LYS LYS B B 196 196 . 0.1861 0.2296 0.1716 0.0384  -0.0148
0.0329  1 .
4799 CG    CG    . LYS LYS LYS B B 196 196 . 0.2356 0.2513 0.2180 -0.0047 -0.0472
0.0806  1 .
4800 CD    CD    . LYS LYS LYS B B 196 196 . 0.3027 0.3871 0.2729 -0.0378 -0.0361
0.1297  1 .
4801 CE    CE    . LYS LYS LYS B B 196 196 . 0.4040 0.4664 0.3016 -0.0657 -0.0573
0.1057  1 .
4802 NZ    NZ    . LYS LYS LYS B B 196 196 . 0.5282 0.4627 0.4007 -0.0208 -0.0417
0.1665  1 .
4803 C     C     . LYS LYS LYS B B 196 196 . 0.1809 0.2310 0.2076 0.0148  0.0031
0.0203  1 .
4804 O     O     . LYS LYS LYS B B 196 196 . 0.1541 0.2774 0.2240 0.0118  0.0067
0.0177  1 .
4805 N     N     . ASP ASP ASP B B 197 197 . 0.1195 0.2261 0.1907 0.0313  0.0176
0.0227  1 .
4806 CA    CA    . ASP ASP ASP B B 197 197 . 0.1589 0.2423 0.2194 0.0316  0.0192
0.0054  1 .
4807 CB    CB    . ASP ASP ASP B B 197 197 . 0.1699 0.2824 0.2104 0.0244  0.0445
0.0037  1 .
4808 CG    CG    . ASP ASP ASP B B 197 197 . 0.1817 0.2620 0.2748 0.0150  0.0015  -
0.0348 1 .
4809 OD1   OD1   . ASP ASP ASP B B 197 197 . 0.3381 0.3452 0.3549 0.0196  -0.0249 -
0.0600 1 .
4810 OD2   OD2   . ASP ASP ASP B B 197 197 . 0.2546 0.3377 0.3236 0.0017  0.0218
0.0340  1 .
4811 C     C     . ASP ASP ASP B B 197 197 . 0.1628 0.2792 0.2088 0.0217  0.0370
0.0158  1 .
4812 O     O     . ASP ASP ASP B B 197 197 . 0.1603 0.3560 0.2472 0.0215  0.0101
0.0230  1 .
4813 N     N     . LYS LYS LYS B B 198 198 . 0.1574 0.2674 0.2035 0.0092  0.0307
0.0404  1 .
4814 CA    CA    . LYS LYS LYS B B 198 198 . 0.1375 0.2630 0.1944 -0.0074 0.0205
0.0334  1 .
4815 CB    CB    . LYS LYS LYS B B 198 198 . 0.1582 0.2650 0.1960 -0.0073 0.0154
0.0425  1 .
4816 CG    CG    . LYS LYS LYS B B 198 198 . 0.2164 0.2688 0.1539 0.0082  0.0354
0.0302  1 .
4817 CD    CD    . LYS LYS LYS B B 198 198 . 0.1947 0.3071 0.1860 -0.0491 0.0239
0.0596  1 .
4818 CE    CE    . LYS LYS LYS B B 198 198 . 0.2246 0.2781 0.2057 -0.0824 -0.0154
0.0855  1 .
4819 NZ    NZ    . LYS LYS LYS B B 198 198 . 0.2070 0.3618 0.2085 0.0094  -0.0047
0.0611  1 .
4820 C     C     . LYS LYS LYS B B 198 198 . 0.1816 0.2770 0.2154 -0.0226 0.0159
0.0252  1 .
4821 O     O     . LYS LYS LYS B B 198 198 . 0.1936 0.3480 0.2347 -0.0467 0.0046
0.0332  1 .
4822 N     N     . TYR TYR TYR B B 199 199 . 0.1615 0.2828 0.1922 -0.0093 0.0207
0.0179  1 .
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4823 CA    CA    . TYR TYR TYR B B 199 199 . 0.1438 0.2181 0.1632 -0.0168 -0.0063
0.0272  1 .
4824 CB    CB    . TYR TYR TYR B B 199 199 . 0.1573 0.2635 0.1740 -0.0025 0.0138
0.0392  1 .
4825 CG    CG    . TYR TYR TYR B B 199 199 . 0.2139 0.2494 0.1637 -0.0742 -0.0059
0.0340  1 .
4826 CD1   CD1   . TYR TYR TYR B B 199 199 . 0.1320 0.2670 0.1360 0.0015  0.0101
0.0084  1 .
4827 CE1   CE1   . TYR TYR TYR B B 199 199 . 0.1543 0.2212 0.1501 -0.0088 -0.0100
0.0481  1 .
4828 CZ    CZ    . TYR TYR TYR B B 199 199 . 0.2405 0.2915 0.1655 -0.0634 0.0110
0.0481  1 .
4829 OH    OH    . TYR TYR TYR B B 199 199 . 0.1758 0.2840 0.1714 -0.0649 -0.0151
0.0795  1 .
4830 CE2   CE2   . TYR TYR TYR B B 199 199 . 0.2295 0.3061 0.1859 -0.0995 0.0038
0.0693  1 .
4831 CD2   CD2   . TYR TYR TYR B B 199 199 . 0.2408 0.3223 0.2199 -0.1026 -0.0250
0.0561  1 .
4832 C     C     . TYR TYR TYR B B 199 199 . 0.1540 0.2237 0.1733 -0.0215 0.0143
0.0180  1 .
4833 O     O     . TYR TYR TYR B B 199 199 . 0.2009 0.2509 0.1716 -0.0349 0.0089
0.0100  1 .
4834 N     N     . GLY GLY GLY B B 200 200 . 0.1581 0.2472 0.1450 0.0125  -0.0073
0.0321  1 .
4835 CA    CA    . GLY GLY GLY B B 200 200 . 0.1471 0.2623 0.1406 -0.0059 0.0248
0.0267  1 .
4836 C     C     . GLY GLY GLY B B 200 200 . 0.1613 0.2837 0.1912 0.0108  0.0263
0.0419  1 .
4837 O     O     . GLY GLY GLY B B 200 200 . 0.1660 0.2271 0.1603 0.0047  0.0174
0.0374  1 .
4838 N     N     . LYS LYS LYS B B 201 201 . 0.1873 0.2773 0.2008 0.0117  0.0508
0.0454  1 .
4839 CA    CA    . LYS LYS LYS B B 201 201 . 0.2065 0.2973 0.2030 0.0207  0.0483
0.0542  1 .
4840 CB    CB    . LYS LYS LYS B B 201 201 . 0.2335 0.3224 0.2181 0.0048  0.0431
0.0706  1 .
4841 CG    CG    . LYS LYS LYS B B 201 201 . 0.3532 0.3194 0.2364 0.0206  0.0345
0.0369  1 .
4842 CD    CD    . LYS LYS LYS B B 201 201 . 0.3637 0.4380 0.2069 0.0397  0.0616
0.0290  1 .
4843 CE    CE    . LYS LYS LYS B B 201 201 . 0.3195 0.4945 0.2417 0.0243  0.0830
0.0429  1 .
4844 NZ    NZ    . LYS LYS LYS B B 201 201 . 0.3280 0.5967 0.3380 0.0712  0.1172
0.0354  1 .
4845 C     C     . LYS LYS LYS B B 201 201 . 0.2063 0.2342 0.1934 0.0086  0.0157
0.0341  1 .
4846 O     O     . LYS LYS LYS B B 201 201 . 0.1853 0.2447 0.1806 0.0117  0.0500
0.0530  1 .
4847 N     N     . ASP ASP ASP B B 202 202 . 0.1827 0.2462 0.1889 -0.0003 0.0324
0.0264  1 .
4848 CA    CA    . ASP ASP ASP B B 202 202 . 0.1888 0.2136 0.2031 -0.0070 0.0244
0.0245  1 .
4849 CB    CB    . ASP ASP ASP B B 202 202 . 0.2182 0.2561 0.2253 -0.0171 -0.0041
0.0103  1 .
4850 CG    CG    . ASP ASP ASP B B 202 202 . 0.3152 0.3340 0.3229 -0.0289 -0.0286
0.0216  1 .
4851 OD1   OD1   . ASP ASP ASP B B 202 202 . 0.3768 0.4672 0.3525 -0.0514 0.0308
0.1032  1 .
4852 OD2   OD2   . ASP ASP ASP B B 202 202 . 0.3744 0.3954 0.4531 -0.0457 -0.0131 -
0.0288 1 .
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4853 C     C     . ASP ASP ASP B B 202 202 . 0.1778 0.2086 0.1979 -0.0049 0.0155
0.0070  1 .
4854 O     O     . ASP ASP ASP B B 202 202 . 0.1993 0.2151 0.1873 -0.0082 0.0462
0.0295  1 .
4855 N     N     . ALA ALA ALA B B 203 203 . 0.1581 0.2096 0.1688 -0.0223 0.0086
0.0320  1 .
4856 CA    CA    . ALA ALA ALA B B 203 203 . 0.1408 0.1791 0.1440 -0.0347 0.0172
0.0203  1 .
4857 CB    CB    . ALA ALA ALA B B 203 203 . 0.1534 0.1438 0.1578 -0.0217 0.0455
0.0335  1 .
4858 C     C     . ALA ALA ALA B B 203 203 . 0.1702 0.1601 0.1540 -0.0179 0.0044
0.0105  1 .
4859 O     O     . ALA ALA ALA B B 203 203 . 0.1515 0.1480 0.1632 -0.0101 0.0001
0.0431  1 .
4860 N     N     . THR THR THR B B 204 204 . 0.1677 0.1501 0.1584 -0.0088 0.0329
0.0017  1 .
4861 CA    CA    . THR THR THR B B 204 204 . 0.1194 0.1540 0.1689 0.0078  0.0287
0.0100  1 .
4862 CB    CB    . THR THR THR B B 204 204 . 0.1544 0.1543 0.1849 0.0185  0.0544  -
0.0004 1 .
4863 OG1   OG1   . THR THR THR B B 204 204 . 0.1668 0.2351 0.2661 0.0282  0.0401
0.0430  1 .
4864 CG2   CG2   . THR THR THR B B 204 204 . 0.2141 0.2288 0.2542 0.0035  0.0833
0.0214  1 .
4865 C     C     . THR THR THR B B 204 204 . 0.1336 0.1420 0.1328 0.0083  0.0218
0.0031  1 .
4866 O     O     . THR THR THR B B 204 204 . 0.1331 0.1450 0.1609 0.0050  0.0257  -
0.0061 1 .
4867 N     N     . ASN ASN ASN B B 205 205 . 0.0967 0.1168 0.1200 0.0000  -0.0061
0.0041  1 .
4868 CA    CA    . ASN ASN ASN B B 205 205 . 0.1073 0.1101 0.0940 0.0014  -0.0061
0.0012  1 .
4869 CB    CB    . ASN ASN ASN B B 205 205 . 0.1131 0.1184 0.1081 0.0047  -0.0246 -
0.0028 1 .
4870 CG    CG    . ASN ASN ASN B B 205 205 . 0.1234 0.1094 0.1034 -0.0118 -0.0230
0.0020  1 .
4871 OD1   OD1   . ASN ASN ASN B B 205 205 . 0.1284 0.1375 0.1323 0.0018  0.0026
0.0175  1 .
4872 ND2   ND2   . ASN ASN ASN B B 205 205 . 0.1507 0.1695 0.1192 -0.0432 0.0058  -
0.0344 1 .
4873 C     C     . ASN ASN ASN B B 205 205 . 0.0889 0.1277 0.0979 -0.0119 -0.0019
0.0127  1 .
4874 O     O     . ASN ASN ASN B B 205 205 . 0.1177 0.1431 0.1215 0.0009  0.0079
0.0064  1 .
4875 N     N     . VAL VAL VAL B B 206 206 . 0.0712 0.1119 0.0914 0.0076  0.0127
0.0155  1 .
4876 CA    CA    . VAL VAL VAL B B 206 206 . 0.1035 0.0940 0.1261 0.0050  -0.0043 -
0.0032 1 .
4877 CB    CB    . VAL VAL VAL B B 206 206 . 0.0888 0.1051 0.1167 0.0032  0.0163  -
0.0112 1 .
4878 CG1   CG1   . VAL VAL VAL B B 206 206 . 0.1086 0.0884 0.1270 0.0083  -0.0097 -
0.0062 1 .
4879 CG2   CG2   . VAL VAL VAL B B 206 206 . 0.1578 0.1067 0.1310 -0.0047 0.0374  -
0.0045 1 .
4880 C     C     . VAL VAL VAL B B 206 206 . 0.0914 0.0945 0.1088 0.0027  -0.0001 -
0.0075 1 .
4881 O     O     . VAL VAL VAL B B 206 206 . 0.1198 0.0985 0.1006 -0.0118 -0.0049 -
0.0042 1 .
4882 N     N     . GLY GLY GLY B B 207 207 . 0.0993 0.0948 0.1012 -0.0032 0.0049
0.0013  1 .
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4883 CA    CA    . GLY GLY GLY B B 207 207 . 0.0878 0.1112 0.1392 -0.0207 0.0173
0.0277  1 .
4884 C     C     . GLY GLY GLY B B 207 207 . 0.0729 0.0997 0.0894 -0.0045 -0.0021
0.0314  1 .
4885 O     O     . GLY GLY GLY B B 207 207 . 0.0890 0.0900 0.1040 0.0114  0.0105
0.0059  1 .
4886 N     N     . ASP ASP ASP B B 208 208 . 0.0821 0.1005 0.1261 0.0067  0.0200  -
0.0166 1 .
4887 CA    CA    . ASP ASP ASP B B 208 208 . 0.0657 0.0958 0.0998 0.0162  0.0082
0.0085  1 .
4888 CB    CB    . ASP ASP ASP B B 208 208 . 0.1234 0.0654 0.0960 0.0053  -0.0191 -
0.0198 1 .
4889 CG    CG    . ASP ASP ASP B B 208 208 . 0.1224 0.1240 0.1451 -0.0263 -0.0204
0.0042  1 .
4890 OD1   OD1   . ASP ASP ASP B B 208 208 . 0.1704 0.1412 0.1703 0.0084  -0.0096
0.0201  1 .
4891 OD2   OD2   . ASP ASP ASP B B 208 208 . 0.1667 0.1196 0.2299 -0.0027 -0.0094
0.0323  1 .
4892 C     C     . ASP ASP ASP B B 208 208 . 0.0983 0.1002 0.0878 0.0081  -0.0043
0.0031  1 .
4893 O     O     . ASP ASP ASP B B 208 208 . 0.0621 0.0970 0.0960 0.0008  0.0032
0.0115  1 .
4894 N     N     . GLU GLU GLU B B 209 209 . 0.1090 0.0820 0.0928 -0.0066 0.0080
0.0032  1 .
4895 CA    CA    . GLU GLU GLU B B 209 209 . 0.0986 0.0910 0.1022 -0.0120 -0.0158 -
0.0016 1 .
4896 CB    CB    . GLU GLU GLU B B 209 209 . 0.1113 0.1029 0.1329 0.0158  -0.0238 -
0.0155 1 .
4897 CG    CG    . GLU GLU GLU B B 209 209 . 0.1069 0.1084 0.1659 -0.0070 -0.0462 -
0.0095 1 .
4898 CD    CD    . GLU GLU GLU B B 209 209 . 0.1542 0.1720 0.1729 0.0351  -0.0233 -
0.0208 1 .
4899 OE1   OE1   . GLU GLU GLU B B 209 209 . 0.1991 0.1596 0.1253 0.0028  -0.0186
0.0190  1 .
4900 OE2   OE2   . GLU GLU GLU B B 209 209 . 0.2205 0.1804 0.2115 0.0624  -0.0041 -
0.0060 1 .
4901 C     C     . GLU GLU GLU B B 209 209 . 0.0606 0.0903 0.1040 -0.0060 -0.0055 -
0.0051 1 .
4902 O     O     . GLU GLU GLU B B 209 209 . 0.1090 0.0973 0.1064 -0.0064 -0.0110 -
0.0113 1 .
4903 N     N     . GLY GLY GLY B B 210 210 . 0.0871 0.0936 0.0894 0.0000  -0.0009
0.0134  1 .
4904 CA    CA    . GLY GLY GLY B B 210 210 . 0.0885 0.0740 0.0890 0.0098  0.0041
0.0221  1 .
4905 C     C     . GLY GLY GLY B B 210 210 . 0.0951 0.0839 0.0883 0.0188  -0.0035
0.0214  1 .
4906 O     O     . GLY GLY GLY B B 210 210 . 0.1164 0.1260 0.1070 0.0319  0.0213
0.0028  1 .
4907 N     N     . GLY GLY GLY B B 211 211 . 0.0841 0.0908 0.0679 0.0094  0.0059
0.0118  1 .
4908 CA    CA    . GLY GLY GLY B B 211 211 . 0.0907 0.1322 0.0880 0.0098  -0.0029
0.0088  1 .
4909 C     C     . GLY GLY GLY B B 211 211 . 0.0954 0.1018 0.0810 0.0061  -0.0031 -
0.0083 1 .
4910 O     O     . GLY GLY GLY B B 211 211 . 0.1092 0.0923 0.0886 0.0000  -0.0081 -
0.0171 1 .
4911 N     N     . PHE PHE PHE B B 212 212 . 0.0729 0.1032 0.0870 -0.0121 0.0111
0.0043  1 .
4912 CA    CA    . PHE PHE PHE B B 212 212 . 0.0810 0.0988 0.1001 -0.0014 -0.0042
0.0070  1 .
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4913 CB    CB    . PHE PHE PHE B B 212 212 . 0.1163 0.0980 0.1022 0.0077  -0.0067
0.0012  1 .
4914 CG    CG    . PHE PHE PHE B B 212 212 . 0.1060 0.1215 0.1054 0.0121  -0.0104 -
0.0056 1 .
4915 CD1   CD1   . PHE PHE PHE B B 212 212 . 0.0970 0.1173 0.1552 -0.0103 0.0247  -
0.0278 1 .
4916 CE1   CE1   . PHE PHE PHE B B 212 212 . 0.1265 0.1566 0.1350 0.0032  0.0177
0.0054  1 .
4917 CZ    CZ    . PHE PHE PHE B B 212 212 . 0.0577 0.1306 0.1068 -0.0010 0.0120
0.0086  1 .
4918 CE2   CE2   . PHE PHE PHE B B 212 212 . 0.1003 0.1092 0.1429 0.0260  0.0247  -
0.0095 1 .
4919 CD2   CD2   . PHE PHE PHE B B 212 212 . 0.1158 0.1217 0.1109 0.0185  0.0169
0.0037  1 .
4920 C     C     . PHE PHE PHE B B 212 212 . 0.1058 0.1207 0.1064 -0.0094 -0.0024
0.0012  1 .
4921 O     O     . PHE PHE PHE B B 212 212 . 0.1335 0.1244 0.1172 -0.0003 -0.0159
0.0010  1 .
4922 N     N     . ALA ALA ALA B B 213 213 . 0.1022 0.1152 0.1339 -0.0179 0.0112  -
0.0186 1 .
4923 CA    CA    . ALA ALA ALA B B 213 213 . 0.1373 0.1222 0.1542 -0.0164 0.0216
0.0005  1 .
4924 CB    CB    . ALA ALA ALA B B 213 213 . 0.1905 0.1378 0.1644 -0.0357 0.0328  -
0.0285 1 .
4925 C     C     . ALA ALA ALA B B 213 213 . 0.1428 0.1587 0.1367 -0.0238 0.0140  -
0.0044 1 .
4926 O     O     . ALA ALA ALA B B 213 213 . 0.1577 0.1688 0.1568 -0.0236 0.0173  -
0.0132 1 .
4927 N     N     . PRO PRO PRO B B 214 214 . 0.1202 0.1493 0.1445 -0.0164 0.0052  -
0.0026 1 .
4928 CA    CA    . PRO PRO PRO B B 214 214 . 0.0991 0.1399 0.1574 -0.0118 0.0036
0.0026  1 .
4929 CB    CB    . PRO PRO PRO B B 214 214 . 0.1345 0.1492 0.1476 -0.0050 0.0000  -
0.0027 1 .
4930 CG    CG    . PRO PRO PRO B B 214 214 . 0.0984 0.1506 0.1267 0.0016  0.0278
0.0209  1 .
4931 CD    CD    . PRO PRO PRO B B 214 214 . 0.1598 0.1322 0.1169 -0.0322 0.0363  -
0.0216 1 .
4932 C     C     . PRO PRO PRO B B 214 214 . 0.1319 0.1391 0.1417 -0.0098 -0.0075
0.0125  1 .
4933 O     O     . PRO PRO PRO B B 214 214 . 0.1353 0.1553 0.1581 -0.0105 0.0057
0.0093  1 .
4934 N     N     . ASN ASN ASN B B 215 215 . 0.1074 0.1465 0.1481 -0.0225 -0.0055 -
0.0115 1 .
4935 CA    CA    . ASN ASN ASN B B 215 215 . 0.1473 0.1776 0.1609 -0.0293 -0.0056
0.0092  1 .
4936 CB    CB    . ASN ASN ASN B B 215 215 . 0.1929 0.2108 0.1681 -0.0174 -0.0229 -
0.0366 1 .
4937 CG    CG    . ASN ASN ASN B B 215 215 . 0.3438 0.3705 0.3976 0.0006  -0.0214 -
0.0535 1 .
4938 OD1   OD1   . ASN ASN ASN B B 215 215 . 0.5292 0.4894 0.5456 -0.0434 -0.0709 -
0.0849 1 .
4939 ND2   ND2   . ASN ASN ASN B B 215 215 . 0.5461 0.4459 0.5082 -0.0035 -0.0370 -
0.0876 1 .
4940 C     C     . ASN ASN ASN B B 215 215 . 0.1370 0.1961 0.1488 -0.0020 -0.0111
0.0036  1 .
4941 O     O     . ASN ASN ASN B B 215 215 . 0.1874 0.2326 0.1542 -0.0286 -0.0146
0.0250  1 .
4942 N     N     . ILE ILE ILE B B 216 216 . 0.1781 0.2267 0.1386 -0.0301 -0.0121 -
0.0091 1 .
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4943 CA    CA    . ILE ILE ILE B B 216 216 . 0.2151 0.2138 0.1840 -0.0323 0.0018  -
0.0209 1 .
4944 CB    CB    . ILE ILE ILE B B 216 216 . 0.2154 0.2174 0.1850 -0.0348 -0.0003 -
0.0114 1 .
4945 CG1   CG1   . ILE ILE ILE B B 216 216 . 0.2088 0.2112 0.1928 -0.0540 -0.0109
0.0096  1 .
4946 CD    CD    . ILE ILE ILE B B 216 216 . 0.1746 0.2275 0.1656 -0.0703 0.0004  -
0.0027 1 .
4947 CG2   CG2   . ILE ILE ILE B B 216 216 . 0.2047 0.2388 0.2159 -0.0307 -0.0113 -
0.0641 1 .
4948 C     C     . ILE ILE ILE B B 216 216 . 0.2170 0.2140 0.1713 -0.0441 -0.0135 -
0.0207 1 .
4949 O     O     . ILE ILE ILE B B 216 216 . 0.2080 0.2090 0.2212 -0.0374 -0.0450
0.0197  1 .
4950 N     N     . LEU LEU LEU B B 217 217 . 0.2843 0.2470 0.2023 -0.0266 -0.0221 -
0.0082 1 .
4951 CA    CA    . LEU LEU LEU B B 217 217 . 0.2594 0.2455 0.2309 -0.0182 -0.0012 -
0.0105 1 .
4952 CB    CB    . LEU LEU LEU B B 217 217 . 0.2354 0.2437 0.2404 -0.0218 -0.0200 -
0.0213 1 .
4953 CG    CG    . LEU LEU LEU B B 217 217 . 0.1859 0.2540 0.2441 -0.0138 0.0205  -
0.0097 1 .
4954 CD1   CD1   . LEU LEU LEU B B 217 217 . 0.3123 0.2510 0.2408 0.1146  0.0619  -
0.0388 1 .
4955 CD2   CD2   . LEU LEU LEU B B 217 217 . 0.2189 0.2877 0.3364 -0.0808 -0.0114 -
0.0123 1 .
4956 C     C     . LEU LEU LEU B B 217 217 . 0.1487 0.2019 0.1710 -0.0110 -0.0277 -
0.0291 1 .
4957 O     O     . LEU LEU LEU B B 217 217 . 0.2790 0.2115 0.2093 0.0029  -0.0041 -
0.0016 1 .
4958 N     N     . GLU GLU GLU B B 218 218 . 0.1980 0.2155 0.1786 -0.0572 0.0220  -
0.0078 1 .
4959 CA    CA    . GLU GLU GLU B B 218 218 . 0.1844 0.2216 0.1785 -0.0248 0.0041  -
0.0177 1 .
4960 CB    CB    . GLU GLU GLU B B 218 218 . 0.1771 0.1886 0.1813 -0.0506 0.0398  -
0.0045 1 .
4961 CG    CG    . GLU GLU GLU B B 218 218 . 0.1784 0.2452 0.2521 -0.0510 0.0220
0.0346  1 .
4962 CD    CD    . GLU GLU GLU B B 218 218 . 0.2665 0.3346 0.4179 -0.0279 0.0006
0.0296  1 .
4963 OE1   OE1   . GLU GLU GLU B B 218 218 . 0.3096 0.3961 0.4569 -0.0162 0.0098
0.0922  1 .
4964 OE2   OE2   . GLU GLU GLU B B 218 218 . 0.3218 0.3639 0.5803 -0.1008 0.0623
0.0227  1 .
4965 C     C     . GLU GLU GLU B B 218 218 . 0.1739 0.1562 0.1587 -0.0140 0.0047  -
0.0206 1 .
4966 O     O     . GLU GLU GLU B B 218 218 . 0.1460 0.1920 0.1343 -0.0127 0.0023  -
0.0243 1 .
4967 N     N     . ASN ASN ASN B B 219 219 . 0.1484 0.1584 0.1373 -0.0119 0.0168  -
0.0389 1 .
4968 CA    CA    . ASN ASN ASN B B 219 219 . 0.1145 0.1117 0.1465 -0.0071 -0.0030 -
0.0109 1 .
4969 CB    CB    . ASN ASN ASN B B 219 219 . 0.1232 0.1274 0.1580 0.0215  0.0041  -
0.0175 1 .
4970 CG    CG    . ASN ASN ASN B B 219 219 . 0.1386 0.1162 0.1132 -0.0119 0.0178  -
0.0128 1 .
4971 OD1   OD1   . ASN ASN ASN B B 219 219 . 0.1333 0.1508 0.1190 0.0055  0.0230  -
0.0018 1 .
4972 ND2   ND2   . ASN ASN ASN B B 219 219 . 0.1533 0.1145 0.1504 -0.0164 0.0030
0.0238  1 .
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4973 C     C     . ASN ASN ASN B B 219 219 . 0.1450 0.1194 0.1068 0.0004  0.0289  -
0.0167 1 .
4974 O     O     . ASN ASN ASN B B 219 219 . 0.1395 0.1376 0.1168 -0.0232 0.0087
0.0004  1 .
4975 N     N     . SER SER SER B B 220 220 . 0.1290 0.1313 0.1217 0.0165  0.0147
0.0067  1 .
4976 CA    CA    . SER SER SER B B 220 220 . 0.1604 0.1297 0.1371 -0.0040 0.0192
0.0214  1 .
4977 CB    CB    . SER SER SER B B 220 220 . 0.1967 0.1356 0.1357 -0.0147 0.0230
0.0370  1 .
4978 OG    OG    . SER SER SER B B 220 220 . 0.1939 0.2271 0.2004 -0.0285 0.0431
0.0166  1 .
4979 C     C     . SER SER SER B B 220 220 . 0.1223 0.1441 0.1187 -0.0114 0.0088
0.0013  1 .
4980 O     O     . SER SER SER B B 220 220 . 0.1366 0.1376 0.1143 0.0137  0.0090
0.0183  1 .
4981 N     N     . GLU GLU GLU B B 221 221 . 0.1323 0.1607 0.1178 -0.0199 0.0047
0.0222  1 .
4982 CA    CA    . GLU GLU GLU B B 221 221 . 0.1234 0.1364 0.1309 -0.0160 0.0104
0.0180  1 .
4983 CB    CB    . GLU GLU GLU B B 221 221 . 0.1523 0.1922 0.1204 0.0007  -0.0126
0.0096  1 .
4984 CG    CG    . GLU GLU GLU B B 221 221 . 0.1728 0.1846 0.1859 -0.0316 -0.0174
0.0411  1 .
4985 CD    CD    . GLU GLU GLU B B 221 221 . 0.1833 0.3274 0.2497 -0.0049 0.0458
0.0679  1 .
4986 OE1   OE1   . GLU GLU GLU B B 221 221 . 0.1625 0.4763 0.2630 0.0512  0.0286
0.0448  1 .
4987 OE2   OE2   . GLU GLU GLU B B 221 221 . 0.2093 0.2881 0.2353 -0.0488 0.0241
0.0726  1 .
4988 C     C     . GLU GLU GLU B B 221 221 . 0.1189 0.1392 0.1456 -0.0214 0.0079
0.0001  1 .
4989 O     O     . GLU GLU GLU B B 221 221 . 0.1197 0.1686 0.1472 -0.0107 0.0137
0.0133  1 .
4990 N     N     . ALA ALA ALA B B 222 222 . 0.1240 0.1233 0.1416 -0.0177 0.0053  -
0.0082 1 .
4991 CA    CA    . ALA ALA ALA B B 222 222 . 0.1232 0.1226 0.1220 -0.0130 0.0118
0.0013  1 .
4992 CB    CB    . ALA ALA ALA B B 222 222 . 0.1341 0.1138 0.1117 0.0035  0.0111  -
0.0038 1 .
4993 C     C     . ALA ALA ALA B B 222 222 . 0.1341 0.1217 0.0970 -0.0171 0.0174
0.0020  1 .
4994 O     O     . ALA ALA ALA B B 222 222 . 0.1481 0.1201 0.1062 0.0062  0.0112
0.0005  1 .
4995 N     N     . LEU LEU LEU B B 223 223 . 0.1176 0.1367 0.1172 -0.0062 0.0022  -
0.0032 1 .
4996 CA    CA    . LEU LEU LEU B B 223 223 . 0.1382 0.1188 0.0692 0.0052  0.0121  -
0.0042 1 .
4997 CB    CB    . LEU LEU LEU B B 223 223 . 0.1270 0.1312 0.1211 0.0243  -0.0150
0.0273  1 .
4998 CG    CG    . LEU LEU LEU B B 223 223 . 0.1452 0.1044 0.1236 0.0070  0.0177
0.0152  1 .
4999 CD1   CD1   . LEU LEU LEU B B 223 223 . 0.1906 0.1432 0.1208 0.0083  0.0009
0.0553  1 .
5000 CD2   CD2   . LEU LEU LEU B B 223 223 . 0.1227 0.1241 0.1314 -0.0025 0.0275
0.0045  1 .
5001 C     C     . LEU LEU LEU B B 223 223 . 0.1297 0.1358 0.1035 -0.0132 -0.0007
0.0112  1 .
5002 O     O     . LEU LEU LEU B B 223 223 . 0.1299 0.1062 0.1219 -0.0092 0.0123  -
0.0068 1 .
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5003 N     N     . GLU GLU GLU B B 224 224 . 0.1245 0.1300 0.1095 -0.0022 0.0120  -
0.0014 1 .
5004 CA    CA    . GLU GLU GLU B B 224 224 . 0.1152 0.1244 0.1232 -0.0042 0.0214
0.0288  1 .
5005 CB    CB    . GLU GLU GLU B B 224 224 . 0.1110 0.1543 0.1340 0.0100  0.0140
0.0062  1 .
5006 CG    CG    . GLU GLU GLU B B 224 224 . 0.2112 0.1944 0.2699 0.0253  0.0568
0.0238  1 .
5007 CD    CD    . GLU GLU GLU B B 224 224 . 0.3541 0.3618 0.3116 -0.0127 0.0761  -
0.0145 1 .
5008 OE1   OE1   . GLU GLU GLU B B 224 224 . 0.4058 0.4181 0.4414 -0.0509 0.1220  -
0.0160 1 .
5009 OE2   OE2   . GLU GLU GLU B B 224 224 . 0.4137 0.3704 0.4604 0.0148  0.0256
0.0002  1 .
5010 C     C     . GLU GLU GLU B B 224 224 . 0.1246 0.1218 0.1069 0.0053  -0.0041
0.0124  1 .
5011 O     O     . GLU GLU GLU B B 224 224 . 0.1811 0.1401 0.1384 -0.0059 0.0247
0.0253  1 .
5012 N     N     . LEU LEU LEU B B 225 225 . 0.1201 0.1216 0.1105 0.0146  0.0252
0.0141  1 .
5013 CA    CA    . LEU LEU LEU B B 225 225 . 0.1402 0.1513 0.1319 0.0092  0.0154
0.0215  1 .
5014 CB    CB    . LEU LEU LEU B B 225 225 . 0.1204 0.1504 0.1448 -0.0155 0.0014  -
0.0107 1 .
5015 CG    CG    . LEU LEU LEU B B 225 225 . 0.1414 0.1583 0.1707 0.0063  -0.0381 -
0.0034 1 .
5016 CD1   CD1   . LEU LEU LEU B B 225 225 . 0.1799 0.1969 0.1481 -0.0076 0.0211  -
0.0054 1 .
5017 CD2   CD2   . LEU LEU LEU B B 225 225 . 0.1355 0.2078 0.2188 0.0232  -0.0599
0.0304  1 .
5018 C     C     . LEU LEU LEU B B 225 225 . 0.0983 0.1065 0.1118 0.0206  0.0133
0.0095  1 .
5019 O     O     . LEU LEU LEU B B 225 225 . 0.1284 0.1340 0.1263 0.0183  0.0331
0.0310  1 .
5020 N     N     . VAL VAL VAL B B 226 226 . 0.1137 0.1436 0.1067 0.0023  0.0094
0.0025  1 .
5021 CA    CA    . VAL VAL VAL B B 226 226 . 0.1111 0.1117 0.1086 0.0049  0.0138
0.0124  1 .
5022 CB    CB    . VAL VAL VAL B B 226 226 . 0.1129 0.1189 0.0918 0.0017  0.0060  -
0.0049 1 .
5023 CG1   CG1   . VAL VAL VAL B B 226 226 . 0.0968 0.1296 0.1516 -0.0098 -0.0168 -
0.0042 1 .
5024 CG2   CG2   . VAL VAL VAL B B 226 226 . 0.1303 0.1226 0.1102 -0.0014 0.0144  -
0.0403 1 .
5025 C     C     . VAL VAL VAL B B 226 226 . 0.1245 0.1103 0.1176 -0.0147 0.0204
0.0168  1 .
5026 O     O     . VAL VAL VAL B B 226 226 . 0.1295 0.1184 0.1376 0.0013  0.0249
0.0257  1 .
5027 N     N     . LYS LYS LYS B B 227 227 . 0.1463 0.1305 0.0984 0.0091  0.0223
0.0204  1 .
5028 CA    CA    . LYS LYS LYS B B 227 227 . 0.1450 0.1181 0.1040 0.0208  0.0246
0.0131  1 .
5029 CB    CB    . LYS LYS LYS B B 227 227 . 0.1822 0.1308 0.1184 0.0258  0.0301
0.0161  1 .
5030 CG    CG    . LYS LYS LYS B B 227 227 . 0.2001 0.1554 0.1348 0.0139  0.0310
0.0089  1 .
5031 CD    CD    . LYS LYS LYS B B 227 227 . 0.3018 0.2299 0.1877 0.0401  0.0438
0.0654  1 .
5032 CE    CE    . LYS LYS LYS B B 227 227 . 0.4017 0.3702 0.3465 0.0444  0.0459  -
0.0527 1 .
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5033 NZ    NZ    . LYS LYS LYS B B 227 227 . 0.4348 0.5503 0.4917 0.0208  0.0113
0.0107  1 .
5034 C     C     . LYS LYS LYS B B 227 227 . 0.1285 0.1262 0.1015 -0.0030 0.0513
0.0127  1 .
5035 O     O     . LYS LYS LYS B B 227 227 . 0.1879 0.1481 0.1346 0.0203  0.0550
0.0054  1 .
5036 N     N     . GLU GLU GLU B B 228 228 . 0.1381 0.1513 0.1264 0.0232  0.0369
0.0282  1 .
5037 CA    CA    . GLU GLU GLU B B 228 228 . 0.1665 0.1503 0.1689 0.0218  0.0257
0.0318  1 .
5038 CB    CB    . GLU GLU GLU B B 228 228 . 0.1465 0.1571 0.1758 0.0462  0.0228
0.0279  1 .
5039 CG    CG    . GLU GLU GLU B B 228 228 . 0.1435 0.1871 0.2181 0.0704  0.0378
0.0319  1 .
5040 CD    CD    . GLU GLU GLU B B 228 228 . 0.3194 0.3774 0.3775 0.0155  0.0205
0.0159  1 .
5041 OE1   OE1   . GLU GLU GLU B B 228 228 . 0.4230 0.4324 0.4889 0.0900  0.0540
0.0164  1 .
5042 OE2   OE2   . GLU GLU GLU B B 228 228 . 0.4093 0.4123 0.4786 0.0388  0.0756
0.0137  1 .
5043 C     C     . GLU GLU GLU B B 228 228 . 0.1736 0.1407 0.1637 0.0106  0.0447
0.0146  1 .
5044 O     O     . GLU GLU GLU B B 228 228 . 0.1402 0.1473 0.1978 0.0211  0.0355
0.0136  1 .
5045 N     N     . ALA ALA ALA B B 229 229 . 0.1382 0.1372 0.1388 0.0104  0.0492
0.0218  1 .
5046 CA    CA    . ALA ALA ALA B B 229 229 . 0.1569 0.1245 0.1189 -0.0041 0.0365
0.0150  1 .
5047 CB    CB    . ALA ALA ALA B B 229 229 . 0.1265 0.1611 0.1059 0.0463  0.0453
0.0158  1 .
5048 C     C     . ALA ALA ALA B B 229 229 . 0.1375 0.1353 0.1317 0.0020  0.0150
0.0162  1 .
5049 O     O     . ALA ALA ALA B B 229 229 . 0.1599 0.1315 0.1352 0.0130  0.0122
0.0068  1 .
5050 N     N     . ILE ILE ILE B B 230 230 . 0.1298 0.1324 0.1106 0.0157  0.0178
0.0065  1 .
5051 CA    CA    . ILE ILE ILE B B 230 230 . 0.1393 0.1195 0.1161 0.0075  0.0200
0.0199  1 .
5052 CB    CB    . ILE ILE ILE B B 230 230 . 0.1419 0.1181 0.1163 0.0312  0.0203  -
0.0017 1 .
5053 CG1   CG1   . ILE ILE ILE B B 230 230 . 0.1189 0.1021 0.1455 0.0134  0.0311
0.0073  1 .
5054 CD    CD    . ILE ILE ILE B B 230 230 . 0.1588 0.0936 0.1103 0.0112  0.0111
0.0167  1 .
5055 CG2   CG2   . ILE ILE ILE B B 230 230 . 0.1594 0.1371 0.1371 0.0043  0.0001  -
0.0111 1 .
5056 C     C     . ILE ILE ILE B B 230 230 . 0.1677 0.1450 0.1592 0.0106  0.0062
0.0078  1 .
5057 O     O     . ILE ILE ILE B B 230 230 . 0.1545 0.1305 0.1399 0.0061  0.0337  -
0.0012 1 .
5058 N     N     . ASP ASP ASP B B 231 231 . 0.1691 0.1722 0.1648 0.0355  0.0332
0.0037  1 .
5059 CA    CA    . ASP ASP ASP B B 231 231 . 0.1878 0.1710 0.1477 0.0291  0.0444
0.0191  1 .
5060 CB    CB    . ASP ASP ASP B B 231 231 . 0.1947 0.1988 0.1761 0.0164  0.0569  -
0.0054 1 .
5061 CG    CG    . ASP ASP ASP B B 231 231 . 0.3386 0.3606 0.3166 0.0444  0.0567  -
0.0195 1 .
5062 OD1   OD1   . ASP ASP ASP B B 231 231 . 0.4909 0.4647 0.4377 -0.0408 0.0436  -
0.0390 1 .
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5063 OD2   OD2   . ASP ASP ASP B B 231 231 . 0.3900 0.5160 0.5152 0.0454  0.0563
0.0029  1 .
5064 C     C     . ASP ASP ASP B B 231 231 . 0.1587 0.1790 0.1737 0.0317  0.0350
0.0096  1 .
5065 O     O     . ASP ASP ASP B B 231 231 . 0.2165 0.1738 0.1881 0.0433  0.0367
0.0087  1 .
5066 N     N     . LYS LYS LYS B B 232 232 . 0.1653 0.1772 0.1684 0.0301  0.0555
0.0154  1 .
5067 CA    CA    . LYS LYS LYS B B 232 232 . 0.1703 0.1862 0.1858 0.0283  0.0299
0.0071  1 .
5068 CB    CB    . LYS LYS LYS B B 232 232 . 0.2249 0.2039 0.1961 0.0154  0.0098
0.0137  1 .
5069 CG    CG    . LYS LYS LYS B B 232 232 . 0.2727 0.2627 0.2516 0.0533  0.0335
0.0318  1 .
5070 CD    CD    . LYS LYS LYS B B 232 232 . 0.3255 0.3161 0.3728 0.0228  0.0282  -
0.0135 1 .
5071 CE    CE    . LYS LYS LYS B B 232 232 . 0.4571 0.4701 0.5057 -0.0042 0.0382
0.0379  1 .
5072 NZ    NZ    . LYS LYS LYS B B 232 232 . 0.6191 0.5470 0.5310 0.0249  0.0102
0.0481  1 .
5073 C     C     . LYS LYS LYS B B 232 232 . 0.1846 0.1785 0.1977 0.0252  0.0231
0.0130  1 .
5074 O     O     . LYS LYS LYS B B 232 232 . 0.1943 0.1668 0.2179 0.0301  0.0273
0.0231  1 .
5075 N     N     . ALA ALA ALA B B 233 233 . 0.1507 0.1741 0.1588 0.0056  0.0212
0.0056  1 .
5076 CA    CA    . ALA ALA ALA B B 233 233 . 0.1389 0.1439 0.1810 0.0242  0.0346  -
0.0072 1 .
5077 CB    CB    . ALA ALA ALA B B 233 233 . 0.1580 0.1379 0.1809 0.0631  0.0444  -
0.0041 1 .
5078 C     C     . ALA ALA ALA B B 233 233 . 0.1610 0.1445 0.1720 0.0220  0.0347  -
0.0150 1 .
5079 O     O     . ALA ALA ALA B B 233 233 . 0.2298 0.1804 0.1943 0.0040  0.0611  -
0.0040 1 .
5080 N     N     . GLY GLY GLY B B 234 234 . 0.1974 0.1491 0.1832 0.0265  0.0229
0.0031  1 .
5081 CA    CA    . GLY GLY GLY B B 234 234 . 0.2182 0.1748 0.1965 0.0246  0.0127  -
0.0054 1 .
5082 C     C     . GLY GLY GLY B B 234 234 . 0.2085 0.1514 0.1680 0.0182  0.0115  -
0.0080 1 .
5083 O     O     . GLY GLY GLY B B 234 234 . 0.2312 0.1526 0.1954 0.0226  0.0114
0.0008  1 .
5084 N     N     . TYR TYR TYR B B 235 235 . 0.2013 0.1420 0.1434 0.0513  0.0286
0.0020  1 .
5085 CA    CA    . TYR TYR TYR B B 235 235 . 0.1611 0.1443 0.1289 0.0245  0.0418  -
0.0197 1 .
5086 CB    CB    . TYR TYR TYR B B 235 235 . 0.1661 0.1597 0.0933 0.0296  0.0525
0.0166  1 .
5087 CG    CG    . TYR TYR TYR B B 235 235 . 0.1651 0.1190 0.1562 -0.0229 0.0416  -
0.0079 1 .
5088 CD1   CD1   . TYR TYR TYR B B 235 235 . 0.1844 0.1200 0.1394 0.0424  0.0011
0.0039  1 .
5089 CE1   CE1   . TYR TYR TYR B B 235 235 . 0.1784 0.1756 0.1794 -0.0162 0.0251
0.0170  1 .
5090 CZ    CZ    . TYR TYR TYR B B 235 235 . 0.1525 0.1710 0.1960 0.0240  0.0325
0.0173  1 .
5091 OH    OH    . TYR TYR TYR B B 235 235 . 0.2422 0.1547 0.1833 0.0181  0.0556
0.0202  1 .
5092 CE2   CE2   . TYR TYR TYR B B 235 235 . 0.1724 0.1716 0.2112 0.0209  0.0248
0.0292  1 .
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5093 CD2   CD2   . TYR TYR TYR B B 235 235 . 0.2196 0.1623 0.1447 -0.0317 0.0332  -
0.0055 1 .
5094 C     C     . TYR TYR TYR B B 235 235 . 0.1683 0.1294 0.1478 0.0060  0.0382  -
0.0096 1 .
5095 O     O     . TYR TYR TYR B B 235 235 . 0.1975 0.1478 0.1447 -0.0032 0.0331  -
0.0147 1 .
5096 N     N     . THR THR THR B B 236 236 . 0.1809 0.1368 0.1417 0.0088  0.0400  -
0.0217 1 .
5097 CA    CA    . THR THR THR B B 236 236 . 0.1816 0.1696 0.1715 0.0294  0.0415  -
0.0123 1 .
5098 CB    CB    . THR THR THR B B 236 236 . 0.2004 0.1846 0.1786 0.0050  0.0476
0.0194  1 .
5099 OG1   OG1   . THR THR THR B B 236 236 . 0.2537 0.2729 0.2695 -0.0111 0.0378
0.0324  1 .
5100 CG2   CG2   . THR THR THR B B 236 236 . 0.1479 0.2386 0.2056 0.0430  0.0565
0.0267  1 .
5101 C     C     . THR THR THR B B 236 236 . 0.2070 0.1847 0.1665 0.0324  0.0426  -
0.0165 1 .
5102 O     O     . THR THR THR B B 236 236 . 0.2125 0.1790 0.1688 0.0344  0.0425
0.0207  1 .
5103 N     N     . GLU GLU GLU B B 237 237 . 0.2244 0.1880 0.1587 -0.0026 0.0367  -
0.0073 1 .
5104 CA    CA    . GLU GLU GLU B B 237 237 . 0.2297 0.2173 0.2301 0.0099  0.0319  -
0.0137 1 .
5105 CB    CB    . GLU GLU GLU B B 237 237 . 0.2688 0.2659 0.2624 0.0082  0.0332  -
0.0525 1 .
5106 CG    CG    . GLU GLU GLU B B 237 237 . 0.3283 0.4025 0.3589 0.0103  0.0543  -
0.0289 1 .
5107 CD    CD    . GLU GLU GLU B B 237 237 . 0.4274 0.4921 0.4655 -0.0197 0.0445  -
0.0135 1 .
5108 OE1   OE1   . GLU GLU GLU B B 237 237 . 0.5001 0.5650 0.4308 -0.0208 0.0418  -
0.0066 1 .
5109 OE2   OE2   . GLU GLU GLU B B 237 237 . 0.4749 0.5109 0.5506 -0.0515 0.0593  -
0.0481 1 .
5110 C     C     . GLU GLU GLU B B 237 237 . 0.2112 0.2276 0.2155 -0.0013 0.0188  -
0.0022 1 .
5111 O     O     . GLU GLU GLU B B 237 237 . 0.2352 0.2797 0.2241 0.0005  0.0293
0.0124  1 .
5112 N     N     . LYS LYS LYS B B 238 238 . 0.1954 0.1610 0.1776 -0.0023 0.0280  -
0.0104 1 .
5113 CA    CA    . LYS LYS LYS B B 238 238 . 0.1931 0.1223 0.1567 0.0063  0.0317  -
0.0028 1 .
5114 CB    CB    . LYS LYS LYS B B 238 238 . 0.2281 0.1117 0.1656 0.0144  0.0097  -
0.0151 1 .
5115 CG    CG    . LYS LYS LYS B B 238 238 . 0.3339 0.1351 0.1798 0.0164  0.0371  -
0.0327 1 .
5116 CD    CD    . LYS LYS LYS B B 238 238 . 0.3413 0.2127 0.2015 -0.0089 -0.0057
0.0260  1 .
5117 CE    CE    . LYS LYS LYS B B 238 238 . 0.3702 0.2123 0.2761 -0.0155 0.0108
0.0326  1 .
5118 NZ    NZ    . LYS LYS LYS B B 238 238 . 0.5067 0.2928 0.3383 -0.0241 0.0132
0.0646  1 .
5119 C     C     . LYS LYS LYS B B 238 238 . 0.1646 0.1286 0.1550 -0.0001 0.0188  -
0.0187 1 .
5120 O     O     . LYS LYS LYS B B 238 238 . 0.1612 0.1320 0.1357 -0.0081 0.0115  -
0.0067 1 .
5121 N     N     . ILE ILE ILE B B 239 239 . 0.1727 0.1077 0.1042 0.0188  0.0307
0.0075  1 .
5122 CA    CA    . ILE ILE ILE B B 239 239 . 0.1633 0.1097 0.1355 0.0091  0.0080  -
0.0051 1 .
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5123 CB    CB    . ILE ILE ILE B B 239 239 . 0.1801 0.1065 0.1110 -0.0035 0.0023  -
0.0235 1 .
5124 CG1   CG1   . ILE ILE ILE B B 239 239 . 0.1637 0.1165 0.1354 0.0187  0.0133  -
0.0069 1 .
5125 CD    CD    . ILE ILE ILE B B 239 239 . 0.1654 0.1723 0.1511 -0.0048 -0.0125 -
0.0211 1 .
5126 CG2   CG2   . ILE ILE ILE B B 239 239 . 0.2117 0.1209 0.1320 0.0235  0.0039  -
0.0636 1 .
5127 C     C     . ILE ILE ILE B B 239 239 . 0.1307 0.1238 0.1330 0.0094  0.0134
0.0151  1 .
5128 O     O     . ILE ILE ILE B B 239 239 . 0.1787 0.1382 0.1857 0.0059  0.0382
0.0105  1 .
5129 N     N     . VAL VAL VAL B B 240 240 . 0.1373 0.0908 0.0906 -0.0022 0.0353
0.0165  1 .
5130 CA    CA    . VAL VAL VAL B B 240 240 . 0.1542 0.0988 0.1077 -0.0035 0.0172
0.0053  1 .
5131 CB    CB    . VAL VAL VAL B B 240 240 . 0.1260 0.0743 0.1068 0.0203  0.0122  -
0.0086 1 .
5132 CG1   CG1   . VAL VAL VAL B B 240 240 . 0.1991 0.0972 0.1254 -0.0062 0.0351  -
0.0239 1 .
5133 CG2   CG2   . VAL VAL VAL B B 240 240 . 0.1317 0.0927 0.0918 -0.0076 0.0162
0.0106  1 .
5134 C     C     . VAL VAL VAL B B 240 240 . 0.1282 0.0934 0.0776 0.0230  0.0220
0.0046  1 .
5135 O     O     . VAL VAL VAL B B 240 240 . 0.1482 0.1130 0.0890 0.0025  0.0237
0.0234  1 .
5136 N     N     . ILE ILE ILE B B 241 241 . 0.1379 0.0760 0.0802 0.0058  0.0042  -
0.0092 1 .
5137 CA    CA    . ILE ILE ILE B B 241 241 . 0.1236 0.0845 0.1005 0.0031  0.0197  -
0.0033 1 .
5138 CB    CB    . ILE ILE ILE B B 241 241 . 0.1077 0.1088 0.1081 -0.0031 -0.0101 -
0.0300 1 .
5139 CG1   CG1   . ILE ILE ILE B B 241 241 . 0.1176 0.1601 0.1008 0.0347  -0.0126
0.0099  1 .
5140 CD    CD    . ILE ILE ILE B B 241 241 . 0.1209 0.1331 0.1721 0.0220  -0.0050
0.0063  1 .
5141 CG2   CG2   . ILE ILE ILE B B 241 241 . 0.1677 0.0919 0.1226 -0.0139 0.0180  -
0.0368 1 .
5142 C     C     . ILE ILE ILE B B 241 241 . 0.1107 0.0930 0.0916 -0.0123 0.0104
0.0127  1 .
5143 O     O     . ILE ILE ILE B B 241 241 . 0.1235 0.1103 0.0812 0.0034  0.0185
0.0101  1 .
5144 N     N     . GLY GLY GLY B B 242 242 . 0.1144 0.0894 0.1067 0.0175  0.0028  -
0.0013 1 .
5145 CA    CA    . GLY GLY GLY B B 242 242 . 0.1404 0.0793 0.1011 0.0144  -0.0016 -
0.0065 1 .
5146 C     C     . GLY GLY GLY B B 242 242 . 0.0948 0.0845 0.1013 0.0065  -0.0082 -
0.0094 1 .
5147 O     O     . GLY GLY GLY B B 242 242 . 0.1857 0.0932 0.1319 0.0221  0.0013
0.0106  1 .
5148 N     N     . MET MET MET B B 243 243 . 0.1180 0.0862 0.0928 0.0052  -0.0055 -
0.0029 1 .
5149 CA    CA    . MET MET MET B B 243 243 . 0.1255 0.0899 0.0983 0.0078  0.0025
0.0134  1 .
5150 CB    CB    . MET MET MET B B 243 243 . 0.1279 0.0982 0.1326 0.0073  0.0104  -
0.0049 1 .
5151 CG    CG    . MET MET MET B B 243 243 . 0.1066 0.1056 0.1442 -0.0067 0.0368
0.0054  1 .
5152 SD    SD    . MET MET MET B B 243 243 . 0.1471 0.1323 0.1473 -0.0072 0.0150  -
0.0144 1 .
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5153 CE    CE    . MET MET MET B B 243 243 . 0.1485 0.1535 0.1601 -0.0713 0.0108  -
0.0268 1 .
5154 C     C     . MET MET MET B B 243 243 . 0.0958 0.0902 0.0775 0.0032  -0.0080
0.0013  1 .
5155 O     O     . MET MET MET B B 243 243 . 0.1037 0.1058 0.1104 0.0106  -0.0209
0.0069  1 .
5156 N     N     . ASP ASP ASP B B 244 244 . 0.1173 0.0924 0.0778 0.0036  0.0032  -
0.0022 1 .
5157 CA    CA    . ASP ASP ASP B B 244 244 . 0.1154 0.0769 0.0833 -0.0018 0.0074
0.0200  1 .
5158 CB    CB    . ASP ASP ASP B B 244 244 . 0.1403 0.0648 0.0766 -0.0020 0.0183  -
0.0064 1 .
5159 CG    CG    . ASP ASP ASP B B 244 244 . 0.0572 0.0997 0.0869 -0.0007 0.0125
0.0054  1 .
5160 OD1   OD1   . ASP ASP ASP B B 244 244 . 0.1012 0.0918 0.0841 -0.0016 0.0146  -
0.0037 1 .
5161 OD2   OD2   . ASP ASP ASP B B 244 244 . 0.1001 0.0974 0.0949 0.0068  0.0013
0.0004  1 .
5162 C     C     . ASP ASP ASP B B 244 244 . 0.0981 0.0929 0.0998 0.0080  -0.0186
0.0029  1 .
5163 O     O     . ASP ASP ASP B B 244 244 . 0.1156 0.1003 0.1008 0.0203  -0.0215
0.0003  1 .
5164 N     N     . VAL VAL VAL B B 245 245 . 0.0993 0.0805 0.0898 -0.0159 -0.0213
0.0135  1 .
5165 CA    CA    . VAL VAL VAL B B 245 245 . 0.1153 0.0888 0.0990 -0.0050 -0.0005
0.0000  1 .
5166 CB    CB    . VAL VAL VAL B B 245 245 . 0.1388 0.0805 0.0774 0.0003  -0.0010
0.0094  1 .
5167 CG1   CG1   . VAL VAL VAL B B 245 245 . 0.1442 0.0960 0.0838 -0.0174 0.0014
0.0023  1 .
5168 CG2   CG2   . VAL VAL VAL B B 245 245 . 0.1470 0.0862 0.1007 -0.0094 0.0187  -
0.0242 1 .
5169 C     C     . VAL VAL VAL B B 245 245 . 0.0802 0.0836 0.0959 -0.0051 -0.0013 -
0.0060 1 .
5170 O     O     . VAL VAL VAL B B 245 245 . 0.1008 0.1082 0.1035 -0.0082 -0.0118 -
0.0089 1 .
5171 N     N     . ALA ALA ALA B B 246 246 . 0.0789 0.0932 0.0915 0.0044  0.0116  -
0.0058 1 .
5172 CA    CA    . ALA ALA ALA B B 246 246 . 0.0931 0.0865 0.0567 0.0067  0.0075  -
0.0061 1 .
5173 CB    CB    . ALA ALA ALA B B 246 246 . 0.1087 0.1136 0.0812 -0.0155 0.0119
0.0247  1 .
5174 C     C     . ALA ALA ALA B B 246 246 . 0.0719 0.0946 0.0633 0.0018  -0.0105 -
0.0058 1 .
5175 O     O     . ALA ALA ALA B B 246 246 . 0.1171 0.0925 0.0975 -0.0070 -0.0065 -
0.0075 1 .
5176 N     N     . ALA ALA ALA B B 247 247 . 0.1181 0.0820 0.0734 -0.0117 -0.0143
0.0089  1 .
5177 CA    CA    . ALA ALA ALA B B 247 247 . 0.1238 0.0844 0.0663 -0.0111 0.0226
0.0160  1 .
5178 CB    CB    . ALA ALA ALA B B 247 247 . 0.1206 0.0873 0.0753 -0.0005 0.0116
0.0083  1 .
5179 C     C     . ALA ALA ALA B B 247 247 . 0.1187 0.0970 0.0875 0.0127  0.0043
0.0185  1 .
5180 O     O     . ALA ALA ALA B B 247 247 . 0.1114 0.0914 0.1016 -0.0017 0.0013
0.0000  1 .
5181 N     N     . SER SER SER B B 248 248 . 0.1267 0.0858 0.1131 0.0049  -0.0015 -
0.0042 1 .
5182 CA    CA    . SER SER SER B B 248 248 . 0.1067 0.0874 0.1106 0.0200  0.0049  -
0.0064 1 .
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5183 CB    CB    . SER SER SER B B 248 248 . 0.0934 0.1135 0.0782 0.0141  0.0080
0.0021  1 .
5184 OG    OG    . SER SER SER B B 248 248 . 0.0999 0.1067 0.0939 -0.0054 -0.0070
0.0137  1 .
5185 C     C     . SER SER SER B B 248 248 . 0.1133 0.0974 0.1123 -0.0021 -0.0043
0.0134  1 .
5186 O     O     . SER SER SER B B 248 248 . 0.1434 0.1258 0.1288 0.0131  -0.0167 -
0.0089 1 .
5187 N     N     . GLU GLU GLU B B 249 249 . 0.1094 0.1143 0.0849 0.0007  -0.0066
0.0070  1 .
5188 CA    CA    . GLU GLU GLU B B 249 249 . 0.1236 0.1250 0.1045 -0.0297 -0.0140
0.0029  1 .
5189 CB    CB    . GLU GLU GLU B B 249 249 . 0.0915 0.1098 0.1134 -0.0281 -0.0224
0.0127  1 .
5190 CG    CG    . GLU GLU GLU B B 249 249 . 0.1316 0.1706 0.1131 -0.0115 0.0186
0.0272  1 .
5191 CD    CD    . GLU GLU GLU B B 249 249 . 0.1233 0.1666 0.1225 0.0149  -0.0261 -
0.0288 1 .
5192 OE1   OE1   . GLU GLU GLU B B 249 249 . 0.2018 0.3447 0.1410 -0.0368 -0.0115 -
0.0633 1 .
5193 OE2   OE2   . GLU GLU GLU B B 249 249 . 0.1453 0.1183 0.1483 -0.0005 -0.0227 -
0.0043 1 .
5194 C     C     . GLU GLU GLU B B 249 249 . 0.1387 0.1258 0.1279 -0.0147 -0.0010 -
0.0093 1 .
5195 O     O     . GLU GLU GLU B B 249 249 . 0.1649 0.1833 0.1353 -0.0581 -0.0212 -
0.0119 1 .
5196 N     N     . PHE PHE PHE B B 250 250 . 0.1149 0.1235 0.0942 -0.0101 -0.0088
0.0198  1 .
5197 CA    CA    . PHE PHE PHE B B 250 250 . 0.1203 0.1113 0.1203 -0.0018 -0.0057
0.0066  1 .
5198 CB    CB    . PHE PHE PHE B B 250 250 . 0.1040 0.1198 0.1318 -0.0038 -0.0052 -
0.0079 1 .
5199 CG    CG    . PHE PHE PHE B B 250 250 . 0.0724 0.1116 0.1198 -0.0042 -0.0117
0.0095  1 .
5200 CD1   CD1   . PHE PHE PHE B B 250 250 . 0.1101 0.1150 0.1069 -0.0059 -0.0210
0.0012  1 .
5201 CE1   CE1   . PHE PHE PHE B B 250 250 . 0.1005 0.1104 0.0978 -0.0037 0.0227  -
0.0015 1 .
5202 CZ    CZ    . PHE PHE PHE B B 250 250 . 0.0959 0.1539 0.1206 0.0070  0.0120
0.0287  1 .
5203 CE2   CE2   . PHE PHE PHE B B 250 250 . 0.1341 0.1328 0.1460 0.0238  -0.0202
0.0105  1 .
5204 CD2   CD2   . PHE PHE PHE B B 250 250 . 0.1119 0.1102 0.0954 0.0081  -0.0187
0.0053  1 .
5205 C     C     . PHE PHE PHE B B 250 250 . 0.1044 0.1217 0.1213 -0.0066 0.0078
0.0338  1 .
5206 O     O     . PHE PHE PHE B B 250 250 . 0.1281 0.1278 0.1558 -0.0280 -0.0102 -
0.0006 1 .
5207 N     N     . TYR TYR TYR B B 251 251 . 0.1265 0.1034 0.1129 -0.0038 -0.0141
0.0235  1 .
5208 CA    CA    . TYR TYR TYR B B 251 251 . 0.1163 0.1042 0.1292 0.0002  -0.0228
0.0211  1 .
5209 CB    CB    . TYR TYR TYR B B 251 251 . 0.1026 0.1341 0.1225 -0.0008 -0.0188
0.0219  1 .
5210 CG    CG    . TYR TYR TYR B B 251 251 . 0.1228 0.1132 0.1220 0.0219  0.0057  -
0.0042 1 .
5211 CD1   CD1   . TYR TYR TYR B B 251 251 . 0.1479 0.1410 0.1377 -0.0251 -0.0182
0.0197  1 .
5212 CE1   CE1   . TYR TYR TYR B B 251 251 . 0.0953 0.1474 0.1679 0.0296  0.0100
0.0072  1 .
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5213 CZ    CZ    . TYR TYR TYR B B 251 251 . 0.2066 0.1743 0.1903 0.0549  -0.0029
0.0162  1 .
5214 OH    OH    . TYR TYR TYR B B 251 251 . 0.1871 0.1858 0.2026 0.0045  -0.0031
0.0474  1 .
5215 CE2   CE2   . TYR TYR TYR B B 251 251 . 0.2983 0.2049 0.2039 0.0757  -0.0013 -
0.0012 1 .
5216 CD2   CD2   . TYR TYR TYR B B 251 251 . 0.2468 0.1921 0.1616 0.0787  0.0137  -
0.0162 1 .
5217 C     C     . TYR TYR TYR B B 251 251 . 0.1287 0.1189 0.1033 -0.0195 0.0164
0.0034  1 .
5218 O     O     . TYR TYR TYR B B 251 251 . 0.1942 0.1421 0.1361 -0.0183 0.0065  -
0.0131 1 .
5219 N     N     . ARG ARG ARG B B 252 252 . 0.1495 0.1150 0.1403 -0.0230 -0.0113
0.0035  1 .
5220 CA    CA    . ARG ARG ARG B B 252 252 . 0.1846 0.1252 0.1587 -0.0129 -0.0147
0.0043  1 .
5221 CB    CB    . ARG ARG ARG B B 252 252 . 0.1849 0.1414 0.1567 -0.0290 -0.0244 -
0.0026 1 .
5222 CG    CG    . ARG ARG ARG B B 252 252 . 0.1978 0.1981 0.2157 -0.0041 -0.0161
0.0101  1 .
5223 CD    CD    . ARG ARG ARG B B 252 252 . 0.2552 0.2185 0.2133 -0.0038 -0.0250
0.0105  1 .
5224 NE    NE    . ARG ARG ARG B B 252 252 . 0.2652 0.2590 0.2112 -0.0112 -0.0308
0.0096  1 .
5225 CZ    CZ    . ARG ARG ARG B B 252 252 . 0.2732 0.2194 0.2379 -0.0062 -0.0313
0.0132  1 .
5226 NH1   NH1   . ARG ARG ARG B B 252 252 . 0.2400 0.1869 0.2006 -0.0187 0.0141  -
0.0115 1 .
5227 NH2   NH2   . ARG ARG ARG B B 252 252 . 0.2616 0.2267 0.2038 0.0081  -0.0114
0.0245  1 .
5228 C     C     . ARG ARG ARG B B 252 252 . 0.1887 0.1369 0.1533 -0.0069 -0.0065 -
0.0055 1 .
5229 O     O     . ARG ARG ARG B B 252 252 . 0.1743 0.1271 0.1777 -0.0343 -0.0002
0.0026  1 .
5230 N     N     . ASP ASP ASP B B 253 253 . 0.2073 0.1716 0.1705 0.0071  -0.0065 -
0.0221 1 .
5231 CA    CA    . ASP ASP ASP B B 253 253 . 0.1998 0.1771 0.1800 -0.0085 -0.0022
0.0023  1 .
5232 CB    CB    . ASP ASP ASP B B 253 253 . 0.2469 0.1931 0.2311 -0.0207 -0.0190 -
0.0004 1 .
5233 CG    CG    . ASP ASP ASP B B 253 253 . 0.3147 0.2222 0.3005 -0.0229 -0.0102 -
0.0124 1 .
5234 OD1   OD1   . ASP ASP ASP B B 253 253 . 0.4887 0.3292 0.4159 -0.0814 -0.0856 -
0.0523 1 .
5235 OD2   OD2   . ASP ASP ASP B B 253 253 . 0.4298 0.3033 0.3602 0.0090  0.0359  -
0.0430 1 .
5236 C     C     . ASP ASP ASP B B 253 253 . 0.1717 0.1573 0.1692 0.0079  -0.0003 -
0.0051 1 .
5237 O     O     . ASP ASP ASP B B 253 253 . 0.1871 0.1419 0.1871 -0.0356 -0.0363
0.0153  1 .
5238 N     N     . GLY GLY GLY B B 254 254 . 0.1599 0.1391 0.1559 0.0096  -0.0079 -
0.0255 1 .
5239 CA    CA    . GLY GLY GLY B B 254 254 . 0.1615 0.1533 0.1406 0.0138  -0.0139
0.0099  1 .
5240 C     C     . GLY GLY GLY B B 254 254 . 0.1612 0.1310 0.1491 -0.0047 -0.0142
0.0022  1 .
5241 O     O     . GLY GLY GLY B B 254 254 . 0.1702 0.1244 0.1446 0.0137  0.0084  -
0.0085 1 .
5242 N     N     . LYS LYS LYS B B 255 255 . 0.1557 0.1334 0.1393 -0.0003 -0.0079 -
0.0019 1 .
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5243 CA    CA    . LYS LYS LYS B B 255 255 . 0.1379 0.1148 0.1519 -0.0093 0.0024
0.0246  1 .
5244 CB    CB    . LYS LYS LYS B B 255 255 . 0.1401 0.1130 0.1624 -0.0027 -0.0005
0.0106  1 .
5245 CG    CG    . LYS LYS LYS B B 255 255 . 0.1479 0.1585 0.1546 -0.0246 0.0099
0.0215  1 .
5246 CD    CD    . LYS LYS LYS B B 255 255 . 0.1757 0.1990 0.2359 -0.0161 0.0159
0.0595  1 .
5247 CE    CE    . LYS LYS LYS B B 255 255 . 0.2401 0.1995 0.3339 -0.0403 0.0584
0.0539  1 .
5248 NZ    NZ    . LYS LYS LYS B B 255 255 . 0.2664 0.3417 0.3739 -0.0197 0.0864  -
0.0051 1 .
5249 C     C     . LYS LYS LYS B B 255 255 . 0.1533 0.1484 0.1381 -0.0098 -0.0007
0.0135  1 .
5250 O     O     . LYS LYS LYS B B 255 255 . 0.1459 0.1380 0.1372 -0.0009 0.0048  -
0.0137 1 .
5251 N     N     . TYR TYR TYR B B 256 256 . 0.1190 0.1290 0.1309 -0.0092 0.0050
0.0111  1 .
5252 CA    CA    . TYR TYR TYR B B 256 256 . 0.1396 0.1373 0.1293 0.0085  -0.0258
0.0144  1 .
5253 CB    CB    . TYR TYR TYR B B 256 256 . 0.0763 0.1286 0.1210 0.0104  -0.0162
0.0108  1 .
5254 CG    CG    . TYR TYR TYR B B 256 256 . 0.0991 0.0978 0.1151 0.0013  -0.0318
0.0155  1 .
5255 CD1   CD1   . TYR TYR TYR B B 256 256 . 0.0915 0.1020 0.1156 0.0004  -0.0038
0.0115  1 .
5256 CE1   CE1   . TYR TYR TYR B B 256 256 . 0.0802 0.0664 0.0859 -0.0124 -0.0354 -
0.0059 1 .
5257 CZ    CZ    . TYR TYR TYR B B 256 256 . 0.0780 0.0724 0.1082 0.0021  -0.0052
0.0033  1 .
5258 OH    OH    . TYR TYR TYR B B 256 256 . 0.0945 0.0853 0.1129 0.0020  -0.0017 -
0.0128 1 .
5259 CE2   CE2   . TYR TYR TYR B B 256 256 . 0.1229 0.0894 0.1317 -0.0182 0.0074
0.0044  1 .
5260 CD2   CD2   . TYR TYR TYR B B 256 256 . 0.1039 0.0987 0.0861 0.0141  -0.0119
0.0018  1 .
5261 C     C     . TYR TYR TYR B B 256 256 . 0.1170 0.1565 0.1254 -0.0076 -0.0139
0.0096  1 .
5262 O     O     . TYR TYR TYR B B 256 256 . 0.1351 0.1604 0.1176 -0.0097 -0.0180 -
0.0066 1 .
5263 N     N     . ASP ASP ASP B B 257 257 . 0.1483 0.2052 0.1595 -0.0043 -0.0202
0.0154  1 .
5264 CA    CA    . ASP ASP ASP B B 257 257 . 0.1360 0.1800 0.1527 -0.0026 -0.0128
0.0033  1 .
5265 CB    CB    . ASP ASP ASP B B 257 257 . 0.1288 0.1750 0.1800 -0.0164 -0.0432 -
0.0248 1 .
5266 CG    CG    . ASP ASP ASP B B 257 257 . 0.1192 0.1652 0.1295 -0.0080 -0.0006
0.0039  1 .
5267 OD1   OD1   . ASP ASP ASP B B 257 257 . 0.1373 0.1763 0.1730 0.0093  -0.0260 -
0.0255 1 .
5268 OD2   OD2   . ASP ASP ASP B B 257 257 . 0.1589 0.1699 0.1753 -0.0005 -0.0173 -
0.0143 1 .
5269 C     C     . ASP ASP ASP B B 257 257 . 0.1047 0.1519 0.1544 0.0012  -0.0176
0.0075  1 .
5270 O     O     . ASP ASP ASP B B 257 257 . 0.1253 0.1887 0.1528 0.0008  -0.0192
0.0138  1 .
5271 N     N     . LEU LEU LEU B B 258 258 . 0.1738 0.1816 0.1440 -0.0322 -0.0275 -
0.0263 1 .
5272 CA    CA    . LEU LEU LEU B B 258 258 . 0.1687 0.1853 0.1657 -0.0036 0.0159  -
0.0256 1 .
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5273 CB    CB    . LEU LEU LEU B B 258 258 . 0.1628 0.1890 0.1466 -0.0055 0.0246  -
0.0457 1 .
5274 CG    CG    . LEU LEU LEU B B 258 258 . 0.1904 0.1800 0.1885 0.0102  0.0134  -
0.0320 1 .
5275 CD1   CD1   . LEU LEU LEU B B 258 258 . 0.2280 0.2345 0.1580 0.0527  0.0245  -
0.0472 1 .
5276 CD2   CD2   . LEU LEU LEU B B 258 258 . 0.1808 0.1893 0.2173 -0.0078 0.0450  -
0.0448 1 .
5277 C     C     . LEU LEU LEU B B 258 258 . 0.1541 0.1675 0.1533 -0.0024 0.0004  -
0.0054 1 .
5278 O     O     . LEU LEU LEU B B 258 258 . 0.2146 0.1725 0.1918 -0.0444 -0.0174
0.0000  1 .
5279 N     N     . ASP ASP ASP B B 259 259 . 0.1780 0.1735 0.1622 -0.0168 0.0025  -
0.0294 1 .
5280 CA    CA    . ASP ASP ASP B B 259 259 . 0.1737 0.1976 0.2034 -0.0327 -0.0073 -
0.0216 1 .
5281 CB    CB    . ASP ASP ASP B B 259 259 . 0.1816 0.2660 0.2619 -0.0452 0.0087  -
0.0363 1 .
5282 CG    CG    . ASP ASP ASP B B 259 259 . 0.2748 0.2990 0.2938 -0.0602 0.0132
0.0151  1 .
5283 OD1   OD1   . ASP ASP ASP B B 259 259 . 0.2520 0.3251 0.3302 -0.0716 0.0321
0.0020  1 .
5284 OD2   OD2   . ASP ASP ASP B B 259 259 . 0.2949 0.3548 0.3458 -0.1128 -0.0529
0.0724  1 .
5285 C     C     . ASP ASP ASP B B 259 259 . 0.1648 0.1939 0.1726 -0.0250 -0.0015 -
0.0293 1 .
5286 O     O     . ASP ASP ASP B B 259 259 . 0.1676 0.2273 0.1379 -0.0193 -0.0245 -
0.0162 1 .
5287 N     N     . PHE PHE PHE B B 260 260 . 0.1312 0.1491 0.1697 0.0010  0.0034  -
0.0286 1 .
5288 CA    CA    . PHE PHE PHE B B 260 260 . 0.1686 0.2019 0.1661 0.0015  -0.0065 -
0.0136 1 .
5289 CB    CB    . PHE PHE PHE B B 260 260 . 0.1246 0.1347 0.1601 -0.0028 0.0030  -
0.0151 1 .
5290 CG    CG    . PHE PHE PHE B B 260 260 . 0.1402 0.1278 0.1373 -0.0002 -0.0096 -
0.0188 1 .
5291 CD1   CD1   . PHE PHE PHE B B 260 260 . 0.1649 0.1581 0.1814 -0.0403 0.0273  -
0.0530 1 .
5292 CE1   CE1   . PHE PHE PHE B B 260 260 . 0.2641 0.1799 0.2728 -0.0574 0.0426  -
0.0529 1 .
5293 CZ    CZ    . PHE PHE PHE B B 260 260 . 0.2669 0.1942 0.2260 -0.0451 0.0445  -
0.0500 1 .
5294 CE2   CE2   . PHE PHE PHE B B 260 260 . 0.1976 0.1400 0.1464 0.0195  -0.0218 -
0.0188 1 .
5295 CD2   CD2   . PHE PHE PHE B B 260 260 . 0.1184 0.1374 0.1179 0.0158  -0.0273 -
0.0070 1 .
5296 C     C     . PHE PHE PHE B B 260 260 . 0.2091 0.2733 0.2613 -0.0031 -0.0082 -
0.0156 1 .
5297 O     O     . PHE PHE PHE B B 260 260 . 0.2884 0.3219 0.2741 -0.0191 -0.0309 -
0.0457 1 .
5298 N     N     . LYS LYS LYS B B 261 261 . 0.2472 0.3157 0.2760 -0.0082 -0.0343
0.0460  1 .
5299 CA    CA    . LYS LYS LYS B B 261 261 . 0.3015 0.3271 0.2935 -0.0101 -0.0273
0.0084  1 .
5300 CB    CB    . LYS LYS LYS B B 261 261 . 0.2859 0.2963 0.3218 0.0093  -0.0334
0.0379  1 .
5301 CG    CG    . LYS LYS LYS B B 261 261 . 0.2990 0.3340 0.3389 0.0135  -0.0196 -
0.0057 1 .
5302 CD    CD    . LYS LYS LYS B B 261 261 . 0.3363 0.3290 0.2917 -0.0141 -0.0293 -
0.0615 1 .
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5303 CE    CE    . LYS LYS LYS B B 261 261 . 0.3678 0.3364 0.2128 0.0034  -0.0779 -
0.0900 1 .
5304 NZ    NZ    . LYS LYS LYS B B 261 261 . 0.2852 0.2503 0.3335 0.0247  -0.0934 -
0.1171 1 .
5305 C     C     . LYS LYS LYS B B 261 261 . 0.3166 0.3468 0.3158 -0.0004 -0.0421
0.0196  1 .
5306 O     O     . LYS LYS LYS B B 261 261 . 0.3425 0.4005 0.3400 0.0073  -0.0492
0.0191  1 .
5307 N     N     . SER SER SER B B 262 262 . 0.2761 0.3337 0.3161 -0.0227 -0.0623
0.0008  1 .
5308 CA    CA    . SER SER SER B B 262 262 . 0.3139 0.3436 0.3444 -0.0284 -0.0634
0.0009  1 .
5309 CB    CB    . SER SER SER B B 262 262 . 0.2738 0.3183 0.3171 -0.0052 -0.1015 -
0.0211 1 .
5310 OG    OG    . SER SER SER B B 262 262 . 0.3047 0.3145 0.4064 -0.0188 -0.0947 -
0.0168 1 .
5311 C     C     . SER SER SER B B 262 262 . 0.3321 0.3367 0.3551 -0.0102 -0.0585 -
0.0073 1 .
5312 O     O     . SER SER SER B B 262 262 . 0.3242 0.3499 0.3184 -0.0303 -0.0987 -
0.0236 1 .
5313 N     N     . PRO PRO PRO B B 263 263 . 0.3681 0.3580 0.3587 -0.0103 -0.0618 -
0.0103 1 .
5314 CA    CA    . PRO PRO PRO B B 263 263 . 0.3783 0.3641 0.3753 -0.0086 -0.0542 -
0.0058 1 .
5315 CB    CB    . PRO PRO PRO B B 263 263 . 0.3827 0.3790 0.3982 -0.0303 -0.0597 -
0.0005 1 .
5316 CG    CG    . PRO PRO PRO B B 263 263 . 0.4239 0.3405 0.3449 -0.0151 -0.0553 -
0.0190 1 .
5317 CD    CD    . PRO PRO PRO B B 263 263 . 0.3798 0.3502 0.3646 -0.0200 -0.0638 -
0.0156 1 .
5318 C     C     . PRO PRO PRO B B 263 263 . 0.3624 0.3753 0.3620 -0.0064 -0.0480 -
0.0102 1 .
5319 O     O     . PRO PRO PRO B B 263 263 . 0.3355 0.3619 0.3524 -0.0037 -0.0686
0.0026  1 .
5320 N     N     . THR THR THR B B 264 264 . 0.3646 0.3664 0.3534 -0.0041 -0.0259 -
0.0173 1 .
5321 CA    CA    . THR THR THR B B 264 264 . 0.3465 0.3561 0.3383 -0.0176 -0.0089 -
0.0153 1 .
5322 CB    CB    . THR THR THR B B 264 264 . 0.3564 0.3501 0.3650 -0.0045 -0.0055 -
0.0055 1 .
5323 OG1   OG1   . THR THR THR B B 264 264 . 0.3525 0.3423 0.4016 -0.0114 -0.0080 -
0.0118 1 .
5324 CG2   CG2   . THR THR THR B B 264 264 . 0.3218 0.3679 0.2777 -0.0330 0.0416
0.0273  1 .
5325 C     C     . THR THR THR B B 264 264 . 0.3300 0.3544 0.3283 -0.0307 -0.0134 -
0.0213 1 .
5326 O     O     . THR THR THR B B 264 264 . 0.3726 0.3642 0.3285 -0.0796 -0.0150 -
0.0182 1 .
5327 N     N     . ASP ASP ASP B B 265 265 . 0.2899 0.3122 0.2773 -0.0334 -0.0128 -
0.0363 1 .
5328 CA    CA    . ASP ASP ASP B B 265 265 . 0.2909 0.2869 0.2999 0.0046  -0.0202 -
0.0388 1 .
5329 CB    CB    . ASP ASP ASP B B 265 265 . 0.2799 0.2956 0.3194 0.0148  -0.0229 -
0.0004 1 .
5330 CG    CG    . ASP ASP ASP B B 265 265 . 0.2871 0.2553 0.2368 0.0369  -0.0487 -
0.0643 1 .
5331 OD1   OD1   . ASP ASP ASP B B 265 265 . 0.2582 0.3624 0.2462 0.0342  -0.0736 -
0.0107 1 .
5332 OD2   OD2   . ASP ASP ASP B B 265 265 . 0.3112 0.4287 0.3353 0.0263  -0.0326 -
0.0603 1 .
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5333 C     C     . ASP ASP ASP B B 265 265 . 0.2856 0.2714 0.2981 0.0131  -0.0326 -
0.0187 1 .
5334 O     O     . ASP ASP ASP B B 265 265 . 0.2401 0.1932 0.3378 0.0454  -0.0455 -
0.0367 1 .
5335 N     N     . PRO PRO PRO B B 266 266 . 0.2790 0.2791 0.3085 0.0125  -0.0165 -
0.0276 1 .
5336 CA    CA    . PRO PRO PRO B B 266 266 . 0.2955 0.2837 0.3021 -0.0175 -0.0169 -
0.0310 1 .
5337 CB    CB    . PRO PRO PRO B B 266 266 . 0.2803 0.2688 0.3069 -0.0170 -0.0361 -
0.0254 1 .
5338 CG    CG    . PRO PRO PRO B B 266 266 . 0.2949 0.2749 0.3159 -0.0152 -0.0185 -
0.0110 1 .
5339 CD    CD    . PRO PRO PRO B B 266 266 . 0.2751 0.2682 0.3374 0.0012  -0.0268 -
0.0357 1 .
5340 C     C     . PRO PRO PRO B B 266 266 . 0.2958 0.2951 0.3293 -0.0164 -0.0104 -
0.0402 1 .
5341 O     O     . PRO PRO PRO B B 266 266 . 0.2815 0.3182 0.3077 -0.0540 -0.0381 -
0.0379 1 .
5342 N     N     . SER SER SER B B 267 267 . 0.2915 0.2982 0.3201 -0.0117 -0.0298 -
0.0469 1 .
5343 CA    CA    . SER SER SER B B 267 267 . 0.2805 0.2922 0.3271 -0.0140 -0.0220 -
0.0244 1 .
5344 CB    CB    . SER SER SER B B 267 267 . 0.2779 0.3124 0.3561 -0.0345 -0.0386
0.0112  1 .
5345 OG    OG    . SER SER SER B B 267 267 . 0.3004 0.3479 0.3295 0.0127  -0.0513
0.0011  1 .
5346 C     C     . SER SER SER B B 267 267 . 0.2895 0.2684 0.2929 -0.0130 -0.0101 -
0.0143 1 .
5347 O     O     . SER SER SER B B 267 267 . 0.2983 0.2684 0.2989 -0.0290 0.0111  -
0.0176 1 .
5348 N     N     . ARG ARG ARG B B 268 268 . 0.2463 0.2013 0.2684 -0.0144 -0.0138 -
0.0111 1 .
5349 CA    CA    . ARG ARG ARG B B 268 268 . 0.2392 0.2381 0.2241 0.0040  -0.0137 -
0.0252 1 .
5350 CB    CB    . ARG ARG ARG B B 268 268 . 0.2484 0.2394 0.2480 0.0004  -0.0052 -
0.0149 1 .
5351 CG    CG    . ARG ARG ARG B B 268 268 . 0.2613 0.1693 0.1815 0.0433  -0.0305
0.0580  1 .
5352 CD    CD    . ARG ARG ARG B B 268 268 . 0.2583 0.2381 0.2131 0.0177  -0.0111
0.0732  1 .
5353 NE    NE    . ARG ARG ARG B B 268 268 . 0.2486 0.2591 0.2509 0.0109  0.0241
0.0521  1 .
5354 CZ    CZ    . ARG ARG ARG B B 268 268 . 0.1429 0.1485 0.2348 -0.0398 -0.0728 -
0.0316 1 .
5355 NH1   NH1   . ARG ARG ARG B B 268 268 . 0.2235 0.2752 0.3661 -0.0220 -0.0970 -
0.0834 1 .
5356 NH2   NH2   . ARG ARG ARG B B 268 268 . 0.2533 0.1405 0.2172 0.0419  -0.0791 -
0.0326 1 .
5357 C     C     . ARG ARG ARG B B 268 268 . 0.1796 0.2195 0.2092 -0.0182 -0.0152 -
0.0123 1 .
5358 O     O     . ARG ARG ARG B B 268 268 . 0.1784 0.2696 0.2514 -0.0142 -0.0183 -
0.0169 1 .
5359 N     N     . TYR TYR TYR B B 269 269 . 0.1983 0.2408 0.1883 -0.0443 0.0010  -
0.0217 1 .
5360 CA    CA    . TYR TYR TYR B B 269 269 . 0.1663 0.1975 0.1586 -0.0445 -0.0058 -
0.0218 1 .
5361 CB    CB    . TYR TYR TYR B B 269 269 . 0.1766 0.1679 0.1788 -0.0520 -0.0200 -
0.0237 1 .
5362 CG    CG    . TYR TYR TYR B B 269 269 . 0.1588 0.1217 0.1766 -0.0330 -0.0201 -
0.0069 1 .
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5363 CD1   CD1   . TYR TYR TYR B B 269 269 . 0.1306 0.1714 0.1762 -0.0295 0.0024  -
0.0216 1 .
5364 CE1   CE1   . TYR TYR TYR B B 269 269 . 0.1709 0.2130 0.1713 -0.0514 -0.0092 -
0.0336 1 .
5365 CZ    CZ    . TYR TYR TYR B B 269 269 . 0.2039 0.1916 0.1554 -0.0195 0.0021  -
0.0230 1 .
5366 OH    OH    . TYR TYR TYR B B 269 269 . 0.2512 0.2972 0.1813 -0.0182 0.0185  -
0.0583 1 .
5367 CE2   CE2   . TYR TYR TYR B B 269 269 . 0.1972 0.1754 0.1906 -0.0737 0.0069  -
0.0251 1 .
5368 CD2   CD2   . TYR TYR TYR B B 269 269 . 0.1793 0.1976 0.1662 -0.0672 -0.0379 -
0.0037 1 .
5369 C     C     . TYR TYR TYR B B 269 269 . 0.1806 0.1763 0.1603 -0.0458 0.0002  -
0.0161 1 .
5370 O     O     . TYR TYR TYR B B 269 269 . 0.2268 0.1900 0.2036 -0.0710 -0.0003 -
0.0219 1 .
5371 N     N     . ILE ILE ILE B B 270 270 . 0.1383 0.1665 0.1518 -0.0217 -0.0120 -
0.0222 1 .
5372 CA    CA    . ILE ILE ILE B B 270 270 . 0.1322 0.1410 0.1544 0.0049  -0.0030 -
0.0239 1 .
5373 CB    CB    . ILE ILE ILE B B 270 270 . 0.1200 0.1406 0.1665 0.0088  0.0038
0.0058  1 .
5374 CG1   CG1   . ILE ILE ILE B B 270 270 . 0.1572 0.1174 0.2098 -0.0177 -0.0034
0.0089  1 .
5375 CD    CD    . ILE ILE ILE B B 270 270 . 0.1568 0.1480 0.1980 0.0066  0.0324
0.0023  1 .
5376 CG2   CG2   . ILE ILE ILE B B 270 270 . 0.1251 0.1815 0.2078 0.0077  -0.0539 -
0.0235 1 .
5377 C     C     . ILE ILE ILE B B 270 270 . 0.1387 0.1126 0.1528 0.0048  -0.0054 -
0.0147 1 .
5378 O     O     . ILE ILE ILE B B 270 270 . 0.1370 0.1303 0.1319 -0.0105 -0.0051 -
0.0089 1 .
5379 N     N     . THR THR THR B B 271 271 . 0.1421 0.1364 0.1573 0.0137  -0.0108 -
0.0027 1 .
5380 CA    CA    . THR THR THR B B 271 271 . 0.1428 0.1378 0.1453 0.0101  -0.0236
0.0005  1 .
5381 CB    CB    . THR THR THR B B 271 271 . 0.1400 0.1500 0.1226 0.0132  0.0204
0.0088  1 .
5382 OG1   OG1   . THR THR THR B B 271 271 . 0.2276 0.1369 0.1668 0.0130  0.0023  -
0.0186 1 .
5383 CG2   CG2   . THR THR THR B B 271 271 . 0.1805 0.1715 0.2144 0.0057  -0.0101
0.0026  1 .
5384 C     C     . THR THR THR B B 271 271 . 0.1377 0.1433 0.1362 0.0073  -0.0020
0.0099  1 .
5385 O     O     . THR THR THR B B 271 271 . 0.1295 0.1215 0.1297 0.0167  -0.0230 -
0.0047 1 .
5386 N     N     . GLY GLY GLY B B 272 272 . 0.1335 0.1640 0.1765 -0.0081 -0.0094 -
0.0179 1 .
5387 CA    CA    . GLY GLY GLY B B 272 272 . 0.1595 0.1305 0.1816 0.0163  0.0107  -
0.0100 1 .
5388 C     C     . GLY GLY GLY B B 272 272 . 0.1710 0.1239 0.1469 0.0084  -0.0102 -
0.0157 1 .
5389 O     O     . GLY GLY GLY B B 272 272 . 0.1476 0.1367 0.1878 0.0343  -0.0067
0.0145  1 .
5390 N     N     . ASP ASP ASP B B 273 273 . 0.1683 0.1542 0.1415 0.0299  -0.0080 -
0.0137 1 .
5391 CA    CA    . ASP ASP ASP B B 273 273 . 0.2089 0.1470 0.1590 0.0167  0.0083
0.0112  1 .
5392 CB    CB    . ASP ASP ASP B B 273 273 . 0.2219 0.1643 0.1649 0.0227  0.0187
0.0382  1 .
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5393 CG    CG    . ASP ASP ASP B B 273 273 . 0.2635 0.2298 0.2695 -0.0010 0.0151
0.0092  1 .
5394 OD1   OD1   . ASP ASP ASP B B 273 273 . 0.3055 0.2752 0.3820 -0.0816 0.0548
0.0120  1 .
5395 OD2   OD2   . ASP ASP ASP B B 273 273 . 0.3440 0.3066 0.2708 -0.0163 0.0384  -
0.0478 1 .
5396 C     C     . ASP ASP ASP B B 273 273 . 0.1853 0.1570 0.1572 0.0114  0.0008
0.0099  1 .
5397 O     O     . ASP ASP ASP B B 273 273 . 0.1911 0.1488 0.1323 0.0192  0.0009
0.0050  1 .
5398 N     N     . GLN GLN GLN B B 274 274 . 0.1544 0.1225 0.1529 0.0072  0.0042  -
0.0012 1 .
5399 CA    CA    . GLN GLN GLN B B 274 274 . 0.1435 0.1460 0.1605 -0.0008 0.0007
0.0137  1 .
5400 CB    CB    . GLN GLN GLN B B 274 274 . 0.1634 0.1447 0.1722 -0.0172 -0.0129
0.0187  1 .
5401 CG    CG    . GLN GLN GLN B B 274 274 . 0.2050 0.1808 0.2137 -0.0066 0.0079
0.0194  1 .
5402 CD    CD    . GLN GLN GLN B B 274 274 . 0.2468 0.2047 0.2641 -0.0297 0.0279  -
0.0157 1 .
5403 OE1   OE1   . GLN GLN GLN B B 274 274 . 0.2037 0.1966 0.1908 -0.0122 0.0453
0.0103  1 .
5404 NE2   NE2   . GLN GLN GLN B B 274 274 . 0.2561 0.3045 0.3566 -0.0483 0.0221  -
0.0668 1 .
5405 C     C     . GLN GLN GLN B B 274 274 . 0.1521 0.1285 0.1568 0.0084  0.0250
0.0025  1 .
5406 O     O     . GLN GLN GLN B B 274 274 . 0.1566 0.1197 0.1422 0.0098  0.0045
0.0065  1 .
5407 N     N     . LEU LEU LEU B B 275 275 . 0.1160 0.1001 0.1373 0.0030  0.0064  -
0.0014 1 .
5408 CA    CA    . LEU LEU LEU B B 275 275 . 0.1134 0.1330 0.1205 0.0090  0.0182  -
0.0138 1 .
5409 CB    CB    . LEU LEU LEU B B 275 275 . 0.1384 0.1619 0.1614 0.0326  0.0309
0.0063  1 .
5410 CG    CG    . LEU LEU LEU B B 275 275 . 0.1474 0.1891 0.1423 0.0463  0.0160
0.0220  1 .
5411 CD1   CD1   . LEU LEU LEU B B 275 275 . 0.1342 0.2172 0.1593 0.0665  0.0180
0.0843  1 .
5412 CD2   CD2   . LEU LEU LEU B B 275 275 . 0.1451 0.1947 0.1299 0.0693  0.0139
0.0023  1 .
5413 C     C     . LEU LEU LEU B B 275 275 . 0.1469 0.1406 0.1491 0.0090  0.0090  -
0.0053 1 .
5414 O     O     . LEU LEU LEU B B 275 275 . 0.1361 0.1422 0.1420 0.0138  0.0187
0.0051  1 .
5415 N     N     . GLY GLY GLY B B 276 276 . 0.1313 0.1064 0.1124 -0.0209 0.0056
0.0112  1 .
5416 CA    CA    . GLY GLY GLY B B 276 276 . 0.1331 0.1040 0.1014 0.0110  0.0011  -
0.0046 1 .
5417 C     C     . GLY GLY GLY B B 276 276 . 0.1478 0.1252 0.1096 0.0058  0.0182
0.0079  1 .
5418 O     O     . GLY GLY GLY B B 276 276 . 0.1606 0.1143 0.1092 0.0013  0.0166  -
0.0043 1 .
5419 N     N     . ALA ALA ALA B B 277 277 . 0.1356 0.0947 0.1221 0.0186  0.0330
0.0193  1 .
5420 CA    CA    . ALA ALA ALA B B 277 277 . 0.1152 0.1163 0.1039 0.0101  0.0206
0.0124  1 .
5421 CB    CB    . ALA ALA ALA B B 277 277 . 0.1364 0.1183 0.1534 0.0072  0.0656
0.0287  1 .
5422 C     C     . ALA ALA ALA B B 277 277 . 0.1344 0.1118 0.1326 0.0161  0.0188
0.0051  1 .
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5423 O     O     . ALA ALA ALA B B 277 277 . 0.1830 0.1182 0.1595 0.0099  0.0393  -
0.0002 1 .
5424 N     N     . LEU LEU LEU B B 278 278 . 0.1118 0.1079 0.1180 0.0132  0.0059
0.0141  1 .
5425 CA    CA    . LEU LEU LEU B B 278 278 . 0.0978 0.1119 0.1216 0.0207  -0.0113
0.0047  1 .
5426 CB    CB    . LEU LEU LEU B B 278 278 . 0.1196 0.1324 0.1277 0.0136  0.0075  -
0.0051 1 .
5427 CG    CG    . LEU LEU LEU B B 278 278 . 0.1601 0.1598 0.1503 0.0057  0.0089  -
0.0269 1 .
5428 CD1   CD1   . LEU LEU LEU B B 278 278 . 0.1353 0.2325 0.2443 0.0135  -0.0523 -
0.0408 1 .
5429 CD2   CD2   . LEU LEU LEU B B 278 278 . 0.2035 0.1951 0.1320 0.0138  -0.0056 -
0.0742 1 .
5430 C     C     . LEU LEU LEU B B 278 278 . 0.0969 0.1041 0.1255 0.0204  -0.0075
0.0039  1 .
5431 O     O     . LEU LEU LEU B B 278 278 . 0.1519 0.1057 0.1049 0.0299  0.0088  -
0.0075 1 .
5432 N     N     . TYR TYR TYR B B 279 279 . 0.0937 0.1164 0.1049 0.0077  0.0194
0.0186  1 .
5433 CA    CA    . TYR TYR TYR B B 279 279 . 0.0905 0.0986 0.1098 0.0077  -0.0007 -
0.0091 1 .
5434 CB    CB    . TYR TYR TYR B B 279 279 . 0.1032 0.0998 0.1073 0.0082  -0.0066 -
0.0102 1 .
5435 CG    CG    . TYR TYR TYR B B 279 279 . 0.0944 0.0812 0.0808 0.0269  0.0043  -
0.0038 1 .
5436 CD1   CD1   . TYR TYR TYR B B 279 279 . 0.1264 0.0918 0.0966 0.0197  -0.0004 -
0.0206 1 .
5437 CE1   CE1   . TYR TYR TYR B B 279 279 . 0.1063 0.1044 0.0818 0.0103  -0.0048 -
0.0162 1 .
5438 CZ    CZ    . TYR TYR TYR B B 279 279 . 0.1260 0.1126 0.0956 0.0155  -0.0091 -
0.0081 1 .
5439 OH    OH    . TYR TYR TYR B B 279 279 . 0.1352 0.1057 0.0976 0.0182  0.0000
0.0044  1 .
5440 CE2   CE2   . TYR TYR TYR B B 279 279 . 0.1045 0.0984 0.0748 0.0106  0.0075  -
0.0237 1 .
5441 CD2   CD2   . TYR TYR TYR B B 279 279 . 0.1141 0.0755 0.0958 0.0040  0.0161  -
0.0097 1 .
5442 C     C     . TYR TYR TYR B B 279 279 . 0.1152 0.1062 0.1027 0.0225  0.0133
0.0001  1 .
5443 O     O     . TYR TYR TYR B B 279 279 . 0.1161 0.1097 0.1144 0.0063  -0.0007 -
0.0045 1 .
5444 N     N     . GLN GLN GLN B B 280 280 . 0.1405 0.1149 0.0994 0.0037  0.0179  -
0.0023 1 .
5445 CA    CA    . GLN GLN GLN B B 280 280 . 0.1395 0.1163 0.1157 0.0184  0.0112  -
0.0063 1 .
5446 CB    CB    . GLN GLN GLN B B 280 280 . 0.1399 0.1622 0.0981 0.0449  0.0260  -
0.0001 1 .
5447 CG    CG    . GLN GLN GLN B B 280 280 . 0.2232 0.1715 0.1818 0.0752  -0.0160 -
0.0421 1 .
5448 CD    CD    . GLN GLN GLN B B 280 280 . 0.4596 0.3861 0.3698 0.0108  -0.0762 -
0.0140 1 .
5449 OE1   OE1   . GLN GLN GLN B B 280 280 . 0.5776 0.4008 0.4865 0.0062  -0.0187
0.0346  1 .
5450 NE2   NE2   . GLN GLN GLN B B 280 280 . 0.5598 0.3728 0.4064 0.0422  -0.0580
0.0748  1 .
5451 C     C     . GLN GLN GLN B B 280 280 . 0.1318 0.1244 0.1112 0.0168  0.0222  -
0.0089 1 .
5452 O     O     . GLN GLN GLN B B 280 280 . 0.1720 0.1123 0.1104 0.0095  0.0085  -
0.0121 1 .
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5453 N     N     . ASP ASP ASP B B 281 281 . 0.1331 0.1483 0.0959 0.0134  0.0105
0.0099  1 .
5454 CA    CA    . ASP ASP ASP B B 281 281 . 0.1361 0.1285 0.1413 0.0041  0.0123
0.0128  1 .
5455 CB    CB    . ASP ASP ASP B B 281 281 . 0.1374 0.1518 0.1391 0.0063  0.0181
0.0272  1 .
5456 CG    CG    . ASP ASP ASP B B 281 281 . 0.2107 0.2043 0.2373 0.0130  -0.0194
0.0224  1 .
5457 OD1   OD1   . ASP ASP ASP B B 281 281 . 0.2504 0.2771 0.2474 0.0063  0.0737
0.0161  1 .
5458 OD2   OD2   . ASP ASP ASP B B 281 281 . 0.2870 0.2858 0.4477 -0.0760 0.0043  -
0.0148 1 .
5459 C     C     . ASP ASP ASP B B 281 281 . 0.1421 0.1314 0.1308 0.0016  0.0200
0.0080  1 .
5460 O     O     . ASP ASP ASP B B 281 281 . 0.1424 0.1268 0.1352 0.0142  0.0131  -
0.0176 1 .
5461 N     N     . PHE PHE PHE B B 282 282 . 0.1002 0.1212 0.1063 -0.0117 0.0079
0.0088  1 .
5462 CA    CA    . PHE PHE PHE B B 282 282 . 0.1269 0.1148 0.1211 -0.0024 0.0043
0.0054  1 .
5463 CB    CB    . PHE PHE PHE B B 282 282 . 0.1208 0.1065 0.1343 -0.0158 0.0130
0.0075  1 .
5464 CG    CG    . PHE PHE PHE B B 282 282 . 0.1524 0.1171 0.1183 -0.0093 -0.0020
0.0529  1 .
5465 CD1   CD1   . PHE PHE PHE B B 282 282 . 0.2539 0.1104 0.1207 -0.0215 0.0063
0.0217  1 .
5466 CE1   CE1   . PHE PHE PHE B B 282 282 . 0.2198 0.1261 0.1476 -0.0111 -0.0176
0.0222  1 .
5467 CZ    CZ    . PHE PHE PHE B B 282 282 . 0.2132 0.1364 0.1317 -0.0302 -0.0137
0.0262  1 .
5468 CE2   CE2   . PHE PHE PHE B B 282 282 . 0.2413 0.1601 0.1820 0.0224  -0.0285 -
0.0020 1 .
5469 CD2   CD2   . PHE PHE PHE B B 282 282 . 0.1295 0.1006 0.1314 0.0165  -0.0088
0.0027  1 .
5470 C     C     . PHE PHE PHE B B 282 282 . 0.1140 0.0969 0.1076 0.0136  0.0053  -
0.0066 1 .
5471 O     O     . PHE PHE PHE B B 282 282 . 0.1304 0.1202 0.0991 0.0069  -0.0143
0.0034  1 .
5472 N     N     . VAL VAL VAL B B 283 283 . 0.1176 0.1160 0.0863 -0.0021 -0.0029 -
0.0089 1 .
5473 CA    CA    . VAL VAL VAL B B 283 283 . 0.0936 0.1011 0.0914 0.0119  -0.0080 -
0.0021 1 .
5474 CB    CB    . VAL VAL VAL B B 283 283 . 0.0819 0.1048 0.0824 0.0070  -0.0099
0.0067  1 .
5475 CG1   CG1   . VAL VAL VAL B B 283 283 . 0.1610 0.1312 0.1148 0.0177  -0.0114 -
0.0161 1 .
5476 CG2   CG2   . VAL VAL VAL B B 283 283 . 0.1313 0.1195 0.1463 0.0283  0.0257
0.0232  1 .
5477 C     C     . VAL VAL VAL B B 283 283 . 0.1010 0.0864 0.0978 0.0035  0.0025
0.0126  1 .
5478 O     O     . VAL VAL VAL B B 283 283 . 0.1636 0.0893 0.1089 0.0018  0.0070  -
0.0047 1 .
5479 N     N     . ARG ARG ARG B B 284 284 . 0.1216 0.1147 0.0865 0.0082  0.0170  -
0.0065 1 .
5480 CA    CA    . ARG ARG ARG B B 284 284 . 0.1201 0.1080 0.1271 0.0150  0.0091  -
0.0077 1 .
5481 CB    CB    . ARG ARG ARG B B 284 284 . 0.1544 0.1257 0.1206 0.0036  0.0419  -
0.0027 1 .
5482 CG    CG    . ARG ARG ARG B B 284 284 . 0.1502 0.1321 0.1451 0.0042  -0.0025 -
0.0204 1 .
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5483 CD    CD    . ARG ARG ARG B B 284 284 . 0.2250 0.1661 0.1372 0.0192  -0.0291 -
0.0146 1 .
5484 NE    NE    . ARG ARG ARG B B 284 284 . 0.1923 0.1621 0.1213 0.0018  -0.0155 -
0.0279 1 .
5485 CZ    CZ    . ARG ARG ARG B B 284 284 . 0.2224 0.2111 0.1737 0.0502  -0.0185 -
0.0025 1 .
5486 NH1   NH1   . ARG ARG ARG B B 284 284 . 0.3064 0.2789 0.1426 -0.0466 0.0557  -
0.0354 1 .
5487 NH2   NH2   . ARG ARG ARG B B 284 284 . 0.2785 0.2770 0.1992 0.1009  -0.0122 -
0.0005 1 .
5488 C     C     . ARG ARG ARG B B 284 284 . 0.1168 0.1105 0.1035 0.0131  -0.0072 -
0.0096 1 .
5489 O     O     . ARG ARG ARG B B 284 284 . 0.1389 0.1279 0.1132 0.0087  -0.0008 -
0.0173 1 .
5490 N     N     . ASP ASP ASP B B 285 285 . 0.1097 0.1280 0.0909 0.0182  0.0043  -
0.0073 1 .
5491 CA    CA    . ASP ASP ASP B B 285 285 . 0.1362 0.1065 0.1144 0.0196  -0.0008 -
0.0147 1 .
5492 CB    CB    . ASP ASP ASP B B 285 285 . 0.1268 0.1102 0.1140 -0.0068 -0.0183 -
0.0207 1 .
5493 CG    CG    . ASP ASP ASP B B 285 285 . 0.1745 0.1623 0.1388 -0.0292 -0.0057 -
0.0107 1 .
5494 OD1   OD1   . ASP ASP ASP B B 285 285 . 0.2123 0.2033 0.1872 -0.0399 0.0187  -
0.0375 1 .
5495 OD2   OD2   . ASP ASP ASP B B 285 285 . 0.2330 0.1939 0.2307 -0.0919 -0.0048
0.0035  1 .
5496 C     C     . ASP ASP ASP B B 285 285 . 0.1174 0.1167 0.1078 -0.0023 -0.0120 -
0.0124 1 .
5497 O     O     . ASP ASP ASP B B 285 285 . 0.1497 0.1388 0.0960 0.0127  0.0131  -
0.0106 1 .
5498 N     N     . TYR TYR TYR B B 286 286 . 0.1342 0.1023 0.1018 -0.0016 0.0153  -
0.0083 1 .
5499 CA    CA    . TYR TYR TYR B B 286 286 . 0.1307 0.1223 0.1092 -0.0009 0.0234  -
0.0062 1 .
5500 CB    CB    . TYR TYR TYR B B 286 286 . 0.1333 0.0848 0.1149 -0.0168 0.0146  -
0.0120 1 .
5501 CG    CG    . TYR TYR TYR B B 286 286 . 0.1074 0.1336 0.1298 0.0270  0.0080
0.0041  1 .
5502 CD1   CD1   . TYR TYR TYR B B 286 286 . 0.1781 0.2029 0.1440 0.0247  0.0471  -
0.0135 1 .
5503 CE1   CE1   . TYR TYR TYR B B 286 286 . 0.1938 0.1952 0.1349 -0.0010 0.0015  -
0.0213 1 .
5504 CZ    CZ    . TYR TYR TYR B B 286 286 . 0.2349 0.2679 0.1623 -0.0139 0.0449  -
0.0217 1 .
5505 OH    OH    . TYR TYR TYR B B 286 286 . 0.2287 0.2745 0.2026 -0.0361 0.0293  -
0.0422 1 .
5506 CE2   CE2   . TYR TYR TYR B B 286 286 . 0.2043 0.2078 0.2027 -0.0073 0.0419  -
0.0275 1 .
5507 CD2   CD2   . TYR TYR TYR B B 286 286 . 0.1797 0.1508 0.1319 -0.0258 0.0200  -
0.0271 1 .
5508 C     C     . TYR TYR TYR B B 286 286 . 0.1367 0.1012 0.1231 0.0064  0.0110  -
0.0003 1 .
5509 O     O     . TYR TYR TYR B B 286 286 . 0.1186 0.1286 0.0930 0.0130  0.0160
0.0141  1 .
5510 N     N     . PRO PRO PRO B B 287 287 . 0.1256 0.1114 0.1118 0.0071  0.0065
0.0100  1 .
5511 CA    CA    . PRO PRO PRO B B 287 287 . 0.1311 0.0911 0.1269 0.0126  0.0195
0.0028  1 .
5512 CB    CB    . PRO PRO PRO B B 287 287 . 0.1663 0.0895 0.1591 0.0249  0.0394
0.0165  1 .
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5513 CG    CG    . PRO PRO PRO B B 287 287 . 0.1622 0.1248 0.1937 0.0214  0.0103
0.0374  1 .
5514 CD    CD    . PRO PRO PRO B B 287 287 . 0.1245 0.1111 0.1294 0.0319  0.0118
0.0216  1 .
5515 C     C     . PRO PRO PRO B B 287 287 . 0.1535 0.1135 0.1210 0.0020  0.0269  -
0.0095 1 .
5516 O     O     . PRO PRO PRO B B 287 287 . 0.1341 0.1063 0.1253 0.0042  0.0215
0.0045  1 .
5517 N     N     . VAL VAL VAL B B 288 288 . 0.1430 0.1075 0.1209 0.0079  0.0062
0.0151  1 .
5518 CA    CA    . VAL VAL VAL B B 288 288 . 0.1298 0.1125 0.1237 -0.0106 0.0154
0.0049  1 .
5519 CB    CB    . VAL VAL VAL B B 288 288 . 0.1340 0.1049 0.1178 0.0182  0.0196
0.0054  1 .
5520 CG1   CG1   . VAL VAL VAL B B 288 288 . 0.1503 0.0891 0.1203 0.0435  0.0298  -
0.0107 1 .
5521 CG2   CG2   . VAL VAL VAL B B 288 288 . 0.1167 0.1416 0.1353 -0.0033 0.0339
0.0040  1 .
5522 C     C     . VAL VAL VAL B B 288 288 . 0.1192 0.1000 0.0820 0.0257  0.0134
0.0077  1 .
5523 O     O     . VAL VAL VAL B B 288 288 . 0.1679 0.1486 0.1067 0.0090  0.0085
0.0388  1 .
5524 N     N     . VAL VAL VAL B B 289 289 . 0.1131 0.0806 0.0923 0.0096  -0.0011 -
0.0043 1 .
5525 CA    CA    . VAL VAL VAL B B 289 289 . 0.1025 0.0896 0.1108 0.0108  0.0017
0.0005  1 .
5526 CB    CB    . VAL VAL VAL B B 289 289 . 0.1535 0.0958 0.1129 0.0148  -0.0042 -
0.0026 1 .
5527 CG1   CG1   . VAL VAL VAL B B 289 289 . 0.1475 0.1248 0.1539 0.0389  0.0087  -
0.0142 1 .
5528 CG2   CG2   . VAL VAL VAL B B 289 289 . 0.1633 0.1285 0.1552 0.0040  0.0331
0.0122  1 .
5529 C     C     . VAL VAL VAL B B 289 289 . 0.0906 0.1059 0.0738 0.0069  0.0072  -
0.0088 1 .
5530 O     O     . VAL VAL VAL B B 289 289 . 0.1405 0.0940 0.1098 0.0052  -0.0021
0.0128  1 .
5531 N     N     . SER SER SER B B 290 290 . 0.1164 0.0815 0.0869 0.0118  0.0145  -
0.0120 1 .
5532 CA    CA    . SER SER SER B B 290 290 . 0.1109 0.0836 0.0922 0.0125  -0.0004
0.0049  1 .
5533 CB    CB    . SER SER SER B B 290 290 . 0.1538 0.0878 0.1131 -0.0024 0.0188  -
0.0060 1 .
5534 OG    OG    . SER SER SER B B 290 290 . 0.1353 0.0882 0.1109 0.0128  0.0134
0.0194  1 .
5535 C     C     . SER SER SER B B 290 290 . 0.0953 0.0842 0.0819 0.0131  -0.0044 -
0.0041 1 .
5536 O     O     . SER SER SER B B 290 290 . 0.1136 0.0854 0.0720 0.0026  -0.0193 -
0.0083 1 .
5537 N     N     . ILE ILE ILE B B 291 291 . 0.0956 0.0843 0.0728 0.0114  0.0024  -
0.0053 1 .
5538 CA    CA    . ILE ILE ILE B B 291 291 . 0.0931 0.0867 0.0904 -0.0072 0.0123  -
0.0018 1 .
5539 CB    CB    . ILE ILE ILE B B 291 291 . 0.0696 0.0615 0.0810 -0.0001 0.0225  -
0.0129 1 .
5540 CG1   CG1   . ILE ILE ILE B B 291 291 . 0.0773 0.1184 0.0948 0.0380  0.0348
0.0029  1 .
5541 CD    CD    . ILE ILE ILE B B 291 291 . 0.1356 0.1366 0.0953 0.0139  0.0517  -
0.0117 1 .
5542 CG2   CG2   . ILE ILE ILE B B 291 291 . 0.1156 0.0739 0.1077 -0.0072 -0.0021 -
0.0351 1 .
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5543 C     C     . ILE ILE ILE B B 291 291 . 0.0893 0.0811 0.0680 0.0012  -0.0162
0.0066  1 .
5544 O     O     . ILE ILE ILE B B 291 291 . 0.0940 0.0834 0.0725 -0.0007 -0.0058 -
0.0056 1 .
5545 N     N     . GLU GLU GLU B B 292 292 . 0.1178 0.0760 0.0760 0.0050  0.0288  -
0.0166 1 .
5546 CA    CA    . GLU GLU GLU B B 292 292 . 0.0722 0.0811 0.0610 -0.0089 0.0165  -
0.0076 1 .
5547 CB    CB    . GLU GLU GLU B B 292 292 . 0.0840 0.0921 0.0544 0.0128  0.0090
0.0104  1 .
5548 CG    CG    . GLU GLU GLU B B 292 292 . 0.0981 0.0862 0.0610 0.0046  -0.0009
0.0246  1 .
5549 CD    CD    . GLU GLU GLU B B 292 292 . 0.0905 0.0957 0.0874 0.0164  -0.0167
0.0087  1 .
5550 OE1   OE1   . GLU GLU GLU B B 292 292 . 0.1295 0.0877 0.0928 0.0092  0.0107  -
0.0055 1 .
5551 OE2   OE2   . GLU GLU GLU B B 292 292 . 0.1459 0.1023 0.1169 0.0105  0.0112
0.0145  1 .
5552 C     C     . GLU GLU GLU B B 292 292 . 0.0818 0.0657 0.0801 0.0068  -0.0085
0.0167  1 .
5553 O     O     . GLU GLU GLU B B 292 292 . 0.0990 0.0760 0.0771 0.0089  -0.0185
0.0021  1 .
5554 N     N     . ASP ASP ASP B B 293 293 . 0.0703 0.0587 0.0697 0.0158  0.0002
0.0074  1 .
5555 CA    CA    . ASP ASP ASP B B 293 293 . 0.0907 0.0746 0.0622 0.0031  -0.0065 -
0.0051 1 .
5556 CB    CB    . ASP ASP ASP B B 293 293 . 0.0811 0.0982 0.0807 -0.0007 0.0074
0.0047  1 .
5557 CG    CG    . ASP ASP ASP B B 293 293 . 0.0856 0.0867 0.0763 0.0244  -0.0002
0.0078  1 .
5558 OD1   OD1   . ASP ASP ASP B B 293 293 . 0.0992 0.1090 0.0896 -0.0042 0.0071
0.0049  1 .
5559 OD2   OD2   . ASP ASP ASP B B 293 293 . 0.1000 0.0981 0.0774 0.0157  0.0058  -
0.0069 1 .
5560 C     C     . ASP ASP ASP B B 293 293 . 0.0866 0.0606 0.0855 0.0091  0.0001
0.0007  1 .
5561 O     O     . ASP ASP ASP B B 293 293 . 0.0878 0.0835 0.0623 -0.0011 0.0015  -
0.0006 1 .
5562 N     N     . PRO PRO PRO B B 294 294 . 0.0965 0.0680 0.0856 -0.0116 -0.0030
0.0142  1 .
5563 CA    CA    . PRO PRO PRO B B 294 294 . 0.1014 0.0751 0.0843 -0.0049 0.0097  -
0.0177 1 .
5564 CB    CB    . PRO PRO PRO B B 294 294 . 0.1000 0.0879 0.0869 0.0039  -0.0040 -
0.0326 1 .
5565 CG    CG    . PRO PRO PRO B B 294 294 . 0.1038 0.0752 0.0706 -0.0283 0.0294
0.0186  1 .
5566 CD    CD    . PRO PRO PRO B B 294 294 . 0.1306 0.1088 0.0653 -0.0056 -0.0007
0.0150  1 .
5567 C     C     . PRO PRO PRO B B 294 294 . 0.0799 0.0718 0.0729 -0.0003 -0.0064
0.0059  1 .
5568 O     O     . PRO PRO PRO B B 294 294 . 0.0984 0.0867 0.0914 0.0061  0.0083  -
0.0076 1 .
5569 N     N     . PHE PHE PHE B B 295 295 . 0.1000 0.0618 0.0912 0.0075  -0.0036
0.0014  1 .
5570 CA    CA    . PHE PHE PHE B B 295 295 . 0.1054 0.0670 0.0692 -0.0011 0.0027  -
0.0109 1 .
5571 CB    CB    . PHE PHE PHE B B 295 295 . 0.1018 0.1148 0.0745 0.0059  0.0008
0.0138  1 .
5572 CG    CG    . PHE PHE PHE B B 295 295 . 0.0782 0.0980 0.0977 -0.0027 -0.0107
0.0099  1 .
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5573 CD1   CD1   . PHE PHE PHE B B 295 295 . 0.1059 0.1334 0.1160 0.0038  0.0068
0.0220  1 .
5574 CE1   CE1   . PHE PHE PHE B B 295 295 . 0.1362 0.1476 0.1407 -0.0254 0.0228
0.0273  1 .
5575 CZ    CZ    . PHE PHE PHE B B 295 295 . 0.1359 0.1434 0.1045 0.0477  0.0046
0.0140  1 .
5576 CE2   CE2   . PHE PHE PHE B B 295 295 . 0.1640 0.1402 0.0823 0.0159  0.0054
0.0059  1 .
5577 CD2   CD2   . PHE PHE PHE B B 295 295 . 0.1412 0.0889 0.0713 0.0090  0.0053
0.0171  1 .
5578 C     C     . PHE PHE PHE B B 295 295 . 0.0816 0.0738 0.1069 0.0047  0.0219
0.0008  1 .
5579 O     O     . PHE PHE PHE B B 295 295 . 0.0924 0.0781 0.0934 -0.0058 0.0056
0.0028  1 .
5580 N     N     . ASP ASP ASP B B 296 296 . 0.1054 0.0845 0.0916 0.0036  -0.0043 -
0.0018 1 .
5581 CA    CA    . ASP ASP ASP B B 296 296 . 0.0677 0.0604 0.0812 0.0007  0.0058  -
0.0038 1 .
5582 CB    CB    . ASP ASP ASP B B 296 296 . 0.0947 0.0714 0.0912 -0.0139 0.0146  -
0.0291 1 .
5583 CG    CG    . ASP ASP ASP B B 296 296 . 0.1074 0.0788 0.0958 -0.0090 0.0014  -
0.0155 1 .
5584 OD1   OD1   . ASP ASP ASP B B 296 296 . 0.1466 0.1062 0.1166 0.0144  -0.0122
0.0056  1 .
5585 OD2   OD2   . ASP ASP ASP B B 296 296 . 0.1397 0.0972 0.1093 0.0099  -0.0187 -
0.0248 1 .
5586 C     C     . ASP ASP ASP B B 296 296 . 0.0979 0.0865 0.0747 0.0090  -0.0036
0.0061  1 .
5587 O     O     . ASP ASP ASP B B 296 296 . 0.1143 0.0729 0.0903 0.0154  -0.0070 -
0.0006 1 .
5588 N     N     . GLN GLN GLN B B 297 297 . 0.0750 0.0641 0.0777 0.0022  0.0130  -
0.0158 1 .
5589 CA    CA    . GLN GLN GLN B B 297 297 . 0.0908 0.0836 0.0635 -0.0019 0.0141
0.0079  1 .
5590 CB    CB    . GLN GLN GLN B B 297 297 . 0.1139 0.0833 0.0627 -0.0148 0.0208  -
0.0261 1 .
5591 CG    CG    . GLN GLN GLN B B 297 297 . 0.1102 0.0957 0.0751 -0.0178 0.0012  -
0.0148 1 .
5592 CD    CD    . GLN GLN GLN B B 297 297 . 0.0845 0.1249 0.1129 0.0058  0.0043
0.0112  1 .
5593 OE1   OE1   . GLN GLN GLN B B 297 297 . 0.1150 0.1058 0.0982 -0.0116 -0.0071
0.0025  1 .
5594 NE2   NE2   . GLN GLN GLN B B 297 297 . 0.1164 0.1271 0.1447 0.0127  -0.0221 -
0.0144 1 .
5595 C     C     . GLN GLN GLN B B 297 297 . 0.0825 0.0717 0.0824 -0.0006 -0.0008 -
0.0070 1 .
5596 O     O     . GLN GLN GLN B B 297 297 . 0.1096 0.0931 0.0999 -0.0026 -0.0180
0.0182  1 .
5597 N     N     . ASP ASP ASP B B 298 298 . 0.0983 0.0808 0.1002 -0.0010 -0.0094 -
0.0037 1 .
5598 CA    CA    . ASP ASP ASP B B 298 298 . 0.1212 0.0766 0.0792 -0.0020 0.0020  -
0.0047 1 .
5599 CB    CB    . ASP ASP ASP B B 298 298 . 0.1136 0.0769 0.1075 0.0124  0.0247  -
0.0152 1 .
5600 CG    CG    . ASP ASP ASP B B 298 298 . 0.1076 0.1175 0.1293 0.0112  0.0090  -
0.0106 1 .
5601 OD1   OD1   . ASP ASP ASP B B 298 298 . 0.1345 0.1203 0.0943 -0.0040 0.0117
0.0033  1 .
5602 OD2   OD2   . ASP ASP ASP B B 298 298 . 0.1714 0.1961 0.1551 0.0272  -0.0095 -
0.0196 1 .
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5603 C     C     . ASP ASP ASP B B 298 298 . 0.1084 0.0859 0.0915 -0.0030 0.0088
0.0065  1 .
5604 O     O     . ASP ASP ASP B B 298 298 . 0.1008 0.0854 0.0908 0.0221  -0.0081
0.0068  1 .
5605 N     N     . ASP ASP ASP B B 299 299 . 0.1064 0.0825 0.0835 0.0004  0.0085  -
0.0045 1 .
5606 CA    CA    . ASP ASP ASP B B 299 299 . 0.0881 0.0762 0.0854 -0.0154 0.0101  -
0.0013 1 .
5607 CB    CB    . ASP ASP ASP B B 299 299 . 0.0952 0.0798 0.0817 -0.0019 0.0085
0.0033  1 .
5608 CG    CG    . ASP ASP ASP B B 299 299 . 0.1109 0.0912 0.1128 0.0026  -0.0167 -
0.0053 1 .
5609 OD1   OD1   . ASP ASP ASP B B 299 299 . 0.1029 0.0747 0.0833 0.0003  0.0037
0.0051  1 .
5610 OD2   OD2   . ASP ASP ASP B B 299 299 . 0.1190 0.0933 0.1266 0.0115  -0.0010
0.0168  1 .
5611 C     C     . ASP ASP ASP B B 299 299 . 0.0809 0.0931 0.0990 -0.0140 0.0071  -
0.0070 1 .
5612 O     O     . ASP ASP ASP B B 299 299 . 0.1081 0.0935 0.1076 0.0070  0.0016
0.0066  1 .
5613 N     N     . TRP TRP TRP B B 300 300 . 0.0901 0.0806 0.0868 0.0126  -0.0044 -
0.0035 1 .
5614 CA    CA    . TRP TRP TRP B B 300 300 . 0.0802 0.0980 0.1051 0.0130  0.0095  -
0.0059 1 .
5615 CB    CB    . TRP TRP TRP B B 300 300 . 0.0698 0.1118 0.0879 0.0246  -0.0082 -
0.0105 1 .
5616 CG    CG    . TRP TRP TRP B B 300 300 . 0.1088 0.0817 0.0991 0.0077  -0.0007
0.0063  1 .
5617 CD1   CD1   . TRP TRP TRP B B 300 300 . 0.1404 0.1054 0.1318 0.0114  -0.0120 -
0.0017 1 .
5618 NE1   NE1   . TRP TRP TRP B B 300 300 . 0.1458 0.1078 0.1473 -0.0050 -0.0174 -
0.0153 1 .
5619 CE2   CE2   . TRP TRP TRP B B 300 300 . 0.1171 0.0790 0.1167 -0.0093 -0.0097
0.0121  1 .
5620 CD2   CD2   . TRP TRP TRP B B 300 300 . 0.1174 0.1042 0.1214 -0.0002 0.0119
0.0151  1 .
5621 CE3   CE3   . TRP TRP TRP B B 300 300 . 0.1434 0.1010 0.1084 -0.0128 0.0010
0.0108  1 .
5622 CZ3   CZ3   . TRP TRP TRP B B 300 300 . 0.1721 0.1246 0.1102 -0.0384 0.0054
0.0080  1 .
5623 CH2   CH2   . TRP TRP TRP B B 300 300 . 0.1182 0.1094 0.1086 -0.0013 -0.0107
0.0124  1 .
5624 CZ2   CZ2   . TRP TRP TRP B B 300 300 . 0.1246 0.1160 0.1238 0.0216  0.0092
0.0062  1 .
5625 C     C     . TRP TRP TRP B B 300 300 . 0.1050 0.0989 0.1105 0.0005  0.0050  -
0.0083 1 .
5626 O     O     . TRP TRP TRP B B 300 300 . 0.1202 0.0882 0.0909 -0.0025 0.0061  -
0.0146 1 .
5627 N     N     . ALA ALA ALA B B 301 301 . 0.1039 0.0846 0.0706 0.0074  0.0084
0.0063  1 .
5628 CA    CA    . ALA ALA ALA B B 301 301 . 0.1101 0.0778 0.0866 0.0053  0.0214
0.0044  1 .
5629 CB    CB    . ALA ALA ALA B B 301 301 . 0.1066 0.0778 0.0841 -0.0015 0.0045
0.0080  1 .
5630 C     C     . ALA ALA ALA B B 301 301 . 0.1082 0.0846 0.0918 -0.0022 0.0038
0.0119  1 .
5631 O     O     . ALA ALA ALA B B 301 301 . 0.1199 0.0763 0.0924 -0.0018 -0.0044
0.0110  1 .
5632 N     N     . ALA ALA ALA B B 302 302 . 0.0882 0.0942 0.0819 0.0070  0.0018
0.0124  1 .
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5633 CA    CA    . ALA ALA ALA B B 302 302 . 0.1070 0.0888 0.1038 0.0051  -0.0009
0.0107  1 .
5634 CB    CB    . ALA ALA ALA B B 302 302 . 0.0957 0.0711 0.0804 0.0021  -0.0221 -
0.0117 1 .
5635 C     C     . ALA ALA ALA B B 302 302 . 0.1362 0.0865 0.0925 0.0027  0.0073
0.0052  1 .
5636 O     O     . ALA ALA ALA B B 302 302 . 0.1099 0.0933 0.0835 0.0118  0.0140  -
0.0002 1 .
5637 N     N     . TRP TRP TRP B B 303 303 . 0.1000 0.0776 0.0996 -0.0070 -0.0073
0.0008  1 .
5638 CA    CA    . TRP TRP TRP B B 303 303 . 0.1188 0.0824 0.0985 -0.0143 0.0062  -
0.0048 1 .
5639 CB    CB    . TRP TRP TRP B B 303 303 . 0.0978 0.0729 0.0755 -0.0015 -0.0116
0.0110  1 .
5640 CG    CG    . TRP TRP TRP B B 303 303 . 0.1203 0.0711 0.0599 0.0044  -0.0103 -
0.0022 1 .
5641 CD1   CD1   . TRP TRP TRP B B 303 303 . 0.1097 0.0774 0.0584 0.0092  -0.0132 -
0.0067 1 .
5642 NE1   NE1   . TRP TRP TRP B B 303 303 . 0.0873 0.0793 0.0846 -0.0020 -0.0014
0.0116  1 .
5643 CE2   CE2   . TRP TRP TRP B B 303 303 . 0.0850 0.0557 0.0736 0.0146  -0.0008
0.0105  1 .
5644 CD2   CD2   . TRP TRP TRP B B 303 303 . 0.1091 0.0663 0.0888 -0.0011 0.0082  -
0.0063 1 .
5645 CE3   CE3   . TRP TRP TRP B B 303 303 . 0.1235 0.0527 0.0846 -0.0057 -0.0071
0.0191  1 .
5646 CZ3   CZ3   . TRP TRP TRP B B 303 303 . 0.1080 0.1054 0.0754 -0.0135 0.0000
0.0229  1 .
5647 CH2   CH2   . TRP TRP TRP B B 303 303 . 0.0769 0.0771 0.0719 -0.0122 -0.0041 -
0.0093 1 .
5648 CZ2   CZ2   . TRP TRP TRP B B 303 303 . 0.0975 0.0747 0.1136 0.0009  0.0139
0.0056  1 .
5649 C     C     . TRP TRP TRP B B 303 303 . 0.1064 0.0938 0.0954 -0.0022 0.0017
0.0035  1 .
5650 O     O     . TRP TRP TRP B B 303 303 . 0.1463 0.0820 0.0847 -0.0133 0.0114  -
0.0060 1 .
5651 N     N     . SER SER SER B B 304 304 . 0.1258 0.0979 0.0783 -0.0049 -0.0073
0.0116  1 .
5652 CA    CA    . SER SER SER B B 304 304 . 0.1239 0.1037 0.0956 0.0192  -0.0052 -
0.0019 1 .
5653 CB    CB    . SER SER SER B B 304 304 . 0.1107 0.1192 0.1129 0.0466  -0.0083
0.0014  1 .
5654 OG    OG    . SER SER SER B B 304 304 . 0.1417 0.1424 0.1197 0.0146  0.0081
0.0107  1 .
5655 C     C     . SER SER SER B B 304 304 . 0.1202 0.0973 0.0731 0.0053  -0.0046
0.0038  1 .
5656 O     O     . SER SER SER B B 304 304 . 0.1535 0.0882 0.1016 -0.0122 0.0042  -
0.0075 1 .
5657 N     N     . LYS LYS LYS B B 305 305 . 0.1127 0.0960 0.0816 0.0129  0.0108
0.0019  1 .
5658 CA    CA    . LYS LYS LYS B B 305 305 . 0.1211 0.1046 0.0903 -0.0018 0.0070
0.0106  1 .
5659 CB    CB    . LYS LYS LYS B B 305 305 . 0.1239 0.1196 0.1306 -0.0046 0.0009
0.0143  1 .
5660 CG    CG    . LYS LYS LYS B B 305 305 . 0.1935 0.1972 0.1726 -0.0078 0.0296  -
0.0416 1 .
5661 CD    CD    . LYS LYS LYS B B 305 305 . 0.2025 0.2598 0.2531 -0.0865 0.0663  -
0.0085 1 .
5662 CE    CE    . LYS LYS LYS B B 305 305 . 0.3546 0.3316 0.3803 -0.1172 0.0859
0.0109  1 .
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5663 NZ    NZ    . LYS LYS LYS B B 305 305 . 0.3984 0.4531 0.5404 -0.1890 0.0330
0.0195  1 .
5664 C     C     . LYS LYS LYS B B 305 305 . 0.1517 0.0999 0.0768 0.0224  0.0051  -
0.0031 1 .
5665 O     O     . LYS LYS LYS B B 305 305 . 0.1664 0.1012 0.1106 0.0007  0.0202  -
0.0283 1 .
5666 N     N     . PHE PHE PHE B B 306 306 . 0.1310 0.1042 0.0854 0.0185  -0.0103
0.0099  1 .
5667 CA    CA    . PHE PHE PHE B B 306 306 . 0.1389 0.1221 0.0999 0.0151  -0.0078 -
0.0182 1 .
5668 CB    CB    . PHE PHE PHE B B 306 306 . 0.1609 0.1082 0.0869 0.0038  -0.0191 -
0.0131 1 .
5669 CG    CG    . PHE PHE PHE B B 306 306 . 0.1080 0.1025 0.0808 0.0095  -0.0140 -
0.0084 1 .
5670 CD1   CD1   . PHE PHE PHE B B 306 306 . 0.1169 0.1066 0.1122 0.0267  0.0071  -
0.0082 1 .
5671 CE1   CE1   . PHE PHE PHE B B 306 306 . 0.1495 0.1315 0.1405 0.0272  -0.0082 -
0.0350 1 .
5672 CZ    CZ    . PHE PHE PHE B B 306 306 . 0.1461 0.1279 0.1481 -0.0134 -0.0341 -
0.0071 1 .
5673 CE2   CE2   . PHE PHE PHE B B 306 306 . 0.1365 0.1221 0.1262 0.0095  -0.0245 -
0.0204 1 .
5674 CD2   CD2   . PHE PHE PHE B B 306 306 . 0.1282 0.1426 0.1164 -0.0048 -0.0231
0.0116  1 .
5675 C     C     . PHE PHE PHE B B 306 306 . 0.1096 0.1115 0.0951 0.0039  0.0014  -
0.0023 1 .
5676 O     O     . PHE PHE PHE B B 306 306 . 0.1239 0.1070 0.1063 0.0137  -0.0092 -
0.0083 1 .
5677 N     N     . THR THR THR B B 307 307 . 0.1188 0.1018 0.0984 -0.0062 -0.0007
0.0178  1 .
5678 CA    CA    . THR THR THR B B 307 307 . 0.1251 0.0987 0.0744 -0.0072 0.0014
0.0016  1 .
5679 CB    CB    . THR THR THR B B 307 307 . 0.1309 0.1181 0.0940 -0.0081 -0.0136 -
0.0034 1 .
5680 OG1   OG1   . THR THR THR B B 307 307 . 0.1584 0.0912 0.0966 -0.0036 -0.0222
0.0050  1 .
5681 CG2   CG2   . THR THR THR B B 307 307 . 0.1477 0.1011 0.1418 -0.0236 0.0037  -
0.0078 1 .
5682 C     C     . THR THR THR B B 307 307 . 0.1392 0.0763 0.0917 -0.0339 -0.0106 -
0.0109 1 .
5683 O     O     . THR THR THR B B 307 307 . 0.1595 0.0719 0.1169 -0.0024 -0.0112 -
0.0172 1 .
5684 N     N     . ALA ALA ALA B B 308 308 . 0.1211 0.1095 0.0839 0.0086  -0.0174 -
0.0058 1 .
5685 CA    CA    . ALA ALA ALA B B 308 308 . 0.1487 0.1002 0.0860 0.0153  -0.0150 -
0.0192 1 .
5686 CB    CB    . ALA ALA ALA B B 308 308 . 0.1764 0.1068 0.0862 0.0291  -0.0241
0.0052  1 .
5687 C     C     . ALA ALA ALA B B 308 308 . 0.1430 0.1149 0.1121 0.0015  -0.0107 -
0.0139 1 .
5688 O     O     . ALA ALA ALA B B 308 308 . 0.1804 0.1627 0.0954 0.0207  -0.0117 -
0.0446 1 .
5689 N     N     . ASN ASN ASN B B 309 309 . 0.1219 0.0823 0.1122 0.0068  0.0084
0.0046  1 .
5690 CA    CA    . ASN ASN ASN B B 309 309 . 0.1224 0.1166 0.1434 -0.0006 -0.0019 -
0.0131 1 .
5691 CB    CB    . ASN ASN ASN B B 309 309 . 0.1367 0.1297 0.1602 -0.0197 -0.0030 -
0.0068 1 .
5692 CG    CG    . ASN ASN ASN B B 309 309 . 0.2760 0.1994 0.2211 -0.0399 0.0045  -
0.0106 1 .
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5693 OD1   OD1   . ASN ASN ASN B B 309 309 . 0.4014 0.2844 0.3534 -0.0590 -0.0442
0.0660  1 .
5694 ND2   ND2   . ASN ASN ASN B B 309 309 . 0.3074 0.2338 0.3653 -0.0734 0.0865  -
0.0463 1 .
5695 C     C     . ASN ASN ASN B B 309 309 . 0.1139 0.1075 0.0882 -0.0016 -0.0050 -
0.0201 1 .
5696 O     O     . ASN ASN ASN B B 309 309 . 0.1465 0.1585 0.1574 -0.0083 0.0112
0.0099  1 .
5697 N     N     . VAL VAL VAL B B 310 310 . 0.1417 0.0904 0.0935 -0.0113 -0.0089 -
0.0149 1 .
5698 CA    CA    . VAL VAL VAL B B 310 310 . 0.1462 0.0972 0.0847 -0.0152 -0.0288 -
0.0129 1 .
5699 CB    CB    . VAL VAL VAL B B 310 310 . 0.1239 0.1313 0.1050 -0.0168 -0.0199
0.0144  1 .
5700 CG1   CG1   . VAL VAL VAL B B 310 310 . 0.1913 0.1752 0.1817 -0.0159 -0.0246 -
0.0148 1 .
5701 CG2   CG2   . VAL VAL VAL B B 310 310 . 0.2252 0.1087 0.1298 0.0208  -0.0033
0.0059  1 .
5702 C     C     . VAL VAL VAL B B 310 310 . 0.1125 0.1082 0.0955 0.0083  -0.0115 -
0.0052 1 .
5703 O     O     . VAL VAL VAL B B 310 310 . 0.1072 0.1101 0.1187 -0.0009 0.0119  -
0.0121 1 .
5704 N     N     . GLY GLY GLY B B 311 311 . 0.1405 0.1075 0.0914 -0.0036 -0.0032 -
0.0075 1 .
5705 CA    CA    . GLY GLY GLY B B 311 311 . 0.1321 0.1269 0.0752 -0.0257 -0.0037 -
0.0067 1 .
5706 C     C     . GLY GLY GLY B B 311 311 . 0.1217 0.1314 0.0968 -0.0243 -0.0022
0.0056  1 .
5707 O     O     . GLY GLY GLY B B 311 311 . 0.1729 0.1255 0.1176 -0.0389 -0.0100 -
0.0039 1 .
5708 N     N     . ILE ILE ILE B B 312 312 . 0.1186 0.0962 0.0842 -0.0064 0.0023
0.0055  1 .
5709 CA    CA    . ILE ILE ILE B B 312 312 . 0.1256 0.1228 0.0943 -0.0102 0.0042
0.0043  1 .
5710 CB    CB    . ILE ILE ILE B B 312 312 . 0.0885 0.1156 0.1054 0.0005  -0.0048
0.0056  1 .
5711 CG1   CG1   . ILE ILE ILE B B 312 312 . 0.1306 0.1271 0.0983 -0.0072 -0.0248
0.0080  1 .
5712 CD    CD    . ILE ILE ILE B B 312 312 . 0.1832 0.1889 0.1147 -0.0183 -0.0435 -
0.0219 1 .
5713 CG2   CG2   . ILE ILE ILE B B 312 312 . 0.1196 0.1225 0.1275 -0.0020 0.0283
0.0094  1 .
5714 C     C     . ILE ILE ILE B B 312 312 . 0.1108 0.0924 0.0926 0.0103  0.0038
0.0021  1 .
5715 O     O     . ILE ILE ILE B B 312 312 . 0.1429 0.1105 0.0981 0.0106  0.0116
0.0120  1 .
5716 N     N     . GLN GLN GLN B B 313 313 . 0.0976 0.0841 0.0743 -0.0054 0.0089
0.0070  1 .
5717 CA    CA    . GLN GLN GLN B B 313 313 . 0.1131 0.0710 0.0859 0.0046  0.0258
0.0136  1 .
5718 CB    CB    . GLN GLN GLN B B 313 313 . 0.1091 0.0820 0.0722 0.0128  0.0165
0.0311  1 .
5719 CG    CG    . GLN GLN GLN B B 313 313 . 0.1355 0.1103 0.1294 -0.0107 0.0418
0.0127  1 .
5720 CD    CD    . GLN GLN GLN B B 313 313 . 0.1305 0.0942 0.0930 -0.0092 0.0105
0.0111  1 .
5721 OE1   OE1   . GLN GLN GLN B B 313 313 . 0.1708 0.1438 0.1173 -0.0145 -0.0055
0.0074  1 .
5722 NE2   NE2   . GLN GLN GLN B B 313 313 . 0.1270 0.1042 0.1141 0.0133  -0.0173 -
0.0066 1 .
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5723 C     C     . GLN GLN GLN B B 313 313 . 0.0884 0.0935 0.0747 -0.0021 -0.0048
0.0186  1 .
5724 O     O     . GLN GLN GLN B B 313 313 . 0.1311 0.1096 0.0683 0.0067  -0.0003 -
0.0027 1 .
5725 N     N     . ILE ILE ILE B B 314 314 . 0.1157 0.0725 0.0799 0.0076  -0.0025 -
0.0080 1 .
5726 CA    CA    . ILE ILE ILE B B 314 314 . 0.1071 0.0736 0.0685 0.0056  0.0033
0.0011  1 .
5727 CB    CB    . ILE ILE ILE B B 314 314 . 0.0875 0.0413 0.0613 0.0120  0.0216
0.0101  1 .
5728 CG1   CG1   . ILE ILE ILE B B 314 314 . 0.1331 0.1134 0.1133 0.0072  0.0251  -
0.0154 1 .
5729 CD    CD    . ILE ILE ILE B B 314 314 . 0.1380 0.1156 0.1061 -0.0151 -0.0032 -
0.0201 1 .
5730 CG2   CG2   . ILE ILE ILE B B 314 314 . 0.1326 0.0888 0.0861 -0.0211 0.0093  -
0.0317 1 .
5731 C     C     . ILE ILE ILE B B 314 314 . 0.0742 0.0688 0.0837 0.0005  -0.0053
0.0038  1 .
5732 O     O     . ILE ILE ILE B B 314 314 . 0.1021 0.0907 0.0832 -0.0008 -0.0012 -
0.0089 1 .
5733 N     N     . VAL VAL VAL B B 315 315 . 0.1160 0.0807 0.0818 0.0099  0.0006
0.0124  1 .
5734 CA    CA    . VAL VAL VAL B B 315 315 . 0.1077 0.0917 0.0707 0.0262  -0.0050
0.0198  1 .
5735 CB    CB    . VAL VAL VAL B B 315 315 . 0.1081 0.0670 0.0687 0.0038  0.0061
0.0150  1 .
5736 CG1   CG1   . VAL VAL VAL B B 315 315 . 0.0992 0.0990 0.0782 0.0086  0.0132
0.0193  1 .
5737 CG2   CG2   . VAL VAL VAL B B 315 315 . 0.1328 0.0885 0.1028 0.0294  -0.0001 -
0.0016 1 .
5738 C     C     . VAL VAL VAL B B 315 315 . 0.0875 0.1086 0.0761 -0.0006 0.0070
0.0069  1 .
5739 O     O     . VAL VAL VAL B B 315 315 . 0.1016 0.1026 0.0886 -0.0019 0.0052  -
0.0079 1 .
5740 N     N     . GLY GLY GLY B B 316 316 . 0.0658 0.0754 0.0769 0.0014  0.0142
0.0046  1 .
5741 CA    CA    . GLY GLY GLY B B 316 316 . 0.0903 0.0948 0.0822 0.0289  0.0046
0.0039  1 .
5742 C     C     . GLY GLY GLY B B 316 316 . 0.0909 0.0779 0.0791 -0.0073 -0.0014
0.0096  1 .
5743 O     O     . GLY GLY GLY B B 316 316 . 0.1069 0.0779 0.0936 -0.0073 0.0030
0.0047  1 .
5744 N     N     . ASP ASP ASP B B 317 317 . 0.1078 0.0687 0.0784 0.0024  -0.0081
0.0085  1 .
5745 CA    CA    . ASP ASP ASP B B 317 317 . 0.0957 0.0840 0.0711 0.0188  -0.0126
0.0003  1 .
5746 CB    CB    . ASP ASP ASP B B 317 317 . 0.1066 0.1124 0.0625 0.0243  -0.0272
0.0078  1 .
5747 CG    CG    . ASP ASP ASP B B 317 317 . 0.0820 0.0804 0.0815 -0.0128 0.0078
0.0036  1 .
5748 OD1   OD1   . ASP ASP ASP B B 317 317 . 0.1026 0.0989 0.0914 0.0060  -0.0001
0.0189  1 .
5749 OD2   OD2   . ASP ASP ASP B B 317 317 . 0.0943 0.1038 0.0852 -0.0017 0.0009  -
0.0077 1 .
5750 C     C     . ASP ASP ASP B B 317 317 . 0.0742 0.0705 0.0706 -0.0023 -0.0140 -
0.0125 1 .
5751 O     O     . ASP ASP ASP B B 317 317 . 0.0935 0.0866 0.1066 0.0014  0.0037
0.0060  1 .
5752 N     N     . ASP ASP ASP B B 318 318 . 0.0961 0.0809 0.0710 0.0025  -0.0074 -
0.0054 1 .
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5753 CA    CA    . ASP ASP ASP B B 318 318 . 0.0785 0.0776 0.0824 0.0131  -0.0113
0.0007  1 .
5754 CB    CB    . ASP ASP ASP B B 318 318 . 0.0894 0.0836 0.0764 0.0127  -0.0166 -
0.0043 1 .
5755 CG    CG    . ASP ASP ASP B B 318 318 . 0.1076 0.1075 0.0781 0.0048  0.0062  -
0.0105 1 .
5756 OD1   OD1   . ASP ASP ASP B B 318 318 . 0.0972 0.0978 0.0830 0.0178  0.0010
0.0020  1 .
5757 OD2   OD2   . ASP ASP ASP B B 318 318 . 0.1176 0.1295 0.1103 0.0142  -0.0107 -
0.0034 1 .
5758 C     C     . ASP ASP ASP B B 318 318 . 0.1017 0.0825 0.0586 0.0125  0.0137
0.0142  1 .
5759 O     O     . ASP ASP ASP B B 318 318 . 0.1062 0.0888 0.0984 0.0066  0.0054  -
0.0001 1 .
5760 N     N     . LEU LEU LEU B B 319 319 . 0.1164 0.1007 0.0713 -0.0036 -0.0004
0.0061  1 .
5761 CA    CA    . LEU LEU LEU B B 319 319 . 0.0724 0.0718 0.0847 0.0151  0.0071
0.0142  1 .
5762 CB    CB    . LEU LEU LEU B B 319 319 . 0.0889 0.0998 0.0582 0.0047  -0.0225 -
0.0100 1 .
5763 CG    CG    . LEU LEU LEU B B 319 319 . 0.1003 0.0749 0.0799 0.0175  -0.0244
0.0003  1 .
5764 CD1   CD1   . LEU LEU LEU B B 319 319 . 0.1177 0.0795 0.1037 -0.0092 -0.0041
0.0067  1 .
5765 CD2   CD2   . LEU LEU LEU B B 319 319 . 0.1241 0.0886 0.0947 0.0159  0.0048  -
0.0141 1 .
5766 C     C     . LEU LEU LEU B B 319 319 . 0.0770 0.0891 0.0842 0.0111  -0.0063
0.0147  1 .
5767 O     O     . LEU LEU LEU B B 319 319 . 0.1209 0.0806 0.0958 0.0231  0.0226  -
0.0054 1 .
5768 N     N     . THR THR THR B B 320 320 . 0.0746 0.0728 0.0643 0.0022  0.0101
0.0087  1 .
5769 CA    CA    . THR THR THR B B 320 320 . 0.0922 0.0666 0.0899 0.0064  0.0078
0.0035  1 .
5770 CB    CB    . THR THR THR B B 320 320 . 0.0920 0.0882 0.0770 0.0124  -0.0155 -
0.0175 1 .
5771 OG1   OG1   . THR THR THR B B 320 320 . 0.1054 0.0959 0.0920 0.0086  -0.0026 -
0.0035 1 .
5772 CG2   CG2   . THR THR THR B B 320 320 . 0.0893 0.1243 0.0848 -0.0203 0.0049
0.0122  1 .
5773 C     C     . THR THR THR B B 320 320 . 0.0918 0.0794 0.0987 0.0163  0.0040
0.0140  1 .
5774 O     O     . THR THR THR B B 320 320 . 0.0924 0.1167 0.0875 0.0129  0.0057
0.0152  1 .
5775 N     N     . VAL VAL VAL B B 321 321 . 0.0893 0.0874 0.0637 0.0043  -0.0136
0.0094  1 .
5776 CA    CA    . VAL VAL VAL B B 321 321 . 0.0842 0.0788 0.0798 -0.0060 -0.0014 -
0.0125 1 .
5777 CB    CB    . VAL VAL VAL B B 321 321 . 0.1078 0.0811 0.1091 0.0051  -0.0140
0.0223  1 .
5778 CG1   CG1   . VAL VAL VAL B B 321 321 . 0.0876 0.1112 0.1019 0.0030  -0.0009
0.0126  1 .
5779 CG2   CG2   . VAL VAL VAL B B 321 321 . 0.1198 0.1299 0.1262 0.0447  -0.0355
0.0328  1 .
5780 C     C     . VAL VAL VAL B B 321 321 . 0.0848 0.0976 0.1058 -0.0020 0.0088
0.0044  1 .
5781 O     O     . VAL VAL VAL B B 321 321 . 0.1008 0.0953 0.0849 -0.0011 0.0027
0.0074  1 .
5782 N     N     . THR THR THR B B 322 322 . 0.0984 0.0940 0.0801 -0.0065 -0.0091
0.0077  1 .
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5783 CA    CA    . THR THR THR B B 322 322 . 0.0923 0.0941 0.0836 0.0032  -0.0028
0.0163  1 .
5784 CB    CB    . THR THR THR B B 322 322 . 0.0954 0.1141 0.0863 -0.0119 0.0238
0.0259  1 .
5785 OG1   OG1   . THR THR THR B B 322 322 . 0.1105 0.1043 0.1093 0.0234  0.0047
0.0103  1 .
5786 CG2   CG2   . THR THR THR B B 322 322 . 0.0915 0.1200 0.1216 -0.0224 0.0016  -
0.0002 1 .
5787 C     C     . THR THR THR B B 322 322 . 0.0937 0.0933 0.0896 0.0139  0.0130
0.0033  1 .
5788 O     O     . THR THR THR B B 322 322 . 0.1013 0.1156 0.1176 0.0000  -0.0018
0.0159  1 .
5789 N     N     . ASN ASN ASN B B 323 323 . 0.0935 0.1034 0.0997 0.0200  0.0044
0.0098  1 .
5790 CA    CA    . ASN ASN ASN B B 323 323 . 0.1145 0.1064 0.1116 0.0347  -0.0155
0.0081  1 .
5791 CB    CB    . ASN ASN ASN B B 323 323 . 0.1224 0.1002 0.1164 0.0403  -0.0190 -
0.0141 1 .
5792 CG    CG    . ASN ASN ASN B B 323 323 . 0.1311 0.1475 0.1333 0.0390  -0.0069 -
0.0315 1 .
5793 OD1   OD1   . ASN ASN ASN B B 323 323 . 0.2182 0.1441 0.1861 0.0666  -0.0497 -
0.0196 1 .
5794 ND2   ND2   . ASN ASN ASN B B 323 323 . 0.1594 0.1312 0.1271 0.0058  -0.0045 -
0.0194 1 .
5795 C     C     . ASN ASN ASN B B 323 323 . 0.0985 0.1038 0.1148 0.0157  -0.0035
0.0007  1 .
5796 O     O     . ASN ASN ASN B B 323 323 . 0.1109 0.1252 0.1117 0.0305  -0.0036
0.0129  1 .
5797 N     N     . PRO PRO PRO B B 324 324 . 0.1151 0.1252 0.1038 -0.0032 0.0046
0.0154  1 .
5798 CA    CA    . PRO PRO PRO B B 324 324 . 0.1088 0.1324 0.1228 -0.0113 -0.0062
0.0100  1 .
5799 CB    CB    . PRO PRO PRO B B 324 324 . 0.0871 0.1510 0.1245 -0.0019 -0.0141
0.0331  1 .
5800 CG    CG    . PRO PRO PRO B B 324 324 . 0.1318 0.1487 0.1507 -0.0091 -0.0254
0.0308  1 .
5801 CD    CD    . PRO PRO PRO B B 324 324 . 0.1008 0.1610 0.1241 -0.0141 0.0160
0.0227  1 .
5802 C     C     . PRO PRO PRO B B 324 324 . 0.1016 0.1349 0.1175 0.0012  -0.0017 -
0.0063 1 .
5803 O     O     . PRO PRO PRO B B 324 324 . 0.1204 0.1558 0.1287 0.0082  -0.0162
0.0122  1 .
5804 N     N     . LYS LYS LYS B B 325 325 . 0.1133 0.1210 0.1424 0.0183  -0.0032
0.0192  1 .
5805 CA    CA    . LYS LYS LYS B B 325 325 . 0.1395 0.1389 0.1544 0.0093  0.0135
0.0198  1 .
5806 CB    CB    . LYS LYS LYS B B 325 325 . 0.1579 0.1622 0.2152 0.0448  0.0049  -
0.0021 1 .
5807 CG    CG    . LYS LYS LYS B B 325 325 . 0.2400 0.2674 0.2914 0.0066  0.0203
0.0257  1 .
5808 CD    CD    . LYS LYS LYS B B 325 325 . 0.4494 0.3712 0.3977 -0.0010 -0.0226 -
0.0928 1 .
5809 CE    CE    . LYS LYS LYS B B 325 325 . 0.5931 0.4452 0.4445 -0.0289 -0.0279 -
0.0713 1 .
5810 NZ    NZ    . LYS LYS LYS B B 325 325 . 0.6992 0.5021 0.4844 -0.0583 -0.0257 -
0.0940 1 .
5811 C     C     . LYS LYS LYS B B 325 325 . 0.1375 0.1405 0.1516 0.0246  0.0101
0.0162  1 .
5812 O     O     . LYS LYS LYS B B 325 325 . 0.1551 0.1725 0.1406 0.0072  -0.0108
0.0364  1 .
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5813 N     N     . ARG ARG ARG B B 326 326 . 0.1039 0.1086 0.1289 0.0092  -0.0087
0.0098  1 .
5814 CA    CA    . ARG ARG ARG B B 326 326 . 0.1315 0.1218 0.1203 0.0046  -0.0015 -
0.0007 1 .
5815 CB    CB    . ARG ARG ARG B B 326 326 . 0.1513 0.1241 0.1646 0.0070  -0.0032 -
0.0270 1 .
5816 CG    CG    . ARG ARG ARG B B 326 326 . 0.2135 0.2178 0.1928 -0.0046 -0.0284 -
0.0734 1 .
5817 CD    CD    . ARG ARG ARG B B 326 326 . 0.1208 0.2035 0.3499 0.0046  0.0989  -
0.0733 1 .
5818 NE    NE    . ARG ARG ARG B B 326 326 . 0.0968 0.1227 0.1583 0.0189  0.0109  -
0.0331 1 .
5819 CZ    CZ    . ARG ARG ARG B B 326 326 . 0.1335 0.1098 0.1425 0.0115  -0.0033 -
0.0003 1 .
5820 NH1   NH1   . ARG ARG ARG B B 326 326 . 0.1959 0.1023 0.2260 0.0172  -0.0535 -
0.0050 1 .
5821 NH2   NH2   . ARG ARG ARG B B 326 326 . 0.1495 0.1317 0.1312 0.0225  0.0255
0.0019  1 .
5822 C     C     . ARG ARG ARG B B 326 326 . 0.1079 0.1117 0.1139 0.0000  0.0047
0.0090  1 .
5823 O     O     . ARG ARG ARG B B 326 326 . 0.1286 0.1116 0.1178 -0.0151 -0.0103
0.0077  1 .
5824 N     N     . ILE ILE ILE B B 327 327 . 0.1081 0.0958 0.1160 0.0201  -0.0068
0.0043  1 .
5825 CA    CA    . ILE ILE ILE B B 327 327 . 0.1143 0.1053 0.0988 0.0001  -0.0052
0.0141  1 .
5826 CB    CB    . ILE ILE ILE B B 327 327 . 0.1237 0.1040 0.1150 -0.0281 -0.0176
0.0194  1 .
5827 CG1   CG1   . ILE ILE ILE B B 327 327 . 0.1259 0.1236 0.1047 -0.0080 -0.0003
0.0297  1 .
5828 CD    CD    . ILE ILE ILE B B 327 327 . 0.1121 0.1742 0.1627 -0.0086 0.0205
0.0417  1 .
5829 CG2   CG2   . ILE ILE ILE B B 327 327 . 0.1508 0.1283 0.1617 -0.0078 0.0212  -
0.0108 1 .
5830 C     C     . ILE ILE ILE B B 327 327 . 0.1190 0.1176 0.1208 0.0035  -0.0119 -
0.0019 1 .
5831 O     O     . ILE ILE ILE B B 327 327 . 0.1268 0.1262 0.1210 0.0065  -0.0077
0.0132  1 .
5832 N     N     . GLU GLU GLU B B 328 328 . 0.1573 0.1443 0.1392 0.0100  -0.0163
0.0266  1 .
5833 CA    CA    . GLU GLU GLU B B 328 328 . 0.1565 0.1664 0.1345 0.0064  -0.0118
0.0238  1 .
5834 CB    CB    . GLU GLU GLU B B 328 328 . 0.1408 0.1850 0.1397 0.0082  -0.0396
0.0373  1 .
5835 CG    CG    . GLU GLU GLU B B 328 328 . 0.2404 0.2700 0.2485 -0.0077 -0.0278
0.0640  1 .
5836 CD    CD    . GLU GLU GLU B B 328 328 . 0.3811 0.5129 0.3543 -0.0034 -0.0558
0.0076  1 .
5837 OE1   OE1   . GLU GLU GLU B B 328 328 . 0.4158 0.6080 0.3644 0.0473  -0.0699
0.0333  1 .
5838 OE2   OE2   . GLU GLU GLU B B 328 328 . 0.3540 0.5589 0.4234 0.0153  -0.0656
0.0263  1 .
5839 C     C     . GLU GLU GLU B B 328 328 . 0.1452 0.1225 0.1314 0.0104  -0.0185
0.0075  1 .
5840 O     O     . GLU GLU GLU B B 328 328 . 0.1517 0.1478 0.1444 0.0224  -0.0111
0.0144  1 .
5841 N     N     . ARG ARG ARG B B 329 329 . 0.1393 0.1242 0.1309 0.0047  -0.0288
0.0303  1 .
5842 CA    CA    . ARG ARG ARG B B 329 329 . 0.1457 0.1103 0.1378 0.0043  -0.0023
0.0248  1 .
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5843 CB    CB    . ARG ARG ARG B B 329 329 . 0.1523 0.1072 0.1314 0.0069  -0.0029
0.0234  1 .
5844 CG    CG    . ARG ARG ARG B B 329 329 . 0.1509 0.1059 0.1487 0.0131  -0.0051
0.0092  1 .
5845 CD    CD    . ARG ARG ARG B B 329 329 . 0.1465 0.1356 0.1626 0.0114  0.0212  -
0.0019 1 .
5846 NE    NE    . ARG ARG ARG B B 329 329 . 0.1529 0.1260 0.1894 -0.0075 -0.0126
0.0199  1 .
5847 CZ    CZ    . ARG ARG ARG B B 329 329 . 0.1659 0.1473 0.1456 0.0065  -0.0124
0.0312  1 .
5848 NH1   NH1   . ARG ARG ARG B B 329 329 . 0.1703 0.1481 0.1672 0.0425  -0.0129 -
0.0080 1 .
5849 NH2   NH2   . ARG ARG ARG B B 329 329 . 0.1568 0.1379 0.1800 0.0268  0.0016
0.0278  1 .
5850 C     C     . ARG ARG ARG B B 329 329 . 0.1332 0.1101 0.1181 0.0092  0.0142
0.0286  1 .
5851 O     O     . ARG ARG ARG B B 329 329 . 0.1461 0.1231 0.1071 0.0256  -0.0064
0.0265  1 .
5852 N     N     . ALA ALA ALA B B 330 330 . 0.1366 0.1207 0.1160 0.0234  -0.0108
0.0033  1 .
5853 CA    CA    . ALA ALA ALA B B 330 330 . 0.1152 0.1154 0.1195 0.0110  -0.0112
0.0094  1 .
5854 CB    CB    . ALA ALA ALA B B 330 330 . 0.1092 0.1172 0.0861 0.0111  -0.0341
0.0090  1 .
5855 C     C     . ALA ALA ALA B B 330 330 . 0.1199 0.1152 0.1341 0.0017  -0.0044 -
0.0111 1 .
5856 O     O     . ALA ALA ALA B B 330 330 . 0.1402 0.1559 0.1060 0.0107  -0.0183 -
0.0011 1 .
5857 N     N     . VAL VAL VAL B B 331 331 . 0.1307 0.1082 0.1185 0.0147  -0.0223
0.0054  1 .
5858 CA    CA    . VAL VAL VAL B B 331 331 . 0.1389 0.1343 0.1283 -0.0050 -0.0105 -
0.0086 1 .
5859 CB    CB    . VAL VAL VAL B B 331 331 . 0.1405 0.1578 0.1336 -0.0238 -0.0106
0.0065  1 .
5860 CG1   CG1   . VAL VAL VAL B B 331 331 . 0.1997 0.1603 0.1719 -0.0009 -0.0033 -
0.0264 1 .
5861 CG2   CG2   . VAL VAL VAL B B 331 331 . 0.1603 0.1328 0.1361 -0.0379 -0.0082
0.0046  1 .
5862 C     C     . VAL VAL VAL B B 331 331 . 0.1418 0.1545 0.1348 -0.0011 -0.0220 -
0.0113 1 .
5863 O     O     . VAL VAL VAL B B 331 331 . 0.1463 0.1797 0.1530 -0.0067 -0.0141 -
0.0151 1 .
5864 N     N     . GLU GLU GLU B B 332 332 . 0.1507 0.1551 0.1271 -0.0100 -0.0378
0.0074  1 .
5865 CA    CA    . GLU GLU GLU B B 332 332 . 0.1693 0.1412 0.1298 0.0069  -0.0230
0.0319  1 .
5866 CB    CB    . GLU GLU GLU B B 332 332 . 0.1986 0.1642 0.1454 0.0289  0.0067
0.0588  1 .
5867 CG    CG    . GLU GLU GLU B B 332 332 . 0.2903 0.2646 0.2860 0.0364  -0.0113
0.0927  1 .
5868 CD    CD    . GLU GLU GLU B B 332 332 . 0.4686 0.3835 0.5243 0.0364  -0.0032
0.0412  1 .
5869 OE1   OE1   . GLU GLU GLU B B 332 332 . 0.5385 0.5370 0.6578 0.0659  0.0062
0.0352  1 .
5870 OE2   OE2   . GLU GLU GLU B B 332 332 . 0.5045 0.4684 0.6174 0.1411  0.0120
0.0113  1 .
5871 C     C     . GLU GLU GLU B B 332 332 . 0.1616 0.1678 0.1423 0.0319  -0.0172
0.0160  1 .
5872 O     O     . GLU GLU GLU B B 332 332 . 0.1863 0.2321 0.1540 0.0200  -0.0313
0.0341  1 .
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5873 N     N     . GLU GLU GLU B B 333 333 . 0.1445 0.1202 0.1439 0.0164  -0.0237
0.0266  1 .
5874 CA    CA    . GLU GLU GLU B B 333 333 . 0.1426 0.1387 0.1547 0.0348  -0.0058
0.0122  1 .
5875 CB    CB    . GLU GLU GLU B B 333 333 . 0.1682 0.1207 0.1701 0.0261  0.0166  -
0.0069 1 .
5876 CG    CG    . GLU GLU GLU B B 333 333 . 0.2047 0.1309 0.1905 0.0456  -0.0308
0.0030  1 .
5877 CD    CD    . GLU GLU GLU B B 333 333 . 0.1793 0.1941 0.1560 -0.0137 0.0165
0.0058  1 .
5878 OE1   OE1   . GLU GLU GLU B B 333 333 . 0.2309 0.1461 0.1697 0.0098  0.0013
0.0043  1 .
5879 OE2   OE2   . GLU GLU GLU B B 333 333 . 0.2016 0.1784 0.1781 0.0312  -0.0134 -
0.0014 1 .
5880 C     C     . GLU GLU GLU B B 333 333 . 0.1455 0.1318 0.1084 0.0147  -0.0082
0.0125  1 .
5881 O     O     . GLU GLU GLU B B 333 333 . 0.1588 0.1369 0.1462 -0.0015 0.0010  -
0.0045 1 .
5882 N     N     . LYS LYS LYS B B 334 334 . 0.1492 0.1387 0.0876 0.0150  -0.0149
0.0082  1 .
5883 CA    CA    . LYS LYS LYS B B 334 334 . 0.1228 0.1427 0.1065 0.0229  0.0096  -
0.0154 1 .
5884 CB    CB    . LYS LYS LYS B B 334 334 . 0.1434 0.1382 0.0924 0.0026  -0.0016 -
0.0087 1 .
5885 CG    CG    . LYS LYS LYS B B 334 334 . 0.1857 0.2148 0.1732 0.0004  -0.0211 -
0.0081 1 .
5886 CD    CD    . LYS LYS LYS B B 334 334 . 0.2115 0.2921 0.1365 -0.0022 -0.0441 -
0.0515 1 .
5887 CE    CE    . LYS LYS LYS B B 334 334 . 0.3559 0.3704 0.3289 -0.0947 -0.0795 -
0.0647 1 .
5888 NZ    NZ    . LYS LYS LYS B B 334 334 . 0.4131 0.3940 0.4580 -0.1139 -0.0569 -
0.0523 1 .
5889 C     C     . LYS LYS LYS B B 334 334 . 0.1215 0.0999 0.1019 -0.0078 0.0016  -
0.0135 1 .
5890 O     O     . LYS LYS LYS B B 334 334 . 0.1305 0.1135 0.1062 -0.0060 -0.0013 -
0.0079 1 .
5891 N     N     . ALA ALA ALA B B 335 335 . 0.1164 0.1221 0.0949 -0.0108 -0.0115 -
0.0005 1 .
5892 CA    CA    . ALA ALA ALA B B 335 335 . 0.1159 0.1046 0.0947 0.0136  -0.0281 -
0.0015 1 .
5893 CB    CB    . ALA ALA ALA B B 335 335 . 0.1458 0.1297 0.1183 0.0125  0.0096  -
0.0155 1 .
5894 C     C     . ALA ALA ALA B B 335 335 . 0.1162 0.1042 0.0833 0.0043  -0.0027 -
0.0032 1 .
5895 O     O     . ALA ALA ALA B B 335 335 . 0.1277 0.1052 0.1124 0.0076  -0.0169 -
0.0174 1 .
5896 N     N     . CYS CYS CYS B B 336 336 . 0.1299 0.1007 0.0879 -0.0057 -0.0028
0.0011  1 .
5897 CA    CA    . CYS CYS CYS B B 336 336 . 0.1006 0.0824 0.0728 -0.0150 -0.0119
0.0155  1 .
5898 CB    CB    . CYS CYS CYS B B 336 336 . 0.1096 0.0839 0.0978 -0.0083 0.0009
0.0167  1 .
5899 SG    SG    . CYS CYS CYS B B 336 336 . 0.1407 0.1138 0.1229 0.0037  0.0010
0.0025  1 .
5900 C     C     . CYS CYS CYS B B 336 336 . 0.1073 0.0885 0.0863 0.0067  -0.0227
0.0087  1 .
5901 O     O     . CYS CYS CYS B B 336 336 . 0.1553 0.1107 0.1363 0.0033  -0.0376
0.0080  1 .
5902 N     N     . ASN ASN ASN B B 337 337 . 0.1020 0.0899 0.1033 -0.0062 0.0032
0.0093  1 .
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5903 CA    CA    . ASN ASN ASN B B 337 337 . 0.1156 0.0646 0.0846 0.0025  0.0012  -
0.0114 1 .
5904 CB    CB    . ASN ASN ASN B B 337 337 . 0.1083 0.0965 0.0861 0.0225  0.0039  -
0.0220 1 .
5905 CG    CG    . ASN ASN ASN B B 337 337 . 0.1237 0.0734 0.0852 0.0227  0.0019  -
0.0112 1 .
5906 OD1   OD1   . ASN ASN ASN B B 337 337 . 0.1277 0.1005 0.0908 0.0167  -0.0046 -
0.0026 1 .
5907 ND2   ND2   . ASN ASN ASN B B 337 337 . 0.1516 0.1456 0.1265 0.0045  0.0234  -
0.0222 1 .
5908 C     C     . ASN ASN ASN B B 337 337 . 0.0997 0.1047 0.0935 -0.0017 -0.0027 -
0.0129 1 .
5909 O     O     . ASN ASN ASN B B 337 337 . 0.1435 0.1209 0.1259 -0.0135 0.0018
0.0036  1 .
5910 N     N     . CYS CYS CYS B B 338 338 . 0.0997 0.1174 0.0881 0.0085  0.0080  -
0.0081 1 .
5911 CA    CA    . CYS CYS CYS B B 338 338 . 0.1150 0.0984 0.0884 -0.0018 0.0018
0.0037  1 .
5912 CB    CB    . CYS CYS CYS B B 338 338 . 0.1316 0.0863 0.0756 0.0198  -0.0244
0.0261  1 .
5913 SG    SG    . CYS CYS CYS B B 338 338 . 0.1310 0.1273 0.1297 -0.0028 -0.0148
0.0161  1 .
5914 C     C     . CYS CYS CYS B B 338 338 . 0.1177 0.0877 0.0947 -0.0064 -0.0009
0.0046  1 .
5915 O     O     . CYS CYS CYS B B 338 338 . 0.1183 0.0923 0.1018 -0.0202 0.0020
0.0015  1 .
5916 N     N     . LEU LEU LEU B B 339 339 . 0.0905 0.0863 0.0702 0.0140  -0.0021
0.0007  1 .
5917 CA    CA    . LEU LEU LEU B B 339 339 . 0.0925 0.0980 0.0818 0.0121  0.0091
0.0132  1 .
5918 CB    CB    . LEU LEU LEU B B 339 339 . 0.0917 0.1196 0.0812 -0.0102 -0.0032 -
0.0133 1 .
5919 CG    CG    . LEU LEU LEU B B 339 339 . 0.0914 0.0875 0.0961 0.0043  -0.0063 -
0.0138 1 .
5920 CD1   CD1   . LEU LEU LEU B B 339 339 . 0.1425 0.0958 0.0944 0.0065  -0.0160 -
0.0250 1 .
5921 CD2   CD2   . LEU LEU LEU B B 339 339 . 0.0951 0.1305 0.1318 0.0011  0.0157  -
0.0021 1 .
5922 C     C     . LEU LEU LEU B B 339 339 . 0.1225 0.1066 0.0736 -0.0038 0.0124  -
0.0031 1 .
5923 O     O     . LEU LEU LEU B B 339 339 . 0.1241 0.1036 0.0831 -0.0085 -0.0122 -
0.0013 1 .
5924 N     N     . LEU LEU LEU B B 340 340 . 0.0941 0.0961 0.0679 0.0047  -0.0143
0.0134  1 .
5925 CA    CA    . LEU LEU LEU B B 340 340 . 0.1015 0.0841 0.0799 -0.0104 -0.0032
0.0148  1 .
5926 CB    CB    . LEU LEU LEU B B 340 340 . 0.0824 0.0684 0.0797 -0.0120 -0.0331
0.0123  1 .
5927 CG    CG    . LEU LEU LEU B B 340 340 . 0.0966 0.0653 0.1045 0.0111  -0.0248 -
0.0065 1 .
5928 CD1   CD1   . LEU LEU LEU B B 340 340 . 0.1117 0.0894 0.1089 0.0244  -0.0075
0.0082  1 .
5929 CD2   CD2   . LEU LEU LEU B B 340 340 . 0.0852 0.0812 0.1367 -0.0135 0.0006  -
0.0394 1 .
5930 C     C     . LEU LEU LEU B B 340 340 . 0.0975 0.0874 0.0859 0.0176  -0.0015
0.0101  1 .
5931 O     O     . LEU LEU LEU B B 340 340 . 0.1180 0.0962 0.0974 0.0016  -0.0004
0.0065  1 .
5932 N     N     . LEU LEU LEU B B 341 341 . 0.0742 0.0880 0.0806 0.0001  0.0056
0.0114  1 .
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5933 CA    CA    . LEU LEU LEU B B 341 341 . 0.0995 0.1006 0.0769 -0.0043 0.0073  -
0.0041 1 .
5934 CB    CB    . LEU LEU LEU B B 341 341 . 0.0844 0.0745 0.1271 0.0077  0.0198  -
0.0103 1 .
5935 CG    CG    . LEU LEU LEU B B 341 341 . 0.0952 0.1072 0.1289 0.0141  -0.0041
0.0298  1 .
5936 CD1   CD1   . LEU LEU LEU B B 341 341 . 0.1633 0.1740 0.1618 0.0081  -0.0430
0.0366  1 .
5937 CD2   CD2   . LEU LEU LEU B B 341 341 . 0.1438 0.1429 0.1852 -0.0230 0.0024
0.0181  1 .
5938 C     C     . LEU LEU LEU B B 341 341 . 0.1167 0.0919 0.0749 0.0044  0.0028
0.0033  1 .
5939 O     O     . LEU LEU LEU B B 341 341 . 0.1084 0.0990 0.0916 0.0242  0.0077  -
0.0035 1 .
5940 N     N     . LYS LYS LYS B B 342 342 . 0.1077 0.0810 0.0734 0.0032  -0.0010
0.0038  1 .
5941 CA    CA    . LYS LYS LYS B B 342 342 . 0.1162 0.1049 0.0874 -0.0080 0.0001
0.0095  1 .
5942 CB    CB    . LYS LYS LYS B B 342 342 . 0.1135 0.1007 0.0866 0.0010  -0.0125 -
0.0185 1 .
5943 CG    CG    . LYS LYS LYS B B 342 342 . 0.0974 0.1267 0.1048 0.0107  -0.0119 -
0.0040 1 .
5944 CD    CD    . LYS LYS LYS B B 342 342 . 0.1027 0.1207 0.1291 -0.0084 0.0273
0.0075  1 .
5945 CE    CE    . LYS LYS LYS B B 342 342 . 0.1349 0.1287 0.1445 0.0133  0.0090
0.0256  1 .
5946 NZ    NZ    . LYS LYS LYS B B 342 342 . 0.1352 0.1642 0.1386 -0.0104 -0.0020 -
0.0261 1 .
5947 C     C     . LYS LYS LYS B B 342 342 . 0.1255 0.0958 0.1002 0.0099  0.0072
0.0079  1 .
5948 O     O     . LYS LYS LYS B B 342 342 . 0.1253 0.1109 0.0970 0.0263  0.0008
0.0050  1 .
5949 N     N     . VAL VAL VAL B B 343 343 . 0.1187 0.1172 0.1085 -0.0002 -0.0038
0.0147  1 .
5950 CA    CA    . VAL VAL VAL B B 343 343 . 0.1154 0.1074 0.1190 -0.0057 0.0002
0.0180  1 .
5951 CB    CB    . VAL VAL VAL B B 343 343 . 0.1146 0.1216 0.1240 -0.0134 -0.0033
0.0255  1 .
5952 CG1   CG1   . VAL VAL VAL B B 343 343 . 0.2012 0.1327 0.1499 0.0165  0.0018  -
0.0204 1 .
5953 CG2   CG2   . VAL VAL VAL B B 343 343 . 0.1406 0.1273 0.1177 -0.0012 -0.0132
0.0235  1 .
5954 C     C     . VAL VAL VAL B B 343 343 . 0.1103 0.1120 0.1146 0.0117  0.0028
0.0056  1 .
5955 O     O     . VAL VAL VAL B B 343 343 . 0.1003 0.1136 0.1200 0.0150  -0.0023 -
0.0115 1 .
5956 N     N     . ASN ASN ASN B B 344 344 . 0.1112 0.0997 0.1047 0.0100  0.0001
0.0012  1 .
5957 CA    CA    . ASN ASN ASN B B 344 344 . 0.1187 0.0937 0.0918 0.0178  -0.0178
0.0076  1 .
5958 CB    CB    . ASN ASN ASN B B 344 344 . 0.0989 0.1227 0.0922 0.0029  -0.0166
0.0085  1 .
5959 CG    CG    . ASN ASN ASN B B 344 344 . 0.1127 0.0658 0.0729 0.0019  0.0041
0.0219  1 .
5960 OD1   OD1   . ASN ASN ASN B B 344 344 . 0.1000 0.0936 0.1135 0.0183  0.0164  -
0.0135 1 .
5961 ND2   ND2   . ASN ASN ASN B B 344 344 . 0.1334 0.1093 0.1221 -0.0010 -0.0416
0.0086  1 .
5962 C     C     . ASN ASN ASN B B 344 344 . 0.0935 0.0918 0.0979 0.0035  0.0052  -
0.0050 1 .
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5963 O     O     . ASN ASN ASN B B 344 344 . 0.1332 0.0932 0.0978 0.0126  0.0101  -
0.0003 1 .
5964 N     N     . GLN GLN GLN B B 345 345 . 0.0950 0.0832 0.0841 0.0128  0.0066
0.0238  1 .
5965 CA    CA    . GLN GLN GLN B B 345 345 . 0.1032 0.0770 0.1008 0.0185  0.0308
0.0251  1 .
5966 CB    CB    . GLN GLN GLN B B 345 345 . 0.0755 0.1022 0.0866 0.0070  0.0300
0.0006  1 .
5967 CG    CG    . GLN GLN GLN B B 345 345 . 0.0883 0.0795 0.0779 0.0008  0.0038
0.0184  1 .
5968 CD    CD    . GLN GLN GLN B B 345 345 . 0.1043 0.1087 0.1001 0.0139  -0.0074 -
0.0036 1 .
5969 OE1   OE1   . GLN GLN GLN B B 345 345 . 0.1513 0.1308 0.1366 -0.0013 0.0020  -
0.0023 1 .
5970 NE2   NE2   . GLN GLN GLN B B 345 345 . 0.0652 0.0552 0.0673 0.0239  -0.0084
0.0097  1 .
5971 C     C     . GLN GLN GLN B B 345 345 . 0.0929 0.0789 0.0933 -0.0072 0.0062  -
0.0005 1 .
5972 O     O     . GLN GLN GLN B B 345 345 . 0.1235 0.1033 0.1053 0.0044  -0.0099
0.0054  1 .
5973 N     N     . ILE ILE ILE B B 346 346 . 0.0740 0.1022 0.1110 0.0108  0.0060  -
0.0015 1 .
5974 CA    CA    . ILE ILE ILE B B 346 346 . 0.1045 0.1124 0.1118 0.0240  -0.0018
0.0040  1 .
5975 CB    CB    . ILE ILE ILE B B 346 346 . 0.1400 0.1144 0.1157 0.0150  -0.0394
0.0041  1 .
5976 CG1   CG1   . ILE ILE ILE B B 346 346 . 0.1034 0.1342 0.1211 0.0256  -0.0186
0.0291  1 .
5977 CD    CD    . ILE ILE ILE B B 346 346 . 0.1329 0.1356 0.1583 -0.0059 0.0053
0.0026  1 .
5978 CG2   CG2   . ILE ILE ILE B B 346 346 . 0.1011 0.0833 0.1192 0.0187  0.0041  -
0.0149 1 .
5979 C     C     . ILE ILE ILE B B 346 346 . 0.0860 0.0837 0.0969 0.0147  0.0010
0.0075  1 .
5980 O     O     . ILE ILE ILE B B 346 346 . 0.1270 0.1136 0.1138 0.0247  0.0072
0.0118  1 .
5981 N     N     . GLY GLY GLY B B 347 347 . 0.1140 0.1218 0.1087 0.0134  0.0144
0.0151  1 .
5982 CA    CA    . GLY GLY GLY B B 347 347 . 0.1119 0.1325 0.1115 0.0130  0.0187  -
0.0031 1 .
5983 C     C     . GLY GLY GLY B B 347 347 . 0.1174 0.1017 0.0995 -0.0002 0.0114  -
0.0017 1 .
5984 O     O     . GLY GLY GLY B B 347 347 . 0.1070 0.1339 0.1246 0.0104  0.0148  -
0.0112 1 .
5985 N     N     . SER SER SER B B 348 348 . 0.0891 0.1005 0.1090 -0.0007 0.0108
0.0004  1 .
5986 CA    CA    . SER SER SER B B 348 348 . 0.1083 0.1038 0.1299 -0.0015 0.0024
0.0015  1 .
5987 CB    CB    . SER SER SER B B 348 348 . 0.1011 0.1362 0.1131 0.0157  -0.0058
0.0113  1 .
5988 OG    OG    . SER SER SER B B 348 348 . 0.1244 0.1319 0.1424 0.0139  -0.0204
0.0149  1 .
5989 C     C     . SER SER SER B B 348 348 . 0.1085 0.0983 0.1051 0.0094  0.0024
0.0072  1 .
5990 O     O     . SER SER SER B B 348 348 . 0.1074 0.1166 0.1135 0.0094  0.0004
0.0168  1 .
5991 N     N     . VAL VAL VAL B B 349 349 . 0.1304 0.1028 0.1127 0.0050  -0.0112
0.0106  1 .
5992 CA    CA    . VAL VAL VAL B B 349 349 . 0.1316 0.1125 0.1121 0.0061  -0.0008 -
0.0006 1 .
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5993 CB    CB    . VAL VAL VAL B B 349 349 . 0.1244 0.1140 0.1194 0.0073  -0.0064
0.0184  1 .
5994 CG1   CG1   . VAL VAL VAL B B 349 349 . 0.1526 0.1578 0.1859 -0.0047 -0.0204 -
0.0163 1 .
5995 CG2   CG2   . VAL VAL VAL B B 349 349 . 0.1792 0.1182 0.1064 0.0096  0.0045
0.0084  1 .
5996 C     C     . VAL VAL VAL B B 349 349 . 0.1016 0.1298 0.1203 0.0080  0.0024
0.0115  1 .
5997 O     O     . VAL VAL VAL B B 349 349 . 0.1243 0.1372 0.1237 0.0281  -0.0160
0.0113  1 .
5998 N     N     . THR THR THR B B 350 350 . 0.1156 0.1208 0.1365 0.0145  -0.0042
0.0002  1 .
5999 CA    CA    . THR THR THR B B 350 350 . 0.1189 0.1429 0.1327 0.0100  0.0086
0.0110  1 .
6000 CB    CB    . THR THR THR B B 350 350 . 0.1125 0.1379 0.1414 0.0159  0.0023
0.0248  1 .
6001 OG1   OG1   . THR THR THR B B 350 350 . 0.1112 0.1681 0.1532 0.0027  0.0023
0.0213  1 .
6002 CG2   CG2   . THR THR THR B B 350 350 . 0.1713 0.1830 0.1740 0.0320  -0.0017
0.0374  1 .
6003 C     C     . THR THR THR B B 350 350 . 0.1242 0.1168 0.1247 0.0077  -0.0063
0.0063  1 .
6004 O     O     . THR THR THR B B 350 350 . 0.1250 0.1382 0.1284 0.0108  0.0177
0.0112  1 .
6005 N     N     . GLU GLU GLU B B 351 351 . 0.1014 0.1170 0.1274 -0.0079 -0.0121
0.0109  1 .
6006 CA    CA    . GLU GLU GLU B B 351 351 . 0.1101 0.1190 0.1211 0.0059  -0.0127
0.0037  1 .
6007 CB    CB    . GLU GLU GLU B B 351 351 . 0.1047 0.1107 0.1415 0.0046  0.0061  -
0.0070 1 .
6008 CG    CG    . GLU GLU GLU B B 351 351 . 0.1265 0.1235 0.1485 0.0033  0.0322
0.0032  1 .
6009 CD    CD    . GLU GLU GLU B B 351 351 . 0.1212 0.1480 0.1341 0.0055  -0.0091
0.0060  1 .
6010 OE1   OE1   . GLU GLU GLU B B 351 351 . 0.1535 0.1447 0.1369 0.0150  -0.0026 -
0.0079 1 .
6011 OE2   OE2   . GLU GLU GLU B B 351 351 . 0.1810 0.1656 0.2090 0.0111  0.0050
0.0455  1 .
6012 C     C     . GLU GLU GLU B B 351 351 . 0.1293 0.1332 0.1324 0.0000  0.0048
0.0156  1 .
6013 O     O     . GLU GLU GLU B B 351 351 . 0.1272 0.1354 0.1090 0.0041  -0.0083 -
0.0053 1 .
6014 N     N     . ALA ALA ALA B B 352 352 . 0.1040 0.1337 0.1310 0.0039  -0.0124
0.0069  1 .
6015 CA    CA    . ALA ALA ALA B B 352 352 . 0.1116 0.1108 0.1127 0.0216  -0.0107
0.0050  1 .
6016 CB    CB    . ALA ALA ALA B B 352 352 . 0.1352 0.1167 0.1002 0.0175  -0.0037 -
0.0112 1 .
6017 C     C     . ALA ALA ALA B B 352 352 . 0.1144 0.1036 0.1268 0.0131  0.0000
0.0129  1 .
6018 O     O     . ALA ALA ALA B B 352 352 . 0.1176 0.1410 0.1065 0.0122  -0.0074
0.0037  1 .
6019 N     N     . ILE ILE ILE B B 353 353 . 0.1171 0.1391 0.1302 -0.0168 -0.0012 -
0.0005 1 .
6020 CA    CA    . ILE ILE ILE B B 353 353 . 0.1165 0.1210 0.1041 -0.0113 0.0020
0.0101  1 .
6021 CB    CB    . ILE ILE ILE B B 353 353 . 0.1136 0.1465 0.1294 -0.0130 -0.0011
0.0020  1 .
6022 CG1   CG1   . ILE ILE ILE B B 353 353 . 0.1431 0.1485 0.1645 -0.0432 -0.0163
0.0113  1 .
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6023 CD    CD    . ILE ILE ILE B B 353 353 . 0.1861 0.1714 0.1862 -0.0838 0.0054
0.0040  1 .
6024 CG2   CG2   . ILE ILE ILE B B 353 353 . 0.1316 0.1580 0.1833 -0.0389 -0.0088 -
0.0272 1 .
6025 C     C     . ILE ILE ILE B B 353 353 . 0.1242 0.1149 0.1257 0.0078  0.0021
0.0158  1 .
6026 O     O     . ILE ILE ILE B B 353 353 . 0.1285 0.1327 0.1201 0.0173  -0.0218
0.0004  1 .
6027 N     N     . GLN GLN GLN B B 354 354 . 0.1012 0.1209 0.1283 -0.0079 0.0049
0.0011  1 .
6028 CA    CA    . GLN GLN GLN B B 354 354 . 0.1340 0.1270 0.1191 0.0007  -0.0013
0.0033  1 .
6029 CB    CB    . GLN GLN GLN B B 354 354 . 0.1371 0.1290 0.1670 0.0257  -0.0083
0.0337  1 .
6030 CG    CG    . GLN GLN GLN B B 354 354 . 0.2547 0.2469 0.2497 0.0489  0.0127
0.0398  1 .
6031 CD    CD    . GLN GLN GLN B B 354 354 . 0.3361 0.2981 0.3624 0.0780  -0.0093
0.0186  1 .
6032 OE1   OE1   . GLN GLN GLN B B 354 354 . 0.3680 0.4618 0.4283 0.1650  -0.0146 -
0.0352 1 .
6033 NE2   NE2   . GLN GLN GLN B B 354 354 . 0.3385 0.3436 0.3240 0.0223  -0.0228
0.0423  1 .
6034 C     C     . GLN GLN GLN B B 354 354 . 0.1516 0.1476 0.1493 -0.0002 -0.0169
0.0089  1 .
6035 O     O     . GLN GLN GLN B B 354 354 . 0.1199 0.1560 0.1385 -0.0012 -0.0128
0.0151  1 .
6036 N     N     . ALA ALA ALA B B 355 355 . 0.1223 0.1252 0.1350 0.0158  -0.0184
0.0072  1 .
6037 CA    CA    . ALA ALA ALA B B 355 355 . 0.1260 0.1104 0.1323 0.0097  -0.0028 -
0.0014 1 .
6038 CB    CB    . ALA ALA ALA B B 355 355 . 0.1073 0.1115 0.1017 0.0334  -0.0223 -
0.0093 1 .
6039 C     C     . ALA ALA ALA B B 355 355 . 0.1042 0.1243 0.1054 0.0058  0.0249
0.0132  1 .
6040 O     O     . ALA ALA ALA B B 355 355 . 0.1163 0.1283 0.0953 -0.0037 -0.0151
0.0092  1 .
6041 N     N     . CYS CYS CYS B B 356 356 . 0.1113 0.1054 0.1254 -0.0012 -0.0095
0.0062  1 .
6042 CA    CA    . CYS CYS CYS B B 356 356 . 0.1159 0.1157 0.1030 0.0034  0.0000
0.0141  1 .
6043 CB    CB    . CYS CYS CYS B B 356 356 . 0.1223 0.1245 0.1417 0.0022  0.0240
0.0095  1 .
6044 SG    SG    . CYS CYS CYS B B 356 356 . 0.1584 0.1325 0.1342 0.0000  -0.0071
0.0154  1 .
6045 C     C     . CYS CYS CYS B B 356 356 . 0.1402 0.1244 0.1397 0.0161  0.0021  -
0.0030 1 .
6046 O     O     . CYS CYS CYS B B 356 356 . 0.1494 0.1224 0.1187 0.0222  -0.0044
0.0183  1 .
6047 N     N     . LYS LYS LYS B B 357 357 . 0.1219 0.1222 0.1193 -0.0040 -0.0320 -
0.0018 1 .
6048 CA    CA    . LYS LYS LYS B B 357 357 . 0.1422 0.1754 0.1374 -0.0009 -0.0174 -
0.0067 1 .
6049 CB    CB    . LYS LYS LYS B B 357 357 . 0.1336 0.1752 0.1346 -0.0178 -0.0166
0.0160  1 .
6050 CG    CG    . LYS LYS LYS B B 357 357 . 0.1733 0.1952 0.2217 -0.0465 -0.0164
0.0402  1 .
6051 CD    CD    . LYS LYS LYS B B 357 357 . 0.2279 0.2896 0.2738 -0.0580 -0.0254
0.0250  1 .
6052 CE    CE    . LYS LYS LYS B B 357 357 . 0.2825 0.4159 0.3329 -0.0718 -0.1055
0.0651  1 .
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6053 NZ    NZ    . LYS LYS LYS B B 357 357 . 0.3120 0.4319 0.3663 -0.0846 -0.0830
0.0755  1 .
6054 C     C     . LYS LYS LYS B B 357 357 . 0.1427 0.1191 0.1250 0.0215  -0.0259 -
0.0023 1 .
6055 O     O     . LYS LYS LYS B B 357 357 . 0.1751 0.1761 0.1307 -0.0059 -0.0246
0.0103  1 .
6056 N     N     . LEU LEU LEU B B 358 358 . 0.1130 0.1354 0.1482 0.0126  -0.0172
0.0128  1 .
6057 CA    CA    . LEU LEU LEU B B 358 358 . 0.1644 0.1369 0.1340 0.0083  -0.0117
0.0121  1 .
6058 CB    CB    . LEU LEU LEU B B 358 358 . 0.1585 0.1483 0.1567 -0.0067 -0.0185
0.0174  1 .
6059 CG    CG    . LEU LEU LEU B B 358 358 . 0.1517 0.1620 0.1601 0.0119  -0.0376
0.0220  1 .
6060 CD1   CD1   . LEU LEU LEU B B 358 358 . 0.2425 0.2044 0.2100 0.0018  -0.1274 -
0.0058 1 .
6061 CD2   CD2   . LEU LEU LEU B B 358 358 . 0.2184 0.1602 0.2005 -0.0033 -0.0131 -
0.0296 1 .
6062 C     C     . LEU LEU LEU B B 358 358 . 0.1638 0.1528 0.1380 0.0060  -0.0197
0.0101  1 .
6063 O     O     . LEU LEU LEU B B 358 358 . 0.1643 0.1820 0.1155 0.0103  -0.0253
0.0043  1 .
6064 N     N     . ALA ALA ALA B B 359 359 . 0.1152 0.1288 0.1277 0.0143  -0.0198
0.0003  1 .
6065 CA    CA    . ALA ALA ALA B B 359 359 . 0.1301 0.1400 0.1246 0.0113  -0.0260
0.0020  1 .
6066 CB    CB    . ALA ALA ALA B B 359 359 . 0.1252 0.1532 0.0995 0.0238  -0.0298
0.0015  1 .
6067 C     C     . ALA ALA ALA B B 359 359 . 0.1485 0.1189 0.1160 -0.0008 0.0063  -
0.0025 1 .
6068 O     O     . ALA ALA ALA B B 359 359 . 0.1550 0.1655 0.1106 0.0095  -0.0200
0.0027  1 .
6069 N     N     . GLN GLN GLN B B 360 360 . 0.1487 0.1270 0.1210 0.0007  -0.0064
0.0072  1 .
6070 CA    CA    . GLN GLN GLN B B 360 360 . 0.1471 0.1397 0.1384 0.0042  -0.0070
0.0011  1 .
6071 CB    CB    . GLN GLN GLN B B 360 360 . 0.1579 0.1206 0.1420 -0.0120 -0.0274 -
0.0021 1 .
6072 CG    CG    . GLN GLN GLN B B 360 360 . 0.1938 0.1562 0.1670 -0.0086 -0.0383
0.0104  1 .
6073 CD    CD    . GLN GLN GLN B B 360 360 . 0.1768 0.1533 0.1596 0.0064  -0.0078 -
0.0024 1 .
6074 OE1   OE1   . GLN GLN GLN B B 360 360 . 0.2035 0.1750 0.1670 -0.0010 0.0060
0.0169  1 .
6075 NE2   NE2   . GLN GLN GLN B B 360 360 . 0.1958 0.1590 0.1848 0.0111  -0.0340 -
0.0247 1 .
6076 C     C     . GLN GLN GLN B B 360 360 . 0.1586 0.1480 0.1379 -0.0065 -0.0065 -
0.0067 1 .
6077 O     O     . GLN GLN GLN B B 360 360 . 0.1791 0.1686 0.1317 0.0000  -0.0261 -
0.0266 1 .
6078 N     N     . GLU GLU GLU B B 361 361 . 0.1383 0.1566 0.1249 -0.0192 -0.0190 -
0.0014 1 .
6079 CA    CA    . GLU GLU GLU B B 361 361 . 0.1673 0.1943 0.1359 -0.0209 -0.0242
0.0003  1 .
6080 CB    CB    . GLU GLU GLU B B 361 361 . 0.1368 0.2943 0.1624 -0.0158 -0.0249
0.0176  1 .
6081 CG    CG    . GLU GLU GLU B B 361 361 . 0.2834 0.3495 0.3333 -0.0200 -0.0247
0.0385  1 .
6082 CD    CD    . GLU GLU GLU B B 361 361 . 0.3974 0.4948 0.4880 0.0174  0.0050
0.0263  1 .
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6083 OE1   OE1   . GLU GLU GLU B B 361 361 . 0.3571 0.5142 0.6017 0.1068  -0.0734
0.0850  1 .
6084 OE2   OE2   . GLU GLU GLU B B 361 361 . 0.4243 0.5903 0.4944 -0.0290 -0.0212
0.0684  1 .
6085 C     C     . GLU GLU GLU B B 361 361 . 0.1923 0.1757 0.1504 -0.0378 -0.0402
0.0136  1 .
6086 O     O     . GLU GLU GLU B B 361 361 . 0.2088 0.2384 0.1529 -0.0263 -0.0577
0.0002  1 .
6087 N     N     . ASN ASN ASN B B 362 362 . 0.1516 0.1695 0.1439 -0.0202 -0.0238
0.0075  1 .
6088 CA    CA    . ASN ASN ASN B B 362 362 . 0.1777 0.1576 0.1443 -0.0104 -0.0250
0.0116  1 .
6089 CB    CB    . ASN ASN ASN B B 362 362 . 0.1436 0.1494 0.1351 -0.0225 -0.0268
0.0113  1 .
6090 CG    CG    . ASN ASN ASN B B 362 362 . 0.1891 0.1454 0.1644 -0.0109 -0.0327
0.0075  1 .
6091 OD1   OD1   . ASN ASN ASN B B 362 362 . 0.2933 0.2318 0.1378 -0.0127 -0.0465
0.0600  1 .
6092 ND2   ND2   . ASN ASN ASN B B 362 362 . 0.2979 0.2182 0.1811 -0.0031 -0.0179
0.0313  1 .
6093 C     C     . ASN ASN ASN B B 362 362 . 0.1922 0.1922 0.1389 -0.0108 -0.0363
0.0080  1 .
6094 O     O     . ASN ASN ASN B B 362 362 . 0.2338 0.2485 0.1966 -0.0349 -0.0175
0.0230  1 .
6095 N     N     . GLY GLY GLY B B 363 363 . 0.1967 0.1750 0.1306 -0.0121 -0.0521 -
0.0048 1 .
6096 CA    CA    . GLY GLY GLY B B 363 363 . 0.2088 0.2281 0.1772 0.0001  -0.0424 -
0.0070 1 .
6097 C     C     . GLY GLY GLY B B 363 363 . 0.1746 0.2016 0.1569 0.0137  -0.0344 -
0.0257 1 .
6098 O     O     . GLY GLY GLY B B 363 363 . 0.1734 0.2745 0.1599 0.0015  -0.0277 -
0.0401 1 .
6099 N     N     . TRP TRP TRP B B 364 364 . 0.1657 0.1369 0.1402 -0.0150 -0.0152 -
0.0074 1 .
6100 CA    CA    . TRP TRP TRP B B 364 364 . 0.1331 0.1207 0.1046 0.0111  -0.0190
0.0042  1 .
6101 CB    CB    . TRP TRP TRP B B 364 364 . 0.1450 0.1035 0.1243 0.0048  -0.0332
0.0076  1 .
6102 CG    CG    . TRP TRP TRP B B 364 364 . 0.1429 0.1329 0.1034 -0.0176 -0.0126 -
0.0029 1 .
6103 CD1   CD1   . TRP TRP TRP B B 364 364 . 0.1536 0.1562 0.1428 -0.0165 -0.0206
0.0220  1 .
6104 NE1   NE1   . TRP TRP TRP B B 364 364 . 0.1563 0.1296 0.1313 0.0047  -0.0345
0.0102  1 .
6105 CE2   CE2   . TRP TRP TRP B B 364 364 . 0.1684 0.1123 0.1182 0.0383  -0.0109 -
0.0046 1 .
6106 CD2   CD2   . TRP TRP TRP B B 364 364 . 0.1330 0.1084 0.1184 0.0158  -0.0110
0.0157  1 .
6107 CE3   CE3   . TRP TRP TRP B B 364 364 . 0.1160 0.1253 0.1115 0.0437  -0.0059 -
0.0287 1 .
6108 CZ3   CZ3   . TRP TRP TRP B B 364 364 . 0.1557 0.1069 0.1362 0.0011  0.0100  -
0.0023 1 .
6109 CH2   CH2   . TRP TRP TRP B B 364 364 . 0.1580 0.1095 0.1240 0.0282  -0.0294
0.0281  1 .
6110 CZ2   CZ2   . TRP TRP TRP B B 364 364 . 0.1365 0.1409 0.1261 0.0104  -0.0163 -
0.0069 1 .
6111 C     C     . TRP TRP TRP B B 364 364 . 0.1365 0.1069 0.1182 -0.0137 0.0091  -
0.0165 1 .
6112 O     O     . TRP TRP TRP B B 364 364 . 0.1570 0.1540 0.1623 -0.0338 -0.0014 -
0.0014 1 .
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6113 N     N     . GLY GLY GLY B B 365 365 . 0.1296 0.1023 0.0778 0.0126  -0.0065
0.0089  1 .
6114 CA    CA    . GLY GLY GLY B B 365 365 . 0.1448 0.0881 0.0906 -0.0026 -0.0054 -
0.0022 1 .
6115 C     C     . GLY GLY GLY B B 365 365 . 0.1121 0.0988 0.1060 0.0001  -0.0150 -
0.0038 1 .
6116 O     O     . GLY GLY GLY B B 365 365 . 0.1304 0.1134 0.0999 -0.0112 -0.0184
0.0045  1 .
6117 N     N     . VAL VAL VAL B B 366 366 . 0.1014 0.1026 0.1012 -0.0059 -0.0041 -
0.0021 1 .
6118 CA    CA    . VAL VAL VAL B B 366 366 . 0.1056 0.1062 0.0913 0.0048  -0.0021
0.0016  1 .
6119 CB    CB    . VAL VAL VAL B B 366 366 . 0.0902 0.1480 0.0883 0.0110  0.0049
0.0020  1 .
6120 CG1   CG1   . VAL VAL VAL B B 366 366 . 0.1275 0.1254 0.0657 0.0195  -0.0004
0.0133  1 .
6121 CG2   CG2   . VAL VAL VAL B B 366 366 . 0.1478 0.1342 0.0920 0.0157  -0.0105
0.0155  1 .
6122 C     C     . VAL VAL VAL B B 366 366 . 0.1070 0.1041 0.0998 0.0034  -0.0056
0.0001  1 .
6123 O     O     . VAL VAL VAL B B 366 366 . 0.1109 0.1075 0.1189 -0.0178 -0.0090
0.0114  1 .
6124 N     N     . MET MET MET B B 367 367 . 0.0822 0.0852 0.0842 -0.0145 -0.0146
0.0165  1 .
6125 CA    CA    . MET MET MET B B 367 367 . 0.0990 0.0753 0.0822 0.0011  -0.0019
0.0209  1 .
6126 CB    CB    . MET MET MET B B 367 367 . 0.0918 0.0964 0.0906 0.0025  -0.0185 -
0.0076 1 .
6127 CG    CG    . MET MET MET B B 367 367 . 0.0657 0.1153 0.0702 -0.0117 -0.0152
0.0196  1 .
6128 SD    SD    . MET MET MET B B 367 367 . 0.1130 0.1138 0.1052 -0.0042 0.0005  -
0.0039 1 .
6129 CE    CE    . MET MET MET B B 367 367 . 0.1634 0.1926 0.1371 -0.0206 0.0284  -
0.0475 1 .
6130 C     C     . MET MET MET B B 367 367 . 0.0937 0.0696 0.0702 -0.0124 -0.0121
0.0020  1 .
6131 O     O     . MET MET MET B B 367 367 . 0.1242 0.0817 0.0932 0.0104  -0.0200
0.0051  1 .
6132 N     N     . VAL VAL VAL B B 368 368 . 0.1036 0.0722 0.0730 -0.0071 -0.0124
0.0000  1 .
6133 CA    CA    . VAL VAL VAL B B 368 368 . 0.0851 0.1005 0.0893 0.0071  -0.0089
0.0036  1 .
6134 CB    CB    . VAL VAL VAL B B 368 368 . 0.0827 0.0846 0.0845 -0.0036 0.0010  -
0.0041 1 .
6135 CG1   CG1   . VAL VAL VAL B B 368 368 . 0.1214 0.1081 0.0889 0.0004  0.0144  -
0.0108 1 .
6136 CG2   CG2   . VAL VAL VAL B B 368 368 . 0.1002 0.0958 0.1254 0.0022  -0.0361 -
0.0023 1 .
6137 C     C     . VAL VAL VAL B B 368 368 . 0.0869 0.0769 0.0952 0.0102  -0.0105 -
0.0077 1 .
6138 O     O     . VAL VAL VAL B B 368 368 . 0.1049 0.1034 0.0888 0.0176  -0.0024
0.0087  1 .
6139 N     N     . SER SER SER B B 369 369 . 0.0700 0.0643 0.0648 -0.0159 -0.0169 -
0.0031 1 .
6140 CA    CA    . SER SER SER B B 369 369 . 0.0671 0.0870 0.0742 -0.0142 0.0005
0.0103  1 .
6141 CB    CB    . SER SER SER B B 369 369 . 0.1101 0.0779 0.0937 -0.0254 -0.0308
0.0162  1 .
6142 OG    OG    . SER SER SER B B 369 369 . 0.1015 0.1000 0.0925 -0.0057 -0.0037
0.0097  1 .
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6143 C     C     . SER SER SER B B 369 369 . 0.0895 0.0792 0.0847 0.0063  0.0005
0.0102  1 .
6144 O     O     . SER SER SER B B 369 369 . 0.0980 0.1190 0.0942 0.0197  -0.0068 -
0.0039 1 .
6145 N     N     . HIS HIS HIS B B 370 370 . 0.0824 0.0859 0.0596 -0.0003 -0.0115
0.0121  1 .
6146 CA    CA    . HIS HIS HIS B B 370 370 . 0.0999 0.0854 0.0727 0.0128  -0.0090 -
0.0063 1 .
6147 CB    CB    . HIS HIS HIS B B 370 370 . 0.1173 0.0925 0.0885 0.0264  0.0175  -
0.0039 1 .
6148 CG    CG    . HIS HIS HIS B B 370 370 . 0.0672 0.0735 0.0903 0.0209  -0.0232
0.0046  1 .
6149 ND1   ND1   . HIS HIS HIS B B 370 370 . 0.0804 0.0790 0.0921 0.0186  -0.0199
0.0042  1 .
6150 CE1   CE1   . HIS HIS HIS B B 370 370 . 0.1499 0.0675 0.1194 -0.0142 -0.0017
0.0054  1 .
6151 NE2   NE2   . HIS HIS HIS B B 370 370 . 0.0884 0.1123 0.0877 0.0214  -0.0080 -
0.0048 1 .
6152 CD2   CD2   . HIS HIS HIS B B 370 370 . 0.0518 0.0759 0.1163 -0.0120 0.0036
0.0088  1 .
6153 C     C     . HIS HIS HIS B B 370 370 . 0.0727 0.0899 0.0638 -0.0164 0.0032  -
0.0111 1 .
6154 O     O     . HIS HIS HIS B B 370 370 . 0.1079 0.0889 0.0990 -0.0041 0.0020
0.0009  1 .
6155 N     N     . ARG ARG ARG B B 371 371 . 0.0854 0.0883 0.0592 -0.0048 -0.0003 -
0.0117 1 .
6156 CA    CA    . ARG ARG ARG B B 371 371 . 0.0687 0.0687 0.0826 0.0107  0.0008  -
0.0066 1 .
6157 CB    CB    . ARG ARG ARG B B 371 371 . 0.0659 0.0916 0.0778 0.0144  0.0156  -
0.0057 1 .
6158 CG    CG    . ARG ARG ARG B B 371 371 . 0.0607 0.0795 0.0569 0.0047  0.0025
0.0044  1 .
6159 CD    CD    . ARG ARG ARG B B 371 371 . 0.0652 0.0712 0.0625 -0.0092 0.0176
0.0157  1 .
6160 NE    NE    . ARG ARG ARG B B 371 371 . 0.0959 0.0619 0.0907 0.0172  -0.0079
0.0238  1 .
6161 CZ    CZ    . ARG ARG ARG B B 371 371 . 0.0803 0.0668 0.0990 0.0075  -0.0133
0.0045  1 .
6162 NH1   NH1   . ARG ARG ARG B B 371 371 . 0.0941 0.0896 0.0861 -0.0018 0.0144  -
0.0012 1 .
6163 NH2   NH2   . ARG ARG ARG B B 371 371 . 0.0917 0.0890 0.1010 -0.0028 -0.0016
0.0139  1 .
6164 C     C     . ARG ARG ARG B B 371 371 . 0.0984 0.0829 0.0620 -0.0024 0.0043
0.0190  1 .
6165 O     O     . ARG ARG ARG B B 371 371 . 0.0923 0.0674 0.0910 0.0045  -0.0046
0.0069  1 .
6166 N     N     . SER SER SER B B 372 372 . 0.0802 0.0844 0.0917 0.0042  0.0017  -
0.0146 1 .
6167 CA    CA    . SER SER SER B B 372 372 . 0.0843 0.0914 0.0789 0.0048  0.0047
0.0080  1 .
6168 CB    CB    . SER SER SER B B 372 372 . 0.0912 0.0815 0.1020 -0.0009 -0.0008
0.0062  1 .
6169 OG    OG    . SER SER SER B B 372 372 . 0.0776 0.1069 0.0808 0.0039  0.0070  -
0.0178 1 .
6170 C     C     . SER SER SER B B 372 372 . 0.0895 0.0816 0.0856 0.0152  -0.0127 -
0.0043 1 .
6171 O     O     . SER SER SER B B 372 372 . 0.0827 0.0860 0.0827 0.0138  -0.0184 -
0.0030 1 .
6172 N     N     . GLY GLY GLY B B 373 373 . 0.0954 0.0784 0.0699 -0.0089 0.0063  -
0.0071 1 .
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6173 CA    CA    . GLY GLY GLY B B 373 373 . 0.1262 0.0950 0.0802 -0.0086 0.0183  -
0.0036 1 .
6174 C     C     . GLY GLY GLY B B 373 373 . 0.0833 0.0919 0.0716 0.0103  0.0046
0.0049  1 .
6175 O     O     . GLY GLY GLY B B 373 373 . 0.0962 0.0702 0.1118 0.0073  -0.0065
0.0022  1 .
6176 N     N     . GLU GLU GLU B B 374 374 . 0.0914 0.0835 0.0725 0.0009  0.0029
0.0135  1 .
6177 CA    CA    . GLU GLU GLU B B 374 374 . 0.0674 0.0783 0.0880 0.0052  0.0148  -
0.0040 1 .
6178 CB    CB    . GLU GLU GLU B B 374 374 . 0.1072 0.0703 0.0562 0.0120  0.0026  -
0.0109 1 .
6179 CG    CG    . GLU GLU GLU B B 374 374 . 0.0673 0.1185 0.0658 0.0061  -0.0122
0.0094  1 .
6180 CD    CD    . GLU GLU GLU B B 374 374 . 0.0887 0.1024 0.0802 0.0248  0.0007  -
0.0066 1 .
6181 OE1   OE1   . GLU GLU GLU B B 374 374 . 0.0913 0.1177 0.1044 -0.0034 -0.0004
0.0179  1 .
6182 OE2   OE2   . GLU GLU GLU B B 374 374 . 0.1230 0.0853 0.0868 0.0257  -0.0014 -
0.0041 1 .
6183 C     C     . GLU GLU GLU B B 374 374 . 0.0852 0.0757 0.0912 0.0082  -0.0043 -
0.0078 1 .
6184 O     O     . GLU GLU GLU B B 374 374 . 0.1026 0.1002 0.0915 0.0055  -0.0104 -
0.0013 1 .
6185 N     N     . THR THR THR B B 375 375 . 0.0827 0.0947 0.0695 -0.0105 0.0022
0.0072  1 .
6186 CA    CA    . THR THR THR B B 375 375 . 0.0711 0.0715 0.0854 0.0030  0.0069
0.0231  1 .
6187 CB    CB    . THR THR THR B B 375 375 . 0.0736 0.0743 0.0921 -0.0021 -0.0034 -
0.0195 1 .
6188 OG1   OG1   . THR THR THR B B 375 375 . 0.1233 0.1294 0.1182 -0.0151 -0.0194 -
0.0137 1 .
6189 CG2   CG2   . THR THR THR B B 375 375 . 0.1201 0.0916 0.1163 -0.0126 0.0091  -
0.0112 1 .
6190 C     C     . THR THR THR B B 375 375 . 0.0950 0.0818 0.0848 0.0025  -0.0052
0.0015  1 .
6191 O     O     . THR THR THR B B 375 375 . 0.0973 0.1001 0.1093 0.0058  0.0022
0.0018  1 .
6192 N     N     . GLU GLU GLU B B 376 376 . 0.1005 0.0928 0.0952 -0.0016 0.0007
0.0029  1 .
6193 CA    CA    . GLU GLU GLU B B 376 376 . 0.1060 0.0970 0.1090 0.0023  -0.0009
0.0077  1 .
6194 CB    CB    . GLU GLU GLU B B 376 376 . 0.1428 0.1147 0.1147 0.0163  -0.0160
0.0204  1 .
6195 CG    CG    . GLU GLU GLU B B 376 376 . 0.1467 0.1457 0.0744 -0.0400 0.0180  -
0.0063 1 .
6196 CD    CD    . GLU GLU GLU B B 376 376 . 0.1513 0.1320 0.0965 -0.0325 0.0068
0.0068  1 .
6197 OE1   OE1   . GLU GLU GLU B B 376 376 . 0.1956 0.1340 0.1307 -0.0480 0.0339  -
0.0065 1 .
6198 OE2   OE2   . GLU GLU GLU B B 376 376 . 0.1551 0.1370 0.1036 0.0096  0.0342
0.0074  1 .
6199 C     C     . GLU GLU GLU B B 376 376 . 0.1075 0.1091 0.1134 0.0039  0.0096
0.0072  1 .
6200 O     O     . GLU GLU GLU B B 376 376 . 0.1480 0.1368 0.1235 -0.0057 -0.0188 -
0.0003 1 .
6201 N     N     . ASP ASP ASP B B 377 377 . 0.0936 0.1271 0.0876 -0.0122 -0.0075
0.0144  1 .
6202 CA    CA    . ASP ASP ASP B B 377 377 . 0.0886 0.1008 0.1081 -0.0074 0.0064
0.0023  1 .
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6203 CB    CB    . ASP ASP ASP B B 377 377 . 0.0992 0.1178 0.1422 -0.0049 -0.0239
0.0081  1 .
6204 CG    CG    . ASP ASP ASP B B 377 377 . 0.1184 0.1631 0.1340 0.0362  -0.0016 -
0.0079 1 .
6205 OD1   OD1   . ASP ASP ASP B B 377 377 . 0.1410 0.1593 0.1549 -0.0078 0.0000  -
0.0237 1 .
6206 OD2   OD2   . ASP ASP ASP B B 377 377 . 0.1244 0.1574 0.1967 -0.0249 0.0251  -
0.0358 1 .
6207 C     C     . ASP ASP ASP B B 377 377 . 0.0988 0.1064 0.0979 -0.0087 -0.0006
0.0108  1 .
6208 O     O     . ASP ASP ASP B B 377 377 . 0.1165 0.1371 0.1393 -0.0155 0.0089  -
0.0063 1 .
6209 N     N     . THR THR THR B B 378 378 . 0.1157 0.0946 0.0775 -0.0068 -0.0016 -
0.0159 1 .
6210 CA    CA    . THR THR THR B B 378 378 . 0.0908 0.0971 0.0730 0.0089  -0.0065
0.0000  1 .
6211 CB    CB    . THR THR THR B B 378 378 . 0.1071 0.1069 0.0981 -0.0009 -0.0186 -
0.0002 1 .
6212 OG1   OG1   . THR THR THR B B 378 378 . 0.1402 0.1423 0.1343 0.0146  -0.0009
0.0031  1 .
6213 CG2   CG2   . THR THR THR B B 378 378 . 0.1187 0.1072 0.1106 0.0045  -0.0450 -
0.0026 1 .
6214 C     C     . THR THR THR B B 378 378 . 0.0948 0.0971 0.0964 -0.0116 -0.0017
0.0088  1 .
6215 O     O     . THR THR THR B B 378 378 . 0.1111 0.1024 0.1056 -0.0042 0.0001  -
0.0001 1 .
6216 N     N     . PHE PHE PHE B B 379 379 . 0.0754 0.1043 0.0966 0.0021  -0.0003 -
0.0059 1 .
6217 CA    CA    . PHE PHE PHE B B 379 379 . 0.0957 0.0811 0.0795 0.0063  -0.0131 -
0.0162 1 .
6218 CB    CB    . PHE PHE PHE B B 379 379 . 0.0861 0.0934 0.1086 0.0409  -0.0091
0.0145  1 .
6219 CG    CG    . PHE PHE PHE B B 379 379 . 0.1295 0.1215 0.1304 0.0148  -0.0091 -
0.0115 1 .
6220 CD1   CD1   . PHE PHE PHE B B 379 379 . 0.1478 0.1727 0.1442 0.0378  -0.0074
0.0063  1 .
6221 CE1   CE1   . PHE PHE PHE B B 379 379 . 0.1453 0.1618 0.1377 0.0332  -0.0035 -
0.0065 1 .
6222 CZ    CZ    . PHE PHE PHE B B 379 379 . 0.1513 0.1636 0.1692 -0.0094 -0.0159 -
0.0409 1 .
6223 CE2   CE2   . PHE PHE PHE B B 379 379 . 0.1287 0.1573 0.1958 0.0082  -0.0155 -
0.0016 1 .
6224 CD2   CD2   . PHE PHE PHE B B 379 379 . 0.1295 0.1255 0.1730 0.0324  -0.0153
0.0205  1 .
6225 C     C     . PHE PHE PHE B B 379 379 . 0.0917 0.0862 0.0828 -0.0043 -0.0050 -
0.0131 1 .
6226 O     O     . PHE PHE PHE B B 379 379 . 0.1061 0.1011 0.0992 -0.0200 -0.0140 -
0.0024 1 .
6227 N     N     . ILE ILE ILE B B 380 380 . 0.0923 0.0883 0.0976 0.0108  0.0079  -
0.0057 1 .
6228 CA    CA    . ILE ILE ILE B B 380 380 . 0.0917 0.0852 0.0830 -0.0039 -0.0112 -
0.0007 1 .
6229 CB    CB    . ILE ILE ILE B B 380 380 . 0.0784 0.0775 0.1146 0.0160  -0.0240
0.0244  1 .
6230 CG1   CG1   . ILE ILE ILE B B 380 380 . 0.0728 0.0948 0.0920 -0.0017 -0.0260
0.0149  1 .
6231 CD    CD    . ILE ILE ILE B B 380 380 . 0.1210 0.1192 0.0696 -0.0250 0.0098
0.0008  1 .
6232 CG2   CG2   . ILE ILE ILE B B 380 380 . 0.1054 0.0614 0.1335 0.0277  -0.0363
0.0010  1 .
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6233 C     C     . ILE ILE ILE B B 380 380 . 0.0941 0.0949 0.0935 0.0003  0.0107
0.0129  1 .
6234 O     O     . ILE ILE ILE B B 380 380 . 0.1198 0.1122 0.1048 0.0027  -0.0297 -
0.0066 1 .
6235 N     N     . ALA ALA ALA B B 381 381 . 0.1038 0.0702 0.0958 -0.0022 -0.0177 -
0.0082 1 .
6236 CA    CA    . ALA ALA ALA B B 381 381 . 0.0775 0.0796 0.0961 -0.0029 0.0008  -
0.0005 1 .
6237 CB    CB    . ALA ALA ALA B B 381 381 . 0.1429 0.1026 0.0959 0.0126  0.0043
0.0217  1 .
6238 C     C     . ALA ALA ALA B B 381 381 . 0.1275 0.0871 0.1210 0.0043  -0.0053
0.0037  1 .
6239 O     O     . ALA ALA ALA B B 381 381 . 0.1035 0.0986 0.0992 -0.0013 0.0011
0.0087  1 .
6240 N     N     . ASP ASP ASP B B 382 382 . 0.1090 0.0959 0.1111 -0.0034 -0.0147
0.0031  1 .
6241 CA    CA    . ASP ASP ASP B B 382 382 . 0.0872 0.1038 0.1142 -0.0068 -0.0048
0.0067  1 .
6242 CB    CB    . ASP ASP ASP B B 382 382 . 0.1165 0.1116 0.1246 -0.0216 0.0148
0.0271  1 .
6243 CG    CG    . ASP ASP ASP B B 382 382 . 0.1896 0.1576 0.1407 -0.0022 -0.0198
0.0217  1 .
6244 OD1   OD1   . ASP ASP ASP B B 382 382 . 0.1323 0.1696 0.1629 -0.0083 -0.0111
0.0419  1 .
6245 OD2   OD2   . ASP ASP ASP B B 382 382 . 0.1449 0.1760 0.2032 0.0043  0.0030
0.0248  1 .
6246 C     C     . ASP ASP ASP B B 382 382 . 0.0938 0.0964 0.0897 -0.0242 -0.0102
0.0064  1 .
6247 O     O     . ASP ASP ASP B B 382 382 . 0.1400 0.1001 0.1016 -0.0071 -0.0227 -
0.0007 1 .
6248 N     N     . LEU LEU LEU B B 383 383 . 0.1164 0.0753 0.1070 -0.0056 -0.0061
0.0123  1 .
6249 CA    CA    . LEU LEU LEU B B 383 383 . 0.1075 0.0934 0.0861 0.0041  0.0047  -
0.0086 1 .
6250 CB    CB    . LEU LEU LEU B B 383 383 . 0.1216 0.0882 0.1286 0.0021  -0.0306 -
0.0022 1 .
6251 CG    CG    . LEU LEU LEU B B 383 383 . 0.1112 0.0831 0.1114 0.0114  0.0029
0.0065  1 .
6252 CD1   CD1   . LEU LEU LEU B B 383 383 . 0.1202 0.1075 0.1201 0.0223  0.0139
0.0022  1 .
6253 CD2   CD2   . LEU LEU LEU B B 383 383 . 0.1331 0.1320 0.1343 -0.0254 -0.0001
0.0124  1 .
6254 C     C     . LEU LEU LEU B B 383 383 . 0.1077 0.0907 0.0964 0.0153  -0.0070 -
0.0165 1 .
6255 O     O     . LEU LEU LEU B B 383 383 . 0.1341 0.1145 0.1229 -0.0190 -0.0182 -
0.0031 1 .
6256 N     N     . VAL VAL VAL B B 384 384 . 0.0938 0.0957 0.0950 -0.0067 -0.0030
0.0026  1 .
6257 CA    CA    . VAL VAL VAL B B 384 384 . 0.0986 0.0887 0.0976 0.0031  0.0048
0.0026  1 .
6258 CB    CB    . VAL VAL VAL B B 384 384 . 0.0892 0.0985 0.0955 0.0132  0.0094
0.0250  1 .
6259 CG1   CG1   . VAL VAL VAL B B 384 384 . 0.1322 0.0925 0.1060 0.0307  0.0199
0.0383  1 .
6260 CG2   CG2   . VAL VAL VAL B B 384 384 . 0.1324 0.1316 0.0764 -0.0110 0.0169  -
0.0126 1 .
6261 C     C     . VAL VAL VAL B B 384 384 . 0.1184 0.0956 0.0902 -0.0197 -0.0096
0.0124  1 .
6262 O     O     . VAL VAL VAL B B 384 384 . 0.1479 0.1097 0.1103 -0.0078 -0.0013
0.0126  1 .
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6263 N     N     . VAL VAL VAL B B 385 385 . 0.1583 0.0826 0.1082 -0.0071 -0.0160
0.0026  1 .
6264 CA    CA    . VAL VAL VAL B B 385 385 . 0.1370 0.1011 0.1077 -0.0173 -0.0194
0.0108  1 .
6265 CB    CB    . VAL VAL VAL B B 385 385 . 0.1153 0.0707 0.0957 -0.0021 -0.0218
0.0000  1 .
6266 CG1   CG1   . VAL VAL VAL B B 385 385 . 0.1493 0.1002 0.1251 -0.0457 -0.0243 -
0.0354 1 .
6267 CG2   CG2   . VAL VAL VAL B B 385 385 . 0.0981 0.1292 0.1369 0.0103  -0.0204
0.0201  1 .
6268 C     C     . VAL VAL VAL B B 385 385 . 0.1306 0.1049 0.1159 -0.0158 -0.0038 -
0.0097 1 .
6269 O     O     . VAL VAL VAL B B 385 385 . 0.1655 0.1507 0.1289 -0.0263 -0.0176
0.0019  1 .
6270 N     N     . GLY GLY GLY B B 386 386 . 0.1111 0.1234 0.1423 -0.0119 0.0027
0.0150  1 .
6271 CA    CA    . GLY GLY GLY B B 386 386 . 0.0933 0.1316 0.1508 -0.0175 -0.0328
0.0121  1 .
6272 C     C     . GLY GLY GLY B B 386 386 . 0.1028 0.1312 0.1490 -0.0167 -0.0296
0.0268  1 .
6273 O     O     . GLY GLY GLY B B 386 386 . 0.1225 0.1634 0.1489 -0.0187 -0.0477
0.0079  1 .
6274 N     N     . LEU LEU LEU B B 387 387 . 0.1109 0.1219 0.1278 -0.0198 -0.0099
0.0310  1 .
6275 CA    CA    . LEU LEU LEU B B 387 387 . 0.1308 0.1278 0.1251 -0.0088 -0.0203
0.0097  1 .
6276 CB    CB    . LEU LEU LEU B B 387 387 . 0.1693 0.1366 0.1408 -0.0041 -0.0239 -
0.0017 1 .
6277 CG    CG    . LEU LEU LEU B B 387 387 . 0.1196 0.1759 0.1585 -0.0165 -0.0234
0.0022  1 .
6278 CD1   CD1   . LEU LEU LEU B B 387 387 . 0.2440 0.1780 0.1205 -0.0501 -0.0376
0.0335  1 .
6279 CD2   CD2   . LEU LEU LEU B B 387 387 . 0.1529 0.1581 0.2150 0.0085  -0.0270
0.0184  1 .
6280 C     C     . LEU LEU LEU B B 387 387 . 0.1462 0.1276 0.1337 -0.0031 -0.0146
0.0081  1 .
6281 O     O     . LEU LEU LEU B B 387 387 . 0.1903 0.1563 0.1458 0.0049  -0.0172
0.0164  1 .
6282 N     N     . CYS CYS CYS B B 388 388 . 0.1513 0.1383 0.1632 -0.0081 0.0057  -
0.0015 1 .
6283 CA    CA    . CYS CYS CYS B B 388 388 . 0.1652 0.1636 0.1632 -0.0098 -0.0060 -
0.0028 1 .
6284 CB    CB    . CYS CYS CYS B B 388 388 . 0.2024 0.1851 0.2077 -0.0252 0.0058  -
0.0317 1 .
6285 SG    SG    . CYS CYS CYS B B 388 388 . 0.3713 0.3466 0.3688 -0.0563 -0.0208 -
0.0103 1 .
6286 C     C     . CYS CYS CYS B B 388 388 . 0.1864 0.1583 0.1415 -0.0093 -0.0044
0.0092  1 .
6287 O     O     . CYS CYS CYS B B 388 388 . 0.2000 0.1972 0.1605 -0.0201 -0.0191
0.0116  1 .
6288 N     N     . THR THR THR B B 389 389 . 0.1594 0.1293 0.1198 -0.0084 0.0039
0.0016  1 .
6289 CA    CA    . THR THR THR B B 389 389 . 0.1565 0.1373 0.1463 -0.0231 -0.0084 -
0.0044 1 .
6290 CB    CB    . THR THR THR B B 389 389 . 0.1461 0.1279 0.1327 -0.0129 -0.0270 -
0.0047 1 .
6291 OG1   OG1   . THR THR THR B B 389 389 . 0.1295 0.1447 0.1193 -0.0129 -0.0440
0.0269  1 .
6292 CG2   CG2   . THR THR THR B B 389 389 . 0.1756 0.1312 0.1714 0.0294  -0.0103
0.0228  1 .
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6293 C     C     . THR THR THR B B 389 389 . 0.1555 0.1370 0.1207 -0.0016 -0.0138
0.0062  1 .
6294 O     O     . THR THR THR B B 389 389 . 0.1867 0.1588 0.1640 -0.0177 0.0037  -
0.0085 1 .
6295 N     N     . GLY GLY GLY B B 390 390 . 0.1423 0.1004 0.1360 0.0063  -0.0319 -
0.0182 1 .
6296 CA    CA    . GLY GLY GLY B B 390 390 . 0.1105 0.1258 0.1298 0.0006  -0.0200 -
0.0283 1 .
6297 C     C     . GLY GLY GLY B B 390 390 . 0.1128 0.1147 0.1009 0.0073  -0.0244 -
0.0091 1 .
6298 O     O     . GLY GLY GLY B B 390 390 . 0.1218 0.1128 0.0795 -0.0133 0.0012
0.0003  1 .
6299 N     N     . GLN GLN GLN B B 391 391 . 0.1185 0.1008 0.0948 0.0011  -0.0105
0.0041  1 .
6300 CA    CA    . GLN GLN GLN B B 391 391 . 0.0987 0.0850 0.0825 -0.0181 0.0031
0.0136  1 .
6301 CB    CB    . GLN GLN GLN B B 391 391 . 0.1500 0.1468 0.1380 -0.0252 -0.0033
0.0247  1 .
6302 CG    CG    . GLN GLN GLN B B 391 391 . 0.2044 0.1846 0.1738 -0.0351 -0.0028
0.0793  1 .
6303 CD    CD    . GLN GLN GLN B B 391 391 . 0.1582 0.1465 0.1656 -0.0243 -0.0103
0.0319  1 .
6304 OE1   OE1   . GLN GLN GLN B B 391 391 . 0.1816 0.1630 0.1097 -0.0160 -0.0054
0.0254  1 .
6305 NE2   NE2   . GLN GLN GLN B B 391 391 . 0.1749 0.1497 0.1919 0.0088  -0.0377
0.0083  1 .
6306 C     C     . GLN GLN GLN B B 391 391 . 0.0784 0.0763 0.0834 0.0222  -0.0072 -
0.0083 1 .
6307 O     O     . GLN GLN GLN B B 391 391 . 0.0928 0.0908 0.0999 0.0059  -0.0140 -
0.0146 1 .
6308 N     N     . ILE ILE ILE B B 392 392 . 0.1200 0.0837 0.0820 -0.0056 -0.0165 -
0.0055 1 .
6309 CA    CA    . ILE ILE ILE B B 392 392 . 0.0931 0.0919 0.0814 -0.0078 0.0011  -
0.0018 1 .
6310 CB    CB    . ILE ILE ILE B B 392 392 . 0.1050 0.0666 0.0867 0.0011  0.0052  -
0.0093 1 .
6311 CG1   CG1   . ILE ILE ILE B B 392 392 . 0.1218 0.1019 0.0570 0.0052  0.0095  -
0.0113 1 .
6312 CD    CD    . ILE ILE ILE B B 392 392 . 0.1042 0.1365 0.1165 -0.0324 0.0047  -
0.0077 1 .
6313 CG2   CG2   . ILE ILE ILE B B 392 392 . 0.1206 0.0972 0.1472 0.0029  -0.0145 -
0.0240 1 .
6314 C     C     . ILE ILE ILE B B 392 392 . 0.0880 0.0906 0.0821 0.0147  0.0024  -
0.0104 1 .
6315 O     O     . ILE ILE ILE B B 392 392 . 0.0945 0.0981 0.1269 0.0179  -0.0035 -
0.0109 1 .
6316 N     N     . LYS LYS LYS B B 393 393 . 0.0763 0.0599 0.0713 -0.0060 -0.0114 -
0.0045 1 .
6317 CA    CA    . LYS LYS LYS B B 393 393 . 0.0814 0.0821 0.0488 -0.0261 0.0060  -
0.0004 1 .
6318 CB    CB    . LYS LYS LYS B B 393 393 . 0.1212 0.0571 0.1032 -0.0090 0.0135
0.0035  1 .
6319 CG    CG    . LYS LYS LYS B B 393 393 . 0.0874 0.0787 0.0868 0.0064  0.0007
0.0219  1 .
6320 CD    CD    . LYS LYS LYS B B 393 393 . 0.0963 0.0811 0.1223 0.0056  0.0189
0.0060  1 .
6321 CE    CE    . LYS LYS LYS B B 393 393 . 0.1328 0.0661 0.0989 -0.0176 -0.0032 -
0.0100 1 .
6322 NZ    NZ    . LYS LYS LYS B B 393 393 . 0.0945 0.0761 0.1173 0.0045  -0.0047
0.0171  1 .
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6323 C     C     . LYS LYS LYS B B 393 393 . 0.0955 0.0655 0.0818 0.0073  0.0023
0.0067  1 .
6324 O     O     . LYS LYS LYS B B 393 393 . 0.0944 0.0991 0.0749 0.0178  0.0065  -
0.0082 1 .
6325 N     N     . THR THR THR B B 394 394 . 0.0638 0.0839 0.0524 -0.0070 -0.0117
0.0099  1 .
6326 CA    CA    . THR THR THR B B 394 394 . 0.0608 0.0941 0.0679 0.0048  0.0019
0.0010  1 .
6327 CB    CB    . THR THR THR B B 394 394 . 0.0841 0.0784 0.0878 -0.0148 0.0128
0.0015  1 .
6328 OG1   OG1   . THR THR THR B B 394 394 . 0.0820 0.0869 0.0741 0.0015  0.0097
0.0077  1 .
6329 CG2   CG2   . THR THR THR B B 394 394 . 0.1211 0.0741 0.0906 0.0069  0.0001
0.0091  1 .
6330 C     C     . THR THR THR B B 394 394 . 0.0662 0.0842 0.0623 0.0077  0.0085
0.0004  1 .
6331 O     O     . THR THR THR B B 394 394 . 0.0784 0.0903 0.0866 0.0000  0.0118
0.0173  1 .
6332 N     N     . GLY GLY GLY B B 395 395 . 0.0814 0.0741 0.0791 -0.0054 -0.0083 -
0.0065 1 .
6333 CA    CA    . GLY GLY GLY B B 395 395 . 0.0841 0.0927 0.0894 0.0107  0.0034  -
0.0003 1 .
6334 C     C     . GLY GLY GLY B B 395 395 . 0.0901 0.0866 0.0995 0.0045  0.0062
0.0040  1 .
6335 O     O     . GLY GLY GLY B B 395 395 . 0.0919 0.0775 0.0859 -0.0035 -0.0109
0.0068  1 .
6336 N     N     . ALA ALA ALA B B 396 396 . 0.0865 0.0786 0.0785 0.0066  -0.0063
0.0134  1 .
6337 CA    CA    . ALA ALA ALA B B 396 396 . 0.0710 0.0685 0.0870 -0.0013 -0.0018
0.0188  1 .
6338 CB    CB    . ALA ALA ALA B B 396 396 . 0.0603 0.1004 0.1105 -0.0106 -0.0091
0.0100  1 .
6339 C     C     . ALA ALA ALA B B 396 396 . 0.0875 0.0796 0.1032 0.0102  0.0073
0.0112  1 .
6340 O     O     . ALA ALA ALA B B 396 396 . 0.0924 0.0935 0.0848 -0.0015 -0.0005
0.0080  1 .
6341 N     N     . PRO PRO PRO B B 397 397 . 0.0836 0.0583 0.0852 0.0085  0.0260
0.0014  1 .
6342 CA    CA    . PRO PRO PRO B B 397 397 . 0.1166 0.0965 0.0886 0.0011  0.0073
0.0118  1 .
6343 CB    CB    . PRO PRO PRO B B 397 397 . 0.0809 0.1067 0.1047 0.0092  0.0173
0.0152  1 .
6344 CG    CG    . PRO PRO PRO B B 397 397 . 0.0906 0.0951 0.1172 -0.0113 0.0138
0.0250  1 .
6345 CD    CD    . PRO PRO PRO B B 397 397 . 0.0886 0.0838 0.1020 0.0060  0.0446  -
0.0013 1 .
6346 C     C     . PRO PRO PRO B B 397 397 . 0.1106 0.0970 0.0952 0.0089  0.0036
0.0060  1 .
6347 O     O     . PRO PRO PRO B B 397 397 . 0.1207 0.1057 0.0879 0.0184  0.0065
0.0029  1 .
6348 N     N     . CYS CYS CYS B B 398 398 . 0.0859 0.0790 0.0578 -0.0017 0.0033
0.0088  1 .
6349 CA    CA    . CYS CYS CYS B B 398 398 . 0.0939 0.0791 0.0618 0.0131  0.0018  -
0.0027 1 .
6350 CB    CB    . CYS CYS CYS B B 398 398 . 0.1154 0.0955 0.0674 -0.0062 0.0068  -
0.0018 1 .
6351 SG    SG    . CYS CYS CYS B B 398 398 . 0.0996 0.1297 0.1027 -0.0019 -0.0009
0.0034  1 .
6352 C     C     . CYS CYS CYS B B 398 398 . 0.0796 0.0899 0.0665 0.0185  0.0086
0.0097  1 .
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6353 O     O     . CYS CYS CYS B B 398 398 . 0.1161 0.0778 0.0934 0.0065  0.0117
0.0158  1 .
6354 N     N     . ARG ARG ARG B B 399 399 . 0.0770 0.0641 0.0605 -0.0075 0.0147  -
0.0092 1 .
6355 CA    CA    . ARG ARG ARG B B 399 399 . 0.0737 0.0548 0.0759 0.0048  0.0214  -
0.0079 1 .
6356 CB    CB    . ARG ARG ARG B B 399 399 . 0.0725 0.0447 0.0887 -0.0043 -0.0038
0.0262  1 .
6357 CG    CG    . ARG ARG ARG B B 399 399 . 0.0748 0.0719 0.0994 0.0019  -0.0056 -
0.0076 1 .
6358 CD    CD    . ARG ARG ARG B B 399 399 . 0.0786 0.0582 0.0698 0.0300  0.0116  -
0.0131 1 .
6359 NE    NE    . ARG ARG ARG B B 399 399 . 0.0654 0.0740 0.0536 0.0151  -0.0057 -
0.0116 1 .
6360 CZ    CZ    . ARG ARG ARG B B 399 399 . 0.0641 0.0710 0.0487 -0.0065 -0.0046
0.0124  1 .
6361 NH1   NH1   . ARG ARG ARG B B 399 399 . 0.0736 0.0932 0.1027 -0.0086 0.0029
0.0160  1 .
6362 NH2   NH2   . ARG ARG ARG B B 399 399 . 0.0937 0.0921 0.0767 0.0212  -0.0044 -
0.0097 1 .
6363 C     C     . ARG ARG ARG B B 399 399 . 0.0774 0.0639 0.0733 0.0013  0.0061
0.0000  1 .
6364 O     O     . ARG ARG ARG B B 399 399 . 0.0795 0.0750 0.0857 0.0020  -0.0005
0.0047  1 .
6365 N     N     . SER SER SER B B 400 400 . 0.0754 0.0615 0.0682 0.0053  0.0073
0.0050  1 .
6366 CA    CA    . SER SER SER B B 400 400 . 0.0625 0.0583 0.0647 0.0084  -0.0033
0.0063  1 .
6367 CB    CB    . SER SER SER B B 400 400 . 0.0832 0.0769 0.1062 0.0122  0.0045
0.0213  1 .
6368 OG    OG    . SER SER SER B B 400 400 . 0.0804 0.0830 0.0962 -0.0021 -0.0004
0.0012  1 .
6369 C     C     . SER SER SER B B 400 400 . 0.0672 0.0734 0.0737 -0.0026 0.0051  -
0.0089 1 .
6370 O     O     . SER SER SER B B 400 400 . 0.0799 0.1029 0.0866 -0.0154 -0.0114 -
0.0095 1 .
6371 N     N     . GLU GLU GLU B B 401 401 . 0.0659 0.0893 0.0840 0.0083  0.0054
0.0047  1 .
6372 CA    CA    . GLU GLU GLU B B 401 401 . 0.0871 0.0658 0.0662 0.0191  -0.0086
0.0045  1 .
6373 CB    CB    . GLU GLU GLU B B 401 401 . 0.0892 0.0621 0.0835 -0.0168 0.0033
0.0012  1 .
6374 CG    CG    . GLU GLU GLU B B 401 401 . 0.0792 0.0795 0.0935 -0.0086 -0.0112
0.0274  1 .
6375 CD    CD    . GLU GLU GLU B B 401 401 . 0.0737 0.0931 0.1019 0.0246  0.0138
0.0123  1 .
6376 OE1   OE1   . GLU GLU GLU B B 401 401 . 0.0898 0.0827 0.0693 0.0012  0.0008
0.0125  1 .
6377 OE2   OE2   . GLU GLU GLU B B 401 401 . 0.0936 0.0834 0.0884 0.0076  0.0046
0.0104  1 .
6378 C     C     . GLU GLU GLU B B 401 401 . 0.0891 0.0868 0.0877 0.0062  -0.0015
0.0108  1 .
6379 O     O     . GLU GLU GLU B B 401 401 . 0.0874 0.1038 0.0880 0.0162  -0.0008 -
0.0033 1 .
6380 N     N     . ARG ARG ARG B B 402 402 . 0.0806 0.0859 0.0623 0.0087  0.0096
0.0062  1 .
6381 CA    CA    . ARG ARG ARG B B 402 402 . 0.0683 0.0775 0.0806 -0.0080 0.0050  -
0.0046 1 .
6382 CB    CB    . ARG ARG ARG B B 402 402 . 0.0712 0.0745 0.0590 0.0001  0.0139  -
0.0199 1 .
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6383 CG    CG    . ARG ARG ARG B B 402 402 . 0.0942 0.0722 0.0852 0.0113  -0.0219
0.0016  1 .
6384 CD    CD    . ARG ARG ARG B B 402 402 . 0.0795 0.0509 0.1140 0.0091  0.0099  -
0.0112 1 .
6385 NE    NE    . ARG ARG ARG B B 402 402 . 0.0733 0.0679 0.0949 -0.0076 0.0062
0.0022  1 .
6386 CZ    CZ    . ARG ARG ARG B B 402 402 . 0.0611 0.0554 0.0848 -0.0084 0.0155  -
0.0060 1 .
6387 NH1   NH1   . ARG ARG ARG B B 402 402 . 0.1035 0.0832 0.0816 -0.0045 -0.0090
0.0012  1 .
6388 NH2   NH2   . ARG ARG ARG B B 402 402 . 0.0656 0.0837 0.0728 -0.0085 0.0253  -
0.0036 1 .
6389 C     C     . ARG ARG ARG B B 402 402 . 0.0724 0.0775 0.0854 0.0025  0.0007  -
0.0087 1 .
6390 O     O     . ARG ARG ARG B B 402 402 . 0.0747 0.0704 0.0750 -0.0029 0.0014
0.0035  1 .
6391 N     N     . LEU LEU LEU B B 403 403 . 0.0862 0.0830 0.0868 0.0022  0.0122
0.0045  1 .
6392 CA    CA    . LEU LEU LEU B B 403 403 . 0.0858 0.0932 0.0954 -0.0022 -0.0074 -
0.0008 1 .
6393 CB    CB    . LEU LEU LEU B B 403 403 . 0.0816 0.0900 0.1017 0.0003  -0.0009
0.0277  1 .
6394 CG    CG    . LEU LEU LEU B B 403 403 . 0.1041 0.0969 0.0962 -0.0140 -0.0002 -
0.0376 1 .
6395 CD1   CD1   . LEU LEU LEU B B 403 403 . 0.1168 0.1166 0.0612 0.0120  0.0333  -
0.0209 1 .
6396 CD2   CD2   . LEU LEU LEU B B 403 403 . 0.0914 0.0685 0.1259 -0.0103 -0.0193 -
0.0164 1 .
6397 C     C     . LEU LEU LEU B B 403 403 . 0.0730 0.0767 0.0617 -0.0057 0.0110  -
0.0011 1 .
6398 O     O     . LEU LEU LEU B B 403 403 . 0.0868 0.0730 0.0985 0.0153  -0.0145 -
0.0088 1 .
6399 N     N     . ALA ALA ALA B B 404 404 . 0.0663 0.0892 0.0971 -0.0002 0.0121
0.0012  1 .
6400 CA    CA    . ALA ALA ALA B B 404 404 . 0.0786 0.0826 0.0720 -0.0174 0.0054  -
0.0056 1 .
6401 CB    CB    . ALA ALA ALA B B 404 404 . 0.1097 0.0765 0.1158 -0.0051 0.0112  -
0.0270 1 .
6402 C     C     . ALA ALA ALA B B 404 404 . 0.0626 0.0730 0.0825 0.0136  -0.0024
0.0120  1 .
6403 O     O     . ALA ALA ALA B B 404 404 . 0.0881 0.0931 0.0919 0.0055  -0.0094
0.0008  1 .
6404 N     N     . LYS LYS LYS B B 405 405 . 0.0811 0.0724 0.0800 -0.0021 0.0068
0.0083  1 .
6405 CA    CA    . LYS LYS LYS B B 405 405 . 0.0710 0.0629 0.0865 -0.0007 -0.0122 -
0.0018 1 .
6406 CB    CB    . LYS LYS LYS B B 405 405 . 0.0923 0.0715 0.0836 -0.0012 0.0020  -
0.0020 1 .
6407 CG    CG    . LYS LYS LYS B B 405 405 . 0.1141 0.0728 0.0822 0.0080  0.0010  -
0.0153 1 .
6408 CD    CD    . LYS LYS LYS B B 405 405 . 0.1258 0.0832 0.0917 0.0267  -0.0229 -
0.0088 1 .
6409 CE    CE    . LYS LYS LYS B B 405 405 . 0.1035 0.0635 0.0782 0.0307  -0.0199 -
0.0166 1 .
6410 NZ    NZ    . LYS LYS LYS B B 405 405 . 0.1150 0.0732 0.0690 0.0104  0.0040  -
0.0019 1 .
6411 C     C     . LYS LYS LYS B B 405 405 . 0.0778 0.0732 0.0687 0.0016  -0.0032
0.0082  1 .
6412 O     O     . LYS LYS LYS B B 405 405 . 0.0828 0.0726 0.0815 -0.0034 -0.0072
0.0040  1 .
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6413 N     N     . TYR TYR TYR B B 406 406 . 0.0742 0.0645 0.0808 0.0117  0.0119  -
0.0083 1 .
6414 CA    CA    . TYR TYR TYR B B 406 406 . 0.0800 0.0636 0.0676 0.0015  0.0089  -
0.0148 1 .
6415 CB    CB    . TYR TYR TYR B B 406 406 . 0.0845 0.0858 0.0812 -0.0135 0.0200
0.0131  1 .
6416 CG    CG    . TYR TYR TYR B B 406 406 . 0.0664 0.0449 0.0550 0.0034  0.0026  -
0.0055 1 .
6417 CD1   CD1   . TYR TYR TYR B B 406 406 . 0.0876 0.0583 0.0789 0.0232  0.0039
0.0015  1 .
6418 CE1   CE1   . TYR TYR TYR B B 406 406 . 0.0728 0.0927 0.0798 -0.0008 0.0012
0.0213  1 .
6419 CZ    CZ    . TYR TYR TYR B B 406 406 . 0.0755 0.0865 0.0768 -0.0138 0.0065
0.0170  1 .
6420 OH    OH    . TYR TYR TYR B B 406 406 . 0.1026 0.0749 0.0975 0.0026  0.0017
0.0046  1 .
6421 CE2   CE2   . TYR TYR TYR B B 406 406 . 0.1015 0.0866 0.0813 -0.0040 0.0056  -
0.0039 1 .
6422 CD2   CD2   . TYR TYR TYR B B 406 406 . 0.0963 0.0958 0.0933 -0.0159 -0.0034 -
0.0015 1 .
6423 C     C     . TYR TYR TYR B B 406 406 . 0.0935 0.0929 0.0705 0.0017  0.0071  -
0.0042 1 .
6424 O     O     . TYR TYR TYR B B 406 406 . 0.1090 0.0893 0.0827 -0.0105 0.0015  -
0.0077 1 .
6425 N     N     . ASN ASN ASN B B 407 407 . 0.0915 0.0903 0.0698 0.0072  0.0046
0.0037  1 .
6426 CA    CA    . ASN ASN ASN B B 407 407 . 0.0680 0.0740 0.0656 -0.0122 0.0020
0.0001  1 .
6427 CB    CB    . ASN ASN ASN B B 407 407 . 0.0585 0.0901 0.0802 0.0034  -0.0067 -
0.0002 1 .
6428 CG    CG    . ASN ASN ASN B B 407 407 . 0.0665 0.0729 0.0769 0.0010  0.0174
0.0080  1 .
6429 OD1   OD1   . ASN ASN ASN B B 407 407 . 0.0786 0.0805 0.0807 0.0099  0.0104
0.0100  1 .
6430 ND2   ND2   . ASN ASN ASN B B 407 407 . 0.1093 0.0806 0.0894 0.0096  -0.0109 -
0.0010 1 .
6431 C     C     . ASN ASN ASN B B 407 407 . 0.0871 0.0779 0.0710 -0.0093 -0.0035
0.0129  1 .
6432 O     O     . ASN ASN ASN B B 407 407 . 0.0994 0.0784 0.0929 -0.0177 -0.0082 -
0.0052 1 .
6433 N     N     . GLN GLN GLN B B 408 408 . 0.0716 0.0898 0.0803 0.0067  0.0044
0.0105  1 .
6434 CA    CA    . GLN GLN GLN B B 408 408 . 0.0779 0.0783 0.0921 0.0172  -0.0027 -
0.0117 1 .
6435 CB    CB    . GLN GLN GLN B B 408 408 . 0.0709 0.0631 0.1070 0.0229  -0.0125
0.0080  1 .
6436 CG    CG    . GLN GLN GLN B B 408 408 . 0.0878 0.1084 0.1239 -0.0197 -0.0035
0.0337  1 .
6437 CD    CD    . GLN GLN GLN B B 408 408 . 0.1135 0.1799 0.1128 -0.0015 0.0062
0.0455  1 .
6438 OE1   OE1   . GLN GLN GLN B B 408 408 . 0.1012 0.1675 0.1923 -0.0219 0.0037
0.0426  1 .
6439 NE2   NE2   . GLN GLN GLN B B 408 408 . 0.1282 0.2106 0.1632 -0.0179 -0.0072
0.0480  1 .
6440 C     C     . GLN GLN GLN B B 408 408 . 0.0803 0.0901 0.0910 0.0004  -0.0065
0.0137  1 .
6441 O     O     . GLN GLN GLN B B 408 408 . 0.1116 0.0738 0.1027 -0.0178 -0.0039
0.0175  1 .
6442 N     N     . LEU LEU LEU B B 409 409 . 0.0850 0.0792 0.0688 -0.0017 0.0065
0.0036  1 .
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6443 CA    CA    . LEU LEU LEU B B 409 409 . 0.0906 0.0837 0.0897 0.0093  0.0099  -
0.0053 1 .
6444 CB    CB    . LEU LEU LEU B B 409 409 . 0.0991 0.0736 0.0875 0.0117  0.0200
0.0048  1 .
6445 CG    CG    . LEU LEU LEU B B 409 409 . 0.1066 0.0663 0.0984 0.0007  -0.0089
0.0095  1 .
6446 CD1   CD1   . LEU LEU LEU B B 409 409 . 0.1332 0.0859 0.1084 0.0060  0.0138
0.0226  1 .
6447 CD2   CD2   . LEU LEU LEU B B 409 409 . 0.0959 0.1111 0.1143 0.0013  -0.0202
0.0076  1 .
6448 C     C     . LEU LEU LEU B B 409 409 . 0.1121 0.0798 0.0874 -0.0101 -0.0262
0.0068  1 .
6449 O     O     . LEU LEU LEU B B 409 409 . 0.1198 0.0825 0.1019 -0.0174 -0.0143 -
0.0063 1 .
6450 N     N     . MET MET MET B B 410 410 . 0.1144 0.0880 0.1129 0.0076  -0.0031
0.0066  1 .
6451 CA    CA    . MET MET MET B B 410 410 . 0.1073 0.0772 0.0875 0.0078  0.0092  -
0.0061 1 .
6452 CB    CB    . MET MET MET B B 410 410 . 0.1199 0.0939 0.1037 -0.0135 -0.0002 -
0.0064 1 .
6453 CG    CG    . MET MET MET B B 410 410 . 0.0929 0.1772 0.1352 0.0213  -0.0429
0.0204  1 .
6454 SD    SD    . MET MET MET B B 410 410 . 0.1468 0.1555 0.1458 0.0029  0.0031
0.0088  1 .
6455 CE    CE    . MET MET MET B B 410 410 . 0.1071 0.1543 0.0873 0.0221  0.0075  -
0.0466 1 .
6456 C     C     . MET MET MET B B 410 410 . 0.1108 0.0919 0.0988 0.0006  0.0012  -
0.0002 1 .
6457 O     O     . MET MET MET B B 410 410 . 0.1284 0.0995 0.1097 -0.0269 -0.0085
0.0065  1 .
6458 N     N     . ARG ARG ARG B B 411 411 . 0.1032 0.0891 0.0866 -0.0036 0.0014
0.0057  1 .
6459 CA    CA    . ARG ARG ARG B B 411 411 . 0.1232 0.1220 0.1021 -0.0125 0.0106
0.0015  1 .
6460 CB    CB    . ARG ARG ARG B B 411 411 . 0.0969 0.1026 0.0838 -0.0087 0.0096
0.0054  1 .
6461 CG    CG    . ARG ARG ARG B B 411 411 . 0.1188 0.1498 0.0764 0.0059  -0.0217
0.0105  1 .
6462 CD    CD    . ARG ARG ARG B B 411 411 . 0.0994 0.1419 0.0660 -0.0175 -0.0045
0.0058  1 .
6463 NE    NE    . ARG ARG ARG B B 411 411 . 0.1152 0.1640 0.1249 -0.0183 0.0259  -
0.0069 1 .
6464 CZ    CZ    . ARG ARG ARG B B 411 411 . 0.1308 0.1335 0.1040 -0.0100 0.0079
0.0075  1 .
6465 NH1   NH1   . ARG ARG ARG B B 411 411 . 0.1622 0.1468 0.1224 -0.0002 -0.0032
0.0256  1 .
6466 NH2   NH2   . ARG ARG ARG B B 411 411 . 0.1469 0.1631 0.1283 0.0065  -0.0078 -
0.0010 1 .
6467 C     C     . ARG ARG ARG B B 411 411 . 0.1352 0.1120 0.1231 -0.0161 -0.0024
0.0203  1 .
6468 O     O     . ARG ARG ARG B B 411 411 . 0.1637 0.1356 0.1188 -0.0303 -0.0334
0.0010  1 .
6469 N     N     . ILE ILE ILE B B 412 412 . 0.1163 0.0997 0.1091 -0.0041 -0.0044
0.0314  1 .
6470 CA    CA    . ILE ILE ILE B B 412 412 . 0.1035 0.1066 0.1154 -0.0056 -0.0069 -
0.0002 1 .
6471 CB    CB    . ILE ILE ILE B B 412 412 . 0.1169 0.1023 0.0818 0.0044  -0.0036
0.0235  1 .
6472 CG1   CG1   . ILE ILE ILE B B 412 412 . 0.1319 0.1039 0.1185 -0.0178 -0.0074 -
0.0065 1 .
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6473 CD    CD    . ILE ILE ILE B B 412 412 . 0.1349 0.0853 0.1282 0.0171  -0.0065
0.0308  1 .
6474 CG2   CG2   . ILE ILE ILE B B 412 412 . 0.1222 0.1664 0.1407 -0.0134 -0.0246
0.0079  1 .
6475 C     C     . ILE ILE ILE B B 412 412 . 0.1229 0.1168 0.1222 -0.0088 -0.0031
0.0135  1 .
6476 O     O     . ILE ILE ILE B B 412 412 . 0.1377 0.1333 0.1438 -0.0515 -0.0027 -
0.0083 1 .
6477 N     N     . GLU GLU GLU B B 413 413 . 0.1271 0.1186 0.1032 0.0035  -0.0030
0.0052  1 .
6478 CA    CA    . GLU GLU GLU B B 413 413 . 0.1238 0.0923 0.1198 -0.0224 0.0196  -
0.0040 1 .
6479 CB    CB    . GLU GLU GLU B B 413 413 . 0.1322 0.1316 0.1221 -0.0126 -0.0035 -
0.0121 1 .
6480 CG    CG    . GLU GLU GLU B B 413 413 . 0.1259 0.1256 0.1441 -0.0247 0.0200  -
0.0367 1 .
6481 CD    CD    . GLU GLU GLU B B 413 413 . 0.1602 0.1257 0.1539 -0.0053 0.0104  -
0.0287 1 .
6482 OE1   OE1   . GLU GLU GLU B B 413 413 . 0.1482 0.1834 0.1961 -0.0290 -0.0155
0.0102  1 .
6483 OE2   OE2   . GLU GLU GLU B B 413 413 . 0.1612 0.1646 0.1558 -0.0201 -0.0154 -
0.0213 1 .
6484 C     C     . GLU GLU GLU B B 413 413 . 0.1606 0.1161 0.1326 -0.0232 -0.0078
0.0126  1 .
6485 O     O     . GLU GLU GLU B B 413 413 . 0.1534 0.1252 0.1213 -0.0542 0.0070
0.0044  1 .
6486 N     N     . GLU GLU GLU B B 414 414 . 0.1611 0.1067 0.1265 -0.0290 0.0016
0.0159  1 .
6487 CA    CA    . GLU GLU GLU B B 414 414 . 0.1770 0.1028 0.1212 -0.0234 0.0074
0.0087  1 .
6488 CB    CB    . GLU GLU GLU B B 414 414 . 0.1802 0.1030 0.1159 -0.0299 0.0131
0.0164  1 .
6489 CG    CG    . GLU GLU GLU B B 414 414 . 0.2670 0.1668 0.1573 -0.0254 0.0183
0.0139  1 .
6490 CD    CD    . GLU GLU GLU B B 414 414 . 0.2142 0.1805 0.1452 -0.0004 0.0029
0.0145  1 .
6491 OE1   OE1   . GLU GLU GLU B B 414 414 . 0.2768 0.2470 0.2323 0.0339  -0.0021 -
0.0398 1 .
6492 OE2   OE2   . GLU GLU GLU B B 414 414 . 0.2611 0.2243 0.2305 -0.0006 -0.0074
0.0070  1 .
6493 C     C     . GLU GLU GLU B B 414 414 . 0.1810 0.1195 0.1454 -0.0294 -0.0040
0.0095  1 .
6494 O     O     . GLU GLU GLU B B 414 414 . 0.2450 0.1458 0.1533 -0.0604 -0.0178 -
0.0151 1 .
6495 N     N     . GLU GLU GLU B B 415 415 . 0.1551 0.1561 0.1816 -0.0477 0.0112  -
0.0043 1 .
6496 CA    CA    . GLU GLU GLU B B 415 415 . 0.1826 0.1793 0.1882 -0.0458 0.0014  -
0.0210 1 .
6497 CB    CB    . GLU GLU GLU B B 415 415 . 0.1865 0.1981 0.2178 -0.0394 0.0356  -
0.0091 1 .
6498 CG    CG    . GLU GLU GLU B B 415 415 . 0.3200 0.4063 0.3835 -0.0297 -0.0166 -
0.0281 1 .
6499 CD    CD    . GLU GLU GLU B B 415 415 . 0.4764 0.5357 0.4501 -0.0778 -0.0058 -
0.0109 1 .
6500 OE1   OE1   . GLU GLU GLU B B 415 415 . 0.7069 0.6603 0.4954 -0.0579 -0.1097 -
0.0598 1 .
6501 OE2   OE2   . GLU GLU GLU B B 415 415 . 0.4894 0.6041 0.5914 -0.1294 -0.0482 -
0.0676 1 .
6502 C     C     . GLU GLU GLU B B 415 415 . 0.1992 0.2117 0.1861 -0.0625 0.0042  -
0.0053 1 .
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6503 O     O     . GLU GLU GLU B B 415 415 . 0.2204 0.2339 0.2275 -0.0887 -0.0070 -
0.0330 1 .
6504 N     N     . LEU LEU LEU B B 416 416 . 0.2040 0.2068 0.1584 -0.0600 -0.0034
0.0026  1 .
6505 CA    CA    . LEU LEU LEU B B 416 416 . 0.2096 0.2035 0.1749 -0.0482 -0.0354 -
0.0173 1 .
6506 CB    CB    . LEU LEU LEU B B 416 416 . 0.2006 0.1964 0.1836 -0.0194 -0.0338 -
0.0045 1 .
6507 CG    CG    . LEU LEU LEU B B 416 416 . 0.2108 0.2205 0.1792 -0.0073 -0.0278 -
0.0245 1 .
6508 CD1   CD1   . LEU LEU LEU B B 416 416 . 0.2878 0.2206 0.2133 0.0012  -0.0143
0.0000  1 .
6509 CD2   CD2   . LEU LEU LEU B B 416 416 . 0.2129 0.2981 0.2211 -0.0223 0.0043  -
0.0346 1 .
6510 C     C     . LEU LEU LEU B B 416 416 . 0.2247 0.2205 0.2004 -0.0304 -0.0411 -
0.0289 1 .
6511 O     O     . LEU LEU LEU B B 416 416 . 0.2829 0.2641 0.2211 -0.0747 -0.0784 -
0.0243 1 .
6512 N     N     . GLY GLY GLY B B 417 417 . 0.2606 0.2146 0.1946 -0.0315 -0.0031 -
0.0255 1 .
6513 CA    CA    . GLY GLY GLY B B 417 417 . 0.3274 0.2380 0.2522 -0.0301 -0.0025 -
0.0272 1 .
6514 C     C     . GLY GLY GLY B B 417 417 . 0.3635 0.2926 0.2842 -0.0340 0.0074  -
0.0307 1 .
6515 O     O     . GLY GLY GLY B B 417 417 . 0.3562 0.2818 0.2500 -0.0274 0.0289  -
0.0314 1 .
6516 N     N     . ASP ASP ASP B B 418 418 . 0.4125 0.3219 0.3333 -0.0491 -0.0024 -
0.0332 1 .
6517 CA    CA    . ASP ASP ASP B B 418 418 . 0.4298 0.3830 0.3668 -0.0494 -0.0135 -
0.0344 1 .
6518 CB    CB    . ASP ASP ASP B B 418 418 . 0.4536 0.3963 0.4084 -0.0532 -0.0149 -
0.0444 1 .
6519 CG    CG    . ASP ASP ASP B B 418 418 . 0.5192 0.5184 0.5010 -0.0227 0.0061  -
0.0362 1 .
6520 OD1   OD1   . ASP ASP ASP B B 418 418 . 0.5170 0.5866 0.6690 -0.0127 0.0452  -
0.0308 1 .
6521 OD2   OD2   . ASP ASP ASP B B 418 418 . 0.5517 0.6187 0.6385 -0.0291 -0.0374 -
0.0324 1 .
6522 C     C     . ASP ASP ASP B B 418 418 . 0.3991 0.3815 0.3658 -0.0529 -0.0133 -
0.0326 1 .
6523 O     O     . ASP ASP ASP B B 418 418 . 0.4323 0.4042 0.3256 -0.0758 -0.0285 -
0.0431 1 .
6524 N     N     . GLU GLU GLU B B 419 419 . 0.3644 0.3591 0.3586 -0.0551 -0.0444 -
0.0344 1 .
6525 CA    CA    . GLU GLU GLU B B 419 419 . 0.3417 0.3663 0.3562 -0.0361 -0.0310 -
0.0014 1 .
6526 CB    CB    . GLU GLU GLU B B 419 419 . 0.3723 0.4012 0.3869 -0.0193 -0.0170
0.0000  1 .
6527 CG    CG    . GLU GLU GLU B B 419 419 . 0.4638 0.4793 0.4870 -0.0002 -0.0093 -
0.0005 1 .
6528 CD    CD    . GLU GLU GLU B B 419 419 . 0.5180 0.5915 0.6001 -0.0071 0.0118  -
0.0479 1 .
6529 OE1   OE1   . GLU GLU GLU B B 419 419 . 0.5853 0.5978 0.6376 -0.0826 0.0126  -
0.0452 1 .
6530 OE2   OE2   . GLU GLU GLU B B 419 419 . 0.5631 0.6171 0.5732 0.0220  0.0010  -
0.0906 1 .
6531 C     C     . GLU GLU GLU B B 419 419 . 0.3263 0.3268 0.3340 -0.0231 -0.0317
0.0176  1 .
6532 O     O     . GLU GLU GLU B B 419 419 . 0.2984 0.3346 0.3466 -0.0192 -0.0689
0.0432  1 .
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6533 N     N     . ALA ALA ALA B B 420 420 . 0.3086 0.2916 0.2837 -0.0385 -0.0216
0.0127  1 .
6534 CA    CA    . ALA ALA ALA B B 420 420 . 0.2728 0.2539 0.2480 -0.0255 0.0042  -
0.0005 1 .
6535 CB    CB    . ALA ALA ALA B B 420 420 . 0.2766 0.2237 0.2419 -0.0282 0.0054  -
0.0160 1 .
6536 C     C     . ALA ALA ALA B B 420 420 . 0.2695 0.2453 0.2340 -0.0176 0.0114  -
0.0038 1 .
6537 O     O     . ALA ALA ALA B B 420 420 . 0.3063 0.2504 0.2193 -0.0378 0.0104
0.0047  1 .
6538 N     N     . ARG ARG ARG B B 421 421 . 0.2100 0.2383 0.1975 -0.0337 0.0025  -
0.0232 1 .
6539 CA    CA    . ARG ARG ARG B B 421 421 . 0.2201 0.2254 0.2273 -0.0486 0.0015  -
0.0064 1 .
6540 CB    CB    . ARG ARG ARG B B 421 421 . 0.2399 0.2542 0.2256 -0.0679 -0.0107 -
0.0018 1 .
6541 CG    CG    . ARG ARG ARG B B 421 421 . 0.3048 0.3325 0.3670 -0.0990 0.0339  -
0.0354 1 .
6542 CD    CD    . ARG ARG ARG B B 421 421 . 0.4467 0.5270 0.5297 -0.0262 0.0381  -
0.0315 1 .
6543 NE    NE    . ARG ARG ARG B B 421 421 . 0.5560 0.6264 0.5482 -0.0349 0.0922  -
0.0237 1 .
6544 CZ    CZ    . ARG ARG ARG B B 421 421 . 0.5828 0.6400 0.5750 -0.0343 0.0805  -
0.0083 1 .
6545 NH1   NH1   . ARG ARG ARG B B 421 421 . 0.5889 0.6217 0.5348 -0.0161 0.0983  -
0.0008 1 .
6546 NH2   NH2   . ARG ARG ARG B B 421 421 . 0.4833 0.6418 0.5469 -0.0268 0.1093
0.0283  1 .
6547 C     C     . ARG ARG ARG B B 421 421 . 0.1873 0.1801 0.1853 -0.0287 0.0000  -
0.0313 1 .
6548 O     O     . ARG ARG ARG B B 421 421 . 0.2379 0.1972 0.2188 -0.0261 -0.0004 -
0.0381 1 .
6549 N     N     . PHE PHE PHE B B 422 422 . 0.1669 0.1366 0.1584 -0.0443 0.0006  -
0.0081 1 .
6550 CA    CA    . PHE PHE PHE B B 422 422 . 0.1597 0.1303 0.1437 -0.0313 -0.0034 -
0.0147 1 .
6551 CB    CB    . PHE PHE PHE B B 422 422 . 0.1646 0.1633 0.1625 -0.0186 0.0039  -
0.0116 1 .
6552 CG    CG    . PHE PHE PHE B B 422 422 . 0.1665 0.0948 0.1183 -0.0156 0.0234
0.0002  1 .
6553 CD1   CD1   . PHE PHE PHE B B 422 422 . 0.1481 0.0860 0.1031 0.0029  0.0216  -
0.0031 1 .
6554 CE1   CE1   . PHE PHE PHE B B 422 422 . 0.1514 0.1116 0.1179 0.0025  0.0058
0.0308  1 .
6555 CZ    CZ    . PHE PHE PHE B B 422 422 . 0.1686 0.1134 0.1260 0.0046  0.0116
0.0146  1 .
6556 CE2   CE2   . PHE PHE PHE B B 422 422 . 0.1628 0.1592 0.1434 -0.0015 0.0003  -
0.0141 1 .
6557 CD2   CD2   . PHE PHE PHE B B 422 422 . 0.1430 0.1415 0.1433 0.0132  0.0180  -
0.0030 1 .
6558 C     C     . PHE PHE PHE B B 422 422 . 0.1881 0.1358 0.1354 -0.0043 0.0061  -
0.0052 1 .
6559 O     O     . PHE PHE PHE B B 422 422 . 0.2156 0.1269 0.1495 -0.0151 0.0147  -
0.0047 1 .
6560 N     N     . ALA ALA ALA B B 423 423 . 0.1460 0.1180 0.1143 -0.0127 0.0007
0.0100  1 .
6561 CA    CA    . ALA ALA ALA B B 423 423 . 0.1574 0.1026 0.1025 -0.0301 0.0141  -
0.0053 1 .
6562 CB    CB    . ALA ALA ALA B B 423 423 . 0.1904 0.1123 0.1385 -0.0032 0.0163  -
0.0145 1 .
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6563 C     C     . ALA ALA ALA B B 423 423 . 0.1552 0.1202 0.1374 -0.0139 0.0110  -
0.0095 1 .
6564 O     O     . ALA ALA ALA B B 423 423 . 0.1735 0.1591 0.1134 -0.0234 -0.0199 -
0.0110 1 .
6565 N     N     . GLY GLY GLY B B 424 424 . 0.1665 0.1231 0.1232 -0.0211 0.0112  -
0.0097 1 .
6566 CA    CA    . GLY GLY GLY B B 424 424 . 0.1802 0.1100 0.1583 -0.0217 0.0159
0.0004  1 .
6567 C     C     . GLY GLY GLY B B 424 424 . 0.2321 0.1442 0.1462 -0.0156 0.0349  -
0.0050 1 .
6568 O     O     . GLY GLY GLY B B 424 424 . 0.2266 0.1603 0.1582 -0.0233 0.0304
0.0020  1 .
6569 N     N     . HIS HIS HIS B B 425 425 . 0.2396 0.1809 0.1502 -0.0133 0.0521
0.0133  1 .
6570 CA    CA    . HIS HIS HIS B B 425 425 . 0.2511 0.1799 0.1497 -0.0037 0.0454  -
0.0131 1 .
6571 CB    CB    . HIS HIS HIS B B 425 425 . 0.2572 0.2134 0.1249 0.0038  0.0453  -
0.0359 1 .
6572 CG    CG    . HIS HIS HIS B B 425 425 . 0.2821 0.2467 0.1383 0.0138  0.0472  -
0.0160 1 .
6573 ND1   ND1   . HIS HIS HIS B B 425 425 . 0.3181 0.2857 0.2203 0.0290  0.0246  -
0.0017 1 .
6574 CE1   CE1   . HIS HIS HIS B B 425 425 . 0.3232 0.3019 0.1921 0.0222  0.0563  -
0.0096 1 .
6575 NE2   NE2   . HIS HIS HIS B B 425 425 . 0.3471 0.3146 0.1809 0.0264  0.0419  -
0.0006 1 .
6576 CD2   CD2   . HIS HIS HIS B B 425 425 . 0.2658 0.3178 0.1375 0.0356  -0.0045 -
0.0290 1 .
6577 C     C     . HIS HIS HIS B B 425 425 . 0.2617 0.2133 0.1769 -0.0165 0.0245  -
0.0108 1 .
6578 O     O     . HIS HIS HIS B B 425 425 . 0.3199 0.2137 0.1924 -0.0172 0.0363
0.0084  1 .
6579 N     N     . ASN ASN ASN B B 426 426 . 0.2501 0.2354 0.1832 0.0119  0.0127  -
0.0372 1 .
6580 CA    CA    . ASN ASN ASN B B 426 426 . 0.2371 0.2312 0.1897 -0.0160 -0.0004 -
0.0058 1 .
6581 CB    CB    . ASN ASN ASN B B 426 426 . 0.2640 0.2591 0.1975 -0.0159 -0.0236 -
0.0519 1 .
6582 CG    CG    . ASN ASN ASN B B 426 426 . 0.3574 0.3353 0.2465 -0.0164 -0.0163 -
0.0417 1 .
6583 OD1   OD1   . ASN ASN ASN B B 426 426 . 0.4398 0.5326 0.3250 -0.0383 0.0246  -
0.0354 1 .
6584 ND2   ND2   . ASN ASN ASN B B 426 426 . 0.4098 0.3650 0.3323 -0.0046 -0.0383 -
0.0876 1 .
6585 C     C     . ASN ASN ASN B B 426 426 . 0.2017 0.1849 0.1810 -0.0145 0.0117
0.0107  1 .
6586 O     O     . ASN ASN ASN B B 426 426 . 0.2239 0.1868 0.1896 -0.0324 -0.0281
0.0059  1 .
6587 N     N     . PHE PHE PHE B B 427 427 . 0.1834 0.1529 0.1294 -0.0090 0.0018
0.0051  1 .
6588 CA    CA    . PHE PHE PHE B B 427 427 . 0.1797 0.1379 0.1564 0.0098  0.0026  -
0.0077 1 .
6589 CB    CB    . PHE PHE PHE B B 427 427 . 0.1570 0.1575 0.1514 0.0016  0.0136
0.0101  1 .
6590 CG    CG    . PHE PHE PHE B B 427 427 . 0.2020 0.1680 0.1674 0.0004  -0.0144 -
0.0074 1 .
6591 CD1   CD1   . PHE PHE PHE B B 427 427 . 0.2158 0.2330 0.2386 -0.0226 0.0670
0.0333  1 .
6592 CE1   CE1   . PHE PHE PHE B B 427 427 . 0.2621 0.2544 0.3343 -0.0222 0.0431
0.0397  1 .
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6593 CZ    CZ    . PHE PHE PHE B B 427 427 . 0.2080 0.2752 0.2140 -0.0423 0.0086
0.0683  1 .
6594 CE2   CE2   . PHE PHE PHE B B 427 427 . 0.2401 0.1999 0.2101 -0.0458 -0.0250
0.0425  1 .
6595 CD2   CD2   . PHE PHE PHE B B 427 427 . 0.2695 0.1722 0.1757 -0.0482 -0.0242
0.0347  1 .
6596 C     C     . PHE PHE PHE B B 427 427 . 0.1745 0.1340 0.1526 -0.0036 0.0254
0.0137  1 .
6597 O     O     . PHE PHE PHE B B 427 427 . 0.1719 0.1243 0.1712 -0.0226 -0.0018 -
0.0003 1 .
6598 N     N     . ARG ARG ARG B B 428 428 . 0.1986 0.1524 0.1781 -0.0298 0.0059
0.0073  1 .
6599 CA    CA    . ARG ARG ARG B B 428 428 . 0.1916 0.1705 0.1704 -0.0112 -0.0080
0.0041  1 .
6600 CB    CB    . ARG ARG ARG B B 428 428 . 0.2157 0.2136 0.1971 -0.0337 0.0041
0.0030  1 .
6601 CG    CG    . ARG ARG ARG B B 428 428 . 0.1946 0.2108 0.1841 -0.0530 -0.0048 -
0.0214 1 .
6602 CD    CD    . ARG ARG ARG B B 428 428 . 0.2575 0.1692 0.1433 -0.0291 -0.0064 -
0.0181 1 .
6603 NE    NE    . ARG ARG ARG B B 428 428 . 0.2158 0.2083 0.1816 -0.0421 -0.0001
0.0214  1 .
6604 CZ    CZ    . ARG ARG ARG B B 428 428 . 0.1984 0.1981 0.1563 -0.0121 -0.0023 -
0.0106 1 .
6605 NH1   NH1   . ARG ARG ARG B B 428 428 . 0.2001 0.1306 0.1367 -0.0244 -0.0204 -
0.0209 1 .
6606 NH2   NH2   . ARG ARG ARG B B 428 428 . 0.2468 0.1721 0.1587 -0.0018 -0.0088 -
0.0121 1 .
6607 C     C     . ARG ARG ARG B B 428 428 . 0.2125 0.1790 0.2101 0.0054  -0.0180 -
0.0008 1 .
6608 O     O     . ARG ARG ARG B B 428 428 . 0.2697 0.2370 0.2525 0.0355  -0.0282 -
0.0383 1 .
6609 N     N     . ASN ASN ASN B B 429 429 . 0.2362 0.1887 0.2035 -0.0192 -0.0468
0.0050  1 .
6610 CA    CA    . ASN ASN ASN B B 429 429 . 0.2486 0.2102 0.2011 -0.0317 -0.0237
0.0044  1 .
6611 CB    CB    . ASN ASN ASN B B 429 429 . 0.2765 0.2322 0.2355 -0.0206 -0.0166
0.0191  1 .
6612 CG    CG    . ASN ASN ASN B B 429 429 . 0.2858 0.2893 0.2528 -0.0150 -0.0116
0.0027  1 .
6613 OD1   OD1   . ASN ASN ASN B B 429 429 . 0.4360 0.3488 0.2522 -0.0767 0.0401  -
0.0013 1 .
6614 ND2   ND2   . ASN ASN ASN B B 429 429 . 0.2944 0.2346 0.2305 0.0213  -0.0126 -
0.0192 1 .
6615 C     C     . ASN ASN ASN B B 429 429 . 0.2680 0.2329 0.2222 -0.0324 -0.0102 -
0.0136 1 .
6616 O     O     . ASN ASN ASN B B 429 429 . 0.3108 0.2295 0.2238 -0.0341 -0.0246 -
0.0266 1 .
6617 N     N     . PRO PRO PRO B B 430 430 . 0.2630 0.2214 0.2075 -0.0313 -0.0093 -
0.0162 1 .
6618 CA    CA    . PRO PRO PRO B B 430 430 . 0.2955 0.2742 0.2473 -0.0463 -0.0080 -
0.0066 1 .
6619 CB    CB    . PRO PRO PRO B B 430 430 . 0.3221 0.2705 0.2339 -0.0308 -0.0060
0.0026  1 .
6620 CG    CG    . PRO PRO PRO B B 430 430 . 0.2807 0.2760 0.1452 -0.0717 -0.0327 -
0.0286 1 .
6621 CD    CD    . PRO PRO PRO B B 430 430 . 0.2518 0.2586 0.2020 -0.0443 0.0049  -
0.0370 1 .
6622 C     C     . PRO PRO PRO B B 430 430 . 0.3082 0.2812 0.3006 -0.0528 -0.0121
0.0063  1 .
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6623 O     O     . PRO PRO PRO B B 430 430 . 0.3469 0.2952 0.3591 -0.0935 -0.0195
0.0127  1 .
6624 N     N     . SER SER SER B B 431 431 . 0.3234 0.3357 0.3269 -0.0413 -0.0210
0.0034  1 .
6625 CA    CA    . SER SER SER B B 431 431 . 0.3732 0.3974 0.3968 -0.0371 -0.0119
0.0036  1 .
6626 CB    CB    . SER SER SER B B 431 431 . 0.3595 0.4055 0.4024 -0.0280 -0.0178
0.0140  1 .
6627 OG    OG    . SER SER SER B B 431 431 . 0.3653 0.4574 0.4198 -0.0583 -0.0054
0.0189  1 .
6628 C     C     . SER SER SER B B 431 431 . 0.4084 0.4380 0.4235 -0.0284 -0.0158 -
0.0038 1 .
6629 O     O     . SER SER SER B B 431 431 . 0.3994 0.4593 0.4427 -0.0377 -0.0315 -
0.0127 1 .
6630 N     N     . VAL VAL VAL B B 432 432 . 0.4305 0.4580 0.4459 -0.0181 -0.0104 -
0.0058 1 .
6631 CA    CA    . VAL VAL VAL B B 432 432 . 0.4646 0.4745 0.4639 -0.0136 -0.0089 -
0.0093 1 .
6632 CB    CB    . VAL VAL VAL B B 432 432 . 0.4618 0.4836 0.4774 -0.0092 -0.0110 -
0.0043 1 .
6633 CG1   CG1   . VAL VAL VAL B B 432 432 . 0.4803 0.4972 0.5093 -0.0259 -0.0274 -
0.0098 1 .
6634 CG2   CG2   . VAL VAL VAL B B 432 432 . 0.4791 0.4845 0.4761 -0.0177 -0.0363 -
0.0304 1 .
6635 C     C     . VAL VAL VAL B B 432 432 . 0.4745 0.4737 0.4624 -0.0165 -0.0066
0.0049  1 .
6636 O     O     . VAL VAL VAL B B 432 432 . 0.4883 0.4898 0.4733 -0.0263 -0.0091 -
0.0085 1 .
6637 MG+2  MG+2  . MG2 MG2 MG2 B . 440 440 . 0.0908 0.0936 0.0808 0.0053  -0.0018
0.0079  1 .
6638 MG+2  MG+2  . MG2 MG2 MG2 B . 441 441 . 0.1072 0.0759 0.0737 0.0001  0.0046
0.0107  1 .
6639 O3P   O3P   . PEP PEP PEP B . 442 442 . 0.1176 0.0831 0.0898 0.0096  0.0018  -
0.0006 1 .
6640 P     P     . PEP PEP PEP B . 442 442 . 0.0937 0.0891 0.0755 0.0098  0.0037
0.0068  1 .
6641 O1P   O1P   . PEP PEP PEP B . 442 442 . 0.0953 0.0812 0.0790 0.0087  -0.0001
0.0094  1 .
6642 O2P   O2P   . PEP PEP PEP B . 442 442 . 0.0835 0.0936 0.0979 0.0075  -0.0023
0.0033  1 .
6643 O2    O2    . PEP PEP PEP B . 442 442 . 0.1048 0.0987 0.0959 0.0267  -0.0023
0.0082  1 .
6644 C2    C2    . PEP PEP PEP B . 442 442 . 0.1569 0.1012 0.0907 -0.0063 0.0069
0.0017  1 .
6645 C3    C3    . PEP PEP PEP B . 442 442 . 0.2066 0.1233 0.1024 -0.0105 0.0005
0.0556  1 .
6646 C1    C1    . PEP PEP PEP B . 442 442 . 0.0954 0.0772 0.0728 -0.0191 0.0004  -
0.0039 1 .
6647 O1    O1    . PEP PEP PEP B . 442 442 . 0.0943 0.0766 0.0739 0.0047  -0.0044
0.0072  1 .
6648 "O2'" "O2'" . PEP PEP PEP B . 442 442 . 0.0956 0.0783 0.0775 0.0083  -0.0074 -
0.0054 1 .
6649 O     O     . HOH HOH HOH B . 446 446 . 0.0764 0.0835 0.0693 -0.0063 0.0025  -
0.0099 1 .
6650 O     O     . HOH HOH HOH B . 447 447 . 0.1157 0.1170 0.0964 0.0212  -0.0014 -
0.0084 1 .
6651 O     O     . HOH HOH HOH B . 448 448 . 0.0895 0.1015 0.0927 -0.0103 -0.0014
0.0064  1 .
6652 O     O     . HOH HOH HOH S . 1   1   . 0.0840 0.0680 0.0618 -0.0237 0.0019
0.0005  1 .
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6653 O     O     . HOH HOH HOH S . 2   2   . 0.0843 0.0768 0.0940 0.0090  0.0043
0.0015  1 .
6654 O     O     . HOH HOH HOH S . 3   3   . 0.0805 0.1119 0.0694 -0.0116 -0.0125
0.0088  1 .
6655 O     O     . HOH HOH HOH S . 4   4   . 0.0742 0.1089 0.0993 0.0126  0.0035
0.0058  1 .
6656 O     O     . HOH HOH HOH S . 5   5   . 0.1008 0.1017 0.0866 -0.0279 0.0058
0.0149  1 .
6657 O     O     . HOH HOH HOH S . 6   6   . 0.1082 0.0778 0.0860 0.0171  -0.0036 -
0.0043 1 .
6658 O     O     . HOH HOH HOH S . 7   7   . 0.0968 0.1063 0.0730 -0.0082 0.0170  -
0.0009 1 .
6659 O     O     . HOH HOH HOH S . 8   8   . 0.1228 0.1081 0.1232 0.0130  0.0018
0.0028  1 .
6660 O     O     . HOH HOH HOH S . 9   9   . 0.1165 0.0882 0.0711 0.0047  0.0015
0.0028  1 .
6661 O     O     . HOH HOH HOH S . 10  10  . 0.1177 0.1073 0.1284 0.0145  -0.0012
0.0233  1 .
6662 O     O     . HOH HOH HOH S . 11  11  . 0.1210 0.0834 0.1101 -0.0042 0.0055  -
0.0086 1 .
6663 O     O     . HOH HOH HOH S . 12  12  . 0.1069 0.1161 0.0904 -0.0050 0.0161
0.0039  1 .
6664 O     O     . HOH HOH HOH S . 13  13  . 0.0849 0.0806 0.1298 -0.0013 -0.0003
0.0026  1 .
6665 O     O     . HOH HOH HOH S . 14  14  . 0.1221 0.0954 0.1077 0.0247  0.0031  -
0.0153 1 .
6666 O     O     . HOH HOH HOH S . 15  15  . 0.1102 0.1339 0.1089 0.0106  0.0171
0.0265  1 .
6667 O     O     . HOH HOH HOH S . 16  16  . 0.1237 0.0820 0.1186 0.0141  0.0051  -
0.0006 1 .
6668 O     O     . HOH HOH HOH S . 17  17  . 0.0946 0.1261 0.1281 0.0251  -0.0190 -
0.0063 1 .
6669 O     O     . HOH HOH HOH S . 18  18  . 0.1653 0.0804 0.1194 -0.0103 0.0308  -
0.0225 1 .
6670 O     O     . HOH HOH HOH S . 19  19  . 0.1531 0.1435 0.1125 0.0028  -0.0079
0.0014  1 .
6671 O     O     . HOH HOH HOH S . 20  20  . 0.1400 0.0929 0.1234 0.0103  0.0122
0.0107  1 .
6672 O     O     . HOH HOH HOH S . 21  21  . 0.1239 0.1026 0.1295 0.0096  0.0221
0.0134  1 .
6673 O     O     . HOH HOH HOH S . 22  22  . 0.1147 0.1151 0.1275 0.0171  0.0128
0.0267  1 .
6674 O     O     . HOH HOH HOH S . 23  23  . 0.1188 0.1466 0.1636 0.0034  -0.0028 -
0.0002 1 .
6675 O     O     . HOH HOH HOH S . 24  24  . 0.1525 0.1304 0.1030 -0.0008 0.0052  -
0.0084 1 .
6676 O     O     . HOH HOH HOH S . 25  25  . 0.1057 0.1204 0.1203 0.0134  -0.0055
0.0220  1 .
6677 O     O     . HOH HOH HOH S . 26  26  . 0.1217 0.1061 0.1314 -0.0241 0.0043
0.0062  1 .
6678 O     O     . HOH HOH HOH S . 27  27  . 0.1447 0.2015 0.1847 -0.0147 -0.0267 -
0.0274 1 .
6679 O     O     . HOH HOH HOH S . 28  28  . 0.1304 0.0962 0.1361 0.0009  -0.0032
0.0004  1 .
6680 O     O     . HOH HOH HOH S . 29  29  . 0.1150 0.1151 0.1564 -0.0008 -0.0025
0.0452  1 .
6681 O     O     . HOH HOH HOH S . 30  30  . 0.1658 0.1136 0.1139 -0.0143 0.0341
0.0008  1 .
6682 O     O     . HOH HOH HOH S . 31  31  . 0.1237 0.1347 0.1162 0.0215  -0.0093
0.0138  1 .
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6683 O     O     . HOH HOH HOH S . 32  32  . 0.1225 0.1282 0.1223 0.0236  -0.0136
0.0017  1 .
6684 O     O     . HOH HOH HOH S . 33  33  . 0.1154 0.0864 0.1443 -0.0153 -0.0007
0.0099  1 .
6685 O     O     . HOH HOH HOH S . 34  34  . 0.1405 0.1316 0.1270 0.0123  0.0032  -
0.0021 1 .
6686 O     O     . HOH HOH HOH S . 35  35  . 0.1106 0.1374 0.1241 -0.0090 -0.0033 -
0.0150 1 .
6687 O     O     . HOH HOH HOH S . 36  36  . 0.1333 0.0773 0.1641 -0.0054 0.0112
0.0305  1 .
6688 O     O     . HOH HOH HOH S . 37  37  . 0.1184 0.1391 0.1528 -0.0067 0.0331
0.0333  1 .
6689 O     O     . HOH HOH HOH S . 38  38  . 0.1219 0.1473 0.1442 0.0064  -0.0125 -
0.0172 1 .
6690 O     O     . HOH HOH HOH S . 39  39  . 0.1252 0.1692 0.1099 0.0463  0.0026
0.0038  1 .
6691 O     O     . HOH HOH HOH S . 40  40  . 0.1574 0.1107 0.1176 0.0080  0.0377
0.0252  1 .
6692 O     O     . HOH HOH HOH S . 41  41  . 0.1531 0.0891 0.1357 0.0130  0.0055
0.0069  1 .
6693 O     O     . HOH HOH HOH S . 42  42  . 0.1316 0.1320 0.1174 0.0236  -0.0179
0.0006  1 .
6694 O     O     . HOH HOH HOH S . 43  43  . 0.1165 0.1153 0.1474 0.0057  -0.0031 -
0.0039 1 .
6695 O     O     . HOH HOH HOH S . 44  44  . 0.1529 0.1225 0.1552 0.0071  -0.0134 -
0.0209 1 .
6696 O     O     . HOH HOH HOH S . 45  45  . 0.1577 0.0883 0.1423 0.0089  0.0094  -
0.0188 1 .
6697 O     O     . HOH HOH HOH S . 46  46  . 0.1265 0.1130 0.1485 -0.0097 0.0227  -
0.0084 1 .
6698 O     O     . HOH HOH HOH S . 47  47  . 0.1276 0.1347 0.1673 0.0164  -0.0295
0.0284  1 .
6699 O     O     . HOH HOH HOH S . 48  48  . 0.1408 0.1194 0.1587 -0.0048 -0.0136
0.0299  1 .
6700 O     O     . HOH HOH HOH S . 49  49  . 0.1344 0.1467 0.1442 -0.0023 0.0103
0.0101  1 .
6701 O     O     . HOH HOH HOH S . 50  50  . 0.1943 0.1210 0.1287 -0.0264 -0.0098 -
0.0077 1 .
6702 O     O     . HOH HOH HOH S . 51  51  . 0.1489 0.1723 0.1183 0.0084  -0.0159 -
0.0337 1 .
6703 O     O     . HOH HOH HOH S . 52  52  . 0.1323 0.0989 0.1615 0.0166  -0.0664
0.0177  1 .
6704 O     O     . HOH HOH HOH S . 53  53  . 0.1620 0.1501 0.1613 0.0239  0.0239
0.0233  1 .
6705 O     O     . HOH HOH HOH S . 54  54  . 0.1748 0.1373 0.1330 0.0026  0.0031  -
0.0194 1 .
6706 O     O     . HOH HOH HOH S . 55  55  . 0.0840 0.1929 0.2588 0.0441  0.0520
0.1021  1 .
6707 O     O     . HOH HOH HOH S . 56  56  . 0.1307 0.1258 0.1227 -0.0156 -0.0045
0.0126  1 .
6708 O     O     . HOH HOH HOH S . 57  57  . 0.1730 0.1272 0.1384 -0.0175 -0.0186 -
0.0152 1 .
6709 O     O     . HOH HOH HOH S . 58  58  . 0.1430 0.1297 0.1432 0.0101  0.0062
0.0074  1 .
6710 O     O     . HOH HOH HOH S . 59  59  . 0.1324 0.1558 0.1388 0.0139  -0.0349
0.0099  1 .
6711 O     O     . HOH HOH HOH S . 60  60  . 0.1787 0.1515 0.0946 0.0039  -0.0013
0.0323  1 .
6712 O     O     . HOH HOH HOH S . 61  61  . 0.1087 0.1141 0.1240 0.0218  0.0121
0.0077  1 .
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6713 O     O     . HOH HOH HOH S . 62  62  . 0.1929 0.1025 0.1541 0.0153  -0.0216
0.0221  1 .
6714 O     O     . HOH HOH HOH S . 63  63  . 0.1701 0.1538 0.1333 0.0489  0.0046  -
0.0088 1 .
6715 O     O     . HOH HOH HOH S . 64  64  . 0.1578 0.1554 0.1983 0.0063  0.0103
0.0243  1 .
6716 O     O     . HOH HOH HOH S . 65  65  . 0.1735 0.1624 0.1250 0.0381  -0.0271 -
0.0194 1 .
6717 O     O     . HOH HOH HOH S . 66  66  . 0.1062 0.1157 0.1215 -0.0021 0.0074
0.0000  1 .
6718 O     O     . HOH HOH HOH S . 67  67  . 0.1819 0.1270 0.1594 0.0195  -0.0415
0.0013  1 .
6719 O     O     . HOH HOH HOH S . 68  68  . 0.1167 0.1232 0.1275 0.0080  -0.0230
0.0174  1 .
6720 O     O     . HOH HOH HOH S . 69  69  . 0.1272 0.1767 0.1692 0.0062  -0.0036
0.0082  1 .
6721 O     O     . HOH HOH HOH S . 70  70  . 0.1387 0.1349 0.1244 0.0119  0.0175
0.0000  1 .
6722 O     O     . HOH HOH HOH S . 71  71  . 0.2280 0.1069 0.1243 0.0137  0.0522
0.0465  1 .
6723 O     O     . HOH HOH HOH S . 72  72  . 0.1818 0.1531 0.1140 -0.0447 -0.0046 -
0.0180 1 .
6724 O     O     . HOH HOH HOH S . 73  73  . 0.1255 0.1326 0.1477 0.0125  0.0006
0.0066  1 .
6725 O     O     . HOH HOH HOH S . 74  74  . 0.1459 0.1257 0.1195 0.0269  -0.0021
0.0281  1 .
6726 O     O     . HOH HOH HOH S . 75  75  . 0.1633 0.1830 0.1371 0.0033  0.0046  -
0.0030 1 .
6727 O     O     . HOH HOH HOH S . 76  76  . 0.1511 0.1482 0.1540 0.0068  -0.0100
0.0264  1 .
6728 O     O     . HOH HOH HOH S . 77  77  . 0.1909 0.1475 0.1341 -0.0158 0.0274
0.0082  1 .
6729 O     O     . HOH HOH HOH S . 78  78  . 0.1547 0.1785 0.1747 0.0142  -0.0113
0.0004  1 .
6730 O     O     . HOH HOH HOH S . 79  79  . 0.1398 0.1921 0.2040 0.0594  -0.0139
0.0345  1 .
6731 O     O     . HOH HOH HOH S . 80  80  . 0.1859 0.1423 0.1408 0.0072  0.0028
0.0592  1 .
6732 O     O     . HOH HOH HOH S . 81  81  . 0.1716 0.1480 0.1690 0.0161  -0.0010
0.0351  1 .
6733 O     O     . HOH HOH HOH S . 82  82  . 0.1452 0.1717 0.1837 0.0012  0.0142
0.0086  1 .
6734 O     O     . HOH HOH HOH S . 83  83  . 0.1644 0.1237 0.1641 0.0165  0.0042
0.0238  1 .
6735 O     O     . HOH HOH HOH S . 85  85  . 0.1777 0.1275 0.1958 0.0191  -0.0314 -
0.0234 1 .
6736 O     O     . HOH HOH HOH S . 86  86  . 0.1496 0.1958 0.2199 -0.0589 0.0596
0.0087  1 .
6737 O     O     . HOH HOH HOH S . 87  87  . 0.1566 0.1506 0.1525 0.0000  0.0302
0.0080  1 .
6738 O     O     . HOH HOH HOH S . 88  88  . 0.1188 0.1754 0.2002 0.0156  -0.0028
0.0233  1 .
6739 O     O     . HOH HOH HOH S . 89  89  . 0.1729 0.1819 0.1725 0.0524  0.0078
0.0134  1 .
6740 O     O     . HOH HOH HOH S . 90  90  . 0.1844 0.1474 0.2264 -0.0038 -0.0050 -
0.0061 1 .
6741 O     O     . HOH HOH HOH S . 91  91  . 0.2173 0.1488 0.1850 -0.0150 -0.0194
0.0068  1 .
6742 O     O     . HOH HOH HOH S . 92  92  . 0.1852 0.1449 0.1342 0.0487  0.0429
0.0200  1 .
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6743 O     O     . HOH HOH HOH S . 93  93  . 0.1862 0.1800 0.1800 0.0006  -0.0089 -
0.0043 1 .
6744 O     O     . HOH HOH HOH S . 94  94  . 0.2620 0.1409 0.1742 0.0362  0.0320
0.0347  1 .
6745 O     O     . HOH HOH HOH S . 95  95  . 0.1195 0.1552 0.1343 0.0100  0.0267
0.0002  1 .
6746 O     O     . HOH HOH HOH S . 96  96  . 0.1379 0.2119 0.1852 -0.0347 -0.0066
0.0095  1 .
6747 O     O     . HOH HOH HOH S . 97  97  . 0.2245 0.1595 0.2272 0.0033  0.0005
0.0239  1 .
6748 O     O     . HOH HOH HOH S . 98  98  . 0.1929 0.2259 0.2125 0.0120  -0.0115
0.0268  1 .
6749 O     O     . HOH HOH HOH S . 99  99  . 0.1538 0.1498 0.1718 0.0187  0.0266
0.0275  1 .
6750 O     O     . HOH HOH HOH S . 100 100 . 0.1816 0.1871 0.1793 0.0023  0.0174  -
0.0033 1 .
6751 O     O     . HOH HOH HOH S . 101 101 . 0.1645 0.1765 0.1497 0.0084  -0.0077
0.0407  1 .
6752 O     O     . HOH HOH HOH S . 102 102 . 0.2052 0.1951 0.2613 -0.0337 -0.0235
0.0150  1 .
6753 O     O     . HOH HOH HOH S . 103 103 . 0.1956 0.3597 0.1299 0.0503  -0.0106
0.0071  1 .
6754 O     O     . HOH HOH HOH S . 104 104 . 0.1864 0.1474 0.1862 0.0049  0.0020  -
0.0142 1 .
6755 O     O     . HOH HOH HOH S . 105 105 . 0.3384 0.1450 0.1607 -0.0199 0.0000  -
0.0148 1 .
6756 O     O     . HOH HOH HOH S . 106 106 . 0.2602 0.1573 0.2461 0.0291  0.0902
0.0193  1 .
6757 O     O     . HOH HOH HOH S . 107 107 . 0.2000 0.1672 0.2212 0.0380  0.0237  -
0.0103 1 .
6758 O     O     . HOH HOH HOH S . 108 108 . 0.2922 0.2062 0.1472 -0.1296 -0.0255 -
0.0160 1 .
6759 O     O     . HOH HOH HOH S . 109 109 . 0.2184 0.1461 0.1811 -0.0170 0.0497  -
0.0173 1 .
6760 O     O     . HOH HOH HOH S . 110 110 . 0.1279 0.2735 0.2375 -0.0448 -0.0988
0.1045  1 .
6761 O     O     . HOH HOH HOH S . 111 111 . 0.2086 0.1744 0.1697 0.0165  0.0403
0.0019  1 .
6762 O     O     . HOH HOH HOH S . 112 112 . 0.1664 0.1802 0.1700 -0.0097 0.0529  -
0.0286 1 .
6763 O     O     . HOH HOH HOH S . 113 113 . 0.1844 0.2218 0.1895 0.0468  -0.0072 -
0.0089 1 .
6764 O     O     . HOH HOH HOH S . 114 114 . 0.1901 0.1699 0.1669 0.0082  0.0344  -
0.0292 1 .
6765 O     O     . HOH HOH HOH S . 115 115 . 0.1869 0.1715 0.1360 -0.0074 0.0352  -
0.0029 1 .
6766 O     O     . HOH HOH HOH S . 116 116 . 0.2059 0.2155 0.2141 0.0710  -0.0167 -
0.0007 1 .
6767 O     O     . HOH HOH HOH S . 117 117 . 0.2399 0.1806 0.2558 0.0030  -0.0308 -
0.0139 1 .
6768 O     O     . HOH HOH HOH S . 118 118 . 0.1672 0.1471 0.3488 -0.0695 -0.0472
0.0343  1 .
6769 O     O     . HOH HOH HOH S . 119 119 . 0.2246 0.2487 0.1860 -0.0416 0.0066
0.0362  1 .
6770 O     O     . HOH HOH HOH S . 120 120 . 0.1928 0.1648 0.1753 0.0085  -0.0165
0.0133  1 .
6771 O     O     . HOH HOH HOH S . 121 121 . 0.2661 0.2931 0.1836 0.0382  0.1010
0.0702  1 .
6772 O     O     . HOH HOH HOH S . 122 122 . 0.1707 0.1726 0.2065 -0.0017 0.0104
0.0311  1 .
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6773 O     O     . HOH HOH HOH S . 123 123 . 0.1602 0.1598 0.1864 0.0301  -0.0130
0.0190  1 .
6774 O     O     . HOH HOH HOH S . 124 124 . 0.2526 0.2219 0.0928 0.0480  -0.0466
0.0350  1 .
6775 O     O     . HOH HOH HOH S . 125 125 . 0.1800 0.1694 0.1310 0.0277  -0.0091 -
0.0155 1 .
6776 O     O     . HOH HOH HOH S . 126 126 . 0.2279 0.1997 0.1478 -0.0026 -0.0162
0.0177  1 .
6777 O     O     . HOH HOH HOH S . 127 127 . 0.2245 0.1769 0.2295 0.0058  -0.0053
0.0432  1 .
6778 O     O     . HOH HOH HOH S . 128 128 . 0.1813 0.2094 0.2012 0.0304  0.0361
0.0366  1 .
6779 O     O     . HOH HOH HOH S . 129 129 . 0.1861 0.1933 0.2154 0.0355  -0.0201
0.0253  1 .
6780 O     O     . HOH HOH HOH S . 130 130 . 0.2155 0.2074 0.1978 -0.0039 0.0010
0.0203  1 .
6781 O     O     . HOH HOH HOH S . 131 131 . 0.2246 0.1557 0.2035 -0.0354 -0.0327
0.0430  1 .
6782 O     O     . HOH HOH HOH S . 132 132 . 0.1721 0.2643 0.2034 -0.0166 -0.0232
0.0294  1 .
6783 O     O     . HOH HOH HOH S . 133 133 . 0.2127 0.1825 0.2042 0.0297  0.0116
0.0446  1 .
6784 O     O     . HOH HOH HOH S . 134 134 . 0.2154 0.2419 0.1964 -0.0436 -0.0159 -
0.0053 1 .
6785 O     O     . HOH HOH HOH S . 135 135 . 0.2134 0.1920 0.1671 -0.0554 0.0084  -
0.0002 1 .
6786 O     O     . HOH HOH HOH S . 136 136 . 0.1732 0.1972 0.1261 0.0355  -0.0222
0.0140  1 .
6787 O     O     . HOH HOH HOH S . 137 137 . 0.1597 0.2124 0.2664 -0.0452 -0.0449
0.0549  1 .
6788 O     O     . HOH HOH HOH S . 138 138 . 0.2970 0.1835 0.1248 -0.0651 0.0248  -
0.0226 1 .
6789 O     O     . HOH HOH HOH S . 139 139 . 0.2519 0.2002 0.2124 0.0525  -0.0478
0.0197  1 .
6790 O     O     . HOH HOH HOH S . 140 140 . 0.1586 0.1766 0.2270 0.0084  -0.0249
0.0397  1 .
6791 O     O     . HOH HOH HOH S . 141 141 . 0.1793 0.1544 0.2347 0.0091  0.0196
0.0461  1 .
6792 O     O     . HOH HOH HOH S . 142 142 . 0.2277 0.2868 0.1608 0.0195  0.0203
0.0432  1 .
6793 O     O     . HOH HOH HOH S . 143 143 . 0.3505 0.2531 0.2005 -0.0726 0.1079
0.0451  1 .
6794 O     O     . HOH HOH HOH S . 144 144 . 0.2295 0.1772 0.1694 -0.0112 0.0279  -
0.0292 1 .
6795 O     O     . HOH HOH HOH S . 145 145 . 0.2626 0.2800 0.1393 0.0150  0.0070  -
0.0253 1 .
6796 O     O     . HOH HOH HOH S . 146 146 . 0.2134 0.1484 0.3082 -0.0048 0.0017  -
0.0034 1 .
6797 O     O     . HOH HOH HOH S . 147 147 . 0.2161 0.1898 0.1950 0.0332  0.0064  -
0.0072 1 .
6798 O     O     . HOH HOH HOH S . 148 148 . 0.2618 0.2015 0.3040 0.0349  0.0452  -
0.0165 1 .
6799 O     O     . HOH HOH HOH S . 149 149 . 0.1548 0.2869 0.2249 -0.0230 -0.0126
0.0675  1 .
6800 O     O     . HOH HOH HOH S . 150 150 . 0.7518 0.2564 0.3377 -0.1320 0.0185
0.0747  1 .
6801 O     O     . HOH HOH HOH S . 151 151 . 0.2346 0.1682 0.2535 0.0074  0.0148
0.0538  1 .
6802 O     O     . HOH HOH HOH S . 152 152 . 0.2148 0.2440 0.2301 0.0056  -0.0301
0.0395  1 .
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6803 O     O     . HOH HOH HOH S . 153 153 . 0.2219 0.2654 0.2733 -0.0482 0.0124  -
0.0213 1 .
6804 O     O     . HOH HOH HOH S . 154 154 . 0.2200 0.3409 0.1423 -0.0186 0.0624  -
0.0505 1 .
6805 O     O     . HOH HOH HOH S . 155 155 . 0.2219 0.2082 0.2355 0.0343  -0.0568
0.0206  1 .
6806 O     O     . HOH HOH HOH S . 156 156 . 0.1809 0.1928 0.1955 -0.0064 -0.0379 -
0.0019 1 .
6807 O     O     . HOH HOH HOH S . 157 157 . 0.2463 0.2212 0.2787 0.0078  0.0166  -
0.0268 1 .
6808 O     O     . HOH HOH HOH S . 158 158 . 0.3156 0.2614 0.3328 0.0224  -0.0463 -
0.0699 1 .
6809 O     O     . HOH HOH HOH S . 159 159 . 0.2432 0.2811 0.1919 -0.0175 0.0369
0.0140  1 .
6810 O     O     . HOH HOH HOH S . 160 160 . 0.2629 0.1387 0.1888 -0.0220 -0.0111
0.0413  1 .
6811 O     O     . HOH HOH HOH S . 161 161 . 0.1975 0.1585 0.2243 0.0173  -0.0116
0.0108  1 .
6812 O     O     . HOH HOH HOH S . 162 162 . 0.1491 0.2794 0.2134 0.0474  0.0035  -
0.0743 1 .
6813 O     O     . HOH HOH HOH S . 163 163 . 0.2899 0.1790 0.3259 0.0877  -0.0048
0.0067  1 .
6814 O     O     . HOH HOH HOH S . 164 164 . 0.2135 0.1584 0.1762 0.0283  -0.0227
0.0084  1 .
6815 O     O     . HOH HOH HOH S . 165 165 . 0.2952 0.2575 0.2627 0.0139  0.0171  -
0.0829 1 .
6816 O     O     . HOH HOH HOH S . 166 166 . 0.2366 0.2131 0.2471 0.0084  -0.0586
0.0130  1 .
6817 O     O     . HOH HOH HOH S . 167 167 . 0.2436 0.1900 0.2068 -0.0544 0.0197  -
0.0431 1 .
6818 O     O     . HOH HOH HOH S . 168 168 . 0.2076 0.2611 0.2358 -0.0691 0.0848  -
0.0388 1 .
6819 O     O     . HOH HOH HOH S . 169 169 . 0.2835 0.1711 0.2774 0.0087  -0.0445
0.0703  1 .
6820 O     O     . HOH HOH HOH S . 170 170 . 0.1877 0.1880 0.2558 -0.0092 -0.0306
0.0322  1 .
6821 O     O     . HOH HOH HOH S . 171 171 . 0.1820 0.2763 0.2824 0.0717  0.0062  -
0.0176 1 .
6822 O     O     . HOH HOH HOH S . 172 172 . 0.2380 0.2588 0.2140 -0.0083 -0.0910 -
0.0420 1 .
6823 O     O     . HOH HOH HOH S . 173 173 . 0.1763 0.2088 0.1698 0.0425  -0.0843 -
0.0703 1 .
6824 O     O     . HOH HOH HOH S . 174 174 . 0.1941 0.1911 0.2217 0.0231  0.0498
0.0289  1 .
6825 O     O     . HOH HOH HOH S . 175 175 . 0.3922 0.3287 0.6629 -0.0126 -0.0916
0.0224  1 .
6826 O     O     . HOH HOH HOH S . 176 176 . 0.2855 0.1097 0.2790 0.0183  0.0175
0.0180  1 .
6827 O     O     . HOH HOH HOH S . 177 177 . 0.2616 0.1769 0.2319 0.0009  0.0022
0.0326  1 .
6828 O     O     . HOH HOH HOH S . 178 178 . 0.1802 0.2165 0.1685 -0.0219 0.0258  -
0.0266 1 .
6829 O     O     . HOH HOH HOH S . 179 179 . 0.2941 0.1830 0.1344 -0.0040 -0.0248 -
0.0078 1 .
6830 O     O     . HOH HOH HOH S . 180 180 . 0.1924 0.2185 0.2519 -0.0529 -0.0606
0.0629  1 .
6831 O     O     . HOH HOH HOH S . 181 181 . 0.1808 0.2829 0.3479 0.0728  -0.0071
0.0298  1 .
6832 O     O     . HOH HOH HOH S . 182 182 . 0.2645 0.2612 0.1859 -0.0332 -0.0161
0.0203  1 .
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6833 O     O     . HOH HOH HOH S . 183 183 . 0.2452 0.2689 0.2326 0.0574  -0.0352 -
0.0223 1 .
6834 O     O     . HOH HOH HOH S . 184 184 . 0.1707 0.1839 0.2821 0.0099  -0.0160 -
0.0221 1 .
6835 O     O     . HOH HOH HOH S . 185 185 . 0.1993 0.1750 0.2696 0.0108  0.0172  -
0.0002 1 .
6836 O     O     . HOH HOH HOH S . 186 186 . 0.2768 0.2759 0.3118 0.0130  -0.0470
0.0572  1 .
6837 O     O     . HOH HOH HOH S . 188 188 . 0.3229 0.3624 0.1435 -0.0509 -0.0547
0.0221  1 .
6838 O     O     . HOH HOH HOH S . 189 189 . 0.1944 0.2753 0.3024 0.0835  -0.0557 -
0.0623 1 .
6839 O     O     . HOH HOH HOH S . 190 190 . 0.2145 0.2664 0.2060 -0.0122 -0.0537
0.0005  1 .
6840 O     O     . HOH HOH HOH S . 191 191 . 0.3412 0.2044 0.2529 0.0678  0.0033  -
0.0359 1 .
6841 O     O     . HOH HOH HOH S . 192 192 . 0.1815 0.2547 0.1968 -0.0221 -0.0299 -
0.0009 1 .
6842 O     O     . HOH HOH HOH S . 193 193 . 0.1924 0.2599 0.2670 0.0076  0.0427
0.0838  1 .
6843 O     O     . HOH HOH HOH S . 194 194 . 0.2664 0.2295 0.2433 -0.0201 -0.0630 -
0.0031 1 .
6844 O     O     . HOH HOH HOH S . 195 195 . 0.2576 0.2603 0.2009 -0.0200 -0.0601
0.0309  1 .
6845 O     O     . HOH HOH HOH S . 196 196 . 0.3087 0.1551 0.2023 -0.0258 0.0137
0.0512  1 .
6846 O     O     . HOH HOH HOH S . 197 197 . 0.2704 0.3412 0.2103 -0.0202 -0.0905
0.0466  1 .
6847 O     O     . HOH HOH HOH S . 198 198 . 0.2179 0.2188 0.2173 0.0483  -0.0336 -
0.0254 1 .
6848 O     O     . HOH HOH HOH S . 199 199 . 0.2381 0.2625 0.1860 0.0157  -0.0521 -
0.0106 1 .
6849 O     O     . HOH HOH HOH S . 200 200 . 0.3984 0.2366 0.2336 0.1003  0.0579  -
0.0686 1 .
6850 O     O     . HOH HOH HOH S . 201 201 . 0.1584 0.3431 0.3162 -0.0358 -0.0574 -
0.0253 1 .
6851 O     O     . HOH HOH HOH S . 202 202 . 0.1515 0.2451 0.2428 0.0100  0.0209  -
0.0294 1 .
6852 O     O     . HOH HOH HOH S . 203 203 . 0.2688 0.2222 0.3221 -0.0523 -0.0427 -
0.0394 1 .
6853 O     O     . HOH HOH HOH S . 204 204 . 0.3295 0.1901 0.4243 -0.0808 0.0283
0.0343  1 .
6854 O     O     . HOH HOH HOH S . 205 205 . 0.2912 0.2595 0.1661 -0.0302 0.0833  -
0.0088 1 .
6855 O     O     . HOH HOH HOH S . 206 206 . 0.2897 0.2176 0.2410 0.0382  0.0042
0.0290  1 .
6856 O     O     . HOH HOH HOH S . 207 207 . 0.2092 0.2356 0.3102 0.0795  -0.0195
0.0297  1 .
6857 O     O     . HOH HOH HOH S . 208 208 . 0.1871 0.2086 0.2176 -0.0351 0.0444  -
0.0240 1 .
6858 O     O     . HOH HOH HOH S . 209 209 . 0.3092 0.2317 0.1628 -0.0444 -0.0731
0.0235  1 .
6859 O     O     . HOH HOH HOH S . 210 210 . 0.1970 0.2728 0.2233 0.0764  0.0483  -
0.0285 1 .
6860 O     O     . HOH HOH HOH S . 211 211 . 0.3918 0.2657 0.1690 0.1587  0.0200
0.0243  1 .
6861 O     O     . HOH HOH HOH S . 212 212 . 0.1675 0.1812 0.3414 -0.0295 -0.0108
0.0081  1 .
6862 O     O     . HOH HOH HOH S . 213 213 . 0.2330 0.3884 0.3171 0.0200  -0.0021
0.1361  1 .
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6863 O     O     . HOH HOH HOH S . 214 214 . 0.2098 0.2502 0.3482 -0.0767 0.0648  -
0.0383 1 .
6864 O     O     . HOH HOH HOH S . 215 215 . 0.2844 0.2759 0.1335 -0.0105 -0.0587
0.0099  1 .
6865 O     O     . HOH HOH HOH S . 216 216 . 0.2431 0.2386 0.2521 -0.0280 0.0469
0.0106  1 .
6866 O     O     . HOH HOH HOH S . 217 217 . 0.1717 0.3606 0.3341 -0.0369 0.1002  -
0.0805 1 .
6867 O     O     . HOH HOH HOH S . 218 218 . 0.3239 0.1176 0.2866 0.0354  -0.0122
0.0183  1 .
6868 O     O     . HOH HOH HOH S . 219 219 . 0.1931 0.2578 0.2826 -0.0515 -0.0295
0.0705  1 .
6869 O     O     . HOH HOH HOH S . 220 220 . 0.1865 0.2828 0.2436 -0.0344 -0.0315
0.0445  1 .
6870 O     O     . HOH HOH HOH S . 221 221 . 0.2262 0.2255 0.2114 -0.0318 0.0178
0.0204  1 .
6871 O     O     . HOH HOH HOH S . 222 222 . 0.1882 0.1766 0.2864 0.0143  0.0338  -
0.0380 1 .
6872 O     O     . HOH HOH HOH S . 223 223 . 0.3325 0.3028 0.3581 0.1299  0.1053
0.0721  1 .
6873 O     O     . HOH HOH HOH S . 224 224 . 0.2391 0.2345 0.1632 -0.0947 -0.0099 -
0.0235 1 .
6874 O     O     . HOH HOH HOH S . 225 225 . 0.1935 0.2381 0.2187 0.0110  0.0165  -
0.0259 1 .
6875 O     O     . HOH HOH HOH S . 226 226 . 0.2209 0.3395 0.2584 0.0007  -0.0815 -
0.0550 1 .
6876 O     O     . HOH HOH HOH S . 227 227 . 0.1790 0.2396 0.2431 0.0133  0.0217
0.0163  1 .
6877 O     O     . HOH HOH HOH S . 228 228 . 0.3108 0.2708 0.2152 0.0183  -0.0162
0.0081  1 .
6878 O     O     . HOH HOH HOH S . 229 229 . 0.2616 0.3584 0.2969 -0.0098 -0.0877
0.0821  1 .
6879 O     O     . HOH HOH HOH S . 230 230 . 0.3435 0.2339 0.1748 0.0662  0.0770  -
0.0483 1 .
6880 O     O     . HOH HOH HOH S . 231 231 . 0.2959 0.3314 0.2569 -0.0312 0.0983  -
0.0933 1 .
6881 O     O     . HOH HOH HOH S . 232 232 . 0.2886 0.3028 0.2090 -0.0032 -0.0360 -
0.0216 1 .
6882 O     O     . HOH HOH HOH S . 233 233 . 0.3586 0.1863 0.2208 0.0762  0.0568
0.0373  1 .
6883 O     O     . HOH HOH HOH S . 234 234 . 0.3331 0.2680 0.2636 -0.0508 0.0343
0.0852  1 .
6884 O     O     . HOH HOH HOH S . 235 235 . 0.3684 0.2189 0.1854 0.0635  0.0022  -
0.0042 1 .
6885 O     O     . HOH HOH HOH S . 236 236 . 0.3061 0.3083 0.2542 0.0364  0.0724  -
0.0733 1 .
6886 O     O     . HOH HOH HOH S . 237 237 . 0.2398 0.2713 0.3032 0.0328  0.0041  -
0.1111 1 .
6887 O     O     . HOH HOH HOH S . 238 238 . 0.2927 0.2822 0.2104 -0.0555 0.0496
0.0140  1 .
6888 O     O     . HOH HOH HOH S . 239 239 . 0.3005 0.3389 0.2381 0.0522  -0.0366
0.0609  1 .
6889 O     O     . HOH HOH HOH S . 240 240 . 0.3781 0.2387 0.1869 0.0388  -0.0973 -
0.0499 1 .
6890 O     O     . HOH HOH HOH S . 241 241 . 0.4624 0.1351 0.3812 -0.0543 0.0067
0.0089  1 .
6891 O     O     . HOH HOH HOH S . 242 242 . 0.2813 0.3154 0.2676 -0.0005 0.0278
0.1104  1 .
6892 O     O     . HOH HOH HOH S . 243 243 . 0.2152 0.2156 0.2459 0.0126  0.0124  -
0.0355 1 .
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6893 O     O     . HOH HOH HOH S . 244 244 . 0.5718 0.2794 0.4978 -0.0974 -0.2172
0.1351  1 .
6894 O     O     . HOH HOH HOH S . 245 245 . 0.2529 0.4134 0.2718 -0.0834 0.0297
0.0424  1 .
6895 O     O     . HOH HOH HOH S . 246 246 . 0.2083 0.3463 0.2380 0.0116  0.0394
0.0224  1 .
6896 O     O     . HOH HOH HOH S . 247 247 . 0.3579 0.2571 0.3332 0.0148  -0.0354 -
0.0412 1 .
6897 O     O     . HOH HOH HOH S . 248 248 . 0.1792 0.4084 0.2604 -0.0096 0.0244  -
0.0186 1 .
6898 O     O     . HOH HOH HOH S . 249 249 . 0.2298 0.2650 0.2256 0.0875  0.0496
0.0518  1 .
6899 O     O     . HOH HOH HOH S . 250 250 . 0.2973 0.2909 0.2058 -0.0132 0.0163
0.0118  1 .
6900 O     O     . HOH HOH HOH S . 251 251 . 0.3122 0.4121 0.2300 -0.1283 0.0281
0.0407  1 .
6901 O     O     . HOH HOH HOH S . 252 252 . 0.2477 0.1869 0.2820 -0.0549 -0.0423 -
0.0109 1 .
6902 O     O     . HOH HOH HOH S . 253 253 . 0.3454 0.3065 0.2092 -0.0034 -0.0102 -
0.0593 1 .
6903 O     O     . HOH HOH HOH S . 254 254 . 0.2524 0.2710 0.2847 0.0426  0.0217
0.0355  1 .
6904 O     O     . HOH HOH HOH S . 255 255 . 2.0842 3.4411 3.9215 -1.0132 1.0902
1.0132  1 .
6905 O     O     . HOH HOH HOH S . 256 256 . 0.2885 0.2049 0.2435 0.0185  -0.0249 -
0.0366 1 .
6906 O     O     . HOH HOH HOH S . 257 257 . 0.2477 0.2762 0.3574 0.0530  -0.0182 -
0.0344 1 .
6907 O     O     . HOH HOH HOH S . 258 258 . 0.3393 0.2260 0.2436 -0.0294 -0.0456
0.0156  1 .
6908 O     O     . HOH HOH HOH S . 259 259 . 0.2359 0.3573 0.3435 -0.0590 -0.0877 -
0.0419 1 .
6909 O     O     . HOH HOH HOH S . 260 260 . 0.2051 0.2033 0.4185 0.0540  0.0223
0.0267  1 .
6910 O     O     . HOH HOH HOH S . 261 261 . 0.2114 0.3343 0.2764 -0.0006 -0.0345
0.0626  1 .
6911 O     O     . HOH HOH HOH S . 262 262 . 0.3529 0.4019 0.2375 -0.0246 -0.0464 -
0.0328 1 .
6912 O     O     . HOH HOH HOH S . 263 263 . 0.3411 0.3807 0.2404 0.0164  0.0770
0.0928  1 .
6913 O     O     . HOH HOH HOH S . 264 264 . 0.2901 0.3246 0.2645 0.0597  0.0127
0.0600  1 .
6914 O     O     . HOH HOH HOH S . 265 265 . 0.2974 0.3749 0.2276 0.0550  0.0347
0.0649  1 .
6915 O     O     . HOH HOH HOH S . 266 266 . 0.2473 0.3059 0.3200 0.0344  0.1030
0.0447  1 .
6916 O     O     . HOH HOH HOH S . 267 267 . 0.1477 0.2295 0.3308 -0.0178 -0.0173 -
0.0699 1 .
6917 O     O     . HOH HOH HOH S . 268 268 . 0.2377 0.2327 0.2692 0.0506  -0.0249 -
0.0088 1 .
6918 O     O     . HOH HOH HOH S . 269 269 . 0.3348 0.2835 0.3415 0.0102  -0.0788
0.0823  1 .
6919 O     O     . HOH HOH HOH S . 270 270 . 0.3342 0.3298 0.2911 0.0447  -0.0864 -
0.0197 1 .
6920 O     O     . HOH HOH HOH S . 271 271 . 0.4110 0.4241 0.3256 -0.0224 0.1421  -
0.1004 1 .
6921 O     O     . HOH HOH HOH S . 272 272 . 0.2386 0.2081 0.3645 0.0587  0.0918
0.0162  1 .
6922 O     O     . HOH HOH HOH S . 273 273 . 0.2102 0.2596 0.3012 0.0799  0.0131
0.0428  1 .
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6923 O     O     . HOH HOH HOH S . 274 274 . 0.3107 0.3600 0.2533 -0.0057 -0.0675
0.0284  1 .
6924 O     O     . HOH HOH HOH S . 275 275 . 0.3127 0.2637 0.3730 0.0582  0.0422
0.0413  1 .
6925 O     O     . HOH HOH HOH S . 276 276 . 0.2651 0.3205 0.3641 -0.0902 0.0056
0.0553  1 .
6926 O     O     . HOH HOH HOH S . 277 277 . 0.3043 0.3318 0.3600 -0.0190 -0.1177 -
0.0691 1 .
6927 O     O     . HOH HOH HOH S . 278 278 . 0.1272 0.4292 0.3449 -0.0098 -0.0216
0.1265  1 .
6928 O     O     . HOH HOH HOH S . 279 279 . 0.3579 0.3020 0.2666 -0.1058 -0.0505
0.0701  1 .
6929 O     O     . HOH HOH HOH S . 280 280 . 0.4326 0.2369 0.2959 0.0908  0.0440
0.0037  1 .
6930 O     O     . HOH HOH HOH S . 281 281 . 0.1780 0.1931 0.4627 0.0560  0.0160  -
0.0428 1 .
6931 O     O     . HOH HOH HOH S . 282 282 . 0.2745 0.2659 0.2581 -0.0629 0.0705
0.0522  1 .
6932 O     O     . HOH HOH HOH S . 283 283 . 0.2988 0.1933 0.1964 -0.0058 -0.0144
0.0407  1 .
6933 O     O     . HOH HOH HOH S . 284 284 . 0.3207 0.2135 0.3040 -0.0051 0.0023  -
0.0467 1 .
6934 O     O     . HOH HOH HOH S . 285 285 . 0.3393 0.3205 0.2038 0.0258  -0.0081
0.0060  1 .
6935 O     O     . HOH HOH HOH S . 286 286 . 0.1977 0.3037 0.3094 -0.0089 -0.0256 -
0.0081 1 .
6936 O     O     . HOH HOH HOH S . 287 287 . 0.3576 0.3208 0.2366 0.1299  0.0143
0.0191  1 .
6937 O     O     . HOH HOH HOH S . 288 288 . 0.3808 0.2802 0.2280 -0.0390 0.0032
0.1174  1 .
6938 O     O     . HOH HOH HOH S . 289 289 . 3.6041 1.9713 4.2513 -0.5120 0.9988
0.4783  1 .
6939 O     O     . HOH HOH HOH S . 290 290 . 0.2183 0.2048 0.2670 -0.0110 0.0540
0.0402  1 .
6940 O     O     . HOH HOH HOH S . 291 291 . 0.4158 0.3042 0.2383 -0.0534 -0.0889 -
0.0534 1 .
6941 O     O     . HOH HOH HOH S . 292 292 . 0.2439 0.2564 0.3260 -0.0099 -0.0561
0.0399  1 .
6942 O     O     . HOH HOH HOH S . 293 293 . 0.2949 0.2410 0.2205 -0.0220 0.0044  -
0.0506 1 .
6943 O     O     . HOH HOH HOH S . 294 294 . 0.3127 0.3085 0.2709 -0.0021 0.0345
0.0059  1 .
6944 O     O     . HOH HOH HOH S . 295 295 . 0.2273 0.3616 0.2872 0.0265  -0.0431
0.1125  1 .
6945 O     O     . HOH HOH HOH S . 296 296 . 0.3290 0.3019 0.2474 -0.0775 0.0659
0.0282  1 .
6946 O     O     . HOH HOH HOH S . 297 297 . 0.3339 0.2567 0.3571 -0.0501 0.0560  -
0.0233 1 .
6947 O     O     . HOH HOH HOH S . 298 298 . 0.3352 0.3435 0.3233 0.0324  0.1083
0.0235  1 .
6948 O     O     . HOH HOH HOH S . 299 299 . 0.3103 0.4235 0.2599 -0.0301 -0.0620 -
0.0166 1 .
6949 O     O     . HOH HOH HOH S . 300 300 . 0.3318 0.2473 0.2268 0.0198  -0.0264 -
0.0469 1 .
6950 O     O     . HOH HOH HOH S . 301 301 . 0.3166 0.3592 0.3123 0.0067  0.0661
0.0210  1 .
6951 O     O     . HOH HOH HOH S . 302 302 . 0.3514 0.2230 0.3625 0.0583  0.0325
0.0882  1 .
6952 O     O     . HOH HOH HOH S . 303 303 . 0.2586 0.4162 0.2747 -0.0217 0.0321  -
0.0682 1 .
```

```
6953 O     O     . HOH HOH HOH S . 304 304 . 0.2964 0.3334 0.2065 0.0503  -0.0647 -
0.1082 1 .
6954 O     O     . HOH HOH HOH S . 305 305 . 0.1510 0.7225 1.6565 -0.1103 -0.4083
0.7865  1 .
6955 O     O     . HOH HOH HOH S . 306 306 . 0.2865 0.3317 0.4217 0.0965  0.0265  -
0.0364 1 .
6956 O     O     . HOH HOH HOH S . 307 307 . 0.3453 0.3454 0.3446 -0.0001 -0.0324 -
0.0653 1 .
6957 O     O     . HOH HOH HOH S . 308 308 . 0.2938 0.4344 0.2254 0.0042  0.0066  -
0.0131 1 .
6958 O     O     . HOH HOH HOH S . 309 309 . 0.3514 0.2153 0.5348 -0.0058 -0.1237 -
0.0318 1 .
6959 O     O     . HOH HOH HOH S . 310 310 . 0.2686 0.2897 0.3704 -0.0591 0.0056  -
0.1145 1 .
6960 O     O     . HOH HOH HOH S . 311 311 . 0.4841 0.2339 0.3702 0.0942  0.1050
0.0909  1 .
6961 O     O     . HOH HOH HOH S . 312 312 . 0.2364 0.2615 0.2079 0.0101  -0.0251
0.0538  1 .
6962 O     O     . HOH HOH HOH S . 313 313 . 0.3980 0.1475 0.3331 -0.0618 0.0283
0.0285  1 .
6963 O     O     . HOH HOH HOH S . 314 314 . 0.3633 0.3521 0.2341 -0.0753 -0.0256
0.0182  1 .
6964 O     O     . HOH HOH HOH S . 315 315 . 0.3475 0.4263 0.2681 0.0441  0.0402
0.0577  1 .
6965 O     O     . HOH HOH HOH S . 316 316 . 0.3205 0.2866 0.2778 -0.0284 0.0403  -
0.0212 1 .
6966 O     O     . HOH HOH HOH S . 317 317 . 0.3125 0.3022 0.2542 -0.0301 -0.0439 -
0.0573 1 .
6967 O     O     . HOH HOH HOH S . 318 318 . 0.3676 0.3014 0.2957 0.0363  -0.0007 -
0.0915 1 .
6968 O     O     . HOH HOH HOH S . 319 319 . 0.3538 0.2560 0.3677 0.0294  -0.0101
0.0178  1 .
6969 O     O     . HOH HOH HOH S . 320 320 . 0.2733 0.3227 0.2559 -0.0366 -0.0240
0.0045  1 .
6970 O     O     . HOH HOH HOH S . 321 321 . 0.2439 0.3085 0.2391 0.0198  0.0487
0.0205  1 .
6971 O     O     . HOH HOH HOH S . 322 322 . 0.2270 0.3061 0.3129 0.1052  -0.0400
0.0582  1 .
6972 O     O     . HOH HOH HOH S . 323 323 . 0.3971 0.4566 0.4491 0.0290  -0.0102 -
0.0767 1 .
6973 O     O     . HOH HOH HOH S . 324 324 . 0.3298 0.3197 0.2986 -0.0442 0.0034
0.0388  1 .
6974 O     O     . HOH HOH HOH S . 325 325 . 0.2669 0.3120 0.3241 -0.0304 -0.0547
0.1500  1 .
6975 O     O     . HOH HOH HOH S . 326 326 . 0.2785 0.3384 0.3147 -0.0163 -0.0139 -
0.0449 1 .
#
_atom_sites.entry_id                      UNNAMED
_atom_sites.fract_transf_matrix[1][1]   0.009460
_atom_sites.fract_transf_matrix[1][2]   0.000000
_atom_sites.fract_transf_matrix[1][3]   0.000000
_atom_sites.fract_transf_matrix[2][1]   0.000000
_atom_sites.fract_transf_matrix[2][2]   0.008430
_atom_sites.fract_transf_matrix[2][3]   0.000000
_atom_sites.fract_transf_matrix[3][1]   0.000000
_atom_sites.fract_transf_matrix[3][2]   0.000000
_atom_sites.fract_transf_matrix[3][3]   0.014797
_atom_sites.fract_transf_vector[1]      0.000000
_atom_sites.fract_transf_vector[2]      0.000000
_atom_sites.fract_transf_vector[3]      0.000000
```

```
#
_cell.length_a      105.708
_cell.length_b      118.623
_cell.length_c      67.579
_cell.angle_alpha   90.000
_cell.angle_beta    90.000
_cell.angle_gamma   90.000
_cell.entry_id      UNNAMED
#
_computing.entry_id                    UNNAMED
_computing.structure_refinement        'REFMAC 5.5.0109'
_computing.structure_solution          ?
_computing.pdbx_data_reduction_ds      HKL
_computing.pdbx_data_reduction_ii      HKL
_computing.cell_refinement             HKL
#
_data_extraction.software             pdb_extract
_data_extraction.extraction_date      'Fri Oct 21 12:10:52 2011'
_data_extraction.version              3.10
_data_extraction.release_date         'June 10, 2010'
_data_extraction.location             http://sw-tools.rcsb.org/apps/PDB_EXTRACT/
#
loop_
_database_2.database_id
_database_2.database_code
PDB  UNNAMED
RCSB UNNAMED
#
_database_PDB_remark.id     3
_database_PDB_remark.text
;
REMARK   3
REMARK   3 REFINEMENT.
REMARK   3   PROGRAM     : REFMAC 5.5.0109
REMARK   3   AUTHORS     : MURSHUDOV,VAGIN,DODSON
REMARK   3
REMARK   3    REFINEMENT TARGET : MAXIMUM LIKELIHOOD
REMARK   3
REMARK   3  DATA USED IN REFINEMENT.
REMARK   3   RESOLUTION RANGE HIGH (ANGSTROMS) :   1.41
REMARK   3   RESOLUTION RANGE LOW  (ANGSTROMS) :  78.92
REMARK   3   DATA CUTOFF            (SIGMA(F)) : NONE
REMARK   3   COMPLETENESS FOR RANGE        (%) :  94.05
REMARK   3   NUMBER OF REFLECTIONS             :  145027
REMARK   3
REMARK   3  FIT TO DATA USED IN REFINEMENT.
REMARK   3   CROSS-VALIDATION METHOD          : THROUGHOUT
REMARK   3   FREE R VALUE TEST SET SELECTION  : RANDOM
REMARK   3   R VALUE     (WORKING + TEST SET) : 0.16321
REMARK   3   R VALUE            (WORKING SET) :  0.16144
REMARK   3   FREE R VALUE                     :  0.19730
REMARK   3   FREE R VALUE TEST SET SIZE   (%) :  5.0
REMARK   3   FREE R VALUE TEST SET COUNT      :  7677
REMARK   3
REMARK   3  FIT IN THE HIGHEST RESOLUTION BIN.
REMARK   3   TOTAL NUMBER OF BINS USED           :      20
REMARK   3   BIN RESOLUTION RANGE HIGH           :    1.414
REMARK   3   BIN RESOLUTION RANGE LOW            :    1.450
REMARK   3   REFLECTION IN BIN     (WORKING SET) :     5532
REMARK   3   BIN COMPLETENESS (WORKING+TEST) (%) :    49.70
```

```
REMARK   3   BIN R VALUE           (WORKING SET) :    0.327
REMARK   3   BIN FREE R VALUE SET COUNT          :      312
REMARK   3   BIN FREE R VALUE                    :    0.382
REMARK   3
REMARK   3  NUMBER OF NON-HYDROGEN ATOMS USED IN REFINEMENT.
REMARK   3   ALL ATOMS               :     6980
REMARK   3
REMARK   3  B VALUES.
REMARK   3   FROM WILSON PLOT           (A**2) : NULL
REMARK   3   MEAN B VALUE      (OVERALL, A**2) :  13.184
REMARK   3   OVERALL ANISOTROPIC B VALUE.
REMARK   3    B11 (A**2) :     0.36
REMARK   3    B22 (A**2) :    -0.32
REMARK   3    B33 (A**2) :    -0.04
REMARK   3    B12 (A**2) :     0.00
REMARK   3    B13 (A**2) :     0.00
REMARK   3    B23 (A**2) :     0.00
REMARK   3
REMARK   3  ESTIMATED OVERALL COORDINATE ERROR.
REMARK   3   ESU BASED ON R VALUE                            (A):   0.069
REMARK   3   ESU BASED ON FREE R VALUE                       (A):   0.064
REMARK   3   ESU BASED ON MAXIMUM LIKELIHOOD                 (A):   0.036
REMARK   3   ESU FOR B VALUES BASED ON MAXIMUM LIKELIHOOD (A**2):   2.019
REMARK   3
REMARK   3 CORRELATION COEFFICIENTS.
REMARK   3   CORRELATION COEFFICIENT FO-FC      :   0.964
REMARK   3   CORRELATION COEFFICIENT FO-FC FREE :   0.951
REMARK   3
REMARK   3  RMS DEVIATIONS FROM IDEAL VALUES        COUNT    RMS    WEIGHT
REMARK   3   BOND LENGTHS REFINED ATOMS        (A):  6754 ; 0.026 ; 0.022
REMARK   3   BOND ANGLES REFINED ATOMS   (DEGREES):  9139 ; 2.131 ; 1.970
REMARK   3   TORSION ANGLES, PERIOD 1    (DEGREES):   864 ; 6.017 ; 5.000
REMARK   3   TORSION ANGLES, PERIOD 2    (DEGREES):   308 ;40.444 ;25.000
REMARK   3   TORSION ANGLES, PERIOD 3    (DEGREES):  1162 ;13.968 ;15.000
REMARK   3   TORSION ANGLES, PERIOD 4    (DEGREES):    40 ;21.789 ;15.000
REMARK   3   CHIRAL-CENTER RESTRAINTS       (A**3):  1025 ; 0.159 ; 0.200
REMARK   3   GENERAL PLANES REFINED ATOMS      (A):  5116 ; 0.013 ; 0.021
REMARK   3
REMARK   3  ISOTROPIC THERMAL FACTOR RESTRAINTS.     COUNT   RMS    WEIGHT
REMARK   3   MAIN-CHAIN BOND REFINED ATOMS  (A**2):  4280 ; 2.275 ; 1.500
REMARK   3   MAIN-CHAIN ANGLE REFINED ATOMS (A**2):  6843 ; 3.192 ; 2.000
REMARK   3   SIDE-CHAIN BOND REFINED ATOMS  (A**2):  2474 ; 5.146 ; 3.000
REMARK   3   SIDE-CHAIN ANGLE REFINED ATOMS (A**2):  2296 ; 7.670 ; 4.500
REMARK   3
REMARK   3 ANISOTROPIC THERMAL FACTOR RESTRAINTS.    COUNT   RMS   WEIGHT
REMARK   3   RIGID-BOND RESTRAINTS          (A**2):  6754 ; 2.761 ; 3.000
REMARK   3
REMARK   3  NCS RESTRAINTS STATISTICS
REMARK   3   NUMBER OF NCS GROUPS : NULL
REMARK   3
REMARK   3  TWIN DETAILS
REMARK   3   NUMBER OF TWIN DOMAINS  : NULL
REMARK   3
REMARK   3
REMARK   3  TLS DETAILS
REMARK   3   NUMBER OF TLS GROUPS  : NULL
REMARK   3
REMARK   3
REMARK   3  BULK SOLVENT MODELLING.
REMARK   3   METHOD USED :  MASK
```

```
REMARK   3   PARAMETERS FOR MASK CALCULATION
REMARK   3   VDW PROBE RADIUS   :   1.40
REMARK   3   ION PROBE RADIUS   :   0.80
REMARK   3   SHRINKAGE RADIUS   :   0.80
REMARK   3
REMARK   3  OTHER REFINEMENT REMARKS:
REMARK   3  HYDROGENS HAVE BEEN ADDED IN THE RIDING POSITIONS
REMARK   3  U VALUES      : REFINED INDIVIDUALLY
REMARK   3
;
#
_entity_poly.entity_id                  1
_entity_poly.pdbx_seq_one_letter_code
;SIQKIWAREILDSRGNPTVEVDLYTAKGLFRAAVPSGASTGIYEALELRDGDKQRYLGKG
VLKAVDHINSTIAPALISSGLSVVEQEKLDNLMLELDGTENKSKFGANAILGVSLAVCKA
GAAERELPLYRHIAQLAGNSDLILPVPAFNVINGGSHAGNKLAMQEFMILPVGAESFRDA
MRLGAEVYHTLKGVIKDKYGKDATNVGDEGGFAPNILENSEALELVKEAIDKAGYTEKIV
IGMDVAASEFYRDGKYDLDFKSPTDPSRYITGDQLGALYQDFVRDYPVVSIEDPFDQDDW
AAWSKFTANVGIQIVGDDLTVTNPKRIERAVEEKACNCLLLKVNQIGSVTEAIQACKLAQ
ENGWGVMVSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEELGDEA
RFAGHNFRNPSVL
;
_entity_poly.pdbx_strand_id             A,B
_entity_poly.type                       'polypeptide(L)'
_entity_poly.pdbx_target_identifier     ?
#
_entry.id   UNNAMED
#
_exptl.crystals_number   1
_exptl.entry_id          UNNAMED
_exptl.method            'X-RAY DIFFRACTION'
#
_exptl_crystal.id                    1
_exptl_crystal.pdbx_mosaicity        0.523
_exptl_crystal.pdbx_mosaicity_esd    ?
_exptl_crystal.density_Matthews      ?
_exptl_crystal.density_diffrn        ?
_exptl_crystal.density_meas          ?
_exptl_crystal.density_meas_temp     ?
_exptl_crystal.density_percent_sol   ?
_exptl_crystal.size_max              ?
_exptl_crystal.size_mid              ?
_exptl_crystal.size_min              ?
_exptl_crystal.size_rad              ?
#
_refine.entry_id                                 UNNAMED
_refine.pdbx_refine_id                           'X-RAY DIFFRACTION'
_refine.ls_d_res_high                            1.4100
_refine.ls_d_res_low                             78.9200
_refine.pdbx_ls_sigma_F                          0.000
_refine.pdbx_data_cutoff_high_absF               ?
_refine.pdbx_data_cutoff_low_absF                ?
_refine.ls_percent_reflns_obs                    94.0500
_refine.ls_number_reflns_obs                     152704
_refine.ls_number_reflns_all                     ?
_refine.pdbx_ls_cross_valid_method               THROUGHOUT
_refine.ls_matrix_type                           ?
_refine.pdbx_R_Free_selection_details            RANDOM
_refine.details
```

```
' HYDROGENS HAVE BEEN ADDED IN THE RIDING POSITIONS U VALUES      : REFINED
INDIVIDUALLY '
_refine.ls_R_factor_all                          ?
_refine.ls_R_factor_obs                          0.1632
_refine.ls_R_factor_R_work                       0.1614
_refine.ls_wR_factor_R_work                      0.1530
_refine.ls_R_factor_R_free                       0.1973
_refine.ls_wR_factor_R_free                      0.1790
_refine.ls_percent_reflns_R_free                 5.0000
_refine.ls_number_reflns_R_free                  7677
_refine.ls_number_reflns_R_work                  145027
_refine.ls_R_factor_R_free_error                 ?
_refine.B_iso_mean                               13.1624
_refine.solvent_model_param_bsol                 ?
_refine.solvent_model_param_ksol                 ?
_refine.pdbx_isotropic_thermal_model             ?
_refine.aniso_B[1][1]                            0.3600
_refine.aniso_B[2][2]                            -0.3200
_refine.aniso_B[3][3]                            -0.0400
_refine.aniso_B[1][2]                            0.0000
_refine.aniso_B[1][3]                            0.0000
_refine.aniso_B[2][3]                            0.0000
_refine.correlation_coeff_Fo_to_Fc               0.9640
_refine.correlation_coeff_Fo_to_Fc_free          0.9510
_refine.overall_SU_R_Cruickshank_DPI             0.0690
_refine.pdbx_overall_SU_R_free_Cruickshank_DPI   ?
_refine.pdbx_overall_SU_R_Blow_DPI               ?
_refine.pdbx_overall_SU_R_free_Blow_DPI          ?
_refine.overall_SU_R_free                        0.0635
_refine.pdbx_overall_ESU_R                       0.0690
_refine.pdbx_overall_ESU_R_Free                  0.0640
_refine.overall_SU_ML                            0.0360
_refine.overall_SU_B                             2.0190
_refine.solvent_model_details                    MASK
_refine.pdbx_solvent_vdw_probe_radii             1.4000
_refine.pdbx_solvent_ion_probe_radii             0.8000
_refine.pdbx_solvent_shrinkage_radii             0.8000
_refine.ls_number_parameters                     ?
_refine.ls_number_restraints                     ?
_refine.pdbx_starting_model                      ?
_refine.pdbx_method_to_determine_struct          ?
_refine.pdbx_stereochemistry_target_values       'MAXIMUM LIKELIHOOD'
_refine.pdbx_stereochem_target_val_spec_case     ?
_refine.overall_FOM_work_R_set                   0.9010
_refine.B_iso_max                                258.630
_refine.B_iso_min                                4.380
_refine.pdbx_overall_phase_error                 ?
_refine.occupancy_max                            1.000
_refine.occupancy_min                            1.000
#
loop_
_refine_ls_restr.pdbx_refine_id
_refine_ls_restr.type
_refine_ls_restr.number
_refine_ls_restr.dev_ideal
_refine_ls_restr.dev_ideal_target
_refine_ls_restr.weight
_refine_ls_restr.pdbx_restraint_function
'X-RAY DIFFRACTION' r_bond_refined_d       6754 0.026  0.022  ? ?
'X-RAY DIFFRACTION' r_angle_refined_deg    9139 2.131  1.970  ? ?
```

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'X-RAY DIFFRACTION' r_dihedral_angle_1_deg 864  6.017  5.000  ? ?
'X-RAY DIFFRACTION' r_dihedral_angle_2_deg 308  40.444 25.000 ? ?
'X-RAY DIFFRACTION' r_dihedral_angle_3_deg 1162 13.968 15.000 ? ?
'X-RAY DIFFRACTION' r_dihedral_angle_4_deg 40   21.789 15.000 ? ?
'X-RAY DIFFRACTION' r_chiral_restr         1025 0.159  0.200  ? ?
'X-RAY DIFFRACTION' r_gen_planes_refined   5116 0.013  0.021  ? ?
'X-RAY DIFFRACTION' r_mcbond_it            4280 2.275  1.500  ? ?
'X-RAY DIFFRACTION' r_mcangle_it           6843 3.192  2.000  ? ?
'X-RAY DIFFRACTION' r_scbond_it            2474 5.146  3.000  ? ?
'X-RAY DIFFRACTION' r_scangle_it           2296 7.670  4.500  ? ?
'X-RAY DIFFRACTION' r_rigid_bond_restr     6754 2.761  3.000  ? ?
#
_refine_ls_shell.d_res_high                          1.4140
_refine_ls_shell.d_res_low                           1.4500
_refine_ls_shell.pdbx_total_number_of_bins_used      20
_refine_ls_shell.percent_reflns_obs                  49.7000
_refine_ls_shell.number_reflns_R_work                5532
_refine_ls_shell.R_factor_all                        ?
_refine_ls_shell.R_factor_R_work                     0.3270
_refine_ls_shell.R_factor_R_free                     0.3820
_refine_ls_shell.percent_reflns_R_free               ?
_refine_ls_shell.number_reflns_R_free                312
_refine_ls_shell.R_factor_R_free_error               ?
_refine_ls_shell.number_reflns_all                   5844
_refine_ls_shell.number_reflns_obs                   ?
_refine_ls_shell.pdbx_refine_id                      'X-RAY DIFFRACTION'
#
_reflns.entry_id                     UNNAMED
_reflns.d_resolution_high            1.410
_reflns.d_resolution_low             50.000
_reflns.pdbx_number_measured_all     959533
_reflns.number_obs                   153055
_reflns.pdbx_Rmerge_I_obs            0.067
_reflns.pdbx_netI_over_av_sigmaI     21.307
_reflns.pdbx_netI_over_sigmaI        9.600
_reflns.pdbx_chi_squared             0.824
_reflns.pdbx_redundancy              6.300
_reflns.percent_possible_obs         94.300
_reflns.pdbx_Rmeas_mean              0.067
_reflns.pdbx_average_I_obs           2086.000
_reflns.pdbx_average_sigmaI_obs      97.900
#
loop_
_reflns_shell.d_res_high
_reflns_shell.d_res_low
_reflns_shell.number_measured_obs
_reflns_shell.number_measured_all
_reflns_shell.number_unique_obs
_reflns_shell.pdbx_rejects
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1.460 1.520  ? ? ? ? 0.483 ? ? 0.621 3.800 ? ? ? ? ? ? ? ? ? 14496 ? ? ? ? 90.400  ?
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1.520 1.590  ? ? ? ? 0.398 ? ? 0.642 5.600 ? ? ? ? ? ? ? ? ? 15758 ? ? ? ? 97.900  ?
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1.590 1.670  ? ? ? ? 0.300 ? ? 0.658 6.400 ? ? ? ? ? ? ? ? ? 15895 ? ? ? ? 98.800  ?
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1.670 1.780  ? ? ? ? 0.223 ? ? 0.660 6.700 ? ? ? ? ? ? ? ? ? 16006 ? ? ? ? 99.200  ?
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1.780 1.910  ? ? ? ? 0.149 ? ? 0.677 7.000 ? ? ? ? ? ? ? ? ? 16078 ? ? ? ? 99.500  ?
?
1.910 2.110  ? ? ? ? 0.091 ? ? 0.717 7.200 ? ? ? ? ? ? ? ? ? 16152 ? ? ? ? 99.700  ?
?
2.110 2.410  ? ? ? ? 0.064 ? ? 0.857 7.300 ? ? ? ? ? ? ? ? ? 16245 ? ? ? ? 99.900  ?
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2.410 3.040  ? ? ? ? 0.053 ? ? 1.236 7.300 ? ? ? ? ? ? ? ? ? 16370 ? ? ? ? 100.000 ?
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1 HKL         ?    ?              package 'Zbyszek Otwinowski' hkl@hkl-xray.com
'data reduction'  http://www.hkl-xray.com/                    ?
2 REFMAC5     ?    ?              program 'Garib N. Murshudov' garib@ysbl.york.ac.uk
refinement        http://www.ccp4.ac.uk/dist/html/refmac5.html Fortran_77
3 pdb_extract 3.10 'June 10, 2010' package PDB
deposit@deposit.rcsb.org
'data extraction' http://sw-tools.pdb.org/apps/PDB_EXTRACT/    C++
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CIF File(s) (REQUIRED if paper describes X-ray crystal structures)

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ATOM 2    CA   CA   . SER SER SER A A 1   1   . 71.527  77.872  21.625  1.00 15.17  1
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ATOM 3    CB   CB   . SER SER SER A A 1   1   . 71.594  76.370  21.571  1.00 16.55  1
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ATOM 4    OG   OG   . SER SER SER A A 1   1   . 70.656  75.882  20.621  1.00 18.41  1
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ATOM 5    C    C    . SER SER SER A A 1   1   . 72.039  78.457  20.297  1.00 13.09  1
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ATOM 6    O    O    . SER SER SER A A 1   1   . 71.410  79.357  19.686  1.00 15.21  1
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ATOM 7    N    N    . ILE ILE ILE A A 2   2   . 73.158  77.929  19.835  1.00 7.28   1
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ATOM 8    CA   CA   . ILE ILE ILE A A 2   2   . 73.793  78.520  18.650  1.00 6.42   1
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ATOM 9    CB   CB   . ILE ILE ILE A A 2   2   . 75.308  78.330  18.744  1.00 3.71   1
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ATOM 10   CG1  CG1  . ILE ILE ILE A A 2   2   . 75.866  79.114  19.947  1.00 4.47   1
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ATOM 11   CD1  CD1  . ILE ILE ILE A A 2   2   . 77.320  78.716  20.315  1.00 4.22   1
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ATOM 12   CG2  CG2  . ILE ILE ILE A A 2   2   . 75.978  78.705  17.457  1.00 3.22   1
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ATOM 13   C    C    . ILE ILE ILE A A 2   2   . 73.262  77.887  17.392  1.00 6.14   1
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ATOM 14   O    O    . ILE ILE ILE A A 2   2   . 73.183  76.634  17.313  1.00 7.91   1
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ATOM 15   N    N    . GLN GLN GLN A A 3   3   . 72.834  78.704  16.423  1.00 6.28   1
. .
ATOM 16   CA   CA   . GLN GLN GLN A A 3   3   . 72.314  78.195  15.182  1.00 5.59   1
. .
ATOM 17   CB   CB   . GLN GLN GLN A A 3   3   . 71.192  79.131  14.678  1.00 9.19   1
. .
ATOM 18   CG   CG   . GLN GLN GLN A A 3   3   . 69.880  79.097  15.483  1.00 12.39  1
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ATOM 19   CD   CD   . GLN GLN GLN A A 3   3   . 68.783  80.089  14.998  1.00 22.20  1
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ATOM 20   OE1  OE1  . GLN GLN GLN A A 3   3   . 69.078  81.165  14.411  1.00 26.87  1
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ATOM 21   NE2  NE2  . GLN GLN GLN A A 3   3   . 67.503  79.761  15.294  1.00 22.53  1
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ATOM 22   C    C    . GLN GLN GLN A A 3   3   . 73.382  78.013  14.120  1.00 4.71   1
. .
ATOM 23   O    O    . GLN GLN GLN A A 3   3   . 73.307  77.096  13.291  1.00 6.47   1
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ATOM 24   N    N    . LYS LYS LYS A A 4   4   . 74.337  78.926  14.055  1.00 2.46   1
. .
ATOM 25   CA   CA   . LYS LYS LYS A A 4   4   . 75.279  78.921  12.985  1.00 2.00   1
. .
ATOM 26   CB   CB   . LYS LYS LYS A A 4   4   . 74.623  79.469  11.679  1.00 2.82   1
. .
ATOM 27   CG   CG   . LYS LYS LYS A A 4   4   . 75.585  79.401  10.509  1.00 7.99   1
. .
ATOM 28   CD   CD   . LYS LYS LYS A A 4   4   . 75.104  80.192  9.264   1.00 15.52  1
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ATOM 29   CE   CE   . LYS LYS LYS A A 4   4   . 74.299  79.347  8.317   1.00 21.42  1
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ATOM 30   NZ   NZ   . LYS LYS LYS A A 4   4   . 73.643  80.247  7.248   1.00 26.39  1
. .
ATOM 31   C    C    . LYS LYS LYS A A 4   4   . 76.444  79.844  13.385  1.00 2.23   1
. .
ATOM 32   O    O    . LYS LYS LYS A A 4   4   . 76.250  80.822  14.058  1.00 3.03   1
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ATOM 33   N    N    . ILE ILE ILE A A 5   5   . 77.641  79.456  12.981  1.00 2.32   1
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ATOM 34   CA   CA   . ILE ILE ILE A A 5   5   . 78.824  80.313  13.176  1.00 2.21   1
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ATOM 35   CB   CB   . ILE ILE ILE A A 5   5   . 79.758  79.753  14.307  1.00 2.81   1
. .
ATOM 36   CG1  CG1  . ILE ILE ILE A A 5   5   . 79.111  79.931  15.664  1.00 2.63   1
. .
ATOM 37   CD1  CD1  . ILE ILE ILE A A 5   5   . 79.862  79.197  16.777  1.00 2.02   1
. .
ATOM 38   CG2  CG2  . ILE ILE ILE A A 5   5   . 81.137  80.363  14.228  1.00 3.45   1
. .
ATOM 39   C    C    . ILE ILE ILE A A 5   5   . 79.605  80.403  11.905  1.00 2.43   1
. .
ATOM 40   O    O    . ILE ILE ILE A A 5   5   . 79.866  79.399  11.266  1.00 3.32   1
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ATOM 41   N    N    . TRP TRP TRP A A 6   6   . 79.930  81.643  11.474  1.00 2.59   1
. .
ATOM 42   CA   CA   . TRP TRP TRP A A 6   6   . 80.705  81.843  10.238  1.00 2.00   1
. .
ATOM 43   CB   CB   . TRP TRP TRP A A 6   6   . 79.800  82.197  9.038   1.00 2.99   1
. .
ATOM 44   CG   CG   . TRP TRP TRP A A 6   6   . 80.591  82.234  7.756   1.00 2.88   1
. .
ATOM 45   CD1  CD1  . TRP TRP TRP A A 6   6   . 80.996  83.328  7.092   1.00 4.89   1
. .
ATOM 46   NE1  NE1  . TRP TRP TRP A A 6   6   . 81.741  83.013  6.039   1.00 3.34   1
. .
ATOM 47   CE2  CE2  . TRP TRP TRP A A 6   6   . 81.821  81.664  5.939   1.00 7.35   1
. .
ATOM 48   CD2  CD2  . TRP TRP TRP A A 6   6   . 81.135  81.134  7.050   1.00 6.34   1
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ATOM 49   CE3  CE3  . TRP TRP TRP A A 6   6   . 81.065  79.759  7.207   1.00 5.12   1
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ATOM 50   CZ3  CZ3  . TRP TRP TRP A A 6   6   . 81.738  78.947  6.239   1.00 4.89   1
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ATOM 51   CH2  CH2  . TRP TRP TRP A A 6   6   . 82.434  79.538  5.173   1.00 7.96   1
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ATOM 52   CZ2  CZ2  . TRP TRP TRP A A 6   6   . 82.487  80.883  5.007   1.00 7.74   1
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ATOM 53   C    C    . TRP TRP TRP A A 6   6   . 81.757  82.894  10.430  1.00 2.00   1
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ATOM 54   O    O    . TRP TRP TRP A A 6   6   . 81.394  84.023  10.800  1.00 2.10   1
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ATOM 55   N    N    . ALA ALA ALA A A 7   7   . 83.010  82.483  10.246  1.00 2.00   1
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ATOM 56   CA   CA   . ALA ALA ALA A A 7   7   . 84.241  83.312  10.333  1.00 2.00   1
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ATOM 57   CB   CB   . ALA ALA ALA A A 7   7   . 85.318  82.589  11.092  1.00 2.00   1
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ATOM 58   C    C    . ALA ALA ALA A A 7   7   . 84.726  83.722  8.983   1.00 2.00   1
. .
ATOM 59   O    O    . ALA ALA ALA A A 7   7   . 84.585  83.041  7.973   1.00 2.00   1
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ATOM 60   N    N    . ARG ARG ARG A A 8   8   . 85.356  84.879  8.981   1.00 2.00   1
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ATOM 61   CA   CA   . ARG ARG ARG A A 8   8   . 85.971  85.371  7.772   1.00 2.00   1
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ATOM 62   CB   CB   . ARG ARG ARG A A 8   8   . 85.051  86.340  6.942   1.00 2.00   1
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ATOM 63   CG   CG   . ARG ARG ARG A A 8   8   . 84.731  87.676  7.706   1.00 2.00   1
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ATOM 64   CD   CD   . ARG ARG ARG A A 8   8   . 83.789  88.598  6.888   1.00 2.12   1
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ATOM 65   NE   NE   . ARG ARG ARG A A 8   8   . 82.470  87.962  6.734   1.00 2.96   1
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ATOM 66   CZ   CZ   . ARG ARG ARG A A 8   8   . 81.526  87.891  7.654   1.00 3.94   1
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ATOM 67   NH1  NH1  . ARG ARG ARG A A 8   8   . 81.593  88.518  8.854   1.00 3.01   1
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ATOM 68   NH2  NH2  . ARG ARG ARG A A 8   8   . 80.427  87.188  7.374   1.00 3.30   1
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ATOM 69   C    C    . ARG ARG ARG A A 8   8   . 87.209  86.178  8.122   1.00 2.00   1
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ATOM 70   O    O    . ARG ARG ARG A A 8   8   . 87.418  86.543  9.274   1.00 2.00   1
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ATOM 71   N    N    . GLU GLU GLU A A 9   9   . 88.004  86.448  7.098   1.00 2.00   1
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ATOM 72   CA   CA   . GLU GLU GLU A A 9   9   . 89.171  87.269  7.254   1.00 2.70   1
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ATOM 73   CB   CB   . GLU GLU GLU A A 9   9   . 90.195  86.701  6.269   1.00 4.37   1
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ATOM 74   CG   CG   . GLU GLU GLU A A 9   9   . 91.560  87.283  6.260   1.00 6.79   1
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ATOM 75   CD   CD   . GLU GLU GLU A A 9   9   . 92.387  86.567  5.150   1.00 6.21   1
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ATOM 76   OE1  OE1  . GLU GLU GLU A A 9   9   . 93.422  85.893  5.490   1.00 3.42   1
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ATOM 77   OE2  OE2  . GLU GLU GLU A A 9   9   . 91.941  86.675  3.954   1.00 6.47   1
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ATOM 78   C    C    . GLU GLU GLU A A 9   9   . 88.786  88.707  6.945   1.00 3.39   1
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ATOM 79   O    O    . GLU GLU GLU A A 9   9   . 88.186  88.997  5.877   1.00 4.64   1
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ATOM 81   CA   CA   . ILE ILE ILE A A 10  10  . 88.903  91.126  7.580   1.00 2.00   1
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ATOM 82   CB   CB   . ILE ILE ILE A A 10  10  . 87.912  91.768  8.519   1.00 2.00   1
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ATOM 83   CG1  CG1  . ILE ILE ILE A A 10  10  . 88.304  91.615  10.000  1.00 2.18   1
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ATOM 84   CD1  CD1  . ILE ILE ILE A A 10  10  . 87.575  92.543  10.887  1.00 2.00   1
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ATOM 85   CG2  CG2  . ILE ILE ILE A A 10  10  . 86.472  91.279  8.301   1.00 2.39   1
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ATOM 86   C    C    . ILE ILE ILE A A 10  10  . 90.278  91.743  7.747   1.00 2.00   1
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ATOM 87   O    O    . ILE ILE ILE A A 10  10  . 91.244  91.057  8.114   1.00 2.00   1
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ATOM 88   N    N    . LEU LEU LEU A A 11  11  . 90.406  93.059  7.434   1.00 2.00   1
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ATOM 89   CA   CA   . LEU LEU LEU A A 11  11  . 91.687  93.712  7.713   1.00 2.00   1
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ATOM 90   CB   CB   . LEU LEU LEU A A 11  11  . 92.039  94.607  6.539   1.00 2.00   1
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ATOM 91   CG   CG   . LEU LEU LEU A A 11  11  . 92.291  93.840  5.203   1.00 2.00   1
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ATOM 92   CD1  CD1  . LEU LEU LEU A A 11  11  . 92.842  94.834  4.179   1.00 3.16   1
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ATOM 93   CD2  CD2  . LEU LEU LEU A A 11  11  . 93.279  92.735  5.348   1.00 3.61   1
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ATOM 94   C    C    . LEU LEU LEU A A 11  11  . 91.609  94.601  8.979   1.00 2.00   1
. .
ATOM 95   O    O    . LEU LEU LEU A A 11  11  . 90.563  95.278  9.198   1.00 2.00   1
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ATOM 96   N    N    . ASP ASP ASP A A 12  12  . 92.702  94.580  9.724   1.00 2.00   1
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ATOM 97   CA   CA   . ASP ASP ASP A A 12  12  . 92.844  95.380  10.946  1.00 2.00   1
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ATOM 98   CB   CB   . ASP ASP ASP A A 12  12  . 93.718  94.627  11.979  1.00 2.00   1
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ATOM 99   CG   CG   . ASP ASP ASP A A 12  12  . 95.224  94.731  11.729  1.00 2.05   1
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ATOM 100  OD1  OD1  . ASP ASP ASP A A 12  12  . 95.717  95.381  10.775  1.00 2.00   1
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ATOM 101  OD2  OD2  . ASP ASP ASP A A 12  12  . 95.969  94.096  12.463  1.00 2.75   1
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ATOM 102  C    C    . ASP ASP ASP A A 12  12  . 93.365  96.758  10.601  1.00 2.00   1
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ATOM 103  O    O    . ASP ASP ASP A A 12  12  . 93.480  97.072  9.428   1.00 2.00   1
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ATOM 104  N    N    . SER SER SER A A 13  13  . 93.563  97.590  11.617  1.00 2.00   1
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ATOM 105  CA   CA   . SER SER SER A A 13  13  . 93.863  98.992  11.402  1.00 2.00   1
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ATOM 106  CB   CB   . SER SER SER A A 13  13  . 93.754  99.755  12.726  1.00 2.00   1
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ATOM 107  OG   OG   . SER SER SER A A 13  13  . 94.679  99.235  13.676  1.00 2.00   1
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ATOM 108  C    C    . SER SER SER A A 13  13  . 95.197  99.267  10.780  1.00 2.00   1
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ATOM 109  O    O    . SER SER SER A A 13  13  . 95.457  100.441 10.416  1.00 2.00   1
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ATOM 110  N    N    . ARG ARG ARG A A 14  14  . 96.065  98.249  10.662  1.00 2.00   1
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ATOM 111  CA   CA   . ARG ARG ARG A A 14  14  . 97.386  98.375  10.018  1.00 2.00   1
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ATOM 112  CB   CB   . ARG ARG ARG A A 14  14  . 98.529  97.791  10.845  1.00 2.61   1
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ATOM 113  CG   CG   . ARG ARG ARG A A 14  14  . 99.204  98.742  11.783  1.00 6.89   1
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ATOM 114  CD   CD   . ARG ARG ARG A A 14  14  . 100.483 98.041  12.403  1.00 8.51   1
. .
ATOM 115  NE   NE   . ARG ARG ARG A A 14  14  . 100.085 96.917  13.192  1.00 9.24   1
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ATOM 116  CZ   CZ   . ARG ARG ARG A A 14  14  . 100.243 96.893  14.510  1.00 6.95   1
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ATOM 117  NH1  NH1  . ARG ARG ARG A A 14  14  . 100.850 97.928  15.147  1.00 5.70   1
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ATOM 118  NH2  NH2  . ARG ARG ARG A A 14  14  . 99.823  95.831  15.158  1.00 10.22  1
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ATOM 119  C    C    . ARG ARG ARG A A 14  14  . 97.335  97.699  8.651   1.00 2.04   1
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ATOM 120  O    O    . ARG ARG ARG A A 14  14  . 98.319  97.679  7.946   1.00 2.33   1
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ATOM 121  N    N    . GLY GLY GLY A A 15  15  . 96.188  97.165  8.287   1.00 2.00   1
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ATOM 122  CA   CA   . GLY GLY GLY A A 15  15  . 96.056  96.491  6.974   1.00 2.00   1
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ATOM 123  C    C    . GLY GLY GLY A A 15  15  . 96.483  95.078  6.926   1.00 2.00   1
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ATOM 124  O    O    . GLY GLY GLY A A 15  15  . 96.747  94.600  5.833   1.00 2.26   1
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ATOM 125  N    N    . ASN ASN ASN A A 16  16  . 96.528  94.451  8.095   1.00 2.00   1
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ATOM 126  CA   CA   . ASN ASN ASN A A 16  16  . 96.838  93.018  8.203   1.00 2.00   1
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ATOM 127  CB   CB   . ASN ASN ASN A A 16  16  . 97.851  92.699  9.289   1.00 2.03   1
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ATOM 128  CG   CG   . ASN ASN ASN A A 16  16  . 99.216  93.370  9.045   1.00 2.62   1
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ATOM 129  OD1  OD1  . ASN ASN ASN A A 16  16  . 99.726  93.322  7.949   1.00 7.18   1
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ATOM 130  ND2  ND2  . ASN ASN ASN A A 16  16  . 99.760  94.050  10.065  1.00 6.55   1
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ATOM 131  C    C    . ASN ASN ASN A A 16  16  . 95.597  92.238  8.454   1.00 2.00   1
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ATOM 132  O    O    . ASN ASN ASN A A 16  16  . 94.664  92.639  9.130   1.00 2.00   1
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ATOM 133  N    N    . PRO PRO PRO A A 17  17  . 95.554  91.009  7.930   1.00 2.00   1
. .
ATOM 134  CA   CA   . PRO PRO PRO A A 17  17  . 94.351  90.151  8.149   1.00 2.00   1
. .
ATOM 135  CB   CB   . PRO PRO PRO A A 17  17  . 94.736  88.856  7.425   1.00 2.00   1
. .
ATOM 136  CG   CG   . PRO PRO PRO A A 17  17  . 95.687  89.387  6.330   1.00 2.42   1
. .
ATOM 137  CD   CD   . PRO PRO PRO A A 17  17  . 96.534  90.407  6.998   1.00 2.00   1
. .
ATOM 138  C    C    . PRO PRO PRO A A 17  17  . 94.100  89.830  9.579   1.00 2.00   1
. .
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ATOM 139  O    O    . PRO PRO PRO A A 17  17  . 95.027  89.691  10.346  1.00 2.00   1
. .
ATOM 140  N    N    . THR THR THR A A 18  18  . 92.817  89.719  9.942   1.00 2.00   1
. .
ATOM 141  CA   CA   . THR THR THR A A 18  18  . 92.508  89.206  11.268  1.00 2.00   1
. .
ATOM 142  CB   CB   . THR THR THR A A 18  18  . 92.595  90.264  12.371  1.00 2.00   1
. .
ATOM 143  OG1  OG1  . THR THR THR A A 18  18  . 92.471  89.589  13.675  1.00 2.00   1
. .
ATOM 144  CG2  CG2  . THR THR THR A A 18  18  . 91.403  91.282  12.229  1.00 2.04   1
. .
ATOM 145  C    C    . THR THR THR A A 18  18  . 91.180  88.505  11.177  1.00 2.00   1
. .
ATOM 146  O    O    . THR THR THR A A 18  18  . 90.485  88.559  10.156  1.00 2.00   1
. .
ATOM 147  N    N    . VAL VAL VAL A A 19  19  . 90.816  87.855  12.282  1.00 2.00   1
. .
ATOM 148  CA   CA   . VAL VAL VAL A A 19  19  . 89.612  87.029  12.360  1.00 2.00   1
. .
ATOM 149  CB   CB   . VAL VAL VAL A A 19  19  . 89.828  85.974  13.469  1.00 2.00   1
. .
ATOM 150  CG1  CG1  . VAL VAL VAL A A 19  19  . 88.550  85.233  13.845  1.00 2.00   1
. .
ATOM 151  CG2  CG2  . VAL VAL VAL A A 19  19  . 90.844  84.969  12.969  1.00 2.64   1
. .
ATOM 152  C    C    . VAL VAL VAL A A 19  19  . 88.369  87.855  12.728  1.00 2.00   1
. .
ATOM 153  O    O    . VAL VAL VAL A A 19  19  . 88.393  88.661  13.676  1.00 2.00   1
. .
ATOM 154  N    N    . GLU GLU GLU A A 20  20  . 87.295  87.644  12.009  1.00 2.00   1
. .
ATOM 155  CA   CA   . GLU GLU GLU A A 20  20  . 86.000  88.128  12.402  1.00 2.00   1
. .
ATOM 156  CB   CB   . GLU GLU GLU A A 20  20  . 85.522  89.214  11.392  1.00 2.00   1
. .
ATOM 157  CG   CG   . GLU GLU GLU A A 20  20  . 84.073  89.635  11.622  1.00 2.58   1
. .
ATOM 158  CD   CD   . GLU GLU GLU A A 20  20  . 83.715  90.834  10.775  1.00 6.29   1
. .
ATOM 159  OE1  OE1  . GLU GLU GLU A A 20  20  . 83.230  90.599  9.667   1.00 5.25   1
. .
ATOM 160  OE2  OE2  . GLU GLU GLU A A 20  20  . 83.988  91.993  11.232  1.00 8.91   1
. .
ATOM 161  C    C    . GLU GLU GLU A A 20  20  . 84.994  86.977  12.461  1.00 2.00   1
. .
ATOM 162  O    O    . GLU GLU GLU A A 20  20  . 85.023  86.115  11.563  1.00 2.00   1
. .
ATOM 163  N    N    . VAL VAL VAL A A 21  21  . 84.130  86.971  13.473  1.00 2.00   1
. .
ATOM 164  CA   CA   . VAL VAL VAL A A 21  21  . 83.180  85.892  13.608  1.00 2.00   1
. .
ATOM 165  CB   CB   . VAL VAL VAL A A 21  21  . 83.454  85.157  14.931  1.00 2.00   1
. .
ATOM 166  CG1  CG1  . VAL VAL VAL A A 21  21  . 82.397  84.096  15.189  1.00 2.00   1
. .
ATOM 167  CG2  CG2  . VAL VAL VAL A A 21  21  . 84.828  84.508  14.935  1.00 2.00   1
. .
ATOM 168  C    C    . VAL VAL VAL A A 21  21  . 81.758  86.389  13.630  1.00 2.02   1
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ATOM 169  O    O    . VAL VAL VAL A A 21  21  . 81.496  87.324  14.378  1.00 2.00   1
. .
ATOM 170  N    N    . ASP ASP ASP A A 22  22  . 80.872  85.720  12.871  1.00 2.00   1
. .
ATOM 171  CA   CA   . ASP ASP ASP A A 22  22  . 79.441  85.961  12.901  1.00 2.00   1
. .
ATOM 172  CB   CB   . ASP ASP ASP A A 22  22  . 78.810  86.124  11.496  1.00 2.29   1
. .
ATOM 173  CG   CG   . ASP ASP ASP A A 22  22  . 79.167  87.384  10.839  1.00 4.17   1
. .
ATOM 174  OD1  OD1  . ASP ASP ASP A A 22  22  . 78.691  87.471  9.705   1.00 8.15   1
. .
ATOM 175  OD2  OD2  . ASP ASP ASP A A 22  22  . 79.861  88.211  11.399  1.00 5.09   1
. .
ATOM 176  C    C    . ASP ASP ASP A A 22  22  . 78.833  84.755  13.590  1.00 2.24   1
. .
ATOM 177  O    O    . ASP ASP ASP A A 22  22  . 79.021  83.602  13.245  1.00 2.52   1
. .
ATOM 178  N    N    . LEU LEU LEU A A 23  23  . 78.052  85.062  14.608  1.00 2.29   1
. .
ATOM 179  CA   CA   . LEU LEU LEU A A 23  23  . 77.374  83.990  15.368  1.00 2.00   1
. .
ATOM 180  CB   CB   . LEU LEU LEU A A 23  23  . 77.900  83.961  16.774  1.00 2.43   1
. .
ATOM 181  CG   CG   . LEU LEU LEU A A 23  23  . 77.446  82.744  17.633  1.00 5.02   1
. .
ATOM 182  CD1  CD1  . LEU LEU LEU A A 23  23  . 78.429  82.377  18.698  1.00 5.68   1
. .
ATOM 183  CD2  CD2  . LEU LEU LEU A A 23  23  . 76.096  83.035  18.388  1.00 7.52   1
. .
ATOM 184  C    C    . LEU LEU LEU A A 23  23  . 75.905  84.268  15.369  1.00 2.14   1
. .
ATOM 185  O    O    . LEU LEU LEU A A 23  23  . 75.495  85.396  15.722  1.00 2.12   1
. .
ATOM 186  N    N    . TYR TYR TYR A A 24  24  . 75.119  83.258  14.963  1.00 2.51   1
. .
ATOM 187  CA   CA   . TYR TYR TYR A A 24  24  . 73.675  83.424  14.877  1.00 2.90   1
. .
ATOM 188  CB   CB   . TYR TYR TYR A A 24  24  . 73.086  82.987  13.509  1.00 3.83   1
. .
ATOM 189  CG   CG   . TYR TYR TYR A A 24  24  . 73.551  83.755  12.267  1.00 5.46   1
. .
ATOM 190  CD1  CD1  . TYR TYR TYR A A 24  24  . 74.820  83.510  11.725  1.00 2.97   1
. .
ATOM 191  CE1  CE1  . TYR TYR TYR A A 24  24  . 75.270  84.197  10.581  1.00 7.72   1
. .
ATOM 192  CZ   CZ   . TYR TYR TYR A A 24  24  . 74.443  85.137  10.012  1.00 10.56  1
. .
ATOM 193  OH   OH   . TYR TYR TYR A A 24  24  . 74.898  85.787  8.890   1.00 14.74  1
. .
ATOM 194  CE2  CE2  . TYR TYR TYR A A 24  24  . 73.176  85.393  10.538  1.00 12.88  1
. .
ATOM 195  CD2  CD2  . TYR TYR TYR A A 24  24  . 72.729  84.693  11.670  1.00 9.35   1
. .
ATOM 196  C    C    . TYR TYR TYR A A 24  24  . 72.948  82.642  15.929  1.00 2.86   1
. .
ATOM 197  O    O    . TYR TYR TYR A A 24  24  . 73.236  81.459  16.170  1.00 3.10   1
. .
ATOM 198  N    N    . THR THR THR A A 25  25  . 71.930  83.300  16.493  1.00 4.35   1
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ATOM 199  CA   CA   . THR THR THR A A 25  25  . 70.997  82.631  17.442  1.00 5.10   1
. .
ATOM 200  CB   CB   . THR THR THR A A 25  25  . 71.129  83.071  18.907  1.00 5.17   1
. .
ATOM 201  OG1  OG1  . THR THR THR A A 25  25  . 70.747  84.453  19.035  1.00 5.97   1
. .
ATOM 202  CG2  CG2  . THR THR THR A A 25  25  . 72.494  82.841  19.475  1.00 5.16   1
. .
ATOM 203  C    C    . THR THR THR A A 25  25  . 69.614  83.004  16.987  1.00 6.34   1
. .
ATOM 204  O    O    . THR THR THR A A 25  25  . 69.435  83.818  16.080  1.00 7.33   1
. .
ATOM 205  N    N    . ALA ALA ALA A A 26  26  . 68.622  82.444  17.648  1.00 7.45   1
. .
ATOM 206  CA   CA   . ALA ALA ALA A A 26  26  . 67.313  82.913  17.347  1.00 10.33  1
. .
ATOM 207  CB   CB   . ALA ALA ALA A A 26  26  . 66.246  82.073  18.103  1.00 12.53  1
. .
ATOM 208  C    C    . ALA ALA ALA A A 26  26  . 67.141  84.439  17.587  1.00 10.30  1
. .
ATOM 209  O    O    . ALA ALA ALA A A 26  26  . 66.206  85.038  17.070  1.00 12.32  1
. .
ATOM 210  N    N    . LYS LYS LYS A A 27  27  . 68.026  85.085  18.359  1.00 12.30  1
. .
ATOM 211  CA   CA   . LYS LYS LYS A A 27  27  . 67.942  86.544  18.502  1.00 12.42  1
. .
ATOM 212  CB   CB   . LYS LYS LYS A A 27  27  . 68.420  86.986  19.865  1.00 13.68  1
. .
ATOM 213  CG   CG   . LYS LYS LYS A A 27  27  . 67.701  86.258  20.961  1.00 17.42  1
. .
ATOM 214  CD   CD   . LYS LYS LYS A A 27  27  . 67.304  87.189  22.056  1.00 18.49  1
. .
ATOM 215  CE   CE   . LYS LYS LYS A A 27  27  . 66.326  86.499  22.941  1.00 20.84  1
. .
ATOM 216  NZ   NZ   . LYS LYS LYS A A 27  27  . 65.007  87.168  22.832  1.00 23.04  1
. .
ATOM 217  C    C    . LYS LYS LYS A A 27  27  . 68.620  87.321  17.412  1.00 11.83  1
. .
ATOM 218  O    O    . LYS LYS LYS A A 27  27  . 68.565  88.516  17.398  1.00 12.19  1
. .
ATOM 219  N    N    . GLY GLY GLY A A 28  28  . 69.291  86.648  16.488  1.00 8.45   1
. .
ATOM 220  CA   CA   . GLY GLY GLY A A 28  28  . 69.881  87.361  15.386  1.00 7.66   1
. .
ATOM 221  C    C    . GLY GLY GLY A A 28  28  . 71.375  87.112  15.163  1.00 4.88   1
. .
ATOM 222  O    O    . GLY GLY GLY A A 28  28  . 71.884  86.120  15.588  1.00 5.49   1
. .
ATOM 223  N    N    . LEU LEU LEU A A 29  29  . 72.041  88.086  14.523  1.00 4.47   1
. .
ATOM 224  CA   CA   . LEU LEU LEU A A 29  29  . 73.481  88.052  14.222  1.00 5.73   1
. .
ATOM 225  CB   CB   . LEU LEU LEU A A 29  29  . 73.781  88.739  12.902  1.00 6.42   1
. .
ATOM 226  CG   CG   . LEU LEU LEU A A 29  29  . 75.252  88.796  12.513  1.00 12.56  1
. .
ATOM 227  CD1  CD1  . LEU LEU LEU A A 29  29  . 75.698  87.439  11.955  1.00 14.69  1
. .
ATOM 228  CD2  CD2  . LEU LEU LEU A A 29  29  . 75.437  89.918  11.556  1.00 17.90  1
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ATOM 229  C    C    . LEU LEU LEU A A 29  29  . 74.336  88.789  15.238  1.00 4.21   1
. .
ATOM 230  O    O    . LEU LEU LEU A A 29  29  . 74.056  89.997  15.542  1.00 8.33   1
. .
ATOM 231  N    N    . PHE PHE PHE A A 30  30  . 75.390  88.143  15.739  1.00 2.20   1
. .
ATOM 232  CA   CA   . PHE PHE PHE A A 30  30  . 76.322  88.808  16.690  1.00 2.10   1
. .
ATOM 233  CB   CB   . PHE PHE PHE A A 30  30  . 76.205  88.126  18.048  1.00 2.15   1
. .
ATOM 234  CG   CG   . PHE PHE PHE A A 30  30  . 74.818  88.196  18.533  1.00 3.22   1
. .
ATOM 235  CD1  CD1  . PHE PHE PHE A A 30  30  . 74.412  89.346  19.207  1.00 3.40   1
. .
ATOM 236  CE1  CE1  . PHE PHE PHE A A 30  30  . 73.102  89.509  19.627  1.00 4.25   1
. .
ATOM 237  CZ   CZ   . PHE PHE PHE A A 30  30  . 72.134  88.487  19.337  1.00 4.11   1
. .
ATOM 238  CE2  CE2  . PHE PHE PHE A A 30  30  . 72.543  87.333  18.675  1.00 4.61   1
. .
ATOM 239  CD2  CD2  . PHE PHE PHE A A 30  30  . 73.917  87.217  18.269  1.00 5.42   1
. .
ATOM 240  C    C    . PHE PHE PHE A A 30  30  . 77.709  88.687  16.068  1.00 2.16   1
. .
ATOM 241  O    O    . PHE PHE PHE A A 30  30  . 78.124  87.580  15.635  1.00 3.63   1
. .
ATOM 242  N    N    . ARG ARG ARG A A 31  31  . 78.420  89.814  16.002  1.00 2.00   1
. .
ATOM 243  CA   CA   . ARG ARG ARG A A 31  31  . 79.662  89.828  15.247  1.00 2.00   1
. .
ATOM 244  CB   CB   . ARG ARG ARG A A 31  31  . 79.473  90.708  13.977  1.00 2.05   1
. .
ATOM 245  CG   CG   . ARG ARG ARG A A 31  31  . 80.725  90.958  13.230  1.00 4.85   1
. .
ATOM 246  CD   CD   . ARG ARG ARG A A 31  31  . 80.457  91.790  11.948  1.00 3.76   1
. .
ATOM 247  NE   NE   . ARG ARG ARG A A 31  31  . 79.714  90.948  10.998  1.00 7.07   1
. .
ATOM 248  CZ   CZ   . ARG ARG ARG A A 31  31  . 78.814  91.341  10.105  1.00 6.87   1
. .
ATOM 249  NH1  NH1  . ARG ARG ARG A A 31  31  . 78.441  92.604  10.029  1.00 8.72   1
. .
ATOM 250  NH2  NH2  . ARG ARG ARG A A 31  31  . 78.201  90.443  9.331   1.00 8.22   1
. .
ATOM 251  C    C    . ARG ARG ARG A A 31  31  . 80.789  90.387  16.112  1.00 2.16   1
. .
ATOM 252  O    O    . ARG ARG ARG A A 31  31  . 80.582  91.367  16.822  1.00 2.00   1
. .
ATOM 253  N    N    . ALA ALA ALA A A 32  32  . 81.989  89.724  16.098  1.00 2.00   1
. .
ATOM 254  CA   CA   . ALA ALA ALA A A 32  32  . 83.133  90.221  16.846  1.00 2.00   1
. .
ATOM 255  CB   CB   . ALA ALA ALA A A 32  32  . 83.282  89.527  18.200  1.00 2.00   1
. .
ATOM 256  C    C    . ALA ALA ALA A A 32  32  . 84.350  90.029  15.988  1.00 2.00   1
. .
ATOM 257  O    O    . ALA ALA ALA A A 32  32  . 84.377  89.164  15.122  1.00 2.00   1
. .
ATOM 258  N    N    . ALA ALA ALA A A 33  33  . 85.346  90.877  16.187  1.00 2.00   1
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ATOM 259  CA   CA   . ALA ALA ALA A A 33  33  . 86.655  90.732  15.596  1.00 2.00   1
. .
ATOM 260  CB   CB   . ALA ALA ALA A A 33  33  . 86.871  91.838  14.532  1.00 2.26   1
. .
ATOM 261  C    C    . ALA ALA ALA A A 33  33  . 87.815  90.753  16.605  1.00 2.00   1
. .
ATOM 262  O    O    . ALA ALA ALA A A 33  33  . 87.670  91.208  17.744  1.00 2.00   1
. .
ATOM 263  N    N    . VAL VAL VAL A A 34  34  . 88.944  90.226  16.170  1.00 2.00   1
. .
ATOM 264  CA   CA   . VAL VAL VAL A A 34  34  . 90.090  89.966  17.027  1.00 2.00   1
. .
ATOM 265  CB   CB   . VAL VAL VAL A A 34  34  . 90.573  88.510  16.856  1.00 2.00   1
. .
ATOM 266  CG1  CG1  . VAL VAL VAL A A 34  34  . 91.737  88.235  17.727  1.00 2.00   1
. .
ATOM 267  CG2  CG2  . VAL VAL VAL A A 34  34  . 89.425  87.598  17.146  1.00 2.00   1
. .
ATOM 268  C    C    . VAL VAL VAL A A 34  34  . 91.237  90.936  16.731  1.00 2.00   1
. .
ATOM 269  O    O    . VAL VAL VAL A A 34  34  . 91.639  91.088  15.593  1.00 2.00   1
. .
ATOM 270  N    N    . PRO PRO PRO A A 35  35  . 91.743  91.628  17.751  1.00 2.00   1
. .
ATOM 271  CA   CA   . PRO PRO PRO A A 35  35  . 92.843  92.546  17.525  1.00 2.00   1
. .
ATOM 272  CB   CB   . PRO PRO PRO A A 35  35  . 92.798  93.407  18.787  1.00 2.00   1
. .
ATOM 273  CG   CG   . PRO PRO PRO A A 35  35  . 92.429  92.435  19.846  1.00 2.00   1
. .
ATOM 274  CD   CD   . PRO PRO PRO A A 35  35  . 91.410  91.470  19.184  1.00 2.09   1
. .
ATOM 275  C    C    . PRO PRO PRO A A 35  35  . 94.192  91.804  17.454  1.00 2.02   1
. .
ATOM 276  O    O    . PRO PRO PRO A A 35  35  . 94.298  90.544  17.657  1.00 2.00   1
. .
ATOM 277  N    N    . SER SER SER A A 36  36  . 95.256  92.550  17.144  1.00 2.18   1
. .
ATOM 278  CA   CA   . SER SER SER A A 36  36  . 96.578  91.944  16.939  1.00 2.23   1
. .
ATOM 279  CB   CB   . SER SER SER A A 36  36  . 96.698  91.586  15.426  1.00 3.43   1
. .
ATOM 280  OG   OG   . SER SER SER A A 36  36  . 98.023  91.177  15.130  1.00 5.51   1
. .
ATOM 281  C    C    . SER SER SER A A 36  36  . 97.699  92.887  17.372  1.00 2.22   1
. .
ATOM 282  O    O    . SER SER SER A A 36  36  . 97.687  94.012  16.992  1.00 2.00   1
. .
ATOM 283  N    N    . GLY GLY GLY A A 37  37  . 98.693  92.399  18.135  1.00 2.00   1
. .
ATOM 284  CA   CA   . GLY GLY GLY A A 37  37  . 99.709  93.271  18.659  1.00 2.00   1
. .
ATOM 285  C    C    . GLY GLY GLY A A 37  37  . 100.893 93.364  17.722  1.00 2.01   1
. .
ATOM 286  O    O    . GLY GLY GLY A A 37  37  . 101.087 92.500  16.881  1.00 2.28   1
. .
ATOM 287  N    N    . ALA ALA ALA A A 38  38  . 101.747 94.369  17.939  1.00 2.00   1
. .
ATOM 288  CA   CA   . ALA ALA ALA A A 38  38  . 103.031 94.507  17.286  1.00 2.28   1
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ATOM 289  CB   CB   . ALA ALA ALA A A 38  38  . 103.174 95.919  16.699  1.00 3.33   1
. .
ATOM 290  C    C    . ALA ALA ALA A A 38  38  . 104.137 94.220  18.301  1.00 3.15   1
. .
ATOM 291  O    O    . ALA ALA ALA A A 38  38  . 105.075 93.384  18.057  1.00 3.61   1
. .
ATOM 292  N    N    . SER SER SER A A 39  39  . 104.058 94.880  19.481  1.00 2.46   1
. .
ATOM 293  CA   CA   . SER SER SER A A 39  39  . 105.038 94.565  20.502  1.00 2.00   1
. .
ATOM 294  CB   CB   . SER SER SER A A 39  39  . 105.401 95.822  21.360  1.00 2.00   1
. .
ATOM 295  OG   OG   . SER SER SER A A 39  39  . 104.201 96.420  21.827  1.00 2.00   1
. .
ATOM 296  C    C    . SER SER SER A A 39  39  . 104.471 93.458  21.411  1.00 2.11   1
. .
ATOM 297  O    O    . SER SER SER A A 39  39  . 103.937 93.721  22.520  1.00 2.00   1
. .
ATOM 298  N    N    . THR THR THR A A 40  40  . 104.532 92.210  20.913  1.00 2.00   1
. .
ATOM 299  CA   CA   . THR THR THR A A 40  40  . 103.871 91.059  21.524  1.00 2.10   1
. .
ATOM 300  CB   CB   . THR THR THR A A 40  40  . 103.308 90.055  20.418  1.00 2.00   1
. .
ATOM 301  OG1  OG1  . THR THR THR A A 40  40  . 104.353 89.852  19.479  1.00 3.23   1
. .
ATOM 302  CG2  CG2  . THR THR THR A A 40  40  . 102.175 90.680  19.628  1.00 2.49   1
. .
ATOM 303  C    C    . THR THR THR A A 40  40  . 104.854 90.267  22.404  1.00 2.33   1
. .
ATOM 304  O    O    . THR THR THR A A 40  40  . 106.013 89.950  21.987  1.00 4.85   1
. .
ATOM 305  N    N    . GLY GLY GLY A A 41  41  . 104.465 90.038  23.632  1.00 2.18   1
. .
ATOM 306  CA   CA   . GLY GLY GLY A A 41  41  . 105.287 89.376  24.617  1.00 2.14   1
. .
ATOM 307  C    C    . GLY GLY GLY A A 41  41  . 105.504 87.927  24.212  1.00 2.06   1
. .
ATOM 308  O    O    . GLY GLY GLY A A 41  41  . 104.655 87.326  23.551  1.00 2.28   1
. .
ATOM 309  N    N    . ILE ILE ILE A A 42  42  . 106.674 87.419  24.535  1.00 2.49   1
. .
ATOM 310  CA   CA   . ILE ILE ILE A A 42  42  . 106.916 86.043  24.211  1.00 2.91   1
. .
ATOM 311  CB   CB   . ILE ILE ILE A A 42  42  . 108.416 85.659  24.535  1.00 4.04   1
. .
ATOM 312  CG1  CG1  . ILE ILE ILE A A 42  42  . 108.672 85.630  26.023  1.00 6.96   1
. .
ATOM 313  CD1  CD1  . ILE ILE ILE A A 42  42  . 110.144 85.437  26.409  1.00 11.97  1
. .
ATOM 314  CG2  CG2  . ILE ILE ILE A A 42  42  . 109.399 86.562  23.897  1.00 5.51   1
. .
ATOM 315  C    C    . ILE ILE ILE A A 42  42  . 105.955 85.074  24.893  1.00 2.03   1
. .
ATOM 316  O    O    . ILE ILE ILE A A 42  42  . 105.829 83.970  24.427  1.00 4.74   1
. .
ATOM 317  N    N    . TYR TYR TYR A A 43  43  . 105.258 85.461  25.970  1.00 2.00   1
. .
ATOM 318  CA   CA   . TYR TYR TYR A A 43  43  . 104.392 84.481  26.673  1.00 2.13   1
. .
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ATOM 319  CB   CB   . TYR TYR TYR A A 43  43  . 104.524 84.654  28.184  1.00 2.27   1
. .
ATOM 320  CG   CG   . TYR TYR TYR A A 43  43  . 105.951 84.350  28.664  1.00 3.23   1
. .
ATOM 321  CD1  CD1  . TYR TYR TYR A A 43  43  . 106.867 85.375  28.954  1.00 5.68   1
. .
ATOM 322  CE1  CE1  . TYR TYR TYR A A 43  43  . 108.155 85.078  29.388  1.00 4.29   1
. .
ATOM 323  CZ   CZ   . TYR TYR TYR A A 43  43  . 108.578 83.747  29.391  1.00 10.35  1
. .
ATOM 324  OH   OH   . TYR TYR TYR A A 43  43  . 109.870 83.425  29.771  1.00 11.99  1
. .
ATOM 325  CE2  CE2  . TYR TYR TYR A A 43  43  . 107.712 82.725  29.040  1.00 7.69   1
. .
ATOM 326  CD2  CD2  . TYR TYR TYR A A 43  43  . 106.413 83.038  28.650  1.00 6.50   1
. .
ATOM 327  C    C    . TYR TYR TYR A A 43  43  . 102.949 84.603  26.257  1.00 2.00   1
. .
ATOM 328  O    O    . TYR TYR TYR A A 43  43  . 102.139 83.938  26.809  1.00 2.66   1
. .
ATOM 329  N    N    . GLU GLU GLU A A 44  44  . 102.640 85.425  25.251  1.00 2.07   1
. .
ATOM 330  CA   CA   . GLU GLU GLU A A 44  44  . 101.236 85.560  24.824  1.00 2.00   1
. .
ATOM 331  CB   CB   . GLU GLU GLU A A 44  44  . 101.139 86.676  23.730  1.00 2.00   1
. .
ATOM 332  CG   CG   . GLU GLU GLU A A 44  44  . 101.450 88.102  24.371  1.00 2.41   1
. .
ATOM 333  CD   CD   . GLU GLU GLU A A 44  44  . 100.970 89.296  23.512  1.00 2.71   1
. .
ATOM 334  OE1  OE1  . GLU GLU GLU A A 44  44  . 100.125 89.093  22.609  1.00 2.72   1
. .
ATOM 335  OE2  OE2  . GLU GLU GLU A A 44  44  . 101.418 90.397  23.805  1.00 2.24   1
. .
ATOM 336  C    C    . GLU GLU GLU A A 44  44  . 100.739 84.269  24.180  1.00 2.00   1
. .
ATOM 337  O    O    . GLU GLU GLU A A 44  44  . 101.531 83.534  23.597  1.00 2.56   1
. .
ATOM 338  N    N    . ALA ALA ALA A A 45  45  . 99.459  83.976  24.286  1.00 2.00   1
. .
ATOM 339  CA   CA   . ALA ALA ALA A A 45  45  . 98.853  82.811  23.570  1.00 2.00   1
. .
ATOM 340  CB   CB   . ALA ALA ALA A A 45  45  . 97.321  82.732  23.868  1.00 2.03   1
. .
ATOM 341  C    C    . ALA ALA ALA A A 45  45  . 99.120  82.938  22.080  1.00 2.00   1
. .
ATOM 342  O    O    . ALA ALA ALA A A 45  45  . 99.282  84.074  21.546  1.00 2.56   1
. .
ATOM 343  N    N    . LEU LEU LEU A A 46  46  . 99.119  81.806  21.361  1.00 2.00   1
. .
ATOM 344  CA   CA   . LEU LEU LEU A A 46  46  . 99.557  81.793  19.942  1.00 2.12   1
. .
ATOM 345  CB   CB   . LEU LEU LEU A A 46  46  . 99.673  80.350  19.477  1.00 2.68   1
. .
ATOM 346  CG   CG   . LEU LEU LEU A A 46  46  . 100.621 79.864  18.378  1.00 11.90  1
. .
ATOM 347  CD1  CD1  . LEU LEU LEU A A 46  46  . 99.822  79.062  17.248  1.00 10.84  1
. .
ATOM 348  CD2  CD2  . LEU LEU LEU A A 46  46  . 101.413 80.922  17.749  1.00 12.65  1
. .
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ATOM 349  C    C    . LEU LEU LEU A A 46  46  . 98.582  82.543  19.035  1.00 2.00   1
. .
ATOM 350  O    O    . LEU LEU LEU A A 46  46  . 97.368  82.211  19.028  1.00 2.71   1
. .
ATOM 351  N    N    . GLU GLU GLU A A 47  47  . 99.045  83.531  18.279  1.00 2.20   1
. .
ATOM 352  CA   CA   . GLU GLU GLU A A 47  47  . 98.245  84.099  17.216  1.00 2.00   1
. .
ATOM 353  CB   CB   . GLU GLU GLU A A 47  47  . 98.628  85.569  17.047  1.00 3.84   1
. .
ATOM 354  CG   CG   . GLU GLU GLU A A 47  47  . 98.056  86.259  15.816  1.00 3.80   1
. .
ATOM 355  CD   CD   . GLU GLU GLU A A 47  47  . 98.546  87.716  15.717  1.00 5.77   1
. .
ATOM 356  OE1  OE1  . GLU GLU GLU A A 47  47  . 97.864  88.555  16.376  1.00 6.97   1
. .
ATOM 357  OE2  OE2  . GLU GLU GLU A A 47  47  . 99.585  88.004  15.032  1.00 7.07   1
. .
ATOM 358  C    C    . GLU GLU GLU A A 47  47  . 98.581  83.353  15.903  1.00 2.04   1
. .
ATOM 359  O    O    . GLU GLU GLU A A 47  47  . 99.734  83.320  15.478  1.00 2.05   1
. .
ATOM 360  N    N    . LEU LEU LEU A A 48  48  . 97.640  82.626  15.385  1.00 2.00   1
. .
ATOM 361  CA   CA   . LEU LEU LEU A A 48  48  . 97.959  81.689  14.313  1.00 2.00   1
. .
ATOM 362  CB   CB   . LEU LEU LEU A A 48  48  . 97.046  80.470  14.340  1.00 2.00   1
. .
ATOM 363  CG   CG   . LEU LEU LEU A A 48  48  . 97.140  79.431  13.208  1.00 2.00   1
. .
ATOM 364  CD1  CD1  . LEU LEU LEU A A 48  48  . 98.527  78.716  13.182  1.00 4.22   1
. .
ATOM 365  CD2  CD2  . LEU LEU LEU A A 48  48  . 96.046  78.426  13.389  1.00 3.83   1
. .
ATOM 366  C    C    . LEU LEU LEU A A 48  48  . 97.843  82.401  12.987  1.00 2.00   1
. .
ATOM 367  O    O    . LEU LEU LEU A A 48  48  . 96.771  82.884  12.629  1.00 2.07   1
. .
ATOM 368  N    N    . ARG ARG ARG A A 49  49  . 98.962  82.494  12.289  1.00 2.00   1
. .
ATOM 369  CA   CA   . ARG ARG ARG A A 49  49  . 98.975  83.057  10.932  1.00 2.48   1
. .
ATOM 370  CB   CB   . ARG ARG ARG A A 49  49  . 99.997  84.170  10.824  1.00 5.94   1
. .
ATOM 371  CG   CG   . ARG ARG ARG A A 49  49  . 99.712  85.306  11.810  1.00 7.10   1
. .
ATOM 372  CD   CD   . ARG ARG ARG A A 49  49  . 99.343  86.474  11.151  1.00 9.01   1
. .
ATOM 373  NE   NE   . ARG ARG ARG A A 49  49  . 99.103  87.571  12.087  1.00 7.16   1
. .
ATOM 374  CZ   CZ   . ARG ARG ARG A A 49  49  . 98.162  88.485  11.829  1.00 4.82   1
. .
ATOM 375  NH1  NH1  . ARG ARG ARG A A 49  49  . 97.453  88.387  10.747  1.00 2.90   1
. .
ATOM 376  NH2  NH2  . ARG ARG ARG A A 49  49  . 97.948  89.457  12.666  1.00 5.27   1
. .
ATOM 377  C    C    . ARG ARG ARG A A 49  49  . 99.320  81.953  9.928   1.00 2.73   1
. .
ATOM 378  O    O    . ARG ARG ARG A A 49  49  . 99.894  80.926  10.311  1.00 4.65   1
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ATOM 379  N    N    . ASP ASP ASP A A 50  50  . 98.993  82.141  8.664   1.00 2.25   1
. .
ATOM 380  CA   CA   . ASP ASP ASP A A 50  50  . 99.137  81.085  7.618   1.00 2.77   1
. .
ATOM 381  CB   CB   . ASP ASP ASP A A 50  50  . 98.310  81.481  6.432   1.00 2.55   1
. .
ATOM 382  CG   CG   . ASP ASP ASP A A 50  50  . 96.824  81.572  6.776   1.00 3.83   1
. .
ATOM 383  OD1  OD1  . ASP ASP ASP A A 50  50  . 96.417  80.951  7.795   1.00 2.50   1
. .
ATOM 384  OD2  OD2  . ASP ASP ASP A A 50  50  . 96.068  82.221  5.997   1.00 2.57   1
. .
ATOM 385  C    C    . ASP ASP ASP A A 50  50  . 100.588 80.870  7.228   1.00 3.93   1
. .
ATOM 386  O    O    . ASP ASP ASP A A 50  50  . 100.998 79.751  6.945   1.00 4.53   1
. .
ATOM 387  N    N    . GLY GLY GLY A A 51  51  . 101.371 81.944  7.164   1.00 5.83   1
. .
ATOM 388  CA   CA   . GLY GLY GLY A A 51  51  . 102.755 81.808  6.731   1.00 7.51   1
. .
ATOM 389  C    C    . GLY GLY GLY A A 51  51  . 102.905 81.600  5.230   1.00 10.12  1
. .
ATOM 390  O    O    . GLY GLY GLY A A 51  51  . 104.021 81.238  4.786   1.00 11.94  1
. .
ATOM 391  N    N    . ASP ASP ASP A A 52  52  . 101.844 81.825  4.455   1.00 7.44   1
. .
ATOM 392  CA   CA   . ASP ASP ASP A A 52  52  . 101.945 81.765  2.969   1.00 10.07  1
. .
ATOM 393  CB   CB   . ASP ASP ASP A A 52  52  . 100.561 81.429  2.342   1.00 10.19  1
. .
ATOM 394  CG   CG   . ASP ASP ASP A A 52  52  . 100.584 81.390  0.799   1.00 10.80  1
. .
ATOM 395  OD1  OD1  . ASP ASP ASP A A 52  52  . 99.517  81.152  0.238   1.00 12.80  1
. .
ATOM 396  OD2  OD2  . ASP ASP ASP A A 52  52  . 101.639 81.631  0.199   1.00 14.85  1
. .
ATOM 397  C    C    . ASP ASP ASP A A 52  52  . 102.507 83.061  2.405   1.00 12.75  1
. .
ATOM 398  O    O    . ASP ASP ASP A A 52  52  . 101.819 84.061  2.353   1.00 12.14  1
. .
ATOM 399  N    N    . LYS LYS LYS A A 53  53  . 103.801 83.020  2.047   1.00 16.12  1
. .
ATOM 400  CA   CA   . LYS LYS LYS A A 53  53  . 104.527 84.168  1.574   1.00 20.72  1
. .
ATOM 401  CB   CB   . LYS LYS LYS A A 53  53  . 105.977 83.760  1.303   1.00 22.04  1
. .
ATOM 402  CG   CG   . LYS LYS LYS A A 53  53  . 106.942 84.052  2.453   1.00 25.91  1
. .
ATOM 403  CD   CD   . LYS LYS LYS A A 53  53  . 106.201 84.540  3.712   1.00 29.15  1
. .
ATOM 404  CE   CE   . LYS LYS LYS A A 53  53  . 107.110 84.777  4.881   1.00 32.82  1
. .
ATOM 405  NZ   NZ   . LYS LYS LYS A A 53  53  . 106.345 84.806  6.146   1.00 31.93  1
. .
ATOM 406  C    C    . LYS LYS LYS A A 53  53  . 103.901 84.860  0.371   1.00 20.90  1
. .
ATOM 407  O    O    . LYS LYS LYS A A 53  53  . 104.098 86.062  0.199   1.00 23.47  1
. .
ATOM 408  N    N    . GLN GLN GLN A A 54  54  . 103.143 84.159  -0.466  1.00 21.41  1
. .
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ATOM 409  CA   CA   . GLN GLN GLN A A 54  54  . 102.513 84.849  -1.590  1.00 22.06  1
. .
ATOM 410  CB   CB   . GLN GLN GLN A A 54  54  . 102.604 84.028  -2.888  1.00 24.66  1
. .
ATOM 411  CG   CG   . GLN GLN GLN A A 54  54  . 102.015 84.676  -4.229  1.00 30.59  1
. .
ATOM 412  CD   CD   . GLN GLN GLN A A 54  54  . 102.724 85.926  -4.722  1.00 37.24  1
. .
ATOM 413  OE1  OE1  . GLN GLN GLN A A 54  54  . 102.089 86.974  -4.978  1.00 39.01  1
. .
ATOM 414  NE2  NE2  . GLN GLN GLN A A 54  54  . 104.043 85.826  -4.889  1.00 41.11  1
. .
ATOM 415  C    C    . GLN GLN GLN A A 54  54  . 101.091 85.350  -1.236  1.00 19.22  1
. .
ATOM 416  O    O    . GLN GLN GLN A A 54  54  . 100.244 85.600  -2.103  1.00 21.16  1
. .
ATOM 417  N    N    . ARG ARG ARG A A 55  55  . 100.833 85.547  0.058   1.00 15.01  1
. .
ATOM 418  CA   CA   . ARG ARG ARG A A 55  55  . 99.521  86.042  0.451   1.00 11.16  1
. .
ATOM 419  CB   CB   . ARG ARG ARG A A 55  55  . 98.600  84.850  0.697   1.00 11.42  1
. .
ATOM 420  CG   CG   . ARG ARG ARG A A 55  55  . 97.188  85.148  0.483   1.00 10.52  1
. .
ATOM 421  CD   CD   . ARG ARG ARG A A 55  55  . 96.208  84.044  0.583   1.00 7.59   1
. .
ATOM 422  NE   NE   . ARG ARG ARG A A 55  55  . 94.901  84.686  0.649   1.00 4.96   1
. .
ATOM 423  CZ   CZ   . ARG ARG ARG A A 55  55  . 94.357  85.168  1.771   1.00 2.67   1
. .
ATOM 424  NH1  NH1  . ARG ARG ARG A A 55  55  . 94.968  84.952  2.973   1.00 2.54   1
. .
ATOM 425  NH2  NH2  . ARG ARG ARG A A 55  55  . 93.164  85.733  1.697   1.00 5.09   1
. .
ATOM 426  C    C    . ARG ARG ARG A A 55  55  . 99.666  86.929  1.694   1.00 8.04   1
. .
ATOM 427  O    O    . ARG ARG ARG A A 55  55  . 100.066 86.483  2.778   1.00 7.18   1
. .
ATOM 428  N    N    . TYR TYR TYR A A 56  56  . 99.436  88.205  1.516   1.00 6.63   1
. .
ATOM 429  CA   CA   . TYR TYR TYR A A 56  56  . 99.550  89.120  2.652   1.00 5.18   1
. .
ATOM 430  CB   CB   . TYR TYR TYR A A 56  56  . 98.369  88.884  3.632   1.00 4.73   1
. .
ATOM 431  CG   CG   . TYR TYR TYR A A 56  56  . 97.069  89.449  3.214   1.00 2.33   1
. .
ATOM 432  CD1  CD1  . TYR TYR TYR A A 56  56  . 95.997  88.653  2.811   1.00 2.70   1
. .
ATOM 433  CE1  CE1  . TYR TYR TYR A A 56  56  . 94.746  89.201  2.452   1.00 3.11   1
. .
ATOM 434  CZ   CZ   . TYR TYR TYR A A 56  56  . 94.612  90.564  2.455   1.00 2.22   1
. .
ATOM 435  OH   OH   . TYR TYR TYR A A 56  56  . 93.430  91.124  2.109   1.00 2.74   1
. .
ATOM 436  CE2  CE2  . TYR TYR TYR A A 56  56  . 95.637  91.351  2.841   1.00 2.66   1
. .
ATOM 437  CD2  CD2  . TYR TYR TYR A A 56  56  . 96.861  90.853  3.194   1.00 2.56   1
. .
ATOM 438  C    C    . TYR TYR TYR A A 56  56  . 100.887 89.006  3.402   1.00 7.68   1
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ATOM 439  O    O    . TYR TYR TYR A A 56  56  . 100.976 89.143  4.621   1.00 8.07   1
. .
ATOM 440  N    N    . LEU LEU LEU A A 57  57  . 101.943 88.708  2.638   1.00 11.77  1
. .
ATOM 441  CA   CA   . LEU LEU LEU A A 57  57  . 103.295 88.669  3.136   1.00 12.34  1
. .
ATOM 442  CB   CB   . LEU LEU LEU A A 57  57  . 103.726 90.078  3.612   1.00 15.19  1
. .
ATOM 443  CG   CG   . LEU LEU LEU A A 57  57  . 103.474 91.287  2.694   1.00 20.79  1
. .
ATOM 444  CD1  CD1  . LEU LEU LEU A A 57  57  . 104.628 92.255  2.835   1.00 23.58  1
. .
ATOM 445  CD2  CD2  . LEU LEU LEU A A 57  57  . 103.290 90.878  1.215   1.00 20.33  1
. .
ATOM 446  C    C    . LEU LEU LEU A A 57  57  . 103.393 87.679  4.297   1.00 10.94  1
. .
ATOM 447  O    O    . LEU LEU LEU A A 57  57  . 104.189 87.888  5.210   1.00 13.81  1
. .
ATOM 448  N    N    . GLY GLY GLY A A 58  58  . 102.593 86.609  4.240   1.00 7.69   1
. .
ATOM 449  CA   CA   . GLY GLY GLY A A 58  58  . 102.555 85.555  5.236   1.00 5.40   1
. .
ATOM 450  C    C    . GLY GLY GLY A A 58  58  . 101.605 85.719  6.394   1.00 4.37   1
. .
ATOM 451  O    O    . GLY GLY GLY A A 58  58  . 101.612 84.925  7.369   1.00 3.55   1
. .
ATOM 452  N    N    . LYS LYS LYS A A 59  59  . 100.771 86.755  6.334   1.00 3.97   1
. .
ATOM 453  CA   CA   . LYS LYS LYS A A 59  59  . 99.968  87.104  7.499   1.00 2.03   1
. .
ATOM 454  CB   CB   . LYS LYS LYS A A 59  59  . 99.989  88.628  7.685   1.00 2.84   1
. .
ATOM 455  CG   CG   . LYS LYS LYS A A 59  59  . 101.390 89.127  7.713   1.00 10.49  1
. .
ATOM 456  CD   CD   . LYS LYS LYS A A 59  59  . 102.157 88.655  8.879   1.00 21.50  1
. .
ATOM 457  CE   CE   . LYS LYS LYS A A 59  59  . 103.083 89.807  9.299   1.00 26.47  1
. .
ATOM 458  NZ   NZ   . LYS LYS LYS A A 59  59  . 102.235 91.009  9.471   1.00 29.95  1
. .
ATOM 459  C    C    . LYS LYS LYS A A 59  59  . 98.530  86.726  7.423   1.00 2.06   1
. .
ATOM 460  O    O    . LYS LYS LYS A A 59  59  . 97.727  87.206  8.246   1.00 2.00   1
. .
ATOM 461  N    N    . GLY GLY GLY A A 60  60  . 98.166  85.922  6.430   1.00 2.00   1
. .
ATOM 462  CA   CA   . GLY GLY GLY A A 60  60  . 96.761  85.520  6.317   1.00 2.00   1
. .
ATOM 463  C    C    . GLY GLY GLY A A 60  60  . 96.271  84.811  7.583   1.00 2.00   1
. .
ATOM 464  O    O    . GLY GLY GLY A A 60  60  . 97.103  84.231  8.341   1.00 2.00   1
. .
ATOM 465  N    N    . VAL VAL VAL A A 61  61  . 94.975  84.769  7.800   1.00 2.00   1
. .
ATOM 466  CA   CA   . VAL VAL VAL A A 61  61  . 94.437  83.942  8.909   1.00 2.00   1
. .
ATOM 467  CB   CB   . VAL VAL VAL A A 61  61  . 93.927  84.795  10.057  1.00 2.00   1
. .
ATOM 468  CG1  CG1  . VAL VAL VAL A A 61  61  . 95.020  85.630  10.659  1.00 2.42   1
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ATOM 469  CG2  CG2  . VAL VAL VAL A A 61  61  . 92.751  85.734  9.562   1.00 2.12   1
. .
ATOM 470  C    C    . VAL VAL VAL A A 61  61  . 93.361  82.950  8.433   1.00 2.00   1
. .
ATOM 471  O    O    . VAL VAL VAL A A 61  61  . 92.412  82.611  9.121   1.00 2.00   1
. .
ATOM 472  N    N    . LEU LEU LEU A A 62  62  . 93.566  82.421  7.225   1.00 2.00   1
. .
ATOM 473  CA   CA   . LEU LEU LEU A A 62  62  . 92.640  81.404  6.706   1.00 2.00   1
. .
ATOM 474  CB   CB   . LEU LEU LEU A A 62  62  . 92.952  81.060  5.268   1.00 2.49   1
. .
ATOM 475  CG   CG   . LEU LEU LEU A A 62  62  . 93.019  82.247  4.307   1.00 4.19   1
. .
ATOM 476  CD1  CD1  . LEU LEU LEU A A 62  62  . 93.368  81.636  2.926   1.00 5.67   1
. .
ATOM 477  CD2  CD2  . LEU LEU LEU A A 62  62  . 91.674  82.937  4.214   1.00 6.71   1
. .
ATOM 478  C    C    . LEU LEU LEU A A 62  62  . 92.669  80.127  7.561   1.00 2.00   1
. .
ATOM 479  O    O    . LEU LEU LEU A A 62  62  . 91.613  79.544  7.657   1.00 2.00   1
. .
ATOM 480  N    N    . LYS LYS LYS A A 63  63  . 93.804  79.766  8.117   1.00 2.19   1
. .
ATOM 481  CA   CA   . LYS LYS LYS A A 63  63  . 93.807  78.476  8.942   1.00 2.00   1
. .
ATOM 482  CB   CB   . LYS LYS LYS A A 63  63  . 95.214  78.104  9.363   1.00 2.00   1
. .
ATOM 483  CG   CG   . LYS LYS LYS A A 63  63  . 96.114  77.729  8.137   1.00 2.20   1
. .
ATOM 484  CD   CD   . LYS LYS LYS A A 63  63  . 97.494  77.406  8.698   1.00 3.77   1
. .
ATOM 485  CE   CE   . LYS LYS LYS A A 63  63  . 98.425  77.062  7.578   1.00 8.90   1
. .
ATOM 486  NZ   NZ   . LYS LYS LYS A A 63  63  . 99.739  76.849  8.257   1.00 11.92  1
. .
ATOM 487  C    C    . LYS LYS LYS A A 63  63  . 92.946  78.698  10.208  1.00 2.00   1
. .
ATOM 488  O    O    . LYS LYS LYS A A 63  63  . 92.135  77.879  10.553  1.00 2.00   1
. .
ATOM 489  N    N    . ALA ALA ALA A A 64  64  . 93.126  79.802  10.944  1.00 2.00   1
. .
ATOM 490  CA   CA   . ALA ALA ALA A A 64  64  . 92.301  80.073  12.058  1.00 2.00   1
. .
ATOM 491  CB   CB   . ALA ALA ALA A A 64  64  . 92.684  81.437  12.664  1.00 2.00   1
. .
ATOM 492  C    C    . ALA ALA ALA A A 64  64  . 90.773  80.088  11.635  1.00 2.00   1
. .
ATOM 493  O    O    . ALA ALA ALA A A 64  64  . 89.932  79.642  12.343  1.00 2.00   1
. .
ATOM 494  N    N    . VAL VAL VAL A A 65  65  . 90.465  80.798  10.526  1.00 2.00   1
. .
ATOM 495  CA   CA   . VAL VAL VAL A A 65  65  . 89.085  80.900  10.071  1.00 2.00   1
. .
ATOM 496  CB   CB   . VAL VAL VAL A A 65  65  . 89.022  81.768  8.736   1.00 2.00   1
. .
ATOM 497  CG1  CG1  . VAL VAL VAL A A 65  65  . 87.753  81.651  8.070   1.00 2.15   1
. .
ATOM 498  CG2  CG2  . VAL VAL VAL A A 65  65  . 89.264  83.269  9.181   1.00 2.00   1
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ATOM 499  C    C    . VAL VAL VAL A A 65  65  . 88.546  79.523  9.832   1.00 2.00   1
. .
ATOM 500  O    O    . VAL VAL VAL A A 65  65  . 87.369  79.279  10.180  1.00 2.00   1
. .
ATOM 501  N    N    . ASP ASP ASP A A 66  66  . 89.339  78.639  9.214   1.00 2.00   1
. .
ATOM 502  CA   CA   . ASP ASP ASP A A 66  66  . 88.887  77.269  8.913   1.00 2.00   1
. .
ATOM 503  CB   CB   . ASP ASP ASP A A 66  66  . 89.864  76.550  7.979   1.00 4.89   1
. .
ATOM 504  CG   CG   . ASP ASP ASP A A 66  66  . 89.460  75.073  7.714   1.00 14.09  1
. .
ATOM 505  OD1  OD1  . ASP ASP ASP A A 66  66  . 88.292  74.795  7.322   1.00 19.27  1
. .
ATOM 506  OD2  OD2  . ASP ASP ASP A A 66  66  . 90.335  74.187  7.914   1.00 23.83  1
. .
ATOM 507  C    C    . ASP ASP ASP A A 66  66  . 88.697  76.424  10.200  1.00 2.00   1
. .
ATOM 508  O    O    . ASP ASP ASP A A 66  66  . 87.714  75.654  10.274  1.00 2.00   1
. .
ATOM 509  N    N    . HIS HIS HIS A A 67  67  . 89.553  76.611  11.200  1.00 2.00   1
. .
ATOM 510  CA   CA   . HIS HIS HIS A A 67  67  . 89.348  75.947  12.465  1.00 2.00   1
. .
ATOM 511  CB   CB   . HIS HIS HIS A A 67  67  . 90.456  76.264  13.465  1.00 2.00   1
. .
ATOM 512  CG   CG   . HIS HIS HIS A A 67  67  . 91.762  75.698  13.098  1.00 2.02   1
. .
ATOM 513  ND1  ND1  . HIS HIS HIS A A 67  67  . 91.896  74.353  12.789  1.00 5.60   1
. .
ATOM 514  CE1  CE1  . HIS HIS HIS A A 67  67  . 93.183  74.082  12.587  1.00 7.55   1
. .
ATOM 515  NE2  NE2  . HIS HIS HIS A A 67  67  . 93.872  75.188  12.750  1.00 4.75   1
. .
ATOM 516  CD2  CD2  . HIS HIS HIS A A 67  67  . 93.016  76.214  13.110  1.00 2.56   1
. .
ATOM 517  C    C    . HIS HIS HIS A A 67  67  . 87.972  76.311  13.069  1.00 2.00   1
. .
ATOM 518  O    O    . HIS HIS HIS A A 67  67  . 87.265  75.477  13.632  1.00 2.00   1
. .
ATOM 519  N    N    . ILE ILE ILE A A 68  68  . 87.623  77.618  12.987  1.00 2.00   1
. .
ATOM 520  CA   CA   . ILE ILE ILE A A 68  68  . 86.349  78.058  13.511  1.00 2.00   1
. .
ATOM 521  CB   CB   . ILE ILE ILE A A 68  68  . 86.231  79.602  13.438  1.00 2.13   1
. .
ATOM 522  CG1  CG1  . ILE ILE ILE A A 68  68  . 87.249  80.218  14.384  1.00 2.00   1
. .
ATOM 523  CD1  CD1  . ILE ILE ILE A A 68  68  . 87.363  81.701  14.080  1.00 2.39   1
. .
ATOM 524  CG2  CG2  . ILE ILE ILE A A 68  68  . 84.829  80.068  13.791  1.00 2.05   1
. .
ATOM 525  C    C    . ILE ILE ILE A A 68  68  . 85.250  77.437  12.667  1.00 2.00   1
. .
ATOM 526  O    O    . ILE ILE ILE A A 68  68  . 84.307  76.859  13.187  1.00 2.01   1
. .
ATOM 527  N    N    . ASN ASN ASN A A 69  69  . 85.325  77.619  11.349  1.00 2.00   1
. .
ATOM 528  CA   CA   . ASN ASN ASN A A 69  69  . 84.187  77.211  10.541  1.00 2.00   1
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ATOM 529  CB   CB   . ASN ASN ASN A A 69  69  . 84.356  77.691  9.116   1.00 2.00   1
. .
ATOM 530  CG   CG   . ASN ASN ASN A A 69  69  . 84.136  79.229  9.061   1.00 2.00   1
. .
ATOM 531  OD1  OD1  . ASN ASN ASN A A 69  69  . 83.457  79.750  9.950   1.00 2.00   1
. .
ATOM 532  ND2  ND2  . ASN ASN ASN A A 69  69  . 84.649  79.864  8.053   1.00 2.00   1
. .
ATOM 533  C    C    . ASN ASN ASN A A 69  69  . 83.935  75.703  10.465  1.00 2.00   1
. .
ATOM 534  O    O    . ASN ASN ASN A A 69  69  . 82.788  75.299  10.448  1.00 2.24   1
. .
ATOM 535  N    N    . SER SER SER A A 70  70  . 85.008  74.961  10.484  1.00 2.00   1
. .
ATOM 536  CA   CA   . SER SER SER A A 70  70  . 84.906  73.518  10.248  1.00 2.00   1
. .
ATOM 537  CB   CB   . SER SER SER A A 70  70  . 86.004  73.046  9.314   1.00 2.10   1
. .
ATOM 538  OG   OG   . SER SER SER A A 70  70  . 85.823  73.765  8.089   1.00 10.34  1
. .
ATOM 539  C    C    . SER SER SER A A 70  70  . 84.934  72.678  11.529  1.00 2.01   1
. .
ATOM 540  O    O    . SER SER SER A A 70  70  . 84.413  71.557  11.535  1.00 2.41   1
. .
ATOM 541  N    N    . THR THR THR A A 71  71  . 85.495  73.206  12.617  1.00 2.00   1
. .
ATOM 542  CA   CA   . THR THR THR A A 71  71  . 85.697  72.405  13.822  1.00 2.00   1
. .
ATOM 543  CB   CB   . THR THR THR A A 71  71  . 87.166  72.060  14.023  1.00 2.11   1
. .
ATOM 544  OG1  OG1  . THR THR THR A A 71  71  . 87.726  71.351  12.864  1.00 2.00   1
. .
ATOM 545  CG2  CG2  . THR THR THR A A 71  71  . 87.323  71.213  15.316  1.00 2.21   1
. .
ATOM 546  C    C    . THR THR THR A A 71  71  . 85.016  72.995  15.034  1.00 2.00   1
. .
ATOM 547  O    O    . THR THR THR A A 71  71  . 84.208  72.342  15.748  1.00 2.00   1
. .
ATOM 548  N    N    . ILE ILE ILE A A 72  72  . 85.315  74.259  15.276  1.00 2.00   1
. .
ATOM 549  CA   CA   . ILE ILE ILE A A 72  72  . 84.743  74.840  16.484  1.00 2.00   1
. .
ATOM 550  CB   CB   . ILE ILE ILE A A 72  72  . 85.447  76.214  16.814  1.00 2.00   1
. .
ATOM 551  CG1  CG1  . ILE ILE ILE A A 72  72  . 86.912  75.995  17.168  1.00 2.00   1
. .
ATOM 552  CD1  CD1  . ILE ILE ILE A A 72  72  . 87.706  77.371  17.387  1.00 2.00   1
. .
ATOM 553  CG2  CG2  . ILE ILE ILE A A 72  72  . 84.706  76.908  17.911  1.00 2.41   1
. .
ATOM 554  C    C    . ILE ILE ILE A A 72  72  . 83.255  75.035  16.363  1.00 2.00   1
. .
ATOM 555  O    O    . ILE ILE ILE A A 72  72  . 82.487  74.769  17.306  1.00 2.00   1
. .
ATOM 556  N    N    . ALA ALA ALA A A 73  73  . 82.842  75.530  15.209  1.00 2.00   1
. .
ATOM 557  CA   CA   . ALA ALA ALA A A 73  73  . 81.373  75.734  14.977  1.00 2.00   1
. .
ATOM 558  CB   CB   . ALA ALA ALA A A 73  73  . 81.052  76.333  13.625  1.00 2.55   1
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ATOM 559  C    C    . ALA ALA ALA A A 73  73  . 80.488  74.549  15.280  1.00 2.00   1
. .
ATOM 560  O    O    . ALA ALA ALA A A 73  73  . 79.603  74.691  16.100  1.00 2.98   1
. .
ATOM 561  N    N    . PRO PRO PRO A A 74  74  . 80.761  73.362  14.659  1.00 2.00   1
. .
ATOM 562  CA   CA   . PRO PRO PRO A A 74  74  . 79.821  72.260  14.892  1.00 2.00   1
. .
ATOM 563  CB   CB   . PRO PRO PRO A A 74  74  . 80.346  71.174  13.912  1.00 2.00   1
. .
ATOM 564  CG   CG   . PRO PRO PRO A A 74  74  . 81.783  71.561  13.580  1.00 2.00   1
. .
ATOM 565  CD   CD   . PRO PRO PRO A A 74  74  . 81.716  73.076  13.558  1.00 2.00   1
. .
ATOM 566  C    C    . PRO PRO PRO A A 74  74  . 79.899  71.808  16.340  1.00 2.04   1
. .
ATOM 567  O    O    . PRO PRO PRO A A 74  74  . 78.915  71.355  16.911  1.00 2.30   1
. .
ATOM 568  N    N    . ALA ALA ALA A A 75  75  . 81.092  71.913  16.939  1.00 2.00   1
. .
ATOM 569  CA   CA   . ALA ALA ALA A A 75  75  . 81.271  71.511  18.376  1.00 2.00   1
. .
ATOM 570  CB   CB   . ALA ALA ALA A A 75  75  . 82.721  71.685  18.792  1.00 2.08   1
. .
ATOM 571  C    C    . ALA ALA ALA A A 75  75  . 80.362  72.329  19.285  1.00 2.12   1
. .
ATOM 572  O    O    . ALA ALA ALA A A 75  75  . 79.789  71.827  20.241  1.00 3.40   1
. .
ATOM 573  N    N    . LEU LEU LEU A A 76  76  . 80.300  73.657  19.058  1.00 2.00   1
. .
ATOM 574  CA   CA   . LEU LEU LEU A A 76  76  . 79.462  74.451  19.957  1.00 2.00   1
. .
ATOM 575  CB   CB   . LEU LEU LEU A A 76  76  . 79.851  75.940  19.913  1.00 2.23   1
. .
ATOM 576  CG   CG   . LEU LEU LEU A A 76  76  . 81.339  76.196  20.220  1.00 3.05   1
. .
ATOM 577  CD1  CD1  . LEU LEU LEU A A 76  76  . 81.526  77.734  20.287  1.00 2.85   1
. .
ATOM 578  CD2  CD2  . LEU LEU LEU A A 76  76  . 81.765  75.474  21.506  1.00 6.04   1
. .
ATOM 579  C    C    . LEU LEU LEU A A 76  76  . 78.005  74.281  19.657  1.00 2.46   1
. .
ATOM 580  O    O    . LEU LEU LEU A A 76  76  . 77.170  74.324  20.562  1.00 4.88   1
. .
ATOM 581  N    N    . ILE ILE ILE A A 77  77  . 77.697  74.124  18.363  1.00 3.65   1
. .
ATOM 582  CA   CA   . ILE ILE ILE A A 77  77  . 76.341  73.861  17.932  1.00 3.00   1
. .
ATOM 583  CB   CB   . ILE ILE ILE A A 77  77  . 76.125  73.868  16.419  1.00 3.55   1
. .
ATOM 584  CG1  CG1  . ILE ILE ILE A A 77  77  . 76.296  75.287  15.839  1.00 4.16   1
. .
ATOM 585  CD1  CD1  . ILE ILE ILE A A 77  77  . 76.618  75.304  14.408  1.00 3.74   1
. .
ATOM 586  CG2  CG2  . ILE ILE ILE A A 77  77  . 74.740  73.327  16.086  1.00 6.03   1
. .
ATOM 587  C    C    . ILE ILE ILE A A 77  77  . 75.890  72.508  18.534  1.00 3.48   1
. .
ATOM 588  O    O    . ILE ILE ILE A A 77  77  . 74.823  72.449  19.187  1.00 4.36   1
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ATOM 589  N    N    . SER SER SER A A 78  78  . 76.762  71.499  18.468  1.00 4.04   1
. .
ATOM 590  CA   CA   . SER SER SER A A 78  78  . 76.477  70.182  19.025  1.00 5.85   1
. .
ATOM 591  CB   CB   . SER SER SER A A 78  78  . 77.600  69.212  18.756  1.00 4.65   1
. .
ATOM 592  OG   OG   . SER SER SER A A 78  78  . 77.499  68.870  17.388  1.00 9.51   1
. .
ATOM 593  C    C    . SER SER SER A A 78  78  . 76.237  70.217  20.505  1.00 5.85   1
. .
ATOM 594  O    O    . SER SER SER A A 78  78  . 75.475  69.434  21.067  1.00 8.17   1
. .
ATOM 595  N    N    . SER SER SER A A 79  79  . 76.903  71.135  21.195  1.00 6.41   1
. .
ATOM 596  CA   CA   . SER SER SER A A 79  79  . 76.751  71.175  22.663  1.00 5.95   1
. .
ATOM 597  CB   CB   . SER SER SER A A 79  79  . 77.755  72.165  23.278  1.00 4.36   1
. .
ATOM 598  OG   OG   . SER SER SER A A 79  79  . 77.283  73.499  23.130  1.00 4.77   1
. .
ATOM 599  C    C    . SER SER SER A A 79  79  . 75.351  71.513  23.107  1.00 7.33   1
. .
ATOM 600  O    O    . SER SER SER A A 79  79  . 74.908  71.156  24.217  1.00 9.30   1
. .
ATOM 601  N    N    . GLY GLY GLY A A 80  80  . 74.660  72.266  22.280  1.00 7.34   1
. .
ATOM 602  CA   CA   . GLY GLY GLY A A 80  80  . 73.294  72.671  22.615  1.00 9.38   1
. .
ATOM 603  C    C    . GLY GLY GLY A A 80  80  . 73.252  73.635  23.797  1.00 9.67   1
. .
ATOM 604  O    O    . GLY GLY GLY A A 80  80  . 72.186  73.991  24.253  1.00 11.06  1
. .
ATOM 605  N    N    . LEU LEU LEU A A 81  81  . 74.423  74.072  24.292  1.00 8.20   1
. .
ATOM 606  CA   CA   . LEU LEU LEU A A 81  81  . 74.473  75.071  25.395  1.00 6.73   1
. .
ATOM 607  CB   CB   . LEU LEU LEU A A 81  81  . 75.914  75.262  25.876  1.00 8.32   1
. .
ATOM 608  CG   CG   . LEU LEU LEU A A 81  81  . 76.524  74.026  26.497  1.00 8.00   1
. .
ATOM 609  CD1  CD1  . LEU LEU LEU A A 81  81  . 77.986  74.094  26.516  1.00 5.10   1
. .
ATOM 610  CD2  CD2  . LEU LEU LEU A A 81  81  . 75.935  73.831  27.961  1.00 12.11  1
. .
ATOM 611  C    C    . LEU LEU LEU A A 81  81  . 73.934  76.456  24.978  1.00 8.47   1
. .
ATOM 612  O    O    . LEU LEU LEU A A 81  81  . 74.118  76.864  23.807  1.00 9.46   1
. .
ATOM 613  N    N    . SER SER SER A A 82  82  . 73.279  77.142  25.923  1.00 6.86   1
. .
ATOM 614  CA   CA   . SER SER SER A A 82  82  . 72.858  78.547  25.755  1.00 6.28   1
. .
ATOM 615  CB   CB   . SER SER SER A A 82  82  . 72.054  79.009  26.957  1.00 7.54   1
. .
ATOM 616  OG   OG   . SER SER SER A A 82  82  . 71.687  80.388  26.752  1.00 11.51  1
. .
ATOM 617  C    C    . SER SER SER A A 82  82  . 74.053  79.446  25.628  1.00 4.68   1
. .
ATOM 618  O    O    . SER SER SER A A 82  82  . 75.040  79.247  26.283  1.00 5.45   1
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ATOM 619  N    N    . VAL VAL VAL A A 83  83  . 73.947  80.457  24.760  1.00 3.41   1
. .
ATOM 620  CA   CA   . VAL VAL VAL A A 83  83  . 75.035  81.432  24.668  1.00 4.87   1
. .
ATOM 621  CB   CB   . VAL VAL VAL A A 83  83  . 74.834  82.401  23.505  1.00 3.81   1
. .
ATOM 622  CG1  CG1  . VAL VAL VAL A A 83  83  . 75.228  81.772  22.180  1.00 4.91   1
. .
ATOM 623  CG2  CG2  . VAL VAL VAL A A 83  83  . 73.374  82.978  23.475  1.00 4.65   1
. .
ATOM 624  C    C    . VAL VAL VAL A A 83  83  . 75.282  82.251  25.961  1.00 5.66   1
. .
ATOM 625  O    O    . VAL VAL VAL A A 83  83  . 76.358  82.864  26.105  1.00 5.41   1
. .
ATOM 626  N    N    . VAL VAL VAL A A 84  84  . 74.357  82.252  26.927  1.00 4.30   1
. .
ATOM 627  CA   CA   . VAL VAL VAL A A 84  84  . 74.680  82.818  28.240  1.00 5.52   1
. .
ATOM 628  CB   CB   . VAL VAL VAL A A 84  84  . 73.415  82.973  29.164  1.00 7.19   1
. .
ATOM 629  CG1  CG1  . VAL VAL VAL A A 84  84  . 72.315  83.565  28.416  1.00 5.76   1
. .
ATOM 630  CG2  CG2  . VAL VAL VAL A A 84  84  . 72.912  81.635  29.671  1.00 5.62   1
. .
ATOM 631  C    C    . VAL VAL VAL A A 84  84  . 75.715  82.019  29.009  1.00 4.38   1
. .
ATOM 632  O    O    . VAL VAL VAL A A 84  84  . 76.275  82.494  29.981  1.00 7.09   1
. .
ATOM 633  N    N    . GLU GLU GLU A A 85  85  . 75.963  80.766  28.612  1.00 4.32   1
. .
ATOM 634  CA   CA   . GLU GLU GLU A A 85  85  . 76.829  79.895  29.328  1.00 4.05   1
. .
ATOM 635  CB   CB   . GLU GLU GLU A A 85  85  . 76.417  78.448  29.093  1.00 6.26   1
. .
ATOM 636  CG   CG   . GLU GLU GLU A A 85  85  . 74.936  78.212  29.576  1.00 9.81   1
. .
ATOM 637  CD   CD   . GLU GLU GLU A A 85  85  . 74.778  78.208  31.099  1.00 21.77  1
. .
ATOM 638  OE1  OE1  . GLU GLU GLU A A 85  85  . 75.777  78.119  31.851  1.00 23.72  1
. .
ATOM 639  OE2  OE2  . GLU GLU GLU A A 85  85  . 73.617  78.279  31.557  1.00 26.39  1
. .
ATOM 640  C    C    . GLU GLU GLU A A 85  85  . 78.312  80.127  28.894  1.00 2.24   1
. .
ATOM 641  O    O    . GLU GLU GLU A A 85  85  . 78.976  79.237  28.355  1.00 3.33   1
. .
ATOM 642  N    N    . GLN GLN GLN A A 86  86  . 78.768  81.346  29.075  1.00 3.17   1
. .
ATOM 643  CA   CA   . GLN GLN GLN A A 86  86  . 80.094  81.776  28.596  1.00 2.03   1
. .
ATOM 644  CB   CB   . GLN GLN GLN A A 86  86  . 80.406  83.198  29.084  1.00 2.00   1
. .
ATOM 645  CG   CG   . GLN GLN GLN A A 86  86  . 81.727  83.698  28.505  1.00 2.65   1
. .
ATOM 646  CD   CD   . GLN GLN GLN A A 86  86  . 81.574  84.120  27.055  1.00 5.27   1
. .
ATOM 647  OE1  OE1  . GLN GLN GLN A A 86  86  . 80.571  84.718  26.708  1.00 3.72   1
. .
ATOM 648  NE2  NE2  . GLN GLN GLN A A 86  86  . 82.608  83.871  26.224  1.00 3.91   1
. .
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ATOM 649  C    C    . GLN GLN GLN A A 86  86  . 81.216  80.843  29.077  1.00 2.48   1
. .
ATOM 650  O    O    . GLN GLN GLN A A 86  86  . 82.023  80.374  28.248  1.00 4.04   1
. .
ATOM 651  N    N    . GLU GLU GLU A A 87  87  . 81.240  80.538  30.395  1.00 2.28   1
. .
ATOM 652  CA   CA   . GLU GLU GLU A A 87  87  . 82.318  79.648  30.909  1.00 2.80   1
. .
ATOM 653  CB   CB   . GLU GLU GLU A A 87  87  . 82.278  79.492  32.400  1.00 4.95   1
. .
ATOM 654  CG   CG   . GLU GLU GLU A A 87  87  . 83.462  78.715  33.002  1.00 8.09   1
. .
ATOM 655  CD   CD   . GLU GLU GLU A A 87  87  . 83.678  79.072  34.474  1.00 16.17  1
. .
ATOM 656  OE1  OE1  . GLU GLU GLU A A 87  87  . 82.773  79.696  35.043  1.00 23.23  1
. .
ATOM 657  OE2  OE2  . GLU GLU GLU A A 87  87  . 84.707  78.717  35.078  1.00 19.46  1
. .
ATOM 658  C    C    . GLU GLU GLU A A 87  87  . 82.289  78.240  30.280  1.00 2.10   1
. .
ATOM 659  O    O    . GLU GLU GLU A A 87  87  . 83.301  77.735  29.894  1.00 2.56   1
. .
ATOM 660  N    N    . LYS LYS LYS A A 88  88  . 81.100  77.667  30.193  1.00 2.36   1
. .
ATOM 661  CA   CA   . LYS LYS LYS A A 88  88  . 81.055  76.292  29.671  1.00 2.74   1
. .
ATOM 662  CB   CB   . LYS LYS LYS A A 88  88  . 79.665  75.728  29.873  1.00 3.80   1
. .
ATOM 663  CG   CG   . LYS LYS LYS A A 88  88  . 79.373  75.406  31.327  1.00 8.85   1
. .
ATOM 664  CD   CD   . LYS LYS LYS A A 88  88  . 77.916  75.086  31.528  1.00 13.94  1
. .
ATOM 665  CE   CE   . LYS LYS LYS A A 88  88  . 77.647  74.774  33.052  1.00 15.60  1
. .
ATOM 666  NZ   NZ   . LYS LYS LYS A A 88  88  . 77.414  73.318  33.216  1.00 20.40  1
. .
ATOM 667  C    C    . LYS LYS LYS A A 88  88  . 81.421  76.251  28.176  1.00 2.68   1
. .
ATOM 668  O    O    . LYS LYS LYS A A 88  88  . 82.097  75.343  27.735  1.00 3.38   1
. .
ATOM 669  N    N    . LEU LEU LEU A A 89  89  . 81.005  77.263  27.422  1.00 2.00   1
. .
ATOM 670  CA   CA   . LEU LEU LEU A A 89  89  . 81.299  77.308  26.001  1.00 2.00   1
. .
ATOM 671  CB   CB   . LEU LEU LEU A A 89  89  . 80.429  78.346  25.245  1.00 2.02   1
. .
ATOM 672  CG   CG   . LEU LEU LEU A A 89  89  . 78.981  77.930  25.067  1.00 2.74   1
. .
ATOM 673  CD1  CD1  . LEU LEU LEU A A 89  89  . 77.988  79.054  24.838  1.00 2.49   1
. .
ATOM 674  CD2  CD2  . LEU LEU LEU A A 89  89  . 78.932  76.835  23.978  1.00 3.04   1
. .
ATOM 675  C    C    . LEU LEU LEU A A 89  89  . 82.800  77.589  25.790  1.00 2.02   1
. .
ATOM 676  O    O    . LEU LEU LEU A A 89  89  . 83.500  76.920  25.002  1.00 3.30   1
. .
ATOM 677  N    N    . ASP ASP ASP A A 90  90  . 83.346  78.536  26.539  1.00 2.33   1
. .
ATOM 678  CA   CA   . ASP ASP ASP A A 90  90  . 84.806  78.729  26.491  1.00 2.44   1
. .
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ATOM 679  CB   CB   . ASP ASP ASP A A 90  90  . 85.231  79.888  27.422  1.00 2.31   1
. .
ATOM 680  CG   CG   . ASP ASP ASP A A 90  90  . 84.989  81.277  26.786  1.00 4.58   1
. .
ATOM 681  OD1  OD1  . ASP ASP ASP A A 90  90  . 84.829  81.397  25.552  1.00 7.28   1
. .
ATOM 682  OD2  OD2  . ASP ASP ASP A A 90  90  . 84.955  82.298  27.525  1.00 5.91   1
. .
ATOM 683  C    C    . ASP ASP ASP A A 90  90  . 85.560  77.471  26.890  1.00 2.98   1
. .
ATOM 684  O    O    . ASP ASP ASP A A 90  90  . 86.514  77.087  26.199  1.00 2.66   1
. .
ATOM 685  N    N    . ASN ASN ASN A A 91  91  . 85.096  76.793  27.957  1.00 3.47   1
. .
ATOM 686  CA   CA   . ASN ASN ASN A A 91  91  . 85.843  75.556  28.365  1.00 4.14   1
. .
ATOM 687  CB   CB   . ASN ASN ASN A A 91  91  . 85.393  75.045  29.741  1.00 5.93   1
. .
ATOM 688  CG   CG   . ASN ASN ASN A A 91  91  . 85.903  75.945  30.865  1.00 12.45  1
. .
ATOM 689  OD1  OD1  . ASN ASN ASN A A 91  91  . 86.890  76.661  30.701  1.00 17.45  1
. .
ATOM 690  ND2  ND2  . ASN ASN ASN A A 91  91  . 85.246  75.881  32.016  1.00 18.96  1
. .
ATOM 691  C    C    . ASN ASN ASN A A 91  91  . 85.842  74.430  27.330  1.00 4.54   1
. .
ATOM 692  O    O    . ASN ASN ASN A A 91  91  . 86.862  73.787  27.114  1.00 4.39   1
. .
ATOM 693  N    N    . LEU LEU LEU A A 92  92  . 84.749  74.284  26.637  1.00 4.06   1
. .
ATOM 694  CA   CA   . LEU LEU LEU A A 92  92  . 84.680  73.378  25.526  1.00 4.41   1
. .
ATOM 695  CB   CB   . LEU LEU LEU A A 92  92  . 83.285  73.478  24.880  1.00 5.90   1
. .
ATOM 696  CG   CG   . LEU LEU LEU A A 92  92  . 82.674  72.230  24.252  1.00 12.49  1
. .
ATOM 697  CD1  CD1  . LEU LEU LEU A A 92  92  . 82.915  71.067  25.203  1.00 13.89  1
. .
ATOM 698  CD2  CD2  . LEU LEU LEU A A 92  92  . 81.224  72.416  24.028  1.00 15.03  1
. .
ATOM 699  C    C    . LEU LEU LEU A A 92  92  . 85.731  73.714  24.454  1.00 3.58   1
. .
ATOM 700  O    O    . LEU LEU LEU A A 92  92  . 86.454  72.847  24.020  1.00 3.88   1
. .
ATOM 701  N    N    . MET MET MET A A 93  93  . 85.877  75.001  24.078  1.00 2.24   1
. .
ATOM 702  CA   CA   . MET MET MET A A 93  93  . 86.882  75.347  23.117  1.00 2.27   1
. .
ATOM 703  CB   CB   . MET MET MET A A 93  93  . 86.762  76.836  22.751  1.00 2.25   1
. .
ATOM 704  CG   CG   . MET MET MET A A 93  93  . 85.450  77.144  21.995  1.00 4.19   1
. .
ATOM 705  SD   SD   . MET MET MET A A 93  93  . 85.490  78.701  21.105  1.00 3.22   1
. .
ATOM 706  CE   CE   . MET MET MET A A 93  93  . 85.096  79.859  22.450  1.00 3.16   1
. .
ATOM 707  C    C    . MET MET MET A A 93  93  . 88.310  75.110  23.645  1.00 2.13   1
. .
ATOM 708  O    O    . MET MET MET A A 93  93  . 89.127  74.630  22.963  1.00 2.77   1
. .
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ATOM 709  N    N    . LEU LEU LEU A A 94  94  . 88.611  75.468  24.883  1.00 2.06   1
. .
ATOM 710  CA   CA   . LEU LEU LEU A A 94  94  . 89.974  75.261  25.440  1.00 3.49   1
. .
ATOM 711  CB   CB   . LEU LEU LEU A A 94  94  . 90.042  75.780  26.912  1.00 4.12   1
. .
ATOM 712  CG   CG   . LEU LEU LEU A A 94  94  . 89.861  77.285  27.154  1.00 8.66   1
. .
ATOM 713  CD1  CD1  . LEU LEU LEU A A 94  94  . 90.077  77.626  28.609  1.00 7.07   1
. .
ATOM 714  CD2  CD2  . LEU LEU LEU A A 94  94  . 90.674  78.158  26.198  1.00 10.54  1
. .
ATOM 715  C    C    . LEU LEU LEU A A 94  94  . 90.331  73.785  25.449  1.00 2.79   1
. .
ATOM 716  O    O    . LEU LEU LEU A A 94  94  . 91.436  73.423  25.156  1.00 3.44   1
. .
ATOM 717  N    N    . GLU GLU GLU A A 95  95  . 89.342  72.971  25.758  1.00 4.07   1
. .
ATOM 718  CA   CA   . GLU GLU GLU A A 95  95  . 89.572  71.536  25.882  1.00 5.22   1
. .
ATOM 719  CB   CB   . GLU GLU GLU A A 95  95  . 88.390  70.848  26.611  1.00 9.03   1
. .
ATOM 720  CG   CG   . GLU GLU GLU A A 95  95  . 88.183  71.179  28.111  1.00 14.50  1
. .
ATOM 721  CD   CD   . GLU GLU GLU A A 95  95  . 89.463  71.415  28.906  1.00 28.42  1
. .
ATOM 722  OE1  OE1  . GLU GLU GLU A A 95  95  . 89.600  70.847  30.027  1.00 32.49  1
. .
ATOM 723  OE2  OE2  . GLU GLU GLU A A 95  95  . 90.341  72.190  28.440  1.00 33.74  1
. .
ATOM 724  C    C    . GLU GLU GLU A A 95  95  . 89.755  70.937  24.507  1.00 5.65   1
. .
ATOM 725  O    O    . GLU GLU GLU A A 95  95  . 90.658  70.037  24.292  1.00 4.73   1
. .
ATOM 726  N    N    . LEU LEU LEU A A 96  96  . 88.936  71.402  23.559  1.00 2.47   1
. .
ATOM 727  CA   CA   . LEU LEU LEU A A 96  96  . 89.030  70.902  22.192  1.00 2.32   1
. .
ATOM 728  CB   CB   . LEU LEU LEU A A 96  96  . 87.808  71.319  21.418  1.00 2.58   1
. .
ATOM 729  CG   CG   . LEU LEU LEU A A 96  96  . 87.753  70.740  20.004  1.00 2.44   1
. .
ATOM 730  CD1  CD1  . LEU LEU LEU A A 96  96  . 87.572  69.249  20.074  1.00 5.44   1
. .
ATOM 731  CD2  CD2  . LEU LEU LEU A A 96  96  . 86.563  71.381  19.209  1.00 5.17   1
. .
ATOM 732  C    C    . LEU LEU LEU A A 96  96  . 90.361  71.323  21.512  1.00 2.74   1
. .
ATOM 733  O    O    . LEU LEU LEU A A 96  96  . 91.014  70.622  20.736  1.00 2.67   1
. .
ATOM 734  N    N    . ASP ASP ASP A A 97  97  . 90.849  72.510  21.879  1.00 3.09   1
. .
ATOM 735  CA   CA   . ASP ASP ASP A A 97  97  . 92.200  72.847  21.434  1.00 3.20   1
. .
ATOM 736  CB   CB   . ASP ASP ASP A A 97  97  . 92.505  74.338  21.764  1.00 4.70   1
. .
ATOM 737  CG   CG   . ASP ASP ASP A A 97  97  . 93.931  74.688  21.479  1.00 3.93   1
. .
ATOM 738  OD1  OD1  . ASP ASP ASP A A 97  97  . 94.272  75.127  20.351  1.00 4.43   1
. .
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ATOM 739  OD2  OD2  . ASP ASP ASP A A 97  97  . 94.715  74.551  22.392  1.00 8.40   1
. .
ATOM 740  C    C    . ASP ASP ASP A A 97  97  . 93.224  71.943  22.164  1.00 5.19   1
. .
ATOM 741  O    O    . ASP ASP ASP A A 97  97  . 94.129  71.358  21.545  1.00 5.86   1
. .
ATOM 742  N    N    . GLY GLY GLY A A 98  98  . 93.087  71.886  23.474  1.00 5.17   1
. .
ATOM 743  CA   CA   . GLY GLY GLY A A 98  98  . 93.934  71.009  24.343  1.00 7.10   1
. .
ATOM 744  C    C    . GLY GLY GLY A A 98  98  . 95.362  71.365  24.636  1.00 7.65   1
. .
ATOM 745  O    O    . GLY GLY GLY A A 98  98  . 96.035  70.622  25.368  1.00 10.51  1
. .
ATOM 746  N    N    . THR THR THR A A 99  99  . 95.856  72.450  24.082  1.00 6.13   1
. .
ATOM 747  CA   CA   . THR THR THR A A 99  99  . 97.208  72.921  24.278  1.00 3.31   1
. .
ATOM 748  CB   CB   . THR THR THR A A 99  99  . 97.885  73.405  22.995  1.00 4.84   1
. .
ATOM 749  OG1  OG1  . THR THR THR A A 99  99  . 97.213  74.591  22.522  1.00 5.02   1
. .
ATOM 750  CG2  CG2  . THR THR THR A A 99  99  . 97.875  72.378  21.844  1.00 4.52   1
. .
ATOM 751  C    C    . THR THR THR A A 99  99  . 97.237  74.092  25.299  1.00 6.09   1
. .
ATOM 752  O    O    . THR THR THR A A 99  99  . 96.265  74.827  25.426  1.00 6.72   1
. .
ATOM 753  N    N    . GLU GLU GLU A A 100 100 . 98.347  74.275  26.014  1.00 7.00   1
. .
ATOM 754  CA   CA   . GLU GLU GLU A A 100 100 . 98.402  75.334  27.001  1.00 8.84   1
. .
ATOM 755  CB   CB   . GLU GLU GLU A A 100 100 . 99.594  75.210  27.981  1.00 12.85  1
. .
ATOM 756  CG   CG   . GLU GLU GLU A A 100 100 . 99.307  75.856  29.357  1.00 21.71  1
. .
ATOM 757  CD   CD   . GLU GLU GLU A A 100 100 . 99.487  74.887  30.540  1.00 33.74  1
. .
ATOM 758  OE1  OE1  . GLU GLU GLU A A 100 100 . 100.265 73.912  30.419  1.00 39.34  1
. .
ATOM 759  OE2  OE2  . GLU GLU GLU A A 100 100 . 98.851  75.094  31.607  1.00 36.52  1
. .
ATOM 760  C    C    . GLU GLU GLU A A 100 100 . 98.371  76.700  26.339  1.00 7.40   1
. .
ATOM 761  O    O    . GLU GLU GLU A A 100 100 . 97.733  77.613  26.892  1.00 9.01   1
. .
ATOM 762  N    N    . ASN ASN ASN A A 101 101 . 98.963  76.832  25.147  1.00 3.26   1
. .
ATOM 763  CA   CA   . ASN ASN ASN A A 101 101 . 99.016  78.182  24.568  1.00 4.42   1
. .
ATOM 764  CB   CB   . ASN ASN ASN A A 101 101 . 100.447 78.408  24.115  1.00 7.73   1
. .
ATOM 765  CG   CG   . ASN ASN ASN A A 101 101 . 100.873 77.350  23.069  1.00 14.79  1
. .
ATOM 766  OD1  OD1  . ASN ASN ASN A A 101 101 . 100.332 76.203  23.036  1.00 19.12  1
. .
ATOM 767  ND2  ND2  . ASN ASN ASN A A 101 101 . 101.785 77.729  22.191  1.00 22.15  1
. .
ATOM 768  C    C    . ASN ASN ASN A A 101 101 . 98.102  78.329  23.335  1.00 2.24   1
. .
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ATOM 769  O    O    . ASN ASN ASN A A 101 101 . 98.276  79.248  22.559  1.00 4.36   1
. .
ATOM 770  N    N    . LYS LYS LYS A A 102 102 . 97.094  77.504  23.199  1.00 2.09   1
. .
ATOM 771  CA   CA   . LYS LYS LYS A A 102 102 . 96.084  77.570  22.139  1.00 2.06   1
. .
ATOM 772  CB   CB   . LYS LYS LYS A A 102 102 . 95.156  78.806  22.227  1.00 2.70   1
. .
ATOM 773  CG   CG   . LYS LYS LYS A A 102 102 . 94.449  78.842  23.578  1.00 2.42   1
. .
ATOM 774  CD   CD   . LYS LYS LYS A A 102 102 . 93.737  80.175  23.754  1.00 4.41   1
. .
ATOM 775  CE   CE   . LYS LYS LYS A A 102 102 . 92.813  80.190  24.957  1.00 6.88   1
. .
ATOM 776  NZ   NZ   . LYS LYS LYS A A 102 102 . 93.494  79.996  26.258  1.00 5.04   1
. .
ATOM 777  C    C    . LYS LYS LYS A A 102 102 . 96.739  77.451  20.795  1.00 2.69   1
. .
ATOM 778  O    O    . LYS LYS LYS A A 102 102 . 96.372  78.139  19.825  1.00 3.41   1
. .
ATOM 779  N    N    . SER SER SER A A 103 103 . 97.750  76.577  20.679  1.00 2.56   1
. .
ATOM 780  CA   CA   . SER SER SER A A 103 103 . 98.464  76.552  19.423  1.00 3.03   1
. .
ATOM 781  CB   CB   . SER SER SER A A 103 103 . 99.915  76.241  19.666  1.00 3.61   1
. .
ATOM 782  OG   OG   . SER SER SER A A 103 103 . 100.025 74.942  20.272  1.00 9.99   1
. .
ATOM 783  C    C    . SER SER SER A A 103 103 . 97.905  75.560  18.409  1.00 3.75   1
. .
ATOM 784  O    O    . SER SER SER A A 103 103 . 98.411  75.519  17.282  1.00 4.55   1
. .
ATOM 785  N    N    . LYS LYS LYS A A 104 104 . 96.833  74.842  18.770  1.00 2.24   1
. .
ATOM 786  CA   CA   . LYS LYS LYS A A 104 104 . 96.223  74.009  17.757  1.00 2.52   1
. .
ATOM 787  CB   CB   . LYS LYS LYS A A 104 104 . 95.462  72.834  18.376  1.00 4.18   1
. .
ATOM 788  CG   CG   . LYS LYS LYS A A 104 104 . 94.837  71.929  17.328  1.00 7.36   1
. .
ATOM 789  CD   CD   . LYS LYS LYS A A 104 104 . 93.730  71.006  17.940  1.00 6.52   1
. .
ATOM 790  CE   CE   . LYS LYS LYS A A 104 104 . 94.353  69.907  18.763  1.00 7.71   1
. .
ATOM 791  NZ   NZ   . LYS LYS LYS A A 104 104 . 93.328  69.170  19.521  1.00 7.94   1
. .
ATOM 792  C    C    . LYS LYS LYS A A 104 104 . 95.323  74.853  16.861  1.00 2.48   1
. .
ATOM 793  O    O    . LYS LYS LYS A A 104 104 . 95.450  74.811  15.626  1.00 4.44   1
. .
ATOM 794  N    N    . PHE PHE PHE A A 105 105 . 94.436  75.623  17.490  1.00 2.00   1
. .
ATOM 795  CA   CA   . PHE PHE PHE A A 105 105 . 93.449  76.426  16.771  1.00 2.06   1
. .
ATOM 796  CB   CB   . PHE PHE PHE A A 105 105 . 92.124  76.466  17.476  1.00 2.60   1
. .
ATOM 797  CG   CG   . PHE PHE PHE A A 105 105 . 91.402  75.155  17.479  1.00 3.74   1
. .
ATOM 798  CD1  CD1  . PHE PHE PHE A A 105 105 . 90.397  74.930  18.459  1.00 4.83   1
. .
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ATOM 799  CE1  CE1  . PHE PHE PHE A A 105 105 . 89.738  73.709  18.530  1.00 3.68   1
. .
ATOM 800  CZ   CZ   . PHE PHE PHE A A 105 105 . 90.032  72.728  17.610  1.00 5.44   1
. .
ATOM 801  CE2  CE2  . PHE PHE PHE A A 105 105 . 90.990  72.935  16.616  1.00 6.28   1
. .
ATOM 802  CD2  CD2  . PHE PHE PHE A A 105 105 . 91.694  74.169  16.560  1.00 5.71   1
. .
ATOM 803  C    C    . PHE PHE PHE A A 105 105 . 93.935  77.856  16.600  1.00 2.12   1
. .
ATOM 804  O    O    . PHE PHE PHE A A 105 105 . 93.547  78.516  15.634  1.00 2.00   1
. .
ATOM 805  N    N    . GLY GLY GLY A A 106 106 . 94.801  78.299  17.504  1.00 2.36   1
. .
ATOM 806  CA   CA   . GLY GLY GLY A A 106 106 . 95.219  79.684  17.596  1.00 2.00   1
. .
ATOM 807  C    C    . GLY GLY GLY A A 106 106 . 94.324  80.407  18.604  1.00 2.00   1
. .
ATOM 808  O    O    . GLY GLY GLY A A 106 106 . 93.103  80.189  18.661  1.00 2.00   1
. .
ATOM 809  N    N    . ALA ALA ALA A A 107 107 . 94.934  81.315  19.375  1.00 2.07   1
. .
ATOM 810  CA   CA   . ALA ALA ALA A A 107 107 . 94.122  82.114  20.280  1.00 2.00   1
. .
ATOM 811  CB   CB   . ALA ALA ALA A A 107 107 . 94.950  82.938  21.194  1.00 2.31   1
. .
ATOM 812  C    C    . ALA ALA ALA A A 107 107 . 93.170  83.023  19.527  1.00 2.29   1
. .
ATOM 813  O    O    . ALA ALA ALA A A 107 107 . 92.113  83.445  20.028  1.00 2.15   1
. .
ATOM 814  N    N    . ASN ASN ASN A A 108 108 . 93.604  83.344  18.281  1.00 2.00   1
. .
ATOM 815  CA   CA   . ASN ASN ASN A A 108 108 . 92.742  84.218  17.528  1.00 2.00   1
. .
ATOM 816  CB   CB   . ASN ASN ASN A A 108 108 . 93.493  84.910  16.386  1.00 2.00   1
. .
ATOM 817  CG   CG   . ASN ASN ASN A A 108 108 . 94.342  83.976  15.496  1.00 2.36   1
. .
ATOM 818  OD1  OD1  . ASN ASN ASN A A 108 108 . 94.768  82.890  15.927  1.00 2.07   1
. .
ATOM 819  ND2  ND2  . ASN ASN ASN A A 108 108 . 94.691  84.448  14.300  1.00 2.18   1
. .
ATOM 820  C    C    . ASN ASN ASN A A 108 108 . 91.485  83.531  17.057  1.00 2.00   1
. .
ATOM 821  O    O    . ASN ASN ASN A A 108 108 . 90.397  84.157  16.956  1.00 2.50   1
. .
ATOM 822  N    N    . ALA ALA ALA A A 109 109 . 91.560  82.223  16.836  1.00 2.00   1
. .
ATOM 823  CA   CA   . ALA ALA ALA A A 109 109 . 90.318  81.516  16.502  1.00 2.00   1
. .
ATOM 824  CB   CB   . ALA ALA ALA A A 109 109 . 90.666  80.093  15.930  1.00 2.01   1
. .
ATOM 825  C    C    . ALA ALA ALA A A 109 109 . 89.351  81.428  17.719  1.00 2.00   1
. .
ATOM 826  O    O    . ALA ALA ALA A A 109 109 . 88.110  81.712  17.635  1.00 2.00   1
. .
ATOM 827  N    N    . ILE ILE ILE A A 110 110 . 89.939  81.049  18.865  1.00 2.00   1
. .
ATOM 828  CA   CA   . ILE ILE ILE A A 110 110 . 89.088  80.777  20.003  1.00 2.00   1
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ATOM 829  CB   CB   . ILE ILE ILE A A 110 110 . 89.934  80.090  21.128  1.00 2.01   1
. .
ATOM 830  CG1  CG1  . ILE ILE ILE A A 110 110 . 90.193  78.644  20.677  1.00 2.50   1
. .
ATOM 831  CD1  CD1  . ILE ILE ILE A A 110 110 . 91.364  77.958  21.498  1.00 4.98   1
. .
ATOM 832  CG2  CG2  . ILE ILE ILE A A 110 110 . 89.249  80.101  22.492  1.00 2.00   1
. .
ATOM 833  C    C    . ILE ILE ILE A A 110 110 . 88.493  82.117  20.495  1.00 2.00   1
. .
ATOM 834  O    O    . ILE ILE ILE A A 110 110 . 87.338  82.172  20.854  1.00 2.00   1
. .
ATOM 835  N    N    . LEU LEU LEU A A 111 111 . 89.313  83.129  20.556  1.00 2.00   1
. .
ATOM 836  CA   CA   . LEU LEU LEU A A 111 111 . 88.815  84.427  21.025  1.00 2.00   1
. .
ATOM 837  CB   CB   . LEU LEU LEU A A 111 111 . 89.929  85.442  21.197  1.00 2.00   1
. .
ATOM 838  CG   CG   . LEU LEU LEU A A 111 111 . 89.453  86.842  21.675  1.00 2.05   1
. .
ATOM 839  CD1  CD1  . LEU LEU LEU A A 111 111 . 88.874  86.740  23.082  1.00 2.24   1
. .
ATOM 840  CD2  CD2  . LEU LEU LEU A A 111 111 . 90.665  87.801  21.697  1.00 4.39   1
. .
ATOM 841  C    C    . LEU LEU LEU A A 111 111 . 87.695  85.021  20.191  1.00 2.00   1
. .
ATOM 842  O    O    . LEU LEU LEU A A 111 111 . 86.744  85.567  20.751  1.00 2.00   1
. .
ATOM 843  N    N    . GLY GLY GLY A A 112 112 . 87.788  84.881  18.867  1.00 2.00   1
. .
ATOM 844  CA   CA   . GLY GLY GLY A A 112 112 . 86.775  85.450  17.996  1.00 2.00   1
. .
ATOM 845  C    C    . GLY GLY GLY A A 112 112 . 85.420  84.828  18.343  1.00 2.00   1
. .
ATOM 846  O    O    . GLY GLY GLY A A 112 112 . 84.332  85.510  18.449  1.00 2.26   1
. .
ATOM 847  N    N    . VAL VAL VAL A A 113 113 . 85.427  83.513  18.519  1.00 2.00   1
. .
ATOM 848  CA   CA   . VAL VAL VAL A A 113 113 . 84.168  82.940  18.939  1.00 2.00   1
. .
ATOM 849  CB   CB   . VAL VAL VAL A A 113 113 . 84.260  81.376  18.788  1.00 2.00   1
. .
ATOM 850  CG1  CG1  . VAL VAL VAL A A 113 113 . 82.926  80.708  19.164  1.00 3.70   1
. .
ATOM 851  CG2  CG2  . VAL VAL VAL A A 113 113 . 84.633  81.046  17.353  1.00 3.05   1
. .
ATOM 852  C    C    . VAL VAL VAL A A 113 113 . 83.717  83.287  20.330  1.00 2.00   1
. .
ATOM 853  O    O    . VAL VAL VAL A A 113 113 . 82.533  83.589  20.571  1.00 2.00   1
. .
ATOM 854  N    N    . SER SER SER A A 114 114 . 84.674  83.309  21.256  1.00 2.00   1
. .
ATOM 855  CA   CA   . SER SER SER A A 114 114 . 84.400  83.686  22.609  1.00 2.00   1
. .
ATOM 856  CB   CB   . SER SER SER A A 114 114 . 85.683  83.617  23.441  1.00 2.41   1
. .
ATOM 857  OG   OG   . SER SER SER A A 114 114 . 85.421  83.891  24.789  1.00 2.61   1
. .
ATOM 858  C    C    . SER SER SER A A 114 114 . 83.746  85.051  22.733  1.00 2.00   1
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ATOM 859  O    O    . SER SER SER A A 114 114 . 82.727  85.208  23.491  1.00 2.00   1
. .
ATOM 860  N    N    . LEU LEU LEU A A 115 115 . 84.243  86.024  21.963  1.00 2.00   1
. .
ATOM 861  CA   CA   . LEU LEU LEU A A 115 115 . 83.651  87.396  21.976  1.00 2.00   1
. .
ATOM 862  CB   CB   . LEU LEU LEU A A 115 115 . 84.487  88.377  21.161  1.00 2.00   1
. .
ATOM 863  CG   CG   . LEU LEU LEU A A 115 115 . 85.904  88.586  21.727  1.00 2.12   1
. .
ATOM 864  CD1  CD1  . LEU LEU LEU A A 115 115 . 86.728  89.306  20.615  1.00 3.06   1
. .
ATOM 865  CD2  CD2  . LEU LEU LEU A A 115 115 . 85.927  89.381  23.064  1.00 2.43   1
. .
ATOM 866  C    C    . LEU LEU LEU A A 115 115 . 82.217  87.382  21.411  1.00 2.00   1
. .
ATOM 867  O    O    . LEU LEU LEU A A 115 115 . 81.301  88.032  21.896  1.00 2.00   1
. .
ATOM 868  N    N    . ALA ALA ALA A A 116 116 . 82.035  86.636  20.332  1.00 2.00   1
. .
ATOM 869  CA   CA   . ALA ALA ALA A A 116 116 . 80.710  86.650  19.679  1.00 2.00   1
. .
ATOM 870  CB   CB   . ALA ALA ALA A A 116 116 . 80.785  86.035  18.309  1.00 2.00   1
. .
ATOM 871  C    C    . ALA ALA ALA A A 116 116 . 79.672  85.960  20.574  1.00 2.00   1
. .
ATOM 872  O    O    . ALA ALA ALA A A 116 116 . 78.526  86.381  20.661  1.00 2.00   1
. .
ATOM 873  N    N    . VAL VAL VAL A A 117 117 . 80.050  84.845  21.199  1.00 2.00   1
. .
ATOM 874  CA   CA   . VAL VAL VAL A A 117 117 . 79.205  84.198  22.174  1.00 2.00   1
. .
ATOM 875  CB   CB   . VAL VAL VAL A A 117 117 . 79.964  82.992  22.827  1.00 2.00   1
. .
ATOM 876  CG1  CG1  . VAL VAL VAL A A 117 117 . 79.279  82.488  24.109  1.00 2.38   1
. .
ATOM 877  CG2  CG2  . VAL VAL VAL A A 117 117 . 80.125  81.880  21.826  1.00 2.00   1
. .
ATOM 878  C    C    . VAL VAL VAL A A 117 117 . 78.782  85.165  23.261  1.00 2.00   1
. .
ATOM 879  O    O    . VAL VAL VAL A A 117 117 . 77.646  85.199  23.607  1.00 2.00   1
. .
ATOM 880  N    N    . CYS CYS CYS A A 118 118 . 79.715  85.942  23.786  1.00 2.15   1
. .
ATOM 881  CA   CA   . CYS CYS CYS A A 118 118 . 79.359  86.869  24.886  1.00 2.34   1
. .
ATOM 882  CB   CB   . CYS CYS CYS A A 118 118 . 80.671  87.534  25.327  1.00 2.62   1
. .
ATOM 883  SG   SG   . CYS CYS CYS A A 118 118 . 80.495  88.449  26.863  1.00 2.98   1
. .
ATOM 884  C    C    . CYS CYS CYS A A 118 118 . 78.375  87.950  24.399  1.00 2.00   1
. .
ATOM 885  O    O    . CYS CYS CYS A A 118 118 . 77.382  88.276  25.071  1.00 2.78   1
. .
ATOM 886  N    N    . LYS LYS LYS A A 119 119 . 78.561  88.484  23.205  1.00 2.00   1
. .
ATOM 887  CA   CA   . LYS LYS LYS A A 119 119 . 77.567  89.390  22.648  1.00 2.00   1
. .
ATOM 888  CB   CB   . LYS LYS LYS A A 119 119 . 78.041  89.949  21.317  1.00 2.38   1
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ATOM 889  CG   CG   . LYS LYS LYS A A 119 119 . 79.275  90.898  21.406  1.00 2.15   1
. .
ATOM 890  CD   CD   . LYS LYS LYS A A 119 119 . 79.668  91.441  20.016  1.00 6.24   1
. .
ATOM 891  CE   CE   . LYS LYS LYS A A 119 119 . 81.084  92.028  20.112  1.00 7.59   1
. .
ATOM 892  NZ   NZ   . LYS LYS LYS A A 119 119 . 81.588  92.914  18.959  1.00 9.74   1
. .
ATOM 893  C    C    . LYS LYS LYS A A 119 119 . 76.188  88.749  22.467  1.00 2.00   1
. .
ATOM 894  O    O    . LYS LYS LYS A A 119 119 . 75.139  89.334  22.743  1.00 2.54   1
. .
ATOM 895  N    N    . ALA ALA ALA A A 120 120 . 76.183  87.525  21.950  1.00 2.00   1
. .
ATOM 896  CA   CA   . ALA ALA ALA A A 120 120 . 74.918  86.758  21.863  1.00 2.00   1
. .
ATOM 897  CB   CB   . ALA ALA ALA A A 120 120 . 75.102  85.540  21.058  1.00 2.00   1
. .
ATOM 898  C    C    . ALA ALA ALA A A 120 120 . 74.264  86.433  23.212  1.00 2.13   1
. .
ATOM 899  O    O    . ALA ALA ALA A A 120 120 . 73.024  86.524  23.393  1.00 2.89   1
. .
ATOM 900  N    N    . GLY GLY GLY A A 121 121 . 75.091  86.191  24.203  1.00 2.33   1
. .
ATOM 901  CA   CA   . GLY GLY GLY A A 121 121 . 74.585  85.850  25.546  1.00 2.45   1
. .
ATOM 902  C    C    . GLY GLY GLY A A 121 121 . 73.910  87.096  26.123  1.00 2.00   1
. .
ATOM 903  O    O    . GLY GLY GLY A A 121 121 . 72.851  87.008  26.746  1.00 2.32   1
. .
ATOM 904  N    N    . ALA ALA ALA A A 122 122 . 74.558  88.284  25.956  1.00 2.00   1
. .
ATOM 905  CA   CA   . ALA ALA ALA A A 122 122 . 73.887  89.529  26.389  1.00 2.48   1
. .
ATOM 906  CB   CB   . ALA ALA ALA A A 122 122 . 74.712  90.722  25.921  1.00 2.00   1
. .
ATOM 907  C    C    . ALA ALA ALA A A 122 122 . 72.473  89.653  25.846  1.00 2.42   1
. .
ATOM 908  O    O    . ALA ALA ALA A A 122 122 . 71.496  90.002  26.557  1.00 5.06   1
. .
ATOM 909  N    N    . ALA ALA ALA A A 123 123 . 72.342  89.392  24.543  1.00 3.39   1
. .
ATOM 910  CA   CA   . ALA ALA ALA A A 123 123 . 71.068  89.526  23.916  1.00 3.70   1
. .
ATOM 911  CB   CB   . ALA ALA ALA A A 123 123 . 71.171  89.430  22.442  1.00 2.90   1
. .
ATOM 912  C    C    . ALA ALA ALA A A 123 123 . 70.085  88.530  24.438  1.00 3.99   1
. .
ATOM 913  O    O    . ALA ALA ALA A A 123 123 . 68.872  88.866  24.636  1.00 7.11   1
. .
ATOM 914  N    N    . GLU GLU GLU A A 124 124 . 70.554  87.304  24.674  1.00 3.94   1
. .
ATOM 915  CA   CA   . GLU GLU GLU A A 124 124 . 69.655  86.319  25.201  1.00 5.84   1
. .
ATOM 916  CB   CB   . GLU GLU GLU A A 124 124 . 70.367  84.965  25.243  1.00 7.67   1
. .
ATOM 917  CG   CG   . GLU GLU GLU A A 124 124 . 69.482  83.731  25.329  1.00 14.07  1
. .
ATOM 918  CD   CD   . GLU GLU GLU A A 124 124 . 68.732  83.475  24.031  1.00 20.94  1
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ATOM 919  OE1  OE1  . GLU GLU GLU A A 124 124 . 69.363  83.351  22.930  1.00 24.24  1
. .
ATOM 920  OE2  OE2  . GLU GLU GLU A A 124 124 . 67.512  83.393  24.133  1.00 25.14  1
. .
ATOM 921  C    C    . GLU GLU GLU A A 124 124 . 69.153  86.732  26.595  1.00 6.42   1
. .
ATOM 922  O    O    . GLU GLU GLU A A 124 124 . 67.985  86.567  26.914  1.00 8.96   1
. .
ATOM 923  N    N    . ARG ARG ARG A A 125 125 . 70.013  87.297  27.418  1.00 6.07   1
. .
ATOM 924  CA   CA   . ARG ARG ARG A A 125 125 . 69.674  87.781  28.753  1.00 7.75   1
. .
ATOM 925  CB   CB   . ARG ARG ARG A A 125 125 . 70.952  88.102  29.550  1.00 8.30   1
. .
ATOM 926  CG   CG   . ARG ARG ARG A A 125 125 . 71.759  86.910  29.970  1.00 10.03  1
. .
ATOM 927  CD   CD   . ARG ARG ARG A A 125 125 . 71.217  86.322  31.260  1.00 10.21  1
. .
ATOM 928  NE   NE   . ARG ARG ARG A A 125 125 . 72.187  85.426  31.839  1.00 16.58  1
. .
ATOM 929  CZ   CZ   . ARG ARG ARG A A 125 125 . 71.993  84.173  32.225  1.00 14.54  1
. .
ATOM 930  NH1  NH1  . ARG ARG ARG A A 125 125 . 73.009  83.524  32.730  1.00 19.67  1
. .
ATOM 931  NH2  NH2  . ARG ARG ARG A A 125 125 . 70.830  83.569  32.112  1.00 16.58  1
. .
ATOM 932  C    C    . ARG ARG ARG A A 125 125 . 68.823  89.029  28.713  1.00 7.85   1
. .
ATOM 933  O    O    . ARG ARG ARG A A 125 125 . 68.331  89.420  29.757  1.00 11.96  1
. .
ATOM 934  N    N    . GLU GLU GLU A A 126 126 . 68.739  89.655  27.533  1.00 8.91   1
. .
ATOM 935  CA   CA   . GLU GLU GLU A A 126 126 . 68.105  90.952  27.241  1.00 10.57  1
. .
ATOM 936  CB   CB   . GLU GLU GLU A A 126 126 . 66.574  90.932  27.370  1.00 14.17  1
. .
ATOM 937  CG   CG   . GLU GLU GLU A A 126 126 . 65.889  90.236  26.223  1.00 19.46  1
. .
ATOM 938  CD   CD   . GLU GLU GLU A A 126 126 . 64.467  89.869  26.514  1.00 25.11  1
. .
ATOM 939  OE1  OE1  . GLU GLU GLU A A 126 126 . 63.818  90.564  27.343  1.00 26.54  1
. .
ATOM 940  OE2  OE2  . GLU GLU GLU A A 126 126 . 64.006  88.880  25.917  1.00 27.52  1
. .
ATOM 941  C    C    . GLU GLU GLU A A 126 126 . 68.706  92.100  28.033  1.00 9.57   1
. .
ATOM 942  O    O    . GLU GLU GLU A A 126 126 . 67.985  92.933  28.633  1.00 10.58  1
. .
ATOM 943  N    N    . LEU LEU LEU A A 127 127 . 70.041  92.179  27.956  1.00 6.65   1
. .
ATOM 944  CA   CA   . LEU LEU LEU A A 127 127 . 70.832  93.091  28.735  1.00 6.94   1
. .
ATOM 945  CB   CB   . LEU LEU LEU A A 127 127 . 71.624  92.326  29.784  1.00 8.60   1
. .
ATOM 946  CG   CG   . LEU LEU LEU A A 127 127 . 70.964  91.712  31.012  1.00 8.41   1
. .
ATOM 947  CD1  CD1  . LEU LEU LEU A A 127 127 . 71.952  90.960  31.909  1.00 12.58  1
. .
ATOM 948  CD2  CD2  . LEU LEU LEU A A 127 127 . 70.284  92.806  31.775  1.00 14.31  1
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ATOM 949  C    C    . LEU LEU LEU A A 127 127 . 71.857  93.716  27.789  1.00 5.53   1
. .
ATOM 950  O    O    . LEU LEU LEU A A 127 127 . 72.300  93.037  26.837  1.00 5.19   1
. .
ATOM 951  N    N    . PRO PRO PRO A A 128 128 . 72.228  94.995  28.017  1.00 5.78   1
. .
ATOM 952  CA   CA   . PRO PRO PRO A A 128 128 . 73.397  95.486  27.265  1.00 5.67   1
. .
ATOM 953  CB   CB   . PRO PRO PRO A A 128 128 . 73.623  96.918  27.820  1.00 6.13   1
. .
ATOM 954  CG   CG   . PRO PRO PRO A A 128 128 . 72.660  97.142  28.891  1.00 7.48   1
. .
ATOM 955  CD   CD   . PRO PRO PRO A A 128 128 . 71.760  95.948  29.044  1.00 5.43   1
. .
ATOM 956  C    C    . PRO PRO PRO A A 128 128 . 74.602  94.666  27.603  1.00 3.45   1
. .
ATOM 957  O    O    . PRO PRO PRO A A 128 128 . 74.677  94.083  28.721  1.00 4.65   1
. .
ATOM 958  N    N    . LEU LEU LEU A A 129 129 . 75.580  94.686  26.693  1.00 2.72   1
. .
ATOM 959  CA   CA   . LEU LEU LEU A A 129 129 . 76.739  93.852  26.843  1.00 2.20   1
. .
ATOM 960  CB   CB   . LEU LEU LEU A A 129 129 . 77.677  94.113  25.666  1.00 2.35   1
. .
ATOM 961  CG   CG   . LEU LEU LEU A A 129 129 . 78.975  93.320  25.636  1.00 2.03   1
. .
ATOM 962  CD1  CD1  . LEU LEU LEU A A 129 129 . 78.769  91.876  25.863  1.00 2.00   1
. .
ATOM 963  CD2  CD2  . LEU LEU LEU A A 129 129 . 79.823  93.604  24.378  1.00 3.22   1
. .
ATOM 964  C    C    . LEU LEU LEU A A 129 129 . 77.418  94.132  28.174  1.00 2.00   1
. .
ATOM 965  O    O    . LEU LEU LEU A A 129 129 . 77.790  93.215  28.871  1.00 2.12   1
. .
ATOM 966  N    N    . TYR TYR TYR A A 130 130 . 77.573  95.436  28.491  1.00 2.28   1
. .
ATOM 967  CA   CA   . TYR TYR TYR A A 130 130 . 78.328  95.778  29.687  1.00 2.00   1
. .
ATOM 968  CB   CB   . TYR TYR TYR A A 130 130 . 78.504  97.310  29.874  1.00 2.24   1
. .
ATOM 969  CG   CG   . TYR TYR TYR A A 130 130 . 77.262  98.162  29.927  1.00 2.00   1
. .
ATOM 970  CD1  CD1  . TYR TYR TYR A A 130 130 . 76.588  98.375  31.121  1.00 2.78   1
. .
ATOM 971  CE1  CE1  . TYR TYR TYR A A 130 130 . 75.462  99.100  31.177  1.00 4.73   1
. .
ATOM 972  CZ   CZ   . TYR TYR TYR A A 130 130 . 74.948  99.658  30.039  1.00 7.00   1
. .
ATOM 973  OH   OH   . TYR TYR TYR A A 130 130 . 73.769  100.400 30.130  1.00 8.04   1
. .
ATOM 974  CE2  CE2  . TYR TYR TYR A A 130 130 . 75.582  99.477  28.829  1.00 3.25   1
. .
ATOM 975  CD2  CD2  . TYR TYR TYR A A 130 130 . 76.709  98.689  28.768  1.00 2.00   1
. .
ATOM 976  C    C    . TYR TYR TYR A A 130 130 . 77.718  95.116  30.930  1.00 2.00   1
. .
ATOM 977  O    O    . TYR TYR TYR A A 130 130 . 78.435  94.738  31.841  1.00 2.19   1
. .
ATOM 978  N    N    . ARG ARG ARG A A 131 131 . 76.382  95.035  30.965  1.00 2.00   1
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ATOM 979  CA   CA   . ARG ARG ARG A A 131 131 . 75.703  94.492  32.121  1.00 2.21   1
. .
ATOM 980  CB   CB   . ARG ARG ARG A A 131 131 . 74.259  94.868  32.100  1.00 4.08   1
. .
ATOM 981  CG   CG   . ARG ARG ARG A A 131 131 . 74.041  96.204  32.733  1.00 10.62  1
. .
ATOM 982  CD   CD   . ARG ARG ARG A A 131 131 . 73.540  95.914  34.132  1.00 20.13  1
. .
ATOM 983  NE   NE   . ARG ARG ARG A A 131 131 . 73.256  97.147  34.829  1.00 24.45  1
. .
ATOM 984  CZ   CZ   . ARG ARG ARG A A 131 131 . 73.702  97.402  36.039  1.00 24.78  1
. .
ATOM 985  NH1  NH1  . ARG ARG ARG A A 131 131 . 74.428  96.491  36.679  1.00 20.43  1
. .
ATOM 986  NH2  NH2  . ARG ARG ARG A A 131 131 . 73.391  98.544  36.612  1.00 28.85  1
. .
ATOM 987  C    C    . ARG ARG ARG A A 131 131 . 75.820  92.972  32.160  1.00 2.00   1
. .
ATOM 988  O    O    . ARG ARG ARG A A 131 131 . 75.926  92.378  33.234  1.00 2.34   1
. .
ATOM 989  N    N    . HIS HIS HIS A A 132 132 . 75.792  92.367  30.991  1.00 2.11   1
. .
ATOM 990  CA   CA   . HIS HIS HIS A A 132 132 . 75.998  90.921  30.961  1.00 2.00   1
. .
ATOM 991  CB   CB   . HIS HIS HIS A A 132 132 . 75.798  90.436  29.515  1.00 2.11   1
. .
ATOM 992  CG   CG   . HIS HIS HIS A A 132 132 . 76.087  88.981  29.311  1.00 3.64   1
. .
ATOM 993  ND1  ND1  . HIS HIS HIS A A 132 132 . 75.529  87.970  30.093  1.00 6.71   1
. .
ATOM 994  CE1  CE1  . HIS HIS HIS A A 132 132 . 75.900  86.802  29.596  1.00 4.25   1
. .
ATOM 995  NE2  NE2  . HIS HIS HIS A A 132 132 . 76.679  87.012  28.554  1.00 5.75   1
. .
ATOM 996  CD2  CD2  . HIS HIS HIS A A 132 132 . 76.823  88.358  28.355  1.00 4.77   1
. .
ATOM 997  C    C    . HIS HIS HIS A A 132 132 . 77.416  90.595  31.461  1.00 2.00   1
. .
ATOM 998  O    O    . HIS HIS HIS A A 132 132 . 77.608  89.640  32.218  1.00 2.72   1
. .
ATOM 999  N    N    . ILE ILE ILE A A 133 133 . 78.410  91.386  31.055  1.00 2.00   1
. .
ATOM 1000 CA   CA   . ILE ILE ILE A A 133 133 . 79.761  91.182  31.446  1.00 2.00   1
. .
ATOM 1001 CB   CB   . ILE ILE ILE A A 133 133 . 80.745  92.080  30.699  1.00 2.00   1
. .
ATOM 1002 CG1  CG1  . ILE ILE ILE A A 133 133 . 80.781  91.604  29.217  1.00 2.00   1
. .
ATOM 1003 CD1  CD1  . ILE ILE ILE A A 133 133 . 81.482  92.613  28.270  1.00 3.46   1
. .
ATOM 1004 CG2  CG2  . ILE ILE ILE A A 133 133 . 82.141  92.058  31.419  1.00 2.01   1
. .
ATOM 1005 C    C    . ILE ILE ILE A A 133 133 . 79.863  91.363  32.973  1.00 2.00   1
. .
ATOM 1006 O    O    . ILE ILE ILE A A 133 133 . 80.543  90.572  33.650  1.00 2.21   1
. .
ATOM 1007 N    N    . ALA ALA ALA A A 134 134 . 79.189  92.404  33.497  1.00 2.04   1
. .
ATOM 1008 CA   CA   . ALA ALA ALA A A 134 134 . 79.178  92.589  34.940  1.00 2.31   1
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ATOM 1009 CB   CB   . ALA ALA ALA A A 134 134 . 78.293  93.817  35.277  1.00 2.42   1
. .
ATOM 1010 C    C    . ALA ALA ALA A A 134 134 . 78.658  91.352  35.663  1.00 3.52   1
. .
ATOM 1011 O    O    . ALA ALA ALA A A 134 134 . 79.236  90.858  36.632  1.00 3.88   1
. .
ATOM 1012 N    N    . GLN GLN GLN A A 135 135 . 77.592  90.815  35.128  1.00 3.32   1
. .
ATOM 1013 CA   CA   . GLN GLN GLN A A 135 135 . 77.042  89.556  35.710  1.00 4.32   1
. .
ATOM 1014 CB   CB   . GLN GLN GLN A A 135 135 . 75.654  89.306  35.121  1.00 5.06   1
. .
ATOM 1015 CG   CG   . GLN GLN GLN A A 135 135 . 74.609  90.344  35.497  1.00 7.77   1
. .
ATOM 1016 CD   CD   . GLN GLN GLN A A 135 135 . 73.185  89.956  35.041  1.00 13.34  1
. .
ATOM 1017 OE1  OE1  . GLN GLN GLN A A 135 135 . 72.224  90.655  35.346  1.00 15.41  1
. .
ATOM 1018 NE2  NE2  . GLN GLN GLN A A 135 135 . 73.046  88.785  34.412  1.00 11.75  1
. .
ATOM 1019 C    C    . GLN GLN GLN A A 135 135 . 77.940  88.333  35.647  1.00 3.51   1
. .
ATOM 1020 O    O    . GLN GLN GLN A A 135 135 . 78.096  87.557  36.639  1.00 5.01   1
. .
ATOM 1021 N    N    . LEU LEU LEU A A 136 136 . 78.595  88.119  34.499  1.00 2.77   1
. .
ATOM 1022 CA   CA   . LEU LEU LEU A A 136 136 . 79.656  87.122  34.394  1.00 4.70   1
. .
ATOM 1023 CB   CB   . LEU LEU LEU A A 136 136 . 80.303  87.067  32.988  1.00 3.31   1
. .
ATOM 1024 CG   CG   . LEU LEU LEU A A 136 136 . 79.401  86.713  31.858  1.00 3.04   1
. .
ATOM 1025 CD1  CD1  . LEU LEU LEU A A 136 136 . 80.133  86.776  30.486  1.00 2.00   1
. .
ATOM 1026 CD2  CD2  . LEU LEU LEU A A 136 136 . 78.890  85.268  32.091  1.00 3.85   1
. .
ATOM 1027 C    C    . LEU LEU LEU A A 136 136 . 80.768  87.304  35.406  1.00 4.63   1
. .
ATOM 1028 O    O    . LEU LEU LEU A A 136 136 . 81.299  86.315  35.896  1.00 8.25   1
. .
ATOM 1029 N    N    . ALA ALA ALA A A 137 137 . 81.077  88.546  35.798  1.00 5.28   1
. .
ATOM 1030 CA   CA   . ALA ALA ALA A A 137 137 . 82.222  88.790  36.645  1.00 5.63   1
. .
ATOM 1031 CB   CB   . ALA ALA ALA A A 137 137 . 82.948  90.107  36.198  1.00 5.82   1
. .
ATOM 1032 C    C    . ALA ALA ALA A A 137 137 . 81.768  88.922  38.111  1.00 7.17   1
. .
ATOM 1033 O    O    . ALA ALA ALA A A 137 137 . 82.597  89.098  38.999  1.00 9.05   1
. .
ATOM 1034 N    N    . GLY GLY GLY A A 138 138 . 80.451  88.931  38.314  1.00 7.61   1
. .
ATOM 1035 CA   CA   . GLY GLY GLY A A 138 138 . 79.921  89.105  39.656  1.00 9.20   1
. .
ATOM 1036 C    C    . GLY GLY GLY A A 138 138 . 79.984  90.516  40.195  1.00 10.04  1
. .
ATOM 1037 O    O    . GLY GLY GLY A A 138 138 . 80.149  90.724  41.408  1.00 13.33  1
. .
ATOM 1038 N    N    . ASN ASN ASN A A 139 139 . 79.774  91.474  39.323  1.00 10.47  1
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ATOM 1039 CA   CA   . ASN ASN ASN A A 139 139 . 79.727  92.849  39.703  1.00 10.95  1
. .
ATOM 1040 CB   CB   . ASN ASN ASN A A 139 139 . 80.693  93.696  38.838  1.00 8.92   1
. .
ATOM 1041 CG   CG   . ASN ASN ASN A A 139 139 . 82.169  93.285  38.967  1.00 9.19   1
. .
ATOM 1042 OD1  OD1  . ASN ASN ASN A A 139 139 . 82.637  92.833  40.033  1.00 14.76  1
. .
ATOM 1043 ND2  ND2  . ASN ASN ASN A A 139 139 . 82.936  93.491  37.889  1.00 8.79   1
. .
ATOM 1044 C    C    . ASN ASN ASN A A 139 139 . 78.334  93.382  39.551  1.00 12.48  1
. .
ATOM 1045 O    O    . ASN ASN ASN A A 139 139 . 77.626  92.916  38.688  1.00 13.14  1
. .
ATOM 1046 N    N    . SER SER SER A A 140 140 . 77.974  94.386  40.375  1.00 16.25  1
. .
ATOM 1047 CA   CA   . SER SER SER A A 140 140 . 76.665  95.097  40.312  1.00 19.80  1
. .
ATOM 1048 CB   CB   . SER SER SER A A 140 140 . 75.896  94.935  41.630  1.00 20.15  1
. .
ATOM 1049 OG   OG   . SER SER SER A A 140 140 . 75.694  93.574  41.961  1.00 25.86  1
. .
ATOM 1050 C    C    . SER SER SER A A 140 140 . 76.782  96.622  40.025  1.00 20.30  1
. .
ATOM 1051 O    O    . SER SER SER A A 140 140 . 75.917  97.200  39.368  1.00 21.52  1
. .
ATOM 1052 N    N    . ASP ASP ASP A A 141 141 . 77.885  97.221  40.453  1.00 19.52  1
. .
ATOM 1053 CA   CA   . ASP ASP ASP A A 141 141 . 78.075  98.661  40.485  1.00 19.04  1
. .
ATOM 1054 CB   CB   . ASP ASP ASP A A 141 141 . 78.459  99.091  41.906  1.00 19.69  1
. .
ATOM 1055 CG   CG   . ASP ASP ASP A A 141 141 . 77.400  98.686  42.925  1.00 24.98  1
. .
ATOM 1056 OD1  OD1  . ASP ASP ASP A A 141 141 . 77.742  97.990  43.908  1.00 32.48  1
. .
ATOM 1057 OD2  OD2  . ASP ASP ASP A A 141 141 . 76.208  98.988  42.700  1.00 27.61  1
. .
ATOM 1058 C    C    . ASP ASP ASP A A 141 141 . 79.082  99.185  39.453  1.00 16.58  1
. .
ATOM 1059 O    O    . ASP ASP ASP A A 141 141 . 80.274  99.295  39.702  1.00 17.45  1
. .
ATOM 1060 N    N    . LEU LEU LEU A A 142 142 . 78.554  99.504  38.284  1.00 12.43  1
. .
ATOM 1061 CA   CA   . LEU LEU LEU A A 142 142 . 79.347  99.815  37.126  1.00 7.80   1
. .
ATOM 1062 CB   CB   . LEU LEU LEU A A 142 142 . 78.462  99.854  35.898  1.00 4.94   1
. .
ATOM 1063 CG   CG   . LEU LEU LEU A A 142 142 . 77.417  98.766  35.624  1.00 9.85   1
. .
ATOM 1064 CD1  CD1  . LEU LEU LEU A A 142 142 . 76.260  99.267  34.769  1.00 14.10  1
. .
ATOM 1065 CD2  CD2  . LEU LEU LEU A A 142 142 . 78.050  97.544  34.997  1.00 11.80  1
. .
ATOM 1066 C    C    . LEU LEU LEU A A 142 142 . 80.017  101.150 37.229  1.00 7.24   1
. .
ATOM 1067 O    O    . LEU LEU LEU A A 142 142 . 79.512  102.102 37.890  1.00 7.93   1
. .
ATOM 1068 N    N    . ILE ILE ILE A A 143 143 . 81.163  101.273 36.558  1.00 5.60   1
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ATOM 1069 CA   CA   . ILE ILE ILE A A 143 143 . 81.885  102.536 36.640  1.00 4.84   1
. .
ATOM 1070 CB   CB   . ILE ILE ILE A A 143 143 . 83.007  102.551 37.772  1.00 8.25   1
. .
ATOM 1071 CG1  CG1  . ILE ILE ILE A A 143 143 . 84.324  102.059 37.282  1.00 12.91  1
. .
ATOM 1072 CD1  CD1  . ILE ILE ILE A A 143 143 . 85.207  103.201 36.912  1.00 15.57  1
. .
ATOM 1073 CG2  CG2  . ILE ILE ILE A A 143 143 . 82.612  101.769 39.067  1.00 11.94  1
. .
ATOM 1074 C    C    . ILE ILE ILE A A 143 143 . 82.500  102.866 35.274  1.00 2.00   1
. .
ATOM 1075 O    O    . ILE ILE ILE A A 143 143 . 82.920  101.988 34.566  1.00 3.58   1
. .
ATOM 1076 N    N    . LEU LEU LEU A A 144 144 . 82.465  104.165 34.939  1.00 2.00   1
. .
ATOM 1077 CA   CA   . LEU LEU LEU A A 144 144 . 83.129  104.602 33.670  1.00 2.00   1
. .
ATOM 1078 CB   CB   . LEU LEU LEU A A 144 144 . 82.476  105.830 33.162  1.00 2.00   1
. .
ATOM 1079 CG   CG   . LEU LEU LEU A A 144 144 . 81.239  105.768 32.276  1.00 2.03   1
. .
ATOM 1080 CD1  CD1  . LEU LEU LEU A A 144 144 . 81.510  105.116 30.889  1.00 3.17   1
. .
ATOM 1081 CD2  CD2  . LEU LEU LEU A A 144 144 . 80.051  105.010 32.816  1.00 2.92   1
. .
ATOM 1082 C    C    . LEU LEU LEU A A 144 144 . 84.594  104.843 33.996  1.00 2.00   1
. .
ATOM 1083 O    O    . LEU LEU LEU A A 144 144 . 84.916  105.448 35.052  1.00 2.05   1
. .
ATOM 1084 N    N    . PRO PRO PRO A A 145 145 . 85.497  104.359 33.172  1.00 2.00   1
. .
ATOM 1085 CA   CA   . PRO PRO PRO A A 145 145 . 86.895  104.428 33.446  1.00 2.00   1
. .
ATOM 1086 CB   CB   . PRO PRO PRO A A 145 145 . 87.458  103.362 32.459  1.00 2.00   1
. .
ATOM 1087 CG   CG   . PRO PRO PRO A A 145 145 . 86.585  103.501 31.260  1.00 2.00   1
. .
ATOM 1088 CD   CD   . PRO PRO PRO A A 145 145 . 85.196  103.740 31.837  1.00 2.08   1
. .
ATOM 1089 C    C    . PRO PRO PRO A A 145 145 . 87.489  105.781 33.079  1.00 2.00   1
. .
ATOM 1090 O    O    . PRO PRO PRO A A 145 145 . 86.936  106.538 32.221  1.00 2.00   1
. .
ATOM 1091 N    N    . VAL VAL VAL A A 146 146 . 88.660  106.117 33.687  1.00 2.00   1
. .
ATOM 1092 CA   CA   . VAL VAL VAL A A 146 146 . 89.415  107.235 33.071  1.00 2.00   1
. .
ATOM 1093 CB   CB   . VAL VAL VAL A A 146 146 . 90.484  107.704 34.035  1.00 2.38   1
. .
ATOM 1094 CG1  CG1  . VAL VAL VAL A A 146 146 . 91.449  108.698 33.371  1.00 2.02   1
. .
ATOM 1095 CG2  CG2  . VAL VAL VAL A A 146 146 . 89.803  108.276 35.364  1.00 2.87   1
. .
ATOM 1096 C    C    . VAL VAL VAL A A 146 146 . 90.080  106.671 31.814  1.00 2.00   1
. .
ATOM 1097 O    O    . VAL VAL VAL A A 146 146 . 90.625  105.594 31.866  1.00 2.00   1
. .
ATOM 1098 N    N    . PRO PRO PRO A A 147 147 . 89.980  107.383 30.664  1.00 2.00   1
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ATOM 1099 CA   CA   . PRO PRO PRO A A 147 147 . 90.680  106.954 29.451  1.00 2.00   1
. .
ATOM 1100 CB   CB   . PRO PRO PRO A A 147 147 . 89.947  107.712 28.323  1.00 2.00   1
. .
ATOM 1101 CG   CG   . PRO PRO PRO A A 147 147 . 89.400  108.991 29.020  1.00 2.00   1
. .
ATOM 1102 CD   CD   . PRO PRO PRO A A 147 147 . 89.181  108.592 30.473  1.00 2.00   1
. .
ATOM 1103 C    C    . PRO PRO PRO A A 147 147 . 92.130  107.385 29.528  1.00 2.00   1
. .
ATOM 1104 O    O    . PRO PRO PRO A A 147 147 . 92.416  108.519 30.028  1.00 2.26   1
. .
ATOM 1105 N    N    . ALA ALA ALA A A 148 148 . 93.034  106.542 29.054  1.00 2.00   1
. .
ATOM 1106 CA   CA   . ALA ALA ALA A A 148 148 . 94.437  106.904 28.904  1.00 2.00   1
. .
ATOM 1107 CB   CB   . ALA ALA ALA A A 148 148 . 95.347  105.822 29.640  1.00 2.00   1
. .
ATOM 1108 C    C    . ALA ALA ALA A A 148 148 . 94.737  107.031 27.440  1.00 2.00   1
. .
ATOM 1109 O    O    . ALA ALA ALA A A 148 148 . 94.798  105.987 26.735  1.00 2.07   1
. .
ATOM 1110 N    N    . PHE PHE PHE A A 149 149 . 94.962  108.263 26.965  1.00 2.00   1
. .
ATOM 1111 CA   CA   . PHE PHE PHE A A 149 149 . 95.069  108.529 25.534  1.00 2.00   1
. .
ATOM 1112 CB   CB   . PHE PHE PHE A A 149 149 . 94.450  109.893 25.119  1.00 2.00   1
. .
ATOM 1113 CG   CG   . PHE PHE PHE A A 149 149 . 93.022  110.036 25.438  1.00 2.00   1
. .
ATOM 1114 CD1  CD1  . PHE PHE PHE A A 149 149 . 92.071  109.457 24.628  1.00 2.00   1
. .
ATOM 1115 CE1  CE1  . PHE PHE PHE A A 149 149 . 90.702  109.619 24.883  1.00 2.00   1
. .
ATOM 1116 CZ   CZ   . PHE PHE PHE A A 149 149 . 90.296  110.416 25.979  1.00 2.05   1
. .
ATOM 1117 CE2  CE2  . PHE PHE PHE A A 149 149 . 91.203  111.010 26.831  1.00 2.00   1
. .
ATOM 1118 CD2  CD2  . PHE PHE PHE A A 149 149 . 92.604  110.831 26.569  1.00 2.00   1
. .
ATOM 1119 C    C    . PHE PHE PHE A A 149 149 . 96.519  108.519 25.163  1.00 2.00   1
. .
ATOM 1120 O    O    . PHE PHE PHE A A 149 149 . 97.276  109.381 25.644  1.00 2.00   1
. .
ATOM 1121 N    N    . ASN ASN ASN A A 150 150 . 96.933  107.658 24.225  1.00 2.00   1
. .
ATOM 1122 CA   CA   . ASN ASN ASN A A 150 150 . 98.339  107.608 23.779  1.00 2.00   1
. .
ATOM 1123 CB   CB   . ASN ASN ASN A A 150 150 . 98.587  106.162 23.228  1.00 2.20   1
. .
ATOM 1124 CG   CG   . ASN ASN ASN A A 150 150 . 99.988  105.902 22.688  1.00 4.96   1
. .
ATOM 1125 OD1  OD1  . ASN ASN ASN A A 150 150 . 100.206 104.883 22.018  1.00 6.00   1
. .
ATOM 1126 ND2  ND2  . ASN ASN ASN A A 150 150 . 100.917 106.773 22.933  1.00 2.04   1
. .
ATOM 1127 C    C    . ASN ASN ASN A A 150 150 . 98.581  108.651 22.708  1.00 2.00   1
. .
ATOM 1128 O    O    . ASN ASN ASN A A 150 150 . 98.458  108.362 21.507  1.00 2.29   1
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ATOM 1129 N    N    . VAL VAL VAL A A 151 151 . 99.013  109.826 23.122  1.00 2.00   1
. .
ATOM 1130 CA   CA   . VAL VAL VAL A A 151 151 . 99.096  110.982 22.239  1.00 2.00   1
. .
ATOM 1131 CB   CB   . VAL VAL VAL A A 151 151 . 98.652  112.244 22.951  1.00 2.03   1
. .
ATOM 1132 CG1  CG1  . VAL VAL VAL A A 151 151 . 97.224  112.063 23.385  1.00 2.24   1
. .
ATOM 1133 CG2  CG2  . VAL VAL VAL A A 151 151 . 99.543  112.566 24.160  1.00 2.67   1
. .
ATOM 1134 C    C    . VAL VAL VAL A A 151 151 . 100.459 111.220 21.570  1.00 2.00   1
. .
ATOM 1135 O    O    . VAL VAL VAL A A 151 151 . 100.489 112.022 20.590  1.00 2.00   1
. .
ATOM 1136 N    N    . ILE ILE ILE A A 152 152 . 101.509 110.599 22.055  1.00 2.00   1
. .
ATOM 1137 CA   CA   . ILE ILE ILE A A 152 152 . 102.797 110.538 21.310  1.00 2.00   1
. .
ATOM 1138 CB   CB   . ILE ILE ILE A A 152 152 . 103.908 111.416 21.943  1.00 2.00   1
. .
ATOM 1139 CG1  CG1  . ILE ILE ILE A A 152 152 . 103.561 112.911 21.846  1.00 2.27   1
. .
ATOM 1140 CD1  CD1  . ILE ILE ILE A A 152 152 . 104.687 113.780 22.531  1.00 4.94   1
. .
ATOM 1141 CG2  CG2  . ILE ILE ILE A A 152 152 . 105.289 111.097 21.234  1.00 2.10   1
. .
ATOM 1142 C    C    . ILE ILE ILE A A 152 152 . 103.220 109.101 21.196  1.00 2.00   1
. .
ATOM 1143 O    O    . ILE ILE ILE A A 152 152 . 103.305 108.417 22.265  1.00 2.33   1
. .
ATOM 1144 N    N    . ASN ASN ASN A A 153 153 . 103.465 108.653 19.985  1.00 2.00   1
. .
ATOM 1145 CA   CA   . ASN ASN ASN A A 153 153 . 103.769 107.225 19.757  1.00 2.00   1
. .
ATOM 1146 CB   CB   . ASN ASN ASN A A 153 153 . 102.980 106.670 18.577  1.00 2.00   1
. .
ATOM 1147 CG   CG   . ASN ASN ASN A A 153 153 . 101.466 106.633 18.812  1.00 2.06   1
. .
ATOM 1148 OD1  OD1  . ASN ASN ASN A A 153 153 . 100.968 106.941 19.929  1.00 5.58   1
. .
ATOM 1149 ND2  ND2  . ASN ASN ASN A A 153 153 . 100.743 106.350 17.763  1.00 2.00   1
. .
ATOM 1150 C    C    . ASN ASN ASN A A 153 153 . 105.284 107.083 19.428  1.00 2.02   1
. .
ATOM 1151 O    O    . ASN ASN ASN A A 153 153 . 105.853 107.906 18.707  1.00 2.44   1
. .
ATOM 1152 N    N    . GLY GLY GLY A A 154 154 . 105.872 106.026 19.929  1.00 2.00   1
. .
ATOM 1153 CA   CA   . GLY GLY GLY A A 154 154 . 107.314 105.740 19.695  1.00 2.00   1
. .
ATOM 1154 C    C    . GLY GLY GLY A A 154 154 . 107.474 104.224 19.633  1.00 2.00   1
. .
ATOM 1155 O    O    . GLY GLY GLY A A 154 154 . 106.505 103.543 19.301  1.00 2.00   1
. .
ATOM 1156 N    N    . GLY GLY GLY A A 155 155 . 108.653 103.732 19.937  1.00 2.00   1
. .
ATOM 1157 CA   CA   . GLY GLY GLY A A 155 155 . 108.903 102.257 19.913  1.00 2.00   1
. .
ATOM 1158 C    C    . GLY GLY GLY A A 155 155 . 108.558 101.616 18.596  1.00 2.00   1
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ATOM 1159 O    O    . GLY GLY GLY A A 155 155 . 108.738 102.234 17.522  1.00 2.41   1
. .
ATOM 1160 N    N    . SER SER SER A A 156 156 . 108.059 100.349 18.671  1.00 2.22   1
. .
ATOM 1161 CA   CA   . SER SER SER A A 156 156 . 107.551 99.654  17.473  1.00 3.37   1
. .
ATOM 1162 CB   CB   . SER SER SER A A 156 156 . 107.380 98.146  17.801  1.00 6.15   1
. .
ATOM 1163 OG   OG   . SER SER SER A A 156 156 . 108.518 97.700  18.495  1.00 11.24  1
. .
ATOM 1164 C    C    . SER SER SER A A 156 156 . 106.254 100.145 16.873  1.00 2.46   1
. .
ATOM 1165 O    O    . SER SER SER A A 156 156 . 105.741 99.457  15.936  1.00 4.52   1
. .
ATOM 1166 N    N    . HIS HIS HIS A A 157 157 . 105.738 101.287 17.309  1.00 2.13   1
. .
ATOM 1167 CA   CA   . HIS HIS HIS A A 157 157 . 104.528 101.802 16.785  1.00 2.00   1
. .
ATOM 1168 CB   CB   . HIS HIS HIS A A 157 157 . 103.553 102.237 17.906  1.00 2.00   1
. .
ATOM 1169 CG   CG   . HIS HIS HIS A A 157 157 . 103.030 101.100 18.721  1.00 2.13   1
. .
ATOM 1170 ND1  ND1  . HIS HIS HIS A A 157 157 . 102.246 101.300 19.847  1.00 2.00   1
. .
ATOM 1171 CE1  CE1  . HIS HIS HIS A A 157 157 . 101.938 100.098 20.342  1.00 2.12   1
. .
ATOM 1172 NE2  NE2  . HIS HIS HIS A A 157 157 . 102.511 99.152  19.604  1.00 2.20   1
. .
ATOM 1173 CD2  CD2  . HIS HIS HIS A A 157 157 . 103.202 99.750  18.574  1.00 2.62   1
. .
ATOM 1174 C    C    . HIS HIS HIS A A 157 157 . 104.694 103.064 15.901  1.00 2.00   1
. .
ATOM 1175 O    O    . HIS HIS HIS A A 157 157 . 103.707 103.602 15.369  1.00 2.37   1
. .
ATOM 1176 N    N    . ALA ALA ALA A A 158 158 . 105.918 103.555 15.772  1.00 2.00   1
. .
ATOM 1177 CA   CA   . ALA ALA ALA A A 158 158 . 106.067 104.824 15.002  1.00 2.00   1
. .
ATOM 1178 CB   CB   . ALA ALA ALA A A 158 158 . 105.912 106.003 15.933  1.00 2.00   1
. .
ATOM 1179 C    C    . ALA ALA ALA A A 158 158 . 107.436 104.883 14.387  1.00 2.49   1
. .
ATOM 1180 O    O    . ALA ALA ALA A A 158 158 . 108.326 104.191 14.886  1.00 3.76   1
. .
ATOM 1181 N    N    . GLY GLY GLY A A 159 159 . 107.519 105.670 13.298  1.00 4.27   1
. .
ATOM 1182 CA   CA   . GLY GLY GLY A A 159 159 . 108.748 105.908 12.535  1.00 4.39   1
. .
ATOM 1183 C    C    . GLY GLY GLY A A 159 159 . 109.380 107.178 13.123  1.00 5.10   1
. .
ATOM 1184 O    O    . GLY GLY GLY A A 159 159 . 109.130 108.298 12.674  1.00 8.72   1
. .
ATOM 1185 N    N    . ASN ASN ASN A A 160 160 . 110.115 106.944 14.203  1.00 3.71   1
. .
ATOM 1186 CA   CA   . ASN ASN ASN A A 160 160 . 110.951 107.964 14.863  1.00 4.45   1
. .
ATOM 1187 CB   CB   . ASN ASN ASN A A 160 160 . 110.123 108.929 15.763  1.00 2.99   1
. .
ATOM 1188 CG   CG   . ASN ASN ASN A A 160 160 . 109.173 108.188 16.767  1.00 2.00   1
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ATOM 1189 OD1  OD1  . ASN ASN ASN A A 160 160 . 109.245 106.998 16.935  1.00 2.65   1
. .
ATOM 1190 ND2  ND2  . ASN ASN ASN A A 160 160 . 108.277 108.918 17.351  1.00 2.81   1
. .
ATOM 1191 C    C    . ASN ASN ASN A A 160 160 . 112.036 107.205 15.637  1.00 2.75   1
. .
ATOM 1192 O    O    . ASN ASN ASN A A 160 160 . 112.001 105.975 15.700  1.00 4.16   1
. .
ATOM 1193 N    N    . LYS LYS LYS A A 161 161 . 112.971 107.928 16.260  1.00 3.98   1
. .
ATOM 1194 CA   CA   . LYS LYS LYS A A 161 161 . 113.949 107.303 17.092  1.00 3.78   1
. .
ATOM 1195 CB   CB   . LYS LYS LYS A A 161 161 . 115.126 108.291 17.285  1.00 5.22   1
. .
ATOM 1196 CG   CG   . LYS LYS LYS A A 161 161 . 115.927 108.445 16.003  1.00 5.97   1
. .
ATOM 1197 CD   CD   . LYS LYS LYS A A 161 161 . 117.257 109.130 16.326  1.00 12.72  1
. .
ATOM 1198 CE   CE   . LYS LYS LYS A A 161 161 . 118.101 109.345 15.091  1.00 18.34  1
. .
ATOM 1199 NZ   NZ   . LYS LYS LYS A A 161 161 . 119.486 109.771 15.516  1.00 20.01  1
. .
ATOM 1200 C    C    . LYS LYS LYS A A 161 161 . 113.445 106.927 18.476  1.00 3.44   1
. .
ATOM 1201 O    O    . LYS LYS LYS A A 161 161 . 114.002 106.060 19.110  1.00 4.42   1
. .
ATOM 1202 N    N    . LEU LEU LEU A A 162 162 . 112.453 107.681 18.954  1.00 3.74   1
. .
ATOM 1203 CA   CA   . LEU LEU LEU A A 162 162 . 111.884 107.548 20.291  1.00 2.57   1
. .
ATOM 1204 CB   CB   . LEU LEU LEU A A 162 162 . 110.540 108.283 20.254  1.00 3.06   1
. .
ATOM 1205 CG   CG   . LEU LEU LEU A A 162 162 . 109.877 108.596 21.592  1.00 2.86   1
. .
ATOM 1206 CD1  CD1  . LEU LEU LEU A A 162 162 . 110.746 109.527 22.536  1.00 3.40   1
. .
ATOM 1207 CD2  CD2  . LEU LEU LEU A A 162 162 . 108.511 109.208 21.288  1.00 3.14   1
. .
ATOM 1208 C    C    . LEU LEU LEU A A 162 162 . 111.730 106.085 20.693  1.00 3.96   1
. .
ATOM 1209 O    O    . LEU LEU LEU A A 162 162 . 110.940 105.369 20.079  1.00 3.94   1
. .
ATOM 1210 N    N    . ALA ALA ALA A A 163 163 . 112.440 105.639 21.731  1.00 2.58   1
. .
ATOM 1211 CA   CA   . ALA ALA ALA A A 163 163 . 112.397 104.183 21.994  1.00 2.08   1
. .
ATOM 1212 CB   CB   . ALA ALA ALA A A 163 163 . 113.629 103.717 22.717  1.00 4.23   1
. .
ATOM 1213 C    C    . ALA ALA ALA A A 163 163 . 111.155 103.827 22.787  1.00 2.47   1
. .
ATOM 1214 O    O    . ALA ALA ALA A A 163 163 . 110.604 102.737 22.569  1.00 2.39   1
. .
ATOM 1215 N    N    . MET MET MET A A 164 164 . 110.747 104.661 23.744  1.00 2.34   1
. .
ATOM 1216 CA   CA   . MET MET MET A A 164 164 . 109.593 104.257 24.560  1.00 2.84   1
. .
ATOM 1217 CB   CB   . MET MET MET A A 164 164 . 109.575 105.029 25.895  1.00 3.80   1
. .
ATOM 1218 CG   CG   . MET MET MET A A 164 164 . 110.873 104.694 26.691  1.00 3.19   1
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ATOM 1219 SD   SD   . MET MET MET A A 164 164 . 110.883 105.614 28.226  1.00 5.96   1
. .
ATOM 1220 CE   CE   . MET MET MET A A 164 164 . 112.561 105.231 28.696  1.00 6.29   1
. .
ATOM 1221 C    C    . MET MET MET A A 164 164 . 108.302 104.354 23.704  1.00 2.00   1
. .
ATOM 1222 O    O    . MET MET MET A A 164 164 . 108.141 105.181 22.829  1.00 2.78   1
. .
ATOM 1223 N    N    . GLN GLN GLN A A 165 165 . 107.389 103.430 23.983  1.00 2.00   1
. .
ATOM 1224 CA   CA   . GLN GLN GLN A A 165 165 . 106.302 103.138 23.060  1.00 2.00   1
. .
ATOM 1225 CB   CB   . GLN GLN GLN A A 165 165 . 105.816 101.708 23.281  1.00 2.00   1
. .
ATOM 1226 CG   CG   . GLN GLN GLN A A 165 165 . 104.789 101.239 22.305  1.00 2.10   1
. .
ATOM 1227 CD   CD   . GLN GLN GLN A A 165 165 . 104.412 99.804  22.596  1.00 2.27   1
. .
ATOM 1228 OE1  OE1  . GLN GLN GLN A A 165 165 . 105.085 98.898  22.112  1.00 3.18   1
. .
ATOM 1229 NE2  NE2  . GLN GLN GLN A A 165 165 . 103.342 99.586  23.326  1.00 2.71   1
. .
ATOM 1230 C    C    . GLN GLN GLN A A 165 165 . 105.136 104.116 23.149  1.00 2.00   1
. .
ATOM 1231 O    O    . GLN GLN GLN A A 165 165 . 104.604 104.580 22.134  1.00 2.00   1
. .
ATOM 1232 N    N    . GLU GLU GLU A A 166 166 . 104.696 104.454 24.375  1.00 2.00   1
. .
ATOM 1233 CA   CA   . GLU GLU GLU A A 166 166 . 103.471 105.248 24.506  1.00 2.00   1
. .
ATOM 1234 CB   CB   . GLU GLU GLU A A 166 166 . 102.262 104.340 24.857  1.00 2.00   1
. .
ATOM 1235 CG   CG   . GLU GLU GLU A A 166 166 . 102.111 103.077 24.007  1.00 3.86   1
. .
ATOM 1236 CD   CD   . GLU GLU GLU A A 166 166 . 101.076 102.096 24.486  1.00 4.00   1
. .
ATOM 1237 OE1  OE1  . GLU GLU GLU A A 166 166 . 100.231 102.408 25.400  1.00 5.23   1
. .
ATOM 1238 OE2  OE2  . GLU GLU GLU A A 166 166 . 101.047 100.980 23.883  1.00 5.45   1
. .
ATOM 1239 C    C    . GLU GLU GLU A A 166 166 . 103.591 106.312 25.604  1.00 2.00   1
. .
ATOM 1240 O    O    . GLU GLU GLU A A 166 166 . 104.002 106.020 26.761  1.00 2.00   1
. .
ATOM 1241 N    N    . PHE PHE PHE A A 167 167 . 103.127 107.519 25.268  1.00 2.00   1
. .
ATOM 1242 CA   CA   . PHE PHE PHE A A 167 167 . 103.001 108.603 26.220  1.00 2.19   1
. .
ATOM 1243 CB   CB   . PHE PHE PHE A A 167 167 . 103.883 109.777 25.734  1.00 2.00   1
. .
ATOM 1244 CG   CG   . PHE PHE PHE A A 167 167 . 105.368 109.376 25.705  1.00 2.64   1
. .
ATOM 1245 CD1  CD1  . PHE PHE PHE A A 167 167 . 105.877 108.629 24.619  1.00 3.91   1
. .
ATOM 1246 CE1  CE1  . PHE PHE PHE A A 167 167 . 107.231 108.193 24.595  1.00 2.76   1
. .
ATOM 1247 CZ   CZ   . PHE PHE PHE A A 167 167 . 108.055 108.481 25.636  1.00 4.28   1
. .
ATOM 1248 CE2  CE2  . PHE PHE PHE A A 167 167 . 107.555 109.212 26.720  1.00 5.98   1
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ATOM 1249 CD2  CD2  . PHE PHE PHE A A 167 167 . 106.205 109.638 26.770  1.00 4.67   1
. .
ATOM 1250 C    C    . PHE PHE PHE A A 167 167 . 101.568 109.019 26.299  1.00 2.00   1
. .
ATOM 1251 O    O    . PHE PHE PHE A A 167 167 . 101.010 109.509 25.320  1.00 2.00   1
. .
ATOM 1252 N    N    . MET MET MET A A 168 168 . 100.974 108.765 27.454  1.00 2.00   1
. .
ATOM 1253 CA   CA   . MET MET MET A A 168 168 . 99.530  108.821 27.597  1.00 2.00   1
. .
ATOM 1254 CB   CB   . MET MET MET A A 168 168 . 99.005  107.494 28.203  1.00 2.00   1
. .
ATOM 1255 CG   CG   . MET MET MET A A 168 168 . 99.040  106.378 27.147  1.00 2.79   1
. .
ATOM 1256 SD   SD   . MET MET MET A A 168 168 . 98.558  104.829 27.946  1.00 5.42   1
. .
ATOM 1257 CE   CE   . MET MET MET A A 168 168 . 100.132 104.189 28.415  1.00 4.04   1
. .
ATOM 1258 C    C    . MET MET MET A A 168 168 . 99.073  109.990 28.452  1.00 2.00   1
. .
ATOM 1259 O    O    . MET MET MET A A 168 168 . 99.835  110.429 29.353  1.00 2.00   1
. .
ATOM 1260 N    N    . ILE ILE ILE A A 169 169 . 97.880  110.550 28.214  1.00 2.00   1
. .
ATOM 1261 CA   CA   . ILE ILE ILE A A 169 169 . 97.332  111.546 29.145  1.00 2.00   1
. .
ATOM 1262 CB   CB   . ILE ILE ILE A A 169 169 . 97.074  112.917 28.459  1.00 2.00   1
. .
ATOM 1263 CG1  CG1  . ILE ILE ILE A A 169 169 . 96.222  112.783 27.179  1.00 2.12   1
. .
ATOM 1264 CD1  CD1  . ILE ILE ILE A A 169 169 . 95.693  114.098 26.662  1.00 3.65   1
. .
ATOM 1265 CG2  CG2  . ILE ILE ILE A A 169 169 . 98.399  113.566 28.110  1.00 2.07   1
. .
ATOM 1266 C    C    . ILE ILE ILE A A 169 169 . 96.024  110.913 29.699  1.00 2.00   1
. .
ATOM 1267 O    O    . ILE ILE ILE A A 169 169 . 95.297  110.197 29.012  1.00 2.00   1
. .
ATOM 1268 N    N    . LEU LEU LEU A A 170 170 . 95.842  111.089 31.003  1.00 2.00   1
. .
ATOM 1269 CA   CA   . LEU LEU LEU A A 170 170 . 94.747  110.602 31.773  1.00 2.00   1
. .
ATOM 1270 CB   CB   . LEU LEU LEU A A 170 170 . 95.323  109.694 32.930  1.00 2.00   1
. .
ATOM 1271 CG   CG   . LEU LEU LEU A A 170 170 . 95.780  108.277 32.474  1.00 2.00   1
. .
ATOM 1272 CD1  CD1  . LEU LEU LEU A A 170 170 . 97.173  108.303 31.806  1.00 3.53   1
. .
ATOM 1273 CD2  CD2  . LEU LEU LEU A A 170 170 . 95.888  107.470 33.759  1.00 5.84   1
. .
ATOM 1274 C    C    . LEU LEU LEU A A 170 170 . 93.983  111.750 32.420  1.00 2.00   1
. .
ATOM 1275 O    O    . LEU LEU LEU A A 170 170 . 94.488  112.307 33.386  1.00 2.00   1
. .
ATOM 1276 N    N    . PRO PRO PRO A A 171 171 . 92.782  112.082 31.950  1.00 2.00   1
. .
ATOM 1277 CA   CA   . PRO PRO PRO A A 171 171 . 91.989  113.174 32.544  1.00 2.00   1
. .
ATOM 1278 CB   CB   . PRO PRO PRO A A 171 171 . 90.992  113.540 31.466  1.00 2.00   1
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ATOM 1279 CG   CG   . PRO PRO PRO A A 171 171 . 91.332  112.761 30.212  1.00 3.45   1
. .
ATOM 1280 CD   CD   . PRO PRO PRO A A 171 171 . 92.189  111.605 30.680  1.00 2.48   1
. .
ATOM 1281 C    C    . PRO PRO PRO A A 171 171 . 91.276  112.756 33.859  1.00 2.00   1
. .
ATOM 1282 O    O    . PRO PRO PRO A A 171 171 . 90.035  112.736 33.966  1.00 2.00   1
. .
ATOM 1283 N    N    . VAL VAL VAL A A 172 172 . 92.067  112.516 34.874  1.00 2.00   1
. .
ATOM 1284 CA   CA   . VAL VAL VAL A A 172 172 . 91.587  112.128 36.194  1.00 2.00   1
. .
ATOM 1285 CB   CB   . VAL VAL VAL A A 172 172 . 92.719  111.767 37.159  1.00 2.06   1
. .
ATOM 1286 CG1  CG1  . VAL VAL VAL A A 172 172 . 93.390  110.496 36.780  1.00 2.00   1
. .
ATOM 1287 CG2  CG2  . VAL VAL VAL A A 172 172 . 93.717  112.907 37.339  1.00 4.69   1
. .
ATOM 1288 C    C    . VAL VAL VAL A A 172 172 . 90.617  113.178 36.802  1.00 2.10   1
. .
ATOM 1289 O    O    . VAL VAL VAL A A 172 172 . 89.702  112.811 37.593  1.00 2.65   1
. .
ATOM 1290 N    N    . GLY GLY GLY A A 173 173 . 90.842  114.466 36.460  1.00 2.00   1
. .
ATOM 1291 CA   CA   . GLY GLY GLY A A 173 173 . 90.068  115.589 37.002  1.00 2.01   1
. .
ATOM 1292 C    C    . GLY GLY GLY A A 173 173 . 88.806  115.935 36.197  1.00 2.80   1
. .
ATOM 1293 O    O    . GLY GLY GLY A A 173 173 . 88.078  116.936 36.493  1.00 4.64   1
. .
ATOM 1294 N    N    . ALA ALA ALA A A 174 174 . 88.499  115.135 35.153  1.00 2.49   1
. .
ATOM 1295 CA   CA   . ALA ALA ALA A A 174 174 . 87.265  115.333 34.386  1.00 2.30   1
. .
ATOM 1296 CB   CB   . ALA ALA ALA A A 174 174 . 87.231  114.442 33.157  1.00 2.47   1
. .
ATOM 1297 C    C    . ALA ALA ALA A A 174 174 . 85.970  115.137 35.215  1.00 2.24   1
. .
ATOM 1298 O    O    . ALA ALA ALA A A 174 174 . 85.963  114.417 36.183  1.00 2.90   1
. .
ATOM 1299 N    N    . GLU GLU GLU A A 175 175 . 84.889  115.784 34.829  1.00 4.03   1
. .
ATOM 1300 CA   CA   . GLU GLU GLU A A 175 175 . 83.628  115.627 35.571  1.00 6.27   1
. .
ATOM 1301 CB   CB   . GLU GLU GLU A A 175 175 . 82.697  116.821 35.316  1.00 8.34   1
. .
ATOM 1302 CG   CG   . GLU GLU GLU A A 175 175 . 83.365  118.171 35.327  1.00 16.78  1
. .
ATOM 1303 CD   CD   . GLU GLU GLU A A 175 175 . 83.880  118.610 36.704  1.00 26.45  1
. .
ATOM 1304 OE1  OE1  . GLU GLU GLU A A 175 175 . 84.144  117.769 37.589  1.00 31.66  1
. .
ATOM 1305 OE2  OE2  . GLU GLU GLU A A 175 175 . 84.050  119.830 36.900  1.00 31.81  1
. .
ATOM 1306 C    C    . GLU GLU GLU A A 175 175 . 82.881  114.315 35.179  1.00 4.85   1
. .
ATOM 1307 O    O    . GLU GLU GLU A A 175 175 . 82.038  113.823 35.929  1.00 6.03   1
. .
ATOM 1308 N    N    . SER SER SER A A 176 176 . 83.192  113.744 34.001  1.00 2.25   1
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ATOM 1309 CA   CA   . SER SER SER A A 176 176 . 82.444  112.636 33.477  1.00 2.00   1
. .
ATOM 1310 CB   CB   . SER SER SER A A 176 176 . 81.123  113.041 32.902  1.00 2.00   1
. .
ATOM 1311 OG   OG   . SER SER SER A A 176 176 . 81.348  113.896 31.738  1.00 2.93   1
. .
ATOM 1312 C    C    . SER SER SER A A 176 176 . 83.279  111.982 32.365  1.00 2.00   1
. .
ATOM 1313 O    O    . SER SER SER A A 176 176 . 84.369  112.501 32.033  1.00 2.00   1
. .
ATOM 1314 N    N    . PHE PHE PHE A A 177 177 . 82.788  110.887 31.802  1.00 2.00   1
. .
ATOM 1315 CA   CA   . PHE PHE PHE A A 177 177 . 83.498  110.314 30.668  1.00 2.00   1
. .
ATOM 1316 CB   CB   . PHE PHE PHE A A 177 177 . 83.029  108.884 30.329  1.00 2.08   1
. .
ATOM 1317 CG   CG   . PHE PHE PHE A A 177 177 . 83.970  108.239 29.341  1.00 2.03   1
. .
ATOM 1318 CD1  CD1  . PHE PHE PHE A A 177 177 . 85.130  107.635 29.859  1.00 2.17   1
. .
ATOM 1319 CE1  CE1  . PHE PHE PHE A A 177 177 . 86.035  107.075 29.033  1.00 2.19   1
. .
ATOM 1320 CZ   CZ   . PHE PHE PHE A A 177 177 . 85.885  107.283 27.603  1.00 2.00   1
. .
ATOM 1321 CE2  CE2  . PHE PHE PHE A A 177 177 . 84.749  107.827 27.104  1.00 2.00   1
. .
ATOM 1322 CD2  CD2  . PHE PHE PHE A A 177 177 . 83.787  108.333 27.942  1.00 2.00   1
. .
ATOM 1323 C    C    . PHE PHE PHE A A 177 177 . 83.500  111.239 29.465  1.00 2.00   1
. .
ATOM 1324 O    O    . PHE PHE PHE A A 177 177 . 84.498  111.492 28.802  1.00 2.00   1
. .
ATOM 1325 N    N    . ARG ARG ARG A A 178 178 . 82.333  111.750 29.188  1.00 2.00   1
. .
ATOM 1326 CA   CA   . ARG ARG ARG A A 178 178 . 82.163  112.680 28.100  1.00 2.00   1
. .
ATOM 1327 CB   CB   . ARG ARG ARG A A 178 178 . 80.683  113.121 28.050  1.00 3.01   1
. .
ATOM 1328 CG   CG   . ARG ARG ARG A A 178 178 . 80.433  114.216 27.039  1.00 10.37  1
. .
ATOM 1329 CD   CD   . ARG ARG ARG A A 178 178 . 78.997  114.725 27.073  1.00 17.11  1
. .
ATOM 1330 NE   NE   . ARG ARG ARG A A 178 178 . 78.762  115.328 25.762  1.00 24.88  1
. .
ATOM 1331 CZ   CZ   . ARG ARG ARG A A 178 178 . 78.280  116.546 25.515  1.00 29.06  1
. .
ATOM 1332 NH1  NH1  . ARG ARG ARG A A 178 178 . 78.113  116.904 24.238  1.00 28.14  1
. .
ATOM 1333 NH2  NH2  . ARG ARG ARG A A 178 178 . 77.940  117.388 26.505  1.00 30.34  1
. .
ATOM 1334 C    C    . ARG ARG ARG A A 178 178 . 83.073  113.928 28.243  1.00 2.00   1
. .
ATOM 1335 O    O    . ARG ARG ARG A A 178 178 . 83.678  114.371 27.298  1.00 2.00   1
. .
ATOM 1336 N    N    . ASP ASP ASP A A 179 179 . 83.188  114.469 29.459  1.00 2.00   1
. .
ATOM 1337 CA   CA   . ASP ASP ASP A A 179 179 . 84.136  115.481 29.753  1.00 2.00   1
. .
ATOM 1338 CB   CB   . ASP ASP ASP A A 179 179 . 83.877  115.999 31.192  1.00 2.00   1
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ATOM 1339 CG   CG   . ASP ASP ASP A A 179 179 . 84.528  117.328 31.474  1.00 4.09   1
. .
ATOM 1340 OD1  OD1  . ASP ASP ASP A A 179 179 . 85.214  117.523 32.532  1.00 6.74   1
. .
ATOM 1341 OD2  OD2  . ASP ASP ASP A A 179 179 . 84.361  118.182 30.533  1.00 10.03  1
. .
ATOM 1342 C    C    . ASP ASP ASP A A 179 179 . 85.566  115.036 29.605  1.00 2.00   1
. .
ATOM 1343 O    O    . ASP ASP ASP A A 179 179 . 86.367  115.805 29.097  1.00 2.00   1
. .
ATOM 1344 N    N    . ALA ALA ALA A A 180 180 . 85.908  113.805 29.998  1.00 2.00   1
. .
ATOM 1345 CA   CA   . ALA ALA ALA A A 180 180 . 87.298  113.327 29.774  1.00 2.00   1
. .
ATOM 1346 CB   CB   . ALA ALA ALA A A 180 180 . 87.512  111.922 30.330  1.00 2.00   1
. .
ATOM 1347 C    C    . ALA ALA ALA A A 180 180 . 87.640  113.314 28.268  1.00 2.00   1
. .
ATOM 1348 O    O    . ALA ALA ALA A A 180 180 . 88.804  113.527 27.942  1.00 2.00   1
. .
ATOM 1349 N    N    . MET MET MET A A 181 181 . 86.676  112.927 27.419  1.00 2.00   1
. .
ATOM 1350 CA   CA   . MET MET MET A A 181 181 . 86.896  112.973 25.984  1.00 2.00   1
. .
ATOM 1351 CB   CB   . MET MET MET A A 181 181 . 85.684  112.444 25.189  1.00 2.00   1
. .
ATOM 1352 CG   CG   . MET MET MET A A 181 181 . 85.448  110.953 25.408  1.00 2.19   1
. .
ATOM 1353 SD   SD   . MET MET MET A A 181 181 . 86.874  109.894 25.128  1.00 2.23   1
. .
ATOM 1354 CE   CE   . MET MET MET A A 181 181 . 87.326  110.476 23.457  1.00 2.62   1
. .
ATOM 1355 C    C    . MET MET MET A A 181 181 . 87.246  114.377 25.483  1.00 2.00   1
. .
ATOM 1356 O    O    . MET MET MET A A 181 181 . 88.184  114.535 24.662  1.00 2.00   1
. .
ATOM 1357 N    N    . ARG ARG ARG A A 182 182 . 86.551  115.370 26.042  1.00 2.12   1
. .
ATOM 1358 CA   CA   . ARG ARG ARG A A 182 182 . 86.791  116.757 25.648  1.00 2.00   1
. .
ATOM 1359 CB   CB   . ARG ARG ARG A A 182 182 . 85.703  117.686 26.203  1.00 2.15   1
. .
ATOM 1360 CG   CG   . ARG ARG ARG A A 182 182 . 85.985  119.161 25.919  1.00 3.15   1
. .
ATOM 1361 CD   CD   . ARG ARG ARG A A 182 182 . 85.072  120.126 26.820  1.00 8.25   1
. .
ATOM 1362 NE   NE   . ARG ARG ARG A A 182 182 . 85.722  121.440 26.796  1.00 12.90  1
. .
ATOM 1363 CZ   CZ   . ARG ARG ARG A A 182 182 . 85.169  122.593 27.175  1.00 13.57  1
. .
ATOM 1364 NH1  NH1  . ARG ARG ARG A A 182 182 . 85.876  123.686 27.065  1.00 12.93  1
. .
ATOM 1365 NH2  NH2  . ARG ARG ARG A A 182 182 . 83.912  122.673 27.637  1.00 12.60  1
. .
ATOM 1366 C    C    . ARG ARG ARG A A 182 182 . 88.192  117.185 26.067  1.00 2.00   1
. .
ATOM 1367 O    O    . ARG ARG ARG A A 182 182 . 88.974  117.734 25.244  1.00 2.05   1
. .
ATOM 1368 N    N    . LEU LEU LEU A A 183 183 . 88.542  116.909 27.300  1.00 2.00   1
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ATOM 1369 CA   CA   . LEU LEU LEU A A 183 183 . 89.918  117.214 27.782  1.00 2.15   1
. .
ATOM 1370 CB   CB   . LEU LEU LEU A A 183 183 . 89.971  116.815 29.237  1.00 2.00   1
. .
ATOM 1371 CG   CG   . LEU LEU LEU A A 183 183 . 89.601  117.962 30.226  1.00 2.50   1
. .
ATOM 1372 CD1  CD1  . LEU LEU LEU A A 183 183 . 88.236  118.555 29.998  1.00 2.46   1
. .
ATOM 1373 CD2  CD2  . LEU LEU LEU A A 183 183 . 89.749  117.547 31.649  1.00 2.62   1
. .
ATOM 1374 C    C    . LEU LEU LEU A A 183 183 . 90.981  116.534 26.958  1.00 2.19   1
. .
ATOM 1375 O    O    . LEU LEU LEU A A 183 183 . 91.926  117.171 26.511  1.00 2.21   1
. .
ATOM 1376 N    N    . GLY GLY GLY A A 184 184 . 90.812  115.226 26.718  1.00 2.00   1
. .
ATOM 1377 CA   CA   . GLY GLY GLY A A 184 184 . 91.777  114.488 25.895  1.00 2.00   1
. .
ATOM 1378 C    C    . GLY GLY GLY A A 184 184 . 91.922  115.041 24.491  1.00 2.00   1
. .
ATOM 1379 O    O    . GLY GLY GLY A A 184 184 . 93.055  115.257 24.008  1.00 2.00   1
. .
ATOM 1380 N    N    . ALA ALA ALA A A 185 185 . 90.817  115.287 23.847  1.00 2.00   1
. .
ATOM 1381 CA   CA   . ALA ALA ALA A A 185 185 . 90.850  115.805 22.483  1.00 2.00   1
. .
ATOM 1382 CB   CB   . ALA ALA ALA A A 185 185 . 89.454  115.794 21.819  1.00 2.00   1
. .
ATOM 1383 C    C    . ALA ALA ALA A A 185 185 . 91.458  117.180 22.448  1.00 2.14   1
. .
ATOM 1384 O    O    . ALA ALA ALA A A 185 185 . 92.261  117.492 21.565  1.00 2.00   1
. .
ATOM 1385 N    N    . GLU GLU GLU A A 186 186 . 91.073  117.978 23.437  1.00 2.00   1
. .
ATOM 1386 CA   CA   . GLU GLU GLU A A 186 186 . 91.600  119.372 23.398  1.00 2.00   1
. .
ATOM 1387 CB   CB   . GLU GLU GLU A A 186 186 . 90.937  120.280 24.437  1.00 2.04   1
. .
ATOM 1388 CG   CG   . GLU GLU GLU A A 186 186 . 89.511  120.662 24.045  1.00 2.69   1
. .
ATOM 1389 CD   CD   . GLU GLU GLU A A 186 186 . 88.824  121.577 25.081  1.00 3.85   1
. .
ATOM 1390 OE1  OE1  . GLU GLU GLU A A 186 186 . 89.480  122.043 26.054  1.00 6.24   1
. .
ATOM 1391 OE2  OE2  . GLU GLU GLU A A 186 186 . 87.655  121.799 24.850  1.00 4.11   1
. .
ATOM 1392 C    C    . GLU GLU GLU A A 186 186 . 93.097  119.372 23.624  1.00 2.00   1
. .
ATOM 1393 O    O    . GLU GLU GLU A A 186 186 . 93.829  120.168 22.985  1.00 2.00   1
. .
ATOM 1394 N    N    . VAL VAL VAL A A 187 187 . 93.601  118.559 24.499  1.00 2.00   1
. .
ATOM 1395 CA   CA   . VAL VAL VAL A A 187 187 . 95.016  118.511 24.680  1.00 2.00   1
. .
ATOM 1396 CB   CB   . VAL VAL VAL A A 187 187 . 95.351  117.647 25.920  1.00 2.00   1
. .
ATOM 1397 CG1  CG1  . VAL VAL VAL A A 187 187 . 96.836  117.402 26.040  1.00 2.03   1
. .
ATOM 1398 CG2  CG2  . VAL VAL VAL A A 187 187 . 94.794  118.299 27.221  1.00 2.17   1
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ATOM 1399 C    C    . VAL VAL VAL A A 187 187 . 95.707  117.937 23.394  1.00 2.00   1
. .
ATOM 1400 O    O    . VAL VAL VAL A A 187 187 . 96.721  118.406 22.941  1.00 2.44   1
. .
ATOM 1401 N    N    . TYR TYR TYR A A 188 188 . 95.172  116.867 22.844  1.00 2.00   1
. .
ATOM 1402 CA   CA   . TYR TYR TYR A A 188 188 . 95.721  116.342 21.608  1.00 2.00   1
. .
ATOM 1403 CB   CB   . TYR TYR TYR A A 188 188 . 94.824  115.123 21.191  1.00 2.00   1
. .
ATOM 1404 CG   CG   . TYR TYR TYR A A 188 188 . 95.273  114.414 19.944  1.00 2.00   1
. .
ATOM 1405 CD1  CD1  . TYR TYR TYR A A 188 188 . 96.287  113.502 20.005  1.00 2.06   1
. .
ATOM 1406 CE1  CE1  . TYR TYR TYR A A 188 188 . 96.723  112.840 18.811  1.00 2.00   1
. .
ATOM 1407 CZ   CZ   . TYR TYR TYR A A 188 188 . 96.125  113.139 17.633  1.00 2.00   1
. .
ATOM 1408 OH   OH   . TYR TYR TYR A A 188 188 . 96.471  112.495 16.463  1.00 2.00   1
. .
ATOM 1409 CE2  CE2  . TYR TYR TYR A A 188 188 . 95.085  114.071 17.551  1.00 2.00   1
. .
ATOM 1410 CD2  CD2  . TYR TYR TYR A A 188 188 . 94.673  114.718 18.715  1.00 2.00   1
. .
ATOM 1411 C    C    . TYR TYR TYR A A 188 188 . 95.841  117.383 20.525  1.00 2.00   1
. .
ATOM 1412 O    O    . TYR TYR TYR A A 188 188 . 96.894  117.481 19.846  1.00 2.00   1
. .
ATOM 1413 N    N    . HIS HIS HIS A A 189 189 . 94.790  118.171 20.283  1.00 2.00   1
. .
ATOM 1414 CA   CA   . HIS HIS HIS A A 189 189 . 94.847  119.222 19.235  1.00 2.00   1
. .
ATOM 1415 CB   CB   . HIS HIS HIS A A 189 189 . 93.452  119.811 18.948  1.00 2.00   1
. .
ATOM 1416 CG   CG   . HIS HIS HIS A A 189 189 . 92.552  118.781 18.363  1.00 4.01   1
. .
ATOM 1417 ND1  ND1  . HIS HIS HIS A A 189 189 . 91.212  118.613 18.735  1.00 6.49   1
. .
ATOM 1418 CE1  CE1  . HIS HIS HIS A A 189 189 . 90.719  117.566 18.094  1.00 5.45   1
. .
ATOM 1419 NE2  NE2  . HIS HIS HIS A A 189 189 . 91.675  117.068 17.310  1.00 5.27   1
. .
ATOM 1420 CD2  CD2  . HIS HIS HIS A A 189 189 . 92.839  117.778 17.514  1.00 4.28   1
. .
ATOM 1421 C    C    . HIS HIS HIS A A 189 189 . 95.826  120.294 19.615  1.00 2.06   1
. .
ATOM 1422 O    O    . HIS HIS HIS A A 189 189 . 96.511  120.857 18.769  1.00 3.15   1
. .
ATOM 1423 N    N    . THR THR THR A A 190 190 . 95.898  120.612 20.916  1.00 2.00   1
. .
ATOM 1424 CA   CA   . THR THR THR A A 190 190 . 96.897  121.648 21.333  1.00 2.25   1
. .
ATOM 1425 CB   CB   . THR THR THR A A 190 190 . 96.658  121.938 22.792  1.00 2.47   1
. .
ATOM 1426 OG1  OG1  . THR THR THR A A 190 190 . 95.323  122.452 22.935  1.00 4.20   1
. .
ATOM 1427 CG2  CG2  . THR THR THR A A 190 190 . 97.668  122.981 23.284  1.00 3.85   1
. .
ATOM 1428 C    C    . THR THR THR A A 190 190 . 98.299  121.108 21.102  1.00 2.03   1
. .
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ATOM 1429 O    O    . THR THR THR A A 190 190 . 99.217  121.815 20.609  1.00 2.74   1
. .
ATOM 1430 N    N    . LEU LEU LEU A A 191 191 . 98.500  119.855 21.434  1.00 2.36   1
. .
ATOM 1431 CA   CA   . LEU LEU LEU A A 191 191 . 99.798  119.188 21.247  1.00 2.00   1
. .
ATOM 1432 CB   CB   . LEU LEU LEU A A 191 191 . 99.769  117.710 21.760  1.00 2.03   1
. .
ATOM 1433 CG   CG   . LEU LEU LEU A A 191 191 . 100.981 116.923 21.595  1.00 2.79   1
. .
ATOM 1434 CD1  CD1  . LEU LEU LEU A A 191 191 . 102.147 117.556 22.360  1.00 2.14   1
. .
ATOM 1435 CD2  CD2  . LEU LEU LEU A A 191 191 . 100.656 115.494 22.081  1.00 2.00   1
. .
ATOM 1436 C    C    . LEU LEU LEU A A 191 191 . 100.217 119.232 19.770  1.00 2.00   1
. .
ATOM 1437 O    O    . LEU LEU LEU A A 191 191 . 101.426 119.357 19.483  1.00 2.32   1
. .
ATOM 1438 N    N    . LYS LYS LYS A A 192 192 . 99.302  119.095 18.847  1.00 2.32   1
. .
ATOM 1439 CA   CA   . LYS LYS LYS A A 192 192 . 99.696  119.106 17.425  1.00 2.00   1
. .
ATOM 1440 CB   CB   . LYS LYS LYS A A 192 192 . 98.455  118.890 16.529  1.00 2.27   1
. .
ATOM 1441 CG   CG   . LYS LYS LYS A A 192 192 . 98.853  118.627 15.079  1.00 3.52   1
. .
ATOM 1442 CD   CD   . LYS LYS LYS A A 192 192 . 97.684  118.234 14.232  1.00 5.92   1
. .
ATOM 1443 CE   CE   . LYS LYS LYS A A 192 192 . 98.181  117.905 12.819  1.00 6.78   1
. .
ATOM 1444 NZ   NZ   . LYS LYS LYS A A 192 192 . 97.068  117.493 11.834  1.00 11.41  1
. .
ATOM 1445 C    C    . LYS LYS LYS A A 192 192 . 100.350 120.422 17.081  1.00 2.00   1
. .
ATOM 1446 O    O    . LYS LYS LYS A A 192 192 . 101.412 120.422 16.435  1.00 2.35   1
. .
ATOM 1447 N    N    . GLY GLY GLY A A 193 193 . 99.797  121.502 17.655  1.00 2.35   1
. .
ATOM 1448 CA   CA   . GLY GLY GLY A A 193 193 . 100.348 122.904 17.514  1.00 2.87   1
. .
ATOM 1449 C    C    . GLY GLY GLY A A 193 193 . 101.683 123.061 18.201  1.00 2.91   1
. .
ATOM 1450 O    O    . GLY GLY GLY A A 193 193 . 102.602 123.644 17.672  1.00 2.65   1
. .
ATOM 1451 N    N    . VAL VAL VAL A A 194 194 . 101.815 122.512 19.391  1.00 2.03   1
. .
ATOM 1452 CA   CA   . VAL VAL VAL A A 194 194 . 103.105 122.553 20.093  1.00 2.15   1
. .
ATOM 1453 CB   CB   . VAL VAL VAL A A 194 194 . 102.985 121.898 21.472  1.00 2.47   1
. .
ATOM 1454 CG1  CG1  . VAL VAL VAL A A 194 194 . 104.316 121.711 22.143  1.00 2.23   1
. .
ATOM 1455 CG2  CG2  . VAL VAL VAL A A 194 194 . 101.941 122.642 22.366  1.00 4.60   1
. .
ATOM 1456 C    C    . VAL VAL VAL A A 194 194 . 104.225 121.926 19.275  1.00 2.59   1
. .
ATOM 1457 O    O    . VAL VAL VAL A A 194 194 . 105.353 122.462 19.131  1.00 2.26   1
. .
ATOM 1458 N    N    . ILE ILE ILE A A 195 195 . 103.922 120.738 18.759  1.00 2.12   1
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ATOM 1459 CA   CA   . ILE ILE ILE A A 195 195 . 104.894 120.022 17.952  1.00 2.78   1
. .
ATOM 1460 CB   CB   . ILE ILE ILE A A 195 195 . 104.357 118.609 17.656  1.00 2.55   1
. .
ATOM 1461 CG1  CG1  . ILE ILE ILE A A 195 195 . 104.328 117.858 18.987  1.00 2.13   1
. .
ATOM 1462 CD1  CD1  . ILE ILE ILE A A 195 195 . 105.647 117.733 19.676  1.00 15.78  1
. .
ATOM 1463 CG2  CG2  . ILE ILE ILE A A 195 195 . 105.244 117.917 16.597  1.00 3.56   1
. .
ATOM 1464 C    C    . ILE ILE ILE A A 195 195 . 105.188 120.705 16.670  1.00 2.67   1
. .
ATOM 1465 O    O    . ILE ILE ILE A A 195 195 . 106.347 120.857 16.307  1.00 5.63   1
. .
ATOM 1466 N    N    . LYS LYS LYS A A 196 196 . 104.145 121.117 15.982  1.00 4.13   1
. .
ATOM 1467 CA   CA   . LYS LYS LYS A A 196 196 . 104.354 121.850 14.702  1.00 4.63   1
. .
ATOM 1468 CB   CB   . LYS LYS LYS A A 196 196 . 103.010 122.236 14.104  1.00 5.55   1
. .
ATOM 1469 CG   CG   . LYS LYS LYS A A 196 196 . 103.182 122.887 12.714  1.00 8.32   1
. .
ATOM 1470 CD   CD   . LYS LYS LYS A A 196 196 . 101.895 123.288 12.058  1.00 16.29  1
. .
ATOM 1471 CE   CE   . LYS LYS LYS A A 196 196 . 102.191 124.358 11.006  1.00 21.07  1
. .
ATOM 1472 NZ   NZ   . LYS LYS LYS A A 196 196 . 102.668 125.614 11.721  1.00 26.24  1
. .
ATOM 1473 C    C    . LYS LYS LYS A A 196 196 . 105.224 123.104 14.841  1.00 5.85   1
. .
ATOM 1474 O    O    . LYS LYS LYS A A 196 196 . 106.105 123.351 14.015  1.00 7.50   1
. .
ATOM 1475 N    N    . ASP ASP ASP A A 197 197 . 104.941 123.880 15.874  1.00 4.64   1
. .
ATOM 1476 CA   CA   . ASP ASP ASP A A 197 197 . 105.688 125.095 16.158  1.00 7.42   1
. .
ATOM 1477 CB   CB   . ASP ASP ASP A A 197 197 . 105.137 125.757 17.416  1.00 9.19   1
. .
ATOM 1478 CG   CG   . ASP ASP ASP A A 197 197 . 103.816 126.490 17.189  1.00 15.28  1
. .
ATOM 1479 OD1  OD1  . ASP ASP ASP A A 197 197 . 103.147 126.865 18.193  1.00 19.53  1
. .
ATOM 1480 OD2  OD2  . ASP ASP ASP A A 197 197 . 103.458 126.706 16.001  1.00 19.47  1
. .
ATOM 1481 C    C    . ASP ASP ASP A A 197 197 . 107.156 124.782 16.391  1.00 7.94   1
. .
ATOM 1482 O    O    . ASP ASP ASP A A 197 197 . 108.030 125.536 15.918  1.00 11.19  1
. .
ATOM 1483 N    N    . LYS LYS LYS A A 198 198 . 107.431 123.690 17.119  1.00 4.69   1
. .
ATOM 1484 CA   CA   . LYS LYS LYS A A 198 198 . 108.758 123.334 17.509  1.00 5.22   1
. .
ATOM 1485 CB   CB   . LYS LYS LYS A A 198 198 . 108.800 122.586 18.836  1.00 5.37   1
. .
ATOM 1486 CG   CG   . LYS LYS LYS A A 198 198 . 110.200 122.343 19.284  1.00 4.73   1
. .
ATOM 1487 CD   CD   . LYS LYS LYS A A 198 198 . 110.216 121.955 20.720  1.00 4.87   1
. .
ATOM 1488 CE   CE   . LYS LYS LYS A A 198 198 . 111.676 121.789 21.172  1.00 8.77   1
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ATOM 1489 NZ   NZ   . LYS LYS LYS A A 198 198 . 111.748 121.458 22.633  1.00 14.08  1
. .
ATOM 1490 C    C    . LYS LYS LYS A A 198 198 . 109.532 122.585 16.443  1.00 6.67   1
. .
ATOM 1491 O    O    . LYS LYS LYS A A 198 198 . 110.715 122.904 16.186  1.00 9.54   1
. .
ATOM 1492 N    N    . TYR TYR TYR A A 199 199 . 108.903 121.611 15.812  1.00 6.07   1
. .
ATOM 1493 CA   CA   . TYR TYR TYR A A 199 199 . 109.571 120.689 14.889  1.00 6.82   1
. .
ATOM 1494 CB   CB   . TYR TYR TYR A A 199 199 . 109.362 119.233 15.352  1.00 6.64   1
. .
ATOM 1495 CG   CG   . TYR TYR TYR A A 199 199 . 109.987 118.967 16.711  1.00 7.00   1
. .
ATOM 1496 CD1  CD1  . TYR TYR TYR A A 199 199 . 109.223 118.874 17.874  1.00 10.45  1
. .
ATOM 1497 CE1  CE1  . TYR TYR TYR A A 199 199 . 109.825 118.608 19.077  1.00 7.37   1
. .
ATOM 1498 CZ   CZ   . TYR TYR TYR A A 199 199 . 111.215 118.497 19.134  1.00 9.45   1
. .
ATOM 1499 OH   OH   . TYR TYR TYR A A 199 199 . 111.809 118.260 20.328  1.00 11.48  1
. .
ATOM 1500 CE2  CE2  . TYR TYR TYR A A 199 199 . 111.988 118.618 18.023  1.00 10.06  1
. .
ATOM 1501 CD2  CD2  . TYR TYR TYR A A 199 199 . 111.374 118.884 16.815  1.00 9.63   1
. .
ATOM 1502 C    C    . TYR TYR TYR A A 199 199 . 109.165 120.806 13.416  1.00 8.56   1
. .
ATOM 1503 O    O    . TYR TYR TYR A A 199 199 . 109.849 120.216 12.524  1.00 12.42  1
. .
ATOM 1504 N    N    . GLY GLY GLY A A 200 200 . 108.021 121.446 13.164  1.00 6.73   1
. .
ATOM 1505 CA   CA   . GLY GLY GLY A A 200 200 . 107.536 121.625 11.786  1.00 7.68   1
. .
ATOM 1506 C    C    . GLY GLY GLY A A 200 200 . 106.395 120.653 11.520  1.00 7.27   1
. .
ATOM 1507 O    O    . GLY GLY GLY A A 200 200 . 106.159 119.713 12.272  1.00 6.82   1
. .
ATOM 1508 N    N    . LYS LYS LYS A A 201 201 . 105.662 120.883 10.445  1.00 7.08   1
. .
ATOM 1509 CA   CA   . LYS LYS LYS A A 201 201 . 104.485 120.090 10.046  1.00 9.92   1
. .
ATOM 1510 CB   CB   . LYS LYS LYS A A 201 201 . 103.933 120.683 8.726   1.00 13.31  1
. .
ATOM 1511 CG   CG   . LYS LYS LYS A A 201 201 . 105.005 120.719 7.570   1.00 20.16  1
. .
ATOM 1512 CD   CD   . LYS LYS LYS A A 201 201 . 104.451 121.312 6.258   1.00 28.29  1
. .
ATOM 1513 CE   CE   . LYS LYS LYS A A 201 201 . 105.526 121.488 5.164   1.00 31.28  1
. .
ATOM 1514 NZ   NZ   . LYS LYS LYS A A 201 201 . 106.539 122.580 5.455   1.00 33.36  1
. .
ATOM 1515 C    C    . LYS LYS LYS A A 201 201 . 104.821 118.603 9.853   1.00 8.77   1
. .
ATOM 1516 O    O    . LYS LYS LYS A A 201 201 . 104.001 117.750 10.143  1.00 10.55  1
. .
ATOM 1517 N    N    . ASP ASP ASP A A 202 202 . 106.053 118.261 9.451   1.00 5.99   1
. .
ATOM 1518 CA   CA   . ASP ASP ASP A A 202 202 . 106.389 116.892 9.168   1.00 8.41   1
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ATOM 1519 CB   CB   . ASP ASP ASP A A 202 202 . 107.669 116.819 8.380   1.00 9.76   1
. .
ATOM 1520 CG   CG   . ASP ASP ASP A A 202 202 . 108.771 117.423 9.127   1.00 16.69  1
. .
ATOM 1521 OD1  OD1  . ASP ASP ASP A A 202 202 . 108.728 118.686 9.341   1.00 26.42  1
. .
ATOM 1522 OD2  OD2  . ASP ASP ASP A A 202 202 . 109.625 116.616 9.570   1.00 23.70  1
. .
ATOM 1523 C    C    . ASP ASP ASP A A 202 202 . 106.497 116.040 10.390  1.00 5.93   1
. .
ATOM 1524 O    O    . ASP ASP ASP A A 202 202 . 106.515 114.854 10.255  1.00 7.95   1
. .
ATOM 1525 N    N    . ALA ALA ALA A A 203 203 . 106.552 116.641 11.572  1.00 3.79   1
. .
ATOM 1526 CA   CA   . ALA ALA ALA A A 203 203 . 106.537 115.891 12.844  1.00 2.18   1
. .
ATOM 1527 CB   CB   . ALA ALA ALA A A 203 203 . 107.252 116.659 13.940  1.00 5.34   1
. .
ATOM 1528 C    C    . ALA ALA ALA A A 203 203 . 105.124 115.604 13.347  1.00 2.00   1
. .
ATOM 1529 O    O    . ALA ALA ALA A A 203 203 . 104.990 115.086 14.446  1.00 3.34   1
. .
ATOM 1530 N    N    . THR THR THR A A 204 204 . 104.097 115.966 12.589  1.00 2.00   1
. .
ATOM 1531 CA   CA   . THR THR THR A A 204 204 . 102.743 115.823 13.106  1.00 2.26   1
. .
ATOM 1532 CB   CB   . THR THR THR A A 204 204 . 101.916 117.118 13.034  1.00 4.95   1
. .
ATOM 1533 OG1  OG1  . THR THR THR A A 204 204 . 101.841 117.526 11.670  1.00 8.03   1
. .
ATOM 1534 CG2  CG2  . THR THR THR A A 204 204 . 102.527 118.236 13.889  1.00 9.93   1
. .
ATOM 1535 C    C    . THR THR THR A A 204 204 . 101.900 114.756 12.434  1.00 2.00   1
. .
ATOM 1536 O    O    . THR THR THR A A 204 204 . 100.691 114.770 12.638  1.00 2.86   1
. .
ATOM 1537 N    N    . ASN ASN ASN A A 205 205 . 102.522 113.880 11.647  1.00 2.00   1
. .
ATOM 1538 CA   CA   . ASN ASN ASN A A 205 205 . 101.851 112.653 11.204  1.00 2.11   1
. .
ATOM 1539 CB   CB   . ASN ASN ASN A A 205 205 . 102.565 112.080 9.938   1.00 2.00   1
. .
ATOM 1540 CG   CG   . ASN ASN ASN A A 205 205 . 102.727 113.128 8.825   1.00 2.55   1
. .
ATOM 1541 OD1  OD1  . ASN ASN ASN A A 205 205 . 101.744 113.641 8.310   1.00 4.93   1
. .
ATOM 1542 ND2  ND2  . ASN ASN ASN A A 205 205 . 103.941 113.462 8.506   1.00 7.21   1
. .
ATOM 1543 C    C    . ASN ASN ASN A A 205 205 . 101.772 111.712 12.353  1.00 2.00   1
. .
ATOM 1544 O    O    . ASN ASN ASN A A 205 205 . 102.318 111.985 13.474  1.00 2.00   1
. .
ATOM 1545 N    N    . VAL VAL VAL A A 206 206 . 101.065 110.578 12.177  1.00 2.00   1
. .
ATOM 1546 CA   CA   . VAL VAL VAL A A 206 206 . 100.771 109.746 13.369  1.00 2.00   1
. .
ATOM 1547 CB   CB   . VAL VAL VAL A A 206 206 . 99.229  109.702 13.708  1.00 2.00   1
. .
ATOM 1548 CG1  CG1  . VAL VAL VAL A A 206 206 . 98.662  111.117 14.045  1.00 2.31   1
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ATOM 1549 CG2  CG2  . VAL VAL VAL A A 206 206 . 98.449  109.109 12.570  1.00 2.41   1
. .
ATOM 1550 C    C    . VAL VAL VAL A A 206 206 . 101.261 108.355 13.262  1.00 2.11   1
. .
ATOM 1551 O    O    . VAL VAL VAL A A 206 206 . 101.421 107.831 12.152  1.00 2.55   1
. .
ATOM 1552 N    N    . GLY GLY GLY A A 207 207 . 101.454 107.763 14.423  1.00 2.00   1
. .
ATOM 1553 CA   CA   . GLY GLY GLY A A 207 207 . 101.862 106.342 14.525  1.00 2.00   1
. .
ATOM 1554 C    C    . GLY GLY GLY A A 207 207 . 100.626 105.446 14.554  1.00 2.00   1
. .
ATOM 1555 O    O    . GLY GLY GLY A A 207 207 . 99.510  105.870 14.319  1.00 2.10   1
. .
ATOM 1556 N    N    . ASP ASP ASP A A 208 208 . 100.890 104.195 14.871  1.00 2.00   1
. .
ATOM 1557 CA   CA   . ASP ASP ASP A A 208 208 . 99.918  103.134 14.676  1.00 2.00   1
. .
ATOM 1558 CB   CB   . ASP ASP ASP A A 208 208 . 100.536 101.791 15.009  1.00 2.00   1
. .
ATOM 1559 CG   CG   . ASP ASP ASP A A 208 208 . 101.414 101.253 13.918  1.00 4.93   1
. .
ATOM 1560 OD1  OD1  . ASP ASP ASP A A 208 208 . 101.308 101.699 12.776  1.00 4.68   1
. .
ATOM 1561 OD2  OD2  . ASP ASP ASP A A 208 208 . 102.191 100.321 14.213  1.00 4.54   1
. .
ATOM 1562 C    C    . ASP ASP ASP A A 208 208 . 98.727  103.330 15.617  1.00 2.00   1
. .
ATOM 1563 O    O    . ASP ASP ASP A A 208 208 . 97.626  102.923 15.295  1.00 2.00   1
. .
ATOM 1564 N    N    . GLU GLU GLU A A 209 209 . 98.963  104.024 16.748  1.00 2.00   1
. .
ATOM 1565 CA   CA   . GLU GLU GLU A A 209 209 . 97.837  104.217 17.671  1.00 2.00   1
. .
ATOM 1566 CB   CB   . GLU GLU GLU A A 209 209 . 98.291  103.865 19.115  1.00 2.00   1
. .
ATOM 1567 CG   CG   . GLU GLU GLU A A 209 209 . 98.499  102.323 19.184  1.00 2.33   1
. .
ATOM 1568 CD   CD   . GLU GLU GLU A A 209 209 . 98.618  101.832 20.597  1.00 4.68   1
. .
ATOM 1569 OE1  OE1  . GLU GLU GLU A A 209 209 . 98.652  100.560 20.776  1.00 4.18   1
. .
ATOM 1570 OE2  OE2  . GLU GLU GLU A A 209 209 . 98.666  102.668 21.568  1.00 6.10   1
. .
ATOM 1571 C    C    . GLU GLU GLU A A 209 209 . 97.232  105.602 17.672  1.00 2.00   1
. .
ATOM 1572 O    O    . GLU GLU GLU A A 209 209 . 96.440  105.947 18.563  1.00 2.00   1
. .
ATOM 1573 N    N    . GLY GLY GLY A A 210 210 . 97.568  106.399 16.663  1.00 2.00   1
. .
ATOM 1574 CA   CA   . GLY GLY GLY A A 210 210 . 96.947  107.689 16.479  1.00 2.04   1
. .
ATOM 1575 C    C    . GLY GLY GLY A A 210 210 . 97.761  108.810 17.154  1.00 2.00   1
. .
ATOM 1576 O    O    . GLY GLY GLY A A 210 210 . 97.349  109.918 17.019  1.00 2.00   1
. .
ATOM 1577 N    N    . GLY GLY GLY A A 211 211 . 98.789  108.507 17.917  1.00 2.00   1
. .
ATOM 1578 CA   CA   . GLY GLY GLY A A 211 211 . 99.621  109.512 18.603  1.00 2.00   1
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ATOM 1579 C    C    . GLY GLY GLY A A 211 211 . 100.547 110.157 17.566  1.00 2.14   1
. .
ATOM 1580 O    O    . GLY GLY GLY A A 211 211 . 100.869 109.541 16.518  1.00 2.13   1
. .
ATOM 1581 N    N    . PHE PHE PHE A A 212 212 . 100.967 111.414 17.791  1.00 2.00   1
. .
ATOM 1582 CA   CA   . PHE PHE PHE A A 212 212 . 101.915 112.005 16.894  1.00 2.00   1
. .
ATOM 1583 CB   CB   . PHE PHE PHE A A 212 212 . 102.134 113.477 17.284  1.00 2.08   1
. .
ATOM 1584 CG   CG   . PHE PHE PHE A A 212 212 . 100.858 114.259 17.210  1.00 2.00   1
. .
ATOM 1585 CD1  CD1  . PHE PHE PHE A A 212 212 . 100.250 114.761 18.344  1.00 2.68   1
. .
ATOM 1586 CE1  CE1  . PHE PHE PHE A A 212 212 . 99.012  115.387 18.279  1.00 2.21   1
. .
ATOM 1587 CZ   CZ   . PHE PHE PHE A A 212 212 . 98.386  115.576 17.032  1.00 3.37   1
. .
ATOM 1588 CE2  CE2  . PHE PHE PHE A A 212 212 . 98.969  115.075 15.893  1.00 2.47   1
. .
ATOM 1589 CD2  CD2  . PHE PHE PHE A A 212 212 . 100.227 114.435 15.967  1.00 2.00   1
. .
ATOM 1590 C    C    . PHE PHE PHE A A 212 212 . 103.214 111.278 16.931  1.00 2.00   1
. .
ATOM 1591 O    O    . PHE PHE PHE A A 212 212 . 103.610 110.842 18.014  1.00 2.00   1
. .
ATOM 1592 N    N    . ALA ALA ALA A A 213 213 . 103.945 111.285 15.782  1.00 2.00   1
. .
ATOM 1593 CA   CA   . ALA ALA ALA A A 213 213 . 105.209 110.622 15.724  1.00 2.10   1
. .
ATOM 1594 CB   CB   . ALA ALA ALA A A 213 213 . 105.125 109.556 14.653  1.00 3.09   1
. .
ATOM 1595 C    C    . ALA ALA ALA A A 213 213 . 106.354 111.620 15.388  1.00 2.81   1
. .
ATOM 1596 O    O    . ALA ALA ALA A A 213 213 . 106.898 111.598 14.277  1.00 2.91   1
. .
ATOM 1597 N    N    . PRO PRO PRO A A 214 214 . 106.594 112.579 16.304  1.00 2.32   1
. .
ATOM 1598 CA   CA   . PRO PRO PRO A A 214 214 . 107.669 113.541 16.044  1.00 2.08   1
. .
ATOM 1599 CB   CB   . PRO PRO PRO A A 214 214 . 107.563 114.514 17.249  1.00 2.04   1
. .
ATOM 1600 CG   CG   . PRO PRO PRO A A 214 214 . 107.011 113.611 18.377  1.00 2.00   1
. .
ATOM 1601 CD   CD   . PRO PRO PRO A A 214 214 . 106.054 112.663 17.678  1.00 2.29   1
. .
ATOM 1602 C    C    . PRO PRO PRO A A 214 214 . 109.041 112.846 15.984  1.00 2.10   1
. .
ATOM 1603 O    O    . PRO PRO PRO A A 214 214 . 109.263 111.774 16.564  1.00 3.14   1
. .
ATOM 1604 N    N    . ASN ASN ASN A A 215 215 . 109.963 113.498 15.285  1.00 6.05   1
. .
ATOM 1605 CA   CA   . ASN ASN ASN A A 215 215 . 111.287 112.997 14.949  1.00 8.98   1
. .
ATOM 1606 CB   CB   . ASN ASN ASN A A 215 215 . 111.799 113.637 13.623  1.00 11.30  1
. .
ATOM 1607 CG   CG   . ASN ASN ASN A A 215 215 . 111.613 115.182 13.542  1.00 12.53  1
. .
ATOM 1608 OD1  OD1  . ASN ASN ASN A A 215 215 . 112.590 115.918 13.305  1.00 20.99  1
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ATOM 1609 ND2  ND2  . ASN ASN ASN A A 215 215 . 110.386 115.672 13.673  1.00 11.64  1
. .
ATOM 1610 C    C    . ASN ASN ASN A A 215 215 . 112.264 113.347 16.081  1.00 9.53   1
. .
ATOM 1611 O    O    . ASN ASN ASN A A 215 215 . 113.209 114.120 15.906  1.00 10.66  1
. .
ATOM 1612 N    N    . ILE ILE ILE A A 216 216 . 112.013 112.768 17.228  1.00 7.28   1
. .
ATOM 1613 CA   CA   . ILE ILE ILE A A 216 216 . 112.789 112.993 18.424  1.00 6.44   1
. .
ATOM 1614 CB   CB   . ILE ILE ILE A A 216 216 . 111.966 113.696 19.592  1.00 6.73   1
. .
ATOM 1615 CG1  CG1  . ILE ILE ILE A A 216 216 . 110.793 112.828 19.977  1.00 6.20   1
. .
ATOM 1616 CD1  CD1  . ILE ILE ILE A A 216 216 . 109.804 113.377 21.116  1.00 8.08   1
. .
ATOM 1617 CG2  CG2  . ILE ILE ILE A A 216 216 . 111.458 115.080 19.141  1.00 6.96   1
. .
ATOM 1618 C    C    . ILE ILE ILE A A 216 216 . 113.272 111.670 18.938  1.00 4.43   1
. .
ATOM 1619 O    O    . ILE ILE ILE A A 216 216 . 112.762 110.585 18.529  1.00 4.63   1
. .
ATOM 1620 N    N    . LEU LEU LEU A A 217 217 . 114.253 111.728 19.856  1.00 4.58   1
. .
ATOM 1621 CA   CA   . LEU LEU LEU A A 217 217 . 114.906 110.540 20.396  1.00 4.34   1
. .
ATOM 1622 CB   CB   . LEU LEU LEU A A 217 217 . 116.421 110.561 20.110  1.00 5.68   1
. .
ATOM 1623 CG   CG   . LEU LEU LEU A A 217 217 . 117.262 109.670 21.012  1.00 7.21   1
. .
ATOM 1624 CD1  CD1  . LEU LEU LEU A A 217 217 . 116.927 108.179 20.808  1.00 8.12   1
. .
ATOM 1625 CD2  CD2  . LEU LEU LEU A A 217 217 . 118.808 109.913 20.769  1.00 7.33   1
. .
ATOM 1626 C    C    . LEU LEU LEU A A 217 217 . 114.671 110.505 21.891  1.00 6.20   1
. .
ATOM 1627 O    O    . LEU LEU LEU A A 217 217 . 114.461 109.434 22.500  1.00 6.23   1
. .
ATOM 1628 N    N    . GLU GLU GLU A A 218 218 . 114.699 111.656 22.525  1.00 6.04   1
. .
ATOM 1629 CA   CA   . GLU GLU GLU A A 218 218 . 114.688 111.612 23.972  1.00 9.59   1
. .
ATOM 1630 CB   CB   . GLU GLU GLU A A 218 218 . 115.473 112.778 24.564  1.00 11.57  1
. .
ATOM 1631 CG   CG   . GLU GLU GLU A A 218 218 . 116.284 112.312 25.820  1.00 22.56  1
. .
ATOM 1632 CD   CD   . GLU GLU GLU A A 218 218 . 116.993 110.939 25.682  1.00 33.57  1
. .
ATOM 1633 OE1  OE1  . GLU GLU GLU A A 218 218 . 118.244 110.916 25.598  1.00 39.63  1
. .
ATOM 1634 OE2  OE2  . GLU GLU GLU A A 218 218 . 116.311 109.882 25.679  1.00 37.84  1
. .
ATOM 1635 C    C    . GLU GLU GLU A A 218 218 . 113.285 111.456 24.587  1.00 6.34   1
. .
ATOM 1636 O    O    . GLU GLU GLU A A 218 218 . 112.308 112.222 24.277  1.00 6.02   1
. .
ATOM 1637 N    N    . ASN ASN ASN A A 219 219 . 113.178 110.482 25.466  1.00 4.32   1
. .
ATOM 1638 CA   CA   . ASN ASN ASN A A 219 219 . 111.874 110.204 26.051  1.00 4.78   1
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ATOM 1639 CB   CB   . ASN ASN ASN A A 219 219 . 111.897 108.871 26.814  1.00 3.80   1
. .
ATOM 1640 CG   CG   . ASN ASN ASN A A 219 219 . 112.317 107.723 25.877  1.00 5.84   1
. .
ATOM 1641 OD1  OD1  . ASN ASN ASN A A 219 219 . 113.499 107.306 25.835  1.00 6.28   1
. .
ATOM 1642 ND2  ND2  . ASN ASN ASN A A 219 219 . 111.427 107.385 24.987  1.00 3.35   1
. .
ATOM 1643 C    C    . ASN ASN ASN A A 219 219 . 111.426 111.346 26.929  1.00 3.35   1
. .
ATOM 1644 O    O    . ASN ASN ASN A A 219 219 . 110.223 111.667 26.993  1.00 2.67   1
. .
ATOM 1645 N    N    . SER SER SER A A 220 220 . 112.373 112.041 27.529  1.00 6.02   1
. .
ATOM 1646 CA   CA   . SER SER SER A A 220 220 . 111.980 113.176 28.394  1.00 5.50   1
. .
ATOM 1647 CB   CB   . SER SER SER A A 220 220 . 113.171 113.699 29.194  1.00 6.22   1
. .
ATOM 1648 OG   OG   . SER SER SER A A 220 220 . 114.313 113.828 28.363  1.00 10.43  1
. .
ATOM 1649 C    C    . SER SER SER A A 220 220 . 111.389 114.274 27.531  1.00 4.15   1
. .
ATOM 1650 O    O    . SER SER SER A A 220 220 . 110.514 115.061 27.989  1.00 7.31   1
. .
ATOM 1651 N    N    . GLU GLU GLU A A 221 221 . 111.787 114.352 26.261  1.00 5.81   1
. .
ATOM 1652 CA   CA   . GLU GLU GLU A A 221 221 . 111.245 115.452 25.443  1.00 4.86   1
. .
ATOM 1653 CB   CB   . GLU GLU GLU A A 221 221 . 112.109 115.664 24.188  1.00 6.58   1
. .
ATOM 1654 CG   CG   . GLU GLU GLU A A 221 221 . 111.474 116.547 23.139  1.00 9.18   1
. .
ATOM 1655 CD   CD   . GLU GLU GLU A A 221 221 . 111.213 117.997 23.556  1.00 16.26  1
. .
ATOM 1656 OE1  OE1  . GLU GLU GLU A A 221 221 . 111.232 118.358 24.743  1.00 18.81  1
. .
ATOM 1657 OE2  OE2  . GLU GLU GLU A A 221 221 . 110.959 118.798 22.657  1.00 16.04  1
. .
ATOM 1658 C    C    . GLU GLU GLU A A 221 221 . 109.805 115.147 25.069  1.00 2.86   1
. .
ATOM 1659 O    O    . GLU GLU GLU A A 221 221 . 108.942 116.039 24.970  1.00 4.04   1
. .
ATOM 1660 N    N    . ALA ALA ALA A A 222 222 . 109.515 113.867 24.865  1.00 2.54   1
. .
ATOM 1661 CA   CA   . ALA ALA ALA A A 222 222 . 108.116 113.548 24.641  1.00 2.00   1
. .
ATOM 1662 CB   CB   . ALA ALA ALA A A 222 222 . 107.942 112.014 24.329  1.00 2.00   1
. .
ATOM 1663 C    C    . ALA ALA ALA A A 222 222 . 107.289 113.932 25.868  1.00 2.42   1
. .
ATOM 1664 O    O    . ALA ALA ALA A A 222 222 . 106.181 114.542 25.756  1.00 2.98   1
. .
ATOM 1665 N    N    . LEU LEU LEU A A 223 223 . 107.831 113.606 27.066  1.00 3.59   1
. .
ATOM 1666 CA   CA   . LEU LEU LEU A A 223 223 . 107.184 114.020 28.313  1.00 4.47   1
. .
ATOM 1667 CB   CB   . LEU LEU LEU A A 223 223 . 107.902 113.510 29.580  1.00 5.23   1
. .
ATOM 1668 CG   CG   . LEU LEU LEU A A 223 223 . 107.840 111.984 29.760  1.00 5.62   1
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ATOM 1669 CD1  CD1  . LEU LEU LEU A A 223 223 . 108.842 111.415 30.721  1.00 6.22   1
. .
ATOM 1670 CD2  CD2  . LEU LEU LEU A A 223 223 . 106.415 111.584 30.091  1.00 3.54   1
. .
ATOM 1671 C    C    . LEU LEU LEU A A 223 223 . 106.999 115.520 28.423  1.00 3.77   1
. .
ATOM 1672 O    O    . LEU LEU LEU A A 223 223 . 105.868 115.959 28.799  1.00 3.80   1
. .
ATOM 1673 N    N    . GLU GLU GLU A A 224 224 . 108.040 116.284 28.090  1.00 5.76   1
. .
ATOM 1674 CA   CA   . GLU GLU GLU A A 224 224 . 107.977 117.749 28.110  1.00 5.96   1
. .
ATOM 1675 CB   CB   . GLU GLU GLU A A 224 224 . 109.349 118.341 27.792  1.00 8.37   1
. .
ATOM 1676 CG   CG   . GLU GLU GLU A A 224 224 . 109.346 119.862 27.867  1.00 17.81  1
. .
ATOM 1677 CD   CD   . GLU GLU GLU A A 224 224 . 108.784 120.337 29.205  1.00 26.31  1
. .
ATOM 1678 OE1  OE1  . GLU GLU GLU A A 224 224 . 107.708 121.017 29.231  1.00 29.79  1
. .
ATOM 1679 OE2  OE2  . GLU GLU GLU A A 224 224 . 109.399 119.981 30.228  1.00 27.70  1
. .
ATOM 1680 C    C    . GLU GLU GLU A A 224 224 . 106.928 118.319 27.144  1.00 4.26   1
. .
ATOM 1681 O    O    . GLU GLU GLU A A 224 224 . 106.176 119.198 27.499  1.00 5.47   1
. .
ATOM 1682 N    N    . LEU LEU LEU A A 225 225 . 106.832 117.758 25.937  1.00 3.29   1
. .
ATOM 1683 CA   CA   . LEU LEU LEU A A 225 225 . 105.802 118.160 24.994  1.00 2.26   1
. .
ATOM 1684 CB   CB   . LEU LEU LEU A A 225 225 . 106.007 117.439 23.630  1.00 2.67   1
. .
ATOM 1685 CG   CG   . LEU LEU LEU A A 225 225 . 107.314 117.892 22.960  1.00 3.94   1
. .
ATOM 1686 CD1  CD1  . LEU LEU LEU A A 225 225 . 107.739 116.811 21.960  1.00 6.60   1
. .
ATOM 1687 CD2  CD2  . LEU LEU LEU A A 225 225 . 107.111 119.218 22.240  1.00 4.72   1
. .
ATOM 1688 C    C    . LEU LEU LEU A A 225 225 . 104.388 117.909 25.503  1.00 2.00   1
. .
ATOM 1689 O    O    . LEU LEU LEU A A 225 225 . 103.503 118.732 25.321  1.00 2.00   1
. .
ATOM 1690 N    N    . VAL VAL VAL A A 226 226 . 104.178 116.731 26.075  1.00 2.00   1
. .
ATOM 1691 CA   CA   . VAL VAL VAL A A 226 226 . 102.830 116.442 26.588  1.00 2.00   1
. .
ATOM 1692 CB   CB   . VAL VAL VAL A A 226 226 . 102.768 114.962 27.016  1.00 2.00   1
. .
ATOM 1693 CG1  CG1  . VAL VAL VAL A A 226 226 . 101.504 114.682 27.818  1.00 2.35   1
. .
ATOM 1694 CG2  CG2  . VAL VAL VAL A A 226 226 . 102.857 114.091 25.749  1.00 2.28   1
. .
ATOM 1695 C    C    . VAL VAL VAL A A 226 226 . 102.493 117.389 27.784  1.00 2.00   1
. .
ATOM 1696 O    O    . VAL VAL VAL A A 226 226 . 101.380 117.941 27.855  1.00 2.02   1
. .
ATOM 1697 N    N    . LYS LYS LYS A A 227 227 . 103.430 117.611 28.706  1.00 2.47   1
. .
ATOM 1698 CA   CA   . LYS LYS LYS A A 227 227 . 103.203 118.526 29.819  1.00 3.68   1
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ATOM 1699 CB   CB   . LYS LYS LYS A A 227 227 . 104.422 118.508 30.719  1.00 5.56   1
. .
ATOM 1700 CG   CG   . LYS LYS LYS A A 227 227 . 104.380 119.336 31.957  1.00 10.69  1
. .
ATOM 1701 CD   CD   . LYS LYS LYS A A 227 227 . 105.553 118.998 32.840  1.00 15.72  1
. .
ATOM 1702 CE   CE   . LYS LYS LYS A A 227 227 . 105.821 120.031 33.962  1.00 23.57  1
. .
ATOM 1703 NZ   NZ   . LYS LYS LYS A A 227 227 . 106.655 119.473 35.103  1.00 21.78  1
. .
ATOM 1704 C    C    . LYS LYS LYS A A 227 227 . 102.898 119.916 29.310  1.00 2.94   1
. .
ATOM 1705 O    O    . LYS LYS LYS A A 227 227 . 101.958 120.581 29.787  1.00 6.62   1
. .
ATOM 1706 N    N    . GLU GLU GLU A A 228 228 . 103.608 120.363 28.275  1.00 2.43   1
. .
ATOM 1707 CA   CA   . GLU GLU GLU A A 228 228 . 103.337 121.710 27.756  1.00 3.60   1
. .
ATOM 1708 CB   CB   . GLU GLU GLU A A 228 228 . 104.378 122.071 26.662  1.00 7.20   1
. .
ATOM 1709 CG   CG   . GLU GLU GLU A A 228 228 . 104.222 123.459 26.046  1.00 11.41  1
. .
ATOM 1710 CD   CD   . GLU GLU GLU A A 228 228 . 104.262 124.565 27.102  1.00 24.14  1
. .
ATOM 1711 OE1  OE1  . GLU GLU GLU A A 228 228 . 103.196 125.136 27.462  1.00 29.49  1
. .
ATOM 1712 OE2  OE2  . GLU GLU GLU A A 228 228 . 105.374 124.829 27.590  1.00 30.99  1
. .
ATOM 1713 C    C    . GLU GLU GLU A A 228 228 . 101.936 121.777 27.144  1.00 3.04   1
. .
ATOM 1714 O    O    . GLU GLU GLU A A 228 228 . 101.245 122.771 27.331  1.00 4.66   1
. .
ATOM 1715 N    N    . ALA ALA ALA A A 229 229 . 101.519 120.731 26.387  1.00 2.51   1
. .
ATOM 1716 CA   CA   . ALA ALA ALA A A 229 229 . 100.191 120.765 25.803  1.00 2.63   1
. .
ATOM 1717 CB   CB   . ALA ALA ALA A A 229 229 . 99.950  119.588 24.930  1.00 2.00   1
. .
ATOM 1718 C    C    . ALA ALA ALA A A 229 229 . 99.109  120.789 26.858  1.00 2.00   1
. .
ATOM 1719 O    O    . ALA ALA ALA A A 229 229 . 98.075  121.419 26.657  1.00 3.72   1
. .
ATOM 1720 N    N    . ILE ILE ILE A A 230 230 . 99.295  119.983 27.917  1.00 2.06   1
. .
ATOM 1721 CA   CA   . ILE ILE ILE A A 230 230 . 98.304  119.990 29.063  1.00 2.11   1
. .
ATOM 1722 CB   CB   . ILE ILE ILE A A 230 230 . 98.670  119.001 30.196  1.00 2.23   1
. .
ATOM 1723 CG1  CG1  . ILE ILE ILE A A 230 230 . 98.566  117.558 29.709  1.00 2.00   1
. .
ATOM 1724 CD1  CD1  . ILE ILE ILE A A 230 230 . 99.229  116.583 30.633  1.00 2.27   1
. .
ATOM 1725 CG2  CG2  . ILE ILE ILE A A 230 230 . 97.820  119.230 31.558  1.00 2.30   1
. .
ATOM 1726 C    C    . ILE ILE ILE A A 230 230 . 98.168  121.429 29.635  1.00 3.95   1
. .
ATOM 1727 O    O    . ILE ILE ILE A A 230 230 . 97.045  121.928 29.833  1.00 4.87   1
. .
ATOM 1728 N    N    . ASP ASP ASP A A 231 231 . 99.283  122.085 29.805  1.00 4.86   1
. .
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ATOM 1729 CA   CA   . ASP ASP ASP A A 231 231 . 99.331  123.414 30.461  1.00 5.27   1
. .
ATOM 1730 CB   CB   . ASP ASP ASP A A 231 231 . 100.787 123.736 30.843  1.00 6.74   1
. .
ATOM 1731 CG   CG   . ASP ASP ASP A A 231 231 . 101.361 122.811 32.008  1.00 15.61  1
. .
ATOM 1732 OD1  OD1  . ASP ASP ASP A A 231 231 . 102.567 122.967 32.358  1.00 25.52  1
. .
ATOM 1733 OD2  OD2  . ASP ASP ASP A A 231 231 . 100.658 121.948 32.584  1.00 23.47  1
. .
ATOM 1734 C    C    . ASP ASP ASP A A 231 231 . 98.749  124.458 29.561  1.00 6.16   1
. .
ATOM 1735 O    O    . ASP ASP ASP A A 231 231 . 97.887  125.230 29.954  1.00 4.92   1
. .
ATOM 1736 N    N    . LYS LYS LYS A A 232 232 . 99.139  124.448 28.289  1.00 3.73   1
. .
ATOM 1737 CA   CA   . LYS LYS LYS A A 232 232 . 98.642  125.406 27.296  1.00 6.42   1
. .
ATOM 1738 CB   CB   . LYS LYS LYS A A 232 232 . 99.350  125.100 25.997  1.00 8.33   1
. .
ATOM 1739 CG   CG   . LYS LYS LYS A A 232 232 . 99.473  126.256 24.996  1.00 14.72  1
. .
ATOM 1740 CD   CD   . LYS LYS LYS A A 232 232 . 100.892 126.206 24.312  1.00 22.55  1
. .
ATOM 1741 CE   CE   . LYS LYS LYS A A 232 232 . 100.882 126.902 22.947  1.00 26.16  1
. .
ATOM 1742 NZ   NZ   . LYS LYS LYS A A 232 232 . 100.823 125.979 21.794  1.00 28.60  1
. .
ATOM 1743 C    C    . LYS LYS LYS A A 232 232 . 97.155  125.187 27.129  1.00 3.75   1
. .
ATOM 1744 O    O    . LYS LYS LYS A A 232 232 . 96.395  126.119 26.889  1.00 5.77   1
. .
ATOM 1745 N    N    . ALA ALA ALA A A 233 233 . 96.673  123.941 27.265  1.00 4.28   1
. .
ATOM 1746 CA   CA   . ALA ALA ALA A A 233 233 . 95.212  123.740 27.091  1.00 3.37   1
. .
ATOM 1747 CB   CB   . ALA ALA ALA A A 233 233 . 94.845  122.254 26.660  1.00 3.97   1
. .
ATOM 1748 C    C    . ALA ALA ALA A A 233 233 . 94.398  124.132 28.352  1.00 2.95   1
. .
ATOM 1749 O    O    . ALA ALA ALA A A 233 233 . 93.152  124.210 28.310  1.00 4.70   1
. .
ATOM 1750 N    N    . GLY GLY GLY A A 234 234 . 95.090  124.389 29.406  1.00 3.56   1
. .
ATOM 1751 CA   CA   . GLY GLY GLY A A 234 234 . 94.553  124.863 30.653  1.00 3.72   1
. .
ATOM 1752 C    C    . GLY GLY GLY A A 234 234 . 94.166  123.782 31.631  1.00 3.67   1
. .
ATOM 1753 O    O    . GLY GLY GLY A A 234 234 . 93.339  124.009 32.509  1.00 5.14   1
. .
ATOM 1754 N    N    . TYR TYR TYR A A 235 235 . 94.741  122.582 31.503  1.00 2.04   1
. .
ATOM 1755 CA   CA   . TYR TYR TYR A A 235 235 . 94.289  121.484 32.293  1.00 2.12   1
. .
ATOM 1756 CB   CB   . TYR TYR TYR A A 235 235 . 93.684  120.388 31.322  1.00 2.00   1
. .
ATOM 1757 CG   CG   . TYR TYR TYR A A 235 235 . 92.444  120.778 30.636  1.00 2.28   1
. .
ATOM 1758 CD1  CD1  . TYR TYR TYR A A 235 235 . 92.331  120.669 29.232  1.00 2.32   1
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ATOM 1759 CE1  CE1  . TYR TYR TYR A A 235 235 . 91.231  121.089 28.588  1.00 2.51   1
. .
ATOM 1760 CZ   CZ   . TYR TYR TYR A A 235 235 . 90.126  121.556 29.297  1.00 6.99   1
. .
ATOM 1761 OH   OH   . TYR TYR TYR A A 235 235 . 88.980  121.933 28.651  1.00 5.87   1
. .
ATOM 1762 CE2  CE2  . TYR TYR TYR A A 235 235 . 90.170  121.624 30.675  1.00 4.25   1
. .
ATOM 1763 CD2  CD2  . TYR TYR TYR A A 235 235 . 91.333  121.228 31.319  1.00 3.31   1
. .
ATOM 1764 C    C    . TYR TYR TYR A A 235 235 . 95.315  120.900 33.231  1.00 3.27   1
. .
ATOM 1765 O    O    . TYR TYR TYR A A 235 235 . 95.189  119.773 33.640  1.00 2.32   1
. .
ATOM 1766 N    N    . THR THR THR A A 236 236 . 96.348  121.638 33.601  1.00 3.61   1
. .
ATOM 1767 CA   CA   . THR THR THR A A 236 236 . 97.310  121.159 34.508  1.00 4.69   1
. .
ATOM 1768 CB   CB   . THR THR THR A A 236 236 . 98.300  122.313 34.833  1.00 6.42   1
. .
ATOM 1769 OG1  OG1  . THR THR THR A A 236 236 . 98.903  122.718 33.593  1.00 9.94   1
. .
ATOM 1770 CG2  CG2  . THR THR THR A A 236 236 . 99.396  121.922 35.775  1.00 4.60   1
. .
ATOM 1771 C    C    . THR THR THR A A 236 236 . 96.750  120.551 35.790  1.00 6.89   1
. .
ATOM 1772 O    O    . THR THR THR A A 236 236 . 97.294  119.585 36.308  1.00 5.75   1
. .
ATOM 1773 N    N    . GLU GLU GLU A A 237 237 . 95.643  121.062 36.307  1.00 7.12   1
. .
ATOM 1774 CA   CA   . GLU GLU GLU A A 237 237 . 95.141  120.469 37.553  1.00 13.06  1
. .
ATOM 1775 CB   CB   . GLU GLU GLU A A 237 237 . 94.253  121.504 38.261  1.00 16.38  1
. .
ATOM 1776 CG   CG   . GLU GLU GLU A A 237 237 . 95.017  122.780 38.515  1.00 22.97  1
. .
ATOM 1777 CD   CD   . GLU GLU GLU A A 237 237 . 95.711  122.762 39.847  1.00 31.63  1
. .
ATOM 1778 OE1  OE1  . GLU GLU GLU A A 237 237 . 96.596  121.873 40.052  1.00 33.41  1
. .
ATOM 1779 OE2  OE2  . GLU GLU GLU A A 237 237 . 95.364  123.650 40.675  1.00 32.84  1
. .
ATOM 1780 C    C    . GLU GLU GLU A A 237 237 . 94.405  119.139 37.386  1.00 12.31  1
. .
ATOM 1781 O    O    . GLU GLU GLU A A 237 237 . 94.095  118.460 38.342  1.00 15.07  1
. .
ATOM 1782 N    N    . LYS LYS LYS A A 238 238 . 94.145  118.771 36.139  1.00 9.71   1
. .
ATOM 1783 CA   CA   . LYS LYS LYS A A 238 238 . 93.102  117.835 35.829  1.00 6.15   1
. .
ATOM 1784 CB   CB   . LYS LYS LYS A A 238 238 . 91.999  118.595 35.077  1.00 6.77   1
. .
ATOM 1785 CG   CG   . LYS LYS LYS A A 238 238 . 91.186  119.587 35.934  1.00 10.24  1
. .
ATOM 1786 CD   CD   . LYS LYS LYS A A 238 238 . 89.907  120.091 35.205  1.00 18.27  1
. .
ATOM 1787 CE   CE   . LYS LYS LYS A A 238 238 . 88.857  120.619 36.190  1.00 23.78  1
. .
ATOM 1788 NZ   NZ   . LYS LYS LYS A A 238 238 . 89.518  121.285 37.376  1.00 29.26  1
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ATOM 1789 C    C    . LYS LYS LYS A A 238 238 . 93.579  116.651 34.944  1.00 2.29   1
. .
ATOM 1790 O    O    . LYS LYS LYS A A 238 238 . 92.872  115.663 34.847  1.00 2.51   1
. .
ATOM 1791 N    N    . ILE ILE ILE A A 239 239 . 94.790  116.747 34.425  1.00 2.00   1
. .
ATOM 1792 CA   CA   . ILE ILE ILE A A 239 239 . 95.297  115.662 33.533  1.00 2.00   1
. .
ATOM 1793 CB   CB   . ILE ILE ILE A A 239 239 . 95.315  116.113 32.054  1.00 2.00   1
. .
ATOM 1794 CG1  CG1  . ILE ILE ILE A A 239 239 . 93.917  116.623 31.627  1.00 2.03   1
. .
ATOM 1795 CD1  CD1  . ILE ILE ILE A A 239 239 . 93.772  117.108 30.148  1.00 2.00   1
. .
ATOM 1796 CG2  CG2  . ILE ILE ILE A A 239 239 . 95.815  114.946 31.167  1.00 2.06   1
. .
ATOM 1797 C    C    . ILE ILE ILE A A 239 239 . 96.671  115.283 33.948  1.00 2.00   1
. .
ATOM 1798 O    O    . ILE ILE ILE A A 239 239 . 97.520  116.182 34.147  1.00 3.11   1
. .
ATOM 1799 N    N    . VAL VAL VAL A A 240 240 . 96.903  113.969 34.083  1.00 2.00   1
. .
ATOM 1800 CA   CA   . VAL VAL VAL A A 240 240 . 98.194  113.447 34.475  1.00 2.00   1
. .
ATOM 1801 CB   CB   . VAL VAL VAL A A 240 240 . 98.181  112.677 35.795  1.00 2.22   1
. .
ATOM 1802 CG1  CG1  . VAL VAL VAL A A 240 240 . 97.756  113.647 36.937  1.00 4.65   1
. .
ATOM 1803 CG2  CG2  . VAL VAL VAL A A 240 240 . 97.173  111.483 35.743  1.00 2.12   1
. .
ATOM 1804 C    C    . VAL VAL VAL A A 240 240 . 98.692  112.516 33.378  1.00 2.12   1
. .
ATOM 1805 O    O    . VAL VAL VAL A A 240 240 . 97.995  112.384 32.350  1.00 2.50   1
. .
ATOM 1806 N    N    . ILE ILE ILE A A 241 241 . 99.895  111.964 33.546  1.00 2.00   1
. .
ATOM 1807 CA   CA   . ILE ILE ILE A A 241 241 . 100.596 111.287 32.436  1.00 2.00   1
. .
ATOM 1808 CB   CB   . ILE ILE ILE A A 241 241 . 101.998 111.963 32.107  1.00 2.10   1
. .
ATOM 1809 CG1  CG1  . ILE ILE ILE A A 241 241 . 101.854 113.387 31.639  1.00 4.54   1
. .
ATOM 1810 CD1  CD1  . ILE ILE ILE A A 241 241 . 100.661 113.597 30.856  1.00 12.19  1
. .
ATOM 1811 CG2  CG2  . ILE ILE ILE A A 241 241 . 102.819 111.119 31.106  1.00 3.30   1
. .
ATOM 1812 C    C    . ILE ILE ILE A A 241 241 . 100.847 109.848 32.814  1.00 2.00   1
. .
ATOM 1813 O    O    . ILE ILE ILE A A 241 241 . 101.194 109.499 33.980  1.00 3.52   1
. .
ATOM 1814 N    N    . GLY GLY GLY A A 242 242 . 100.694 108.937 31.803  1.00 2.00   1
. .
ATOM 1815 CA   CA   . GLY GLY GLY A A 242 242 . 101.132 107.609 32.013  1.00 2.00   1
. .
ATOM 1816 C    C    . GLY GLY GLY A A 242 242 . 102.045 107.214 30.831  1.00 2.00   1
. .
ATOM 1817 O    O    . GLY GLY GLY A A 242 242 . 102.045 107.881 29.803  1.00 2.34   1
. .
ATOM 1818 N    N    . MET MET MET A A 243 243 . 102.803 106.152 31.026  1.00 2.19   1
. .
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ATOM 1819 CA   CA   . MET MET MET A A 243 243 . 103.730 105.637 30.020  1.00 3.71   1
. .
ATOM 1820 CB   CB   . MET MET MET A A 243 243 . 105.165 105.923 30.478  1.00 4.94   1
. .
ATOM 1821 CG   CG   . MET MET MET A A 243 243 . 105.484 107.407 30.636  1.00 7.29   1
. .
ATOM 1822 SD   SD   . MET MET MET A A 243 243 . 107.075 107.666 31.375  1.00 8.84   1
. .
ATOM 1823 CE   CE   . MET MET MET A A 243 243 . 108.263 107.105 30.179  1.00 14.79  1
. .
ATOM 1824 C    C    . MET MET MET A A 243 243 . 103.614 104.150 29.823  1.00 2.56   1
. .
ATOM 1825 O    O    . MET MET MET A A 243 243 . 103.323 103.430 30.801  1.00 4.44   1
. .
ATOM 1826 N    N    . ASP ASP ASP A A 244 244 . 103.785 103.716 28.557  1.00 2.02   1
. .
ATOM 1827 CA   CA   . ASP ASP ASP A A 244 244 . 104.102 102.322 28.281  1.00 2.00   1
. .
ATOM 1828 CB   CB   . ASP ASP ASP A A 244 244 . 103.066 101.626 27.400  1.00 2.01   1
. .
ATOM 1829 CG   CG   . ASP ASP ASP A A 244 244 . 103.422 100.146 27.176  1.00 2.00   1
. .
ATOM 1830 OD1  OD1  . ASP ASP ASP A A 244 244 . 102.642 99.459  26.450  1.00 2.00   1
. .
ATOM 1831 OD2  OD2  . ASP ASP ASP A A 244 244 . 104.412 99.661  27.739  1.00 2.00   1
. .
ATOM 1832 C    C    . ASP ASP ASP A A 244 244 . 105.476 102.267 27.621  1.00 2.00   1
. .
ATOM 1833 O    O    . ASP ASP ASP A A 244 244 . 105.679 102.683 26.460  1.00 2.00   1
. .
ATOM 1834 N    N    . VAL VAL VAL A A 245 245 . 106.436 101.802 28.398  1.00 2.04   1
. .
ATOM 1835 CA   CA   . VAL VAL VAL A A 245 245 . 107.824 101.748 27.951  1.00 2.00   1
. .
ATOM 1836 CB   CB   . VAL VAL VAL A A 245 245 . 108.791 101.568 29.105  1.00 2.25   1
. .
ATOM 1837 CG1  CG1  . VAL VAL VAL A A 245 245 . 110.228 101.366 28.631  1.00 2.00   1
. .
ATOM 1838 CG2  CG2  . VAL VAL VAL A A 245 245 . 108.683 102.755 30.095  1.00 2.07   1
. .
ATOM 1839 C    C    . VAL VAL VAL A A 245 245 . 107.968 100.634 26.943  1.00 2.11   1
. .
ATOM 1840 O    O    . VAL VAL VAL A A 245 245 . 108.670 100.812 25.959  1.00 2.23   1
. .
ATOM 1841 N    N    . ALA ALA ALA A A 246 246 . 107.277 99.516  27.218  1.00 2.27   1
. .
ATOM 1842 CA   CA   . ALA ALA ALA A A 246 246 . 107.412 98.288  26.376  1.00 2.18   1
. .
ATOM 1843 CB   CB   . ALA ALA ALA A A 246 246 . 106.856 98.514  24.962  1.00 2.49   1
. .
ATOM 1844 C    C    . ALA ALA ALA A A 246 246 . 108.901 97.863  26.310  1.00 2.00   1
. .
ATOM 1845 O    O    . ALA ALA ALA A A 246 246 . 109.422 97.591  25.251  1.00 2.56   1
. .
ATOM 1846 N    N    . ALA ALA ALA A A 247 247 . 109.563 97.788  27.467  1.00 2.00   1
. .
ATOM 1847 CA   CA   . ALA ALA ALA A A 247 247 . 111.042 97.619  27.552  1.00 2.00   1
. .
ATOM 1848 CB   CB   . ALA ALA ALA A A 247 247 . 111.438 97.673  29.020  1.00 2.82   1
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ATOM 1849 C    C    . ALA ALA ALA A A 247 247 . 111.513 96.294  26.908  1.00 2.01   1
. .
ATOM 1850 O    O    . ALA ALA ALA A A 247 247 . 112.667 96.206  26.564  1.00 4.46   1
. .
ATOM 1851 N    N    . SER SER SER A A 248 248 . 110.633 95.288  26.803  1.00 2.27   1
. .
ATOM 1852 CA   CA   . SER SER SER A A 248 248 . 111.009 93.980  26.201  1.00 2.00   1
. .
ATOM 1853 CB   CB   . SER SER SER A A 248 248 . 109.844 92.967  26.274  1.00 2.00   1
. .
ATOM 1854 OG   OG   . SER SER SER A A 248 248 . 109.486 92.636  27.599  1.00 3.75   1
. .
ATOM 1855 C    C    . SER SER SER A A 248 248 . 111.413 94.201  24.750  1.00 2.10   1
. .
ATOM 1856 O    O    . SER SER SER A A 248 248 . 112.209 93.402  24.208  1.00 3.85   1
. .
ATOM 1857 N    N    . GLU GLU GLU A A 249 249 . 110.940 95.281  24.137  1.00 2.06   1
. .
ATOM 1858 CA   CA   . GLU GLU GLU A A 249 249 . 111.264 95.576  22.731  1.00 3.19   1
. .
ATOM 1859 CB   CB   . GLU GLU GLU A A 249 249 . 110.357 96.696  22.229  1.00 2.23   1
. .
ATOM 1860 CG   CG   . GLU GLU GLU A A 249 249 . 108.884 96.298  22.126  1.00 3.68   1
. .
ATOM 1861 CD   CD   . GLU GLU GLU A A 249 249 . 108.678 95.170  21.101  1.00 5.91   1
. .
ATOM 1862 OE1  OE1  . GLU GLU GLU A A 249 249 . 108.836 95.438  19.888  1.00 8.24   1
. .
ATOM 1863 OE2  OE2  . GLU GLU GLU A A 249 249 . 108.332 94.025  21.482  1.00 8.05   1
. .
ATOM 1864 C    C    . GLU GLU GLU A A 249 249 . 112.713 96.036  22.539  1.00 3.41   1
. .
ATOM 1865 O    O    . GLU GLU GLU A A 249 249 . 113.213 95.948  21.420  1.00 5.00   1
. .
ATOM 1866 N    N    . PHE PHE PHE A A 250 250 . 113.327 96.555  23.604  1.00 3.36   1
. .
ATOM 1867 CA   CA   . PHE PHE PHE A A 250 250 . 114.645 97.092  23.435  1.00 3.53   1
. .
ATOM 1868 CB   CB   . PHE PHE PHE A A 250 250 . 114.594 98.641  23.450  1.00 2.45   1
. .
ATOM 1869 CG   CG   . PHE PHE PHE A A 250 250 . 114.004 99.270  24.664  1.00 2.71   1
. .
ATOM 1870 CD1  CD1  . PHE PHE PHE A A 250 250 . 112.787 100.003 24.523  1.00 2.32   1
. .
ATOM 1871 CE1  CE1  . PHE PHE PHE A A 250 250 . 112.248 100.665 25.612  1.00 3.10   1
. .
ATOM 1872 CZ   CZ   . PHE PHE PHE A A 250 250 . 112.888 100.629 26.815  1.00 3.68   1
. .
ATOM 1873 CE2  CE2  . PHE PHE PHE A A 250 250 . 114.098 99.914  26.998  1.00 4.37   1
. .
ATOM 1874 CD2  CD2  . PHE PHE PHE A A 250 250 . 114.674 99.256  25.917  1.00 5.87   1
. .
ATOM 1875 C    C    . PHE PHE PHE A A 250 250 . 115.659 96.518  24.423  1.00 3.59   1
. .
ATOM 1876 O    O    . PHE PHE PHE A A 250 250 . 116.789 97.080  24.639  1.00 4.34   1
. .
ATOM 1877 N    N    . TYR TYR TYR A A 251 251 . 115.258 95.393  25.040  1.00 5.89   1
. .
ATOM 1878 CA   CA   . TYR TYR TYR A A 251 251 . 116.134 94.586  25.886  1.00 6.09   1
. .
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ATOM 1879 CB   CB   . TYR TYR TYR A A 251 251 . 115.304 93.598  26.685  1.00 6.23   1
. .
ATOM 1880 CG   CG   . TYR TYR TYR A A 251 251 . 116.041 92.766  27.679  1.00 7.38   1
. .
ATOM 1881 CD1  CD1  . TYR TYR TYR A A 251 251 . 116.640 93.342  28.821  1.00 10.61  1
. .
ATOM 1882 CE1  CE1  . TYR TYR TYR A A 251 251 . 117.287 92.560  29.769  1.00 12.03  1
. .
ATOM 1883 CZ   CZ   . TYR TYR TYR A A 251 251 . 117.362 91.193  29.565  1.00 13.17  1
. .
ATOM 1884 OH   OH   . TYR TYR TYR A A 251 251 . 118.033 90.385  30.492  1.00 18.33  1
. .
ATOM 1885 CE2  CE2  . TYR TYR TYR A A 251 251 . 116.799 90.599  28.441  1.00 12.92  1
. .
ATOM 1886 CD2  CD2  . TYR TYR TYR A A 251 251 . 116.120 91.394  27.505  1.00 8.13   1
. .
ATOM 1887 C    C    . TYR TYR TYR A A 251 251 . 117.196 93.857  25.034  1.00 7.59   1
. .
ATOM 1888 O    O    . TYR TYR TYR A A 251 251 . 116.829 93.133  24.095  1.00 7.82   1
. .
ATOM 1889 N    N    . ARG ARG ARG A A 252 252 . 118.477 94.055  25.339  1.00 9.24   1
. .
ATOM 1890 CA   CA   . ARG ARG ARG A A 252 252 . 119.580 93.489  24.533  1.00 14.02  1
. .
ATOM 1891 CB   CB   . ARG ARG ARG A A 252 252 . 120.120 94.556  23.582  1.00 12.34  1
. .
ATOM 1892 CG   CG   . ARG ARG ARG A A 252 252 . 119.047 95.198  22.745  1.00 14.00  1
. .
ATOM 1893 CD   CD   . ARG ARG ARG A A 252 252 . 118.766 94.398  21.467  1.00 15.35  1
. .
ATOM 1894 NE   NE   . ARG ARG ARG A A 252 252 . 117.848 95.081  20.542  1.00 17.14  1
. .
ATOM 1895 CZ   CZ   . ARG ARG ARG A A 252 252 . 116.516 94.961  20.546  1.00 15.19  1
. .
ATOM 1896 NH1  NH1  . ARG ARG ARG A A 252 252 . 115.881 94.218  21.456  1.00 9.00   1
. .
ATOM 1897 NH2  NH2  . ARG ARG ARG A A 252 252 . 115.807 95.604  19.625  1.00 15.68  1
. .
ATOM 1898 C    C    . ARG ARG ARG A A 252 252 . 120.710 92.946  25.384  1.00 16.22  1
. .
ATOM 1899 O    O    . ARG ARG ARG A A 252 252 . 121.438 93.705  26.004  1.00 18.80  1
. .
ATOM 1900 N    N    . ASP ASP ASP A A 253 253 . 120.836 91.628  25.386  1.00 19.56  1
. .
ATOM 1901 CA   CA   . ASP ASP ASP A A 253 253 . 121.822 90.873  26.185  1.00 21.69  1
. .
ATOM 1902 CB   CB   . ASP ASP ASP A A 253 253 . 123.183 90.730  25.478  1.00 23.95  1
. .
ATOM 1903 CG   CG   . ASP ASP ASP A A 253 253 . 123.738 92.061  24.850  1.00 28.22  1
. .
ATOM 1904 OD1  OD1  . ASP ASP ASP A A 253 253 . 123.900 92.129  23.600  1.00 30.15  1
. .
ATOM 1905 OD2  OD2  . ASP ASP ASP A A 253 253 . 124.076 93.013  25.592  1.00 33.39  1
. .
ATOM 1906 C    C    . ASP ASP ASP A A 253 253 . 121.962 91.321  27.630  1.00 20.42  1
. .
ATOM 1907 O    O    . ASP ASP ASP A A 253 253 . 123.066 91.547  28.116  1.00 21.37  1
. .
ATOM 1908 N    N    . GLY GLY GLY A A 254 254 . 120.833 91.458  28.310  1.00 17.15  1
. .
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ATOM 1909 CA   CA   . GLY GLY GLY A A 254 254 . 120.834 91.877  29.695  1.00 14.60  1
. .
ATOM 1910 C    C    . GLY GLY GLY A A 254 254 . 120.869 93.382  29.866  1.00 10.71  1
. .
ATOM 1911 O    O    . GLY GLY GLY A A 254 254 . 120.872 93.876  30.971  1.00 12.59  1
. .
ATOM 1912 N    N    . LYS LYS LYS A A 255 255 . 120.895 94.140  28.787  1.00 10.63  1
. .
ATOM 1913 CA   CA   . LYS LYS LYS A A 255 255 . 120.885 95.590  28.972  1.00 10.08  1
. .
ATOM 1914 CB   CB   . LYS LYS LYS A A 255 255 . 122.232 96.218  28.545  1.00 9.59   1
. .
ATOM 1915 CG   CG   . LYS LYS LYS A A 255 255 . 123.457 95.726  29.383  1.00 12.73  1
. .
ATOM 1916 CD   CD   . LYS LYS LYS A A 255 255 . 124.739 96.480  29.010  1.00 18.65  1
. .
ATOM 1917 CE   CE   . LYS LYS LYS A A 255 255 . 124.813 97.846  29.642  1.00 25.09  1
. .
ATOM 1918 NZ   NZ   . LYS LYS LYS A A 255 255 . 126.142 98.473  29.441  1.00 29.82  1
. .
ATOM 1919 C    C    . LYS LYS LYS A A 255 255 . 119.737 96.230  28.157  1.00 8.88   1
. .
ATOM 1920 O    O    . LYS LYS LYS A A 255 255 . 118.994 95.524  27.512  1.00 9.67   1
. .
ATOM 1921 N    N    . TYR TYR TYR A A 256 256 . 119.656 97.554  28.159  1.00 5.86   1
. .
ATOM 1922 CA   CA   . TYR TYR TYR A A 256 256 . 118.552 98.253  27.442  1.00 5.37   1
. .
ATOM 1923 CB   CB   . TYR TYR TYR A A 256 256 . 117.586 98.837  28.468  1.00 3.78   1
. .
ATOM 1924 CG   CG   . TYR TYR TYR A A 256 256 . 116.911 97.769  29.309  1.00 3.65   1
. .
ATOM 1925 CD1  CD1  . TYR TYR TYR A A 256 256 . 115.636 97.259  28.931  1.00 3.07   1
. .
ATOM 1926 CE1  CE1  . TYR TYR TYR A A 256 256 . 114.987 96.283  29.709  1.00 2.11   1
. .
ATOM 1927 CZ   CZ   . TYR TYR TYR A A 256 256 . 115.592 95.865  30.897  1.00 6.57   1
. .
ATOM 1928 OH   OH   . TYR TYR TYR A A 256 256 . 114.992 94.918  31.667  1.00 5.18   1
. .
ATOM 1929 CE2  CE2  . TYR TYR TYR A A 256 256 . 116.848 96.420  31.297  1.00 6.73   1
. .
ATOM 1930 CD2  CD2  . TYR TYR TYR A A 256 256 . 117.456 97.374  30.502  1.00 5.98   1
. .
ATOM 1931 C    C    . TYR TYR TYR A A 256 256 . 119.043 99.287  26.432  1.00 6.01   1
. .
ATOM 1932 O    O    . TYR TYR TYR A A 256 256 . 119.926 100.097 26.772  1.00 7.76   1
. .
ATOM 1933 N    N    . ASP ASP ASP A A 257 257 . 118.456 99.297  25.231  1.00 7.41   1
. .
ATOM 1934 CA   CA   . ASP ASP ASP A A 257 257 . 118.894 100.162 24.137  1.00 7.48   1
. .
ATOM 1935 CB   CB   . ASP ASP ASP A A 257 257 . 119.199 99.314  22.886  1.00 8.37   1
. .
ATOM 1936 CG   CG   . ASP ASP ASP A A 257 257 . 119.641 100.115 21.691  1.00 7.08   1
. .
ATOM 1937 OD1  OD1  . ASP ASP ASP A A 257 257 . 119.841 101.378 21.789  1.00 7.57   1
. .
ATOM 1938 OD2  OD2  . ASP ASP ASP A A 257 257 . 119.759 99.486  20.598  1.00 7.57   1
. .
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ATOM 1939 C    C    . ASP ASP ASP A A 257 257 . 117.849 101.221 23.848  1.00 7.02   1
. .
ATOM 1940 O    O    . ASP ASP ASP A A 257 257 . 116.860 100.968 23.152  1.00 5.60   1
. .
ATOM 1941 N    N    . LEU LEU LEU A A 258 258 . 118.062 102.420 24.365  1.00 5.77   1
. .
ATOM 1942 CA   CA   . LEU LEU LEU A A 258 258 . 117.079 103.510 24.146  1.00 7.16   1
. .
ATOM 1943 CB   CB   . LEU LEU LEU A A 258 258 . 117.105 104.552 25.272  1.00 7.38   1
. .
ATOM 1944 CG   CG   . LEU LEU LEU A A 258 258 . 116.691 104.115 26.678  1.00 8.25   1
. .
ATOM 1945 CD1  CD1  . LEU LEU LEU A A 258 258 . 116.500 105.280 27.656  1.00 6.81   1
. .
ATOM 1946 CD2  CD2  . LEU LEU LEU A A 258 258 . 115.338 103.349 26.629  1.00 5.78   1
. .
ATOM 1947 C    C    . LEU LEU LEU A A 258 258 . 117.252 104.170 22.760  1.00 6.80   1
. .
ATOM 1948 O    O    . LEU LEU LEU A A 258 258 . 116.665 105.220 22.451  1.00 8.48   1
. .
ATOM 1949 N    N    . ASP ASP ASP A A 259 259 . 118.047 103.551 21.924  1.00 6.20   1
. .
ATOM 1950 CA   CA   . ASP ASP ASP A A 259 259 . 118.125 104.027 20.542  1.00 7.21   1
. .
ATOM 1951 CB   CB   . ASP ASP ASP A A 259 259 . 119.411 104.844 20.316  1.00 6.60   1
. .
ATOM 1952 CG   CG   . ASP ASP ASP A A 259 259 . 119.299 105.842 19.141  1.00 12.22  1
. .
ATOM 1953 OD1  OD1  . ASP ASP ASP A A 259 259 . 118.293 105.893 18.387  1.00 14.86  1
. .
ATOM 1954 OD2  OD2  . ASP ASP ASP A A 259 259 . 120.248 106.618 18.932  1.00 16.52  1
. .
ATOM 1955 C    C    . ASP ASP ASP A A 259 259 . 118.030 102.815 19.607  1.00 7.24   1
. .
ATOM 1956 O    O    . ASP ASP ASP A A 259 259 . 118.677 102.758 18.559  1.00 7.85   1
. .
ATOM 1957 N    N    . PHE PHE PHE A A 260 260 . 117.155 101.860 19.982  1.00 6.14   1
. .
ATOM 1958 CA   CA   . PHE PHE PHE A A 260 260 . 117.079 100.597 19.277  1.00 5.35   1
. .
ATOM 1959 CB   CB   . PHE PHE PHE A A 260 260 . 116.247 99.523  20.037  1.00 5.20   1
. .
ATOM 1960 CG   CG   . PHE PHE PHE A A 260 260 . 114.740 99.672  19.879  1.00 2.29   1
. .
ATOM 1961 CD1  CD1  . PHE PHE PHE A A 260 260 . 114.020 100.604 20.617  1.00 4.68   1
. .
ATOM 1962 CE1  CE1  . PHE PHE PHE A A 260 260 . 112.646 100.715 20.436  1.00 3.39   1
. .
ATOM 1963 CZ   CZ   . PHE PHE PHE A A 260 260 . 111.984 99.903  19.552  1.00 6.32   1
. .
ATOM 1964 CE2  CE2  . PHE PHE PHE A A 260 260 . 112.710 98.946  18.795  1.00 5.58   1
. .
ATOM 1965 CD2  CD2  . PHE PHE PHE A A 260 260 . 114.057 98.864  18.959  1.00 5.12   1
. .
ATOM 1966 C    C    . PHE PHE PHE A A 260 260 . 116.623 100.664 17.830  1.00 5.61   1
. .
ATOM 1967 O    O    . PHE PHE PHE A A 260 260 . 116.774 99.658  17.135  1.00 7.56   1
. .
ATOM 1968 N    N    . LYS LYS LYS A A 261 261 . 116.146 101.815 17.353  1.00 6.81   1
. .
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ATOM 1969 CA   CA   . LYS LYS LYS A A 261 261 . 115.743 101.914 15.953  1.00 8.30   1
. .
ATOM 1970 CB   CB   . LYS LYS LYS A A 261 261 . 114.470 102.714 15.811  1.00 6.67   1
. .
ATOM 1971 CG   CG   . LYS LYS LYS A A 261 261 . 113.295 101.891 16.427  1.00 8.70   1
. .
ATOM 1972 CD   CD   . LYS LYS LYS A A 261 261 . 111.956 102.656 16.363  1.00 6.62   1
. .
ATOM 1973 CE   CE   . LYS LYS LYS A A 261 261 . 111.801 103.623 17.527  1.00 4.88   1
. .
ATOM 1974 NZ   NZ   . LYS LYS LYS A A 261 261 . 110.492 104.345 17.461  1.00 3.07   1
. .
ATOM 1975 C    C    . LYS LYS LYS A A 261 261 . 116.831 102.434 15.079  1.00 8.03   1
. .
ATOM 1976 O    O    . LYS LYS LYS A A 261 261 . 116.648 102.607 13.866  1.00 8.55   1
. .
ATOM 1977 N    N    . SER SER SER A A 262 262 . 117.980 102.652 15.686  1.00 8.03   1
. .
ATOM 1978 CA   CA   . SER SER SER A A 262 262 . 119.139 103.097 14.917  1.00 10.73  1
. .
ATOM 1979 CB   CB   . SER SER SER A A 262 262 . 119.780 104.250 15.688  1.00 10.79  1
. .
ATOM 1980 OG   OG   . SER SER SER A A 262 262 . 118.960 105.434 15.704  1.00 14.64  1
. .
ATOM 1981 C    C    . SER SER SER A A 262 262 . 120.110 101.924 14.816  1.00 11.66  1
. .
ATOM 1982 O    O    . SER SER SER A A 262 262 . 120.051 101.029 15.672  1.00 12.21  1
. .
ATOM 1983 N    N    . PRO PRO PRO A A 263 263 . 121.023 101.933 13.832  1.00 11.66  1
. .
ATOM 1984 CA   CA   . PRO PRO PRO A A 263 263 . 121.924 100.790 13.613  1.00 13.14  1
. .
ATOM 1985 CB   CB   . PRO PRO PRO A A 263 263 . 122.932 101.333 12.606  1.00 12.57  1
. .
ATOM 1986 CG   CG   . PRO PRO PRO A A 263 263 . 122.217 102.442 11.915  1.00 14.09  1
. .
ATOM 1987 CD   CD   . PRO PRO PRO A A 263 263 . 121.406 103.079 12.987  1.00 12.17  1
. .
ATOM 1988 C    C    . PRO PRO PRO A A 263 263 . 122.690 100.384 14.867  1.00 12.56  1
. .
ATOM 1989 O    O    . PRO PRO PRO A A 263 263 . 123.134 101.259 15.602  1.00 13.89  1
. .
ATOM 1990 N    N    . THR THR THR A A 264 264 . 122.884 99.076  15.065  1.00 16.15  1
. .
ATOM 1991 CA   CA   . THR THR THR A A 264 264 . 123.290 98.490  16.373  1.00 18.65  1
. .
ATOM 1992 CB   CB   . THR THR THR A A 264 264 . 123.467 96.939  16.281  1.00 18.64  1
. .
ATOM 1993 OG1  OG1  . THR THR THR A A 264 264 . 122.347 96.353  15.631  1.00 20.58  1
. .
ATOM 1994 CG2  CG2  . THR THR THR A A 264 264 . 123.574 96.320  17.652  1.00 19.28  1
. .
ATOM 1995 C    C    . THR THR THR A A 264 264 . 124.589 99.080  16.875  1.00 20.05  1
. .
ATOM 1996 O    O    . THR THR THR A A 264 264 . 125.512 99.262  16.092  1.00 22.44  1
. .
ATOM 1997 N    N    . ASP ASP ASP A A 265 265 . 124.658 99.403  18.164  1.00 20.24  1
. .
ATOM 1998 CA   CA   . ASP ASP ASP A A 265 265 . 125.858 99.966  18.763  1.00 20.20  1
. .
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ATOM 1999 CB   CB   . ASP ASP ASP A A 265 265 . 125.982 101.464 18.485  1.00 21.36  1
. .
ATOM 2000 CG   CG   . ASP ASP ASP A A 265 265 . 127.253 102.051 19.050  1.00 24.91  1
. .
ATOM 2001 OD1  OD1  . ASP ASP ASP A A 265 265 . 128.190 101.293 19.351  1.00 27.94  1
. .
ATOM 2002 OD2  OD2  . ASP ASP ASP A A 265 265 . 127.318 103.287 19.196  1.00 30.81  1
. .
ATOM 2003 C    C    . ASP ASP ASP A A 265 265 . 125.787 99.780  20.265  1.00 19.47  1
. .
ATOM 2004 O    O    . ASP ASP ASP A A 265 265 . 125.278 100.651 20.961  1.00 19.97  1
. .
ATOM 2005 N    N    . PRO PRO PRO A A 266 266 . 126.334 98.671  20.773  1.00 19.07  1
. .
ATOM 2006 CA   CA   . PRO PRO PRO A A 266 266 . 126.162 98.280  22.177  1.00 18.55  1
. .
ATOM 2007 CB   CB   . PRO PRO PRO A A 266 266 . 126.809 96.881  22.242  1.00 18.07  1
. .
ATOM 2008 CG   CG   . PRO PRO PRO A A 266 266 . 127.014 96.502  20.791  1.00 18.44  1
. .
ATOM 2009 CD   CD   . PRO PRO PRO A A 266 266 . 127.206 97.739  20.056  1.00 18.95  1
. .
ATOM 2010 C    C    . PRO PRO PRO A A 266 266 . 126.830 99.226  23.115  1.00 17.27  1
. .
ATOM 2011 O    O    . PRO PRO PRO A A 266 266 . 126.592 99.193  24.287  1.00 17.42  1
. .
ATOM 2012 N    N    . SER SER SER A A 267 267 . 127.688 100.088 22.603  1.00 18.21  1
. .
ATOM 2013 CA   CA   . SER SER SER A A 267 267 . 128.295 101.086 23.485  1.00 18.13  1
. .
ATOM 2014 CB   CB   . SER SER SER A A 267 267 . 129.389 101.850 22.743  1.00 19.74  1
. .
ATOM 2015 OG   OG   . SER SER SER A A 267 267 . 128.934 102.326 21.473  1.00 24.28  1
. .
ATOM 2016 C    C    . SER SER SER A A 267 267 . 127.247 102.071 24.077  1.00 17.07  1
. .
ATOM 2017 O    O    . SER SER SER A A 267 267 . 127.515 102.705 25.097  1.00 16.92  1
. .
ATOM 2018 N    N    . ARG ARG ARG A A 268 268 . 126.048 102.161 23.484  1.00 15.20  1
. .
ATOM 2019 CA   CA   . ARG ARG ARG A A 268 268 . 125.004 103.059 24.016  1.00 13.89  1
. .
ATOM 2020 CB   CB   . ARG ARG ARG A A 268 268 . 124.218 103.706 22.873  1.00 12.87  1
. .
ATOM 2021 CG   CG   . ARG ARG ARG A A 268 268 . 123.290 102.706 22.164  1.00 13.89  1
. .
ATOM 2022 CD   CD   . ARG ARG ARG A A 268 268 . 122.739 103.224 20.818  1.00 11.94  1
. .
ATOM 2023 NE   NE   . ARG ARG ARG A A 268 268 . 121.903 102.194 20.200  1.00 9.63   1
. .
ATOM 2024 CZ   CZ   . ARG ARG ARG A A 268 268 . 121.852 101.942 18.894  1.00 11.80  1
. .
ATOM 2025 NH1  NH1  . ARG ARG ARG A A 268 268 . 121.074 100.939 18.446  1.00 13.43  1
. .
ATOM 2026 NH2  NH2  . ARG ARG ARG A A 268 268 . 122.569 102.688 18.022  1.00 10.26  1
. .
ATOM 2027 C    C    . ARG ARG ARG A A 268 268 . 124.014 102.389 25.009  1.00 12.88  1
. .
ATOM 2028 O    O    . ARG ARG ARG A A 268 268 . 123.171 103.058 25.585  1.00 13.37  1
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ATOM 2029 N    N    . TYR TYR TYR A A 269 269 . 124.109 101.085 25.191  1.00 12.29  1
. .
ATOM 2030 CA   CA   . TYR TYR TYR A A 269 269 . 123.195 100.344 26.055  1.00 11.69  1
. .
ATOM 2031 CB   CB   . TYR TYR TYR A A 269 269 . 123.440 98.803  25.948  1.00 11.36  1
. .
ATOM 2032 CG   CG   . TYR TYR TYR A A 269 269 . 123.217 98.187  24.590  1.00 11.30  1
. .
ATOM 2033 CD1  CD1  . TYR TYR TYR A A 269 269 . 122.743 98.943  23.520  1.00 13.04  1
. .
ATOM 2034 CE1  CE1  . TYR TYR TYR A A 269 269 . 122.529 98.377  22.295  1.00 12.92  1
. .
ATOM 2035 CZ   CZ   . TYR TYR TYR A A 269 269 . 122.775 97.027  22.102  1.00 16.16  1
. .
ATOM 2036 OH   OH   . TYR TYR TYR A A 269 269 . 122.570 96.452  20.865  1.00 21.54  1
. .
ATOM 2037 CE2  CE2  . TYR TYR TYR A A 269 269 . 123.246 96.255  23.114  1.00 13.43  1
. .
ATOM 2038 CD2  CD2  . TYR TYR TYR A A 269 269 . 123.437 96.832  24.372  1.00 13.35  1
. .
ATOM 2039 C    C    . TYR TYR TYR A A 269 269 . 123.335 100.774 27.486  1.00 10.67  1
. .
ATOM 2040 O    O    . TYR TYR TYR A A 269 269 . 124.442 101.114 27.914  1.00 11.99  1
. .
ATOM 2041 N    N    . ILE ILE ILE A A 270 270 . 122.226 100.839 28.221  1.00 9.03   1
. .
ATOM 2042 CA   CA   . ILE ILE ILE A A 270 270 . 122.279 101.170 29.647  1.00 7.93   1
. .
ATOM 2043 CB   CB   . ILE ILE ILE A A 270 270 . 121.436 102.442 30.010  1.00 7.91   1
. .
ATOM 2044 CG1  CG1  . ILE ILE ILE A A 270 270 . 119.905 102.212 29.713  1.00 5.88   1
. .
ATOM 2045 CD1  CD1  . ILE ILE ILE A A 270 270 . 119.012 103.390 30.071  1.00 8.62   1
. .
ATOM 2046 CG2  CG2  . ILE ILE ILE A A 270 270 . 121.955 103.665 29.318  1.00 8.59   1
. .
ATOM 2047 C    C    . ILE ILE ILE A A 270 270 . 121.845 99.962  30.505  1.00 8.74   1
. .
ATOM 2048 O    O    . ILE ILE ILE A A 270 270 . 121.207 99.023  29.992  1.00 9.59   1
. .
ATOM 2049 N    N    . THR THR THR A A 271 271 . 122.174 99.949  31.790  1.00 7.76   1
. .
ATOM 2050 CA   CA   . THR THR THR A A 271 271 . 121.747 98.838  32.629  1.00 9.73   1
. .
ATOM 2051 CB   CB   . THR THR THR A A 271 271 . 122.668 98.651  33.781  1.00 10.10  1
. .
ATOM 2052 OG1  OG1  . THR THR THR A A 271 271 . 122.511 99.739  34.716  1.00 13.09  1
. .
ATOM 2053 CG2  CG2  . THR THR THR A A 271 271 . 124.139 98.590  33.241  1.00 14.67  1
. .
ATOM 2054 C    C    . THR THR THR A A 271 271 . 120.315 99.110  33.129  1.00 8.95   1
. .
ATOM 2055 O    O    . THR THR THR A A 271 271 . 119.781 100.240 33.018  1.00 8.93   1
. .
ATOM 2056 N    N    . GLY GLY GLY A A 272 272 . 119.733 98.090  33.712  1.00 9.79   1
. .
ATOM 2057 CA   CA   . GLY GLY GLY A A 272 272 . 118.436 98.164  34.414  1.00 11.59  1
. .
ATOM 2058 C    C    . GLY GLY GLY A A 272 272 . 118.459 99.223  35.498  1.00 11.59  1
. .
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ATOM 2059 O    O    . GLY GLY GLY A A 272 272 . 117.484 99.950  35.708  1.00 11.02  1
. .
ATOM 2060 N    N    . ASP ASP ASP A A 273 273 . 119.584 99.340  36.207  1.00 11.03  1
. .
ATOM 2061 CA   CA   . ASP ASP ASP A A 273 273 . 119.673 100.366 37.224  1.00 11.83  1
. .
ATOM 2062 CB   CB   . ASP ASP ASP A A 273 273 . 120.951 100.220 38.009  1.00 13.13  1
. .
ATOM 2063 CG   CG   . ASP ASP ASP A A 273 273 . 120.863 99.091  39.004  1.00 18.04  1
. .
ATOM 2064 OD1  OD1  . ASP ASP ASP A A 273 273 . 119.724 98.685  39.336  1.00 21.32  1
. .
ATOM 2065 OD2  OD2  . ASP ASP ASP A A 273 273 . 121.914 98.593  39.458  1.00 26.15  1
. .
ATOM 2066 C    C    . ASP ASP ASP A A 273 273 . 119.564 101.749 36.708  1.00 10.61  1
. .
ATOM 2067 O    O    . ASP ASP ASP A A 273 273 . 118.804 102.594 37.269  1.00 10.57  1
. .
ATOM 2068 N    N    . GLN GLN GLN A A 274 274 . 120.323 102.012 35.652  1.00 10.25  1
. .
ATOM 2069 CA   CA   . GLN GLN GLN A A 274 274 . 120.292 103.324 34.987  1.00 9.91   1
. .
ATOM 2070 CB   CB   . GLN GLN GLN A A 274 274 . 121.305 103.378 33.851  1.00 10.97  1
. .
ATOM 2071 CG   CG   . GLN GLN GLN A A 274 274 . 122.769 103.229 34.303  1.00 14.25  1
. .
ATOM 2072 CD   CD   . GLN GLN GLN A A 274 274 . 123.779 103.048 33.151  1.00 15.59  1
. .
ATOM 2073 OE1  OE1  . GLN GLN GLN A A 274 274 . 123.743 102.047 32.429  1.00 15.36  1
. .
ATOM 2074 NE2  NE2  . GLN GLN GLN A A 274 274 . 124.692 104.017 32.997  1.00 18.82  1
. .
ATOM 2075 C    C    . GLN GLN GLN A A 274 274 . 118.896 103.562 34.444  1.00 9.11   1
. .
ATOM 2076 O    O    . GLN GLN GLN A A 274 274 . 118.362 104.640 34.541  1.00 9.61   1
. .
ATOM 2077 N    N    . LEU LEU LEU A A 275 275 . 118.291 102.545 33.858  1.00 8.68   1
. .
ATOM 2078 CA   CA   . LEU LEU LEU A A 275 275 . 116.918 102.791 33.372  1.00 7.20   1
. .
ATOM 2079 CB   CB   . LEU LEU LEU A A 275 275 . 116.472 101.564 32.545  1.00 6.86   1
. .
ATOM 2080 CG   CG   . LEU LEU LEU A A 275 275 . 115.161 101.626 31.796  1.00 5.89   1
. .
ATOM 2081 CD1  CD1  . LEU LEU LEU A A 275 275 . 115.172 102.755 30.821  1.00 5.96   1
. .
ATOM 2082 CD2  CD2  . LEU LEU LEU A A 275 275 . 114.951 100.263 31.087  1.00 5.44   1
. .
ATOM 2083 C    C    . LEU LEU LEU A A 275 275 . 115.949 103.186 34.521  1.00 6.82   1
. .
ATOM 2084 O    O    . LEU LEU LEU A A 275 275 . 115.161 104.119 34.389  1.00 8.84   1
. .
ATOM 2085 N    N    . GLY GLY GLY A A 276 276 . 116.011 102.465 35.637  1.00 5.76   1
. .
ATOM 2086 CA   CA   . GLY GLY GLY A A 276 276 . 115.269 102.780 36.848  1.00 7.13   1
. .
ATOM 2087 C    C    . GLY GLY GLY A A 276 276 . 115.480 104.204 37.289  1.00 7.00   1
. .
ATOM 2088 O    O    . GLY GLY GLY A A 276 276 . 114.541 104.938 37.554  1.00 7.29   1
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ATOM 2089 N    N    . ALA ALA ALA A A 277 277 . 116.754 104.589 37.386  1.00 6.10   1
. .
ATOM 2090 CA   CA   . ALA ALA ALA A A 277 277 . 117.087 105.922 37.744  1.00 6.13   1
. .
ATOM 2091 CB   CB   . ALA ALA ALA A A 277 277 . 118.634 106.098 37.778  1.00 7.66   1
. .
ATOM 2092 C    C    . ALA ALA ALA A A 277 277 . 116.433 106.936 36.816  1.00 5.43   1
. .
ATOM 2093 O    O    . ALA ALA ALA A A 277 277 . 116.029 108.018 37.262  1.00 8.67   1
. .
ATOM 2094 N    N    . LEU LEU LEU A A 278 278 . 116.409 106.654 35.505  1.00 7.69   1
. .
ATOM 2095 CA   CA   . LEU LEU LEU A A 278 278 . 115.700 107.519 34.581  1.00 6.93   1
. .
ATOM 2096 CB   CB   . LEU LEU LEU A A 278 278 . 115.836 106.945 33.162  1.00 10.65  1
. .
ATOM 2097 CG   CG   . LEU LEU LEU A A 278 278 . 115.432 107.832 31.986  1.00 12.20  1
. .
ATOM 2098 CD1  CD1  . LEU LEU LEU A A 278 278 . 116.304 109.122 32.022  1.00 15.39  1
. .
ATOM 2099 CD2  CD2  . LEU LEU LEU A A 278 278 . 115.518 107.109 30.602  1.00 16.21  1
. .
ATOM 2100 C    C    . LEU LEU LEU A A 278 278 . 114.210 107.707 34.909  1.00 5.17   1
. .
ATOM 2101 O    O    . LEU LEU LEU A A 278 278 . 113.673 108.812 34.862  1.00 5.10   1
. .
ATOM 2102 N    N    . TYR TYR TYR A A 279 279 . 113.533 106.600 35.115  1.00 3.50   1
. .
ATOM 2103 CA   CA   . TYR TYR TYR A A 279 279 . 112.131 106.662 35.510  1.00 3.53   1
. .
ATOM 2104 CB   CB   . TYR TYR TYR A A 279 279 . 111.594 105.251 35.781  1.00 4.01   1
. .
ATOM 2105 CG   CG   . TYR TYR TYR A A 279 279 . 111.645 104.266 34.648  1.00 3.38   1
. .
ATOM 2106 CD1  CD1  . TYR TYR TYR A A 279 279 . 111.429 104.673 33.299  1.00 2.53   1
. .
ATOM 2107 CE1  CE1  . TYR TYR TYR A A 279 279 . 111.519 103.779 32.258  1.00 3.54   1
. .
ATOM 2108 CZ   CZ   . TYR TYR TYR A A 279 279 . 111.792 102.465 32.531  1.00 3.21   1
. .
ATOM 2109 OH   OH   . TYR TYR TYR A A 279 279 . 111.836 101.525 31.524  1.00 3.14   1
. .
ATOM 2110 CE2  CE2  . TYR TYR TYR A A 279 279 . 112.011 102.047 33.809  1.00 2.00   1
. .
ATOM 2111 CD2  CD2  . TYR TYR TYR A A 279 279 . 111.918 102.944 34.892  1.00 2.00   1
. .
ATOM 2112 C    C    . TYR TYR TYR A A 279 279 . 111.975 107.462 36.813  1.00 3.87   1
. .
ATOM 2113 O    O    . TYR TYR TYR A A 279 279 . 111.048 108.171 36.955  1.00 4.10   1
. .
ATOM 2114 N    N    . GLN GLN GLN A A 280 280 . 112.926 107.322 37.745  1.00 3.91   1
. .
ATOM 2115 CA   CA   . GLN GLN GLN A A 280 280 . 112.800 108.154 38.946  1.00 6.04   1
. .
ATOM 2116 CB   CB   . GLN GLN GLN A A 280 280 . 113.788 107.790 40.062  1.00 6.02   1
. .
ATOM 2117 CG   CG   . GLN GLN GLN A A 280 280 . 113.611 106.393 40.581  1.00 8.26   1
. .
ATOM 2118 CD   CD   . GLN GLN GLN A A 280 280 . 112.507 106.222 41.581  1.00 10.16  1
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ATOM 2119 OE1  OE1  . GLN GLN GLN A A 280 280 . 111.810 107.167 41.925  1.00 13.09  1
. .
ATOM 2120 NE2  NE2  . GLN GLN GLN A A 280 280 . 112.336 105.005 42.083  1.00 9.74   1
. .
ATOM 2121 C    C    . GLN GLN GLN A A 280 280 . 112.836 109.612 38.639  1.00 5.96   1
. .
ATOM 2122 O    O    . GLN GLN GLN A A 280 280 . 112.106 110.360 39.219  1.00 5.16   1
. .
ATOM 2123 N    N    . ASP ASP ASP A A 281 281 . 113.663 110.005 37.672  1.00 5.74   1
. .
ATOM 2124 CA   CA   . ASP ASP ASP A A 281 281 . 113.711 111.403 37.250  1.00 7.05   1
. .
ATOM 2125 CB   CB   . ASP ASP ASP A A 281 281 . 114.846 111.652 36.287  1.00 8.91   1
. .
ATOM 2126 CG   CG   . ASP ASP ASP A A 281 281 . 116.188 111.324 36.895  1.00 15.44  1
. .
ATOM 2127 OD1  OD1  . ASP ASP ASP A A 281 281 . 116.303 111.373 38.143  1.00 20.95  1
. .
ATOM 2128 OD2  OD2  . ASP ASP ASP A A 281 281 . 117.143 111.052 36.120  1.00 24.94  1
. .
ATOM 2129 C    C    . ASP ASP ASP A A 281 281 . 112.415 111.811 36.609  1.00 6.37   1
. .
ATOM 2130 O    O    . ASP ASP ASP A A 281 281 . 111.978 112.934 36.809  1.00 6.07   1
. .
ATOM 2131 N    N    . PHE PHE PHE A A 282 282 . 111.861 110.940 35.744  1.00 5.92   1
. .
ATOM 2132 CA   CA   . PHE PHE PHE A A 282 282 . 110.587 111.223 35.107  1.00 4.79   1
. .
ATOM 2133 CB   CB   . PHE PHE PHE A A 282 282 . 110.154 110.085 34.191  1.00 6.95   1
. .
ATOM 2134 CG   CG   . PHE PHE PHE A A 282 282 . 111.000 109.905 32.970  1.00 8.00   1
. .
ATOM 2135 CD1  CD1  . PHE PHE PHE A A 282 282 . 110.875 108.737 32.202  1.00 10.86  1
. .
ATOM 2136 CE1  CE1  . PHE PHE PHE A A 282 282 . 111.655 108.558 31.036  1.00 13.19  1
. .
ATOM 2137 CZ   CZ   . PHE PHE PHE A A 282 282 . 112.560 109.517 30.665  1.00 11.92  1
. .
ATOM 2138 CE2  CE2  . PHE PHE PHE A A 282 282 . 112.704 110.675 31.411  1.00 13.17  1
. .
ATOM 2139 CD2  CD2  . PHE PHE PHE A A 282 282 . 111.920 110.875 32.562  1.00 8.89   1
. .
ATOM 2140 C    C    . PHE PHE PHE A A 282 282 . 109.473 111.415 36.136  1.00 5.48   1
. .
ATOM 2141 O    O    . PHE PHE PHE A A 282 282 . 108.695 112.321 36.000  1.00 5.30   1
. .
ATOM 2142 N    N    . VAL VAL VAL A A 283 283 . 109.414 110.558 37.132  1.00 3.41   1
. .
ATOM 2143 CA   CA   . VAL VAL VAL A A 283 283 . 108.344 110.690 38.118  1.00 4.25   1
. .
ATOM 2144 CB   CB   . VAL VAL VAL A A 283 283 . 108.362 109.439 38.991  1.00 3.64   1
. .
ATOM 2145 CG1  CG1  . VAL VAL VAL A A 283 283 . 107.547 109.596 40.264  1.00 6.92   1
. .
ATOM 2146 CG2  CG2  . VAL VAL VAL A A 283 283 . 107.820 108.272 38.135  1.00 4.04   1
. .
ATOM 2147 C    C    . VAL VAL VAL A A 283 283 . 108.487 111.995 38.947  1.00 5.12   1
. .
ATOM 2148 O    O    . VAL VAL VAL A A 283 283 . 107.530 112.565 39.465  1.00 5.09   1
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ATOM 2149 N    N    . ARG ARG ARG A A 284 284 . 109.719 112.425 39.099  1.00 6.40   1
. .
ATOM 2150 CA   CA   . ARG ARG ARG A A 284 284 . 109.885 113.618 39.928  1.00 9.06   1
. .
ATOM 2151 CB   CB   . ARG ARG ARG A A 284 284 . 111.135 113.501 40.763  1.00 11.99  1
. .
ATOM 2152 CG   CG   . ARG ARG ARG A A 284 284 . 112.320 113.790 40.072  1.00 11.72  1
. .
ATOM 2153 CD   CD   . ARG ARG ARG A A 284 284 . 112.946 114.987 40.711  1.00 17.14  1
. .
ATOM 2154 NE   NE   . ARG ARG ARG A A 284 284 . 114.043 115.369 39.854  1.00 25.09  1
. .
ATOM 2155 CZ   CZ   . ARG ARG ARG A A 284 284 . 115.073 114.593 39.525  1.00 28.94  1
. .
ATOM 2156 NH1  NH1  . ARG ARG ARG A A 284 284 . 115.160 113.367 39.989  1.00 30.91  1
. .
ATOM 2157 NH2  NH2  . ARG ARG ARG A A 284 284 . 116.021 115.056 38.711  1.00 29.16  1
. .
ATOM 2158 C    C    . ARG ARG ARG A A 284 284 . 109.726 114.875 39.067  1.00 8.14   1
. .
ATOM 2159 O    O    . ARG ARG ARG A A 284 284 . 109.111 115.845 39.498  1.00 8.04   1
. .
ATOM 2160 N    N    . ASP ASP ASP A A 285 285 . 110.135 114.827 37.809  1.00 7.50   1
. .
ATOM 2161 CA   CA   . ASP ASP ASP A A 285 285 . 109.973 116.016 36.960  1.00 7.35   1
. .
ATOM 2162 CB   CB   . ASP ASP ASP A A 285 285 . 111.122 116.148 35.958  1.00 9.58   1
. .
ATOM 2163 CG   CG   . ASP ASP ASP A A 285 285 . 112.512 116.166 36.643  1.00 14.34  1
. .
ATOM 2164 OD1  OD1  . ASP ASP ASP A A 285 285 . 112.565 116.541 37.830  1.00 16.22  1
. .
ATOM 2165 OD2  OD2  . ASP ASP ASP A A 285 285 . 113.535 115.785 35.968  1.00 15.85  1
. .
ATOM 2166 C    C    . ASP ASP ASP A A 285 285 . 108.629 116.202 36.232  1.00 6.98   1
. .
ATOM 2167 O    O    . ASP ASP ASP A A 285 285 . 108.312 117.318 35.821  1.00 9.69   1
. .
ATOM 2168 N    N    . TYR TYR TYR A A 286 286 . 107.841 115.150 36.028  1.00 6.73   1
. .
ATOM 2169 CA   CA   . TYR TYR TYR A A 286 286 . 106.571 115.261 35.273  1.00 5.45   1
. .
ATOM 2170 CB   CB   . TYR TYR TYR A A 286 286 . 106.641 114.631 33.847  1.00 4.71   1
. .
ATOM 2171 CG   CG   . TYR TYR TYR A A 286 286 . 107.819 115.186 33.099  1.00 6.72   1
. .
ATOM 2172 CD1  CD1  . TYR TYR TYR A A 286 286 . 107.672 116.317 32.321  1.00 10.30  1
. .
ATOM 2173 CE1  CE1  . TYR TYR TYR A A 286 286 . 108.679 116.839 31.660  1.00 8.63   1
. .
ATOM 2174 CZ   CZ   . TYR TYR TYR A A 286 286 . 109.913 116.312 31.772  1.00 11.54  1
. .
ATOM 2175 OH   OH   . TYR TYR TYR A A 286 286 . 110.902 116.939 31.072  1.00 16.49  1
. .
ATOM 2176 CE2  CE2  . TYR TYR TYR A A 286 286 . 110.134 115.183 32.544  1.00 11.08  1
. .
ATOM 2177 CD2  CD2  . TYR TYR TYR A A 286 286 . 109.079 114.608 33.195  1.00 11.17  1
. .
ATOM 2178 C    C    . TYR TYR TYR A A 286 286 . 105.487 114.582 36.105  1.00 4.58   1
. .
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ATOM 2179 O    O    . TYR TYR TYR A A 286 286 . 105.822 113.793 37.009  1.00 3.61   1
. .
ATOM 2180 N    N    . PRO PRO PRO A A 287 287 . 104.213 114.879 35.808  1.00 4.20   1
. .
ATOM 2181 CA   CA   . PRO PRO PRO A A 287 287 . 103.113 114.254 36.486  1.00 3.04   1
. .
ATOM 2182 CB   CB   . PRO PRO PRO A A 287 287 . 101.953 115.209 36.249  1.00 4.91   1
. .
ATOM 2183 CG   CG   . PRO PRO PRO A A 287 287 . 102.213 115.739 34.909  1.00 5.55   1
. .
ATOM 2184 CD   CD   . PRO PRO PRO A A 287 287 . 103.738 115.932 34.895  1.00 4.92   1
. .
ATOM 2185 C    C    . PRO PRO PRO A A 287 287 . 102.829 112.807 35.979  1.00 2.34   1
. .
ATOM 2186 O    O    . PRO PRO PRO A A 287 287 . 101.657 112.455 35.669  1.00 2.73   1
. .
ATOM 2187 N    N    . VAL VAL VAL A A 288 288 . 103.863 112.005 36.002  1.00 3.41   1
. .
ATOM 2188 CA   CA   . VAL VAL VAL A A 288 288 . 103.717 110.554 35.696  1.00 2.24   1
. .
ATOM 2189 CB   CB   . VAL VAL VAL A A 288 288 . 105.045 109.982 35.231  1.00 2.85   1
. .
ATOM 2190 CG1  CG1  . VAL VAL VAL A A 288 288 . 104.865 108.516 34.872  1.00 3.17   1
. .
ATOM 2191 CG2  CG2  . VAL VAL VAL A A 288 288 . 105.514 110.751 33.980  1.00 4.50   1
. .
ATOM 2192 C    C    . VAL VAL VAL A A 288 288 . 103.174 109.757 36.844  1.00 2.19   1
. .
ATOM 2193 O    O    . VAL VAL VAL A A 288 288 . 103.791 109.731 37.911  1.00 4.90   1
. .
ATOM 2194 N    N    . VAL VAL VAL A A 289 289 . 102.010 109.140 36.647  1.00 2.31   1
. .
ATOM 2195 CA   CA   . VAL VAL VAL A A 289 289 . 101.353 108.397 37.705  1.00 2.09   1
. .
ATOM 2196 CB   CB   . VAL VAL VAL A A 289 289 . 99.923  108.926 37.971  1.00 2.00   1
. .
ATOM 2197 CG1  CG1  . VAL VAL VAL A A 289 289 . 99.982  110.402 38.481  1.00 3.69   1
. .
ATOM 2198 CG2  CG2  . VAL VAL VAL A A 289 289 . 99.053  108.852 36.733  1.00 4.06   1
. .
ATOM 2199 C    C    . VAL VAL VAL A A 289 289 . 101.297 106.870 37.404  1.00 2.00   1
. .
ATOM 2200 O    O    . VAL VAL VAL A A 289 289 . 100.759 106.109 38.177  1.00 3.69   1
. .
ATOM 2201 N    N    . SER SER SER A A 290 290 . 101.767 106.464 36.224  1.00 2.00   1
. .
ATOM 2202 CA   CA   . SER SER SER A A 290 290 . 101.672 105.078 35.779  1.00 2.68   1
. .
ATOM 2203 CB   CB   . SER SER SER A A 290 290 . 100.245 104.765 35.214  1.00 2.44   1
. .
ATOM 2204 OG   OG   . SER SER SER A A 290 290 . 100.137 103.395 34.767  1.00 2.47   1
. .
ATOM 2205 C    C    . SER SER SER A A 290 290 . 102.718 104.772 34.743  1.00 2.01   1
. .
ATOM 2206 O    O    . SER SER SER A A 290 290 . 102.902 105.542 33.781  1.00 2.45   1
. .
ATOM 2207 N    N    . ILE ILE ILE A A 291 291 . 103.417 103.637 34.950  1.00 2.06   1
. .
ATOM 2208 CA   CA   . ILE ILE ILE A A 291 291 . 104.446 103.199 34.020  1.00 2.00   1
. .
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ATOM 2209 CB   CB   . ILE ILE ILE A A 291 291 . 105.896 103.456 34.544  1.00 2.29   1
. .
ATOM 2210 CG1  CG1  . ILE ILE ILE A A 291 291 . 106.117 104.945 34.816  1.00 3.78   1
. .
ATOM 2211 CD1  CD1  . ILE ILE ILE A A 291 291 . 107.537 105.321 35.357  1.00 3.24   1
. .
ATOM 2212 CG2  CG2  . ILE ILE ILE A A 291 291 . 106.954 102.927 33.560  1.00 3.35   1
. .
ATOM 2213 C    C    . ILE ILE ILE A A 291 291 . 104.192 101.736 33.756  1.00 2.12   1
. .
ATOM 2214 O    O    . ILE ILE ILE A A 291 291 . 104.233 100.916 34.660  1.00 2.00   1
. .
ATOM 2215 N    N    . GLU GLU GLU A A 292 292 . 104.035 101.409 32.463  1.00 2.00   1
. .
ATOM 2216 CA   CA   . GLU GLU GLU A A 292 292 . 103.808 100.015 32.013  1.00 2.00   1
. .
ATOM 2217 CB   CB   . GLU GLU GLU A A 292 292 . 102.662 100.037 31.022  1.00 2.00   1
. .
ATOM 2218 CG   CG   . GLU GLU GLU A A 292 292 . 102.464 98.648  30.392  1.00 2.00   1
. .
ATOM 2219 CD   CD   . GLU GLU GLU A A 292 292 . 101.429 98.754  29.268  1.00 3.93   1
. .
ATOM 2220 OE1  OE1  . GLU GLU GLU A A 292 292 . 101.530 97.970  28.334  1.00 2.61   1
. .
ATOM 2221 OE2  OE2  . GLU GLU GLU A A 292 292 . 100.606 99.684  29.258  1.00 6.39   1
. .
ATOM 2222 C    C    . GLU GLU GLU A A 292 292 . 105.102 99.374  31.451  1.00 2.16   1
. .
ATOM 2223 O    O    . GLU GLU GLU A A 292 292 . 105.832 100.028 30.723  1.00 2.03   1
. .
ATOM 2224 N    N    . ASP ASP ASP A A 293 293 . 105.345 98.075  31.756  1.00 2.00   1
. .
ATOM 2225 CA   CA   . ASP ASP ASP A A 293 293 . 106.519 97.350  31.256  1.00 2.00   1
. .
ATOM 2226 CB   CB   . ASP ASP ASP A A 293 293 . 106.249 96.900  29.839  1.00 2.00   1
. .
ATOM 2227 CG   CG   . ASP ASP ASP A A 293 293 . 105.418 95.630  29.772  1.00 2.00   1
. .
ATOM 2228 OD1  OD1  . ASP ASP ASP A A 293 293 . 105.185 94.912  30.790  1.00 2.87   1
. .
ATOM 2229 OD2  OD2  . ASP ASP ASP A A 293 293 . 105.046 95.237  28.612  1.00 2.17   1
. .
ATOM 2230 C    C    . ASP ASP ASP A A 293 293 . 107.843 98.198  31.296  1.00 2.00   1
. .
ATOM 2231 O    O    . ASP ASP ASP A A 293 293 . 108.519 98.382  30.281  1.00 2.10   1
. .
ATOM 2232 N    N    . PRO PRO PRO A A 294 294 . 108.203 98.711  32.475  1.00 2.00   1
. .
ATOM 2233 CA   CA   . PRO PRO PRO A A 294 294 . 109.433 99.406  32.628  1.00 2.11   1
. .
ATOM 2234 CB   CB   . PRO PRO PRO A A 294 294 . 109.380 99.905  34.094  1.00 2.49   1
. .
ATOM 2235 CG   CG   . PRO PRO PRO A A 294 294 . 108.511 98.986  34.762  1.00 2.50   1
. .
ATOM 2236 CD   CD   . PRO PRO PRO A A 294 294 . 107.464 98.592  33.717  1.00 2.32   1
. .
ATOM 2237 C    C    . PRO PRO PRO A A 294 294 . 110.638 98.500  32.437  1.00 2.00   1
. .
ATOM 2238 O    O    . PRO PRO PRO A A 294 294 . 111.755 99.036  32.170  1.00 4.72   1
. .
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ATOM 2239 N    N    . PHE PHE PHE A A 295 295 . 110.469 97.174  32.528  1.00 2.24   1
. .
ATOM 2240 CA   CA   . PHE PHE PHE A A 295 295 . 111.631 96.325  32.310  1.00 2.22   1
. .
ATOM 2241 CB   CB   . PHE PHE PHE A A 295 295 . 112.212 95.877  33.653  1.00 2.69   1
. .
ATOM 2242 CG   CG   . PHE PHE PHE A A 295 295 . 112.648 97.012  34.507  1.00 3.82   1
. .
ATOM 2243 CD1  CD1  . PHE PHE PHE A A 295 295 . 113.834 97.693  34.215  1.00 3.30   1
. .
ATOM 2244 CE1  CE1  . PHE PHE PHE A A 295 295 . 114.227 98.774  34.986  1.00 5.58   1
. .
ATOM 2245 CZ   CZ   . PHE PHE PHE A A 295 295 . 113.391 99.200  36.066  1.00 5.15   1
. .
ATOM 2246 CE2  CE2  . PHE PHE PHE A A 295 295 . 112.190 98.534  36.387  1.00 6.35   1
. .
ATOM 2247 CD2  CD2  . PHE PHE PHE A A 295 295 . 111.837 97.465  35.589  1.00 3.54   1
. .
ATOM 2248 C    C    . PHE PHE PHE A A 295 295 . 111.195 95.156  31.438  1.00 2.00   1
. .
ATOM 2249 O    O    . PHE PHE PHE A A 295 295 . 109.992 94.973  31.246  1.00 2.31   1
. .
ATOM 2250 N    N    . ASP ASP ASP A A 296 296 . 112.149 94.344  30.991  1.00 2.19   1
. .
ATOM 2251 CA   CA   . ASP ASP ASP A A 296 296 . 111.887 93.173  30.173  1.00 2.80   1
. .
ATOM 2252 CB   CB   . ASP ASP ASP A A 296 296 . 113.231 92.518  29.806  1.00 3.93   1
. .
ATOM 2253 CG   CG   . ASP ASP ASP A A 296 296 . 113.017 91.299  28.947  1.00 3.85   1
. .
ATOM 2254 OD1  OD1  . ASP ASP ASP A A 296 296 . 112.617 91.522  27.773  1.00 3.43   1
. .
ATOM 2255 OD2  OD2  . ASP ASP ASP A A 296 296 . 113.172 90.120  29.455  1.00 7.60   1
. .
ATOM 2256 C    C    . ASP ASP ASP A A 296 296 . 111.005 92.156  30.895  1.00 2.63   1
. .
ATOM 2257 O    O    . ASP ASP ASP A A 296 296 . 110.967 92.065  32.140  1.00 2.72   1
. .
ATOM 2258 N    N    . GLN GLN GLN A A 297 297 . 110.243 91.418  30.095  1.00 3.48   1
. .
ATOM 2259 CA   CA   . GLN GLN GLN A A 297 297 . 109.267 90.421  30.553  1.00 3.29   1
. .
ATOM 2260 CB   CB   . GLN GLN GLN A A 297 297 . 108.612 89.813  29.283  1.00 4.21   1
. .
ATOM 2261 CG   CG   . GLN GLN GLN A A 297 297 . 109.478 89.002  28.432  1.00 3.46   1
. .
ATOM 2262 CD   CD   . GLN GLN GLN A A 297 297 . 109.153 89.158  26.976  1.00 3.03   1
. .
ATOM 2263 OE1  OE1  . GLN GLN GLN A A 297 297 . 107.987 89.081  26.613  1.00 4.36   1
. .
ATOM 2264 NE2  NE2  . GLN GLN GLN A A 297 297 . 110.160 89.479  26.110  1.00 4.49   1
. .
ATOM 2265 C    C    . GLN GLN GLN A A 297 297 . 109.835 89.296  31.385  1.00 5.25   1
. .
ATOM 2266 O    O    . GLN GLN GLN A A 297 297 . 109.077 88.636  32.123  1.00 7.77   1
. .
ATOM 2267 N    N    . ASP ASP ASP A A 298 298 . 111.139 89.043  31.286  1.00 7.06   1
. .
ATOM 2268 CA   CA   . ASP ASP ASP A A 298 298 . 111.729 88.066  32.275  1.00 9.04   1
. .
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ATOM 2269 CB   CB   . ASP ASP ASP A A 298 298 . 112.623 87.005  31.574  1.00 10.91  1
. .
ATOM 2270 CG   CG   . ASP ASP ASP A A 298 298 . 111.914 86.158  30.478  1.00 10.57  1
. .
ATOM 2271 OD1  OD1  . ASP ASP ASP A A 298 298 . 110.954 85.486  30.814  1.00 12.79  1
. .
ATOM 2272 OD2  OD2  . ASP ASP ASP A A 298 298 . 112.387 86.078  29.303  1.00 16.26  1
. .
ATOM 2273 C    C    . ASP ASP ASP A A 298 298 . 112.641 88.773  33.308  1.00 8.67   1
. .
ATOM 2274 O    O    . ASP ASP ASP A A 298 298 . 113.412 88.061  33.961  1.00 9.56   1
. .
ATOM 2275 N    N    . ASP ASP ASP A A 299 299 . 112.716 90.120  33.380  1.00 7.78   1
. .
ATOM 2276 CA   CA   . ASP ASP ASP A A 299 299 . 113.684 90.819  34.308  1.00 8.21   1
. .
ATOM 2277 CB   CB   . ASP ASP ASP A A 299 299 . 114.139 92.144  33.629  1.00 8.95   1
. .
ATOM 2278 CG   CG   . ASP ASP ASP A A 299 299 . 115.402 92.786  34.256  1.00 9.85   1
. .
ATOM 2279 OD1  OD1  . ASP ASP ASP A A 299 299 . 115.893 92.294  35.269  1.00 10.61  1
. .
ATOM 2280 OD2  OD2  . ASP ASP ASP A A 299 299 . 115.928 93.794  33.707  1.00 8.47   1
. .
ATOM 2281 C    C    . ASP ASP ASP A A 299 299 . 113.071 91.039  35.716  1.00 7.73   1
. .
ATOM 2282 O    O    . ASP ASP ASP A A 299 299 . 112.963 92.187  36.173  1.00 6.18   1
. .
ATOM 2283 N    N    . TRP TRP TRP A A 300 300 . 112.634 89.969  36.358  1.00 7.34   1
. .
ATOM 2284 CA   CA   . TRP TRP TRP A A 300 300 . 111.757 89.972  37.519  1.00 7.37   1
. .
ATOM 2285 CB   CB   . TRP TRP TRP A A 300 300 . 111.468 88.560  37.982  1.00 7.62   1
. .
ATOM 2286 CG   CG   . TRP TRP TRP A A 300 300 . 110.516 87.792  37.080  1.00 5.52   1
. .
ATOM 2287 CD1  CD1  . TRP TRP TRP A A 300 300 . 110.884 86.936  36.039  1.00 10.87  1
. .
ATOM 2288 NE1  NE1  . TRP TRP TRP A A 300 300 . 109.743 86.393  35.435  1.00 12.25  1
. .
ATOM 2289 CE2  CE2  . TRP TRP TRP A A 300 300 . 108.627 86.888  36.054  1.00 9.51   1
. .
ATOM 2290 CD2  CD2  . TRP TRP TRP A A 300 300 . 109.064 87.761  37.110  1.00 4.55   1
. .
ATOM 2291 CE3  CE3  . TRP TRP TRP A A 300 300 . 108.085 88.371  37.919  1.00 9.08   1
. .
ATOM 2292 CZ3  CZ3  . TRP TRP TRP A A 300 300 . 106.742 88.092  37.668  1.00 8.42   1
. .
ATOM 2293 CH2  CH2  . TRP TRP TRP A A 300 300 . 106.346 87.233  36.633  1.00 9.12   1
. .
ATOM 2294 CZ2  CZ2  . TRP TRP TRP A A 300 300 . 107.266 86.616  35.814  1.00 8.61   1
. .
ATOM 2295 C    C    . TRP TRP TRP A A 300 300 . 112.393 90.814  38.645  1.00 8.07   1
. .
ATOM 2296 O    O    . TRP TRP TRP A A 300 300 . 111.733 91.619  39.316  1.00 7.49   1
. .
ATOM 2297 N    N    . ALA ALA ALA A A 301 301 . 113.708 90.681  38.799  1.00 8.57   1
. .
ATOM 2298 CA   CA   . ALA ALA ALA A A 301 301 . 114.383 91.403  39.882  1.00 8.46   1
. .
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ATOM 2299 CB   CB   . ALA ALA ALA A A 301 301 . 115.903 90.952  40.002  1.00 9.21   1
. .
ATOM 2300 C    C    . ALA ALA ALA A A 301 301 . 114.282 92.936  39.759  1.00 7.72   1
. .
ATOM 2301 O    O    . ALA ALA ALA A A 301 301 . 114.080 93.630  40.768  1.00 8.42   1
. .
ATOM 2302 N    N    . ALA ALA ALA A A 302 302 . 114.393 93.424  38.550  1.00 7.56   1
. .
ATOM 2303 CA   CA   . ALA ALA ALA A A 302 302 . 114.383 94.870  38.302  1.00 6.62   1
. .
ATOM 2304 CB   CB   . ALA ALA ALA A A 302 302 . 114.816 95.198  36.842  1.00 9.54   1
. .
ATOM 2305 C    C    . ALA ALA ALA A A 302 302 . 112.981 95.377  38.581  1.00 6.10   1
. .
ATOM 2306 O    O    . ALA ALA ALA A A 302 302 . 112.831 96.440  39.148  1.00 5.30   1
. .
ATOM 2307 N    N    . TRP TRP TRP A A 303 303 . 111.966 94.577  38.174  1.00 4.88   1
. .
ATOM 2308 CA   CA   . TRP TRP TRP A A 303 303 . 110.585 94.961  38.439  1.00 3.36   1
. .
ATOM 2309 CB   CB   . TRP TRP TRP A A 303 303 . 109.582 93.945  37.945  1.00 3.56   1
. .
ATOM 2310 CG   CG   . TRP TRP TRP A A 303 303 . 109.333 93.988  36.412  1.00 2.59   1
. .
ATOM 2311 CD1  CD1  . TRP TRP TRP A A 303 303 . 110.124 93.483  35.450  1.00 2.51   1
. .
ATOM 2312 NE1  NE1  . TRP TRP TRP A A 303 303 . 109.536 93.650  34.216  1.00 2.39   1
. .
ATOM 2313 CE2  CE2  . TRP TRP TRP A A 303 303 . 108.304 94.258  34.391  1.00 2.71   1
. .
ATOM 2314 CD2  CD2  . TRP TRP TRP A A 303 303 . 108.158 94.494  35.777  1.00 2.00   1
. .
ATOM 2315 CE3  CE3  . TRP TRP TRP A A 303 303 . 106.990 95.123  36.262  1.00 4.83   1
. .
ATOM 2316 CZ3  CZ3  . TRP TRP TRP A A 303 303 . 105.980 95.505  35.279  1.00 3.80   1
. .
ATOM 2317 CH2  CH2  . TRP TRP TRP A A 303 303 . 106.185 95.252  33.892  1.00 3.24   1
. .
ATOM 2318 CZ2  CZ2  . TRP TRP TRP A A 303 303 . 107.362 94.649  33.430  1.00 2.44   1
. .
ATOM 2319 C    C    . TRP TRP TRP A A 303 303 . 110.354 95.155  39.912  1.00 5.02   1
. .
ATOM 2320 O    O    . TRP TRP TRP A A 303 303 . 109.918 96.206  40.339  1.00 5.09   1
. .
ATOM 2321 N    N    . SER SER SER A A 304 304 . 110.627 94.101  40.669  1.00 5.48   1
. .
ATOM 2322 CA   CA   . SER SER SER A A 304 304 . 110.365 94.095  42.060  1.00 7.47   1
. .
ATOM 2323 CB   CB   . SER SER SER A A 304 304 . 110.800 92.755  42.661  1.00 8.19   1
. .
ATOM 2324 OG   OG   . SER SER SER A A 304 304 . 109.988 91.737  42.202  1.00 11.19  1
. .
ATOM 2325 C    C    . SER SER SER A A 304 304 . 111.081 95.235  42.783  1.00 8.48   1
. .
ATOM 2326 O    O    . SER SER SER A A 304 304 . 110.523 95.820  43.696  1.00 8.20   1
. .
ATOM 2327 N    N    . LYS LYS LYS A A 305 305 . 112.308 95.522  42.331  1.00 8.77   1
. .
ATOM 2328 CA   CA   . LYS LYS LYS A A 305 305 . 113.131 96.498  42.997  1.00 10.23  1
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ATOM 2329 CB   CB   . LYS LYS LYS A A 305 305 . 114.569 96.490  42.487  1.00 11.47  1
. .
ATOM 2330 CG   CG   . LYS LYS LYS A A 305 305 . 115.468 97.544  43.143  1.00 15.72  1
. .
ATOM 2331 CD   CD   . LYS LYS LYS A A 305 305 . 116.908 97.407  42.735  1.00 22.42  1
. .
ATOM 2332 CE   CE   . LYS LYS LYS A A 305 305 . 117.778 98.144  43.752  1.00 27.51  1
. .
ATOM 2333 NZ   NZ   . LYS LYS LYS A A 305 305 . 118.203 97.231  44.856  1.00 31.29  1
. .
ATOM 2334 C    C    . LYS LYS LYS A A 305 305 . 112.516 97.822  42.745  1.00 9.67   1
. .
ATOM 2335 O    O    . LYS LYS LYS A A 305 305 . 112.326 98.626  43.695  1.00 11.28  1
. .
ATOM 2336 N    N    . PHE PHE PHE A A 306 306 . 112.153 98.055  41.486  1.00 8.12   1
. .
ATOM 2337 CA   CA   . PHE PHE PHE A A 306 306 . 111.600 99.327  41.124  1.00 6.83   1
. .
ATOM 2338 CB   CB   . PHE PHE PHE A A 306 306 . 111.533 99.448  39.582  1.00 6.03   1
. .
ATOM 2339 CG   CG   . PHE PHE PHE A A 306 306 . 111.065 100.799 39.093  1.00 8.19   1
. .
ATOM 2340 CD1  CD1  . PHE PHE PHE A A 306 306 . 111.883 101.914 39.252  1.00 10.41  1
. .
ATOM 2341 CE1  CE1  . PHE PHE PHE A A 306 306 . 111.451 103.223 38.863  1.00 8.62   1
. .
ATOM 2342 CZ   CZ   . PHE PHE PHE A A 306 306 . 110.154 103.392 38.279  1.00 7.68   1
. .
ATOM 2343 CE2  CE2  . PHE PHE PHE A A 306 306 . 109.342 102.245 38.077  1.00 4.85   1
. .
ATOM 2344 CD2  CD2  . PHE PHE PHE A A 306 306 . 109.787 100.968 38.576  1.00 6.07   1
. .
ATOM 2345 C    C    . PHE PHE PHE A A 306 306 . 110.228 99.597  41.792  1.00 6.28   1
. .
ATOM 2346 O    O    . PHE PHE PHE A A 306 306 . 109.967 100.674 42.374  1.00 5.57   1
. .
ATOM 2347 N    N    . THR THR THR A A 307 307 . 109.347 98.619  41.720  1.00 5.67   1
. .
ATOM 2348 CA   CA   . THR THR THR A A 307 307 . 108.040 98.729  42.320  1.00 5.47   1
. .
ATOM 2349 CB   CB   . THR THR THR A A 307 307 . 107.231 97.462  42.040  1.00 4.41   1
. .
ATOM 2350 OG1  OG1  . THR THR THR A A 307 307 . 107.046 97.401  40.605  1.00 4.46   1
. .
ATOM 2351 CG2  CG2  . THR THR THR A A 307 307 . 105.876 97.518  42.663  1.00 8.29   1
. .
ATOM 2352 C    C    . THR THR THR A A 307 307 . 108.120 99.030  43.830  1.00 4.40   1
. .
ATOM 2353 O    O    . THR THR THR A A 307 307 . 107.370 99.799  44.317  1.00 6.02   1
. .
ATOM 2354 N    N    . ALA ALA ALA A A 308 308 . 109.114 98.452  44.511  1.00 6.45   1
. .
ATOM 2355 CA   CA   . ALA ALA ALA A A 308 308 . 109.285 98.705  45.926  1.00 7.97   1
. .
ATOM 2356 CB   CB   . ALA ALA ALA A A 308 308 . 110.105 97.628  46.577  1.00 5.32   1
. .
ATOM 2357 C    C    . ALA ALA ALA A A 308 308 . 109.767 100.103 46.280  1.00 9.78   1
. .
ATOM 2358 O    O    . ALA ALA ALA A A 308 308 . 109.568 100.538 47.404  1.00 11.32  1
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ATOM 2359 N    N    . ASN ASN ASN A A 309 309 . 110.269 100.844 45.285  1.00 10.55  1
. .
ATOM 2360 CA   CA   . ASN ASN ASN A A 309 309 . 110.874 102.145 45.418  1.00 11.97  1
. .
ATOM 2361 CB   CB   . ASN ASN ASN A A 309 309 . 112.261 102.117 44.715  1.00 14.46  1
. .
ATOM 2362 CG   CG   . ASN ASN ASN A A 309 309 . 113.304 101.398 45.564  1.00 20.91  1
. .
ATOM 2363 OD1  OD1  . ASN ASN ASN A A 309 309 . 114.155 100.652 45.058  1.00 27.64  1
. .
ATOM 2364 ND2  ND2  . ASN ASN ASN A A 309 309 . 113.234 101.622 46.869  1.00 23.75  1
. .
ATOM 2365 C    C    . ASN ASN ASN A A 309 309 . 110.023 103.272 44.822  1.00 10.11  1
. .
ATOM 2366 O    O    . ASN ASN ASN A A 309 309 . 110.455 104.390 44.738  1.00 13.08  1
. .
ATOM 2367 N    N    . VAL VAL VAL A A 310 310 . 108.796 103.014 44.407  1.00 7.18   1
. .
ATOM 2368 CA   CA   . VAL VAL VAL A A 310 310 . 107.927 104.116 43.976  1.00 7.09   1
. .
ATOM 2369 CB   CB   . VAL VAL VAL A A 310 310 . 107.782 104.108 42.451  1.00 9.34   1
. .
ATOM 2370 CG1  CG1  . VAL VAL VAL A A 310 310 . 109.061 104.293 41.805  1.00 12.51  1
. .
ATOM 2371 CG2  CG2  . VAL VAL VAL A A 310 310 . 107.141 102.759 42.048  1.00 10.85  1
. .
ATOM 2372 C    C    . VAL VAL VAL A A 310 310 . 106.521 104.010 44.528  1.00 6.98   1
. .
ATOM 2373 O    O    . VAL VAL VAL A A 310 310 . 106.143 102.932 45.092  1.00 7.72   1
. .
ATOM 2374 N    N    . GLY GLY GLY A A 311 311 . 105.742 105.089 44.390  1.00 4.55   1
. .
ATOM 2375 CA   CA   . GLY GLY GLY A A 311 311 . 104.411 105.125 44.925  1.00 4.61   1
. .
ATOM 2376 C    C    . GLY GLY GLY A A 311 311 . 103.385 105.162 43.856  1.00 4.94   1
. .
ATOM 2377 O    O    . GLY GLY GLY A A 311 311 . 102.203 105.259 44.147  1.00 8.33   1
. .
ATOM 2378 N    N    . ILE ILE ILE A A 312 312 . 103.847 105.143 42.608  1.00 3.98   1
. .
ATOM 2379 CA   CA   . ILE ILE ILE A A 312 312 . 102.935 105.174 41.477  1.00 3.88   1
. .
ATOM 2380 CB   CB   . ILE ILE ILE A A 312 312 . 103.557 105.954 40.312  1.00 4.42   1
. .
ATOM 2381 CG1  CG1  . ILE ILE ILE A A 312 312 . 104.825 105.193 39.788  1.00 4.79   1
. .
ATOM 2382 CD1  CD1  . ILE ILE ILE A A 312 312 . 105.258 105.521 38.272  1.00 8.96   1
. .
ATOM 2383 CG2  CG2  . ILE ILE ILE A A 312 312 . 103.846 107.450 40.698  1.00 6.74   1
. .
ATOM 2384 C    C    . ILE ILE ILE A A 312 312 . 102.454 103.765 40.976  1.00 3.08   1
. .
ATOM 2385 O    O    . ILE ILE ILE A A 312 312 . 102.835 102.714 41.459  1.00 4.15   1
. .
ATOM 2386 N    N    . GLN GLN GLN A A 313 313 . 101.541 103.781 39.995  1.00 2.27   1
. .
ATOM 2387 CA   CA   . GLN GLN GLN A A 313 313 . 101.040 102.546 39.412  1.00 2.01   1
. .
ATOM 2388 CB   CB   . GLN GLN GLN A A 313 313 . 99.722  102.852 38.672  1.00 2.14   1
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ATOM 2389 CG   CG   . GLN GLN GLN A A 313 313 . 99.264  101.672 37.839  1.00 2.77   1
. .
ATOM 2390 CD   CD   . GLN GLN GLN A A 313 313 . 97.817  101.824 37.372  1.00 2.00   1
. .
ATOM 2391 OE1  OE1  . GLN GLN GLN A A 313 313 . 96.909  101.411 38.044  1.00 4.07   1
. .
ATOM 2392 NE2  NE2  . GLN GLN GLN A A 313 313 . 97.637  102.420 36.227  1.00 2.54   1
. .
ATOM 2393 C    C    . GLN GLN GLN A A 313 313 . 102.103 101.964 38.523  1.00 2.00   1
. .
ATOM 2394 O    O    . GLN GLN GLN A A 313 313 . 102.709 102.698 37.746  1.00 2.00   1
. .
ATOM 2395 N    N    . ILE ILE ILE A A 314 314 . 102.372 100.660 38.647  1.00 2.00   1
. .
ATOM 2396 CA   CA   . ILE ILE ILE A A 314 314 . 103.372 99.963  37.829  1.00 2.00   1
. .
ATOM 2397 CB   CB   . ILE ILE ILE A A 314 314 . 104.564 99.417  38.592  1.00 2.40   1
. .
ATOM 2398 CG1  CG1  . ILE ILE ILE A A 314 314 . 105.379 100.580 39.160  1.00 5.08   1
. .
ATOM 2399 CD1  CD1  . ILE ILE ILE A A 314 314 . 105.438 100.548 40.634  1.00 15.90  1
. .
ATOM 2400 CG2  CG2  . ILE ILE ILE A A 314 314 . 105.397 98.431  37.780  1.00 2.51   1
. .
ATOM 2401 C    C    . ILE ILE ILE A A 314 314 . 102.564 98.772  37.162  1.00 2.00   1
. .
ATOM 2402 O    O    . ILE ILE ILE A A 314 314 . 102.027 97.929  37.838  1.00 2.35   1
. .
ATOM 2403 N    N    . VAL VAL VAL A A 315 315 . 102.507 98.802  35.837  1.00 2.00   1
. .
ATOM 2404 CA   CA   . VAL VAL VAL A A 315 315 . 101.610 97.966  35.053  1.00 2.00   1
. .
ATOM 2405 CB   CB   . VAL VAL VAL A A 315 315 . 100.858 98.763  33.998  1.00 2.08   1
. .
ATOM 2406 CG1  CG1  . VAL VAL VAL A A 315 315 . 99.736  97.880  33.322  1.00 2.28   1
. .
ATOM 2407 CG2  CG2  . VAL VAL VAL A A 315 315 . 100.223 100.070 34.564  1.00 2.00   1
. .
ATOM 2408 C    C    . VAL VAL VAL A A 315 315 . 102.336 96.829  34.320  1.00 2.00   1
. .
ATOM 2409 O    O    . VAL VAL VAL A A 315 315 . 103.300 97.045  33.567  1.00 2.00   1
. .
ATOM 2410 N    N    . GLY GLY GLY A A 316 316 . 101.911 95.617  34.635  1.00 2.00   1
. .
ATOM 2411 CA   CA   . GLY GLY GLY A A 316 316 . 102.405 94.408  33.941  1.00 2.00   1
. .
ATOM 2412 C    C    . GLY GLY GLY A A 316 316 . 101.642 94.238  32.619  1.00 2.00   1
. .
ATOM 2413 O    O    . GLY GLY GLY A A 316 316 . 100.377 94.280  32.635  1.00 2.00   1
. .
ATOM 2414 N    N    . ASP ASP ASP A A 317 317 . 102.375 94.147  31.519  1.00 2.00   1
. .
ATOM 2415 CA   CA   . ASP ASP ASP A A 317 317 . 101.763 93.832  30.194  1.00 2.00   1
. .
ATOM 2416 CB   CB   . ASP ASP ASP A A 317 317 . 101.800 95.071  29.285  1.00 2.16   1
. .
ATOM 2417 CG   CG   . ASP ASP ASP A A 317 317 . 101.449 94.734  27.823  1.00 2.00   1
. .
ATOM 2418 OD1  OD1  . ASP ASP ASP A A 317 317 . 101.713 95.549  26.897  1.00 2.00   1
. .
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ATOM 2419 OD2  OD2  . ASP ASP ASP A A 317 317 . 100.797 93.696  27.621  1.00 3.61   1
. .
ATOM 2420 C    C    . ASP ASP ASP A A 317 317 . 102.421 92.577  29.619  1.00 2.00   1
. .
ATOM 2421 O    O    . ASP ASP ASP A A 317 317 . 101.864 91.493  29.808  1.00 2.39   1
. .
ATOM 2422 N    N    . ASP ASP ASP A A 318 318 . 103.582 92.698  29.000  1.00 2.00   1
. .
ATOM 2423 CA   CA   . ASP ASP ASP A A 318 318 . 104.350 91.523  28.582  1.00 2.00   1
. .
ATOM 2424 CB   CB   . ASP ASP ASP A A 318 318 . 105.530 91.852  27.642  1.00 2.22   1
. .
ATOM 2425 CG   CG   . ASP ASP ASP A A 318 318 . 105.077 92.494  26.348  1.00 4.22   1
. .
ATOM 2426 OD1  OD1  . ASP ASP ASP A A 318 318 . 103.950 92.237  25.881  1.00 3.92   1
. .
ATOM 2427 OD2  OD2  . ASP ASP ASP A A 318 318 . 105.876 93.274  25.774  1.00 5.29   1
. .
ATOM 2428 C    C    . ASP ASP ASP A A 318 318 . 104.773 90.678  29.744  1.00 2.14   1
. .
ATOM 2429 O    O    . ASP ASP ASP A A 318 318 . 104.984 89.497  29.603  1.00 2.28   1
. .
ATOM 2430 N    N    . LEU LEU LEU A A 319 319 . 104.897 91.307  30.914  1.00 2.00   1
. .
ATOM 2431 CA   CA   . LEU LEU LEU A A 319 319 . 105.223 90.571  32.094  1.00 2.00   1
. .
ATOM 2432 CB   CB   . LEU LEU LEU A A 319 319 . 105.434 91.523  33.318  1.00 2.07   1
. .
ATOM 2433 CG   CG   . LEU LEU LEU A A 319 319 . 105.792 90.784  34.609  1.00 2.00   1
. .
ATOM 2434 CD1  CD1  . LEU LEU LEU A A 319 319 . 107.200 90.420  34.519  1.00 3.60   1
. .
ATOM 2435 CD2  CD2  . LEU LEU LEU A A 319 319 . 105.551 91.727  35.808  1.00 3.11   1
. .
ATOM 2436 C    C    . LEU LEU LEU A A 319 319 . 104.188 89.481  32.441  1.00 2.04   1
. .
ATOM 2437 O    O    . LEU LEU LEU A A 319 319 . 104.543 88.314  32.738  1.00 2.43   1
. .
ATOM 2438 N    N    . THR THR THR A A 320 320 . 102.926 89.891  32.382  1.00 2.24   1
. .
ATOM 2439 CA   CA   . THR THR THR A A 320 320 . 101.784 89.143  32.975  1.00 2.00   1
. .
ATOM 2440 CB   CB   . THR THR THR A A 320 320 . 100.897 90.093  33.786  1.00 2.02   1
. .
ATOM 2441 OG1  OG1  . THR THR THR A A 320 320 . 100.823 91.366  33.152  1.00 3.84   1
. .
ATOM 2442 CG2  CG2  . THR THR THR A A 320 320 . 101.444 90.313  35.198  1.00 4.16   1
. .
ATOM 2443 C    C    . THR THR THR A A 320 320 . 100.949 88.451  31.893  1.00 2.00   1
. .
ATOM 2444 O    O    . THR THR THR A A 320 320 . 100.313 87.386  32.118  1.00 2.16   1
. .
ATOM 2445 N    N    . VAL VAL VAL A A 321 321 . 100.947 89.038  30.704  1.00 2.00   1
. .
ATOM 2446 CA   CA   . VAL VAL VAL A A 321 321 . 100.206 88.526  29.504  1.00 2.00   1
. .
ATOM 2447 CB   CB   . VAL VAL VAL A A 321 321 . 101.006 87.503  28.575  1.00 2.00   1
. .
ATOM 2448 CG1  CG1  . VAL VAL VAL A A 321 321 . 102.237 88.273  27.889  1.00 2.42   1
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ATOM 2449 CG2  CG2  . VAL VAL VAL A A 321 321 . 101.513 86.309  29.514  1.00 2.19   1
. .
ATOM 2450 C    C    . VAL VAL VAL A A 321 321 . 98.818  88.026  29.820  1.00 2.00   1
. .
ATOM 2451 O    O    . VAL VAL VAL A A 321 321 . 98.361  87.011  29.306  1.00 2.00   1
. .
ATOM 2452 N    N    . THR THR THR A A 322 322 . 98.136  88.689  30.731  1.00 2.00   1
. .
ATOM 2453 CA   CA   . THR THR THR A A 322 322 . 96.712  88.394  31.006  1.00 2.00   1
. .
ATOM 2454 CB   CB   . THR THR THR A A 322 322 . 95.830  88.801  29.827  1.00 2.00   1
. .
ATOM 2455 OG1  OG1  . THR THR THR A A 322 322 . 96.140  90.181  29.455  1.00 2.00   1
. .
ATOM 2456 CG2  CG2  . THR THR THR A A 322 322 . 94.333  88.803  30.213  1.00 2.29   1
. .
ATOM 2457 C    C    . THR THR THR A A 322 322 . 96.567  86.913  31.394  1.00 2.00   1
. .
ATOM 2458 O    O    . THR THR THR A A 322 322 . 95.544  86.319  31.159  1.00 2.01   1
. .
ATOM 2459 N    N    . ASN ASN ASN A A 323 323 . 97.599  86.382  32.097  1.00 2.00   1
. .
ATOM 2460 CA   CA   . ASN ASN ASN A A 323 323 . 97.716  84.939  32.283  1.00 2.00   1
. .
ATOM 2461 CB   CB   . ASN ASN ASN A A 323 323 . 98.913  84.433  31.531  1.00 2.36   1
. .
ATOM 2462 CG   CG   . ASN ASN ASN A A 323 323 . 99.052  82.951  31.601  1.00 3.31   1
. .
ATOM 2463 OD1  OD1  . ASN ASN ASN A A 323 323 . 98.957  82.378  32.688  1.00 10.30  1
. .
ATOM 2464 ND2  ND2  . ASN ASN ASN A A 323 323 . 99.356  82.313  30.476  1.00 5.27   1
. .
ATOM 2465 C    C    . ASN ASN ASN A A 323 323 . 97.811  84.692  33.814  1.00 2.00   1
. .
ATOM 2466 O    O    . ASN ASN ASN A A 323 323 . 98.779  85.088  34.451  1.00 2.56   1
. .
ATOM 2467 N    N    . PRO PRO PRO A A 324 324 . 96.813  84.052  34.380  1.00 4.49   1
. .
ATOM 2468 CA   CA   . PRO PRO PRO A A 324 324 . 96.780  83.815  35.837  1.00 6.21   1
. .
ATOM 2469 CB   CB   . PRO PRO PRO A A 324 324 . 95.540  82.922  36.063  1.00 6.36   1
. .
ATOM 2470 CG   CG   . PRO PRO PRO A A 324 324 . 94.665  83.117  34.840  1.00 8.47   1
. .
ATOM 2471 CD   CD   . PRO PRO PRO A A 324 324 . 95.573  83.642  33.687  1.00 5.89   1
. .
ATOM 2472 C    C    . PRO PRO PRO A A 324 324 . 98.048  83.204  36.435  1.00 7.92   1
. .
ATOM 2473 O    O    . PRO PRO PRO A A 324 324 . 98.382  83.555  37.555  1.00 9.02   1
. .
ATOM 2474 N    N    . LYS LYS LYS A A 325 325 . 98.722  82.322  35.691  1.00 10.05  1
. .
ATOM 2475 CA   CA   . LYS LYS LYS A A 325 325 . 100.017 81.663  36.057  1.00 10.82  1
. .
ATOM 2476 CB   CB   . LYS LYS LYS A A 325 325 . 100.486 80.740  34.890  1.00 14.08  1
. .
ATOM 2477 CG   CG   . LYS LYS LYS A A 325 325 . 101.361 79.495  35.229  1.00 19.48  1
. .
ATOM 2478 CD   CD   . LYS LYS LYS A A 325 325 . 102.670 79.804  35.962  1.00 28.14  1
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ATOM 2479 CE   CE   . LYS LYS LYS A A 325 325 . 103.751 80.393  35.050  1.00 31.70  1
. .
ATOM 2480 NZ   NZ   . LYS LYS LYS A A 325 325 . 104.936 80.851  35.827  1.00 33.30  1
. .
ATOM 2481 C    C    . LYS LYS LYS A A 325 325 . 101.070 82.734  36.269  1.00 9.99   1
. .
ATOM 2482 O    O    . LYS LYS LYS A A 325 325 . 101.762 82.756  37.249  1.00 10.89  1
. .
ATOM 2483 N    N    . ARG ARG ARG A A 326 326 . 101.145 83.686  35.363  1.00 7.23   1
. .
ATOM 2484 CA   CA   . ARG ARG ARG A A 326 326 . 102.218 84.705  35.467  1.00 6.81   1
. .
ATOM 2485 CB   CB   . ARG ARG ARG A A 326 326 . 102.489 85.342  34.098  1.00 6.48   1
. .
ATOM 2486 CG   CG   . ARG ARG ARG A A 326 326 . 103.285 84.406  33.135  1.00 11.40  1
. .
ATOM 2487 CD   CD   . ARG ARG ARG A A 326 326 . 104.221 85.289  32.246  1.00 17.89  1
. .
ATOM 2488 NE   NE   . ARG ARG ARG A A 326 326 . 105.529 84.764  32.411  1.00 21.29  1
. .
ATOM 2489 CZ   CZ   . ARG ARG ARG A A 326 326 . 106.686 85.385  32.510  1.00 17.05  1
. .
ATOM 2490 NH1  NH1  . ARG ARG ARG A A 326 326 . 106.892 86.702  32.433  1.00 12.18  1
. .
ATOM 2491 NH2  NH2  . ARG ARG ARG A A 326 326 . 107.696 84.598  32.668  1.00 19.55  1
. .
ATOM 2492 C    C    . ARG ARG ARG A A 326 326 . 101.776 85.793  36.449  1.00 3.64   1
. .
ATOM 2493 O    O    . ARG ARG ARG A A 326 326 . 102.603 86.455  37.109  1.00 7.67   1
. .
ATOM 2494 N    N    . ILE ILE ILE A A 327 327 . 100.490 86.053  36.502  1.00 3.13   1
. .
ATOM 2495 CA   CA   . ILE ILE ILE A A 327 327 . 99.991  87.022  37.486  1.00 2.50   1
. .
ATOM 2496 CB   CB   . ILE ILE ILE A A 327 327 . 98.443  87.296  37.326  1.00 2.68   1
. .
ATOM 2497 CG1  CG1  . ILE ILE ILE A A 327 327 . 98.139  87.914  35.934  1.00 2.91   1
. .
ATOM 2498 CD1  CD1  . ILE ILE ILE A A 327 327 . 96.573  87.880  35.530  1.00 6.14   1
. .
ATOM 2499 CG2  CG2  . ILE ILE ILE A A 327 327 . 97.868  88.140  38.463  1.00 2.97   1
. .
ATOM 2500 C    C    . ILE ILE ILE A A 327 327 . 100.313 86.508  38.898  1.00 3.65   1
. .
ATOM 2501 O    O    . ILE ILE ILE A A 327 327 . 100.715 87.334  39.778  1.00 4.87   1
. .
ATOM 2502 N    N    . GLU GLU GLU A A 328 328 . 100.047 85.242  39.158  1.00 7.38   1
. .
ATOM 2503 CA   CA   . GLU GLU GLU A A 328 328 . 100.316 84.729  40.498  1.00 9.85   1
. .
ATOM 2504 CB   CB   . GLU GLU GLU A A 328 328 . 99.833  83.261  40.712  1.00 12.58  1
. .
ATOM 2505 CG   CG   . GLU GLU GLU A A 328 328 . 98.317  83.183  41.115  1.00 19.73  1
. .
ATOM 2506 CD   CD   . GLU GLU GLU A A 328 328 . 97.905  84.392  42.012  1.00 30.80  1
. .
ATOM 2507 OE1  OE1  . GLU GLU GLU A A 328 328 . 97.905  84.291  43.267  1.00 33.13  1
. .
ATOM 2508 OE2  OE2  . GLU GLU GLU A A 328 328 . 97.657  85.488  41.451  1.00 35.43  1
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ATOM 2509 C    C    . GLU GLU GLU A A 328 328 . 101.775 84.980  40.936  1.00 8.62   1
. .
ATOM 2510 O    O    . GLU GLU GLU A A 328 328 . 102.034 85.373  42.099  1.00 7.36   1
. .
ATOM 2511 N    N    . ARG ARG ARG A A 329 329 . 102.711 84.713  40.041  1.00 7.80   1
. .
ATOM 2512 CA   CA   . ARG ARG ARG A A 329 329 . 104.123 84.923  40.274  1.00 7.96   1
. .
ATOM 2513 CB   CB   . ARG ARG ARG A A 329 329 . 104.917 84.429  39.066  1.00 10.03  1
. .
ATOM 2514 CG   CG   . ARG ARG ARG A A 329 329 . 106.405 84.501  39.240  1.00 10.84  1
. .
ATOM 2515 CD   CD   . ARG ARG ARG A A 329 329 . 107.225 83.787  38.207  1.00 16.20  1
. .
ATOM 2516 NE   NE   . ARG ARG ARG A A 329 329 . 108.652 84.192  38.240  1.00 17.24  1
. .
ATOM 2517 CZ   CZ   . ARG ARG ARG A A 329 329 . 109.563 83.795  37.334  1.00 18.05  1
. .
ATOM 2518 NH1  NH1  . ARG ARG ARG A A 329 329 . 109.223 82.996  36.338  1.00 18.37  1
. .
ATOM 2519 NH2  NH2  . ARG ARG ARG A A 329 329 . 110.815 84.170  37.418  1.00 21.52  1
. .
ATOM 2520 C    C    . ARG ARG ARG A A 329 329 . 104.390 86.421  40.550  1.00 7.88   1
. .
ATOM 2521 O    O    . ARG ARG ARG A A 329 329 . 105.019 86.827  41.545  1.00 7.57   1
. .
ATOM 2522 N    N    . ALA ALA ALA A A 330 330 . 103.873 87.283  39.670  1.00 4.69   1
. .
ATOM 2523 CA   CA   . ALA ALA ALA A A 330 330 . 104.022 88.703  39.907  1.00 3.28   1
. .
ATOM 2524 CB   CB   . ALA ALA ALA A A 330 330 . 103.377 89.478  38.701  1.00 3.31   1
. .
ATOM 2525 C    C    . ALA ALA ALA A A 330 330 . 103.484 89.180  41.243  1.00 5.07   1
. .
ATOM 2526 O    O    . ALA ALA ALA A A 330 330 . 104.011 90.126  41.827  1.00 6.18   1
. .
ATOM 2527 N    N    . VAL VAL VAL A A 331 331 . 102.362 88.608  41.682  1.00 7.65   1
. .
ATOM 2528 CA   CA   . VAL VAL VAL A A 331 331 . 101.781 89.001  42.969  1.00 8.03   1
. .
ATOM 2529 CB   CB   . VAL VAL VAL A A 331 331 . 100.354 88.403  43.220  1.00 8.28   1
. .
ATOM 2530 CG1  CG1  . VAL VAL VAL A A 331 331 . 99.980  88.481  44.704  1.00 10.82  1
. .
ATOM 2531 CG2  CG2  . VAL VAL VAL A A 331 331 . 99.328  89.042  42.317  1.00 7.39   1
. .
ATOM 2532 C    C    . VAL VAL VAL A A 331 331 . 102.678 88.527  44.039  1.00 10.25  1
. .
ATOM 2533 O    O    . VAL VAL VAL A A 331 331 . 103.028 89.296  44.877  1.00 10.57  1
. .
ATOM 2534 N    N    . GLU GLU GLU A A 332 332 . 103.111 87.288  43.978  1.00 10.74  1
. .
ATOM 2535 CA   CA   . GLU GLU GLU A A 332 332 . 104.051 86.795  44.989  1.00 14.60  1
. .
ATOM 2536 CB   CB   . GLU GLU GLU A A 332 332 . 104.334 85.302  44.795  1.00 15.25  1
. .
ATOM 2537 CG   CG   . GLU GLU GLU A A 332 332 . 105.767 84.904  45.071  1.00 23.21  1
. .
ATOM 2538 CD   CD   . GLU GLU GLU A A 332 332 . 105.997 84.254  46.411  1.00 32.86  1
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ATOM 2539 OE1  OE1  . GLU GLU GLU A A 332 332 . 106.880 83.361  46.464  1.00 39.45  1
. .
ATOM 2540 OE2  OE2  . GLU GLU GLU A A 332 332 . 105.329 84.616  47.407  1.00 35.09  1
. .
ATOM 2541 C    C    . GLU GLU GLU A A 332 332 . 105.355 87.601  45.049  1.00 14.27  1
. .
ATOM 2542 O    O    . GLU GLU GLU A A 332 332 . 105.865 87.884  46.139  1.00 15.04  1
. .
ATOM 2543 N    N    . GLU GLU GLU A A 333 333 . 105.934 87.931  43.897  1.00 11.65  1
. .
ATOM 2544 CA   CA   . GLU GLU GLU A A 333 333 . 107.138 88.767  43.870  1.00 11.61  1
. .
ATOM 2545 CB   CB   . GLU GLU GLU A A 333 333 . 107.925 88.423  42.613  1.00 11.71  1
. .
ATOM 2546 CG   CG   . GLU GLU GLU A A 333 333 . 108.102 86.951  42.470  1.00 15.61  1
. .
ATOM 2547 CD   CD   . GLU GLU GLU A A 333 333 . 109.229 86.554  41.606  1.00 19.16  1
. .
ATOM 2548 OE1  OE1  . GLU GLU GLU A A 333 333 . 109.231 85.338  41.251  1.00 18.63  1
. .
ATOM 2549 OE2  OE2  . GLU GLU GLU A A 333 333 . 110.094 87.446  41.318  1.00 19.95  1
. .
ATOM 2550 C    C    . GLU GLU GLU A A 333 333 . 106.953 90.278  43.959  1.00 9.84   1
. .
ATOM 2551 O    O    . GLU GLU GLU A A 333 333 . 107.958 90.999  43.882  1.00 10.59  1
. .
ATOM 2552 N    N    . LYS LYS LYS A A 334 334 . 105.697 90.746  44.063  1.00 7.40   1
. .
ATOM 2553 CA   CA   . LYS LYS LYS A A 334 334 . 105.375 92.161  44.111  1.00 7.18   1
. .
ATOM 2554 CB   CB   . LYS LYS LYS A A 334 334 . 105.837 92.746  45.447  1.00 8.85   1
. .
ATOM 2555 CG   CG   . LYS LYS LYS A A 334 334 . 105.084 92.123  46.661  1.00 11.16  1
. .
ATOM 2556 CD   CD   . LYS LYS LYS A A 334 334 . 105.265 92.941  47.921  1.00 15.84  1
. .
ATOM 2557 CE   CE   . LYS LYS LYS A A 334 334 . 105.321 94.489  47.705  1.00 21.26  1
. .
ATOM 2558 NZ   NZ   . LYS LYS LYS A A 334 334 . 104.131 95.252  48.313  1.00 26.42  1
. .
ATOM 2559 C    C    . LYS LYS LYS A A 334 334 . 106.092 92.842  42.933  1.00 6.73   1
. .
ATOM 2560 O    O    . LYS LYS LYS A A 334 334 . 106.734 93.868  43.067  1.00 8.18   1
. .
ATOM 2561 N    N    . ALA ALA ALA A A 335 335 . 105.964 92.254  41.748  1.00 5.79   1
. .
ATOM 2562 CA   CA   . ALA ALA ALA A A 335 335 . 106.644 92.810  40.618  1.00 5.89   1
. .
ATOM 2563 CB   CB   . ALA ALA ALA A A 335 335 . 106.829 91.776  39.436  1.00 5.66   1
. .
ATOM 2564 C    C    . ALA ALA ALA A A 335 335 . 105.958 94.050  40.105  1.00 5.32   1
. .
ATOM 2565 O    O    . ALA ALA ALA A A 335 335 . 106.605 94.881  39.505  1.00 7.59   1
. .
ATOM 2566 N    N    . CYS CYS CYS A A 336 336 . 104.644 94.130  40.303  1.00 5.28   1
. .
ATOM 2567 CA   CA   . CYS CYS CYS A A 336 336 . 103.927 95.291  39.777  1.00 3.67   1
. .
ATOM 2568 CB   CB   . CYS CYS CYS A A 336 336 . 103.624 95.078  38.284  1.00 3.21   1
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ATOM 2569 SG   SG   . CYS CYS CYS A A 336 336 . 102.722 93.574  37.911  1.00 5.56   1
. .
ATOM 2570 C    C    . CYS CYS CYS A A 336 336 . 102.655 95.469  40.589  1.00 3.64   1
. .
ATOM 2571 O    O    . CYS CYS CYS A A 336 336 . 102.409 94.690  41.474  1.00 5.72   1
. .
ATOM 2572 N    N    . ASN ASN ASN A A 337 337 . 101.843 96.458  40.286  1.00 4.01   1
. .
ATOM 2573 CA   CA   . ASN ASN ASN A A 337 337 . 100.612 96.635  41.055  1.00 2.00   1
. .
ATOM 2574 CB   CB   . ASN ASN ASN A A 337 337 . 100.811 97.727  42.150  1.00 2.10   1
. .
ATOM 2575 CG   CG   . ASN ASN ASN A A 337 337 . 101.283 99.036  41.584  1.00 5.10   1
. .
ATOM 2576 OD1  OD1  . ASN ASN ASN A A 337 337 . 102.176 99.687  42.173  1.00 7.52   1
. .
ATOM 2577 ND2  ND2  . ASN ASN ASN A A 337 337 . 100.728 99.437  40.451  1.00 2.04   1
. .
ATOM 2578 C    C    . ASN ASN ASN A A 337 337 . 99.362  96.885  40.199  1.00 2.13   1
. .
ATOM 2579 O    O    . ASN ASN ASN A A 337 337 . 98.323  97.264  40.739  1.00 2.30   1
. .
ATOM 2580 N    N    . CYS CYS CYS A A 338 338 . 99.495  96.617  38.906  1.00 2.00   1
. .
ATOM 2581 CA   CA   . CYS CYS CYS A A 338 338 . 98.360  96.774  37.985  1.00 2.00   1
. .
ATOM 2582 CB   CB   . CYS CYS CYS A A 338 338 . 98.358  98.210  37.440  1.00 2.00   1
. .
ATOM 2583 SG   SG   . CYS CYS CYS A A 338 338 . 96.884  98.551  36.404  1.00 2.30   1
. .
ATOM 2584 C    C    . CYS CYS CYS A A 338 338 . 98.510  95.762  36.843  1.00 2.00   1
. .
ATOM 2585 O    O    . CYS CYS CYS A A 338 338 . 99.628  95.478  36.416  1.00 2.00   1
. .
ATOM 2586 N    N    . LEU LEU LEU A A 339 339 . 97.423  95.168  36.457  1.00 2.00   1
. .
ATOM 2587 CA   CA   . LEU LEU LEU A A 339 339 . 97.404  94.244  35.318  1.00 2.00   1
. .
ATOM 2588 CB   CB   . LEU LEU LEU A A 339 339 . 96.459  93.130  35.604  1.00 2.34   1
. .
ATOM 2589 CG   CG   . LEU LEU LEU A A 339 339 . 96.192  92.112  34.480  1.00 2.27   1
. .
ATOM 2590 CD1  CD1  . LEU LEU LEU A A 339 339 . 97.423  91.352  34.041  1.00 2.46   1
. .
ATOM 2591 CD2  CD2  . LEU LEU LEU A A 339 339 . 94.989  91.150  34.760  1.00 2.22   1
. .
ATOM 2592 C    C    . LEU LEU LEU A A 339 339 . 96.875  94.974  34.076  1.00 2.00   1
. .
ATOM 2593 O    O    . LEU LEU LEU A A 339 339 . 95.810  95.554  34.148  1.00 2.00   1
. .
ATOM 2594 N    N    . LEU LEU LEU A A 340 340 . 97.568  94.858  32.983  1.00 2.00   1
. .
ATOM 2595 CA   CA   . LEU LEU LEU A A 340 340 . 96.985  95.311  31.665  1.00 2.00   1
. .
ATOM 2596 CB   CB   . LEU LEU LEU A A 340 340 . 98.093  95.607  30.670  1.00 2.00   1
. .
ATOM 2597 CG   CG   . LEU LEU LEU A A 340 340 . 97.585  96.558  29.563  1.00 2.00   1
. .
ATOM 2598 CD1  CD1  . LEU LEU LEU A A 340 340 . 97.298  98.046  30.032  1.00 3.36   1
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ATOM 2599 CD2  CD2  . LEU LEU LEU A A 340 340 . 98.546  96.566  28.414  1.00 2.00   1
. .
ATOM 2600 C    C    . LEU LEU LEU A A 340 340 . 96.183  94.126  31.155  1.00 2.00   1
. .
ATOM 2601 O    O    . LEU LEU LEU A A 340 340 . 96.764  93.056  30.929  1.00 2.00   1
. .
ATOM 2602 N    N    . LEU LEU LEU A A 341 341 . 94.918  94.352  30.879  1.00 2.00   1
. .
ATOM 2603 CA   CA   . LEU LEU LEU A A 341 341 . 94.033  93.251  30.488  1.00 2.00   1
. .
ATOM 2604 CB   CB   . LEU LEU LEU A A 341 341 . 92.700  93.423  31.176  1.00 2.00   1
. .
ATOM 2605 CG   CG   . LEU LEU LEU A A 341 341 . 91.883  92.138  31.280  1.00 2.00   1
. .
ATOM 2606 CD1  CD1  . LEU LEU LEU A A 341 341 . 92.498  91.247  32.336  1.00 6.71   1
. .
ATOM 2607 CD2  CD2  . LEU LEU LEU A A 341 341 . 90.400  92.526  31.645  1.00 3.39   1
. .
ATOM 2608 C    C    . LEU LEU LEU A A 341 341 . 93.810  93.223  28.978  1.00 2.00   1
. .
ATOM 2609 O    O    . LEU LEU LEU A A 341 341 . 93.166  94.105  28.430  1.00 2.00   1
. .
ATOM 2610 N    N    . LYS LYS LYS A A 342 342 . 94.397  92.250  28.326  1.00 2.00   1
. .
ATOM 2611 CA   CA   . LYS LYS LYS A A 342 342 . 94.296  92.086  26.859  1.00 2.00   1
. .
ATOM 2612 CB   CB   . LYS LYS LYS A A 342 342 . 95.672  92.211  26.152  1.00 2.00   1
. .
ATOM 2613 CG   CG   . LYS LYS LYS A A 342 342 . 96.162  93.698  26.099  1.00 2.23   1
. .
ATOM 2614 CD   CD   . LYS LYS LYS A A 342 342 . 97.629  93.669  25.637  1.00 2.34   1
. .
ATOM 2615 CE   CE   . LYS LYS LYS A A 342 342 . 98.162  95.034  25.175  1.00 6.74   1
. .
ATOM 2616 NZ   NZ   . LYS LYS LYS A A 342 342 . 99.615  95.038  25.047  1.00 4.16   1
. .
ATOM 2617 C    C    . LYS LYS LYS A A 342 342 . 93.690  90.715  26.605  1.00 2.00   1
. .
ATOM 2618 O    O    . LYS LYS LYS A A 342 342 . 94.368  89.701  26.796  1.00 2.00   1
. .
ATOM 2619 N    N    . VAL VAL VAL A A 343 343 . 92.408  90.685  26.238  1.00 2.00   1
. .
ATOM 2620 CA   CA   . VAL VAL VAL A A 343 343 . 91.730  89.399  25.977  1.00 2.00   1
. .
ATOM 2621 CB   CB   . VAL VAL VAL A A 343 343 . 90.313  89.566  25.419  1.00 2.12   1
. .
ATOM 2622 CG1  CG1  . VAL VAL VAL A A 343 343 . 89.358  90.114  26.505  1.00 3.16   1
. .
ATOM 2623 CG2  CG2  . VAL VAL VAL A A 343 343 . 90.335  90.544  24.261  1.00 2.51   1
. .
ATOM 2624 C    C    . VAL VAL VAL A A 343 343 . 92.516  88.581  24.979  1.00 2.00   1
. .
ATOM 2625 O    O    . VAL VAL VAL A A 343 343 . 92.524  87.349  25.102  1.00 2.27   1
. .
ATOM 2626 N    N    . ASN ASN ASN A A 344 344 . 93.225  89.182  24.008  1.00 2.00   1
. .
ATOM 2627 CA   CA   . ASN ASN ASN A A 344 344 . 93.896  88.307  23.022  1.00 2.00   1
. .
ATOM 2628 CB   CB   . ASN ASN ASN A A 344 344 . 93.993  88.936  21.622  1.00 2.00   1
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ATOM 2629 CG   CG   . ASN ASN ASN A A 344 344 . 95.292  89.619  21.378  1.00 3.26   1
. .
ATOM 2630 OD1  OD1  . ASN ASN ASN A A 344 344 . 95.673  90.549  22.114  1.00 2.00   1
. .
ATOM 2631 ND2  ND2  . ASN ASN ASN A A 344 344 . 95.974  89.237  20.290  1.00 2.00   1
. .
ATOM 2632 C    C    . ASN ASN ASN A A 344 344 . 95.257  87.784  23.522  1.00 2.00   1
. .
ATOM 2633 O    O    . ASN ASN ASN A A 344 344 . 95.874  86.921  22.879  1.00 2.00   1
. .
ATOM 2634 N    N    . GLN GLN GLN A A 345 345 . 95.733  88.253  24.681  1.00 2.00   1
. .
ATOM 2635 CA   CA   . GLN GLN GLN A A 345 345 . 96.975  87.654  25.197  1.00 2.00   1
. .
ATOM 2636 CB   CB   . GLN GLN GLN A A 345 345 . 97.702  88.524  26.225  1.00 2.00   1
. .
ATOM 2637 CG   CG   . GLN GLN GLN A A 345 345 . 98.418  89.754  25.626  1.00 2.00   1
. .
ATOM 2638 CD   CD   . GLN GLN GLN A A 345 345 . 99.044  90.624  26.759  1.00 2.04   1
. .
ATOM 2639 OE1  OE1  . GLN GLN GLN A A 345 345 . 98.471  90.752  27.810  1.00 2.00   1
. .
ATOM 2640 NE2  NE2  . GLN GLN GLN A A 345 345 . 100.224 91.135  26.522  1.00 2.00   1
. .
ATOM 2641 C    C    . GLN GLN GLN A A 345 345 . 96.712  86.271  25.782  1.00 2.00   1
. .
ATOM 2642 O    O    . GLN GLN GLN A A 345 345 . 97.656  85.497  25.938  1.00 2.32   1
. .
ATOM 2643 N    N    . ILE ILE ILE A A 346 346 . 95.475  86.037  26.157  1.00 2.00   1
. .
ATOM 2644 CA   CA   . ILE ILE ILE A A 346 346 . 95.150  84.740  26.843  1.00 2.00   1
. .
ATOM 2645 CB   CB   . ILE ILE ILE A A 346 346 . 94.612  84.995  28.281  1.00 2.00   1
. .
ATOM 2646 CG1  CG1  . ILE ILE ILE A A 346 346 . 94.559  83.683  29.096  1.00 3.01   1
. .
ATOM 2647 CD1  CD1  . ILE ILE ILE A A 346 346 . 95.917  83.107  29.321  1.00 5.36   1
. .
ATOM 2648 CG2  CG2  . ILE ILE ILE A A 346 346 . 93.237  85.606  28.245  1.00 3.34   1
. .
ATOM 2649 C    C    . ILE ILE ILE A A 346 346 . 94.195  83.925  25.965  1.00 2.18   1
. .
ATOM 2650 O    O    . ILE ILE ILE A A 346 346 . 94.289  82.674  25.982  1.00 2.43   1
. .
ATOM 2651 N    N    . GLY GLY GLY A A 347 347 . 93.264  84.572  25.244  1.00 2.00   1
. .
ATOM 2652 CA   CA   . GLY GLY GLY A A 347 347 . 92.547  83.924  24.195  1.00 2.11   1
. .
ATOM 2653 C    C    . GLY GLY GLY A A 347 347 . 91.101  83.582  24.468  1.00 2.00   1
. .
ATOM 2654 O    O    . GLY GLY GLY A A 347 347 . 90.475  83.043  23.576  1.00 2.00   1
. .
ATOM 2655 N    N    . SER SER SER A A 348 348 . 90.550  83.978  25.641  1.00 2.17   1
. .
ATOM 2656 CA   CA   . SER SER SER A A 348 348 . 89.126  83.836  25.879  1.00 2.00   1
. .
ATOM 2657 CB   CB   . SER SER SER A A 348 348 . 88.731  82.441  26.416  1.00 2.36   1
. .
ATOM 2658 OG   OG   . SER SER SER A A 348 348 . 89.218  82.149  27.722  1.00 4.98   1
. .
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ATOM 2659 C    C    . SER SER SER A A 348 348 . 88.562  84.882  26.861  1.00 2.00   1
. .
ATOM 2660 O    O    . SER SER SER A A 348 348 . 89.294  85.385  27.710  1.00 2.50   1
. .
ATOM 2661 N    N    . VAL VAL VAL A A 349 349 . 87.254  85.129  26.730  1.00 2.00   1
. .
ATOM 2662 CA   CA   . VAL VAL VAL A A 349 349 . 86.592  86.028  27.619  1.00 2.00   1
. .
ATOM 2663 CB   CB   . VAL VAL VAL A A 349 349 . 85.098  86.332  27.159  1.00 2.00   1
. .
ATOM 2664 CG1  CG1  . VAL VAL VAL A A 349 349 . 84.379  87.079  28.211  1.00 2.14   1
. .
ATOM 2665 CG2  CG2  . VAL VAL VAL A A 349 349 . 85.055  87.044  25.801  1.00 2.19   1
. .
ATOM 2666 C    C    . VAL VAL VAL A A 349 349 . 86.683  85.507  29.039  1.00 2.00   1
. .
ATOM 2667 O    O    . VAL VAL VAL A A 349 349 . 86.995  86.249  29.957  1.00 2.74   1
. .
ATOM 2668 N    N    . THR THR THR A A 350 350 . 86.333  84.210  29.232  1.00 2.80   1
. .
ATOM 2669 CA   CA   . THR THR THR A A 350 350 . 86.327  83.660  30.564  1.00 2.16   1
. .
ATOM 2670 CB   CB   . THR THR THR A A 350 350 . 85.946  82.142  30.501  1.00 2.46   1
. .
ATOM 2671 OG1  OG1  . THR THR THR A A 350 350 . 84.578  82.075  30.127  1.00 3.37   1
. .
ATOM 2672 CG2  CG2  . THR THR THR A A 350 350 . 86.138  81.434  31.884  1.00 5.52   1
. .
ATOM 2673 C    C    . THR THR THR A A 350 350 . 87.691  83.807  31.207  1.00 2.08   1
. .
ATOM 2674 O    O    . THR THR THR A A 350 350 . 87.796  84.169  32.391  1.00 2.00   1
. .
ATOM 2675 N    N    . GLU GLU GLU A A 351 351 . 88.771  83.473  30.531  1.00 2.11   1
. .
ATOM 2676 CA   CA   . GLU GLU GLU A A 351 351 . 90.121  83.566  31.196  1.00 2.51   1
. .
ATOM 2677 CB   CB   . GLU GLU GLU A A 351 351 . 91.178  82.927  30.349  1.00 2.51   1
. .
ATOM 2678 CG   CG   . GLU GLU GLU A A 351 351 . 90.988  81.371  30.209  1.00 3.37   1
. .
ATOM 2679 CD   CD   . GLU GLU GLU A A 351 351 . 91.854  80.782  29.135  1.00 3.99   1
. .
ATOM 2680 OE1  OE1  . GLU GLU GLU A A 351 351 . 91.602  81.042  27.923  1.00 3.80   1
. .
ATOM 2681 OE2  OE2  . GLU GLU GLU A A 351 351 . 92.861  80.126  29.500  1.00 7.20   1
. .
ATOM 2682 C    C    . GLU GLU GLU A A 351 351 . 90.541  85.014  31.440  1.00 2.00   1
. .
ATOM 2683 O    O    . GLU GLU GLU A A 351 351 . 91.161  85.319  32.485  1.00 3.31   1
. .
ATOM 2684 N    N    . ALA ALA ALA A A 352 352 . 90.194  85.916  30.519  1.00 2.00   1
. .
ATOM 2685 CA   CA   . ALA ALA ALA A A 352 352 . 90.416  87.352  30.831  1.00 2.00   1
. .
ATOM 2686 CB   CB   . ALA ALA ALA A A 352 352 . 90.061  88.273  29.682  1.00 2.28   1
. .
ATOM 2687 C    C    . ALA ALA ALA A A 352 352 . 89.683  87.833  32.040  1.00 2.00   1
. .
ATOM 2688 O    O    . ALA ALA ALA A A 352 352 . 90.248  88.596  32.850  1.00 2.75   1
. .
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ATOM 2689 N    N    . ILE ILE ILE A A 353 353 . 88.418  87.467  32.177  1.00 2.00   1
. .
ATOM 2690 CA   CA   . ILE ILE ILE A A 353 353 . 87.702  87.827  33.421  1.00 2.21   1
. .
ATOM 2691 CB   CB   . ILE ILE ILE A A 353 353 . 86.198  87.410  33.331  1.00 2.00   1
. .
ATOM 2692 CG1  CG1  . ILE ILE ILE A A 353 353 . 85.365  88.214  32.347  1.00 4.93   1
. .
ATOM 2693 CD1  CD1  . ILE ILE ILE A A 353 353 . 85.975  88.581  31.020  1.00 13.78  1
. .
ATOM 2694 CG2  CG2  . ILE ILE ILE A A 353 353 . 85.551  87.613  34.668  1.00 4.35   1
. .
ATOM 2695 C    C    . ILE ILE ILE A A 353 353 . 88.307  87.211  34.658  1.00 2.00   1
. .
ATOM 2696 O    O    . ILE ILE ILE A A 353 353 . 88.484  87.915  35.689  1.00 3.09   1
. .
ATOM 2697 N    N    . GLN GLN GLN A A 354 354 . 88.694  85.944  34.602  1.00 2.24   1
. .
ATOM 2698 CA   CA   . GLN GLN GLN A A 354 354 . 89.443  85.305  35.681  1.00 4.18   1
. .
ATOM 2699 CB   CB   . GLN GLN GLN A A 354 354 . 89.792  83.838  35.341  1.00 5.15   1
. .
ATOM 2700 CG   CG   . GLN GLN GLN A A 354 354 . 88.503  83.031  35.206  1.00 11.05  1
. .
ATOM 2701 CD   CD   . GLN GLN GLN A A 354 354 . 88.688  81.531  35.035  1.00 17.74  1
. .
ATOM 2702 OE1  OE1  . GLN GLN GLN A A 354 354 . 87.773  80.758  35.405  1.00 22.77  1
. .
ATOM 2703 NE2  NE2  . GLN GLN GLN A A 354 354 . 89.818  81.106  34.455  1.00 20.61  1
. .
ATOM 2704 C    C    . GLN GLN GLN A A 354 354 . 90.730  86.068  36.011  1.00 4.04   1
. .
ATOM 2705 O    O    . GLN GLN GLN A A 354 354 . 91.029  86.222  37.185  1.00 4.73   1
. .
ATOM 2706 N    N    . ALA ALA ALA A A 355 355 . 91.491  86.521  34.985  1.00 3.10   1
. .
ATOM 2707 CA   CA   . ALA ALA ALA A A 355 355 . 92.734  87.238  35.200  1.00 2.41   1
. .
ATOM 2708 CB   CB   . ALA ALA ALA A A 355 355 . 93.497  87.507  33.894  1.00 2.00   1
. .
ATOM 2709 C    C    . ALA ALA ALA A A 355 355 . 92.415  88.549  35.927  1.00 2.00   1
. .
ATOM 2710 O    O    . ALA ALA ALA A A 355 355 . 93.109  88.906  36.902  1.00 2.69   1
. .
ATOM 2711 N    N    . CYS CYS CYS A A 356 356 . 91.349  89.235  35.504  1.00 2.26   1
. .
ATOM 2712 CA   CA   . CYS CYS CYS A A 356 356 . 90.978  90.515  36.113  1.00 2.00   1
. .
ATOM 2713 CB   CB   . CYS CYS CYS A A 356 356 . 89.697  91.044  35.414  1.00 2.26   1
. .
ATOM 2714 SG   SG   . CYS CYS CYS A A 356 356 . 89.192  92.670  36.030  1.00 2.97   1
. .
ATOM 2715 C    C    . CYS CYS CYS A A 356 356 . 90.660  90.295  37.594  1.00 2.36   1
. .
ATOM 2716 O    O    . CYS CYS CYS A A 356 356 . 91.080  91.054  38.442  1.00 2.62   1
. .
ATOM 2717 N    N    . LYS LYS LYS A A 357 357 . 89.861  89.295  37.860  1.00 2.27   1
. .
ATOM 2718 CA   CA   . LYS LYS LYS A A 357 357 . 89.360  89.126  39.241  1.00 3.84   1
. .
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ATOM 2719 CB   CB   . LYS LYS LYS A A 357 357 . 88.235  88.087  39.382  1.00 3.77   1
. .
ATOM 2720 CG   CG   . LYS LYS LYS A A 357 357 . 86.975  88.519  38.686  1.00 9.81   1
. .
ATOM 2721 CD   CD   . LYS LYS LYS A A 357 357 . 85.944  87.413  38.443  1.00 19.95  1
. .
ATOM 2722 CE   CE   . LYS LYS LYS A A 357 357 . 85.475  86.671  39.703  1.00 24.30  1
. .
ATOM 2723 NZ   NZ   . LYS LYS LYS A A 357 357 . 84.325  87.407  40.312  1.00 27.52  1
. .
ATOM 2724 C    C    . LYS LYS LYS A A 357 357 . 90.511  88.738  40.146  1.00 3.51   1
. .
ATOM 2725 O    O    . LYS LYS LYS A A 357 357 . 90.520  89.143  41.320  1.00 4.27   1
. .
ATOM 2726 N    N    . LEU LEU LEU A A 358 358 . 91.438  87.951  39.612  1.00 2.76   1
. .
ATOM 2727 CA   CA   . LEU LEU LEU A A 358 358 . 92.682  87.607  40.315  1.00 2.76   1
. .
ATOM 2728 CB   CB   . LEU LEU LEU A A 358 358 . 93.473  86.549  39.526  1.00 2.79   1
. .
ATOM 2729 CG   CG   . LEU LEU LEU A A 358 358 . 94.888  86.210  40.080  1.00 6.23   1
. .
ATOM 2730 CD1  CD1  . LEU LEU LEU A A 358 358 . 94.717  85.457  41.430  1.00 5.99   1
. .
ATOM 2731 CD2  CD2  . LEU LEU LEU A A 358 358 . 95.670  85.344  39.150  1.00 9.60   1
. .
ATOM 2732 C    C    . LEU LEU LEU A A 358 358 . 93.488  88.816  40.693  1.00 3.23   1
. .
ATOM 2733 O    O    . LEU LEU LEU A A 358 358 . 93.896  88.999  41.869  1.00 3.58   1
. .
ATOM 2734 N    N    . ALA ALA ALA A A 359 359 . 93.673  89.726  39.742  1.00 2.00   1
. .
ATOM 2735 CA   CA   . ALA ALA ALA A A 359 359 . 94.387  90.953  40.099  1.00 2.32   1
. .
ATOM 2736 CB   CB   . ALA ALA ALA A A 359 359 . 94.629  91.786  38.759  1.00 2.38   1
. .
ATOM 2737 C    C    . ALA ALA ALA A A 359 359 . 93.649  91.758  41.134  1.00 2.92   1
. .
ATOM 2738 O    O    . ALA ALA ALA A A 359 359 . 94.208  92.170  42.137  1.00 4.11   1
. .
ATOM 2739 N    N    . GLN GLN GLN A A 360 360 . 92.355  91.936  40.939  1.00 3.13   1
. .
ATOM 2740 CA   CA   . GLN GLN GLN A A 360 360 . 91.557  92.741  41.843  1.00 3.75   1
. .
ATOM 2741 CB   CB   . GLN GLN GLN A A 360 360 . 90.150  92.948  41.293  1.00 3.68   1
. .
ATOM 2742 CG   CG   . GLN GLN GLN A A 360 360 . 90.146  93.879  40.071  1.00 4.14   1
. .
ATOM 2743 CD   CD   . GLN GLN GLN A A 360 360 . 88.791  93.986  39.437  1.00 6.10   1
. .
ATOM 2744 OE1  OE1  . GLN GLN GLN A A 360 360 . 88.451  95.025  38.839  1.00 10.83  1
. .
ATOM 2745 NE2  NE2  . GLN GLN GLN A A 360 360 . 88.008  92.898  39.480  1.00 5.30   1
. .
ATOM 2746 C    C    . GLN GLN GLN A A 360 360 . 91.499  92.148  43.239  1.00 4.17   1
. .
ATOM 2747 O    O    . GLN GLN GLN A A 360 360 . 91.515  92.900  44.261  1.00 6.88   1
. .
ATOM 2748 N    N    . GLU GLU GLU A A 361 361 . 91.470  90.831  43.319  1.00 4.85   1
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ATOM 2749 CA   CA   . GLU GLU GLU A A 361 361 . 91.465  90.162  44.635  1.00 8.06   1
. .
ATOM 2750 CB   CB   . GLU GLU GLU A A 361 361 . 91.166  88.664  44.469  1.00 8.95   1
. .
ATOM 2751 CG   CG   . GLU GLU GLU A A 361 361 . 89.671  88.386  44.110  1.00 17.54  1
. .
ATOM 2752 CD   CD   . GLU GLU GLU A A 361 361 . 89.427  87.024  43.367  1.00 26.79  1
. .
ATOM 2753 OE1  OE1  . GLU GLU GLU A A 361 361 . 90.439  86.365  42.964  1.00 30.98  1
. .
ATOM 2754 OE2  OE2  . GLU GLU GLU A A 361 361 . 88.224  86.635  43.173  1.00 27.57  1
. .
ATOM 2755 C    C    . GLU GLU GLU A A 361 361 . 92.770  90.370  45.361  1.00 7.68   1
. .
ATOM 2756 O    O    . GLU GLU GLU A A 361 361 . 92.803  90.287  46.624  1.00 9.17   1
. .
ATOM 2757 N    N    . ASN ASN ASN A A 362 362 . 93.826  90.691  44.617  1.00 7.82   1
. .
ATOM 2758 CA   CA   . ASN ASN ASN A A 362 362 . 95.115  90.925  45.212  1.00 7.49   1
. .
ATOM 2759 CB   CB   . ASN ASN ASN A A 362 362 . 96.191  90.141  44.496  1.00 8.23   1
. .
ATOM 2760 CG   CG   . ASN ASN ASN A A 362 362 . 96.126  88.667  44.826  1.00 10.09  1
. .
ATOM 2761 OD1  OD1  . ASN ASN ASN A A 362 362 . 96.688  88.231  45.840  1.00 11.93  1
. .
ATOM 2762 ND2  ND2  . ASN ASN ASN A A 362 362 . 95.393  87.887  44.006  1.00 9.56   1
. .
ATOM 2763 C    C    . ASN ASN ASN A A 362 362 . 95.492  92.399  45.438  1.00 5.88   1
. .
ATOM 2764 O    O    . ASN ASN ASN A A 362 362 . 96.654  92.715  45.717  1.00 7.65   1
. .
ATOM 2765 N    N    . GLY GLY GLY A A 363 363 . 94.495  93.283  45.331  1.00 4.61   1
. .
ATOM 2766 CA   CA   . GLY GLY GLY A A 363 363 . 94.720  94.736  45.514  1.00 7.03   1
. .
ATOM 2767 C    C    . GLY GLY GLY A A 363 363 . 95.318  95.462  44.320  1.00 6.58   1
. .
ATOM 2768 O    O    . GLY GLY GLY A A 363 363 . 95.634  96.647  44.415  1.00 6.98   1
. .
ATOM 2769 N    N    . TRP TRP TRP A A 364 364 . 95.485  94.775  43.209  1.00 3.99   1
. .
ATOM 2770 CA   CA   . TRP TRP TRP A A 364 364 . 95.988  95.434  41.975  1.00 3.56   1
. .
ATOM 2771 CB   CB   . TRP TRP TRP A A 364 364 . 96.464  94.405  41.022  1.00 3.10   1
. .
ATOM 2772 CG   CG   . TRP TRP TRP A A 364 364 . 97.754  93.726  41.325  1.00 3.94   1
. .
ATOM 2773 CD1  CD1  . TRP TRP TRP A A 364 364 . 98.402  93.552  42.530  1.00 5.00   1
. .
ATOM 2774 NE1  NE1  . TRP TRP TRP A A 364 364 . 99.566  92.790  42.336  1.00 3.37   1
. .
ATOM 2775 CE2  CE2  . TRP TRP TRP A A 364 364 . 99.639  92.433  41.001  1.00 4.16   1
. .
ATOM 2776 CD2  CD2  . TRP TRP TRP A A 364 364 . 98.481  92.962  40.367  1.00 4.10   1
. .
ATOM 2777 CE3  CE3  . TRP TRP TRP A A 364 364 . 98.311  92.756  38.980  1.00 4.65   1
. .
ATOM 2778 CZ3  CZ3  . TRP TRP TRP A A 364 364 . 99.228  91.946  38.305  1.00 3.17   1
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ATOM 2779 CH2  CH2  . TRP TRP TRP A A 364 364 . 100.319 91.406  38.975  1.00 3.35   1
. .
ATOM 2780 CZ2  CZ2  . TRP TRP TRP A A 364 364 . 100.553 91.658  40.325  1.00 7.11   1
. .
ATOM 2781 C    C    . TRP TRP TRP A A 364 364 . 94.950  96.255  41.247  1.00 2.17   1
. .
ATOM 2782 O    O    . TRP TRP TRP A A 364 364 . 93.739  95.971  41.328  1.00 2.55   1
. .
ATOM 2783 N    N    . GLY GLY GLY A A 365 365 . 95.398  97.285  40.546  1.00 2.06   1
. .
ATOM 2784 CA   CA   . GLY GLY GLY A A 365 365 . 94.495  97.856  39.554  1.00 2.00   1
. .
ATOM 2785 C    C    . GLY GLY GLY A A 365 365 . 94.415  96.996  38.317  1.00 2.03   1
. .
ATOM 2786 O    O    . GLY GLY GLY A A 365 365 . 95.193  96.055  38.180  1.00 2.00   1
. .
ATOM 2787 N    N    . VAL VAL VAL A A 366 366 . 93.495  97.300  37.412  1.00 2.00   1
. .
ATOM 2788 CA   CA   . VAL VAL VAL A A 366 366 . 93.485  96.661  36.114  1.00 2.00   1
. .
ATOM 2789 CB   CB   . VAL VAL VAL A A 366 366 . 92.385  95.552  36.099  1.00 2.19   1
. .
ATOM 2790 CG1  CG1  . VAL VAL VAL A A 366 366 . 92.237  94.957  34.723  1.00 2.00   1
. .
ATOM 2791 CG2  CG2  . VAL VAL VAL A A 366 366 . 92.675  94.449  37.102  1.00 2.00   1
. .
ATOM 2792 C    C    . VAL VAL VAL A A 366 366 . 93.134  97.710  35.067  1.00 2.00   1
. .
ATOM 2793 O    O    . VAL VAL VAL A A 366 366 . 92.158  98.475  35.226  1.00 2.00   1
. .
ATOM 2794 N    N    . MET MET MET A A 367 367 . 93.971  97.733  34.018  1.00 2.00   1
. .
ATOM 2795 CA   CA   . MET MET MET A A 367 367 . 93.692  98.645  32.931  1.00 2.00   1
. .
ATOM 2796 CB   CB   . MET MET MET A A 367 367 . 94.915  99.479  32.668  1.00 2.25   1
. .
ATOM 2797 CG   CG   . MET MET MET A A 367 367 . 94.687  100.426 31.470  1.00 2.00   1
. .
ATOM 2798 SD   SD   . MET MET MET A A 367 367 . 96.106  101.557 31.058  1.00 5.13   1
. .
ATOM 2799 CE   CE   . MET MET MET A A 367 367 . 96.146  102.769 32.414  1.00 6.23   1
. .
ATOM 2800 C    C    . MET MET MET A A 367 367 . 93.374  97.777  31.723  1.00 2.00   1
. .
ATOM 2801 O    O    . MET MET MET A A 367 367 . 94.234  97.018  31.238  1.00 2.00   1
. .
ATOM 2802 N    N    . VAL VAL VAL A A 368 368 . 92.166  97.933  31.219  1.00 2.00   1
. .
ATOM 2803 CA   CA   . VAL VAL VAL A A 368 368 . 91.753  97.224  29.996  1.00 2.00   1
. .
ATOM 2804 CB   CB   . VAL VAL VAL A A 368 368 . 90.192  97.281  29.860  1.00 2.00   1
. .
ATOM 2805 CG1  CG1  . VAL VAL VAL A A 368 368 . 89.684  96.655  28.542  1.00 2.63   1
. .
ATOM 2806 CG2  CG2  . VAL VAL VAL A A 368 368 . 89.552  96.519  30.992  1.00 2.00   1
. .
ATOM 2807 C    C    . VAL VAL VAL A A 368 368 . 92.457  97.910  28.839  1.00 2.00   1
. .
ATOM 2808 O    O    . VAL VAL VAL A A 368 368 . 92.634  99.095  28.826  1.00 2.00   1
. .
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ATOM 2809 N    N    . SER SER SER A A 369 369 . 92.785  97.121  27.813  1.00 2.00   1
. .
ATOM 2810 CA   CA   . SER SER SER A A 369 369 . 93.614  97.652  26.715  1.00 2.00   1
. .
ATOM 2811 CB   CB   . SER SER SER A A 369 369 . 95.091  97.286  26.952  1.00 2.00   1
. .
ATOM 2812 OG   OG   . SER SER SER A A 369 369 . 95.964  97.783  25.970  1.00 2.09   1
. .
ATOM 2813 C    C    . SER SER SER A A 369 369 . 93.246  97.111  25.372  1.00 2.00   1
. .
ATOM 2814 O    O    . SER SER SER A A 369 369 . 92.971  95.938  25.226  1.00 2.01   1
. .
ATOM 2815 N    N    . HIS HIS HIS A A 370 370 . 93.331  97.977  24.370  1.00 2.00   1
. .
ATOM 2816 CA   CA   . HIS HIS HIS A A 370 370 . 93.398  97.580  22.973  1.00 2.00   1
. .
ATOM 2817 CB   CB   . HIS HIS HIS A A 370 370 . 93.303  98.865  22.100  1.00 2.00   1
. .
ATOM 2818 CG   CG   . HIS HIS HIS A A 370 370 . 94.414  99.835  22.284  1.00 2.00   1
. .
ATOM 2819 ND1  ND1  . HIS HIS HIS A A 370 370 . 94.545  100.896 21.412  1.00 2.00   1
. .
ATOM 2820 CE1  CE1  . HIS HIS HIS A A 370 370 . 95.570  101.633 21.778  1.00 2.00   1
. .
ATOM 2821 NE2  NE2  . HIS HIS HIS A A 370 370 . 96.070  101.158 22.902  1.00 2.29   1
. .
ATOM 2822 CD2  CD2  . HIS HIS HIS A A 370 370 . 95.357  100.013 23.241  1.00 2.10   1
. .
ATOM 2823 C    C    . HIS HIS HIS A A 370 370 . 94.670  96.898  22.611  1.00 2.00   1
. .
ATOM 2824 O    O    . HIS HIS HIS A A 370 370 . 95.576  96.790  23.446  1.00 2.00   1
. .
ATOM 2825 N    N    . ARG ARG ARG A A 371 371 . 94.769  96.528  21.325  1.00 2.00   1
. .
ATOM 2826 CA   CA   . ARG ARG ARG A A 371 371 . 96.101  96.207  20.779  1.00 2.00   1
. .
ATOM 2827 CB   CB   . ARG ARG ARG A A 371 371 . 96.145  94.854  20.017  1.00 2.00   1
. .
ATOM 2828 CG   CG   . ARG ARG ARG A A 371 371 . 95.876  93.581  20.850  1.00 2.00   1
. .
ATOM 2829 CD   CD   . ARG ARG ARG A A 371 371 . 96.656  93.546  22.138  1.00 2.00   1
. .
ATOM 2830 NE   NE   . ARG ARG ARG A A 371 371 . 98.116  93.530  21.974  1.00 2.00   1
. .
ATOM 2831 CZ   CZ   . ARG ARG ARG A A 371 371 . 98.898  92.449  22.203  1.00 2.06   1
. .
ATOM 2832 NH1  NH1  . ARG ARG ARG A A 371 371 . 98.353  91.223  22.437  1.00 2.00   1
. .
ATOM 2833 NH2  NH2  . ARG ARG ARG A A 371 371 . 100.212 92.592  22.159  1.00 2.00   1
. .
ATOM 2834 C    C    . ARG ARG ARG A A 371 371 . 96.468  97.285  19.737  1.00 2.00   1
. .
ATOM 2835 O    O    . ARG ARG ARG A A 371 371 . 95.558  97.996  19.327  1.00 2.00   1
. .
ATOM 2836 N    N    . SER SER SER A A 372 372 . 97.742  97.348  19.334  1.00 2.00   1
. .
ATOM 2837 CA   CA   . SER SER SER A A 372 372 . 98.287  98.240  18.311  1.00 2.16   1
. .
ATOM 2838 CB   CB   . SER SER SER A A 372 372 . 99.800  97.695  18.016  1.00 2.88   1
. .
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ATOM 2839 OG   OG   . SER SER SER A A 372 372 . 100.446 98.962  17.935  1.00 17.92  1
. .
ATOM 2840 C    C    . SER SER SER A A 372 372 . 97.530  98.059  17.001  1.00 2.00   1
. .
ATOM 2841 O    O    . SER SER SER A A 372 372 . 97.293  99.027  16.232  1.00 2.00   1
. .
ATOM 2842 N    N    . GLY GLY GLY A A 373 373 . 97.195  96.846  16.702  1.00 2.00   1
. .
ATOM 2843 CA   CA   . GLY GLY GLY A A 373 373 . 96.395  96.429  15.567  1.00 2.00   1
. .
ATOM 2844 C    C    . GLY GLY GLY A A 373 373 . 94.974  96.230  16.010  1.00 2.00   1
. .
ATOM 2845 O    O    . GLY GLY GLY A A 373 373 . 94.642  95.226  16.635  1.00 2.00   1
. .
ATOM 2846 N    N    . GLU GLU GLU A A 374 374 . 94.076  97.190  15.732  1.00 2.00   1
. .
ATOM 2847 CA   CA   . GLU GLU GLU A A 374 374 . 92.715  97.088  16.219  1.00 2.00   1
. .
ATOM 2848 CB   CB   . GLU GLU GLU A A 374 374 . 92.393  98.380  17.073  1.00 2.00   1
. .
ATOM 2849 CG   CG   . GLU GLU GLU A A 374 374 . 92.480  98.151  18.579  1.00 2.00   1
. .
ATOM 2850 CD   CD   . GLU GLU GLU A A 374 374 . 91.577  97.036  19.060  1.00 2.00   1
. .
ATOM 2851 OE1  OE1  . GLU GLU GLU A A 374 374 . 90.479  96.757  18.512  1.00 2.00   1
. .
ATOM 2852 OE2  OE2  . GLU GLU GLU A A 374 374 . 91.981  96.403  20.055  1.00 2.00   1
. .
ATOM 2853 C    C    . GLU GLU GLU A A 374 374 . 91.716  96.915  15.088  1.00 2.00   1
. .
ATOM 2854 O    O    . GLU GLU GLU A A 374 374 . 92.081  96.964  13.890  1.00 2.00   1
. .
ATOM 2855 N    N    . THR THR THR A A 375 375 . 90.454  96.840  15.423  1.00 2.00   1
. .
ATOM 2856 CA   CA   . THR THR THR A A 375 375 . 89.395  96.805  14.426  1.00 2.00   1
. .
ATOM 2857 CB   CB   . THR THR THR A A 375 375 . 88.790  95.379  14.285  1.00 2.10   1
. .
ATOM 2858 OG1  OG1  . THR THR THR A A 375 375 . 88.010  95.077  15.451  1.00 2.01   1
. .
ATOM 2859 CG2  CG2  . THR THR THR A A 375 375 . 89.920  94.349  14.198  1.00 4.23   1
. .
ATOM 2860 C    C    . THR THR THR A A 375 375 . 88.284  97.737  14.859  1.00 2.00   1
. .
ATOM 2861 O    O    . THR THR THR A A 375 375 . 88.371  98.355  15.865  1.00 2.00   1
. .
ATOM 2862 N    N    . GLU GLU GLU A A 376 376 . 87.223  97.827  14.065  1.00 2.00   1
. .
ATOM 2863 CA   CA   . GLU GLU GLU A A 376 376 . 86.040  98.625  14.373  1.00 2.00   1
. .
ATOM 2864 CB   CB   . GLU GLU GLU A A 376 376 . 85.186  98.783  13.084  1.00 2.65   1
. .
ATOM 2865 CG   CG   . GLU GLU GLU A A 376 376 . 84.901  97.450  12.353  1.00 3.36   1
. .
ATOM 2866 CD   CD   . GLU GLU GLU A A 376 376 . 85.880  97.025  11.303  1.00 4.12   1
. .
ATOM 2867 OE1  OE1  . GLU GLU GLU A A 376 376 . 87.118  97.162  11.494  1.00 8.44   1
. .
ATOM 2868 OE2  OE2  . GLU GLU GLU A A 376 376 . 85.368  96.508  10.266  1.00 2.78   1
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ATOM 2869 C    C    . GLU GLU GLU A A 376 376 . 85.211  97.965  15.520  1.00 2.00   1
. .
ATOM 2870 O    O    . GLU GLU GLU A A 376 376 . 84.232  98.513  15.958  1.00 3.52   1
. .
ATOM 2871 N    N    . ASP ASP ASP A A 377 377 . 85.656  96.811  16.026  1.00 2.29   1
. .
ATOM 2872 CA   CA   . ASP ASP ASP A A 377 377 . 85.005  96.205  17.188  1.00 2.70   1
. .
ATOM 2873 CB   CB   . ASP ASP ASP A A 377 377 . 85.676  94.852  17.434  1.00 2.81   1
. .
ATOM 2874 CG   CG   . ASP ASP ASP A A 377 377 . 85.051  94.016  18.539  1.00 6.16   1
. .
ATOM 2875 OD1  OD1  . ASP ASP ASP A A 377 377 . 85.367  94.243  19.758  1.00 12.16  1
. .
ATOM 2876 OD2  OD2  . ASP ASP ASP A A 377 377 . 84.355  93.062  18.226  1.00 8.28   1
. .
ATOM 2877 C    C    . ASP ASP ASP A A 377 377 . 85.085  97.103  18.445  1.00 2.00   1
. .
ATOM 2878 O    O    . ASP ASP ASP A A 377 377 . 86.073  97.773  18.646  1.00 2.00   1
. .
ATOM 2879 N    N    . THR THR THR A A 378 378 . 84.020  97.129  19.256  1.00 2.00   1
. .
ATOM 2880 CA   CA   . THR THR THR A A 378 378 . 84.054  97.909  20.444  1.00 2.00   1
. .
ATOM 2881 CB   CB   . THR THR THR A A 378 378 . 82.967  99.006  20.477  1.00 2.00   1
. .
ATOM 2882 OG1  OG1  . THR THR THR A A 378 378 . 81.671  98.414  20.477  1.00 2.23   1
. .
ATOM 2883 CG2  CG2  . THR THR THR A A 378 378 . 82.996  99.883  19.214  1.00 4.39   1
. .
ATOM 2884 C    C    . THR THR THR A A 378 378 . 83.824  97.111  21.731  1.00 2.00   1
. .
ATOM 2885 O    O    . THR THR THR A A 378 378 . 83.503  97.731  22.772  1.00 2.00   1
. .
ATOM 2886 N    N    . PHE PHE PHE A A 379 379 . 84.026  95.790  21.691  1.00 2.00   1
. .
ATOM 2887 CA   CA   . PHE PHE PHE A A 379 379 . 83.839  94.984  22.867  1.00 2.00   1
. .
ATOM 2888 CB   CB   . PHE PHE PHE A A 379 379 . 84.426  93.567  22.579  1.00 2.00   1
. .
ATOM 2889 CG   CG   . PHE PHE PHE A A 379 379 . 84.139  92.523  23.643  1.00 2.00   1
. .
ATOM 2890 CD1  CD1  . PHE PHE PHE A A 379 379 . 85.047  92.293  24.669  1.00 2.00   1
. .
ATOM 2891 CE1  CE1  . PHE PHE PHE A A 379 379 . 84.741  91.289  25.677  1.00 2.00   1
. .
ATOM 2892 CZ   CZ   . PHE PHE PHE A A 379 379 . 83.587  90.642  25.662  1.00 2.84   1
. .
ATOM 2893 CE2  CE2  . PHE PHE PHE A A 379 379 . 82.686  90.863  24.615  1.00 2.83   1
. .
ATOM 2894 CD2  CD2  . PHE PHE PHE A A 379 379 . 82.979  91.801  23.591  1.00 2.00   1
. .
ATOM 2895 C    C    . PHE PHE PHE A A 379 379 . 84.553  95.529  24.123  1.00 2.00   1
. .
ATOM 2896 O    O    . PHE PHE PHE A A 379 379 . 83.999  95.488  25.180  1.00 2.00   1
. .
ATOM 2897 N    N    . ILE ILE ILE A A 380 380 . 85.787  96.018  24.001  1.00 2.00   1
. .
ATOM 2898 CA   CA   . ILE ILE ILE A A 380 380 . 86.512  96.313  25.220  1.00 2.00   1
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ATOM 2899 CB   CB   . ILE ILE ILE A A 380 380 . 88.010  96.532  25.040  1.00 2.00   1
. .
ATOM 2900 CG1  CG1  . ILE ILE ILE A A 380 380 . 88.248  97.720  24.069  1.00 2.00   1
. .
ATOM 2901 CD1  CD1  . ILE ILE ILE A A 380 380 . 89.761  98.106  23.965  1.00 2.00   1
. .
ATOM 2902 CG2  CG2  . ILE ILE ILE A A 380 380 . 88.758  95.236  24.616  1.00 2.04   1
. .
ATOM 2903 C    C    . ILE ILE ILE A A 380 380 . 85.896  97.522  25.953  1.00 2.00   1
. .
ATOM 2904 O    O    . ILE ILE ILE A A 380 380 . 86.145  97.684  27.167  1.00 2.00   1
. .
ATOM 2905 N    N    . ALA ALA ALA A A 381 381 . 85.092  98.359  25.239  1.00 2.00   1
. .
ATOM 2906 CA   CA   . ALA ALA ALA A A 381 381 . 84.382  99.470  25.934  1.00 2.00   1
. .
ATOM 2907 CB   CB   . ALA ALA ALA A A 381 381 . 83.677  100.351 24.920  1.00 2.00   1
. .
ATOM 2908 C    C    . ALA ALA ALA A A 381 381 . 83.402  98.858  26.970  1.00 2.00   1
. .
ATOM 2909 O    O    . ALA ALA ALA A A 381 381 . 83.348  99.251  28.140  1.00 2.00   1
. .
ATOM 2910 N    N    . ASP ASP ASP A A 382 382 . 82.654  97.875  26.542  1.00 2.00   1
. .
ATOM 2911 CA   CA   . ASP ASP ASP A A 382 382 . 81.684  97.242  27.389  1.00 2.00   1
. .
ATOM 2912 CB   CB   . ASP ASP ASP A A 382 382 . 80.782  96.325  26.541  1.00 2.18   1
. .
ATOM 2913 CG   CG   . ASP ASP ASP A A 382 382 . 79.708  97.161  25.785  1.00 2.41   1
. .
ATOM 2914 OD1  OD1  . ASP ASP ASP A A 382 382 . 80.048  97.805  24.770  1.00 5.40   1
. .
ATOM 2915 OD2  OD2  . ASP ASP ASP A A 382 382 . 78.515  97.283  26.207  1.00 5.13   1
. .
ATOM 2916 C    C    . ASP ASP ASP A A 382 382 . 82.429  96.458  28.457  1.00 2.00   1
. .
ATOM 2917 O    O    . ASP ASP ASP A A 382 382 . 81.997  96.417  29.609  1.00 2.00   1
. .
ATOM 2918 N    N    . LEU LEU LEU A A 383 383 . 83.540  95.831  28.084  1.00 2.00   1
. .
ATOM 2919 CA   CA   . LEU LEU LEU A A 383 383 . 84.295  95.024  29.004  1.00 2.00   1
. .
ATOM 2920 CB   CB   . LEU LEU LEU A A 383 383 . 85.470  94.402  28.272  1.00 2.00   1
. .
ATOM 2921 CG   CG   . LEU LEU LEU A A 383 383 . 86.365  93.486  29.103  1.00 2.00   1
. .
ATOM 2922 CD1  CD1  . LEU LEU LEU A A 383 383 . 85.618  92.243  29.491  1.00 2.10   1
. .
ATOM 2923 CD2  CD2  . LEU LEU LEU A A 383 383 . 87.657  93.161  28.308  1.00 2.00   1
. .
ATOM 2924 C    C    . LEU LEU LEU A A 383 383 . 84.810  95.855  30.189  1.00 2.00   1
. .
ATOM 2925 O    O    . LEU LEU LEU A A 383 383 . 84.687  95.469  31.376  1.00 2.00   1
. .
ATOM 2926 N    N    . VAL VAL VAL A A 384 384 . 85.392  97.026  29.933  1.00 2.00   1
. .
ATOM 2927 CA   CA   . VAL VAL VAL A A 384 384 . 85.968  97.797  31.055  1.00 2.00   1
. .
ATOM 2928 CB   CB   . VAL VAL VAL A A 384 384 . 86.873  98.951  30.529  1.00 2.00   1
. .
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ATOM 2929 CG1  CG1  . VAL VAL VAL A A 384 384 . 86.027  99.985  29.777  1.00 2.00   1
. .
ATOM 2930 CG2  CG2  . VAL VAL VAL A A 384 384 . 87.631  99.729  31.648  1.00 2.00   1
. .
ATOM 2931 C    C    . VAL VAL VAL A A 384 384 . 84.865  98.323  32.010  1.00 2.00   1
. .
ATOM 2932 O    O    . VAL VAL VAL A A 384 384 . 85.102  98.416  33.205  1.00 2.00   1
. .
ATOM 2933 N    N    . VAL VAL VAL A A 385 385 . 83.704  98.610  31.468  1.00 2.00   1
. .
ATOM 2934 CA   CA   . VAL VAL VAL A A 385 385 . 82.591  99.057  32.322  1.00 2.10   1
. .
ATOM 2935 CB   CB   . VAL VAL VAL A A 385 385 . 81.484  99.747  31.492  1.00 2.00   1
. .
ATOM 2936 CG1  CG1  . VAL VAL VAL A A 385 385 . 80.203  100.012 32.383  1.00 2.25   1
. .
ATOM 2937 CG2  CG2  . VAL VAL VAL A A 385 385 . 82.038  101.079 30.878  1.00 2.00   1
. .
ATOM 2938 C    C    . VAL VAL VAL A A 385 385 . 82.050  97.867  33.160  1.00 2.00   1
. .
ATOM 2939 O    O    . VAL VAL VAL A A 385 385 . 81.902  97.992  34.355  1.00 2.00   1
. .
ATOM 2940 N    N    . GLY GLY GLY A A 386 386 . 81.829  96.713  32.553  1.00 2.00   1
. .
ATOM 2941 CA   CA   . GLY GLY GLY A A 386 386 . 81.325  95.534  33.255  1.00 2.00   1
. .
ATOM 2942 C    C    . GLY GLY GLY A A 386 386 . 82.308  95.022  34.247  1.00 2.05   1
. .
ATOM 2943 O    O    . GLY GLY GLY A A 386 386 . 81.888  94.571  35.318  1.00 4.07   1
. .
ATOM 2944 N    N    . LEU LEU LEU A A 387 387 . 83.622  95.102  33.988  1.00 2.00   1
. .
ATOM 2945 CA   CA   . LEU LEU LEU A A 387 387 . 84.639  94.734  34.954  1.00 2.00   1
. .
ATOM 2946 CB   CB   . LEU LEU LEU A A 387 387 . 85.941  94.292  34.281  1.00 2.00   1
. .
ATOM 2947 CG   CG   . LEU LEU LEU A A 387 387 . 85.793  93.098  33.377  1.00 2.08   1
. .
ATOM 2948 CD1  CD1  . LEU LEU LEU A A 387 387 . 87.164  92.663  32.817  1.00 4.36   1
. .
ATOM 2949 CD2  CD2  . LEU LEU LEU A A 387 387 . 85.098  91.910  34.131  1.00 4.12   1
. .
ATOM 2950 C    C    . LEU LEU LEU A A 387 387 . 84.906  95.777  36.007  1.00 2.18   1
. .
ATOM 2951 O    O    . LEU LEU LEU A A 387 387 . 85.668  95.492  36.974  1.00 2.01   1
. .
ATOM 2952 N    N    . CYS CYS CYS A A 388 388 . 84.309  96.962  35.867  1.00 2.18   1
. .
ATOM 2953 CA   CA   . CYS CYS CYS A A 388 388 . 84.452  98.073  36.786  1.00 2.00   1
. .
ATOM 2954 CB   CB   . CYS CYS CYS A A 388 388 . 83.756  97.753  38.152  1.00 4.84   1
. .
ATOM 2955 SG   SG   . CYS CYS CYS A A 388 388 . 82.011  97.505  37.949  1.00 10.89  1
. .
ATOM 2956 C    C    . CYS CYS CYS A A 388 388 . 85.944  98.450  37.102  1.00 2.00   1
. .
ATOM 2957 O    O    . CYS CYS CYS A A 388 388 . 86.295  98.739  38.283  1.00 3.98   1
. .
ATOM 2958 N    N    . THR THR THR A A 389 389 . 86.842  98.309  36.145  1.00 2.00   1
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ATOM 2959 CA   CA   . THR THR THR A A 389 389 . 88.292  98.450  36.479  1.00 2.00   1
. .
ATOM 2960 CB   CB   . THR THR THR A A 389 389 . 89.232  97.840  35.496  1.00 2.22   1
. .
ATOM 2961 OG1  OG1  . THR THR THR A A 389 389 . 89.403  98.710  34.355  1.00 2.27   1
. .
ATOM 2962 CG2  CG2  . THR THR THR A A 389 389 . 88.658  96.548  34.932  1.00 2.98   1
. .
ATOM 2963 C    C    . THR THR THR A A 389 389 . 88.692  99.917  36.701  1.00 2.00   1
. .
ATOM 2964 O    O    . THR THR THR A A 389 389 . 89.673  100.151 37.355  1.00 3.25   1
. .
ATOM 2965 N    N    . GLY GLY GLY A A 390 390 . 88.029  100.880 36.075  1.00 2.00   1
. .
ATOM 2966 CA   CA   . GLY GLY GLY A A 390 390 . 88.329  102.261 36.364  1.00 2.00   1
. .
ATOM 2967 C    C    . GLY GLY GLY A A 390 390 . 89.345  102.896 35.400  1.00 2.00   1
. .
ATOM 2968 O    O    . GLY GLY GLY A A 390 390 . 89.548  104.095 35.430  1.00 2.00   1
. .
ATOM 2969 N    N    . GLN GLN GLN A A 391 391 . 89.938  102.095 34.508  1.00 2.00   1
. .
ATOM 2970 CA   CA   . GLN GLN GLN A A 391 391 . 90.906  102.599 33.534  1.00 2.00   1
. .
ATOM 2971 CB   CB   . GLN GLN GLN A A 391 391 . 92.346  102.632 34.071  1.00 3.60   1
. .
ATOM 2972 CG   CG   . GLN GLN GLN A A 391 391 . 92.561  101.826 35.327  1.00 3.46   1
. .
ATOM 2973 CD   CD   . GLN GLN GLN A A 391 391 . 94.002  101.841 35.828  1.00 2.25   1
. .
ATOM 2974 OE1  OE1  . GLN GLN GLN A A 391 391 . 94.848  102.525 35.324  1.00 3.86   1
. .
ATOM 2975 NE2  NE2  . GLN GLN GLN A A 391 391 . 94.249  101.100 36.858  1.00 2.00   1
. .
ATOM 2976 C    C    . GLN GLN GLN A A 391 391 . 90.912  101.764 32.251  1.00 2.00   1
. .
ATOM 2977 O    O    . GLN GLN GLN A A 391 391 . 90.973  100.534 32.323  1.00 2.00   1
. .
ATOM 2978 N    N    . ILE ILE ILE A A 392 392 . 91.028  102.489 31.120  1.00 2.00   1
. .
ATOM 2979 CA   CA   . ILE ILE ILE A A 392 392 . 91.188  101.871 29.817  1.00 2.00   1
. .
ATOM 2980 CB   CB   . ILE ILE ILE A A 392 392 . 89.842  101.799 29.059  1.00 2.00   1
. .
ATOM 2981 CG1  CG1  . ILE ILE ILE A A 392 392 . 90.035  101.030 27.690  1.00 2.00   1
. .
ATOM 2982 CD1  CD1  . ILE ILE ILE A A 392 392 . 88.691  100.638 27.087  1.00 2.07   1
. .
ATOM 2983 CG2  CG2  . ILE ILE ILE A A 392 392 . 89.217  103.199 28.866  1.00 2.00   1
. .
ATOM 2984 C    C    . ILE ILE ILE A A 392 392 . 92.181  102.628 28.991  1.00 2.00   1
. .
ATOM 2985 O    O    . ILE ILE ILE A A 392 392 . 92.157  103.866 29.017  1.00 2.00   1
. .
ATOM 2986 N    N    . LYS LYS LYS A A 393 393 . 93.010  101.915 28.248  1.00 2.00   1
. .
ATOM 2987 CA   CA   . LYS LYS LYS A A 393 393 . 93.801  102.605 27.258  1.00 2.00   1
. .
ATOM 2988 CB   CB   . LYS LYS LYS A A 393 393 . 95.299  102.502 27.442  1.00 2.00   1
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ATOM 2989 CG   CG   . LYS LYS LYS A A 393 393 . 95.888  101.102 27.346  1.00 2.03   1
. .
ATOM 2990 CD   CD   . LYS LYS LYS A A 393 393 . 97.463  101.239 27.389  1.00 2.00   1
. .
ATOM 2991 CE   CE   . LYS LYS LYS A A 393 393 . 98.134  100.112 26.629  1.00 2.04   1
. .
ATOM 2992 NZ   NZ   . LYS LYS LYS A A 393 393 . 99.592  100.217 26.685  1.00 2.18   1
. .
ATOM 2993 C    C    . LYS LYS LYS A A 393 393 . 93.370  102.035 25.905  1.00 2.00   1
. .
ATOM 2994 O    O    . LYS LYS LYS A A 393 393 . 93.386  100.797 25.704  1.00 2.00   1
. .
ATOM 2995 N    N    . THR THR THR A A 394 394 . 92.934  102.910 25.007  1.00 2.00   1
. .
ATOM 2996 CA   CA   . THR THR THR A A 394 394 . 92.522  102.415 23.675  1.00 2.00   1
. .
ATOM 2997 CB   CB   . THR THR THR A A 394 394 . 91.035  101.915 23.737  1.00 2.00   1
. .
ATOM 2998 OG1  OG1  . THR THR THR A A 394 394 . 90.682  101.307 22.467  1.00 2.00   1
. .
ATOM 2999 CG2  CG2  . THR THR THR A A 394 394 . 89.999  102.962 24.132  1.00 2.00   1
. .
ATOM 3000 C    C    . THR THR THR A A 394 394 . 92.796  103.407 22.572  1.00 2.00   1
. .
ATOM 3001 O    O    . THR THR THR A A 394 394 . 92.069  103.404 21.602  1.00 2.00   1
. .
ATOM 3002 N    N    . GLY GLY GLY A A 395 395 . 93.890  104.131 22.710  1.00 2.00   1
. .
ATOM 3003 CA   CA   . GLY GLY GLY A A 395 395 . 94.443  104.948 21.624  1.00 2.00   1
. .
ATOM 3004 C    C    . GLY GLY GLY A A 395 395 . 94.451  106.419 21.887  1.00 2.00   1
. .
ATOM 3005 O    O    . GLY GLY GLY A A 395 395 . 93.821  106.917 22.787  1.00 2.00   1
. .
ATOM 3006 N    N    . ALA ALA ALA A A 396 396 . 95.115  107.134 21.021  1.00 2.00   1
. .
ATOM 3007 CA   CA   . ALA ALA ALA A A 396 396 . 94.877  108.613 20.937  1.00 2.00   1
. .
ATOM 3008 CB   CB   . ALA ALA ALA A A 396 396 . 95.788  109.191 19.891  1.00 2.00   1
. .
ATOM 3009 C    C    . ALA ALA ALA A A 396 396 . 93.426  108.823 20.536  1.00 2.00   1
. .
ATOM 3010 O    O    . ALA ALA ALA A A 396 396 . 92.739  107.909 20.082  1.00 2.00   1
. .
ATOM 3011 N    N    . PRO PRO PRO A A 397 397 . 92.908  110.047 20.703  1.00 2.00   1
. .
ATOM 3012 CA   CA   . PRO PRO PRO A A 397 397 . 91.572  110.356 20.189  1.00 2.00   1
. .
ATOM 3013 CB   CB   . PRO PRO PRO A A 397 397 . 91.198  111.618 20.991  1.00 2.64   1
. .
ATOM 3014 CG   CG   . PRO PRO PRO A A 397 397 . 92.579  112.279 21.153  1.00 2.00   1
. .
ATOM 3015 CD   CD   . PRO PRO PRO A A 397 397 . 93.549  111.179 21.460  1.00 2.03   1
. .
ATOM 3016 C    C    . PRO PRO PRO A A 397 397 . 91.658  110.661 18.701  1.00 2.02   1
. .
ATOM 3017 O    O    . PRO PRO PRO A A 397 397 . 91.274  111.692 18.211  1.00 2.84   1
. .
ATOM 3018 N    N    . CYS CYS CYS A A 398 398 . 92.182  109.686 17.959  1.00 2.00   1
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ATOM 3019 CA   CA   . CYS CYS CYS A A 398 398 . 92.531  109.809 16.499  1.00 2.00   1
. .
ATOM 3020 CB   CB   . CYS CYS CYS A A 398 398 . 93.915  110.507 16.362  1.00 2.00   1
. .
ATOM 3021 SG   SG   . CYS CYS CYS A A 398 398 . 94.501  110.579 14.640  1.00 3.05   1
. .
ATOM 3022 C    C    . CYS CYS CYS A A 398 398 . 92.621  108.361 15.948  1.00 2.00   1
. .
ATOM 3023 O    O    . CYS CYS CYS A A 398 398 . 93.256  107.552 16.595  1.00 2.00   1
. .
ATOM 3024 N    N    . ARG ARG ARG A A 399 399 . 92.047  108.112 14.782  1.00 2.00   1
. .
ATOM 3025 CA   CA   . ARG ARG ARG A A 399 399 . 91.908  106.807 14.112  1.00 2.00   1
. .
ATOM 3026 CB   CB   . ARG ARG ARG A A 399 399 . 93.152  105.956 14.211  1.00 2.00   1
. .
ATOM 3027 CG   CG   . ARG ARG ARG A A 399 399 . 94.414  106.665 13.627  1.00 2.00   1
. .
ATOM 3028 CD   CD   . ARG ARG ARG A A 399 399 . 95.746  105.823 13.803  1.00 2.00   1
. .
ATOM 3029 NE   NE   . ARG ARG ARG A A 399 399 . 95.658  104.507 13.147  1.00 2.00   1
. .
ATOM 3030 CZ   CZ   . ARG ARG ARG A A 399 399 . 96.636  104.001 12.403  1.00 2.00   1
. .
ATOM 3031 NH1  NH1  . ARG ARG ARG A A 399 399 . 97.802  104.695 12.235  1.00 2.00   1
. .
ATOM 3032 NH2  NH2  . ARG ARG ARG A A 399 399 . 96.501  102.768 11.879  1.00 2.02   1
. .
ATOM 3033 C    C    . ARG ARG ARG A A 399 399 . 90.685  106.131 14.725  1.00 2.00   1
. .
ATOM 3034 O    O    . ARG ARG ARG A A 399 399 . 90.610  105.955 15.982  1.00 2.00   1
. .
ATOM 3035 N    N    . SER SER SER A A 400 400 . 89.748  105.735 13.896  1.00 2.00   1
. .
ATOM 3036 CA   CA   . SER SER SER A A 400 400 . 88.451  105.327 14.448  1.00 2.00   1
. .
ATOM 3037 CB   CB   . SER SER SER A A 400 400 . 87.302  105.436 13.410  1.00 2.00   1
. .
ATOM 3038 OG   OG   . SER SER SER A A 400 400 . 87.076  106.839 13.144  1.00 2.00   1
. .
ATOM 3039 C    C    . SER SER SER A A 400 400 . 88.482  103.932 15.064  1.00 2.00   1
. .
ATOM 3040 O    O    . SER SER SER A A 400 400 . 87.522  103.563 15.685  1.00 2.00   1
. .
ATOM 3041 N    N    . GLU GLU GLU A A 401 401 . 89.550  103.172 14.829  1.00 2.00   1
. .
ATOM 3042 CA   CA   . GLU GLU GLU A A 401 401 . 89.626  101.922 15.612  1.00 2.00   1
. .
ATOM 3043 CB   CB   . GLU GLU GLU A A 401 401 . 90.774  100.962 15.082  1.00 2.00   1
. .
ATOM 3044 CG   CG   . GLU GLU GLU A A 401 401 . 92.143  101.490 15.392  1.00 2.00   1
. .
ATOM 3045 CD   CD   . GLU GLU GLU A A 401 401 . 92.724  102.492 14.322  1.00 2.14   1
. .
ATOM 3046 OE1  OE1  . GLU GLU GLU A A 401 401 . 91.960  102.884 13.390  1.00 2.00   1
. .
ATOM 3047 OE2  OE2  . GLU GLU GLU A A 401 401 . 93.944  102.787 14.438  1.00 2.00   1
. .
ATOM 3048 C    C    . GLU GLU GLU A A 401 401 . 89.814  102.249 17.087  1.00 2.00   1
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ATOM 3049 O    O    . GLU GLU GLU A A 401 401 . 89.695  101.389 17.950  1.00 2.00   1
. .
ATOM 3050 N    N    . ARG ARG ARG A A 402 402 . 90.207  103.532 17.370  1.00 2.00   1
. .
ATOM 3051 CA   CA   . ARG ARG ARG A A 402 402 . 90.355  104.002 18.766  1.00 2.00   1
. .
ATOM 3052 CB   CB   . ARG ARG ARG A A 402 402 . 91.562  104.917 18.926  1.00 2.00   1
. .
ATOM 3053 CG   CG   . ARG ARG ARG A A 402 402 . 92.828  104.492 18.116  1.00 2.00   1
. .
ATOM 3054 CD   CD   . ARG ARG ARG A A 402 402 . 93.451  103.157 18.586  1.00 2.00   1
. .
ATOM 3055 NE   NE   . ARG ARG ARG A A 402 402 . 94.297  102.706 17.508  1.00 2.02   1
. .
ATOM 3056 CZ   CZ   . ARG ARG ARG A A 402 402 . 94.906  101.536 17.520  1.00 2.00   1
. .
ATOM 3057 NH1  NH1  . ARG ARG ARG A A 402 402 . 94.794  100.712 18.554  1.00 2.00   1
. .
ATOM 3058 NH2  NH2  . ARG ARG ARG A A 402 402 . 95.556  101.139 16.405  1.00 2.00   1
. .
ATOM 3059 C    C    . ARG ARG ARG A A 402 402 . 89.077  104.730 19.138  1.00 2.00   1
. .
ATOM 3060 O    O    . ARG ARG ARG A A 402 402 . 88.460  104.404 20.168  1.00 2.00   1
. .
ATOM 3061 N    N    . LEU LEU LEU A A 403 403 . 88.670  105.687 18.313  1.00 2.00   1
. .
ATOM 3062 CA   CA   . LEU LEU LEU A A 403 403 . 87.434  106.424 18.646  1.00 2.00   1
. .
ATOM 3063 CB   CB   . LEU LEU LEU A A 403 403 . 87.100  107.559 17.621  1.00 2.00   1
. .
ATOM 3064 CG   CG   . LEU LEU LEU A A 403 403 . 87.864  108.922 17.737  1.00 2.00   1
. .
ATOM 3065 CD1  CD1  . LEU LEU LEU A A 403 403 . 88.143  109.356 19.211  1.00 2.05   1
. .
ATOM 3066 CD2  CD2  . LEU LEU LEU A A 403 403 . 89.165  108.759 16.881  1.00 2.00   1
. .
ATOM 3067 C    C    . LEU LEU LEU A A 403 403 . 86.231  105.537 18.781  1.00 2.00   1
. .
ATOM 3068 O    O    . LEU LEU LEU A A 403 403 . 85.293  105.842 19.479  1.00 2.00   1
. .
ATOM 3069 N    N    . ALA ALA ALA A A 404 404 . 86.198  104.436 18.022  1.00 2.00   1
. .
ATOM 3070 CA   CA   . ALA ALA ALA A A 404 404 . 85.010  103.606 18.139  1.00 2.00   1
. .
ATOM 3071 CB   CB   . ALA ALA ALA A A 404 404 . 85.130  102.369 17.208  1.00 2.00   1
. .
ATOM 3072 C    C    . ALA ALA ALA A A 404 404 . 84.766  103.130 19.594  1.00 2.00   1
. .
ATOM 3073 O    O    . ALA ALA ALA A A 404 404 . 83.622  103.120 20.054  1.00 2.00   1
. .
ATOM 3074 N    N    . LYS LYS LYS A A 405 405 . 85.853  102.827 20.292  1.00 2.00   1
. .
ATOM 3075 CA   CA   . LYS LYS LYS A A 405 405 . 85.723  102.439 21.721  1.00 2.00   1
. .
ATOM 3076 CB   CB   . LYS LYS LYS A A 405 405 . 87.027  101.910 22.276  1.00 2.00   1
. .
ATOM 3077 CG   CG   . LYS LYS LYS A A 405 405 . 87.350  100.441 21.848  1.00 2.00   1
. .
ATOM 3078 CD   CD   . LYS LYS LYS A A 405 405 . 87.805  100.365 20.393  1.00 2.00   1
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ATOM 3079 CE   CE   . LYS LYS LYS A A 405 405 . 88.619  99.064  20.120  1.00 2.00   1
. .
ATOM 3080 NZ   NZ   . LYS LYS LYS A A 405 405 . 88.645  98.762  18.636  1.00 2.15   1
. .
ATOM 3081 C    C    . LYS LYS LYS A A 405 405 . 85.302  103.662 22.583  1.00 2.00   1
. .
ATOM 3082 O    O    . LYS LYS LYS A A 405 405 . 84.431  103.518 23.466  1.00 2.00   1
. .
ATOM 3083 N    N    . TYR TYR TYR A A 406 406 . 85.995  104.798 22.380  1.00 2.00   1
. .
ATOM 3084 CA   CA   . TYR TYR TYR A A 406 406 . 85.701  105.978 23.180  1.00 2.00   1
. .
ATOM 3085 CB   CB   . TYR TYR TYR A A 406 406 . 86.700  107.104 22.804  1.00 2.00   1
. .
ATOM 3086 CG   CG   . TYR TYR TYR A A 406 406 . 88.077  106.766 23.251  1.00 2.00   1
. .
ATOM 3087 CD1  CD1  . TYR TYR TYR A A 406 406 . 88.340  106.399 24.565  1.00 2.00   1
. .
ATOM 3088 CE1  CE1  . TYR TYR TYR A A 406 406 . 89.642  106.098 24.984  1.00 2.00   1
. .
ATOM 3089 CZ   CZ   . TYR TYR TYR A A 406 406 . 90.707  106.225 24.083  1.00 2.00   1
. .
ATOM 3090 OH   OH   . TYR TYR TYR A A 406 406 . 91.947  105.928 24.498  1.00 2.00   1
. .
ATOM 3091 CE2  CE2  . TYR TYR TYR A A 406 406 . 90.498  106.609 22.750  1.00 2.00   1
. .
ATOM 3092 CD2  CD2  . TYR TYR TYR A A 406 406 . 89.187  106.930 22.360  1.00 2.00   1
. .
ATOM 3093 C    C    . TYR TYR TYR A A 406 406 . 84.262  106.463 22.925  1.00 2.00   1
. .
ATOM 3094 O    O    . TYR TYR TYR A A 406 406 . 83.566  106.848 23.881  1.00 2.00   1
. .
ATOM 3095 N    N    . ASN ASN ASN A A 407 407 . 83.771  106.406 21.670  1.00 2.00   1
. .
ATOM 3096 CA   CA   . ASN ASN ASN A A 407 407 . 82.378  106.801 21.381  1.00 2.00   1
. .
ATOM 3097 CB   CB   . ASN ASN ASN A A 407 407 . 82.154  106.811 19.851  1.00 2.00   1
. .
ATOM 3098 CG   CG   . ASN ASN ASN A A 407 407 . 82.896  107.960 19.175  1.00 2.00   1
. .
ATOM 3099 OD1  OD1  . ASN ASN ASN A A 407 407 . 83.186  109.006 19.789  1.00 2.00   1
. .
ATOM 3100 ND2  ND2  . ASN ASN ASN A A 407 407 . 83.141  107.772 17.874  1.00 2.00   1
. .
ATOM 3101 C    C    . ASN ASN ASN A A 407 407 . 81.410  105.857 22.093  1.00 2.00   1
. .
ATOM 3102 O    O    . ASN ASN ASN A A 407 407 . 80.354  106.253 22.571  1.00 2.00   1
. .
ATOM 3103 N    N    . GLN GLN GLN A A 408 408 . 81.777  104.560 22.085  1.00 2.00   1
. .
ATOM 3104 CA   CA   . GLN GLN GLN A A 408 408 . 80.916  103.571 22.748  1.00 2.00   1
. .
ATOM 3105 CB   CB   . GLN GLN GLN A A 408 408 . 81.396  102.165 22.410  1.00 2.10   1
. .
ATOM 3106 CG   CG   . GLN GLN GLN A A 408 408 . 80.569  101.082 23.132  1.00 2.00   1
. .
ATOM 3107 CD   CD   . GLN GLN GLN A A 408 408 . 79.167  100.914 22.703  1.00 3.78   1
. .
ATOM 3108 OE1  OE1  . GLN GLN GLN A A 408 408 . 78.637  101.630 21.804  1.00 3.37   1
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ATOM 3109 NE2  NE2  . GLN GLN GLN A A 408 408 . 78.505  99.935  23.304  1.00 8.59   1
. .
ATOM 3110 C    C    . GLN GLN GLN A A 408 408 . 80.846  103.848 24.259  1.00 2.00   1
. .
ATOM 3111 O    O    . GLN GLN GLN A A 408 408 . 79.755  103.682 24.866  1.00 2.00   1
. .
ATOM 3112 N    N    . LEU LEU LEU A A 409 409 . 81.974  104.212 24.840  1.00 2.00   1
. .
ATOM 3113 CA   CA   . LEU LEU LEU A A 409 409 . 81.974  104.528 26.261  1.00 2.00   1
. .
ATOM 3114 CB   CB   . LEU LEU LEU A A 409 409 . 83.405  104.756 26.764  1.00 2.00   1
. .
ATOM 3115 CG   CG   . LEU LEU LEU A A 409 409 . 84.199  103.423 26.980  1.00 2.09   1
. .
ATOM 3116 CD1  CD1  . LEU LEU LEU A A 409 409 . 85.655  103.712 27.052  1.00 2.00   1
. .
ATOM 3117 CD2  CD2  . LEU LEU LEU A A 409 409 . 83.701  102.760 28.197  1.00 2.00   1
. .
ATOM 3118 C    C    . LEU LEU LEU A A 409 409 . 81.078  105.738 26.482  1.00 2.00   1
. .
ATOM 3119 O    O    . LEU LEU LEU A A 409 409 . 80.421  105.827 27.501  1.00 2.00   1
. .
ATOM 3120 N    N    . MET MET MET A A 410 410 . 81.103  106.711 25.540  1.00 2.00   1
. .
ATOM 3121 CA   CA   . MET MET MET A A 410 410 . 80.225  107.845 25.762  1.00 2.00   1
. .
ATOM 3122 CB   CB   . MET MET MET A A 410 410 . 80.468  108.986 24.755  1.00 2.00   1
. .
ATOM 3123 CG   CG   . MET MET MET A A 410 410 . 81.822  109.691 24.993  1.00 2.03   1
. .
ATOM 3124 SD   SD   . MET MET MET A A 410 410 . 81.924  111.295 24.171  1.00 3.83   1
. .
ATOM 3125 CE   CE   . MET MET MET A A 410 410 . 82.150  110.710 22.485  1.00 2.44   1
. .
ATOM 3126 C    C    . MET MET MET A A 410 410 . 78.777  107.407 25.699  1.00 2.00   1
. .
ATOM 3127 O    O    . MET MET MET A A 410 410 . 77.933  107.951 26.445  1.00 2.21   1
. .
ATOM 3128 N    N    . ARG ARG ARG A A 411 411 . 78.475  106.475 24.802  1.00 2.00   1
. .
ATOM 3129 CA   CA   . ARG ARG ARG A A 411 411 . 77.101  105.942 24.705  1.00 2.00   1
. .
ATOM 3130 CB   CB   . ARG ARG ARG A A 411 411 . 76.891  104.999 23.484  1.00 2.00   1
. .
ATOM 3131 CG   CG   . ARG ARG ARG A A 411 411 . 77.118  105.694 22.080  1.00 2.04   1
. .
ATOM 3132 CD   CD   . ARG ARG ARG A A 411 411 . 76.777  104.726 20.961  1.00 3.47   1
. .
ATOM 3133 NE   NE   . ARG ARG ARG A A 411 411 . 77.389  105.233 19.737  1.00 2.95   1
. .
ATOM 3134 CZ   CZ   . ARG ARG ARG A A 411 411 . 78.547  104.791 19.229  1.00 2.56   1
. .
ATOM 3135 NH1  NH1  . ARG ARG ARG A A 411 411 . 79.092  103.694 19.767  1.00 2.38   1
. .
ATOM 3136 NH2  NH2  . ARG ARG ARG A A 411 411 . 79.054  105.313 18.099  1.00 2.82   1
. .
ATOM 3137 C    C    . ARG ARG ARG A A 411 411 . 76.683  105.162 25.956  1.00 2.00   1
. .
ATOM 3138 O    O    . ARG ARG ARG A A 411 411 . 75.538  105.211 26.331  1.00 2.00   1
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ATOM 3139 N    N    . ILE ILE ILE A A 412 412 . 77.611  104.395 26.528  1.00 2.00   1
. .
ATOM 3140 CA   CA   . ILE ILE ILE A A 412 412 . 77.320  103.626 27.730  1.00 2.00   1
. .
ATOM 3141 CB   CB   . ILE ILE ILE A A 412 412 . 78.491  102.692 28.072  1.00 2.00   1
. .
ATOM 3142 CG1  CG1  . ILE ILE ILE A A 412 412 . 78.594  101.573 27.040  1.00 2.04   1
. .
ATOM 3143 CD1  CD1  . ILE ILE ILE A A 412 412 . 79.897  100.893 27.111  1.00 2.10   1
. .
ATOM 3144 CG2  CG2  . ILE ILE ILE A A 412 412 . 78.328  102.173 29.505  1.00 2.22   1
. .
ATOM 3145 C    C    . ILE ILE ILE A A 412 412 . 77.059  104.595 28.893  1.00 2.04   1
. .
ATOM 3146 O    O    . ILE ILE ILE A A 412 412 . 76.098  104.406 29.651  1.00 2.00   1
. .
ATOM 3147 N    N    . GLU GLU GLU A A 413 413 . 77.834  105.681 28.971  1.00 2.00   1
. .
ATOM 3148 CA   CA   . GLU GLU GLU A A 413 413 . 77.620  106.722 29.980  1.00 2.00   1
. .
ATOM 3149 CB   CB   . GLU GLU GLU A A 413 413 . 78.682  107.785 29.910  1.00 2.43   1
. .
ATOM 3150 CG   CG   . GLU GLU GLU A A 413 413 . 78.518  108.916 31.029  1.00 3.96   1
. .
ATOM 3151 CD   CD   . GLU GLU GLU A A 413 413 . 79.694  109.774 31.168  1.00 2.00   1
. .
ATOM 3152 OE1  OE1  . GLU GLU GLU A A 413 413 . 79.970  110.555 30.238  1.00 3.45   1
. .
ATOM 3153 OE2  OE2  . GLU GLU GLU A A 413 413 . 80.430  109.685 32.173  1.00 3.25   1
. .
ATOM 3154 C    C    . GLU GLU GLU A A 413 413 . 76.242  107.280 29.861  1.00 2.00   1
. .
ATOM 3155 O    O    . GLU GLU GLU A A 413 413 . 75.494  107.474 30.868  1.00 2.14   1
. .
ATOM 3156 N    N    . GLU GLU GLU A A 414 414 . 75.859  107.574 28.640  1.00 2.00   1
. .
ATOM 3157 CA   CA   . GLU GLU GLU A A 414 414 . 74.520  108.138 28.409  1.00 2.82   1
. .
ATOM 3158 CB   CB   . GLU GLU GLU A A 414 414 . 74.425  108.451 26.903  1.00 5.43   1
. .
ATOM 3159 CG   CG   . GLU GLU GLU A A 414 414 . 73.267  109.384 26.458  1.00 12.49  1
. .
ATOM 3160 CD   CD   . GLU GLU GLU A A 414 414 . 73.285  109.644 24.915  1.00 18.78  1
. .
ATOM 3161 OE1  OE1  . GLU GLU GLU A A 414 414 . 74.264  110.207 24.391  1.00 21.71  1
. .
ATOM 3162 OE2  OE2  . GLU GLU GLU A A 414 414 . 72.349  109.211 24.245  1.00 18.87  1
. .
ATOM 3163 C    C    . GLU GLU GLU A A 414 414 . 73.421  107.151 28.861  1.00 4.84   1
. .
ATOM 3164 O    O    . GLU GLU GLU A A 414 414 . 72.418  107.541 29.446  1.00 6.19   1
. .
ATOM 3165 N    N    . GLU GLU GLU A A 415 415 . 73.595  105.873 28.533  1.00 2.83   1
. .
ATOM 3166 CA   CA   . GLU GLU GLU A A 415 415 . 72.610  104.853 28.866  1.00 7.38   1
. .
ATOM 3167 CB   CB   . GLU GLU GLU A A 415 415 . 72.933  103.538 28.162  1.00 9.28   1
. .
ATOM 3168 CG   CG   . GLU GLU GLU A A 415 415 . 71.830  102.461 28.177  1.00 18.41  1
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ATOM 3169 CD   CD   . GLU GLU GLU A A 415 415 . 70.784  102.632 27.093  1.00 29.01  1
. .
ATOM 3170 OE1  OE1  . GLU GLU GLU A A 415 415 . 69.833  101.804 27.024  1.00 35.13  1
. .
ATOM 3171 OE2  OE2  . GLU GLU GLU A A 415 415 . 70.911  103.568 26.266  1.00 35.49  1
. .
ATOM 3172 C    C    . GLU GLU GLU A A 415 415 . 72.415  104.673 30.381  1.00 8.97   1
. .
ATOM 3173 O    O    . GLU GLU GLU A A 415 415 . 71.305  104.363 30.854  1.00 10.52  1
. .
ATOM 3174 N    N    . LEU LEU LEU A A 416 416 . 73.516  104.871 31.122  1.00 7.72   1
. .
ATOM 3175 CA   CA   . LEU LEU LEU A A 416 416 . 73.527  104.607 32.535  1.00 9.13   1
. .
ATOM 3176 CB   CB   . LEU LEU LEU A A 416 416 . 74.938  104.360 33.043  1.00 8.02   1
. .
ATOM 3177 CG   CG   . LEU LEU LEU A A 416 416 . 75.507  102.997 32.709  1.00 8.44   1
. .
ATOM 3178 CD1  CD1  . LEU LEU LEU A A 416 416 . 76.970  102.862 33.064  1.00 10.25  1
. .
ATOM 3179 CD2  CD2  . LEU LEU LEU A A 416 416 . 74.701  101.902 33.382  1.00 12.97  1
. .
ATOM 3180 C    C    . LEU LEU LEU A A 416 416 . 72.862  105.724 33.319  1.00 12.07  1
. .
ATOM 3181 O    O    . LEU LEU LEU A A 416 416 . 72.414  105.487 34.458  1.00 12.89  1
. .
ATOM 3182 N    N    . GLY GLY GLY A A 417 417 . 72.887  106.933 32.778  1.00 15.62  1
. .
ATOM 3183 CA   CA   . GLY GLY GLY A A 417 417 . 72.161  108.061 33.351  1.00 20.68  1
. .
ATOM 3184 C    C    . GLY GLY GLY A A 417 417 . 72.791  108.629 34.606  1.00 24.47  1
. .
ATOM 3185 O    O    . GLY GLY GLY A A 417 417 . 74.003  108.667 34.713  1.00 25.32  1
. .
ATOM 3186 N    N    . ASP ASP ASP A A 418 418 . 71.969  109.052 35.572  1.00 28.03  1
. .
ATOM 3187 CA   CA   . ASP ASP ASP A A 418 418 . 72.488  109.656 36.837  1.00 30.75  1
. .
ATOM 3188 CB   CB   . ASP ASP ASP A A 418 418 . 71.389  110.492 37.569  1.00 32.14  1
. .
ATOM 3189 CG   CG   . ASP ASP ASP A A 418 418 . 71.917  111.804 38.252  1.00 36.16  1
. .
ATOM 3190 OD1  OD1  . ASP ASP ASP A A 418 418 . 73.015  111.819 38.874  1.00 39.25  1
. .
ATOM 3191 OD2  OD2  . ASP ASP ASP A A 418 418 . 71.186  112.830 38.192  1.00 37.02  1
. .
ATOM 3192 C    C    . ASP ASP ASP A A 418 418 . 73.049  108.504 37.705  1.00 29.98  1
. .
ATOM 3193 O    O    . ASP ASP ASP A A 418 418 . 73.577  108.710 38.793  1.00 31.46  1
. .
ATOM 3194 N    N    . GLU GLU GLU A A 419 419 . 72.954  107.287 37.212  1.00 28.22  1
. .
ATOM 3195 CA   CA   . GLU GLU GLU A A 419 419 . 73.704  106.195 37.825  1.00 26.91  1
. .
ATOM 3196 CB   CB   . GLU GLU GLU A A 419 419 . 72.842  104.944 37.889  1.00 28.13  1
. .
ATOM 3197 CG   CG   . GLU GLU GLU A A 419 419 . 73.138  103.910 36.867  1.00 33.67  1
. .
ATOM 3198 CD   CD   . GLU GLU GLU A A 419 419 . 72.187  102.755 36.955  1.00 40.51  1
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ATOM 3199 OE1  OE1  . GLU GLU GLU A A 419 419 . 72.691  101.634 37.166  1.00 42.83  1
. .
ATOM 3200 OE2  OE2  . GLU GLU GLU A A 419 419 . 70.943  102.960 36.831  1.00 43.81  1
. .
ATOM 3201 C    C    . GLU GLU GLU A A 419 419 . 75.078  105.924 37.122  1.00 24.10  1
. .
ATOM 3202 O    O    . GLU GLU GLU A A 419 419 . 75.763  104.942 37.450  1.00 23.47  1
. .
ATOM 3203 N    N    . ALA ALA ALA A A 420 420 . 75.450  106.753 36.142  1.00 21.81  1
. .
ATOM 3204 CA   CA   . ALA ALA ALA A A 420 420 . 76.861  106.729 35.651  1.00 19.19  1
. .
ATOM 3205 CB   CB   . ALA ALA ALA A A 420 420 . 77.003  107.471 34.270  1.00 16.48  1
. .
ATOM 3206 C    C    . ALA ALA ALA A A 420 420 . 77.801  107.319 36.717  1.00 18.89  1
. .
ATOM 3207 O    O    . ALA ALA ALA A A 420 420 . 77.605  108.482 37.147  1.00 21.10  1
. .
ATOM 3208 N    N    . ARG ARG ARG A A 421 421 . 78.797  106.534 37.157  1.00 17.81  1
. .
ATOM 3209 CA   CA   . ARG ARG ARG A A 421 421 . 79.871  107.029 38.076  1.00 13.93  1
. .
ATOM 3210 CB   CB   . ARG ARG ARG A A 421 421 . 80.045  106.162 39.352  1.00 14.70  1
. .
ATOM 3211 CG   CG   . ARG ARG ARG A A 421 421 . 79.832  106.799 40.715  1.00 19.05  1
. .
ATOM 3212 CD   CD   . ARG ARG ARG A A 421 421 . 78.964  108.101 40.716  1.00 23.99  1
. .
ATOM 3213 NE   NE   . ARG ARG ARG A A 421 421 . 77.752  107.978 41.533  1.00 30.72  1
. .
ATOM 3214 CZ   CZ   . ARG ARG ARG A A 421 421 . 76.530  108.358 41.159  1.00 33.19  1
. .
ATOM 3215 NH1  NH1  . ARG ARG ARG A A 421 421 . 76.322  108.926 39.970  1.00 34.69  1
. .
ATOM 3216 NH2  NH2  . ARG ARG ARG A A 421 421 . 75.509  108.176 41.989  1.00 33.68  1
. .
ATOM 3217 C    C    . ARG ARG ARG A A 421 421 . 81.170  106.970 37.266  1.00 9.88   1
. .
ATOM 3218 O    O    . ARG ARG ARG A A 421 421 . 81.460  105.984 36.649  1.00 12.44  1
. .
ATOM 3219 N    N    . PHE PHE PHE A A 422 422 . 81.929  108.033 37.308  1.00 3.32   1
. .
ATOM 3220 CA   CA   . PHE PHE PHE A A 422 422 . 83.227  108.170 36.678  1.00 2.03   1
. .
ATOM 3221 CB   CB   . PHE PHE PHE A A 422 422 . 83.293  109.603 36.049  1.00 2.67   1
. .
ATOM 3222 CG   CG   . PHE PHE PHE A A 422 422 . 84.570  109.907 35.396  1.00 2.00   1
. .
ATOM 3223 CD1  CD1  . PHE PHE PHE A A 422 422 . 84.909  109.211 34.222  1.00 2.20   1
. .
ATOM 3224 CE1  CE1  . PHE PHE PHE A A 422 422 . 86.127  109.493 33.592  1.00 2.00   1
. .
ATOM 3225 CZ   CZ   . PHE PHE PHE A A 422 422 . 87.010  110.466 34.111  1.00 2.00   1
. .
ATOM 3226 CE2  CE2  . PHE PHE PHE A A 422 422 . 86.659  111.167 35.215  1.00 2.81   1
. .
ATOM 3227 CD2  CD2  . PHE PHE PHE A A 422 422 . 85.408  110.886 35.867  1.00 2.11   1
. .
ATOM 3228 C    C    . PHE PHE PHE A A 422 422 . 84.334  107.929 37.706  1.00 2.12   1
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ATOM 3229 O    O    . PHE PHE PHE A A 422 422 . 84.364  108.538 38.781  1.00 3.01   1
. .
ATOM 3230 N    N    . ALA ALA ALA A A 423 423 . 85.349  107.142 37.338  1.00 2.00   1
. .
ATOM 3231 CA   CA   . ALA ALA ALA A A 423 423 . 86.412  106.784 38.237  1.00 2.00   1
. .
ATOM 3232 CB   CB   . ALA ALA ALA A A 423 423 . 87.277  105.688 37.618  1.00 2.00   1
. .
ATOM 3233 C    C    . ALA ALA ALA A A 423 423 . 87.303  107.880 38.749  1.00 2.03   1
. .
ATOM 3234 O    O    . ALA ALA ALA A A 423 423 . 87.729  107.862 39.917  1.00 2.77   1
. .
ATOM 3235 N    N    . GLY GLY GLY A A 424 424 . 87.485  108.869 37.928  1.00 2.00   1
. .
ATOM 3236 CA   CA   . GLY GLY GLY A A 424 424 . 88.286  110.063 38.268  1.00 2.07   1
. .
ATOM 3237 C    C    . GLY GLY GLY A A 424 424 . 89.604  109.747 38.920  1.00 2.10   1
. .
ATOM 3238 O    O    . GLY GLY GLY A A 424 424 . 90.360  108.887 38.518  1.00 2.69   1
. .
ATOM 3239 N    N    . HIS HIS HIS A A 425 425 . 89.816  110.381 40.106  1.00 2.00   1
. .
ATOM 3240 CA   CA   . HIS HIS HIS A A 425 425 . 91.068  110.107 40.808  1.00 2.00   1
. .
ATOM 3241 CB   CB   . HIS HIS HIS A A 425 425 . 91.282  111.199 41.898  1.00 2.55   1
. .
ATOM 3242 CG   CG   . HIS HIS HIS A A 425 425 . 91.565  112.536 41.328  1.00 2.66   1
. .
ATOM 3243 ND1  ND1  . HIS HIS HIS A A 425 425 . 92.839  112.926 40.996  1.00 6.11   1
. .
ATOM 3244 CE1  CE1  . HIS HIS HIS A A 425 425 . 92.812  114.172 40.524  1.00 4.03   1
. .
ATOM 3245 NE2  NE2  . HIS HIS HIS A A 425 425 . 91.556  114.573 40.494  1.00 5.38   1
. .
ATOM 3246 CD2  CD2  . HIS HIS HIS A A 425 425 . 90.756  113.570 40.985  1.00 6.07   1
. .
ATOM 3247 C    C    . HIS HIS HIS A A 425 425 . 91.155  108.739 41.468  1.00 2.00   1
. .
ATOM 3248 O    O    . HIS HIS HIS A A 425 425 . 92.200  108.406 42.004  1.00 2.17   1
. .
ATOM 3249 N    N    . ASN ASN ASN A A 426 426 . 90.025  108.000 41.500  1.00 2.00   1
. .
ATOM 3250 CA   CA   . ASN ASN ASN A A 426 426 . 90.050  106.611 41.953  1.00 2.00   1
. .
ATOM 3251 CB   CB   . ASN ASN ASN A A 426 426 . 88.788  106.358 42.735  1.00 2.00   1
. .
ATOM 3252 CG   CG   . ASN ASN ASN A A 426 426 . 88.859  107.108 44.044  1.00 2.18   1
. .
ATOM 3253 OD1  OD1  . ASN ASN ASN A A 426 426 . 89.553  106.678 44.994  1.00 8.36   1
. .
ATOM 3254 ND2  ND2  . ASN ASN ASN A A 426 426 . 88.196  108.190 44.125  1.00 2.00   1
. .
ATOM 3255 C    C    . ASN ASN ASN A A 426 426 . 90.247  105.590 40.845  1.00 2.00   1
. .
ATOM 3256 O    O    . ASN ASN ASN A A 426 426 . 89.879  104.436 41.016  1.00 3.16   1
. .
ATOM 3257 N    N    . PHE PHE PHE A A 427 427 . 90.852  106.031 39.746  1.00 2.12   1
. .
ATOM 3258 CA   CA   . PHE PHE PHE A A 427 427 . 91.086  105.071 38.633  1.00 3.60   1
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ATOM 3259 CB   CB   . PHE PHE PHE A A 427 427 . 91.809  105.795 37.500  1.00 3.22   1
. .
ATOM 3260 CG   CG   . PHE PHE PHE A A 427 427 . 93.290  106.151 37.778  1.00 4.88   1
. .
ATOM 3261 CD1  CD1  . PHE PHE PHE A A 427 427 . 93.624  107.319 38.450  1.00 5.07   1
. .
ATOM 3262 CE1  CE1  . PHE PHE PHE A A 427 427 . 94.965  107.652 38.672  1.00 4.93   1
. .
ATOM 3263 CZ   CZ   . PHE PHE PHE A A 427 427 . 95.982  106.814 38.225  1.00 7.64   1
. .
ATOM 3264 CE2  CE2  . PHE PHE PHE A A 427 427 . 95.685  105.630 37.608  1.00 4.74   1
. .
ATOM 3265 CD2  CD2  . PHE PHE PHE A A 427 427 . 94.333  105.319 37.378  1.00 9.34   1
. .
ATOM 3266 C    C    . PHE PHE PHE A A 427 427 . 91.839  103.806 39.041  1.00 2.29   1
. .
ATOM 3267 O    O    . PHE PHE PHE A A 427 427 . 91.626  102.740 38.431  1.00 3.26   1
. .
ATOM 3268 N    N    . ARG ARG ARG A A 428 428 . 92.697  103.869 40.054  1.00 2.74   1
. .
ATOM 3269 CA   CA   . ARG ARG ARG A A 428 428 . 93.364  102.662 40.495  1.00 4.98   1
. .
ATOM 3270 CB   CB   . ARG ARG ARG A A 428 428 . 94.654  102.914 41.296  1.00 4.71   1
. .
ATOM 3271 CG   CG   . ARG ARG ARG A A 428 428 . 95.782  103.511 40.441  1.00 7.42   1
. .
ATOM 3272 CD   CD   . ARG ARG ARG A A 428 428 . 96.998  103.959 41.284  1.00 12.45  1
. .
ATOM 3273 NE   NE   . ARG ARG ARG A A 428 428 . 97.658  102.759 41.805  1.00 13.31  1
. .
ATOM 3274 CZ   CZ   . ARG ARG ARG A A 428 428 . 98.742  102.744 42.618  1.00 16.96  1
. .
ATOM 3275 NH1  NH1  . ARG ARG ARG A A 428 428 . 99.313  103.876 43.015  1.00 13.28  1
. .
ATOM 3276 NH2  NH2  . ARG ARG ARG A A 428 428 . 99.238  101.583 43.056  1.00 16.67  1
. .
ATOM 3277 C    C    . ARG ARG ARG A A 428 428 . 92.471  101.672 41.260  1.00 7.58   1
. .
ATOM 3278 O    O    . ARG ARG ARG A A 428 428 . 92.723  100.466 41.203  1.00 11.67  1
. .
ATOM 3279 N    N    . ASN ASN ASN A A 429 429 . 91.464  102.183 41.973  1.00 8.95   1
. .
ATOM 3280 CA   CA   . ASN ASN ASN A A 429 429 . 90.641  101.427 42.879  1.00 10.25  1
. .
ATOM 3281 CB   CB   . ASN ASN ASN A A 429 429 . 91.323  101.378 44.301  1.00 13.68  1
. .
ATOM 3282 CG   CG   . ASN ASN ASN A A 429 429 . 91.575  102.778 44.918  1.00 20.76  1
. .
ATOM 3283 OD1  OD1  . ASN ASN ASN A A 429 429 . 90.761  103.744 44.855  1.00 23.88  1
. .
ATOM 3284 ND2  ND2  . ASN ASN ASN A A 429 429 . 92.775  102.909 45.498  1.00 30.57  1
. .
ATOM 3285 C    C    . ASN ASN ASN A A 429 429 . 89.234  102.022 42.955  1.00 8.31   1
. .
ATOM 3286 O    O    . ASN ASN ASN A A 429 429 . 88.880  102.684 43.918  1.00 6.81   1
. .
ATOM 3287 N    N    . PRO PRO PRO A A 430 430 . 88.423  101.874 41.891  1.00 6.36   1
. .
ATOM 3288 CA   CA   . PRO PRO PRO A A 430 430 . 87.176  102.601 41.891  1.00 6.61   1
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ATOM 3289 CB   CB   . PRO PRO PRO A A 430 430 . 86.756  102.568 40.383  1.00 6.66   1
. .
ATOM 3290 CG   CG   . PRO PRO PRO A A 430 430 . 87.357  101.314 39.914  1.00 7.50   1
. .
ATOM 3291 CD   CD   . PRO PRO PRO A A 430 430 . 88.713  101.296 40.559  1.00 5.51   1
. .
ATOM 3292 C    C    . PRO PRO PRO A A 430 430 . 86.062  101.940 42.713  1.00 6.09   1
. .
ATOM 3293 O    O    . PRO PRO PRO A A 430 430 . 84.960  102.507 42.774  1.00 6.84   1
. .
ATOM 3294 N    N    . SER SER SER A A 431 431 . 86.330  100.804 43.321  1.00 8.03   1
. .
ATOM 3295 CA   CA   . SER SER SER A A 431 431 . 85.244  100.127 44.117  1.00 13.26  1
. .
ATOM 3296 CB   CB   . SER SER SER A A 431 431 . 85.722  98.784  44.610  1.00 13.73  1
. .
ATOM 3297 OG   OG   . SER SER SER A A 431 431 . 86.744  99.042  45.561  1.00 20.24  1
. .
ATOM 3298 C    C    . SER SER SER A A 431 431 . 84.765  100.959 45.329  1.00 14.31  1
. .
ATOM 3299 O    O    . SER SER SER A A 431 431 . 83.720  100.674 45.892  1.00 16.92  1
. .
ATOM 3300 N    N    . VAL VAL VAL A A 432 432 . 85.539  101.972 45.729  1.00 13.81  1
. .
ATOM 3301 CA   CA   . VAL VAL VAL A A 432 432 . 85.190  102.849 46.813  1.00 12.94  1
. .
ATOM 3302 CB   CB   . VAL VAL VAL A A 432 432 . 86.476  103.662 47.332  1.00 12.80  1
. .
ATOM 3303 CG1  CG1  . VAL VAL VAL A A 432 432 . 87.659  102.709 47.652  1.00 11.73  1
. .
ATOM 3304 CG2  CG2  . VAL VAL VAL A A 432 432 . 86.926  104.731 46.311  1.00 10.27  1
. .
ATOM 3305 C    C    . VAL VAL VAL A A 432 432 . 84.087  103.861 46.506  1.00 13.61  1
. .
ATOM 3306 O    O    . VAL VAL VAL A A 432 432 . 83.610  104.515 47.436  1.00 15.23  1
. .
ATOM 3307 N    N    . LEU LEU LEU A A 433 433 . 83.785  104.131 45.224  1.00 11.62  1
. .
ATOM 3308 CA   CA   . LEU LEU LEU A A 433 433 . 82.701  105.026 44.858  1.00 12.20  1
. .
ATOM 3309 CB   CB   . LEU LEU LEU A A 433 433 . 82.920  105.566 43.433  1.00 11.48  1
. .
ATOM 3310 CG   CG   . LEU LEU LEU A A 433 433 . 84.276  106.231 43.240  1.00 12.84  1
. .
ATOM 3311 CD1  CD1  . LEU LEU LEU A A 433 433 . 84.563  106.562 41.743  1.00 10.72  1
. .
ATOM 3312 CD2  CD2  . LEU LEU LEU A A 433 433 . 84.301  107.529 44.081  1.00 11.42  1
. .
ATOM 3313 C    C    . LEU LEU LEU A A 433 433 . 81.368  104.294 44.822  1.00 12.17  1
. .
ATOM 3314 O    O    . LEU LEU LEU A A 433 433 . 81.378  103.078 44.758  1.00 15.68  1
. .
ATOM 3315 MG+2 MG+2 . MG2 MG2 MG2 A . 599 599 . 102.147 97.488  26.385  1.00 2.00   1
. .
ATOM 3316 MG+2 MG+2 . MG2 MG2 MG2 A . 600 600 . 103.114 95.317  23.362  1.00 2.00   1
. .
ATOM 3317 O4P  O4P  . 2PG 2PG 2PG A . 601 601 . 99.386  95.835  20.929  1.00 2.00   1
. .
ATOM 3318 P    P    . 2PG 2PG 2PG A . 601 601 . 100.845 96.146  21.197  1.00 2.00   1
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ATOM 3319 O2P  O2P  . 2PG 2PG 2PG A . 601 601 . 101.614 96.385  19.931  1.00 2.00   1
. .
ATOM 3320 O3P  O3P  . 2PG 2PG 2PG A . 601 601 . 101.534 95.170  22.073  1.00 2.00   1
. .
ATOM 3321 O1P  O1P  . 2PG 2PG 2PG A . 601 601 . 100.863 97.575  21.996  1.00 2.10   1
. .
ATOM 3322 C2   C2   . 2PG 2PG 2PG A . 601 601 . 100.149 97.444  23.248  1.00 7.12   1
. .
ATOM 3323 C1   C1   . 2PG 2PG 2PG A . 601 601 . 101.109 97.453  24.430  1.00 5.82   1
. .
ATOM 3324 O2   O2   . 2PG 2PG 2PG A . 601 601 . 100.469 97.794  25.501  1.00 6.88   1
. .
ATOM 3325 O1   O1   . 2PG 2PG 2PG A . 601 601 . 102.375 97.036  24.358  1.00 2.45   1
. .
ATOM 3326 C3   C3   . 2PG 2PG 2PG A . 601 601 . 98.980  98.484  23.411  1.00 12.22  1
. .
ATOM 3327 O3   O3   . 2PG 2PG 2PG A . 601 601 . 99.292  99.723  22.824  1.00 16.18  1
. .
ATOM 3328 O    O    . HOH HOH HOH A . 446 446 . 104.136 97.099  26.833  1.00 2.00   1
. .
ATOM 3329 O    O    . HOH HOH HOH A . 447 447 . 104.685 95.501  24.587  1.00 2.30   1
. .
ATOM 3330 O    O    . HOH HOH HOH A . 448 448 . 102.358 94.022  24.689  1.00 2.00   1
. .
ATOM 3331 O3   O3   . TRS TRS TRS A . 460 460 . 110.686 92.249  19.784  1.00 29.69  1
. .
ATOM 3332 C3   C3   . TRS TRS TRS A . 460 460 . 110.544 90.891  20.110  1.00 26.98  1
. .
ATOM 3333 C    C    . TRS TRS TRS A . 460 460 . 109.403 90.682  21.100  1.00 27.01  1
. .
ATOM 3334 N    N    . TRS TRS TRS A . 460 460 . 108.180 91.350  20.593  1.00 26.02  1
. .
ATOM 3335 C2   C2   . TRS TRS TRS A . 460 460 . 109.198 89.175  21.216  1.00 27.82  1
. .
ATOM 3336 O2   O2   . TRS TRS TRS A . 460 460 . 108.524 88.676  20.090  1.00 27.92  1
. .
ATOM 3337 C1   C1   . TRS TRS TRS A . 460 460 . 109.820 91.269  22.442  1.00 25.56  1
. .
ATOM 3338 O1   O1   . TRS TRS TRS A . 460 460 . 109.333 90.521  23.514  1.00 20.13  1
. .
ATOM 3339 N    N    . SER SER SER B B 1   1   . 56.213  103.796 11.482  1.00 20.40  1
. .
ATOM 3340 CA   CA   . SER SER SER B B 1   1   . 56.794  105.136 11.603  1.00 19.60  1
. .
ATOM 3341 CB   CB   . SER SER SER B B 1   1   . 55.732  106.169 11.870  1.00 20.83  1
. .
ATOM 3342 OG   OG   . SER SER SER B B 1   1   . 55.285  106.116 13.197  1.00 23.77  1
. .
ATOM 3343 C    C    . SER SER SER B B 1   1   . 57.892  105.186 12.683  1.00 16.60  1
. .
ATOM 3344 O    O    . SER SER SER B B 1   1   . 58.287  104.168 13.326  1.00 16.51  1
. .
ATOM 3345 N    N    . ILE ILE ILE B B 2   2   . 58.428  106.379 12.818  1.00 12.76  1
. .
ATOM 3346 CA   CA   . ILE ILE ILE B B 2   2   . 59.554  106.629 13.631  1.00 10.05  1
. .
ATOM 3347 CB   CB   . ILE ILE ILE B B 2   2   . 60.318  107.902 13.126  1.00 10.13  1
. .
ATOM 3348 CG1  CG1  . ILE ILE ILE B B 2   2   . 60.869  107.763 11.695  1.00 8.63   1
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ATOM 3349 CD1  CD1  . ILE ILE ILE B B 2   2   . 61.203  109.078 11.055  1.00 8.37   1
. .
ATOM 3350 CG2  CG2  . ILE ILE ILE B B 2   2   . 61.389  108.310 14.113  1.00 6.44   1
. .
ATOM 3351 C    C    . ILE ILE ILE B B 2   2   . 59.047  106.827 15.082  1.00 11.00  1
. .
ATOM 3352 O    O    . ILE ILE ILE B B 2   2   . 58.100  107.609 15.332  1.00 11.49  1
. .
ATOM 3353 N    N    . GLN GLN GLN B B 3   3   . 59.639  106.109 16.034  1.00 8.48   1
. .
ATOM 3354 CA   CA   . GLN GLN GLN B B 3   3   . 59.248  106.182 17.443  1.00 10.24  1
. .
ATOM 3355 CB   CB   . GLN GLN GLN B B 3   3   . 59.428  104.815 18.129  1.00 10.52  1
. .
ATOM 3356 CG   CG   . GLN GLN GLN B B 3   3   . 58.488  103.743 17.504  1.00 14.30  1
. .
ATOM 3357 CD   CD   . GLN GLN GLN B B 3   3   . 58.668  102.343 18.115  1.00 20.13  1
. .
ATOM 3358 OE1  OE1  . GLN GLN GLN B B 3   3   . 59.692  102.050 18.711  1.00 22.96  1
. .
ATOM 3359 NE2  NE2  . GLN GLN GLN B B 3   3   . 57.678  101.480 17.935  1.00 17.58  1
. .
ATOM 3360 C    C    . GLN GLN GLN B B 3   3   . 60.049  107.218 18.211  1.00 8.33   1
. .
ATOM 3361 O    O    . GLN GLN GLN B B 3   3   . 59.565  107.852 19.111  1.00 10.06  1
. .
ATOM 3362 N    N    . LYS LYS LYS B B 4   4   . 61.326  107.385 17.839  1.00 7.70   1
. .
ATOM 3363 CA   CA   . LYS LYS LYS B B 4   4   . 62.209  108.270 18.562  1.00 7.23   1
. .
ATOM 3364 CB   CB   . LYS LYS LYS B B 4   4   . 62.643  107.636 19.910  1.00 7.06   1
. .
ATOM 3365 CG   CG   . LYS LYS LYS B B 4   4   . 63.722  108.450 20.654  1.00 11.60  1
. .
ATOM 3366 CD   CD   . LYS LYS LYS B B 4   4   . 64.288  107.738 21.873  1.00 21.82  1
. .
ATOM 3367 CE   CE   . LYS LYS LYS B B 4   4   . 63.638  108.229 23.182  1.00 25.96  1
. .
ATOM 3368 NZ   NZ   . LYS LYS LYS B B 4   4   . 62.181  107.938 23.210  1.00 29.16  1
. .
ATOM 3369 C    C    . LYS LYS LYS B B 4   4   . 63.467  108.583 17.748  1.00 6.27   1
. .
ATOM 3370 O    O    . LYS LYS LYS B B 4   4   . 63.924  107.751 16.990  1.00 5.53   1
. .
ATOM 3371 N    N    . ILE ILE ILE B B 5   5   . 63.948  109.820 17.838  1.00 7.14   1
. .
ATOM 3372 CA   CA   . ILE ILE ILE B B 5   5   . 65.196  110.156 17.229  1.00 5.35   1
. .
ATOM 3373 CB   CB   . ILE ILE ILE B B 5   5   . 64.941  111.073 16.020  1.00 5.56   1
. .
ATOM 3374 CG1  CG1  . ILE ILE ILE B B 5   5   . 64.287  110.318 14.886  1.00 6.76   1
. .
ATOM 3375 CD1  CD1  . ILE ILE ILE B B 5   5   . 63.848  111.205 13.699  1.00 6.02   1
. .
ATOM 3376 CG2  CG2  . ILE ILE ILE B B 5   5   . 66.233  111.649 15.467  1.00 7.41   1
. .
ATOM 3377 C    C    . ILE ILE ILE B B 5   5   . 66.041  110.804 18.296  1.00 4.72   1
. .
ATOM 3378 O    O    . ILE ILE ILE B B 5   5   . 65.546  111.674 18.988  1.00 7.34   1
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ATOM 3379 N    N    . TRP TRP TRP B B 6   6   . 67.334  110.430 18.427  1.00 2.74   1
. .
ATOM 3380 CA   CA   . TRP TRP TRP B B 6   6   . 68.165  111.015 19.444  1.00 3.21   1
. .
ATOM 3381 CB   CB   . TRP TRP TRP B B 6   6   . 68.252  110.155 20.712  1.00 4.64   1
. .
ATOM 3382 CG   CG   . TRP TRP TRP B B 6   6   . 69.095  110.802 21.746  1.00 6.75   1
. .
ATOM 3383 CD1  CD1  . TRP TRP TRP B B 6   6   . 70.351  110.451 22.119  1.00 7.93   1
. .
ATOM 3384 NE1  NE1  . TRP TRP TRP B B 6   6   . 70.806  111.314 23.119  1.00 11.52  1
. .
ATOM 3385 CE2  CE2  . TRP TRP TRP B B 6   6   . 69.851  112.277 23.310  1.00 10.15  1
. .
ATOM 3386 CD2  CD2  . TRP TRP TRP B B 6   6   . 68.767  111.965 22.471  1.00 6.15   1
. .
ATOM 3387 CE3  CE3  . TRP TRP TRP B B 6   6   . 67.625  112.778 22.511  1.00 8.12   1
. .
ATOM 3388 CZ3  CZ3  . TRP TRP TRP B B 6   6   . 67.618  113.873 23.352  1.00 11.92  1
. .
ATOM 3389 CH2  CH2  . TRP TRP TRP B B 6   6   . 68.717  114.152 24.183  1.00 11.74  1
. .
ATOM 3390 CZ2  CZ2  . TRP TRP TRP B B 6   6   . 69.810  113.358 24.202  1.00 12.38  1
. .
ATOM 3391 C    C    . TRP TRP TRP B B 6   6   . 69.594  111.145 18.882  1.00 2.31   1
. .
ATOM 3392 O    O    . TRP TRP TRP B B 6   6   . 70.191  110.162 18.423  1.00 3.67   1
. .
ATOM 3393 N    N    . ALA ALA ALA B B 7   7   . 70.012  112.391 18.812  1.00 2.00   1
. .
ATOM 3394 CA   CA   . ALA ALA ALA B B 7   7   . 71.325  112.749 18.312  1.00 2.01   1
. .
ATOM 3395 CB   CB   . ALA ALA ALA B B 7   7   . 71.231  113.963 17.377  1.00 2.00   1
. .
ATOM 3396 C    C    . ALA ALA ALA B B 7   7   . 72.297  113.057 19.428  1.00 2.00   1
. .
ATOM 3397 O    O    . ALA ALA ALA B B 7   7   . 71.926  113.605 20.521  1.00 2.52   1
. .
ATOM 3398 N    N    . ARG ARG ARG B B 8   8   . 73.584  112.828 19.146  1.00 2.08   1
. .
ATOM 3399 CA   CA   . ARG ARG ARG B B 8   8   . 74.602  113.044 20.103  1.00 2.00   1
. .
ATOM 3400 CB   CB   . ARG ARG ARG B B 8   8   . 74.809  111.756 20.931  1.00 2.00   1
. .
ATOM 3401 CG   CG   . ARG ARG ARG B B 8   8   . 75.676  110.729 20.227  1.00 2.75   1
. .
ATOM 3402 CD   CD   . ARG ARG ARG B B 8   8   . 76.051  109.508 21.147  1.00 3.59   1
. .
ATOM 3403 NE   NE   . ARG ARG ARG B B 8   8   . 74.847  108.907 21.762  1.00 2.73   1
. .
ATOM 3404 CZ   CZ   . ARG ARG ARG B B 8   8   . 74.026  108.056 21.137  1.00 5.44   1
. .
ATOM 3405 NH1  NH1  . ARG ARG ARG B B 8   8   . 74.256  107.631 19.890  1.00 4.74   1
. .
ATOM 3406 NH2  NH2  . ARG ARG ARG B B 8   8   . 72.936  107.590 21.715  1.00 9.96   1
. .
ATOM 3407 C    C    . ARG ARG ARG B B 8   8   . 75.933  113.427 19.412  1.00 2.00   1
. .
ATOM 3408 O    O    . ARG ARG ARG B B 8   8   . 76.099  113.203 18.245  1.00 2.19   1
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ATOM 3409 N    N    . GLU GLU GLU B B 9   9   . 76.838  114.044 20.150  1.00 2.00   1
. .
ATOM 3410 CA   CA   . GLU GLU GLU B B 9   9   . 78.154  114.372 19.633  1.00 2.34   1
. .
ATOM 3411 CB   CB   . GLU GLU GLU B B 9   9   . 78.671  115.527 20.439  1.00 5.18   1
. .
ATOM 3412 CG   CG   . GLU GLU GLU B B 9   9   . 79.765  116.383 19.949  1.00 8.94   1
. .
ATOM 3413 CD   CD   . GLU GLU GLU B B 9   9   . 79.954  117.561 20.851  1.00 9.08   1
. .
ATOM 3414 OE1  OE1  . GLU GLU GLU B B 9   9   . 80.172  118.705 20.374  1.00 5.59   1
. .
ATOM 3415 OE2  OE2  . GLU GLU GLU B B 9   9   . 79.990  117.334 22.103  1.00 11.59  1
. .
ATOM 3416 C    C    . GLU GLU GLU B B 9   9   . 79.062  113.171 19.861  1.00 2.98   1
. .
ATOM 3417 O    O    . GLU GLU GLU B B 9   9   . 79.150  112.639 20.997  1.00 3.00   1
. .
ATOM 3418 N    N    . ILE ILE ILE B B 10  10  . 79.746  112.698 18.809  1.00 2.00   1
. .
ATOM 3419 CA   CA   . ILE ILE ILE B B 10  10  . 80.814  111.718 18.948  1.00 2.00   1
. .
ATOM 3420 CB   CB   . ILE ILE ILE B B 10  10  . 80.415  110.378 18.178  1.00 2.00   1
. .
ATOM 3421 CG1  CG1  . ILE ILE ILE B B 10  10  . 80.152  110.569 16.661  1.00 2.05   1
. .
ATOM 3422 CD1  CD1  . ILE ILE ILE B B 10  10  . 80.279  109.232 15.894  1.00 2.00   1
. .
ATOM 3423 CG2  CG2  . ILE ILE ILE B B 10  10  . 79.275  109.640 18.932  1.00 2.00   1
. .
ATOM 3424 C    C    . ILE ILE ILE B B 10  10  . 82.097  112.286 18.378  1.00 2.00   1
. .
ATOM 3425 O    O    . ILE ILE ILE B B 10  10  . 82.062  113.383 17.788  1.00 2.00   1
. .
ATOM 3426 N    N    . LEU LEU LEU B B 11  11  . 83.229  111.598 18.468  1.00 2.00   1
. .
ATOM 3427 CA   CA   . LEU LEU LEU B B 11  11  . 84.422  112.114 17.789  1.00 2.00   1
. .
ATOM 3428 CB   CB   . LEU LEU LEU B B 11  11  . 85.631  112.000 18.705  1.00 2.00   1
. .
ATOM 3429 CG   CG   . LEU LEU LEU B B 11  11  . 85.605  112.819 20.008  1.00 2.00   1
. .
ATOM 3430 CD1  CD1  . LEU LEU LEU B B 11  11  . 86.924  112.844 20.790  1.00 3.35   1
. .
ATOM 3431 CD2  CD2  . LEU LEU LEU B B 11  11  . 85.148  114.290 19.587  1.00 2.03   1
. .
ATOM 3432 C    C    . LEU LEU LEU B B 11  11  . 84.710  111.360 16.489  1.00 2.00   1
. .
ATOM 3433 O    O    . LEU LEU LEU B B 11  11  . 84.534  110.097 16.447  1.00 2.00   1
. .
ATOM 3434 N    N    . ASP ASP ASP B B 12  12  . 85.095  112.105 15.462  1.00 2.00   1
. .
ATOM 3435 CA   CA   . ASP ASP ASP B B 12  12  . 85.489  111.535 14.179  1.00 2.00   1
. .
ATOM 3436 CB   CB   . ASP ASP ASP B B 12  12  . 85.233  112.546 13.065  1.00 2.00   1
. .
ATOM 3437 CG   CG   . ASP ASP ASP B B 12  12  . 86.262  113.725 12.987  1.00 2.00   1
. .
ATOM 3438 OD1  OD1  . ASP ASP ASP B B 12  12  . 87.330  113.767 13.630  1.00 2.36   1
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ATOM 3439 OD2  OD2  . ASP ASP ASP B B 12  12  . 86.000  114.623 12.088  1.00 2.67   1
. .
ATOM 3440 C    C    . ASP ASP ASP B B 12  12  . 86.982  111.088 14.211  1.00 2.00   1
. .
ATOM 3441 O    O    . ASP ASP ASP B B 12  12  . 87.664  111.181 15.219  1.00 2.00   1
. .
ATOM 3442 N    N    . SER SER SER B B 13  13  . 87.442  110.584 13.097  1.00 2.00   1
. .
ATOM 3443 CA   CA   . SER SER SER B B 13  13  . 88.764  110.045 12.999  1.00 2.00   1
. .
ATOM 3444 CB   CB   . SER SER SER B B 13  13  . 88.897  109.283 11.653  1.00 2.00   1
. .
ATOM 3445 OG   OG   . SER SER SER B B 13  13  . 88.836  110.225 10.608  1.00 2.00   1
. .
ATOM 3446 C    C    . SER SER SER B B 13  13  . 89.917  110.952 13.243  1.00 2.00   1
. .
ATOM 3447 O    O    . SER SER SER B B 13  13  . 91.049  110.486 13.416  1.00 2.00   1
. .
ATOM 3448 N    N    . ARG ARG ARG B B 14  14  . 89.663  112.294 13.179  1.00 2.00   1
. .
ATOM 3449 CA   CA   . ARG ARG ARG B B 14  14  . 90.683  113.259 13.526  1.00 2.00   1
. .
ATOM 3450 CB   CB   . ARG ARG ARG B B 14  14  . 90.636  114.456 12.565  1.00 2.61   1
. .
ATOM 3451 CG   CG   . ARG ARG ARG B B 14  14  . 91.452  114.260 11.300  1.00 8.93   1
. .
ATOM 3452 CD   CD   . ARG ARG ARG B B 14  14  . 91.577  115.579 10.469  1.00 9.77   1
. .
ATOM 3453 NE   NE   . ARG ARG ARG B B 14  14  . 90.297  115.865 9.897   1.00 9.64   1
. .
ATOM 3454 CZ   CZ   . ARG ARG ARG B B 14  14  . 90.038  115.802 8.613   1.00 2.82   1
. .
ATOM 3455 NH1  NH1  . ARG ARG ARG B B 14  14  . 91.048  115.560 7.770   1.00 2.27   1
. .
ATOM 3456 NH2  NH2  . ARG ARG ARG B B 14  14  . 88.846  116.109 8.205   1.00 2.70   1
. .
ATOM 3457 C    C    . ARG ARG ARG B B 14  14  . 90.592  113.731 14.977  1.00 2.00   1
. .
ATOM 3458 O    O    . ARG ARG ARG B B 14  14  . 91.389  114.608 15.388  1.00 2.18   1
. .
ATOM 3459 N    N    . GLY GLY GLY B B 15  15  . 89.583  113.276 15.672  1.00 2.00   1
. .
ATOM 3460 CA   CA   . GLY GLY GLY B B 15  15  . 89.332  113.686 17.079  1.00 2.00   1
. .
ATOM 3461 C    C    . GLY GLY GLY B B 15  15  . 88.491  114.959 17.118  1.00 2.00   1
. .
ATOM 3462 O    O    . GLY GLY GLY B B 15  15  . 88.523  115.620 18.123  1.00 2.43   1
. .
ATOM 3463 N    N    . ASN ASN ASN B B 16  16  . 87.782  115.274 16.032  1.00 2.00   1
. .
ATOM 3464 CA   CA   . ASN ASN ASN B B 16  16  . 86.878  116.407 16.046  1.00 2.00   1
. .
ATOM 3465 CB   CB   . ASN ASN ASN B B 16  16  . 86.977  117.194 14.781  1.00 2.00   1
. .
ATOM 3466 CG   CG   . ASN ASN ASN B B 16  16  . 88.309  117.964 14.741  1.00 4.83   1
. .
ATOM 3467 OD1  OD1  . ASN ASN ASN B B 16  16  . 88.741  118.531 15.741  1.00 5.37   1
. .
ATOM 3468 ND2  ND2  . ASN ASN ASN B B 16  16  . 88.972  117.902 13.595  1.00 8.29   1
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ATOM 3469 C    C    . ASN ASN ASN B B 16  16  . 85.421  115.947 16.237  1.00 2.00   1
. .
ATOM 3470 O    O    . ASN ASN ASN B B 16  16  . 85.025  114.886 15.756  1.00 2.00   1
. .
ATOM 3471 N    N    . PRO PRO PRO B B 17  17  . 84.604  116.749 16.908  1.00 2.00   1
. .
ATOM 3472 CA   CA   . PRO PRO PRO B B 17  17  . 83.183  116.414 17.105  1.00 2.00   1
. .
ATOM 3473 CB   CB   . PRO PRO PRO B B 17  17  . 82.653  117.643 17.926  1.00 2.00   1
. .
ATOM 3474 CG   CG   . PRO PRO PRO B B 17  17  . 83.874  118.017 18.716  1.00 2.04   1
. .
ATOM 3475 CD   CD   . PRO PRO PRO B B 17  17  . 84.951  117.987 17.655  1.00 2.25   1
. .
ATOM 3476 C    C    . PRO PRO PRO B B 17  17  . 82.447  116.204 15.801  1.00 2.00   1
. .
ATOM 3477 O    O    . PRO PRO PRO B B 17  17  . 82.729  116.860 14.805  1.00 2.00   1
. .
ATOM 3478 N    N    . THR THR THR B B 18  18  . 81.568  115.224 15.780  1.00 2.00   1
. .
ATOM 3479 CA   CA   . THR THR THR B B 18  18  . 80.616  115.139 14.675  1.00 2.01   1
. .
ATOM 3480 CB   CB   . THR THR THR B B 18  18  . 81.148  114.393 13.486  1.00 2.08   1
. .
ATOM 3481 OG1  OG1  . THR THR THR B B 18  18  . 80.262  114.597 12.374  1.00 2.00   1
. .
ATOM 3482 CG2  CG2  . THR THR THR B B 18  18  . 81.134  112.895 13.772  1.00 2.00   1
. .
ATOM 3483 C    C    . THR THR THR B B 18  18  . 79.282  114.615 15.168  1.00 2.00   1
. .
ATOM 3484 O    O    . THR THR THR B B 18  18  . 79.147  114.299 16.361  1.00 2.00   1
. .
ATOM 3485 N    N    . VAL VAL VAL B B 19  19  . 78.263  114.624 14.348  1.00 2.00   1
. .
ATOM 3486 CA   CA   . VAL VAL VAL B B 19  19  . 76.898  114.231 14.650  1.00 2.00   1
. .
ATOM 3487 CB   CB   . VAL VAL VAL B B 19  19  . 75.925  114.965 13.711  1.00 2.00   1
. .
ATOM 3488 CG1  CG1  . VAL VAL VAL B B 19  19  . 74.511  114.434 13.855  1.00 2.00   1
. .
ATOM 3489 CG2  CG2  . VAL VAL VAL B B 19  19  . 76.025  116.460 14.052  1.00 2.00   1
. .
ATOM 3490 C    C    . VAL VAL VAL B B 19  19  . 76.683  112.744 14.466  1.00 2.00   1
. .
ATOM 3491 O    O    . VAL VAL VAL B B 19  19  . 77.052  112.240 13.415  1.00 2.65   1
. .
ATOM 3492 N    N    . GLU GLU GLU B B 20  20  . 76.135  112.043 15.481  1.00 2.00   1
. .
ATOM 3493 CA   CA   . GLU GLU GLU B B 20  20  . 75.607  110.724 15.359  1.00 2.00   1
. .
ATOM 3494 CB   CB   . GLU GLU GLU B B 20  20  . 76.353  109.786 16.340  1.00 2.79   1
. .
ATOM 3495 CG   CG   . GLU GLU GLU B B 20  20  . 75.816  108.421 16.416  1.00 4.33   1
. .
ATOM 3496 CD   CD   . GLU GLU GLU B B 20  20  . 76.714  107.534 17.249  1.00 6.21   1
. .
ATOM 3497 OE1  OE1  . GLU GLU GLU B B 20  20  . 77.645  106.987 16.646  1.00 8.10   1
. .
ATOM 3498 OE2  OE2  . GLU GLU GLU B B 20  20  . 76.502  107.424 18.515  1.00 8.84   1
. .
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ATOM 3499 C    C    . GLU GLU GLU B B 20  20  . 74.113  110.782 15.659  1.00 2.00   1
. .
ATOM 3500 O    O    . GLU GLU GLU B B 20  20  . 73.720  111.470 16.636  1.00 2.00   1
. .
ATOM 3501 N    N    . VAL VAL VAL B B 21  21  . 73.347  109.942 14.981  1.00 2.06   1
. .
ATOM 3502 CA   CA   . VAL VAL VAL B B 21  21  . 71.893  109.834 15.198  1.00 2.00   1
. .
ATOM 3503 CB   CB   . VAL VAL VAL B B 21  21  . 71.124  110.407 13.979  1.00 2.00   1
. .
ATOM 3504 CG1  CG1  . VAL VAL VAL B B 21  21  . 69.605  110.144 14.119  1.00 2.49   1
. .
ATOM 3505 CG2  CG2  . VAL VAL VAL B B 21  21  . 71.400  111.971 13.835  1.00 2.52   1
. .
ATOM 3506 C    C    . VAL VAL VAL B B 21  21  . 71.503  108.406 15.437  1.00 2.00   1
. .
ATOM 3507 O    O    . VAL VAL VAL B B 21  21  . 71.869  107.511 14.644  1.00 2.08   1
. .
ATOM 3508 N    N    . ASP ASP ASP B B 22  22  . 70.712  108.215 16.504  1.00 2.00   1
. .
ATOM 3509 CA   CA   . ASP ASP ASP B B 22  22  . 70.034  106.965 16.821  1.00 2.00   1
. .
ATOM 3510 CB   CB   . ASP ASP ASP B B 22  22  . 70.127  106.661 18.307  1.00 2.11   1
. .
ATOM 3511 CG   CG   . ASP ASP ASP B B 22  22  . 71.480  106.176 18.741  1.00 5.34   1
. .
ATOM 3512 OD1  OD1  . ASP ASP ASP B B 22  22  . 71.608  105.874 19.981  1.00 7.78   1
. .
ATOM 3513 OD2  OD2  . ASP ASP ASP B B 22  22  . 72.361  106.076 17.906  1.00 11.56  1
. .
ATOM 3514 C    C    . ASP ASP ASP B B 22  22  . 68.538  107.152 16.469  1.00 2.00   1
. .
ATOM 3515 O    O    . ASP ASP ASP B B 22  22  . 67.873  108.111 16.890  1.00 4.01   1
. .
ATOM 3516 N    N    . LEU LEU LEU B B 23  23  . 68.043  106.261 15.632  1.00 2.04   1
. .
ATOM 3517 CA   CA   . LEU LEU LEU B B 23  23  . 66.631  106.310 15.270  1.00 2.48   1
. .
ATOM 3518 CB   CB   . LEU LEU LEU B B 23  23  . 66.450  106.543 13.764  1.00 3.52   1
. .
ATOM 3519 CG   CG   . LEU LEU LEU B B 23  23  . 65.014  106.803 13.269  1.00 3.43   1
. .
ATOM 3520 CD1  CD1  . LEU LEU LEU B B 23  23  . 65.180  107.601 11.933  1.00 7.22   1
. .
ATOM 3521 CD2  CD2  . LEU LEU LEU B B 23  23  . 64.294  105.548 12.972  1.00 9.16   1
. .
ATOM 3522 C    C    . LEU LEU LEU B B 23  23  . 66.030  104.979 15.648  1.00 3.17   1
. .
ATOM 3523 O    O    . LEU LEU LEU B B 23  23  . 66.558  103.922 15.249  1.00 5.50   1
. .
ATOM 3524 N    N    . TYR TYR TYR B B 24  24  . 64.857  105.069 16.290  1.00 3.80   1
. .
ATOM 3525 CA   CA   . TYR TYR TYR B B 24  24  . 64.156  103.854 16.724  1.00 3.83   1
. .
ATOM 3526 CB   CB   . TYR TYR TYR B B 24  24  . 63.853  103.864 18.223  1.00 7.09   1
. .
ATOM 3527 CG   CG   . TYR TYR TYR B B 24  24  . 65.029  103.911 19.131  1.00 8.74   1
. .
ATOM 3528 CD1  CD1  . TYR TYR TYR B B 24  24  . 65.749  105.108 19.319  1.00 11.52  1
. .
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ATOM 3529 CE1  CE1  . TYR TYR TYR B B 24  24  . 66.860  105.143 20.191  1.00 15.84  1
. .
ATOM 3530 CZ   CZ   . TYR TYR TYR B B 24  24  . 67.203  103.956 20.888  1.00 18.48  1
. .
ATOM 3531 OH   OH   . TYR TYR TYR B B 24  24  . 68.263  103.937 21.722  1.00 22.74  1
. .
ATOM 3532 CE2  CE2  . TYR TYR TYR B B 24  24  . 66.492  102.785 20.722  1.00 17.09  1
. .
ATOM 3533 CD2  CD2  . TYR TYR TYR B B 24  24  . 65.419  102.766 19.851  1.00 14.07  1
. .
ATOM 3534 C    C    . TYR TYR TYR B B 24  24  . 62.843  103.684 15.982  1.00 5.13   1
. .
ATOM 3535 O    O    . TYR TYR TYR B B 24  24  . 62.064  104.648 15.850  1.00 4.87   1
. .
ATOM 3536 N    N    . THR THR THR B B 25  25  . 62.658  102.465 15.493  1.00 6.23   1
. .
ATOM 3537 CA   CA   . THR THR THR B B 25  25  . 61.367  102.007 14.989  1.00 7.59   1
. .
ATOM 3538 CB   CB   . THR THR THR B B 25  25  . 61.405  101.743 13.502  1.00 7.48   1
. .
ATOM 3539 OG1  OG1  . THR THR THR B B 25  25  . 62.097  100.545 13.278  1.00 6.89   1
. .
ATOM 3540 CG2  CG2  . THR THR THR B B 25  25  . 62.111  102.841 12.741  1.00 9.30   1
. .
ATOM 3541 C    C    . THR THR THR B B 25  25  . 60.968  100.697 15.660  1.00 8.63   1
. .
ATOM 3542 O    O    . THR THR THR B B 25  25  . 61.677  100.208 16.534  1.00 9.43   1
. .
ATOM 3543 N    N    . ALA ALA ALA B B 26  26  . 59.847  100.125 15.282  1.00 9.80   1
. .
ATOM 3544 CA   CA   . ALA ALA ALA B B 26  26  . 59.502  98.816  15.885  1.00 12.18  1
. .
ATOM 3545 CB   CB   . ALA ALA ALA B B 26  26  . 58.111  98.359  15.445  1.00 12.21  1
. .
ATOM 3546 C    C    . ALA ALA ALA B B 26  26  . 60.538  97.764  15.518  1.00 12.63  1
. .
ATOM 3547 O    O    . ALA ALA ALA B B 26  26  . 60.609  96.694  16.162  1.00 13.45  1
. .
ATOM 3548 N    N    . LYS LYS LYS B B 27  27  . 61.304  98.006  14.450  1.00 13.08  1
. .
ATOM 3549 CA   CA   . LYS LYS LYS B B 27  27  . 62.332  97.006  14.040  1.00 12.65  1
. .
ATOM 3550 CB   CB   . LYS LYS LYS B B 27  27  . 62.640  97.069  12.542  1.00 14.72  1
. .
ATOM 3551 CG   CG   . LYS LYS LYS B B 27  27  . 61.491  96.722  11.634  1.00 14.90  1
. .
ATOM 3552 CD   CD   . LYS LYS LYS B B 27  27  . 61.554  95.237  11.273  1.00 15.30  1
. .
ATOM 3553 CE   CE   . LYS LYS LYS B B 27  27  . 60.567  94.996  10.179  1.00 15.75  1
. .
ATOM 3554 NZ   NZ   . LYS LYS LYS B B 27  27  . 59.449  94.266  10.696  1.00 22.40  1
. .
ATOM 3555 C    C    . LYS LYS LYS B B 27  27  . 63.609  97.131  14.858  1.00 13.51  1
. .
ATOM 3556 O    O    . LYS LYS LYS B B 27  27  . 64.478  96.255  14.847  1.00 13.30  1
. .
ATOM 3557 N    N    . GLY GLY GLY B B 28  28  . 63.714  98.203  15.634  1.00 11.93  1
. .
ATOM 3558 CA   CA   . GLY GLY GLY B B 28  28  . 64.894  98.303  16.467  1.00 10.27  1
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ATOM 3559 C    C    . GLY GLY GLY B B 28  28  . 65.630  99.619  16.314  1.00 7.03   1
. .
ATOM 3560 O    O    . GLY GLY GLY B B 28  28  . 65.048  100.609 16.059  1.00 6.99   1
. .
ATOM 3561 N    N    . LEU LEU LEU B B 29  29  . 66.934  99.593  16.540  1.00 6.99   1
. .
ATOM 3562 CA   CA   . LEU LEU LEU B B 29  29  . 67.718  100.817 16.603  1.00 6.72   1
. .
ATOM 3563 CB   CB   . LEU LEU LEU B B 29  29  . 68.543  100.798 17.895  1.00 8.63   1
. .
ATOM 3564 CG   CG   . LEU LEU LEU B B 29  29  . 69.710  101.780 18.056  1.00 12.47  1
. .
ATOM 3565 CD1  CD1  . LEU LEU LEU B B 29  29  . 69.257  103.237 18.126  1.00 15.22  1
. .
ATOM 3566 CD2  CD2  . LEU LEU LEU B B 29  29  . 70.533  101.409 19.327  1.00 15.14  1
. .
ATOM 3567 C    C    . LEU LEU LEU B B 29  29  . 68.620  100.911 15.403  1.00 5.66   1
. .
ATOM 3568 O    O    . LEU LEU LEU B B 29  29  . 69.248  99.937  15.037  1.00 7.46   1
. .
ATOM 3569 N    N    . PHE PHE PHE B B 30  30  . 68.685  102.099 14.800  1.00 4.50   1
. .
ATOM 3570 CA   CA   . PHE PHE PHE B B 30  30  . 69.431  102.329 13.590  1.00 3.98   1
. .
ATOM 3571 CB   CB   . PHE PHE PHE B B 30  30  . 68.455  102.500 12.374  1.00 5.82   1
. .
ATOM 3572 CG   CG   . PHE PHE PHE B B 30  30  . 67.609  101.308 12.213  1.00 5.04   1
. .
ATOM 3573 CD1  CD1  . PHE PHE PHE B B 30  30  . 68.129  100.199 11.580  1.00 5.26   1
. .
ATOM 3574 CE1  CE1  . PHE PHE PHE B B 30  30  . 67.373  99.047  11.442  1.00 4.58   1
. .
ATOM 3575 CZ   CZ   . PHE PHE PHE B B 30  30  . 66.121  98.975  12.066  1.00 5.53   1
. .
ATOM 3576 CE2  CE2  . PHE PHE PHE B B 30  30  . 65.604  100.054 12.752  1.00 4.59   1
. .
ATOM 3577 CD2  CD2  . PHE PHE PHE B B 30  30  . 66.356  101.219 12.865  1.00 5.53   1
. .
ATOM 3578 C    C    . PHE PHE PHE B B 30  30  . 70.237  103.582 13.840  1.00 2.89   1
. .
ATOM 3579 O    O    . PHE PHE PHE B B 30  30  . 69.662  104.627 14.128  1.00 6.75   1
. .
ATOM 3580 N    N    . ARG ARG ARG B B 31  31  . 71.563  103.441 13.702  1.00 2.35   1
. .
ATOM 3581 CA   CA   . ARG ARG ARG B B 31  31  . 72.511  104.481 14.051  1.00 2.00   1
. .
ATOM 3582 CB   CB   . ARG ARG ARG B B 31  31  . 73.381  103.898 15.143  1.00 3.22   1
. .
ATOM 3583 CG   CG   . ARG ARG ARG B B 31  31  . 74.556  104.811 15.579  1.00 2.47   1
. .
ATOM 3584 CD   CD   . ARG ARG ARG B B 31  31  . 75.216  104.227 16.770  1.00 6.79   1
. .
ATOM 3585 NE   NE   . ARG ARG ARG B B 31  31  . 74.329  104.254 17.934  1.00 8.07   1
. .
ATOM 3586 CZ   CZ   . ARG ARG ARG B B 31  31  . 74.362  103.422 18.981  1.00 11.60  1
. .
ATOM 3587 NH1  NH1  . ARG ARG ARG B B 31  31  . 73.507  103.626 20.002  1.00 12.16  1
. .
ATOM 3588 NH2  NH2  . ARG ARG ARG B B 31  31  . 75.240  102.429 19.011  1.00 10.59  1
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ATOM 3589 C    C    . ARG ARG ARG B B 31  31  . 73.335  104.886 12.797  1.00 2.19   1
. .
ATOM 3590 O    O    . ARG ARG ARG B B 31  31  . 73.780  104.013 12.035  1.00 3.25   1
. .
ATOM 3591 N    N    . ALA ALA ALA B B 32  32  . 73.532  106.207 12.624  1.00 2.15   1
. .
ATOM 3592 CA   CA   . ALA ALA ALA B B 32  32  . 74.460  106.678 11.592  1.00 2.00   1
. .
ATOM 3593 CB   CB   . ALA ALA ALA B B 32  32  . 73.710  107.019 10.259  1.00 3.06   1
. .
ATOM 3594 C    C    . ALA ALA ALA B B 32  32  . 75.229  107.862 12.053  1.00 2.00   1
. .
ATOM 3595 O    O    . ALA ALA ALA B B 32  32  . 74.788  108.548 12.933  1.00 2.33   1
. .
ATOM 3596 N    N    . ALA ALA ALA B B 33  33  . 76.362  108.127 11.429  1.00 2.00   1
. .
ATOM 3597 CA   CA   . ALA ALA ALA B B 33  33  . 77.166  109.306 11.799  1.00 2.00   1
. .
ATOM 3598 CB   CB   . ALA ALA ALA B B 33  33  . 78.342  108.877 12.741  1.00 2.41   1
. .
ATOM 3599 C    C    . ALA ALA ALA B B 33  33  . 77.694  110.004 10.550  1.00 2.00   1
. .
ATOM 3600 O    O    . ALA ALA ALA B B 33  33  . 77.683  109.425 9.482   1.00 2.46   1
. .
ATOM 3601 N    N    . VAL VAL VAL B B 34  34  . 78.039  111.254 10.695  1.00 2.00   1
. .
ATOM 3602 CA   CA   . VAL VAL VAL B B 34  34  . 78.264  112.172 9.571   1.00 2.00   1
. .
ATOM 3603 CB   CB   . VAL VAL VAL B B 34  34  . 77.507  113.463 9.828   1.00 2.00   1
. .
ATOM 3604 CG1  CG1  . VAL VAL VAL B B 34  34  . 77.774  114.570 8.706   1.00 2.03   1
. .
ATOM 3605 CG2  CG2  . VAL VAL VAL B B 34  34  . 76.087  113.217 9.928   1.00 2.04   1
. .
ATOM 3606 C    C    . VAL VAL VAL B B 34  34  . 79.791  112.424 9.505   1.00 2.00   1
. .
ATOM 3607 O    O    . VAL VAL VAL B B 34  34  . 80.425  112.688 10.513  1.00 2.00   1
. .
ATOM 3608 N    N    . PRO PRO PRO B B 35  35  . 80.365  112.335 8.308   1.00 2.00   1
. .
ATOM 3609 CA   CA   . PRO PRO PRO B B 35  35  . 81.806  112.588 8.153   1.00 2.00   1
. .
ATOM 3610 CB   CB   . PRO PRO PRO B B 35  35  . 82.131  111.877 6.810   1.00 2.00   1
. .
ATOM 3611 CG   CG   . PRO PRO PRO B B 35  35  . 80.864  112.073 6.015   1.00 2.00   1
. .
ATOM 3612 CD   CD   . PRO PRO PRO B B 35  35  . 79.728  111.914 7.068   1.00 2.05   1
. .
ATOM 3613 C    C    . PRO PRO PRO B B 35  35  . 82.061  114.075 7.957   1.00 2.00   1
. .
ATOM 3614 O    O    . PRO PRO PRO B B 35  35  . 81.077  114.818 7.897   1.00 2.17   1
. .
ATOM 3615 N    N    . SER SER SER B B 36  36  . 83.326  114.446 7.832   1.00 2.00   1
. .
ATOM 3616 CA   CA   . SER SER SER B B 36  36  . 83.671  115.870 7.713   1.00 2.09   1
. .
ATOM 3617 CB   CB   . SER SER SER B B 36  36  . 83.807  116.456 9.124   1.00 2.04   1
. .
ATOM 3618 OG   OG   . SER SER SER B B 36  36  . 84.280  117.825 8.992   1.00 6.22   1
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ATOM 3619 C    C    . SER SER SER B B 36  36  . 84.964  116.083 6.979   1.00 2.00   1
. .
ATOM 3620 O    O    . SER SER SER B B 36  36  . 85.966  115.404 7.251   1.00 2.00   1
. .
ATOM 3621 N    N    . GLY GLY GLY B B 37  37  . 84.937  116.941 5.940   1.00 2.00   1
. .
ATOM 3622 CA   CA   . GLY GLY GLY B B 37  37  . 86.109  117.200 5.165   1.00 2.37   1
. .
ATOM 3623 C    C    . GLY GLY GLY B B 37  37  . 87.042  118.203 5.699   1.00 2.00   1
. .
ATOM 3624 O    O    . GLY GLY GLY B B 37  37  . 86.691  119.003 6.651   1.00 2.00   1
. .
ATOM 3625 N    N    . ALA ALA ALA B B 38  38  . 88.232  118.220 5.095   1.00 2.00   1
. .
ATOM 3626 CA   CA   . ALA ALA ALA B B 38  38  . 89.232  119.262 5.399   1.00 2.11   1
. .
ATOM 3627 CB   CB   . ALA ALA ALA B B 38  38  . 90.592  118.679 5.827   1.00 2.36   1
. .
ATOM 3628 C    C    . ALA ALA ALA B B 38  38  . 89.417  120.135 4.189   1.00 2.01   1
. .
ATOM 3629 O    O    . ALA ALA ALA B B 38  38  . 89.383  121.399 4.333   1.00 2.02   1
. .
ATOM 3630 N    N    . SER SER SER B B 39  39  . 89.524  119.496 3.016   1.00 2.00   1
. .
ATOM 3631 CA   CA   . SER SER SER B B 39  39  . 89.673  120.327 1.810   1.00 2.00   1
. .
ATOM 3632 CB   CB   . SER SER SER B B 39  39  . 90.667  119.714 0.784   1.00 2.04   1
. .
ATOM 3633 OG   OG   . SER SER SER B B 39  39  . 90.292  118.383 0.528   1.00 2.00   1
. .
ATOM 3634 C    C    . SER SER SER B B 39  39  . 88.255  120.478 1.231   1.00 2.64   1
. .
ATOM 3635 O    O    . SER SER SER B B 39  39  . 87.868  119.814 0.251   1.00 2.00   1
. .
ATOM 3636 N    N    . THR THR THR B B 40  40  . 87.440  121.292 1.921   1.00 2.00   1
. .
ATOM 3637 CA   CA   . THR THR THR B B 40  40  . 86.081  121.453 1.582   1.00 2.00   1
. .
ATOM 3638 CB   CB   . THR THR THR B B 40  40  . 85.262  121.822 2.810   1.00 2.74   1
. .
ATOM 3639 OG1  OG1  . THR THR THR B B 40  40  . 85.890  122.962 3.417   1.00 2.08   1
. .
ATOM 3640 CG2  CG2  . THR THR THR B B 40  40  . 85.295  120.708 3.795   1.00 2.57   1
. .
ATOM 3641 C    C    . THR THR THR B B 40  40  . 85.808  122.578 0.521   1.00 2.35   1
. .
ATOM 3642 O    O    . THR THR THR B B 40  40  . 86.333  123.669 0.655   1.00 3.00   1
. .
ATOM 3643 N    N    . GLY GLY GLY B B 41  41  . 85.090  122.209 -0.548  1.00 2.00   1
. .
ATOM 3644 CA   CA   . GLY GLY GLY B B 41  41  . 84.716  123.145 -1.623  1.00 2.00   1
. .
ATOM 3645 C    C    . GLY GLY GLY B B 41  41  . 83.867  124.294 -1.073  1.00 2.00   1
. .
ATOM 3646 O    O    . GLY GLY GLY B B 41  41  . 83.052  124.118 -0.161  1.00 2.42   1
. .
ATOM 3647 N    N    . ILE ILE ILE B B 42  42  . 84.058  125.478 -1.664  1.00 2.00   1
. .
ATOM 3648 CA   CA   . ILE ILE ILE B B 42  42  . 83.250  126.631 -1.221  1.00 2.00   1
. .
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ATOM 3649 CB   CB   . ILE ILE ILE B B 42  42  . 83.721  127.967 -1.879  1.00 2.23   1
. .
ATOM 3650 CG1  CG1  . ILE ILE ILE B B 42  42  . 83.542  127.896 -3.379  1.00 3.50   1
. .
ATOM 3651 CD1  CD1  . ILE ILE ILE B B 42  42  . 83.908  129.229 -4.010  1.00 4.85   1
. .
ATOM 3652 CG2  CG2  . ILE ILE ILE B B 42  42  . 85.195  128.197 -1.558  1.00 3.49   1
. .
ATOM 3653 C    C    . ILE ILE ILE B B 42  42  . 81.801  126.398 -1.512  1.00 2.00   1
. .
ATOM 3654 O    O    . ILE ILE ILE B B 42  42  . 80.970  126.986 -0.880  1.00 2.29   1
. .
ATOM 3655 N    N    . TYR TYR TYR B B 43  43  . 81.453  125.469 -2.419  1.00 2.00   1
. .
ATOM 3656 CA   CA   . TYR TYR TYR B B 43  43  . 80.068  125.267 -2.743  1.00 2.00   1
. .
ATOM 3657 CB   CB   . TYR TYR TYR B B 43  43  . 79.897  125.037 -4.284  1.00 2.00   1
. .
ATOM 3658 CG   CG   . TYR TYR TYR B B 43  43  . 80.332  126.230 -5.117  1.00 2.00   1
. .
ATOM 3659 CD1  CD1  . TYR TYR TYR B B 43  43  . 81.528  126.184 -5.853  1.00 2.99   1
. .
ATOM 3660 CE1  CE1  . TYR TYR TYR B B 43  43  . 81.965  127.326 -6.585  1.00 2.00   1
. .
ATOM 3661 CZ   CZ   . TYR TYR TYR B B 43  43  . 81.228  128.505 -6.469  1.00 3.83   1
. .
ATOM 3662 OH   OH   . TYR TYR TYR B B 43  43  . 81.652  129.611 -7.183  1.00 2.40   1
. .
ATOM 3663 CE2  CE2  . TYR TYR TYR B B 43  43  . 80.067  128.578 -5.669  1.00 2.00   1
. .
ATOM 3664 CD2  CD2  . TYR TYR TYR B B 43  43  . 79.644  127.439 -5.025  1.00 2.66   1
. .
ATOM 3665 C    C    . TYR TYR TYR B B 43  43  . 79.380  124.108 -1.984  1.00 2.00   1
. .
ATOM 3666 O    O    . TYR TYR TYR B B 43  43  . 78.206  123.812 -2.232  1.00 2.21   1
. .
ATOM 3667 N    N    . GLU GLU GLU B B 44  44  . 80.062  123.583 -0.977  1.00 2.00   1
. .
ATOM 3668 CA   CA   . GLU GLU GLU B B 44  44  . 79.491  122.459 -0.228  1.00 2.00   1
. .
ATOM 3669 CB   CB   . GLU GLU GLU B B 44  44  . 80.546  121.796 0.638   1.00 2.40   1
. .
ATOM 3670 CG   CG   . GLU GLU GLU B B 44  44  . 81.671  121.131 -0.148  1.00 3.44   1
. .
ATOM 3671 CD   CD   . GLU GLU GLU B B 44  44  . 82.511  120.155 0.622   1.00 3.53   1
. .
ATOM 3672 OE1  OE1  . GLU GLU GLU B B 44  44  . 82.176  119.781 1.797   1.00 5.06   1
. .
ATOM 3673 OE2  OE2  . GLU GLU GLU B B 44  44  . 83.558  119.737 0.059   1.00 2.00   1
. .
ATOM 3674 C    C    . GLU GLU GLU B B 44  44  . 78.360  123.015 0.685   1.00 2.54   1
. .
ATOM 3675 O    O    . GLU GLU GLU B B 44  44  . 78.418  124.199 1.104   1.00 2.23   1
. .
ATOM 3676 N    N    . ALA ALA ALA B B 45  45  . 77.328  122.192 0.951   1.00 2.15   1
. .
ATOM 3677 CA   CA   . ALA ALA ALA B B 45  45  . 76.282  122.506 1.896   1.00 3.68   1
. .
ATOM 3678 CB   CB   . ALA ALA ALA B B 45  45  . 75.286  121.329 2.041   1.00 2.46   1
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ATOM 3679 C    C    . ALA ALA ALA B B 45  45  . 76.931  122.813 3.265   1.00 2.63   1
. .
ATOM 3680 O    O    . ALA ALA ALA B B 45  45  . 78.020  122.364 3.575   1.00 2.45   1
. .
ATOM 3681 N    N    . LEU LEU LEU B B 46  46  . 76.276  123.644 4.087   1.00 2.49   1
. .
ATOM 3682 CA   CA   . LEU LEU LEU B B 46  46  . 77.001  124.138 5.281   1.00 3.86   1
. .
ATOM 3683 CB   CB   . LEU LEU LEU B B 46  46  . 76.317  125.382 5.812   1.00 6.59   1
. .
ATOM 3684 CG   CG   . LEU LEU LEU B B 46  46  . 76.738  125.804 7.241   1.00 9.11   1
. .
ATOM 3685 CD1  CD1  . LEU LEU LEU B B 46  46  . 78.055  126.570 7.088   1.00 10.50  1
. .
ATOM 3686 CD2  CD2  . LEU LEU LEU B B 46  46  . 75.695  126.616 7.937   1.00 15.20  1
. .
ATOM 3687 C    C    . LEU LEU LEU B B 46  46  . 77.105  123.055 6.366   1.00 3.63   1
. .
ATOM 3688 O    O    . LEU LEU LEU B B 46  46  . 76.116  122.461 6.739   1.00 6.84   1
. .
ATOM 3689 N    N    . GLU GLU GLU B B 47  47  . 78.329  122.862 6.819   1.00 3.83   1
. .
ATOM 3690 CA   CA   . GLU GLU GLU B B 47  47  . 78.631  122.105 8.042   1.00 2.65   1
. .
ATOM 3691 CB   CB   . GLU GLU GLU B B 47  47  . 80.020  121.494 7.902   1.00 4.39   1
. .
ATOM 3692 CG   CG   . GLU GLU GLU B B 47  47  . 80.483  120.716 9.099   1.00 3.23   1
. .
ATOM 3693 CD   CD   . GLU GLU GLU B B 47  47  . 81.903  120.216 8.874   1.00 7.53   1
. .
ATOM 3694 OE1  OE1  . GLU GLU GLU B B 47  47  . 82.088  119.118 8.261   1.00 7.70   1
. .
ATOM 3695 OE2  OE2  . GLU GLU GLU B B 47  47  . 82.808  120.912 9.314   1.00 5.45   1
. .
ATOM 3696 C    C    . GLU GLU GLU B B 47  47  . 78.519  123.041 9.205   1.00 2.65   1
. .
ATOM 3697 O    O    . GLU GLU GLU B B 47  47  . 79.330  123.959 9.379   1.00 5.24   1
. .
ATOM 3698 N    N    . LEU LEU LEU B B 48  48  . 77.530  122.804 10.058  1.00 3.19   1
. .
ATOM 3699 CA   CA   . LEU LEU LEU B B 48  48  . 77.334  123.751 11.215  1.00 2.19   1
. .
ATOM 3700 CB   CB   . LEU LEU LEU B B 48  48  . 75.854  123.782 11.562  1.00 2.77   1
. .
ATOM 3701 CG   CG   . LEU LEU LEU B B 48  48  . 75.497  124.703 12.777  1.00 2.27   1
. .
ATOM 3702 CD1  CD1  . LEU LEU LEU B B 48  48  . 75.829  126.200 12.385  1.00 4.07   1
. .
ATOM 3703 CD2  CD2  . LEU LEU LEU B B 48  48  . 74.031  124.501 13.188  1.00 4.17   1
. .
ATOM 3704 C    C    . LEU LEU LEU B B 48  48  . 78.152  123.342 12.443  1.00 2.80   1
. .
ATOM 3705 O    O    . LEU LEU LEU B B 48  48  . 78.033  122.209 12.971  1.00 3.94   1
. .
ATOM 3706 N    N    . ARG ARG ARG B B 49  49  . 78.993  124.268 12.878  1.00 3.34   1
. .
ATOM 3707 CA   CA   . ARG ARG ARG B B 49  49  . 79.848  124.096 14.008  1.00 2.68   1
. .
ATOM 3708 CB   CB   . ARG ARG ARG B B 49  49  . 81.297  124.281 13.548  1.00 4.14   1
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ATOM 3709 CG   CG   . ARG ARG ARG B B 49  49  . 81.743  123.224 12.554  1.00 8.56   1
. .
ATOM 3710 CD   CD   . ARG ARG ARG B B 49  49  . 82.609  122.164 13.178  1.00 8.44   1
. .
ATOM 3711 NE   NE   . ARG ARG ARG B B 49  49  . 82.986  121.089 12.208  1.00 6.80   1
. .
ATOM 3712 CZ   CZ   . ARG ARG ARG B B 49  49  . 83.174  119.833 12.601  1.00 5.76   1
. .
ATOM 3713 NH1  NH1  . ARG ARG ARG B B 49  49  . 83.051  119.499 13.876  1.00 3.19   1
. .
ATOM 3714 NH2  NH2  . ARG ARG ARG B B 49  49  . 83.503  118.921 11.712  1.00 5.06   1
. .
ATOM 3715 C    C    . ARG ARG ARG B B 49  49  . 79.453  125.212 14.976  1.00 2.99   1
. .
ATOM 3716 O    O    . ARG ARG ARG B B 49  49  . 78.917  126.249 14.575  1.00 7.21   1
. .
ATOM 3717 N    N    . ASP ASP ASP B B 50  50  . 79.748  124.968 16.248  1.00 2.62   1
. .
ATOM 3718 CA   CA   . ASP ASP ASP B B 50  50  . 79.311  125.849 17.296  1.00 4.00   1
. .
ATOM 3719 CB   CB   . ASP ASP ASP B B 50  50  . 79.468  125.085 18.617  1.00 3.58   1
. .
ATOM 3720 CG   CG   . ASP ASP ASP B B 50  50  . 78.533  123.919 18.761  1.00 7.03   1
. .
ATOM 3721 OD1  OD1  . ASP ASP ASP B B 50  50  . 77.556  123.772 17.995  1.00 3.21   1
. .
ATOM 3722 OD2  OD2  . ASP ASP ASP B B 50  50  . 78.813  123.122 19.763  1.00 6.25   1
. .
ATOM 3723 C    C    . ASP ASP ASP B B 50  50  . 80.150  127.107 17.386  1.00 5.48   1
. .
ATOM 3724 O    O    . ASP ASP ASP B B 50  50  . 79.630  128.169 17.755  1.00 6.89   1
. .
ATOM 3725 N    N    . GLY GLY GLY B B 51  51  . 81.422  127.018 17.018  1.00 7.60   1
. .
ATOM 3726 CA   CA   . GLY GLY GLY B B 51  51  . 82.324  128.184 17.026  1.00 8.99   1
. .
ATOM 3727 C    C    . GLY GLY GLY B B 51  51  . 82.561  128.752 18.422  1.00 9.83   1
. .
ATOM 3728 O    O    . GLY GLY GLY B B 51  51  . 82.863  129.976 18.558  1.00 12.18  1
. .
ATOM 3729 N    N    . ASP ASP ASP B B 52  52  . 82.443  127.916 19.453  1.00 9.46   1
. .
ATOM 3730 CA   CA   . ASP ASP ASP B B 52  52  . 82.805  128.249 20.838  1.00 11.12  1
. .
ATOM 3731 CB   CB   . ASP ASP ASP B B 52  52  . 81.976  127.437 21.837  1.00 11.93  1
. .
ATOM 3732 CG   CG   . ASP ASP ASP B B 52  52  . 82.383  127.658 23.311  1.00 12.75  1
. .
ATOM 3733 OD1  OD1  . ASP ASP ASP B B 52  52  . 83.404  128.363 23.592  1.00 17.49  1
. .
ATOM 3734 OD2  OD2  . ASP ASP ASP B B 52  52  . 81.675  127.112 24.199  1.00 12.85  1
. .
ATOM 3735 C    C    . ASP ASP ASP B B 52  52  . 84.296  128.004 20.970  1.00 12.92  1
. .
ATOM 3736 O    O    . ASP ASP ASP B B 52  52  . 84.745  126.853 21.059  1.00 12.52  1
. .
ATOM 3737 N    N    . LYS LYS LYS B B 53  53  . 85.097  129.075 20.970  1.00 14.92  1
. .
ATOM 3738 CA   CA   . LYS LYS LYS B B 53  53  . 86.559  128.869 20.847  1.00 17.45  1
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ATOM 3739 CB   CB   . LYS LYS LYS B B 53  53  . 87.289  130.180 20.526  1.00 19.70  1
. .
ATOM 3740 CG   CG   . LYS LYS LYS B B 53  53  . 87.088  130.600 19.024  1.00 25.15  1
. .
ATOM 3741 CD   CD   . LYS LYS LYS B B 53  53  . 87.503  132.037 18.701  1.00 30.15  1
. .
ATOM 3742 CE   CE   . LYS LYS LYS B B 53  53  . 86.960  133.089 19.732  1.00 33.35  1
. .
ATOM 3743 NZ   NZ   . LYS LYS LYS B B 53  53  . 85.483  133.417 19.595  1.00 32.76  1
. .
ATOM 3744 C    C    . LYS LYS LYS B B 53  53  . 87.187  128.109 22.004  1.00 17.99  1
. .
ATOM 3745 O    O    . LYS LYS LYS B B 53  53  . 88.277  127.525 21.845  1.00 18.73  1
. .
ATOM 3746 N    N    . GLN GLN GLN B B 54  54  . 86.484  128.119 23.139  1.00 16.68  1
. .
ATOM 3747 CA   CA   . GLN GLN GLN B B 54  54  . 86.844  127.438 24.377  1.00 17.33  1
. .
ATOM 3748 CB   CB   . GLN GLN GLN B B 54  54  . 86.129  128.074 25.594  1.00 18.90  1
. .
ATOM 3749 CG   CG   . GLN GLN GLN B B 54  54  . 86.402  129.572 25.808  1.00 23.99  1
. .
ATOM 3750 CD   CD   . GLN GLN GLN B B 54  54  . 87.869  129.828 25.695  1.00 29.33  1
. .
ATOM 3751 OE1  OE1  . GLN GLN GLN B B 54  54  . 88.619  129.572 26.640  1.00 32.81  1
. .
ATOM 3752 NE2  NE2  . GLN GLN GLN B B 54  54  . 88.314  130.261 24.508  1.00 33.39  1
. .
ATOM 3753 C    C    . GLN GLN GLN B B 54  54  . 86.528  125.957 24.411  1.00 15.44  1
. .
ATOM 3754 O    O    . GLN GLN GLN B B 54  54  . 87.107  125.258 25.253  1.00 15.85  1
. .
ATOM 3755 N    N    . ARG ARG ARG B B 55  55  . 85.582  125.497 23.580  1.00 12.22  1
. .
ATOM 3756 CA   CA   . ARG ARG ARG B B 55  55  . 85.158  124.095 23.603  1.00 6.82   1
. .
ATOM 3757 CB   CB   . ARG ARG ARG B B 55  55  . 83.653  124.063 23.767  1.00 6.86   1
. .
ATOM 3758 CG   CG   . ARG ARG ARG B B 55  55  . 83.169  122.679 24.054  1.00 4.82   1
. .
ATOM 3759 CD   CD   . ARG ARG ARG B B 55  55  . 81.734  122.605 24.604  1.00 6.46   1
. .
ATOM 3760 NE   NE   . ARG ARG ARG B B 55  55  . 81.454  121.171 24.801  1.00 4.16   1
. .
ATOM 3761 CZ   CZ   . ARG ARG ARG B B 55  55  . 81.004  120.342 23.871  1.00 2.43   1
. .
ATOM 3762 NH1  NH1  . ARG ARG ARG B B 55  55  . 80.793  120.756 22.609  1.00 3.57   1
. .
ATOM 3763 NH2  NH2  . ARG ARG ARG B B 55  55  . 80.801  119.076 24.152  1.00 2.70   1
. .
ATOM 3764 C    C    . ARG ARG ARG B B 55  55  . 85.562  123.361 22.312  1.00 6.45   1
. .
ATOM 3765 O    O    . ARG ARG ARG B B 55  55  . 85.171  123.793 21.208  1.00 6.91   1
. .
ATOM 3766 N    N    . TYR TYR TYR B B 56  56  . 86.395  122.300 22.410  1.00 4.16   1
. .
ATOM 3767 CA   CA   . TYR TYR TYR B B 56  56  . 86.863  121.637 21.168  1.00 3.86   1
. .
ATOM 3768 CB   CB   . TYR TYR TYR B B 56  56  . 85.669  120.830 20.625  1.00 2.59   1
. .
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ATOM 3769 CG   CG   . TYR TYR TYR B B 56  56  . 85.445  119.503 21.332  1.00 3.17   1
. .
ATOM 3770 CD1  CD1  . TYR TYR TYR B B 56  56  . 84.345  119.282 22.118  1.00 2.00   1
. .
ATOM 3771 CE1  CE1  . TYR TYR TYR B B 56  56  . 84.105  118.058 22.731  1.00 2.28   1
. .
ATOM 3772 CZ   CZ   . TYR TYR TYR B B 56  56  . 84.968  117.075 22.552  1.00 3.18   1
. .
ATOM 3773 OH   OH   . TYR TYR TYR B B 56  56  . 84.788  115.848 23.127  1.00 2.28   1
. .
ATOM 3774 CE2  CE2  . TYR TYR TYR B B 56  56  . 86.135  117.287 21.755  1.00 2.34   1
. .
ATOM 3775 CD2  CD2  . TYR TYR TYR B B 56  56  . 86.339  118.461 21.146  1.00 2.00   1
. .
ATOM 3776 C    C    . TYR TYR TYR B B 56  56  . 87.376  122.629 20.128  1.00 4.09   1
. .
ATOM 3777 O    O    . TYR TYR TYR B B 56  56  . 87.257  122.421 18.878  1.00 5.13   1
. .
ATOM 3778 N    N    . LEU LEU LEU B B 57  57  . 87.964  123.761 20.579  1.00 5.58   1
. .
ATOM 3779 CA   CA   . LEU LEU LEU B B 57  57  . 88.636  124.709 19.648  1.00 8.38   1
. .
ATOM 3780 CB   CB   . LEU LEU LEU B B 57  57  . 89.862  124.048 18.990  1.00 9.35   1
. .
ATOM 3781 CG   CG   . LEU LEU LEU B B 57  57  . 91.083  123.745 19.856  1.00 13.24  1
. .
ATOM 3782 CD1  CD1  . LEU LEU LEU B B 57  57  . 91.478  125.053 20.590  1.00 16.81  1
. .
ATOM 3783 CD2  CD2  . LEU LEU LEU B B 57  57  . 90.955  122.520 20.823  1.00 16.67  1
. .
ATOM 3784 C    C    . LEU LEU LEU B B 57  57  . 87.634  125.177 18.593  1.00 5.89   1
. .
ATOM 3785 O    O    . LEU LEU LEU B B 57  57  . 87.950  125.390 17.389  1.00 6.58   1
. .
ATOM 3786 N    N    . GLY GLY GLY B B 58  58  . 86.380  125.327 19.019  1.00 6.35   1
. .
ATOM 3787 CA   CA   . GLY GLY GLY B B 58  58  . 85.383  125.879 18.141  1.00 6.20   1
. .
ATOM 3788 C    C    . GLY GLY GLY B B 58  58  . 84.617  124.904 17.307  1.00 4.72   1
. .
ATOM 3789 O    O    . GLY GLY GLY B B 58  58  . 83.731  125.277 16.576  1.00 6.05   1
. .
ATOM 3790 N    N    . LYS LYS LYS B B 59  59  . 84.991  123.651 17.404  1.00 2.21   1
. .
ATOM 3791 CA   CA   . LYS LYS LYS B B 59  59  . 84.513  122.605 16.503  1.00 3.00   1
. .
ATOM 3792 CB   CB   . LYS LYS LYS B B 59  59  . 85.697  121.752 16.082  1.00 4.10   1
. .
ATOM 3793 CG   CG   . LYS LYS LYS B B 59  59  . 86.717  122.555 15.310  1.00 8.19   1
. .
ATOM 3794 CD   CD   . LYS LYS LYS B B 59  59  . 88.076  121.873 15.154  1.00 15.19  1
. .
ATOM 3795 CE   CE   . LYS LYS LYS B B 59  59  . 88.909  122.649 14.091  1.00 16.98  1
. .
ATOM 3796 NZ   NZ   . LYS LYS LYS B B 59  59  . 89.264  121.795 12.903  1.00 21.52  1
. .
ATOM 3797 C    C    . LYS LYS LYS B B 59  59  . 83.332  121.782 17.049  1.00 2.00   1
. .
ATOM 3798 O    O    . LYS LYS LYS B B 59  59  . 82.943  120.760 16.435  1.00 3.69   1
. .
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ATOM 3799 N    N    . GLY GLY GLY B B 60  60  . 82.733  122.176 18.160  1.00 2.00   1
. .
ATOM 3800 CA   CA   . GLY GLY GLY B B 60  60  . 81.579  121.415 18.721  1.00 2.05   1
. .
ATOM 3801 C    C    . GLY GLY GLY B B 60  60  . 80.438  121.344 17.761  1.00 2.37   1
. .
ATOM 3802 O    O    . GLY GLY GLY B B 60  60  . 80.289  122.200 16.875  1.00 2.00   1
. .
ATOM 3803 N    N    . VAL VAL VAL B B 61  61  . 79.574  120.358 17.881  1.00 2.00   1
. .
ATOM 3804 CA   CA   . VAL VAL VAL B B 61  61  . 78.366  120.307 17.080  1.00 2.43   1
. .
ATOM 3805 CB   CB   . VAL VAL VAL B B 61  61  . 78.430  119.156 16.020  1.00 2.00   1
. .
ATOM 3806 CG1  CG1  . VAL VAL VAL B B 61  61  . 79.544  119.408 15.076  1.00 2.61   1
. .
ATOM 3807 CG2  CG2  . VAL VAL VAL B B 61  61  . 78.635  117.837 16.692  1.00 2.33   1
. .
ATOM 3808 C    C    . VAL VAL VAL B B 61  61  . 77.111  120.189 17.962  1.00 2.00   1
. .
ATOM 3809 O    O    . VAL VAL VAL B B 61  61  . 76.116  119.617 17.578  1.00 2.00   1
. .
ATOM 3810 N    N    . LEU LEU LEU B B 62  62  . 77.152  120.878 19.111  1.00 2.76   1
. .
ATOM 3811 CA   CA   . LEU LEU LEU B B 62  62  . 75.954  120.930 19.962  1.00 2.18   1
. .
ATOM 3812 CB   CB   . LEU LEU LEU B B 62  62  . 76.237  121.700 21.251  1.00 3.14   1
. .
ATOM 3813 CG   CG   . LEU LEU LEU B B 62  62  . 77.313  121.148 22.216  1.00 3.08   1
. .
ATOM 3814 CD1  CD1  . LEU LEU LEU B B 62  62  . 77.542  122.094 23.396  1.00 7.62   1
. .
ATOM 3815 CD2  CD2  . LEU LEU LEU B B 62  62  . 77.020  119.735 22.658  1.00 4.39   1
. .
ATOM 3816 C    C    . LEU LEU LEU B B 62  62  . 74.799  121.623 19.266  1.00 2.00   1
. .
ATOM 3817 O    O    . LEU LEU LEU B B 62  62  . 73.637  121.284 19.518  1.00 2.00   1
. .
ATOM 3818 N    N    . LYS LYS LYS B B 63  63  . 75.081  122.578 18.388  1.00 2.00   1
. .
ATOM 3819 CA   CA   . LYS LYS LYS B B 63  63  . 73.944  123.275 17.761  1.00 2.07   1
. .
ATOM 3820 CB   CB   . LYS LYS LYS B B 63  63  . 74.394  124.540 17.029  1.00 2.01   1
. .
ATOM 3821 CG   CG   . LYS LYS LYS B B 63  63  . 74.645  125.683 17.931  1.00 5.15   1
. .
ATOM 3822 CD   CD   . LYS LYS LYS B B 63  63  . 75.146  126.882 17.238  1.00 6.28   1
. .
ATOM 3823 CE   CE   . LYS LYS LYS B B 63  63  . 75.847  127.823 18.276  1.00 11.53  1
. .
ATOM 3824 NZ   NZ   . LYS LYS LYS B B 63  63  . 76.433  129.075 17.670  1.00 10.87  1
. .
ATOM 3825 C    C    . LYS LYS LYS B B 63  63  . 73.192  122.364 16.811  1.00 2.27   1
. .
ATOM 3826 O    O    . LYS LYS LYS B B 63  63  . 71.917  122.322 16.802  1.00 4.02   1
. .
ATOM 3827 N    N    . ALA ALA ALA B B 64  64  . 73.980  121.649 15.991  1.00 2.79   1
. .
ATOM 3828 CA   CA   . ALA ALA ALA B B 64  64  . 73.398  120.725 15.070  1.00 2.92   1
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ATOM 3829 CB   CB   . ALA ALA ALA B B 64  64  . 74.495  120.113 14.132  1.00 2.53   1
. .
ATOM 3830 C    C    . ALA ALA ALA B B 64  64  . 72.657  119.622 15.832  1.00 2.68   1
. .
ATOM 3831 O    O    . ALA ALA ALA B B 64  64  . 71.568  119.195 15.492  1.00 3.25   1
. .
ATOM 3832 N    N    . VAL VAL VAL B B 65  65  . 73.275  119.109 16.883  1.00 3.03   1
. .
ATOM 3833 CA   CA   . VAL VAL VAL B B 65  65  . 72.578  118.093 17.672  1.00 2.66   1
. .
ATOM 3834 CB   CB   . VAL VAL VAL B B 65  65  . 73.510  117.608 18.797  1.00 3.40   1
. .
ATOM 3835 CG1  CG1  . VAL VAL VAL B B 65  65  . 72.760  116.876 19.910  1.00 2.62   1
. .
ATOM 3836 CG2  CG2  . VAL VAL VAL B B 65  65  . 74.766  116.756 18.256  1.00 2.00   1
. .
ATOM 3837 C    C    . VAL VAL VAL B B 65  65  . 71.245  118.655 18.202  1.00 2.53   1
. .
ATOM 3838 O    O    . VAL VAL VAL B B 65  65  . 70.246  117.987 18.177  1.00 2.96   1
. .
ATOM 3839 N    N    . ASP ASP ASP B B 66  66  . 71.258  119.880 18.706  1.00 2.95   1
. .
ATOM 3840 CA   CA   . ASP ASP ASP B B 66  66  . 70.026  120.509 19.176  1.00 3.41   1
. .
ATOM 3841 CB   CB   . ASP ASP ASP B B 66  66  . 70.339  121.860 19.767  1.00 5.07   1
. .
ATOM 3842 CG   CG   . ASP ASP ASP B B 66  66  . 69.093  122.599 20.231  1.00 14.52  1
. .
ATOM 3843 OD1  OD1  . ASP ASP ASP B B 66  66  . 68.776  123.703 19.645  1.00 20.75  1
. .
ATOM 3844 OD2  OD2  . ASP ASP ASP B B 66  66  . 68.410  122.049 21.141  1.00 18.89  1
. .
ATOM 3845 C    C    . ASP ASP ASP B B 66  66  . 68.990  120.608 18.071  1.00 3.48   1
. .
ATOM 3846 O    O    . ASP ASP ASP B B 66  66  . 67.802  120.437 18.310  1.00 4.38   1
. .
ATOM 3847 N    N    . HIS HIS HIS B B 67  67  . 69.422  120.955 16.866  1.00 2.53   1
. .
ATOM 3848 CA   CA   . HIS HIS HIS B B 67  67  . 68.437  121.101 15.822  1.00 3.73   1
. .
ATOM 3849 CB   CB   . HIS HIS HIS B B 67  67  . 69.045  121.619 14.511  1.00 3.79   1
. .
ATOM 3850 CG   CG   . HIS HIS HIS B B 67  67  . 69.440  123.065 14.578  1.00 3.60   1
. .
ATOM 3851 ND1  ND1  . HIS HIS HIS B B 67  67  . 68.586  124.052 15.022  1.00 8.05   1
. .
ATOM 3852 CE1  CE1  . HIS HIS HIS B B 67  67  . 69.207  125.215 14.985  1.00 9.33   1
. .
ATOM 3853 NE2  NE2  . HIS HIS HIS B B 67  67  . 70.443  125.013 14.564  1.00 6.91   1
. .
ATOM 3854 CD2  CD2  . HIS HIS HIS B B 67  67  . 70.600  123.676 14.268  1.00 3.28   1
. .
ATOM 3855 C    C    . HIS HIS HIS B B 67  67  . 67.732  119.788 15.607  1.00 2.83   1
. .
ATOM 3856 O    O    . HIS HIS HIS B B 67  67  . 66.520  119.717 15.348  1.00 2.55   1
. .
ATOM 3857 N    N    . ILE ILE ILE B B 68  68  . 68.483  118.692 15.616  1.00 3.40   1
. .
ATOM 3858 CA   CA   . ILE ILE ILE B B 68  68  . 67.877  117.405 15.423  1.00 2.34   1
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ATOM 3859 CB   CB   . ILE ILE ILE B B 68  68  . 68.945  116.252 15.384  1.00 2.35   1
. .
ATOM 3860 CG1  CG1  . ILE ILE ILE B B 68  68  . 69.780  116.391 14.128  1.00 2.51   1
. .
ATOM 3861 CD1  CD1  . ILE ILE ILE B B 68  68  . 71.103  115.541 14.142  1.00 2.03   1
. .
ATOM 3862 CG2  CG2  . ILE ILE ILE B B 68  68  . 68.250  114.932 15.422  1.00 3.19   1
. .
ATOM 3863 C    C    . ILE ILE ILE B B 68  68  . 66.963  117.084 16.642  1.00 2.27   1
. .
ATOM 3864 O    O    . ILE ILE ILE B B 68  68  . 65.800  116.720 16.413  1.00 4.57   1
. .
ATOM 3865 N    N    . ASN ASN ASN B B 69  69  . 67.475  117.201 17.873  1.00 2.48   1
. .
ATOM 3866 CA   CA   . ASN ASN ASN B B 69  69  . 66.633  116.758 19.006  1.00 4.14   1
. .
ATOM 3867 CB   CB   . ASN ASN ASN B B 69  69  . 67.449  116.630 20.271  1.00 3.52   1
. .
ATOM 3868 CG   CG   . ASN ASN ASN B B 69  69  . 68.518  115.535 20.144  1.00 4.62   1
. .
ATOM 3869 OD1  OD1  . ASN ASN ASN B B 69  69  . 68.302  114.589 19.417  1.00 5.41   1
. .
ATOM 3870 ND2  ND2  . ASN ASN ASN B B 69  69  . 69.657  115.677 20.894  1.00 3.63   1
. .
ATOM 3871 C    C    . ASN ASN ASN B B 69  69  . 65.373  117.616 19.286  1.00 6.44   1
. .
ATOM 3872 O    O    . ASN ASN ASN B B 69  69  . 64.376  117.089 19.699  1.00 7.44   1
. .
ATOM 3873 N    N    . SER SER SER B B 70  70  . 65.494  118.923 19.110  1.00 7.89   1
. .
ATOM 3874 CA   CA   . SER SER SER B B 70  70  . 64.422  119.851 19.428  1.00 9.84   1
. .
ATOM 3875 CB   CB   . SER SER SER B B 70  70  . 64.996  121.189 19.870  1.00 10.03  1
. .
ATOM 3876 OG   OG   . SER SER SER B B 70  70  . 65.734  121.039 21.070  1.00 18.75  1
. .
ATOM 3877 C    C    . SER SER SER B B 70  70  . 63.494  120.120 18.275  1.00 8.77   1
. .
ATOM 3878 O    O    . SER SER SER B B 70  70  . 62.320  120.460 18.506  1.00 11.33  1
. .
ATOM 3879 N    N    . THR THR THR B B 71  71  . 64.020  120.083 17.046  1.00 8.88   1
. .
ATOM 3880 CA   CA   . THR THR THR B B 71  71  . 63.238  120.536 15.873  1.00 8.59   1
. .
ATOM 3881 CB   CB   . THR THR THR B B 71  71  . 63.872  121.767 15.138  1.00 9.96   1
. .
ATOM 3882 OG1  OG1  . THR THR THR B B 71  71  . 64.087  122.832 16.069  1.00 12.95  1
. .
ATOM 3883 CG2  CG2  . THR THR THR B B 71  71  . 63.017  122.230 13.983  1.00 12.39  1
. .
ATOM 3884 C    C    . THR THR THR B B 71  71  . 62.936  119.471 14.877  1.00 6.21   1
. .
ATOM 3885 O    O    . THR THR THR B B 71  71  . 61.751  119.208 14.553  1.00 5.98   1
. .
ATOM 3886 N    N    . ILE ILE ILE B B 72  72  . 63.980  118.808 14.360  1.00 5.64   1
. .
ATOM 3887 CA   CA   . ILE ILE ILE B B 72  72  . 63.708  117.826 13.375  1.00 3.27   1
. .
ATOM 3888 CB   CB   . ILE ILE ILE B B 72  72  . 65.021  117.393 12.591  1.00 4.22   1
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ATOM 3889 CG1  CG1  . ILE ILE ILE B B 72  72  . 65.625  118.622 11.887  1.00 6.46   1
. .
ATOM 3890 CD1  CD1  . ILE ILE ILE B B 72  72  . 67.152  118.602 11.567  1.00 7.06   1
. .
ATOM 3891 CG2  CG2  . ILE ILE ILE B B 72  72  . 64.810  116.199 11.723  1.00 3.72   1
. .
ATOM 3892 C    C    . ILE ILE ILE B B 72  72  . 63.026  116.578 13.891  1.00 5.67   1
. .
ATOM 3893 O    O    . ILE ILE ILE B B 72  72  . 62.072  116.080 13.272  1.00 8.78   1
. .
ATOM 3894 N    N    . ALA ALA ALA B B 73  73  . 63.521  116.037 15.001  1.00 5.73   1
. .
ATOM 3895 CA   CA   . ALA ALA ALA B B 73  73  . 62.935  114.738 15.514  1.00 4.20   1
. .
ATOM 3896 CB   CB   . ALA ALA ALA B B 73  73  . 63.565  114.345 16.778  1.00 5.51   1
. .
ATOM 3897 C    C    . ALA ALA ALA B B 73  73  . 61.429  114.856 15.738  1.00 5.54   1
. .
ATOM 3898 O    O    . ALA ALA ALA B B 73  73  . 60.681  114.068 15.164  1.00 6.38   1
. .
ATOM 3899 N    N    . PRO PRO PRO B B 74  74  . 60.986  115.879 16.537  1.00 6.22   1
. .
ATOM 3900 CA   CA   . PRO PRO PRO B B 74  74  . 59.507  115.911 16.709  1.00 7.06   1
. .
ATOM 3901 CB   CB   . PRO PRO PRO B B 74  74  . 59.300  117.052 17.685  1.00 6.34   1
. .
ATOM 3902 CG   CG   . PRO PRO PRO B B 74  74  . 60.569  117.841 17.715  1.00 7.00   1
. .
ATOM 3903 CD   CD   . PRO PRO PRO B B 74  74  . 61.680  116.981 17.236  1.00 7.20   1
. .
ATOM 3904 C    C    . PRO PRO PRO B B 74  74  . 58.669  116.095 15.442  1.00 7.64   1
. .
ATOM 3905 O    O    . PRO PRO PRO B B 74  74  . 57.602  115.479 15.314  1.00 9.39   1
. .
ATOM 3906 N    N    . ALA ALA ALA B B 75  75  . 59.141  116.901 14.503  1.00 7.38   1
. .
ATOM 3907 CA   CA   . ALA ALA ALA B B 75  75  . 58.446  116.979 13.196  1.00 7.34   1
. .
ATOM 3908 CB   CB   . ALA ALA ALA B B 75  75  . 59.069  118.051 12.356  1.00 7.18   1
. .
ATOM 3909 C    C    . ALA ALA ALA B B 75  75  . 58.329  115.662 12.382  1.00 6.76   1
. .
ATOM 3910 O    O    . ALA ALA ALA B B 75  75  . 57.232  115.302 11.883  1.00 9.12   1
. .
ATOM 3911 N    N    . LEU LEU LEU B B 76  76  . 59.431  114.923 12.224  1.00 5.85   1
. .
ATOM 3912 CA   CA   . LEU LEU LEU B B 76  76  . 59.364  113.712 11.453  1.00 4.55   1
. .
ATOM 3913 CB   CB   . LEU LEU LEU B B 76  76  . 60.761  113.104 11.212  1.00 4.00   1
. .
ATOM 3914 CG   CG   . LEU LEU LEU B B 76  76  . 61.706  114.034 10.503  1.00 7.84   1
. .
ATOM 3915 CD1  CD1  . LEU LEU LEU B B 76  76  . 62.946  113.332 10.163  1.00 7.24   1
. .
ATOM 3916 CD2  CD2  . LEU LEU LEU B B 76  76  . 61.065  114.510 9.241   1.00 9.37   1
. .
ATOM 3917 C    C    . LEU LEU LEU B B 76  76  . 58.496  112.657 12.154  1.00 3.16   1
. .
ATOM 3918 O    O    . LEU LEU LEU B B 76  76  . 57.853  111.861 11.543  1.00 7.51   1
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ATOM 3919 N    N    . ILE ILE ILE B B 77  77  . 58.567  112.680 13.461  1.00 4.03   1
. .
ATOM 3920 CA   CA   . ILE ILE ILE B B 77  77  . 57.818  111.741 14.262  1.00 5.57   1
. .
ATOM 3921 CB   CB   . ILE ILE ILE B B 77  77  . 58.263  111.780 15.735  1.00 4.82   1
. .
ATOM 3922 CG1  CG1  . ILE ILE ILE B B 77  77  . 59.641  111.066 15.874  1.00 5.72   1
. .
ATOM 3923 CD1  CD1  . ILE ILE ILE B B 77  77  . 60.208  111.055 17.302  1.00 9.34   1
. .
ATOM 3924 CG2  CG2  . ILE ILE ILE B B 77  77  . 57.180  111.104 16.639  1.00 8.14   1
. .
ATOM 3925 C    C    . ILE ILE ILE B B 77  77  . 56.346  112.135 14.110  1.00 6.80   1
. .
ATOM 3926 O    O    . ILE ILE ILE B B 77  77  . 55.503  111.297 13.887  1.00 8.67   1
. .
ATOM 3927 N    N    . SER SER SER B B 78  78  . 56.043  113.405 14.269  1.00 7.09   1
. .
ATOM 3928 CA   CA   . SER SER SER B B 78  78  . 54.606  113.819 14.115  1.00 9.84   1
. .
ATOM 3929 CB   CB   . SER SER SER B B 78  78  . 54.490  115.334 14.326  1.00 8.98   1
. .
ATOM 3930 OG   OG   . SER SER SER B B 78  78  . 54.820  115.598 15.651  1.00 19.47  1
. .
ATOM 3931 C    C    . SER SER SER B B 78  78  . 54.072  113.509 12.737  1.00 9.59   1
. .
ATOM 3932 O    O    . SER SER SER B B 78  78  . 52.839  113.358 12.548  1.00 10.33  1
. .
ATOM 3933 N    N    . SER SER SER B B 79  79  . 54.945  113.426 11.754  1.00 9.25   1
. .
ATOM 3934 CA   CA   . SER SER SER B B 79  79  . 54.500  113.172 10.369  1.00 9.15   1
. .
ATOM 3935 CB   CB   . SER SER SER B B 79  79  . 55.679  113.322 9.413   1.00 10.62  1
. .
ATOM 3936 OG   OG   . SER SER SER B B 79  79  . 56.393  112.092 9.307   1.00 11.19  1
. .
ATOM 3937 C    C    . SER SER SER B B 79  79  . 53.838  111.825 10.141  1.00 9.28   1
. .
ATOM 3938 O    O    . SER SER SER B B 79  79  . 53.103  111.640 9.194   1.00 10.02  1
. .
ATOM 3939 N    N    . GLY GLY GLY B B 80  80  . 54.220  110.856 10.933  1.00 10.05  1
. .
ATOM 3940 CA   CA   . GLY GLY GLY B B 80  80  . 53.795  109.465 10.753  1.00 9.95   1
. .
ATOM 3941 C    C    . GLY GLY GLY B B 80  80  . 54.363  108.759 9.533   1.00 10.35  1
. .
ATOM 3942 O    O    . GLY GLY GLY B B 80  80  . 54.007  107.613 9.250   1.00 12.86  1
. .
ATOM 3943 N    N    . LEU LEU LEU B B 81  81  . 55.221  109.428 8.758   1.00 9.12   1
. .
ATOM 3944 CA   CA   . LEU LEU LEU B B 81  81  . 55.813  108.763 7.580   1.00 7.03   1
. .
ATOM 3945 CB   CB   . LEU LEU LEU B B 81  81  . 56.756  109.688 6.823   1.00 9.54   1
. .
ATOM 3946 CG   CG   . LEU LEU LEU B B 81  81  . 56.081  110.891 6.154   1.00 8.17   1
. .
ATOM 3947 CD1  CD1  . LEU LEU LEU B B 81  81  . 57.091  111.882 5.670   1.00 8.51   1
. .
ATOM 3948 CD2  CD2  . LEU LEU LEU B B 81  81  . 55.228  110.441 5.008   1.00 13.68  1
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ATOM 3949 C    C    . LEU LEU LEU B B 81  81  . 56.579  107.489 7.918   1.00 9.14   1
. .
ATOM 3950 O    O    . LEU LEU LEU B B 81  81  . 57.315  107.457 8.921   1.00 7.02   1
. .
ATOM 3951 N    N    . SER SER SER B B 82  82  . 56.407  106.465 7.085   1.00 9.05   1
. .
ATOM 3952 CA   CA   . SER SER SER B B 82  82  . 57.201  105.244 7.206   1.00 9.24   1
. .
ATOM 3953 CB   CB   . SER SER SER B B 82  82  . 56.674  104.158 6.284   1.00 8.34   1
. .
ATOM 3954 OG   OG   . SER SER SER B B 82  82  . 57.597  103.112 6.061   1.00 12.35  1
. .
ATOM 3955 C    C    . SER SER SER B B 82  82  . 58.610  105.615 6.815   1.00 7.64   1
. .
ATOM 3956 O    O    . SER SER SER B B 82  82  . 58.822  106.430 5.905   1.00 6.89   1
. .
ATOM 3957 N    N    . VAL VAL VAL B B 83  83  . 59.566  105.037 7.546   1.00 7.78   1
. .
ATOM 3958 CA   CA   . VAL VAL VAL B B 83  83  . 60.973  105.139 7.194   1.00 6.97   1
. .
ATOM 3959 CB   CB   . VAL VAL VAL B B 83  83  . 61.934  104.489 8.231   1.00 6.38   1
. .
ATOM 3960 CG1  CG1  . VAL VAL VAL B B 83  83  . 61.912  105.272 9.495   1.00 7.35   1
. .
ATOM 3961 CG2  CG2  . VAL VAL VAL B B 83  83  . 61.543  103.019 8.525   1.00 7.62   1
. .
ATOM 3962 C    C    . VAL VAL VAL B B 83  83  . 61.325  104.596 5.819   1.00 7.02   1
. .
ATOM 3963 O    O    . VAL VAL VAL B B 83  83  . 62.450  104.866 5.367   1.00 8.17   1
. .
ATOM 3964 N    N    . VAL VAL VAL B B 84  84  . 60.460  103.816 5.178   1.00 7.92   1
. .
ATOM 3965 CA   CA   . VAL VAL VAL B B 84  84  . 60.702  103.481 3.781   1.00 8.29   1
. .
ATOM 3966 CB   CB   . VAL VAL VAL B B 84  84  . 59.823  102.359 3.211   1.00 8.15   1
. .
ATOM 3967 CG1  CG1  . VAL VAL VAL B B 84  84  . 59.840  101.139 4.139   1.00 8.38   1
. .
ATOM 3968 CG2  CG2  . VAL VAL VAL B B 84  84  . 58.398  102.835 3.036   1.00 10.87  1
. .
ATOM 3969 C    C    . VAL VAL VAL B B 84  84  . 60.585  104.696 2.849   1.00 8.53   1
. .
ATOM 3970 O    O    . VAL VAL VAL B B 84  84  . 61.160  104.653 1.731   1.00 10.34  1
. .
ATOM 3971 N    N    . GLU GLU GLU B B 85  85  . 59.923  105.762 3.319   1.00 9.31   1
. .
ATOM 3972 CA   CA   . GLU GLU GLU B B 85  85  . 59.611  106.955 2.444   1.00 9.50   1
. .
ATOM 3973 CB   CB   . GLU GLU GLU B B 85  85  . 58.316  107.679 2.909   1.00 10.69  1
. .
ATOM 3974 CG   CG   . GLU GLU GLU B B 85  85  . 57.088  106.788 3.082   1.00 15.29  1
. .
ATOM 3975 CD   CD   . GLU GLU GLU B B 85  85  . 56.419  106.453 1.755   1.00 25.59  1
. .
ATOM 3976 OE1  OE1  . GLU GLU GLU B B 85  85  . 56.018  105.266 1.566   1.00 29.18  1
. .
ATOM 3977 OE2  OE2  . GLU GLU GLU B B 85  85  . 56.298  107.356 0.887   1.00 27.77  1
. .
ATOM 3978 C    C    . GLU GLU GLU B B 85  85  . 60.795  107.965 2.500   1.00 6.80   1
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ATOM 3979 O    O    . GLU GLU GLU B B 85  85  . 60.665  109.065 3.017   1.00 5.34   1
. .
ATOM 3980 N    N    . GLN GLN GLN B B 86  86  . 61.939  107.555 2.005   1.00 6.55   1
. .
ATOM 3981 CA   CA   . GLN GLN GLN B B 86  86  . 63.135  108.396 2.116   1.00 5.69   1
. .
ATOM 3982 CB   CB   . GLN GLN GLN B B 86  86  . 64.279  107.771 1.296   1.00 8.10   1
. .
ATOM 3983 CG   CG   . GLN GLN GLN B B 86  86  . 65.637  108.373 1.526   1.00 6.22   1
. .
ATOM 3984 CD   CD   . GLN GLN GLN B B 86  86  . 66.192  108.137 2.967   1.00 5.77   1
. .
ATOM 3985 OE1  OE1  . GLN GLN GLN B B 86  86  . 66.183  107.019 3.471   1.00 6.21   1
. .
ATOM 3986 NE2  NE2  . GLN GLN GLN B B 86  86  . 66.800  109.129 3.513   1.00 5.34   1
. .
ATOM 3987 C    C    . GLN GLN GLN B B 86  86  . 62.894  109.793 1.567   1.00 5.68   1
. .
ATOM 3988 O    O    . GLN GLN GLN B B 86  86  . 63.265  110.793 2.203   1.00 5.74   1
. .
ATOM 3989 N    N    . GLU GLU GLU B B 87  87  . 62.327  109.818 0.350   1.00 7.30   1
. .
ATOM 3990 CA   CA   . GLU GLU GLU B B 87  87  . 62.138  111.094 -0.364  1.00 6.91   1
. .
ATOM 3991 CB   CB   . GLU GLU GLU B B 87  87  . 61.621  110.886 -1.766  1.00 8.00   1
. .
ATOM 3992 CG   CG   . GLU GLU GLU B B 87  87  . 61.532  112.180 -2.555  1.00 15.05  1
. .
ATOM 3993 CD   CD   . GLU GLU GLU B B 87  87  . 61.546  111.921 -4.051  1.00 23.17  1
. .
ATOM 3994 OE1  OE1  . GLU GLU GLU B B 87  87  . 61.504  112.898 -4.817  1.00 28.21  1
. .
ATOM 3995 OE2  OE2  . GLU GLU GLU B B 87  87  . 61.616  110.740 -4.454  1.00 23.70  1
. .
ATOM 3996 C    C    . GLU GLU GLU B B 87  87  . 61.252  112.050 0.413   1.00 5.88   1
. .
ATOM 3997 O    O    . GLU GLU GLU B B 87  87  . 61.599  113.202 0.618   1.00 8.21   1
. .
ATOM 3998 N    N    . LYS LYS LYS B B 88  88  . 60.140  111.534 0.928   1.00 5.06   1
. .
ATOM 3999 CA   CA   . LYS LYS LYS B B 88  88  . 59.246  112.392 1.698   1.00 6.12   1
. .
ATOM 4000 CB   CB   . LYS LYS LYS B B 88  88  . 57.928  111.692 1.943   1.00 6.11   1
. .
ATOM 4001 CG   CG   . LYS LYS LYS B B 88  88  . 57.047  111.590 0.690   1.00 9.62   1
. .
ATOM 4002 CD   CD   . LYS LYS LYS B B 88  88  . 55.777  110.894 1.110   1.00 13.39  1
. .
ATOM 4003 CE   CE   . LYS LYS LYS B B 88  88  . 54.645  111.056 0.108   1.00 19.93  1
. .
ATOM 4004 NZ   NZ   . LYS LYS LYS B B 88  88  . 54.902  110.141 -1.020  1.00 23.80  1
. .
ATOM 4005 C    C    . LYS LYS LYS B B 88  88  . 59.843  112.911 2.977   1.00 5.48   1
. .
ATOM 4006 O    O    . LYS LYS LYS B B 88  88  . 59.644  114.075 3.352   1.00 5.95   1
. .
ATOM 4007 N    N    . LEU LEU LEU B B 89  89  . 60.577  112.013 3.677   1.00 6.89   1
. .
ATOM 4008 CA   CA   . LEU LEU LEU B B 89  89  . 61.216  112.418 4.916   1.00 6.02   1
. .
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ATOM 4009 CB   CB   . LEU LEU LEU B B 89  89  . 61.643  111.183 5.716   1.00 6.30   1
. .
ATOM 4010 CG   CG   . LEU LEU LEU B B 89  89  . 60.439  110.403 6.324   1.00 5.72   1
. .
ATOM 4011 CD1  CD1  . LEU LEU LEU B B 89  89  . 60.889  109.012 6.712   1.00 6.80   1
. .
ATOM 4012 CD2  CD2  . LEU LEU LEU B B 89  89  . 59.934  111.110 7.575   1.00 6.27   1
. .
ATOM 4013 C    C    . LEU LEU LEU B B 89  89  . 62.360  113.398 4.697   1.00 7.10   1
. .
ATOM 4014 O    O    . LEU LEU LEU B B 89  89  . 62.450  114.394 5.410   1.00 6.17   1
. .
ATOM 4015 N    N    . ASP ASP ASP B B 90  90  . 63.210  113.151 3.686   1.00 5.56   1
. .
ATOM 4016 CA   CA   . ASP ASP ASP B B 90  90  . 64.261  114.130 3.372   1.00 6.25   1
. .
ATOM 4017 CB   CB   . ASP ASP ASP B B 90  90  . 65.146  113.580 2.224   1.00 4.86   1
. .
ATOM 4018 CG   CG   . ASP ASP ASP B B 90  90  . 66.163  112.552 2.719   1.00 7.25   1
. .
ATOM 4019 OD1  OD1  . ASP ASP ASP B B 90  90  . 66.518  112.563 3.946   1.00 8.54   1
. .
ATOM 4020 OD2  OD2  . ASP ASP ASP B B 90  90  . 66.618  111.775 1.858   1.00 6.90   1
. .
ATOM 4021 C    C    . ASP ASP ASP B B 90  90  . 63.639  115.505 3.006   1.00 6.41   1
. .
ATOM 4022 O    O    . ASP ASP ASP B B 90  90  . 64.036  116.549 3.505   1.00 7.22   1
. .
ATOM 4023 N    N    . ASN ASN ASN B B 91  91  . 62.616  115.463 2.179   1.00 7.47   1
. .
ATOM 4024 CA   CA   . ASN ASN ASN B B 91  91  . 61.949  116.690 1.714   1.00 8.78   1
. .
ATOM 4025 CB   CB   . ASN ASN ASN B B 91  91  . 60.843  116.272 0.734   1.00 11.60  1
. .
ATOM 4026 CG   CG   . ASN ASN ASN B B 91  91  . 60.735  117.186 -0.384  1.00 19.58  1
. .
ATOM 4027 OD1  OD1  . ASN ASN ASN B B 91  91  . 60.175  118.285 -0.263  1.00 27.67  1
. .
ATOM 4028 ND2  ND2  . ASN ASN ASN B B 91  91  . 61.269  116.747 -1.527  1.00 28.46  1
. .
ATOM 4029 C    C    . ASN ASN ASN B B 91  91  . 61.347  117.528 2.841   1.00 8.25   1
. .
ATOM 4030 O    O    . ASN ASN ASN B B 91  91  . 61.464  118.766 2.852   1.00 7.00   1
. .
ATOM 4031 N    N    . LEU LEU LEU B B 92  92  . 60.684  116.850 3.814   1.00 7.53   1
. .
ATOM 4032 CA   CA   . LEU LEU LEU B B 92  92  . 60.217  117.498 5.033   1.00 6.97   1
. .
ATOM 4033 CB   CB   . LEU LEU LEU B B 92  92  . 59.503  116.486 5.938   1.00 7.82   1
. .
ATOM 4034 CG   CG   . LEU LEU LEU B B 92  92  . 58.699  116.987 7.119   1.00 13.89  1
. .
ATOM 4035 CD1  CD1  . LEU LEU LEU B B 92  92  . 57.624  117.964 6.609   1.00 13.07  1
. .
ATOM 4036 CD2  CD2  . LEU LEU LEU B B 92  92  . 57.970  115.741 7.630   1.00 16.40  1
. .
ATOM 4037 C    C    . LEU LEU LEU B B 92  92  . 61.397  118.200 5.739   1.00 6.68   1
. .
ATOM 4038 O    O    . LEU LEU LEU B B 92  92  . 61.303  119.372 6.120   1.00 8.35   1
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ATOM 4039 N    N    . MET MET MET B B 93  93  . 62.536  117.506 5.922   1.00 5.56   1
. .
ATOM 4040 CA   CA   . MET MET MET B B 93  93  . 63.701  118.211 6.443   1.00 5.34   1
. .
ATOM 4041 CB   CB   . MET MET MET B B 93  93  . 64.889  117.242 6.664   1.00 4.04   1
. .
ATOM 4042 CG   CG   . MET MET MET B B 93  93  . 64.634  116.254 7.818   1.00 8.62   1
. .
ATOM 4043 SD   SD   . MET MET MET B B 93  93  . 66.129  115.312 8.302   1.00 7.44   1
. .
ATOM 4044 CE   CE   . MET MET MET B B 93  93  . 66.331  114.274 6.874   1.00 6.73   1
. .
ATOM 4045 C    C    . MET MET MET B B 93  93  . 64.164  119.411 5.689   1.00 3.43   1
. .
ATOM 4046 O    O    . MET MET MET B B 93  93  . 64.535  120.407 6.275   1.00 4.00   1
. .
ATOM 4047 N    N    . LEU LEU LEU B B 94  94  . 64.225  119.266 4.363   1.00 3.92   1
. .
ATOM 4048 CA   CA   . LEU LEU LEU B B 94  94  . 64.651  120.342 3.457   1.00 7.72   1
. .
ATOM 4049 CB   CB   . LEU LEU LEU B B 94  94  . 64.615  119.886 2.007   1.00 8.59   1
. .
ATOM 4050 CG   CG   . LEU LEU LEU B B 94  94  . 65.589  118.737 1.586   1.00 13.41  1
. .
ATOM 4051 CD1  CD1  . LEU LEU LEU B B 94  94  . 65.702  118.676 0.063   1.00 17.64  1
. .
ATOM 4052 CD2  CD2  . LEU LEU LEU B B 94  94  . 66.944  118.817 2.199   1.00 12.75  1
. .
ATOM 4053 C    C    . LEU LEU LEU B B 94  94  . 63.745  121.545 3.611   1.00 5.92   1
. .
ATOM 4054 O    O    . LEU LEU LEU B B 94  94  . 64.258  122.658 3.734   1.00 6.67   1
. .
ATOM 4055 N    N    . GLU GLU GLU B B 95  95  . 62.446  121.310 3.694   1.00 7.51   1
. .
ATOM 4056 CA   CA   . GLU GLU GLU B B 95  95  . 61.486  122.427 3.884   1.00 6.87   1
. .
ATOM 4057 CB   CB   . GLU GLU GLU B B 95  95  . 60.097  121.953 3.515   1.00 8.63   1
. .
ATOM 4058 CG   CG   . GLU GLU GLU B B 95  95  . 60.002  121.734 2.013   1.00 12.53  1
. .
ATOM 4059 CD   CD   . GLU GLU GLU B B 95  95  . 60.288  123.018 1.268   1.00 22.31  1
. .
ATOM 4060 OE1  OE1  . GLU GLU GLU B B 95  95  . 61.068  122.961 0.260   1.00 27.50  1
. .
ATOM 4061 OE2  OE2  . GLU GLU GLU B B 95  95  . 59.769  124.083 1.715   1.00 23.48  1
. .
ATOM 4062 C    C    . GLU GLU GLU B B 95  95  . 61.523  123.094 5.253   1.00 7.58   1
. .
ATOM 4063 O    O    . GLU GLU GLU B B 95  95  . 61.328  124.285 5.337   1.00 9.13   1
. .
ATOM 4064 N    N    . LEU LEU LEU B B 96  96  . 61.819  122.337 6.318   1.00 6.69   1
. .
ATOM 4065 CA   CA   . LEU LEU LEU B B 96  96  . 61.977  122.889 7.654   1.00 8.09   1
. .
ATOM 4066 CB   CB   . LEU LEU LEU B B 96  96  . 61.971  121.755 8.723   1.00 9.10   1
. .
ATOM 4067 CG   CG   . LEU LEU LEU B B 96  96  . 60.600  121.131 9.023   1.00 12.88  1
. .
ATOM 4068 CD1  CD1  . LEU LEU LEU B B 96  96  . 60.802  120.032 10.014  1.00 14.61  1
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ATOM 4069 CD2  CD2  . LEU LEU LEU B B 96  96  . 59.650  122.153 9.625   1.00 7.11   1
. .
ATOM 4070 C    C    . LEU LEU LEU B B 96  96  . 63.223  123.729 7.803   1.00 8.56   1
. .
ATOM 4071 O    O    . LEU LEU LEU B B 96  96  . 63.220  124.800 8.438   1.00 9.58   1
. .
ATOM 4072 N    N    . ASP ASP ASP B B 97  97  . 64.292  123.313 7.132   1.00 6.22   1
. .
ATOM 4073 CA   CA   . ASP ASP ASP B B 97  97  . 65.481  124.143 7.113   1.00 7.98   1
. .
ATOM 4074 CB   CB   . ASP ASP ASP B B 97  97  . 66.652  123.376 6.544   1.00 8.07   1
. .
ATOM 4075 CG   CG   . ASP ASP ASP B B 97  97  . 67.829  124.266 6.331   1.00 9.76   1
. .
ATOM 4076 OD1  OD1  . ASP ASP ASP B B 97  97  . 68.672  124.375 7.232   1.00 10.69  1
. .
ATOM 4077 OD2  OD2  . ASP ASP ASP B B 97  97  . 67.863  124.892 5.272   1.00 10.49  1
. .
ATOM 4078 C    C    . ASP ASP ASP B B 97  97  . 65.262  125.441 6.284   1.00 8.59   1
. .
ATOM 4079 O    O    . ASP ASP ASP B B 97  97  . 65.680  126.566 6.688   1.00 9.62   1
. .
ATOM 4080 N    N    . GLY GLY GLY B B 98  98  . 64.689  125.224 5.092   1.00 8.29   1
. .
ATOM 4081 CA   CA   . GLY GLY GLY B B 98  98  . 64.183  126.283 4.270   1.00 9.43   1
. .
ATOM 4082 C    C    . GLY GLY GLY B B 98  98  . 65.249  127.047 3.476   1.00 11.17  1
. .
ATOM 4083 O    O    . GLY GLY GLY B B 98  98  . 64.901  127.947 2.709   1.00 12.37  1
. .
ATOM 4084 N    N    . THR THR THR B B 99  99  . 66.518  126.693 3.632   1.00 10.90  1
. .
ATOM 4085 CA   CA   . THR THR THR B B 99  99  . 67.632  127.420 2.975   1.00 10.35  1
. .
ATOM 4086 CB   CB   . THR THR THR B B 99  99  . 68.725  127.835 4.001   1.00 10.82  1
. .
ATOM 4087 OG1  OG1  . THR THR THR B B 99  99  . 69.379  126.640 4.484   1.00 8.69   1
. .
ATOM 4088 CG2  CG2  . THR THR THR B B 99  99  . 68.129  128.492 5.205   1.00 8.94   1
. .
ATOM 4089 C    C    . THR THR THR B B 99  99  . 68.276  126.509 1.910   1.00 11.82  1
. .
ATOM 4090 O    O    . THR THR THR B B 99  99  . 68.284  125.248 2.075   1.00 13.75  1
. .
ATOM 4091 N    N    . GLU GLU GLU B B 100 100 . 68.798  127.108 0.840   1.00 10.52  1
. .
ATOM 4092 CA   CA   . GLU GLU GLU B B 100 100 . 69.359  126.355 -0.271  1.00 12.35  1
. .
ATOM 4093 CB   CB   . GLU GLU GLU B B 100 100 . 69.810  127.270 -1.419  1.00 14.09  1
. .
ATOM 4094 CG   CG   . GLU GLU GLU B B 100 100 . 69.954  126.502 -2.751  1.00 21.02  1
. .
ATOM 4095 CD   CD   . GLU GLU GLU B B 100 100 . 68.755  125.542 -2.999  1.00 29.83  1
. .
ATOM 4096 OE1  OE1  . GLU GLU GLU B B 100 100 . 67.727  126.007 -3.505  1.00 31.73  1
. .
ATOM 4097 OE2  OE2  . GLU GLU GLU B B 100 100 . 68.813  124.332 -2.646  1.00 35.45  1
. .
ATOM 4098 C    C    . GLU GLU GLU B B 100 100 . 70.539  125.481 0.174   1.00 10.04  1
. .
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ATOM 4099 O    O    . GLU GLU GLU B B 100 100 . 70.662  124.322 -0.271  1.00 9.77   1
. .
ATOM 4100 N    N    . ASN ASN ASN B B 101 101 . 71.353  126.015 1.079   1.00 7.80   1
. .
ATOM 4101 CA   CA   . ASN ASN ASN B B 101 101 . 72.600  125.385 1.424   1.00 9.22   1
. .
ATOM 4102 CB   CB   . ASN ASN ASN B B 101 101 . 73.751  126.405 1.383   1.00 11.41  1
. .
ATOM 4103 CG   CG   . ASN ASN ASN B B 101 101 . 73.549  127.605 2.382   1.00 18.41  1
. .
ATOM 4104 OD1  OD1  . ASN ASN ASN B B 101 101 . 74.508  128.021 3.071   1.00 24.74  1
. .
ATOM 4105 ND2  ND2  . ASN ASN ASN B B 101 101 . 72.334  128.158 2.430   1.00 22.32  1
. .
ATOM 4106 C    C    . ASN ASN ASN B B 101 101 . 72.557  124.672 2.781   1.00 6.78   1
. .
ATOM 4107 O    O    . ASN ASN ASN B B 101 101 . 73.609  124.362 3.360   1.00 5.36   1
. .
ATOM 4108 N    N    . LYS LYS LYS B B 102 102 . 71.365  124.497 3.310   1.00 4.74   1
. .
ATOM 4109 CA   CA   . LYS LYS LYS B B 102 102 . 71.119  123.899 4.655   1.00 3.30   1
. .
ATOM 4110 CB   CB   . LYS LYS LYS B B 102 102 . 71.503  122.409 4.620   1.00 4.31   1
. .
ATOM 4111 CG   CG   . LYS LYS LYS B B 102 102 . 70.689  121.655 3.594   1.00 3.25   1
. .
ATOM 4112 CD   CD   . LYS LYS LYS B B 102 102 . 71.151  120.210 3.510   1.00 5.35   1
. .
ATOM 4113 CE   CE   . LYS LYS LYS B B 102 102 . 70.330  119.348 2.489   1.00 4.96   1
. .
ATOM 4114 NZ   NZ   . LYS LYS LYS B B 102 102 . 70.178  119.977 1.127   1.00 5.43   1
. .
ATOM 4115 C    C    . LYS LYS LYS B B 102 102 . 71.836  124.691 5.740   1.00 4.58   1
. .
ATOM 4116 O    O    . LYS LYS LYS B B 102 102 . 72.353  124.153 6.710   1.00 5.30   1
. .
ATOM 4117 N    N    . SER SER SER B B 103 103 . 71.781  126.039 5.645   1.00 5.64   1
. .
ATOM 4118 CA   CA   . SER SER SER B B 103 103 . 72.569  126.824 6.583   1.00 7.49   1
. .
ATOM 4119 CB   CB   . SER SER SER B B 103 103 . 72.990  128.165 6.007   1.00 8.18   1
. .
ATOM 4120 OG   OG   . SER SER SER B B 103 103 . 71.859  128.860 5.515   1.00 13.06  1
. .
ATOM 4121 C    C    . SER SER SER B B 103 103 . 71.841  127.028 7.935   1.00 8.58   1
. .
ATOM 4122 O    O    . SER SER SER B B 103 103 . 72.471  127.504 8.873   1.00 11.75  1
. .
ATOM 4123 N    N    . LYS LYS LYS B B 104 104 . 70.574  126.660 8.057   1.00 5.01   1
. .
ATOM 4124 CA   CA   . LYS LYS LYS B B 104 104 . 69.935  126.865 9.311   1.00 6.61   1
. .
ATOM 4125 CB   CB   . LYS LYS LYS B B 104 104 . 68.465  127.092 9.165   1.00 8.34   1
. .
ATOM 4126 CG   CG   . LYS LYS LYS B B 104 104 . 67.849  127.510 10.477  1.00 10.17  1
. .
ATOM 4127 CD   CD   . LYS LYS LYS B B 104 104 . 66.440  127.900 10.289  1.00 12.32  1
. .
ATOM 4128 CE   CE   . LYS LYS LYS B B 104 104 . 65.548  126.738 10.090  1.00 11.92  1
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ATOM 4129 NZ   NZ   . LYS LYS LYS B B 104 104 . 64.258  127.344 9.730   1.00 18.66  1
. .
ATOM 4130 C    C    . LYS LYS LYS B B 104 104 . 70.129  125.702 10.260  1.00 6.48   1
. .
ATOM 4131 O    O    . LYS LYS LYS B B 104 104 . 70.445  125.925 11.419  1.00 9.37   1
. .
ATOM 4132 N    N    . PHE PHE PHE B B 105 105 . 69.870  124.477 9.815   1.00 6.25   1
. .
ATOM 4133 CA   CA   . PHE PHE PHE B B 105 105 . 70.103  123.333 10.735  1.00 4.26   1
. .
ATOM 4134 CB   CB   . PHE PHE PHE B B 105 105 . 69.151  122.201 10.424  1.00 4.91   1
. .
ATOM 4135 CG   CG   . PHE PHE PHE B B 105 105 . 67.695  122.490 10.658  1.00 5.65   1
. .
ATOM 4136 CD1  CD1  . PHE PHE PHE B B 105 105 . 66.725  121.825 9.924   1.00 6.21   1
. .
ATOM 4137 CE1  CE1  . PHE PHE PHE B B 105 105 . 65.323  122.025 10.140  1.00 7.48   1
. .
ATOM 4138 CZ   CZ   . PHE PHE PHE B B 105 105 . 64.904  122.921 11.131  1.00 7.96   1
. .
ATOM 4139 CE2  CE2  . PHE PHE PHE B B 105 105 . 65.882  123.649 11.885  1.00 6.20   1
. .
ATOM 4140 CD2  CD2  . PHE PHE PHE B B 105 105 . 67.287  123.411 11.663  1.00 7.29   1
. .
ATOM 4141 C    C    . PHE PHE PHE B B 105 105 . 71.537  122.792 10.620  1.00 5.04   1
. .
ATOM 4142 O    O    . PHE PHE PHE B B 105 105 . 72.021  122.168 11.554  1.00 4.12   1
. .
ATOM 4143 N    N    . GLY GLY GLY B B 106 106 . 72.195  123.049 9.493   1.00 4.78   1
. .
ATOM 4144 CA   CA   . GLY GLY GLY B B 106 106 . 73.472  122.431 9.127   1.00 5.33   1
. .
ATOM 4145 C    C    . GLY GLY GLY B B 106 106 . 73.236  121.165 8.319   1.00 4.40   1
. .
ATOM 4146 O    O    . GLY GLY GLY B B 106 106 . 72.247  120.412 8.519   1.00 3.81   1
. .
ATOM 4147 N    N    . ALA ALA ALA B B 107 107 . 74.053  120.948 7.309   1.00 3.15   1
. .
ATOM 4148 CA   CA   . ALA ALA ALA B B 107 107 . 73.893  119.805 6.474   1.00 3.34   1
. .
ATOM 4149 CB   CB   . ALA ALA ALA B B 107 107 . 74.817  119.921 5.262   1.00 6.21   1
. .
ATOM 4150 C    C    . ALA ALA ALA B B 107 107 . 74.219  118.549 7.265   1.00 2.93   1
. .
ATOM 4151 O    O    . ALA ALA ALA B B 107 107 . 73.701  117.453 6.970   1.00 2.75   1
. .
ATOM 4152 N    N    . ASN ASN ASN B B 108 108 . 75.011  118.771 8.293   1.00 3.05   1
. .
ATOM 4153 CA   CA   . ASN ASN ASN B B 108 108 . 75.401  117.684 9.212   1.00 2.00   1
. .
ATOM 4154 CB   CB   . ASN ASN ASN B B 108 108 . 76.695  117.997 9.998   1.00 2.15   1
. .
ATOM 4155 CG   CG   . ASN ASN ASN B B 108 108 . 76.648  119.364 10.715  1.00 2.10   1
. .
ATOM 4156 OD1  OD1  . ASN ASN ASN B B 108 108 . 75.920  120.273 10.277  1.00 4.65   1
. .
ATOM 4157 ND2  ND2  . ASN ASN ASN B B 108 108 . 77.544  119.572 11.698  1.00 2.44   1
. .
ATOM 4158 C    C    . ASN ASN ASN B B 108 108 . 74.262  117.236 10.067  1.00 3.12   1
. .
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ATOM 4159 O    O    . ASN ASN ASN B B 108 108 . 74.154  116.055 10.409  1.00 3.83   1
. .
ATOM 4160 N    N    . ALA ALA ALA B B 109 109 . 73.391  118.144 10.472  1.00 2.64   1
. .
ATOM 4161 CA   CA   . ALA ALA ALA B B 109 109 . 72.196  117.700 11.174  1.00 2.20   1
. .
ATOM 4162 CB   CB   . ALA ALA ALA B B 109 109 . 71.485  118.860 11.814  1.00 3.35   1
. .
ATOM 4163 C    C    . ALA ALA ALA B B 109 109 . 71.269  116.919 10.249  1.00 2.77   1
. .
ATOM 4164 O    O    . ALA ALA ALA B B 109 109 . 70.816  115.798 10.585  1.00 4.47   1
. .
ATOM 4165 N    N    . ILE ILE ILE B B 110 110 . 70.996  117.439 9.035   1.00 2.93   1
. .
ATOM 4166 CA   CA   . ILE ILE ILE B B 110 110 . 70.008  116.791 8.167   1.00 2.00   1
. .
ATOM 4167 CB   CB   . ILE ILE ILE B B 110 110 . 69.622  117.733 6.999   1.00 2.19   1
. .
ATOM 4168 CG1  CG1  . ILE ILE ILE B B 110 110 . 68.937  118.983 7.553   1.00 2.77   1
. .
ATOM 4169 CD1  CD1  . ILE ILE ILE B B 110 110 . 68.701  119.974 6.446   1.00 6.28   1
. .
ATOM 4170 CG2  CG2  . ILE ILE ILE B B 110 110 . 68.875  116.981 5.816   1.00 4.20   1
. .
ATOM 4171 C    C    . ILE ILE ILE B B 110 110 . 70.501  115.447 7.620   1.00 2.28   1
. .
ATOM 4172 O    O    . ILE ILE ILE B B 110 110 . 69.783  114.456 7.601   1.00 2.06   1
. .
ATOM 4173 N    N    . LEU LEU LEU B B 111 111 . 71.789  115.404 7.314   1.00 2.00   1
. .
ATOM 4174 CA   CA   . LEU LEU LEU B B 111 111 . 72.302  114.123 6.792   1.00 2.00   1
. .
ATOM 4175 CB   CB   . LEU LEU LEU B B 111 111 . 73.728  114.298 6.366   1.00 2.00   1
. .
ATOM 4176 CG   CG   . LEU LEU LEU B B 111 111 . 74.313  112.992 5.709   1.00 2.00   1
. .
ATOM 4177 CD1  CD1  . LEU LEU LEU B B 111 111 . 73.480  112.486 4.502   1.00 2.58   1
. .
ATOM 4178 CD2  CD2  . LEU LEU LEU B B 111 111 . 75.724  113.365 5.362   1.00 2.09   1
. .
ATOM 4179 C    C    . LEU LEU LEU B B 111 111 . 72.239  113.039 7.884   1.00 2.00   1
. .
ATOM 4180 O    O    . LEU LEU LEU B B 111 111 . 71.939  111.920 7.553   1.00 2.13   1
. .
ATOM 4181 N    N    . GLY GLY GLY B B 112 112 . 72.555  113.380 9.126   1.00 2.00   1
. .
ATOM 4182 CA   CA   . GLY GLY GLY B B 112 112 . 72.650  112.343 10.187  1.00 2.20   1
. .
ATOM 4183 C    C    . GLY GLY GLY B B 112 112 . 71.293  111.618 10.251  1.00 2.00   1
. .
ATOM 4184 O    O    . GLY GLY GLY B B 112 112 . 71.170  110.354 10.344  1.00 4.12   1
. .
ATOM 4185 N    N    . VAL VAL VAL B B 113 113 . 70.228  112.412 10.186  1.00 2.72   1
. .
ATOM 4186 CA   CA   . VAL VAL VAL B B 113 113 . 68.884  111.860 10.195  1.00 2.00   1
. .
ATOM 4187 CB   CB   . VAL VAL VAL B B 113 113 . 67.814  112.933 10.486  1.00 2.00   1
. .
ATOM 4188 CG1  CG1  . VAL VAL VAL B B 113 113 . 66.436  112.325 10.536  1.00 3.63   1
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ATOM 4189 CG2  CG2  . VAL VAL VAL B B 113 113 . 68.072  113.615 11.803  1.00 2.30   1
. .
ATOM 4190 C    C    . VAL VAL VAL B B 113 113 . 68.573  111.068 8.920   1.00 2.00   1
. .
ATOM 4191 O    O    . VAL VAL VAL B B 113 113 . 68.066  109.973 8.987   1.00 2.40   1
. .
ATOM 4192 N    N    . SER SER SER B B 114 114 . 68.915  111.614 7.759   1.00 2.18   1
. .
ATOM 4193 CA   CA   . SER SER SER B B 114 114 . 68.663  111.014 6.493   1.00 2.12   1
. .
ATOM 4194 CB   CB   . SER SER SER B B 114 114 . 69.201  111.941 5.394   1.00 2.00   1
. .
ATOM 4195 OG   OG   . SER SER SER B B 114 114 . 68.814  111.510 4.118   1.00 4.10   1
. .
ATOM 4196 C    C    . SER SER SER B B 114 114 . 69.318  109.609 6.400   1.00 2.00   1
. .
ATOM 4197 O    O    . SER SER SER B B 114 114 . 68.735  108.654 5.970   1.00 2.50   1
. .
ATOM 4198 N    N    . LEU LEU LEU B B 115 115 . 70.579  109.529 6.835   1.00 2.00   1
. .
ATOM 4199 CA   CA   . LEU LEU LEU B B 115 115 . 71.216  108.210 6.841   1.00 2.00   1
. .
ATOM 4200 CB   CB   . LEU LEU LEU B B 115 115 . 72.719  108.364 7.209   1.00 2.03   1
. .
ATOM 4201 CG   CG   . LEU LEU LEU B B 115 115 . 73.566  109.294 6.377   1.00 2.00   1
. .
ATOM 4202 CD1  CD1  . LEU LEU LEU B B 115 115 . 74.910  109.509 7.051   1.00 2.17   1
. .
ATOM 4203 CD2  CD2  . LEU LEU LEU B B 115 115 . 73.701  108.593 4.972   1.00 2.02   1
. .
ATOM 4204 C    C    . LEU LEU LEU B B 115 115 . 70.567  107.193 7.759   1.00 2.00   1
. .
ATOM 4205 O    O    . LEU LEU LEU B B 115 115 . 70.425  106.018 7.368   1.00 3.50   1
. .
ATOM 4206 N    N    . ALA ALA ALA B B 116 116 . 70.196  107.625 8.943   1.00 2.01   1
. .
ATOM 4207 CA   CA   . ALA ALA ALA B B 116 116 . 69.558  106.681 9.904   1.00 2.16   1
. .
ATOM 4208 CB   CB   . ALA ALA ALA B B 116 116 . 69.458  107.348 11.258  1.00 2.15   1
. .
ATOM 4209 C    C    . ALA ALA ALA B B 116 116 . 68.190  106.257 9.359   1.00 2.33   1
. .
ATOM 4210 O    O    . ALA ALA ALA B B 116 116 . 67.824  105.100 9.470   1.00 2.17   1
. .
ATOM 4211 N    N    . VAL VAL VAL B B 117 117 . 67.479  107.179 8.728   1.00 3.84   1
. .
ATOM 4212 CA   CA   . VAL VAL VAL B B 117 117 . 66.193  106.848 8.144   1.00 2.55   1
. .
ATOM 4213 CB   CB   . VAL VAL VAL B B 117 117 . 65.519  108.104 7.493   1.00 3.60   1
. .
ATOM 4214 CG1  CG1  . VAL VAL VAL B B 117 117 . 64.521  107.744 6.461   1.00 2.34   1
. .
ATOM 4215 CG2  CG2  . VAL VAL VAL B B 117 117 . 64.920  109.019 8.648   1.00 2.89   1
. .
ATOM 4216 C    C    . VAL VAL VAL B B 117 117 . 66.394  105.720 7.110   1.00 3.15   1
. .
ATOM 4217 O    O    . VAL VAL VAL B B 117 117 . 65.635  104.738 7.042   1.00 4.19   1
. .
ATOM 4218 N    N    . CYS CYS CYS B B 118 118 . 67.358  105.918 6.239   1.00 2.48   1
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ATOM 4219 CA   CA   . CYS CYS CYS B B 118 118 . 67.663  104.933 5.224   1.00 2.15   1
. .
ATOM 4220 CB   CB   . CYS CYS CYS B B 118 118 . 68.800  105.444 4.300   1.00 3.84   1
. .
ATOM 4221 SG   SG   . CYS CYS CYS B B 118 118 . 68.991  104.582 2.800   1.00 7.67   1
. .
ATOM 4222 C    C    . CYS CYS CYS B B 118 118 . 67.937  103.550 5.805   1.00 2.33   1
. .
ATOM 4223 O    O    . CYS CYS CYS B B 118 118 . 67.442  102.527 5.271   1.00 2.97   1
. .
ATOM 4224 N    N    . LYS LYS LYS B B 119 119 . 68.762  103.491 6.824   1.00 2.00   1
. .
ATOM 4225 CA   CA   . LYS LYS LYS B B 119 119 . 69.064  102.158 7.448   1.00 2.90   1
. .
ATOM 4226 CB   CB   . LYS LYS LYS B B 119 119 . 70.166  102.331 8.485   1.00 2.13   1
. .
ATOM 4227 CG   CG   . LYS LYS LYS B B 119 119 . 71.525  102.681 7.994   1.00 3.92   1
. .
ATOM 4228 CD   CD   . LYS LYS LYS B B 119 119 . 72.470  102.987 9.156   1.00 4.29   1
. .
ATOM 4229 CE   CE   . LYS LYS LYS B B 119 119 . 73.779  103.726 8.710   1.00 5.31   1
. .
ATOM 4230 NZ   NZ   . LYS LYS LYS B B 119 119 . 74.897  103.674 9.721   1.00 11.24  1
. .
ATOM 4231 C    C    . LYS LYS LYS B B 119 119 . 67.769  101.577 8.034   1.00 3.17   1
. .
ATOM 4232 O    O    . LYS LYS LYS B B 119 119 . 67.471  100.361 7.930   1.00 6.70   1
. .
ATOM 4233 N    N    . ALA ALA ALA B B 120 120 . 66.982  102.415 8.664   1.00 2.40   1
. .
ATOM 4234 CA   CA   . ALA ALA ALA B B 120 120 . 65.727  101.930 9.204   1.00 4.96   1
. .
ATOM 4235 CB   CB   . ALA ALA ALA B B 120 120 . 65.113  102.962 10.131  1.00 4.29   1
. .
ATOM 4236 C    C    . ALA ALA ALA B B 120 120 . 64.762  101.519 8.112   1.00 4.81   1
. .
ATOM 4237 O    O    . ALA ALA ALA B B 120 120 . 63.977  100.546 8.276   1.00 7.68   1
. .
ATOM 4238 N    N    . GLY GLY GLY B B 121 121 . 64.808  102.245 6.993   1.00 4.27   1
. .
ATOM 4239 CA   CA   . GLY GLY GLY B B 121 121 . 64.009  101.873 5.873   1.00 4.24   1
. .
ATOM 4240 C    C    . GLY GLY GLY B B 121 121 . 64.288  100.472 5.360   1.00 5.05   1
. .
ATOM 4241 O    O    . GLY GLY GLY B B 121 121 . 63.379  99.713  4.995   1.00 4.91   1
. .
ATOM 4242 N    N    . ALA ALA ALA B B 122 122 . 65.573  100.121 5.240   1.00 5.24   1
. .
ATOM 4243 CA   CA   . ALA ALA ALA B B 122 122 . 65.943  98.845  4.731   1.00 5.05   1
. .
ATOM 4244 CB   CB   . ALA ALA ALA B B 122 122 . 67.478  98.743  4.651   1.00 3.48   1
. .
ATOM 4245 C    C    . ALA ALA ALA B B 122 122 . 65.367  97.782  5.601   1.00 5.62   1
. .
ATOM 4246 O    O    . ALA ALA ALA B B 122 122 . 64.850  96.780  5.103   1.00 6.36   1
. .
ATOM 4247 N    N    . ALA ALA ALA B B 123 123 . 65.480  97.990  6.888   1.00 3.61   1
. .
ATOM 4248 CA   CA   . ALA ALA ALA B B 123 123 . 64.948  96.990  7.829   1.00 4.96   1
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ATOM 4249 CB   CB   . ALA ALA ALA B B 123 123 . 65.428  97.344  9.172   1.00 3.07   1
. .
ATOM 4250 C    C    . ALA ALA ALA B B 123 123 . 63.439  96.851  7.768   1.00 7.11   1
. .
ATOM 4251 O    O    . ALA ALA ALA B B 123 123 . 62.887  95.748  7.898   1.00 9.69   1
. .
ATOM 4252 N    N    . GLU GLU GLU B B 124 124 . 62.736  97.928  7.465   1.00 9.51   1
. .
ATOM 4253 CA   CA   . GLU GLU GLU B B 124 124 . 61.295  97.820  7.288   1.00 12.06  1
. .
ATOM 4254 CB   CB   . GLU GLU GLU B B 124 124 . 60.614  99.200  7.360   1.00 12.40  1
. .
ATOM 4255 CG   CG   . GLU GLU GLU B B 124 124 . 59.088  99.261  7.087   1.00 19.87  1
. .
ATOM 4256 CD   CD   . GLU GLU GLU B B 124 124 . 58.185  98.662  8.145   1.00 27.87  1
. .
ATOM 4257 OE1  OE1  . GLU GLU GLU B B 124 124 . 57.178  98.013  7.758   1.00 32.19  1
. .
ATOM 4258 OE2  OE2  . GLU GLU GLU B B 124 124 . 58.422  98.832  9.361   1.00 33.02  1
. .
ATOM 4259 C    C    . GLU GLU GLU B B 124 124 . 60.972  97.018  6.011   1.00 10.90  1
. .
ATOM 4260 O    O    . GLU GLU GLU B B 124 124 . 59.987  96.301  5.991   1.00 12.78  1
. .
ATOM 4261 N    N    . ARG ARG ARG B B 125 125 . 61.794  97.108  4.990   1.00 10.34  1
. .
ATOM 4262 CA   CA   . ARG ARG ARG B B 125 125 . 61.605  96.414  3.732   1.00 11.41  1
. .
ATOM 4263 CB   CB   . ARG ARG ARG B B 125 125 . 62.416  97.074  2.642   1.00 12.07  1
. .
ATOM 4264 CG   CG   . ARG ARG ARG B B 125 125 . 61.875  98.445  2.176   1.00 11.18  1
. .
ATOM 4265 CD   CD   . ARG ARG ARG B B 125 125 . 60.620  98.276  1.325   1.00 12.50  1
. .
ATOM 4266 NE   NE   . ARG ARG ARG B B 125 125 . 60.427  99.384  0.387   1.00 17.56  1
. .
ATOM 4267 CZ   CZ   . ARG ARG ARG B B 125 125 . 59.272  100.037 0.233   1.00 23.21  1
. .
ATOM 4268 NH1  NH1  . ARG ARG ARG B B 125 125 . 58.188  99.708  0.931   1.00 26.38  1
. .
ATOM 4269 NH2  NH2  . ARG ARG ARG B B 125 125 . 59.189  101.008 -0.653  1.00 23.43  1
. .
ATOM 4270 C    C    . ARG ARG ARG B B 125 125 . 62.070  94.980  3.835   1.00 11.73  1
. .
ATOM 4271 O    O    . ARG ARG ARG B B 125 125 . 61.878  94.204  2.878   1.00 13.42  1
. .
ATOM 4272 N    N    . GLU GLU GLU B B 126 126 . 62.709  94.654  4.959   1.00 11.31  1
. .
ATOM 4273 CA   CA   . GLU GLU GLU B B 126 126 . 63.376  93.380  5.207   1.00 11.54  1
. .
ATOM 4274 CB   CB   . GLU GLU GLU B B 126 126 . 62.392  92.189  5.445   1.00 13.12  1
. .
ATOM 4275 CG   CG   . GLU GLU GLU B B 126 126 . 61.724  92.284  6.809   1.00 21.19  1
. .
ATOM 4276 CD   CD   . GLU GLU GLU B B 126 126 . 60.633  91.217  7.038   1.00 30.62  1
. .
ATOM 4277 OE1  OE1  . GLU GLU GLU B B 126 126 . 60.513  90.710  8.175   1.00 36.14  1
. .
ATOM 4278 OE2  OE2  . GLU GLU GLU B B 126 126 . 59.893  90.884  6.089   1.00 34.23  1
. .
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ATOM 4279 C    C    . GLU GLU GLU B B 126 126 . 64.379  93.104  4.100   1.00 10.54  1
. .
ATOM 4280 O    O    . GLU GLU GLU B B 126 126 . 64.427  92.038  3.553   1.00 10.89  1
. .
ATOM 4281 N    N    . LEU LEU LEU B B 127 127 . 65.203  94.107  3.813   1.00 9.17   1
. .
ATOM 4282 CA   CA   . LEU LEU LEU B B 127 127 . 66.240  94.004  2.802   1.00 8.94   1
. .
ATOM 4283 CB   CB   . LEU LEU LEU B B 127 127 . 65.903  94.982  1.670   1.00 9.51   1
. .
ATOM 4284 CG   CG   . LEU LEU LEU B B 127 127 . 64.852  94.589  0.663   1.00 12.77  1
. .
ATOM 4285 CD1  CD1  . LEU LEU LEU B B 127 127 . 64.524  95.868  -0.167  1.00 15.53  1
. .
ATOM 4286 CD2  CD2  . LEU LEU LEU B B 127 127 . 65.317  93.470  -0.279  1.00 14.89  1
. .
ATOM 4287 C    C    . LEU LEU LEU B B 127 127 . 67.581  94.430  3.368   1.00 7.18   1
. .
ATOM 4288 O    O    . LEU LEU LEU B B 127 127 . 67.610  95.277  4.250   1.00 6.55   1
. .
ATOM 4289 N    N    . PRO PRO PRO B B 128 128 . 68.706  93.888  2.880   1.00 7.48   1
. .
ATOM 4290 CA   CA   . PRO PRO PRO B B 128 128 . 70.012  94.527  3.273   1.00 6.71   1
. .
ATOM 4291 CB   CB   . PRO PRO PRO B B 128 128 . 71.079  93.631  2.647   1.00 8.17   1
. .
ATOM 4292 CG   CG   . PRO PRO PRO B B 128 128 . 70.368  92.731  1.693   1.00 10.15  1
. .
ATOM 4293 CD   CD   . PRO PRO PRO B B 128 128 . 68.881  92.709  2.017   1.00 10.34  1
. .
ATOM 4294 C    C    . PRO PRO PRO B B 128 128 . 70.100  95.988  2.747   1.00 5.54   1
. .
ATOM 4295 O    O    . PRO PRO PRO B B 128 128 . 69.439  96.294  1.782   1.00 6.23   1
. .
ATOM 4296 N    N    . LEU LEU LEU B B 129 129 . 70.869  96.850  3.440   1.00 4.10   1
. .
ATOM 4297 CA   CA   . LEU LEU LEU B B 129 129 . 70.952  98.251  3.080   1.00 2.27   1
. .
ATOM 4298 CB   CB   . LEU LEU LEU B B 129 129 . 71.949  98.984  3.943   1.00 2.61   1
. .
ATOM 4299 CG   CG   . LEU LEU LEU B B 129 129 . 72.020  100.520 3.759   1.00 2.86   1
. .
ATOM 4300 CD1  CD1  . LEU LEU LEU B B 129 129 . 70.765  101.271 3.858   1.00 3.89   1
. .
ATOM 4301 CD2  CD2  . LEU LEU LEU B B 129 129 . 73.046  101.044 4.692   1.00 5.66   1
. .
ATOM 4302 C    C    . LEU LEU LEU B B 129 129 . 71.221  98.404  1.599   1.00 2.34   1
. .
ATOM 4303 O    O    . LEU LEU LEU B B 129 129 . 70.598  99.207  0.976   1.00 3.21   1
. .
ATOM 4304 N    N    . TYR TYR TYR B B 130 130 . 72.146  97.631  1.059   1.00 2.78   1
. .
ATOM 4305 CA   CA   . TYR TYR TYR B B 130 130 . 72.588  97.881  -0.285  1.00 2.81   1
. .
ATOM 4306 CB   CB   . TYR TYR TYR B B 130 130 . 73.875  97.078  -0.579  1.00 2.83   1
. .
ATOM 4307 CG   CG   . TYR TYR TYR B B 130 130 . 73.788  95.607  -0.475  1.00 2.48   1
. .
ATOM 4308 CD1  CD1  . TYR TYR TYR B B 130 130 . 73.422  94.886  -1.556  1.00 3.25   1
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ATOM 4309 CE1  CE1  . TYR TYR TYR B B 130 130 . 73.284  93.465  -1.471  1.00 5.62   1
. .
ATOM 4310 CZ   CZ   . TYR TYR TYR B B 130 130 . 73.528  92.844  -0.272  1.00 6.80   1
. .
ATOM 4311 OH   OH   . TYR TYR TYR B B 130 130 . 73.436  91.449  -0.223  1.00 13.99  1
. .
ATOM 4312 CE2  CE2  . TYR TYR TYR B B 130 130 . 73.944  93.577  0.837   1.00 4.34   1
. .
ATOM 4313 CD2  CD2  . TYR TYR TYR B B 130 130 . 74.043  94.965  0.720   1.00 3.33   1
. .
ATOM 4314 C    C    . TYR TYR TYR B B 130 130 . 71.431  97.630  -1.255  1.00 3.36   1
. .
ATOM 4315 O    O    . TYR TYR TYR B B 130 130 . 71.300  98.284  -2.308  1.00 5.32   1
. .
ATOM 4316 N    N    . ARG ARG ARG B B 131 131 . 70.557  96.690  -0.869  1.00 4.09   1
. .
ATOM 4317 CA   CA   . ARG ARG ARG B B 131 131 . 69.415  96.367  -1.742  1.00 5.20   1
. .
ATOM 4318 CB   CB   . ARG ARG ARG B B 131 131 . 68.848  95.002  -1.369  1.00 6.71   1
. .
ATOM 4319 CG   CG   . ARG ARG ARG B B 131 131 . 69.712  93.842  -1.856  1.00 12.36  1
. .
ATOM 4320 CD   CD   . ARG ARG ARG B B 131 131 . 68.862  92.564  -2.067  1.00 23.66  1
. .
ATOM 4321 NE   NE   . ARG ARG ARG B B 131 131 . 69.623  91.410  -2.526  1.00 32.14  1
. .
ATOM 4322 CZ   CZ   . ARG ARG ARG B B 131 131 . 69.972  91.188  -3.799  1.00 36.56  1
. .
ATOM 4323 NH1  NH1  . ARG ARG ARG B B 131 131 . 70.683  90.106  -4.118  1.00 38.72  1
. .
ATOM 4324 NH2  NH2  . ARG ARG ARG B B 131 131 . 69.618  92.043  -4.754  1.00 36.27  1
. .
ATOM 4325 C    C    . ARG ARG ARG B B 131 131 . 68.329  97.450  -1.643  1.00 5.16   1
. .
ATOM 4326 O    O    . ARG ARG ARG B B 131 131 . 67.680  97.776  -2.656  1.00 6.42   1
. .
ATOM 4327 N    N    . HIS HIS HIS B B 132 132 . 68.112  98.001  -0.429  1.00 4.46   1
. .
ATOM 4328 CA   CA   . HIS HIS HIS B B 132 132 . 67.163  99.095  -0.279  1.00 4.64   1
. .
ATOM 4329 CB   CB   . HIS HIS HIS B B 132 132 . 67.109  99.441  1.169   1.00 2.67   1
. .
ATOM 4330 CG   CG   . HIS HIS HIS B B 132 132 . 66.230  100.615 1.529   1.00 3.74   1
. .
ATOM 4331 ND1  ND1  . HIS HIS HIS B B 132 132 . 64.904  100.726 1.161   1.00 6.66   1
. .
ATOM 4332 CE1  CE1  . HIS HIS HIS B B 132 132 . 64.393  101.806 1.730   1.00 8.97   1
. .
ATOM 4333 NE2  NE2  . HIS HIS HIS B B 132 132 . 65.328  102.391 2.449   1.00 4.42   1
. .
ATOM 4334 CD2  CD2  . HIS HIS HIS B B 132 132 . 66.475  101.655 2.359   1.00 4.27   1
. .
ATOM 4335 C    C    . HIS HIS HIS B B 132 132 . 67.592  100.304 -1.132  1.00 3.59   1
. .
ATOM 4336 O    O    . HIS HIS HIS B B 132 132 . 66.773  100.938 -1.822  1.00 4.32   1
. .
ATOM 4337 N    N    . ILE ILE ILE B B 133 133 . 68.882  100.606 -1.073  1.00 4.73   1
. .
ATOM 4338 CA   CA   . ILE ILE ILE B B 133 133 . 69.405  101.751 -1.811  1.00 2.59   1
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ATOM 4339 CB   CB   . ILE ILE ILE B B 133 133 . 70.893  101.996 -1.470  1.00 2.85   1
. .
ATOM 4340 CG1  CG1  . ILE ILE ILE B B 133 133 . 70.954  102.560 0.009   1.00 2.00   1
. .
ATOM 4341 CD1  CD1  . ILE ILE ILE B B 133 133 . 72.332  102.775 0.567   1.00 5.27   1
. .
ATOM 4342 CG2  CG2  . ILE ILE ILE B B 133 133 . 71.504  102.994 -2.407  1.00 4.72   1
. .
ATOM 4343 C    C    . ILE ILE ILE B B 133 133 . 69.188  101.481 -3.281  1.00 2.39   1
. .
ATOM 4344 O    O    . ILE ILE ILE B B 133 133 . 68.839  102.403 -3.976  1.00 4.96   1
. .
ATOM 4345 N    N    . ALA ALA ALA B B 134 134 . 69.455  100.271 -3.762  1.00 3.67   1
. .
ATOM 4346 CA   CA   . ALA ALA ALA B B 134 134 . 69.197  99.964  -5.192  1.00 3.52   1
. .
ATOM 4347 CB   CB   . ALA ALA ALA B B 134 134 . 69.555  98.502  -5.503  1.00 2.75   1
. .
ATOM 4348 C    C    . ALA ALA ALA B B 134 134 . 67.743  100.232 -5.522  1.00 4.71   1
. .
ATOM 4349 O    O    . ALA ALA ALA B B 134 134 . 67.442  100.799 -6.566  1.00 6.64   1
. .
ATOM 4350 N    N    . GLN GLN GLN B B 135 135 . 66.835  99.836  -4.656  1.00 5.24   1
. .
ATOM 4351 CA   CA   . GLN GLN GLN B B 135 135 . 65.414  100.071 -4.998  1.00 6.96   1
. .
ATOM 4352 CB   CB   . GLN GLN GLN B B 135 135 . 64.521  99.309  -4.070  1.00 8.14   1
. .
ATOM 4353 CG   CG   . GLN GLN GLN B B 135 135 . 64.675  97.795  -4.288  1.00 8.55   1
. .
ATOM 4354 CD   CD   . GLN GLN GLN B B 135 135 . 63.661  96.978  -3.515  1.00 11.94  1
. .
ATOM 4355 OE1  OE1  . GLN GLN GLN B B 135 135 . 62.983  97.501  -2.626  1.00 13.07  1
. .
ATOM 4356 NE2  NE2  . GLN GLN GLN B B 135 135 . 63.557  95.688  -3.843  1.00 12.19  1
. .
ATOM 4357 C    C    . GLN GLN GLN B B 135 135 . 65.080  101.568 -4.995  1.00 6.28   1
. .
ATOM 4358 O    O    . GLN GLN GLN B B 135 135 . 64.307  102.049 -5.869  1.00 8.23   1
. .
ATOM 4359 N    N    . LEU LEU LEU B B 136 136 . 65.659  102.326 -4.062  1.00 6.29   1
. .
ATOM 4360 CA   CA   . LEU LEU LEU B B 136 136 . 65.458  103.815 -4.039  1.00 6.65   1
. .
ATOM 4361 CB   CB   . LEU LEU LEU B B 136 136 . 66.142  104.446 -2.843  1.00 5.80   1
. .
ATOM 4362 CG   CG   . LEU LEU LEU B B 136 136 . 65.554  104.136 -1.461  1.00 3.59   1
. .
ATOM 4363 CD1  CD1  . LEU LEU LEU B B 136 136 . 66.450  104.773 -0.385  1.00 5.02   1
. .
ATOM 4364 CD2  CD2  . LEU LEU LEU B B 136 136 . 64.092  104.618 -1.300  1.00 9.32   1
. .
ATOM 4365 C    C    . LEU LEU LEU B B 136 136 . 65.958  104.457 -5.305  1.00 7.25   1
. .
ATOM 4366 O    O    . LEU LEU LEU B B 136 136 . 65.436  105.510 -5.742  1.00 7.56   1
. .
ATOM 4367 N    N    . ALA ALA ALA B B 137 137 . 67.033  103.881 -5.825  1.00 4.43   1
. .
ATOM 4368 CA   CA   . ALA ALA ALA B B 137 137 . 67.702  104.381 -7.047  1.00 6.82   1
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ATOM 4369 CB   CB   . ALA ALA ALA B B 137 137 . 69.208  104.125 -6.967  1.00 6.66   1
. .
ATOM 4370 C    C    . ALA ALA ALA B B 137 137 . 67.143  103.770 -8.348  1.00 9.50   1
. .
ATOM 4371 O    O    . ALA ALA ALA B B 137 137 . 67.512  104.248 -9.433  1.00 10.24  1
. .
ATOM 4372 N    N    . GLY GLY GLY B B 138 138 . 66.276  102.764 -8.258  1.00 11.43  1
. .
ATOM 4373 CA   CA   . GLY GLY GLY B B 138 138 . 65.746  102.025 -9.401  1.00 14.62  1
. .
ATOM 4374 C    C    . GLY GLY GLY B B 138 138 . 66.789  101.133 -10.048 1.00 15.76  1
. .
ATOM 4375 O    O    . GLY GLY GLY B B 138 138 . 66.847  101.034 -11.290 1.00 17.57  1
. .
ATOM 4376 N    N    . ASN ASN ASN B B 139 139 . 67.639  100.498 -9.251  1.00 16.48  1
. .
ATOM 4377 CA   CA   . ASN ASN ASN B B 139 139 . 68.660  99.596  -9.808  1.00 18.23  1
. .
ATOM 4378 CB   CB   . ASN ASN ASN B B 139 139 . 70.055  99.960  -9.316  1.00 16.61  1
. .
ATOM 4379 CG   CG   . ASN ASN ASN B B 139 139 . 70.530  101.244 -9.902  1.00 18.30  1
. .
ATOM 4380 OD1  OD1  . ASN ASN ASN B B 139 139 . 70.080  101.616 -10.967 1.00 19.26  1
. .
ATOM 4381 ND2  ND2  . ASN ASN ASN B B 139 139 . 71.435  101.953 -9.207  1.00 15.50  1
. .
ATOM 4382 C    C    . ASN ASN ASN B B 139 139 . 68.397  98.148  -9.503  1.00 19.86  1
. .
ATOM 4383 O    O    . ASN ASN ASN B B 139 139 . 67.903  97.837  -8.427  1.00 21.01  1
. .
ATOM 4384 N    N    . SER SER SER B B 140 140 . 68.749  97.256  -10.427 1.00 22.48  1
. .
ATOM 4385 CA   CA   . SER SER SER B B 140 140 . 68.530  95.821  -10.199 1.00 24.31  1
. .
ATOM 4386 CB   CB   . SER SER SER B B 140 140 . 67.506  95.279  -11.174 1.00 24.59  1
. .
ATOM 4387 OG   OG   . SER SER SER B B 140 140 . 67.664  93.877  -11.332 1.00 27.47  1
. .
ATOM 4388 C    C    . SER SER SER B B 140 140 . 69.804  94.993  -10.244 1.00 25.75  1
. .
ATOM 4389 O    O    . SER SER SER B B 140 140 . 69.952  94.028  -9.501  1.00 27.56  1
. .
ATOM 4390 N    N    . ASP ASP ASP B B 141 141 . 70.715  95.354  -11.133 1.00 26.99  1
. .
ATOM 4391 CA   CA   . ASP ASP ASP B B 141 141 . 72.045  94.801  -11.101 1.00 27.74  1
. .
ATOM 4392 CB   CB   . ASP ASP ASP B B 141 141 . 72.841  95.198  -12.372 1.00 30.10  1
. .
ATOM 4393 CG   CG   . ASP ASP ASP B B 141 141 . 72.875  96.734  -12.631 1.00 35.14  1
. .
ATOM 4394 OD1  OD1  . ASP ASP ASP B B 141 141 . 73.980  97.266  -12.916 1.00 38.58  1
. .
ATOM 4395 OD2  OD2  . ASP ASP ASP B B 141 141 . 71.806  97.407  -12.578 1.00 39.57  1
. .
ATOM 4396 C    C    . ASP ASP ASP B B 141 141 . 72.713  95.293  -9.811  1.00 26.45  1
. .
ATOM 4397 O    O    . ASP ASP ASP B B 141 141 . 72.350  96.343  -9.256  1.00 26.44  1
. .
ATOM 4398 N    N    . LEU LEU LEU B B 142 142 . 73.659  94.531  -9.289  1.00 22.98  1
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ATOM 4399 CA   CA   . LEU LEU LEU B B 142 142 . 74.541  95.116  -8.283  1.00 20.21  1
. .
ATOM 4400 CB   CB   . LEU LEU LEU B B 142 142 . 74.349  94.482  -6.921  1.00 20.28  1
. .
ATOM 4401 CG   CG   . LEU LEU LEU B B 142 142 . 72.965  94.387  -6.296  1.00 21.39  1
. .
ATOM 4402 CD1  CD1  . LEU LEU LEU B B 142 142 . 73.018  93.245  -5.350  1.00 21.02  1
. .
ATOM 4403 CD2  CD2  . LEU LEU LEU B B 142 142 . 72.579  95.658  -5.550  1.00 24.35  1
. .
ATOM 4404 C    C    . LEU LEU LEU B B 142 142 . 75.914  94.857  -8.766  1.00 16.94  1
. .
ATOM 4405 O    O    . LEU LEU LEU B B 142 142 . 76.116  93.968  -9.568  1.00 18.18  1
. .
ATOM 4406 N    N    . ILE ILE ILE B B 143 143 . 76.882  95.623  -8.288  1.00 13.02  1
. .
ATOM 4407 CA   CA   . ILE ILE ILE B B 143 143 . 78.232  95.356  -8.686  1.00 8.55   1
. .
ATOM 4408 CB   CB   . ILE ILE ILE B B 143 143 . 78.575  96.017  -10.055 1.00 12.59  1
. .
ATOM 4409 CG1  CG1  . ILE ILE ILE B B 143 143 . 79.681  95.243  -10.783 1.00 11.27  1
. .
ATOM 4410 CD1  CD1  . ILE ILE ILE B B 143 143 . 79.350  94.979  -12.231 1.00 18.44  1
. .
ATOM 4411 CG2  CG2  . ILE ILE ILE B B 143 143 . 78.966  97.493  -9.886  1.00 12.70  1
. .
ATOM 4412 C    C    . ILE ILE ILE B B 143 143 . 79.168  95.828  -7.578  1.00 6.38   1
. .
ATOM 4413 O    O    . ILE ILE ILE B B 143 143 . 78.965  96.911  -7.015  1.00 5.16   1
. .
ATOM 4414 N    N    . LEU LEU LEU B B 144 144 . 80.204  95.017  -7.311  1.00 2.37   1
. .
ATOM 4415 CA   CA   . LEU LEU LEU B B 144 144 . 81.250  95.471  -6.385  1.00 2.11   1
. .
ATOM 4416 CB   CB   . LEU LEU LEU B B 144 144 . 81.990  94.276  -5.774  1.00 2.76   1
. .
ATOM 4417 CG   CG   . LEU LEU LEU B B 144 144 . 81.349  93.516  -4.627  1.00 4.28   1
. .
ATOM 4418 CD1  CD1  . LEU LEU LEU B B 144 144 . 81.294  94.293  -3.295  1.00 3.91   1
. .
ATOM 4419 CD2  CD2  . LEU LEU LEU B B 144 144 . 79.999  92.975  -4.887  1.00 3.73   1
. .
ATOM 4420 C    C    . LEU LEU LEU B B 144 144 . 82.198  96.393  -7.073  1.00 2.09   1
. .
ATOM 4421 O    O    . LEU LEU LEU B B 144 144 . 82.572  96.192  -8.200  1.00 4.03   1
. .
ATOM 4422 N    N    . PRO PRO PRO B B 145 145 . 82.580  97.502  -6.404  1.00 2.00   1
. .
ATOM 4423 CA   CA   . PRO PRO PRO B B 145 145 . 83.400  98.510  -7.078  1.00 2.00   1
. .
ATOM 4424 CB   CB   . PRO PRO PRO B B 145 145 . 83.228  99.745  -6.177  1.00 2.00   1
. .
ATOM 4425 CG   CG   . PRO PRO PRO B B 145 145 . 82.929  99.107  -4.736  1.00 2.00   1
. .
ATOM 4426 CD   CD   . PRO PRO PRO B B 145 145 . 82.144  97.872  -5.059  1.00 2.00   1
. .
ATOM 4427 C    C    . PRO PRO PRO B B 145 145 . 84.882  98.177  -7.017  1.00 2.00   1
. .
ATOM 4428 O    O    . PRO PRO PRO B B 145 145 . 85.288  97.415  -6.093  1.00 2.00   1
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ATOM 4429 N    N    . VAL VAL VAL B B 146 146 . 85.724  98.732  -7.874  1.00 2.00   1
. .
ATOM 4430 CA   CA   . VAL VAL VAL B B 146 146 . 87.115  98.719  -7.656  1.00 2.00   1
. .
ATOM 4431 CB   CB   . VAL VAL VAL B B 146 146 . 87.915  99.158  -8.916  1.00 2.00   1
. .
ATOM 4432 CG1  CG1  . VAL VAL VAL B B 146 146 . 89.386  99.255  -8.670  1.00 2.80   1
. .
ATOM 4433 CG2  CG2  . VAL VAL VAL B B 146 146 . 87.576  98.196  -10.119 1.00 3.54   1
. .
ATOM 4434 C    C    . VAL VAL VAL B B 146 146 . 87.432  99.777  -6.565  1.00 2.29   1
. .
ATOM 4435 O    O    . VAL VAL VAL B B 146 146 . 86.976  100.932 -6.668  1.00 2.30   1
. .
ATOM 4436 N    N    . PRO PRO PRO B B 147 147 . 88.179  99.388  -5.528  1.00 2.00   1
. .
ATOM 4437 CA   CA   . PRO PRO PRO B B 147 147 . 88.562  100.365 -4.515  1.00 2.00   1
. .
ATOM 4438 CB   CB   . PRO PRO PRO B B 147 147 . 88.999  99.473  -3.332  1.00 2.24   1
. .
ATOM 4439 CG   CG   . PRO PRO PRO B B 147 147 . 89.418  98.086  -3.996  1.00 2.00   1
. .
ATOM 4440 CD   CD   . PRO PRO PRO B B 147 147 . 88.620  97.994  -5.227  1.00 2.14   1
. .
ATOM 4441 C    C    . PRO PRO PRO B B 147 147 . 89.741  101.154 -4.954  1.00 2.00   1
. .
ATOM 4442 O    O    . PRO PRO PRO B B 147 147 . 90.614  100.619 -5.589  1.00 2.34   1
. .
ATOM 4443 N    N    . ALA ALA ALA B B 148 148 . 89.687  102.466 -4.705  1.00 2.00   1
. .
ATOM 4444 CA   CA   . ALA ALA ALA B B 148 148 . 90.817  103.359 -4.899  1.00 2.00   1
. .
ATOM 4445 CB   CB   . ALA ALA ALA B B 148 148 . 90.356  104.643 -5.648  1.00 2.06   1
. .
ATOM 4446 C    C    . ALA ALA ALA B B 148 148 . 91.476  103.700 -3.603  1.00 2.00   1
. .
ATOM 4447 O    O    . ALA ALA ALA B B 148 148 . 90.938  104.531 -2.825  1.00 2.83   1
. .
ATOM 4448 N    N    . PHE PHE PHE B B 149 149 . 92.656  103.157 -3.361  1.00 2.00   1
. .
ATOM 4449 CA   CA   . PHE PHE PHE B B 149 149 . 93.362  103.348 -2.093  1.00 2.23   1
. .
ATOM 4450 CB   CB   . PHE PHE PHE B B 149 149 . 94.163  102.058 -1.751  1.00 2.35   1
. .
ATOM 4451 CG   CG   . PHE PHE PHE B B 149 149 . 93.330  100.813 -1.681  1.00 3.26   1
. .
ATOM 4452 CD1  CD1  . PHE PHE PHE B B 149 149 . 92.535  100.538 -0.563  1.00 2.45   1
. .
ATOM 4453 CE1  CE1  . PHE PHE PHE B B 149 149 . 91.812  99.338  -0.469  1.00 3.29   1
. .
ATOM 4454 CZ   CZ   . PHE PHE PHE B B 149 149 . 91.935  98.334  -1.472  1.00 2.66   1
. .
ATOM 4455 CE2  CE2  . PHE PHE PHE B B 149 149 . 92.744  98.624  -2.572  1.00 3.30   1
. .
ATOM 4456 CD2  CD2  . PHE PHE PHE B B 149 149 . 93.445  99.801  -2.660  1.00 3.26   1
. .
ATOM 4457 C    C    . PHE PHE PHE B B 149 149 . 94.340  104.493 -2.053  1.00 2.00   1
. .
ATOM 4458 O    O    . PHE PHE PHE B B 149 149 . 95.354  104.459 -2.702  1.00 2.71   1
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ATOM 4459 N    N    . ASN ASN ASN B B 150 150 . 94.081  105.497 -1.203  1.00 2.24   1
. .
ATOM 4460 CA   CA   . ASN ASN ASN B B 150 150 . 94.964  106.632 -1.069  1.00 2.72   1
. .
ATOM 4461 CB   CB   . ASN ASN ASN B B 150 150 . 94.134  107.761 -0.425  1.00 3.22   1
. .
ATOM 4462 CG   CG   . ASN ASN ASN B B 150 150 . 94.868  109.090 -0.229  1.00 5.46   1
. .
ATOM 4463 OD1  OD1  . ASN ASN ASN B B 150 150 . 94.341  109.943 0.521   1.00 6.43   1
. .
ATOM 4464 ND2  ND2  . ASN ASN ASN B B 150 150 . 96.042  109.262 -0.770  1.00 3.19   1
. .
ATOM 4465 C    C    . ASN ASN ASN B B 150 150 . 96.208  106.318 -0.305  1.00 3.02   1
. .
ATOM 4466 O    O    . ASN ASN ASN B B 150 150 . 96.185  106.500 0.913   1.00 4.17   1
. .
ATOM 4467 N    N    . VAL VAL VAL B B 151 151 . 97.290  105.865 -0.969  1.00 2.91   1
. .
ATOM 4468 CA   CA   . VAL VAL VAL B B 151 151 . 98.442  105.348 -0.276  1.00 3.50   1
. .
ATOM 4469 CB   CB   . VAL VAL VAL B B 151 151 . 98.980  104.040 -0.913  1.00 3.12   1
. .
ATOM 4470 CG1  CG1  . VAL VAL VAL B B 151 151 . 97.889  102.983 -0.947  1.00 3.49   1
. .
ATOM 4471 CG2  CG2  . VAL VAL VAL B B 151 151 . 99.531  104.397 -2.320  1.00 5.10   1
. .
ATOM 4472 C    C    . VAL VAL VAL B B 151 151 . 99.595  106.271 -0.040  1.00 2.00   1
. .
ATOM 4473 O    O    . VAL VAL VAL B B 151 151 . 100.463 105.940 0.738   1.00 5.25   1
. .
ATOM 4474 N    N    . ILE ILE ILE B B 152 152 . 99.637  107.418 -0.725  1.00 2.93   1
. .
ATOM 4475 CA   CA   . ILE ILE ILE B B 152 152 . 100.459 108.520 -0.387  1.00 4.29   1
. .
ATOM 4476 CB   CB   . ILE ILE ILE B B 152 152 . 101.561 108.799 -1.433  1.00 5.96   1
. .
ATOM 4477 CG1  CG1  . ILE ILE ILE B B 152 152 . 102.522 107.594 -1.586  1.00 7.37   1
. .
ATOM 4478 CD1  CD1  . ILE ILE ILE B B 152 152 . 103.705 107.560 -0.716  1.00 16.98  1
. .
ATOM 4479 CG2  CG2  . ILE ILE ILE B B 152 152 . 102.332 110.061 -1.152  1.00 5.23   1
. .
ATOM 4480 C    C    . ILE ILE ILE B B 152 152 . 99.567  109.758 -0.193  1.00 4.97   1
. .
ATOM 4481 O    O    . ILE ILE ILE B B 152 152 . 98.888  110.192 -1.145  1.00 4.50   1
. .
ATOM 4482 N    N    . ASN ASN ASN B B 153 153 . 99.609  110.331 1.016   1.00 3.53   1
. .
ATOM 4483 CA   CA   . ASN ASN ASN B B 153 153 . 98.779  111.550 1.346   1.00 4.05   1
. .
ATOM 4484 CB   CB   . ASN ASN ASN B B 153 153 . 98.168  111.393 2.757   1.00 6.21   1
. .
ATOM 4485 CG   CG   . ASN ASN ASN B B 153 153 . 97.185  110.224 2.882   1.00 8.20   1
. .
ATOM 4486 OD1  OD1  . ASN ASN ASN B B 153 153 . 96.866  109.511 1.908   1.00 13.65  1
. .
ATOM 4487 ND2  ND2  . ASN ASN ASN B B 153 153 . 96.707  109.989 4.097   1.00 2.58   1
. .
ATOM 4488 C    C    . ASN ASN ASN B B 153 153 . 99.649  112.812 1.273   1.00 2.96   1
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ATOM 4489 O    O    . ASN ASN ASN B B 153 153 . 100.836 112.825 1.697   1.00 4.10   1
. .
ATOM 4490 N    N    . GLY GLY GLY B B 154 154 . 99.070  113.874 0.716   1.00 2.55   1
. .
ATOM 4491 CA   CA   . GLY GLY GLY B B 154 154 . 99.698  115.166 0.468   1.00 3.15   1
. .
ATOM 4492 C    C    . GLY GLY GLY B B 154 154 . 98.647  116.301 0.761   1.00 4.19   1
. .
ATOM 4493 O    O    . GLY GLY GLY B B 154 154 . 97.543  116.034 1.320   1.00 5.27   1
. .
ATOM 4494 N    N    . ASN ASN ASN B B 160 160 . 103.723 117.249 4.926   1.00 8.63   1
. .
ATOM 4495 CA   CA   . ASN ASN ASN B B 160 160 . 104.861 117.257 4.085   1.00 8.86   1
. .
ATOM 4496 CB   CB   . ASN ASN ASN B B 160 160 . 104.945 115.881 3.334   1.00 8.57   1
. .
ATOM 4497 CG   CG   . ASN ASN ASN B B 160 160 . 103.623 115.458 2.698   1.00 9.35   1
. .
ATOM 4498 OD1  OD1  . ASN ASN ASN B B 160 160 . 102.705 116.263 2.571   1.00 10.39  1
. .
ATOM 4499 ND2  ND2  . ASN ASN ASN B B 160 160 . 103.532 114.170 2.240   1.00 7.69   1
. .
ATOM 4500 C    C    . ASN ASN ASN B B 160 160 . 104.703 118.404 3.133   1.00 8.44   1
. .
ATOM 4501 O    O    . ASN ASN ASN B B 160 160 . 103.676 119.094 3.209   1.00 6.10   1
. .
ATOM 4502 N    N    . LYS LYS LYS B B 161 161 . 105.650 118.632 2.229   1.00 7.92   1
. .
ATOM 4503 CA   CA   . LYS LYS LYS B B 161 161 . 105.451 119.702 1.237   1.00 8.93   1
. .
ATOM 4504 CB   CB   . LYS LYS LYS B B 161 161 . 106.744 120.220 0.742   1.00 9.95   1
. .
ATOM 4505 CG   CG   . LYS LYS LYS B B 161 161 . 107.502 120.968 1.771   1.00 16.69  1
. .
ATOM 4506 CD   CD   . LYS LYS LYS B B 161 161 . 108.613 121.867 1.133   1.00 20.75  1
. .
ATOM 4507 CE   CE   . LYS LYS LYS B B 161 161 . 109.464 122.561 2.248   1.00 24.96  1
. .
ATOM 4508 NZ   NZ   . LYS LYS LYS B B 161 161 . 108.620 123.381 3.189   1.00 29.89  1
. .
ATOM 4509 C    C    . LYS LYS LYS B B 161 161 . 104.597 119.362 0.002   1.00 9.15   1
. .
ATOM 4510 O    O    . LYS LYS LYS B B 161 161 . 104.238 120.253 -0.787  1.00 11.43  1
. .
ATOM 4511 N    N    . LEU LEU LEU B B 162 162 . 104.347 118.058 -0.167  1.00 7.66   1
. .
ATOM 4512 CA   CA   . LEU LEU LEU B B 162 162 . 103.696 117.505 -1.350  1.00 5.84   1
. .
ATOM 4513 CB   CB   . LEU LEU LEU B B 162 162 . 103.389 116.010 -1.063  1.00 5.94   1
. .
ATOM 4514 CG   CG   . LEU LEU LEU B B 162 162 . 102.937 115.093 -2.191  1.00 4.82   1
. .
ATOM 4515 CD1  CD1  . LEU LEU LEU B B 162 162 . 103.719 115.316 -3.530  1.00 8.73   1
. .
ATOM 4516 CD2  CD2  . LEU LEU LEU B B 162 162 . 102.864 113.677 -1.694  1.00 2.91   1
. .
ATOM 4517 C    C    . LEU LEU LEU B B 162 162 . 102.357 118.311 -1.511  1.00 5.68   1
. .
ATOM 4518 O    O    . LEU LEU LEU B B 162 162 . 101.449 118.235 -0.628  1.00 8.88   1
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ATOM 4519 N    N    . ALA ALA ALA B B 163 163 . 102.215 118.991 -2.653  1.00 5.54   1
. .
ATOM 4520 CA   CA   . ALA ALA ALA B B 163 163 . 101.004 119.827 -2.905  1.00 4.90   1
. .
ATOM 4521 CB   CB   . ALA ALA ALA B B 163 163 . 101.291 120.925 -3.907  1.00 4.17   1
. .
ATOM 4522 C    C    . ALA ALA ALA B B 163 163 . 99.765  119.059 -3.303  1.00 4.12   1
. .
ATOM 4523 O    O    . ALA ALA ALA B B 163 163 . 98.694  119.346 -2.773  1.00 3.63   1
. .
ATOM 4524 N    N    . MET MET MET B B 164 164 . 99.899  118.061 -4.165  1.00 4.00   1
. .
ATOM 4525 CA   CA   . MET MET MET B B 164 164 . 98.712  117.337 -4.585  1.00 2.31   1
. .
ATOM 4526 CB   CB   . MET MET MET B B 164 164 . 98.943  116.596 -5.936  1.00 2.06   1
. .
ATOM 4527 CG   CG   . MET MET MET B B 164 164 . 99.494  117.564 -6.961  1.00 2.00   1
. .
ATOM 4528 SD   SD   . MET MET MET B B 164 164 . 99.677  116.854 -8.631  1.00 5.12   1
. .
ATOM 4529 CE   CE   . MET MET MET B B 164 164 . 100.040 118.315 -9.613  1.00 3.58   1
. .
ATOM 4530 C    C    . MET MET MET B B 164 164 . 98.278  116.392 -3.456  1.00 2.44   1
. .
ATOM 4531 O    O    . MET MET MET B B 164 164 . 99.111  115.908 -2.689  1.00 4.32   1
. .
ATOM 4532 N    N    . GLN GLN GLN B B 165 165 . 96.955  116.288 -3.320  1.00 2.22   1
. .
ATOM 4533 CA   CA   . GLN GLN GLN B B 165 165 . 96.325  115.689 -2.118  1.00 2.12   1
. .
ATOM 4534 CB   CB   . GLN GLN GLN B B 165 165 . 94.862  116.060 -2.085  1.00 2.03   1
. .
ATOM 4535 CG   CG   . GLN GLN GLN B B 165 165 . 94.247  115.835 -0.740  1.00 4.71   1
. .
ATOM 4536 CD   CD   . GLN GLN GLN B B 165 165 . 92.822  116.353 -0.697  1.00 2.00   1
. .
ATOM 4537 OE1  OE1  . GLN GLN GLN B B 165 165 . 92.653  117.474 -0.276  1.00 3.02   1
. .
ATOM 4538 NE2  NE2  . GLN GLN GLN B B 165 165 . 91.831  115.571 -1.053  1.00 3.89   1
. .
ATOM 4539 C    C    . GLN GLN GLN B B 165 165 . 96.418  114.198 -1.998  1.00 2.71   1
. .
ATOM 4540 O    O    . GLN GLN GLN B B 165 165 . 96.698  113.649 -0.914  1.00 4.54   1
. .
ATOM 4541 N    N    . GLU GLU GLU B B 166 166 . 96.172  113.460 -3.070  1.00 2.34   1
. .
ATOM 4542 CA   CA   . GLU GLU GLU B B 166 166 . 96.045  112.005 -2.906  1.00 2.13   1
. .
ATOM 4543 CB   CB   . GLU GLU GLU B B 166 166 . 94.603  111.616 -2.886  1.00 2.39   1
. .
ATOM 4544 CG   CG   . GLU GLU GLU B B 166 166 . 93.719  112.384 -1.840  1.00 3.85   1
. .
ATOM 4545 CD   CD   . GLU GLU GLU B B 166 166 . 92.241  112.046 -1.926  1.00 5.21   1
. .
ATOM 4546 OE1  OE1  . GLU GLU GLU B B 166 166 . 91.792  111.031 -2.587  1.00 5.06   1
. .
ATOM 4547 OE2  OE2  . GLU GLU GLU B B 166 166 . 91.477  112.797 -1.289  1.00 6.35   1
. .
ATOM 4548 C    C    . GLU GLU GLU B B 166 166 . 96.647  111.243 -4.085  1.00 3.22   1
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ATOM 4549 O    O    . GLU GLU GLU B B 166 166 . 96.433  111.647 -5.224  1.00 2.22   1
. .
ATOM 4550 N    N    . PHE PHE PHE B B 167 167 . 97.434  110.177 -3.786  1.00 2.81   1
. .
ATOM 4551 CA   CA   . PHE PHE PHE B B 167 167 . 97.893  109.274 -4.861  1.00 2.00   1
. .
ATOM 4552 CB   CB   . PHE PHE PHE B B 167 167 . 99.423  109.282 -4.902  1.00 2.00   1
. .
ATOM 4553 CG   CG   . PHE PHE PHE B B 167 167 . 100.000 110.659 -5.187  1.00 2.16   1
. .
ATOM 4554 CD1  CD1  . PHE PHE PHE B B 167 167 . 100.042 111.654 -4.220  1.00 2.70   1
. .
ATOM 4555 CE1  CE1  . PHE PHE PHE B B 167 167 . 100.436 112.916 -4.614  1.00 4.81   1
. .
ATOM 4556 CZ   CZ   . PHE PHE PHE B B 167 167 . 100.842 113.207 -5.870  1.00 6.62   1
. .
ATOM 4557 CE2  CE2  . PHE PHE PHE B B 167 167 . 100.822 112.280 -6.838  1.00 5.21   1
. .
ATOM 4558 CD2  CD2  . PHE PHE PHE B B 167 167 . 100.399 111.012 -6.513  1.00 5.24   1
. .
ATOM 4559 C    C    . PHE PHE PHE B B 167 167 . 97.317  107.910 -4.592  1.00 2.00   1
. .
ATOM 4560 O    O    . PHE PHE PHE B B 167 167 . 97.599  107.374 -3.486  1.00 2.85   1
. .
ATOM 4561 N    N    . MET MET MET B B 168 168 . 96.480  107.406 -5.484  1.00 2.00   1
. .
ATOM 4562 CA   CA   . MET MET MET B B 168 168 . 95.703  106.230 -5.187  1.00 2.08   1
. .
ATOM 4563 CB   CB   . MET MET MET B B 168 168 . 94.186  106.447 -5.382  1.00 2.01   1
. .
ATOM 4564 CG   CG   . MET MET MET B B 168 168 . 93.610  107.585 -4.396  1.00 2.54   1
. .
ATOM 4565 SD   SD   . MET MET MET B B 168 168 . 91.890  107.918 -4.805  1.00 8.59   1
. .
ATOM 4566 CE   CE   . MET MET MET B B 168 168 . 92.169  109.450 -5.736  1.00 4.11   1
. .
ATOM 4567 C    C    . MET MET MET B B 168 168 . 96.116  105.082 -6.120  1.00 2.00   1
. .
ATOM 4568 O    O    . MET MET MET B B 168 168 . 96.543  105.251 -7.262  1.00 2.84   1
. .
ATOM 4569 N    N    . ILE ILE ILE B B 169 169 . 95.990  103.900 -5.576  1.00 2.00   1
. .
ATOM 4570 CA   CA   . ILE ILE ILE B B 169 169 . 96.117  102.681 -6.424  1.00 2.28   1
. .
ATOM 4571 CB   CB   . ILE ILE ILE B B 169 169 . 97.146  101.719 -5.874  1.00 2.05   1
. .
ATOM 4572 CG1  CG1  . ILE ILE ILE B B 169 169 . 96.764  101.308 -4.413  1.00 2.68   1
. .
ATOM 4573 CD1  CD1  . ILE ILE ILE B B 169 169 . 97.573  100.130 -3.847  1.00 4.28   1
. .
ATOM 4574 CG2  CG2  . ILE ILE ILE B B 169 169 . 98.480  102.259 -5.963  1.00 2.70   1
. .
ATOM 4575 C    C    . ILE ILE ILE B B 169 169 . 94.788  102.027 -6.550  1.00 2.00   1
. .
ATOM 4576 O    O    . ILE ILE ILE B B 169 169 . 94.021  101.940 -5.560  1.00 2.35   1
. .
ATOM 4577 N    N    . LEU LEU LEU B B 170 170 . 94.491  101.520 -7.750  1.00 2.00   1
. .
ATOM 4578 CA   CA   . LEU LEU LEU B B 170 170 . 93.247  100.916 -8.095  1.00 2.00   1
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ATOM 4579 CB   CB   . LEU LEU LEU B B 170 170 . 92.544  101.750 -9.183  1.00 3.69   1
. .
ATOM 4580 CG   CG   . LEU LEU LEU B B 170 170 . 91.711  102.998 -8.808  1.00 2.89   1
. .
ATOM 4581 CD1  CD1  . LEU LEU LEU B B 170 170 . 92.672  104.128 -8.564  1.00 4.82   1
. .
ATOM 4582 CD2  CD2  . LEU LEU LEU B B 170 170 . 90.844  103.426 -10.027 1.00 5.23   1
. .
ATOM 4583 C    C    . LEU LEU LEU B B 170 170 . 93.493  99.474  -8.652  1.00 2.00   1
. .
ATOM 4584 O    O    . LEU LEU LEU B B 170 170 . 93.953  99.323  -9.760  1.00 2.91   1
. .
ATOM 4585 N    N    . PRO PRO PRO B B 171 171 . 93.152  98.416  -7.878  1.00 2.21   1
. .
ATOM 4586 CA   CA   . PRO PRO PRO B B 171 171 . 93.386  97.059  -8.385  1.00 2.08   1
. .
ATOM 4587 CB   CB   . PRO PRO PRO B B 171 171 . 93.236  96.163  -7.113  1.00 2.28   1
. .
ATOM 4588 CG   CG   . PRO PRO PRO B B 171 171 . 93.217  97.097  -6.024  1.00 2.61   1
. .
ATOM 4589 CD   CD   . PRO PRO PRO B B 171 171 . 92.617  98.366  -6.514  1.00 2.16   1
. .
ATOM 4590 C    C    . PRO PRO PRO B B 171 171 . 92.347  96.643  -9.378  1.00 2.00   1
. .
ATOM 4591 O    O    . PRO PRO PRO B B 171 171 . 91.615  95.696  -9.189  1.00 3.58   1
. .
ATOM 4592 N    N    . VAL VAL VAL B B 172 172 . 92.354  97.246  -10.558 1.00 2.00   1
. .
ATOM 4593 CA   CA   . VAL VAL VAL B B 172 172 . 91.401  96.919  -11.598 1.00 2.00   1
. .
ATOM 4594 CB   CB   . VAL VAL VAL B B 172 172 . 91.590  97.894  -12.821 1.00 2.57   1
. .
ATOM 4595 CG1  CG1  . VAL VAL VAL B B 172 172 . 91.195  99.277  -12.403 1.00 4.67   1
. .
ATOM 4596 CG2  CG2  . VAL VAL VAL B B 172 172 . 93.057  97.884  -13.361 1.00 4.09   1
. .
ATOM 4597 C    C    . VAL VAL VAL B B 172 172 . 91.530  95.471  -12.129 1.00 2.00   1
. .
ATOM 4598 O    O    . VAL VAL VAL B B 172 172 . 90.563  94.917  -12.566 1.00 4.33   1
. .
ATOM 4599 N    N    . GLY GLY GLY B B 173 173 . 92.704  94.893  -12.023 1.00 3.53   1
. .
ATOM 4600 CA   CA   . GLY GLY GLY B B 173 173 . 92.909  93.499  -12.559 1.00 4.55   1
. .
ATOM 4601 C    C    . GLY GLY GLY B B 173 173 . 92.717  92.419  -11.503 1.00 5.67   1
. .
ATOM 4602 O    O    . GLY GLY GLY B B 173 173 . 93.104  91.292  -11.694 1.00 8.00   1
. .
ATOM 4603 N    N    . ALA ALA ALA B B 174 174 . 92.158  92.765  -10.363 1.00 4.08   1
. .
ATOM 4604 CA   CA   . ALA ALA ALA B B 174 174 . 91.852  91.794  -9.320  1.00 3.75   1
. .
ATOM 4605 CB   CB   . ALA ALA ALA B B 174 174 . 91.437  92.493  -8.034  1.00 4.24   1
. .
ATOM 4606 C    C    . ALA ALA ALA B B 174 174 . 90.736  90.840  -9.764  1.00 6.30   1
. .
ATOM 4607 O    O    . ALA ALA ALA B B 174 174 . 89.899  91.158  -10.617 1.00 5.78   1
. .
ATOM 4608 N    N    . GLU GLU GLU B B 175 175 . 90.647  89.688  -9.084  1.00 7.70   1
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ATOM 4609 CA   CA   . GLU GLU GLU B B 175 175 . 89.663  88.698  -9.437  1.00 8.81   1
. .
ATOM 4610 CB   CB   . GLU GLU GLU B B 175 175 . 90.116  87.282  -9.042  1.00 10.50  1
. .
ATOM 4611 CG   CG   . GLU GLU GLU B B 175 175 . 91.554  86.847  -9.432  1.00 20.64  1
. .
ATOM 4612 CD   CD   . GLU GLU GLU B B 175 175 . 92.005  85.674  -8.548  1.00 31.33  1
. .
ATOM 4613 OE1  OE1  . GLU GLU GLU B B 175 175 . 91.115  84.871  -8.166  1.00 36.62  1
. .
ATOM 4614 OE2  OE2  . GLU GLU GLU B B 175 175 . 93.212  85.549  -8.223  1.00 34.37  1
. .
ATOM 4615 C    C    . GLU GLU GLU B B 175 175 . 88.329  88.930  -8.756  1.00 7.32   1
. .
ATOM 4616 O    O    . GLU GLU GLU B B 175 175 . 87.327  88.405  -9.213  1.00 8.09   1
. .
ATOM 4617 N    N    . SER SER SER B B 176 176 . 88.313  89.718  -7.642  1.00 5.90   1
. .
ATOM 4618 CA   CA   . SER SER SER B B 176 176 . 87.061  89.954  -6.905  1.00 3.82   1
. .
ATOM 4619 CB   CB   . SER SER SER B B 176 176 . 86.715  88.770  -5.926  1.00 5.94   1
. .
ATOM 4620 OG   OG   . SER SER SER B B 176 176 . 87.847  88.454  -5.088  1.00 3.47   1
. .
ATOM 4621 C    C    . SER SER SER B B 176 176 . 87.319  91.152  -6.019  1.00 2.00   1
. .
ATOM 4622 O    O    . SER SER SER B B 176 176 . 88.467  91.589  -5.958  1.00 2.00   1
. .
ATOM 4623 N    N    . PHE PHE PHE B B 177 177 . 86.316  91.553  -5.227  1.00 2.00   1
. .
ATOM 4624 CA   CA   . PHE PHE PHE B B 177 177 . 86.578  92.619  -4.304  1.00 2.02   1
. .
ATOM 4625 CB   CB   . PHE PHE PHE B B 177 177 . 85.320  93.192  -3.686  1.00 2.31   1
. .
ATOM 4626 CG   CG   . PHE PHE PHE B B 177 177 . 85.628  94.429  -2.903  1.00 2.00   1
. .
ATOM 4627 CD1  CD1  . PHE PHE PHE B B 177 177 . 85.738  95.648  -3.532  1.00 2.31   1
. .
ATOM 4628 CE1  CE1  . PHE PHE PHE B B 177 177 . 86.067  96.759  -2.868  1.00 2.60   1
. .
ATOM 4629 CZ   CZ   . PHE PHE PHE B B 177 177 . 86.354  96.700  -1.461  1.00 2.97   1
. .
ATOM 4630 CE2  CE2  . PHE PHE PHE B B 177 177 . 86.234  95.501  -0.823  1.00 2.97   1
. .
ATOM 4631 CD2  CD2  . PHE PHE PHE B B 177 177 . 85.905  94.346  -1.539  1.00 2.00   1
. .
ATOM 4632 C    C    . PHE PHE PHE B B 177 177 . 87.573  92.203  -3.203  1.00 2.00   1
. .
ATOM 4633 O    O    . PHE PHE PHE B B 177 177 . 88.526  92.919  -2.794  1.00 2.14   1
. .
ATOM 4634 N    N    . ARG ARG ARG B B 178 178 . 87.391  90.987  -2.698  1.00 2.00   1
. .
ATOM 4635 CA   CA   . ARG ARG ARG B B 178 178 . 88.283  90.517  -1.666  1.00 4.25   1
. .
ATOM 4636 CB   CB   . ARG ARG ARG B B 178 178 . 87.777  89.173  -1.128  1.00 6.35   1
. .
ATOM 4637 CG   CG   . ARG ARG ARG B B 178 178 . 87.000  89.144  0.224   1.00 17.74  1
. .
ATOM 4638 CD   CD   . ARG ARG ARG B B 178 178 . 85.456  89.037  0.057   1.00 27.12  1
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ATOM 4639 NE   NE   . ARG ARG ARG B B 178 178 . 84.970  87.972  -0.841  1.00 36.49  1
. .
ATOM 4640 CZ   CZ   . ARG ARG ARG B B 178 178 . 84.205  86.937  -0.473  1.00 40.34  1
. .
ATOM 4641 NH1  NH1  . ARG ARG ARG B B 178 178 . 83.838  86.779  0.792   1.00 45.25  1
. .
ATOM 4642 NH2  NH2  . ARG ARG ARG B B 178 178 . 83.791  86.055  -1.362  1.00 40.63  1
. .
ATOM 4643 C    C    . ARG ARG ARG B B 178 178 . 89.725  90.366  -2.193  1.00 2.24   1
. .
ATOM 4644 O    O    . ARG ARG ARG B B 178 178 . 90.688  90.673  -1.530  1.00 2.16   1
. .
ATOM 4645 N    N    . ASP ASP ASP B B 179 179 . 89.885  89.995  -3.473  1.00 2.83   1
. .
ATOM 4646 CA   CA   . ASP ASP ASP B B 179 179 . 91.190  89.977  -4.060  1.00 2.63   1
. .
ATOM 4647 CB   CB   . ASP ASP ASP B B 179 179 . 91.109  89.198  -5.381  1.00 4.33   1
. .
ATOM 4648 CG   CG   . ASP ASP ASP B B 179 179 . 92.466  88.808  -5.942  1.00 7.00   1
. .
ATOM 4649 OD1  OD1  . ASP ASP ASP B B 179 179 . 92.737  89.136  -7.142  1.00 11.45  1
. .
ATOM 4650 OD2  OD2  . ASP ASP ASP B B 179 179 . 93.350  88.225  -5.227  1.00 9.23   1
. .
ATOM 4651 C    C    . ASP ASP ASP B B 179 179 . 91.796  91.375  -4.238  1.00 2.00   1
. .
ATOM 4652 O    O    . ASP ASP ASP B B 179 179 . 93.009  91.587  -3.992  1.00 2.00   1
. .
ATOM 4653 N    N    . ALA ALA ALA B B 180 180 . 90.936  92.323  -4.557  1.00 2.30   1
. .
ATOM 4654 CA   CA   . ALA ALA ALA B B 180 180 . 91.382  93.709  -4.672  1.00 2.20   1
. .
ATOM 4655 CB   CB   . ALA ALA ALA B B 180 180 . 90.150  94.607  -5.178  1.00 2.54   1
. .
ATOM 4656 C    C    . ALA ALA ALA B B 180 180 . 91.909  94.230  -3.318  1.00 2.00   1
. .
ATOM 4657 O    O    . ALA ALA ALA B B 180 180 . 92.865  94.971  -3.245  1.00 2.00   1
. .
ATOM 4658 N    N    . MET MET MET B B 181 181 . 91.321  93.768  -2.233  1.00 2.00   1
. .
ATOM 4659 CA   CA   . MET MET MET B B 181 181 . 91.794  94.167  -0.886  1.00 2.00   1
. .
ATOM 4660 CB   CB   . MET MET MET B B 181 181 . 90.823  93.761  0.219   1.00 2.00   1
. .
ATOM 4661 CG   CG   . MET MET MET B B 181 181 . 89.466  94.397  0.145   1.00 2.00   1
. .
ATOM 4662 SD   SD   . MET MET MET B B 181 181 . 89.594  96.225  0.259   1.00 2.34   1
. .
ATOM 4663 CE   CE   . MET MET MET B B 181 181 . 90.575  96.362  1.724   1.00 3.19   1
. .
ATOM 4664 C    C    . MET MET MET B B 181 181 . 93.192  93.601  -0.590  1.00 2.00   1
. .
ATOM 4665 O    O    . MET MET MET B B 181 181 . 94.045  94.293  -0.133  1.00 2.00   1
. .
ATOM 4666 N    N    . ARG ARG ARG B B 182 182 . 93.400  92.325  -0.960  1.00 2.00   1
. .
ATOM 4667 CA   CA   . ARG ARG ARG B B 182 182 . 94.772  91.773  -0.795  1.00 2.06   1
. .
ATOM 4668 CB   CB   . ARG ARG ARG B B 182 182 . 94.745  90.294  -1.085  1.00 2.61   1
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ATOM 4669 CG   CG   . ARG ARG ARG B B 182 182 . 96.077  89.634  -0.910  1.00 4.05   1
. .
ATOM 4670 CD   CD   . ARG ARG ARG B B 182 182 . 96.007  88.162  -1.316  1.00 10.31  1
. .
ATOM 4671 NE   NE   . ARG ARG ARG B B 182 182 . 95.585  87.963  -2.678  1.00 12.10  1
. .
ATOM 4672 CZ   CZ   . ARG ARG ARG B B 182 182 . 96.427  87.947  -3.698  1.00 17.53  1
. .
ATOM 4673 NH1  NH1  . ARG ARG ARG B B 182 182 . 97.732  88.090  -3.465  1.00 12.79  1
. .
ATOM 4674 NH2  NH2  . ARG ARG ARG B B 182 182 . 95.978  87.762  -4.943  1.00 21.65  1
. .
ATOM 4675 C    C    . ARG ARG ARG B B 182 182 . 95.790  92.499  -1.665  1.00 2.00   1
. .
ATOM 4676 O    O    . ARG ARG ARG B B 182 182 . 96.894  92.797  -1.172  1.00 2.03   1
. .
ATOM 4677 N    N    . LEU LEU LEU B B 183 183 . 95.465  92.746  -2.937  1.00 2.00   1
. .
ATOM 4678 CA   CA   . LEU LEU LEU B B 183 183 . 96.403  93.477  -3.822  1.00 2.59   1
. .
ATOM 4679 CB   CB   . LEU LEU LEU B B 183 183 . 95.785  93.718  -5.151  1.00 3.05   1
. .
ATOM 4680 CG   CG   . LEU LEU LEU B B 183 183 . 95.497  92.572  -6.086  1.00 8.33   1
. .
ATOM 4681 CD1  CD1  . LEU LEU LEU B B 183 183 . 95.683  92.996  -7.571  1.00 5.90   1
. .
ATOM 4682 CD2  CD2  . LEU LEU LEU B B 183 183 . 96.134  91.202  -5.684  1.00 7.02   1
. .
ATOM 4683 C    C    . LEU LEU LEU B B 183 183 . 96.727  94.882  -3.218  1.00 2.00   1
. .
ATOM 4684 O    O    . LEU LEU LEU B B 183 183 . 97.850  95.302  -3.176  1.00 2.08   1
. .
ATOM 4685 N    N    . GLY GLY GLY B B 184 184 . 95.691  95.552  -2.732  1.00 2.00   1
. .
ATOM 4686 CA   CA   . GLY GLY GLY B B 184 184 . 95.919  96.879  -2.132  1.00 2.00   1
. .
ATOM 4687 C    C    . GLY GLY GLY B B 184 184 . 96.783  96.870  -0.893  1.00 2.00   1
. .
ATOM 4688 O    O    . GLY GLY GLY B B 184 184 . 97.782  97.582  -0.786  1.00 2.29   1
. .
ATOM 4689 N    N    . ALA ALA ALA B B 185 185 . 96.480  95.913  0.006   1.00 2.00   1
. .
ATOM 4690 CA   CA   . ALA ALA ALA B B 185 185 . 97.167  95.816  1.251   1.00 2.00   1
. .
ATOM 4691 CB   CB   . ALA ALA ALA B B 185 185 . 96.501  94.826  2.088   1.00 2.00   1
. .
ATOM 4692 C    C    . ALA ALA ALA B B 185 185 . 98.634  95.414  0.950   1.00 2.00   1
. .
ATOM 4693 O    O    . ALA ALA ALA B B 185 185 . 99.550  95.977  1.478   1.00 2.00   1
. .
ATOM 4694 N    N    . GLU GLU GLU B B 186 186 . 98.849  94.461  0.002   1.00 2.00   1
. .
ATOM 4695 CA   CA   . GLU GLU GLU B B 186 186 . 100.234 94.055  -0.270  1.00 2.00   1
. .
ATOM 4696 CB   CB   . GLU GLU GLU B B 186 186 . 100.275 92.863  -1.201  1.00 2.00   1
. .
ATOM 4697 CG   CG   . GLU GLU GLU B B 186 186 . 99.781  91.582  -0.508  1.00 2.45   1
. .
ATOM 4698 CD   CD   . GLU GLU GLU B B 186 186 . 99.777  90.354  -1.409  1.00 5.38   1
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ATOM 4699 OE1  OE1  . GLU GLU GLU B B 186 186 . 100.268 90.453  -2.555  1.00 6.36   1
. .
ATOM 4700 OE2  OE2  . GLU GLU GLU B B 186 186 . 99.268  89.304  -0.990  1.00 4.71   1
. .
ATOM 4701 C    C    . GLU GLU GLU B B 186 186 . 101.033 95.210  -0.878  1.00 2.00   1
. .
ATOM 4702 O    O    . GLU GLU GLU B B 186 186 . 102.192 95.412  -0.509  1.00 2.00   1
. .
ATOM 4703 N    N    . VAL VAL VAL B B 187 187 . 100.407 95.976  -1.770  1.00 2.00   1
. .
ATOM 4704 CA   CA   . VAL VAL VAL B B 187 187 . 101.175 97.102  -2.348  1.00 2.00   1
. .
ATOM 4705 CB   CB   . VAL VAL VAL B B 187 187 . 100.452 97.708  -3.565  1.00 2.00   1
. .
ATOM 4706 CG1  CG1  . VAL VAL VAL B B 187 187 . 101.176 98.999  -4.028  1.00 2.06   1
. .
ATOM 4707 CG2  CG2  . VAL VAL VAL B B 187 187 . 100.425 96.708  -4.759  1.00 2.00   1
. .
ATOM 4708 C    C    . VAL VAL VAL B B 187 187 . 101.457 98.176  -1.281  1.00 2.00   1
. .
ATOM 4709 O    O    . VAL VAL VAL B B 187 187 . 102.576 98.669  -1.210  1.00 2.00   1
. .
ATOM 4710 N    N    . TYR TYR TYR B B 188 188 . 100.483 98.436  -0.393  1.00 2.00   1
. .
ATOM 4711 CA   CA   . TYR TYR TYR B B 188 188 . 100.694 99.310  0.707   1.00 2.00   1
. .
ATOM 4712 CB   CB   . TYR TYR TYR B B 188 188 . 99.414  99.422  1.543   1.00 2.00   1
. .
ATOM 4713 CG   CG   . TYR TYR TYR B B 188 188 . 99.464  100.417 2.688   1.00 2.00   1
. .
ATOM 4714 CD1  CD1  . TYR TYR TYR B B 188 188 . 99.269  101.817 2.500   1.00 2.09   1
. .
ATOM 4715 CE1  CE1  . TYR TYR TYR B B 188 188 . 99.263  102.621 3.593   1.00 2.00   1
. .
ATOM 4716 CZ   CZ   . TYR TYR TYR B B 188 188 . 99.457  102.120 4.827   1.00 2.00   1
. .
ATOM 4717 OH   OH   . TYR TYR TYR B B 188 188 . 99.496  102.961 5.948   1.00 2.00   1
. .
ATOM 4718 CE2  CE2  . TYR TYR TYR B B 188 188 . 99.652  100.772 5.042   1.00 2.00   1
. .
ATOM 4719 CD2  CD2  . TYR TYR TYR B B 188 188 . 99.631  99.938  3.962   1.00 2.00   1
. .
ATOM 4720 C    C    . TYR TYR TYR B B 188 188 . 101.885 98.937  1.566   1.00 2.00   1
. .
ATOM 4721 O    O    . TYR TYR TYR B B 188 188 . 102.773 99.724  1.849   1.00 2.00   1
. .
ATOM 4722 N    N    . HIS HIS HIS B B 189 189 . 101.927 97.659  1.974   1.00 2.00   1
. .
ATOM 4723 CA   CA   . HIS HIS HIS B B 189 189 . 103.027 97.268  2.812   1.00 2.03   1
. .
ATOM 4724 CB   CB   . HIS HIS HIS B B 189 189 . 102.766 95.857  3.463   1.00 2.00   1
. .
ATOM 4725 CG   CG   . HIS HIS HIS B B 189 189 . 101.526 95.853  4.301   1.00 5.36   1
. .
ATOM 4726 ND1  ND1  . HIS HIS HIS B B 189 189 . 101.359 96.702  5.373   1.00 12.95  1
. .
ATOM 4727 CE1  CE1  . HIS HIS HIS B B 189 189 . 100.163 96.513  5.904   1.00 8.16   1
. .
ATOM 4728 NE2  NE2  . HIS HIS HIS B B 189 189 . 99.564  95.561  5.223   1.00 9.72   1
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ATOM 4729 CD2  CD2  . HIS HIS HIS B B 189 189 . 100.392 95.127  4.219   1.00 11.61  1
. .
ATOM 4730 C    C    . HIS HIS HIS B B 189 189 . 104.334 97.248  2.053   1.00 2.00   1
. .
ATOM 4731 O    O    . HIS HIS HIS B B 189 189 . 105.297 97.568  2.639   1.00 3.87   1
. .
ATOM 4732 N    N    . THR THR THR B B 190 190 . 104.304 96.964  0.737   1.00 2.44   1
. .
ATOM 4733 CA   CA   . THR THR THR B B 190 190 . 105.503 97.052  -0.081  1.00 2.00   1
. .
ATOM 4734 CB   CB   . THR THR THR B B 190 190 . 105.281 96.486  -1.462  1.00 2.49   1
. .
ATOM 4735 OG1  OG1  . THR THR THR B B 190 190 . 104.880 95.116  -1.346  1.00 4.59   1
. .
ATOM 4736 CG2  CG2  . THR THR THR B B 190 190 . 106.586 96.575  -2.267  1.00 2.94   1
. .
ATOM 4737 C    C    . THR THR THR B B 190 190 . 105.994 98.525  -0.163  1.00 2.00   1
. .
ATOM 4738 O    O    . THR THR THR B B 190 190 . 107.191 98.816  0.025   1.00 2.23   1
. .
ATOM 4739 N    N    . LEU LEU LEU B B 191 191 . 105.035 99.442  -0.291  1.00 2.00   1
. .
ATOM 4740 CA   CA   . LEU LEU LEU B B 191 191 . 105.339 100.861 -0.335  1.00 2.00   1
. .
ATOM 4741 CB   CB   . LEU LEU LEU B B 191 191 . 104.035 101.633 -0.669  1.00 2.00   1
. .
ATOM 4742 CG   CG   . LEU LEU LEU B B 191 191 . 104.151 103.148 -0.619  1.00 2.26   1
. .
ATOM 4743 CD1  CD1  . LEU LEU LEU B B 191 191 . 105.208 103.623 -1.660  1.00 4.03   1
. .
ATOM 4744 CD2  CD2  . LEU LEU LEU B B 191 191 . 102.729 103.744 -0.943  1.00 2.50   1
. .
ATOM 4745 C    C    . LEU LEU LEU B B 191 191 . 105.974 101.379 0.933   1.00 2.05   1
. .
ATOM 4746 O    O    . LEU LEU LEU B B 191 191 . 106.879 102.251 0.921   1.00 2.30   1
. .
ATOM 4747 N    N    . LYS LYS LYS B B 192 192 . 105.544 100.887 2.102   1.00 2.00   1
. .
ATOM 4748 CA   CA   . LYS LYS LYS B B 192 192 . 106.178 101.299 3.342   1.00 2.18   1
. .
ATOM 4749 CB   CB   . LYS LYS LYS B B 192 192 . 105.507 100.605 4.540   1.00 2.09   1
. .
ATOM 4750 CG   CG   . LYS LYS LYS B B 192 192 . 105.939 101.239 5.834   1.00 4.07   1
. .
ATOM 4751 CD   CD   . LYS LYS LYS B B 192 192 . 105.130 100.703 7.020   1.00 7.17   1
. .
ATOM 4752 CE   CE   . LYS LYS LYS B B 192 192 . 105.587 101.381 8.287   1.00 10.00  1
. .
ATOM 4753 NZ   NZ   . LYS LYS LYS B B 192 192 . 104.789 100.810 9.437   1.00 12.04  1
. .
ATOM 4754 C    C    . LYS LYS LYS B B 192 192 . 107.709 101.067 3.323   1.00 2.00   1
. .
ATOM 4755 O    O    . LYS LYS LYS B B 192 192 . 108.486 101.951 3.722   1.00 3.09   1
. .
ATOM 4756 N    N    . GLY GLY GLY B B 193 193 . 108.098 99.860  2.892   1.00 3.48   1
. .
ATOM 4757 CA   CA   . GLY GLY GLY B B 193 193 . 109.502 99.501  2.681   1.00 4.93   1
. .
ATOM 4758 C    C    . GLY GLY GLY B B 193 193 . 110.231 100.361 1.662   1.00 4.34   1
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ATOM 4759 O    O    . GLY GLY GLY B B 193 193 . 111.386 100.769 1.863   1.00 8.07   1
. .
ATOM 4760 N    N    . VAL VAL VAL B B 194 194 . 109.594 100.581 0.514   1.00 5.06   1
. .
ATOM 4761 CA   CA   . VAL VAL VAL B B 194 194 . 110.194 101.399 -0.513  1.00 6.78   1
. .
ATOM 4762 CB   CB   . VAL VAL VAL B B 194 194 . 109.287 101.526 -1.761  1.00 4.45   1
. .
ATOM 4763 CG1  CG1  . VAL VAL VAL B B 194 194 . 109.831 102.599 -2.731  1.00 6.39   1
. .
ATOM 4764 CG2  CG2  . VAL VAL VAL B B 194 194 . 109.122 100.197 -2.448  1.00 9.62   1
. .
ATOM 4765 C    C    . VAL VAL VAL B B 194 194 . 110.498 102.772 0.077   1.00 6.83   1
. .
ATOM 4766 O    O    . VAL VAL VAL B B 194 194 . 111.581 103.317 -0.096  1.00 5.48   1
. .
ATOM 4767 N    N    . ILE ILE ILE B B 195 195 . 109.508 103.326 0.793   1.00 3.82   1
. .
ATOM 4768 CA   CA   . ILE ILE ILE B B 195 195 . 109.723 104.624 1.376   1.00 5.65   1
. .
ATOM 4769 CB   CB   . ILE ILE ILE B B 195 195 . 108.424 105.222 1.943   1.00 3.01   1
. .
ATOM 4770 CG1  CG1  . ILE ILE ILE B B 195 195 . 107.358 105.487 0.891   1.00 8.14   1
. .
ATOM 4771 CD1  CD1  . ILE ILE ILE B B 195 195 . 107.735 106.406 -0.248  1.00 14.08  1
. .
ATOM 4772 CG2  CG2  . ILE ILE ILE B B 195 195 . 108.697 106.424 2.850   1.00 4.32   1
. .
ATOM 4773 C    C    . ILE ILE ILE B B 195 195 . 110.792 104.596 2.462   1.00 5.70   1
. .
ATOM 4774 O    O    . ILE ILE ILE B B 195 195 . 111.623 105.508 2.563   1.00 8.06   1
. .
ATOM 4775 N    N    . LYS LYS LYS B B 196 196 . 110.731 103.577 3.318   1.00 7.84   1
. .
ATOM 4776 CA   CA   . LYS LYS LYS B B 196 196 . 111.667 103.497 4.429   1.00 7.14   1
. .
ATOM 4777 CB   CB   . LYS LYS LYS B B 196 196 . 111.353 102.314 5.309   1.00 8.27   1
. .
ATOM 4778 CG   CG   . LYS LYS LYS B B 196 196 . 112.280 102.218 6.471   1.00 11.99  1
. .
ATOM 4779 CD   CD   . LYS LYS LYS B B 196 196 . 111.875 101.109 7.421   1.00 21.53  1
. .
ATOM 4780 CE   CE   . LYS LYS LYS B B 196 196 . 112.650 101.318 8.745   1.00 24.87  1
. .
ATOM 4781 NZ   NZ   . LYS LYS LYS B B 196 196 . 114.119 101.382 8.487   1.00 29.84  1
. .
ATOM 4782 C    C    . LYS LYS LYS B B 196 196 . 113.134 103.384 3.879   1.00 7.23   1
. .
ATOM 4783 O    O    . LYS LYS LYS B B 196 196 . 114.035 104.066 4.334   1.00 7.58   1
. .
ATOM 4784 N    N    . ASP ASP ASP B B 197 197 . 113.320 102.633 2.823   1.00 8.32   1
. .
ATOM 4785 CA   CA   . ASP ASP ASP B B 197 197 . 114.683 102.505 2.294   1.00 11.55  1
. .
ATOM 4786 CB   CB   . ASP ASP ASP B B 197 197 . 114.781 101.327 1.336   1.00 13.67  1
. .
ATOM 4787 CG   CG   . ASP ASP ASP B B 197 197 . 114.770 99.989  2.095   1.00 19.23  1
. .
ATOM 4788 OD1  OD1  . ASP ASP ASP B B 197 197 . 114.336 98.953  1.546   1.00 26.16  1
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ATOM 4789 OD2  OD2  . ASP ASP ASP B B 197 197 . 115.163 99.992  3.295   1.00 25.97  1
. .
ATOM 4790 C    C    . ASP ASP ASP B B 197 197 . 115.217 103.760 1.653   1.00 11.10  1
. .
ATOM 4791 O    O    . ASP ASP ASP B B 197 197 . 116.397 104.050 1.738   1.00 14.11  1
. .
ATOM 4792 N    N    . LYS LYS LYS B B 198 198 . 114.353 104.529 1.035   1.00 11.42  1
. .
ATOM 4793 CA   CA   . LYS LYS LYS B B 198 198 . 114.813 105.750 0.413   1.00 12.19  1
. .
ATOM 4794 CB   CB   . LYS LYS LYS B B 198 198 . 113.913 106.048 -0.808  1.00 13.09  1
. .
ATOM 4795 CG   CG   . LYS LYS LYS B B 198 198 . 114.500 107.110 -1.750  1.00 16.04  1
. .
ATOM 4796 CD   CD   . LYS LYS LYS B B 198 198 . 113.703 107.281 -3.034  1.00 20.18  1
. .
ATOM 4797 CE   CE   . LYS LYS LYS B B 198 198 . 114.626 107.934 -4.066  1.00 20.78  1
. .
ATOM 4798 NZ   NZ   . LYS LYS LYS B B 198 198 . 113.912 108.920 -4.816  1.00 18.68  1
. .
ATOM 4799 C    C    . LYS LYS LYS B B 198 198 . 114.904 106.973 1.355   1.00 12.01  1
. .
ATOM 4800 O    O    . LYS LYS LYS B B 198 198 . 115.848 107.793 1.304   1.00 11.16  1
. .
ATOM 4801 N    N    . TYR TYR TYR B B 199 199 . 113.885 107.122 2.200   1.00 8.72   1
. .
ATOM 4802 CA   CA   . TYR TYR TYR B B 199 199 . 113.733 108.282 3.020   1.00 7.20   1
. .
ATOM 4803 CB   CB   . TYR TYR TYR B B 199 199 . 112.348 108.910 2.776   1.00 6.67   1
. .
ATOM 4804 CG   CG   . TYR TYR TYR B B 199 199 . 112.195 109.425 1.347   1.00 7.94   1
. .
ATOM 4805 CD1  CD1  . TYR TYR TYR B B 199 199 . 111.489 108.700 0.401   1.00 10.57  1
. .
ATOM 4806 CE1  CE1  . TYR TYR TYR B B 199 199 . 111.398 109.140 -0.912  1.00 7.10   1
. .
ATOM 4807 CZ   CZ   . TYR TYR TYR B B 199 199 . 111.964 110.334 -1.247  1.00 10.92  1
. .
ATOM 4808 OH   OH   . TYR TYR TYR B B 199 199 . 111.928 110.906 -2.512  1.00 15.13  1
. .
ATOM 4809 CE2  CE2  . TYR TYR TYR B B 199 199 . 112.651 111.090 -0.315  1.00 11.86  1
. .
ATOM 4810 CD2  CD2  . TYR TYR TYR B B 199 199 . 112.747 110.632 0.983   1.00 10.15  1
. .
ATOM 4811 C    C    . TYR TYR TYR B B 199 199 . 113.959 108.069 4.488   1.00 7.29   1
. .
ATOM 4812 O    O    . TYR TYR TYR B B 199 199 . 114.019 109.074 5.225   1.00 9.53   1
. .
ATOM 4813 N    N    . GLY GLY GLY B B 200 200 . 114.039 106.821 4.945   1.00 6.31   1
. .
ATOM 4814 CA   CA   . GLY GLY GLY B B 200 200 . 114.206 106.560 6.384   1.00 8.08   1
. .
ATOM 4815 C    C    . GLY GLY GLY B B 200 200 . 112.890 106.283 7.067   1.00 8.28   1
. .
ATOM 4816 O    O    . GLY GLY GLY B B 200 200 . 111.804 106.548 6.490   1.00 8.76   1
. .
ATOM 4817 N    N    . LYS LYS LYS B B 201 201 . 112.948 105.776 8.305   1.00 10.95  1
. .
ATOM 4818 CA   CA   . LYS LYS LYS B B 201 201 . 111.705 105.398 9.002   1.00 11.66  1
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ATOM 4819 CB   CB   . LYS LYS LYS B B 201 201 . 112.083 104.642 10.292  1.00 13.01  1
. .
ATOM 4820 CG   CG   . LYS LYS LYS B B 201 201 . 112.921 105.514 11.221  1.00 16.91  1
. .
ATOM 4821 CD   CD   . LYS LYS LYS B B 201 201 . 113.573 104.700 12.388  1.00 23.03  1
. .
ATOM 4822 CE   CE   . LYS LYS LYS B B 201 201 . 114.380 105.608 13.302  1.00 23.18  1
. .
ATOM 4823 NZ   NZ   . LYS LYS LYS B B 201 201 . 115.730 105.742 12.739  1.00 21.53  1
. .
ATOM 4824 C    C    . LYS LYS LYS B B 201 201 . 110.784 106.582 9.302   1.00 12.35  1
. .
ATOM 4825 O    O    . LYS LYS LYS B B 201 201 . 109.599 106.396 9.357   1.00 13.25  1
. .
ATOM 4826 N    N    . ASP ASP ASP B B 202 202 . 111.323 107.792 9.479   1.00 13.78  1
. .
ATOM 4827 CA   CA   . ASP ASP ASP B B 202 202 . 110.498 108.971 9.774   1.00 14.58  1
. .
ATOM 4828 CB   CB   . ASP ASP ASP B B 202 202 . 111.383 110.190 10.098  1.00 17.57  1
. .
ATOM 4829 CG   CG   . ASP ASP ASP B B 202 202 . 112.443 109.888 11.172  1.00 23.15  1
. .
ATOM 4830 OD1  OD1  . ASP ASP ASP B B 202 202 . 112.316 108.848 11.848  1.00 29.61  1
. .
ATOM 4831 OD2  OD2  . ASP ASP ASP B B 202 202 . 113.430 110.675 11.332  1.00 29.14  1
. .
ATOM 4832 C    C    . ASP ASP ASP B B 202 202 . 109.571 109.346 8.631   1.00 13.01  1
. .
ATOM 4833 O    O    . ASP ASP ASP B B 202 202 . 108.643 110.160 8.793   1.00 13.71  1
. .
ATOM 4834 N    N    . ALA ALA ALA B B 203 203 . 109.785 108.795 7.448   1.00 8.44   1
. .
ATOM 4835 CA   CA   . ALA ALA ALA B B 203 203 . 108.865 109.082 6.353   1.00 6.65   1
. .
ATOM 4836 CB   CB   . ALA ALA ALA B B 203 203 . 109.663 109.184 5.041   1.00 5.82   1
. .
ATOM 4837 C    C    . ALA ALA ALA B B 203 203 . 107.727 108.050 6.264   1.00 4.93   1
. .
ATOM 4838 O    O    . ALA ALA ALA B B 203 203 . 106.882 108.101 5.373   1.00 4.70   1
. .
ATOM 4839 N    N    . THR THR THR B B 204 204 . 107.661 107.159 7.235   1.00 3.53   1
. .
ATOM 4840 CA   CA   . THR THR THR B B 204 204 . 106.688 106.107 7.119   1.00 3.78   1
. .
ATOM 4841 CB   CB   . THR THR THR B B 204 204 . 107.343 104.762 7.393   1.00 4.30   1
. .
ATOM 4842 OG1  OG1  . THR THR THR B B 204 204 . 107.859 104.752 8.734   1.00 8.56   1
. .
ATOM 4843 CG2  CG2  . THR THR THR B B 204 204 . 108.537 104.425 6.420   1.00 7.16   1
. .
ATOM 4844 C    C    . THR THR THR B B 204 204 . 105.506 106.220 8.086   1.00 2.37   1
. .
ATOM 4845 O    O    . THR THR THR B B 204 204 . 104.826 105.245 8.340   1.00 3.08   1
. .
ATOM 4846 N    N    . ASN ASN ASN B B 205 205 . 105.349 107.368 8.695   1.00 2.30   1
. .
ATOM 4847 CA   CA   . ASN ASN ASN B B 205 205 . 104.123 107.646 9.464   1.00 2.29   1
. .
ATOM 4848 CB   CB   . ASN ASN ASN B B 205 205 . 104.385 108.674 10.539  1.00 4.39   1
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ATOM 4849 CG   CG   . ASN ASN ASN B B 205 205 . 105.493 108.235 11.442  1.00 4.35   1
. .
ATOM 4850 OD1  OD1  . ASN ASN ASN B B 205 205 . 105.429 107.186 12.060  1.00 6.40   1
. .
ATOM 4851 ND2  ND2  . ASN ASN ASN B B 205 205 . 106.606 109.018 11.468  1.00 5.77   1
. .
ATOM 4852 C    C    . ASN ASN ASN B B 205 205 . 102.991 108.019 8.548   1.00 2.13   1
. .
ATOM 4853 O    O    . ASN ASN ASN B B 205 205 . 103.197 108.155 7.362   1.00 3.78   1
. .
ATOM 4854 N    N    . VAL VAL VAL B B 206 206 . 101.746 108.111 9.054   1.00 2.00   1
. .
ATOM 4855 CA   CA   . VAL VAL VAL B B 206 206 . 100.622 108.244 8.133   1.00 2.00   1
. .
ATOM 4856 CB   CB   . VAL VAL VAL B B 206 206 . 99.617  107.011 8.266   1.00 2.00   1
. .
ATOM 4857 CG1  CG1  . VAL VAL VAL B B 206 206 . 100.306 105.676 8.031   1.00 2.24   1
. .
ATOM 4858 CG2  CG2  . VAL VAL VAL B B 206 206 . 98.953  107.004 9.628   1.00 2.36   1
. .
ATOM 4859 C    C    . VAL VAL VAL B B 206 206 . 99.886  109.543 8.299   1.00 2.00   1
. .
ATOM 4860 O    O    . VAL VAL VAL B B 206 206 . 99.966  110.149 9.401   1.00 2.12   1
. .
ATOM 4861 N    N    . GLY GLY GLY B B 207 207 . 99.219  109.965 7.197   1.00 2.52   1
. .
ATOM 4862 CA   CA   . GLY GLY GLY B B 207 207 . 98.356  111.140 7.218   1.00 2.00   1
. .
ATOM 4863 C    C    . GLY GLY GLY B B 207 207 . 96.920  110.760 7.551   1.00 2.00   1
. .
ATOM 4864 O    O    . GLY GLY GLY B B 207 207 . 96.627  109.593 8.013   1.00 2.00   1
. .
ATOM 4865 N    N    . ASP ASP ASP B B 208 208 . 96.030  111.716 7.387   1.00 2.33   1
. .
ATOM 4866 CA   CA   . ASP ASP ASP B B 208 208 . 94.626  111.599 7.808   1.00 2.00   1
. .
ATOM 4867 CB   CB   . ASP ASP ASP B B 208 208 . 93.821  112.906 7.494   1.00 2.35   1
. .
ATOM 4868 CG   CG   . ASP ASP ASP B B 208 208 . 94.175  114.026 8.401   1.00 4.71   1
. .
ATOM 4869 OD1  OD1  . ASP ASP ASP B B 208 208 . 94.788  113.835 9.513   1.00 8.78   1
. .
ATOM 4870 OD2  OD2  . ASP ASP ASP B B 208 208 . 93.925  115.172 7.946   1.00 5.82   1
. .
ATOM 4871 C    C    . ASP ASP ASP B B 208 208 . 93.905  110.413 7.244   1.00 2.21   1
. .
ATOM 4872 O    O    . ASP ASP ASP B B 208 208 . 92.999  109.893 7.912   1.00 2.03   1
. .
ATOM 4873 N    N    . GLU GLU GLU B B 209 209 . 94.267  110.008 6.012   1.00 2.00   1
. .
ATOM 4874 CA   CA   . GLU GLU GLU B B 209 209 . 93.517  108.931 5.346   1.00 2.00   1
. .
ATOM 4875 CB   CB   . GLU GLU GLU B B 209 209 . 93.135  109.329 3.921   1.00 2.83   1
. .
ATOM 4876 CG   CG   . GLU GLU GLU B B 209 209 . 92.288  110.615 3.899   1.00 3.50   1
. .
ATOM 4877 CD   CD   . GLU GLU GLU B B 209 209 . 91.540  110.745 2.638   1.00 7.82   1
. .
ATOM 4878 OE1  OE1  . GLU GLU GLU B B 209 209 . 91.986  110.124 1.604   1.00 5.81   1
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ATOM 4879 OE2  OE2  . GLU GLU GLU B B 209 209 . 90.515  111.531 2.604   1.00 6.67   1
. .
ATOM 4880 C    C    . GLU GLU GLU B B 209 209 . 94.263  107.602 5.384   1.00 2.00   1
. .
ATOM 4881 O    O    . GLU GLU GLU B B 209 209 . 93.898  106.713 4.634   1.00 2.00   1
. .
ATOM 4882 N    N    . GLY GLY GLY B B 210 210 . 95.378  107.555 6.112   1.00 2.00   1
. .
ATOM 4883 CA   CA   . GLY GLY GLY B B 210 210 . 96.071  106.267 6.355   1.00 2.00   1
. .
ATOM 4884 C    C    . GLY GLY GLY B B 210 210 . 97.190  106.063 5.331   1.00 2.00   1
. .
ATOM 4885 O    O    . GLY GLY GLY B B 210 210 . 97.968  105.150 5.466   1.00 2.00   1
. .
ATOM 4886 N    N    . GLY GLY GLY B B 211 211 . 97.341  106.979 4.379   1.00 2.00   1
. .
ATOM 4887 CA   CA   . GLY GLY GLY B B 211 211 . 98.445  106.902 3.389   1.00 2.07   1
. .
ATOM 4888 C    C    . GLY GLY GLY B B 211 211 . 99.759  107.427 3.988   1.00 2.00   1
. .
ATOM 4889 O    O    . GLY GLY GLY B B 211 211 . 99.789  108.176 4.996   1.00 2.84   1
. .
ATOM 4890 N    N    . PHE PHE PHE B B 212 212 . 100.869 107.038 3.403   1.00 2.31   1
. .
ATOM 4891 CA   CA   . PHE PHE PHE B B 212 212 . 102.117 107.545 3.903   1.00 2.88   1
. .
ATOM 4892 CB   CB   . PHE PHE PHE B B 212 212 . 103.318 106.686 3.434   1.00 3.11   1
. .
ATOM 4893 CG   CG   . PHE PHE PHE B B 212 212 . 103.126 105.270 3.746   1.00 5.53   1
. .
ATOM 4894 CD1  CD1  . PHE PHE PHE B B 212 212 . 102.836 104.358 2.741   1.00 4.80   1
. .
ATOM 4895 CE1  CE1  . PHE PHE PHE B B 212 212 . 102.623 102.994 3.011   1.00 5.48   1
. .
ATOM 4896 CZ   CZ   . PHE PHE PHE B B 212 212 . 102.655 102.566 4.331   1.00 10.61  1
. .
ATOM 4897 CE2  CE2  . PHE PHE PHE B B 212 212 . 102.930 103.459 5.344   1.00 10.08  1
. .
ATOM 4898 CD2  CD2  . PHE PHE PHE B B 212 212 . 103.159 104.808 5.100   1.00 8.88   1
. .
ATOM 4899 C    C    . PHE PHE PHE B B 212 212 . 102.344 108.957 3.551   1.00 2.69   1
. .
ATOM 4900 O    O    . PHE PHE PHE B B 212 212 . 101.890 109.505 2.529   1.00 4.94   1
. .
ATOM 4901 N    N    . ALA ALA ALA B B 213 213 . 103.049 109.573 4.455   1.00 4.82   1
. .
ATOM 4902 CA   CA   . ALA ALA ALA B B 213 213 . 103.355 110.982 4.361   1.00 5.47   1
. .
ATOM 4903 CB   CB   . ALA ALA ALA B B 213 213 . 102.704 111.638 5.638   1.00 6.88   1
. .
ATOM 4904 C    C    . ALA ALA ALA B B 213 213 . 104.838 111.253 4.290   1.00 8.45   1
. .
ATOM 4905 O    O    . ALA ALA ALA B B 213 213 . 105.441 111.810 5.260   1.00 8.88   1
. .
ATOM 4906 N    N    . PRO PRO PRO B B 214 214 . 105.480 110.922 3.132   1.00 8.27   1
. .
ATOM 4907 CA   CA   . PRO PRO PRO B B 214 214 . 106.897 111.117 3.049   1.00 7.40   1
. .
ATOM 4908 CB   CB   . PRO PRO PRO B B 214 214 . 107.307 110.252 1.818   1.00 8.05   1
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ATOM 4909 CG   CG   . PRO PRO PRO B B 214 214 . 106.044 110.356 0.976   1.00 7.71   1
. .
ATOM 4910 CD   CD   . PRO PRO PRO B B 214 214 . 104.979 110.198 1.940   1.00 8.11   1
. .
ATOM 4911 C    C    . PRO PRO PRO B B 214 214 . 107.196 112.567 2.798   1.00 10.13  1
. .
ATOM 4912 O    O    . PRO PRO PRO B B 214 214 . 106.371 113.350 2.254   1.00 9.01   1
. .
ATOM 4913 N    N    . ASN ASN ASN B B 215 215 . 108.396 112.907 3.217   1.00 11.42  1
. .
ATOM 4914 CA   CA   . ASN ASN ASN B B 215 215 . 108.882 114.278 3.147   1.00 12.69  1
. .
ATOM 4915 CB   CB   . ASN ASN ASN B B 215 215 . 110.025 114.517 4.176   1.00 12.71  1
. .
ATOM 4916 CG   CG   . ASN ASN ASN B B 215 215 . 111.096 113.351 4.225   1.00 16.37  1
. .
ATOM 4917 OD1  OD1  . ASN ASN ASN B B 215 215 . 112.309 113.640 4.307   1.00 23.87  1
. .
ATOM 4918 ND2  ND2  . ASN ASN ASN B B 215 215 . 110.660 112.068 4.257   1.00 9.86   1
. .
ATOM 4919 C    C    . ASN ASN ASN B B 215 215 . 109.320 114.633 1.728   1.00 12.28  1
. .
ATOM 4920 O    O    . ASN ASN ASN B B 215 215 . 110.510 114.892 1.471   1.00 14.08  1
. .
ATOM 4921 N    N    . ILE ILE ILE B B 216 216 . 108.381 114.629 0.782   1.00 11.39  1
. .
ATOM 4922 CA   CA   . ILE ILE ILE B B 216 216 . 108.765 115.059 -0.558  1.00 11.06  1
. .
ATOM 4923 CB   CB   . ILE ILE ILE B B 216 216 . 108.692 113.890 -1.608  1.00 10.84  1
. .
ATOM 4924 CG1  CG1  . ILE ILE ILE B B 216 216 . 107.257 113.410 -1.896  1.00 13.88  1
. .
ATOM 4925 CD1  CD1  . ILE ILE ILE B B 216 216 . 106.418 113.121 -0.716  1.00 19.58  1
. .
ATOM 4926 CG2  CG2  . ILE ILE ILE B B 216 216 . 109.549 112.697 -1.184  1.00 9.89   1
. .
ATOM 4927 C    C    . ILE ILE ILE B B 216 216 . 107.928 116.208 -1.030  1.00 11.02  1
. .
ATOM 4928 O    O    . ILE ILE ILE B B 216 216 . 106.869 116.477 -0.439  1.00 10.25  1
. .
ATOM 4929 N    N    . LEU LEU LEU B B 217 217 . 108.430 116.852 -2.065  1.00 8.91   1
. .
ATOM 4930 CA   CA   . LEU LEU LEU B B 217 217 . 107.809 117.987 -2.702  1.00 12.02  1
. .
ATOM 4931 CB   CB   . LEU LEU LEU B B 217 217 . 108.787 119.156 -2.812  1.00 12.71  1
. .
ATOM 4932 CG   CG   . LEU LEU LEU B B 217 217 . 108.345 120.407 -3.601  1.00 13.90  1
. .
ATOM 4933 CD1  CD1  . LEU LEU LEU B B 217 217 . 107.085 121.023 -3.076  1.00 14.09  1
. .
ATOM 4934 CD2  CD2  . LEU LEU LEU B B 217 217 . 109.454 121.378 -3.664  1.00 15.73  1
. .
ATOM 4935 C    C    . LEU LEU LEU B B 217 217 . 107.281 117.618 -4.069  1.00 12.23  1
. .
ATOM 4936 O    O    . LEU LEU LEU B B 217 217 . 106.142 117.978 -4.382  1.00 12.92  1
. .
ATOM 4937 N    N    . GLU GLU GLU B B 218 218 . 108.075 116.911 -4.871  1.00 11.02  1
. .
ATOM 4938 CA   CA   . GLU GLU GLU B B 218 218 . 107.719 116.699 -6.310  1.00 10.14  1
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ATOM 4939 CB   CB   . GLU GLU GLU B B 218 218 . 108.977 116.269 -7.051  1.00 12.77  1
. .
ATOM 4940 CG   CG   . GLU GLU GLU B B 218 218 . 110.036 117.389 -7.347  1.00 15.67  1
. .
ATOM 4941 CD   CD   . GLU GLU GLU B B 218 218 . 109.540 118.478 -8.338  1.00 24.92  1
. .
ATOM 4942 OE1  OE1  . GLU GLU GLU B B 218 218 . 108.475 118.287 -8.981  1.00 27.75  1
. .
ATOM 4943 OE2  OE2  . GLU GLU GLU B B 218 218 . 110.211 119.543 -8.460  1.00 29.86  1
. .
ATOM 4944 C    C    . GLU GLU GLU B B 218 218 . 106.577 115.661 -6.526  1.00 8.63   1
. .
ATOM 4945 O    O    . GLU GLU GLU B B 218 218 . 106.706 114.509 -6.068  1.00 6.56   1
. .
ATOM 4946 N    N    . ASN ASN ASN B B 219 219 . 105.459 116.048 -7.155  1.00 5.73   1
. .
ATOM 4947 CA   CA   . ASN ASN ASN B B 219 219 . 104.351 115.115 -7.330  1.00 4.51   1
. .
ATOM 4948 CB   CB   . ASN ASN ASN B B 219 219 . 103.113 115.853 -7.842  1.00 5.44   1
. .
ATOM 4949 CG   CG   . ASN ASN ASN B B 219 219 . 102.699 116.889 -6.902  1.00 4.32   1
. .
ATOM 4950 OD1  OD1  . ASN ASN ASN B B 219 219 . 102.099 116.598 -5.862  1.00 4.41   1
. .
ATOM 4951 ND2  ND2  . ASN ASN ASN B B 219 219 . 103.072 118.120 -7.211  1.00 9.54   1
. .
ATOM 4952 C    C    . ASN ASN ASN B B 219 219 . 104.778 113.902 -8.178  1.00 3.96   1
. .
ATOM 4953 O    O    . ASN ASN ASN B B 219 219 . 104.264 112.788 -7.976  1.00 4.52   1
. .
ATOM 4954 N    N    . SER SER SER B B 220 220 . 105.699 114.090 -9.079  1.00 4.12   1
. .
ATOM 4955 CA   CA   . SER SER SER B B 220 220 . 106.188 112.977 -9.869  1.00 6.07   1
. .
ATOM 4956 CB   CB   . SER SER SER B B 220 220 . 107.026 113.468 -11.023 1.00 6.57   1
. .
ATOM 4957 OG   OG   . SER SER SER B B 220 220 . 108.213 114.043 -10.547 1.00 10.06  1
. .
ATOM 4958 C    C    . SER SER SER B B 220 220 . 106.968 111.981 -9.039  1.00 5.47   1
. .
ATOM 4959 O    O    . SER SER SER B B 220 220 . 106.915 110.783 -9.333  1.00 5.27   1
. .
ATOM 4960 N    N    . GLU GLU GLU B B 221 221 . 107.626 112.435 -7.978  1.00 6.02   1
. .
ATOM 4961 CA   CA   . GLU GLU GLU B B 221 221 . 108.235 111.450 -7.064  1.00 6.25   1
. .
ATOM 4962 CB   CB   . GLU GLU GLU B B 221 221 . 109.195 112.142 -6.114  1.00 8.29   1
. .
ATOM 4963 CG   CG   . GLU GLU GLU B B 221 221 . 109.699 111.280 -4.992  1.00 10.67  1
. .
ATOM 4964 CD   CD   . GLU GLU GLU B B 221 221 . 110.832 110.307 -5.429  1.00 19.40  1
. .
ATOM 4965 OE1  OE1  . GLU GLU GLU B B 221 221 . 111.354 110.460 -6.569  1.00 22.92  1
. .
ATOM 4966 OE2  OE2  . GLU GLU GLU B B 221 221 . 111.197 109.415 -4.614  1.00 19.12  1
. .
ATOM 4967 C    C    . GLU GLU GLU B B 221 221 . 107.224 110.560 -6.322  1.00 5.38   1
. .
ATOM 4968 O    O    . GLU GLU GLU B B 221 221 . 107.501 109.386 -6.108  1.00 4.38   1
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ATOM 4969 N    N    . ALA ALA ALA B B 222 222 . 106.066 111.096 -5.953  1.00 3.17   1
. .
ATOM 4970 CA   CA   . ALA ALA ALA B B 222 222 . 104.993 110.318 -5.337  1.00 2.66   1
. .
ATOM 4971 CB   CB   . ALA ALA ALA B B 222 222 . 103.789 111.200 -4.998  1.00 3.43   1
. .
ATOM 4972 C    C    . ALA ALA ALA B B 222 222 . 104.601 109.220 -6.334  1.00 2.16   1
. .
ATOM 4973 O    O    . ALA ALA ALA B B 222 222 . 104.465 108.065 -5.984  1.00 2.56   1
. .
ATOM 4974 N    N    . LEU LEU LEU B B 223 223 . 104.484 109.634 -7.588  1.00 2.15   1
. .
ATOM 4975 CA   CA   . LEU LEU LEU B B 223 223 . 104.058 108.699 -8.611  1.00 2.30   1
. .
ATOM 4976 CB   CB   . LEU LEU LEU B B 223 223 . 103.768 109.462 -9.936  1.00 3.24   1
. .
ATOM 4977 CG   CG   . LEU LEU LEU B B 223 223 . 102.457 110.214 -9.901  1.00 2.71   1
. .
ATOM 4978 CD1  CD1  . LEU LEU LEU B B 223 223 . 102.400 111.057 -11.127 1.00 3.53   1
. .
ATOM 4979 CD2  CD2  . LEU LEU LEU B B 223 223 . 101.271 109.308 -9.733  1.00 3.72   1
. .
ATOM 4980 C    C    . LEU LEU LEU B B 223 223 . 105.140 107.641 -8.820  1.00 2.00   1
. .
ATOM 4981 O    O    . LEU LEU LEU B B 223 223 . 104.833 106.428 -8.898  1.00 2.84   1
. .
ATOM 4982 N    N    . GLU GLU GLU B B 224 224 . 106.411 108.052 -8.782  1.00 3.28   1
. .
ATOM 4983 CA   CA   . GLU GLU GLU B B 224 224 . 107.483 107.038 -8.952  1.00 5.75   1
. .
ATOM 4984 CB   CB   . GLU GLU GLU B B 224 224 . 108.867 107.667 -9.034  1.00 9.10   1
. .
ATOM 4985 CG   CG   . GLU GLU GLU B B 224 224 . 109.876 106.814 -9.852  1.00 17.32  1
. .
ATOM 4986 CD   CD   . GLU GLU GLU B B 224 224 . 109.754 107.067 -11.374 1.00 27.54  1
. .
ATOM 4987 OE1  OE1  . GLU GLU GLU B B 224 224 . 109.060 106.272 -12.041 1.00 30.65  1
. .
ATOM 4988 OE2  OE2  . GLU GLU GLU B B 224 224 . 110.306 108.091 -11.886 1.00 29.93  1
. .
ATOM 4989 C    C    . GLU GLU GLU B B 224 224 . 107.509 106.031 -7.812  1.00 4.76   1
. .
ATOM 4990 O    O    . GLU GLU GLU B B 224 224 . 107.724 104.857 -8.029  1.00 3.88   1
. .
ATOM 4991 N    N    . LEU LEU LEU B B 225 225 . 107.263 106.524 -6.613  1.00 3.36   1
. .
ATOM 4992 CA   CA   . LEU LEU LEU B B 225 225 . 107.291 105.635 -5.470  1.00 3.05   1
. .
ATOM 4993 CB   CB   . LEU LEU LEU B B 225 225 . 107.102 106.440 -4.174  1.00 5.01   1
. .
ATOM 4994 CG   CG   . LEU LEU LEU B B 225 225 . 108.346 107.137 -3.672  1.00 4.85   1
. .
ATOM 4995 CD1  CD1  . LEU LEU LEU B B 225 225 . 107.937 108.301 -2.700  1.00 8.35   1
. .
ATOM 4996 CD2  CD2  . LEU LEU LEU B B 225 225 . 109.384 106.188 -3.062  1.00 8.21   1
. .
ATOM 4997 C    C    . LEU LEU LEU B B 225 225 . 106.166 104.594 -5.564  1.00 2.79   1
. .
ATOM 4998 O    O    . LEU LEU LEU B B 225 225 . 106.368 103.394 -5.307  1.00 5.39   1
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ATOM 4999 N    N    . VAL VAL VAL B B 226 226 . 104.951 105.082 -5.862  1.00 2.77   1
. .
ATOM 5000 CA   CA   . VAL VAL VAL B B 226 226 . 103.795 104.253 -6.070  1.00 2.68   1
. .
ATOM 5001 CB   CB   . VAL VAL VAL B B 226 226 . 102.550 105.109 -6.351  1.00 3.34   1
. .
ATOM 5002 CG1  CG1  . VAL VAL VAL B B 226 226 . 101.327 104.269 -6.643  1.00 3.15   1
. .
ATOM 5003 CG2  CG2  . VAL VAL VAL B B 226 226 . 102.233 105.938 -5.101  1.00 2.15   1
. .
ATOM 5004 C    C    . VAL VAL VAL B B 226 226 . 104.040 103.230 -7.176  1.00 2.82   1
. .
ATOM 5005 O    O    . VAL VAL VAL B B 226 226 . 103.754 102.024 -7.018  1.00 3.86   1
. .
ATOM 5006 N    N    . LYS LYS LYS B B 227 227 . 104.580 103.689 -8.311  1.00 2.57   1
. .
ATOM 5007 CA   CA   . LYS LYS LYS B B 227 227 . 104.874 102.764 -9.389  1.00 4.10   1
. .
ATOM 5008 CB   CB   . LYS LYS LYS B B 227 227 . 105.432 103.557 -10.608 1.00 4.85   1
. .
ATOM 5009 CG   CG   . LYS LYS LYS B B 227 227 . 105.630 102.751 -11.821 1.00 8.87   1
. .
ATOM 5010 CD   CD   . LYS LYS LYS B B 227 227 . 106.083 103.655 -12.982 1.00 12.51  1
. .
ATOM 5011 CE   CE   . LYS LYS LYS B B 227 227 . 106.054 102.906 -14.308 1.00 17.55  1
. .
ATOM 5012 NZ   NZ   . LYS LYS LYS B B 227 227 . 106.092 103.995 -15.385 1.00 18.14  1
. .
ATOM 5013 C    C    . LYS LYS LYS B B 227 227 . 105.877 101.720 -9.002  1.00 5.01   1
. .
ATOM 5014 O    O    . LYS LYS LYS B B 227 227 . 105.708 100.520 -9.431  1.00 6.07   1
. .
ATOM 5015 N    N    . GLU GLU GLU B B 228 228 . 106.917 102.110 -8.262  1.00 4.92   1
. .
ATOM 5016 CA   CA   . GLU GLU GLU B B 228 228 . 107.881 101.127 -7.825  1.00 7.76   1
. .
ATOM 5017 CB   CB   . GLU GLU GLU B B 228 228 . 109.036 101.743 -7.083  1.00 9.04   1
. .
ATOM 5018 CG   CG   . GLU GLU GLU B B 228 228 . 110.178 100.733 -6.709  1.00 12.58  1
. .
ATOM 5019 CD   CD   . GLU GLU GLU B B 228 228 . 111.354 101.397 -5.956  1.00 24.23  1
. .
ATOM 5020 OE1  OE1  . GLU GLU GLU B B 228 228 . 112.062 100.714 -5.168  1.00 30.79  1
. .
ATOM 5021 OE2  OE2  . GLU GLU GLU B B 228 228 . 111.579 102.618 -6.127  1.00 29.01  1
. .
ATOM 5022 C    C    . GLU GLU GLU B B 228 228 . 107.234 100.074 -6.953  1.00 7.55   1
. .
ATOM 5023 O    O    . GLU GLU GLU B B 228 228 . 107.455 98.859  -7.154  1.00 9.04   1
. .
ATOM 5024 N    N    . ALA ALA ALA B B 229 229 . 106.428 100.510 -5.972  1.00 5.76   1
. .
ATOM 5025 CA   CA   . ALA ALA ALA B B 229 229 . 105.836 99.547  -5.053  1.00 4.99   1
. .
ATOM 5026 CB   CB   . ALA ALA ALA B B 229 229 . 105.124 100.290 -3.969  1.00 4.50   1
. .
ATOM 5027 C    C    . ALA ALA ALA B B 229 229 . 104.886 98.605  -5.752  1.00 3.51   1
. .
ATOM 5028 O    O    . ALA ALA ALA B B 229 229 . 104.837 97.434  -5.438  1.00 4.51   1
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ATOM 5029 N    N    . ILE ILE ILE B B 230 230 . 104.134 99.061  -6.745  1.00 2.96   1
. .
ATOM 5030 CA   CA   . ILE ILE ILE B B 230 230 . 103.266 98.195  -7.456  1.00 3.33   1
. .
ATOM 5031 CB   CB   . ILE ILE ILE B B 230 230 . 102.495 99.015  -8.550  1.00 3.05   1
. .
ATOM 5032 CG1  CG1  . ILE ILE ILE B B 230 230 . 101.357 99.867  -7.917  1.00 2.72   1
. .
ATOM 5033 CD1  CD1  . ILE ILE ILE B B 230 230 . 100.841 100.934 -8.865  1.00 5.34   1
. .
ATOM 5034 CG2  CG2  . ILE ILE ILE B B 230 230 . 101.900 98.066  -9.608  1.00 3.34   1
. .
ATOM 5035 C    C    . ILE ILE ILE B B 230 230 . 104.109 97.088  -8.131  1.00 5.94   1
. .
ATOM 5036 O    O    . ILE ILE ILE B B 230 230 . 103.770 95.869  -8.180  1.00 5.97   1
. .
ATOM 5037 N    N    . ASP ASP ASP B B 231 231 . 105.206 97.525  -8.699  1.00 7.66   1
. .
ATOM 5038 CA   CA   . ASP ASP ASP B B 231 231 . 106.056 96.623  -9.474  1.00 9.83   1
. .
ATOM 5039 CB   CB   . ASP ASP ASP B B 231 231 . 107.098 97.426  -10.287 1.00 11.87  1
. .
ATOM 5040 CG   CG   . ASP ASP ASP B B 231 231 . 107.968 96.511  -11.180 1.00 18.24  1
. .
ATOM 5041 OD1  OD1  . ASP ASP ASP B B 231 231 . 109.167 96.314  -10.874 1.00 23.71  1
. .
ATOM 5042 OD2  OD2  . ASP ASP ASP B B 231 231 . 107.438 95.968  -12.171 1.00 30.04  1
. .
ATOM 5043 C    C    . ASP ASP ASP B B 231 231 . 106.769 95.659  -8.527  1.00 8.34   1
. .
ATOM 5044 O    O    . ASP ASP ASP B B 231 231 . 106.838 94.447  -8.791  1.00 9.27   1
. .
ATOM 5045 N    N    . LYS LYS LYS B B 232 232 . 107.251 96.162  -7.413  1.00 6.57   1
. .
ATOM 5046 CA   CA   . LYS LYS LYS B B 232 232 . 107.990 95.326  -6.438  1.00 8.21   1
. .
ATOM 5047 CB   CB   . LYS LYS LYS B B 232 232 . 108.533 96.215  -5.331  1.00 10.45  1
. .
ATOM 5048 CG   CG   . LYS LYS LYS B B 232 232 . 109.394 95.552  -4.256  1.00 16.06  1
. .
ATOM 5049 CD   CD   . LYS LYS LYS B B 232 232 . 110.121 96.631  -3.410  1.00 21.55  1
. .
ATOM 5050 CE   CE   . LYS LYS LYS B B 232 232 . 111.584 96.314  -3.129  1.00 28.60  1
. .
ATOM 5051 NZ   NZ   . LYS LYS LYS B B 232 232 . 112.414 97.507  -3.590  1.00 33.54  1
. .
ATOM 5052 C    C    . LYS LYS LYS B B 232 232 . 107.064 94.267  -5.858  1.00 7.88   1
. .
ATOM 5053 O    O    . LYS LYS LYS B B 232 232 . 107.531 93.176  -5.492  1.00 8.98   1
. .
ATOM 5054 N    N    . ALA ALA ALA B B 233 233 . 105.763 94.585  -5.743  1.00 6.31   1
. .
ATOM 5055 CA   CA   . ALA ALA ALA B B 233 233 . 104.807 93.700  -5.190  1.00 6.00   1
. .
ATOM 5056 CB   CB   . ALA ALA ALA B B 233 233 . 103.577 94.546  -4.671  1.00 5.02   1
. .
ATOM 5057 C    C    . ALA ALA ALA B B 233 233 . 104.347 92.661  -6.200  1.00 7.96   1
. .
ATOM 5058 O    O    . ALA ALA ALA B B 233 233 . 103.652 91.643  -5.860  1.00 10.31  1
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ATOM 5059 N    N    . GLY GLY GLY B B 234 234 . 104.749 92.923  -7.441  1.00 8.11   1
. .
ATOM 5060 CA   CA   . GLY GLY GLY B B 234 234 . 104.509 92.047  -8.622  1.00 8.74   1
. .
ATOM 5061 C    C    . GLY GLY GLY B B 234 234 . 103.213 92.249  -9.362  1.00 7.66   1
. .
ATOM 5062 O    O    . GLY GLY GLY B B 234 234 . 102.715 91.390  -10.066 1.00 10.56  1
. .
ATOM 5063 N    N    . TYR TYR TYR B B 235 235 . 102.623 93.428  -9.225  1.00 6.80   1
. .
ATOM 5064 CA   CA   . TYR TYR TYR B B 235 235 . 101.302 93.653  -9.720  1.00 4.75   1
. .
ATOM 5065 CB   CB   . TYR TYR TYR B B 235 235 . 100.355 94.049  -8.559  1.00 4.85   1
. .
ATOM 5066 CG   CG   . TYR TYR TYR B B 235 235 . 100.084 92.915  -7.604  1.00 2.42   1
. .
ATOM 5067 CD1  CD1  . TYR TYR TYR B B 235 235 . 100.351 93.066  -6.273  1.00 3.51   1
. .
ATOM 5068 CE1  CE1  . TYR TYR TYR B B 235 235 . 100.139 92.062  -5.381  1.00 5.41   1
. .
ATOM 5069 CZ   CZ   . TYR TYR TYR B B 235 235 . 99.707  90.864  -5.806  1.00 8.79   1
. .
ATOM 5070 OH   OH   . TYR TYR TYR B B 235 235 . 99.533  89.837  -4.882  1.00 10.81  1
. .
ATOM 5071 CE2  CE2  . TYR TYR TYR B B 235 235 . 99.501  90.644  -7.155  1.00 8.41   1
. .
ATOM 5072 CD2  CD2  . TYR TYR TYR B B 235 235 . 99.664  91.667  -8.044  1.00 7.92   1
. .
ATOM 5073 C    C    . TYR TYR TYR B B 235 235 . 101.201 94.708  -10.859 1.00 4.44   1
. .
ATOM 5074 O    O    . TYR TYR TYR B B 235 235 . 100.152 95.248  -11.084 1.00 3.79   1
. .
ATOM 5075 N    N    . THR THR THR B B 236 236 . 102.299 94.954  -11.547 1.00 4.58   1
. .
ATOM 5076 CA   CA   . THR THR THR B B 236 236 . 102.270 95.920  -12.665 1.00 6.59   1
. .
ATOM 5077 CB   CB   . THR THR THR B B 236 236 . 103.575 95.936  -13.418 1.00 6.85   1
. .
ATOM 5078 OG1  OG1  . THR THR THR B B 236 236 . 104.590 96.083  -12.468 1.00 11.65  1
. .
ATOM 5079 CG2  CG2  . THR THR THR B B 236 236 . 103.679 97.079  -14.513 1.00 4.31   1
. .
ATOM 5080 C    C    . THR THR THR B B 236 236 . 101.118 95.695  -13.596 1.00 8.13   1
. .
ATOM 5081 O    O    . THR THR THR B B 236 236 . 100.550 96.643  -14.113 1.00 8.58   1
. .
ATOM 5082 N    N    . GLU GLU GLU B B 237 237 . 100.796 94.441  -13.914 1.00 9.98   1
. .
ATOM 5083 CA   CA   . GLU GLU GLU B B 237 237 . 99.713  94.305  -14.873 1.00 12.03  1
. .
ATOM 5084 CB   CB   . GLU GLU GLU B B 237 237 . 99.826  92.985  -15.664 1.00 15.13  1
. .
ATOM 5085 CG   CG   . GLU GLU GLU B B 237 237 . 101.235 92.709  -16.306 1.00 21.25  1
. .
ATOM 5086 CD   CD   . GLU GLU GLU B B 237 237 . 101.981 93.958  -16.782 1.00 29.44  1
. .
ATOM 5087 OE1  OE1  . GLU GLU GLU B B 237 237 . 103.161 94.121  -16.421 1.00 33.55  1
. .
ATOM 5088 OE2  OE2  . GLU GLU GLU B B 237 237 . 101.413 94.785  -17.524 1.00 33.35  1
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ATOM 5089 C    C    . GLU GLU GLU B B 237 237 . 98.310  94.481  -14.304 1.00 10.91  1
. .
ATOM 5090 O    O    . GLU GLU GLU B B 237 237 . 97.316  94.420  -15.061 1.00 12.46  1
. .
ATOM 5091 N    N    . LYS LYS LYS B B 238 238 . 98.172  94.689  -12.998 1.00 6.18   1
. .
ATOM 5092 CA   CA   . LYS LYS LYS B B 238 238 . 96.810  94.574  -12.435 1.00 5.87   1
. .
ATOM 5093 CB   CB   . LYS LYS LYS B B 238 238 . 96.694  93.371  -11.528 1.00 6.26   1
. .
ATOM 5094 CG   CG   . LYS LYS LYS B B 238 238 . 96.801  91.970  -12.201 1.00 9.13   1
. .
ATOM 5095 CD   CD   . LYS LYS LYS B B 238 238 . 97.028  91.001  -11.051 1.00 15.55  1
. .
ATOM 5096 CE   CE   . LYS LYS LYS B B 238 238 . 96.299  89.707  -11.239 1.00 24.25  1
. .
ATOM 5097 NZ   NZ   . LYS LYS LYS B B 238 238 . 96.358  88.913  -9.947  1.00 27.35  1
. .
ATOM 5098 C    C    . LYS LYS LYS B B 238 238 . 96.372  95.775  -11.580 1.00 2.70   1
. .
ATOM 5099 O    O    . LYS LYS LYS B B 238 238 . 95.187  95.837  -11.237 1.00 3.46   1
. .
ATOM 5100 N    N    . ILE ILE ILE B B 239 239 . 97.296  96.722  -11.370 1.00 3.14   1
. .
ATOM 5101 CA   CA   . ILE ILE ILE B B 239 239 . 97.007  97.925  -10.578 1.00 3.10   1
. .
ATOM 5102 CB   CB   . ILE ILE ILE B B 239 239 . 97.742  97.827  -9.248  1.00 4.26   1
. .
ATOM 5103 CG1  CG1  . ILE ILE ILE B B 239 239 . 97.392  96.535  -8.552  1.00 5.08   1
. .
ATOM 5104 CD1  CD1  . ILE ILE ILE B B 239 239 . 98.175  96.324  -7.247  1.00 5.55   1
. .
ATOM 5105 CG2  CG2  . ILE ILE ILE B B 239 239 . 97.367  99.032  -8.327  1.00 3.66   1
. .
ATOM 5106 C    C    . ILE ILE ILE B B 239 239 . 97.380  99.169  -11.330 1.00 2.40   1
. .
ATOM 5107 O    O    . ILE ILE ILE B B 239 239 . 98.465  99.235  -11.907 1.00 2.87   1
. .
ATOM 5108 N    N    . VAL VAL VAL B B 240 240 . 96.489  100.165 -11.257 1.00 2.16   1
. .
ATOM 5109 CA   CA   . VAL VAL VAL B B 240 240 . 96.743  101.470 -11.918 1.00 2.00   1
. .
ATOM 5110 CB   CB   . VAL VAL VAL B B 240 240 . 95.858  101.725 -13.132 1.00 2.00   1
. .
ATOM 5111 CG1  CG1  . VAL VAL VAL B B 240 240 . 96.187  100.674 -14.227 1.00 2.94   1
. .
ATOM 5112 CG2  CG2  . VAL VAL VAL B B 240 240 . 94.377  101.653 -12.791 1.00 2.66   1
. .
ATOM 5113 C    C    . VAL VAL VAL B B 240 240 . 96.582  102.568 -10.897 1.00 2.00   1
. .
ATOM 5114 O    O    . VAL VAL VAL B B 240 240 . 96.294  102.308 -9.733  1.00 2.00   1
. .
ATOM 5115 N    N    . ILE ILE ILE B B 241 241 . 96.830  103.803 -11.316 1.00 2.00   1
. .
ATOM 5116 CA   CA   . ILE ILE ILE B B 241 241 . 96.954  104.921 -10.353 1.00 2.00   1
. .
ATOM 5117 CB   CB   . ILE ILE ILE B B 241 241 . 98.310  105.573 -10.464 1.00 2.00   1
. .
ATOM 5118 CG1  CG1  . ILE ILE ILE B B 241 241 . 99.399  104.575 -9.934  1.00 2.00   1
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ATOM 5119 CD1  CD1  . ILE ILE ILE B B 241 241 . 100.847 104.930 -10.256 1.00 2.51   1
. .
ATOM 5120 CG2  CG2  . ILE ILE ILE B B 241 241 . 98.391  106.915 -9.643  1.00 2.00   1
. .
ATOM 5121 C    C    . ILE ILE ILE B B 241 241 . 95.841  105.930 -10.596 1.00 2.25   1
. .
ATOM 5122 O    O    . ILE ILE ILE B B 241 241 . 95.482  106.207 -11.745 1.00 2.00   1
. .
ATOM 5123 N    N    . GLY GLY GLY B B 242 242 . 95.313  106.512 -9.510  1.00 2.00   1
. .
ATOM 5124 CA   CA   . GLY GLY GLY B B 242 242 . 94.429  107.657 -9.634  1.00 2.04   1
. .
ATOM 5125 C    C    . GLY GLY GLY B B 242 242 . 94.974  108.765 -8.752  1.00 2.00   1
. .
ATOM 5126 O    O    . GLY GLY GLY B B 242 242 . 95.796  108.557 -7.900  1.00 2.48   1
. .
ATOM 5127 N    N    . MET MET MET B B 243 243 . 94.585  110.009 -9.040  1.00 2.19   1
. .
ATOM 5128 CA   CA   . MET MET MET B B 243 243 . 95.090  111.143 -8.247  1.00 2.00   1
. .
ATOM 5129 CB   CB   . MET MET MET B B 243 243 . 96.055  112.040 -9.069  1.00 2.11   1
. .
ATOM 5130 CG   CG   . MET MET MET B B 243 243 . 97.326  111.303 -9.456  1.00 4.08   1
. .
ATOM 5131 SD   SD   . MET MET MET B B 243 243 . 98.245  112.208 -10.726 1.00 5.22   1
. .
ATOM 5132 CE   CE   . MET MET MET B B 243 243 . 98.637  113.727 -9.822  1.00 5.00   1
. .
ATOM 5133 C    C    . MET MET MET B B 243 243 . 93.894  112.021 -7.884  1.00 2.00   1
. .
ATOM 5134 O    O    . MET MET MET B B 243 243 . 92.921  112.117 -8.665  1.00 2.00   1
. .
ATOM 5135 N    N    . ASP ASP ASP B B 244 244 . 93.974  112.577 -6.659  1.00 2.00   1
. .
ATOM 5136 CA   CA   . ASP ASP ASP B B 244 244 . 93.123  113.721 -6.359  1.00 2.00   1
. .
ATOM 5137 CB   CB   . ASP ASP ASP B B 244 244 . 92.272  113.501 -5.072  1.00 2.00   1
. .
ATOM 5138 CG   CG   . ASP ASP ASP B B 244 244 . 91.391  114.754 -4.716  1.00 2.00   1
. .
ATOM 5139 OD1  OD1  . ASP ASP ASP B B 244 244 . 90.550  114.663 -3.812  1.00 2.00   1
. .
ATOM 5140 OD2  OD2  . ASP ASP ASP B B 244 244 . 91.349  115.738 -5.501  1.00 2.00   1
. .
ATOM 5141 C    C    . ASP ASP ASP B B 244 244 . 94.075  114.890 -6.167  1.00 2.00   1
. .
ATOM 5142 O    O    . ASP ASP ASP B B 244 244 . 94.744  114.999 -5.160  1.00 2.00   1
. .
ATOM 5143 N    N    . VAL VAL VAL B B 245 245 . 94.094  115.824 -7.093  1.00 2.00   1
. .
ATOM 5144 CA   CA   . VAL VAL VAL B B 245 245 . 94.915  116.988 -6.969  1.00 2.00   1
. .
ATOM 5145 CB   CB   . VAL VAL VAL B B 245 245 . 94.962  117.674 -8.341  1.00 2.00   1
. .
ATOM 5146 CG1  CG1  . VAL VAL VAL B B 245 245 . 95.754  118.983 -8.329  1.00 2.05   1
. .
ATOM 5147 CG2  CG2  . VAL VAL VAL B B 245 245 . 95.577  116.680 -9.318  1.00 2.08   1
. .
ATOM 5148 C    C    . VAL VAL VAL B B 245 245 . 94.393  117.957 -5.865  1.00 2.00   1
. .
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ATOM 5149 O    O    . VAL VAL VAL B B 245 245 . 95.189  118.621 -5.196  1.00 2.35   1
. .
ATOM 5150 N    N    . ALA ALA ALA B B 246 246 . 93.086  118.054 -5.733  1.00 2.00   1
. .
ATOM 5151 CA   CA   . ALA ALA ALA B B 246 246 . 92.419  119.099 -4.977  1.00 2.00   1
. .
ATOM 5152 CB   CB   . ALA ALA ALA B B 246 246 . 92.399  118.746 -3.450  1.00 2.00   1
. .
ATOM 5153 C    C    . ALA ALA ALA B B 246 246 . 92.978  120.473 -5.266  1.00 2.13   1
. .
ATOM 5154 O    O    . ALA ALA ALA B B 246 246 . 93.273  121.277 -4.427  1.00 2.00   1
. .
ATOM 5155 N    N    . ALA ALA ALA B B 247 247 . 93.028  120.816 -6.549  1.00 2.00   1
. .
ATOM 5156 CA   CA   . ALA ALA ALA B B 247 247 . 93.663  122.065 -6.994  1.00 2.00   1
. .
ATOM 5157 CB   CB   . ALA ALA ALA B B 247 247 . 93.556  122.188 -8.488  1.00 2.01   1
. .
ATOM 5158 C    C    . ALA ALA ALA B B 247 247 . 93.053  123.356 -6.368  1.00 2.03   1
. .
ATOM 5159 O    O    . ALA ALA ALA B B 247 247 . 93.762  124.323 -6.320  1.00 2.37   1
. .
ATOM 5160 N    N    . SER SER SER B B 248 248 . 91.809  123.312 -5.860  1.00 2.17   1
. .
ATOM 5161 CA   CA   . SER SER SER B B 248 248 . 91.237  124.544 -5.269  1.00 2.11   1
. .
ATOM 5162 CB   CB   . SER SER SER B B 248 248 . 89.808  124.332 -4.873  1.00 2.00   1
. .
ATOM 5163 OG   OG   . SER SER SER B B 248 248 . 88.986  124.036 -5.985  1.00 2.05   1
. .
ATOM 5164 C    C    . SER SER SER B B 248 248 . 92.072  124.913 -4.053  1.00 2.57   1
. .
ATOM 5165 O    O    . SER SER SER B B 248 248 . 92.082  126.104 -3.666  1.00 5.79   1
. .
ATOM 5166 N    N    . GLU GLU GLU B B 249 249 . 92.752  123.934 -3.434  1.00 2.73   1
. .
ATOM 5167 CA   CA   . GLU GLU GLU B B 249 249 . 93.532  124.248 -2.272  1.00 2.69   1
. .
ATOM 5168 CB   CB   . GLU GLU GLU B B 249 249 . 93.952  122.977 -1.499  1.00 2.39   1
. .
ATOM 5169 CG   CG   . GLU GLU GLU B B 249 249 . 92.717  122.210 -1.152  1.00 4.51   1
. .
ATOM 5170 CD   CD   . GLU GLU GLU B B 249 249 . 91.995  122.705 0.124   1.00 9.45   1
. .
ATOM 5171 OE1  OE1  . GLU GLU GLU B B 249 249 . 92.664  122.852 1.205   1.00 15.12  1
. .
ATOM 5172 OE2  OE2  . GLU GLU GLU B B 249 249 . 90.777  122.983 0.072   1.00 6.78   1
. .
ATOM 5173 C    C    . GLU GLU GLU B B 249 249 . 94.745  125.066 -2.555  1.00 3.97   1
. .
ATOM 5174 O    O    . GLU GLU GLU B B 249 249 . 95.244  125.698 -1.646  1.00 5.41   1
. .
ATOM 5175 N    N    . PHE PHE PHE B B 250 250 . 95.236  125.069 -3.801  1.00 2.61   1
. .
ATOM 5176 CA   CA   . PHE PHE PHE B B 250 250 . 96.461  125.750 -4.134  1.00 2.49   1
. .
ATOM 5177 CB   CB   . PHE PHE PHE B B 250 250 . 97.679  124.790 -4.267  1.00 2.71   1
. .
ATOM 5178 CG   CG   . PHE PHE PHE B B 250 250 . 97.512  123.732 -5.352  1.00 2.63   1
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ATOM 5179 CD1  CD1  . PHE PHE PHE B B 250 250 . 97.307  122.404 -5.012  1.00 2.43   1
. .
ATOM 5180 CE1  CE1  . PHE PHE PHE B B 250 250 . 97.173  121.466 -5.983  1.00 2.72   1
. .
ATOM 5181 CZ   CZ   . PHE PHE PHE B B 250 250 . 97.312  121.748 -7.309  1.00 2.41   1
. .
ATOM 5182 CE2  CE2  . PHE PHE PHE B B 250 250 . 97.510  123.079 -7.732  1.00 3.86   1
. .
ATOM 5183 CD2  CD2  . PHE PHE PHE B B 250 250 . 97.631  124.061 -6.676  1.00 3.34   1
. .
ATOM 5184 C    C    . PHE PHE PHE B B 250 250 . 96.307  126.800 -5.279  1.00 2.82   1
. .
ATOM 5185 O    O    . PHE PHE PHE B B 250 250 . 97.291  127.315 -5.839  1.00 4.07   1
. .
ATOM 5186 N    N    . TYR TYR TYR B B 251 251 . 95.066  127.052 -5.630  1.00 2.73   1
. .
ATOM 5187 CA   CA   . TYR TYR TYR B B 251 251 . 94.746  128.183 -6.570  1.00 3.56   1
. .
ATOM 5188 CB   CB   . TYR TYR TYR B B 251 251 . 93.233  128.165 -6.877  1.00 3.20   1
. .
ATOM 5189 CG   CG   . TYR TYR TYR B B 251 251 . 92.798  129.300 -7.803  1.00 6.10   1
. .
ATOM 5190 CD1  CD1  . TYR TYR TYR B B 251 251 . 92.902  129.242 -9.213  1.00 5.83   1
. .
ATOM 5191 CE1  CE1  . TYR TYR TYR B B 251 251 . 92.494  130.299 -10.009 1.00 8.73   1
. .
ATOM 5192 CZ   CZ   . TYR TYR TYR B B 251 251 . 91.989  131.475 -9.414  1.00 8.43   1
. .
ATOM 5193 OH   OH   . TYR TYR TYR B B 251 251 . 91.509  132.550 -10.204 1.00 9.79   1
. .
ATOM 5194 CE2  CE2  . TYR TYR TYR B B 251 251 . 91.875  131.555 -8.065  1.00 8.18   1
. .
ATOM 5195 CD2  CD2  . TYR TYR TYR B B 251 251 . 92.280  130.490 -7.248  1.00 11.23  1
. .
ATOM 5196 C    C    . TYR TYR TYR B B 251 251 . 95.098  129.499 -5.901  1.00 4.83   1
. .
ATOM 5197 O    O    . TYR TYR TYR B B 251 251 . 94.632  129.761 -4.758  1.00 6.69   1
. .
ATOM 5198 N    N    . ARG ARG ARG B B 252 252 . 95.870  130.315 -6.599  1.00 4.17   1
. .
ATOM 5199 CA   CA   . ARG ARG ARG B B 252 252 . 96.342  131.645 -6.059  1.00 6.35   1
. .
ATOM 5200 CB   CB   . ARG ARG ARG B B 252 252 . 97.782  131.493 -5.545  1.00 5.94   1
. .
ATOM 5201 CG   CG   . ARG ARG ARG B B 252 252 . 98.031  130.442 -4.376  1.00 5.54   1
. .
ATOM 5202 CD   CD   . ARG ARG ARG B B 252 252 . 97.373  130.820 -3.120  1.00 14.62  1
. .
ATOM 5203 NE   NE   . ARG ARG ARG B B 252 252 . 97.685  129.872 -2.016  1.00 14.08  1
. .
ATOM 5204 CZ   CZ   . ARG ARG ARG B B 252 252 . 96.810  128.998 -1.538  1.00 13.62  1
. .
ATOM 5205 NH1  NH1  . ARG ARG ARG B B 252 252 . 95.597  128.881 -2.084  1.00 9.05   1
. .
ATOM 5206 NH2  NH2  . ARG ARG ARG B B 252 252 . 97.152  128.178 -0.555  1.00 11.01  1
. .
ATOM 5207 C    C    . ARG ARG ARG B B 252 252 . 96.303  132.704 -7.169  1.00 6.21   1
. .
ATOM 5208 O    O    . ARG ARG ARG B B 252 252 . 97.050  132.603 -8.121  1.00 7.22   1
. .
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ATOM 5209 N    N    . ASP ASP ASP B B 253 253 . 95.404  133.691 -7.077  1.00 8.23   1
. .
ATOM 5210 CA   CA   . ASP ASP ASP B B 253 253 . 95.568  134.821 -8.007  1.00 8.46   1
. .
ATOM 5211 CB   CB   . ASP ASP ASP B B 253 253 . 96.987  135.450 -7.894  1.00 11.62  1
. .
ATOM 5212 CG   CG   . ASP ASP ASP B B 253 253 . 97.286  136.015 -6.505  1.00 16.65  1
. .
ATOM 5213 OD1  OD1  . ASP ASP ASP B B 253 253 . 98.496  136.210 -6.202  1.00 20.09  1
. .
ATOM 5214 OD2  OD2  . ASP ASP ASP B B 253 253 . 96.300  136.268 -5.754  1.00 19.51  1
. .
ATOM 5215 C    C    . ASP ASP ASP B B 253 253 . 95.380  134.489 -9.463  1.00 7.60   1
. .
ATOM 5216 O    O    . ASP ASP ASP B B 253 253 . 95.982  135.134 -10.312 1.00 7.24   1
. .
ATOM 5217 N    N    . GLY GLY GLY B B 254 254 . 94.552  133.495 -9.811  1.00 6.35   1
. .
ATOM 5218 CA   CA   . GLY GLY GLY B B 254 254 . 94.374  133.133 -11.187 1.00 3.92   1
. .
ATOM 5219 C    C    . GLY GLY GLY B B 254 254 . 95.390  132.107 -11.668 1.00 4.67   1
. .
ATOM 5220 O    O    . GLY GLY GLY B B 254 254 . 95.319  131.714 -12.842 1.00 4.51   1
. .
ATOM 5221 N    N    . LYS LYS LYS B B 255 255 . 96.301  131.718 -10.791 1.00 3.60   1
. .
ATOM 5222 CA   CA   . LYS LYS LYS B B 255 255 . 97.387  130.709 -11.059 1.00 3.53   1
. .
ATOM 5223 CB   CB   . LYS LYS LYS B B 255 255 . 98.726  131.423 -11.093 1.00 4.37   1
. .
ATOM 5224 CG   CG   . LYS LYS LYS B B 255 255 . 98.870  132.306 -12.316 1.00 3.75   1
. .
ATOM 5225 CD   CD   . LYS LYS LYS B B 255 255 . 100.315 132.797 -12.366 1.00 11.26  1
. .
ATOM 5226 CE   CE   . LYS LYS LYS B B 255 255 . 100.540 133.845 -13.461 1.00 14.20  1
. .
ATOM 5227 NZ   NZ   . LYS LYS LYS B B 255 255 . 101.891 134.465 -13.311 1.00 18.83  1
. .
ATOM 5228 C    C    . LYS LYS LYS B B 255 255 . 97.347  129.592 -9.984  1.00 3.70   1
. .
ATOM 5229 O    O    . LYS LYS LYS B B 255 255 . 96.421  129.526 -9.179  1.00 3.36   1
. .
ATOM 5230 N    N    . TYR TYR TYR B B 256 256 . 98.362  128.717 -9.996  1.00 3.21   1
. .
ATOM 5231 CA   CA   . TYR TYR TYR B B 256 256 . 98.446  127.561 -9.115  1.00 2.30   1
. .
ATOM 5232 CB   CB   . TYR TYR TYR B B 256 256 . 98.104  126.276 -9.911  1.00 2.34   1
. .
ATOM 5233 CG   CG   . TYR TYR TYR B B 256 256 . 96.664  126.291 -10.364 1.00 2.00   1
. .
ATOM 5234 CD1  CD1  . TYR TYR TYR B B 256 256 . 95.700  125.795 -9.546  1.00 2.05   1
. .
ATOM 5235 CE1  CE1  . TYR TYR TYR B B 256 256 . 94.342  125.830 -9.940  1.00 2.32   1
. .
ATOM 5236 CZ   CZ   . TYR TYR TYR B B 256 256 . 93.984  126.331 -11.244 1.00 2.00   1
. .
ATOM 5237 OH   OH   . TYR TYR TYR B B 256 256 . 92.694  126.313 -11.599 1.00 2.00   1
. .
ATOM 5238 CE2  CE2  . TYR TYR TYR B B 256 256 . 94.962  126.804 -12.133 1.00 2.00   1
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ATOM 5239 CD2  CD2  . TYR TYR TYR B B 256 256 . 96.318  126.790 -11.663 1.00 2.54   1
. .
ATOM 5240 C    C    . TYR TYR TYR B B 256 256 . 99.822  127.479 -8.409  1.00 2.34   1
. .
ATOM 5241 O    O    . TYR TYR TYR B B 256 256 . 100.836 127.667 -9.037  1.00 4.93   1
. .
ATOM 5242 N    N    . ASP ASP ASP B B 257 257 . 99.802  127.176 -7.110  1.00 4.90   1
. .
ATOM 5243 CA   CA   . ASP ASP ASP B B 257 257 . 101.005 127.112 -6.297  1.00 5.08   1
. .
ATOM 5244 CB   CB   . ASP ASP ASP B B 257 257 . 100.770 127.867 -4.965  1.00 5.69   1
. .
ATOM 5245 CG   CG   . ASP ASP ASP B B 257 257 . 102.064 128.027 -4.158  1.00 11.45  1
. .
ATOM 5246 OD1  OD1  . ASP ASP ASP B B 257 257 . 103.131 127.640 -4.683  1.00 15.99  1
. .
ATOM 5247 OD2  OD2  . ASP ASP ASP B B 257 257 . 101.995 128.555 -3.004  1.00 12.86  1
. .
ATOM 5248 C    C    . ASP ASP ASP B B 257 257 . 101.345 125.685 -5.904  1.00 3.32   1
. .
ATOM 5249 O    O    . ASP ASP ASP B B 257 257 . 100.820 125.178 -4.918  1.00 3.66   1
. .
ATOM 5250 N    N    . LEU LEU LEU B B 258 258 . 102.229 125.039 -6.639  1.00 5.59   1
. .
ATOM 5251 CA   CA   . LEU LEU LEU B B 258 258 . 102.547 123.639 -6.253  1.00 6.85   1
. .
ATOM 5252 CB   CB   . LEU LEU LEU B B 258 258 . 103.125 122.851 -7.416  1.00 6.31   1
. .
ATOM 5253 CG   CG   . LEU LEU LEU B B 258 258 . 102.195 122.608 -8.591  1.00 6.18   1
. .
ATOM 5254 CD1  CD1  . LEU LEU LEU B B 258 258 . 102.884 121.768 -9.573  1.00 7.66   1
. .
ATOM 5255 CD2  CD2  . LEU LEU LEU B B 258 258 . 100.900 121.975 -8.025  1.00 4.47   1
. .
ATOM 5256 C    C    . LEU LEU LEU B B 258 258 . 103.472 123.501 -5.025  1.00 8.52   1
. .
ATOM 5257 O    O    . LEU LEU LEU B B 258 258 . 103.892 122.440 -4.720  1.00 9.23   1
. .
ATOM 5258 N    N    . ASP ASP ASP B B 259 259 . 103.705 124.577 -4.269  1.00 9.64   1
. .
ATOM 5259 CA   CA   . ASP ASP ASP B B 259 259 . 104.443 124.454 -3.013  1.00 11.46  1
. .
ATOM 5260 CB   CB   . ASP ASP ASP B B 259 259 . 105.851 124.955 -3.272  1.00 12.20  1
. .
ATOM 5261 CG   CG   . ASP ASP ASP B B 259 259 . 106.844 124.561 -2.176  1.00 14.81  1
. .
ATOM 5262 OD1  OD1  . ASP ASP ASP B B 259 259 . 106.507 123.906 -1.124  1.00 16.18  1
. .
ATOM 5263 OD2  OD2  . ASP ASP ASP B B 259 259 . 107.992 124.989 -2.368  1.00 16.46  1
. .
ATOM 5264 C    C    . ASP ASP ASP B B 259 259 . 103.717 125.258 -1.882  1.00 12.84  1
. .
ATOM 5265 O    O    . ASP ASP ASP B B 259 259 . 104.321 125.925 -1.027  1.00 11.97  1
. .
ATOM 5266 N    N    . PHE PHE PHE B B 260 260 . 102.385 125.124 -1.856  1.00 12.96  1
. .
ATOM 5267 CA   CA   . PHE PHE PHE B B 260 260 . 101.578 126.017 -1.040  1.00 12.62  1
. .
ATOM 5268 CB   CB   . PHE PHE PHE B B 260 260 . 100.116 125.968 -1.437  1.00 11.08  1
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ATOM 5269 CG   CG   . PHE PHE PHE B B 260 260 . 99.413  124.774 -0.910  1.00 10.65  1
. .
ATOM 5270 CD1  CD1  . PHE PHE PHE B B 260 260 . 98.696  124.804 0.265   1.00 10.50  1
. .
ATOM 5271 CE1  CE1  . PHE PHE PHE B B 260 260 . 98.094  123.665 0.742   1.00 12.36  1
. .
ATOM 5272 CZ   CZ   . PHE PHE PHE B B 260 260 . 98.141  122.497 -0.027  1.00 10.25  1
. .
ATOM 5273 CE2  CE2  . PHE PHE PHE B B 260 260 . 98.867  122.484 -1.181  1.00 11.01  1
. .
ATOM 5274 CD2  CD2  . PHE PHE PHE B B 260 260 . 99.523  123.589 -1.605  1.00 11.07  1
. .
ATOM 5275 C    C    . PHE PHE PHE B B 260 260 . 101.708 125.854 0.471   1.00 12.93  1
. .
ATOM 5276 O    O    . PHE PHE PHE B B 260 260 . 101.289 126.749 1.229   1.00 13.09  1
. .
ATOM 5277 N    N    . LYS LYS LYS B B 261 261 . 102.278 124.728 0.929   1.00 12.83  1
. .
ATOM 5278 CA   CA   . LYS LYS LYS B B 261 261 . 102.533 124.570 2.337   1.00 12.98  1
. .
ATOM 5279 CB   CB   . LYS LYS LYS B B 261 261 . 102.370 123.102 2.708   1.00 12.46  1
. .
ATOM 5280 CG   CG   . LYS LYS LYS B B 261 261 . 100.944 122.688 2.671   1.00 12.27  1
. .
ATOM 5281 CD   CD   . LYS LYS LYS B B 261 261 . 100.867 121.147 2.907   1.00 8.88   1
. .
ATOM 5282 CE   CE   . LYS LYS LYS B B 261 261 . 101.505 120.358 1.733   1.00 13.04  1
. .
ATOM 5283 NZ   NZ   . LYS LYS LYS B B 261 261 . 101.301 118.951 2.110   1.00 12.47  1
. .
ATOM 5284 C    C    . LYS LYS LYS B B 261 261 . 103.890 125.158 2.759   1.00 14.11  1
. .
ATOM 5285 O    O    . LYS LYS LYS B B 261 261 . 104.284 125.036 3.915   1.00 13.27  1
. .
ATOM 5286 N    N    . SER SER SER B B 262 262 . 104.543 125.858 1.828   1.00 15.65  1
. .
ATOM 5287 CA   CA   . SER SER SER B B 262 262 . 105.729 126.675 2.083   1.00 19.81  1
. .
ATOM 5288 CB   CB   . SER SER SER B B 262 262 . 106.754 126.512 0.941   1.00 19.23  1
. .
ATOM 5289 OG   OG   . SER SER SER B B 262 262 . 107.501 125.293 1.073   1.00 22.62  1
. .
ATOM 5290 C    C    . SER SER SER B B 262 262 . 105.372 128.176 2.176   1.00 21.80  1
. .
ATOM 5291 O    O    . SER SER SER B B 262 262 . 104.395 128.608 1.537   1.00 22.16  1
. .
ATOM 5292 N    N    . PRO PRO PRO B B 263 263 . 106.179 128.976 2.932   1.00 23.64  1
. .
ATOM 5293 CA   CA   . PRO PRO PRO B B 263 263 . 105.940 130.442 2.976   1.00 25.28  1
. .
ATOM 5294 CB   CB   . PRO PRO PRO B B 263 263 . 107.233 130.996 3.597   1.00 24.79  1
. .
ATOM 5295 CG   CG   . PRO PRO PRO B B 263 263 . 107.705 129.910 4.486   1.00 23.34  1
. .
ATOM 5296 CD   CD   . PRO PRO PRO B B 263 263 . 107.353 128.605 3.749   1.00 24.10  1
. .
ATOM 5297 C    C    . PRO PRO PRO B B 263 263 . 105.743 131.059 1.597   1.00 26.36  1
. .
ATOM 5298 O    O    . PRO PRO PRO B B 263 263 . 106.502 130.736 0.693   1.00 27.51  1
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ATOM 5299 N    N    . THR THR THR B B 264 264 . 104.722 131.913 1.475   1.00 27.60  1
. .
ATOM 5300 CA   CA   . THR THR THR B B 264 264 . 104.298 132.575 0.226   1.00 29.42  1
. .
ATOM 5301 CB   CB   . THR THR THR B B 264 264 . 103.459 133.849 0.492   1.00 29.59  1
. .
ATOM 5302 OG1  OG1  . THR THR THR B B 264 264 . 102.595 133.652 1.612   1.00 31.80  1
. .
ATOM 5303 CG2  CG2  . THR THR THR B B 264 264 . 102.619 134.182 -0.718  1.00 29.93  1
. .
ATOM 5304 C    C    . THR THR THR B B 264 264 . 105.434 133.015 -0.671  1.00 29.36  1
. .
ATOM 5305 O    O    . THR THR THR B B 264 264 . 106.431 133.560 -0.214  1.00 30.72  1
. .
ATOM 5306 N    N    . ASP ASP ASP B B 265 265 . 105.268 132.793 -1.960  1.00 28.89  1
. .
ATOM 5307 CA   CA   . ASP ASP ASP B B 265 265 . 106.187 133.302 -2.934  1.00 28.15  1
. .
ATOM 5308 CB   CB   . ASP ASP ASP B B 265 265 . 107.484 132.506 -2.904  1.00 29.06  1
. .
ATOM 5309 CG   CG   . ASP ASP ASP B B 265 265 . 108.416 132.899 -4.013  1.00 29.65  1
. .
ATOM 5310 OD1  OD1  . ASP ASP ASP B B 265 265 . 108.056 133.843 -4.766  1.00 29.75  1
. .
ATOM 5311 OD2  OD2  . ASP ASP ASP B B 265 265 . 109.491 132.261 -4.122  1.00 29.15  1
. .
ATOM 5312 C    C    . ASP ASP ASP B B 265 265 . 105.550 133.157 -4.300  1.00 27.81  1
. .
ATOM 5313 O    O    . ASP ASP ASP B B 265 265 . 105.613 132.068 -4.881  1.00 26.37  1
. .
ATOM 5314 N    N    . PRO PRO PRO B B 266 266 . 104.922 134.241 -4.807  1.00 26.61  1
. .
ATOM 5315 CA   CA   . PRO PRO PRO B B 266 266 . 104.281 134.329 -6.122  1.00 25.72  1
. .
ATOM 5316 CB   CB   . PRO PRO PRO B B 266 266 . 104.003 135.819 -6.245  1.00 26.39  1
. .
ATOM 5317 CG   CG   . PRO PRO PRO B B 266 266 . 103.551 136.156 -4.894  1.00 27.12  1
. .
ATOM 5318 CD   CD   . PRO PRO PRO B B 266 266 . 104.481 135.365 -3.957  1.00 27.06  1
. .
ATOM 5319 C    C    . PRO PRO PRO B B 266 266 . 105.122 133.888 -7.283  1.00 24.37  1
. .
ATOM 5320 O    O    . PRO PRO PRO B B 266 266 . 104.575 133.467 -8.320  1.00 23.71  1
. .
ATOM 5321 N    N    . SER SER SER B B 267 267 . 106.443 133.980 -7.128  1.00 22.21  1
. .
ATOM 5322 CA   CA   . SER SER SER B B 267 267 . 107.342 133.670 -8.226  1.00 21.26  1
. .
ATOM 5323 CB   CB   . SER SER SER B B 267 267 . 108.803 134.018 -7.868  1.00 21.42  1
. .
ATOM 5324 OG   OG   . SER SER SER B B 267 267 . 109.334 133.175 -6.840  1.00 22.65  1
. .
ATOM 5325 C    C    . SER SER SER B B 267 267 . 107.211 132.205 -8.663  1.00 18.67  1
. .
ATOM 5326 O    O    . SER SER SER B B 267 267 . 107.464 131.868 -9.788  1.00 18.02  1
. .
ATOM 5327 N    N    . ARG ARG ARG B B 268 268 . 106.793 131.348 -7.739  1.00 18.26  1
. .
ATOM 5328 CA   CA   . ARG ARG ARG B B 268 268 . 106.734 129.929 -8.046  1.00 16.32  1
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ATOM 5329 CB   CB   . ARG ARG ARG B B 268 268 . 107.064 129.084 -6.786  1.00 16.65  1
. .
ATOM 5330 CG   CG   . ARG ARG ARG B B 268 268 . 105.988 129.150 -5.709  1.00 15.43  1
. .
ATOM 5331 CD   CD   . ARG ARG ARG B B 268 268 . 106.430 128.638 -4.391  1.00 14.61  1
. .
ATOM 5332 NE   NE   . ARG ARG ARG B B 268 268 . 105.328 128.753 -3.441  1.00 16.24  1
. .
ATOM 5333 CZ   CZ   . ARG ARG ARG B B 268 268 . 105.477 128.960 -2.133  1.00 15.48  1
. .
ATOM 5334 NH1  NH1  . ARG ARG ARG B B 268 268 . 106.683 129.060 -1.590  1.00 14.19  1
. .
ATOM 5335 NH2  NH2  . ARG ARG ARG B B 268 268 . 104.408 129.046 -1.381  1.00 11.68  1
. .
ATOM 5336 C    C    . ARG ARG ARG B B 268 268 . 105.386 129.540 -8.694  1.00 16.38  1
. .
ATOM 5337 O    O    . ARG ARG ARG B B 268 268 . 105.210 128.376 -9.100  1.00 16.11  1
. .
ATOM 5338 N    N    . TYR TYR TYR B B 269 269 . 104.455 130.497 -8.838  1.00 15.18  1
. .
ATOM 5339 CA   CA   . TYR TYR TYR B B 269 269 . 103.106 130.139 -9.376  1.00 13.25  1
. .
ATOM 5340 CB   CB   . TYR TYR TYR B B 269 269 . 102.144 131.318 -9.296  1.00 12.27  1
. .
ATOM 5341 CG   CG   . TYR TYR TYR B B 269 269 . 101.817 131.747 -7.907  1.00 14.52  1
. .
ATOM 5342 CD1  CD1  . TYR TYR TYR B B 269 269 . 101.010 132.879 -7.691  1.00 14.14  1
. .
ATOM 5343 CE1  CE1  . TYR TYR TYR B B 269 269 . 100.712 133.306 -6.394  1.00 17.65  1
. .
ATOM 5344 CZ   CZ   . TYR TYR TYR B B 269 269 . 101.217 132.589 -5.303  1.00 20.75  1
. .
ATOM 5345 OH   OH   . TYR TYR TYR B B 269 269 . 100.905 132.976 -4.026  1.00 21.70  1
. .
ATOM 5346 CE2  CE2  . TYR TYR TYR B B 269 269 . 102.040 131.463 -5.493  1.00 18.27  1
. .
ATOM 5347 CD2  CD2  . TYR TYR TYR B B 269 269 . 102.324 131.051 -6.790  1.00 16.35  1
. .
ATOM 5348 C    C    . TYR TYR TYR B B 269 269 . 103.132 129.661 -10.823 1.00 11.65  1
. .
ATOM 5349 O    O    . TYR TYR TYR B B 269 269 . 103.904 130.144 -11.631 1.00 13.78  1
. .
ATOM 5350 N    N    . ILE ILE ILE B B 270 270 . 102.290 128.703 -11.177 1.00 8.79   1
. .
ATOM 5351 CA   CA   . ILE ILE ILE B B 270 270 . 102.153 128.373 -12.602 1.00 7.51   1
. .
ATOM 5352 CB   CB   . ILE ILE ILE B B 270 270 . 102.668 126.926 -12.876 1.00 7.85   1
. .
ATOM 5353 CG1  CG1  . ILE ILE ILE B B 270 270 . 101.708 125.873 -12.375 1.00 11.04  1
. .
ATOM 5354 CD1  CD1  . ILE ILE ILE B B 270 270 . 101.404 125.846 -10.958 1.00 15.04  1
. .
ATOM 5355 CG2  CG2  . ILE ILE ILE B B 270 270 . 104.123 126.800 -12.393 1.00 4.90   1
. .
ATOM 5356 C    C    . ILE ILE ILE B B 270 270 . 100.719 128.570 -13.178 1.00 4.91   1
. .
ATOM 5357 O    O    . ILE ILE ILE B B 270 270 . 99.738  128.610 -12.439 1.00 5.40   1
. .
ATOM 5358 N    N    . THR THR THR B B 271 271 . 100.591 128.603 -14.506 1.00 4.21   1
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ATOM 5359 CA   CA   . THR THR THR B B 271 271 . 99.263  128.795 -14.986 1.00 5.72   1
. .
ATOM 5360 CB   CB   . THR THR THR B B 271 271 . 99.238  129.478 -16.322 1.00 7.00   1
. .
ATOM 5361 OG1  OG1  . THR THR THR B B 271 271 . 99.676  128.518 -17.328 1.00 10.47  1
. .
ATOM 5362 CG2  CG2  . THR THR THR B B 271 271 . 100.201 130.668 -16.318 1.00 7.09   1
. .
ATOM 5363 C    C    . THR THR THR B B 271 271 . 98.522  127.464 -15.174 1.00 6.25   1
. .
ATOM 5364 O    O    . THR THR THR B B 271 271 . 99.135  126.395 -15.086 1.00 5.65   1
. .
ATOM 5365 N    N    . GLY GLY GLY B B 272 272 . 97.233  127.540 -15.462 1.00 4.88   1
. .
ATOM 5366 CA   CA   . GLY GLY GLY B B 272 272 . 96.485  126.303 -15.647 1.00 3.31   1
. .
ATOM 5367 C    C    . GLY GLY GLY B B 272 272 . 97.003  125.518 -16.846 1.00 3.65   1
. .
ATOM 5368 O    O    . GLY GLY GLY B B 272 272 . 96.993  124.309 -16.893 1.00 2.54   1
. .
ATOM 5369 N    N    . ASP ASP ASP B B 273 273 . 97.470  126.216 -17.857 1.00 4.88   1
. .
ATOM 5370 CA   CA   . ASP ASP ASP B B 273 273 . 98.108  125.590 -18.996 1.00 7.30   1
. .
ATOM 5371 CB   CB   . ASP ASP ASP B B 273 273 . 98.544  126.669 -19.955 1.00 9.11   1
. .
ATOM 5372 CG   CG   . ASP ASP ASP B B 273 273 . 98.821  126.134 -21.328 1.00 19.05  1
. .
ATOM 5373 OD1  OD1  . ASP ASP ASP B B 273 273 . 97.940  125.422 -21.890 1.00 25.67  1
. .
ATOM 5374 OD2  OD2  . ASP ASP ASP B B 273 273 . 99.903  126.473 -21.878 1.00 28.32  1
. .
ATOM 5375 C    C    . ASP ASP ASP B B 273 273 . 99.342  124.784 -18.606 1.00 6.18   1
. .
ATOM 5376 O    O    . ASP ASP ASP B B 273 273 . 99.489  123.616 -19.091 1.00 6.65   1
. .
ATOM 5377 N    N    . GLN GLN GLN B B 274 274 . 100.243 125.354 -17.787 1.00 5.72   1
. .
ATOM 5378 CA   CA   . GLN GLN GLN B B 274 274 . 101.414 124.604 -17.332 1.00 5.47   1
. .
ATOM 5379 CB   CB   . GLN GLN GLN B B 274 274 . 102.394 125.491 -16.563 1.00 7.04   1
. .
ATOM 5380 CG   CG   . GLN GLN GLN B B 274 274 . 102.776 126.681 -17.418 1.00 9.31   1
. .
ATOM 5381 CD   CD   . GLN GLN GLN B B 274 274 . 103.556 127.688 -16.601 1.00 11.95  1
. .
ATOM 5382 OE1  OE1  . GLN GLN GLN B B 274 274 . 103.004 128.533 -15.872 1.00 12.03  1
. .
ATOM 5383 NE2  NE2  . GLN GLN GLN B B 274 274 . 104.892 127.588 -16.728 1.00 17.96  1
. .
ATOM 5384 C    C    . GLN GLN GLN B B 274 274 . 100.990 123.412 -16.490 1.00 4.94   1
. .
ATOM 5385 O    O    . GLN GLN GLN B B 274 274 . 101.574 122.305 -16.588 1.00 4.32   1
. .
ATOM 5386 N    N    . LEU LEU LEU B B 275 275 . 99.959  123.597 -15.712 1.00 2.30   1
. .
ATOM 5387 CA   CA   . LEU LEU LEU B B 275 275 . 99.485  122.515 -14.860 1.00 2.54   1
. .
ATOM 5388 CB   CB   . LEU LEU LEU B B 275 275 . 98.515  123.084 -13.816 1.00 4.44   1
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ATOM 5389 CG   CG   . LEU LEU LEU B B 275 275 . 97.936  122.166 -12.763 1.00 5.46   1
. .
ATOM 5390 CD1  CD1  . LEU LEU LEU B B 275 275 . 99.038  121.515 -11.879 1.00 3.59   1
. .
ATOM 5391 CD2  CD2  . LEU LEU LEU B B 275 275 . 96.967  122.975 -11.900 1.00 2.00   1
. .
ATOM 5392 C    C    . LEU LEU LEU B B 275 275 . 98.930  121.380 -15.717 1.00 2.48   1
. .
ATOM 5393 O    O    . LEU LEU LEU B B 275 275 . 99.240  120.200 -15.473 1.00 4.45   1
. .
ATOM 5394 N    N    . GLY GLY GLY B B 276 276 . 98.077  121.690 -16.674 1.00 2.56   1
. .
ATOM 5395 CA   CA   . GLY GLY GLY B B 276 276 . 97.637  120.674 -17.646 1.00 2.16   1
. .
ATOM 5396 C    C    . GLY GLY GLY B B 276 276 . 98.747  119.926 -18.391 1.00 2.00   1
. .
ATOM 5397 O    O    . GLY GLY GLY B B 276 276 . 98.686  118.694 -18.467 1.00 2.32   1
. .
ATOM 5398 N    N    . ALA ALA ALA B B 277 277 . 99.792  120.625 -18.836 1.00 2.00   1
. .
ATOM 5399 CA   CA   . ALA ALA ALA B B 277 277 . 100.963 119.975 -19.427 1.00 2.76   1
. .
ATOM 5400 CB   CB   . ALA ALA ALA B B 277 277 . 102.035 121.012 -19.903 1.00 2.70   1
. .
ATOM 5401 C    C    . ALA ALA ALA B B 277 277 . 101.658 119.048 -18.456 1.00 2.23   1
. .
ATOM 5402 O    O    . ALA ALA ALA B B 277 277 . 102.131 118.005 -18.854 1.00 3.56   1
. .
ATOM 5403 N    N    . LEU LEU LEU B B 278 278 . 101.677 119.395 -17.167 1.00 2.11   1
. .
ATOM 5404 CA   CA   . LEU LEU LEU B B 278 278 . 102.209 118.474 -16.154 1.00 2.40   1
. .
ATOM 5405 CB   CB   . LEU LEU LEU B B 278 278 . 102.264 119.136 -14.792 1.00 3.17   1
. .
ATOM 5406 CG   CG   . LEU LEU LEU B B 278 278 . 102.872 118.303 -13.702 1.00 4.78   1
. .
ATOM 5407 CD1  CD1  . LEU LEU LEU B B 278 278 . 104.336 118.122 -13.950 1.00 9.33   1
. .
ATOM 5408 CD2  CD2  . LEU LEU LEU B B 278 278 . 102.728 119.063 -12.430 1.00 10.44  1
. .
ATOM 5409 C    C    . LEU LEU LEU B B 278 278 . 101.403 117.190 -16.102 1.00 2.60   1
. .
ATOM 5410 O    O    . LEU LEU LEU B B 278 278 . 102.002 116.077 -16.087 1.00 2.60   1
. .
ATOM 5411 N    N    . TYR TYR TYR B B 279 279 . 100.077 117.338 -16.058 1.00 2.00   1
. .
ATOM 5412 CA   CA   . TYR TYR TYR B B 279 279 . 99.215  116.167 -16.001 1.00 2.00   1
. .
ATOM 5413 CB   CB   . TYR TYR TYR B B 279 279 . 97.746  116.530 -15.903 1.00 2.16   1
. .
ATOM 5414 CG   CG   . TYR TYR TYR B B 279 279 . 97.358  117.374 -14.681 1.00 2.00   1
. .
ATOM 5415 CD1  CD1  . TYR TYR TYR B B 279 279 . 97.902  117.155 -13.443 1.00 2.00   1
. .
ATOM 5416 CE1  CE1  . TYR TYR TYR B B 279 279 . 97.526  117.947 -12.379 1.00 2.01   1
. .
ATOM 5417 CZ   CZ   . TYR TYR TYR B B 279 279 . 96.574  118.915 -12.541 1.00 2.00   1
. .
ATOM 5418 OH   OH   . TYR TYR TYR B B 279 279 . 96.211  119.716 -11.492 1.00 2.07   1
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ATOM 5419 CE2  CE2  . TYR TYR TYR B B 279 279 . 95.993  119.181 -13.735 1.00 2.00   1
. .
ATOM 5420 CD2  CD2  . TYR TYR TYR B B 279 279 . 96.364  118.339 -14.823 1.00 2.00   1
. .
ATOM 5421 C    C    . TYR TYR TYR B B 279 279 . 99.436  115.308 -17.268 1.00 2.00   1
. .
ATOM 5422 O    O    . TYR TYR TYR B B 279 279 . 99.412  114.079 -17.208 1.00 2.00   1
. .
ATOM 5423 N    N    . GLN GLN GLN B B 280 280 . 99.601  115.936 -18.411 1.00 2.00   1
. .
ATOM 5424 CA   CA   . GLN GLN GLN B B 280 280 . 99.731  115.101 -19.660 1.00 2.00   1
. .
ATOM 5425 CB   CB   . GLN GLN GLN B B 280 280 . 99.765  116.086 -20.827 1.00 3.10   1
. .
ATOM 5426 CG   CG   . GLN GLN GLN B B 280 280 . 98.396  116.687 -21.109 1.00 5.18   1
. .
ATOM 5427 CD   CD   . GLN GLN GLN B B 280 280 . 97.447  115.873 -21.941 1.00 12.68  1
. .
ATOM 5428 OE1  OE1  . GLN GLN GLN B B 280 280 . 97.662  114.675 -22.219 1.00 15.69  1
. .
ATOM 5429 NE2  NE2  . GLN GLN GLN B B 280 280 . 96.341  116.523 -22.356 1.00 12.81  1
. .
ATOM 5430 C    C    . GLN GLN GLN B B 280 280 . 101.061 114.316 -19.546 1.00 2.00   1
. .
ATOM 5431 O    O    . GLN GLN GLN B B 280 280 . 101.129 113.133 -19.998 1.00 2.87   1
. .
ATOM 5432 N    N    . ASP ASP ASP B B 281 281 . 102.048 114.905 -18.912 1.00 2.00   1
. .
ATOM 5433 CA   CA   . ASP ASP ASP B B 281 281 . 103.312 114.173 -18.662 1.00 2.34   1
. .
ATOM 5434 CB   CB   . ASP ASP ASP B B 281 281 . 104.379 115.086 -18.026 1.00 6.23   1
. .
ATOM 5435 CG   CG   . ASP ASP ASP B B 281 281 . 104.959 116.042 -19.032 1.00 14.00  1
. .
ATOM 5436 OD1  OD1  . ASP ASP ASP B B 281 281 . 104.699 115.781 -20.236 1.00 18.47  1
. .
ATOM 5437 OD2  OD2  . ASP ASP ASP B B 281 281 . 105.661 117.013 -18.644 1.00 19.96  1
. .
ATOM 5438 C    C    . ASP ASP ASP B B 281 281 . 103.093 112.975 -17.729 1.00 2.77   1
. .
ATOM 5439 O    O    . ASP ASP ASP B B 281 281 . 103.591 111.864 -18.020 1.00 2.91   1
. .
ATOM 5440 N    N    . PHE PHE PHE B B 282 282 . 102.344 113.190 -16.643 1.00 2.00   1
. .
ATOM 5441 CA   CA   . PHE PHE PHE B B 282 282 . 101.992 112.089 -15.705 1.00 2.16   1
. .
ATOM 5442 CB   CB   . PHE PHE PHE B B 282 282 . 101.087 112.569 -14.582 1.00 2.78   1
. .
ATOM 5443 CG   CG   . PHE PHE PHE B B 282 282 . 101.723 113.553 -13.635 1.00 2.45   1
. .
ATOM 5444 CD1  CD1  . PHE PHE PHE B B 282 282 . 100.931 114.211 -12.760 1.00 3.42   1
. .
ATOM 5445 CE1  CE1  . PHE PHE PHE B B 282 282 . 101.485 115.152 -11.873 1.00 4.39   1
. .
ATOM 5446 CZ   CZ   . PHE PHE PHE B B 282 282 . 102.837 115.354 -11.865 1.00 4.65   1
. .
ATOM 5447 CE2  CE2  . PHE PHE PHE B B 282 282 . 103.657 114.699 -12.775 1.00 8.75   1
. .
ATOM 5448 CD2  CD2  . PHE PHE PHE B B 282 282 . 103.090 113.814 -13.655 1.00 2.38   1
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ATOM 5449 C    C    . PHE PHE PHE B B 282 282 . 101.302 110.970 -16.410 1.00 2.00   1
. .
ATOM 5450 O    O    . PHE PHE PHE B B 282 282 . 101.575 109.792 -16.161 1.00 2.64   1
. .
ATOM 5451 N    N    . VAL VAL VAL B B 283 283 . 100.306 111.284 -17.264 1.00 2.00   1
. .
ATOM 5452 CA   CA   . VAL VAL VAL B B 283 283 . 99.521  110.246 -17.910 1.00 2.36   1
. .
ATOM 5453 CB   CB   . VAL VAL VAL B B 283 283 . 98.289  110.864 -18.610 1.00 2.95   1
. .
ATOM 5454 CG1  CG1  . VAL VAL VAL B B 283 283 . 97.631  109.851 -19.472 1.00 4.76   1
. .
ATOM 5455 CG2  CG2  . VAL VAL VAL B B 283 283 . 97.366  111.402 -17.506 1.00 3.06   1
. .
ATOM 5456 C    C    . VAL VAL VAL B B 283 283 . 100.445 109.460 -18.860 1.00 2.00   1
. .
ATOM 5457 O    O    . VAL VAL VAL B B 283 283 . 100.263 108.264 -19.094 1.00 3.30   1
. .
ATOM 5458 N    N    . ARG ARG ARG B B 284 284 . 101.381 110.148 -19.511 1.00 2.20   1
. .
ATOM 5459 CA   CA   . ARG ARG ARG B B 284 284 . 102.226 109.460 -20.483 1.00 3.77   1
. .
ATOM 5460 CB   CB   . ARG ARG ARG B B 284 284 . 102.912 110.435 -21.437 1.00 2.88   1
. .
ATOM 5461 CG   CG   . ARG ARG ARG B B 284 284 . 103.996 109.849 -22.289 1.00 3.66   1
. .
ATOM 5462 CD   CD   . ARG ARG ARG B B 284 284 . 103.408 108.960 -23.404 1.00 7.59   1
. .
ATOM 5463 NE   NE   . ARG ARG ARG B B 284 284 . 102.524 109.686 -24.341 1.00 11.23  1
. .
ATOM 5464 CZ   CZ   . ARG ARG ARG B B 284 284 . 102.944 110.462 -25.349 1.00 13.07  1
. .
ATOM 5465 NH1  NH1  . ARG ARG ARG B B 284 284 . 104.250 110.598 -25.613 1.00 8.61   1
. .
ATOM 5466 NH2  NH2  . ARG ARG ARG B B 284 284 . 102.044 111.090 -26.081 1.00 12.22  1
. .
ATOM 5467 C    C    . ARG ARG ARG B B 284 284 . 103.237 108.566 -19.754 1.00 2.51   1
. .
ATOM 5468 O    O    . ARG ARG ARG B B 284 284 . 103.491 107.451 -20.188 1.00 4.76   1
. .
ATOM 5469 N    N    . ASP ASP ASP B B 285 285 . 103.729 109.006 -18.598 1.00 2.77   1
. .
ATOM 5470 CA   CA   . ASP ASP ASP B B 285 285 . 104.889 108.327 -17.958 1.00 3.98   1
. .
ATOM 5471 CB   CB   . ASP ASP ASP B B 285 285 . 105.841 109.340 -17.338 1.00 4.11   1
. .
ATOM 5472 CG   CG   . ASP ASP ASP B B 285 285 . 106.462 110.309 -18.371 1.00 7.83   1
. .
ATOM 5473 OD1  OD1  . ASP ASP ASP B B 285 285 . 106.518 109.968 -19.578 1.00 13.85  1
. .
ATOM 5474 OD2  OD2  . ASP ASP ASP B B 285 285 . 106.884 111.440 -17.993 1.00 13.32  1
. .
ATOM 5475 C    C    . ASP ASP ASP B B 285 285 . 104.518 107.339 -16.844 1.00 2.83   1
. .
ATOM 5476 O    O    . ASP ASP ASP B B 285 285 . 105.378 106.550 -16.405 1.00 4.37   1
. .
ATOM 5477 N    N    . TYR TYR TYR B B 286 286 . 103.277 107.365 -16.411 1.00 2.06   1
. .
ATOM 5478 CA   CA   . TYR TYR TYR B B 286 286 . 102.788 106.593 -15.228 1.00 2.00   1
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ATOM 5479 CB   CB   . TYR TYR TYR B B 286 286 . 102.683 107.412 -13.926 1.00 2.00   1
. .
ATOM 5480 CG   CG   . TYR TYR TYR B B 286 286 . 103.980 108.004 -13.549 1.00 3.69   1
. .
ATOM 5481 CD1  CD1  . TYR TYR TYR B B 286 286 . 104.979 107.234 -12.973 1.00 8.53   1
. .
ATOM 5482 CE1  CE1  . TYR TYR TYR B B 286 286 . 106.224 107.777 -12.669 1.00 10.32  1
. .
ATOM 5483 CZ   CZ   . TYR TYR TYR B B 286 286 . 106.447 109.120 -12.919 1.00 14.30  1
. .
ATOM 5484 OH   OH   . TYR TYR TYR B B 286 286 . 107.638 109.769 -12.669 1.00 19.21  1
. .
ATOM 5485 CE2  CE2  . TYR TYR TYR B B 286 286 . 105.463 109.886 -13.507 1.00 9.75   1
. .
ATOM 5486 CD2  CD2  . TYR TYR TYR B B 286 286 . 104.237 109.309 -13.806 1.00 5.01   1
. .
ATOM 5487 C    C    . TYR TYR TYR B B 286 286 . 101.447 106.063 -15.594 1.00 2.03   1
. .
ATOM 5488 O    O    . TYR TYR TYR B B 286 286 . 100.770 106.652 -16.443 1.00 2.04   1
. .
ATOM 5489 N    N    . PRO PRO PRO B B 287 287 . 101.018 104.999 -14.963 1.00 2.23   1
. .
ATOM 5490 CA   CA   . PRO PRO PRO B B 287 287 . 99.719  104.404 -15.313 1.00 2.32   1
. .
ATOM 5491 CB   CB   . PRO PRO PRO B B 287 287 . 99.872  102.965 -14.795 1.00 2.66   1
. .
ATOM 5492 CG   CG   . PRO PRO PRO B B 287 287 . 100.740 103.065 -13.627 1.00 4.28   1
. .
ATOM 5493 CD   CD   . PRO PRO PRO B B 287 287 . 101.767 104.217 -13.933 1.00 3.60   1
. .
ATOM 5494 C    C    . PRO PRO PRO B B 287 287 . 98.535  105.155 -14.641 1.00 2.22   1
. .
ATOM 5495 O    O    . PRO PRO PRO B B 287 287 . 97.750  104.550 -13.963 1.00 2.00   1
. .
ATOM 5496 N    N    . VAL VAL VAL B B 288 288 . 98.504  106.470 -14.802 1.00 2.10   1
. .
ATOM 5497 CA   CA   . VAL VAL VAL B B 288 288 . 97.423  107.286 -14.257 1.00 2.33   1
. .
ATOM 5498 CB   CB   . VAL VAL VAL B B 288 288 . 97.852  108.765 -14.074 1.00 2.00   1
. .
ATOM 5499 CG1  CG1  . VAL VAL VAL B B 288 288 . 96.696  109.718 -13.650 1.00 3.51   1
. .
ATOM 5500 CG2  CG2  . VAL VAL VAL B B 288 288 . 99.032  108.922 -13.028 1.00 4.08   1
. .
ATOM 5501 C    C    . VAL VAL VAL B B 288 288 . 96.215  107.230 -15.154 1.00 2.00   1
. .
ATOM 5502 O    O    . VAL VAL VAL B B 288 288 . 96.269  107.647 -16.321 1.00 2.78   1
. .
ATOM 5503 N    N    . VAL VAL VAL B B 289 289 . 95.098  106.809 -14.594 1.00 2.00   1
. .
ATOM 5504 CA   CA   . VAL VAL VAL B B 289 289 . 93.872  106.604 -15.341 1.00 2.00   1
. .
ATOM 5505 CB   CB   . VAL VAL VAL B B 289 289 . 93.379  105.117 -15.191 1.00 2.08   1
. .
ATOM 5506 CG1  CG1  . VAL VAL VAL B B 289 289 . 94.390  104.145 -15.859 1.00 2.85   1
. .
ATOM 5507 CG2  CG2  . VAL VAL VAL B B 289 289 . 93.129  104.753 -13.711 1.00 2.04   1
. .
ATOM 5508 C    C    . VAL VAL VAL B B 289 289 . 92.753  107.540 -14.882 1.00 2.00   1
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ATOM 5509 O    O    . VAL VAL VAL B B 289 289 . 91.668  107.542 -15.451 1.00 2.00   1
. .
ATOM 5510 N    N    . SER SER SER B B 290 290 . 93.002  108.330 -13.802 1.00 2.00   1
. .
ATOM 5511 CA   CA   . SER SER SER B B 290 290 . 91.894  109.159 -13.257 1.00 2.00   1
. .
ATOM 5512 CB   CB   . SER SER SER B B 290 290 . 91.094  108.395 -12.196 1.00 2.47   1
. .
ATOM 5513 OG   OG   . SER SER SER B B 290 290 . 89.978  109.162 -11.759 1.00 2.59   1
. .
ATOM 5514 C    C    . SER SER SER B B 290 290 . 92.551  110.284 -12.489 1.00 2.00   1
. .
ATOM 5515 O    O    . SER SER SER B B 290 290 . 93.499  110.053 -11.811 1.00 2.18   1
. .
ATOM 5516 N    N    . ILE ILE ILE B B 291 291 . 92.101  111.514 -12.761 1.00 2.00   1
. .
ATOM 5517 CA   CA   . ILE ILE ILE B B 291 291 . 92.541  112.677 -11.988 1.00 2.00   1
. .
ATOM 5518 CB   CB   . ILE ILE ILE B B 291 291 . 93.469  113.602 -12.854 1.00 2.00   1
. .
ATOM 5519 CG1  CG1  . ILE ILE ILE B B 291 291 . 94.709  112.868 -13.287 1.00 2.00   1
. .
ATOM 5520 CD1  CD1  . ILE ILE ILE B B 291 291 . 95.575  113.590 -14.313 1.00 2.88   1
. .
ATOM 5521 CG2  CG2  . ILE ILE ILE B B 291 291 . 93.843  114.894 -12.065 1.00 2.00   1
. .
ATOM 5522 C    C    . ILE ILE ILE B B 291 291 . 91.300  113.457 -11.552 1.00 2.00   1
. .
ATOM 5523 O    O    . ILE ILE ILE B B 291 291 . 90.412  113.798 -12.347 1.00 2.00   1
. .
ATOM 5524 N    N    . GLU GLU GLU B B 292 292 . 91.259  113.732 -10.239 1.00 2.00   1
. .
ATOM 5525 CA   CA   . GLU GLU GLU B B 292 292 . 90.125  114.410 -9.583  1.00 2.00   1
. .
ATOM 5526 CB   CB   . GLU GLU GLU B B 292 292 . 89.793  113.697 -8.301  1.00 2.00   1
. .
ATOM 5527 CG   CG   . GLU GLU GLU B B 292 292 . 88.741  114.394 -7.446  1.00 2.04   1
. .
ATOM 5528 CD   CD   . GLU GLU GLU B B 292 292 . 88.595  113.710 -6.132  1.00 2.42   1
. .
ATOM 5529 OE1  OE1  . GLU GLU GLU B B 292 292 . 88.208  114.407 -5.174  1.00 2.22   1
. .
ATOM 5530 OE2  OE2  . GLU GLU GLU B B 292 292 . 88.838  112.458 -6.053  1.00 3.44   1
. .
ATOM 5531 C    C    . GLU GLU GLU B B 292 292 . 90.557  115.861 -9.221  1.00 2.00   1
. .
ATOM 5532 O    O    . GLU GLU GLU B B 292 292 . 91.685  116.076 -8.853  1.00 2.00   1
. .
ATOM 5533 N    N    . ASP ASP ASP B B 293 293 . 89.637  116.822 -9.465  1.00 2.00   1
. .
ATOM 5534 CA   CA   . ASP ASP ASP B B 293 293 . 89.920  118.284 -9.182  1.00 2.00   1
. .
ATOM 5535 CB   CB   . ASP ASP ASP B B 293 293 . 89.795  118.630 -7.687  1.00 2.00   1
. .
ATOM 5536 CG   CG   . ASP ASP ASP B B 293 293 . 88.369  118.727 -7.274  1.00 2.46   1
. .
ATOM 5537 OD1  OD1  . ASP ASP ASP B B 293 293 . 87.513  118.800 -8.110  1.00 2.00   1
. .
ATOM 5538 OD2  OD2  . ASP ASP ASP B B 293 293 . 88.050  118.748 -6.040  1.00 2.00   1
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ATOM 5539 C    C    . ASP ASP ASP B B 293 293 . 91.255  118.739 -9.702  1.00 2.00   1
. .
ATOM 5540 O    O    . ASP ASP ASP B B 293 293 . 92.030  119.310 -9.025  1.00 2.00   1
. .
ATOM 5541 N    N    . PRO PRO PRO B B 294 294 . 91.504  118.547 -11.022 1.00 2.00   1
. .
ATOM 5542 CA   CA   . PRO PRO PRO B B 294 294 . 92.809  119.003 -11.606 1.00 2.00   1
. .
ATOM 5543 CB   CB   . PRO PRO PRO B B 294 294 . 92.766  118.469 -13.095 1.00 2.00   1
. .
ATOM 5544 CG   CG   . PRO PRO PRO B B 294 294 . 91.235  118.250 -13.331 1.00 2.00   1
. .
ATOM 5545 CD   CD   . PRO PRO PRO B B 294 294 . 90.694  117.755 -11.965 1.00 2.10   1
. .
ATOM 5546 C    C    . PRO PRO PRO B B 294 294 . 92.909  120.568 -11.611 1.00 2.00   1
. .
ATOM 5547 O    O    . PRO PRO PRO B B 294 294 . 93.980  121.068 -11.720 1.00 2.00   1
. .
ATOM 5548 N    N    . PHE PHE PHE B B 295 295 . 91.758  121.195 -11.534 1.00 2.00   1
. .
ATOM 5549 CA   CA   . PHE PHE PHE B B 295 295 . 91.749  122.689 -11.525 1.00 2.00   1
. .
ATOM 5550 CB   CB   . PHE PHE PHE B B 295 295 . 91.394  123.256 -12.924 1.00 2.00   1
. .
ATOM 5551 CG   CG   . PHE PHE PHE B B 295 295 . 92.289  122.751 -14.017 1.00 2.00   1
. .
ATOM 5552 CD1  CD1  . PHE PHE PHE B B 295 295 . 93.589  123.266 -14.154 1.00 2.00   1
. .
ATOM 5553 CE1  CE1  . PHE PHE PHE B B 295 295 . 94.479  122.768 -15.139 1.00 2.04   1
. .
ATOM 5554 CZ   CZ   . PHE PHE PHE B B 295 295 . 94.034  121.647 -15.951 1.00 2.00   1
. .
ATOM 5555 CE2  CE2  . PHE PHE PHE B B 295 295 . 92.721  121.153 -15.792 1.00 2.00   1
. .
ATOM 5556 CD2  CD2  . PHE PHE PHE B B 295 295 . 91.860  121.709 -14.809 1.00 2.00   1
. .
ATOM 5557 C    C    . PHE PHE PHE B B 295 295 . 90.773  123.156 -10.436 1.00 2.00   1
. .
ATOM 5558 O    O    . PHE PHE PHE B B 295 295 . 90.022  122.381 -9.868  1.00 2.00   1
. .
ATOM 5559 N    N    . ASP ASP ASP B B 296 296 . 90.785  124.498 -10.225 1.00 2.00   1
. .
ATOM 5560 CA   CA   . ASP ASP ASP B B 296 296 . 89.998  125.129 -9.198  1.00 2.00   1
. .
ATOM 5561 CB   CB   . ASP ASP ASP B B 296 296 . 90.357  126.579 -9.139  1.00 2.00   1
. .
ATOM 5562 CG   CG   . ASP ASP ASP B B 296 296 . 89.631  127.324 -7.968  1.00 2.22   1
. .
ATOM 5563 OD1  OD1  . ASP ASP ASP B B 296 296 . 89.962  127.169 -6.765  1.00 2.09   1
. .
ATOM 5564 OD2  OD2  . ASP ASP ASP B B 296 296 . 88.618  128.064 -8.303  1.00 3.07   1
. .
ATOM 5565 C    C    . ASP ASP ASP B B 296 296 . 88.502  124.948 -9.491  1.00 2.00   1
. .
ATOM 5566 O    O    . ASP ASP ASP B B 296 296 . 88.067  124.843 -10.662 1.00 2.00   1
. .
ATOM 5567 N    N    . GLN GLN GLN B B 297 297 . 87.714  124.922 -8.445  1.00 2.00   1
. .
ATOM 5568 CA   CA   . GLN GLN GLN B B 297 297 . 86.289  124.771 -8.534  1.00 2.00   1
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ATOM 5569 CB   CB   . GLN GLN GLN B B 297 297 . 85.731  124.690 -7.083  1.00 2.00   1
. .
ATOM 5570 CG   CG   . GLN GLN GLN B B 297 297 . 85.996  126.044 -6.330  1.00 2.00   1
. .
ATOM 5571 CD   CD   . GLN GLN GLN B B 297 297 . 86.206  125.937 -4.814  1.00 2.00   1
. .
ATOM 5572 OE1  OE1  . GLN GLN GLN B B 297 297 . 85.610  125.094 -4.149  1.00 2.25   1
. .
ATOM 5573 NE2  NE2  . GLN GLN GLN B B 297 297 . 87.140  126.771 -4.286  1.00 2.00   1
. .
ATOM 5574 C    C    . GLN GLN GLN B B 297 297 . 85.559  125.813 -9.380  1.00 2.00   1
. .
ATOM 5575 O    O    . GLN GLN GLN B B 297 297 . 84.413  125.604 -9.715  1.00 2.00   1
. .
ATOM 5576 N    N    . ASP ASP ASP B B 298 298 . 86.188  126.969 -9.640  1.00 2.00   1
. .
ATOM 5577 CA   CA   . ASP ASP ASP B B 298 298 . 85.581  127.990 -10.508 1.00 2.00   1
. .
ATOM 5578 CB   CB   . ASP ASP ASP B B 298 298 . 85.601  129.398 -9.856  1.00 2.07   1
. .
ATOM 5579 CG   CG   . ASP ASP ASP B B 298 298 . 84.676  129.487 -8.666  1.00 2.00   1
. .
ATOM 5580 OD1  OD1  . ASP ASP ASP B B 298 298 . 83.527  129.172 -8.823  1.00 2.20   1
. .
ATOM 5581 OD2  OD2  . ASP ASP ASP B B 298 298 . 85.077  129.892 -7.541  1.00 2.79   1
. .
ATOM 5582 C    C    . ASP ASP ASP B B 298 298 . 86.273  128.094 -11.876 1.00 2.00   1
. .
ATOM 5583 O    O    . ASP ASP ASP B B 298 298 . 85.893  128.949 -12.694 1.00 2.00   1
. .
ATOM 5584 N    N    . ASP ASP ASP B B 299 299 . 87.382  127.378 -12.083 1.00 2.00   1
. .
ATOM 5585 CA   CA   . ASP ASP ASP B B 299 299 . 88.173  127.528 -13.350 1.00 2.00   1
. .
ATOM 5586 CB   CB   . ASP ASP ASP B B 299 299 . 89.659  127.216 -13.031 1.00 2.00   1
. .
ATOM 5587 CG   CG   . ASP ASP ASP B B 299 299 . 90.628  127.553 -14.100 1.00 2.00   1
. .
ATOM 5588 OD1  OD1  . ASP ASP ASP B B 299 299 . 90.306  128.099 -15.179 1.00 2.00   1
. .
ATOM 5589 OD2  OD2  . ASP ASP ASP B B 299 299 . 91.851  127.264 -13.845 1.00 2.00   1
. .
ATOM 5590 C    C    . ASP ASP ASP B B 299 299 . 87.593  126.637 -14.431 1.00 2.00   1
. .
ATOM 5591 O    O    . ASP ASP ASP B B 299 299 . 88.248  125.784 -14.933 1.00 2.00   1
. .
ATOM 5592 N    N    . TRP TRP TRP B B 300 300 . 86.322  126.906 -14.795 1.00 2.00   1
. .
ATOM 5593 CA   CA   . TRP TRP TRP B B 300 300 . 85.602  126.073 -15.756 1.00 2.00   1
. .
ATOM 5594 CB   CB   . TRP TRP TRP B B 300 300 . 84.222  126.637 -15.995 1.00 2.00   1
. .
ATOM 5595 CG   CG   . TRP TRP TRP B B 300 300 . 83.364  126.577 -14.826 1.00 2.00   1
. .
ATOM 5596 CD1  CD1  . TRP TRP TRP B B 300 300 . 83.160  127.551 -13.822 1.00 2.00   1
. .
ATOM 5597 NE1  NE1  . TRP TRP TRP B B 300 300 . 82.239  127.065 -12.918 1.00 2.00   1
. .
ATOM 5598 CE2  CE2  . TRP TRP TRP B B 300 300 . 81.833  125.794 -13.301 1.00 2.00   1
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ATOM 5599 CD2  CD2  . TRP TRP TRP B B 300 300 . 82.517  125.478 -14.491 1.00 2.15   1
. .
ATOM 5600 CE3  CE3  . TRP TRP TRP B B 300 300 . 82.279  124.210 -15.110 1.00 3.77   1
. .
ATOM 5601 CZ3  CZ3  . TRP TRP TRP B B 300 300 . 81.363  123.342 -14.511 1.00 3.15   1
. .
ATOM 5602 CH2  CH2  . TRP TRP TRP B B 300 300 . 80.728  123.669 -13.299 1.00 2.44   1
. .
ATOM 5603 CZ2  CZ2  . TRP TRP TRP B B 300 300 . 80.935  124.911 -12.697 1.00 2.62   1
. .
ATOM 5604 C    C    . TRP TRP TRP B B 300 300 . 86.341  125.921 -17.081 1.00 2.00   1
. .
ATOM 5605 O    O    . TRP TRP TRP B B 300 300 . 86.380  124.818 -17.686 1.00 2.06   1
. .
ATOM 5606 N    N    . ALA ALA ALA B B 301 301 . 86.961  126.960 -17.589 1.00 2.00   1
. .
ATOM 5607 CA   CA   . ALA ALA ALA B B 301 301 . 87.646  126.837 -18.873 1.00 2.00   1
. .
ATOM 5608 CB   CB   . ALA ALA ALA B B 301 301 . 88.240  128.207 -19.292 1.00 2.29   1
. .
ATOM 5609 C    C    . ALA ALA ALA B B 301 301 . 88.776  125.812 -18.881 1.00 2.00   1
. .
ATOM 5610 O    O    . ALA ALA ALA B B 301 301 . 88.930  125.097 -19.870 1.00 2.00   1
. .
ATOM 5611 N    N    . ALA ALA ALA B B 302 302 . 89.486  125.664 -17.787 1.00 2.00   1
. .
ATOM 5612 CA   CA   . ALA ALA ALA B B 302 302 . 90.615  124.732 -17.715 1.00 2.00   1
. .
ATOM 5613 CB   CB   . ALA ALA ALA B B 302 302 . 91.464  124.964 -16.499 1.00 2.00   1
. .
ATOM 5614 C    C    . ALA ALA ALA B B 302 302 . 90.058  123.323 -17.669 1.00 2.00   1
. .
ATOM 5615 O    O    . ALA ALA ALA B B 302 302 . 90.571  122.434 -18.359 1.00 2.00   1
. .
ATOM 5616 N    N    . TRP TRP TRP B B 303 303 . 88.986  123.139 -16.924 1.00 2.00   1
. .
ATOM 5617 CA   CA   . TRP TRP TRP B B 303 303 . 88.367  121.784 -16.847 1.00 2.00   1
. .
ATOM 5618 CB   CB   . TRP TRP TRP B B 303 303 . 87.161  121.786 -15.985 1.00 2.00   1
. .
ATOM 5619 CG   CG   . TRP TRP TRP B B 303 303 . 87.451  121.748 -14.475 1.00 2.00   1
. .
ATOM 5620 CD1  CD1  . TRP TRP TRP B B 303 303 . 87.714  122.832 -13.650 1.00 2.00   1
. .
ATOM 5621 NE1  NE1  . TRP TRP TRP B B 303 303 . 87.851  122.425 -12.362 1.00 2.00   1
. .
ATOM 5622 CE2  CE2  . TRP TRP TRP B B 303 303 . 87.656  121.088 -12.307 1.00 2.02   1
. .
ATOM 5623 CD2  CD2  . TRP TRP TRP B B 303 303 . 87.449  120.616 -13.619 1.00 2.08   1
. .
ATOM 5624 CE3  CE3  . TRP TRP TRP B B 303 303 . 87.156  119.263 -13.817 1.00 2.00   1
. .
ATOM 5625 CZ3  CZ3  . TRP TRP TRP B B 303 303 . 87.259  118.428 -12.739 1.00 2.00   1
. .
ATOM 5626 CH2  CH2  . TRP TRP TRP B B 303 303 . 87.465  118.935 -11.431 1.00 2.00   1
. .
ATOM 5627 CZ2  CZ2  . TRP TRP TRP B B 303 303 . 87.718  120.251 -11.209 1.00 2.00   1
. .
ATOM 5628 C    C    . TRP TRP TRP B B 303 303 . 87.873  121.301 -18.213 1.00 2.00   1
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ATOM 5629 O    O    . TRP TRP TRP B B 303 303 . 88.229  120.202 -18.622 1.00 2.07   1
. .
ATOM 5630 N    N    . SER SER SER B B 304 304 . 87.115  122.129 -18.940 1.00 2.05   1
. .
ATOM 5631 CA   CA   . SER SER SER B B 304 304 . 86.583  121.753 -20.190 1.00 2.00   1
. .
ATOM 5632 CB   CB   . SER SER SER B B 304 304 . 85.663  122.854 -20.748 1.00 2.00   1
. .
ATOM 5633 OG   OG   . SER SER SER B B 304 304 . 84.543  122.957 -19.937 1.00 2.60   1
. .
ATOM 5634 C    C    . SER SER SER B B 304 304 . 87.719  121.513 -21.223 1.00 2.00   1
. .
ATOM 5635 O    O    . SER SER SER B B 304 304 . 87.602  120.562 -22.012 1.00 2.00   1
. .
ATOM 5636 N    N    . LYS LYS LYS B B 305 305 . 88.732  122.383 -21.252 1.00 2.31   1
. .
ATOM 5637 CA   CA   . LYS LYS LYS B B 305 305 . 89.793  122.263 -22.228 1.00 2.29   1
. .
ATOM 5638 CB   CB   . LYS LYS LYS B B 305 305 . 90.661  123.509 -22.161 1.00 3.99   1
. .
ATOM 5639 CG   CG   . LYS LYS LYS B B 305 305 . 91.722  123.609 -23.290 1.00 4.77   1
. .
ATOM 5640 CD   CD   . LYS LYS LYS B B 305 305 . 92.211  125.060 -23.424 1.00 8.76   1
. .
ATOM 5641 CE   CE   . LYS LYS LYS B B 305 305 . 93.693  125.143 -23.732 1.00 14.47  1
. .
ATOM 5642 NZ   NZ   . LYS LYS LYS B B 305 305 . 94.141  126.611 -23.820 1.00 16.94  1
. .
ATOM 5643 C    C    . LYS LYS LYS B B 305 305 . 90.587  120.979 -21.940 1.00 2.00   1
. .
ATOM 5644 O    O    . LYS LYS LYS B B 305 305 . 90.886  120.192 -22.856 1.00 2.79   1
. .
ATOM 5645 N    N    . PHE PHE PHE B B 306 306 . 90.843  120.709 -20.669 1.00 2.12   1
. .
ATOM 5646 CA   CA   . PHE PHE PHE B B 306 306 . 91.668  119.539 -20.364 1.00 2.00   1
. .
ATOM 5647 CB   CB   . PHE PHE PHE B B 306 306 . 92.114  119.599 -18.899 1.00 2.00   1
. .
ATOM 5648 CG   CG   . PHE PHE PHE B B 306 306 . 93.010  118.494 -18.522 1.00 2.58   1
. .
ATOM 5649 CD1  CD1  . PHE PHE PHE B B 306 306 . 94.311  118.481 -19.020 1.00 3.27   1
. .
ATOM 5650 CE1  CE1  . PHE PHE PHE B B 306 306 . 95.210  117.462 -18.603 1.00 3.34   1
. .
ATOM 5651 CZ   CZ   . PHE PHE PHE B B 306 306 . 94.746  116.415 -17.726 1.00 3.41   1
. .
ATOM 5652 CE2  CE2  . PHE PHE PHE B B 306 306 . 93.455  116.448 -17.279 1.00 3.13   1
. .
ATOM 5653 CD2  CD2  . PHE PHE PHE B B 306 306 . 92.593  117.484 -17.676 1.00 2.27   1
. .
ATOM 5654 C    C    . PHE PHE PHE B B 306 306 . 90.889  118.248 -20.623 1.00 2.00   1
. .
ATOM 5655 O    O    . PHE PHE PHE B B 306 306 . 91.400  117.283 -21.294 1.00 2.00   1
. .
ATOM 5656 N    N    . THR THR THR B B 307 307 . 89.621  118.213 -20.244 1.00 2.00   1
. .
ATOM 5657 CA   CA   . THR THR THR B B 307 307 . 88.766  117.037 -20.472 1.00 2.02   1
. .
ATOM 5658 CB   CB   . THR THR THR B B 307 307 . 87.386  117.269 -19.864 1.00 2.00   1
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ATOM 5659 OG1  OG1  . THR THR THR B B 307 307 . 87.547  117.253 -18.442 1.00 2.82   1
. .
ATOM 5660 CG2  CG2  . THR THR THR B B 307 307 . 86.400  116.117 -20.202 1.00 3.13   1
. .
ATOM 5661 C    C    . THR THR THR B B 307 307 . 88.652  116.718 -21.968 1.00 2.00   1
. .
ATOM 5662 O    O    . THR THR THR B B 307 307 . 88.692  115.553 -22.344 1.00 2.00   1
. .
ATOM 5663 N    N    . ALA ALA ALA B B 308 308 . 88.562  117.775 -22.787 1.00 2.00   1
. .
ATOM 5664 CA   CA   . ALA ALA ALA B B 308 308 . 88.484  117.547 -24.235 1.00 2.00   1
. .
ATOM 5665 CB   CB   . ALA ALA ALA B B 308 308 . 88.064  118.759 -24.969 1.00 2.71   1
. .
ATOM 5666 C    C    . ALA ALA ALA B B 308 308 . 89.773  117.023 -24.849 1.00 2.00   1
. .
ATOM 5667 O    O    . ALA ALA ALA B B 308 308 . 89.731  116.575 -26.003 1.00 2.83   1
. .
ATOM 5668 N    N    . ASN ASN ASN B B 309 309 . 90.899  117.086 -24.150 1.00 2.00   1
. .
ATOM 5669 CA   CA   . ASN ASN ASN B B 309 309 . 92.203  116.762 -24.747 1.00 2.41   1
. .
ATOM 5670 CB   CB   . ASN ASN ASN B B 309 309 . 93.161  117.965 -24.613 1.00 3.54   1
. .
ATOM 5671 CG   CG   . ASN ASN ASN B B 309 309 . 92.874  119.065 -25.661 1.00 8.18   1
. .
ATOM 5672 OD1  OD1  . ASN ASN ASN B B 309 309 . 92.629  118.792 -26.860 1.00 16.00  1
. .
ATOM 5673 ND2  ND2  . ASN ASN ASN B B 309 309 . 92.945  120.341 -25.224 1.00 13.56  1
. .
ATOM 5674 C    C    . ASN ASN ASN B B 309 309 . 92.855  115.513 -24.095 1.00 2.00   1
. .
ATOM 5675 O    O    . ASN ASN ASN B B 309 309 . 94.041  115.332 -24.209 1.00 2.52   1
. .
ATOM 5676 N    N    . VAL VAL VAL B B 310 310 . 92.096  114.739 -23.358 1.00 2.12   1
. .
ATOM 5677 CA   CA   . VAL VAL VAL B B 310 310 . 92.574  113.522 -22.646 1.00 2.00   1
. .
ATOM 5678 CB   CB   . VAL VAL VAL B B 310 310 . 92.929  113.745 -21.100 1.00 2.71   1
. .
ATOM 5679 CG1  CG1  . VAL VAL VAL B B 310 310 . 93.944  114.796 -20.969 1.00 6.82   1
. .
ATOM 5680 CG2  CG2  . VAL VAL VAL B B 310 310 . 91.699  114.080 -20.216 1.00 2.00   1
. .
ATOM 5681 C    C    . VAL VAL VAL B B 310 310 . 91.559  112.402 -22.740 1.00 2.00   1
. .
ATOM 5682 O    O    . VAL VAL VAL B B 310 310 . 90.349  112.663 -22.913 1.00 2.00   1
. .
ATOM 5683 N    N    . GLY GLY GLY B B 311 311 . 92.001  111.144 -22.540 1.00 2.00   1
. .
ATOM 5684 CA   CA   . GLY GLY GLY B B 311 311 . 90.989  110.087 -22.524 1.00 2.00   1
. .
ATOM 5685 C    C    . GLY GLY GLY B B 311 311 . 90.867  109.462 -21.144 1.00 2.00   1
. .
ATOM 5686 O    O    . GLY GLY GLY B B 311 311 . 90.080  108.508 -20.934 1.00 2.39   1
. .
ATOM 5687 N    N    . ILE ILE ILE B B 312 312 . 91.588  110.021 -20.175 1.00 2.00   1
. .
ATOM 5688 CA   CA   . ILE ILE ILE B B 312 312 . 91.453  109.556 -18.758 1.00 2.00   1
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ATOM 5689 CB   CB   . ILE ILE ILE B B 312 312 . 92.611  110.001 -17.877 1.00 2.01   1
. .
ATOM 5690 CG1  CG1  . ILE ILE ILE B B 312 312 . 92.763  111.570 -17.843 1.00 2.00   1
. .
ATOM 5691 CD1  CD1  . ILE ILE ILE B B 312 312 . 93.605  112.019 -16.615 1.00 2.00   1
. .
ATOM 5692 CG2  CG2  . ILE ILE ILE B B 312 312 . 93.922  109.278 -18.355 1.00 3.42   1
. .
ATOM 5693 C    C    . ILE ILE ILE B B 312 312 . 90.140  110.011 -18.129 1.00 2.00   1
. .
ATOM 5694 O    O    . ILE ILE ILE B B 312 312 . 89.461  110.915 -18.614 1.00 2.00   1
. .
ATOM 5695 N    N    . GLN GLN GLN B B 313 313 . 89.840  109.407 -16.956 1.00 2.00   1
. .
ATOM 5696 CA   CA   . GLN GLN GLN B B 313 313 . 88.695  109.792 -16.160 1.00 2.00   1
. .
ATOM 5697 CB   CB   . GLN GLN GLN B B 313 313 . 88.417  108.713 -15.096 1.00 2.00   1
. .
ATOM 5698 CG   CG   . GLN GLN GLN B B 313 313 . 87.235  109.191 -14.214 1.00 2.06   1
. .
ATOM 5699 CD   CD   . GLN GLN GLN B B 313 313 . 86.752  108.008 -13.418 1.00 2.38   1
. .
ATOM 5700 OE1  OE1  . GLN GLN GLN B B 313 313 . 85.716  107.443 -13.739 1.00 3.50   1
. .
ATOM 5701 NE2  NE2  . GLN GLN GLN B B 313 313 . 87.476  107.685 -12.375 1.00 2.15   1
. .
ATOM 5702 C    C    . GLN GLN GLN B B 313 313 . 89.077  111.151 -15.461 1.00 2.00   1
. .
ATOM 5703 O    O    . GLN GLN GLN B B 313 313 . 90.197  111.358 -14.987 1.00 2.00   1
. .
ATOM 5704 N    N    . ILE ILE ILE B B 314 314 . 88.146  112.102 -15.513 1.00 2.00   1
. .
ATOM 5705 CA   CA   . ILE ILE ILE B B 314 314 . 88.340  113.448 -14.926 1.00 2.00   1
. .
ATOM 5706 CB   CB   . ILE ILE ILE B B 314 314 . 88.272  114.569 -16.001 1.00 2.00   1
. .
ATOM 5707 CG1  CG1  . ILE ILE ILE B B 314 314 . 89.412  114.405 -17.026 1.00 2.22   1
. .
ATOM 5708 CD1  CD1  . ILE ILE ILE B B 314 314 . 90.789  114.457 -16.439 1.00 2.00   1
. .
ATOM 5709 CG2  CG2  . ILE ILE ILE B B 314 314 . 88.333  115.952 -15.400 1.00 2.00   1
. .
ATOM 5710 C    C    . ILE ILE ILE B B 314 314 . 87.200  113.590 -13.963 1.00 2.00   1
. .
ATOM 5711 O    O    . ILE ILE ILE B B 314 314 . 86.024  113.624 -14.359 1.00 2.00   1
. .
ATOM 5712 N    N    . VAL VAL VAL B B 315 315 . 87.536  113.687 -12.637 1.00 2.00   1
. .
ATOM 5713 CA   CA   . VAL VAL VAL B B 315 315 . 86.512  113.635 -11.609 1.00 2.00   1
. .
ATOM 5714 CB   CB   . VAL VAL VAL B B 315 315 . 86.956  112.646 -10.460 1.00 2.03   1
. .
ATOM 5715 CG1  CG1  . VAL VAL VAL B B 315 315 . 85.809  112.422 -9.448  1.00 2.00   1
. .
ATOM 5716 CG2  CG2  . VAL VAL VAL B B 315 315 . 87.403  111.295 -11.097 1.00 2.02   1
. .
ATOM 5717 C    C    . VAL VAL VAL B B 315 315 . 86.258  114.990 -10.992 1.00 2.00   1
. .
ATOM 5718 O    O    . VAL VAL VAL B B 315 315 . 87.183  115.616 -10.535 1.00 2.00   1
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ATOM 5719 N    N    . GLY GLY GLY B B 316 316 . 84.974  115.371 -10.997 1.00 2.00   1
. .
ATOM 5720 CA   CA   . GLY GLY GLY B B 316 316 . 84.600  116.600 -10.273 1.00 2.00   1
. .
ATOM 5721 C    C    . GLY GLY GLY B B 316 316 . 84.344  116.231 -8.830  1.00 2.00   1
. .
ATOM 5722 O    O    . GLY GLY GLY B B 316 316 . 83.578  115.328 -8.546  1.00 2.00   1
. .
ATOM 5723 N    N    . ASP ASP ASP B B 317 317 . 84.961  117.019 -7.968  1.00 2.00   1
. .
ATOM 5724 CA   CA   . ASP ASP ASP B B 317 317 . 84.729  116.882 -6.523  1.00 2.00   1
. .
ATOM 5725 CB   CB   . ASP ASP ASP B B 317 317 . 86.006  116.423 -5.809  1.00 2.18   1
. .
ATOM 5726 CG   CG   . ASP ASP ASP B B 317 317 . 85.836  116.398 -4.254  1.00 2.14   1
. .
ATOM 5727 OD1  OD1  . ASP ASP ASP B B 317 317 . 86.865  116.263 -3.569  1.00 3.25   1
. .
ATOM 5728 OD2  OD2  . ASP ASP ASP B B 317 317 . 84.693  116.520 -3.791  1.00 2.01   1
. .
ATOM 5729 C    C    . ASP ASP ASP B B 317 317 . 84.306  118.308 -6.031  1.00 2.00   1
. .
ATOM 5730 O    O    . ASP ASP ASP B B 317 317 . 83.146  118.565 -5.900  1.00 2.00   1
. .
ATOM 5731 N    N    . ASP ASP ASP B B 318 318 . 85.277  119.167 -5.765  1.00 2.00   1
. .
ATOM 5732 CA   CA   . ASP ASP ASP B B 318 318 . 84.902  120.579 -5.353  1.00 2.00   1
. .
ATOM 5733 CB   CB   . ASP ASP ASP B B 318 318 . 86.098  121.350 -4.837  1.00 2.00   1
. .
ATOM 5734 CG   CG   . ASP ASP ASP B B 318 318 . 86.651  120.780 -3.512  1.00 2.00   1
. .
ATOM 5735 OD1  OD1  . ASP ASP ASP B B 318 318 . 85.839  120.191 -2.772  1.00 2.74   1
. .
ATOM 5736 OD2  OD2  . ASP ASP ASP B B 318 318 . 87.881  120.989 -3.254  1.00 2.59   1
. .
ATOM 5737 C    C    . ASP ASP ASP B B 318 318 . 84.227  121.252 -6.540  1.00 2.00   1
. .
ATOM 5738 O    O    . ASP ASP ASP B B 318 318 . 83.389  122.195 -6.381  1.00 2.00   1
. .
ATOM 5739 N    N    . LEU LEU LEU B B 319 319 . 84.387  120.718 -7.735  1.00 2.00   1
. .
ATOM 5740 CA   CA   . LEU LEU LEU B B 319 319 . 83.706  121.396 -8.854  1.00 2.00   1
. .
ATOM 5741 CB   CB   . LEU LEU LEU B B 319 319 . 84.234  120.831 -10.195 1.00 2.00   1
. .
ATOM 5742 CG   CG   . LEU LEU LEU B B 319 319 . 83.579  121.385 -11.459 1.00 2.00   1
. .
ATOM 5743 CD1  CD1  . LEU LEU LEU B B 319 319 . 84.081  122.815 -11.822 1.00 2.00   1
. .
ATOM 5744 CD2  CD2  . LEU LEU LEU B B 319 319 . 83.854  120.469 -12.693 1.00 2.01   1
. .
ATOM 5745 C    C    . LEU LEU LEU B B 319 319 . 82.186  121.194 -8.794  1.00 2.00   1
. .
ATOM 5746 O    O    . LEU LEU LEU B B 319 319 . 81.394  122.093 -9.027  1.00 2.10   1
. .
ATOM 5747 N    N    . THR THR THR B B 320 320 . 81.742  119.981 -8.447  1.00 2.00   1
. .
ATOM 5748 CA   CA   . THR THR THR B B 320 320 . 80.372  119.625 -8.586  1.00 2.00   1
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ATOM 5749 CB   CB   . THR THR THR B B 320 320 . 80.347  118.221 -9.262  1.00 2.01   1
. .
ATOM 5750 OG1  OG1  . THR THR THR B B 320 320 . 81.463  117.442 -8.763  1.00 2.44   1
. .
ATOM 5751 CG2  CG2  . THR THR THR B B 320 320 . 80.470  118.315 -10.785 1.00 2.34   1
. .
ATOM 5752 C    C    . THR THR THR B B 320 320 . 79.628  119.505 -7.268  1.00 2.00   1
. .
ATOM 5753 O    O    . THR THR THR B B 320 320 . 78.375  119.545 -7.260  1.00 2.00   1
. .
ATOM 5754 N    N    . VAL VAL VAL B B 321 321 . 80.394  119.330 -6.176  1.00 2.00   1
. .
ATOM 5755 CA   CA   . VAL VAL VAL B B 321 321 . 79.884  119.229 -4.775  1.00 2.00   1
. .
ATOM 5756 CB   CB   . VAL VAL VAL B B 321 321 . 79.798  120.564 -4.054  1.00 2.00   1
. .
ATOM 5757 CG1  CG1  . VAL VAL VAL B B 321 321 . 81.186  121.076 -3.756  1.00 2.00   1
. .
ATOM 5758 CG2  CG2  . VAL VAL VAL B B 321 321 . 79.005  121.587 -4.867  1.00 2.07   1
. .
ATOM 5759 C    C    . VAL VAL VAL B B 321 321 . 78.623  118.384 -4.654  1.00 2.00   1
. .
ATOM 5760 O    O    . VAL VAL VAL B B 321 321 . 77.729  118.698 -3.917  1.00 2.00   1
. .
ATOM 5761 N    N    . THR THR THR B B 322 322 . 78.562  117.254 -5.328  1.00 2.00   1
. .
ATOM 5762 CA   CA   . THR THR THR B B 322 322 . 77.383  116.368 -5.293  1.00 2.00   1
. .
ATOM 5763 CB   CB   . THR THR THR B B 322 322 . 77.449  115.477 -4.016  1.00 2.00   1
. .
ATOM 5764 OG1  OG1  . THR THR THR B B 322 322 . 78.780  115.005 -3.906  1.00 2.00   1
. .
ATOM 5765 CG2  CG2  . THR THR THR B B 322 322 . 76.557  114.285 -4.036  1.00 2.00   1
. .
ATOM 5766 C    C    . THR THR THR B B 322 322 . 76.067  117.126 -5.438  1.00 2.00   1
. .
ATOM 5767 O    O    . THR THR THR B B 322 322 . 75.015  116.756 -4.864  1.00 2.11   1
. .
ATOM 5768 N    N    . ASN ASN ASN B B 323 323 . 76.057  118.150 -6.311  1.00 2.27   1
. .
ATOM 5769 CA   CA   . ASN ASN ASN B B 323 323 . 74.939  119.065 -6.336  1.00 2.71   1
. .
ATOM 5770 CB   CB   . ASN ASN ASN B B 323 323 . 75.447  120.433 -5.952  1.00 2.01   1
. .
ATOM 5771 CG   CG   . ASN ASN ASN B B 323 323 . 74.320  121.396 -5.799  1.00 5.30   1
. .
ATOM 5772 OD1  OD1  . ASN ASN ASN B B 323 323 . 73.369  121.401 -6.600  1.00 7.48   1
. .
ATOM 5773 ND2  ND2  . ASN ASN ASN B B 323 323 . 74.399  122.200 -4.769  1.00 4.10   1
. .
ATOM 5774 C    C    . ASN ASN ASN B B 323 323 . 74.376  119.118 -7.745  1.00 2.22   1
. .
ATOM 5775 O    O    . ASN ASN ASN B B 323 323 . 75.088  119.551 -8.663  1.00 2.31   1
. .
ATOM 5776 N    N    . PRO PRO PRO B B 324 324 . 73.114  118.642 -7.956  1.00 2.73   1
. .
ATOM 5777 CA   CA   . PRO PRO PRO B B 324 324 . 72.545  118.625 -9.278  1.00 4.40   1
. .
ATOM 5778 CB   CB   . PRO PRO PRO B B 324 324 . 71.083  118.257 -8.991  1.00 5.73   1
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ATOM 5779 CG   CG   . PRO PRO PRO B B 324 324 . 71.160  117.417 -7.812  1.00 4.82   1
. .
ATOM 5780 CD   CD   . PRO PRO PRO B B 324 324 . 72.221  118.013 -6.988  1.00 3.12   1
. .
ATOM 5781 C    C    . PRO PRO PRO B B 324 324 . 72.607  119.899 -10.086 1.00 3.14   1
. .
ATOM 5782 O    O    . PRO PRO PRO B B 324 324 . 72.814  119.845 -11.299 1.00 5.89   1
. .
ATOM 5783 N    N    . LYS LYS LYS B B 325 325 . 72.537  121.064 -9.430  1.00 6.63   1
. .
ATOM 5784 CA   CA   . LYS LYS LYS B B 325 325 . 72.718  122.337 -10.180 1.00 5.34   1
. .
ATOM 5785 CB   CB   . LYS LYS LYS B B 325 325 . 72.399  123.524 -9.302  1.00 8.63   1
. .
ATOM 5786 CG   CG   . LYS LYS LYS B B 325 325 . 70.976  123.498 -8.758  1.00 13.56  1
. .
ATOM 5787 CD   CD   . LYS LYS LYS B B 325 325 . 70.698  124.768 -7.972  1.00 22.66  1
. .
ATOM 5788 CE   CE   . LYS LYS LYS B B 325 325 . 69.779  124.492 -6.786  1.00 25.61  1
. .
ATOM 5789 NZ   NZ   . LYS LYS LYS B B 325 325 . 68.580  125.307 -6.866  1.00 28.98  1
. .
ATOM 5790 C    C    . LYS LYS LYS B B 325 325 . 74.123  122.531 -10.777 1.00 5.20   1
. .
ATOM 5791 O    O    . LYS LYS LYS B B 325 325 . 74.291  123.042 -11.902 1.00 7.27   1
. .
ATOM 5792 N    N    . ARG ARG ARG B B 326 326 . 75.146  122.168 -9.999  1.00 3.71   1
. .
ATOM 5793 CA   CA   . ARG ARG ARG B B 326 326 . 76.509  122.289 -10.496 1.00 2.70   1
. .
ATOM 5794 CB   CB   . ARG ARG ARG B B 326 326 . 77.491  122.109 -9.332  1.00 2.85   1
. .
ATOM 5795 CG   CG   . ARG ARG ARG B B 326 326 . 77.355  123.170 -8.256  1.00 4.45   1
. .
ATOM 5796 CD   CD   . ARG ARG ARG B B 326 326 . 78.060  124.436 -8.582  1.00 4.54   1
. .
ATOM 5797 NE   NE   . ARG ARG ARG B B 326 326 . 79.533  124.273 -8.696  1.00 3.06   1
. .
ATOM 5798 CZ   CZ   . ARG ARG ARG B B 326 326 . 80.343  125.268 -9.077  1.00 3.09   1
. .
ATOM 5799 NH1  NH1  . ARG ARG ARG B B 326 326 . 79.866  126.516 -9.238  1.00 3.02   1
. .
ATOM 5800 NH2  NH2  . ARG ARG ARG B B 326 326 . 81.648  125.053 -9.251  1.00 2.91   1
. .
ATOM 5801 C    C    . ARG ARG ARG B B 326 326 . 76.784  121.208 -11.537 1.00 2.63   1
. .
ATOM 5802 O    O    . ARG ARG ARG B B 326 326 . 77.504  121.422 -12.517 1.00 2.41   1
. .
ATOM 5803 N    N    . ILE ILE ILE B B 327 327 . 76.215  120.014 -11.318 1.00 2.24   1
. .
ATOM 5804 CA   CA   . ILE ILE ILE B B 327 327 . 76.455  118.913 -12.228 1.00 2.00   1
. .
ATOM 5805 CB   CB   . ILE ILE ILE B B 327 327 . 75.821  117.616 -11.713 1.00 3.07   1
. .
ATOM 5806 CG1  CG1  . ILE ILE ILE B B 327 327 . 76.543  117.140 -10.429 1.00 2.67   1
. .
ATOM 5807 CD1  CD1  . ILE ILE ILE B B 327 327 . 75.685  116.150 -9.525  1.00 4.31   1
. .
ATOM 5808 CG2  CG2  . ILE ILE ILE B B 327 327 . 75.814  116.550 -12.792 1.00 3.32   1
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ATOM 5809 C    C    . ILE ILE ILE B B 327 327 . 75.857  119.332 -13.598 1.00 2.44   1
. .
ATOM 5810 O    O    . ILE ILE ILE B B 327 327 . 76.495  119.046 -14.606 1.00 2.35   1
. .
ATOM 5811 N    N    . GLU GLU GLU B B 328 328 . 74.664  119.941 -13.608 1.00 2.29   1
. .
ATOM 5812 CA   CA   . GLU GLU GLU B B 328 328 . 74.035  120.393 -14.861 1.00 5.44   1
. .
ATOM 5813 CB   CB   . GLU GLU GLU B B 328 328 . 72.677  121.044 -14.618 1.00 6.94   1
. .
ATOM 5814 CG   CG   . GLU GLU GLU B B 328 328 . 71.690  120.001 -14.237 1.00 14.52  1
. .
ATOM 5815 CD   CD   . GLU GLU GLU B B 328 328 . 71.022  119.314 -15.427 1.00 24.46  1
. .
ATOM 5816 OE1  OE1  . GLU GLU GLU B B 328 328 . 71.683  119.007 -16.463 1.00 25.22  1
. .
ATOM 5817 OE2  OE2  . GLU GLU GLU B B 328 328 . 69.801  119.043 -15.288 1.00 28.63  1
. .
ATOM 5818 C    C    . GLU GLU GLU B B 328 328 . 74.933  121.264 -15.674 1.00 3.93   1
. .
ATOM 5819 O    O    . GLU GLU GLU B B 328 328 . 75.147  121.034 -16.873 1.00 6.41   1
. .
ATOM 5820 N    N    . ARG ARG ARG B B 329 329 . 75.534  122.255 -15.010 1.00 3.23   1
. .
ATOM 5821 CA   CA   . ARG ARG ARG B B 329 329 . 76.465  123.116 -15.660 1.00 2.35   1
. .
ATOM 5822 CB   CB   . ARG ARG ARG B B 329 329 . 76.948  124.181 -14.681 1.00 4.83   1
. .
ATOM 5823 CG   CG   . ARG ARG ARG B B 329 329 . 77.923  125.142 -15.340 1.00 3.91   1
. .
ATOM 5824 CD   CD   . ARG ARG ARG B B 329 329 . 78.156  126.360 -14.473 1.00 5.34   1
. .
ATOM 5825 NE   NE   . ARG ARG ARG B B 329 329 . 79.063  127.298 -15.119 1.00 3.18   1
. .
ATOM 5826 CZ   CZ   . ARG ARG ARG B B 329 329 . 79.562  128.404 -14.546 1.00 5.07   1
. .
ATOM 5827 NH1  NH1  . ARG ARG ARG B B 329 329 . 79.231  128.741 -13.352 1.00 6.75   1
. .
ATOM 5828 NH2  NH2  . ARG ARG ARG B B 329 329 . 80.408  129.178 -15.234 1.00 3.64   1
. .
ATOM 5829 C    C    . ARG ARG ARG B B 329 329 . 77.707  122.306 -16.187 1.00 2.00   1
. .
ATOM 5830 O    O    . ARG ARG ARG B B 329 329 . 78.173  122.510 -17.270 1.00 3.11   1
. .
ATOM 5831 N    N    . ALA ALA ALA B B 330 330 . 78.229  121.388 -15.355 1.00 2.00   1
. .
ATOM 5832 CA   CA   . ALA ALA ALA B B 330 330 . 79.415  120.655 -15.778 1.00 2.06   1
. .
ATOM 5833 CB   CB   . ALA ALA ALA B B 330 330 . 79.988  119.847 -14.596 1.00 2.00   1
. .
ATOM 5834 C    C    . ALA ALA ALA B B 330 330 . 79.102  119.739 -16.968 1.00 2.00   1
. .
ATOM 5835 O    O    . ALA ALA ALA B B 330 330 . 79.944  119.558 -17.852 1.00 2.26   1
. .
ATOM 5836 N    N    . VAL VAL VAL B B 331 331 . 77.855  119.278 -17.023 1.00 2.00   1
. .
ATOM 5837 CA   CA   . VAL VAL VAL B B 331 331 . 77.440  118.426 -18.109 1.00 2.21   1
. .
ATOM 5838 CB   CB   . VAL VAL VAL B B 331 331 . 76.081  117.774 -17.857 1.00 3.14   1
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ATOM 5839 CG1  CG1  . VAL VAL VAL B B 331 331 . 75.538  117.243 -19.191 1.00 5.96   1
. .
ATOM 5840 CG2  CG2  . VAL VAL VAL B B 331 331 . 76.227  116.662 -16.832 1.00 2.00   1
. .
ATOM 5841 C    C    . VAL VAL VAL B B 331 331 . 77.411  119.310 -19.376 1.00 3.49   1
. .
ATOM 5842 O    O    . VAL VAL VAL B B 331 331 . 78.036  118.961 -20.380 1.00 4.21   1
. .
ATOM 5843 N    N    . GLU GLU GLU B B 332 332 . 76.747  120.470 -19.252 1.00 3.70   1
. .
ATOM 5844 CA   CA   . GLU GLU GLU B B 332 332 . 76.623  121.343 -20.428 1.00 5.73   1
. .
ATOM 5845 CB   CB   . GLU GLU GLU B B 332 332 . 75.748  122.572 -20.068 1.00 8.48   1
. .
ATOM 5846 CG   CG   . GLU GLU GLU B B 332 332 . 75.113  123.168 -21.340 1.00 16.12  1
. .
ATOM 5847 CD   CD   . GLU GLU GLU B B 332 332 . 75.482  124.591 -21.595 1.00 28.07  1
. .
ATOM 5848 OE1  OE1  . GLU GLU GLU B B 332 332 . 75.110  125.487 -20.766 1.00 31.98  1
. .
ATOM 5849 OE2  OE2  . GLU GLU GLU B B 332 332 . 76.107  124.818 -22.667 1.00 31.64  1
. .
ATOM 5850 C    C    . GLU GLU GLU B B 332 332 . 77.961  121.775 -20.935 1.00 3.59   1
. .
ATOM 5851 O    O    . GLU GLU GLU B B 332 332 . 78.155  121.844 -22.155 1.00 6.50   1
. .
ATOM 5852 N    N    . GLU GLU GLU B B 333 333 . 78.901  122.136 -20.029 1.00 3.11   1
. .
ATOM 5853 CA   CA   . GLU GLU GLU B B 333 333 . 80.250  122.618 -20.396 1.00 3.58   1
. .
ATOM 5854 CB   CB   . GLU GLU GLU B B 333 333 . 80.744  123.624 -19.395 1.00 4.75   1
. .
ATOM 5855 CG   CG   . GLU GLU GLU B B 333 333 . 79.714  124.789 -19.264 1.00 6.32   1
. .
ATOM 5856 CD   CD   . GLU GLU GLU B B 333 333 . 80.268  125.984 -18.508 1.00 6.77   1
. .
ATOM 5857 OE1  OE1  . GLU GLU GLU B B 333 333 . 79.446  126.783 -17.977 1.00 6.29   1
. .
ATOM 5858 OE2  OE2  . GLU GLU GLU B B 333 333 . 81.503  126.140 -18.439 1.00 5.31   1
. .
ATOM 5859 C    C    . GLU GLU GLU B B 333 333 . 81.256  121.500 -20.653 1.00 2.40   1
. .
ATOM 5860 O    O    . GLU GLU GLU B B 333 333 . 82.405  121.741 -21.023 1.00 2.00   1
. .
ATOM 5861 N    N    . LYS LYS LYS B B 334 334 . 80.812  120.246 -20.513 1.00 2.00   1
. .
ATOM 5862 CA   CA   . LYS LYS LYS B B 334 334 . 81.734  119.121 -20.704 1.00 2.04   1
. .
ATOM 5863 CB   CB   . LYS LYS LYS B B 334 334 . 82.028  118.846 -22.205 1.00 2.00   1
. .
ATOM 5864 CG   CG   . LYS LYS LYS B B 334 334 . 80.781  118.395 -22.962 1.00 4.68   1
. .
ATOM 5865 CD   CD   . LYS LYS LYS B B 334 334 . 81.166  117.858 -24.338 1.00 10.38  1
. .
ATOM 5866 CE   CE   . LYS LYS LYS B B 334 334 . 80.004  118.030 -25.386 1.00 15.00  1
. .
ATOM 5867 NZ   NZ   . LYS LYS LYS B B 334 334 . 78.796  117.312 -24.868 1.00 20.58  1
. .
ATOM 5868 C    C    . LYS LYS LYS B B 334 334 . 83.008  119.329 -19.857 1.00 2.00   1
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ATOM 5869 O    O    . LYS LYS LYS B B 334 334 . 84.128  119.155 -20.302 1.00 2.00   1
. .
ATOM 5870 N    N    . ALA ALA ALA B B 335 335 . 82.784  119.658 -18.562 1.00 2.00   1
. .
ATOM 5871 CA   CA   . ALA ALA ALA B B 335 335 . 83.912  120.015 -17.715 1.00 2.00   1
. .
ATOM 5872 CB   CB   . ALA ALA ALA B B 335 335 . 83.421  120.817 -16.543 1.00 2.02   1
. .
ATOM 5873 C    C    . ALA ALA ALA B B 335 335 . 84.669  118.774 -17.183 1.00 2.00   1
. .
ATOM 5874 O    O    . ALA ALA ALA B B 335 335 . 85.844  118.824 -16.928 1.00 2.00   1
. .
ATOM 5875 N    N    . CYS CYS CYS B B 336 336 . 83.945  117.664 -17.067 1.00 2.00   1
. .
ATOM 5876 CA   CA   . CYS CYS CYS B B 336 336 . 84.550  116.443 -16.435 1.00 2.00   1
. .
ATOM 5877 CB   CB   . CYS CYS CYS B B 336 336 . 84.578  116.572 -14.879 1.00 2.00   1
. .
ATOM 5878 SG   SG   . CYS CYS CYS B B 336 336 . 82.953  116.816 -14.134 1.00 2.19   1
. .
ATOM 5879 C    C    . CYS CYS CYS B B 336 336 . 83.727  115.274 -16.913 1.00 2.00   1
. .
ATOM 5880 O    O    . CYS CYS CYS B B 336 336 . 82.732  115.495 -17.633 1.00 2.60   1
. .
ATOM 5881 N    N    . ASN ASN ASN B B 337 337 . 84.107  114.054 -16.547 1.00 2.00   1
. .
ATOM 5882 CA   CA   . ASN ASN ASN B B 337 337 . 83.304  112.932 -17.010 1.00 2.00   1
. .
ATOM 5883 CB   CB   . ASN ASN ASN B B 337 337 . 83.997  112.225 -18.188 1.00 2.00   1
. .
ATOM 5884 CG   CG   . ASN ASN ASN B B 337 337 . 85.425  111.851 -17.901 1.00 2.00   1
. .
ATOM 5885 OD1  OD1  . ASN ASN ASN B B 337 337 . 85.714  111.393 -16.793 1.00 2.00   1
. .
ATOM 5886 ND2  ND2  . ASN ASN ASN B B 337 337 . 86.342  112.050 -18.849 1.00 2.00   1
. .
ATOM 5887 C    C    . ASN ASN ASN B B 337 337 . 83.009  111.937 -15.890 1.00 2.00   1
. .
ATOM 5888 O    O    . ASN ASN ASN B B 337 337 . 82.615  110.794 -16.144 1.00 2.00   1
. .
ATOM 5889 N    N    . CYS CYS CYS B B 338 338 . 83.227  112.385 -14.656 1.00 2.00   1
. .
ATOM 5890 CA   CA   . CYS CYS CYS B B 338 338 . 82.941  111.519 -13.494 1.00 2.00   1
. .
ATOM 5891 CB   CB   . CYS CYS CYS B B 338 338 . 84.130  110.661 -13.182 1.00 2.00   1
. .
ATOM 5892 SG   SG   . CYS CYS CYS B B 338 338 . 83.913  109.430 -11.761 1.00 2.00   1
. .
ATOM 5893 C    C    . CYS CYS CYS B B 338 338 . 82.574  112.404 -12.316 1.00 2.00   1
. .
ATOM 5894 O    O    . CYS CYS CYS B B 338 338 . 83.133  113.478 -12.177 1.00 2.01   1
. .
ATOM 5895 N    N    . LEU LEU LEU B B 339 339 . 81.618  111.945 -11.521 1.00 2.00   1
. .
ATOM 5896 CA   CA   . LEU LEU LEU B B 339 339 . 81.178  112.658 -10.301 1.00 2.00   1
. .
ATOM 5897 CB   CB   . LEU LEU LEU B B 339 339 . 79.641  112.607 -10.211 1.00 2.00   1
. .
ATOM 5898 CG   CG   . LEU LEU LEU B B 339 339 . 79.069  113.190 -8.892  1.00 2.11   1
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ATOM 5899 CD1  CD1  . LEU LEU LEU B B 339 339 . 79.425  114.671 -8.790  1.00 2.02   1
. .
ATOM 5900 CD2  CD2  . LEU LEU LEU B B 339 339 . 77.589  112.972 -8.925  1.00 2.00   1
. .
ATOM 5901 C    C    . LEU LEU LEU B B 339 339 . 81.772  112.015 -9.088  1.00 2.00   1
. .
ATOM 5902 O    O    . LEU LEU LEU B B 339 339 . 81.588  110.805 -8.981  1.00 2.00   1
. .
ATOM 5903 N    N    . LEU LEU LEU B B 340 340 . 82.329  112.804 -8.161  1.00 2.00   1
. .
ATOM 5904 CA   CA   . LEU LEU LEU B B 340 340 . 82.719  112.232 -6.825  1.00 2.00   1
. .
ATOM 5905 CB   CB   . LEU LEU LEU B B 340 340 . 83.955  112.956 -6.254  1.00 2.45   1
. .
ATOM 5906 CG   CG   . LEU LEU LEU B B 340 340 . 84.518  112.124 -5.107  1.00 2.03   1
. .
ATOM 5907 CD1  CD1  . LEU LEU LEU B B 340 340 . 85.364  110.901 -5.685  1.00 2.06   1
. .
ATOM 5908 CD2  CD2  . LEU LEU LEU B B 340 340 . 85.431  113.019 -4.259  1.00 2.00   1
. .
ATOM 5909 C    C    . LEU LEU LEU B B 340 340 . 81.510  112.431 -5.937  1.00 2.00   1
. .
ATOM 5910 O    O    . LEU LEU LEU B B 340 340 . 81.003  113.524 -5.741  1.00 2.32   1
. .
ATOM 5911 N    N    . LEU LEU LEU B B 341 341 . 80.974  111.325 -5.447  1.00 2.00   1
. .
ATOM 5912 CA   CA   . LEU LEU LEU B B 341 341 . 79.721  111.397 -4.704  1.00 2.00   1
. .
ATOM 5913 CB   CB   . LEU LEU LEU B B 341 341 . 78.814  110.210 -5.056  1.00 2.00   1
. .
ATOM 5914 CG   CG   . LEU LEU LEU B B 341 341 . 77.351  110.393 -4.772  1.00 2.00   1
. .
ATOM 5915 CD1  CD1  . LEU LEU LEU B B 341 341 . 76.685  111.134 -5.953  1.00 5.73   1
. .
ATOM 5916 CD2  CD2  . LEU LEU LEU B B 341 341 . 76.696  109.082 -4.673  1.00 5.47   1
. .
ATOM 5917 C    C    . LEU LEU LEU B B 341 341 . 80.008  111.377 -3.199  1.00 2.00   1
. .
ATOM 5918 O    O    . LEU LEU LEU B B 341 341 . 80.370  110.349 -2.606  1.00 2.00   1
. .
ATOM 5919 N    N    . LYS LYS LYS B B 342 342 . 79.771  112.544 -2.628  1.00 2.00   1
. .
ATOM 5920 CA   CA   . LYS LYS LYS B B 342 342 . 79.869  112.728 -1.180  1.00 2.00   1
. .
ATOM 5921 CB   CB   . LYS LYS LYS B B 342 342 . 80.952  113.761 -0.854  1.00 2.00   1
. .
ATOM 5922 CG   CG   . LYS LYS LYS B B 342 342 . 82.363  113.398 -1.120  1.00 2.00   1
. .
ATOM 5923 CD   CD   . LYS LYS LYS B B 342 342 . 83.286  114.557 -1.047  1.00 3.60   1
. .
ATOM 5924 CE   CE   . LYS LYS LYS B B 342 342 . 84.679  114.070 -0.927  1.00 3.70   1
. .
ATOM 5925 NZ   NZ   . LYS LYS LYS B B 342 342 . 85.688  115.124 -1.167  1.00 7.00   1
. .
ATOM 5926 C    C    . LYS LYS LYS B B 342 342 . 78.555  113.136 -0.609  1.00 2.00   1
. .
ATOM 5927 O    O    . LYS LYS LYS B B 342 342 . 78.115  114.288 -0.754  1.00 2.47   1
. .
ATOM 5928 N    N    . VAL VAL VAL B B 343 343 . 77.925  112.271 0.128   1.00 2.59   1
. .
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ATOM 5929 CA   CA   . VAL VAL VAL B B 343 343 . 76.579  112.562 0.676   1.00 2.00   1
. .
ATOM 5930 CB   CB   . VAL VAL VAL B B 343 343 . 76.089  111.424 1.518   1.00 2.81   1
. .
ATOM 5931 CG1  CG1  . VAL VAL VAL B B 343 343 . 75.625  110.206 0.639   1.00 5.89   1
. .
ATOM 5932 CG2  CG2  . VAL VAL VAL B B 343 343 . 77.136  111.002 2.505   1.00 5.72   1
. .
ATOM 5933 C    C    . VAL VAL VAL B B 343 343 . 76.603  113.843 1.525   1.00 2.05   1
. .
ATOM 5934 O    O    . VAL VAL VAL B B 343 343 . 75.604  114.598 1.488   1.00 2.12   1
. .
ATOM 5935 N    N    . ASN ASN ASN B B 344 344 . 77.732  114.151 2.206   1.00 2.20   1
. .
ATOM 5936 CA   CA   . ASN ASN ASN B B 344 344 . 77.704  115.319 3.076   1.00 2.09   1
. .
ATOM 5937 CB   CB   . ASN ASN ASN B B 344 344 . 78.555  115.173 4.311   1.00 2.00   1
. .
ATOM 5938 CG   CG   . ASN ASN ASN B B 344 344 . 79.984  115.673 4.142   1.00 2.00   1
. .
ATOM 5939 OD1  OD1  . ASN ASN ASN B B 344 344 . 80.689  115.310 3.212   1.00 4.55   1
. .
ATOM 5940 ND2  ND2  . ASN ASN ASN B B 344 344 . 80.397  116.589 5.037   1.00 3.40   1
. .
ATOM 5941 C    C    . ASN ASN ASN B B 344 344 . 78.057  116.641 2.327   1.00 2.00   1
. .
ATOM 5942 O    O    . ASN ASN ASN B B 344 344 . 77.956  117.732 2.911   1.00 2.80   1
. .
ATOM 5943 N    N    . GLN GLN GLN B B 345 345 . 78.313  116.578 1.034   1.00 2.03   1
. .
ATOM 5944 CA   CA   . GLN GLN GLN B B 345 345 . 78.504  117.842 0.321   1.00 2.00   1
. .
ATOM 5945 CB   CB   . GLN GLN GLN B B 345 345 . 79.250  117.586 -1.007  1.00 2.00   1
. .
ATOM 5946 CG   CG   . GLN GLN GLN B B 345 345 . 80.716  117.406 -0.809  1.00 2.00   1
. .
ATOM 5947 CD   CD   . GLN GLN GLN B B 345 345 . 81.501  117.298 -2.115  1.00 2.00   1
. .
ATOM 5948 OE1  OE1  . GLN GLN GLN B B 345 345 . 82.627  117.810 -2.218  1.00 2.02   1
. .
ATOM 5949 NE2  NE2  . GLN GLN GLN B B 345 345 . 80.959  116.600 -3.047  1.00 2.00   1
. .
ATOM 5950 C    C    . GLN GLN GLN B B 345 345 . 77.130  118.391 -0.033  1.00 2.00   1
. .
ATOM 5951 O    O    . GLN GLN GLN B B 345 345 . 76.970  119.597 -0.383  1.00 2.18   1
. .
ATOM 5952 N    N    . ILE ILE ILE B B 346 346 . 76.134  117.540 -0.025  1.00 2.26   1
. .
ATOM 5953 CA   CA   . ILE ILE ILE B B 346 346 . 74.795  117.965 -0.416  1.00 2.18   1
. .
ATOM 5954 CB   CB   . ILE ILE ILE B B 346 346 . 74.311  117.266 -1.729  1.00 3.21   1
. .
ATOM 5955 CG1  CG1  . ILE ILE ILE B B 346 346 . 73.089  117.945 -2.351  1.00 2.00   1
. .
ATOM 5956 CD1  CD1  . ILE ILE ILE B B 346 346 . 73.433  119.387 -2.900  1.00 6.40   1
. .
ATOM 5957 CG2  CG2  . ILE ILE ILE B B 346 346 . 74.032  115.766 -1.453  1.00 2.32   1
. .
ATOM 5958 C    C    . ILE ILE ILE B B 346 346 . 73.833  117.875 0.719   1.00 2.38   1
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ATOM 5959 O    O    . ILE ILE ILE B B 346 346 . 72.938  118.720 0.844   1.00 4.55   1
. .
ATOM 5960 N    N    . GLY GLY GLY B B 347 347 . 73.986  116.868 1.596   1.00 2.51   1
. .
ATOM 5961 CA   CA   . GLY GLY GLY B B 347 347 . 73.255  116.849 2.858   1.00 3.82   1
. .
ATOM 5962 C    C    . GLY GLY GLY B B 347 347 . 72.087  115.951 3.000   1.00 2.89   1
. .
ATOM 5963 O    O    . GLY GLY GLY B B 347 347 . 71.479  115.925 4.084   1.00 5.74   1
. .
ATOM 5964 N    N    . SER SER SER B B 348 348 . 71.747  115.153 2.002   1.00 2.19   1
. .
ATOM 5965 CA   CA   . SER SER SER B B 348 348 . 70.687  114.156 2.199   1.00 2.00   1
. .
ATOM 5966 CB   CB   . SER SER SER B B 348 348 . 69.295  114.734 1.986   1.00 2.01   1
. .
ATOM 5967 OG   OG   . SER SER SER B B 348 348 . 69.018  114.953 0.560   1.00 3.97   1
. .
ATOM 5968 C    C    . SER SER SER B B 348 348 . 70.906  112.980 1.274   1.00 2.36   1
. .
ATOM 5969 O    O    . SER SER SER B B 348 348 . 71.441  113.107 0.167   1.00 2.06   1
. .
ATOM 5970 N    N    . VAL VAL VAL B B 349 349 . 70.490  111.788 1.716   1.00 2.47   1
. .
ATOM 5971 CA   CA   . VAL VAL VAL B B 349 349 . 70.480  110.682 0.863   1.00 3.36   1
. .
ATOM 5972 CB   CB   . VAL VAL VAL B B 349 349 . 69.943  109.400 1.601   1.00 2.83   1
. .
ATOM 5973 CG1  CG1  . VAL VAL VAL B B 349 349 . 69.749  108.241 0.596   1.00 6.19   1
. .
ATOM 5974 CG2  CG2  . VAL VAL VAL B B 349 349 . 70.896  109.052 2.805   1.00 2.94   1
. .
ATOM 5975 C    C    . VAL VAL VAL B B 349 349 . 69.713  110.866 -0.449  1.00 3.17   1
. .
ATOM 5976 O    O    . VAL VAL VAL B B 349 349 . 70.221  110.554 -1.509  1.00 2.25   1
. .
ATOM 5977 N    N    . THR THR THR B B 350 350 . 68.473  111.334 -0.388  1.00 3.84   1
. .
ATOM 5978 CA   CA   . THR THR THR B B 350 350 . 67.698  111.592 -1.596  1.00 5.17   1
. .
ATOM 5979 CB   CB   . THR THR THR B B 350 350 . 66.344  112.264 -1.213  1.00 6.55   1
. .
ATOM 5980 OG1  OG1  . THR THR THR B B 350 350 . 65.572  111.294 -0.527  1.00 5.34   1
. .
ATOM 5981 CG2  CG2  . THR THR THR B B 350 350 . 65.542  112.703 -2.461  1.00 9.19   1
. .
ATOM 5982 C    C    . THR THR THR B B 350 350 . 68.467  112.444 -2.603  1.00 3.16   1
. .
ATOM 5983 O    O    . THR THR THR B B 350 350 . 68.589  112.060 -3.779  1.00 4.83   1
. .
ATOM 5984 N    N    . GLU GLU GLU B B 351 351 . 68.984  113.603 -2.176  1.00 2.91   1
. .
ATOM 5985 CA   CA   . GLU GLU GLU B B 351 351 . 69.699  114.423 -3.091  1.00 3.54   1
. .
ATOM 5986 CB   CB   . GLU GLU GLU B B 351 351 . 70.019  115.791 -2.483  1.00 4.67   1
. .
ATOM 5987 CG   CG   . GLU GLU GLU B B 351 351 . 68.801  116.621 -2.173  1.00 4.65   1
. .
ATOM 5988 CD   CD   . GLU GLU GLU B B 351 351 . 69.188  117.814 -1.308  1.00 7.43   1
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ATOM 5989 OE1  OE1  . GLU GLU GLU B B 351 351 . 69.547  117.610 -0.133  1.00 6.00   1
. .
ATOM 5990 OE2  OE2  . GLU GLU GLU B B 351 351 . 69.136  118.958 -1.776  1.00 11.23  1
. .
ATOM 5991 C    C    . GLU GLU GLU B B 351 351 . 70.979  113.811 -3.638  1.00 2.67   1
. .
ATOM 5992 O    O    . GLU GLU GLU B B 351 351 . 71.324  114.062 -4.811  1.00 3.28   1
. .
ATOM 5993 N    N    . ALA ALA ALA B B 352 352 . 71.657  112.988 -2.808  1.00 2.24   1
. .
ATOM 5994 CA   CA   . ALA ALA ALA B B 352 352 . 72.877  112.259 -3.341  1.00 2.01   1
. .
ATOM 5995 CB   CB   . ALA ALA ALA B B 352 352 . 73.731  111.580 -2.240  1.00 3.11   1
. .
ATOM 5996 C    C    . ALA ALA ALA B B 352 352 . 72.496  111.262 -4.416  1.00 2.08   1
. .
ATOM 5997 O    O    . ALA ALA ALA B B 352 352 . 73.192  111.113 -5.388  1.00 2.22   1
. .
ATOM 5998 N    N    . ILE ILE ILE B B 353 353 . 71.415  110.561 -4.227  1.00 2.82   1
. .
ATOM 5999 CA   CA   . ILE ILE ILE B B 353 353 . 70.999  109.544 -5.213  1.00 2.87   1
. .
ATOM 6000 CB   CB   . ILE ILE ILE B B 353 353 . 69.890  108.678 -4.647  1.00 2.65   1
. .
ATOM 6001 CG1  CG1  . ILE ILE ILE B B 353 353 . 70.423  107.886 -3.390  1.00 4.81   1
. .
ATOM 6002 CD1  CD1  . ILE ILE ILE B B 353 353 . 69.358  106.996 -2.812  1.00 6.01   1
. .
ATOM 6003 CG2  CG2  . ILE ILE ILE B B 353 353 . 69.342  107.703 -5.776  1.00 3.85   1
. .
ATOM 6004 C    C    . ILE ILE ILE B B 353 353 . 70.550  110.285 -6.484  1.00 3.21   1
. .
ATOM 6005 O    O    . ILE ILE ILE B B 353 353 . 70.893  109.839 -7.585  1.00 5.19   1
. .
ATOM 6006 N    N    . GLN GLN GLN B B 354 354 . 69.847  111.416 -6.329  1.00 4.36   1
. .
ATOM 6007 CA   CA   . GLN GLN GLN B B 354 354 . 69.499  112.235 -7.521  1.00 4.25   1
. .
ATOM 6008 CB   CB   . GLN GLN GLN B B 354 354 . 68.531  113.396 -7.150  1.00 8.29   1
. .
ATOM 6009 CG   CG   . GLN GLN GLN B B 354 354 . 68.469  114.586 -8.190  1.00 14.86  1
. .
ATOM 6010 CD   CD   . GLN GLN GLN B B 354 354 . 67.685  115.822 -7.706  1.00 23.61  1
. .
ATOM 6011 OE1  OE1  . GLN GLN GLN B B 354 354 . 67.794  116.254 -6.543  1.00 29.72  1
. .
ATOM 6012 NE2  NE2  . GLN GLN GLN B B 354 354 . 66.879  116.395 -8.606  1.00 26.41  1
. .
ATOM 6013 C    C    . GLN GLN GLN B B 354 354 . 70.771  112.702 -8.249  1.00 4.34   1
. .
ATOM 6014 O    O    . GLN GLN GLN B B 354 354 . 70.808  112.753 -9.529  1.00 4.29   1
. .
ATOM 6015 N    N    . ALA ALA ALA B B 355 355 . 71.806  113.096 -7.505  1.00 2.55   1
. .
ATOM 6016 CA   CA   . ALA ALA ALA B B 355 355 . 73.056  113.583 -8.154  1.00 2.00   1
. .
ATOM 6017 CB   CB   . ALA ALA ALA B B 355 355 . 74.043  114.111 -7.143  1.00 2.54   1
. .
ATOM 6018 C    C    . ALA ALA ALA B B 355 355 . 73.712  112.424 -8.946  1.00 2.08   1
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ATOM 6019 O    O    . ALA ALA ALA B B 355 355 . 74.152  112.581 -10.068 1.00 2.08   1
. .
ATOM 6020 N    N    . CYS CYS CYS B B 356 356 . 73.776  111.238 -8.313  1.00 2.00   1
. .
ATOM 6021 CA   CA   . CYS CYS CYS B B 356 356 . 74.357  110.093 -8.988  1.00 2.20   1
. .
ATOM 6022 CB   CB   . CYS CYS CYS B B 356 356 . 74.337  108.880 -8.022  1.00 2.00   1
. .
ATOM 6023 SG   SG   . CYS CYS CYS B B 356 356 . 74.911  107.351 -8.748  1.00 4.46   1
. .
ATOM 6024 C    C    . CYS CYS CYS B B 356 356 . 73.575  109.743 -10.238 1.00 2.03   1
. .
ATOM 6025 O    O    . CYS CYS CYS B B 356 356 . 74.156  109.502 -11.312 1.00 3.17   1
. .
ATOM 6026 N    N    . LYS LYS LYS B B 357 357 . 72.238  109.783 -10.168 1.00 2.76   1
. .
ATOM 6027 CA   CA   . LYS LYS LYS B B 357 357 . 71.466  109.369 -11.372 1.00 5.02   1
. .
ATOM 6028 CB   CB   . LYS LYS LYS B B 357 357 . 69.994  109.141 -11.087 1.00 7.67   1
. .
ATOM 6029 CG   CG   . LYS LYS LYS B B 357 357 . 69.717  107.882 -10.386 1.00 13.32  1
. .
ATOM 6030 CD   CD   . LYS LYS LYS B B 357 357 . 68.630  108.082 -9.354  1.00 23.25  1
. .
ATOM 6031 CE   CE   . LYS LYS LYS B B 357 357 . 67.283  107.586 -9.784  1.00 28.90  1
. .
ATOM 6032 NZ   NZ   . LYS LYS LYS B B 357 357 . 66.546  107.063 -8.565  1.00 30.12  1
. .
ATOM 6033 C    C    . LYS LYS LYS B B 357 357 . 71.568  110.422 -12.494 1.00 3.97   1
. .
ATOM 6034 O    O    . LYS LYS LYS B B 357 357 . 71.660  110.091 -13.691 1.00 7.75   1
. .
ATOM 6035 N    N    . LEU LEU LEU B B 358 358 . 71.646  111.702 -12.136 1.00 3.01   1
. .
ATOM 6036 CA   CA   . LEU LEU LEU B B 358 358 . 71.896  112.747 -13.151 1.00 3.34   1
. .
ATOM 6037 CB   CB   . LEU LEU LEU B B 358 358 . 71.885  114.101 -12.438 1.00 2.01   1
. .
ATOM 6038 CG   CG   . LEU LEU LEU B B 358 358 . 72.077  115.292 -13.379 1.00 6.11   1
. .
ATOM 6039 CD1  CD1  . LEU LEU LEU B B 358 358 . 70.831  115.392 -14.299 1.00 7.46   1
. .
ATOM 6040 CD2  CD2  . LEU LEU LEU B B 358 358 . 72.133  116.546 -12.560 1.00 6.45   1
. .
ATOM 6041 C    C    . LEU LEU LEU B B 358 358 . 73.216  112.567 -13.876 1.00 2.16   1
. .
ATOM 6042 O    O    . LEU LEU LEU B B 358 358 . 73.295  112.652 -15.151 1.00 3.57   1
. .
ATOM 6043 N    N    . ALA ALA ALA B B 359 359 . 74.259  112.274 -13.121 1.00 3.31   1
. .
ATOM 6044 CA   CA   . ALA ALA ALA B B 359 359 . 75.609  111.980 -13.653 1.00 3.10   1
. .
ATOM 6045 CB   CB   . ALA ALA ALA B B 359 359 . 76.580  111.631 -12.488 1.00 4.04   1
. .
ATOM 6046 C    C    . ALA ALA ALA B B 359 359 . 75.496  110.739 -14.567 1.00 3.03   1
. .
ATOM 6047 O    O    . ALA ALA ALA B B 359 359 . 75.950  110.774 -15.716 1.00 5.11   1
. .
ATOM 6048 N    N    . GLN GLN GLN B B 360 360 . 74.859  109.671 -14.091 1.00 2.82   1
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ATOM 6049 CA   CA   . GLN GLN GLN B B 360 360 . 74.869  108.391 -14.854 1.00 4.16   1
. .
ATOM 6050 CB   CB   . GLN GLN GLN B B 360 360 . 74.303  107.261 -13.978 1.00 5.03   1
. .
ATOM 6051 CG   CG   . GLN GLN GLN B B 360 360 . 75.305  106.747 -12.945 1.00 6.23   1
. .
ATOM 6052 CD   CD   . GLN GLN GLN B B 360 360 . 74.682  105.760 -12.013 1.00 6.88   1
. .
ATOM 6053 OE1  OE1  . GLN GLN GLN B B 360 360 . 73.477  105.752 -11.855 1.00 7.59   1
. .
ATOM 6054 NE2  NE2  . GLN GLN GLN B B 360 360 . 75.510  104.966 -11.309 1.00 6.94   1
. .
ATOM 6055 C    C    . GLN GLN GLN B B 360 360 . 74.053  108.565 -16.134 1.00 3.98   1
. .
ATOM 6056 O    O    . GLN GLN GLN B B 360 360 . 74.434  108.070 -17.203 1.00 5.89   1
. .
ATOM 6057 N    N    . GLU GLU GLU B B 361 361 . 72.915  109.276 -16.040 1.00 4.64   1
. .
ATOM 6058 CA   CA   . GLU GLU GLU B B 361 361 . 72.071  109.539 -17.235 1.00 7.61   1
. .
ATOM 6059 CB   CB   . GLU GLU GLU B B 361 361 . 70.742  110.123 -16.786 1.00 10.15  1
. .
ATOM 6060 CG   CG   . GLU GLU GLU B B 361 361 . 70.468  111.586 -17.124 1.00 18.42  1
. .
ATOM 6061 CD   CD   . GLU GLU GLU B B 361 361 . 69.214  112.142 -16.370 1.00 28.22  1
. .
ATOM 6062 OE1  OE1  . GLU GLU GLU B B 361 361 . 68.979  111.746 -15.193 1.00 31.92  1
. .
ATOM 6063 OE2  OE2  . GLU GLU GLU B B 361 361 . 68.464  112.961 -16.944 1.00 31.14  1
. .
ATOM 6064 C    C    . GLU GLU GLU B B 361 361 . 72.783  110.355 -18.302 1.00 7.58   1
. .
ATOM 6065 O    O    . GLU GLU GLU B B 361 361 . 72.458  110.252 -19.525 1.00 9.18   1
. .
ATOM 6066 N    N    . ASN ASN ASN B B 362 362 . 73.872  111.030 -17.891 1.00 5.87   1
. .
ATOM 6067 CA   CA   . ASN ASN ASN B B 362 362 . 74.628  111.836 -18.865 1.00 5.50   1
. .
ATOM 6068 CB   CB   . ASN ASN ASN B B 362 362 . 74.805  113.275 -18.348 1.00 3.66   1
. .
ATOM 6069 CG   CG   . ASN ASN ASN B B 362 362 . 73.526  114.069 -18.489 1.00 5.84   1
. .
ATOM 6070 OD1  OD1  . ASN ASN ASN B B 362 362 . 73.236  114.474 -19.621 1.00 8.10   1
. .
ATOM 6071 ND2  ND2  . ASN ASN ASN B B 362 362 . 72.711  114.225 -17.421 1.00 8.48   1
. .
ATOM 6072 C    C    . ASN ASN ASN B B 362 362 . 75.926  111.189 -19.258 1.00 5.81   1
. .
ATOM 6073 O    O    . ASN ASN ASN B B 362 362 . 76.845  111.833 -19.806 1.00 8.15   1
. .
ATOM 6074 N    N    . GLY GLY GLY B B 363 363 . 76.001  109.897 -19.018 1.00 4.32   1
. .
ATOM 6075 CA   CA   . GLY GLY GLY B B 363 363 . 77.147  109.131 -19.371 1.00 5.43   1
. .
ATOM 6076 C    C    . GLY GLY GLY B B 363 363 . 78.403  109.368 -18.564 1.00 3.75   1
. .
ATOM 6077 O    O    . GLY GLY GLY B B 363 363 . 79.499  108.942 -18.982 1.00 7.31   1
. .
ATOM 6078 N    N    . TRP TRP TRP B B 364 364 . 78.280  109.913 -17.375 1.00 2.10   1
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ATOM 6079 CA   CA   . TRP TRP TRP B B 364 364 . 79.468  110.025 -16.537 1.00 2.00   1
. .
ATOM 6080 CB   CB   . TRP TRP TRP B B 364 364 . 79.297  111.167 -15.570 1.00 2.00   1
. .
ATOM 6081 CG   CG   . TRP TRP TRP B B 364 364 . 79.325  112.577 -16.094 1.00 2.10   1
. .
ATOM 6082 CD1  CD1  . TRP TRP TRP B B 364 364 . 79.259  113.046 -17.382 1.00 2.25   1
. .
ATOM 6083 NE1  NE1  . TRP TRP TRP B B 364 364 . 79.312  114.461 -17.385 1.00 2.33   1
. .
ATOM 6084 CE2  CE2  . TRP TRP TRP B B 364 364 . 79.435  114.864 -16.073 1.00 2.42   1
. .
ATOM 6085 CD2  CD2  . TRP TRP TRP B B 364 364 . 79.451  113.704 -15.258 1.00 2.00   1
. .
ATOM 6086 CE3  CE3  . TRP TRP TRP B B 364 364 . 79.556  113.856 -13.849 1.00 2.00   1
. .
ATOM 6087 CZ3  CZ3  . TRP TRP TRP B B 364 364 . 79.668  115.129 -13.293 1.00 3.40   1
. .
ATOM 6088 CH2  CH2  . TRP TRP TRP B B 364 364 . 79.645  116.289 -14.165 1.00 2.71   1
. .
ATOM 6089 CZ2  CZ2  . TRP TRP TRP B B 364 364 . 79.528  116.169 -15.505 1.00 2.71   1
. .
ATOM 6090 C    C    . TRP TRP TRP B B 364 364 . 79.636  108.812 -15.616 1.00 2.04   1
. .
ATOM 6091 O    O    . TRP TRP TRP B B 364 364 . 78.687  108.151 -15.277 1.00 2.97   1
. .
ATOM 6092 N    N    . GLY GLY GLY B B 365 365 . 80.848  108.583 -15.218 1.00 2.00   1
. .
ATOM 6093 CA   CA   . GLY GLY GLY B B 365 365 . 81.122  107.675 -14.096 1.00 2.00   1
. .
ATOM 6094 C    C    . GLY GLY GLY B B 365 365 . 80.783  108.335 -12.779 1.00 2.00   1
. .
ATOM 6095 O    O    . GLY GLY GLY B B 365 365 . 80.538  109.538 -12.711 1.00 2.00   1
. .
ATOM 6096 N    N    . VAL VAL VAL B B 366 366 . 80.675  107.491 -11.757 1.00 2.00   1
. .
ATOM 6097 CA   CA   . VAL VAL VAL B B 366 366 . 80.513  108.007 -10.407 1.00 2.00   1
. .
ATOM 6098 CB   CB   . VAL VAL VAL B B 366 366 . 79.029  107.884 -9.926  1.00 2.00   1
. .
ATOM 6099 CG1  CG1  . VAL VAL VAL B B 366 366 . 78.871  108.447 -8.490  1.00 3.45   1
. .
ATOM 6100 CG2  CG2  . VAL VAL VAL B B 366 366 . 78.152  108.698 -10.806 1.00 2.42   1
. .
ATOM 6101 C    C    . VAL VAL VAL B B 366 366 . 81.398  107.273 -9.467  1.00 2.15   1
. .
ATOM 6102 O    O    . VAL VAL VAL B B 366 366 . 81.429  106.013 -9.510  1.00 2.46   1
. .
ATOM 6103 N    N    . MET MET MET B B 367 367 . 82.130  108.016 -8.659  1.00 2.43   1
. .
ATOM 6104 CA   CA   . MET MET MET B B 367 367 . 82.986  107.427 -7.652  1.00 2.00   1
. .
ATOM 6105 CB   CB   . MET MET MET B B 367 367 . 84.468  107.826 -7.831  1.00 2.01   1
. .
ATOM 6106 CG   CG   . MET MET MET B B 367 367 . 85.388  107.224 -6.718  1.00 2.46   1
. .
ATOM 6107 SD   SD   . MET MET MET B B 367 367 . 87.130  107.684 -6.812  1.00 3.38   1
. .
ATOM 6108 CE   CE   . MET MET MET B B 367 367 . 87.697  106.529 -8.007  1.00 3.69   1
. .
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ATOM 6109 C    C    . MET MET MET B B 367 367 . 82.445  107.821 -6.286  1.00 2.00   1
. .
ATOM 6110 O    O    . MET MET MET B B 367 367 . 82.473  109.009 -5.944  1.00 2.00   1
. .
ATOM 6111 N    N    . VAL VAL VAL B B 368 368 . 81.986  106.846 -5.500  1.00 2.00   1
. .
ATOM 6112 CA   CA   . VAL VAL VAL B B 368 368 . 81.526  107.163 -4.141  1.00 2.00   1
. .
ATOM 6113 CB   CB   . VAL VAL VAL B B 368 368 . 80.706  105.961 -3.543  1.00 2.00   1
. .
ATOM 6114 CG1  CG1  . VAL VAL VAL B B 368 368 . 80.444  106.090 -2.026  1.00 2.30   1
. .
ATOM 6115 CG2  CG2  . VAL VAL VAL B B 368 368 . 79.363  105.907 -4.276  1.00 2.73   1
. .
ATOM 6116 C    C    . VAL VAL VAL B B 368 368 . 82.745  107.438 -3.263  1.00 2.00   1
. .
ATOM 6117 O    O    . VAL VAL VAL B B 368 368 . 83.817  106.844 -3.472  1.00 2.00   1
. .
ATOM 6118 N    N    . SER SER SER B B 369 369 . 82.675  108.416 -2.353  1.00 2.00   1
. .
ATOM 6119 CA   CA   . SER SER SER B B 369 369 . 83.840  108.777 -1.569  1.00 2.00   1
. .
ATOM 6120 CB   CB   . SER SER SER B B 369 369 . 84.306  110.158 -2.053  1.00 2.00   1
. .
ATOM 6121 OG   OG   . SER SER SER B B 369 369 . 85.594  110.522 -1.432  1.00 2.00   1
. .
ATOM 6122 C    C    . SER SER SER B B 369 369 . 83.547  108.995 -0.067  1.00 2.00   1
. .
ATOM 6123 O    O    . SER SER SER B B 369 369 . 82.443  109.497 0.277   1.00 2.00   1
. .
ATOM 6124 N    N    . HIS HIS HIS B B 370 370 . 84.548  108.659 0.741   1.00 2.00   1
. .
ATOM 6125 CA   CA   . HIS HIS HIS B B 370 370 . 84.627  109.098 2.135   1.00 2.00   1
. .
ATOM 6126 CB   CB   . HIS HIS HIS B B 370 370 . 85.775  108.393 2.867   1.00 2.00   1
. .
ATOM 6127 CG   CG   . HIS HIS HIS B B 370 370 . 87.133  108.594 2.268   1.00 2.00   1
. .
ATOM 6128 ND1  ND1  . HIS HIS HIS B B 370 370 . 88.306  108.229 2.909   1.00 2.18   1
. .
ATOM 6129 CE1  CE1  . HIS HIS HIS B B 370 370 . 89.347  108.523 2.152   1.00 2.22   1
. .
ATOM 6130 NE2  NE2  . HIS HIS HIS B B 370 370 . 88.893  109.033 1.012   1.00 2.32   1
. .
ATOM 6131 CD2  CD2  . HIS HIS HIS B B 370 370 . 87.519  109.080 1.062   1.00 2.11   1
. .
ATOM 6132 C    C    . HIS HIS HIS B B 370 370 . 84.937  110.591 2.241   1.00 2.00   1
. .
ATOM 6133 O    O    . HIS HIS HIS B B 370 370 . 85.127  111.272 1.214   1.00 2.00   1
. .
ATOM 6134 N    N    . ARG ARG ARG B B 371 371 . 84.998  111.102 3.480   1.00 2.00   1
. .
ATOM 6135 CA   CA   . ARG ARG ARG B B 371 371 . 85.670  112.400 3.698   1.00 2.00   1
. .
ATOM 6136 CB   CB   . ARG ARG ARG B B 371 371 . 84.853  113.453 4.491   1.00 2.00   1
. .
ATOM 6137 CG   CG   . ARG ARG ARG B B 371 371 . 83.475  113.725 3.980   1.00 2.00   1
. .
ATOM 6138 CD   CD   . ARG ARG ARG B B 371 371 . 83.599  114.330 2.534   1.00 2.00   1
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ATOM 6139 NE   NE   . ARG ARG ARG B B 371 371 . 84.536  115.418 2.314   1.00 2.11   1
. .
ATOM 6140 CZ   CZ   . ARG ARG ARG B B 371 371 . 84.111  116.663 2.043   1.00 2.00   1
. .
ATOM 6141 NH1  NH1  . ARG ARG ARG B B 371 371 . 82.807  116.917 2.091   1.00 2.00   1
. .
ATOM 6142 NH2  NH2  . ARG ARG ARG B B 371 371 . 85.004  117.608 1.812   1.00 2.00   1
. .
ATOM 6143 C    C    . ARG ARG ARG B B 371 371 . 86.955  112.131 4.428   1.00 2.00   1
. .
ATOM 6144 O    O    . ARG ARG ARG B B 371 371 . 87.095  111.005 5.056   1.00 2.00   1
. .
ATOM 6145 N    N    . SER SER SER B B 372 372 . 87.840  113.091 4.524   1.00 2.00   1
. .
ATOM 6146 CA   CA   . SER SER SER B B 372 372 . 89.119  112.859 5.240   1.00 2.00   1
. .
ATOM 6147 CB   CB   . SER SER SER B B 372 372 . 90.178  113.896 4.972   1.00 2.27   1
. .
ATOM 6148 OG   OG   . SER SER SER B B 372 372 . 89.632  115.208 5.252   1.00 2.00   1
. .
ATOM 6149 C    C    . SER SER SER B B 372 372 . 88.895  112.750 6.759   1.00 2.00   1
. .
ATOM 6150 O    O    . SER SER SER B B 372 372 . 89.701  112.151 7.430   1.00 2.00   1
. .
ATOM 6151 N    N    . GLY GLY GLY B B 373 373 . 87.809  113.307 7.276   1.00 2.00   1
. .
ATOM 6152 CA   CA   . GLY GLY GLY B B 373 373 . 87.377  113.051 8.667   1.00 2.00   1
. .
ATOM 6153 C    C    . GLY GLY GLY B B 373 373 . 86.241  112.050 8.602   1.00 2.00   1
. .
ATOM 6154 O    O    . GLY GLY GLY B B 373 373 . 85.117  112.345 8.213   1.00 2.64   1
. .
ATOM 6155 N    N    . GLU GLU GLU B B 374 374 . 86.504  110.821 8.984   1.00 2.00   1
. .
ATOM 6156 CA   CA   . GLU GLU GLU B B 374 374 . 85.455  109.782 8.878   1.00 2.00   1
. .
ATOM 6157 CB   CB   . GLU GLU GLU B B 374 374 . 85.956  108.573 8.010   1.00 2.00   1
. .
ATOM 6158 CG   CG   . GLU GLU GLU B B 374 374 . 85.543  108.698 6.573   1.00 2.12   1
. .
ATOM 6159 CD   CD   . GLU GLU GLU B B 374 374 . 84.054  108.636 6.383   1.00 2.00   1
. .
ATOM 6160 OE1  OE1  . GLU GLU GLU B B 374 374 . 83.329  108.049 7.229   1.00 2.63   1
. .
ATOM 6161 OE2  OE2  . GLU GLU GLU B B 374 374 . 83.576  109.185 5.356   1.00 3.29   1
. .
ATOM 6162 C    C    . GLU GLU GLU B B 374 374 . 85.098  109.239 10.224  1.00 2.00   1
. .
ATOM 6163 O    O    . GLU GLU GLU B B 374 374 . 85.643  109.693 11.239  1.00 2.23   1
. .
ATOM 6164 N    N    . THR THR THR B B 375 375 . 84.128  108.339 10.237  1.00 2.00   1
. .
ATOM 6165 CA   CA   . THR THR THR B B 375 375 . 83.741  107.637 11.481  1.00 2.00   1
. .
ATOM 6166 CB   CB   . THR THR THR B B 375 375 . 82.344  108.074 11.915  1.00 2.00   1
. .
ATOM 6167 OG1  OG1  . THR THR THR B B 375 375 . 81.348  107.637 10.970  1.00 2.00   1
. .
ATOM 6168 CG2  CG2  . THR THR THR B B 375 375 . 82.275  109.604 11.989  1.00 2.27   1
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ATOM 6169 C    C    . THR THR THR B B 375 375 . 83.759  106.155 11.264  1.00 2.00   1
. .
ATOM 6170 O    O    . THR THR THR B B 375 375 . 84.027  105.720 10.146  1.00 2.00   1
. .
ATOM 6171 N    N    . GLU GLU GLU B B 376 376 . 83.299  105.430 12.278  1.00 2.37   1
. .
ATOM 6172 CA   CA   . GLU GLU GLU B B 376 376 . 83.140  103.977 12.126  1.00 2.48   1
. .
ATOM 6173 CB   CB   . GLU GLU GLU B B 376 376 . 83.104  103.346 13.553  1.00 3.79   1
. .
ATOM 6174 CG   CG   . GLU GLU GLU B B 376 376 . 82.048  103.910 14.465  1.00 4.90   1
. .
ATOM 6175 CD   CD   . GLU GLU GLU B B 376 376 . 82.482  105.108 15.314  1.00 5.42   1
. .
ATOM 6176 OE1  OE1  . GLU GLU GLU B B 376 376 . 83.249  105.971 14.860  1.00 7.74   1
. .
ATOM 6177 OE2  OE2  . GLU GLU GLU B B 376 376 . 82.112  105.192 16.495  1.00 2.15   1
. .
ATOM 6178 C    C    . GLU GLU GLU B B 376 376 . 81.864  103.581 11.339  1.00 2.68   1
. .
ATOM 6179 O    O    . GLU GLU GLU B B 376 376 . 81.550  102.406 11.119  1.00 3.77   1
. .
ATOM 6180 N    N    . ASP ASP ASP B B 377 377 . 81.140  104.567 10.845  1.00 2.22   1
. .
ATOM 6181 CA   CA   . ASP ASP ASP B B 377 377 . 79.988  104.313 9.972   1.00 2.00   1
. .
ATOM 6182 CB   CB   . ASP ASP ASP B B 377 377 . 79.363  105.722 9.755   1.00 2.76   1
. .
ATOM 6183 CG   CG   . ASP ASP ASP B B 377 377 . 78.076  105.655 8.998   1.00 5.22   1
. .
ATOM 6184 OD1  OD1  . ASP ASP ASP B B 377 377 . 78.125  105.587 7.742   1.00 9.26   1
. .
ATOM 6185 OD2  OD2  . ASP ASP ASP B B 377 377 . 77.037  105.734 9.629   1.00 5.39   1
. .
ATOM 6186 C    C    . ASP ASP ASP B B 377 377 . 80.376  103.674 8.653   1.00 2.17   1
. .
ATOM 6187 O    O    . ASP ASP ASP B B 377 377 . 81.407  104.026 8.061   1.00 2.00   1
. .
ATOM 6188 N    N    . THR THR THR B B 378 378 . 79.616  102.717 8.173   1.00 2.00   1
. .
ATOM 6189 CA   CA   . THR THR THR B B 378 378 . 79.956  102.098 6.881   1.00 2.00   1
. .
ATOM 6190 CB   CB   . THR THR THR B B 378 378 . 80.160  100.583 7.055   1.00 2.26   1
. .
ATOM 6191 OG1  OG1  . THR THR THR B B 378 378 . 78.932  100.024 7.538   1.00 3.18   1
. .
ATOM 6192 CG2  CG2  . THR THR THR B B 378 378 . 81.291  100.278 8.079   1.00 2.33   1
. .
ATOM 6193 C    C    . THR THR THR B B 378 378 . 78.893  102.277 5.802   1.00 2.00   1
. .
ATOM 6194 O    O    . THR THR THR B B 378 378 . 78.862  101.518 4.854   1.00 2.23   1
. .
ATOM 6195 N    N    . PHE PHE PHE B B 379 379 . 77.966  103.206 5.963   1.00 2.00   1
. .
ATOM 6196 CA   CA   . PHE PHE PHE B B 379 379 . 76.943  103.509 4.945   1.00 2.00   1
. .
ATOM 6197 CB   CB   . PHE PHE PHE B B 379 379 . 76.264  104.867 5.248   1.00 2.00   1
. .
ATOM 6198 CG   CG   . PHE PHE PHE B B 379 379 . 75.013  105.133 4.442   1.00 2.00   1
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ATOM 6199 CD1  CD1  . PHE PHE PHE B B 379 379 . 75.098  105.805 3.236   1.00 4.08   1
. .
ATOM 6200 CE1  CE1  . PHE PHE PHE B B 379 379 . 73.920  106.055 2.477   1.00 3.50   1
. .
ATOM 6201 CZ   CZ   . PHE PHE PHE B B 379 379 . 72.692  105.635 2.917   1.00 3.10   1
. .
ATOM 6202 CE2  CE2  . PHE PHE PHE B B 379 379 . 72.598  104.960 4.147   1.00 6.54   1
. .
ATOM 6203 CD2  CD2  . PHE PHE PHE B B 379 379 . 73.766  104.755 4.918   1.00 3.95   1
. .
ATOM 6204 C    C    . PHE PHE PHE B B 379 379 . 77.460  103.560 3.518   1.00 2.00   1
. .
ATOM 6205 O    O    . PHE PHE PHE B B 379 379 . 76.863  102.968 2.640   1.00 2.00   1
. .
ATOM 6206 N    N    . ILE ILE ILE B B 380 380 . 78.609  104.184 3.282   1.00 2.00   1
. .
ATOM 6207 CA   CA   . ILE ILE ILE B B 380 380 . 78.960  104.360 1.878   1.00 2.00   1
. .
ATOM 6208 CB   CB   . ILE ILE ILE B B 380 380 . 80.063  105.458 1.669   1.00 2.00   1
. .
ATOM 6209 CG1  CG1  . ILE ILE ILE B B 380 380 . 81.374  105.069 2.385   1.00 2.00   1
. .
ATOM 6210 CD1  CD1  . ILE ILE ILE B B 380 380 . 82.525  106.044 2.123   1.00 2.54   1
. .
ATOM 6211 CG2  CG2  . ILE ILE ILE B B 380 380 . 79.503  106.787 2.036   1.00 2.00   1
. .
ATOM 6212 C    C    . ILE ILE ILE B B 380 380 . 79.342  103.039 1.200   1.00 2.00   1
. .
ATOM 6213 O    O    . ILE ILE ILE B B 380 380 . 79.344  102.972 -0.011  1.00 2.00   1
. .
ATOM 6214 N    N    . ALA ALA ALA B B 381 381 . 79.638  102.010 1.974   1.00 2.00   1
. .
ATOM 6215 CA   CA   . ALA ALA ALA B B 381 381 . 79.853  100.698 1.350   1.00 2.00   1
. .
ATOM 6216 CB   CB   . ALA ALA ALA B B 381 381 . 80.445  99.705  2.419   1.00 2.00   1
. .
ATOM 6217 C    C    . ALA ALA ALA B B 381 381 . 78.570  100.143 0.746   1.00 2.16   1
. .
ATOM 6218 O    O    . ALA ALA ALA B B 381 381 . 78.549  99.711  -0.421  1.00 2.19   1
. .
ATOM 6219 N    N    . ASP ASP ASP B B 382 382 . 77.472  100.253 1.444   1.00 2.00   1
. .
ATOM 6220 CA   CA   . ASP ASP ASP B B 382 382 . 76.187  99.796  0.929   1.00 2.34   1
. .
ATOM 6221 CB   CB   . ASP ASP ASP B B 382 382 . 75.169  99.712  2.009   1.00 2.39   1
. .
ATOM 6222 CG   CG   . ASP ASP ASP B B 382 382 . 75.433  98.510  2.924   1.00 5.62   1
. .
ATOM 6223 OD1  OD1  . ASP ASP ASP B B 382 382 . 76.398  98.572  3.709   1.00 7.72   1
. .
ATOM 6224 OD2  OD2  . ASP ASP ASP B B 382 382 . 74.712  97.484  2.834   1.00 6.86   1
. .
ATOM 6225 C    C    . ASP ASP ASP B B 382 382 . 75.771  100.726 -0.218  1.00 2.83   1
. .
ATOM 6226 O    O    . ASP ASP ASP B B 382 382 . 75.197  100.277 -1.183  1.00 2.04   1
. .
ATOM 6227 N    N    . LEU LEU LEU B B 383 383 . 76.151  102.015 -0.099  1.00 2.00   1
. .
ATOM 6228 CA   CA   . LEU LEU LEU B B 383 383 . 75.779  103.008 -1.093  1.00 2.00   1
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ATOM 6229 CB   CB   . LEU LEU LEU B B 383 383 . 76.212  104.410 -0.603  1.00 2.00   1
. .
ATOM 6230 CG   CG   . LEU LEU LEU B B 383 383 . 75.869  105.639 -1.494  1.00 2.00   1
. .
ATOM 6231 CD1  CD1  . LEU LEU LEU B B 383 383 . 74.268  105.753 -1.573  1.00 2.00   1
. .
ATOM 6232 CD2  CD2  . LEU LEU LEU B B 383 383 . 76.419  106.940 -0.873  1.00 2.00   1
. .
ATOM 6233 C    C    . LEU LEU LEU B B 383 383 . 76.400  102.683 -2.422  1.00 2.02   1
. .
ATOM 6234 O    O    . LEU LEU LEU B B 383 383 . 75.713  102.687 -3.438  1.00 2.67   1
. .
ATOM 6235 N    N    . VAL VAL VAL B B 384 384 . 77.708  102.414 -2.447  1.00 2.00   1
. .
ATOM 6236 CA   CA   . VAL VAL VAL B B 384 384 . 78.334  102.279 -3.707  1.00 2.00   1
. .
ATOM 6237 CB   CB   . VAL VAL VAL B B 384 384 . 79.830  102.328 -3.573  1.00 2.00   1
. .
ATOM 6238 CG1  CG1  . VAL VAL VAL B B 384 384 . 80.371  101.046 -2.849  1.00 3.03   1
. .
ATOM 6239 CG2  CG2  . VAL VAL VAL B B 384 384 . 80.500  102.519 -5.019  1.00 2.40   1
. .
ATOM 6240 C    C    . VAL VAL VAL B B 384 384 . 77.863  101.010 -4.410  1.00 2.00   1
. .
ATOM 6241 O    O    . VAL VAL VAL B B 384 384 . 77.763  100.984 -5.655  1.00 2.00   1
. .
ATOM 6242 N    N    . VAL VAL VAL B B 385 385 . 77.494  99.996  -3.664  1.00 2.07   1
. .
ATOM 6243 CA   CA   . VAL VAL VAL B B 385 385 . 76.979  98.775  -4.273  1.00 2.00   1
. .
ATOM 6244 CB   CB   . VAL VAL VAL B B 385 385 . 77.035  97.636  -3.268  1.00 2.00   1
. .
ATOM 6245 CG1  CG1  . VAL VAL VAL B B 385 385 . 76.345  96.298  -3.915  1.00 2.68   1
. .
ATOM 6246 CG2  CG2  . VAL VAL VAL B B 385 385 . 78.429  97.335  -2.961  1.00 2.00   1
. .
ATOM 6247 C    C    . VAL VAL VAL B B 385 385 . 75.541  98.998  -4.806  1.00 2.60   1
. .
ATOM 6248 O    O    . VAL VAL VAL B B 385 385 . 75.226  98.582  -5.953  1.00 2.43   1
. .
ATOM 6249 N    N    . GLY GLY GLY B B 386 386 . 74.678  99.634  -4.020  1.00 2.15   1
. .
ATOM 6250 CA   CA   . GLY GLY GLY B B 386 386 . 73.281  99.825  -4.432  1.00 3.18   1
. .
ATOM 6251 C    C    . GLY GLY GLY B B 386 386 . 73.183  100.773 -5.663  1.00 2.60   1
. .
ATOM 6252 O    O    . GLY GLY GLY B B 386 386 . 72.317  100.580 -6.507  1.00 4.67   1
. .
ATOM 6253 N    N    . LEU LEU LEU B B 387 387 . 74.052  101.789 -5.708  1.00 2.51   1
. .
ATOM 6254 CA   CA   . LEU LEU LEU B B 387 387 . 74.046  102.767 -6.851  1.00 2.99   1
. .
ATOM 6255 CB   CB   . LEU LEU LEU B B 387 387 . 74.711  104.058 -6.451  1.00 2.00   1
. .
ATOM 6256 CG   CG   . LEU LEU LEU B B 387 387 . 73.942  104.812 -5.352  1.00 2.51   1
. .
ATOM 6257 CD1  CD1  . LEU LEU LEU B B 387 387 . 74.483  106.212 -5.082  1.00 2.87   1
. .
ATOM 6258 CD2  CD2  . LEU LEU LEU B B 387 387 . 72.503  104.956 -5.937  1.00 3.27   1
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ATOM 6259 C    C    . LEU LEU LEU B B 387 387 . 74.790  102.187 -8.033  1.00 3.53   1
. .
ATOM 6260 O    O    . LEU LEU LEU B B 387 387 . 74.858  102.799 -9.120  1.00 4.19   1
. .
ATOM 6261 N    N    . CYS CYS CYS B B 388 388 . 75.469  101.028 -7.812  1.00 4.02   1
. .
ATOM 6262 CA   CA   . CYS CYS CYS B B 388 388 . 76.170  100.349 -8.904  1.00 6.67   1
. .
ATOM 6263 CB   CB   . CYS CYS CYS B B 388 388 . 75.115  99.813  -9.898  1.00 9.16   1
. .
ATOM 6264 SG   SG   . CYS CYS CYS B B 388 388 . 74.059  98.606  -9.172  1.00 21.31  1
. .
ATOM 6265 C    C    . CYS CYS CYS B B 388 388 . 77.212  101.193 -9.617  1.00 6.86   1
. .
ATOM 6266 O    O    . CYS CYS CYS B B 388 388 . 77.309  101.096 -10.789 1.00 10.37  1
. .
ATOM 6267 N    N    . THR THR THR B B 389 389 . 78.044  101.951 -8.917  1.00 4.15   1
. .
ATOM 6268 CA   CA   . THR THR THR B B 389 389 . 78.839  102.924 -9.613  1.00 3.89   1
. .
ATOM 6269 CB   CB   . THR THR THR B B 389 389 . 79.108  104.203 -8.733  1.00 3.73   1
. .
ATOM 6270 OG1  OG1  . THR THR THR B B 389 389 . 80.293  103.978 -7.957  1.00 4.13   1
. .
ATOM 6271 CG2  CG2  . THR THR THR B B 389 389 . 77.930  104.636 -7.874  1.00 5.57   1
. .
ATOM 6272 C    C    . THR THR THR B B 389 389 . 80.180  102.334 -10.074 1.00 3.18   1
. .
ATOM 6273 O    O    . THR THR THR B B 389 389 . 80.817  102.825 -10.965 1.00 4.98   1
. .
ATOM 6274 N    N    . GLY GLY GLY B B 390 390 . 80.630  101.230 -9.449  1.00 2.30   1
. .
ATOM 6275 CA   CA   . GLY GLY GLY B B 390 390 . 81.821  100.582 -9.875  1.00 2.30   1
. .
ATOM 6276 C    C    . GLY GLY GLY B B 390 390 . 83.136  101.113 -9.318  1.00 2.00   1
. .
ATOM 6277 O    O    . GLY GLY GLY B B 390 390 . 84.206  100.530 -9.589  1.00 2.00   1
. .
ATOM 6278 N    N    . GLN GLN GLN B B 391 391 . 83.085  102.184 -8.503  1.00 2.00   1
. .
ATOM 6279 CA   CA   . GLN GLN GLN B B 391 391 . 84.350  102.649 -7.970  1.00 2.00   1
. .
ATOM 6280 CB   CB   . GLN GLN GLN B B 391 391 . 85.083  103.563 -8.970  1.00 4.46   1
. .
ATOM 6281 CG   CG   . GLN GLN GLN B B 391 391 . 84.224  104.285 -9.883  1.00 5.58   1
. .
ATOM 6282 CD   CD   . GLN GLN GLN B B 391 391 . 84.944  105.259 -10.810 1.00 3.65   1
. .
ATOM 6283 OE1  OE1  . GLN GLN GLN B B 391 391 . 86.145  105.546 -10.668 1.00 4.05   1
. .
ATOM 6284 NE2  NE2  . GLN GLN GLN B B 391 391 . 84.198  105.694 -11.841 1.00 3.88   1
. .
ATOM 6285 C    C    . GLN GLN GLN B B 391 391 . 84.073  103.402 -6.670  1.00 2.00   1
. .
ATOM 6286 O    O    . GLN GLN GLN B B 391 391 . 83.046  104.063 -6.547  1.00 2.00   1
. .
ATOM 6287 N    N    . ILE ILE ILE B B 392 392 . 84.970  103.201 -5.707  1.00 2.00   1
. .
ATOM 6288 CA   CA   . ILE ILE ILE B B 392 392 . 84.872  103.862 -4.372  1.00 2.00   1
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ATOM 6289 CB   CB   . ILE ILE ILE B B 392 392 . 84.183  103.001 -3.321  1.00 2.00   1
. .
ATOM 6290 CG1  CG1  . ILE ILE ILE B B 392 392 . 84.029  103.790 -2.003  1.00 2.14   1
. .
ATOM 6291 CD1  CD1  . ILE ILE ILE B B 392 392 . 83.134  103.136 -0.987  1.00 2.01   1
. .
ATOM 6292 CG2  CG2  . ILE ILE ILE B B 392 392 . 85.009  101.679 -3.044  1.00 2.84   1
. .
ATOM 6293 C    C    . ILE ILE ILE B B 392 392 . 86.245  104.219 -3.928  1.00 2.00   1
. .
ATOM 6294 O    O    . ILE ILE ILE B B 392 392 . 87.184  103.475 -4.084  1.00 2.00   1
. .
ATOM 6295 N    N    . LYS LYS LYS B B 393 393 . 86.385  105.417 -3.310  1.00 2.00   1
. .
ATOM 6296 CA   CA   . LYS LYS LYS B B 393 393 . 87.632  105.708 -2.657  1.00 2.00   1
. .
ATOM 6297 CB   CB   . LYS LYS LYS B B 393 393 . 88.341  106.963 -3.245  1.00 2.12   1
. .
ATOM 6298 CG   CG   . LYS LYS LYS B B 393 393 . 87.688  108.338 -3.085  1.00 3.06   1
. .
ATOM 6299 CD   CD   . LYS LYS LYS B B 393 393 . 88.619  109.436 -3.639  1.00 4.91   1
. .
ATOM 6300 CE   CE   . LYS LYS LYS B B 393 393 . 88.438  110.750 -2.831  1.00 4.71   1
. .
ATOM 6301 NZ   NZ   . LYS LYS LYS B B 393 393 . 89.330  111.777 -3.379  1.00 3.57   1
. .
ATOM 6302 C    C    . LYS LYS LYS B B 393 393 . 87.238  105.957 -1.184  1.00 2.02   1
. .
ATOM 6303 O    O    . LYS LYS LYS B B 393 393 . 86.375  106.784 -0.878  1.00 2.00   1
. .
ATOM 6304 N    N    . THR THR THR B B 394 394 . 87.823  105.194 -0.301  1.00 2.00   1
. .
ATOM 6305 CA   CA   . THR THR THR B B 394 394 . 87.540  105.378 1.124   1.00 2.00   1
. .
ATOM 6306 CB   CB   . THR THR THR B B 394 394 . 86.273  104.576 1.525   1.00 2.00   1
. .
ATOM 6307 OG1  OG1  . THR THR THR B B 394 394 . 86.000  104.768 2.906   1.00 2.08   1
. .
ATOM 6308 CG2  CG2  . THR THR THR B B 394 394 . 86.449  103.064 1.346   1.00 2.00   1
. .
ATOM 6309 C    C    . THR THR THR B B 394 394 . 88.770  105.075 1.983   1.00 2.00   1
. .
ATOM 6310 O    O    . THR THR THR B B 394 394 . 88.644  104.601 3.132   1.00 2.00   1
. .
ATOM 6311 N    N    . GLY GLY GLY B B 395 395 . 89.936  105.417 1.486   1.00 2.00   1
. .
ATOM 6312 CA   CA   . GLY GLY GLY B B 395 395 . 91.140  105.498 2.281   1.00 2.00   1
. .
ATOM 6313 C    C    . GLY GLY GLY B B 395 395 . 92.207  104.512 1.868   1.00 2.00   1
. .
ATOM 6314 O    O    . GLY GLY GLY B B 395 395 . 91.943  103.582 1.096   1.00 2.00   1
. .
ATOM 6315 N    N    . ALA ALA ALA B B 396 396 . 93.388  104.706 2.414   1.00 2.00   1
. .
ATOM 6316 CA   CA   . ALA ALA ALA B B 396 396 . 94.393  103.627 2.365   1.00 2.00   1
. .
ATOM 6317 CB   CB   . ALA ALA ALA B B 396 396 . 95.684  104.057 3.050   1.00 2.00   1
. .
ATOM 6318 C    C    . ALA ALA ALA B B 396 396 . 93.825  102.412 3.144   1.00 2.00   1
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ATOM 6319 O    O    . ALA ALA ALA B B 396 396 . 92.818  102.509 3.826   1.00 2.00   1
. .
ATOM 6320 N    N    . PRO PRO PRO B B 397 397 . 94.433  101.233 2.973   1.00 2.00   1
. .
ATOM 6321 CA   CA   . PRO PRO PRO B B 397 397 . 94.034  100.091 3.805   1.00 2.00   1
. .
ATOM 6322 CB   CB   . PRO PRO PRO B B 397 397 . 94.539  98.849  2.977   1.00 2.02   1
. .
ATOM 6323 CG   CG   . PRO PRO PRO B B 397 397 . 95.749  99.380  2.289   1.00 2.00   1
. .
ATOM 6324 CD   CD   . PRO PRO PRO B B 397 397 . 95.399  100.847 1.917   1.00 2.07   1
. .
ATOM 6325 C    C    . PRO PRO PRO B B 397 397 . 94.689  100.177 5.197   1.00 2.01   1
. .
ATOM 6326 O    O    . PRO PRO PRO B B 397 397 . 95.401  99.287  5.631   1.00 2.00   1
. .
ATOM 6327 N    N    . CYS CYS CYS B B 398 398 . 94.499  101.296 5.849   1.00 2.00   1
. .
ATOM 6328 CA   CA   . CYS CYS CYS B B 398 398 . 95.096  101.576 7.161   1.00 2.00   1
. .
ATOM 6329 CB   CB   . CYS CYS CYS B B 398 398 . 96.520  102.176 6.894   1.00 2.00   1
. .
ATOM 6330 SG   SG   . CYS CYS CYS B B 398 398 . 97.289  102.808 8.354   1.00 2.19   1
. .
ATOM 6331 C    C    . CYS CYS CYS B B 398 398 . 94.200  102.605 7.813   1.00 2.00   1
. .
ATOM 6332 O    O    . CYS CYS CYS B B 398 398 . 93.758  103.525 7.127   1.00 2.07   1
. .
ATOM 6333 N    N    . ARG ARG ARG B B 399 399 . 93.926  102.416 9.103   1.00 2.00   1
. .
ATOM 6334 CA   CA   . ARG ARG ARG B B 399 399 . 93.004  103.231 9.920   1.00 2.00   1
. .
ATOM 6335 CB   CB   . ARG ARG ARG B B 399 399 . 93.053  104.744 9.646   1.00 2.00   1
. .
ATOM 6336 CG   CG   . ARG ARG ARG B B 399 399 . 94.465  105.335 9.811   1.00 2.00   1
. .
ATOM 6337 CD   CD   . ARG ARG ARG B B 399 399 . 94.496  106.838 9.380   1.00 2.30   1
. .
ATOM 6338 NE   NE   . ARG ARG ARG B B 399 399 . 93.590  107.688 10.125  1.00 2.00   1
. .
ATOM 6339 CZ   CZ   . ARG ARG ARG B B 399 399 . 93.931  108.845 10.705  1.00 2.00   1
. .
ATOM 6340 NH1  NH1  . ARG ARG ARG B B 399 399 . 95.190  109.312 10.602  1.00 2.00   1
. .
ATOM 6341 NH2  NH2  . ARG ARG ARG B B 399 399 . 93.018  109.520 11.413  1.00 2.00   1
. .
ATOM 6342 C    C    . ARG ARG ARG B B 399 399 . 91.575  102.720 9.759   1.00 2.00   1
. .
ATOM 6343 O    O    . ARG ARG ARG B B 399 399 . 91.038  102.660 8.699   1.00 2.00   1
. .
ATOM 6344 N    N    . SER SER SER B B 400 400 . 90.971  102.263 10.829  1.00 2.00   1
. .
ATOM 6345 CA   CA   . SER SER SER B B 400 400 . 89.705  101.533 10.687  1.00 2.00   1
. .
ATOM 6346 CB   CB   . SER SER SER B B 400 400 . 89.394  100.650 11.918  1.00 2.00   1
. .
ATOM 6347 OG   OG   . SER SER SER B B 400 400 . 90.385  99.658  12.090  1.00 2.00   1
. .
ATOM 6348 C    C    . SER SER SER B B 400 400 . 88.536  102.359 10.277  1.00 2.00   1
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ATOM 6349 O    O    . SER SER SER B B 400 400 . 87.516  101.790 9.913   1.00 2.00   1
. .
ATOM 6350 N    N    . GLU GLU GLU B B 401 401 . 88.614  103.708 10.341  1.00 2.00   1
. .
ATOM 6351 CA   CA   . GLU GLU GLU B B 401 401 . 87.528  104.433 9.657   1.00 2.00   1
. .
ATOM 6352 CB   CB   . GLU GLU GLU B B 401 401 . 87.588  105.946 9.958   1.00 2.00   1
. .
ATOM 6353 CG   CG   . GLU GLU GLU B B 401 401 . 88.717  106.733 9.338   1.00 2.00   1
. .
ATOM 6354 CD   CD   . GLU GLU GLU B B 401 401 . 90.054  106.642 10.045  1.00 2.00   1
. .
ATOM 6355 OE1  OE1  . GLU GLU GLU B B 401 401 . 90.191  105.908 11.061  1.00 2.00   1
. .
ATOM 6356 OE2  OE2  . GLU GLU GLU B B 401 401 . 90.947  107.402 9.635   1.00 2.00   1
. .
ATOM 6357 C    C    . GLU GLU GLU B B 401 401 . 87.548  104.243 8.135   1.00 2.00   1
. .
ATOM 6358 O    O    . GLU GLU GLU B B 401 401 . 86.574  104.544 7.440   1.00 2.00   1
. .
ATOM 6359 N    N    . ARG ARG ARG B B 402 402 . 88.679  103.733 7.656   1.00 2.00   1
. .
ATOM 6360 CA   CA   . ARG ARG ARG B B 402 402 . 88.779  103.294 6.205   1.00 2.00   1
. .
ATOM 6361 CB   CB   . ARG ARG ARG B B 402 402 . 90.210  103.563 5.700   1.00 2.00   1
. .
ATOM 6362 CG   CG   . ARG ARG ARG B B 402 402 . 90.722  104.955 6.191   1.00 2.00   1
. .
ATOM 6363 CD   CD   . ARG ARG ARG B B 402 402 . 89.906  106.131 5.672   1.00 2.00   1
. .
ATOM 6364 NE   NE   . ARG ARG ARG B B 402 402 . 90.246  107.234 6.563   1.00 2.00   1
. .
ATOM 6365 CZ   CZ   . ARG ARG ARG B B 402 402 . 89.794  108.497 6.509   1.00 2.55   1
. .
ATOM 6366 NH1  NH1  . ARG ARG ARG B B 402 402 . 88.880  108.863 5.648   1.00 2.00   1
. .
ATOM 6367 NH2  NH2  . ARG ARG ARG B B 402 402 . 90.137  109.315 7.490   1.00 2.00   1
. .
ATOM 6368 C    C    . ARG ARG ARG B B 402 402 . 88.451  101.823 6.064   1.00 2.00   1
. .
ATOM 6369 O    O    . ARG ARG ARG B B 402 402 . 87.538  101.468 5.322   1.00 2.00   1
. .
ATOM 6370 N    N    . LEU LEU LEU B B 403 403 . 89.176  100.999 6.829   1.00 2.00   1
. .
ATOM 6371 CA   CA   . LEU LEU LEU B B 403 403 . 88.893  99.568  6.734   1.00 2.00   1
. .
ATOM 6372 CB   CB   . LEU LEU LEU B B 403 403 . 89.817  98.724  7.585   1.00 2.00   1
. .
ATOM 6373 CG   CG   . LEU LEU LEU B B 403 403 . 91.268  98.477  7.253   1.00 2.22   1
. .
ATOM 6374 CD1  CD1  . LEU LEU LEU B B 403 403 . 91.414  98.096  5.782   1.00 2.00   1
. .
ATOM 6375 CD2  CD2  . LEU LEU LEU B B 403 403 . 92.152  99.617  7.700   1.00 2.02   1
. .
ATOM 6376 C    C    . LEU LEU LEU B B 403 403 . 87.487  99.185  7.041   1.00 2.00   1
. .
ATOM 6377 O    O    . LEU LEU LEU B B 403 403 . 87.024  98.144  6.534   1.00 2.00   1
. .
ATOM 6378 N    N    . ALA ALA ALA B B 404 404 . 86.798  99.923  7.959   1.00 2.00   1
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ATOM 6379 CA   CA   . ALA ALA ALA B B 404 404 . 85.392  99.533  8.259   1.00 2.00   1
. .
ATOM 6380 CB   CB   . ALA ALA ALA B B 404 404 . 84.722  100.480 9.265   1.00 2.00   1
. .
ATOM 6381 C    C    . ALA ALA ALA B B 404 404 . 84.590  99.467  6.928   1.00 2.00   1
. .
ATOM 6382 O    O    . ALA ALA ALA B B 404 404 . 83.743  98.596  6.759   1.00 2.00   1
. .
ATOM 6383 N    N    . LYS LYS LYS B B 405 405 . 84.820  100.368 5.983   1.00 2.00   1
. .
ATOM 6384 CA   CA   . LYS LYS LYS B B 405 405 . 84.055  100.349 4.725   1.00 2.00   1
. .
ATOM 6385 CB   CB   . LYS LYS LYS B B 405 405 . 84.275  101.656 3.970   1.00 2.00   1
. .
ATOM 6386 CG   CG   . LYS LYS LYS B B 405 405 . 83.477  102.851 4.446   1.00 2.00   1
. .
ATOM 6387 CD   CD   . LYS LYS LYS B B 405 405 . 83.969  103.413 5.748   1.00 2.00   1
. .
ATOM 6388 CE   CE   . LYS LYS LYS B B 405 405 . 83.473  104.845 5.902   1.00 2.00   1
. .
ATOM 6389 NZ   NZ   . LYS LYS LYS B B 405 405 . 83.766  105.323 7.289   1.00 2.00   1
. .
ATOM 6390 C    C    . LYS LYS LYS B B 405 405 . 84.532  99.183  3.859   1.00 2.00   1
. .
ATOM 6391 O    O    . LYS LYS LYS B B 405 405 . 83.713  98.495  3.313   1.00 2.00   1
. .
ATOM 6392 N    N    . TYR TYR TYR B B 406 406 . 85.841  99.025  3.759   1.00 2.00   1
. .
ATOM 6393 CA   CA   . TYR TYR TYR B B 406 406 . 86.383  97.955  2.888   1.00 2.00   1
. .
ATOM 6394 CB   CB   . TYR TYR TYR B B 406 406 . 87.888  98.027  2.799   1.00 2.00   1
. .
ATOM 6395 CG   CG   . TYR TYR TYR B B 406 406 . 88.398  99.277  2.048   1.00 2.00   1
. .
ATOM 6396 CD1  CD1  . TYR TYR TYR B B 406 406 . 87.950  99.551  0.755   1.00 2.00   1
. .
ATOM 6397 CE1  CE1  . TYR TYR TYR B B 406 406 . 88.397  100.673 0.059   1.00 2.00   1
. .
ATOM 6398 CZ   CZ   . TYR TYR TYR B B 406 406 . 89.319  101.550 0.701   1.00 2.00   1
. .
ATOM 6399 OH   OH   . TYR TYR TYR B B 406 406 . 89.769  102.703 0.048   1.00 2.00   1
. .
ATOM 6400 CE2  CE2  . TYR TYR TYR B B 406 406 . 89.752  101.324 1.970   1.00 2.00   1
. .
ATOM 6401 CD2  CD2  . TYR TYR TYR B B 406 406 . 89.325  100.159 2.671   1.00 2.00   1
. .
ATOM 6402 C    C    . TYR TYR TYR B B 406 406 . 85.971  96.587  3.403   1.00 2.00   1
. .
ATOM 6403 O    O    . TYR TYR TYR B B 406 406 . 85.663  95.676  2.645   1.00 2.00   1
. .
ATOM 6404 N    N    . ASN ASN ASN B B 407 407 . 86.012  96.422  4.715   1.00 2.00   1
. .
ATOM 6405 CA   CA   . ASN ASN ASN B B 407 407 . 85.537  95.149  5.278   1.00 2.00   1
. .
ATOM 6406 CB   CB   . ASN ASN ASN B B 407 407 . 85.778  95.145  6.853   1.00 2.00   1
. .
ATOM 6407 CG   CG   . ASN ASN ASN B B 407 407 . 87.255  95.027  7.199   1.00 2.00   1
. .
ATOM 6408 OD1  OD1  . ASN ASN ASN B B 407 407 . 88.060  94.542  6.437   1.00 2.00   1
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ATOM 6409 ND2  ND2  . ASN ASN ASN B B 407 407 . 87.583  95.465  8.395   1.00 2.00   1
. .
ATOM 6410 C    C    . ASN ASN ASN B B 407 407 . 84.080  94.938  5.067   1.00 2.00   1
. .
ATOM 6411 O    O    . ASN ASN ASN B B 407 407 . 83.672  93.811  4.804   1.00 2.00   1
. .
ATOM 6412 N    N    . GLN GLN GLN B B 408 408 . 83.255  96.013  5.114   1.00 2.00   1
. .
ATOM 6413 CA   CA   . GLN GLN GLN B B 408 408 . 81.833  95.847  4.781   1.00 2.00   1
. .
ATOM 6414 CB   CB   . GLN GLN GLN B B 408 408 . 81.094  97.154  5.148   1.00 2.00   1
. .
ATOM 6415 CG   CG   . GLN GLN GLN B B 408 408 . 79.615  97.187  4.793   1.00 2.06   1
. .
ATOM 6416 CD   CD   . GLN GLN GLN B B 408 408 . 78.777  96.228  5.606   1.00 3.15   1
. .
ATOM 6417 OE1  OE1  . GLN GLN GLN B B 408 408 . 79.299  95.476  6.458   1.00 2.86   1
. .
ATOM 6418 NE2  NE2  . GLN GLN GLN B B 408 408 . 77.467  96.192  5.313   1.00 3.66   1
. .
ATOM 6419 C    C    . GLN GLN GLN B B 408 408 . 81.632  95.462  3.302   1.00 2.00   1
. .
ATOM 6420 O    O    . GLN GLN GLN B B 408 408 . 80.771  94.629  2.988   1.00 2.00   1
. .
ATOM 6421 N    N    . LEU LEU LEU B B 409 409 . 82.407  96.044  2.407   1.00 2.00   1
. .
ATOM 6422 CA   CA   . LEU LEU LEU B B 409 409 . 82.302  95.612  1.043   1.00 2.00   1
. .
ATOM 6423 CB   CB   . LEU LEU LEU B B 409 409 . 83.190  96.490  0.139   1.00 2.14   1
. .
ATOM 6424 CG   CG   . LEU LEU LEU B B 409 409 . 82.666  97.930  -0.053  1.00 2.05   1
. .
ATOM 6425 CD1  CD1  . LEU LEU LEU B B 409 409 . 83.669  98.881  -0.629  1.00 2.00   1
. .
ATOM 6426 CD2  CD2  . LEU LEU LEU B B 409 409 . 81.396  97.836  -0.976  1.00 2.59   1
. .
ATOM 6427 C    C    . LEU LEU LEU B B 409 409 . 82.676  94.119  0.901   1.00 2.00   1
. .
ATOM 6428 O    O    . LEU LEU LEU B B 409 409 . 82.046  93.446  0.096   1.00 2.00   1
. .
ATOM 6429 N    N    . MET MET MET B B 410 410 . 83.705  93.636  1.595   1.00 2.00   1
. .
ATOM 6430 CA   CA   . MET MET MET B B 410 410 . 83.972  92.185  1.559   1.00 2.00   1
. .
ATOM 6431 CB   CB   . MET MET MET B B 410 410 . 85.232  91.845  2.364   1.00 2.54   1
. .
ATOM 6432 CG   CG   . MET MET MET B B 410 410 . 86.443  92.271  1.676   1.00 2.95   1
. .
ATOM 6433 SD   SD   . MET MET MET B B 410 410 . 88.012  91.625  2.274   1.00 5.21   1
. .
ATOM 6434 CE   CE   . MET MET MET B B 410 410 . 88.038  92.351  3.875   1.00 4.50   1
. .
ATOM 6435 C    C    . MET MET MET B B 410 410 . 82.763  91.434  2.049   1.00 2.00   1
. .
ATOM 6436 O    O    . MET MET MET B B 410 410 . 82.431  90.307  1.482   1.00 2.00   1
. .
ATOM 6437 N    N    . ARG ARG ARG B B 411 411 . 82.092  91.917  3.096   1.00 2.00   1
. .
ATOM 6438 CA   CA   . ARG ARG ARG B B 411 411 . 80.892  91.224  3.554   1.00 2.00   1
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ATOM 6439 CB   CB   . ARG ARG ARG B B 411 411 . 80.366  91.779  4.898   1.00 2.00   1
. .
ATOM 6440 CG   CG   . ARG ARG ARG B B 411 411 . 81.344  91.604  6.012   1.00 2.99   1
. .
ATOM 6441 CD   CD   . ARG ARG ARG B B 411 411 . 80.774  92.155  7.379   1.00 2.25   1
. .
ATOM 6442 NE   NE   . ARG ARG ARG B B 411 411 . 81.845  92.516  8.315   1.00 4.65   1
. .
ATOM 6443 CZ   CZ   . ARG ARG ARG B B 411 411 . 82.260  93.769  8.628   1.00 4.42   1
. .
ATOM 6444 NH1  NH1  . ARG ARG ARG B B 411 411 . 81.682  94.847  8.112   1.00 2.55   1
. .
ATOM 6445 NH2  NH2  . ARG ARG ARG B B 411 411 . 83.293  93.921  9.466   1.00 2.04   1
. .
ATOM 6446 C    C    . ARG ARG ARG B B 411 411 . 79.793  91.206  2.551   1.00 2.18   1
. .
ATOM 6447 O    O    . ARG ARG ARG B B 411 411 . 79.084  90.212  2.393   1.00 3.70   1
. .
ATOM 6448 N    N    . ILE ILE ILE B B 412 412 . 79.607  92.340  1.874   1.00 2.05   1
. .
ATOM 6449 CA   CA   . ILE ILE ILE B B 412 412 . 78.519  92.408  0.893   1.00 2.00   1
. .
ATOM 6450 CB   CB   . ILE ILE ILE B B 412 412 . 78.380  93.851  0.406   1.00 2.23   1
. .
ATOM 6451 CG1  CG1  . ILE ILE ILE B B 412 412 . 77.832  94.726  1.538   1.00 2.00   1
. .
ATOM 6452 CD1  CD1  . ILE ILE ILE B B 412 412 . 76.819  94.036  2.354   1.00 13.31  1
. .
ATOM 6453 CG2  CG2  . ILE ILE ILE B B 412 412 . 77.532  93.960  -0.940  1.00 2.00   1
. .
ATOM 6454 C    C    . ILE ILE ILE B B 412 412 . 78.847  91.451  -0.272  1.00 2.00   1
. .
ATOM 6455 O    O    . ILE ILE ILE B B 412 412 . 77.954  90.755  -0.761  1.00 4.22   1
. .
ATOM 6456 N    N    . GLU GLU GLU B B 413 413 . 80.121  91.377  -0.688  1.00 2.10   1
. .
ATOM 6457 CA   CA   . GLU GLU GLU B B 413 413 . 80.499  90.450  -1.751  1.00 2.53   1
. .
ATOM 6458 CB   CB   . GLU GLU GLU B B 413 413 . 81.956  90.641  -2.122  1.00 2.61   1
. .
ATOM 6459 CG   CG   . GLU GLU GLU B B 413 413 . 82.409  89.621  -3.169  1.00 6.84   1
. .
ATOM 6460 CD   CD   . GLU GLU GLU B B 413 413 . 83.774  89.943  -3.686  1.00 6.55   1
. .
ATOM 6461 OE1  OE1  . GLU GLU GLU B B 413 413 . 84.762  89.642  -2.988  1.00 9.08   1
. .
ATOM 6462 OE2  OE2  . GLU GLU GLU B B 413 413 . 83.855  90.451  -4.822  1.00 6.54   1
. .
ATOM 6463 C    C    . GLU GLU GLU B B 413 413 . 80.196  88.994  -1.317  1.00 3.03   1
. .
ATOM 6464 O    O    . GLU GLU GLU B B 413 413 . 79.644  88.204  -2.041  1.00 3.45   1
. .
ATOM 6465 N    N    . GLU GLU GLU B B 414 414 . 80.561  88.677  -0.090  1.00 2.69   1
. .
ATOM 6466 CA   CA   . GLU GLU GLU B B 414 414 . 80.232  87.351  0.437   1.00 4.94   1
. .
ATOM 6467 CB   CB   . GLU GLU GLU B B 414 414 . 80.859  87.266  1.811   1.00 5.33   1
. .
ATOM 6468 CG   CG   . GLU GLU GLU B B 414 414 . 80.612  85.955  2.621   1.00 10.06  1
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ATOM 6469 CD   CD   . GLU GLU GLU B B 414 414 . 81.060  86.098  4.070   1.00 13.67  1
. .
ATOM 6470 OE1  OE1  . GLU GLU GLU B B 414 414 . 82.270  86.362  4.296   1.00 13.77  1
. .
ATOM 6471 OE2  OE2  . GLU GLU GLU B B 414 414 . 80.175  86.013  4.958   1.00 14.92  1
. .
ATOM 6472 C    C    . GLU GLU GLU B B 414 414 . 78.736  87.097  0.475   1.00 5.65   1
. .
ATOM 6473 O    O    . GLU GLU GLU B B 414 414 . 78.324  85.978  0.130   1.00 8.43   1
. .
ATOM 6474 N    N    . GLU GLU GLU B B 415 415 . 77.901  88.066  0.876   1.00 7.41   1
. .
ATOM 6475 CA   CA   . GLU GLU GLU B B 415 415 . 76.447  87.925  0.898   1.00 10.06  1
. .
ATOM 6476 CB   CB   . GLU GLU GLU B B 415 415 . 75.780  89.166  1.503   1.00 13.17  1
. .
ATOM 6477 CG   CG   . GLU GLU GLU B B 415 415 . 75.814  89.353  3.043   1.00 20.10  1
. .
ATOM 6478 CD   CD   . GLU GLU GLU B B 415 415 . 75.051  90.620  3.456   1.00 31.41  1
. .
ATOM 6479 OE1  OE1  . GLU GLU GLU B B 415 415 . 75.550  91.407  4.316   1.00 33.90  1
. .
ATOM 6480 OE2  OE2  . GLU GLU GLU B B 415 415 . 73.945  90.831  2.877   1.00 34.71  1
. .
ATOM 6481 C    C    . GLU GLU GLU B B 415 415 . 75.798  87.728  -0.474  1.00 11.02  1
. .
ATOM 6482 O    O    . GLU GLU GLU B B 415 415 . 74.723  87.097  -0.597  1.00 10.65  1
. .
ATOM 6483 N    N    . LEU LEU LEU B B 416 416 . 76.431  88.288  -1.516  1.00 10.67  1
. .
ATOM 6484 CA   CA   . LEU LEU LEU B B 416 416 . 75.871  88.154  -2.858  1.00 10.71  1
. .
ATOM 6485 CB   CB   . LEU LEU LEU B B 416 416 . 76.387  89.283  -3.715  1.00 11.19  1
. .
ATOM 6486 CG   CG   . LEU LEU LEU B B 416 416 . 75.851  90.669  -3.398  1.00 11.30  1
. .
ATOM 6487 CD1  CD1  . LEU LEU LEU B B 416 416 . 76.608  91.823  -4.130  1.00 10.22  1
. .
ATOM 6488 CD2  CD2  . LEU LEU LEU B B 416 416 . 74.356  90.634  -3.647  1.00 12.64  1
. .
ATOM 6489 C    C    . LEU LEU LEU B B 416 416 . 76.280  86.805  -3.475  1.00 13.50  1
. .
ATOM 6490 O    O    . LEU LEU LEU B B 416 416 . 75.774  86.403  -4.533  1.00 13.80  1
. .
ATOM 6491 N    N    . GLY GLY GLY B B 417 417 . 77.208  86.097  -2.832  1.00 16.10  1
. .
ATOM 6492 CA   CA   . GLY GLY GLY B B 417 417 . 77.603  84.739  -3.253  1.00 21.06  1
. .
ATOM 6493 C    C    . GLY GLY GLY B B 417 417 . 77.941  84.649  -4.738  1.00 23.51  1
. .
ATOM 6494 O    O    . GLY GLY GLY B B 417 417 . 78.677  85.487  -5.275  1.00 22.45  1
. .
ATOM 6495 N    N    . ASP ASP ASP B B 418 418 . 77.379  83.626  -5.389  1.00 26.35  1
. .
ATOM 6496 CA   CA   . ASP ASP ASP B B 418 418 . 77.463  83.481  -6.854  1.00 29.28  1
. .
ATOM 6497 CB   CB   . ASP ASP ASP B B 418 418 . 76.706  82.218  -7.300  1.00 31.32  1
. .
ATOM 6498 CG   CG   . ASP ASP ASP B B 418 418 . 77.586  80.997  -7.387  1.00 36.06  1
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ATOM 6499 OD1  OD1  . ASP ASP ASP B B 418 418 . 77.059  79.953  -7.828  1.00 41.46  1
. .
ATOM 6500 OD2  OD2  . ASP ASP ASP B B 418 418 . 78.782  81.043  -7.013  1.00 40.00  1
. .
ATOM 6501 C    C    . ASP ASP ASP B B 418 418 . 76.957  84.678  -7.683  1.00 28.43  1
. .
ATOM 6502 O    O    . ASP ASP ASP B B 418 418 . 77.370  84.854  -8.817  1.00 28.17  1
. .
ATOM 6503 N    N    . GLU GLU GLU B B 419 419 . 76.018  85.463  -7.170  1.00 27.33  1
. .
ATOM 6504 CA   CA   . GLU GLU GLU B B 419 419 . 75.576  86.646  -7.945  1.00 26.52  1
. .
ATOM 6505 CB   CB   . GLU GLU GLU B B 419 419 . 74.089  86.965  -7.700  1.00 27.96  1
. .
ATOM 6506 CG   CG   . GLU GLU GLU B B 419 419 . 73.702  87.928  -6.584  1.00 32.85  1
. .
ATOM 6507 CD   CD   . GLU GLU GLU B B 419 419 . 72.183  87.952  -6.364  1.00 39.47  1
. .
ATOM 6508 OE1  OE1  . GLU GLU GLU B B 419 419 . 71.746  87.846  -5.199  1.00 40.14  1
. .
ATOM 6509 OE2  OE2  . GLU GLU GLU B B 419 419 . 71.417  88.041  -7.353  1.00 42.35  1
. .
ATOM 6510 C    C    . GLU GLU GLU B B 419 419 . 76.505  87.879  -7.840  1.00 24.21  1
. .
ATOM 6511 O    O    . GLU GLU GLU B B 419 419 . 76.202  88.948  -8.394  1.00 23.51  1
. .
ATOM 6512 N    N    . ALA ALA ALA B B 420 420 . 77.636  87.724  -7.151  1.00 21.11  1
. .
ATOM 6513 CA   CA   . ALA ALA ALA B B 420 420 . 78.634  88.786  -7.061  1.00 19.24  1
. .
ATOM 6514 CB   CB   . ALA ALA ALA B B 420 420 . 79.631  88.457  -5.953  1.00 19.29  1
. .
ATOM 6515 C    C    . ALA ALA ALA B B 420 420 . 79.398  89.011  -8.395  1.00 17.90  1
. .
ATOM 6516 O    O    . ALA ALA ALA B B 420 420 . 79.999  88.089  -8.928  1.00 19.65  1
. .
ATOM 6517 N    N    . ARG ARG ARG B B 421 421 . 79.389  90.239  -8.912  1.00 15.31  1
. .
ATOM 6518 CA   CA   . ARG ARG ARG B B 421 421 . 80.327  90.624  -9.974  1.00 14.64  1
. .
ATOM 6519 CB   CB   . ARG ARG ARG B B 421 421 . 79.600  91.015  -11.264 1.00 16.35  1
. .
ATOM 6520 CG   CG   . ARG ARG ARG B B 421 421 . 78.309  91.729  -11.136 1.00 21.82  1
. .
ATOM 6521 CD   CD   . ARG ARG ARG B B 421 421 . 77.411  91.240  -12.293 1.00 30.81  1
. .
ATOM 6522 NE   NE   . ARG ARG ARG B B 421 421 . 76.080  91.860  -12.284 1.00 37.46  1
. .
ATOM 6523 CZ   CZ   . ARG ARG ARG B B 421 421 . 75.096  91.469  -11.479 1.00 40.97  1
. .
ATOM 6524 NH1  NH1  . ARG ARG ARG B B 421 421 . 73.917  92.083  -11.529 1.00 43.29  1
. .
ATOM 6525 NH2  NH2  . ARG ARG ARG B B 421 421 . 75.293  90.466  -10.614 1.00 40.35  1
. .
ATOM 6526 C    C    . ARG ARG ARG B B 421 421 . 81.186  91.789  -9.496  1.00 10.66  1
. .
ATOM 6527 O    O    . ARG ARG ARG B B 421 421 . 80.727  92.587  -8.630  1.00 14.19  1
. .
ATOM 6528 N    N    . PHE PHE PHE B B 422 422 . 82.434  91.848  -9.971  1.00 7.35   1
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ATOM 6529 CA   CA   . PHE PHE PHE B B 422 422 . 83.375  92.895  -9.631  1.00 4.44   1
. .
ATOM 6530 CB   CB   . PHE PHE PHE B B 422 422 . 84.618  92.177  -9.148  1.00 4.59   1
. .
ATOM 6531 CG   CG   . PHE PHE PHE B B 422 422 . 85.799  93.053  -8.882  1.00 3.34   1
. .
ATOM 6532 CD1  CD1  . PHE PHE PHE B B 422 422 . 85.747  94.027  -7.894  1.00 3.12   1
. .
ATOM 6533 CE1  CE1  . PHE PHE PHE B B 422 422 . 86.872  94.876  -7.656  1.00 2.73   1
. .
ATOM 6534 CZ   CZ   . PHE PHE PHE B B 422 422 . 88.033  94.732  -8.421  1.00 2.27   1
. .
ATOM 6535 CE2  CE2  . PHE PHE PHE B B 422 422 . 88.067  93.731  -9.408  1.00 2.87   1
. .
ATOM 6536 CD2  CD2  . PHE PHE PHE B B 422 422 . 86.916  92.956  -9.653  1.00 3.43   1
. .
ATOM 6537 C    C    . PHE PHE PHE B B 422 422 . 83.674  93.792  -10.862 1.00 4.10   1
. .
ATOM 6538 O    O    . PHE PHE PHE B B 422 422 . 83.988  93.308  -11.924 1.00 5.69   1
. .
ATOM 6539 N    N    . ALA ALA ALA B B 423 423 . 83.564  95.109  -10.689 1.00 3.62   1
. .
ATOM 6540 CA   CA   . ALA ALA ALA B B 423 423 . 83.645  95.977  -11.849 1.00 3.08   1
. .
ATOM 6541 CB   CB   . ALA ALA ALA B B 423 423 . 83.434  97.357  -11.369 1.00 2.51   1
. .
ATOM 6542 C    C    . ALA ALA ALA B B 423 423 . 84.964  95.853  -12.598 1.00 3.39   1
. .
ATOM 6543 O    O    . ALA ALA ALA B B 423 423 . 84.993  96.066  -13.804 1.00 6.39   1
. .
ATOM 6544 N    N    . GLY GLY GLY B B 424 424 . 86.066  95.604  -11.889 1.00 3.62   1
. .
ATOM 6545 CA   CA   . GLY GLY GLY B B 424 424 . 87.393  95.405  -12.476 1.00 4.24   1
. .
ATOM 6546 C    C    . GLY GLY GLY B B 424 424 . 87.768  96.402  -13.570 1.00 5.77   1
. .
ATOM 6547 O    O    . GLY GLY GLY B B 424 424 . 87.791  97.619  -13.346 1.00 4.65   1
. .
ATOM 6548 N    N    . HIS HIS HIS B B 425 425 . 88.051  95.893  -14.774 1.00 8.38   1
. .
ATOM 6549 CA   CA   . HIS HIS HIS B B 425 425 . 88.532  96.803  -15.810 1.00 9.57   1
. .
ATOM 6550 CB   CB   . HIS HIS HIS B B 425 425 . 89.175  95.985  -16.939 1.00 10.95  1
. .
ATOM 6551 CG   CG   . HIS HIS HIS B B 425 425 . 90.581  95.613  -16.634 1.00 15.31  1
. .
ATOM 6552 ND1  ND1  . HIS HIS HIS B B 425 425 . 90.977  94.311  -16.397 1.00 19.52  1
. .
ATOM 6553 CE1  CE1  . HIS HIS HIS B B 425 425 . 92.266  94.297  -16.119 1.00 21.66  1
. .
ATOM 6554 NE2  NE2  . HIS HIS HIS B B 425 425 . 92.720  95.539  -16.177 1.00 21.21  1
. .
ATOM 6555 CD2  CD2  . HIS HIS HIS B B 425 425 . 91.690  96.374  -16.503 1.00 18.17  1
. .
ATOM 6556 C    C    . HIS HIS HIS B B 425 425 . 87.492  97.809  -16.304 1.00 9.57   1
. .
ATOM 6557 O    O    . HIS HIS HIS B B 425 425 . 87.840  98.815  -16.902 1.00 10.71  1
. .
ATOM 6558 N    N    . ASN ASN ASN B B 426 426 . 86.237  97.526  -16.000 1.00 9.08   1
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ATOM 6559 CA   CA   . ASN ASN ASN B B 426 426 . 85.058  98.278  -16.335 1.00 10.03  1
. .
ATOM 6560 CB   CB   . ASN ASN ASN B B 426 426 . 83.978  97.264  -16.679 1.00 13.69  1
. .
ATOM 6561 CG   CG   . ASN ASN ASN B B 426 426 . 84.192  96.635  -18.049 1.00 19.76  1
. .
ATOM 6562 OD1  OD1  . ASN ASN ASN B B 426 426 . 83.524  96.991  -19.028 1.00 26.20  1
. .
ATOM 6563 ND2  ND2  . ASN ASN ASN B B 426 426 . 85.136  95.702  -18.129 1.00 25.64  1
. .
ATOM 6564 C    C    . ASN ASN ASN B B 426 426 . 84.555  99.229  -15.206 1.00 6.98   1
. .
ATOM 6565 O    O    . ASN ASN ASN B B 426 426 . 83.347  99.687  -15.202 1.00 6.10   1
. .
ATOM 6566 N    N    . PHE PHE PHE B B 427 427 . 85.486  99.569  -14.308 1.00 4.23   1
. .
ATOM 6567 CA   CA   . PHE PHE PHE B B 427 427 . 85.204  100.561 -13.210 1.00 2.74   1
. .
ATOM 6568 CB   CB   . PHE PHE PHE B B 427 427 . 86.380  100.824 -12.297 1.00 3.27   1
. .
ATOM 6569 CG   CG   . PHE PHE PHE B B 427 427 . 87.444  101.705 -12.874 1.00 2.69   1
. .
ATOM 6570 CD1  CD1  . PHE PHE PHE B B 427 427 . 88.443  101.184 -13.679 1.00 5.55   1
. .
ATOM 6571 CE1  CE1  . PHE PHE PHE B B 427 427 . 89.432  102.003 -14.182 1.00 8.92   1
. .
ATOM 6572 CZ   CZ   . PHE PHE PHE B B 427 427 . 89.401  103.316 -13.865 1.00 8.13   1
. .
ATOM 6573 CE2  CE2  . PHE PHE PHE B B 427 427 . 88.401  103.827 -13.036 1.00 4.85   1
. .
ATOM 6574 CD2  CD2  . PHE PHE PHE B B 427 427 . 87.448  103.066 -12.617 1.00 4.12   1
. .
ATOM 6575 C    C    . PHE PHE PHE B B 427 427 . 84.597  101.895 -13.693 1.00 3.57   1
. .
ATOM 6576 O    O    . PHE PHE PHE B B 427 427 . 83.719  102.401 -13.057 1.00 4.72   1
. .
ATOM 6577 N    N    . ARG ARG ARG B B 428 428 . 85.019  102.341 -14.871 1.00 4.63   1
. .
ATOM 6578 CA   CA   . ARG ARG ARG B B 428 428 . 84.474  103.630 -15.385 1.00 5.67   1
. .
ATOM 6579 CB   CB   . ARG ARG ARG B B 428 428 . 85.399  104.287 -16.415 1.00 6.18   1
. .
ATOM 6580 CG   CG   . ARG ARG ARG B B 428 428 . 86.774  104.644 -15.921 1.00 6.11   1
. .
ATOM 6581 CD   CD   . ARG ARG ARG B B 428 428 . 87.600  105.346 -16.997 1.00 6.25   1
. .
ATOM 6582 NE   NE   . ARG ARG ARG B B 428 428 . 86.875  106.389 -17.703 1.00 5.22   1
. .
ATOM 6583 CZ   CZ   . ARG ARG ARG B B 428 428 . 87.417  107.077 -18.702 1.00 5.52   1
. .
ATOM 6584 NH1  NH1  . ARG ARG ARG B B 428 428 . 88.687  106.845 -19.057 1.00 2.95   1
. .
ATOM 6585 NH2  NH2  . ARG ARG ARG B B 428 428 . 86.679  108.002 -19.285 1.00 6.06   1
. .
ATOM 6586 C    C    . ARG ARG ARG B B 428 428 . 83.040  103.505 -15.852 1.00 6.95   1
. .
ATOM 6587 O    O    . ARG ARG ARG B B 428 428 . 82.246  104.486 -15.725 1.00 11.08  1
. .
ATOM 6588 N    N    . ASN ASN ASN B B 429 429 . 82.677  102.343 -16.429 1.00 7.89   1
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ATOM 6589 CA   CA   . ASN ASN ASN B B 429 429 . 81.371  102.141 -16.963 1.00 9.40   1
. .
ATOM 6590 CB   CB   . ASN ASN ASN B B 429 429 . 81.407  102.472 -18.454 1.00 11.54  1
. .
ATOM 6591 CG   CG   . ASN ASN ASN B B 429 429 . 82.336  101.551 -19.251 1.00 12.65  1
. .
ATOM 6592 OD1  OD1  . ASN ASN ASN B B 429 429 . 82.055  101.227 -20.416 1.00 18.39  1
. .
ATOM 6593 ND2  ND2  . ASN ASN ASN B B 429 429 . 83.408  101.080 -18.620 1.00 14.48  1
. .
ATOM 6594 C    C    . ASN ASN ASN B B 429 429 . 80.863  100.726 -16.704 1.00 8.90   1
. .
ATOM 6595 O    O    . ASN ASN ASN B B 429 429 . 80.879  99.851  -17.585 1.00 9.31   1
. .
ATOM 6596 N    N    . PRO PRO PRO B B 430 430 . 80.477  100.455 -15.449 1.00 9.14   1
. .
ATOM 6597 CA   CA   . PRO PRO PRO B B 430 430 . 80.230  99.063  -15.124 1.00 10.09  1
. .
ATOM 6598 CB   CB   . PRO PRO PRO B B 430 430 . 80.287  99.059  -13.602 1.00 9.11   1
. .
ATOM 6599 CG   CG   . PRO PRO PRO B B 430 430 . 79.938  100.462 -13.208 1.00 10.42  1
. .
ATOM 6600 CD   CD   . PRO PRO PRO B B 430 430 . 80.500  101.332 -14.251 1.00 10.26  1
. .
ATOM 6601 C    C    . PRO PRO PRO B B 430 430 . 78.849  98.621  -15.562 1.00 12.70  1
. .
ATOM 6602 O    O    . PRO PRO PRO B B 430 430 . 78.528  97.447  -15.510 1.00 12.86  1
. .
ATOM 6603 N    N    . SER SER SER B B 431 431 . 78.011  99.563  -15.975 1.00 16.22  1
. .
ATOM 6604 CA   CA   . SER SER SER B B 431 431 . 76.713  99.200  -16.524 1.00 20.39  1
. .
ATOM 6605 CB   CB   . SER SER SER B B 431 431 . 75.945  100.425 -16.951 1.00 20.10  1
. .
ATOM 6606 OG   OG   . SER SER SER B B 431 431 . 76.413  100.855 -18.201 1.00 20.92  1
. .
ATOM 6607 C    C    . SER SER SER B B 431 431 . 76.826  98.268  -17.733 1.00 22.94  1
. .
ATOM 6608 O    O    . SER SER SER B B 431 431 . 75.823  97.632  -18.048 1.00 24.06  1
. .
ATOM 6609 N    N    . VAL VAL VAL B B 432 432 . 77.994  98.188  -18.391 1.00 23.43  1
. .
ATOM 6610 CA   CA   . VAL VAL VAL B B 432 432 . 78.222  97.153  -19.430 1.00 25.98  1
. .
ATOM 6611 CB   CB   . VAL VAL VAL B B 432 432 . 79.250  97.562  -20.477 1.00 25.71  1
. .
ATOM 6612 CG1  CG1  . VAL VAL VAL B B 432 432 . 79.323  99.049  -20.611 1.00 27.60  1
. .
ATOM 6613 CG2  CG2  . VAL VAL VAL B B 432 432 . 80.650  97.019  -20.102 1.00 26.88  1
. .
ATOM 6614 C    C    . VAL VAL VAL B B 432 432 . 78.775  95.893  -18.777 1.00 26.77  1
. .
ATOM 6615 O    O    . VAL VAL VAL B B 432 432 . 78.383  94.783  -19.121 1.00 28.93  1
. .
ATOM 6616 MG+2 MG+2 . MG2 MG2 MG2 B B 599 599 . 88.730  115.510 -3.538  1.00 2.00   1
. .
ATOM 6617 MG+2 MG+2 . MG2 MG2 MG2 B B 600 600 . 88.365  117.986 -0.472  1.00 2.00   1
. .
ATOM 6618 O4P  O4P  . 2PG 2PG 2PG B B 601 601 . 87.146  115.121 2.700   1.00 2.09   1
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ATOM 6619 P    P    . 2PG 2PG 2PG B B 601 601 . 88.223  115.939 2.111   1.00 2.00   1
. .
ATOM 6620 O2P  O2P  . 2PG 2PG 2PG B B 601 601 . 89.218  116.570 3.013   1.00 2.00   1
. .
ATOM 6621 O3P  O3P  . 2PG 2PG 2PG B B 601 601 . 87.677  117.019 1.174   1.00 2.00   1
. .
ATOM 6622 O1P  O1P  . 2PG 2PG 2PG B B 601 601 . 89.201  114.976 1.142   1.00 3.23   1
. .
ATOM 6623 C2   C2   . 2PG 2PG 2PG B B 601 601 . 88.541  114.197 0.155   1.00 9.89   1
. .
ATOM 6624 C1   C1   . 2PG 2PG 2PG B B 601 601 . 88.590  114.850 -1.232  1.00 5.63   1
. .
ATOM 6625 O2   O2   . 2PG 2PG 2PG B B 601 601 . 88.192  114.048 -2.178  1.00 3.38   1
. .
ATOM 6626 O1   O1   . 2PG 2PG 2PG B B 601 601 . 88.938  116.107 -1.447  1.00 3.80   1
. .
ATOM 6627 C3   C3   . 2PG 2PG 2PG B B 601 601 . 89.122  112.743 0.135   1.00 13.05  1
. .
ATOM 6628 O3   O3   . 2PG 2PG 2PG B B 601 601 . 88.588  111.896 1.136   1.00 24.62  1
. .
ATOM 6629 O    O    . HOH HOH HOH B B 800 800 . 89.465  117.199 -4.363  1.00 2.28   1
. .
ATOM 6630 O    O    . HOH HOH HOH B B 801 801 . 89.186  119.045 -2.139  1.00 2.00   1
. .
ATOM 6631 O    O    . HOH HOH HOH B B 802 802 . 86.540  117.936 -1.416  1.00 2.46   1
. .
ATOM 6632 N    N    . GLY GLY GLY B B 155 155 . 99.005  117.568 0.224   0.26 2.00   1
. .
ATOM 6633 CA   CA   . GLY GLY GLY B B 155 155 . 97.870  118.515 0.186   0.26 2.14   1
. .
ATOM 6634 C    C    . GLY GLY GLY B B 155 155 . 97.907  119.591 1.240   0.26 2.85   1
. .
ATOM 6635 O    O    . GLY GLY GLY B B 155 155 . 98.947  119.881 1.864   0.26 2.82   1
. .
ATOM 6636 N    N    . SER SER SER B B 156 156 . 96.746  120.200 1.425   0.26 3.29   1
. .
ATOM 6637 CA   CA   . SER SER SER B B 156 156 . 96.542  121.278 2.369   0.26 2.49   1
. .
ATOM 6638 CB   CB   . SER SER SER B B 156 156 . 95.054  121.562 2.451   0.26 2.05   1
. .
ATOM 6639 OG   OG   . SER SER SER B B 156 156 . 94.846  122.760 1.727   0.26 6.61   1
. .
ATOM 6640 C    C    . SER SER SER B B 156 156 . 97.053  121.075 3.759   0.26 2.35   1
. .
ATOM 6641 O    O    . SER SER SER B B 156 156 . 97.458  122.021 4.444   0.26 2.47   1
. .
ATOM 6642 N    N    . HIS HIS HIS B B 157 157 . 97.026  119.831 4.160   0.26 2.27   1
. .
ATOM 6643 CA   CA   . HIS HIS HIS B B 157 157 . 97.087  119.516 5.560   0.26 3.07   1
. .
ATOM 6644 CB   CB   . HIS HIS HIS B B 157 157 . 95.681  119.121 6.004   0.26 3.91   1
. .
ATOM 6645 CG   CG   . HIS HIS HIS B B 157 157 . 94.656  120.191 5.785   0.26 2.97   1
. .
ATOM 6646 ND1  ND1  . HIS HIS HIS B B 157 157 . 93.894  120.271 4.643   0.26 4.41   1
. .
ATOM 6647 CE1  CE1  . HIS HIS HIS B B 157 157 . 93.092  121.322 4.715   0.26 2.00   1
. .
ATOM 6648 NE2  NE2  . HIS HIS HIS B B 157 157 . 93.290  121.912 5.881   0.26 3.71   1
. .
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ATOM 6649 CD2  CD2  . HIS HIS HIS B B 157 157 . 94.265  121.227 6.566   0.26 3.59   1
. .
ATOM 6650 C    C    . HIS HIS HIS B B 157 157 . 98.018  118.349 5.804   0.26 2.84   1
. .
ATOM 6651 O    O    . HIS HIS HIS B B 157 157 . 97.791  117.560 6.711   0.26 2.79   1
. .
ATOM 6652 N    N    . ALA ALA ALA B B 158 158 . 99.071  118.217 5.010   0.26 2.76   1
. .
ATOM 6653 CA   CA   . ALA ALA ALA B B 158 158 . 99.870  117.018 5.150   0.26 2.18   1
. .
ATOM 6654 CB   CB   . ALA ALA ALA B B 158 158 . 100.047 116.309 3.785   0.26 2.87   1
. .
ATOM 6655 C    C    . ALA ALA ALA B B 158 158 . 101.141 117.310 5.783   0.26 2.67   1
. .
ATOM 6656 O    O    . ALA ALA ALA B B 158 158 . 101.786 118.298 5.442   0.26 2.79   1
. .
ATOM 6657 N    N    . GLY GLY GLY B B 159 159 . 101.516 116.480 6.758   0.26 2.15   1
. .
ATOM 6658 CA   CA   . GLY GLY GLY B B 159 159 . 102.676 116.820 7.574   0.26 2.00   1
. .
ATOM 6659 C    C    . GLY GLY GLY B B 159 159 . 104.021 116.535 6.936   0.26 2.00   1
. .
ATOM 6660 O    O    . GLY GLY GLY B B 159 159 . 104.316 115.445 6.526   0.26 2.02   1
. .
ATOM 6661 O    O    . HOH HOH HOH S . 2   2   . 83.198  123.863 -4.150  1.00 2.13   1
. .
ATOM 6662 O    O    . HOH HOH HOH S . 3   3   . 91.111  111.347 9.672   1.00 2.00   1
. .
ATOM 6663 O    O    . HOH HOH HOH S . 4   4   . 85.545  100.920 34.475  1.00 2.92   1
. .
ATOM 6664 O    O    . HOH HOH HOH S . 5   5   . 89.522  97.328  10.892  1.00 2.00   1
. .
ATOM 6665 O    O    . HOH HOH HOH S . 6   6   . 85.171  107.922 14.722  1.00 2.00   1
. .
ATOM 6666 O    O    . HOH HOH HOH S . 7   7   . 85.361  119.296 -22.589 1.00 2.00   1
. .
ATOM 6667 O    O    . HOH HOH HOH S . 8   8   . 87.266  95.806  21.350  1.00 2.00   1
. .
ATOM 6668 O    O    . HOH HOH HOH S . 9   9   . 78.386  68.293  15.364  1.00 2.60   1
. .
ATOM 6669 O    O    . HOH HOH HOH S . 10  10  . 95.902  104.778 24.516  1.00 2.00   1
. .
ATOM 6670 O    O    . HOH HOH HOH S . 11  11  . 80.207  112.778 2.307   1.00 3.64   1
. .
ATOM 6671 O    O    . HOH HOH HOH S . 12  12  . 89.660  121.238 -5.286  1.00 2.62   1
. .
ATOM 6672 O    O    . HOH HOH HOH S . 13  13  . 93.564  91.945  23.380  1.00 2.92   1
. .
ATOM 6673 O    O    . HOH HOH HOH S . 14  14  . 84.158  69.578  16.140  1.00 2.00   1
. .
ATOM 6674 O    O    . HOH HOH HOH S . 15  15  . 99.485  84.139  4.494   1.00 2.09   1
. .
ATOM 6675 O    O    . HOH HOH HOH S . 16  16  . 79.977  105.724 5.515   1.00 2.00   1
. .
ATOM 6676 O    O    . HOH HOH HOH S . 17  17  . 87.143  109.541 46.241  1.00 2.55   1
. .
ATOM 6677 O    O    . HOH HOH HOH S . 18  18  . 91.226  106.301 -0.846  1.00 2.71   1
. .
ATOM 6678 O    O    . HOH HOH HOH S . 19  19  . 81.559  103.243 18.267  1.00 2.00   1
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ATOM 6679 O    O    . HOH HOH HOH S . 20  20  . 91.327  93.456  26.386  1.00 2.05   1
. .
ATOM 6680 O    O    . HOH HOH HOH S . 21  21  . 81.126  116.226 -6.258  1.00 2.31   1
. .
ATOM 6681 O    O    . HOH HOH HOH S . 22  22  . 95.965  119.850 -2.735  1.00 4.00   1
. .
ATOM 6682 O    O    . HOH HOH HOH S . 23  23  . 82.544  118.638 5.728   1.00 3.56   1
. .
ATOM 6683 O    O    . HOH HOH HOH S . 24  24  . 98.569  89.643  18.880  1.00 3.98   1
. .
ATOM 6684 O    O    . HOH HOH HOH S . 25  25  . 99.034  91.496  30.943  1.00 2.00   1
. .
ATOM 6685 O    O    . HOH HOH HOH S . 26  26  . 106.880 107.846 43.706  1.00 5.90   1
. .
ATOM 6686 O    O    . HOH HOH HOH S . 27  27  . 107.564 94.866  27.168  1.00 4.99   1
. .
ATOM 6687 O    O    . HOH HOH HOH S . 28  28  . 82.704  124.663 19.914  1.00 4.08   1
. .
ATOM 6688 O    O    . HOH HOH HOH S . 29  29  . 97.153  100.464 13.850  1.00 2.00   1
. .
ATOM 6689 O    O    . HOH HOH HOH S . 30  30  . 97.938  102.917 24.192  1.00 3.57   1
. .
ATOM 6690 O    O    . HOH HOH HOH S . 31  31  . 95.646  81.474  10.497  1.00 2.00   1
. .
ATOM 6691 O    O    . HOH HOH HOH S . 32  32  . 79.951  68.478  17.152  1.00 3.94   1
. .
ATOM 6692 O    O    . HOH HOH HOH S . 33  33  . 109.488 100.148 23.186  1.00 2.00   1
. .
ATOM 6693 O    O    . HOH HOH HOH S . 34  34  . 115.347 109.578 27.644  1.00 8.46   1
. .
ATOM 6694 O    O    . HOH HOH HOH S . 35  35  . 88.438  111.797 -20.972 1.00 2.88   1
. .
ATOM 6695 O    O    . HOH HOH HOH S . 36  36  . 79.054  109.678 0.057   1.00 2.86   1
. .
ATOM 6696 O    O    . HOH HOH HOH S . 37  37  . 80.904  108.489 4.878   1.00 4.96   1
. .
ATOM 6697 O    O    . HOH HOH HOH S . 38  38  . 80.452  123.551 21.448  1.00 5.11   1
. .
ATOM 6698 O    O    . HOH HOH HOH S . 39  39  . 100.722 102.183 8.449   1.00 4.26   1
. .
ATOM 6699 O    O    . HOH HOH HOH S . 40  40  . 107.649 99.340  21.155  1.00 3.33   1
. .
ATOM 6700 O    O    . HOH HOH HOH S . 41  41  . 99.768  87.816  20.399  1.00 3.06   1
. .
ATOM 6701 O    O    . HOH HOH HOH S . 42  42  . 98.060  114.510 12.325  1.00 14.24  1
. .
ATOM 6702 O    O    . HOH HOH HOH S . 43  43  . 83.046  97.135  8.916   1.00 2.06   1
. .
ATOM 6703 O    O    . HOH HOH HOH S . 44  44  . 85.273  82.956  5.360   1.00 3.20   1
. .
ATOM 6704 O    O    . HOH HOH HOH S . 45  45  . 91.938  94.097  23.385  1.00 2.00   1
. .
ATOM 6705 O    O    . HOH HOH HOH S . 46  46  . 98.445  94.334  12.695  1.00 6.48   1
. .
ATOM 6706 O    O    . HOH HOH HOH S . 47  47  . 99.357  84.028  27.842  1.00 3.27   1
. .
ATOM 6707 O    O    . HOH HOH HOH S . 48  48  . 87.297  113.733 38.487  1.00 9.48   1
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ATOM 6708 O    O    . HOH HOH HOH S . 49  49  . 79.478  117.214 11.645  1.00 5.10   1
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ATOM 6709 O    O    . HOH HOH HOH S . 50  50  . 84.180  116.399 12.555  1.00 4.49   1
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ATOM 6710 O    O    . HOH HOH HOH S . 51  51  . 97.109  82.962  3.738   1.00 2.00   1
. .
ATOM 6711 O    O    . HOH HOH HOH S . 52  52  . 99.373  102.529 10.917  1.00 3.73   1
. .
ATOM 6712 O    O    . HOH HOH HOH S . 53  53  . 64.507  104.840 3.457   1.00 12.02  1
. .
ATOM 6713 O    O    . HOH HOH HOH S . 54  54  . 90.950  110.018 -9.464  1.00 2.43   1
. .
ATOM 6714 O    O    . HOH HOH HOH S . 55  55  . 82.813  115.411 24.940  1.00 3.47   1
. .
ATOM 6715 O    O    . HOH HOH HOH S . 56  56  . 104.800 111.741 39.592  1.00 6.96   1
. .
ATOM 6716 O    O    . HOH HOH HOH S . 57  57  . 95.976  113.599 13.901  1.00 2.30   1
. .
ATOM 6717 O    O    . HOH HOH HOH S . 58  58  . 94.189  87.412  14.294  1.00 4.44   1
. .
ATOM 6718 O    O    . HOH HOH HOH S . 60  60  . 105.493 112.802 11.778  1.00 6.41   1
. .
ATOM 6719 O    O    . HOH HOH HOH S . 61  61  . 79.655  99.528  -7.268  1.00 2.82   1
. .
ATOM 6720 O    O    . HOH HOH HOH S . 62  62  . 94.741  119.358 -0.211  1.00 3.71   1
. .
ATOM 6721 O    O    . HOH HOH HOH S . 63  63  . 92.691  75.284  9.402   1.00 5.04   1
. .
ATOM 6722 O    O    . HOH HOH HOH S . 64  64  . 88.121  121.824 -7.899  1.00 2.74   1
. .
ATOM 6723 O    O    . HOH HOH HOH S . 65  65  . 100.735 103.315 32.173  1.00 2.73   1
. .
ATOM 6724 O    O    . HOH HOH HOH S . 66  66  . 87.883  126.051 -22.142 1.00 5.19   1
. .
ATOM 6725 O    O    . HOH HOH HOH S . 67  67  . 77.839  84.731  27.421  1.00 4.52   1
. .
ATOM 6726 O    O    . HOH HOH HOH S . 68  68  . 90.182  94.841  21.382  1.00 2.52   1
. .
ATOM 6727 O    O    . HOH HOH HOH S . 70  70  . 105.628 88.001  27.403  1.00 2.42   1
. .
ATOM 6728 O    O    . HOH HOH HOH S . 71  71  . 80.152  117.372 8.670   1.00 5.16   1
. .
ATOM 6729 O    O    . HOH HOH HOH S . 72  72  . 77.871  76.948  11.683  1.00 3.66   1
. .
ATOM 6730 O    O    . HOH HOH HOH S . 73  73  . 91.005  105.840 -17.668 1.00 14.09  1
. .
ATOM 6731 O    O    . HOH HOH HOH S . 74  74  . 95.383  88.181  16.770  1.00 4.48   1
. .
ATOM 6732 O    O    . HOH HOH HOH S . 75  75  . 88.853  110.432 -7.638  1.00 3.18   1
. .
ATOM 6733 O    O    . HOH HOH HOH S . 76  76  . 91.971  99.575  38.481  1.00 4.26   1
. .
ATOM 6734 O    O    . HOH HOH HOH S . 77  77  . 102.443 104.084 20.583  1.00 3.45   1
. .
ATOM 6735 O    O    . HOH HOH HOH S . 78  78  . 99.236  117.822 35.293  1.00 11.41  1
. .
ATOM 6736 O    O    . HOH HOH HOH S . 79  79  . 72.914  114.280 22.916  1.00 7.36   1
. .
ATOM 6737 O    O    . HOH HOH HOH S . 80  80  . 97.594  86.037  20.681  1.00 3.20   1
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ATOM 6738 O    O    . HOH HOH HOH S . 81  81  . 81.490  128.405 -10.567 1.00 4.25   1
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ATOM 6739 O    O    . HOH HOH HOH S . 82  82  . 93.712  106.088 41.855  1.00 4.71   1
. .
ATOM 6740 O    O    . HOH HOH HOH S . 83  83  . 89.308  94.306  17.601  1.00 2.87   1
. .
ATOM 6741 O    O    . HOH HOH HOH S . 84  84  . 87.489  115.834 -27.558 1.00 13.92  1
. .
ATOM 6742 O    O    . HOH HOH HOH S . 85  85  . 96.133  91.434  12.220  1.00 2.94   1
. .
ATOM 6743 O    O    . HOH HOH HOH S . 86  86  . 85.114  112.891 -21.590 1.00 6.22   1
. .
ATOM 6744 O    O    . HOH HOH HOH S . 87  87  . 84.055  125.709 -19.671 1.00 4.80   1
. .
ATOM 6745 O    O    . HOH HOH HOH S . 88  88  . 81.305  104.729 -12.668 1.00 6.65   1
. .
ATOM 6746 O    O    . HOH HOH HOH S . 89  89  . 78.626  119.898 4.559   1.00 3.30   1
. .
ATOM 6747 O    O    . HOH HOH HOH S . 90  90  . 80.630  69.380  21.494  1.00 11.12  1
. .
ATOM 6748 O    O    . HOH HOH HOH S . 91  91  . 99.606  109.941 -23.353 1.00 16.60  1
. .
ATOM 6749 O    O    . HOH HOH HOH S . 92  92  . 81.329  120.543 4.228   1.00 2.91   1
. .
ATOM 6750 O    O    . HOH HOH HOH S . 93  93  . 100.431 99.232  -13.590 1.00 12.10  1
. .
ATOM 6751 O    O    . HOH HOH HOH S . 94  94  . 87.359  129.348 -6.437  1.00 3.94   1
. .
ATOM 6752 O    O    . HOH HOH HOH S . 95  95  . 99.514  112.455 -22.185 1.00 4.87   1
. .
ATOM 6753 O    O    . HOH HOH HOH S . 96  96  . 76.706  122.651 15.509  1.00 3.55   1
. .
ATOM 6754 O    O    . HOH HOH HOH S . 97  97  . 97.445  131.121 -14.298 1.00 244.05 1
. .
ATOM 6755 O    O    . HOH HOH HOH S . 98  98  . 94.758  112.122 11.711  1.00 5.53   1
. .
ATOM 6756 O    O    . HOH HOH HOH S . 99  99  . 114.620 106.955 23.121  1.00 4.37   1
. .
ATOM 6757 O    O    . HOH HOH HOH S . 100 100 . 87.545  116.462 11.213  1.00 7.77   1
. .
ATOM 6758 O    O    . HOH HOH HOH S . 101 101 . 78.881  78.829  31.912  1.00 5.40   1
. .
ATOM 6759 O    O    . HOH HOH HOH S . 102 102 . 108.313 95.066  44.991  1.00 8.96   1
. .
ATOM 6760 O    O    . HOH HOH HOH S . 103 103 . 76.289  121.655 -2.390  1.00 3.58   1
. .
ATOM 6761 O    O    . HOH HOH HOH S . 104 104 . 95.245  86.474  19.034  1.00 5.42   1
. .
ATOM 6762 O    O    . HOH HOH HOH S . 105 105 . 87.751  125.604 -1.368  1.00 13.26  1
. .
ATOM 6763 O    O    . HOH HOH HOH S . 106 106 . 106.254 124.544 20.653  1.00 9.43   1
. .
ATOM 6764 O    O    . HOH HOH HOH S . 107 107 . 91.389  89.497  0.972   1.00 4.43   1
. .
ATOM 6765 O    O    . HOH HOH HOH S . 108 108 . 79.411  81.471  32.462  1.00 10.31  1
. .
ATOM 6766 O    O    . HOH HOH HOH S . 109 109 . 88.993  130.495 -9.149  1.00 11.32  1
. .
ATOM 6767 O    O    . HOH HOH HOH S . 110 110 . 110.863 115.600 -3.820  1.00 9.76   1
. .
ATOM 6768 O    O    . HOH HOH HOH S . 111 111 . 113.328 110.552 14.896  1.00 9.73   1
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ATOM 6769 O    O    . HOH HOH HOH S . 112 112 . 82.606  120.858 29.902  1.00 121.50 1
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ATOM 6770 O    O    . HOH HOH HOH S . 114 114 . 90.059  129.196 -5.254  1.00 17.49  1
. .
ATOM 6771 O    O    . HOH HOH HOH S . 115 115 . 99.452  101.145 31.157  1.00 8.01   1
. .
ATOM 6772 O    O    . HOH HOH HOH S . 116 116 . 81.109  108.877 8.808   1.00 4.90   1
. .
ATOM 6773 O    O    . HOH HOH HOH S . 117 117 . 99.141  124.585 20.428  1.00 10.10  1
. .
ATOM 6774 O    O    . HOH HOH HOH S . 118 118 . 89.741  92.412  -12.978 1.00 7.51   1
. .
ATOM 6775 O    O    . HOH HOH HOH S . 119 119 . 120.526 103.240 25.624  1.00 15.16  1
. .
ATOM 6776 O    O    . HOH HOH HOH S . 120 120 . 90.968  109.152 -0.890  1.00 6.84   1
. .
ATOM 6777 O    O    . HOH HOH HOH S . 121 121 . 80.939  110.198 2.501   1.00 2.53   1
. .
ATOM 6778 O    O    . HOH HOH HOH S . 122 122 . 90.247  84.476  39.146  1.00 10.05  1
. .
ATOM 6779 O    O    . HOH HOH HOH S . 123 123 . 112.994 90.935  25.111  1.00 7.26   1
. .
ATOM 6780 O    O    . HOH HOH HOH S . 124 124 . 72.272  75.744  28.563  1.00 13.78  1
. .
ATOM 6781 O    O    . HOH HOH HOH S . 125 125 . 90.259  88.448  3.100   1.00 12.77  1
. .
ATOM 6782 O    O    . HOH HOH HOH S . 126 126 . 115.992 104.315 17.939  1.00 13.53  1
. .
ATOM 6783 O    O    . HOH HOH HOH S . 127 127 . 82.865  124.658 2.396   1.00 9.41   1
. .
ATOM 6784 O    O    . HOH HOH HOH S . 128 128 . 76.645  99.697  6.057   1.00 10.87  1
. .
ATOM 6785 O    O    . HOH HOH HOH S . 129 129 . 106.035 110.235 8.225   1.00 12.22  1
. .
ATOM 6786 O    O    . HOH HOH HOH S . 130 130 . 68.886  80.157  19.241  1.00 15.17  1
. .
ATOM 6787 O    O    . HOH HOH HOH S . 131 131 . 96.813  73.471  13.962  1.00 19.05  1
. .
ATOM 6788 O    O    . HOH HOH HOH S . 132 132 . 109.403 97.124  0.138   1.00 11.83  1
. .
ATOM 6789 O    O    . HOH HOH HOH S . 133 133 . 109.056 111.147 12.704  1.00 13.65  1
. .
ATOM 6790 O    O    . HOH HOH HOH S . 134 134 . 103.032 90.945  -3.381  1.00 14.88  1
. .
ATOM 6791 O    O    . HOH HOH HOH S . 135 135 . 97.272  80.891  1.949   1.00 10.10  1
. .
ATOM 6792 O    O    . HOH HOH HOH S . 136 136 . 97.955  106.562 -18.289 1.00 8.54   1
. .
ATOM 6793 O    O    . HOH HOH HOH S . 137 137 . 92.634  86.765  -3.158  1.00 19.04  1
. .
ATOM 6794 O    O    . HOH HOH HOH S . 138 138 . 78.687  108.318 7.184   1.00 6.36   1
. .
ATOM 6795 O    O    . HOH HOH HOH S . 139 139 . 81.715  117.618 26.525  1.00 12.40  1
. .
ATOM 6796 O    O    . HOH HOH HOH S . 140 140 . 93.287  75.505  25.016  1.00 7.64   1
. .
ATOM 6797 O    O    . HOH HOH HOH S . 141 141 . 85.731  92.629  37.804  1.00 15.50  1
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ATOM 6798 O    O    . HOH HOH HOH S . 142 142 . 70.726  121.324 -5.630  1.00 10.55  1
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ATOM 6799 O    O    . HOH HOH HOH S . 143 143 . 62.455  99.963  10.401  1.00 10.92  1
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ATOM 6800 O    O    . HOH HOH HOH S . 144 144 . 103.916 119.645 -4.873  1.00 8.64   1
. .
ATOM 6801 O    O    . HOH HOH HOH S . 146 146 . 88.075  119.392 18.113  1.00 15.01  1
. .
ATOM 6802 O    O    . HOH HOH HOH S . 147 147 . 89.033  124.250 23.097  1.00 15.47  1
. .
ATOM 6803 O    O    . HOH HOH HOH S . 148 148 . 81.758  115.669 -20.320 1.00 7.76   1
. .
ATOM 6804 O    O    . HOH HOH HOH S . 149 149 . 101.215 102.850 -18.197 1.00 37.74  1
. .
ATOM 6805 O    O    . HOH HOH HOH S . 150 150 . 89.576  79.525  5.568   1.00 6.85   1
. .
ATOM 6806 O    O    . HOH HOH HOH S . 151 151 . 101.437 81.527  13.391  1.00 15.95  1
. .
ATOM 6807 O    O    . HOH HOH HOH S . 152 152 . 66.963  122.828 3.030   1.00 11.47  1
. .
ATOM 6808 O    O    . HOH HOH HOH S . 153 153 . 68.610  122.278 0.873   1.00 9.45   1
. .
ATOM 6809 O    O    . HOH HOH HOH S . 154 154 . 75.777  115.150 22.750  1.00 10.49  1
. .
ATOM 6810 O    O    . HOH HOH HOH S . 155 155 . 76.674  82.505  32.617  1.00 15.63  1
. .
ATOM 6811 O    O    . HOH HOH HOH S . 156 156 . 62.362  111.448 19.621  1.00 9.42   1
. .
ATOM 6812 O    O    . HOH HOH HOH S . 157 157 . 79.709  125.275 23.368  1.00 11.68  1
. .
ATOM 6813 O    O    . HOH HOH HOH S . 158 158 . 78.165  110.505 27.509  1.00 16.88  1
. .
ATOM 6814 O    O    . HOH HOH HOH S . 159 159 . 97.579  98.997  43.083  1.00 14.61  1
. .
ATOM 6815 O    O    . HOH HOH HOH S . 160 160 . 81.841  128.841 -17.893 1.00 5.38   1
. .
ATOM 6816 O    O    . HOH HOH HOH S . 161 161 . 100.592 78.185  10.051  1.00 13.35  1
. .
ATOM 6817 O    O    . HOH HOH HOH S . 162 162 . 94.068  115.437 14.136  1.00 8.37   1
. .
ATOM 6818 O    O    . HOH HOH HOH S . 163 163 . 114.447 102.657 41.900  1.00 16.28  1
. .
ATOM 6819 O    O    . HOH HOH HOH S . 164 164 . 80.547  114.911 23.305  1.00 13.04  1
. .
ATOM 6820 O    O    . HOH HOH HOH S . 165 165 . 85.692  70.045  24.249  1.00 8.17   1
. .
ATOM 6821 O    O    . HOH HOH HOH S . 166 166 . 74.570  75.898  21.297  1.00 7.77   1
. .
ATOM 6822 O    O    . HOH HOH HOH S . 167 167 . 83.124  89.420  -11.504 1.00 12.62  1
. .
ATOM 6823 O    O    . HOH HOH HOH S . 168 168 . 61.443  107.528 -1.267  1.00 11.90  1
. .
ATOM 6824 O    O    . HOH HOH HOH S . 169 169 . 70.829  124.524 17.848  1.00 10.21  1
. .
ATOM 6825 O    O    . HOH HOH HOH S . 170 170 . 81.886  100.134 12.403  1.00 8.01   1
. .
ATOM 6826 O    O    . HOH HOH HOH S . 171 171 . 102.953 98.712  44.751  1.00 12.51  1
. .
ATOM 6827 O    O    . HOH HOH HOH S . 172 172 . 74.286  87.344  32.507  1.00 6.53   1
. .
ATOM 6828 O    O    . HOH HOH HOH S . 174 174 . 119.940 97.008  19.661  1.00 24.30  1
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ATOM 6829 O    O    . HOH HOH HOH S . 175 175 . 82.255  100.114 14.983  1.00 9.35   1
. .
ATOM 6830 O    O    . HOH HOH HOH S . 176 176 . 104.188 122.866 -0.191  1.00 15.88  1
. .
ATOM 6831 O    O    . HOH HOH HOH S . 177 177 . 107.748 93.520  29.941  1.00 8.78   1
. .
ATOM 6832 O    O    . HOH HOH HOH S . 178 178 . 57.467  108.871 11.518  1.00 11.96  1
. .
ATOM 6833 O    O    . HOH HOH HOH S . 179 179 . 59.544  120.945 15.053  1.00 13.29  1
. .
ATOM 6834 O    O    . HOH HOH HOH S . 180 180 . 75.575  101.110 37.882  1.00 26.76  1
. .
ATOM 6835 O    O    . HOH HOH HOH S . 181 181 . 73.035  119.838 21.891  1.00 8.74   1
. .
ATOM 6836 O    O    . HOH HOH HOH S . 182 182 . 72.070  95.771  5.958   1.00 16.25  1
. .
ATOM 6837 O    O    . HOH HOH HOH S . 183 183 . 92.330  87.292  -0.534  1.00 15.25  1
. .
ATOM 6838 O    O    . HOH HOH HOH S . 184 184 . 121.970 106.974 20.962  1.00 28.89  1
. .
ATOM 6839 O    O    . HOH HOH HOH S . 185 185 . 96.873  75.001  11.831  1.00 15.40  1
. .
ATOM 6840 O    O    . HOH HOH HOH S . 186 186 . 88.026  93.043  19.787  1.00 6.77   1
. .
ATOM 6841 O    O    . HOH HOH HOH S . 187 187 . 87.614  84.670  4.782   1.00 8.47   1
. .
ATOM 6842 O    O    . HOH HOH HOH S . 188 188 . 79.818  105.420 -17.542 1.00 18.59  1
. .
ATOM 6843 O    O    . HOH HOH HOH S . 189 189 . 113.407 92.677  21.636  1.00 17.22  1
. .
ATOM 6844 O    O    . HOH HOH HOH S . 190 190 . 81.615  120.655 27.558  1.00 9.79   1
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ATOM 6845 O    O    . HOH HOH HOH S . 191 191 . 79.284  126.623 11.004  1.00 15.40  1
. .
ATOM 6846 O    O    . HOH HOH HOH S . 192 192 . 87.215  113.511 -23.729 1.00 12.91  1
. .
ATOM 6847 O    O    . HOH HOH HOH S . 193 193 . 71.100  85.401  21.523  1.00 8.32   1
. .
ATOM 6848 O    O    . HOH HOH HOH S . 194 194 . 88.098  72.200  6.122   1.00 12.04  1
. .
ATOM 6849 O    O    . HOH HOH HOH S . 195 195 . 63.019  99.814  -0.757  1.00 24.08  1
. .
ATOM 6850 O    O    . HOH HOH HOH S . 196 196 . 82.735  73.581  31.833  1.00 17.76  1
. .
ATOM 6851 O    O    . HOH HOH HOH S . 197 197 . 95.315  112.491 1.319   1.00 7.62   1
. .
ATOM 6852 O    O    . HOH HOH HOH S . 198 198 . 81.470  95.776  18.396  1.00 13.45  1
. .
ATOM 6853 O    O    . HOH HOH HOH S . 199 199 . 80.446  77.123  10.236  1.00 13.00  1
. .
ATOM 6854 O    O    . HOH HOH HOH S . 200 200 . 111.180 110.154 41.727  1.00 14.23  1
. .
ATOM 6855 O    O    . HOH HOH HOH S . 201 201 . 58.174  103.219 9.885   1.00 14.39  1
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ATOM 6856 O    O    . HOH HOH HOH S . 202 202 . 101.932 84.131  18.600  1.00 8.61   1
. .
ATOM 6857 O    O    . HOH HOH HOH S . 203 203 . 62.487  128.434 2.515   1.00 25.60  1
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ATOM 6858 O    O    . HOH HOH HOH S . 204 204 . 103.812 101.953 43.923  1.00 17.18  1
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ATOM 6859 O    O    . HOH HOH HOH S . 205 205 . 57.458  115.477 2.389   1.00 15.42  1
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ATOM 6860 O    O    . HOH HOH HOH S . 206 206 . 94.684  110.512 -22.007 1.00 7.29   1
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ATOM 6861 O    O    . HOH HOH HOH S . 207 207 . 99.485  135.398 -3.674  1.00 30.82  1
. .
ATOM 6862 O    O    . HOH HOH HOH S . 208 208 . 76.903  92.366  16.774  1.00 11.97  1
. .
ATOM 6863 O    O    . HOH HOH HOH S . 209 209 . 107.816 117.430 2.757   1.00 34.98  1
. .
ATOM 6864 O    O    . HOH HOH HOH S . 210 210 . 97.944  122.320 -21.351 1.00 22.14  1
. .
ATOM 6865 O    O    . HOH HOH HOH S . 211 211 . 102.952 117.901 -21.614 1.00 17.49  1
. .
ATOM 6866 O    O    . HOH HOH HOH S . 212 212 . 104.488 122.215 -17.234 1.00 29.02  1
. .
ATOM 6867 O    O    . HOH HOH HOH S . 213 213 . 77.505  101.997 9.995   1.00 15.16  1
. .
ATOM 6868 O    O    . HOH HOH HOH S . 214 214 . 107.288 92.561  23.783  1.00 8.98   1
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ATOM 6869 O    O    . HOH HOH HOH S . 215 215 . 117.212 109.108 39.430  1.00 16.96  1
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ATOM 6870 O    O    . HOH HOH HOH S . 216 216 . 126.154 101.731 31.404  1.00 36.86  1
. .
ATOM 6871 O    O    . HOH HOH HOH S . 217 217 . 84.050  94.032  12.970  1.00 35.86  1
. .
ATOM 6872 O    O    . HOH HOH HOH S . 218 218 . 64.439  84.048  24.838  1.00 56.94  1
. .
ATOM 6873 O    O    . HOH HOH HOH S . 219 219 . 113.431 102.795 -2.105  1.00 13.76  1
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ATOM 6874 O    O    . HOH HOH HOH S . 220 220 . 72.228  93.062  24.279  1.00 14.52  1
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ATOM 6875 O    O    . HOH HOH HOH S . 221 221 . 76.973  126.449 -18.838 1.00 14.53  1
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ATOM 6876 O    O    . HOH HOH HOH S . 222 222 . 59.291  108.961 -0.261  1.00 15.37  1
. .
ATOM 6877 O    O    . HOH HOH HOH S . 223 223 . 90.819  120.276 15.283  1.00 19.41  1
. .
ATOM 6878 O    O    . HOH HOH HOH S . 224 224 . 64.006  93.508  8.958   1.00 23.72  1
. .
ATOM 6879 O    O    . HOH HOH HOH S . 225 225 . 102.581 95.624  9.761   1.00 17.55  1
. .
ATOM 6880 O    O    . HOH HOH HOH S . 226 226 . 72.864  74.237  18.637  1.00 31.55  1
. .
ATOM 6881 O    O    . HOH HOH HOH S . 227 227 . 57.857  101.858 14.164  1.00 20.04  1
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ATOM 6882 O    O    . HOH HOH HOH S . 228 228 . 124.531 100.515 36.171  1.00 21.75  1
. .
ATOM 6883 O    O    . HOH HOH HOH S . 229 229 . 78.821  97.998  9.325   1.00 28.19  1
. .
ATOM 6884 O    O    . HOH HOH HOH S . 230 230 . 74.373  91.853  22.255  1.00 17.04  1
. .
ATOM 6885 O    O    . HOH HOH HOH S . 231 231 . 101.207 92.014  44.746  1.00 12.17  1
. .
ATOM 6886 O    O    . HOH HOH HOH S . 232 232 . 93.175  105.015 44.219  1.00 13.41  1
. .
ATOM 6887 O    O    . HOH HOH HOH S . 233 233 . 82.208  72.911  29.035  1.00 8.95   1
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ATOM 6888 O    O    . HOH HOH HOH S . 234 234 . 74.530  94.501  -16.033 1.00 39.56  1
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ATOM 6889 O    O    . HOH HOH HOH S . 235 235 . 79.156  115.898 -20.078 1.00 8.52   1
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ATOM 6890 O    O    . HOH HOH HOH S . 236 236 . 101.126 89.853  16.107  1.00 9.47   1
. .
ATOM 6891 O    O    . HOH HOH HOH S . 237 237 . 56.461  114.628 17.740  1.00 16.22  1
. .
ATOM 6892 O    O    . HOH HOH HOH S . 238 238 . 86.937  101.226 -17.125 1.00 20.41  1
. .
ATOM 6893 O    O    . HOH HOH HOH S . 239 239 . 60.601  125.884 3.222   1.00 17.29  1
. .
ATOM 6894 O    O    . HOH HOH HOH S . 240 240 . 84.726  120.463 31.088  1.00 28.12  1
. .
ATOM 6895 O    O    . HOH HOH HOH S . 242 242 . 102.959 103.565 9.517   1.00 13.31  1
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ATOM 6896 O    O    . HOH HOH HOH S . 243 243 . 89.161  131.843 -6.899  1.00 16.88  1
. .
ATOM 6897 O    O    . HOH HOH HOH S . 244 244 . 80.822  94.374  21.117  1.00 28.60  1
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ATOM 6898 O    O    . HOH HOH HOH S . 245 245 . 52.736  112.446 6.789   1.00 15.98  1
. .
ATOM 6899 O    O    . HOH HOH HOH S . 246 246 . 72.614  100.844 12.643  1.00 12.80  1
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ATOM 6900 O    O    . HOH HOH HOH S . 247 247 . 126.925 97.831  26.790  1.00 39.11  1
. .
ATOM 6901 O    O    . HOH HOH HOH S . 248 248 . 90.024  97.454  39.329  1.00 13.41  1
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ATOM 6902 O    O    . HOH HOH HOH S . 249 249 . 73.305  120.392 -18.444 1.00 14.16  1
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ATOM 6903 O    O    . HOH HOH HOH S . 250 250 . 62.312  123.609 17.913  1.00 17.97  1
. .
ATOM 6904 O    O    . HOH HOH HOH S . 251 251 . 69.892  117.684 22.588  1.00 44.27  1
. .
ATOM 6905 O    O    . HOH HOH HOH S . 252 252 . 85.731  72.348  5.081   1.00 18.04  1
. .
ATOM 6906 O    O    . HOH HOH HOH S . 253 253 . 102.750 83.542  21.031  1.00 19.13  1
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ATOM 6907 O    O    . HOH HOH HOH S . 254 254 . 97.309  100.250 40.574  1.00 8.05   1
. .
ATOM 6908 O    O    . HOH HOH HOH S . 255 255 . 88.028  118.092 38.952  1.00 19.44  1
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ATOM 6909 O    O    . HOH HOH HOH S . 256 256 . 78.169  102.160 -16.951 1.00 14.31  1
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ATOM 6910 O    O    . HOH HOH HOH S . 257 257 . 86.987  118.471 9.749   1.00 16.64  1
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ATOM 6911 O    O    . HOH HOH HOH S . 258 258 . 102.059 88.339  -0.367  1.00 14.08  1
. .
ATOM 6912 O    O    . HOH HOH HOH S . 259 259 . 78.201  105.313 14.630  1.00 33.75  1
. .
ATOM 6913 O    O    . HOH HOH HOH S . 260 260 . 88.848  124.387 1.562   1.00 21.47  1
. .
ATOM 6914 O    O    . HOH HOH HOH S . 261 261 . 66.981  120.439 -4.113  1.00 41.82  1
. .
ATOM 6915 O    O    . HOH HOH HOH S . 262 262 . 84.720  107.838 -16.254 1.00 11.36  1
. .
ATOM 6916 O    O    . HOH HOH HOH S . 263 263 . 90.084  72.680  10.135  1.00 36.52  1
. .
ATOM 6917 O    O    . HOH HOH HOH S . 264 264 . 121.402 96.825  36.616  1.00 20.28  1
. .
ATOM 6918 O    O    . HOH HOH HOH S . 265 265 . 67.505  108.915 24.840  1.00 26.33  1
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ATOM 6919 O    O    . HOH HOH HOH S . 266 266 . 91.459  68.202  26.073  1.00 20.29  1
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ATOM 6920 O    O    . HOH HOH HOH S . 267 267 . 81.059  110.418 39.064  1.00 13.91  1
. .
ATOM 6921 O    O    . HOH HOH HOH S . 268 268 . 82.515  124.048 9.500   1.00 29.04  1
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ATOM 6922 O    O    . HOH HOH HOH S . 269 269 . 101.329 105.480 -18.912 1.00 16.19  1
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ATOM 6923 O    O    . HOH HOH HOH S . 270 270 . 94.461  121.197 -22.283 1.00 18.65  1
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ATOM 6924 O    O    . HOH HOH HOH S . 271 271 . 91.815  117.389 -28.612 1.00 12.68  1
. .
ATOM 6925 O    O    . HOH HOH HOH S . 272 272 . 69.474  119.185 -4.577  1.00 26.06  1
. .
ATOM 6926 O    O    . HOH HOH HOH S . 273 273 . 92.848  127.538 -1.511  1.00 24.46  1
. .
ATOM 6927 O    O    . HOH HOH HOH S . 274 274 . 98.550  80.552  -2.075  1.00 38.12  1
. .
ATOM 6928 O    O    . HOH HOH HOH S . 275 275 . 120.640 95.320  33.112  1.00 23.15  1
. .
ATOM 6929 O    O    . HOH HOH HOH S . 276 276 . 104.928 126.142 -5.945  1.00 115.82 1
. .
ATOM 6930 O    O    . HOH HOH HOH S . 277 277 . 111.794 119.001 12.488  1.00 24.83  1
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ATOM 6931 O    O    . HOH HOH HOH S . 278 278 . 84.380  107.243 -18.756 1.00 30.40  1
. .
ATOM 6932 O    O    . HOH HOH HOH S . 279 279 . 94.539  77.280  26.638  1.00 9.35   1
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ATOM 6933 O    O    . HOH HOH HOH S . 280 280 . 80.122  111.815 36.492  1.00 19.29  1
. .
ATOM 6934 O    O    . HOH HOH HOH S . 281 281 . 102.616 77.570  25.781  1.00 37.08  1
. .
ATOM 6935 O    O    . HOH HOH HOH S . 282 282 . 65.148  86.302  25.756  1.00 30.50  1
. .
ATOM 6936 O    O    . HOH HOH HOH S . 283 283 . 87.537  92.994  -15.165 1.00 22.02  1
. .
ATOM 6937 O    O    . HOH HOH HOH S . 284 284 . 77.399  85.690  8.291   1.00 18.47  1
. .
ATOM 6938 O    O    . HOH HOH HOH S . 285 285 . 112.968 88.033  27.672  1.00 15.79  1
. .
ATOM 6939 O    O    . HOH HOH HOH S . 286 286 . 71.548  110.127 29.933  1.00 18.42  1
. .
ATOM 6940 O    O    . HOH HOH HOH S . 287 287 . 105.159 118.016 -9.364  1.00 11.86  1
. .
ATOM 6941 O    O    . HOH HOH HOH S . 288 288 . 99.797  90.256  10.563  1.00 78.69  1
. .
ATOM 6942 O    O    . HOH HOH HOH S . 289 289 . 80.201  84.685  -6.974  1.00 37.45  1
. .
ATOM 6943 O    O    . HOH HOH HOH S . 290 290 . 73.684  75.981  10.789  1.00 9.13   1
. .
ATOM 6944 O    O    . HOH HOH HOH S . 291 291 . 99.439  74.022  9.136   1.00 38.13  1
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ATOM 6945 O    O    . HOH HOH HOH S . 292 292 . 96.608  124.811 32.899  1.00 23.02  1
. .
ATOM 6946 O    O    . HOH HOH HOH S . 293 293 . 109.096 114.085 10.628  1.00 26.02  1
. .
ATOM 6947 O    O    . HOH HOH HOH S . 294 294 . 71.426  89.913  -1.235  1.00 19.42  1
. .
ATOM 6948 O    O    . HOH HOH HOH S . 295 295 . 115.319 88.277  37.445  1.00 21.50  1
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ATOM 6949 O    O    . HOH HOH HOH S . 296 296 . 103.892 126.011 -8.520  1.00 13.31  1
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ATOM 6950 O    O    . HOH HOH HOH S . 297 297 . 86.340  78.583  6.124   1.00 14.21  1
. .
ATOM 6951 O    O    . HOH HOH HOH S . 298 298 . 96.304  113.822 -24.931 1.00 23.38  1
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ATOM 6952 O    O    . HOH HOH HOH S . 299 299 . 66.229  124.391 15.727  1.00 16.03  1
. .
ATOM 6953 O    O    . HOH HOH HOH S . 300 300 . 88.694  122.940 -1.750  1.00 9.86   1
. .
ATOM 6954 O    O    . HOH HOH HOH S . 301 301 . 77.291  127.775 -8.347  1.00 15.32  1
. .
ATOM 6955 O    O    . HOH HOH HOH S . 302 302 . 76.444  125.464 -3.274  1.00 17.90  1
. .
ATOM 6956 O    O    . HOH HOH HOH S . 303 303 . 84.425  121.055 -24.426 1.00 14.42  1
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ATOM 6957 O    O    . HOH HOH HOH S . 304 304 . 85.047  116.710 -23.697 1.00 6.35   1
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ATOM 6958 O    O    . HOH HOH HOH S . 305 305 . 84.920  126.056 -22.193 1.00 7.17   1
. .
ATOM 6959 O    O    . HOH HOH HOH S . 306 306 . 83.553  114.898 -22.353 1.00 15.12  1
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ATOM 6960 O    O    . HOH HOH HOH S . 307 307 . 82.128  117.970 -27.508 1.00 56.23  1
. .
ATOM 6961 O    O    . HOH HOH HOH S . 308 308 . 80.598  96.687  22.264  1.00 11.44  1
. .
ATOM 6962 O    O    . HOH HOH HOH S . 309 309 . 80.337  67.455  19.841  1.00 9.22   1
. .
ATOM 6963 O    O    . HOH HOH HOH S . 310 310 . 76.389  70.174  14.934  1.00 7.32   1
. .
ATOM 6964 O    O    . HOH HOH HOH S . 311 311 . 76.556  66.633  21.345  1.00 24.81  1
. .
ATOM 6965 O    O    . HOH HOH HOH S . 312 312 . 95.187  80.796  0.195   1.00 46.67  1
. .
ATOM 6966 O    O    . HOH HOH HOH S . 313 313 . 94.042  84.762  -2.125  1.00 13.77  1
. .
ATOM 6967 O    O    . HOH HOH HOH S . 314 314 . 84.668  110.389 45.633  1.00 11.58  1
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ATOM 6968 O    O    . HOH HOH HOH S . 315 315 . 85.236  110.138 40.845  1.00 14.55  1
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ATOM 6969 O    O    . HOH HOH HOH S . 316 316 . 87.525  110.114 42.199  1.00 14.01  1
. .
ATOM 6970 O    O    . HOH HOH HOH S . 317 317 . 83.804  110.736 42.960  1.00 22.97  1
. .
ATOM 6971 O    O    . HOH HOH HOH S . 318 318 . 80.525  101.181 16.882  1.00 4.68   1
. .
ATOM 6972 O    O    . HOH HOH HOH S . 319 319 . 78.322  102.485 15.632  1.00 18.99  1
. .
ATOM 6973 O    O    . HOH HOH HOH S . 320 320 . 77.255  104.204 12.537  1.00 25.99  1
. .
ATOM 6974 O    O    . HOH HOH HOH S . 321 321 . 82.317  122.977 4.731   1.00 14.76  1
. .
ATOM 6975 O    O    . HOH HOH HOH S . 322 322 . 80.532  124.299 5.820   1.00 25.47  1
. .
ATOM 6976 O    O    . HOH HOH HOH S . 323 323 . 84.897  123.191 5.937   1.00 23.28  1
. .
ATOM 6977 O    O    . HOH HOH HOH S . 324 324 . 85.122  120.936 7.736   1.00 7.80   1
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ATOM 6978 O    O    . HOH HOH HOH S . 325 325 . 78.335  118.127 6.839   1.00 10.73  1
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ATOM 6979 O    O    . HOH HOH HOH S . 326 326 . 102.016 86.858  19.198  1.00 11.29  1
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ATOM 6980 O    O    . HOH HOH HOH S . 327 327 . 102.317 87.995  17.377  1.00 49.66  1
. .
ATOM 6981 O    O    . HOH HOH HOH S . 328 328 . 106.702 110.556 43.663  1.00 26.10  1
. .
ATOM 6982 O    O    . HOH HOH HOH S . 329 329 . 106.825 111.889 46.694  1.00 20.33  1
. .
ATOM 6983 O    O    . HOH HOH HOH S . 330 330 . 107.135 107.810 46.749  1.00 11.97  1
. .
ATOM 6984 O    O    . HOH HOH HOH S . 331 331 . 104.245 104.833 48.682  1.00 14.39  1
. .
ATOM 6985 O    O    . HOH HOH HOH S . 332 332 . 109.962 107.806 43.283  1.00 29.19  1
. .
ATOM 6986 O    O    . HOH HOH HOH S . 333 333 . 109.308 111.624 43.226  1.00 22.07  1
. .
ATOM 6987 O    O    . HOH HOH HOH S . 334 334 . 78.264  124.474 25.734  1.00 15.79  1
. .
ATOM 6988 O    O    . HOH HOH HOH S . 335 335 . 119.275 108.073 24.691  1.00 26.86  1
. .
ATOM 6989 O    O    . HOH HOH HOH S . 336 336 . 121.015 106.151 23.250  1.00 19.58  1
. .
ATOM 6990 O    O    . HOH HOH HOH S . 337 337 . 100.847 99.549  8.536   1.00 17.14  1
. .
ATOM 6991 O    O    . HOH HOH HOH S . 338 338 . 104.399 86.326  21.116  1.00 10.22  1
. .
ATOM 6992 O    O    . HOH HOH HOH S . 339 339 . 103.774 83.832  16.794  1.00 23.11  1
. .
ATOM 6993 O    O    . HOH HOH HOH S . 340 340 . 97.702  112.721 10.690  1.00 22.98  1
. .
ATOM 6994 O    O    . HOH HOH HOH S . 341 341 . 99.117  114.697 9.310   1.00 29.32  1
. .
ATOM 6995 O    O    . HOH HOH HOH S . 342 342 . 94.898  117.573 15.955  1.00 14.90  1
. .
ATOM 6996 O    O    . HOH HOH HOH S . 343 343 . 91.530  118.736 12.861  1.00 16.59  1
. .
ATOM 6997 O    O    . HOH HOH HOH S . 344 344 . 81.332  97.770  10.808  1.00 6.11   1
. .
ATOM 6998 O    O    . HOH HOH HOH S . 345 345 . 81.255  95.389  12.047  1.00 24.94  1
. .
ATOM 6999 O    O    . HOH HOH HOH S . 346 346 . 77.510  95.538  8.823   1.00 20.67  1
. .
ATOM 7000 O    O    . HOH HOH HOH S . 347 347 . 89.339  85.216  2.555   1.00 15.38  1
. .
ATOM 7001 O    O    . HOH HOH HOH S . 348 348 . 83.483  84.003  3.610   1.00 23.64  1
. .
ATOM 7002 O    O    . HOH HOH HOH S . 349 349 . 86.141  80.661  4.276   1.00 10.34  1
. .
ATOM 7003 O    O    . HOH HOH HOH S . 350 350 . 99.719  92.381  13.924  1.00 19.37  1
. .
ATOM 7004 O    O    . HOH HOH HOH S . 351 351 . 98.650  81.394  26.913  1.00 8.58   1
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ATOM 7005 O    O    . HOH HOH HOH S . 352 352 . 96.484  80.140  26.794  1.00 12.59  1
. .
ATOM 7006 O    O    . HOH HOH HOH S . 353 353 . 102.479 81.713  28.375  1.00 14.85  1
. .
ATOM 7007 O    O    . HOH HOH HOH S . 354 354 . 82.244  118.201 28.909  1.00 10.43  1
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ATOM 7008 O    O    . HOH HOH HOH S . 355 355 . 94.986  74.236  9.324   1.00 19.71  1
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ATOM 7009 O    O    . HOH HOH HOH S . 356 356 . 88.785  128.619 -22.962 1.00 13.77  1
. .
ATOM 7010 O    O    . HOH HOH HOH S . 357 357 . 84.622  128.035 -23.911 1.00 15.29  1
. .
ATOM 7011 O    O    . HOH HOH HOH S . 358 358 . 90.711  102.983 -17.584 1.00 14.68  1
. .
ATOM 7012 O    O    . HOH HOH HOH S . 359 359 . 92.416  101.138 -16.107 1.00 31.30  1
. .
ATOM 7013 O    O    . HOH HOH HOH S . 360 360 . 95.306  101.466 -18.181 1.00 24.29  1
. .
ATOM 7014 O    O    . HOH HOH HOH S . 361 361 . 90.678  107.427 -8.570  1.00 39.85  1
. .
ATOM 7015 O    O    . HOH HOH HOH S . 362 362 . 101.439 119.338 34.075  1.00 36.01  1
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ATOM 7016 O    O    . HOH HOH HOH S . 363 363 . 71.786  116.391 24.043  1.00 16.48  1
. .
ATOM 7017 O    O    . HOH HOH HOH S . 364 364 . 73.382  112.434 24.823  1.00 14.34  1
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ATOM 7018 O    O    . HOH HOH HOH S . 365 365 . 76.578  111.443 24.582  1.00 35.35  1
. .
ATOM 7019 O    O    . HOH HOH HOH S . 366 366 . 79.883  130.607 -10.843 1.00 15.22  1
. .
ATOM 7020 O    O    . HOH HOH HOH S . 367 367 . 81.518  131.578 -13.434 1.00 16.28  1
. .
ATOM 7021 O    O    . HOH HOH HOH S . 368 368 . 96.095  107.135 42.500  1.00 22.08  1
. .
ATOM 7022 O    O    . HOH HOH HOH S . 369 369 . 94.708  109.777 42.217  1.00 28.25  1
. .
ATOM 7023 O    O    . HOH HOH HOH S . 370 370 . 99.395  106.652 40.744  1.00 12.16  1
. .
ATOM 7024 O    O    . HOH HOH HOH S . 371 371 . 97.651  108.278 41.165  1.00 25.31  1
. .
ATOM 7025 O    O    . HOH HOH HOH S . 372 372 . 96.449  111.074 39.727  1.00 25.34  1
. .
ATOM 7026 O    O    . HOH HOH HOH S . 373 373 . 90.367  119.765 -28.085 1.00 19.09  1
. .
ATOM 7027 O    O    . HOH HOH HOH S . 374 374 . 77.898  104.706 -12.523 1.00 17.86  1
. .
ATOM 7028 O    O    . HOH HOH HOH S . 375 375 . 79.295  68.783  23.580  1.00 42.76  1
. .
ATOM 7029 O    O    . HOH HOH HOH S . 376 376 . 78.851  70.482  26.385  1.00 20.31  1
. .
ATOM 7030 O    O    . HOH HOH HOH S . 377 377 . 99.521  110.263 -25.902 1.00 19.51  1
. .
ATOM 7031 O    O    . HOH HOH HOH S . 378 378 . 96.680  112.317 -22.563 1.00 19.61  1
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ATOM 7032 O    O    . HOH HOH HOH S . 379 379 . 79.941  125.187 3.090   1.00 17.24  1
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ATOM 7033 O    O    . HOH HOH HOH S . 380 380 . 102.904 100.286 -13.288 1.00 24.23  1
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ATOM 7034 O    O    . HOH HOH HOH S . 381 381 . 104.657 99.265  -11.703 1.00 28.60  1
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ATOM 7035 O    O    . HOH HOH HOH S . 382 382 . 79.753  77.503  34.476  1.00 18.91  1
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ATOM 7036 O    O    . HOH HOH HOH S . 383 383 . 81.700  75.301  34.504  1.00 49.98  1
. .
ATOM 7037 O    O    . HOH HOH HOH S . 384 384 . 106.548 96.614  46.420  1.00 11.44  1
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ATOM 7038 O    O    . HOH HOH HOH S . 385 385 . 103.508 96.138  45.930  1.00 18.40  1
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ATOM 7039 O    O    . HOH HOH HOH S . 386 386 . 105.173 99.813  46.091  1.00 17.33  1
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ATOM 7040 O    O    . HOH HOH HOH S . 387 387 . 109.881 93.500  46.701  1.00 28.09  1
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ATOM 7041 O    O    . HOH HOH HOH S . 388 388 . 109.986 90.932  46.274  1.00 21.65  1
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ATOM 7042 O    O    . HOH HOH HOH S . 389 389 . 112.727 94.068  45.792  1.00 28.09  1
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ATOM 7043 O    O    . HOH HOH HOH S . 390 390 . 74.380  122.890 -0.943  1.00 9.58   1
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ATOM 7044 O    O    . HOH HOH HOH S . 391 391 . 70.335  121.145 -2.342  1.00 19.42  1
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ATOM 7045 O    O    . HOH HOH HOH S . 392 392 . 93.576  85.750  20.878  1.00 19.76  1
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ATOM 7046 O    O    . HOH HOH HOH S . 393 393 . 108.453 126.064 19.784  1.00 16.71  1
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ATOM 7047 O    O    . HOH HOH HOH S . 394 394 . 103.301 126.167 20.525  1.00 49.88  1
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ATOM 7048 O    O    . HOH HOH HOH S . 395 395 . 107.256 129.189 19.381  1.00 36.04  1
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ATOM 7049 O    O    . HOH HOH HOH S . 396 396 . 104.584 125.785 24.485  1.00 34.82  1
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ATOM 7050 O    O    . HOH HOH HOH S . 397 397 . 107.330 123.360 23.232  1.00 31.54  1
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ATOM 7051 O    O    . HOH HOH HOH S . 398 398 . 110.768 125.658 21.577  1.00 22.90  1
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ATOM 7052 O    O    . HOH HOH HOH S . 399 399 . 80.823  83.060  34.087  1.00 35.74  1
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ATOM 7053 O    O    . HOH HOH HOH S . 400 400 . 80.096  117.308 28.880  1.00 40.38  1
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ATOM 7054 O    O    . HOH HOH HOH S . 401 401 . 80.729  118.848 33.501  1.00 34.82  1
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ATOM 7055 O    O    . HOH HOH HOH S . 402 402 . 120.600 106.253 27.128  1.00 27.63  1
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ATOM 7056 O    O    . HOH HOH HOH S . 403 403 . 87.566  84.193  39.085  1.00 27.62  1
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ATOM 7057 O    O    . HOH HOH HOH S . 404 404 . 85.893  84.772  36.844  1.00 35.39  1
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ATOM 7058 O    O    . HOH HOH HOH S . 405 405 . 87.104  87.844  3.591   1.00 35.17  1
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ATOM 7059 O    O    . HOH HOH HOH S . 406 406 . 97.804  78.930  3.861   1.00 20.90  1
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ATOM 7060 O    O    . HOH HOH HOH S . 407 407 . 93.690  73.127  28.065  1.00 31.87  1
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ATOM 7061 O    O    . HOH HOH HOH S . 408 408 . 84.525  90.374  40.707  1.00 24.39  1
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ATOM 7062 O    O    . HOH HOH HOH S . 409 409 . 86.643  91.488  41.566  1.00 26.03  1
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ATOM 7063 O    O    . HOH HOH HOH S . 410 410 . 59.818  100.131 10.588  1.00 26.07  1
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ATOM 7064 O    O    . HOH HOH HOH S . 411 411 . 80.003  111.475 -22.129 1.00 26.00  1
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ATOM 7065 O    O    . HOH HOH HOH S . 412 412 . 77.551  114.164 -21.221 1.00 22.16  1
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ATOM 7066 O    O    . HOH HOH HOH S . 413 413 . 103.465 103.773 -17.010 1.00 19.76  1
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ATOM 7067 O    O    . HOH HOH HOH S . 414 414 . 102.257 79.304  14.160  1.00 24.11  1
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ATOM 7068 O    O    . HOH HOH HOH S . 415 415 . 100.024 75.922  15.486  1.00 26.15  1
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ATOM 7069 O    O    . HOH HOH HOH S . 416 416 . 101.950 77.381  12.367  1.00 46.73  1
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ATOM 7070 O    O    . HOH HOH HOH S . 417 417 . 73.838  117.897 23.327  1.00 18.94  1
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ATOM 7071 O    O    . HOH HOH HOH S . 418 418 . 74.691  118.949 25.599  1.00 35.17  1
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ATOM 7072 O    O    . HOH HOH HOH S . 419 419 . 60.107  109.919 20.565  1.00 28.06  1
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ATOM 7073 O    O    . HOH HOH HOH S . 420 420 . 60.837  113.920 19.208  1.00 13.20  1
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ATOM 7074 O    O    . HOH HOH HOH S . 421 421 . 58.314  113.882 19.689  1.00 15.10  1
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ATOM 7075 O    O    . HOH HOH HOH S . 422 422 . 77.611  126.687 21.589  1.00 21.48  1
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ATOM 7076 O    O    . HOH HOH HOH S . 423 423 . 76.028  111.952 28.600  1.00 21.65  1
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ATOM 7077 O    O    . HOH HOH HOH S . 424 424 . 74.294  111.612 30.887  1.00 32.93  1
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ATOM 7078 O    O    . HOH HOH HOH S . 425 425 . 95.355  99.331  43.173  1.00 23.77  1
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ATOM 7079 O    O    . HOH HOH HOH S . 426 426 . 100.935 99.058  46.055  1.00 26.85  1
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ATOM 7080 O    O    . HOH HOH HOH S . 427 427 . 103.953 77.765  7.317   1.00 58.75  1
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ATOM 7081 O    O    . HOH HOH HOH S . 428 428 . 115.500 100.868 39.667  1.00 28.14  1
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ATOM 7082 O    O    . HOH HOH HOH S . 429 429 . 115.254 98.154  38.732  1.00 27.14  1
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ATOM 7083 O    O    . HOH HOH HOH S . 430 430 . 118.126 102.818 39.315  1.00 38.23  1
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ATOM 7084 O    O    . HOH HOH HOH S . 431 431 . 85.183  69.320  26.707  1.00 16.51  1
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ATOM 7085 O    O    . HOH HOH HOH S . 432 432 . 87.326  89.967  -12.692 1.00 40.58  1
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ATOM 7086 O    O    . HOH HOH HOH S . 433 433 . 85.528  94.223  -15.687 1.00 44.72  1
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ATOM 7087 O    O    . HOH HOH HOH S . 434 434 . 58.616  110.164 -2.683  1.00 27.60  1
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ATOM 7088 O    O    . HOH HOH HOH S . 435 435 . 65.563  108.755 -2.027  1.00 17.67  1
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ATOM 7089 O    O    . HOH HOH HOH S . 436 436 . 62.903  108.522 -3.222  1.00 31.70  1
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ATOM 7090 O    O    . HOH HOH HOH S . 437 437 . 60.650  104.903 -1.211  1.00 19.09  1
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ATOM 7091 O    O    . HOH HOH HOH S . 438 438 . 71.061  127.054 17.099  1.00 21.53  1
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ATOM 7092 O    O    . HOH HOH HOH S . 439 439 . 102.431 94.489  44.297  1.00 15.08  1
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ATOM 7093 O    O    . HOH HOH HOH S . 440 440 . 70.491  87.909  34.102  1.00 26.95  1
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ATOM 7094 O    O    . HOH HOH HOH S . 441 441 . 116.867 96.771  17.126  1.00 24.90  1
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ATOM 7095 O    O    . HOH HOH HOH S . 442 442 . 55.895  108.257 13.853  1.00 25.80  1
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ATOM 7096 O    O    . HOH HOH HOH S . 443 443 . 57.394  119.684 16.077  0.50 17.34  1
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ATOM 7097 O    O    . HOH HOH HOH S . 444 444 . 123.259 105.264 18.280  1.00 30.09  1
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ATOM 7098 O    O    . HOH HOH HOH S . 445 445 . 81.562  128.098 13.572  1.00 22.14  1
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ATOM 7099 O    O    . HOH HOH HOH S . 446 446 . 77.875  128.770 10.651  1.00 19.04  1
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ATOM 7100 O    O    . HOH HOH HOH S . 447 447 . 77.868  128.550 15.125  1.00 19.12  1
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ATOM 7101 O    O    . HOH HOH HOH S . 448 448 . 77.488  129.571 12.609  1.00 48.59  1
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ATOM 7102 O    O    . HOH HOH HOH S . 449 449 . 85.702  114.186 -25.886 1.00 28.81  1
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ATOM 7103 O    O    . HOH HOH HOH S . 451 451 . 57.646  115.168 -0.490  1.00 26.19  1
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ATOM 7104 O    O    . HOH HOH HOH S . 452 452 . 79.573  93.873  16.268  1.00 29.68  1
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ATOM 7105 O    O    . HOH HOH HOH S . 453 453 . 101.308 119.338 -23.004 1.00 39.48  1
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ATOM 7106 O    O    . HOH HOH HOH S . 454 454 . 106.133 119.841 -20.765 1.00 40.49  1
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ATOM 7107 O    O    . HOH HOH HOH S . 455 455 . 104.589 123.562 -19.241 1.00 19.86  1
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ATOM 7108 O    O    . HOH HOH HOH S . 456 456 . 105.227 123.798 -14.689 1.00 30.08  1
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ATOM 7109 O    O    . HOH HOH HOH S . 457 457 . 67.583  90.853  23.321  1.00 16.44  1
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ATOM 7110 O    O    . HOH HOH HOH S . 458 458 . 74.930  95.830  24.170  1.00 12.24  1
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ATOM 7111 O    O    . HOH HOH HOH S . 459 459 . 78.204  127.369 -21.347 1.00 20.16  1
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ATOM 7112 O    O    . HOH HOH HOH S . 460 460 . 76.019  129.013 -21.680 1.00 25.96  1
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ATOM 7113 O    O    . HOH HOH HOH S . 461 461 . 58.245  105.249 -1.667  1.00 21.89  1
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ATOM 7114 O    O    . HOH HOH HOH S . 462 462 . 102.337 93.331  7.191   1.00 30.37  1
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ATOM 7115 O    O    . HOH HOH HOH S . 463 463 . 104.237 92.453  10.773  1.00 39.78  1
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ATOM 7116 O    O    . HOH HOH HOH S . 464 464 . 58.854  99.590  12.348  1.00 47.17  1
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ATOM 7117 O    O    . HOH HOH HOH S . 465 465 . 76.598  93.438  22.176  1.00 26.03  1
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ATOM 7118 O    O    . HOH HOH HOH S . 466 466 . 93.144  107.203 46.063  1.00 16.72  1
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ATOM 7119 O    O    . HOH HOH HOH S . 467 467 . 95.153  103.860 45.501  1.00 24.09  1
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ATOM 7120 O    O    . HOH HOH HOH S . 468 468 . 84.794  71.714  28.835  1.00 23.81  1
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ATOM 7121 O    O    . HOH HOH HOH S . 469 469 . 86.576  122.432 30.439  1.00 24.68  1
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ATOM 7122 O    O    . HOH HOH HOH S . 470 470 . 108.086 93.848  17.916  1.00 23.33  1
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ATOM 7123 O    O    . HOH HOH HOH S . 471 471 . 77.463  96.549  22.003  1.00 17.38  1
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ATOM 7124 O    O    . HOH HOH HOH S . 472 472 . 52.338  109.871 6.330   1.00 42.89  1
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ATOM 7125 O    O    . HOH HOH HOH S . 473 473 . 52.666  105.696 7.278   1.00 26.79  1
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ATOM 7126 O    O    . HOH HOH HOH S . 474 474 . 91.336  97.206  41.745  1.00 26.51  1
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ATOM 7127 O    O    . HOH HOH HOH S . 475 475 . 91.943  115.659 2.728   1.00 7.59   1
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ATOM 7128 O    O    . HOH HOH HOH S . 476 476 . 115.567 114.420 20.937  1.00 6.86   1
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ATOM 7129 O    O    . HOH HOH HOH S . 477 477 . 77.024  127.439 -11.620 1.00 22.91  1
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ATOM 7130 O    O    . HOH HOH HOH S . 478 478 . 92.669  105.871 -19.734 1.00 14.06  1
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ATOM 7131 O    O    . HOH HOH HOH S . 479 479 . 71.099  80.654  23.035  1.00 17.89  1
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ATOM 7132 O    O    . HOH HOH HOH S . 480 480 . 77.915  65.563  19.584  1.00 19.28  1
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ATOM 7133 O    O    . HOH HOH HOH S . 481 481 . 72.460  104.400 -9.540  1.00 16.11  1
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ATOM 7134 O    O    . HOH HOH HOH S . 482 482 . 69.148  98.242  8.188   1.00 15.25  1
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ATOM 7135 O    O    . HOH HOH HOH S . 483 483 . 57.410  119.687 19.286  0.50 28.59  1
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ATOM 7136 O    O    . HOH HOH HOH S . 484 484 . 84.146  131.662 21.012  1.00 21.06  1
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ATOM 7137 O    O    . HOH HOH HOH S . 485 485 . 107.054 116.843 -10.796 1.00 22.49  1
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ATOM 7138 O    O    . HOH HOH HOH S . 486 486 . 98.059  112.558 40.767  1.00 32.35  1
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ATOM 7139 O    O    . HOH HOH HOH S . 487 487 . 107.040 125.158 12.745  1.00 33.05  1
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ATOM 7140 O    O    . HOH HOH HOH S . 488 488 . 74.776  95.568  4.811   1.00 33.21  1
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ATOM 7141 O    O    . HOH HOH HOH S . 489 489 . 79.632  95.807  42.171  1.00 50.11  1
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ATOM 7142 O    O    . HOH HOH HOH S . 490 490 . 67.746  121.339 -1.385  1.00 26.83  1
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ATOM 7143 O    O    . HOH HOH HOH S . 491 491 . 75.598  125.902 -5.781  1.00 23.48  1
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ATOM 7144 O    O    . HOH HOH HOH S . 492 492 . 76.777  97.899  24.488  1.00 27.02  1
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ATOM 7145 O    O    . HOH HOH HOH S . 493 493 . 110.016 102.800 13.101  1.00 33.96  1
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ATOM 7146 O    O    . HOH HOH HOH S . 494 494 . 54.219  106.358 5.070   1.00 16.27  1
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ATOM 7147 O    O    . HOH HOH HOH S . 495 495 . 94.370  120.443 15.072  1.00 27.92  1
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ATOM 7148 O    O    . HOH HOH HOH S . 496 496 . 84.688  112.604 39.404  1.00 25.06  1
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ATOM 7149 O    O    . HOH HOH HOH S . 497 497 . 99.705  95.629  45.390  1.00 30.04  1
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ATOM 7150 O    O    . HOH HOH HOH S . 498 498 . 96.023  119.312 -22.243 1.00 18.50  1
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ATOM 7151 O    O    . HOH HOH HOH S . 499 499 . 116.559 107.508 42.153  1.00 44.64  1
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ATOM 7152 O    O    . HOH HOH HOH S . 500 500 . 80.965  127.194 -22.071 1.00 31.57  1
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ATOM 7153 O    O    . HOH HOH HOH S . 501 501 . 105.437 80.605  2.051   1.00 24.22  1
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ATOM 7154 O    O    . HOH HOH HOH S . 502 502 . 94.630  124.985 22.869  1.00 18.52  1
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ATOM 7155 O    O    . HOH HOH HOH S . 503 503 . 71.745  122.008 0.011   1.00 29.75  1
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ATOM 7156 O    O    . HOH HOH HOH S . 504 504 . 106.402 114.318 6.193   1.00 22.13  1
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ATOM 7157 O    O    . HOH HOH HOH S . 505 505 . 97.459  102.388 -17.024 1.00 23.56  1
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ATOM 7158 O    O    . HOH HOH HOH S . 506 506 . 103.034 113.538 40.237  1.00 16.33  1
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ATOM 7159 O    O    . HOH HOH HOH S . 507 507 . 115.707 105.050 8.861   1.00 24.12  1
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ATOM 7160 O    O    . HOH HOH HOH S . 508 508 . 105.725 123.798 9.189   1.00 15.02  1
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ATOM 7161 O    O    . HOH HOH HOH S . 509 509 . 109.104 112.798 7.770   1.00 27.90  1
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ATOM 7162 O    O    . HOH HOH HOH S . 510 510 . 67.833  97.282  17.918  1.00 20.63  1
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ATOM 7163 O    O    . HOH HOH HOH S . 511 511 . 112.447 95.096  18.946  1.00 31.74  1
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ATOM 7164 O    O    . HOH HOH HOH S . 512 512 . 82.912  83.882  31.846  1.00 21.33  1
. .
ATOM 7165 O    O    . HOH HOH HOH S . 513 513 . 79.227  99.794  19.099  1.00 35.36  1
. .
ATOM 7166 O    O    . HOH HOH HOH S . 514 514 . 89.249  119.790 9.265   1.00 21.64  1
. .
ATOM 7167 O    O    . HOH HOH HOH S . 515 515 . 82.293  93.609  15.423  1.00 39.04  1
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ATOM 7168 O    O    . HOH HOH HOH S . 516 516 . 88.535  130.988 -5.190  1.00 16.50  1
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ATOM 7169 O    O    . HOH HOH HOH S . 517 517 . 114.790 110.940 41.499  1.00 26.94  1
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ATOM 7170 O    O    . HOH HOH HOH S . 518 518 . 79.965  109.945 35.080  1.00 30.19  1
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ATOM 7171 O    O    . HOH HOH HOH S . 519 519 . 84.834  87.855  -8.949  1.00 35.23  1
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ATOM 7172 O    O    . HOH HOH HOH S . 520 520 . 68.525  112.791 -10.939 1.00 15.83  1
. .
ATOM 7173 O    O    . HOH HOH HOH S . 521 521 . 72.670  124.599 -4.318  1.00 25.82  1
. .
ATOM 7174 O    O    . HOH HOH HOH S . 522 522 . 71.034  128.174 12.654  1.00 27.92  1
. .
ATOM 7175 O    O    . HOH HOH HOH S . 523 523 . 84.285  126.717 14.220  1.00 18.19  1
. .
ATOM 7176 O    O    . HOH HOH HOH S . 524 524 . 98.712  104.199 -18.915 1.00 25.35  1
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ATOM 7177 O    O    . HOH HOH HOH S . 525 525 . 101.704 85.378  14.825  1.00 27.48  1
. .
ATOM 7178 O    O    . HOH HOH HOH S . 526 526 . 102.107 113.517 -24.301 1.00 50.44  1
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ATOM 7179 O    O    . HOH HOH HOH S . 527 527 . 72.315  127.499 14.802  1.00 17.75  1
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ATOM 7180 O    O    . HOH HOH HOH S . 528 528 . 84.355  70.044  3.260   1.00 22.78  1
. .
ATOM 7181 O    O    . HOH HOH HOH S . 529 529 . 103.968 104.646 11.641  1.00 29.54  1
. .
ATOM 7182 O    O    . HOH HOH HOH S . 530 530 . 69.693  96.914  35.465  1.00 26.06  1
. .
ATOM 7183 O    O    . HOH HOH HOH S . 531 531 . 96.172  121.791 16.413  1.00 22.06  1
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ATOM 7184 O    O    . HOH HOH HOH S . 532 532 . 101.649 92.213  -12.875 1.00 31.01  1
. .
ATOM 7185 O    O    . HOH HOH HOH S . 533 533 . 94.251  77.392  4.371   1.00 28.33  1
. .
ATOM 7186 O    O    . HOH HOH HOH S . 534 534 . 75.796  101.245 -13.191 1.00 26.93  1
. .
ATOM 7187 O    O    . HOH HOH HOH S . 535 535 . 114.140 92.282  43.282  1.00 39.83  1
. .
ATOM 7188 O    O    . HOH HOH HOH S . 536 536 . 100.954 105.376 46.675  1.00 17.09  1
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ATOM 7189 O    O    . HOH HOH HOH S . 538 538 . 107.679 113.217 48.646  1.00 30.01  1
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ATOM 7190 O    O    . HOH HOH HOH S . 539 539 . 96.507  79.400  30.934  1.00 40.40  1
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ATOM 7191 O    O    . HOH HOH HOH S . 540 540 . 71.793  100.246 31.258  1.00 28.15  1
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ATOM 7192 O    O    . HOH HOH HOH S . 541 541 . 78.847  115.378 31.308  1.00 30.84  1
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ATOM 7193 O    O    . HOH HOH HOH S . 542 542 . 96.361  96.575  -15.756 1.00 36.95  1
. .
ATOM 7194 O    O    . HOH HOH HOH S . 543 543 . 91.397  123.779 26.192  1.00 12.73  1
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ATOM 7195 O    O    . HOH HOH HOH S . 544 544 . 108.702 99.274  6.664   1.00 24.31  1
. .
ATOM 7196 O    O    . HOH HOH HOH S . 545 545 . 100.165 79.480  29.863  1.00 20.36  1
. .
ATOM 7197 O    O    . HOH HOH HOH S . 547 547 . 119.917 98.341  16.692  1.00 34.12  1
. .
ATOM 7198 O    O    . HOH HOH HOH S . 548 548 . 75.770  80.279  33.568  1.00 32.59  1
. .
ATOM 7199 O    O    . HOH HOH HOH S . 549 549 . 87.829  124.238 -24.274 1.00 30.05  1
. .
ATOM 7200 O    O    . HOH HOH HOH S . 550 550 . 116.696 114.185 42.762  1.00 26.62  1
. .
ATOM 7201 O    O    . HOH HOH HOH S . 551 551 . 106.412 112.976 -15.545 1.00 26.31  1
. .
ATOM 7202 O    O    . HOH HOH HOH S . 552 552 . 73.080  91.882  -8.603  1.00 31.02  1
. .
ATOM 7203 O    O    . HOH HOH HOH S . 554 554 . 115.436 112.303 15.994  1.00 32.04  1
. .
ATOM 7204 O    O    . HOH HOH HOH S . 555 555 . 117.482 104.845 4.936   1.00 36.74  1
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ATOM 7205 O    O    . HOH HOH HOH S . 556 556 . 86.127  98.358  41.081  1.00 49.64  1
. .
ATOM 7206 O    O    . HOH HOH HOH S . 557 557 . 108.914 101.193 14.450  1.00 16.68  1
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ATOM 7207 O    O    . HOH HOH HOH S . 558 558 . 64.660  114.034 20.423  1.00 31.35  1
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ATOM 7208 O    O    . HOH HOH HOH S . 559 559 . 114.499 108.614 9.305   1.00 23.47  1
. .
ATOM 7209 O    O    . HOH HOH HOH S . 560 560 . 88.288  91.223  -17.326 1.00 30.79  1
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ATOM 7210 O    O    . HOH HOH HOH S . 561 561 . 98.759  77.517  0.516   1.00 33.53  1
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ATOM 7211 O    O    . HOH HOH HOH S . 562 562 . 76.146  93.467  8.026   1.00 37.88  1
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ATOM 7212 O    O    . HOH HOH HOH S . 563 563 . 110.409 126.996 17.136  1.00 25.00  1
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ATOM 7213 O    O    . HOH HOH HOH S . 564 564 . 77.172  91.825  -7.859  1.00 19.21  1
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ATOM 7214 O    O    . HOH HOH HOH S . 565 565 . 60.464  96.394  -0.995  1.00 39.49  1
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ATOM 7216 O    O    . HOH HOH HOH S . 567 567 . 78.652  88.689  5.146   1.00 26.47  1
. .
ATOM 7217 O    O    . HOH HOH HOH S . 568 568 . 68.655  130.059 0.536   1.00 23.50  1
. .
ATOM 7218 O    O    . HOH HOH HOH S . 569 569 . 81.243  128.444 1.235   1.00 26.94  1
. .
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ATOM 7219 O    O    . HOH HOH HOH S . 570 570 . 78.508  94.386  11.714  1.00 40.73  1
. .
ATOM 7220 O    O    . HOH HOH HOH S . 571 571 . 89.923  125.331 29.553  1.00 21.94  1
. .
ATOM 7221 O    O    . HOH HOH HOH S . 572 572 . 65.070  124.765 0.531   1.00 23.94  1
. .
ATOM 7222 O    O    . HOH HOH HOH S . 573 573 . 104.618 93.407  -11.751 1.00 28.33  1
. .
ATOM 7223 O    O    . HOH HOH HOH S . 574 574 . 75.347  93.505  37.066  1.00 28.13  1
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ATOM 7226 O    O    . HOH HOH HOH S . 578 578 . 61.680  130.998 2.579   1.00 26.42  1
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ATOM 7227 O    O    . HOH HOH HOH S . 579 579 . 86.445  119.867 33.423  1.00 28.55  1
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ATOM 7228 O    O    . HOH HOH HOH S . 580 580 . 91.465  95.547  44.044  1.00 36.44  1
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ATOM 7232 O    O    . HOH HOH HOH S . 584 584 . 94.717  126.015 0.869   1.00 32.67  1
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ATOM 7233 O    O    . HOH HOH HOH S . 585 585 . 85.713  128.884 15.550  1.00 34.33  1
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ATOM 7234 O    O    . HOH HOH HOH S . 586 586 . 77.309  130.278 -8.016  1.00 39.14  1
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. .
ATOM 7241 O    O    . HOH HOH HOH S . 594 594 . 74.829  100.837 25.603  1.00 35.84  1
. .
ATOM 7242 O    O    . HOH HOH HOH S . 596 596 . 102.905 80.893  30.851  1.00 24.58  1
. .
ATOM 7243 O    O    . HOH HOH HOH S . 597 597 . 81.331  73.507  38.053  1.00 59.93  1
. .
ATOM 7244 O    O    . HOH HOH HOH S . 598 598 . 110.118 125.754 13.327  1.00 36.52  1
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ATOM 7245 O    O    . HOH HOH HOH S . 599 599 . 73.664  75.101  31.132  1.00 30.50  1
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ATOM 7246 O    O    . HOH HOH HOH S . 600 600 . 106.657 120.977 -8.044  1.00 33.32  1
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ATOM 7247 O    O    . HOH HOH HOH S . 601 601 . 73.403  92.936  19.694  1.00 26.29  1
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ATOM 7248 O    O    . HOH HOH HOH S . 602 602 . 93.270  133.687 -4.707  1.00 73.65  1
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ATOM 7249 O    O    . HOH HOH HOH S . 603 603 . 75.482  85.657  33.928  1.00 30.21  1
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ATOM 7250 O    O    . HOH HOH HOH S . 605 605 . 69.752  105.869 22.065  1.00 25.18  1
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ATOM 7251 O    O    . HOH HOH HOH S . 606 606 . 86.991  126.721 0.880   1.00 29.71  1
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ATOM 7252 O    O    . HOH HOH HOH S . 609 609 . 82.466  114.175 21.857  1.00 39.35  1
. .
ATOM 7253 O    O    . HOH HOH HOH S . 610 610 . 96.523  106.702 -20.892 1.00 33.52  1
. .
ATOM 7254 O    O    . HOH HOH HOH S . 613 613 . 88.298  81.611  4.017   1.00 30.74  1
. .
ATOM 7255 O    O    . HOH HOH HOH S . 615 615 . 101.510 102.123 45.474  1.00 26.37  1
. .
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1    N    N    . SER SER SER A A 1   1   . 0.2093 0.1934 0.2005 0.0220  0.0060  -
0.0014 1 .
2    CA   CA   . SER SER SER A A 1   1   . 0.1864 0.1992 0.1906 -0.0104 0.0039
0.0001  1 .
3    CB   CB   . SER SER SER A A 1   1   . 0.2188 0.2112 0.1985 -0.0070 0.0010
0.0092  1 .
4    OG   OG   . SER SER SER A A 1   1   . 0.2008 0.2526 0.2458 -0.0645 -0.0087 -
0.0159 1 .
5    C    C    . SER SER SER A A 1   1   . 0.1689 0.1576 0.1708 0.0023  0.0028
0.0029  1 .
6    O    O    . SER SER SER A A 1   1   . 0.1958 0.1984 0.1838 0.0127  -0.0096
0.0180  1 .
7    N    N    . ILE ILE ILE A A 2   2   . 0.0929 0.0844 0.0991 -0.0045 0.0119  -
0.0001 1 .
8    CA   CA   . ILE ILE ILE A A 2   2   . 0.0763 0.0807 0.0867 -0.0040 -0.0016
0.0018  1 .
9    CB   CB   . ILE ILE ILE A A 2   2   . 0.0402 0.0531 0.0474 -0.0007 -0.0040 -
0.0110 1 .
10   CG1  CG1  . ILE ILE ILE A A 2   2   . 0.0454 0.0686 0.0557 -0.0036 -0.0130 -
0.0266 1 .
11   CD1  CD1  . ILE ILE ILE A A 2   2   . 0.0406 0.0744 0.0452 0.0007  -0.0029
0.0008  1 .
12   CG2  CG2  . ILE ILE ILE A A 2   2   . 0.0428 0.0487 0.0308 -0.0179 -0.0041 -
0.0004 1 .
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13   C    C    . ILE ILE ILE A A 2   2   . 0.0881 0.0626 0.0825 -0.0077 0.0049
0.0041  1 .
14   O    O    . ILE ILE ILE A A 2   2   . 0.0998 0.0695 0.1310 -0.0006 0.0037  -
0.0101 1 .
15   N    N    . GLN GLN GLN A A 3   3   . 0.0702 0.0827 0.0856 0.0017  -0.0220 -
0.0042 1 .
16   CA   CA   . GLN GLN GLN A A 3   3   . 0.0727 0.0645 0.0750 -0.0033 0.0005  -
0.0077 1 .
17   CB   CB   . GLN GLN GLN A A 3   3   . 0.1019 0.1199 0.1274 -0.0054 -0.0243 -
0.0099 1 .
18   CG   CG   . GLN GLN GLN A A 3   3   . 0.1686 0.1491 0.1528 -0.0261 0.0220  -
0.0303 1 .
19   CD   CD   . GLN GLN GLN A A 3   3   . 0.2759 0.2860 0.2815 -0.0089 -0.0130
0.0017  1 .
20   OE1  OE1  . GLN GLN GLN A A 3   3   . 0.3697 0.3531 0.2978 0.0065  -0.0076
0.0449  1 .
21   NE2  NE2  . GLN GLN GLN A A 3   3   . 0.2760 0.2733 0.3067 -0.0138 0.0286
0.0164  1 .
22   C    C    . GLN GLN GLN A A 3   3   . 0.0564 0.0598 0.0626 -0.0093 -0.0087 -
0.0138 1 .
23   O    O    . GLN GLN GLN A A 3   3   . 0.0736 0.0723 0.0996 -0.0133 -0.0012 -
0.0197 1 .
24   N    N    . LYS LYS LYS A A 4   4   . 0.0287 0.0329 0.0318 -0.0049 -0.0045
0.0069  1 .
25   CA   CA   . LYS LYS LYS A A 4   4   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
26   CB   CB   . LYS LYS LYS A A 4   4   . 0.0373 0.0323 0.0374 -0.0004 -0.0020
0.0036  1 .
27   CG   CG   . LYS LYS LYS A A 4   4   . 0.0984 0.0956 0.1093 -0.0223 0.0055  -
0.0051 1 .
28   CD   CD   . LYS LYS LYS A A 4   4   . 0.2076 0.2217 0.1603 0.0181  -0.0062
0.0274  1 .
29   CE   CE   . LYS LYS LYS A A 4   4   . 0.2716 0.2692 0.2728 -0.0108 -0.0262
0.0075  1 .
30   NZ   NZ   . LYS LYS LYS A A 4   4   . 0.3567 0.2968 0.3490 -0.0059 -0.0302
0.0657  1 .
31   C    C    . LYS LYS LYS A A 4   4   . 0.0263 0.0316 0.0267 -0.0025 0.0012  -
0.0030 1 .
32   O    O    . LYS LYS LYS A A 4   4   . 0.0327 0.0278 0.0545 -0.0043 0.0147  -
0.0085 1 .
33   N    N    . ILE ILE ILE A A 5   5   . 0.0262 0.0310 0.0310 -0.0022 0.0022  -
0.0057 1 .
34   CA   CA   . ILE ILE ILE A A 5   5   . 0.0290 0.0272 0.0276 -0.0027 -0.0029
0.0021  1 .
35   CB   CB   . ILE ILE ILE A A 5   5   . 0.0356 0.0386 0.0323 -0.0117 -0.0080
0.0092  1 .
36   CG1  CG1  . ILE ILE ILE A A 5   5   . 0.0334 0.0328 0.0337 0.0050  -0.0078 -
0.0068 1 .
37   CD1  CD1  . ILE ILE ILE A A 5   5   . 0.0258 0.0253 0.0256 -0.0001 -0.0004
0.0000  1 .
38   CG2  CG2  . ILE ILE ILE A A 5   5   . 0.0361 0.0566 0.0381 -0.0168 -0.0084
0.0187  1 .
39   C    C    . ILE ILE ILE A A 5   5   . 0.0301 0.0260 0.0359 0.0013  0.0046  -
0.0002 1 .
40   O    O    . ILE ILE ILE A A 5   5   . 0.0596 0.0354 0.0309 0.0029  0.0099  -
0.0031 1 .
41   N    N    . TRP TRP TRP A A 6   6   . 0.0386 0.0282 0.0313 -0.0061 0.0089  -
0.0041 1 .
42   CA   CA   . TRP TRP TRP A A 6   6   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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43   CB   CB   . TRP TRP TRP A A 6   6   . 0.0410 0.0391 0.0333 0.0135  0.0033  -
0.0010 1 .
44   CG   CG   . TRP TRP TRP A A 6   6   . 0.0358 0.0263 0.0473 -0.0031 0.0036  -
0.0019 1 .
45   CD1  CD1  . TRP TRP TRP A A 6   6   . 0.0567 0.0647 0.0643 -0.0147 0.0163
0.0237  1 .
46   NE1  NE1  . TRP TRP TRP A A 6   6   . 0.0627 0.0304 0.0337 0.0074  -0.0174 -
0.0044 1 .
47   CE2  CE2  . TRP TRP TRP A A 6   6   . 0.0906 0.0976 0.0910 0.0000  0.0151
0.0053  1 .
48   CD2  CD2  . TRP TRP TRP A A 6   6   . 0.0913 0.0750 0.0746 -0.0131 -0.0061 -
0.0071 1 .
49   CE3  CE3  . TRP TRP TRP A A 6   6   . 0.0795 0.0508 0.0642 -0.0029 0.0088  -
0.0005 1 .
50   CZ3  CZ3  . TRP TRP TRP A A 6   6   . 0.0778 0.0579 0.0499 -0.0177 -0.0035
0.0004  1 .
51   CH2  CH2  . TRP TRP TRP A A 6   6   . 0.0796 0.1121 0.1107 0.0032  0.0359  -
0.0094 1 .
52   CZ2  CZ2  . TRP TRP TRP A A 6   6   . 0.1062 0.0992 0.0884 -0.0001 0.0005  -
0.0226 1 .
53   C    C    . TRP TRP TRP A A 6   6   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
54   O    O    . TRP TRP TRP A A 6   6   . 0.0280 0.0264 0.0253 0.0017  0.0000
0.0000  1 .
55   N    N    . ALA ALA ALA A A 7   7   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
56   CA   CA   . ALA ALA ALA A A 7   7   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
57   CB   CB   . ALA ALA ALA A A 7   7   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
58   C    C    . ALA ALA ALA A A 7   7   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
59   O    O    . ALA ALA ALA A A 7   7   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
60   N    N    . ARG ARG ARG A A 8   8   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
61   CA   CA   . ARG ARG ARG A A 8   8   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
62   CB   CB   . ARG ARG ARG A A 8   8   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
63   CG   CG   . ARG ARG ARG A A 8   8   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
64   CD   CD   . ARG ARG ARG A A 8   8   . 0.0267 0.0261 0.0277 -0.0010 -0.0018
0.0014  1 .
65   NE   NE   . ARG ARG ARG A A 8   8   . 0.0256 0.0406 0.0459 -0.0023 -0.0027
0.0178  1 .
66   CZ   CZ   . ARG ARG ARG A A 8   8   . 0.0489 0.0503 0.0505 0.0228  0.0003  -
0.0081 1 .
67   NH1  NH1  . ARG ARG ARG A A 8   8   . 0.0469 0.0365 0.0307 0.0000  -0.0105
0.0017  1 .
68   NH2  NH2  . ARG ARG ARG A A 8   8   . 0.0506 0.0281 0.0465 0.0000  -0.0170 -
0.0038 1 .
69   C    C    . ARG ARG ARG A A 8   8   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
70   O    O    . ARG ARG ARG A A 8   8   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
71   N    N    . GLU GLU GLU A A 9   9   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
72   CA   CA   . GLU GLU GLU A A 9   9   . 0.0344 0.0352 0.0328 0.0004  0.0081
0.0021  1 .
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73   CB   CB   . GLU GLU GLU A A 9   9   . 0.0517 0.0768 0.0374 -0.0058 0.0040  -
0.0171 1 .
74   CG   CG   . GLU GLU GLU A A 9   9   . 0.0880 0.0918 0.0779 -0.0020 0.0141
0.0126  1 .
75   CD   CD   . GLU GLU GLU A A 9   9   . 0.0716 0.0997 0.0646 0.0226  0.0026  -
0.0037 1 .
76   OE1  OE1  . GLU GLU GLU A A 9   9   . 0.0620 0.0278 0.0398 0.0046  0.0034  -
0.0025 1 .
77   OE2  OE2  . GLU GLU GLU A A 9   9   . 0.0890 0.0798 0.0769 0.0178  -0.0068 -
0.0084 1 .
78   C    C    . GLU GLU GLU A A 9   9   . 0.0494 0.0416 0.0378 0.0002  -0.0171
0.0018  1 .
79   O    O    . GLU GLU GLU A A 9   9   . 0.0786 0.0500 0.0475 -0.0021 -0.0263
0.0000  1 .
80   N    N    . ILE ILE ILE A A 10  10  . 0.0253 0.0253 0.0253 0.0000  0.0000
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0.0000  1 .
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0.0000  1 .
83   CG1  CG1  . ILE ILE ILE A A 10  10  . 0.0311 0.0255 0.0262 -0.0010 0.0023  -
0.0004 1 .
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0.0000  1 .
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0.0000  1 .
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0.0000  1 .
88   N    N    . LEU LEU LEU A A 11  11  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
89   CA   CA   . LEU LEU LEU A A 11  11  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
90   CB   CB   . LEU LEU LEU A A 11  11  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
91   CG   CG   . LEU LEU LEU A A 11  11  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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93   CD2  CD2  . LEU LEU LEU A A 11  11  . 0.0569 0.0417 0.0384 0.0188  -0.0090 -
0.0127 1 .
94   C    C    . LEU LEU LEU A A 11  11  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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0.0000  1 .
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98   CB   CB   . ASP ASP ASP A A 12  12  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
99   CG   CG   . ASP ASP ASP A A 12  12  . 0.0264 0.0255 0.0257 0.0005  -0.0007 -
0.0003 1 .
100  OD1  OD1  . ASP ASP ASP A A 12  12  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
101  OD2  OD2  . ASP ASP ASP A A 12  12  . 0.0370 0.0311 0.0362 0.0034  -0.0104 -
0.0002 1 .
102  C    C    . ASP ASP ASP A A 12  12  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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103  O    O    . ASP ASP ASP A A 12  12  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
104  N    N    . SER SER SER A A 13  13  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
105  CA   CA   . SER SER SER A A 13  13  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
106  CB   CB   . SER SER SER A A 13  13  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
107  OG   OG   . SER SER SER A A 13  13  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
108  C    C    . SER SER SER A A 13  13  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
109  O    O    . SER SER SER A A 13  13  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
110  N    N    . ARG ARG ARG A A 14  14  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
111  CA   CA   . ARG ARG ARG A A 14  14  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
112  CB   CB   . ARG ARG ARG A A 14  14  . 0.0329 0.0317 0.0344 0.0018  0.0043  -
0.0051 1 .
113  CG   CG   . ARG ARG ARG A A 14  14  . 0.0730 0.0880 0.1005 -0.0048 -0.0067 -
0.0081 1 .
114  CD   CD   . ARG ARG ARG A A 14  14  . 0.0992 0.1422 0.0817 -0.0033 0.0134
0.0263  1 .
115  NE   NE   . ARG ARG ARG A A 14  14  . 0.1253 0.1074 0.1180 0.0420  -0.0003 -
0.0112 1 .
116  CZ   CZ   . ARG ARG ARG A A 14  14  . 0.0626 0.1040 0.0972 0.0056  -0.0142 -
0.0133 1 .
117  NH1  NH1  . ARG ARG ARG A A 14  14  . 0.0644 0.0582 0.0940 0.0211  -0.0029 -
0.0173 1 .
118  NH2  NH2  . ARG ARG ARG A A 14  14  . 0.1269 0.1157 0.1456 0.0393  -0.0263
0.0228  1 .
119  C    C    . ARG ARG ARG A A 14  14  . 0.0260 0.0254 0.0259 -0.0002 0.0006  -
0.0002 1 .
120  O    O    . ARG ARG ARG A A 14  14  . 0.0295 0.0324 0.0266 0.0016  0.0015  -
0.0015 1 .
121  N    N    . GLY GLY GLY A A 15  15  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
122  CA   CA   . GLY GLY GLY A A 15  15  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
123  C    C    . GLY GLY GLY A A 15  15  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
124  O    O    . GLY GLY GLY A A 15  15  . 0.0282 0.0276 0.0299 -0.0024 0.0035  -
0.0032 1 .
125  N    N    . ASN ASN ASN A A 16  16  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
126  CA   CA   . ASN ASN ASN A A 16  16  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
127  CB   CB   . ASN ASN ASN A A 16  16  . 0.0253 0.0262 0.0255 -0.0001 0.0000  -
0.0004 1 .
128  CG   CG   . ASN ASN ASN A A 16  16  . 0.0259 0.0442 0.0295 -0.0005 -0.0014
0.0051  1 .
129  OD1  OD1  . ASN ASN ASN A A 16  16  . 0.0817 0.1109 0.0801 -0.0185 0.0055  -
0.0190 1 .
130  ND2  ND2  . ASN ASN ASN A A 16  16  . 0.0950 0.0659 0.0881 -0.0045 -0.0160 -
0.0046 1 .
131  C    C    . ASN ASN ASN A A 16  16  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
132  O    O    . ASN ASN ASN A A 16  16  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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133  N    N    . PRO PRO PRO A A 17  17  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
134  CA   CA   . PRO PRO PRO A A 17  17  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
135  CB   CB   . PRO PRO PRO A A 17  17  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
136  CG   CG   . PRO PRO PRO A A 17  17  . 0.0320 0.0262 0.0335 -0.0024 0.0074  -
0.0027 1 .
137  CD   CD   . PRO PRO PRO A A 17  17  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
138  C    C    . PRO PRO PRO A A 17  17  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
139  O    O    . PRO PRO PRO A A 17  17  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
140  N    N    . THR THR THR A A 18  18  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
141  CA   CA   . THR THR THR A A 18  18  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
142  CB   CB   . THR THR THR A A 18  18  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
143  OG1  OG1  . THR THR THR A A 18  18  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
144  CG2  CG2  . THR THR THR A A 18  18  . 0.0260 0.0253 0.0259 0.0002  0.0007
0.0002  1 .
145  C    C    . THR THR THR A A 18  18  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
146  O    O    . THR THR THR A A 18  18  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
147  N    N    . VAL VAL VAL A A 19  19  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
148  CA   CA   . VAL VAL VAL A A 19  19  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
149  CB   CB   . VAL VAL VAL A A 19  19  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
150  CG1  CG1  . VAL VAL VAL A A 19  19  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
151  CG2  CG2  . VAL VAL VAL A A 19  19  . 0.0299 0.0255 0.0446 0.0010  -0.0094 -
0.0021 1 .
152  C    C    . VAL VAL VAL A A 19  19  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
153  O    O    . VAL VAL VAL A A 19  19  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
154  N    N    . GLU GLU GLU A A 20  20  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
155  CA   CA   . GLU GLU GLU A A 20  20  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
156  CB   CB   . GLU GLU GLU A A 20  20  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
157  CG   CG   . GLU GLU GLU A A 20  20  . 0.0283 0.0321 0.0374 -0.0045 -0.0060
0.0090  1 .
158  CD   CD   . GLU GLU GLU A A 20  20  . 0.0822 0.0646 0.0920 -0.0196 -0.0256
0.0224  1 .
159  OE1  OE1  . GLU GLU GLU A A 20  20  . 0.0837 0.0446 0.0710 0.0070  -0.0027
0.0153  1 .
160  OE2  OE2  . GLU GLU GLU A A 20  20  . 0.1437 0.0977 0.0970 0.0049  0.0007  -
0.0128 1 .
161  C    C    . GLU GLU GLU A A 20  20  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
162  O    O    . GLU GLU GLU A A 20  20  . 0.0254 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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163  N    N    . VAL VAL VAL A A 21  21  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
164  CA   CA   . VAL VAL VAL A A 21  21  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
165  CB   CB   . VAL VAL VAL A A 21  21  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
166  CG1  CG1  . VAL VAL VAL A A 21  21  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
167  CG2  CG2  . VAL VAL VAL A A 21  21  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
168  C    C    . VAL VAL VAL A A 21  21  . 0.0255 0.0258 0.0254 0.0003  0.0001
0.0002  1 .
169  O    O    . VAL VAL VAL A A 21  21  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
170  N    N    . ASP ASP ASP A A 22  22  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
171  CA   CA   . ASP ASP ASP A A 22  22  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
172  CB   CB   . ASP ASP ASP A A 22  22  . 0.0317 0.0253 0.0297 -0.0002 -0.0053
0.0001  1 .
173  CG   CG   . ASP ASP ASP A A 22  22  . 0.0578 0.0624 0.0381 0.0157  0.0122  -
0.0095 1 .
174  OD1  OD1  . ASP ASP ASP A A 22  22  . 0.0914 0.1283 0.0899 -0.0006 -0.0217
0.0283  1 .
175  OD2  OD2  . ASP ASP ASP A A 22  22  . 0.0520 0.0570 0.0844 -0.0125 0.0044  -
0.0042 1 .
176  C    C    . ASP ASP ASP A A 22  22  . 0.0262 0.0265 0.0322 -0.0010 0.0025  -
0.0029 1 .
177  O    O    . ASP ASP ASP A A 22  22  . 0.0283 0.0339 0.0335 0.0050  -0.0003
0.0005  1 .
178  N    N    . LEU LEU LEU A A 23  23  . 0.0314 0.0254 0.0301 -0.0008 0.0054  -
0.0007 1 .
179  CA   CA   . LEU LEU LEU A A 23  23  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
180  CB   CB   . LEU LEU LEU A A 23  23  . 0.0366 0.0274 0.0283 -0.0042 -0.0013 -
0.0007 1 .
181  CG   CG   . LEU LEU LEU A A 23  23  . 0.0702 0.0763 0.0441 -0.0167 0.0009
0.0124  1 .
182  CD1  CD1  . LEU LEU LEU A A 23  23  . 0.0699 0.0676 0.0783 0.0419  -0.0033 -
0.0048 1 .
183  CD2  CD2  . LEU LEU LEU A A 23  23  . 0.0750 0.1019 0.1086 0.0299  -0.0170
0.0162  1 .
184  C    C    . LEU LEU LEU A A 23  23  . 0.0255 0.0288 0.0268 0.0008  -0.0005 -
0.0023 1 .
185  O    O    . LEU LEU LEU A A 23  23  . 0.0253 0.0254 0.0296 0.0000  -0.0004
0.0006  1 .
186  N    N    . TYR TYR TYR A A 24  24  . 0.0254 0.0264 0.0434 0.0003  0.0014
0.0044  1 .
187  CA   CA   . TYR TYR TYR A A 24  24  . 0.0331 0.0357 0.0410 0.0001  -0.0074
0.0008  1 .
188  CB   CB   . TYR TYR TYR A A 24  24  . 0.0509 0.0557 0.0389 -0.0165 -0.0055
0.0084  1 .
189  CG   CG   . TYR TYR TYR A A 24  24  . 0.0858 0.0694 0.0521 -0.0117 -0.0053
0.0155  1 .
190  CD1  CD1  . TYR TYR TYR A A 24  24  . 0.0322 0.0305 0.0501 -0.0036 -0.0010 -
0.0084 1 .
191  CE1  CE1  . TYR TYR TYR A A 24  24  . 0.1030 0.1206 0.0695 -0.0109 -0.0006
0.0048  1 .
192  CZ   CZ   . TYR TYR TYR A A 24  24  . 0.1232 0.1307 0.1470 -0.0154 0.0078
0.0096  1 .
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193  OH   OH   . TYR TYR TYR A A 24  24  . 0.1851 0.2095 0.1652 -0.0037 -0.0384
0.0361  1 .
194  CE2  CE2  . TYR TYR TYR A A 24  24  . 0.1853 0.1470 0.1571 0.0288  0.0067
0.0099  1 .
195  CD2  CD2  . TYR TYR TYR A A 24  24  . 0.1101 0.1152 0.1298 0.0048  0.0111
0.0113  1 .
196  C    C    . TYR TYR TYR A A 24  24  . 0.0266 0.0395 0.0424 0.0009  -0.0031
0.0092  1 .
197  O    O    . TYR TYR TYR A A 24  24  . 0.0277 0.0336 0.0562 -0.0035 -0.0008 -
0.0084 1 .
198  N    N    . THR THR THR A A 25  25  . 0.0635 0.0618 0.0400 -0.0104 0.0117  -
0.0124 1 .
199  CA   CA   . THR THR THR A A 25  25  . 0.0619 0.0593 0.0724 -0.0023 0.0010
0.0001  1 .
200  CB   CB   . THR THR THR A A 25  25  . 0.0496 0.0631 0.0834 -0.0014 0.0041  -
0.0042 1 .
201  OG1  OG1  . THR THR THR A A 25  25  . 0.0701 0.0665 0.0902 0.0075  0.0051  -
0.0021 1 .
202  CG2  CG2  . THR THR THR A A 25  25  . 0.0586 0.0763 0.0610 0.0079  -0.0030
0.0000  1 .
203  C    C    . THR THR THR A A 25  25  . 0.0750 0.0803 0.0854 -0.0033 0.0033  -
0.0040 1 .
204  O    O    . THR THR THR A A 25  25  . 0.0725 0.1012 0.1047 -0.0056 0.0005
0.0110  1 .
205  N    N    . ALA ALA ALA A A 26  26  . 0.0947 0.0923 0.0961 -0.0080 0.0068  -
0.0013 1 .
206  CA   CA   . ALA ALA ALA A A 26  26  . 0.1207 0.1340 0.1376 -0.0095 0.0013
0.0047  1 .
207  CB   CB   . ALA ALA ALA A A 26  26  . 0.1575 0.1615 0.1569 -0.0097 0.0069
0.0276  1 .
208  C    C    . ALA ALA ALA A A 26  26  . 0.1235 0.1325 0.1351 -0.0015 -0.0038
0.0101  1 .
209  O    O    . ALA ALA ALA A A 26  26  . 0.1434 0.1601 0.1646 -0.0082 -0.0032 -
0.0046 1 .
210  N    N    . LYS LYS LYS A A 27  27  . 0.1617 0.1491 0.1564 -0.0032 0.0062  -
0.0005 1 .
211  CA   CA   . LYS LYS LYS A A 27  27  . 0.1520 0.1588 0.1608 -0.0001 0.0025
0.0001  1 .
212  CB   CB   . LYS LYS LYS A A 27  27  . 0.1737 0.1777 0.1682 0.0030  0.0048  -
0.0042 1 .
213  CG   CG   . LYS LYS LYS A A 27  27  . 0.2228 0.2068 0.2322 -0.0040 0.0098  -
0.0006 1 .
214  CD   CD   . LYS LYS LYS A A 27  27  . 0.2394 0.2407 0.2224 0.0050  0.0057  -
0.0216 1 .
215  CE   CE   . LYS LYS LYS A A 27  27  . 0.2810 0.2693 0.2415 -0.0122 0.0177  -
0.0245 1 .
216  NZ   NZ   . LYS LYS LYS A A 27  27  . 0.2801 0.3418 0.2535 0.0159  0.0006  -
0.0316 1 .
217  C    C    . LYS LYS LYS A A 27  27  . 0.1515 0.1453 0.1525 0.0002  -0.0029 -
0.0082 1 .
218  O    O    . LYS LYS LYS A A 27  27  . 0.1671 0.1439 0.1522 0.0127  -0.0001 -
0.0139 1 .
219  N    N    . GLY GLY GLY A A 28  28  . 0.0970 0.1247 0.0994 0.0076  0.0050  -
0.0073 1 .
220  CA   CA   . GLY GLY GLY A A 28  28  . 0.0911 0.0959 0.1037 -0.0063 -0.0071
0.0050  1 .
221  C    C    . GLY GLY GLY A A 28  28  . 0.0611 0.0509 0.0733 0.0020  -0.0020 -
0.0074 1 .
222  O    O    . GLY GLY GLY A A 28  28  . 0.0519 0.0718 0.0848 -0.0018 -0.0101
0.0099  1 .
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223  N    N    . LEU LEU LEU A A 29  29  . 0.0549 0.0598 0.0551 0.0048  0.0135  -
0.0036 1 .
224  CA   CA   . LEU LEU LEU A A 29  29  . 0.0668 0.0732 0.0774 0.0053  -0.0027 -
0.0019 1 .
225  CB   CB   . LEU LEU LEU A A 29  29  . 0.0841 0.0822 0.0776 -0.0073 -0.0019 -
0.0157 1 .
226  CG   CG   . LEU LEU LEU A A 29  29  . 0.1579 0.1617 0.1577 0.0113  -0.0154 -
0.0032 1 .
227  CD1  CD1  . LEU LEU LEU A A 29  29  . 0.1845 0.2061 0.1674 0.0570  0.0187  -
0.0050 1 .
228  CD2  CD2  . LEU LEU LEU A A 29  29  . 0.1980 0.2234 0.2583 -0.0190 0.0180
0.0039  1 .
229  C    C    . LEU LEU LEU A A 29  29  . 0.0541 0.0434 0.0624 0.0091  0.0011  -
0.0061 1 .
230  O    O    . LEU LEU LEU A A 29  29  . 0.0886 0.1024 0.1253 0.0055  0.0000  -
0.0037 1 .
231  N    N    . PHE PHE PHE A A 30  30  . 0.0255 0.0319 0.0259 -0.0010 -0.0003
0.0020  1 .
232  CA   CA   . PHE PHE PHE A A 30  30  . 0.0266 0.0255 0.0277 -0.0005 0.0017  -
0.0006 1 .
233  CB   CB   . PHE PHE PHE A A 30  30  . 0.0258 0.0279 0.0277 0.0011  -0.0011 -
0.0025 1 .
234  CG   CG   . PHE PHE PHE A A 30  30  . 0.0465 0.0367 0.0388 -0.0067 -0.0050 -
0.0043 1 .
235  CD1  CD1  . PHE PHE PHE A A 30  30  . 0.0380 0.0347 0.0562 0.0059  0.0056  -
0.0111 1 .
236  CE1  CE1  . PHE PHE PHE A A 30  30  . 0.0415 0.0665 0.0534 -0.0090 0.0171
0.0094  1 .
237  CZ   CZ   . PHE PHE PHE A A 30  30  . 0.0556 0.0428 0.0578 -0.0176 0.0211  -
0.0236 1 .
238  CE2  CE2  . PHE PHE PHE A A 30  30  . 0.0447 0.0621 0.0681 0.0007  0.0236  -
0.0218 1 .
239  CD2  CD2  . PHE PHE PHE A A 30  30  . 0.0644 0.0664 0.0749 -0.0187 -0.0064
0.0112  1 .
240  C    C    . PHE PHE PHE A A 30  30  . 0.0255 0.0257 0.0306 -0.0003 0.0011  -
0.0014 1 .
241  O    O    . PHE PHE PHE A A 30  30  . 0.0465 0.0332 0.0582 -0.0107 0.0080  -
0.0127 1 .
242  N    N    . ARG ARG ARG A A 31  31  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
243  CA   CA   . ARG ARG ARG A A 31  31  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
244  CB   CB   . ARG ARG ARG A A 31  31  . 0.0270 0.0253 0.0254 0.0000  -0.0004
0.0000  1 .
245  CG   CG   . ARG ARG ARG A A 31  31  . 0.0660 0.0656 0.0526 -0.0009 -0.0082
0.0202  1 .
246  CD   CD   . ARG ARG ARG A A 31  31  . 0.0639 0.0446 0.0342 0.0166  0.0082
0.0128  1 .
247  NE   NE   . ARG ARG ARG A A 31  31  . 0.0856 0.0849 0.0979 -0.0028 -0.0007 -
0.0016 1 .
248  CZ   CZ   . ARG ARG ARG A A 31  31  . 0.0810 0.1056 0.0743 -0.0136 0.0070
0.0133  1 .
249  NH1  NH1  . ARG ARG ARG A A 31  31  . 0.1221 0.0991 0.1101 0.0278  0.0286
0.0162  1 .
250  NH2  NH2  . ARG ARG ARG A A 31  31  . 0.1282 0.1094 0.0745 0.0087  0.0333  -
0.0175 1 .
251  C    C    . ARG ARG ARG A A 31  31  . 0.0254 0.0258 0.0306 -0.0002 0.0007  -
0.0016 1 .
252  O    O    . ARG ARG ARG A A 31  31  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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253  N    N    . ALA ALA ALA A A 32  32  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
254  CA   CA   . ALA ALA ALA A A 32  32  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
255  CB   CB   . ALA ALA ALA A A 32  32  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
256  C    C    . ALA ALA ALA A A 32  32  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
257  O    O    . ALA ALA ALA A A 32  32  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
258  N    N    . ALA ALA ALA A A 33  33  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
259  CA   CA   . ALA ALA ALA A A 33  33  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
260  CB   CB   . ALA ALA ALA A A 33  33  . 0.0346 0.0254 0.0257 -0.0011 -0.0019
0.0002  1 .
261  C    C    . ALA ALA ALA A A 33  33  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
262  O    O    . ALA ALA ALA A A 33  33  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
263  N    N    . VAL VAL VAL A A 34  34  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
264  CA   CA   . VAL VAL VAL A A 34  34  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
265  CB   CB   . VAL VAL VAL A A 34  34  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
266  CG1  CG1  . VAL VAL VAL A A 34  34  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
267  CG2  CG2  . VAL VAL VAL A A 34  34  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
268  C    C    . VAL VAL VAL A A 34  34  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
269  O    O    . VAL VAL VAL A A 34  34  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
270  N    N    . PRO PRO PRO A A 35  35  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
271  CA   CA   . PRO PRO PRO A A 35  35  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
272  CB   CB   . PRO PRO PRO A A 35  35  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
273  CG   CG   . PRO PRO PRO A A 35  35  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
274  CD   CD   . PRO PRO PRO A A 35  35  . 0.0275 0.0266 0.0253 -0.0016 0.0000
0.0000  1 .
275  C    C    . PRO PRO PRO A A 35  35  . 0.0254 0.0256 0.0254 -0.0001 -0.0001
0.0002  1 .
276  O    O    . PRO PRO PRO A A 35  35  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
277  N    N    . SER SER SER A A 36  36  . 0.0254 0.0284 0.0289 -0.0007 -0.0007
0.0033  1 .
278  CA   CA   . SER SER SER A A 36  36  . 0.0278 0.0279 0.0289 -0.0025 0.0030  -
0.0031 1 .
279  CB   CB   . SER SER SER A A 36  36  . 0.0403 0.0564 0.0333 -0.0030 0.0070
0.0020  1 .
280  OG   OG   . SER SER SER A A 36  36  . 0.0791 0.0583 0.0718 -0.0032 0.0030  -
0.0066 1 .
281  C    C    . SER SER SER A A 36  36  . 0.0260 0.0328 0.0253 -0.0022 0.0000
0.0002  1 .
282  O    O    . SER SER SER A A 36  36  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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283  N    N    . GLY GLY GLY A A 37  37  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
284  CA   CA   . GLY GLY GLY A A 37  37  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
285  C    C    . GLY GLY GLY A A 37  37  . 0.0254 0.0253 0.0254 0.0000  0.0000
0.0000  1 .
286  O    O    . GLY GLY GLY A A 37  37  . 0.0286 0.0317 0.0261 -0.0044 0.0008  -
0.0016 1 .
287  N    N    . ALA ALA ALA A A 38  38  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
288  CA   CA   . ALA ALA ALA A A 38  38  . 0.0342 0.0256 0.0267 0.0015  0.0035
0.0006  1 .
289  CB   CB   . ALA ALA ALA A A 38  38  . 0.0471 0.0262 0.0531 0.0044  0.0063
0.0022  1 .
290  C    C    . ALA ALA ALA A A 38  38  . 0.0291 0.0485 0.0419 -0.0008 0.0061  -
0.0139 1 .
291  O    O    . ALA ALA ALA A A 38  38  . 0.0566 0.0315 0.0489 0.0137  0.0037
0.0000  1 .
292  N    N    . SER SER SER A A 39  39  . 0.0413 0.0255 0.0265 -0.0020 0.0043  -
0.0005 1 .
293  CA   CA   . SER SER SER A A 39  39  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
294  CB   CB   . SER SER SER A A 39  39  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
295  OG   OG   . SER SER SER A A 39  39  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
296  C    C    . SER SER SER A A 39  39  . 0.0268 0.0259 0.0275 -0.0009 0.0018  -
0.0011 1 .
297  O    O    . SER SER SER A A 39  39  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
298  N    N    . THR THR THR A A 40  40  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
299  CA   CA   . THR THR THR A A 40  40  . 0.0259 0.0282 0.0254 -0.0013 0.0003  -
0.0006 1 .
300  CB   CB   . THR THR THR A A 40  40  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
301  OG1  OG1  . THR THR THR A A 40  40  . 0.0415 0.0253 0.0559 -0.0009 -0.0093
0.0004  1 .
302  CG2  CG2  . THR THR THR A A 40  40  . 0.0406 0.0261 0.0277 0.0034  -0.0060 -
0.0013 1 .
303  C    C    . THR THR THR A A 40  40  . 0.0318 0.0295 0.0272 0.0052  0.0035
0.0028  1 .
304  O    O    . THR THR THR A A 40  40  . 0.0582 0.0848 0.0411 0.0040  -0.0054 -
0.0079 1 .
305  N    N    . GLY GLY GLY A A 41  41  . 0.0287 0.0259 0.0280 0.0015  -0.0030 -
0.0013 1 .
306  CA   CA   . GLY GLY GLY A A 41  41  . 0.0268 0.0255 0.0291 0.0005  -0.0023 -
0.0008 1 .
307  C    C    . GLY GLY GLY A A 41  41  . 0.0259 0.0253 0.0268 0.0001  -0.0009 -
0.0001 1 .
308  O    O    . GLY GLY GLY A A 41  41  . 0.0255 0.0267 0.0344 0.0006  -0.0015 -
0.0035 1 .
309  N    N    . ILE ILE ILE A A 42  42  . 0.0308 0.0284 0.0351 0.0041  0.0073
0.0055  1 .
310  CA   CA   . ILE ILE ILE A A 42  42  . 0.0373 0.0303 0.0429 -0.0065 -0.0034 -
0.0017 1 .
311  CB   CB   . ILE ILE ILE A A 42  42  . 0.0428 0.0461 0.0645 0.0061  0.0028  -
0.0066 1 .
312  CG1  CG1  . ILE ILE ILE A A 42  42  . 0.0805 0.1069 0.0769 0.0138  -0.0001 -
0.0071 1 .
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313  CD1  CD1  . ILE ILE ILE A A 42  42  . 0.1394 0.1564 0.1587 0.0509  -0.0216
0.0324  1 .
314  CG2  CG2  . ILE ILE ILE A A 42  42  . 0.0799 0.0430 0.0864 0.0172  0.0101
0.0073  1 .
315  C    C    . ILE ILE ILE A A 42  42  . 0.0253 0.0261 0.0255 0.0001  0.0000  -
0.0004 1 .
316  O    O    . ILE ILE ILE A A 42  42  . 0.0604 0.0478 0.0720 0.0025  0.0166  -
0.0029 1 .
317  N    N    . TYR TYR TYR A A 43  43  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
318  CA   CA   . TYR TYR TYR A A 43  43  . 0.0284 0.0262 0.0261 0.0016  -0.0015 -
0.0008 1 .
319  CB   CB   . TYR TYR TYR A A 43  43  . 0.0285 0.0299 0.0279 0.0038  0.0028
0.0034  1 .
320  CG   CG   . TYR TYR TYR A A 43  43  . 0.0371 0.0403 0.0453 -0.0001 -0.0142
0.0054  1 .
321  CD1  CD1  . TYR TYR TYR A A 43  43  . 0.0711 0.0800 0.0647 0.0115  -0.0185 -
0.0077 1 .
322  CE1  CE1  . TYR TYR TYR A A 43  43  . 0.0543 0.0449 0.0637 0.0044  0.0046  -
0.0185 1 .
323  CZ   CZ   . TYR TYR TYR A A 43  43  . 0.1240 0.1121 0.1572 0.0029  -0.0124 -
0.0020 1 .
324  OH   OH   . TYR TYR TYR A A 43  43  . 0.1248 0.1686 0.1619 0.0322  -0.0320 -
0.0256 1 .
325  CE2  CE2  . TYR TYR TYR A A 43  43  . 0.0782 0.0996 0.1144 0.0092  -0.0072 -
0.0269 1 .
326  CD2  CD2  . TYR TYR TYR A A 43  43  . 0.0824 0.0663 0.0980 0.0124  -0.0081 -
0.0060 1 .
327  C    C    . TYR TYR TYR A A 43  43  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
328  O    O    . TYR TYR TYR A A 43  43  . 0.0346 0.0270 0.0394 0.0036  -0.0101 -
0.0049 1 .
329  N    N    . GLU GLU GLU A A 44  44  . 0.0268 0.0258 0.0260 0.0009  -0.0010 -
0.0006 1 .
330  CA   CA   . GLU GLU GLU A A 44  44  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
331  CB   CB   . GLU GLU GLU A A 44  44  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
332  CG   CG   . GLU GLU GLU A A 44  44  . 0.0323 0.0291 0.0300 0.0051  -0.0057 -
0.0042 1 .
333  CD   CD   . GLU GLU GLU A A 44  44  . 0.0326 0.0372 0.0330 -0.0066 -0.0054
0.0003  1 .
334  OE1  OE1  . GLU GLU GLU A A 44  44  . 0.0267 0.0390 0.0375 -0.0003 -0.0013
0.0125  1 .
335  OE2  OE2  . GLU GLU GLU A A 44  44  . 0.0253 0.0273 0.0322 0.0000  0.0001
0.0037  1 .
336  C    C    . GLU GLU GLU A A 44  44  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
337  O    O    . GLU GLU GLU A A 44  44  . 0.0259 0.0366 0.0348 0.0015  0.0013  -
0.0033 1 .
338  N    N    . ALA ALA ALA A A 45  45  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
339  CA   CA   . ALA ALA ALA A A 45  45  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
340  CB   CB   . ALA ALA ALA A A 45  45  . 0.0262 0.0253 0.0256 0.0000  0.0004
0.0000  1 .
341  C    C    . ALA ALA ALA A A 45  45  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
342  O    O    . ALA ALA ALA A A 45  45  . 0.0375 0.0269 0.0326 0.0035  -0.0086 -
0.0033 1 .
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343  N    N    . LEU LEU LEU A A 46  46  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
344  CA   CA   . LEU LEU LEU A A 46  46  . 0.0287 0.0256 0.0260 -0.0007 -0.0013
0.0001  1 .
345  CB   CB   . LEU LEU LEU A A 46  46  . 0.0396 0.0292 0.0330 0.0019  -0.0027 -
0.0054 1 .
346  CG   CG   . LEU LEU LEU A A 46  46  . 0.1518 0.1474 0.1527 -0.0143 0.0236  -
0.0274 1 .
347  CD1  CD1  . LEU LEU LEU A A 46  46  . 0.1555 0.1483 0.1079 0.0281  -0.0067 -
0.0040 1 .
348  CD2  CD2  . LEU LEU LEU A A 46  46  . 0.1729 0.1467 0.1609 0.0141  0.0317  -
0.0202 1 .
349  C    C    . LEU LEU LEU A A 46  46  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
350  O    O    . LEU LEU LEU A A 46  46  . 0.0313 0.0401 0.0315 -0.0042 -0.0047
0.0073  1 .
351  N    N    . GLU GLU GLU A A 47  47  . 0.0263 0.0321 0.0253 0.0026  0.0000
0.0001  1 .
352  CA   CA   . GLU GLU GLU A A 47  47  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
353  CB   CB   . GLU GLU GLU A A 47  47  . 0.0565 0.0295 0.0599 -0.0011 -0.0111
0.0050  1 .
354  CG   CG   . GLU GLU GLU A A 47  47  . 0.0727 0.0449 0.0268 -0.0054 0.0057  -
0.0046 1 .
355  CD   CD   . GLU GLU GLU A A 47  47  . 0.0822 0.0556 0.0814 0.0083  0.0185
0.0088  1 .
356  OE1  OE1  . GLU GLU GLU A A 47  47  . 0.1004 0.0860 0.0785 0.0135  -0.0154 -
0.0108 1 .
357  OE2  OE2  . GLU GLU GLU A A 47  47  . 0.0884 0.0861 0.0939 0.0217  -0.0042
0.0038  1 .
358  C    C    . GLU GLU GLU A A 47  47  . 0.0255 0.0256 0.0263 0.0002  0.0004
0.0005  1 .
359  O    O    . GLU GLU GLU A A 47  47  . 0.0266 0.0253 0.0256 -0.0002 0.0006  -
0.0001 1 .
360  N    N    . LEU LEU LEU A A 48  48  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
361  CA   CA   . LEU LEU LEU A A 48  48  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
362  CB   CB   . LEU LEU LEU A A 48  48  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
363  CG   CG   . LEU LEU LEU A A 48  48  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
364  CD1  CD1  . LEU LEU LEU A A 48  48  . 0.0604 0.0486 0.0510 0.0153  -0.0141 -
0.0083 1 .
365  CD2  CD2  . LEU LEU LEU A A 48  48  . 0.0675 0.0326 0.0451 -0.0164 -0.0174
0.0101  1 .
366  C    C    . LEU LEU LEU A A 48  48  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
367  O    O    . LEU LEU LEU A A 48  48  . 0.0253 0.0273 0.0261 0.0002  -0.0001 -
0.0012 1 .
368  N    N    . ARG ARG ARG A A 49  49  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
369  CA   CA   . ARG ARG ARG A A 49  49  . 0.0329 0.0283 0.0329 0.0048  0.0076
0.0048  1 .
370  CB   CB   . ARG ARG ARG A A 49  49  . 0.0789 0.0598 0.0868 0.0124  0.0069  -
0.0118 1 .
371  CG   CG   . ARG ARG ARG A A 49  49  . 0.1390 0.0689 0.0617 -0.0023 0.0126  -
0.0067 1 .
372  CD   CD   . ARG ARG ARG A A 49  49  . 0.0905 0.1217 0.1300 0.0601  -0.0330 -
0.0124 1 .
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373  NE   NE   . ARG ARG ARG A A 49  49  . 0.0873 0.0720 0.1124 0.0016  -0.0077 -
0.0303 1 .
374  CZ   CZ   . ARG ARG ARG A A 49  49  . 0.0793 0.0473 0.0564 0.0121  -0.0023
0.0103  1 .
375  NH1  NH1  . ARG ARG ARG A A 49  49  . 0.0315 0.0272 0.0514 0.0020  -0.0057
0.0032  1 .
376  NH2  NH2  . ARG ARG ARG A A 49  49  . 0.1007 0.0502 0.0492 0.0023  0.0075  -
0.0096 1 .
377  C    C    . ARG ARG ARG A A 49  49  . 0.0428 0.0275 0.0332 0.0060  -0.0058 -
0.0012 1 .
378  O    O    . ARG ARG ARG A A 49  49  . 0.0665 0.0522 0.0579 0.0242  -0.0107
0.0130  1 .
379  N    N    . ASP ASP ASP A A 50  50  . 0.0337 0.0261 0.0255 0.0025  0.0012
0.0003  1 .
380  CA   CA   . ASP ASP ASP A A 50  50  . 0.0369 0.0359 0.0323 0.0070  -0.0037 -
0.0083 1 .
381  CB   CB   . ASP ASP ASP A A 50  50  . 0.0373 0.0292 0.0303 0.0069  0.0077
0.0044  1 .
382  CG   CG   . ASP ASP ASP A A 50  50  . 0.0481 0.0543 0.0429 0.0131  0.0084  -
0.0127 1 .
383  OD1  OD1  . ASP ASP ASP A A 50  50  . 0.0385 0.0258 0.0304 0.0026  0.0081
0.0016  1 .
384  OD2  OD2  . ASP ASP ASP A A 50  50  . 0.0424 0.0268 0.0284 0.0029  0.0040  -
0.0007 1 .
385  C    C    . ASP ASP ASP A A 50  50  . 0.0550 0.0442 0.0501 -0.0056 0.0035
0.0014  1 .
386  O    O    . ASP ASP ASP A A 50  50  . 0.0612 0.0514 0.0594 0.0085  0.0053  -
0.0077 1 .
387  N    N    . GLY GLY GLY A A 51  51  . 0.0600 0.0734 0.0882 -0.0059 0.0023
0.0087  1 .
388  CA   CA   . GLY GLY GLY A A 51  51  . 0.1033 0.0917 0.0901 0.0173  0.0177
0.0009  1 .
389  C    C    . GLY GLY GLY A A 51  51  . 0.1326 0.1320 0.1197 0.0052  0.0035
0.0003  1 .
390  O    O    . GLY GLY GLY A A 51  51  . 0.1441 0.1627 0.1469 0.0034  0.0158  -
0.0116 1 .
391  N    N    . ASP ASP ASP A A 52  52  . 0.0902 0.0968 0.0954 -0.0010 0.0089
0.0007  1 .
392  CA   CA   . ASP ASP ASP A A 52  52  . 0.1275 0.1296 0.1256 -0.0103 0.0027
0.0000  1 .
393  CB   CB   . ASP ASP ASP A A 52  52  . 0.1447 0.1335 0.1088 0.0068  -0.0066 -
0.0014 1 .
394  CG   CG   . ASP ASP ASP A A 52  52  . 0.1588 0.1119 0.1394 -0.0014 0.0018
0.0048  1 .
395  OD1  OD1  . ASP ASP ASP A A 52  52  . 0.2242 0.1463 0.1157 0.0230  0.0066  -
0.0170 1 .
396  OD2  OD2  . ASP ASP ASP A A 52  52  . 0.2287 0.1742 0.1611 0.0624  0.0519  -
0.0270 1 .
397  C    C    . ASP ASP ASP A A 52  52  . 0.1625 0.1652 0.1565 0.0081  0.0028
0.0068  1 .
398  O    O    . ASP ASP ASP A A 52  52  . 0.1654 0.1547 0.1409 0.0100  0.0176
0.0082  1 .
399  N    N    . LYS LYS LYS A A 53  53  . 0.2064 0.2064 0.1996 0.0002  0.0132
0.0113  1 .
400  CA   CA   . LYS LYS LYS A A 53  53  . 0.2595 0.2587 0.2691 -0.0010 0.0088  -
0.0026 1 .
401  CB   CB   . LYS LYS LYS A A 53  53  . 0.2725 0.2798 0.2851 -0.0014 0.0135  -
0.0051 1 .
402  CG   CG   . LYS LYS LYS A A 53  53  . 0.3245 0.3331 0.3268 -0.0097 -0.0098
0.0090  1 .
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403  CD   CD   . LYS LYS LYS A A 53  53  . 0.3453 0.3838 0.3783 0.0173  0.0130  -
0.0167 1 .
404  CE   CE   . LYS LYS LYS A A 53  53  . 0.3935 0.4425 0.4110 0.0046  -0.0064 -
0.0148 1 .
405  NZ   NZ   . LYS LYS LYS A A 53  53  . 0.3383 0.4595 0.4151 0.0135  -0.0048 -
0.0233 1 .
406  C    C    . LYS LYS LYS A A 53  53  . 0.2606 0.2604 0.2728 0.0074  0.0081  -
0.0050 1 .
407  O    O    . LYS LYS LYS A A 53  53  . 0.2956 0.2890 0.3070 0.0018  0.0222
0.0111  1 .
408  N    N    . GLN GLN GLN A A 54  54  . 0.2716 0.2646 0.2770 0.0128  0.0078  -
0.0068 1 .
409  CA   CA   . GLN GLN GLN A A 54  54  . 0.2862 0.2758 0.2761 0.0105  0.0013  -
0.0003 1 .
410  CB   CB   . GLN GLN GLN A A 54  54  . 0.3099 0.3125 0.3145 0.0101  0.0024  -
0.0056 1 .
411  CG   CG   . GLN GLN GLN A A 54  54  . 0.3932 0.3909 0.3779 0.0269  -0.0131
0.0126  1 .
412  CD   CD   . GLN GLN GLN A A 54  54  . 0.4730 0.4686 0.4733 -0.0095 0.0087
0.0177  1 .
413  OE1  OE1  . GLN GLN GLN A A 54  54  . 0.4963 0.4975 0.4883 0.0163  -0.0184
0.0098  1 .
414  NE2  NE2  . GLN GLN GLN A A 54  54  . 0.5040 0.5142 0.5437 0.0328  0.0117
0.0151  1 .
415  C    C    . GLN GLN GLN A A 54  54  . 0.2498 0.2461 0.2342 -0.0007 0.0007
0.0042  1 .
416  O    O    . GLN GLN GLN A A 54  54  . 0.2760 0.2783 0.2495 -0.0069 -0.0006 -
0.0142 1 .
417  N    N    . ARG ARG ARG A A 55  55  . 0.1998 0.1785 0.1919 0.0091  0.0089  -
0.0074 1 .
418  CA   CA   . ARG ARG ARG A A 55  55  . 0.1512 0.1449 0.1278 -0.0021 -0.0045
0.0017  1 .
419  CB   CB   . ARG ARG ARG A A 55  55  . 0.1583 0.1540 0.1216 -0.0032 -0.0080 -
0.0018 1 .
420  CG   CG   . ARG ARG ARG A A 55  55  . 0.1268 0.1503 0.1224 -0.0041 0.0059
0.0381  1 .
421  CD   CD   . ARG ARG ARG A A 55  55  . 0.1096 0.0837 0.0949 0.0245  0.0097  -
0.0090 1 .
422  NE   NE   . ARG ARG ARG A A 55  55  . 0.0651 0.0630 0.0601 0.0132  0.0007
0.0158  1 .
423  CZ   CZ   . ARG ARG ARG A A 55  55  . 0.0486 0.0254 0.0274 0.0015  -0.0071 -
0.0004 1 .
424  NH1  NH1  . ARG ARG ARG A A 55  55  . 0.0317 0.0253 0.0395 0.0005  0.0095
0.0007  1 .
425  NH2  NH2  . ARG ARG ARG A A 55  55  . 0.0749 0.0612 0.0574 -0.0117 0.0144  -
0.0008 1 .
426  C    C    . ARG ARG ARG A A 55  55  . 0.1161 0.0934 0.0957 0.0067  0.0065
0.0030  1 .
427  O    O    . ARG ARG ARG A A 55  55  . 0.1002 0.0965 0.0760 0.0077  -0.0001
0.0050  1 .
428  N    N    . TYR TYR TYR A A 56  56  . 0.0839 0.0829 0.0849 -0.0012 0.0147  -
0.0016 1 .
429  CA   CA   . TYR TYR TYR A A 56  56  . 0.0804 0.0558 0.0605 -0.0040 0.0188  -
0.0059 1 .
430  CB   CB   . TYR TYR TYR A A 56  56  . 0.0590 0.0481 0.0723 -0.0057 0.0238
0.0087  1 .
431  CG   CG   . TYR TYR TYR A A 56  56  . 0.0343 0.0262 0.0278 -0.0029 0.0047  -
0.0015 1 .
432  CD1  CD1  . TYR TYR TYR A A 56  56  . 0.0434 0.0267 0.0325 0.0046  0.0107
0.0023  1 .
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433  CE1  CE1  . TYR TYR TYR A A 56  56  . 0.0450 0.0281 0.0448 -0.0044 0.0196  -
0.0043 1 .
434  CZ   CZ   . TYR TYR TYR A A 56  56  . 0.0258 0.0325 0.0260 0.0019  0.0006
0.0022  1 .
435  OH   OH   . TYR TYR TYR A A 56  56  . 0.0435 0.0345 0.0260 0.0130  -0.0035 -
0.0025 1 .
436  CE2  CE2  . TYR TYR TYR A A 56  56  . 0.0495 0.0257 0.0257 -0.0031 0.0031  -
0.0004 1 .
437  CD2  CD2  . TYR TYR TYR A A 56  56  . 0.0312 0.0287 0.0373 0.0044  0.0084
0.0063  1 .
438  C    C    . TYR TYR TYR A A 56  56  . 0.1075 0.0843 0.0996 0.0139  0.0091  -
0.0016 1 .
439  O    O    . TYR TYR TYR A A 56  56  . 0.1094 0.0843 0.1128 0.0105  0.0094  -
0.0048 1 .
440  N    N    . LEU LEU LEU A A 57  57  . 0.1526 0.1516 0.1430 -0.0011 0.0149
0.0130  1 .
441  CA   CA   . LEU LEU LEU A A 57  57  . 0.1515 0.1618 0.1553 0.0007  -0.0007
0.0023  1 .
442  CB   CB   . LEU LEU LEU A A 57  57  . 0.1956 0.1899 0.1916 -0.0033 0.0086
0.0046  1 .
443  CG   CG   . LEU LEU LEU A A 57  57  . 0.2726 0.2603 0.2570 -0.0114 0.0017
0.0057  1 .
444  CD1  CD1  . LEU LEU LEU A A 57  57  . 0.3054 0.2849 0.3054 -0.0536 0.0477
0.0004  1 .
445  CD2  CD2  . LEU LEU LEU A A 57  57  . 0.2699 0.2589 0.2434 -0.0228 0.0233  -
0.0004 1 .
446  C    C    . LEU LEU LEU A A 57  57  . 0.1339 0.1386 0.1432 -0.0026 0.0014
0.0016  1 .
447  O    O    . LEU LEU LEU A A 57  57  . 0.1725 0.1690 0.1831 -0.0071 -0.0003
0.0054  1 .
448  N    N    . GLY GLY GLY A A 58  58  . 0.0978 0.1042 0.0899 0.0004  0.0103  -
0.0015 1 .
449  CA   CA   . GLY GLY GLY A A 58  58  . 0.0687 0.0494 0.0868 0.0208  0.0063  -
0.0063 1 .
450  C    C    . GLY GLY GLY A A 58  58  . 0.0512 0.0515 0.0632 0.0107  0.0065
0.0092  1 .
451  O    O    . GLY GLY GLY A A 58  58  . 0.0410 0.0458 0.0479 0.0028  0.0134
0.0173  1 .
452  N    N    . LYS LYS LYS A A 59  59  . 0.0619 0.0293 0.0594 0.0070  0.0044
0.0102  1 .
453  CA   CA   . LYS LYS LYS A A 59  59  . 0.0255 0.0253 0.0262 0.0000  0.0003  -
0.0002 1 .
454  CB   CB   . LYS LYS LYS A A 59  59  . 0.0365 0.0315 0.0398 -0.0001 -0.0020
0.0093  1 .
455  CG   CG   . LYS LYS LYS A A 59  59  . 0.1069 0.1311 0.1606 -0.0117 -0.0048
0.0031  1 .
456  CD   CD   . LYS LYS LYS A A 59  59  . 0.2739 0.2922 0.2506 0.0000  -0.0364
0.0029  1 .
457  CE   CE   . LYS LYS LYS A A 59  59  . 0.3614 0.3259 0.3183 -0.0270 -0.0202
0.0104  1 .
458  NZ   NZ   . LYS LYS LYS A A 59  59  . 0.4223 0.3859 0.3297 0.0006  -0.0079
0.0206  1 .
459  C    C    . LYS LYS LYS A A 59  59  . 0.0254 0.0256 0.0273 0.0002  0.0005
0.0008  1 .
460  O    O    . LYS LYS LYS A A 59  59  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
461  N    N    . GLY GLY GLY A A 60  60  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
462  CA   CA   . GLY GLY GLY A A 60  60  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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463  C    C    . GLY GLY GLY A A 60  60  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
464  O    O    . GLY GLY GLY A A 60  60  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
465  N    N    . VAL VAL VAL A A 61  61  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
466  CA   CA   . VAL VAL VAL A A 61  61  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
467  CB   CB   . VAL VAL VAL A A 61  61  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
468  CG1  CG1  . VAL VAL VAL A A 61  61  . 0.0253 0.0352 0.0312 0.0001  0.0000  -
0.0076 1 .
469  CG2  CG2  . VAL VAL VAL A A 61  61  . 0.0279 0.0256 0.0270 0.0008  -0.0020 -
0.0007 1 .
470  C    C    . VAL VAL VAL A A 61  61  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
471  O    O    . VAL VAL VAL A A 61  61  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
472  N    N    . LEU LEU LEU A A 62  62  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
473  CA   CA   . LEU LEU LEU A A 62  62  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
474  CB   CB   . LEU LEU LEU A A 62  62  . 0.0327 0.0286 0.0329 0.0015  -0.0054 -
0.0044 1 .
475  CG   CG   . LEU LEU LEU A A 62  62  . 0.0644 0.0496 0.0451 -0.0104 0.0116  -
0.0076 1 .
476  CD1  CD1  . LEU LEU LEU A A 62  62  . 0.0938 0.0694 0.0521 -0.0117 0.0109  -
0.0016 1 .
477  CD2  CD2  . LEU LEU LEU A A 62  62  . 0.0820 0.0770 0.0956 0.0191  -0.0253
0.0234  1 .
478  C    C    . LEU LEU LEU A A 62  62  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
479  O    O    . LEU LEU LEU A A 62  62  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
480  N    N    . LYS LYS LYS A A 63  63  . 0.0325 0.0254 0.0254 -0.0007 -0.0008
0.0000  1 .
481  CA   CA   . LYS LYS LYS A A 63  63  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
482  CB   CB   . LYS LYS LYS A A 63  63  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
483  CG   CG   . LYS LYS LYS A A 63  63  . 0.0254 0.0260 0.0320 -0.0002 0.0008  -
0.0021 1 .
484  CD   CD   . LYS LYS LYS A A 63  63  . 0.0467 0.0402 0.0564 0.0025  -0.0247 -
0.0090 1 .
485  CE   CE   . LYS LYS LYS A A 63  63  . 0.1069 0.0872 0.1441 -0.0126 0.0022  -
0.0249 1 .
486  NZ   NZ   . LYS LYS LYS A A 63  63  . 0.1369 0.1291 0.1866 0.0382  -0.0255 -
0.0053 1 .
487  C    C    . LYS LYS LYS A A 63  63  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
488  O    O    . LYS LYS LYS A A 63  63  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
489  N    N    . ALA ALA ALA A A 64  64  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
490  CA   CA   . ALA ALA ALA A A 64  64  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
491  CB   CB   . ALA ALA ALA A A 64  64  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
492  C    C    . ALA ALA ALA A A 64  64  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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493  O    O    . ALA ALA ALA A A 64  64  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
494  N    N    . VAL VAL VAL A A 65  65  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
495  CA   CA   . VAL VAL VAL A A 65  65  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
496  CB   CB   . VAL VAL VAL A A 65  65  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
497  CG1  CG1  . VAL VAL VAL A A 65  65  . 0.0259 0.0282 0.0275 0.0013  0.0011
0.0025  1 .
498  CG2  CG2  . VAL VAL VAL A A 65  65  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
499  C    C    . VAL VAL VAL A A 65  65  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
500  O    O    . VAL VAL VAL A A 65  65  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
501  N    N    . ASP ASP ASP A A 66  66  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
502  CA   CA   . ASP ASP ASP A A 66  66  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
503  CB   CB   . ASP ASP ASP A A 66  66  . 0.0762 0.0561 0.0533 -0.0001 0.0067  -
0.0196 1 .
504  CG   CG   . ASP ASP ASP A A 66  66  . 0.1859 0.1466 0.2028 -0.0135 -0.0047
0.0076  1 .
505  OD1  OD1  . ASP ASP ASP A A 66  66  . 0.2589 0.2484 0.2246 -0.0435 -0.0260
0.0170  1 .
506  OD2  OD2  . ASP ASP ASP A A 66  66  . 0.2745 0.2812 0.3496 0.0263  0.0012
0.0015  1 .
507  C    C    . ASP ASP ASP A A 66  66  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
508  O    O    . ASP ASP ASP A A 66  66  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
509  N    N    . HIS HIS HIS A A 67  67  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
510  CA   CA   . HIS HIS HIS A A 67  67  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
511  CB   CB   . HIS HIS HIS A A 67  67  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
512  CG   CG   . HIS HIS HIS A A 67  67  . 0.0259 0.0255 0.0253 -0.0003 0.0000
0.0000  1 .
513  ND1  ND1  . HIS HIS HIS A A 67  67  . 0.0682 0.0648 0.0798 0.0274  0.0224  -
0.0162 1 .
514  CE1  CE1  . HIS HIS HIS A A 67  67  . 0.0802 0.1006 0.1059 0.0033  -0.0164 -
0.0236 1 .
515  NE2  NE2  . HIS HIS HIS A A 67  67  . 0.0562 0.0640 0.0602 0.0100  0.0000
0.0294  1 .
516  CD2  CD2  . HIS HIS HIS A A 67  67  . 0.0263 0.0300 0.0407 -0.0021 0.0038  -
0.0085 1 .
517  C    C    . HIS HIS HIS A A 67  67  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
518  O    O    . HIS HIS HIS A A 67  67  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
519  N    N    . ILE ILE ILE A A 68  68  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
520  CA   CA   . ILE ILE ILE A A 68  68  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
521  CB   CB   . ILE ILE ILE A A 68  68  . 0.0264 0.0255 0.0287 -0.0005 0.0019  -
0.0008 1 .
522  CG1  CG1  . ILE ILE ILE A A 68  68  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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523  CD1  CD1  . ILE ILE ILE A A 68  68  . 0.0331 0.0253 0.0324 0.0000  -0.0074
0.0000  1 .
524  CG2  CG2  . ILE ILE ILE A A 68  68  . 0.0263 0.0257 0.0259 0.0006  -0.0007 -
0.0005 1 .
525  C    C    . ILE ILE ILE A A 68  68  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
526  O    O    . ILE ILE ILE A A 68  68  . 0.0256 0.0253 0.0253 0.0000  -0.0001
0.0000  1 .
527  N    N    . ASN ASN ASN A A 69  69  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
528  CA   CA   . ASN ASN ASN A A 69  69  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
529  CB   CB   . ASN ASN ASN A A 69  69  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
530  CG   CG   . ASN ASN ASN A A 69  69  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
531  OD1  OD1  . ASN ASN ASN A A 69  69  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
532  ND2  ND2  . ASN ASN ASN A A 69  69  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
533  C    C    . ASN ASN ASN A A 69  69  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
534  O    O    . ASN ASN ASN A A 69  69  . 0.0271 0.0263 0.0316 -0.0013 -0.0033
0.0025  1 .
535  N    N    . SER SER SER A A 70  70  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
536  CA   CA   . SER SER SER A A 70  70  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
537  CB   CB   . SER SER SER A A 70  70  . 0.0286 0.0256 0.0256 0.0010  0.0010
0.0003  1 .
538  OG   OG   . SER SER SER A A 70  70  . 0.1625 0.1170 0.1132 0.0149  -0.0227 -
0.0058 1 .
539  C    C    . SER SER SER A A 70  70  . 0.0254 0.0255 0.0254 -0.0001 -0.0001
0.0001  1 .
540  O    O    . SER SER SER A A 70  70  . 0.0327 0.0286 0.0303 -0.0038 0.0010  -
0.0030 1 .
541  N    N    . THR THR THR A A 71  71  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
542  CA   CA   . THR THR THR A A 71  71  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
543  CB   CB   . THR THR THR A A 71  71  . 0.0286 0.0261 0.0254 -0.0016 -0.0004
0.0002  1 .
544  OG1  OG1  . THR THR THR A A 71  71  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
545  CG2  CG2  . THR THR THR A A 71  71  . 0.0280 0.0274 0.0282 -0.0024 -0.0028
0.0024  1 .
546  C    C    . THR THR THR A A 71  71  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
547  O    O    . THR THR THR A A 71  71  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
548  N    N    . ILE ILE ILE A A 72  72  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
549  CA   CA   . ILE ILE ILE A A 72  72  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
550  CB   CB   . ILE ILE ILE A A 72  72  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
551  CG1  CG1  . ILE ILE ILE A A 72  72  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
552  CD1  CD1  . ILE ILE ILE A A 72  72  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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553  CG2  CG2  . ILE ILE ILE A A 72  72  . 0.0254 0.0400 0.0261 0.0013  0.0003
0.0033  1 .
554  C    C    . ILE ILE ILE A A 72  72  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
555  O    O    . ILE ILE ILE A A 72  72  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
556  N    N    . ALA ALA ALA A A 73  73  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
557  CA   CA   . ALA ALA ALA A A 73  73  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
558  CB   CB   . ALA ALA ALA A A 73  73  . 0.0366 0.0256 0.0343 0.0018  -0.0101 -
0.0016 1 .
559  C    C    . ALA ALA ALA A A 73  73  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
560  O    O    . ALA ALA ALA A A 73  73  . 0.0334 0.0334 0.0464 -0.0056 0.0088
0.0008  1 .
561  N    N    . PRO PRO PRO A A 74  74  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
562  CA   CA   . PRO PRO PRO A A 74  74  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
563  CB   CB   . PRO PRO PRO A A 74  74  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
564  CG   CG   . PRO PRO PRO A A 74  74  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
565  CD   CD   . PRO PRO PRO A A 74  74  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
566  C    C    . PRO PRO PRO A A 74  74  . 0.0262 0.0254 0.0260 -0.0002 0.0007  -
0.0002 1 .
567  O    O    . PRO PRO PRO A A 74  74  . 0.0267 0.0330 0.0273 0.0031  -0.0017 -
0.0037 1 .
568  N    N    . ALA ALA ALA A A 75  75  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
569  CA   CA   . ALA ALA ALA A A 75  75  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
570  CB   CB   . ALA ALA ALA A A 75  75  . 0.0259 0.0255 0.0274 0.0003  0.0011
0.0006  1 .
571  C    C    . ALA ALA ALA A A 75  75  . 0.0282 0.0266 0.0257 -0.0019 -0.0011
0.0007  1 .
572  O    O    . ALA ALA ALA A A 75  75  . 0.0344 0.0371 0.0576 -0.0079 0.0127  -
0.0027 1 .
573  N    N    . LEU LEU LEU A A 76  76  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
574  CA   CA   . LEU LEU LEU A A 76  76  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
575  CB   CB   . LEU LEU LEU A A 76  76  . 0.0272 0.0258 0.0316 -0.0010 -0.0035
0.0018  1 .
576  CG   CG   . LEU LEU LEU A A 76  76  . 0.0288 0.0392 0.0477 -0.0068 -0.0038
0.0047  1 .
577  CD1  CD1  . LEU LEU LEU A A 76  76  . 0.0265 0.0284 0.0534 0.0019  0.0057
0.0093  1 .
578  CD2  CD2  . LEU LEU LEU A A 76  76  . 0.0589 0.0857 0.0848 -0.0052 -0.0090 -
0.0171 1 .
579  C    C    . LEU LEU LEU A A 76  76  . 0.0369 0.0260 0.0304 -0.0028 0.0076  -
0.0018 1 .
580  O    O    . LEU LEU LEU A A 76  76  . 0.0583 0.0486 0.0782 -0.0192 0.0154
0.0145  1 .
581  N    N    . ILE ILE ILE A A 77  77  . 0.0503 0.0401 0.0480 -0.0064 -0.0050
0.0114  1 .
582  CA   CA   . ILE ILE ILE A A 77  77  . 0.0477 0.0320 0.0342 -0.0058 0.0050
0.0050  1 .
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583  CB   CB   . ILE ILE ILE A A 77  77  . 0.0367 0.0411 0.0571 -0.0081 0.0034
0.0150  1 .
584  CG1  CG1  . ILE ILE ILE A A 77  77  . 0.0559 0.0400 0.0619 -0.0166 -0.0033
0.0161  1 .
585  CD1  CD1  . ILE ILE ILE A A 77  77  . 0.0424 0.0402 0.0592 -0.0112 0.0199  -
0.0041 1 .
586  CG2  CG2  . ILE ILE ILE A A 77  77  . 0.0775 0.0898 0.0619 0.0014  -0.0189
0.0023  1 .
587  C    C    . ILE ILE ILE A A 77  77  . 0.0490 0.0271 0.0561 -0.0006 0.0060  -
0.0001 1 .
588  O    O    . ILE ILE ILE A A 77  77  . 0.0528 0.0459 0.0668 -0.0091 0.0008
0.0060  1 .
589  N    N    . SER SER SER A A 78  78  . 0.0535 0.0512 0.0487 -0.0074 0.0061
0.0019  1 .
590  CA   CA   . SER SER SER A A 78  78  . 0.0867 0.0558 0.0795 -0.0090 -0.0035 -
0.0044 1 .
591  CB   CB   . SER SER SER A A 78  78  . 0.0551 0.0686 0.0530 -0.0023 0.0123  -
0.0081 1 .
592  OG   OG   . SER SER SER A A 78  78  . 0.1520 0.0957 0.1136 -0.0142 -0.0241
0.0063  1 .
593  C    C    . SER SER SER A A 78  78  . 0.0918 0.0660 0.0644 -0.0073 0.0058  -
0.0081 1 .
594  O    O    . SER SER SER A A 78  78  . 0.1072 0.0846 0.1186 -0.0357 0.0263  -
0.0160 1 .
595  N    N    . SER SER SER A A 79  79  . 0.0820 0.0707 0.0907 -0.0099 -0.0167
0.0019  1 .
596  CA   CA   . SER SER SER A A 79  79  . 0.0761 0.0698 0.0799 -0.0038 0.0021  -
0.0037 1 .
597  CB   CB   . SER SER SER A A 79  79  . 0.0588 0.0442 0.0623 -0.0053 -0.0037 -
0.0028 1 .
598  OG   OG   . SER SER SER A A 79  79  . 0.0585 0.0569 0.0656 -0.0078 0.0068  -
0.0029 1 .
599  C    C    . SER SER SER A A 79  79  . 0.1053 0.0740 0.0990 0.0000  0.0005  -
0.0029 1 .
600  O    O    . SER SER SER A A 79  79  . 0.1430 0.0821 0.1280 -0.0186 0.0153  -
0.0127 1 .
601  N    N    . GLY GLY GLY A A 80  80  . 0.1027 0.0751 0.1008 0.0000  -0.0124 -
0.0050 1 .
602  CA   CA   . GLY GLY GLY A A 80  80  . 0.1259 0.1100 0.1205 -0.0175 0.0142
0.0062  1 .
603  C    C    . GLY GLY GLY A A 80  80  . 0.1270 0.1158 0.1244 -0.0135 0.0119
0.0024  1 .
604  O    O    . GLY GLY GLY A A 80  80  . 0.1343 0.1309 0.1548 -0.0002 0.0165
0.0218  1 .
605  N    N    . LEU LEU LEU A A 81  81  . 0.0995 0.1124 0.0996 -0.0106 -0.0049
0.0087  1 .
606  CA   CA   . LEU LEU LEU A A 81  81  . 0.0885 0.0787 0.0883 -0.0062 -0.0008
0.0096  1 .
607  CB   CB   . LEU LEU LEU A A 81  81  . 0.1061 0.0970 0.1129 0.0025  0.0155  -
0.0031 1 .
608  CG   CG   . LEU LEU LEU A A 81  81  . 0.1127 0.1208 0.0701 -0.0066 -0.0034
0.0054  1 .
609  CD1  CD1  . LEU LEU LEU A A 81  81  . 0.0700 0.0648 0.0590 0.0154  0.0084  -
0.0157 1 .
610  CD2  CD2  . LEU LEU LEU A A 81  81  . 0.1515 0.1995 0.1088 0.0102  0.0854  -
0.0072 1 .
611  C    C    . LEU LEU LEU A A 81  81  . 0.1196 0.0946 0.1074 -0.0134 0.0057  -
0.0026 1 .
612  O    O    . LEU LEU LEU A A 81  81  . 0.1229 0.1106 0.1258 -0.0232 -0.0030
0.0090  1 .
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613  N    N    . SER SER SER A A 82  82  . 0.0895 0.0736 0.0973 -0.0032 0.0082
0.0004  1 .
614  CA   CA   . SER SER SER A A 82  82  . 0.0849 0.0679 0.0854 -0.0070 0.0080  -
0.0007 1 .
615  CB   CB   . SER SER SER A A 82  82  . 0.0854 0.0888 0.1123 -0.0106 0.0153  -
0.0113 1 .
616  OG   OG   . SER SER SER A A 82  82  . 0.1467 0.1346 0.1557 0.0094  0.0269
0.0162  1 .
617  C    C    . SER SER SER A A 82  82  . 0.0490 0.0558 0.0728 -0.0012 -0.0035
0.0135  1 .
618  O    O    . SER SER SER A A 82  82  . 0.0758 0.0645 0.0666 -0.0120 -0.0018
0.0207  1 .
619  N    N    . VAL VAL VAL A A 83  83  . 0.0493 0.0402 0.0399 -0.0136 -0.0003 -
0.0100 1 .
620  CA   CA   . VAL VAL VAL A A 83  83  . 0.0493 0.0644 0.0711 -0.0140 0.0060
0.0004  1 .
621  CB   CB   . VAL VAL VAL A A 83  83  . 0.0430 0.0473 0.0544 -0.0044 -0.0035 -
0.0052 1 .
622  CG1  CG1  . VAL VAL VAL A A 83  83  . 0.0739 0.0473 0.0655 -0.0045 0.0158
0.0037  1 .
623  CG2  CG2  . VAL VAL VAL A A 83  83  . 0.0435 0.0623 0.0708 -0.0118 -0.0009 -
0.0081 1 .
624  C    C    . VAL VAL VAL A A 83  83  . 0.0632 0.0817 0.0700 -0.0069 0.0028  -
0.0033 1 .
625  O    O    . VAL VAL VAL A A 83  83  . 0.0687 0.0622 0.0744 -0.0216 -0.0028 -
0.0012 1 .
626  N    N    . VAL VAL VAL A A 84  84  . 0.0560 0.0514 0.0559 0.0010  0.0038  -
0.0002 1 .
627  CA   CA   . VAL VAL VAL A A 84  84  . 0.0631 0.0693 0.0773 -0.0089 0.0139  -
0.0027 1 .
628  CB   CB   . VAL VAL VAL A A 84  84  . 0.0885 0.0800 0.1044 -0.0010 0.0194  -
0.0004 1 .
629  CG1  CG1  . VAL VAL VAL A A 84  84  . 0.0824 0.0672 0.0692 0.0032  -0.0035
0.0107  1 .
630  CG2  CG2  . VAL VAL VAL A A 84  84  . 0.0694 0.0505 0.0935 -0.0141 0.0218
0.0093  1 .
631  C    C    . VAL VAL VAL A A 84  84  . 0.0642 0.0575 0.0447 -0.0109 0.0074  -
0.0003 1 .
632  O    O    . VAL VAL VAL A A 84  84  . 0.0854 0.0833 0.1007 -0.0216 0.0084  -
0.0091 1 .
633  N    N    . GLU GLU GLU A A 85  85  . 0.0597 0.0530 0.0514 0.0066  0.0144  -
0.0035 1 .
634  CA   CA   . GLU GLU GLU A A 85  85  . 0.0386 0.0535 0.0616 -0.0071 0.0027  -
0.0090 1 .
635  CB   CB   . GLU GLU GLU A A 85  85  . 0.0734 0.0655 0.0990 -0.0041 0.0079
0.0063  1 .
636  CG   CG   . GLU GLU GLU A A 85  85  . 0.0916 0.1391 0.1418 -0.0167 0.0133  -
0.0092 1 .
637  CD   CD   . GLU GLU GLU A A 85  85  . 0.2767 0.2930 0.2574 -0.0015 0.0078  -
0.0097 1 .
638  OE1  OE1  . GLU GLU GLU A A 85  85  . 0.2973 0.3178 0.2860 -0.0038 0.0004
0.0035  1 .
639  OE2  OE2  . GLU GLU GLU A A 85  85  . 0.3180 0.3378 0.3467 0.0007  0.0773  -
0.0455 1 .
640  C    C    . GLU GLU GLU A A 85  85  . 0.0282 0.0287 0.0282 -0.0016 0.0028  -
0.0010 1 .
641  O    O    . GLU GLU GLU A A 85  85  . 0.0416 0.0341 0.0508 0.0017  0.0072  -
0.0011 1 .
642  N    N    . GLN GLN GLN A A 86  86  . 0.0423 0.0277 0.0501 0.0001  0.0061  -
0.0019 1 .
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643  CA   CA   . GLN GLN GLN A A 86  86  . 0.0259 0.0255 0.0255 -0.0003 -0.0003
0.0002  1 .
644  CB   CB   . GLN GLN GLN A A 86  86  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
645  CG   CG   . GLN GLN GLN A A 86  86  . 0.0406 0.0340 0.0260 -0.0115 0.0032  -
0.0024 1 .
646  CD   CD   . GLN GLN GLN A A 86  86  . 0.0647 0.0568 0.0788 -0.0050 -0.0162 -
0.0015 1 .
647  OE1  OE1  . GLN GLN GLN A A 86  86  . 0.0386 0.0527 0.0498 -0.0135 -0.0021
0.0203  1 .
648  NE2  NE2  . GLN GLN GLN A A 86  86  . 0.0471 0.0456 0.0556 -0.0210 0.0257  -
0.0248 1 .
649  C    C    . GLN GLN GLN A A 86  86  . 0.0375 0.0253 0.0312 0.0007  0.0085
0.0005  1 .
650  O    O    . GLN GLN GLN A A 86  86  . 0.0541 0.0301 0.0690 -0.0049 0.0084
0.0112  1 .
651  N    N    . GLU GLU GLU A A 87  87  . 0.0320 0.0287 0.0257 -0.0047 -0.0017
0.0012  1 .
652  CA   CA   . GLU GLU GLU A A 87  87  . 0.0419 0.0298 0.0344 -0.0046 -0.0043 -
0.0038 1 .
653  CB   CB   . GLU GLU GLU A A 87  87  . 0.0638 0.0637 0.0605 -0.0038 0.0048  -
0.0139 1 .
654  CG   CG   . GLU GLU GLU A A 87  87  . 0.1219 0.0880 0.0973 0.0165  -0.0144
0.0062  1 .
655  CD   CD   . GLU GLU GLU A A 87  87  . 0.2400 0.1791 0.1950 -0.0022 0.0000  -
0.0110 1 .
656  OE1  OE1  . GLU GLU GLU A A 87  87  . 0.3042 0.2970 0.2812 0.0364  0.0724  -
0.0034 1 .
657  OE2  OE2  . GLU GLU GLU A A 87  87  . 0.2741 0.2292 0.2360 0.0081  -0.0132 -
0.0048 1 .
658  C    C    . GLU GLU GLU A A 87  87  . 0.0267 0.0255 0.0273 0.0004  -0.0017 -
0.0005 1 .
659  O    O    . GLU GLU GLU A A 87  87  . 0.0440 0.0253 0.0278 0.0004  0.0068
0.0001  1 .
660  N    N    . LYS LYS LYS A A 88  88  . 0.0378 0.0254 0.0263 0.0009  -0.0034 -
0.0002 1 .
661  CA   CA   . LYS LYS LYS A A 88  88  . 0.0401 0.0264 0.0375 0.0040  0.0023
0.0006  1 .
662  CB   CB   . LYS LYS LYS A A 88  88  . 0.0412 0.0413 0.0619 -0.0094 -0.0051
0.0079  1 .
663  CG   CG   . LYS LYS LYS A A 88  88  . 0.1344 0.0920 0.1099 -0.0184 -0.0006
0.0174  1 .
664  CD   CD   . LYS LYS LYS A A 88  88  . 0.1575 0.1950 0.1769 -0.0017 0.0252
0.0079  1 .
665  CE   CE   . LYS LYS LYS A A 88  88  . 0.2086 0.2063 0.1777 -0.0496 0.0254
0.0116  1 .
666  NZ   NZ   . LYS LYS LYS A A 88  88  . 0.2859 0.2431 0.2457 -0.0065 0.0069
0.0145  1 .
667  C    C    . LYS LYS LYS A A 88  88  . 0.0350 0.0327 0.0339 0.0084  0.0091
0.0079  1 .
668  O    O    . LYS LYS LYS A A 88  88  . 0.0472 0.0350 0.0461 0.0029  0.0149  -
0.0079 1 .
669  N    N    . LEU LEU LEU A A 89  89  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
670  CA   CA   . LEU LEU LEU A A 89  89  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
671  CB   CB   . LEU LEU LEU A A 89  89  . 0.0260 0.0253 0.0254 0.0001  0.0002
0.0000  1 .
672  CG   CG   . LEU LEU LEU A A 89  89  . 0.0391 0.0358 0.0290 0.0032  0.0004  -
0.0058 1 .
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673  CD1  CD1  . LEU LEU LEU A A 89  89  . 0.0345 0.0269 0.0331 0.0021  -0.0073 -
0.0031 1 .
674  CD2  CD2  . LEU LEU LEU A A 89  89  . 0.0540 0.0255 0.0360 -0.0011 -0.0167
0.0002  1 .
675  C    C    . LEU LEU LEU A A 89  89  . 0.0258 0.0255 0.0253 0.0003  0.0001
0.0000  1 .
676  O    O    . LEU LEU LEU A A 89  89  . 0.0504 0.0305 0.0445 -0.0071 0.0017  -
0.0082 1 .
677  N    N    . ASP ASP ASP A A 90  90  . 0.0293 0.0275 0.0315 -0.0029 -0.0049
0.0036  1 .
678  CA   CA   . ASP ASP ASP A A 90  90  . 0.0289 0.0296 0.0341 0.0030  -0.0013
0.0025  1 .
679  CB   CB   . ASP ASP ASP A A 90  90  . 0.0354 0.0253 0.0271 0.0002  0.0043
0.0000  1 .
680  CG   CG   . ASP ASP ASP A A 90  90  . 0.0647 0.0509 0.0585 0.0212  0.0201  -
0.0049 1 .
681  OD1  OD1  . ASP ASP ASP A A 90  90  . 0.1070 0.0845 0.0849 0.0127  -0.0004 -
0.0034 1 .
682  OD2  OD2  . ASP ASP ASP A A 90  90  . 0.0804 0.0592 0.0849 -0.0161 0.0027  -
0.0161 1 .
683  C    C    . ASP ASP ASP A A 90  90  . 0.0474 0.0287 0.0370 0.0078  0.0069
0.0000  1 .
684  O    O    . ASP ASP ASP A A 90  90  . 0.0301 0.0404 0.0304 0.0004  -0.0032 -
0.0069 1 .
685  N    N    . ASN ASN ASN A A 91  91  . 0.0540 0.0357 0.0421 0.0107  0.0038
0.0108  1 .
686  CA   CA   . ASN ASN ASN A A 91  91  . 0.0623 0.0471 0.0476 0.0055  0.0043
0.0042  1 .
687  CB   CB   . ASN ASN ASN A A 91  91  . 0.0799 0.0827 0.0625 -0.0211 0.0057
0.0033  1 .
688  CG   CG   . ASN ASN ASN A A 91  91  . 0.1854 0.1583 0.1291 -0.0073 0.0055  -
0.0160 1 .
689  OD1  OD1  . ASN ASN ASN A A 91  91  . 0.2154 0.2465 0.2010 -0.0182 -0.0175 -
0.0202 1 .
690  ND2  ND2  . ASN ASN ASN A A 91  91  . 0.2420 0.2694 0.2088 0.0097  0.0824  -
0.0286 1 .
691  C    C    . ASN ASN ASN A A 91  91  . 0.0559 0.0512 0.0652 -0.0068 0.0033
0.0078  1 .
692  O    O    . ASN ASN ASN A A 91  91  . 0.0677 0.0443 0.0546 0.0167  0.0005  -
0.0021 1 .
693  N    N    . LEU LEU LEU A A 92  92  . 0.0697 0.0383 0.0461 0.0011  -0.0061
0.0159  1 .
694  CA   CA   . LEU LEU LEU A A 92  92  . 0.0585 0.0483 0.0606 0.0011  0.0026
0.0036  1 .
695  CB   CB   . LEU LEU LEU A A 92  92  . 0.0827 0.0608 0.0806 0.0126  -0.0104
0.0041  1 .
696  CG   CG   . LEU LEU LEU A A 92  92  . 0.1672 0.1376 0.1697 -0.0063 -0.0159
0.0022  1 .
697  CD1  CD1  . LEU LEU LEU A A 92  92  . 0.1987 0.1375 0.1916 -0.0058 -0.0302
0.0204  1 .
698  CD2  CD2  . LEU LEU LEU A A 92  92  . 0.1872 0.1731 0.2106 -0.0295 -0.0330 -
0.0081 1 .
699  C    C    . LEU LEU LEU A A 92  92  . 0.0513 0.0320 0.0524 0.0046  0.0040  -
0.0023 1 .
700  O    O    . LEU LEU LEU A A 92  92  . 0.0578 0.0455 0.0440 -0.0040 0.0065  -
0.0073 1 .
701  N    N    . MET MET MET A A 93  93  . 0.0270 0.0284 0.0296 0.0023  0.0027
0.0037  1 .
702  CA   CA   . MET MET MET A A 93  93  . 0.0354 0.0253 0.0253 -0.0002 -0.0003
0.0000  1 .
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703  CB   CB   . MET MET MET A A 93  93  . 0.0303 0.0256 0.0293 -0.0012 -0.0045
0.0010  1 .
704  CG   CG   . MET MET MET A A 93  93  . 0.0359 0.0339 0.0892 -0.0076 -0.0220
0.0234  1 .
705  SD   SD   . MET MET MET A A 93  93  . 0.0577 0.0262 0.0382 -0.0045 -0.0085
0.0030  1 .
706  CE   CE   . MET MET MET A A 93  93  . 0.0500 0.0383 0.0315 0.0096  -0.0088 -
0.0087 1 .
707  C    C    . MET MET MET A A 93  93  . 0.0262 0.0260 0.0284 0.0007  0.0017
0.0014  1 .
708  O    O    . MET MET MET A A 93  93  . 0.0360 0.0272 0.0420 -0.0027 0.0107  -
0.0053 1 .
709  N    N    . LEU LEU LEU A A 94  94  . 0.0264 0.0255 0.0261 0.0004  -0.0009 -
0.0004 1 .
710  CA   CA   . LEU LEU LEU A A 94  94  . 0.0523 0.0385 0.0418 0.0073  -0.0016 -
0.0140 1 .
711  CB   CB   . LEU LEU LEU A A 94  94  . 0.0854 0.0364 0.0345 -0.0069 -0.0222 -
0.0005 1 .
712  CG   CG   . LEU LEU LEU A A 94  94  . 0.1240 0.1053 0.0994 0.0001  -0.0019 -
0.0156 1 .
713  CD1  CD1  . LEU LEU LEU A A 94  94  . 0.1000 0.0749 0.0934 -0.0243 0.0166
0.0046  1 .
714  CD2  CD2  . LEU LEU LEU A A 94  94  . 0.1560 0.1397 0.1045 0.0022  -0.0034 -
0.0202 1 .
715  C    C    . LEU LEU LEU A A 94  94  . 0.0373 0.0367 0.0320 0.0036  -0.0032
0.0067  1 .
716  O    O    . LEU LEU LEU A A 94  94  . 0.0467 0.0329 0.0509 -0.0040 -0.0031 -
0.0028 1 .
717  N    N    . GLU GLU GLU A A 95  95  . 0.0525 0.0389 0.0631 -0.0069 -0.0095 -
0.0101 1 .
718  CA   CA   . GLU GLU GLU A A 95  95  . 0.0783 0.0461 0.0736 0.0136  -0.0006
0.0024  1 .
719  CB   CB   . GLU GLU GLU A A 95  95  . 0.1357 0.0836 0.1238 0.0024  0.0120
0.0026  1 .
720  CG   CG   . GLU GLU GLU A A 95  95  . 0.2361 0.1317 0.1830 0.0173  0.0227
0.0111  1 .
721  CD   CD   . GLU GLU GLU A A 95  95  . 0.3609 0.3670 0.3520 -0.0191 -0.0091 -
0.0046 1 .
722  OE1  OE1  . GLU GLU GLU A A 95  95  . 0.4390 0.3757 0.4195 -0.0068 0.0008
0.0412  1 .
723  OE2  OE2  . GLU GLU GLU A A 95  95  . 0.4469 0.4082 0.4268 -0.0354 0.0086  -
0.0070 1 .
724  C    C    . GLU GLU GLU A A 95  95  . 0.0821 0.0605 0.0720 0.0091  -0.0007
0.0049  1 .
725  O    O    . GLU GLU GLU A A 95  95  . 0.0577 0.0655 0.0563 0.0146  0.0017  -
0.0071 1 .
726  N    N    . LEU LEU LEU A A 96  96  . 0.0296 0.0323 0.0318 0.0053  -0.0048 -
0.0066 1 .
727  CA   CA   . LEU LEU LEU A A 96  96  . 0.0335 0.0281 0.0266 -0.0047 -0.0033
0.0019  1 .
728  CB   CB   . LEU LEU LEU A A 96  96  . 0.0277 0.0266 0.0437 0.0017  -0.0007 -
0.0016 1 .
729  CG   CG   . LEU LEU LEU A A 96  96  . 0.0275 0.0270 0.0382 0.0007  -0.0046 -
0.0037 1 .
730  CD1  CD1  . LEU LEU LEU A A 96  96  . 0.0820 0.0822 0.0422 -0.0205 -0.0170
0.0302  1 .
731  CD2  CD2  . LEU LEU LEU A A 96  96  . 0.0746 0.0705 0.0513 0.0067  -0.0184
0.0113  1 .
732  C    C    . LEU LEU LEU A A 96  96  . 0.0377 0.0313 0.0349 0.0052  0.0023  -
0.0048 1 .
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733  O    O    . LEU LEU LEU A A 96  96  . 0.0362 0.0335 0.0318 -0.0031 -0.0043 -
0.0046 1 .
734  N    N    . ASP ASP ASP A A 97  97  . 0.0356 0.0310 0.0506 -0.0071 -0.0054
0.0000  1 .
735  CA   CA   . ASP ASP ASP A A 97  97  . 0.0430 0.0267 0.0519 0.0033  0.0034  -
0.0038 1 .
736  CB   CB   . ASP ASP ASP A A 97  97  . 0.0604 0.0525 0.0654 -0.0107 0.0012  -
0.0133 1 .
737  CG   CG   . ASP ASP ASP A A 97  97  . 0.0637 0.0271 0.0585 -0.0073 0.0030
0.0019  1 .
738  OD1  OD1  . ASP ASP ASP A A 97  97  . 0.0734 0.0393 0.0553 -0.0027 0.0105
0.0059  1 .
739  OD2  OD2  . ASP ASP ASP A A 97  97  . 0.1156 0.1032 0.1003 -0.0063 -0.0085
0.0004  1 .
740  C    C    . ASP ASP ASP A A 97  97  . 0.0675 0.0585 0.0709 -0.0005 0.0047
0.0033  1 .
741  O    O    . ASP ASP ASP A A 97  97  . 0.0727 0.0735 0.0762 0.0021  -0.0017 -
0.0062 1 .
742  N    N    . GLY GLY GLY A A 98  98  . 0.0777 0.0526 0.0660 0.0032  -0.0243 -
0.0019 1 .
743  CA   CA   . GLY GLY GLY A A 98  98  . 0.0891 0.0771 0.1033 0.0009  -0.0134
0.0065  1 .
744  C    C    . GLY GLY GLY A A 98  98  . 0.1034 0.0985 0.0887 0.0006  -0.0058
0.0090  1 .
745  O    O    . GLY GLY GLY A A 98  98  . 0.1196 0.1208 0.1587 0.0236  -0.0255
0.0148  1 .
746  N    N    . THR THR THR A A 99  99  . 0.0937 0.0536 0.0857 0.0129  -0.0010 -
0.0025 1 .
747  CA   CA   . THR THR THR A A 99  99  . 0.0438 0.0313 0.0505 0.0081  -0.0051 -
0.0044 1 .
748  CB   CB   . THR THR THR A A 99  99  . 0.0807 0.0380 0.0651 0.0092  -0.0101 -
0.0146 1 .
749  OG1  OG1  . THR THR THR A A 99  99  . 0.0800 0.0548 0.0557 0.0161  0.0047
0.0155  1 .
750  CG2  CG2  . THR THR THR A A 99  99  . 0.0627 0.0544 0.0545 0.0158  -0.0038 -
0.0025 1 .
751  C    C    . THR THR THR A A 99  99  . 0.0759 0.0796 0.0757 0.0059  0.0040  -
0.0062 1 .
752  O    O    . THR THR THR A A 99  99  . 0.0881 0.0802 0.0868 0.0062  -0.0025
0.0046  1 .
753  N    N    . GLU GLU GLU A A 100 100 . 0.0861 0.0929 0.0866 -0.0031 -0.0012
0.0038  1 .
754  CA   CA   . GLU GLU GLU A A 100 100 . 0.1183 0.1090 0.1082 0.0065  -0.0084
0.0035  1 .
755  CB   CB   . GLU GLU GLU A A 100 100 . 0.1585 0.1665 0.1628 0.0011  -0.0078
0.0024  1 .
756  CG   CG   . GLU GLU GLU A A 100 100 . 0.2814 0.2843 0.2591 0.0132  0.0029  -
0.0276 1 .
757  CD   CD   . GLU GLU GLU A A 100 100 . 0.4418 0.4180 0.4221 0.0195  -0.0027
0.0258  1 .
758  OE1  OE1  . GLU GLU GLU A A 100 100 . 0.5026 0.4659 0.5259 0.0361  0.0144  -
0.0429 1 .
759  OE2  OE2  . GLU GLU GLU A A 100 100 . 0.4750 0.4818 0.4307 0.0149  0.0194
0.0226  1 .
760  C    C    . GLU GLU GLU A A 100 100 . 0.0989 0.0894 0.0928 -0.0060 0.0079
0.0041  1 .
761  O    O    . GLU GLU GLU A A 100 100 . 0.1304 0.1060 0.1057 0.0013  0.0192
0.0037  1 .
762  N    N    . ASN ASN ASN A A 101 101 . 0.0523 0.0348 0.0367 -0.0025 -0.0101
0.0086  1 .
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763  CA   CA   . ASN ASN ASN A A 101 101 . 0.0603 0.0500 0.0574 -0.0025 -0.0074
0.0187  1 .
764  CB   CB   . ASN ASN ASN A A 101 101 . 0.0857 0.1072 0.1008 -0.0108 0.0044
0.0190  1 .
765  CG   CG   . ASN ASN ASN A A 101 101 . 0.1893 0.1823 0.1903 0.0132  0.0203  -
0.0185 1 .
766  OD1  OD1  . ASN ASN ASN A A 101 101 . 0.2287 0.2407 0.2567 -0.0084 0.0164  -
0.0501 1 .
767  ND2  ND2  . ASN ASN ASN A A 101 101 . 0.2665 0.2863 0.2885 -0.0529 0.0052
0.0138  1 .
768  C    C    . ASN ASN ASN A A 101 101 . 0.0275 0.0292 0.0283 -0.0029 -0.0025
0.0034  1 .
769  O    O    . ASN ASN ASN A A 101 101 . 0.0696 0.0445 0.0514 -0.0095 -0.0140
0.0223  1 .
770  N    N    . LYS LYS LYS A A 102 102 . 0.0282 0.0255 0.0258 -0.0007 -0.0012
0.0003  1 .
771  CA   CA   . LYS LYS LYS A A 102 102 . 0.0271 0.0254 0.0254 0.0005  -0.0005 -
0.0001 1 .
772  CB   CB   . LYS LYS LYS A A 102 102 . 0.0328 0.0359 0.0339 0.0089  0.0080
0.0095  1 .
773  CG   CG   . LYS LYS LYS A A 102 102 . 0.0352 0.0298 0.0270 0.0066  0.0041
0.0027  1 .
774  CD   CD   . LYS LYS LYS A A 102 102 . 0.0796 0.0415 0.0462 0.0251  0.0023
0.0010  1 .
775  CE   CE   . LYS LYS LYS A A 102 102 . 0.0717 0.0943 0.0954 -0.0109 0.0053
0.0255  1 .
776  NZ   NZ   . LYS LYS LYS A A 102 102 . 0.0762 0.0437 0.0714 -0.0006 -0.0100 -
0.0104 1 .
777  C    C    . LYS LYS LYS A A 102 102 . 0.0342 0.0282 0.0395 0.0039  0.0075
0.0064  1 .
778  O    O    . LYS LYS LYS A A 102 102 . 0.0490 0.0357 0.0446 0.0073  -0.0212 -
0.0054 1 .
779  N    N    . SER SER SER A A 103 103 . 0.0271 0.0254 0.0444 0.0004  -0.0059 -
0.0015 1 .
780  CA   CA   . SER SER SER A A 103 103 . 0.0442 0.0266 0.0441 -0.0024 -0.0012 -
0.0041 1 .
781  CB   CB   . SER SER SER A A 103 103 . 0.0446 0.0546 0.0379 -0.0105 -0.0117
0.0110  1 .
782  OG   OG   . SER SER SER A A 103 103 . 0.1300 0.1072 0.1423 0.0203  0.0079
0.0036  1 .
783  C    C    . SER SER SER A A 103 103 . 0.0438 0.0482 0.0505 -0.0012 -0.0003 -
0.0117 1 .
784  O    O    . SER SER SER A A 103 103 . 0.0670 0.0598 0.0459 -0.0111 -0.0018
0.0019  1 .
785  N    N    . LYS LYS LYS A A 104 104 . 0.0327 0.0253 0.0271 0.0003  0.0036
0.0001  1 .
786  CA   CA   . LYS LYS LYS A A 104 104 . 0.0258 0.0360 0.0339 -0.0014 -0.0004 -
0.0057 1 .
787  CB   CB   . LYS LYS LYS A A 104 104 . 0.0620 0.0361 0.0604 0.0070  0.0010
0.0000  1 .
788  CG   CG   . LYS LYS LYS A A 104 104 . 0.0929 0.0899 0.0965 0.0019  0.0042  -
0.0189 1 .
789  CD   CD   . LYS LYS LYS A A 104 104 . 0.0950 0.0728 0.0800 -0.0031 -0.0320
0.0139  1 .
790  CE   CE   . LYS LYS LYS A A 104 104 . 0.1131 0.0737 0.1058 0.0122  -0.0205 -
0.0007 1 .
791  NZ   NZ   . LYS LYS LYS A A 104 104 . 0.1068 0.1002 0.0947 0.0205  0.0070  -
0.0420 1 .
792  C    C    . LYS LYS LYS A A 104 104 . 0.0379 0.0307 0.0254 -0.0083 -0.0013
0.0008  1 .
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793  O    O    . LYS LYS LYS A A 104 104 . 0.0638 0.0612 0.0434 0.0050  0.0069  -
0.0032 1 .
794  N    N    . PHE PHE PHE A A 105 105 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
795  CA   CA   . PHE PHE PHE A A 105 105 . 0.0256 0.0265 0.0260 0.0006  -0.0004 -
0.0009 1 .
796  CB   CB   . PHE PHE PHE A A 105 105 . 0.0283 0.0347 0.0355 -0.0053 -0.0055
0.0098  1 .
797  CG   CG   . PHE PHE PHE A A 105 105 . 0.0672 0.0283 0.0464 -0.0086 0.0065
0.0035  1 .
798  CD1  CD1  . PHE PHE PHE A A 105 105 . 0.0325 0.0596 0.0913 0.0150  0.0129
0.0260  1 .
799  CE1  CE1  . PHE PHE PHE A A 105 105 . 0.0382 0.0456 0.0560 -0.0013 -0.0011 -
0.0091 1 .
800  CZ   CZ   . PHE PHE PHE A A 105 105 . 0.0719 0.0680 0.0666 0.0110  0.0037  -
0.0054 1 .
801  CE2  CE2  . PHE PHE PHE A A 105 105 . 0.0846 0.0739 0.0798 -0.0184 0.0084
0.0077  1 .
802  CD2  CD2  . PHE PHE PHE A A 105 105 . 0.0738 0.0738 0.0691 0.0015  0.0020
0.0234  1 .
803  C    C    . PHE PHE PHE A A 105 105 . 0.0254 0.0282 0.0268 -0.0004 -0.0003
0.0021  1 .
804  O    O    . PHE PHE PHE A A 105 105 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
805  N    N    . GLY GLY GLY A A 106 106 . 0.0384 0.0254 0.0257 -0.0011 -0.0006
0.0000  1 .
806  CA   CA   . GLY GLY GLY A A 106 106 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
807  C    C    . GLY GLY GLY A A 106 106 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
808  O    O    . GLY GLY GLY A A 106 106 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
809  N    N    . ALA ALA ALA A A 107 107 . 0.0259 0.0258 0.0266 -0.0006 -0.0009
0.0008  1 .
810  CA   CA   . ALA ALA ALA A A 107 107 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
811  CB   CB   . ALA ALA ALA A A 107 107 . 0.0257 0.0334 0.0285 0.0018  -0.0011 -
0.0051 1 .
812  C    C    . ALA ALA ALA A A 107 107 . 0.0262 0.0344 0.0261 0.0029  -0.0008 -
0.0026 1 .
813  O    O    . ALA ALA ALA A A 107 107 . 0.0260 0.0272 0.0282 -0.0011 0.0014  -
0.0023 1 .
814  N    N    . ASN ASN ASN A A 108 108 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
815  CA   CA   . ASN ASN ASN A A 108 108 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
816  CB   CB   . ASN ASN ASN A A 108 108 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
817  CG   CG   . ASN ASN ASN A A 108 108 . 0.0255 0.0322 0.0320 0.0011  0.0011
0.0068  1 .
818  OD1  OD1  . ASN ASN ASN A A 108 108 . 0.0268 0.0255 0.0261 0.0005  0.0011
0.0004  1 .
819  ND2  ND2  . ASN ASN ASN A A 108 108 . 0.0298 0.0276 0.0254 -0.0032 0.0007  -
0.0005 1 .
820  C    C    . ASN ASN ASN A A 108 108 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
821  O    O    . ASN ASN ASN A A 108 108 . 0.0272 0.0289 0.0388 -0.0026 -0.0051
0.0070  1 .
822  N    N    . ALA ALA ALA A A 109 109 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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823  CA   CA   . ALA ALA ALA A A 109 109 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
824  CB   CB   . ALA ALA ALA A A 109 109 . 0.0253 0.0254 0.0255 0.0000  0.0000
0.0002  1 .
825  C    C    . ALA ALA ALA A A 109 109 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
826  O    O    . ALA ALA ALA A A 109 109 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
827  N    N    . ILE ILE ILE A A 110 110 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
828  CA   CA   . ILE ILE ILE A A 110 110 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
829  CB   CB   . ILE ILE ILE A A 110 110 . 0.0255 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
830  CG1  CG1  . ILE ILE ILE A A 110 110 . 0.0256 0.0259 0.0432 0.0004  0.0022
0.0033  1 .
831  CD1  CD1  . ILE ILE ILE A A 110 110 . 0.0692 0.0441 0.0758 0.0012  -0.0283
0.0237  1 .
832  CG2  CG2  . ILE ILE ILE A A 110 110 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
833  C    C    . ILE ILE ILE A A 110 110 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
834  O    O    . ILE ILE ILE A A 110 110 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
835  N    N    . LEU LEU LEU A A 111 111 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
836  CA   CA   . LEU LEU LEU A A 111 111 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
837  CB   CB   . LEU LEU LEU A A 111 111 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
838  CG   CG   . LEU LEU LEU A A 111 111 . 0.0262 0.0255 0.0260 -0.0004 0.0008  -
0.0003 1 .
839  CD1  CD1  . LEU LEU LEU A A 111 111 . 0.0255 0.0299 0.0295 0.0010  -0.0010 -
0.0044 1 .
840  CD2  CD2  . LEU LEU LEU A A 111 111 . 0.0683 0.0525 0.0459 -0.0263 0.0036  -
0.0040 1 .
841  C    C    . LEU LEU LEU A A 111 111 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
842  O    O    . LEU LEU LEU A A 111 111 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
843  N    N    . GLY GLY GLY A A 112 112 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
844  CA   CA   . GLY GLY GLY A A 112 112 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
845  C    C    . GLY GLY GLY A A 112 112 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
846  O    O    . GLY GLY GLY A A 112 112 . 0.0295 0.0273 0.0288 -0.0029 0.0038  -
0.0026 1 .
847  N    N    . VAL VAL VAL A A 113 113 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
848  CA   CA   . VAL VAL VAL A A 113 113 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
849  CB   CB   . VAL VAL VAL A A 113 113 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
850  CG1  CG1  . VAL VAL VAL A A 113 113 . 0.0613 0.0369 0.0421 -0.0146 -0.0174
0.0001  1 .
851  CG2  CG2  . VAL VAL VAL A A 113 113 . 0.0595 0.0258 0.0305 -0.0031 0.0131  -
0.0014 1 .
852  C    C    . VAL VAL VAL A A 113 113 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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853  O    O    . VAL VAL VAL A A 113 113 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
854  N    N    . SER SER SER A A 114 114 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
855  CA   CA   . SER SER SER A A 114 114 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
856  CB   CB   . SER SER SER A A 114 114 . 0.0296 0.0341 0.0278 0.0062  -0.0033 -
0.0047 1 .
857  OG   OG   . SER SER SER A A 114 114 . 0.0468 0.0253 0.0269 -0.0007 0.0059  -
0.0002 1 .
858  C    C    . SER SER SER A A 114 114 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
859  O    O    . SER SER SER A A 114 114 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
860  N    N    . LEU LEU LEU A A 115 115 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
861  CA   CA   . LEU LEU LEU A A 115 115 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
862  CB   CB   . LEU LEU LEU A A 115 115 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
863  CG   CG   . LEU LEU LEU A A 115 115 . 0.0266 0.0281 0.0258 -0.0019 0.0008  -
0.0012 1 .
864  CD1  CD1  . LEU LEU LEU A A 115 115 . 0.0454 0.0350 0.0358 -0.0096 0.0072
0.0027  1 .
865  CD2  CD2  . LEU LEU LEU A A 115 115 . 0.0386 0.0256 0.0280 0.0021  -0.0059 -
0.0009 1 .
866  C    C    . LEU LEU LEU A A 115 115 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
867  O    O    . LEU LEU LEU A A 115 115 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
868  N    N    . ALA ALA ALA A A 116 116 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
869  CA   CA   . ALA ALA ALA A A 116 116 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
870  CB   CB   . ALA ALA ALA A A 116 116 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
871  C    C    . ALA ALA ALA A A 116 116 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
872  O    O    . ALA ALA ALA A A 116 116 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
873  N    N    . VAL VAL VAL A A 117 117 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
874  CA   CA   . VAL VAL VAL A A 117 117 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
875  CB   CB   . VAL VAL VAL A A 117 117 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
876  CG1  CG1  . VAL VAL VAL A A 117 117 . 0.0270 0.0367 0.0267 -0.0044 0.0015  -
0.0040 1 .
877  CG2  CG2  . VAL VAL VAL A A 117 117 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
878  C    C    . VAL VAL VAL A A 117 117 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
879  O    O    . VAL VAL VAL A A 117 117 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
880  N    N    . CYS CYS CYS A A 118 118 . 0.0289 0.0269 0.0256 -0.0024 0.0011  -
0.0007 1 .
881  CA   CA   . CYS CYS CYS A A 118 118 . 0.0260 0.0316 0.0311 -0.0021 0.0020  -
0.0060 1 .
882  CB   CB   . CYS CYS CYS A A 118 118 . 0.0284 0.0399 0.0311 -0.0067 0.0042  -
0.0091 1 .
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883  SG   SG   . CYS CYS CYS A A 118 118 . 0.0412 0.0341 0.0377 -0.0016 0.0082  -
0.0075 1 .
884  C    C    . CYS CYS CYS A A 118 118 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
885  O    O    . CYS CYS CYS A A 118 118 . 0.0421 0.0268 0.0365 -0.0001 0.0106  -
0.0026 1 .
886  N    N    . LYS LYS LYS A A 119 119 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
887  CA   CA   . LYS LYS LYS A A 119 119 . 0.0254 0.0253 0.0254 0.0000  0.0000
0.0000  1 .
888  CB   CB   . LYS LYS LYS A A 119 119 . 0.0313 0.0294 0.0297 -0.0049 0.0051  -
0.0042 1 .
889  CG   CG   . LYS LYS LYS A A 119 119 . 0.0272 0.0291 0.0253 -0.0027 0.0002  -
0.0002 1 .
890  CD   CD   . LYS LYS LYS A A 119 119 . 0.1124 0.0523 0.0722 -0.0100 -0.0088
0.0083  1 .
891  CE   CE   . LYS LYS LYS A A 119 119 . 0.0805 0.0939 0.1137 -0.0109 0.0127
0.0061  1 .
892  NZ   NZ   . LYS LYS LYS A A 119 119 . 0.1589 0.0937 0.1174 -0.0066 0.0074  -
0.0083 1 .
893  C    C    . LYS LYS LYS A A 119 119 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
894  O    O    . LYS LYS LYS A A 119 119 . 0.0322 0.0335 0.0308 -0.0069 -0.0011 -
0.0013 1 .
895  N    N    . ALA ALA ALA A A 120 120 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
896  CA   CA   . ALA ALA ALA A A 120 120 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
897  CB   CB   . ALA ALA ALA A A 120 120 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
898  C    C    . ALA ALA ALA A A 120 120 . 0.0284 0.0254 0.0271 0.0005  -0.0023 -
0.0004 1 .
899  O    O    . ALA ALA ALA A A 120 120 . 0.0253 0.0371 0.0473 -0.0007 -0.0009
0.0161  1 .
900  N    N    . GLY GLY GLY A A 121 121 . 0.0298 0.0253 0.0332 -0.0002 0.0059  -
0.0003 1 .
901  CA   CA   . GLY GLY GLY A A 121 121 . 0.0393 0.0280 0.0257 -0.0061 -0.0025
0.0011  1 .
902  C    C    . GLY GLY GLY A A 121 121 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
903  O    O    . GLY GLY GLY A A 121 121 . 0.0280 0.0261 0.0337 -0.0014 0.0048  -
0.0026 1 .
904  N    N    . ALA ALA ALA A A 122 122 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
905  CA   CA   . ALA ALA ALA A A 122 122 . 0.0312 0.0319 0.0310 -0.0062 -0.0038
0.0044  1 .
906  CB   CB   . ALA ALA ALA A A 122 122 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
907  C    C    . ALA ALA ALA A A 122 122 . 0.0308 0.0285 0.0325 0.0000  0.0056
0.0021  1 .
908  O    O    . ALA ALA ALA A A 122 122 . 0.0639 0.0470 0.0812 -0.0258 0.0065  -
0.0014 1 .
909  N    N    . ALA ALA ALA A A 123 123 . 0.0457 0.0428 0.0403 -0.0042 -0.0075 -
0.0078 1 .
910  CA   CA   . ALA ALA ALA A A 123 123 . 0.0327 0.0425 0.0653 0.0110  -0.0014
0.0034  1 .
911  CB   CB   . ALA ALA ALA A A 123 123 . 0.0291 0.0384 0.0425 0.0070  -0.0081 -
0.0150 1 .
912  C    C    . ALA ALA ALA A A 123 123 . 0.0456 0.0509 0.0547 0.0048  0.0029
0.0164  1 .
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913  O    O    . ALA ALA ALA A A 123 123 . 0.0757 0.0939 0.1004 0.0000  0.0112
0.0063  1 .
914  N    N    . GLU GLU GLU A A 124 124 . 0.0466 0.0449 0.0579 -0.0055 0.0149  -
0.0138 1 .
915  CA   CA   . GLU GLU GLU A A 124 124 . 0.0725 0.0739 0.0754 -0.0103 0.0099
0.0055  1 .
916  CB   CB   . GLU GLU GLU A A 124 124 . 0.0885 0.1035 0.0992 -0.0097 0.0085
0.0011  1 .
917  CG   CG   . GLU GLU GLU A A 124 124 . 0.2038 0.1519 0.1786 -0.0252 0.0035  -
0.0097 1 .
918  CD   CD   . GLU GLU GLU A A 124 124 . 0.2806 0.2572 0.2577 -0.0243 -0.0369 -
0.0235 1 .
919  OE1  OE1  . GLU GLU GLU A A 124 124 . 0.2634 0.3285 0.3291 -0.0140 -0.0218 -
0.0184 1 .
920  OE2  OE2  . GLU GLU GLU A A 124 124 . 0.2962 0.3311 0.3276 0.0639  0.0198  -
0.0224 1 .
921  C    C    . GLU GLU GLU A A 124 124 . 0.0802 0.0879 0.0757 -0.0065 -0.0011 -
0.0032 1 .
922  O    O    . GLU GLU GLU A A 124 124 . 0.1049 0.1005 0.1350 -0.0366 0.0082  -
0.0157 1 .
923  N    N    . ARG ARG ARG A A 125 125 . 0.0746 0.0625 0.0932 -0.0200 0.0073
0.0078  1 .
924  CA   CA   . ARG ARG ARG A A 125 125 . 0.0927 0.0975 0.1042 -0.0114 -0.0018 -
0.0012 1 .
925  CB   CB   . ARG ARG ARG A A 125 125 . 0.1077 0.0989 0.1085 0.0047  0.0035  -
0.0110 1 .
926  CG   CG   . ARG ARG ARG A A 125 125 . 0.1189 0.1469 0.1151 0.0048  0.0136
0.0022  1 .
927  CD   CD   . ARG ARG ARG A A 125 125 . 0.1333 0.1300 0.1243 -0.0398 0.0154
0.0273  1 .
928  NE   NE   . ARG ARG ARG A A 125 125 . 0.2275 0.1957 0.2067 -0.0105 -0.0032 -
0.0253 1 .
929  CZ   CZ   . ARG ARG ARG A A 125 125 . 0.2050 0.1855 0.1617 -0.0168 0.0056  -
0.0003 1 .
930  NH1  NH1  . ARG ARG ARG A A 125 125 . 0.2601 0.2328 0.2541 -0.0126 -0.0303
0.0041  1 .
931  NH2  NH2  . ARG ARG ARG A A 125 125 . 0.1992 0.2117 0.2190 0.0125  -0.0236
0.0214  1 .
932  C    C    . ARG ARG ARG A A 125 125 . 0.0955 0.0999 0.1029 -0.0030 0.0055  -
0.0106 1 .
933  O    O    . ARG ARG ARG A A 125 125 . 0.1428 0.1572 0.1542 0.0003  0.0035  -
0.0029 1 .
934  N    N    . GLU GLU GLU A A 126 126 . 0.1082 0.1062 0.1241 -0.0043 -0.0054 -
0.0072 1 .
935  CA   CA   . GLU GLU GLU A A 126 126 . 0.1277 0.1273 0.1464 -0.0066 0.0059  -
0.0048 1 .
936  CB   CB   . GLU GLU GLU A A 126 126 . 0.1688 0.1884 0.1809 -0.0055 0.0020
0.0015  1 .
937  CG   CG   . GLU GLU GLU A A 126 126 . 0.2471 0.2627 0.2293 -0.0106 0.0072  -
0.0341 1 .
938  CD   CD   . GLU GLU GLU A A 126 126 . 0.2923 0.3334 0.3283 -0.0189 0.0109  -
0.0124 1 .
939  OE1  OE1  . GLU GLU GLU A A 126 126 . 0.2919 0.3134 0.4028 -0.0199 0.0240  -
0.0385 1 .
940  OE2  OE2  . GLU GLU GLU A A 126 126 . 0.3588 0.3475 0.3391 -0.0190 0.0318  -
0.0179 1 .
941  C    C    . GLU GLU GLU A A 126 126 . 0.1117 0.1312 0.1208 -0.0013 0.0040  -
0.0138 1 .
942  O    O    . GLU GLU GLU A A 126 126 . 0.0994 0.1385 0.1639 -0.0010 0.0101  -
0.0120 1 .
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943  N    N    . LEU LEU LEU A A 127 127 . 0.0710 0.0923 0.0892 -0.0029 0.0030  -
0.0047 1 .
944  CA   CA   . LEU LEU LEU A A 127 127 . 0.0855 0.0955 0.0825 -0.0171 0.0025  -
0.0022 1 .
945  CB   CB   . LEU LEU LEU A A 127 127 . 0.1001 0.1083 0.1184 -0.0135 0.0159
0.0097  1 .
946  CG   CG   . LEU LEU LEU A A 127 127 . 0.1117 0.1077 0.0998 -0.0268 0.0142  -
0.0115 1 .
947  CD1  CD1  . LEU LEU LEU A A 127 127 . 0.1728 0.1579 0.1472 -0.0285 0.0127  -
0.0209 1 .
948  CD2  CD2  . LEU LEU LEU A A 127 127 . 0.1712 0.1616 0.2110 -0.0054 0.0648  -
0.0080 1 .
949  C    C    . LEU LEU LEU A A 127 127 . 0.0692 0.0743 0.0666 -0.0097 0.0098  -
0.0048 1 .
950  O    O    . LEU LEU LEU A A 127 127 . 0.0485 0.0715 0.0772 -0.0063 0.0103  -
0.0244 1 .
951  N    N    . PRO PRO PRO A A 128 128 . 0.0649 0.0748 0.0798 -0.0123 0.0089  -
0.0045 1 .
952  CA   CA   . PRO PRO PRO A A 128 128 . 0.0728 0.0748 0.0679 -0.0075 0.0049  -
0.0029 1 .
953  CB   CB   . PRO PRO PRO A A 128 128 . 0.0716 0.0510 0.1101 -0.0002 -0.0010 -
0.0004 1 .
954  CG   CG   . PRO PRO PRO A A 128 128 . 0.0968 0.0861 0.1011 -0.0147 -0.0068
0.0000  1 .
955  CD   CD   . PRO PRO PRO A A 128 128 . 0.0687 0.0531 0.0845 -0.0117 0.0038  -
0.0017 1 .
956  C    C    . PRO PRO PRO A A 128 128 . 0.0536 0.0374 0.0398 -0.0055 0.0059  -
0.0064 1 .
957  O    O    . PRO PRO PRO A A 128 128 . 0.0673 0.0478 0.0613 -0.0052 0.0044
0.0007  1 .
958  N    N    . LEU LEU LEU A A 129 129 . 0.0350 0.0275 0.0407 -0.0014 0.0017  -
0.0057 1 .
959  CA   CA   . LEU LEU LEU A A 129 129 . 0.0262 0.0287 0.0286 -0.0017 0.0017  -
0.0033 1 .
960  CB   CB   . LEU LEU LEU A A 129 129 . 0.0385 0.0253 0.0254 0.0006  0.0012
0.0000  1 .
961  CG   CG   . LEU LEU LEU A A 129 129 . 0.0257 0.0253 0.0258 -0.0001 0.0004  -
0.0001 1 .
962  CD1  CD1  . LEU LEU LEU A A 129 129 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
963  CD2  CD2  . LEU LEU LEU A A 129 129 . 0.0543 0.0411 0.0266 -0.0214 0.0062  -
0.0046 1 .
964  C    C    . LEU LEU LEU A A 129 129 . 0.0253 0.0253 0.0254 0.0000  0.0000
0.0000  1 .
965  O    O    . LEU LEU LEU A A 129 129 . 0.0286 0.0266 0.0254 -0.0021 0.0005  -
0.0003 1 .
966  N    N    . TYR TYR TYR A A 130 130 . 0.0275 0.0283 0.0307 -0.0025 0.0034  -
0.0040 1 .
967  CA   CA   . TYR TYR TYR A A 130 130 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
968  CB   CB   . TYR TYR TYR A A 130 130 . 0.0254 0.0310 0.0287 0.0007  -0.0005 -
0.0043 1 .
969  CG   CG   . TYR TYR TYR A A 130 130 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
970  CD1  CD1  . TYR TYR TYR A A 130 130 . 0.0427 0.0306 0.0323 -0.0059 -0.0014 -
0.0042 1 .
971  CE1  CE1  . TYR TYR TYR A A 130 130 . 0.0658 0.0605 0.0531 0.0007  0.0149
0.0283  1 .
972  CZ   CZ   . TYR TYR TYR A A 130 130 . 0.0881 0.1016 0.0762 0.0186  -0.0126 -
0.0120 1 .
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973  OH   OH   . TYR TYR TYR A A 130 130 . 0.0791 0.0871 0.1391 0.0163  0.0052
0.0118  1 .
974  CE2  CE2  . TYR TYR TYR A A 130 130 . 0.0323 0.0414 0.0498 0.0060  -0.0033
0.0026  1 .
975  CD2  CD2  . TYR TYR TYR A A 130 130 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
976  C    C    . TYR TYR TYR A A 130 130 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
977  O    O    . TYR TYR TYR A A 130 130 . 0.0274 0.0261 0.0294 -0.0012 0.0029  -
0.0017 1 .
978  N    N    . ARG ARG ARG A A 131 131 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
979  CA   CA   . ARG ARG ARG A A 131 131 . 0.0264 0.0256 0.0319 0.0005  -0.0027 -
0.0013 1 .
980  CB   CB   . ARG ARG ARG A A 131 131 . 0.0503 0.0497 0.0550 0.0014  -0.0011 -
0.0160 1 .
981  CG   CG   . ARG ARG ARG A A 131 131 . 0.1433 0.1131 0.1471 0.0047  -0.0039
0.0022  1 .
982  CD   CD   . ARG ARG ARG A A 131 131 . 0.2798 0.2939 0.1911 -0.0213 0.0342
0.0095  1 .
983  NE   NE   . ARG ARG ARG A A 131 131 . 0.3115 0.3097 0.3075 -0.0080 0.0188
0.0049  1 .
984  CZ   CZ   . ARG ARG ARG A A 131 131 . 0.3031 0.3204 0.3177 -0.0098 -0.0055 -
0.0056 1 .
985  NH1  NH1  . ARG ARG ARG A A 131 131 . 0.2388 0.2678 0.2696 -0.0085 0.0345  -
0.0281 1 .
986  NH2  NH2  . ARG ARG ARG A A 131 131 . 0.3394 0.3432 0.4134 0.0251  0.0066  -
0.0162 1 .
987  C    C    . ARG ARG ARG A A 131 131 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
988  O    O    . ARG ARG ARG A A 131 131 . 0.0356 0.0258 0.0273 0.0024  0.0046
0.0010  1 .
989  N    N    . HIS HIS HIS A A 132 132 . 0.0273 0.0253 0.0273 0.0001  0.0020
0.0001  1 .
990  CA   CA   . HIS HIS HIS A A 132 132 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
991  CB   CB   . HIS HIS HIS A A 132 132 . 0.0253 0.0277 0.0271 0.0000  0.0000  -
0.0020 1 .
992  CG   CG   . HIS HIS HIS A A 132 132 . 0.0488 0.0472 0.0423 0.0032  0.0190
0.0085  1 .
993  ND1  ND1  . HIS HIS HIS A A 132 132 . 0.0929 0.0503 0.1118 0.0083  0.0108
0.0124  1 .
994  CE1  CE1  . HIS HIS HIS A A 132 132 . 0.0408 0.0477 0.0729 -0.0145 0.0202  -
0.0051 1 .
995  NE2  NE2  . HIS HIS HIS A A 132 132 . 0.0773 0.0686 0.0724 -0.0001 0.0323  -
0.0142 1 .
996  CD2  CD2  . HIS HIS HIS A A 132 132 . 0.0650 0.0608 0.0554 0.0241  0.0254  -
0.0014 1 .
997  C    C    . HIS HIS HIS A A 132 132 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
998  O    O    . HIS HIS HIS A A 132 132 . 0.0384 0.0307 0.0341 -0.0068 -0.0056
0.0063  1 .
999  N    N    . ILE ILE ILE A A 133 133 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1000 CA   CA   . ILE ILE ILE A A 133 133 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1001 CB   CB   . ILE ILE ILE A A 133 133 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1002 CG1  CG1  . ILE ILE ILE A A 133 133 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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1003 CD1  CD1  . ILE ILE ILE A A 133 133 . 0.0586 0.0289 0.0436 -0.0045 0.0155
0.0037  1 .
1004 CG2  CG2  . ILE ILE ILE A A 133 133 . 0.0253 0.0254 0.0254 0.0000  0.0000
0.0001  1 .
1005 C    C    . ILE ILE ILE A A 133 133 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1006 O    O    . ILE ILE ILE A A 133 133 . 0.0283 0.0283 0.0274 0.0029  0.0025
0.0025  1 .
1007 N    N    . ALA ALA ALA A A 134 134 . 0.0255 0.0262 0.0257 -0.0003 0.0002  -
0.0005 1 .
1008 CA   CA   . ALA ALA ALA A A 134 134 . 0.0329 0.0281 0.0266 -0.0046 0.0032  -
0.0019 1 .
1009 CB   CB   . ALA ALA ALA A A 134 134 . 0.0300 0.0288 0.0330 0.0040  0.0060
0.0051  1 .
1010 C    C    . ALA ALA ALA A A 134 134 . 0.0456 0.0483 0.0398 -0.0071 0.0088  -
0.0007 1 .
1011 O    O    . ALA ALA ALA A A 134 134 . 0.0496 0.0482 0.0496 0.0013  0.0085
0.0162  1 .
1012 N    N    . GLN GLN GLN A A 135 135 . 0.0393 0.0516 0.0351 -0.0091 0.0065
0.0073  1 .
1013 CA   CA   . GLN GLN GLN A A 135 135 . 0.0602 0.0535 0.0504 -0.0129 0.0075
0.0102  1 .
1014 CB   CB   . GLN GLN GLN A A 135 135 . 0.0640 0.0763 0.0518 -0.0160 0.0136
0.0014  1 .
1015 CG   CG   . GLN GLN GLN A A 135 135 . 0.1119 0.0878 0.0955 -0.0077 -0.0103
0.0000  1 .
1016 CD   CD   . GLN GLN GLN A A 135 135 . 0.1498 0.1649 0.1919 -0.0065 0.0150  -
0.0059 1 .
1017 OE1  OE1  . GLN GLN GLN A A 135 135 . 0.2128 0.1690 0.2036 -0.0131 -0.0041
0.0280  1 .
1018 NE2  NE2  . GLN GLN GLN A A 135 135 . 0.1203 0.1843 0.1416 -0.0287 0.0075  -
0.0275 1 .
1019 C    C    . GLN GLN GLN A A 135 135 . 0.0484 0.0422 0.0427 -0.0190 -0.0019 -
0.0029 1 .
1020 O    O    . GLN GLN GLN A A 135 135 . 0.0800 0.0650 0.0451 0.0011  0.0153
0.0088  1 .
1021 N    N    . LEU LEU LEU A A 136 136 . 0.0422 0.0313 0.0317 -0.0044 0.0079
0.0015  1 .
1022 CA   CA   . LEU LEU LEU A A 136 136 . 0.0704 0.0570 0.0510 0.0016  0.0007
0.0069  1 .
1023 CB   CB   . LEU LEU LEU A A 136 136 . 0.0374 0.0313 0.0568 -0.0023 0.0177
0.0015  1 .
1024 CG   CG   . LEU LEU LEU A A 136 136 . 0.0374 0.0314 0.0468 -0.0011 0.0045
0.0104  1 .
1025 CD1  CD1  . LEU LEU LEU A A 136 136 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1026 CD2  CD2  . LEU LEU LEU A A 136 136 . 0.0561 0.0467 0.0433 -0.0227 0.0155  -
0.0046 1 .
1027 C    C    . LEU LEU LEU A A 136 136 . 0.0723 0.0493 0.0542 -0.0021 0.0025
0.0030  1 .
1028 O    O    . LEU LEU LEU A A 136 136 . 0.1124 0.1046 0.0963 0.0016  -0.0103
0.0069  1 .
1029 N    N    . ALA ALA ALA A A 137 137 . 0.0902 0.0668 0.0434 -0.0110 0.0069
0.0064  1 .
1030 CA   CA   . ALA ALA ALA A A 137 137 . 0.0735 0.0780 0.0624 -0.0082 0.0144
0.0052  1 .
1031 CB   CB   . ALA ALA ALA A A 137 137 . 0.0860 0.0659 0.0691 -0.0126 0.0050
0.0070  1 .
1032 C    C    . ALA ALA ALA A A 137 137 . 0.0896 0.1008 0.0819 0.0010  0.0023
0.0001  1 .
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1033 O    O    . ALA ALA ALA A A 137 137 . 0.1165 0.1322 0.0950 0.0113  0.0011
0.0198  1 .
1034 N    N    . GLY GLY GLY A A 138 138 . 0.1000 0.1021 0.0868 -0.0026 0.0130
0.0023  1 .
1035 CA   CA   . GLY GLY GLY A A 138 138 . 0.1315 0.1152 0.1029 0.0042  0.0121
0.0054  1 .
1036 C    C    . GLY GLY GLY A A 138 138 . 0.1336 0.1295 0.1184 -0.0109 0.0000
0.0008  1 .
1037 O    O    . GLY GLY GLY A A 138 138 . 0.1847 0.1548 0.1669 -0.0057 -0.0074
0.0039  1 .
1038 N    N    . ASN ASN ASN A A 139 139 . 0.1235 0.1372 0.1369 -0.0069 -0.0059 -
0.0019 1 .
1039 CA   CA   . ASN ASN ASN A A 139 139 . 0.1386 0.1386 0.1389 -0.0024 0.0049
0.0063  1 .
1040 CB   CB   . ASN ASN ASN A A 139 139 . 0.1175 0.1284 0.0930 -0.0071 0.0088
0.0179  1 .
1041 CG   CG   . ASN ASN ASN A A 139 139 . 0.1256 0.1120 0.1115 0.0055  0.0087
0.0156  1 .
1042 OD1  OD1  . ASN ASN ASN A A 139 139 . 0.2187 0.2211 0.1207 0.0266  0.0055
0.0078  1 .
1043 ND2  ND2  . ASN ASN ASN A A 139 139 . 0.1302 0.1033 0.1002 0.0109  0.0050  -
0.0173 1 .
1044 C    C    . ASN ASN ASN A A 139 139 . 0.1530 0.1651 0.1559 -0.0073 0.0014
0.0016  1 .
1045 O    O    . ASN ASN ASN A A 139 139 . 0.1741 0.1738 0.1512 -0.0026 0.0200  -
0.0062 1 .
1046 N    N    . SER SER SER A A 140 140 . 0.2091 0.2029 0.2051 0.0054  0.0053
0.0033  1 .
1047 CA   CA   . SER SER SER A A 140 140 . 0.2462 0.2527 0.2534 0.0008  0.0077
0.0006  1 .
1048 CB   CB   . SER SER SER A A 140 140 . 0.2452 0.2609 0.2593 0.0046  0.0107  -
0.0015 1 .
1049 OG   OG   . SER SER SER A A 140 140 . 0.3172 0.3262 0.3389 0.0128  0.0297  -
0.0030 1 .
1050 C    C    . SER SER SER A A 140 140 . 0.2584 0.2582 0.2545 0.0069  0.0036  -
0.0006 1 .
1051 O    O    . SER SER SER A A 140 140 . 0.2610 0.2734 0.2831 0.0143  0.0079  -
0.0094 1 .
1052 N    N    . ASP ASP ASP A A 141 141 . 0.2519 0.2512 0.2384 -0.0033 0.0069  -
0.0056 1 .
1053 CA   CA   . ASP ASP ASP A A 141 141 . 0.2394 0.2462 0.2379 -0.0019 0.0098
0.0022  1 .
1054 CB   CB   . ASP ASP ASP A A 141 141 . 0.2443 0.2571 0.2465 0.0016  -0.0049 -
0.0025 1 .
1055 CG   CG   . ASP ASP ASP A A 141 141 . 0.3177 0.3086 0.3228 -0.0166 0.0081
0.0123  1 .
1056 OD1  OD1  . ASP ASP ASP A A 141 141 . 0.4182 0.4481 0.3678 -0.0379 -0.0511
0.0268  1 .
1057 OD2  OD2  . ASP ASP ASP A A 141 141 . 0.3347 0.3384 0.3757 0.0207  0.0192
0.0191  1 .
1058 C    C    . ASP ASP ASP A A 141 141 . 0.2139 0.2069 0.2089 -0.0028 -0.0037
0.0046  1 .
1059 O    O    . ASP ASP ASP A A 141 141 . 0.2166 0.2160 0.2303 -0.0185 -0.0081
0.0065  1 .
1060 N    N    . LEU LEU LEU A A 142 142 . 0.1589 0.1612 0.1522 -0.0135 -0.0009 -
0.0022 1 .
1061 CA   CA   . LEU LEU LEU A A 142 142 . 0.0980 0.0952 0.1030 -0.0106 0.0012
0.0002  1 .
1062 CB   CB   . LEU LEU LEU A A 142 142 . 0.0912 0.0465 0.0500 -0.0213 0.0072  -
0.0016 1 .
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1063 CG   CG   . LEU LEU LEU A A 142 142 . 0.1022 0.1327 0.1392 -0.0417 0.0067
0.0156  1 .
1064 CD1  CD1  . LEU LEU LEU A A 142 142 . 0.1975 0.1750 0.1631 -0.0273 0.0254
0.0450  1 .
1065 CD2  CD2  . LEU LEU LEU A A 142 142 . 0.1135 0.1644 0.1701 -0.0372 0.0384  -
0.0067 1 .
1066 C    C    . LEU LEU LEU A A 142 142 . 0.0930 0.0953 0.0867 -0.0051 0.0012  -
0.0171 1 .
1067 O    O    . LEU LEU LEU A A 142 142 . 0.0864 0.1072 0.1075 -0.0014 0.0129  -
0.0200 1 .
1068 N    N    . ILE ILE ILE A A 143 143 . 0.0550 0.0770 0.0805 -0.0153 -0.0033 -
0.0030 1 .
1069 CA   CA   . ILE ILE ILE A A 143 143 . 0.0677 0.0640 0.0522 -0.0047 -0.0051
0.0098  1 .
1070 CB   CB   . ILE ILE ILE A A 143 143 . 0.0983 0.1195 0.0953 -0.0086 -0.0014
0.0214  1 .
1071 CG1  CG1  . ILE ILE ILE A A 143 143 . 0.1744 0.1879 0.1281 0.0082  0.0086
0.0020  1 .
1072 CD1  CD1  . ILE ILE ILE A A 143 143 . 0.2131 0.1716 0.2067 -0.0181 -0.0146 -
0.0389 1 .
1073 CG2  CG2  . ILE ILE ILE A A 143 143 . 0.1437 0.1894 0.1203 0.0249  -0.0172
0.0485  1 .
1074 C    C    . ILE ILE ILE A A 143 143 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1075 O    O    . ILE ILE ILE A A 143 143 . 0.0378 0.0550 0.0432 -0.0011 0.0088
0.0178  1 .
1076 N    N    . LEU LEU LEU A A 144 144 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1077 CA   CA   . LEU LEU LEU A A 144 144 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1078 CB   CB   . LEU LEU LEU A A 144 144 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1079 CG   CG   . LEU LEU LEU A A 144 144 . 0.0254 0.0263 0.0253 0.0003  0.0000
0.0000  1 .
1080 CD1  CD1  . LEU LEU LEU A A 144 144 . 0.0561 0.0323 0.0317 0.0146  -0.0133 -
0.0066 1 .
1081 CD2  CD2  . LEU LEU LEU A A 144 144 . 0.0455 0.0350 0.0304 -0.0009 0.0027  -
0.0005 1 .
1082 C    C    . LEU LEU LEU A A 144 144 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1083 O    O    . LEU LEU LEU A A 144 144 . 0.0262 0.0259 0.0256 -0.0007 0.0005  -
0.0004 1 .
1084 N    N    . PRO PRO PRO A A 145 145 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1085 CA   CA   . PRO PRO PRO A A 145 145 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1086 CB   CB   . PRO PRO PRO A A 145 145 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1087 CG   CG   . PRO PRO PRO A A 145 145 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1088 CD   CD   . PRO PRO PRO A A 145 145 . 0.0254 0.0267 0.0268 -0.0003 0.0003  -
0.0014 1 .
1089 C    C    . PRO PRO PRO A A 145 145 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1090 O    O    . PRO PRO PRO A A 145 145 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1091 N    N    . VAL VAL VAL A A 146 146 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1092 CA   CA   . VAL VAL VAL A A 146 146 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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1093 CB   CB   . VAL VAL VAL A A 146 146 . 0.0266 0.0288 0.0347 -0.0021 0.0035  -
0.0057 1 .
1094 CG1  CG1  . VAL VAL VAL A A 146 146 . 0.0257 0.0253 0.0257 0.0000  -0.0004
0.0000  1 .
1095 CG2  CG2  . VAL VAL VAL A A 146 146 . 0.0262 0.0527 0.0300 0.0049  0.0020
0.0114  1 .
1096 C    C    . VAL VAL VAL A A 146 146 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1097 O    O    . VAL VAL VAL A A 146 146 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1098 N    N    . PRO PRO PRO A A 147 147 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1099 CA   CA   . PRO PRO PRO A A 147 147 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1100 CB   CB   . PRO PRO PRO A A 147 147 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1101 CG   CG   . PRO PRO PRO A A 147 147 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1102 CD   CD   . PRO PRO PRO A A 147 147 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1103 C    C    . PRO PRO PRO A A 147 147 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1104 O    O    . PRO PRO PRO A A 147 147 . 0.0273 0.0270 0.0315 -0.0018 0.0035  -
0.0033 1 .
1105 N    N    . ALA ALA ALA A A 148 148 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1106 CA   CA   . ALA ALA ALA A A 148 148 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1107 CB   CB   . ALA ALA ALA A A 148 148 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1108 C    C    . ALA ALA ALA A A 148 148 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1109 O    O    . ALA ALA ALA A A 148 148 . 0.0272 0.0261 0.0253 -0.0012 0.0000
0.0000  1 .
1110 N    N    . PHE PHE PHE A A 149 149 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1111 CA   CA   . PHE PHE PHE A A 149 149 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1112 CB   CB   . PHE PHE PHE A A 149 149 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1113 CG   CG   . PHE PHE PHE A A 149 149 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1114 CD1  CD1  . PHE PHE PHE A A 149 149 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1115 CE1  CE1  . PHE PHE PHE A A 149 149 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1116 CZ   CZ   . PHE PHE PHE A A 149 149 . 0.0257 0.0262 0.0258 0.0006  -0.0005 -
0.0006 1 .
1117 CE2  CE2  . PHE PHE PHE A A 149 149 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1118 CD2  CD2  . PHE PHE PHE A A 149 149 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1119 C    C    . PHE PHE PHE A A 149 149 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1120 O    O    . PHE PHE PHE A A 149 149 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1121 N    N    . ASN ASN ASN A A 150 150 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1122 CA   CA   . ASN ASN ASN A A 150 150 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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1123 CB   CB   . ASN ASN ASN A A 150 150 . 0.0253 0.0279 0.0301 -0.0003 0.0004  -
0.0035 1 .
1124 CG   CG   . ASN ASN ASN A A 150 150 . 0.0610 0.0607 0.0668 -0.0038 0.0078  -
0.0140 1 .
1125 OD1  OD1  . ASN ASN ASN A A 150 150 . 0.0885 0.0628 0.0767 0.0007  0.0003  -
0.0150 1 .
1126 ND2  ND2  . ASN ASN ASN A A 150 150 . 0.0255 0.0253 0.0265 0.0000  0.0004
0.0000  1 .
1127 C    C    . ASN ASN ASN A A 150 150 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1128 O    O    . ASN ASN ASN A A 150 150 . 0.0294 0.0278 0.0296 -0.0031 -0.0041
0.0032  1 .
1129 N    N    . VAL VAL VAL A A 151 151 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1130 CA   CA   . VAL VAL VAL A A 151 151 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1131 CB   CB   . VAL VAL VAL A A 151 151 . 0.0258 0.0255 0.0257 -0.0003 0.0004  -
0.0003 1 .
1132 CG1  CG1  . VAL VAL VAL A A 151 151 . 0.0274 0.0279 0.0297 0.0018  -0.0008 -
0.0028 1 .
1133 CG2  CG2  . VAL VAL VAL A A 151 151 . 0.0366 0.0277 0.0371 -0.0052 -0.0115
0.0053  1 .
1134 C    C    . VAL VAL VAL A A 151 151 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1135 O    O    . VAL VAL VAL A A 151 151 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1136 N    N    . ILE ILE ILE A A 152 152 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1137 CA   CA   . ILE ILE ILE A A 152 152 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1138 CB   CB   . ILE ILE ILE A A 152 152 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1139 CG1  CG1  . ILE ILE ILE A A 152 152 . 0.0256 0.0282 0.0325 0.0008  -0.0014 -
0.0045 1 .
1140 CD1  CD1  . ILE ILE ILE A A 152 152 . 0.0485 0.0555 0.0834 -0.0213 0.0004  -
0.0253 1 .
1141 CG2  CG2  . ILE ILE ILE A A 152 152 . 0.0253 0.0279 0.0263 -0.0002 -0.0001
0.0016  1 .
1142 C    C    . ILE ILE ILE A A 152 152 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1143 O    O    . ILE ILE ILE A A 152 152 . 0.0323 0.0289 0.0270 0.0050  0.0035
0.0025  1 .
1144 N    N    . ASN ASN ASN A A 153 153 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1145 CA   CA   . ASN ASN ASN A A 153 153 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1146 CB   CB   . ASN ASN ASN A A 153 153 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1147 CG   CG   . ASN ASN ASN A A 153 153 . 0.0263 0.0257 0.0263 0.0006  0.0009
0.0006  1 .
1148 OD1  OD1  . ASN ASN ASN A A 153 153 . 0.0710 0.0791 0.0616 -0.0079 0.0294
0.0031  1 .
1149 ND2  ND2  . ASN ASN ASN A A 153 153 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1150 C    C    . ASN ASN ASN A A 153 153 . 0.0255 0.0255 0.0256 -0.0001 0.0002  -
0.0002 1 .
1151 O    O    . ASN ASN ASN A A 153 153 . 0.0408 0.0260 0.0259 -0.0032 0.0031  -
0.0006 1 .
1152 N    N    . GLY GLY GLY A A 154 154 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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1153 CA   CA   . GLY GLY GLY A A 154 154 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1154 C    C    . GLY GLY GLY A A 154 154 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1155 O    O    . GLY GLY GLY A A 154 154 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1156 N    N    . GLY GLY GLY A A 155 155 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1157 CA   CA   . GLY GLY GLY A A 155 155 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1158 C    C    . GLY GLY GLY A A 155 155 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1159 O    O    . GLY GLY GLY A A 155 155 . 0.0264 0.0372 0.0277 0.0036  0.0016
0.0053  1 .
1160 N    N    . SER SER SER A A 156 156 . 0.0294 0.0269 0.0278 0.0025  -0.0032 -
0.0019 1 .
1161 CA   CA   . SER SER SER A A 156 156 . 0.0400 0.0296 0.0583 -0.0029 -0.0006 -
0.0062 1 .
1162 CB   CB   . SER SER SER A A 156 156 . 0.0894 0.0464 0.0975 0.0104  -0.0098
0.0072  1 .
1163 OG   OG   . SER SER SER A A 156 156 . 0.1498 0.1429 0.1344 0.0047  -0.0347 -
0.0111 1 .
1164 C    C    . SER SER SER A A 156 156 . 0.0306 0.0309 0.0320 0.0054  -0.0059 -
0.0061 1 .
1165 O    O    . SER SER SER A A 156 156 . 0.0491 0.0484 0.0740 -0.0117 -0.0146 -
0.0097 1 .
1166 N    N    . HIS HIS HIS A A 157 157 . 0.0297 0.0253 0.0256 0.0004  0.0011
0.0001  1 .
1167 CA   CA   . HIS HIS HIS A A 157 157 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1168 CB   CB   . HIS HIS HIS A A 157 157 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1169 CG   CG   . HIS HIS HIS A A 157 157 . 0.0280 0.0257 0.0271 0.0010  0.0022
0.0008  1 .
1170 ND1  ND1  . HIS HIS HIS A A 157 157 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1171 CE1  CE1  . HIS HIS HIS A A 157 157 . 0.0284 0.0267 0.0254 -0.0021 0.0006  -
0.0004 1 .
1172 NE2  NE2  . HIS HIS HIS A A 157 157 . 0.0301 0.0262 0.0271 0.0021  0.0029
0.0012  1 .
1173 CD2  CD2  . HIS HIS HIS A A 157 157 . 0.0348 0.0297 0.0350 -0.0064 0.0096  -
0.0065 1 .
1174 C    C    . HIS HIS HIS A A 157 157 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1175 O    O    . HIS HIS HIS A A 157 157 . 0.0283 0.0255 0.0359 0.0007  0.0056
0.0014  1 .
1176 N    N    . ALA ALA ALA A A 158 158 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1177 CA   CA   . ALA ALA ALA A A 158 158 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1178 CB   CB   . ALA ALA ALA A A 158 158 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1179 C    C    . ALA ALA ALA A A 158 158 . 0.0309 0.0286 0.0348 -0.0003 -0.0018 -
0.0052 1 .
1180 O    O    . ALA ALA ALA A A 158 158 . 0.0421 0.0475 0.0532 0.0068  -0.0133 -
0.0237 1 .
1181 N    N    . GLY GLY GLY A A 159 159 . 0.0467 0.0633 0.0521 -0.0035 0.0176  -
0.0044 1 .
1182 CA   CA   . GLY GLY GLY A A 159 159 . 0.0516 0.0624 0.0525 -0.0196 0.0140  -
0.0123 1 .
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1183 C    C    . GLY GLY GLY A A 159 159 . 0.0717 0.0573 0.0646 -0.0098 -0.0037 -
0.0037 1 .
1184 O    O    . GLY GLY GLY A A 159 159 . 0.0981 0.1141 0.1189 -0.0116 0.0111  -
0.0005 1 .
1185 N    N    . ASN ASN ASN A A 160 160 . 0.0487 0.0361 0.0559 -0.0118 -0.0082 -
0.0033 1 .
1186 CA   CA   . ASN ASN ASN A A 160 160 . 0.0545 0.0609 0.0534 0.0001  0.0015  -
0.0060 1 .
1187 CB   CB   . ASN ASN ASN A A 160 160 . 0.0353 0.0384 0.0398 0.0016  0.0118
0.0043  1 .
1188 CG   CG   . ASN ASN ASN A A 160 160 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1189 OD1  OD1  . ASN ASN ASN A A 160 160 . 0.0335 0.0264 0.0409 0.0028  0.0108
0.0032  1 .
1190 ND2  ND2  . ASN ASN ASN A A 160 160 . 0.0389 0.0282 0.0393 -0.0063 0.0138  -
0.0063 1 .
1191 C    C    . ASN ASN ASN A A 160 160 . 0.0376 0.0324 0.0344 -0.0076 0.0002
0.0044  1 .
1192 O    O    . ASN ASN ASN A A 160 160 . 0.0427 0.0598 0.0555 0.0144  0.0103  -
0.0097 1 .
1193 N    N    . LYS LYS LYS A A 161 161 . 0.0518 0.0558 0.0434 0.0072  0.0052  -
0.0125 1 .
1194 CA   CA   . LYS LYS LYS A A 161 161 . 0.0455 0.0522 0.0459 -0.0079 -0.0021 -
0.0165 1 .
1195 CB   CB   . LYS LYS LYS A A 161 161 . 0.0602 0.0596 0.0784 -0.0266 0.0026  -
0.0020 1 .
1196 CG   CG   . LYS LYS LYS A A 161 161 . 0.0816 0.0646 0.0807 0.0023  0.0064  -
0.0005 1 .
1197 CD   CD   . LYS LYS LYS A A 161 161 . 0.1280 0.1798 0.1754 -0.0095 -0.0128
0.0136  1 .
1198 CE   CE   . LYS LYS LYS A A 161 161 . 0.2286 0.2350 0.2332 -0.0155 0.0085
0.0099  1 .
1199 NZ   NZ   . LYS LYS LYS A A 161 161 . 0.2209 0.2605 0.2787 -0.0492 0.0076  -
0.0341 1 .
1200 C    C    . LYS LYS LYS A A 161 161 . 0.0391 0.0356 0.0558 0.0015  0.0048  -
0.0002 1 .
1201 O    O    . LYS LYS LYS A A 161 161 . 0.0478 0.0655 0.0544 -0.0004 0.0028
0.0090  1 .
1202 N    N    . LEU LEU LEU A A 162 162 . 0.0370 0.0582 0.0466 0.0003  0.0079  -
0.0044 1 .
1203 CA   CA   . LEU LEU LEU A A 162 162 . 0.0321 0.0291 0.0363 0.0024  0.0018
0.0061  1 .
1204 CB   CB   . LEU LEU LEU A A 162 162 . 0.0328 0.0328 0.0505 -0.0063 0.0105  -
0.0041 1 .
1205 CG   CG   . LEU LEU LEU A A 162 162 . 0.0282 0.0358 0.0444 -0.0054 0.0038  -
0.0093 1 .
1206 CD1  CD1  . LEU LEU LEU A A 162 162 . 0.0396 0.0484 0.0410 0.0018  0.0012  -
0.0187 1 .
1207 CD2  CD2  . LEU LEU LEU A A 162 162 . 0.0331 0.0368 0.0491 -0.0009 -0.0033 -
0.0156 1 .
1208 C    C    . LEU LEU LEU A A 162 162 . 0.0496 0.0529 0.0476 -0.0067 -0.0045
0.0030  1 .
1209 O    O    . LEU LEU LEU A A 162 162 . 0.0642 0.0379 0.0473 -0.0054 -0.0062 -
0.0093 1 .
1210 N    N    . ALA ALA ALA A A 163 163 . 0.0285 0.0311 0.0381 -0.0024 -0.0030
0.0085  1 .
1211 CA   CA   . ALA ALA ALA A A 163 163 . 0.0260 0.0255 0.0274 0.0003  -0.0012 -
0.0006 1 .
1212 CB   CB   . ALA ALA ALA A A 163 163 . 0.0487 0.0455 0.0661 0.0070  -0.0001
0.0095  1 .
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1213 C    C    . ALA ALA ALA A A 163 163 . 0.0369 0.0312 0.0256 -0.0082 0.0019  -
0.0013 1 .
1214 O    O    . ALA ALA ALA A A 163 163 . 0.0294 0.0288 0.0325 -0.0038 0.0050  -
0.0046 1 .
1215 N    N    . MET MET MET A A 164 164 . 0.0290 0.0307 0.0292 -0.0037 0.0031  -
0.0018 1 .
1216 CA   CA   . MET MET MET A A 164 164 . 0.0372 0.0387 0.0317 -0.0041 0.0023  -
0.0092 1 .
1217 CB   CB   . MET MET MET A A 164 164 . 0.0402 0.0524 0.0516 -0.0150 -0.0029 -
0.0110 1 .
1218 CG   CG   . MET MET MET A A 164 164 . 0.0549 0.0290 0.0373 0.0080  -0.0081
0.0016  1 .
1219 SD   SD   . MET MET MET A A 164 164 . 0.0686 0.0794 0.0785 -0.0079 -0.0041 -
0.0136 1 .
1220 CE   CE   . MET MET MET A A 164 164 . 0.0783 0.0912 0.0693 0.0180  -0.0369
0.0017  1 .
1221 C    C    . MET MET MET A A 164 164 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1222 O    O    . MET MET MET A A 164 164 . 0.0318 0.0284 0.0455 -0.0019 -0.0005 -
0.0046 1 .
1223 N    N    . GLN GLN GLN A A 165 165 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1224 CA   CA   . GLN GLN GLN A A 165 165 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1225 CB   CB   . GLN GLN GLN A A 165 165 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1226 CG   CG   . GLN GLN GLN A A 165 165 . 0.0264 0.0264 0.0269 -0.0011 0.0013  -
0.0013 1 .
1227 CD   CD   . GLN GLN GLN A A 165 165 . 0.0305 0.0260 0.0297 -0.0019 0.0047  -
0.0018 1 .
1228 OE1  OE1  . GLN GLN GLN A A 165 165 . 0.0442 0.0277 0.0487 0.0050  0.0069
0.0066  1 .
1229 NE2  NE2  . GLN GLN GLN A A 165 165 . 0.0291 0.0470 0.0267 -0.0091 0.0023  -
0.0055 1 .
1230 C    C    . GLN GLN GLN A A 165 165 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1231 O    O    . GLN GLN GLN A A 165 165 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1232 N    N    . GLU GLU GLU A A 166 166 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1233 CA   CA   . GLU GLU GLU A A 166 166 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1234 CB   CB   . GLU GLU GLU A A 166 166 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1235 CG   CG   . GLU GLU GLU A A 166 166 . 0.0382 0.0526 0.0560 -0.0187 -0.0016
0.0026  1 .
1236 CD   CD   . GLU GLU GLU A A 166 166 . 0.0541 0.0386 0.0591 0.0001  0.0049
0.0034  1 .
1237 OE1  OE1  . GLU GLU GLU A A 166 166 . 0.0785 0.0484 0.0718 -0.0103 0.0162
0.0150  1 .
1238 OE2  OE2  . GLU GLU GLU A A 166 166 . 0.0604 0.0721 0.0743 0.0042  0.0197  -
0.0100 1 .
1239 C    C    . GLU GLU GLU A A 166 166 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1240 O    O    . GLU GLU GLU A A 166 166 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1241 N    N    . PHE PHE PHE A A 167 167 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1242 CA   CA   . PHE PHE PHE A A 167 167 . 0.0277 0.0264 0.0288 -0.0016 0.0029  -
0.0019 1 .
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1243 CB   CB   . PHE PHE PHE A A 167 167 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1244 CG   CG   . PHE PHE PHE A A 167 167 . 0.0348 0.0300 0.0353 0.0037  0.0089
0.0012  1 .
1245 CD1  CD1  . PHE PHE PHE A A 167 167 . 0.0466 0.0621 0.0399 0.0018  0.0163  -
0.0072 1 .
1246 CE1  CE1  . PHE PHE PHE A A 167 167 . 0.0418 0.0267 0.0362 0.0048  -0.0134 -
0.0039 1 .
1247 CZ   CZ   . PHE PHE PHE A A 167 167 . 0.0497 0.0605 0.0522 -0.0059 0.0032
0.0016  1 .
1248 CE2  CE2  . PHE PHE PHE A A 167 167 . 0.0644 0.0950 0.0675 0.0022  0.0083  -
0.0375 1 .
1249 CD2  CD2  . PHE PHE PHE A A 167 167 . 0.0464 0.0417 0.0892 -0.0054 -0.0201 -
0.0068 1 .
1250 C    C    . PHE PHE PHE A A 167 167 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1251 O    O    . PHE PHE PHE A A 167 167 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1252 N    N    . MET MET MET A A 168 168 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1253 CA   CA   . MET MET MET A A 168 168 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1254 CB   CB   . MET MET MET A A 168 168 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1255 CG   CG   . MET MET MET A A 168 168 . 0.0442 0.0276 0.0341 -0.0066 -0.0129
0.0045  1 .
1256 SD   SD   . MET MET MET A A 168 168 . 0.0722 0.0554 0.0783 -0.0075 0.0033
0.0015  1 .
1257 CE   CE   . MET MET MET A A 168 168 . 0.0518 0.0586 0.0431 -0.0136 -0.0035 -
0.0194 1 .
1258 C    C    . MET MET MET A A 168 168 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1259 O    O    . MET MET MET A A 168 168 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1260 N    N    . ILE ILE ILE A A 169 169 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1261 CA   CA   . ILE ILE ILE A A 169 169 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1262 CB   CB   . ILE ILE ILE A A 169 169 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1263 CG1  CG1  . ILE ILE ILE A A 169 169 . 0.0253 0.0283 0.0267 -0.0001 -0.0001
0.0020  1 .
1264 CD1  CD1  . ILE ILE ILE A A 169 169 . 0.0579 0.0366 0.0443 0.0040  -0.0178 -
0.0121 1 .
1265 CG2  CG2  . ILE ILE ILE A A 169 169 . 0.0267 0.0263 0.0253 -0.0012 0.0002  -
0.0002 1 .
1266 C    C    . ILE ILE ILE A A 169 169 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1267 O    O    . ILE ILE ILE A A 169 169 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1268 N    N    . LEU LEU LEU A A 170 170 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1269 CA   CA   . LEU LEU LEU A A 170 170 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1270 CB   CB   . LEU LEU LEU A A 170 170 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1271 CG   CG   . LEU LEU LEU A A 170 170 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1272 CD1  CD1  . LEU LEU LEU A A 170 170 . 0.0429 0.0468 0.0442 0.0125  0.0182
0.0127  1 .
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1273 CD2  CD2  . LEU LEU LEU A A 170 170 . 0.0823 0.0658 0.0736 0.0193  -0.0092
0.0366  1 .
1274 C    C    . LEU LEU LEU A A 170 170 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1275 O    O    . LEU LEU LEU A A 170 170 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1276 N    N    . PRO PRO PRO A A 171 171 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1277 CA   CA   . PRO PRO PRO A A 171 171 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1278 CB   CB   . PRO PRO PRO A A 171 171 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1279 CG   CG   . PRO PRO PRO A A 171 171 . 0.0788 0.0256 0.0267 0.0040  -0.0086 -
0.0006 1 .
1280 CD   CD   . PRO PRO PRO A A 171 171 . 0.0313 0.0285 0.0341 0.0044  -0.0073 -
0.0053 1 .
1281 C    C    . PRO PRO PRO A A 171 171 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1282 O    O    . PRO PRO PRO A A 171 171 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1283 N    N    . VAL VAL VAL A A 172 172 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1284 CA   CA   . VAL VAL VAL A A 172 172 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1285 CB   CB   . VAL VAL VAL A A 172 172 . 0.0259 0.0262 0.0259 -0.0007 0.0006  -
0.0007 1 .
1286 CG1  CG1  . VAL VAL VAL A A 172 172 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1287 CG2  CG2  . VAL VAL VAL A A 172 172 . 0.0403 0.0433 0.0944 0.0049  0.0073  -
0.0137 1 .
1288 C    C    . VAL VAL VAL A A 172 172 . 0.0272 0.0266 0.0261 -0.0015 0.0012  -
0.0010 1 .
1289 O    O    . VAL VAL VAL A A 172 172 . 0.0366 0.0333 0.0305 -0.0094 0.0037  -
0.0039 1 .
1290 N    N    . GLY GLY GLY A A 173 173 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1291 CA   CA   . GLY GLY GLY A A 173 173 . 0.0255 0.0254 0.0253 0.0001  0.0000
0.0000  1 .
1292 C    C    . GLY GLY GLY A A 173 173 . 0.0253 0.0391 0.0418 -0.0003 0.0003  -
0.0151 1 .
1293 O    O    . GLY GLY GLY A A 173 173 . 0.0675 0.0643 0.0442 0.0086  0.0078  -
0.0161 1 .
1294 N    N    . ALA ALA ALA A A 174 174 . 0.0312 0.0357 0.0275 0.0013  0.0005  -
0.0045 1 .
1295 CA   CA   . ALA ALA ALA A A 174 174 . 0.0261 0.0296 0.0317 -0.0018 0.0022  -
0.0052 1 .
1296 CB   CB   . ALA ALA ALA A A 174 174 . 0.0253 0.0431 0.0254 -0.0005 0.0000  -
0.0015 1 .
1297 C    C    . ALA ALA ALA A A 174 174 . 0.0281 0.0279 0.0290 -0.0014 -0.0032
0.0013  1 .
1298 O    O    . ALA ALA ALA A A 174 174 . 0.0440 0.0350 0.0312 -0.0025 0.0105  -
0.0018 1 .
1299 N    N    . GLU GLU GLU A A 175 175 . 0.0542 0.0460 0.0527 0.0118  -0.0020 -
0.0216 1 .
1300 CA   CA   . GLU GLU GLU A A 175 175 . 0.0757 0.0806 0.0818 -0.0052 -0.0012
0.0042  1 .
1301 CB   CB   . GLU GLU GLU A A 175 175 . 0.1264 0.0933 0.0969 0.0009  0.0124  -
0.0192 1 .
1302 CG   CG   . GLU GLU GLU A A 175 175 . 0.2201 0.1792 0.2382 -0.0220 0.0305
0.0035  1 .
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1303 CD   CD   . GLU GLU GLU A A 175 175 . 0.3591 0.3363 0.3094 -0.0077 0.0043  -
0.0199 1 .
1304 OE1  OE1  . GLU GLU GLU A A 175 175 . 0.4408 0.3868 0.3751 0.0099  0.0351
0.0205  1 .
1305 OE2  OE2  . GLU GLU GLU A A 175 175 . 0.4134 0.3657 0.4293 -0.0146 0.0746  -
0.0144 1 .
1306 C    C    . GLU GLU GLU A A 175 175 . 0.0708 0.0556 0.0578 -0.0030 0.0057  -
0.0097 1 .
1307 O    O    . GLU GLU GLU A A 175 175 . 0.0735 0.0983 0.0572 -0.0092 0.0096
0.0018  1 .
1308 N    N    . SER SER SER A A 176 176 . 0.0277 0.0305 0.0271 0.0028  0.0013
0.0029  1 .
1309 CA   CA   . SER SER SER A A 176 176 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1310 CB   CB   . SER SER SER A A 176 176 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1311 OG   OG   . SER SER SER A A 176 176 . 0.0259 0.0513 0.0338 0.0015  0.0017  -
0.0039 1 .
1312 C    C    . SER SER SER A A 176 176 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1313 O    O    . SER SER SER A A 176 176 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1314 N    N    . PHE PHE PHE A A 177 177 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1315 CA   CA   . PHE PHE PHE A A 177 177 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1316 CB   CB   . PHE PHE PHE A A 177 177 . 0.0273 0.0253 0.0262 0.0001  0.0013
0.0000  1 .
1317 CG   CG   . PHE PHE PHE A A 177 177 . 0.0258 0.0253 0.0260 0.0001  -0.0006 -
0.0001 1 .
1318 CD1  CD1  . PHE PHE PHE A A 177 177 . 0.0258 0.0253 0.0311 0.0000  -0.0017
0.0001  1 .
1319 CE1  CE1  . PHE PHE PHE A A 177 177 . 0.0278 0.0287 0.0267 -0.0029 0.0018  -
0.0021 1 .
1320 CZ   CZ   . PHE PHE PHE A A 177 177 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1321 CE2  CE2  . PHE PHE PHE A A 177 177 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1322 CD2  CD2  . PHE PHE PHE A A 177 177 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1323 C    C    . PHE PHE PHE A A 177 177 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1324 O    O    . PHE PHE PHE A A 177 177 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1325 N    N    . ARG ARG ARG A A 178 178 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1326 CA   CA   . ARG ARG ARG A A 178 178 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1327 CB   CB   . ARG ARG ARG A A 178 178 . 0.0284 0.0489 0.0369 -0.0037 0.0037
0.0071  1 .
1328 CG   CG   . ARG ARG ARG A A 178 178 . 0.1368 0.1147 0.1424 0.0045  -0.0019
0.0226  1 .
1329 CD   CD   . ARG ARG ARG A A 178 178 . 0.1845 0.2061 0.2593 0.0322  -0.0247 -
0.0021 1 .
1330 NE   NE   . ARG ARG ARG A A 178 178 . 0.3121 0.3271 0.3060 0.0093  -0.0067
0.0162  1 .
1331 CZ   CZ   . ARG ARG ARG A A 178 178 . 0.3849 0.3499 0.3692 0.0198  0.0076
0.0113  1 .
1332 NH1  NH1  . ARG ARG ARG A A 178 178 . 0.3682 0.3275 0.3732 0.0041  0.0268
0.0471  1 .
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1333 NH2  NH2  . ARG ARG ARG A A 178 178 . 0.4025 0.3545 0.3958 0.0337  0.0212  -
0.0026 1 .
1334 C    C    . ARG ARG ARG A A 178 178 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1335 O    O    . ARG ARG ARG A A 178 178 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1336 N    N    . ASP ASP ASP A A 179 179 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1337 CA   CA   . ASP ASP ASP A A 179 179 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1338 CB   CB   . ASP ASP ASP A A 179 179 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1339 CG   CG   . ASP ASP ASP A A 179 179 . 0.0646 0.0355 0.0551 0.0185  0.0007
0.0070  1 .
1340 OD1  OD1  . ASP ASP ASP A A 179 179 . 0.0909 0.0809 0.0839 0.0034  0.0004
0.0129  1 .
1341 OD2  OD2  . ASP ASP ASP A A 179 179 . 0.1569 0.1071 0.1170 0.0185  0.0017
0.0194  1 .
1342 C    C    . ASP ASP ASP A A 179 179 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1343 O    O    . ASP ASP ASP A A 179 179 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1344 N    N    . ALA ALA ALA A A 180 180 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1345 CA   CA   . ALA ALA ALA A A 180 180 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1346 CB   CB   . ALA ALA ALA A A 180 180 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1347 C    C    . ALA ALA ALA A A 180 180 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1348 O    O    . ALA ALA ALA A A 180 180 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1349 N    N    . MET MET MET A A 181 181 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1350 CA   CA   . MET MET MET A A 181 181 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1351 CB   CB   . MET MET MET A A 181 181 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1352 CG   CG   . MET MET MET A A 181 181 . 0.0294 0.0276 0.0260 -0.0030 -0.0016
0.0012  1 .
1353 SD   SD   . MET MET MET A A 181 181 . 0.0319 0.0262 0.0266 -0.0024 0.0029  -
0.0011 1 .
1354 CE   CE   . MET MET MET A A 181 181 . 0.0453 0.0288 0.0253 0.0083  0.0010
0.0004  1 .
1355 C    C    . MET MET MET A A 181 181 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1356 O    O    . MET MET MET A A 181 181 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1357 N    N    . ARG ARG ARG A A 182 182 . 0.0272 0.0256 0.0275 -0.0007 0.0020  -
0.0007 1 .
1358 CA   CA   . ARG ARG ARG A A 182 182 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1359 CB   CB   . ARG ARG ARG A A 182 182 . 0.0279 0.0258 0.0279 0.0011  0.0026
0.0011  1 .
1360 CG   CG   . ARG ARG ARG A A 182 182 . 0.0456 0.0313 0.0428 -0.0072 0.0135
0.0005  1 .
1361 CD   CD   . ARG ARG ARG A A 182 182 . 0.1138 0.0750 0.1246 0.0001  0.0082  -
0.0063 1 .
1362 NE   NE   . ARG ARG ARG A A 182 182 . 0.1771 0.1144 0.1984 0.0123  0.0031
0.0064  1 .
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1363 CZ   CZ   . ARG ARG ARG A A 182 182 . 0.1692 0.1825 0.1637 -0.0017 0.0315  -
0.0249 1 .
1364 NH1  NH1  . ARG ARG ARG A A 182 182 . 0.1780 0.1379 0.1752 0.0129  -0.0080 -
0.0510 1 .
1365 NH2  NH2  . ARG ARG ARG A A 182 182 . 0.1357 0.1752 0.1676 -0.0009 -0.0470 -
0.0237 1 .
1366 C    C    . ARG ARG ARG A A 182 182 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1367 O    O    . ARG ARG ARG A A 182 182 . 0.0253 0.0257 0.0266 0.0000  0.0000
0.0007  1 .
1368 N    N    . LEU LEU LEU A A 183 183 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1369 CA   CA   . LEU LEU LEU A A 183 183 . 0.0254 0.0266 0.0297 0.0003  -0.0006 -
0.0024 1 .
1370 CB   CB   . LEU LEU LEU A A 183 183 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1371 CG   CG   . LEU LEU LEU A A 183 183 . 0.0307 0.0316 0.0325 0.0058  -0.0062 -
0.0067 1 .
1372 CD1  CD1  . LEU LEU LEU A A 183 183 . 0.0299 0.0285 0.0350 0.0038  -0.0067 -
0.0055 1 .
1373 CD2  CD2  . LEU LEU LEU A A 183 183 . 0.0485 0.0254 0.0253 -0.0019 0.0000
0.0000  1 .
1374 C    C    . LEU LEU LEU A A 183 183 . 0.0284 0.0279 0.0268 -0.0028 0.0021  -
0.0019 1 .
1375 O    O    . LEU LEU LEU A A 183 183 . 0.0274 0.0306 0.0256 -0.0033 -0.0008
0.0013  1 .
1376 N    N    . GLY GLY GLY A A 184 184 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1377 CA   CA   . GLY GLY GLY A A 184 184 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1378 C    C    . GLY GLY GLY A A 184 184 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1379 O    O    . GLY GLY GLY A A 184 184 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1380 N    N    . ALA ALA ALA A A 185 185 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1381 CA   CA   . ALA ALA ALA A A 185 185 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1382 CB   CB   . ALA ALA ALA A A 185 185 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1383 C    C    . ALA ALA ALA A A 185 185 . 0.0273 0.0260 0.0278 -0.0011 0.0022  -
0.0013 1 .
1384 O    O    . ALA ALA ALA A A 185 185 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1385 N    N    . GLU GLU GLU A A 186 186 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1386 CA   CA   . GLU GLU GLU A A 186 186 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1387 CB   CB   . GLU GLU GLU A A 186 186 . 0.0261 0.0257 0.0254 -0.0005 0.0003  -
0.0002 1 .
1388 CG   CG   . GLU GLU GLU A A 186 186 . 0.0262 0.0421 0.0336 0.0039  -0.0028 -
0.0118 1 .
1389 CD   CD   . GLU GLU GLU A A 186 186 . 0.0468 0.0532 0.0462 0.0087  -0.0061 -
0.0241 1 .
1390 OE1  OE1  . GLU GLU GLU A A 186 186 . 0.0674 0.0903 0.0792 0.0106  0.0024  -
0.0355 1 .
1391 OE2  OE2  . GLU GLU GLU A A 186 186 . 0.0525 0.0459 0.0576 -0.0011 0.0078  -
0.0251 1 .
1392 C    C    . GLU GLU GLU A A 186 186 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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1393 O    O    . GLU GLU GLU A A 186 186 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1394 N    N    . VAL VAL VAL A A 187 187 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1395 CA   CA   . VAL VAL VAL A A 187 187 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1396 CB   CB   . VAL VAL VAL A A 187 187 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1397 CG1  CG1  . VAL VAL VAL A A 187 187 . 0.0260 0.0256 0.0253 -0.0004 0.0000
0.0000  1 .
1398 CG2  CG2  . VAL VAL VAL A A 187 187 . 0.0266 0.0281 0.0276 -0.0019 0.0017  -
0.0025 1 .
1399 C    C    . VAL VAL VAL A A 187 187 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1400 O    O    . VAL VAL VAL A A 187 187 . 0.0334 0.0285 0.0305 -0.0050 0.0065  -
0.0040 1 .
1401 N    N    . TYR TYR TYR A A 188 188 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1402 CA   CA   . TYR TYR TYR A A 188 188 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1403 CB   CB   . TYR TYR TYR A A 188 188 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1404 CG   CG   . TYR TYR TYR A A 188 188 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1405 CD1  CD1  . TYR TYR TYR A A 188 188 . 0.0265 0.0253 0.0264 -0.0001 0.0011  -
0.0001 1 .
1406 CE1  CE1  . TYR TYR TYR A A 188 188 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1407 CZ   CZ   . TYR TYR TYR A A 188 188 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1408 OH   OH   . TYR TYR TYR A A 188 188 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1409 CE2  CE2  . TYR TYR TYR A A 188 188 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1410 CD2  CD2  . TYR TYR TYR A A 188 188 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1411 C    C    . TYR TYR TYR A A 188 188 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1412 O    O    . TYR TYR TYR A A 188 188 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1413 N    N    . HIS HIS HIS A A 189 189 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1414 CA   CA   . HIS HIS HIS A A 189 189 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1415 CB   CB   . HIS HIS HIS A A 189 189 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1416 CG   CG   . HIS HIS HIS A A 189 189 . 0.0286 0.0583 0.0653 -0.0098 -0.0015 -
0.0074 1 .
1417 ND1  ND1  . HIS HIS HIS A A 189 189 . 0.0753 0.0844 0.0868 -0.0102 0.0235  -
0.0258 1 .
1418 CE1  CE1  . HIS HIS HIS A A 189 189 . 0.0610 0.0697 0.0763 -0.0064 -0.0132
0.0136  1 .
1419 NE2  NE2  . HIS HIS HIS A A 189 189 . 0.0740 0.0488 0.0772 -0.0045 0.0211  -
0.0273 1 .
1420 CD2  CD2  . HIS HIS HIS A A 189 189 . 0.0368 0.0665 0.0593 0.0182  -0.0142 -
0.0082 1 .
1421 C    C    . HIS HIS HIS A A 189 189 . 0.0269 0.0256 0.0255 -0.0007 0.0005  -
0.0002 1 .
1422 O    O    . HIS HIS HIS A A 189 189 . 0.0534 0.0277 0.0385 -0.0082 0.0193  -
0.0056 1 .
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1423 N    N    . THR THR THR A A 190 190 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1424 CA   CA   . THR THR THR A A 190 190 . 0.0288 0.0293 0.0271 -0.0037 0.0008  -
0.0010 1 .
1425 CB   CB   . THR THR THR A A 190 190 . 0.0305 0.0297 0.0336 0.0048  -0.0065 -
0.0061 1 .
1426 OG1  OG1  . THR THR THR A A 190 190 . 0.0498 0.0481 0.0616 -0.0167 0.0202  -
0.0018 1 .
1427 CG2  CG2  . THR THR THR A A 190 190 . 0.0546 0.0332 0.0583 -0.0106 0.0049  -
0.0132 1 .
1428 C    C    . THR THR THR A A 190 190 . 0.0261 0.0257 0.0253 -0.0005 -0.0001
0.0000  1 .
1429 O    O    . THR THR THR A A 190 190 . 0.0374 0.0385 0.0281 -0.0126 0.0058  -
0.0060 1 .
1430 N    N    . LEU LEU LEU A A 191 191 . 0.0385 0.0253 0.0258 -0.0006 0.0025  -
0.0001 1 .
1431 CA   CA   . LEU LEU LEU A A 191 191 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1432 CB   CB   . LEU LEU LEU A A 191 191 . 0.0259 0.0253 0.0257 -0.0001 0.0005
0.0000  1 .
1433 CG   CG   . LEU LEU LEU A A 191 191 . 0.0353 0.0367 0.0338 -0.0107 -0.0092
0.0098  1 .
1434 CD1  CD1  . LEU LEU LEU A A 191 191 . 0.0295 0.0264 0.0253 -0.0021 -0.0005
0.0002  1 .
1435 CD2  CD2  . LEU LEU LEU A A 191 191 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1436 C    C    . LEU LEU LEU A A 191 191 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1437 O    O    . LEU LEU LEU A A 191 191 . 0.0344 0.0269 0.0268 -0.0038 0.0037  -
0.0015 1 .
1438 N    N    . LYS LYS LYS A A 192 192 . 0.0283 0.0286 0.0312 0.0031  0.0042
0.0044  1 .
1439 CA   CA   . LYS LYS LYS A A 192 192 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1440 CB   CB   . LYS LYS LYS A A 192 192 . 0.0259 0.0332 0.0270 0.0021  -0.0010 -
0.0037 1 .
1441 CG   CG   . LYS LYS LYS A A 192 192 . 0.0476 0.0494 0.0364 0.0011  0.0143
0.0075  1 .
1442 CD   CD   . LYS LYS LYS A A 192 192 . 0.0578 0.0837 0.0833 -0.0015 0.0029  -
0.0057 1 .
1443 CE   CE   . LYS LYS LYS A A 192 192 . 0.0845 0.0726 0.1002 -0.0090 -0.0073 -
0.0156 1 .
1444 NZ   NZ   . LYS LYS LYS A A 192 192 . 0.1617 0.1568 0.1148 -0.0042 -0.0297 -
0.0164 1 .
1445 C    C    . LYS LYS LYS A A 192 192 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1446 O    O    . LYS LYS LYS A A 192 192 . 0.0326 0.0278 0.0286 -0.0043 0.0049  -
0.0029 1 .
1447 N    N    . GLY GLY GLY A A 193 193 . 0.0280 0.0256 0.0355 -0.0009 0.0052  -
0.0019 1 .
1448 CA   CA   . GLY GLY GLY A A 193 193 . 0.0326 0.0321 0.0443 -0.0057 -0.0015
0.0076  1 .
1449 C    C    . GLY GLY GLY A A 193 193 . 0.0379 0.0374 0.0350 0.0024  -0.0048 -
0.0088 1 .
1450 O    O    . GLY GLY GLY A A 193 193 . 0.0391 0.0327 0.0287 -0.0097 -0.0029
0.0033  1 .
1451 N    N    . VAL VAL VAL A A 194 194 . 0.0260 0.0257 0.0253 -0.0005 0.0000
0.0000  1 .
1452 CA   CA   . VAL VAL VAL A A 194 194 . 0.0254 0.0261 0.0299 0.0001  0.0004
0.0019  1 .
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1453 CB   CB   . VAL VAL VAL A A 194 194 . 0.0395 0.0285 0.0258 0.0067  -0.0027 -
0.0013 1 .
1454 CG1  CG1  . VAL VAL VAL A A 194 194 . 0.0284 0.0265 0.0297 -0.0019 0.0037  -
0.0023 1 .
1455 CG2  CG2  . VAL VAL VAL A A 194 194 . 0.0580 0.0420 0.0745 -0.0007 0.0314  -
0.0113 1 .
1456 C    C    . VAL VAL VAL A A 194 194 . 0.0310 0.0301 0.0373 -0.0027 -0.0047 -
0.0030 1 .
1457 O    O    . VAL VAL VAL A A 194 194 . 0.0294 0.0270 0.0293 0.0026  0.0040
0.0026  1 .
1458 N    N    . ILE ILE ILE A A 195 195 . 0.0278 0.0264 0.0261 -0.0016 0.0014  -
0.0009 1 .
1459 CA   CA   . ILE ILE ILE A A 195 195 . 0.0362 0.0271 0.0422 0.0000  0.0008
0.0055  1 .
1460 CB   CB   . ILE ILE ILE A A 195 195 . 0.0324 0.0331 0.0311 -0.0070 -0.0044
0.0028  1 .
1461 CG1  CG1  . ILE ILE ILE A A 195 195 . 0.0282 0.0253 0.0273 0.0003  -0.0024 -
0.0003 1 .
1462 CD1  CD1  . ILE ILE ILE A A 195 195 . 0.1500 0.2289 0.2206 0.0016  -0.0397
0.0249  1 .
1463 CG2  CG2  . ILE ILE ILE A A 195 195 . 0.0569 0.0437 0.0347 -0.0086 0.0026  -
0.0128 1 .
1464 C    C    . ILE ILE ILE A A 195 195 . 0.0358 0.0265 0.0389 0.0027  0.0037  -
0.0014 1 .
1465 O    O    . ILE ILE ILE A A 195 195 . 0.0606 0.0572 0.0961 -0.0147 0.0115  -
0.0019 1 .
1466 N    N    . LYS LYS LYS A A 196 196 . 0.0543 0.0567 0.0459 -0.0074 -0.0048 -
0.0019 1 .
1467 CA   CA   . LYS LYS LYS A A 196 196 . 0.0639 0.0559 0.0558 -0.0099 0.0014
0.0089  1 .
1468 CB   CB   . LYS LYS LYS A A 196 196 . 0.0782 0.0674 0.0650 0.0056  -0.0037
0.0014  1 .
1469 CG   CG   . LYS LYS LYS A A 196 196 . 0.1167 0.1168 0.0825 -0.0160 0.0196
0.0258  1 .
1470 CD   CD   . LYS LYS LYS A A 196 196 . 0.1765 0.2271 0.2150 0.0335  0.0102
0.0324  1 .
1471 CE   CE   . LYS LYS LYS A A 196 196 . 0.2811 0.2481 0.2714 -0.0219 0.0128
0.0341  1 .
1472 NZ   NZ   . LYS LYS LYS A A 196 196 . 0.3476 0.3397 0.3093 -0.0180 -0.0113 -
0.0268 1 .
1473 C    C    . LYS LYS LYS A A 196 196 . 0.0648 0.0796 0.0780 -0.0064 0.0053  -
0.0051 1 .
1474 O    O    . LYS LYS LYS A A 196 196 . 0.0995 0.0869 0.0986 -0.0264 0.0084
0.0035  1 .
1475 N    N    . ASP ASP ASP A A 197 197 . 0.0639 0.0477 0.0646 -0.0200 0.0012  -
0.0088 1 .
1476 CA   CA   . ASP ASP ASP A A 197 197 . 0.1007 0.0811 0.0999 -0.0170 -0.0070
0.0089  1 .
1477 CB   CB   . ASP ASP ASP A A 197 197 . 0.1350 0.1101 0.1038 0.0014  0.0016
0.0108  1 .
1478 CG   CG   . ASP ASP ASP A A 197 197 . 0.1915 0.1876 0.2015 0.0016  -0.0040
0.0019  1 .
1479 OD1  OD1  . ASP ASP ASP A A 197 197 . 0.2543 0.2260 0.2616 -0.0291 0.0212  -
0.0326 1 .
1480 OD2  OD2  . ASP ASP ASP A A 197 197 . 0.3132 0.1966 0.2298 0.0017  -0.0440
0.0212  1 .
1481 C    C    . ASP ASP ASP A A 197 197 . 0.1020 0.0893 0.1101 -0.0063 0.0029
0.0118  1 .
1482 O    O    . ASP ASP ASP A A 197 197 . 0.1329 0.1416 0.1507 -0.0360 0.0066
0.0103  1 .
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1483 N    N    . LYS LYS LYS A A 198 198 . 0.0685 0.0477 0.0619 -0.0206 -0.0065 -
0.0024 1 .
1484 CA   CA   . LYS LYS LYS A A 198 198 . 0.0689 0.0535 0.0759 -0.0099 0.0100
0.0026  1 .
1485 CB   CB   . LYS LYS LYS A A 198 198 . 0.0684 0.0687 0.0668 0.0039  0.0007  -
0.0309 1 .
1486 CG   CG   . LYS LYS LYS A A 198 198 . 0.0772 0.0564 0.0460 0.0027  -0.0070 -
0.0061 1 .
1487 CD   CD   . LYS LYS LYS A A 198 198 . 0.0738 0.0634 0.0479 0.0200  -0.0084 -
0.0137 1 .
1488 CE   CE   . LYS LYS LYS A A 198 198 . 0.0761 0.1316 0.1253 0.0107  -0.0002 -
0.0217 1 .
1489 NZ   NZ   . LYS LYS LYS A A 198 198 . 0.1980 0.1622 0.1746 -0.0100 -0.0481 -
0.0147 1 .
1490 C    C    . LYS LYS LYS A A 198 198 . 0.0827 0.0875 0.0833 -0.0037 0.0009  -
0.0136 1 .
1491 O    O    . LYS LYS LYS A A 198 198 . 0.1063 0.1362 0.1198 -0.0185 0.0061  -
0.0105 1 .
1492 N    N    . TYR TYR TYR A A 199 199 . 0.0756 0.0697 0.0851 -0.0117 -0.0014 -
0.0062 1 .
1493 CA   CA   . TYR TYR TYR A A 199 199 . 0.0819 0.0880 0.0889 -0.0034 0.0094
0.0025  1 .
1494 CB   CB   . TYR TYR TYR A A 199 199 . 0.0877 0.0872 0.0773 -0.0068 0.0005  -
0.0005 1 .
1495 CG   CG   . TYR TYR TYR A A 199 199 . 0.0973 0.0863 0.0822 -0.0204 -0.0103 -
0.0018 1 .
1496 CD1  CD1  . TYR TYR TYR A A 199 199 . 0.1457 0.1049 0.1464 -0.0216 -0.0164 -
0.0211 1 .
1497 CE1  CE1  . TYR TYR TYR A A 199 199 . 0.1185 0.0579 0.1033 -0.0196 -0.0140 -
0.0254 1 .
1498 CZ   CZ   . TYR TYR TYR A A 199 199 . 0.1278 0.1006 0.1307 0.0068  0.0052  -
0.0225 1 .
1499 OH   OH   . TYR TYR TYR A A 199 199 . 0.1684 0.1091 0.1586 -0.0072 -0.0332 -
0.0181 1 .
1500 CE2  CE2  . TYR TYR TYR A A 199 199 . 0.1242 0.1310 0.1268 -0.0156 -0.0082 -
0.0070 1 .
1501 CD2  CD2  . TYR TYR TYR A A 199 199 . 0.1087 0.1272 0.1298 0.0061  0.0052  -
0.0050 1 .
1502 C    C    . TYR TYR TYR A A 199 199 . 0.1140 0.1008 0.1104 0.0040  0.0033
0.0030  1 .
1503 O    O    . TYR TYR TYR A A 199 199 . 0.1471 0.1678 0.1567 -0.0052 0.0229  -
0.0006 1 .
1504 N    N    . GLY GLY GLY A A 200 200 . 0.0855 0.0915 0.0784 -0.0029 0.0001
0.0109  1 .
1505 CA   CA   . GLY GLY GLY A A 200 200 . 0.1021 0.0998 0.0895 -0.0087 -0.0053
0.0058  1 .
1506 C    C    . GLY GLY GLY A A 200 200 . 0.0948 0.0850 0.0963 -0.0087 -0.0063
0.0019  1 .
1507 O    O    . GLY GLY GLY A A 200 200 . 0.1004 0.0899 0.0688 -0.0098 0.0007
0.0112  1 .
1508 N    N    . LYS LYS LYS A A 201 201 . 0.1057 0.0854 0.0779 -0.0170 -0.0103
0.0195  1 .
1509 CA   CA   . LYS LYS LYS A A 201 201 . 0.1258 0.1295 0.1214 -0.0054 0.0001
0.0109  1 .
1510 CB   CB   . LYS LYS LYS A A 201 201 . 0.1631 0.1774 0.1651 -0.0063 -0.0199
0.0038  1 .
1511 CG   CG   . LYS LYS LYS A A 201 201 . 0.2547 0.2587 0.2525 0.0098  0.0183
0.0100  1 .
1512 CD   CD   . LYS LYS LYS A A 201 201 . 0.3638 0.3813 0.3298 0.0040  -0.0139
0.0142  1 .
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1513 CE   CE   . LYS LYS LYS A A 201 201 . 0.3847 0.4204 0.3832 -0.0034 0.0103
0.0063  1 .
1514 NZ   NZ   . LYS LYS LYS A A 201 201 . 0.4487 0.3902 0.4286 0.0055  -0.0062
0.0139  1 .
1515 C    C    . LYS LYS LYS A A 201 201 . 0.1087 0.1173 0.1071 -0.0127 -0.0081
0.0098  1 .
1516 O    O    . LYS LYS LYS A A 201 201 . 0.1240 0.1527 0.1239 -0.0062 -0.0127 -
0.0005 1 .
1517 N    N    . ASP ASP ASP A A 202 202 . 0.0806 0.0739 0.0731 -0.0001 -0.0031 -
0.0105 1 .
1518 CA   CA   . ASP ASP ASP A A 202 202 . 0.1005 0.1100 0.1088 -0.0043 -0.0113
0.0071  1 .
1519 CB   CB   . ASP ASP ASP A A 202 202 . 0.1231 0.1369 0.1106 0.0175  0.0140  -
0.0031 1 .
1520 CG   CG   . ASP ASP ASP A A 202 202 . 0.1967 0.2343 0.2029 -0.0199 -0.0151 -
0.0155 1 .
1521 OD1  OD1  . ASP ASP ASP A A 202 202 . 0.3204 0.3246 0.3587 0.0174  0.0176
0.0056  1 .
1522 OD2  OD2  . ASP ASP ASP A A 202 202 . 0.3361 0.2786 0.2857 0.0427  -0.0249 -
0.0218 1 .
1523 C    C    . ASP ASP ASP A A 202 202 . 0.0760 0.0783 0.0710 -0.0004 -0.0047 -
0.0018 1 .
1524 O    O    . ASP ASP ASP A A 202 202 . 0.0893 0.0818 0.1310 0.0012  -0.0255 -
0.0091 1 .
1525 N    N    . ALA ALA ALA A A 203 203 . 0.0436 0.0494 0.0510 -0.0029 -0.0013 -
0.0049 1 .
1526 CA   CA   . ALA ALA ALA A A 203 203 . 0.0295 0.0276 0.0255 -0.0031 0.0009  -
0.0007 1 .
1527 CB   CB   . ALA ALA ALA A A 203 203 . 0.0659 0.0690 0.0678 -0.0182 -0.0026 -
0.0125 1 .
1528 C    C    . ALA ALA ALA A A 203 203 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1529 O    O    . ALA ALA ALA A A 203 203 . 0.0410 0.0543 0.0314 -0.0053 -0.0014 -
0.0078 1 .
1530 N    N    . THR THR THR A A 204 204 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1531 CA   CA   . THR THR THR A A 204 204 . 0.0260 0.0304 0.0294 -0.0019 0.0017  -
0.0046 1 .
1532 CB   CB   . THR THR THR A A 204 204 . 0.0629 0.0591 0.0658 -0.0067 -0.0020 -
0.0017 1 .
1533 OG1  OG1  . THR THR THR A A 204 204 . 0.1013 0.0893 0.1142 0.0092  0.0004
0.0186  1 .
1534 CG2  CG2  . THR THR THR A A 204 204 . 0.1206 0.1258 0.1306 -0.0098 -0.0202 -
0.0428 1 .
1535 C    C    . THR THR THR A A 204 204 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1536 O    O    . THR THR THR A A 204 204 . 0.0303 0.0352 0.0428 -0.0041 0.0089  -
0.0106 1 .
1537 N    N    . ASN ASN ASN A A 205 205 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1538 CA   CA   . ASN ASN ASN A A 205 205 . 0.0263 0.0262 0.0276 -0.0009 0.0015  -
0.0015 1 .
1539 CB   CB   . ASN ASN ASN A A 205 205 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1540 CG   CG   . ASN ASN ASN A A 205 205 . 0.0253 0.0392 0.0321 0.0003  -0.0002 -
0.0097 1 .
1541 OD1  OD1  . ASN ASN ASN A A 205 205 . 0.0735 0.0485 0.0653 -0.0011 -0.0133
0.0187  1 .
1542 ND2  ND2  . ASN ASN ASN A A 205 205 . 0.1006 0.0804 0.0927 -0.0239 0.0323  -
0.0120 1 .
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1543 C    C    . ASN ASN ASN A A 205 205 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1544 O    O    . ASN ASN ASN A A 205 205 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1545 N    N    . VAL VAL VAL A A 206 206 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1546 CA   CA   . VAL VAL VAL A A 206 206 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1547 CB   CB   . VAL VAL VAL A A 206 206 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1548 CG1  CG1  . VAL VAL VAL A A 206 206 . 0.0313 0.0258 0.0307 0.0017  0.0057
0.0016  1 .
1549 CG2  CG2  . VAL VAL VAL A A 206 206 . 0.0256 0.0303 0.0356 0.0013  0.0019
0.0072  1 .
1550 C    C    . VAL VAL VAL A A 206 206 . 0.0261 0.0281 0.0258 -0.0015 0.0006  -
0.0011 1 .
1551 O    O    . VAL VAL VAL A A 206 206 . 0.0329 0.0300 0.0339 -0.0059 0.0080  -
0.0063 1 .
1552 N    N    . GLY GLY GLY A A 207 207 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1553 CA   CA   . GLY GLY GLY A A 207 207 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1554 C    C    . GLY GLY GLY A A 207 207 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1555 O    O    . GLY GLY GLY A A 207 207 . 0.0263 0.0265 0.0269 -0.0011 0.0012  -
0.0014 1 .
1556 N    N    . ASP ASP ASP A A 208 208 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1557 CA   CA   . ASP ASP ASP A A 208 208 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1558 CB   CB   . ASP ASP ASP A A 208 208 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1559 CG   CG   . ASP ASP ASP A A 208 208 . 0.0625 0.0726 0.0519 0.0217  0.0029
0.0114  1 .
1560 OD1  OD1  . ASP ASP ASP A A 208 208 . 0.0657 0.0679 0.0441 0.0149  0.0036
0.0061  1 .
1561 OD2  OD2  . ASP ASP ASP A A 208 208 . 0.0673 0.0499 0.0552 0.0249  0.0041  -
0.0144 1 .
1562 C    C    . ASP ASP ASP A A 208 208 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1563 O    O    . ASP ASP ASP A A 208 208 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1564 N    N    . GLU GLU GLU A A 209 209 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1565 CA   CA   . GLU GLU GLU A A 209 209 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1566 CB   CB   . GLU GLU GLU A A 209 209 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1567 CG   CG   . GLU GLU GLU A A 209 209 . 0.0254 0.0253 0.0377 0.0000  0.0011
0.0000  1 .
1568 CD   CD   . GLU GLU GLU A A 209 209 . 0.0746 0.0659 0.0371 0.0042  0.0059  -
0.0045 1 .
1569 OE1  OE1  . GLU GLU GLU A A 209 209 . 0.0436 0.0542 0.0607 0.0063  0.0084  -
0.0011 1 .
1570 OE2  OE2  . GLU GLU GLU A A 209 209 . 0.0680 0.0617 0.1019 -0.0033 -0.0108
0.0016  1 .
1571 C    C    . GLU GLU GLU A A 209 209 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1572 O    O    . GLU GLU GLU A A 209 209 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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1573 N    N    . GLY GLY GLY A A 210 210 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1574 CA   CA   . GLY GLY GLY A A 210 210 . 0.0258 0.0262 0.0253 -0.0006 0.0000
0.0000  1 .
1575 C    C    . GLY GLY GLY A A 210 210 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1576 O    O    . GLY GLY GLY A A 210 210 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1577 N    N    . GLY GLY GLY A A 211 211 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1578 CA   CA   . GLY GLY GLY A A 211 211 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1579 C    C    . GLY GLY GLY A A 211 211 . 0.0274 0.0271 0.0267 -0.0019 0.0017  -
0.0016 1 .
1580 O    O    . GLY GLY GLY A A 211 211 . 0.0261 0.0266 0.0279 -0.0010 0.0014  -
0.0018 1 .
1581 N    N    . PHE PHE PHE A A 212 212 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1582 CA   CA   . PHE PHE PHE A A 212 212 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1583 CB   CB   . PHE PHE PHE A A 212 212 . 0.0280 0.0255 0.0253 -0.0006 -0.0001
0.0000  1 .
1584 CG   CG   . PHE PHE PHE A A 212 212 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1585 CD1  CD1  . PHE PHE PHE A A 212 212 . 0.0259 0.0308 0.0451 -0.0018 0.0035  -
0.0104 1 .
1586 CE1  CE1  . PHE PHE PHE A A 212 212 . 0.0296 0.0255 0.0287 0.0009  -0.0038 -
0.0008 1 .
1587 CZ   CZ   . PHE PHE PHE A A 212 212 . 0.0489 0.0302 0.0489 -0.0093 -0.0125
0.0044  1 .
1588 CE2  CE2  . PHE PHE PHE A A 212 212 . 0.0288 0.0282 0.0365 -0.0030 0.0058  -
0.0046 1 .
1589 CD2  CD2  . PHE PHE PHE A A 212 212 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1590 C    C    . PHE PHE PHE A A 212 212 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1591 O    O    . PHE PHE PHE A A 212 212 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1592 N    N    . ALA ALA ALA A A 213 213 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1593 CA   CA   . ALA ALA ALA A A 213 213 . 0.0260 0.0258 0.0278 -0.0006 0.0013  -
0.0011 1 .
1594 CB   CB   . ALA ALA ALA A A 213 213 . 0.0309 0.0504 0.0361 -0.0017 0.0011  -
0.0165 1 .
1595 C    C    . ALA ALA ALA A A 213 213 . 0.0300 0.0408 0.0357 -0.0075 0.0069  -
0.0102 1 .
1596 O    O    . ALA ALA ALA A A 213 213 . 0.0399 0.0367 0.0337 -0.0075 0.0072
0.0023  1 .
1597 N    N    . PRO PRO PRO A A 214 214 . 0.0307 0.0310 0.0261 -0.0055 0.0021  -
0.0022 1 .
1598 CA   CA   . PRO PRO PRO A A 214 214 . 0.0261 0.0257 0.0272 -0.0005 0.0012  -
0.0008 1 .
1599 CB   CB   . PRO PRO PRO A A 214 214 . 0.0266 0.0253 0.0254 -0.0002 -0.0003
0.0000  1 .
1600 CG   CG   . PRO PRO PRO A A 214 214 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1601 CD   CD   . PRO PRO PRO A A 214 214 . 0.0288 0.0309 0.0271 -0.0044 0.0025  -
0.0031 1 .
1602 C    C    . PRO PRO PRO A A 214 214 . 0.0255 0.0274 0.0266 -0.0006 -0.0004
0.0016  1 .
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1603 O    O    . PRO PRO PRO A A 214 214 . 0.0307 0.0408 0.0475 -0.0061 0.0079
0.0002  1 .
1604 N    N    . ASN ASN ASN A A 215 215 . 0.0671 0.0691 0.0936 -0.0003 -0.0008
0.0009  1 .
1605 CA   CA   . ASN ASN ASN A A 215 215 . 0.1034 0.1269 0.1108 -0.0068 -0.0034
0.0009  1 .
1606 CB   CB   . ASN ASN ASN A A 215 215 . 0.1407 0.1493 0.1391 -0.0151 -0.0050
0.0113  1 .
1607 CG   CG   . ASN ASN ASN A A 215 215 . 0.1537 0.1565 0.1658 0.0050  -0.0018
0.0058  1 .
1608 OD1  OD1  . ASN ASN ASN A A 215 215 . 0.2457 0.2780 0.2737 -0.0126 0.0324
0.0395  1 .
1609 ND2  ND2  . ASN ASN ASN A A 215 215 . 0.1546 0.1830 0.1045 -0.0083 0.0456
0.0435  1 .
1610 C    C    . ASN ASN ASN A A 215 215 . 0.1204 0.1286 0.1128 -0.0072 -0.0009 -
0.0019 1 .
1611 O    O    . ASN ASN ASN A A 215 215 . 0.1210 0.1477 0.1363 -0.0196 0.0120  -
0.0068 1 .
1612 N    N    . ILE ILE ILE A A 216 216 . 0.0861 0.0949 0.0954 0.0006  0.0019
0.0091  1 .
1613 CA   CA   . ILE ILE ILE A A 216 216 . 0.0762 0.0902 0.0782 0.0033  0.0006  -
0.0067 1 .
1614 CB   CB   . ILE ILE ILE A A 216 216 . 0.1040 0.0736 0.0779 0.0155  0.0051  -
0.0108 1 .
1615 CG1  CG1  . ILE ILE ILE A A 216 216 . 0.0971 0.0822 0.0561 0.0058  0.0111  -
0.0095 1 .
1616 CD1  CD1  . ILE ILE ILE A A 216 216 . 0.1104 0.1003 0.0963 0.0226  -0.0113 -
0.0284 1 .
1617 CG2  CG2  . ILE ILE ILE A A 216 216 . 0.0962 0.0906 0.0776 0.0194  0.0146  -
0.0044 1 .
1618 C    C    . ILE ILE ILE A A 216 216 . 0.0597 0.0428 0.0658 -0.0108 0.0012  -
0.0026 1 .
1619 O    O    . ILE ILE ILE A A 216 216 . 0.0479 0.0546 0.0733 -0.0136 -0.0121 -
0.0022 1 .
1620 N    N    . LEU LEU LEU A A 217 217 . 0.0567 0.0560 0.0612 -0.0044 -0.0043
0.0107  1 .
1621 CA   CA   . LEU LEU LEU A A 217 217 . 0.0454 0.0535 0.0657 -0.0072 0.0033
0.0083  1 .
1622 CB   CB   . LEU LEU LEU A A 217 217 . 0.0660 0.0717 0.0780 0.0065  0.0077  -
0.0087 1 .
1623 CG   CG   . LEU LEU LEU A A 217 217 . 0.0796 0.1121 0.0820 0.0016  0.0048
0.0125  1 .
1624 CD1  CD1  . LEU LEU LEU A A 217 217 . 0.1038 0.0971 0.1075 -0.0088 0.0032
0.0020  1 .
1625 CD2  CD2  . LEU LEU LEU A A 217 217 . 0.0728 0.1000 0.1058 -0.0248 0.0022  -
0.0065 1 .
1626 C    C    . LEU LEU LEU A A 217 217 . 0.0689 0.0802 0.0864 0.0011  -0.0060 -
0.0030 1 .
1627 O    O    . LEU LEU LEU A A 217 217 . 0.0918 0.0655 0.0793 0.0022  0.0039
0.0122  1 .
1628 N    N    . GLU GLU GLU A A 218 218 . 0.0744 0.0715 0.0833 0.0046  -0.0029 -
0.0041 1 .
1629 CA   CA   . GLU GLU GLU A A 218 218 . 0.1166 0.1325 0.1150 -0.0036 0.0035
0.0000  1 .
1630 CB   CB   . GLU GLU GLU A A 218 218 . 0.1427 0.1547 0.1419 -0.0114 -0.0050 -
0.0097 1 .
1631 CG   CG   . GLU GLU GLU A A 218 218 . 0.2882 0.3025 0.2662 -0.0015 -0.0368
0.0142  1 .
1632 CD   CD   . GLU GLU GLU A A 218 218 . 0.4331 0.4002 0.4418 0.0210  -0.0062 -
0.0213 1 .
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1633 OE1  OE1  . GLU GLU GLU A A 218 218 . 0.4656 0.5146 0.5253 0.0187  -0.0055 -
0.0060 1 .
1634 OE2  OE2  . GLU GLU GLU A A 218 218 . 0.4778 0.4398 0.5198 -0.0206 -0.0031
0.0034  1 .
1635 C    C    . GLU GLU GLU A A 218 218 . 0.0721 0.0873 0.0813 0.0066  0.0011  -
0.0011 1 .
1636 O    O    . GLU GLU GLU A A 218 218 . 0.0812 0.0814 0.0661 0.0101  0.0023
0.0079  1 .
1637 N    N    . ASN ASN ASN A A 219 219 . 0.0464 0.0583 0.0594 -0.0078 0.0009  -
0.0105 1 .
1638 CA   CA   . ASN ASN ASN A A 219 219 . 0.0566 0.0581 0.0669 -0.0028 0.0158
0.0007  1 .
1639 CB   CB   . ASN ASN ASN A A 219 219 . 0.0576 0.0483 0.0384 0.0161  0.0037
0.0041  1 .
1640 CG   CG   . ASN ASN ASN A A 219 219 . 0.0595 0.0764 0.0858 -0.0112 -0.0115 -
0.0179 1 .
1641 OD1  OD1  . ASN ASN ASN A A 219 219 . 0.0751 0.0804 0.0829 0.0395  -0.0059 -
0.0253 1 .
1642 ND2  ND2  . ASN ASN ASN A A 219 219 . 0.0453 0.0329 0.0490 0.0099  0.0054  -
0.0050 1 .
1643 C    C    . ASN ASN ASN A A 219 219 . 0.0415 0.0368 0.0490 -0.0049 -0.0001 -
0.0109 1 .
1644 O    O    . ASN ASN ASN A A 219 219 . 0.0280 0.0330 0.0404 0.0004  0.0002  -
0.0015 1 .
1645 N    N    . SER SER SER A A 220 220 . 0.0737 0.0820 0.0731 -0.0053 0.0080  -
0.0024 1 .
1646 CA   CA   . SER SER SER A A 220 220 . 0.0681 0.0623 0.0785 -0.0039 -0.0033 -
0.0133 1 .
1647 CB   CB   . SER SER SER A A 220 220 . 0.0819 0.0763 0.0781 -0.0087 0.0047
0.0149  1 .
1648 OG   OG   . SER SER SER A A 220 220 . 0.1224 0.1308 0.1428 -0.0333 0.0089
0.0099  1 .
1649 C    C    . SER SER SER A A 220 220 . 0.0476 0.0632 0.0468 -0.0014 -0.0079 -
0.0095 1 .
1650 O    O    . SER SER SER A A 220 220 . 0.0980 0.1087 0.0709 0.0006  -0.0163 -
0.0253 1 .
1651 N    N    . GLU GLU GLU A A 221 221 . 0.0663 0.0722 0.0822 -0.0167 -0.0064
0.0034  1 .
1652 CA   CA   . GLU GLU GLU A A 221 221 . 0.0624 0.0639 0.0583 -0.0046 -0.0091
0.0009  1 .
1653 CB   CB   . GLU GLU GLU A A 221 221 . 0.0737 0.0896 0.0865 -0.0039 0.0055  -
0.0004 1 .
1654 CG   CG   . GLU GLU GLU A A 221 221 . 0.1204 0.1163 0.1120 0.0097  0.0112
0.0166  1 .
1655 CD   CD   . GLU GLU GLU A A 221 221 . 0.2359 0.1683 0.2136 -0.0037 0.0040
0.0130  1 .
1656 OE1  OE1  . GLU GLU GLU A A 221 221 . 0.3020 0.1790 0.2334 0.0203  -0.0209 -
0.0044 1 .
1657 OE2  OE2  . GLU GLU GLU A A 221 221 . 0.2368 0.1795 0.1932 0.0355  -0.0086 -
0.0002 1 .
1658 C    C    . GLU GLU GLU A A 221 221 . 0.0289 0.0286 0.0511 0.0034  -0.0015 -
0.0010 1 .
1659 O    O    . GLU GLU GLU A A 221 221 . 0.0488 0.0450 0.0595 -0.0126 -0.0033 -
0.0016 1 .
1660 N    N    . ALA ALA ALA A A 222 222 . 0.0298 0.0311 0.0356 -0.0033 -0.0032
0.0075  1 .
1661 CA   CA   . ALA ALA ALA A A 222 222 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1662 CB   CB   . ALA ALA ALA A A 222 222 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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1663 C    C    . ALA ALA ALA A A 222 222 . 0.0313 0.0254 0.0351 -0.0009 -0.0077
0.0012  1 .
1664 O    O    . ALA ALA ALA A A 222 222 . 0.0395 0.0413 0.0324 0.0005  -0.0013 -
0.0054 1 .
1665 N    N    . LEU LEU LEU A A 223 223 . 0.0463 0.0472 0.0429 -0.0104 0.0027
0.0156  1 .
1666 CA   CA   . LEU LEU LEU A A 223 223 . 0.0610 0.0527 0.0560 -0.0059 -0.0027 -
0.0022 1 .
1667 CB   CB   . LEU LEU LEU A A 223 223 . 0.0571 0.0643 0.0773 -0.0028 -0.0073
0.0090  1 .
1668 CG   CG   . LEU LEU LEU A A 223 223 . 0.0637 0.0672 0.0825 0.0003  -0.0016
0.0026  1 .
1669 CD1  CD1  . LEU LEU LEU A A 223 223 . 0.0970 0.0738 0.0653 -0.0270 -0.0179 -
0.0130 1 .
1670 CD2  CD2  . LEU LEU LEU A A 223 223 . 0.0489 0.0438 0.0416 -0.0117 0.0111  -
0.0174 1 .
1671 C    C    . LEU LEU LEU A A 223 223 . 0.0441 0.0402 0.0587 0.0027  0.0081  -
0.0086 1 .
1672 O    O    . LEU LEU LEU A A 223 223 . 0.0451 0.0392 0.0600 -0.0006 0.0029  -
0.0126 1 .
1673 N    N    . GLU GLU GLU A A 224 224 . 0.0755 0.0667 0.0766 0.0060  0.0037  -
0.0018 1 .
1674 CA   CA   . GLU GLU GLU A A 224 224 . 0.0783 0.0758 0.0721 -0.0051 -0.0032 -
0.0059 1 .
1675 CB   CB   . GLU GLU GLU A A 224 224 . 0.1021 0.1102 0.1055 -0.0159 0.0064  -
0.0110 1 .
1676 CG   CG   . GLU GLU GLU A A 224 224 . 0.2378 0.1912 0.2474 0.0053  -0.0045
0.0097  1 .
1677 CD   CD   . GLU GLU GLU A A 224 224 . 0.3489 0.3366 0.3141 0.0010  0.0092  -
0.0273 1 .
1678 OE1  OE1  . GLU GLU GLU A A 224 224 . 0.3974 0.3331 0.4012 0.0411  -0.0199 -
0.0225 1 .
1679 OE2  OE2  . GLU GLU GLU A A 224 224 . 0.3573 0.3349 0.3600 0.0079  -0.0413
0.0107  1 .
1680 C    C    . GLU GLU GLU A A 224 224 . 0.0475 0.0478 0.0665 0.0001  -0.0011 -
0.0114 1 .
1681 O    O    . GLU GLU GLU A A 224 224 . 0.0600 0.0745 0.0733 -0.0111 0.0049  -
0.0176 1 .
1682 N    N    . LEU LEU LEU A A 225 225 . 0.0469 0.0416 0.0364 -0.0053 0.0043
0.0045  1 .
1683 CA   CA   . LEU LEU LEU A A 225 225 . 0.0260 0.0283 0.0312 -0.0015 0.0021  -
0.0042 1 .
1684 CB   CB   . LEU LEU LEU A A 225 225 . 0.0287 0.0397 0.0331 -0.0069 0.0051  -
0.0106 1 .
1685 CG   CG   . LEU LEU LEU A A 225 225 . 0.0484 0.0375 0.0636 0.0094  0.0245
0.0202  1 .
1686 CD1  CD1  . LEU LEU LEU A A 225 225 . 0.0772 0.0689 0.1044 -0.0444 0.0341  -
0.0115 1 .
1687 CD2  CD2  . LEU LEU LEU A A 225 225 . 0.0627 0.0424 0.0741 0.0016  0.0190
0.0200  1 .
1688 C    C    . LEU LEU LEU A A 225 225 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1689 O    O    . LEU LEU LEU A A 225 225 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1690 N    N    . VAL VAL VAL A A 226 226 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1691 CA   CA   . VAL VAL VAL A A 226 226 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1692 CB   CB   . VAL VAL VAL A A 226 226 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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1693 CG1  CG1  . VAL VAL VAL A A 226 226 . 0.0268 0.0368 0.0254 -0.0042 0.0003  -
0.0009 1 .
1694 CG2  CG2  . VAL VAL VAL A A 226 226 . 0.0353 0.0258 0.0253 0.0023  0.0003
0.0000  1 .
1695 C    C    . VAL VAL VAL A A 226 226 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1696 O    O    . VAL VAL VAL A A 226 226 . 0.0256 0.0253 0.0257 0.0000  0.0003
0.0001  1 .
1697 N    N    . LYS LYS LYS A A 227 227 . 0.0253 0.0302 0.0382 0.0003  -0.0006 -
0.0079 1 .
1698 CA   CA   . LYS LYS LYS A A 227 227 . 0.0424 0.0521 0.0453 -0.0103 -0.0093 -
0.0074 1 .
1699 CB   CB   . LYS LYS LYS A A 227 227 . 0.0572 0.0709 0.0828 0.0102  -0.0082 -
0.0020 1 .
1700 CG   CG   . LYS LYS LYS A A 227 227 . 0.1478 0.1412 0.1171 -0.0150 0.0208  -
0.0153 1 .
1701 CD   CD   . LYS LYS LYS A A 227 227 . 0.2023 0.1907 0.2040 -0.0078 -0.0142
0.0144  1 .
1702 CE   CE   . LYS LYS LYS A A 227 227 . 0.3516 0.2843 0.2593 0.0308  -0.0241 -
0.0091 1 .
1703 NZ   NZ   . LYS LYS LYS A A 227 227 . 0.2330 0.3419 0.2525 0.0389  -0.0672 -
0.0657 1 .
1704 C    C    . LYS LYS LYS A A 227 227 . 0.0295 0.0441 0.0380 -0.0015 -0.0050 -
0.0093 1 .
1705 O    O    . LYS LYS LYS A A 227 227 . 0.0788 0.0786 0.0941 0.0021  0.0037  -
0.0273 1 .
1706 N    N    . GLU GLU GLU A A 228 228 . 0.0316 0.0332 0.0273 -0.0058 -0.0032
0.0021  1 .
1707 CA   CA   . GLU GLU GLU A A 228 228 . 0.0474 0.0427 0.0464 -0.0021 0.0053  -
0.0080 1 .
1708 CB   CB   . GLU GLU GLU A A 228 228 . 0.0896 0.1011 0.0828 -0.0073 0.0141  -
0.0015 1 .
1709 CG   CG   . GLU GLU GLU A A 228 228 . 0.1461 0.1408 0.1464 0.0284  -0.0098 -
0.0103 1 .
1710 CD   CD   . GLU GLU GLU A A 228 228 . 0.3314 0.2706 0.3151 -0.0117 -0.0285 -
0.0655 1 .
1711 OE1  OE1  . GLU GLU GLU A A 228 228 . 0.3695 0.3309 0.4197 -0.0175 -0.0339 -
0.1082 1 .
1712 OE2  OE2  . GLU GLU GLU A A 228 228 . 0.3711 0.3585 0.4478 -0.0348 -0.0314 -
0.0683 1 .
1713 C    C    . GLU GLU GLU A A 228 228 . 0.0396 0.0330 0.0429 0.0033  0.0004  -
0.0109 1 .
1714 O    O    . GLU GLU GLU A A 228 228 . 0.0571 0.0527 0.0671 0.0011  -0.0024 -
0.0077 1 .
1715 N    N    . ALA ALA ALA A A 229 229 . 0.0293 0.0331 0.0327 -0.0055 0.0054  -
0.0076 1 .
1716 CA   CA   . ALA ALA ALA A A 229 229 . 0.0384 0.0269 0.0344 -0.0039 -0.0022
0.0026  1 .
1717 CB   CB   . ALA ALA ALA A A 229 229 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1718 C    C    . ALA ALA ALA A A 229 229 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1719 O    O    . ALA ALA ALA A A 229 229 . 0.0508 0.0390 0.0515 -0.0104 -0.0087 -
0.0113 1 .
1720 N    N    . ILE ILE ILE A A 230 230 . 0.0255 0.0258 0.0267 0.0002  -0.0005 -
0.0008 1 .
1721 CA   CA   . ILE ILE ILE A A 230 230 . 0.0278 0.0253 0.0269 -0.0003 0.0020  -
0.0002 1 .
1722 CB   CB   . ILE ILE ILE A A 230 230 . 0.0263 0.0298 0.0283 -0.0021 0.0017  -
0.0036 1 .
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1723 CG1  CG1  . ILE ILE ILE A A 230 230 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1724 CD1  CD1  . ILE ILE ILE A A 230 230 . 0.0326 0.0256 0.0280 -0.0014 0.0044  -
0.0008 1 .
1725 CG2  CG2  . ILE ILE ILE A A 230 230 . 0.0311 0.0309 0.0253 -0.0056 0.0005  -
0.0004 1 .
1726 C    C    . ILE ILE ILE A A 230 230 . 0.0427 0.0483 0.0589 0.0066  -0.0006 -
0.0052 1 .
1727 O    O    . ILE ILE ILE A A 230 230 . 0.0656 0.0480 0.0715 0.0142  0.0133  -
0.0107 1 .
1728 N    N    . ASP ASP ASP A A 231 231 . 0.0699 0.0527 0.0619 -0.0046 -0.0010 -
0.0035 1 .
1729 CA   CA   . ASP ASP ASP A A 231 231 . 0.0689 0.0624 0.0687 0.0016  0.0018  -
0.0111 1 .
1730 CB   CB   . ASP ASP ASP A A 231 231 . 0.0849 0.0799 0.0912 -0.0094 -0.0081 -
0.0125 1 .
1731 CG   CG   . ASP ASP ASP A A 231 231 . 0.2175 0.1812 0.1942 0.0016  -0.0161
0.0119  1 .
1732 OD1  OD1  . ASP ASP ASP A A 231 231 . 0.2913 0.3435 0.3348 -0.0088 0.0009
0.0142  1 .
1733 OD2  OD2  . ASP ASP ASP A A 231 231 . 0.2586 0.3150 0.3180 -0.0613 0.0055
0.0336  1 .
1734 C    C    . ASP ASP ASP A A 231 231 . 0.0735 0.0780 0.0822 -0.0079 0.0052  -
0.0158 1 .
1735 O    O    . ASP ASP ASP A A 231 231 . 0.0603 0.0551 0.0714 0.0210  0.0107  -
0.0176 1 .
1736 N    N    . LYS LYS LYS A A 232 232 . 0.0507 0.0517 0.0392 -0.0138 0.0027  -
0.0011 1 .
1737 CA   CA   . LYS LYS LYS A A 232 232 . 0.0852 0.0708 0.0876 -0.0051 -0.0010 -
0.0041 1 .
1738 CB   CB   . LYS LYS LYS A A 232 232 . 0.1117 0.0953 0.1094 -0.0080 0.0080
0.0030  1 .
1739 CG   CG   . LYS LYS LYS A A 232 232 . 0.1959 0.1627 0.2005 0.0173  0.0172
0.0313  1 .
1740 CD   CD   . LYS LYS LYS A A 232 232 . 0.2818 0.2828 0.2922 -0.0075 0.0521  -
0.0079 1 .
1741 CE   CE   . LYS LYS LYS A A 232 232 . 0.3594 0.3085 0.3259 -0.0078 0.0231
0.0167  1 .
1742 NZ   NZ   . LYS LYS LYS A A 232 232 . 0.3677 0.3547 0.3642 -0.0744 -0.0399 -
0.0285 1 .
1743 C    C    . LYS LYS LYS A A 232 232 . 0.0471 0.0429 0.0523 0.0004  0.0005
0.0037  1 .
1744 O    O    . LYS LYS LYS A A 232 232 . 0.0703 0.0637 0.0849 -0.0146 0.0107  -
0.0018 1 .
1745 N    N    . ALA ALA ALA A A 233 233 . 0.0581 0.0321 0.0722 -0.0032 0.0086  -
0.0004 1 .
1746 CA   CA   . ALA ALA ALA A A 233 233 . 0.0435 0.0295 0.0550 0.0003  0.0058  -
0.0088 1 .
1747 CB   CB   . ALA ALA ALA A A 233 233 . 0.0450 0.0337 0.0719 -0.0055 0.0073  -
0.0194 1 .
1748 C    C    . ALA ALA ALA A A 233 233 . 0.0386 0.0328 0.0406 -0.0028 0.0065
0.0000  1 .
1749 O    O    . ALA ALA ALA A A 233 233 . 0.0649 0.0447 0.0689 0.0047  0.0087  -
0.0067 1 .
1750 N    N    . GLY GLY GLY A A 234 234 . 0.0456 0.0339 0.0556 -0.0082 0.0123
0.0060  1 .
1751 CA   CA   . GLY GLY GLY A A 234 234 . 0.0565 0.0334 0.0512 -0.0083 0.0160  -
0.0145 1 .
1752 C    C    . GLY GLY GLY A A 234 234 . 0.0479 0.0370 0.0544 0.0034  0.0051  -
0.0088 1 .
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1753 O    O    . GLY GLY GLY A A 234 234 . 0.0774 0.0484 0.0691 -0.0227 0.0179  -
0.0110 1 .
1754 N    N    . TYR TYR TYR A A 235 235 . 0.0265 0.0254 0.0255 -0.0003 0.0005  -
0.0001 1 .
1755 CA   CA   . TYR TYR TYR A A 235 235 . 0.0268 0.0264 0.0274 -0.0012 0.0017  -
0.0015 1 .
1756 CB   CB   . TYR TYR TYR A A 235 235 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1757 CG   CG   . TYR TYR TYR A A 235 235 . 0.0326 0.0283 0.0256 -0.0047 -0.0015
0.0010  1 .
1758 CD1  CD1  . TYR TYR TYR A A 235 235 . 0.0282 0.0334 0.0265 -0.0035 0.0019  -
0.0022 1 .
1759 CE1  CE1  . TYR TYR TYR A A 235 235 . 0.0256 0.0391 0.0307 -0.0021 0.0013  -
0.0086 1 .
1760 CZ   CZ   . TYR TYR TYR A A 235 235 . 0.0891 0.0919 0.0845 0.0091  0.0009  -
0.0183 1 .
1761 OH   OH   . TYR TYR TYR A A 235 235 . 0.0901 0.0733 0.0595 0.0015  0.0008  -
0.0068 1 .
1762 CE2  CE2  . TYR TYR TYR A A 235 235 . 0.0607 0.0522 0.0485 -0.0131 -0.0127 -
0.0057 1 .
1763 CD2  CD2  . TYR TYR TYR A A 235 235 . 0.0483 0.0363 0.0409 0.0086  0.0011  -
0.0105 1 .
1764 C    C    . TYR TYR TYR A A 235 235 . 0.0436 0.0389 0.0414 -0.0125 -0.0011 -
0.0081 1 .
1765 O    O    . TYR TYR TYR A A 235 235 . 0.0363 0.0260 0.0258 -0.0028 -0.0023
0.0006  1 .
1766 N    N    . THR THR THR A A 236 236 . 0.0461 0.0471 0.0437 -0.0153 0.0022  -
0.0140 1 .
1767 CA   CA   . THR THR THR A A 236 236 . 0.0745 0.0414 0.0624 -0.0051 0.0001  -
0.0079 1 .
1768 CB   CB   . THR THR THR A A 236 236 . 0.0660 0.0851 0.0926 -0.0205 -0.0049 -
0.0050 1 .
1769 OG1  OG1  . THR THR THR A A 236 236 . 0.1257 0.1525 0.0994 -0.0357 -0.0092 -
0.0181 1 .
1770 CG2  CG2  . THR THR THR A A 236 236 . 0.0833 0.0472 0.0443 -0.0120 0.0020  -
0.0084 1 .
1771 C    C    . THR THR THR A A 236 236 . 0.0887 0.0914 0.0815 -0.0082 -0.0013 -
0.0145 1 .
1772 O    O    . THR THR THR A A 236 236 . 0.0758 0.0704 0.0723 -0.0002 -0.0039
0.0024  1 .
1773 N    N    . GLU GLU GLU A A 237 237 . 0.0900 0.0898 0.0906 0.0089  -0.0160 -
0.0170 1 .
1774 CA   CA   . GLU GLU GLU A A 237 237 . 0.1687 0.1602 0.1672 -0.0059 0.0053  -
0.0110 1 .
1775 CB   CB   . GLU GLU GLU A A 237 237 . 0.2194 0.1977 0.2052 0.0008  0.0095  -
0.0143 1 .
1776 CG   CG   . GLU GLU GLU A A 237 237 . 0.2874 0.2772 0.3082 -0.0173 0.0035  -
0.0126 1 .
1777 CD   CD   . GLU GLU GLU A A 237 237 . 0.3959 0.4152 0.3905 0.0044  -0.0310 -
0.0021 1 .
1778 OE1  OE1  . GLU GLU GLU A A 237 237 . 0.4170 0.3977 0.4546 0.0262  -0.0122 -
0.0173 1 .
1779 OE2  OE2  . GLU GLU GLU A A 237 237 . 0.4048 0.4399 0.4029 0.0094  -0.0146 -
0.0161 1 .
1780 C    C    . GLU GLU GLU A A 237 237 . 0.1683 0.1524 0.1468 -0.0132 -0.0048 -
0.0009 1 .
1781 O    O    . GLU GLU GLU A A 237 237 . 0.1945 0.2093 0.1687 -0.0172 0.0007  -
0.0219 1 .
1782 N    N    . LYS LYS LYS A A 238 238 . 0.1352 0.1220 0.1116 -0.0125 0.0056  -
0.0126 1 .
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1783 CA   CA   . LYS LYS LYS A A 238 238 . 0.0790 0.0828 0.0716 0.0033  0.0088  -
0.0093 1 .
1784 CB   CB   . LYS LYS LYS A A 238 238 . 0.0840 0.0945 0.0787 0.0121  0.0113
0.0010  1 .
1785 CG   CG   . LYS LYS LYS A A 238 238 . 0.1639 0.1071 0.1181 0.0237  0.0096  -
0.0031 1 .
1786 CD   CD   . LYS LYS LYS A A 238 238 . 0.2329 0.2294 0.2318 0.0236  -0.0127 -
0.0340 1 .
1787 CE   CE   . LYS LYS LYS A A 238 238 . 0.3135 0.3023 0.2877 0.0088  0.0167  -
0.0094 1 .
1788 NZ   NZ   . LYS LYS LYS A A 238 238 . 0.4243 0.3292 0.3579 0.0087  0.0047  -
0.0715 1 .
1789 C    C    . LYS LYS LYS A A 238 238 . 0.0281 0.0280 0.0307 -0.0027 0.0038  -
0.0038 1 .
1790 O    O    . LYS LYS LYS A A 238 238 . 0.0314 0.0318 0.0318 -0.0055 0.0060  -
0.0064 1 .
1791 N    N    . ILE ILE ILE A A 239 239 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1792 CA   CA   . ILE ILE ILE A A 239 239 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1793 CB   CB   . ILE ILE ILE A A 239 239 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1794 CG1  CG1  . ILE ILE ILE A A 239 239 . 0.0255 0.0259 0.0255 -0.0003 0.0002  -
0.0003 1 .
1795 CD1  CD1  . ILE ILE ILE A A 239 239 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1796 CG2  CG2  . ILE ILE ILE A A 239 239 . 0.0254 0.0261 0.0268 0.0003  -0.0004 -
0.0011 1 .
1797 C    C    . ILE ILE ILE A A 239 239 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1798 O    O    . ILE ILE ILE A A 239 239 . 0.0319 0.0366 0.0496 -0.0067 0.0026  -
0.0010 1 .
1799 N    N    . VAL VAL VAL A A 240 240 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1800 CA   CA   . VAL VAL VAL A A 240 240 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1801 CB   CB   . VAL VAL VAL A A 240 240 . 0.0306 0.0264 0.0273 -0.0023 0.0032  -
0.0014 1 .
1802 CG1  CG1  . VAL VAL VAL A A 240 240 . 0.0487 0.0716 0.0561 0.0074  -0.0081 -
0.0376 1 .
1803 CG2  CG2  . VAL VAL VAL A A 240 240 . 0.0263 0.0287 0.0254 -0.0018 0.0003  -
0.0006 1 .
1804 C    C    . VAL VAL VAL A A 240 240 . 0.0263 0.0281 0.0258 0.0017  -0.0007 -
0.0012 1 .
1805 O    O    . VAL VAL VAL A A 240 240 . 0.0310 0.0317 0.0321 0.0060  -0.0062 -
0.0066 1 .
1806 N    N    . ILE ILE ILE A A 241 241 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1807 CA   CA   . ILE ILE ILE A A 241 241 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1808 CB   CB   . ILE ILE ILE A A 241 241 . 0.0254 0.0279 0.0265 -0.0005 0.0003  -
0.0017 1 .
1809 CG1  CG1  . ILE ILE ILE A A 241 241 . 0.0656 0.0648 0.0421 -0.0042 -0.0120 -
0.0214 1 .
1810 CD1  CD1  . ILE ILE ILE A A 241 241 . 0.1476 0.1054 0.2100 0.0462  0.0018
0.0208  1 .
1811 CG2  CG2  . ILE ILE ILE A A 241 241 . 0.0430 0.0490 0.0334 -0.0063 -0.0075 -
0.0051 1 .
1812 C    C    . ILE ILE ILE A A 241 241 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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1813 O    O    . ILE ILE ILE A A 241 241 . 0.0578 0.0390 0.0367 -0.0091 0.0020  -
0.0118 1 .
1814 N    N    . GLY GLY GLY A A 242 242 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1815 CA   CA   . GLY GLY GLY A A 242 242 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1816 C    C    . GLY GLY GLY A A 242 242 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1817 O    O    . GLY GLY GLY A A 242 242 . 0.0316 0.0301 0.0270 0.0055  -0.0032 -
0.0028 1 .
1818 N    N    . MET MET MET A A 243 243 . 0.0299 0.0254 0.0276 -0.0008 0.0032  -
0.0006 1 .
1819 CA   CA   . MET MET MET A A 243 243 . 0.0481 0.0403 0.0522 0.0035  0.0132  -
0.0093 1 .
1820 CB   CB   . MET MET MET A A 243 243 . 0.0573 0.0645 0.0656 -0.0002 -0.0004 -
0.0045 1 .
1821 CG   CG   . MET MET MET A A 243 243 . 0.0786 0.0717 0.1265 0.0052  0.0165  -
0.0030 1 .
1822 SD   SD   . MET MET MET A A 243 243 . 0.1178 0.0931 0.1247 -0.0200 -0.0054 -
0.0202 1 .
1823 CE   CE   . MET MET MET A A 243 243 . 0.1638 0.2103 0.1877 0.0020  0.0447
0.0078  1 .
1824 C    C    . MET MET MET A A 243 243 . 0.0316 0.0367 0.0290 -0.0015 0.0034
0.0036  1 .
1825 O    O    . MET MET MET A A 243 243 . 0.0592 0.0496 0.0596 -0.0028 -0.0158
0.0059  1 .
1826 N    N    . ASP ASP ASP A A 244 244 . 0.0255 0.0256 0.0255 0.0002  -0.0002 -
0.0002 1 .
1827 CA   CA   . ASP ASP ASP A A 244 244 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1828 CB   CB   . ASP ASP ASP A A 244 244 . 0.0253 0.0253 0.0255 0.0000  -0.0001
0.0000  1 .
1829 CG   CG   . ASP ASP ASP A A 244 244 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1830 OD1  OD1  . ASP ASP ASP A A 244 244 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1831 OD2  OD2  . ASP ASP ASP A A 244 244 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1832 C    C    . ASP ASP ASP A A 244 244 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1833 O    O    . ASP ASP ASP A A 244 244 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1834 N    N    . VAL VAL VAL A A 245 245 . 0.0260 0.0254 0.0261 -0.0003 0.0007  -
0.0003 1 .
1835 CA   CA   . VAL VAL VAL A A 245 245 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1836 CB   CB   . VAL VAL VAL A A 245 245 . 0.0271 0.0261 0.0322 -0.0012 0.0035  -
0.0023 1 .
1837 CG1  CG1  . VAL VAL VAL A A 245 245 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1838 CG2  CG2  . VAL VAL VAL A A 245 245 . 0.0260 0.0262 0.0264 -0.0008 0.0009  -
0.0010 1 .
1839 C    C    . VAL VAL VAL A A 245 245 . 0.0259 0.0282 0.0260 -0.0012 0.0006  -
0.0014 1 .
1840 O    O    . VAL VAL VAL A A 245 245 . 0.0271 0.0253 0.0323 0.0000  -0.0018
0.0001  1 .
1841 N    N    . ALA ALA ALA A A 246 246 . 0.0320 0.0258 0.0281 0.0018  -0.0043 -
0.0012 1 .
1842 CA   CA   . ALA ALA ALA A A 246 246 . 0.0279 0.0264 0.0285 0.0017  -0.0028 -
0.0019 1 .
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1843 CB   CB   . ALA ALA ALA A A 246 246 . 0.0260 0.0288 0.0398 -0.0016 -0.0033
0.0071  1 .
1844 C    C    . ALA ALA ALA A A 246 246 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1845 O    O    . ALA ALA ALA A A 246 246 . 0.0353 0.0263 0.0356 -0.0020 -0.0030
0.0030  1 .
1846 N    N    . ALA ALA ALA A A 247 247 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1847 CA   CA   . ALA ALA ALA A A 247 247 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1848 CB   CB   . ALA ALA ALA A A 247 247 . 0.0309 0.0287 0.0474 0.0038  -0.0111 -
0.0071 1 .
1849 C    C    . ALA ALA ALA A A 247 247 . 0.0253 0.0253 0.0255 0.0000  0.0000
0.0000  1 .
1850 O    O    . ALA ALA ALA A A 247 247 . 0.0580 0.0598 0.0515 0.0000  -0.0091 -
0.0153 1 .
1851 N    N    . SER SER SER A A 248 248 . 0.0294 0.0266 0.0301 0.0022  -0.0044 -
0.0024 1 .
1852 CA   CA   . SER SER SER A A 248 248 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1853 CB   CB   . SER SER SER A A 248 248 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
1854 OG   OG   . SER SER SER A A 248 248 . 0.0379 0.0562 0.0483 -0.0037 -0.0012 -
0.0158 1 .
1855 C    C    . SER SER SER A A 248 248 . 0.0266 0.0269 0.0262 0.0014  0.0010
0.0012  1 .
1856 O    O    . SER SER SER A A 248 248 . 0.0562 0.0519 0.0380 0.0175  0.0013
0.0073  1 .
1857 N    N    . GLU GLU GLU A A 249 249 . 0.0268 0.0254 0.0260 -0.0004 0.0010  -
0.0003 1 .
1858 CA   CA   . GLU GLU GLU A A 249 249 . 0.0290 0.0470 0.0452 -0.0087 0.0015
0.0012  1 .
1859 CB   CB   . GLU GLU GLU A A 249 249 . 0.0289 0.0298 0.0260 -0.0040 -0.0016
0.0018  1 .
1860 CG   CG   . GLU GLU GLU A A 249 249 . 0.0368 0.0503 0.0528 0.0068  -0.0124
0.0095  1 .
1861 CD   CD   . GLU GLU GLU A A 249 249 . 0.0555 0.0825 0.0865 -0.0043 -0.0208 -
0.0087 1 .
1862 OE1  OE1  . GLU GLU GLU A A 249 249 . 0.1039 0.1147 0.0944 -0.0012 0.0179
0.0056  1 .
1863 OE2  OE2  . GLU GLU GLU A A 249 249 . 0.1028 0.1046 0.0983 0.0130  -0.0232
0.0178  1 .
1864 C    C    . GLU GLU GLU A A 249 249 . 0.0381 0.0551 0.0362 -0.0067 -0.0017 -
0.0097 1 .
1865 O    O    . GLU GLU GLU A A 249 249 . 0.0488 0.0668 0.0742 -0.0067 0.0105  -
0.0002 1 .
1866 N    N    . PHE PHE PHE A A 250 250 . 0.0350 0.0423 0.0504 -0.0066 -0.0110 -
0.0048 1 .
1867 CA   CA   . PHE PHE PHE A A 250 250 . 0.0379 0.0445 0.0514 -0.0097 0.0066
0.0037  1 .
1868 CB   CB   . PHE PHE PHE A A 250 250 . 0.0289 0.0297 0.0345 -0.0039 0.0057  -
0.0063 1 .
1869 CG   CG   . PHE PHE PHE A A 250 250 . 0.0291 0.0377 0.0361 0.0069  -0.0064 -
0.0116 1 .
1870 CD1  CD1  . PHE PHE PHE A A 250 250 . 0.0314 0.0301 0.0264 -0.0054 0.0026  -
0.0023 1 .
1871 CE1  CE1  . PHE PHE PHE A A 250 250 . 0.0264 0.0314 0.0600 0.0002  0.0057  -
0.0033 1 .
1872 CZ   CZ   . PHE PHE PHE A A 250 250 . 0.0552 0.0471 0.0373 0.0076  0.0028  -
0.0145 1 .
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1873 CE2  CE2  . PHE PHE PHE A A 250 250 . 0.0383 0.0654 0.0622 0.0020  -0.0131 -
0.0327 1 .
1874 CD2  CD2  . PHE PHE PHE A A 250 250 . 0.0512 0.1057 0.0658 0.0043  -0.0014 -
0.0146 1 .
1875 C    C    . PHE PHE PHE A A 250 250 . 0.0417 0.0447 0.0497 -0.0104 0.0010
0.0165  1 .
1876 O    O    . PHE PHE PHE A A 250 250 . 0.0407 0.0493 0.0746 -0.0067 -0.0121
0.0122  1 .
1877 N    N    . TYR TYR TYR A A 251 251 . 0.0761 0.0749 0.0725 -0.0097 0.0051  -
0.0037 1 .
1878 CA   CA   . TYR TYR TYR A A 251 251 . 0.0697 0.0797 0.0819 0.0086  0.0109
0.0053  1 .
1879 CB   CB   . TYR TYR TYR A A 251 251 . 0.0740 0.0724 0.0901 -0.0050 0.0035  -
0.0042 1 .
1880 CG   CG   . TYR TYR TYR A A 251 251 . 0.1017 0.0841 0.0943 -0.0069 0.0022
0.0013  1 .
1881 CD1  CD1  . TYR TYR TYR A A 251 251 . 0.1439 0.1321 0.1272 0.0068  -0.0108
0.0077  1 .
1882 CE1  CE1  . TYR TYR TYR A A 251 251 . 0.1536 0.1697 0.1335 0.0081  -0.0050
0.0088  1 .
1883 CZ   CZ   . TYR TYR TYR A A 251 251 . 0.1726 0.1721 0.1558 0.0017  0.0077
0.0108  1 .
1884 OH   OH   . TYR TYR TYR A A 251 251 . 0.2157 0.2309 0.2498 0.0199  -0.0244
0.0423  1 .
1885 CE2  CE2  . TYR TYR TYR A A 251 251 . 0.1224 0.1812 0.1870 -0.0182 -0.0180
0.0404  1 .
1886 CD2  CD2  . TYR TYR TYR A A 251 251 . 0.1020 0.0949 0.1119 -0.0101 0.0087
0.0178  1 .
1887 C    C    . TYR TYR TYR A A 251 251 . 0.1028 0.0901 0.0953 0.0059  0.0037  -
0.0140 1 .
1888 O    O    . TYR TYR TYR A A 251 251 . 0.0894 0.1135 0.0940 0.0150  0.0076
0.0014  1 .
1889 N    N    . ARG ARG ARG A A 252 252 . 0.1182 0.1123 0.1203 0.0045  0.0039  -
0.0091 1 .
1890 CA   CA   . ARG ARG ARG A A 252 252 . 0.1747 0.1790 0.1787 0.0042  0.0030
0.0015  1 .
1891 CB   CB   . ARG ARG ARG A A 252 252 . 0.1592 0.1493 0.1603 -0.0110 0.0061  -
0.0040 1 .
1892 CG   CG   . ARG ARG ARG A A 252 252 . 0.1755 0.1755 0.1807 0.0008  -0.0023
0.0030  1 .
1893 CD   CD   . ARG ARG ARG A A 252 252 . 0.1839 0.1852 0.2141 -0.0056 -0.0212 -
0.0014 1 .
1894 NE   NE   . ARG ARG ARG A A 252 252 . 0.2091 0.2110 0.2310 -0.0111 -0.0065
0.0157  1 .
1895 CZ   CZ   . ARG ARG ARG A A 252 252 . 0.2002 0.1831 0.1939 0.0011  -0.0003
0.0135  1 .
1896 NH1  NH1  . ARG ARG ARG A A 252 252 . 0.1371 0.0902 0.1143 -0.0018 -0.0015 -
0.0014 1 .
1897 NH2  NH2  . ARG ARG ARG A A 252 252 . 0.1867 0.1715 0.2376 0.0138  -0.0103
0.0000  1 .
1898 C    C    . ARG ARG ARG A A 252 252 . 0.1995 0.2120 0.2044 0.0052  0.0003  -
0.0130 1 .
1899 O    O    . ARG ARG ARG A A 252 252 . 0.1969 0.2539 0.2631 0.0016  -0.0018 -
0.0128 1 .
1900 N    N    . ASP ASP ASP A A 253 253 . 0.2513 0.2453 0.2463 0.0088  -0.0053 -
0.0041 1 .
1901 CA   CA   . ASP ASP ASP A A 253 253 . 0.2756 0.2791 0.2694 0.0044  -0.0045 -
0.0053 1 .
1902 CB   CB   . ASP ASP ASP A A 253 253 . 0.2892 0.3133 0.3074 0.0023  -0.0031 -
0.0040 1 .
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1903 CG   CG   . ASP ASP ASP A A 253 253 . 0.3613 0.3475 0.3631 0.0103  -0.0070
0.0112  1 .
1904 OD1  OD1  . ASP ASP ASP A A 253 253 . 0.3790 0.3924 0.3739 0.0524  0.0028
0.0141  1 .
1905 OD2  OD2  . ASP ASP ASP A A 253 253 . 0.4304 0.4114 0.4268 -0.0185 -0.0324 -
0.0216 1 .
1906 C    C    . ASP ASP ASP A A 253 253 . 0.2534 0.2668 0.2556 0.0007  -0.0025 -
0.0005 1 .
1907 O    O    . ASP ASP ASP A A 253 253 . 0.2549 0.2910 0.2661 0.0148  -0.0019 -
0.0003 1 .
1908 N    N    . GLY GLY GLY A A 254 254 . 0.2058 0.2315 0.2142 0.0138  -0.0073 -
0.0047 1 .
1909 CA   CA   . GLY GLY GLY A A 254 254 . 0.1722 0.1924 0.1902 0.0121  -0.0079 -
0.0021 1 .
1910 C    C    . GLY GLY GLY A A 254 254 . 0.1275 0.1397 0.1394 0.0012  -0.0029
0.0088  1 .
1911 O    O    . GLY GLY GLY A A 254 254 . 0.1636 0.1508 0.1640 0.0075  -0.0137
0.0084  1 .
1912 N    N    . LYS LYS LYS A A 255 255 . 0.1197 0.1384 0.1456 0.0051  -0.0054
0.0019  1 .
1913 CA   CA   . LYS LYS LYS A A 255 255 . 0.1226 0.1286 0.1315 -0.0023 -0.0085
0.0065  1 .
1914 CB   CB   . LYS LYS LYS A A 255 255 . 0.0991 0.1381 0.1269 0.0000  -0.0083
0.0021  1 .
1915 CG   CG   . LYS LYS LYS A A 255 255 . 0.1691 0.1766 0.1378 0.0214  -0.0162
0.0116  1 .
1916 CD   CD   . LYS LYS LYS A A 255 255 . 0.2119 0.2681 0.2283 0.0053  -0.0171
0.0033  1 .
1917 CE   CE   . LYS LYS LYS A A 255 255 . 0.3124 0.3187 0.3220 0.0019  -0.0194 -
0.0129 1 .
1918 NZ   NZ   . LYS LYS LYS A A 255 255 . 0.3689 0.3745 0.3896 -0.0181 -0.0134
0.0123  1 .
1919 C    C    . LYS LYS LYS A A 255 255 . 0.0989 0.1181 0.1204 0.0001  -0.0063
0.0084  1 .
1920 O    O    . LYS LYS LYS A A 255 255 . 0.1151 0.1180 0.1343 0.0036  -0.0001
0.0065  1 .
1921 N    N    . TYR TYR TYR A A 256 256 . 0.0623 0.0738 0.0865 0.0007  -0.0003
0.0008  1 .
1922 CA   CA   . TYR TYR TYR A A 256 256 . 0.0745 0.0630 0.0665 -0.0073 -0.0024
0.0006  1 .
1923 CB   CB   . TYR TYR TYR A A 256 256 . 0.0304 0.0536 0.0596 -0.0116 -0.0045
0.0029  1 .
1924 CG   CG   . TYR TYR TYR A A 256 256 . 0.0596 0.0315 0.0475 -0.0008 -0.0114
0.0064  1 .
1925 CD1  CD1  . TYR TYR TYR A A 256 256 . 0.0267 0.0428 0.0469 -0.0049 -0.0037
0.0137  1 .
1926 CE1  CE1  . TYR TYR TYR A A 256 256 . 0.0265 0.0279 0.0258 0.0017  -0.0007 -
0.0011 1 .
1927 CZ   CZ   . TYR TYR TYR A A 256 256 . 0.0861 0.0816 0.0817 0.0013  -0.0102
0.0090  1 .
1928 OH   OH   . TYR TYR TYR A A 256 256 . 0.0639 0.0730 0.0598 0.0035  0.0099  -
0.0191 1 .
1929 CE2  CE2  . TYR TYR TYR A A 256 256 . 0.0682 0.0839 0.1033 0.0013  0.0070
0.0111  1 .
1930 CD2  CD2  . TYR TYR TYR A A 256 256 . 0.0791 0.0756 0.0725 -0.0003 -0.0063 -
0.0104 1 .
1931 C    C    . TYR TYR TYR A A 256 256 . 0.0748 0.0779 0.0757 -0.0017 -0.0057
0.0004  1 .
1932 O    O    . TYR TYR TYR A A 256 256 . 0.0990 0.0961 0.0994 -0.0011 -0.0055
0.0084  1 .
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1933 N    N    . ASP ASP ASP A A 257 257 . 0.0883 0.0959 0.0974 0.0020  0.0017
0.0013  1 .
1934 CA   CA   . ASP ASP ASP A A 257 257 . 0.0883 0.0920 0.1039 0.0019  0.0030  -
0.0008 1 .
1935 CB   CB   . ASP ASP ASP A A 257 257 . 0.0955 0.1069 0.1153 0.0101  -0.0043 -
0.0083 1 .
1936 CG   CG   . ASP ASP ASP A A 257 257 . 0.0713 0.0968 0.1009 0.0199  0.0002  -
0.0044 1 .
1937 OD1  OD1  . ASP ASP ASP A A 257 257 . 0.0650 0.1094 0.1131 -0.0186 0.0067  -
0.0087 1 .
1938 OD2  OD2  . ASP ASP ASP A A 257 257 . 0.0881 0.0982 0.1012 -0.0122 -0.0218
0.0002  1 .
1939 C    C    . ASP ASP ASP A A 257 257 . 0.0858 0.0947 0.0862 0.0034  -0.0044 -
0.0001 1 .
1940 O    O    . ASP ASP ASP A A 257 257 . 0.0514 0.0659 0.0953 -0.0065 -0.0027 -
0.0003 1 .
1941 N    N    . LEU LEU LEU A A 258 258 . 0.0704 0.0677 0.0811 -0.0116 -0.0066
0.0006  1 .
1942 CA   CA   . LEU LEU LEU A A 258 258 . 0.0916 0.0928 0.0876 -0.0029 0.0075
0.0031  1 .
1943 CB   CB   . LEU LEU LEU A A 258 258 . 0.1013 0.0845 0.0943 -0.0155 -0.0026
0.0024  1 .
1944 CG   CG   . LEU LEU LEU A A 258 258 . 0.1050 0.0976 0.1107 -0.0201 -0.0006 -
0.0048 1 .
1945 CD1  CD1  . LEU LEU LEU A A 258 258 . 0.0874 0.0948 0.0763 0.0021  -0.0050 -
0.0173 1 .
1946 CD2  CD2  . LEU LEU LEU A A 258 258 . 0.0591 0.0653 0.0952 -0.0085 -0.0119 -
0.0009 1 .
1947 C    C    . LEU LEU LEU A A 258 258 . 0.0900 0.0831 0.0852 -0.0111 0.0048
0.0016  1 .
1948 O    O    . LEU LEU LEU A A 258 258 . 0.1003 0.1148 0.1071 -0.0139 0.0216
0.0198  1 .
1949 N    N    . ASP ASP ASP A A 259 259 . 0.0604 0.0799 0.0952 -0.0145 0.0039  -
0.0063 1 .
1950 CA   CA   . ASP ASP ASP A A 259 259 . 0.0901 0.0920 0.0917 -0.0033 0.0022  -
0.0029 1 .
1951 CB   CB   . ASP ASP ASP A A 259 259 . 0.0783 0.0785 0.0937 0.0054  0.0047  -
0.0107 1 .
1952 CG   CG   . ASP ASP ASP A A 259 259 . 0.1619 0.1601 0.1423 -0.0053 0.0044  -
0.0017 1 .
1953 OD1  OD1  . ASP ASP ASP A A 259 259 . 0.1779 0.1718 0.2150 -0.0096 0.0009
0.0313  1 .
1954 OD2  OD2  . ASP ASP ASP A A 259 259 . 0.1942 0.2107 0.2228 -0.0502 -0.0065
0.0152  1 .
1955 C    C    . ASP ASP ASP A A 259 259 . 0.0974 0.0837 0.0936 -0.0049 0.0073  -
0.0019 1 .
1956 O    O    . ASP ASP ASP A A 259 259 . 0.0925 0.0977 0.1078 -0.0089 0.0207
0.0098  1 .
1957 N    N    . PHE PHE PHE A A 260 260 . 0.0758 0.0690 0.0883 -0.0051 0.0125  -
0.0020 1 .
1958 CA   CA   . PHE PHE PHE A A 260 260 . 0.0696 0.0711 0.0626 -0.0036 0.0118
0.0022  1 .
1959 CB   CB   . PHE PHE PHE A A 260 260 . 0.0640 0.0766 0.0567 -0.0066 0.0083
0.0061  1 .
1960 CG   CG   . PHE PHE PHE A A 260 260 . 0.0312 0.0299 0.0258 0.0028  0.0015
0.0000  1 .
1961 CD1  CD1  . PHE PHE PHE A A 260 260 . 0.0420 0.0627 0.0729 -0.0057 0.0193
0.0156  1 .
1962 CE1  CE1  . PHE PHE PHE A A 260 260 . 0.0375 0.0290 0.0622 0.0066  -0.0160 -
0.0100 1 .
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1963 CZ   CZ   . PHE PHE PHE A A 260 260 . 0.0848 0.0791 0.0761 0.0268  -0.0205 -
0.0146 1 .
1964 CE2  CE2  . PHE PHE PHE A A 260 260 . 0.0672 0.0678 0.0769 0.0151  -0.0113 -
0.0113 1 .
1965 CD2  CD2  . PHE PHE PHE A A 260 260 . 0.0487 0.0599 0.0857 0.0089  0.0107
0.0096  1 .
1966 C    C    . PHE PHE PHE A A 260 260 . 0.0671 0.0684 0.0776 -0.0051 -0.0028 -
0.0015 1 .
1967 O    O    . PHE PHE PHE A A 260 260 . 0.0895 0.0951 0.1023 0.0038  -0.0072 -
0.0161 1 .
1968 N    N    . LYS LYS LYS A A 261 261 . 0.0761 0.1057 0.0768 0.0070  0.0144  -
0.0001 1 .
1969 CA   CA   . LYS LYS LYS A A 261 261 . 0.0995 0.1074 0.1081 0.0001  -0.0034
0.0016  1 .
1970 CB   CB   . LYS LYS LYS A A 261 261 . 0.0779 0.0878 0.0876 0.0145  0.0152  -
0.0031 1 .
1971 CG   CG   . LYS LYS LYS A A 261 261 . 0.1184 0.0982 0.1139 -0.0101 0.0074  -
0.0139 1 .
1972 CD   CD   . LYS LYS LYS A A 261 261 . 0.0912 0.0957 0.0646 0.0080  -0.0209
0.0098  1 .
1973 CE   CE   . LYS LYS LYS A A 261 261 . 0.0561 0.0581 0.0709 0.0039  0.0073  -
0.0074 1 .
1974 NZ   NZ   . LYS LYS LYS A A 261 261 . 0.0361 0.0471 0.0333 -0.0070 -0.0003
0.0119  1 .
1975 C    C    . LYS LYS LYS A A 261 261 . 0.0953 0.1147 0.0950 0.0022  0.0026
0.0030  1 .
1976 O    O    . LYS LYS LYS A A 261 261 . 0.1035 0.1295 0.0915 0.0023  0.0235
0.0091  1 .
1977 N    N    . SER SER SER A A 262 262 . 0.0999 0.0992 0.1059 0.0094  0.0022
0.0046  1 .
1978 CA   CA   . SER SER SER A A 262 262 . 0.1293 0.1342 0.1440 0.0046  0.0025
0.0107  1 .
1979 CB   CB   . SER SER SER A A 262 262 . 0.1428 0.1259 0.1412 0.0059  -0.0024 -
0.0031 1 .
1980 OG   OG   . SER SER SER A A 262 262 . 0.1726 0.1901 0.1934 0.0046  0.0062  -
0.0045 1 .
1981 C    C    . SER SER SER A A 262 262 . 0.1477 0.1422 0.1529 0.0056  0.0052
0.0070  1 .
1982 O    O    . SER SER SER A A 262 262 . 0.1634 0.1413 0.1591 0.0146  0.0055
0.0151  1 .
1983 N    N    . PRO PRO PRO A A 263 263 . 0.1478 0.1494 0.1457 0.0090  0.0069
0.0082  1 .
1984 CA   CA   . PRO PRO PRO A A 263 263 . 0.1659 0.1636 0.1697 0.0044  0.0077  -
0.0002 1 .
1985 CB   CB   . PRO PRO PRO A A 263 263 . 0.1575 0.1687 0.1512 -0.0076 0.0074
0.0139  1 .
1986 CG   CG   . PRO PRO PRO A A 263 263 . 0.1735 0.1732 0.1884 -0.0008 0.0229
0.0021  1 .
1987 CD   CD   . PRO PRO PRO A A 263 263 . 0.1555 0.1444 0.1622 0.0112  0.0109
0.0039  1 .
1988 C    C    . PRO PRO PRO A A 263 263 . 0.1587 0.1696 0.1486 -0.0032 0.0120
0.0044  1 .
1989 O    O    . PRO PRO PRO A A 263 263 . 0.1717 0.1812 0.1746 -0.0098 0.0176
0.0124  1 .
1990 N    N    . THR THR THR A A 264 264 . 0.1931 0.2161 0.2043 0.0059  0.0110
0.0037  1 .
1991 CA   CA   . THR THR THR A A 264 264 . 0.2326 0.2370 0.2390 0.0067  0.0020
0.0008  1 .
1992 CB   CB   . THR THR THR A A 264 264 . 0.2358 0.2309 0.2414 0.0068  0.0012
0.0034  1 .
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1993 OG1  OG1  . THR THR THR A A 264 264 . 0.2619 0.2441 0.2759 0.0043  0.0072
0.0165  1 .
1994 CG2  CG2  . THR THR THR A A 264 264 . 0.2471 0.2455 0.2399 0.0197  0.0091  -
0.0041 1 .
1995 C    C    . THR THR THR A A 264 264 . 0.2534 0.2540 0.2543 -0.0010 0.0037  -
0.0004 1 .
1996 O    O    . THR THR THR A A 264 264 . 0.2656 0.3052 0.2815 0.0132  0.0085  -
0.0079 1 .
1997 N    N    . ASP ASP ASP A A 265 265 . 0.2598 0.2562 0.2530 0.0009  -0.0004
0.0037  1 .
1998 CA   CA   . ASP ASP ASP A A 265 265 . 0.2584 0.2542 0.2546 0.0044  0.0028
0.0036  1 .
1999 CB   CB   . ASP ASP ASP A A 265 265 . 0.2719 0.2745 0.2650 -0.0046 0.0054
0.0083  1 .
2000 CG   CG   . ASP ASP ASP A A 265 265 . 0.3145 0.3195 0.3125 -0.0045 0.0090
0.0031  1 .
2001 OD1  OD1  . ASP ASP ASP A A 265 265 . 0.3277 0.3647 0.3689 0.0093  0.0180
0.0406  1 .
2002 OD2  OD2  . ASP ASP ASP A A 265 265 . 0.3783 0.3767 0.4156 -0.0492 0.0250  -
0.0350 1 .
2003 C    C    . ASP ASP ASP A A 265 265 . 0.2493 0.2461 0.2443 0.0037  0.0060
0.0015  1 .
2004 O    O    . ASP ASP ASP A A 265 265 . 0.2480 0.2464 0.2640 -0.0004 0.0090
0.0024  1 .
2005 N    N    . PRO PRO PRO A A 266 266 . 0.2449 0.2392 0.2402 0.0007  0.0063  -
0.0008 1 .
2006 CA   CA   . PRO PRO PRO A A 266 266 . 0.2374 0.2315 0.2356 0.0018  0.0022
0.0047  1 .
2007 CB   CB   . PRO PRO PRO A A 266 266 . 0.2268 0.2293 0.2302 0.0123  0.0101  -
0.0065 1 .
2008 CG   CG   . PRO PRO PRO A A 266 266 . 0.2307 0.2336 0.2361 0.0083  0.0085
0.0088  1 .
2009 CD   CD   . PRO PRO PRO A A 266 266 . 0.2302 0.2422 0.2474 0.0105  0.0169  -
0.0041 1 .
2010 C    C    . PRO PRO PRO A A 266 266 . 0.2111 0.2249 0.2200 0.0044  -0.0038
0.0049  1 .
2011 O    O    . PRO PRO PRO A A 266 266 . 0.1800 0.2475 0.2341 0.0076  0.0085
0.0032  1 .
2012 N    N    . SER SER SER A A 267 267 . 0.2275 0.2279 0.2365 0.0035  -0.0017
0.0012  1 .
2013 CA   CA   . SER SER SER A A 267 267 . 0.2261 0.2295 0.2329 0.0017  -0.0018 -
0.0022 1 .
2014 CB   CB   . SER SER SER A A 267 267 . 0.2336 0.2641 0.2524 -0.0031 0.0059
0.0023  1 .
2015 OG   OG   . SER SER SER A A 267 267 . 0.2868 0.3267 0.3088 0.0302  0.0023
0.0075  1 .
2016 C    C    . SER SER SER A A 267 267 . 0.2133 0.2217 0.2135 -0.0034 0.0026
0.0009  1 .
2017 O    O    . SER SER SER A A 267 267 . 0.2096 0.2094 0.2235 -0.0117 -0.0078
0.0016  1 .
2018 N    N    . ARG ARG ARG A A 268 268 . 0.1923 0.1982 0.1869 0.0000  0.0004
0.0012  1 .
2019 CA   CA   . ARG ARG ARG A A 268 268 . 0.1704 0.1814 0.1758 -0.0076 0.0031  -
0.0001 1 .
2020 CB   CB   . ARG ARG ARG A A 268 268 . 0.1462 0.1666 0.1762 -0.0099 -0.0025 -
0.0003 1 .
2021 CG   CG   . ARG ARG ARG A A 268 268 . 0.1664 0.1929 0.1682 -0.0028 -0.0139 -
0.0054 1 .
2022 CD   CD   . ARG ARG ARG A A 268 268 . 0.1640 0.1333 0.1562 -0.0030 -0.0092
0.0064  1 .
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2023 NE   NE   . ARG ARG ARG A A 268 268 . 0.0859 0.1392 0.1405 0.0150  0.0082  -
0.0234 1 .
2024 CZ   CZ   . ARG ARG ARG A A 268 268 . 0.1426 0.1504 0.1550 -0.0029 0.0107  -
0.0101 1 .
2025 NH1  NH1  . ARG ARG ARG A A 268 268 . 0.1460 0.1613 0.2026 0.0168  0.0414  -
0.0147 1 .
2026 NH2  NH2  . ARG ARG ARG A A 268 268 . 0.1258 0.1444 0.1195 0.0127  0.0358
0.0066  1 .
2027 C    C    . ARG ARG ARG A A 268 268 . 0.1631 0.1539 0.1723 -0.0091 0.0023  -
0.0013 1 .
2028 O    O    . ARG ARG ARG A A 268 268 . 0.1471 0.1564 0.2044 -0.0237 0.0088
0.0103  1 .
2029 N    N    . TYR TYR TYR A A 269 269 . 0.1366 0.1549 0.1754 -0.0042 -0.0087
0.0125  1 .
2030 CA   CA   . TYR TYR TYR A A 269 269 . 0.1413 0.1506 0.1520 0.0034  0.0035
0.0003  1 .
2031 CB   CB   . TYR TYR TYR A A 269 269 . 0.1423 0.1436 0.1458 0.0056  0.0045
0.0160  1 .
2032 CG   CG   . TYR TYR TYR A A 269 269 . 0.1098 0.1532 0.1663 0.0013  0.0213
0.0014  1 .
2033 CD1  CD1  . TYR TYR TYR A A 269 269 . 0.1471 0.1742 0.1740 -0.0135 0.0020
0.0134  1 .
2034 CE1  CE1  . TYR TYR TYR A A 269 269 . 0.1161 0.1919 0.1828 0.0133  0.0222  -
0.0109 1 .
2035 CZ   CZ   . TYR TYR TYR A A 269 269 . 0.1684 0.2247 0.2207 -0.0335 0.0128
0.0122  1 .
2036 OH   OH   . TYR TYR TYR A A 269 269 . 0.2347 0.3050 0.2785 -0.0123 0.0416  -
0.0391 1 .
2037 CE2  CE2  . TYR TYR TYR A A 269 269 . 0.1434 0.1758 0.1908 -0.0192 0.0191
0.0019  1 .
2038 CD2  CD2  . TYR TYR TYR A A 269 269 . 0.1553 0.1748 0.1770 -0.0181 0.0046
0.0039  1 .
2039 C    C    . TYR TYR TYR A A 269 269 . 0.1281 0.1426 0.1346 0.0047  -0.0015
0.0062  1 .
2040 O    O    . TYR TYR TYR A A 269 269 . 0.1423 0.1581 0.1551 -0.0179 -0.0085 -
0.0147 1 .
2041 N    N    . ILE ILE ILE A A 270 270 . 0.0933 0.1350 0.1145 -0.0060 -0.0124
0.0114  1 .
2042 CA   CA   . ILE ILE ILE A A 270 270 . 0.0930 0.1051 0.1028 -0.0062 0.0007
0.0000  1 .
2043 CB   CB   . ILE ILE ILE A A 270 270 . 0.0849 0.1095 0.1058 -0.0066 -0.0020
0.0040  1 .
2044 CG1  CG1  . ILE ILE ILE A A 270 270 . 0.0600 0.0889 0.0743 0.0040  0.0029
0.0017  1 .
2045 CD1  CD1  . ILE ILE ILE A A 270 270 . 0.0919 0.0939 0.1417 -0.0279 -0.0123 -
0.0088 1 .
2046 CG2  CG2  . ILE ILE ILE A A 270 270 . 0.0814 0.1214 0.1236 0.0089  0.0001
0.0049  1 .
2047 C    C    . ILE ILE ILE A A 270 270 . 0.1086 0.1050 0.1182 0.0003  -0.0103
0.0017  1 .
2048 O    O    . ILE ILE ILE A A 270 270 . 0.1209 0.1102 0.1330 -0.0013 -0.0094 -
0.0032 1 .
2049 N    N    . THR THR THR A A 271 271 . 0.0902 0.0940 0.1104 -0.0082 0.0031  -
0.0057 1 .
2050 CA   CA   . THR THR THR A A 271 271 . 0.1192 0.1231 0.1272 0.0079  -0.0028
0.0023  1 .
2051 CB   CB   . THR THR THR A A 271 271 . 0.1186 0.1309 0.1341 0.0096  0.0018  -
0.0056 1 .
2052 OG1  OG1  . THR THR THR A A 271 271 . 0.1276 0.1648 0.2049 -0.0099 -0.0224 -
0.0273 1 .
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2053 CG2  CG2  . THR THR THR A A 271 271 . 0.1489 0.1929 0.2156 0.0210  -0.0017
0.0078  1 .
2054 C    C    . THR THR THR A A 271 271 . 0.1040 0.1137 0.1223 -0.0040 0.0009  -
0.0007 1 .
2055 O    O    . THR THR THR A A 271 271 . 0.0958 0.1216 0.1216 0.0009  -0.0118
0.0307  1 .
2056 N    N    . GLY GLY GLY A A 272 272 . 0.1210 0.1271 0.1236 0.0025  -0.0057
0.0099  1 .
2057 CA   CA   . GLY GLY GLY A A 272 272 . 0.1352 0.1581 0.1471 0.0043  -0.0077 -
0.0015 1 .
2058 C    C    . GLY GLY GLY A A 272 272 . 0.1444 0.1486 0.1474 0.0048  -0.0074 -
0.0044 1 .
2059 O    O    . GLY GLY GLY A A 272 272 . 0.1267 0.1566 0.1353 0.0004  -0.0144
0.0015  1 .
2060 N    N    . ASP ASP ASP A A 273 273 . 0.1324 0.1452 0.1412 0.0067  -0.0140
0.0029  1 .
2061 CA   CA   . ASP ASP ASP A A 273 273 . 0.1495 0.1488 0.1510 0.0040  -0.0049 -
0.0044 1 .
2062 CB   CB   . ASP ASP ASP A A 273 273 . 0.1480 0.1693 0.1815 0.0036  -0.0122 -
0.0116 1 .
2063 CG   CG   . ASP ASP ASP A A 273 273 . 0.2360 0.2191 0.2302 -0.0133 -0.0047
0.0081  1 .
2064 OD1  OD1  . ASP ASP ASP A A 273 273 . 0.2531 0.2864 0.2705 -0.0059 -0.0161 -
0.0106 1 .
2065 OD2  OD2  . ASP ASP ASP A A 273 273 . 0.3010 0.3229 0.3694 0.0297  -0.0365
0.0206  1 .
2066 C    C    . ASP ASP ASP A A 273 273 . 0.1220 0.1453 0.1357 0.0005  -0.0060 -
0.0011 1 .
2067 O    O    . ASP ASP ASP A A 273 273 . 0.1344 0.1306 0.1366 -0.0024 -0.0134 -
0.0151 1 .
2068 N    N    . GLN GLN GLN A A 274 274 . 0.1297 0.1345 0.1249 -0.0004 -0.0092 -
0.0007 1 .
2069 CA   CA   . GLN GLN GLN A A 274 274 . 0.1193 0.1272 0.1298 0.0024  -0.0077
0.0029  1 .
2070 CB   CB   . GLN GLN GLN A A 274 274 . 0.1384 0.1391 0.1394 0.0025  -0.0042 -
0.0027 1 .
2071 CG   CG   . GLN GLN GLN A A 274 274 . 0.1724 0.1904 0.1783 -0.0042 -0.0112 -
0.0162 1 .
2072 CD   CD   . GLN GLN GLN A A 274 274 . 0.1871 0.1979 0.2071 0.0021  -0.0055 -
0.0202 1 .
2073 OE1  OE1  . GLN GLN GLN A A 274 274 . 0.1937 0.1906 0.1992 0.0214  -0.0128 -
0.0432 1 .
2074 NE2  NE2  . GLN GLN GLN A A 274 274 . 0.1854 0.2553 0.2741 0.0019  -0.0098
0.0225  1 .
2075 C    C    . GLN GLN GLN A A 274 274 . 0.1112 0.1130 0.1217 -0.0052 -0.0060
0.0000  1 .
2076 O    O    . GLN GLN GLN A A 274 274 . 0.1114 0.1311 0.1227 -0.0091 -0.0091 -
0.0080 1 .
2077 N    N    . LEU LEU LEU A A 275 275 . 0.0989 0.1170 0.1140 0.0019  -0.0076 -
0.0062 1 .
2078 CA   CA   . LEU LEU LEU A A 275 275 . 0.0849 0.0965 0.0921 -0.0077 -0.0158 -
0.0048 1 .
2079 CB   CB   . LEU LEU LEU A A 275 275 . 0.0986 0.0678 0.0942 -0.0049 -0.0154
0.0077  1 .
2080 CG   CG   . LEU LEU LEU A A 275 275 . 0.0747 0.0750 0.0740 -0.0029 -0.0002
0.0000  1 .
2081 CD1  CD1  . LEU LEU LEU A A 275 275 . 0.0916 0.0442 0.0905 -0.0253 -0.0194
0.0139  1 .
2082 CD2  CD2  . LEU LEU LEU A A 275 275 . 0.0562 0.0837 0.0666 -0.0248 -0.0255 -
0.0073 1 .
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2083 C    C    . LEU LEU LEU A A 275 275 . 0.0817 0.0855 0.0916 0.0028  -0.0123 -
0.0051 1 .
2084 O    O    . LEU LEU LEU A A 275 275 . 0.1199 0.1049 0.1109 0.0065  -0.0148 -
0.0059 1 .
2085 N    N    . GLY GLY GLY A A 276 276 . 0.0630 0.0865 0.0694 -0.0028 0.0019  -
0.0017 1 .
2086 CA   CA   . GLY GLY GLY A A 276 276 . 0.0865 0.0965 0.0877 0.0060  -0.0077 -
0.0116 1 .
2087 C    C    . GLY GLY GLY A A 276 276 . 0.0878 0.0871 0.0908 -0.0039 -0.0034
0.0013  1 .
2088 O    O    . GLY GLY GLY A A 276 276 . 0.0748 0.0984 0.1038 -0.0098 -0.0019 -
0.0237 1 .
2089 N    N    . ALA ALA ALA A A 277 277 . 0.0565 0.0947 0.0805 -0.0109 0.0020  -
0.0071 1 .
2090 CA   CA   . ALA ALA ALA A A 277 277 . 0.0670 0.0771 0.0885 -0.0026 0.0133  -
0.0085 1 .
2091 CB   CB   . ALA ALA ALA A A 277 277 . 0.0841 0.1041 0.1025 -0.0114 -0.0055 -
0.0096 1 .
2092 C    C    . ALA ALA ALA A A 277 277 . 0.0606 0.0760 0.0696 -0.0012 -0.0127 -
0.0112 1 .
2093 O    O    . ALA ALA ALA A A 277 277 . 0.0897 0.1208 0.1189 0.0057  -0.0133 -
0.0067 1 .
2094 N    N    . LEU LEU LEU A A 278 278 . 0.0877 0.0964 0.1078 -0.0083 0.0095
0.0134  1 .
2095 CA   CA   . LEU LEU LEU A A 278 278 . 0.0728 0.1085 0.0817 -0.0018 0.0008  -
0.0005 1 .
2096 CB   CB   . LEU LEU LEU A A 278 278 . 0.1321 0.1436 0.1288 -0.0106 0.0066  -
0.0066 1 .
2097 CG   CG   . LEU LEU LEU A A 278 278 . 0.1699 0.1391 0.1542 -0.0198 0.0123  -
0.0038 1 .
2098 CD1  CD1  . LEU LEU LEU A A 278 278 . 0.1965 0.1588 0.2294 -0.0586 0.0028  -
0.0068 1 .
2099 CD2  CD2  . LEU LEU LEU A A 278 278 . 0.2235 0.2162 0.1761 0.0255  0.0297  -
0.0195 1 .
2100 C    C    . LEU LEU LEU A A 278 278 . 0.0663 0.0754 0.0546 -0.0039 0.0000  -
0.0027 1 .
2101 O    O    . LEU LEU LEU A A 278 278 . 0.0686 0.0664 0.0588 -0.0120 -0.0004 -
0.0135 1 .
2102 N    N    . TYR TYR TYR A A 279 279 . 0.0423 0.0510 0.0397 -0.0028 -0.0031
0.0008  1 .
2103 CA   CA   . TYR TYR TYR A A 279 279 . 0.0452 0.0551 0.0336 -0.0020 -0.0038 -
0.0056 1 .
2104 CB   CB   . TYR TYR TYR A A 279 279 . 0.0474 0.0502 0.0547 -0.0034 0.0119  -
0.0145 1 .
2105 CG   CG   . TYR TYR TYR A A 279 279 . 0.0476 0.0442 0.0363 -0.0074 0.0117
0.0049  1 .
2106 CD1  CD1  . TYR TYR TYR A A 279 279 . 0.0349 0.0338 0.0272 0.0006  -0.0029 -
0.0023 1 .
2107 CE1  CE1  . TYR TYR TYR A A 279 279 . 0.0423 0.0412 0.0510 -0.0162 -0.0066
0.0039  1 .
2108 CZ   CZ   . TYR TYR TYR A A 279 279 . 0.0355 0.0340 0.0522 0.0094  -0.0030 -
0.0029 1 .
2109 OH   OH   . TYR TYR TYR A A 279 279 . 0.0354 0.0476 0.0360 0.0007  -0.0086 -
0.0093 1 .
2110 CE2  CE2  . TYR TYR TYR A A 279 279 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2111 CD2  CD2  . TYR TYR TYR A A 279 279 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2112 C    C    . TYR TYR TYR A A 279 279 . 0.0426 0.0511 0.0531 0.0009  -0.0035 -
0.0127 1 .
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2113 O    O    . TYR TYR TYR A A 279 279 . 0.0499 0.0471 0.0586 -0.0182 -0.0010 -
0.0140 1 .
2114 N    N    . GLN GLN GLN A A 280 280 . 0.0457 0.0626 0.0401 -0.0007 -0.0068 -
0.0056 1 .
2115 CA   CA   . GLN GLN GLN A A 280 280 . 0.0703 0.0782 0.0808 -0.0037 -0.0091 -
0.0109 1 .
2116 CB   CB   . GLN GLN GLN A A 280 280 . 0.0864 0.0813 0.0609 0.0153  -0.0129
0.0025  1 .
2117 CG   CG   . GLN GLN GLN A A 280 280 . 0.1217 0.1016 0.0906 -0.0025 -0.0182
0.0000  1 .
2118 CD   CD   . GLN GLN GLN A A 280 280 . 0.1059 0.1316 0.1483 0.0044  -0.0111 -
0.0025 1 .
2119 OE1  OE1  . GLN GLN GLN A A 280 280 . 0.1695 0.1494 0.1783 0.0123  -0.0341 -
0.0216 1 .
2120 NE2  NE2  . GLN GLN GLN A A 280 280 . 0.1372 0.1426 0.0902 0.0330  0.0016  -
0.0031 1 .
2121 C    C    . GLN GLN GLN A A 280 280 . 0.0713 0.0812 0.0740 -0.0036 -0.0029
0.0035  1 .
2122 O    O    . GLN GLN GLN A A 280 280 . 0.0626 0.0633 0.0699 -0.0137 -0.0130 -
0.0240 1 .
2123 N    N    . ASP ASP ASP A A 281 281 . 0.0678 0.0830 0.0672 -0.0122 -0.0044 -
0.0008 1 .
2124 CA   CA   . ASP ASP ASP A A 281 281 . 0.0996 0.0919 0.0763 0.0072  -0.0069 -
0.0164 1 .
2125 CB   CB   . ASP ASP ASP A A 281 281 . 0.1065 0.0990 0.1330 -0.0066 0.0008  -
0.0082 1 .
2126 CG   CG   . ASP ASP ASP A A 281 281 . 0.1956 0.2047 0.1863 0.0128  -0.0149 -
0.0100 1 .
2127 OD1  OD1  . ASP ASP ASP A A 281 281 . 0.2741 0.2813 0.2406 0.0111  -0.0076
0.0270  1 .
2128 OD2  OD2  . ASP ASP ASP A A 281 281 . 0.2389 0.3847 0.3237 0.0187  0.0244  -
0.0074 1 .
2129 C    C    . ASP ASP ASP A A 281 281 . 0.0769 0.0848 0.0801 0.0049  -0.0055 -
0.0113 1 .
2130 O    O    . ASP ASP ASP A A 281 281 . 0.0833 0.0805 0.0669 0.0016  -0.0132 -
0.0242 1 .
2131 N    N    . PHE PHE PHE A A 282 282 . 0.0716 0.0788 0.0744 -0.0028 -0.0057 -
0.0284 1 .
2132 CA   CA   . PHE PHE PHE A A 282 282 . 0.0652 0.0641 0.0524 0.0038  0.0029  -
0.0060 1 .
2133 CB   CB   . PHE PHE PHE A A 282 282 . 0.0802 0.0880 0.0955 -0.0095 -0.0042 -
0.0104 1 .
2134 CG   CG   . PHE PHE PHE A A 282 282 . 0.1021 0.0998 0.1020 -0.0135 0.0066  -
0.0011 1 .
2135 CD1  CD1  . PHE PHE PHE A A 282 282 . 0.1479 0.1316 0.1330 -0.0009 0.0053  -
0.0101 1 .
2136 CE1  CE1  . PHE PHE PHE A A 282 282 . 0.1850 0.1662 0.1500 -0.0189 -0.0051 -
0.0243 1 .
2137 CZ   CZ   . PHE PHE PHE A A 282 282 . 0.1431 0.1755 0.1342 0.0011  0.0286  -
0.0120 1 .
2138 CE2  CE2  . PHE PHE PHE A A 282 282 . 0.1710 0.1815 0.1477 0.0147  0.0012
0.0099  1 .
2139 CD2  CD2  . PHE PHE PHE A A 282 282 . 0.1113 0.1005 0.1258 0.0195  0.0174  -
0.0059 1 .
2140 C    C    . PHE PHE PHE A A 282 282 . 0.0662 0.0725 0.0693 -0.0024 -0.0116 -
0.0127 1 .
2141 O    O    . PHE PHE PHE A A 282 282 . 0.0585 0.0687 0.0742 -0.0002 0.0047  -
0.0087 1 .
2142 N    N    . VAL VAL VAL A A 283 283 . 0.0481 0.0463 0.0350 -0.0179 0.0017  -
0.0095 1 .
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2143 CA   CA   . VAL VAL VAL A A 283 283 . 0.0549 0.0500 0.0565 -0.0082 0.0029  -
0.0127 1 .
2144 CB   CB   . VAL VAL VAL A A 283 283 . 0.0450 0.0490 0.0443 -0.0009 -0.0031 -
0.0102 1 .
2145 CG1  CG1  . VAL VAL VAL A A 283 283 . 0.0643 0.1229 0.0757 -0.0118 0.0051  -
0.0072 1 .
2146 CG2  CG2  . VAL VAL VAL A A 283 283 . 0.0447 0.0483 0.0602 -0.0090 0.0157  -
0.0277 1 .
2147 C    C    . VAL VAL VAL A A 283 283 . 0.0585 0.0657 0.0701 0.0019  -0.0019 -
0.0193 1 .
2148 O    O    . VAL VAL VAL A A 283 283 . 0.0710 0.0635 0.0586 0.0041  -0.0164 -
0.0220 1 .
2149 N    N    . ARG ARG ARG A A 284 284 . 0.0814 0.0751 0.0866 -0.0022 -0.0041 -
0.0153 1 .
2150 CA   CA   . ARG ARG ARG A A 284 284 . 0.1181 0.1070 0.1190 -0.0033 -0.0110 -
0.0141 1 .
2151 CB   CB   . ARG ARG ARG A A 284 284 . 0.1569 0.1411 0.1573 -0.0014 0.0010  -
0.0095 1 .
2152 CG   CG   . ARG ARG ARG A A 284 284 . 0.1584 0.1410 0.1458 0.0047  0.0071  -
0.0180 1 .
2153 CD   CD   . ARG ARG ARG A A 284 284 . 0.2748 0.1777 0.1985 -0.0174 -0.0266 -
0.0217 1 .
2154 NE   NE   . ARG ARG ARG A A 284 284 . 0.2945 0.3348 0.3240 -0.0140 0.0138
0.0009  1 .
2155 CZ   CZ   . ARG ARG ARG A A 284 284 . 0.3740 0.3482 0.3774 0.0182  0.0193  -
0.0102 1 .
2156 NH1  NH1  . ARG ARG ARG A A 284 284 . 0.4086 0.3936 0.3719 0.0097  0.0235
0.0192  1 .
2157 NH2  NH2  . ARG ARG ARG A A 284 284 . 0.3534 0.3567 0.3979 0.0225  0.0547  -
0.0290 1 .
2158 C    C    . ARG ARG ARG A A 284 284 . 0.0986 0.1054 0.1053 -0.0048 -0.0047 -
0.0072 1 .
2159 O    O    . ARG ARG ARG A A 284 284 . 0.1091 0.0896 0.1065 -0.0051 -0.0126 -
0.0084 1 .
2160 N    N    . ASP ASP ASP A A 285 285 . 0.0910 0.1041 0.0896 -0.0076 -0.0045 -
0.0139 1 .
2161 CA   CA   . ASP ASP ASP A A 285 285 . 0.0958 0.0923 0.0912 -0.0034 -0.0066 -
0.0096 1 .
2162 CB   CB   . ASP ASP ASP A A 285 285 . 0.1060 0.1247 0.1332 -0.0187 -0.0033 -
0.0162 1 .
2163 CG   CG   . ASP ASP ASP A A 285 285 . 0.1749 0.1936 0.1763 -0.0041 -0.0068 -
0.0031 1 .
2164 OD1  OD1  . ASP ASP ASP A A 285 285 . 0.2317 0.2044 0.1798 -0.0273 0.0044  -
0.0215 1 .
2165 OD2  OD2  . ASP ASP ASP A A 285 285 . 0.1668 0.2048 0.2303 -0.0249 0.0074
0.0143  1 .
2166 C    C    . ASP ASP ASP A A 285 285 . 0.0890 0.0806 0.0955 -0.0031 -0.0097 -
0.0068 1 .
2167 O    O    . ASP ASP ASP A A 285 285 . 0.1223 0.1097 0.1359 -0.0264 -0.0252 -
0.0254 1 .
2168 N    N    . TYR TYR TYR A A 286 286 . 0.0829 0.0793 0.0934 0.0004  -0.0028 -
0.0116 1 .
2169 CA   CA   . TYR TYR TYR A A 286 286 . 0.0698 0.0671 0.0699 0.0039  -0.0019 -
0.0178 1 .
2170 CB   CB   . TYR TYR TYR A A 286 286 . 0.0514 0.0685 0.0589 0.0009  0.0073  -
0.0124 1 .
2171 CG   CG   . TYR TYR TYR A A 286 286 . 0.0969 0.0824 0.0760 -0.0036 -0.0038 -
0.0066 1 .
2172 CD1  CD1  . TYR TYR TYR A A 286 286 . 0.1269 0.1294 0.1347 -0.0100 -0.0140
0.0026  1 .
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2173 CE1  CE1  . TYR TYR TYR A A 286 286 . 0.1288 0.1054 0.0934 0.0019  -0.0008
0.0070  1 .
2174 CZ   CZ   . TYR TYR TYR A A 286 286 . 0.1537 0.1339 0.1506 0.0056  -0.0012 -
0.0488 1 .
2175 OH   OH   . TYR TYR TYR A A 286 286 . 0.2401 0.2222 0.1642 -0.0274 0.0351  -
0.0251 1 .
2176 CE2  CE2  . TYR TYR TYR A A 286 286 . 0.1270 0.1757 0.1183 -0.0064 -0.0159 -
0.0073 1 .
2177 CD2  CD2  . TYR TYR TYR A A 286 286 . 0.1307 0.1635 0.1302 -0.0215 -0.0057 -
0.0071 1 .
2178 C    C    . TYR TYR TYR A A 286 286 . 0.0634 0.0542 0.0563 0.0034  -0.0020 -
0.0085 1 .
2179 O    O    . TYR TYR TYR A A 286 286 . 0.0492 0.0402 0.0477 -0.0144 -0.0053
0.0006  1 .
2180 N    N    . PRO PRO PRO A A 287 287 . 0.0557 0.0578 0.0460 -0.0043 -0.0017 -
0.0127 1 .
2181 CA   CA   . PRO PRO PRO A A 287 287 . 0.0446 0.0336 0.0371 -0.0125 -0.0014 -
0.0002 1 .
2182 CB   CB   . PRO PRO PRO A A 287 287 . 0.0680 0.0640 0.0544 -0.0070 -0.0014 -
0.0038 1 .
2183 CG   CG   . PRO PRO PRO A A 287 287 . 0.0706 0.0671 0.0728 0.0000  -0.0055
0.0135  1 .
2184 CD   CD   . PRO PRO PRO A A 287 287 . 0.0487 0.0528 0.0852 0.0016  0.0033  -
0.0019 1 .
2185 C    C    . PRO PRO PRO A A 287 287 . 0.0273 0.0345 0.0271 0.0042  -0.0018 -
0.0040 1 .
2186 O    O    . PRO PRO PRO A A 287 287 . 0.0387 0.0308 0.0342 -0.0036 -0.0051 -
0.0041 1 .
2187 N    N    . VAL VAL VAL A A 288 288 . 0.0477 0.0378 0.0439 -0.0077 0.0006  -
0.0137 1 .
2188 CA   CA   . VAL VAL VAL A A 288 288 . 0.0307 0.0262 0.0279 -0.0022 0.0038  -
0.0015 1 .
2189 CB   CB   . VAL VAL VAL A A 288 288 . 0.0410 0.0322 0.0349 -0.0044 -0.0122
0.0029  1 .
2190 CG1  CG1  . VAL VAL VAL A A 288 288 . 0.0390 0.0319 0.0493 -0.0069 0.0085  -
0.0119 1 .
2191 CG2  CG2  . VAL VAL VAL A A 288 288 . 0.0585 0.0510 0.0613 -0.0261 0.0116
0.0035  1 .
2192 C    C    . VAL VAL VAL A A 288 288 . 0.0275 0.0285 0.0270 0.0011  -0.0013 -
0.0021 1 .
2193 O    O    . VAL VAL VAL A A 288 288 . 0.0661 0.0514 0.0685 0.0131  -0.0050 -
0.0045 1 .
2194 N    N    . VAL VAL VAL A A 289 289 . 0.0324 0.0281 0.0272 -0.0045 0.0036  -
0.0023 1 .
2195 CA   CA   . VAL VAL VAL A A 289 289 . 0.0265 0.0270 0.0257 -0.0014 -0.0007
0.0008  1 .
2196 CB   CB   . VAL VAL VAL A A 289 289 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2197 CG1  CG1  . VAL VAL VAL A A 289 289 . 0.0409 0.0440 0.0552 -0.0038 0.0138  -
0.0210 1 .
2198 CG2  CG2  . VAL VAL VAL A A 289 289 . 0.0430 0.0703 0.0406 -0.0225 0.0098  -
0.0092 1 .
2199 C    C    . VAL VAL VAL A A 289 289 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2200 O    O    . VAL VAL VAL A A 289 289 . 0.0724 0.0277 0.0400 -0.0001 0.0000  -
0.0060 1 .
2201 N    N    . SER SER SER A A 290 290 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2202 CA   CA   . SER SER SER A A 290 290 . 0.0295 0.0284 0.0437 -0.0035 -0.0061
0.0055  1 .
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2203 CB   CB   . SER SER SER A A 290 290 . 0.0273 0.0296 0.0355 0.0029  -0.0045 -
0.0066 1 .
2204 OG   OG   . SER SER SER A A 290 290 . 0.0324 0.0283 0.0328 -0.0045 0.0005
0.0005  1 .
2205 C    C    . SER SER SER A A 290 290 . 0.0254 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2206 O    O    . SER SER SER A A 290 290 . 0.0292 0.0314 0.0326 -0.0048 0.0053  -
0.0066 1 .
2207 N    N    . ILE ILE ILE A A 291 291 . 0.0258 0.0256 0.0267 -0.0004 0.0008  -
0.0006 1 .
2208 CA   CA   . ILE ILE ILE A A 291 291 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2209 CB   CB   . ILE ILE ILE A A 291 291 . 0.0304 0.0262 0.0301 -0.0021 0.0049  -
0.0021 1 .
2210 CG1  CG1  . ILE ILE ILE A A 291 291 . 0.0371 0.0411 0.0651 -0.0034 0.0007  -
0.0244 1 .
2211 CD1  CD1  . ILE ILE ILE A A 291 291 . 0.0272 0.0387 0.0570 0.0043  -0.0061 -
0.0204 1 .
2212 CG2  CG2  . ILE ILE ILE A A 291 291 . 0.0354 0.0523 0.0393 0.0049  0.0000  -
0.0078 1 .
2213 C    C    . ILE ILE ILE A A 291 291 . 0.0258 0.0254 0.0292 0.0002  0.0014
0.0006  1 .
2214 O    O    . ILE ILE ILE A A 291 291 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2215 N    N    . GLU GLU GLU A A 292 292 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2216 CA   CA   . GLU GLU GLU A A 292 292 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2217 CB   CB   . GLU GLU GLU A A 292 292 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2218 CG   CG   . GLU GLU GLU A A 292 292 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2219 CD   CD   . GLU GLU GLU A A 292 292 . 0.0429 0.0629 0.0434 0.0016  -0.0149 -
0.0156 1 .
2220 OE1  OE1  . GLU GLU GLU A A 292 292 . 0.0322 0.0295 0.0372 -0.0032 0.0038  -
0.0069 1 .
2221 OE2  OE2  . GLU GLU GLU A A 292 292 . 0.0855 0.0821 0.0752 -0.0047 -0.0185 -
0.0248 1 .
2222 C    C    . GLU GLU GLU A A 292 292 . 0.0288 0.0270 0.0262 -0.0024 0.0018  -
0.0012 1 .
2223 O    O    . GLU GLU GLU A A 292 292 . 0.0256 0.0253 0.0261 -0.0001 -0.0005
0.0002  1 .
2224 N    N    . ASP ASP ASP A A 293 293 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2225 CA   CA   . ASP ASP ASP A A 293 293 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2226 CB   CB   . ASP ASP ASP A A 293 293 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2227 CG   CG   . ASP ASP ASP A A 293 293 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2228 OD1  OD1  . ASP ASP ASP A A 293 293 . 0.0299 0.0375 0.0416 -0.0056 -0.0031 -
0.0048 1 .
2229 OD2  OD2  . ASP ASP ASP A A 293 293 . 0.0291 0.0281 0.0253 -0.0032 -0.0002
0.0002  1 .
2230 C    C    . ASP ASP ASP A A 293 293 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2231 O    O    . ASP ASP ASP A A 293 293 . 0.0259 0.0253 0.0284 0.0000  -0.0014
0.0001  1 .
2232 N    N    . PRO PRO PRO A A 294 294 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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2233 CA   CA   . PRO PRO PRO A A 294 294 . 0.0272 0.0264 0.0264 0.0014  -0.0014 -
0.0011 1 .
2234 CB   CB   . PRO PRO PRO A A 294 294 . 0.0259 0.0430 0.0255 -0.0024 0.0002  -
0.0017 1 .
2235 CG   CG   . PRO PRO PRO A A 294 294 . 0.0299 0.0316 0.0332 0.0013  -0.0059 -
0.0003 1 .
2236 CD   CD   . PRO PRO PRO A A 294 294 . 0.0298 0.0327 0.0255 -0.0058 0.0010  -
0.0012 1 .
2237 C    C    . PRO PRO PRO A A 294 294 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2238 O    O    . PRO PRO PRO A A 294 294 . 0.0569 0.0752 0.0469 -0.0117 0.0005
0.0016  1 .
2239 N    N    . PHE PHE PHE A A 295 295 . 0.0287 0.0303 0.0260 0.0041  -0.0016 -
0.0019 1 .
2240 CA   CA   . PHE PHE PHE A A 295 295 . 0.0319 0.0256 0.0266 0.0007  -0.0027 -
0.0005 1 .
2241 CB   CB   . PHE PHE PHE A A 295 295 . 0.0307 0.0400 0.0316 -0.0088 -0.0058
0.0095  1 .
2242 CG   CG   . PHE PHE PHE A A 295 295 . 0.0504 0.0508 0.0439 0.0048  0.0137  -
0.0138 1 .
2243 CD1  CD1  . PHE PHE PHE A A 295 295 . 0.0259 0.0539 0.0456 0.0029  -0.0011 -
0.0214 1 .
2244 CE1  CE1  . PHE PHE PHE A A 295 295 . 0.0753 0.0546 0.0822 0.0042  -0.0085 -
0.0074 1 .
2245 CZ   CZ   . PHE PHE PHE A A 295 295 . 0.0682 0.0575 0.0699 -0.0010 -0.0009 -
0.0115 1 .
2246 CE2  CE2  . PHE PHE PHE A A 295 295 . 0.0888 0.0799 0.0723 -0.0103 -0.0110 -
0.0003 1 .
2247 CD2  CD2  . PHE PHE PHE A A 295 295 . 0.0379 0.0511 0.0453 -0.0063 0.0058  -
0.0061 1 .
2248 C    C    . PHE PHE PHE A A 295 295 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2249 O    O    . PHE PHE PHE A A 295 295 . 0.0303 0.0267 0.0307 0.0022  -0.0035 -
0.0004 1 .
2250 N    N    . ASP ASP ASP A A 296 296 . 0.0275 0.0262 0.0295 -0.0014 -0.0030
0.0019  1 .
2251 CA   CA   . ASP ASP ASP A A 296 296 . 0.0406 0.0318 0.0339 0.0093  -0.0007 -
0.0030 1 .
2252 CB   CB   . ASP ASP ASP A A 296 296 . 0.0315 0.0632 0.0544 -0.0016 0.0032  -
0.0004 1 .
2253 CG   CG   . ASP ASP ASP A A 296 296 . 0.0633 0.0328 0.0501 0.0104  0.0133  -
0.0060 1 .
2254 OD1  OD1  . ASP ASP ASP A A 296 296 . 0.0426 0.0499 0.0378 0.0007  -0.0147
0.0003  1 .
2255 OD2  OD2  . ASP ASP ASP A A 296 296 . 0.0887 0.0922 0.1078 -0.0144 0.0097  -
0.0005 1 .
2256 C    C    . ASP ASP ASP A A 296 296 . 0.0373 0.0335 0.0289 0.0004  -0.0028 -
0.0050 1 .
2257 O    O    . ASP ASP ASP A A 296 296 . 0.0327 0.0443 0.0262 0.0045  -0.0018 -
0.0033 1 .
2258 N    N    . GLN GLN GLN A A 297 297 . 0.0416 0.0370 0.0535 -0.0072 -0.0180 -
0.0003 1 .
2259 CA   CA   . GLN GLN GLN A A 297 297 . 0.0399 0.0510 0.0338 -0.0061 -0.0080
0.0008  1 .
2260 CB   CB   . GLN GLN GLN A A 297 297 . 0.0397 0.0713 0.0488 -0.0112 -0.0105 -
0.0160 1 .
2261 CG   CG   . GLN GLN GLN A A 297 297 . 0.0399 0.0480 0.0434 0.0175  -0.0051 -
0.0114 1 .
2262 CD   CD   . GLN GLN GLN A A 297 297 . 0.0350 0.0351 0.0448 -0.0035 0.0016  -
0.0053 1 .
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2263 OE1  OE1  . GLN GLN GLN A A 297 297 . 0.0463 0.0536 0.0654 -0.0012 -0.0061 -
0.0049 1 .
2264 NE2  NE2  . GLN GLN GLN A A 297 297 . 0.0546 0.0465 0.0694 -0.0162 0.0260
0.0015  1 .
2265 C    C    . GLN GLN GLN A A 297 297 . 0.0598 0.0684 0.0712 -0.0159 -0.0021
0.0041  1 .
2266 O    O    . GLN GLN GLN A A 297 297 . 0.1039 0.1033 0.0880 -0.0204 -0.0206 -
0.0015 1 .
2267 N    N    . ASP ASP ASP A A 298 298 . 0.0876 0.0819 0.0987 0.0182  -0.0217 -
0.0011 1 .
2268 CA   CA   . ASP ASP ASP A A 298 298 . 0.1166 0.1133 0.1134 0.0010  -0.0062
0.0120  1 .
2269 CB   CB   . ASP ASP ASP A A 298 298 . 0.1532 0.1194 0.1417 0.0042  -0.0130
0.0000  1 .
2270 CG   CG   . ASP ASP ASP A A 298 298 . 0.1289 0.1308 0.1418 0.0097  -0.0095
0.0002  1 .
2271 OD1  OD1  . ASP ASP ASP A A 298 298 . 0.1494 0.1412 0.1953 0.0113  -0.0208
0.0387  1 .
2272 OD2  OD2  . ASP ASP ASP A A 298 298 . 0.2186 0.2107 0.1883 -0.0134 -0.0363
0.0224  1 .
2273 C    C    . ASP ASP ASP A A 298 298 . 0.1193 0.1019 0.1079 0.0065  -0.0100
0.0047  1 .
2274 O    O    . ASP ASP ASP A A 298 298 . 0.1225 0.1329 0.1076 0.0130  -0.0290
0.0210  1 .
2275 N    N    . ASP ASP ASP A A 299 299 . 0.0988 0.0962 0.1005 0.0079  -0.0077 -
0.0073 1 .
2276 CA   CA   . ASP ASP ASP A A 299 299 . 0.1006 0.1049 0.1065 -0.0017 0.0031  -
0.0008 1 .
2277 CB   CB   . ASP ASP ASP A A 299 299 . 0.1002 0.1032 0.1367 0.0060  -0.0029
0.0024  1 .
2278 CG   CG   . ASP ASP ASP A A 299 299 . 0.1212 0.1269 0.1259 0.0009  -0.0087
0.0123  1 .
2279 OD1  OD1  . ASP ASP ASP A A 299 299 . 0.1276 0.1661 0.1092 0.0204  -0.0191
0.0306  1 .
2280 OD2  OD2  . ASP ASP ASP A A 299 299 . 0.0996 0.1052 0.1168 -0.0031 -0.0196
0.0035  1 .
2281 C    C    . ASP ASP ASP A A 299 299 . 0.0888 0.0994 0.1051 -0.0008 -0.0031 -
0.0078 1 .
2282 O    O    . ASP ASP ASP A A 299 299 . 0.0742 0.0688 0.0918 0.0003  -0.0032 -
0.0143 1 .
2283 N    N    . TRP TRP TRP A A 300 300 . 0.0942 0.0826 0.1019 0.0096  -0.0023 -
0.0111 1 .
2284 CA   CA   . TRP TRP TRP A A 300 300 . 0.0989 0.0864 0.0944 0.0050  -0.0046 -
0.0050 1 .
2285 CB   CB   . TRP TRP TRP A A 300 300 . 0.0817 0.1051 0.1025 0.0167  0.0014  -
0.0060 1 .
2286 CG   CG   . TRP TRP TRP A A 300 300 . 0.0909 0.0482 0.0705 -0.0038 0.0081
0.0074  1 .
2287 CD1  CD1  . TRP TRP TRP A A 300 300 . 0.1311 0.1335 0.1484 0.0019  -0.0137 -
0.0051 1 .
2288 NE1  NE1  . TRP TRP TRP A A 300 300 . 0.1832 0.1274 0.1546 0.0203  0.0019  -
0.0004 1 .
2289 CE2  CE2  . TRP TRP TRP A A 300 300 . 0.1133 0.1257 0.1222 -0.0083 0.0017
0.0170  1 .
2290 CD2  CD2  . TRP TRP TRP A A 300 300 . 0.0683 0.0485 0.0561 -0.0011 0.0098  -
0.0190 1 .
2291 CE3  CE3  . TRP TRP TRP A A 300 300 . 0.1057 0.0988 0.1404 0.0241  -0.0063 -
0.0069 1 .
2292 CZ3  CZ3  . TRP TRP TRP A A 300 300 . 0.0876 0.1075 0.1247 0.0012  0.0137  -
0.0156 1 .
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2293 CH2  CH2  . TRP TRP TRP A A 300 300 . 0.0945 0.1149 0.1370 0.0090  0.0183  -
0.0032 1 .
2294 CZ2  CZ2  . TRP TRP TRP A A 300 300 . 0.1331 0.1014 0.0925 0.0259  0.0009
0.0123  1 .
2295 C    C    . TRP TRP TRP A A 300 300 . 0.0976 0.1099 0.0991 0.0075  -0.0130 -
0.0065 1 .
2296 O    O    . TRP TRP TRP A A 300 300 . 0.0917 0.1000 0.0929 0.0210  -0.0185
0.0094  1 .
2297 N    N    . ALA ALA ALA A A 301 301 . 0.0916 0.1215 0.1122 0.0067  -0.0062
0.0010  1 .
2298 CA   CA   . ALA ALA ALA A A 301 301 . 0.1027 0.0984 0.1201 0.0090  -0.0086 -
0.0117 1 .
2299 CB   CB   . ALA ALA ALA A A 301 301 . 0.0917 0.1295 0.1285 0.0124  -0.0028 -
0.0058 1 .
2300 C    C    . ALA ALA ALA A A 301 301 . 0.0915 0.0999 0.1018 0.0013  -0.0040
0.0008  1 .
2301 O    O    . ALA ALA ALA A A 301 301 . 0.1044 0.1027 0.1128 0.0097  -0.0115 -
0.0047 1 .
2302 N    N    . ALA ALA ALA A A 302 302 . 0.0816 0.1019 0.1037 0.0025  -0.0124
0.0047  1 .
2303 CA   CA   . ALA ALA ALA A A 302 302 . 0.0742 0.0893 0.0880 -0.0104 -0.0014 -
0.0006 1 .
2304 CB   CB   . ALA ALA ALA A A 302 302 . 0.1071 0.1296 0.1256 -0.0062 -0.0098 -
0.0060 1 .
2305 C    C    . ALA ALA ALA A A 302 302 . 0.0790 0.0689 0.0838 -0.0032 -0.0123 -
0.0006 1 .
2306 O    O    . ALA ALA ALA A A 302 302 . 0.0577 0.0793 0.0644 0.0242  -0.0034 -
0.0161 1 .
2307 N    N    . TRP TRP TRP A A 303 303 . 0.0542 0.0755 0.0556 0.0007  -0.0076 -
0.0034 1 .
2308 CA   CA   . TRP TRP TRP A A 303 303 . 0.0447 0.0403 0.0425 -0.0007 -0.0089
0.0018  1 .
2309 CB   CB   . TRP TRP TRP A A 303 303 . 0.0415 0.0569 0.0368 -0.0005 -0.0136
0.0021  1 .
2310 CG   CG   . TRP TRP TRP A A 303 303 . 0.0422 0.0296 0.0264 0.0026  -0.0007 -
0.0021 1 .
2311 CD1  CD1  . TRP TRP TRP A A 303 303 . 0.0285 0.0377 0.0290 -0.0010 0.0033
0.0006  1 .
2312 NE1  NE1  . TRP TRP TRP A A 303 303 . 0.0261 0.0365 0.0280 0.0030  0.0014
0.0054  1 .
2313 CE2  CE2  . TRP TRP TRP A A 303 303 . 0.0407 0.0298 0.0322 0.0078  -0.0056 -
0.0012 1 .
2314 CD2  CD2  . TRP TRP TRP A A 303 303 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2315 CE3  CE3  . TRP TRP TRP A A 303 303 . 0.0544 0.0547 0.0742 0.0238  -0.0246 -
0.0117 1 .
2316 CZ3  CZ3  . TRP TRP TRP A A 303 303 . 0.0543 0.0479 0.0420 0.0041  -0.0143
0.0125  1 .
2317 CH2  CH2  . TRP TRP TRP A A 303 303 . 0.0361 0.0419 0.0449 0.0128  -0.0083 -
0.0142 1 .
2318 CZ2  CZ2  . TRP TRP TRP A A 303 303 . 0.0266 0.0342 0.0319 0.0034  -0.0029 -
0.0076 1 .
2319 C    C    . TRP TRP TRP A A 303 303 . 0.0637 0.0643 0.0625 0.0044  -0.0067 -
0.0050 1 .
2320 O    O    . TRP TRP TRP A A 303 303 . 0.0750 0.0573 0.0611 0.0112  -0.0153 -
0.0047 1 .
2321 N    N    . SER SER SER A A 304 304 . 0.0650 0.0709 0.0722 0.0029  -0.0082
0.0081  1 .
2322 CA   CA   . SER SER SER A A 304 304 . 0.0965 0.0911 0.0960 -0.0057 -0.0081 -
0.0036 1 .
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2323 CB   CB   . SER SER SER A A 304 304 . 0.1033 0.1053 0.1025 0.0011  -0.0067
0.0041  1 .
2324 OG   OG   . SER SER SER A A 304 304 . 0.1543 0.1417 0.1289 -0.0167 -0.0134
0.0011  1 .
2325 C    C    . SER SER SER A A 304 304 . 0.0951 0.1088 0.1182 -0.0039 -0.0073 -
0.0039 1 .
2326 O    O    . SER SER SER A A 304 304 . 0.1025 0.1084 0.1004 -0.0148 -0.0132 -
0.0153 1 .
2327 N    N    . LYS LYS LYS A A 305 305 . 0.1161 0.1199 0.0969 -0.0036 0.0037
0.0031  1 .
2328 CA   CA   . LYS LYS LYS A A 305 305 . 0.1274 0.1312 0.1301 -0.0019 -0.0015 -
0.0058 1 .
2329 CB   CB   . LYS LYS LYS A A 305 305 . 0.1325 0.1700 0.1332 -0.0110 0.0043  -
0.0099 1 .
2330 CG   CG   . LYS LYS LYS A A 305 305 . 0.2159 0.1962 0.1848 -0.0019 -0.0034 -
0.0040 1 .
2331 CD   CD   . LYS LYS LYS A A 305 305 . 0.2427 0.3245 0.2845 -0.0257 0.0127  -
0.0025 1 .
2332 CE   CE   . LYS LYS LYS A A 305 305 . 0.3421 0.3679 0.3350 -0.0321 -0.0005 -
0.0159 1 .
2333 NZ   NZ   . LYS LYS LYS A A 305 305 . 0.3947 0.4126 0.3813 0.0058  -0.0200 -
0.0044 1 .
2334 C    C    . LYS LYS LYS A A 305 305 . 0.1233 0.1298 0.1141 0.0064  -0.0085 -
0.0002 1 .
2335 O    O    . LYS LYS LYS A A 305 305 . 0.1509 0.1454 0.1323 0.0116  -0.0283 -
0.0177 1 .
2336 N    N    . PHE PHE PHE A A 306 306 . 0.1179 0.1019 0.0885 -0.0039 0.0053  -
0.0074 1 .
2337 CA   CA   . PHE PHE PHE A A 306 306 . 0.0805 0.0970 0.0818 0.0044  -0.0132
0.0013  1 .
2338 CB   CB   . PHE PHE PHE A A 306 306 . 0.0874 0.0845 0.0571 -0.0072 0.0047
0.0041  1 .
2339 CG   CG   . PHE PHE PHE A A 306 306 . 0.1205 0.0881 0.1025 0.0080  -0.0202 -
0.0149 1 .
2340 CD1  CD1  . PHE PHE PHE A A 306 306 . 0.1352 0.1173 0.1431 -0.0192 -0.0168
0.0223  1 .
2341 CE1  CE1  . PHE PHE PHE A A 306 306 . 0.1217 0.1020 0.1037 0.0110  -0.0205
0.0132  1 .
2342 CZ   CZ   . PHE PHE PHE A A 306 306 . 0.0681 0.1006 0.1227 -0.0142 0.0145  -
0.0035 1 .
2343 CE2  CE2  . PHE PHE PHE A A 306 306 . 0.0835 0.0604 0.0402 -0.0028 -0.0060
0.0084  1 .
2344 CD2  CD2  . PHE PHE PHE A A 306 306 . 0.0635 0.0731 0.0940 0.0090  -0.0294 -
0.0143 1 .
2345 C    C    . PHE PHE PHE A A 306 306 . 0.0874 0.0841 0.0670 0.0004  0.0009  -
0.0040 1 .
2346 O    O    . PHE PHE PHE A A 306 306 . 0.0719 0.0638 0.0757 0.0024  -0.0135
0.0027  1 .
2347 N    N    . THR THR THR A A 307 307 . 0.0682 0.0790 0.0681 0.0041  -0.0045 -
0.0056 1 .
2348 CA   CA   . THR THR THR A A 307 307 . 0.0730 0.0722 0.0624 -0.0011 -0.0071 -
0.0053 1 .
2349 CB   CB   . THR THR THR A A 307 307 . 0.0657 0.0562 0.0455 -0.0004 0.0037  -
0.0172 1 .
2350 OG1  OG1  . THR THR THR A A 307 307 . 0.0676 0.0563 0.0455 0.0149  -0.0146
0.0145  1 .
2351 CG2  CG2  . THR THR THR A A 307 307 . 0.0923 0.1153 0.1073 -0.0284 -0.0030 -
0.0225 1 .
2352 C    C    . THR THR THR A A 307 307 . 0.0577 0.0601 0.0492 0.0128  0.0059  -
0.0073 1 .
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2353 O    O    . THR THR THR A A 307 307 . 0.0742 0.0838 0.0706 0.0022  -0.0083 -
0.0031 1 .
2354 N    N    . ALA ALA ALA A A 308 308 . 0.0871 0.0887 0.0692 0.0061  -0.0054
0.0007  1 .
2355 CA   CA   . ALA ALA ALA A A 308 308 . 0.1045 0.1022 0.0960 0.0051  -0.0022
0.0010  1 .
2356 CB   CB   . ALA ALA ALA A A 308 308 . 0.0631 0.0640 0.0750 0.0054  -0.0057
0.0056  1 .
2357 C    C    . ALA ALA ALA A A 308 308 . 0.1299 0.1207 0.1210 -0.0039 0.0024  -
0.0067 1 .
2358 O    O    . ALA ALA ALA A A 308 308 . 0.1764 0.1320 0.1216 -0.0139 0.0060
0.0046  1 .
2359 N    N    . ASN ASN ASN A A 309 309 . 0.1539 0.1174 0.1293 -0.0030 0.0143  -
0.0122 1 .
2360 CA   CA   . ASN ASN ASN A A 309 309 . 0.1490 0.1563 0.1492 -0.0031 -0.0034 -
0.0130 1 .
2361 CB   CB   . ASN ASN ASN A A 309 309 . 0.1798 0.1863 0.1831 -0.0050 0.0014  -
0.0098 1 .
2362 CG   CG   . ASN ASN ASN A A 309 309 . 0.2596 0.2642 0.2704 0.0217  -0.0168 -
0.0058 1 .
2363 OD1  OD1  . ASN ASN ASN A A 309 309 . 0.3335 0.3490 0.3677 0.0361  -0.0011 -
0.0330 1 .
2364 ND2  ND2  . ASN ASN ASN A A 309 309 . 0.2905 0.3425 0.2693 0.0178  -0.0146 -
0.0065 1 .
2365 C    C    . ASN ASN ASN A A 309 309 . 0.1332 0.1147 0.1361 -0.0049 0.0015  -
0.0102 1 .
2366 O    O    . ASN ASN ASN A A 309 309 . 0.1639 0.1681 0.1650 -0.0302 -0.0076 -
0.0091 1 .
2367 N    N    . VAL VAL VAL A A 310 310 . 0.0982 0.0921 0.0822 -0.0049 -0.0060 -
0.0072 1 .
2368 CA   CA   . VAL VAL VAL A A 310 310 . 0.0959 0.0898 0.0834 0.0024  -0.0056 -
0.0065 1 .
2369 CB   CB   . VAL VAL VAL A A 310 310 . 0.1293 0.1162 0.1093 0.0057  -0.0081
0.0008  1 .
2370 CG1  CG1  . VAL VAL VAL A A 310 310 . 0.1600 0.1701 0.1453 -0.0048 0.0121
0.0072  1 .
2371 CG2  CG2  . VAL VAL VAL A A 310 310 . 0.1492 0.1209 0.1421 -0.0047 -0.0288
0.0012  1 .
2372 C    C    . VAL VAL VAL A A 310 310 . 0.1008 0.0830 0.0814 -0.0071 -0.0044
0.0000  1 .
2373 O    O    . VAL VAL VAL A A 310 310 . 0.0986 0.1009 0.0938 -0.0164 -0.0095
0.0086  1 .
2374 N    N    . GLY GLY GLY A A 311 311 . 0.0674 0.0663 0.0391 -0.0045 -0.0101 -
0.0084 1 .
2375 CA   CA   . GLY GLY GLY A A 311 311 . 0.0696 0.0530 0.0523 -0.0123 -0.0141 -
0.0193 1 .
2376 C    C    . GLY GLY GLY A A 311 311 . 0.0558 0.0664 0.0652 0.0049  0.0005
0.0025  1 .
2377 O    O    . GLY GLY GLY A A 311 311 . 0.1088 0.1126 0.0950 -0.0006 -0.0108 -
0.0164 1 .
2378 N    N    . ILE ILE ILE A A 312 312 . 0.0585 0.0479 0.0445 -0.0018 -0.0107 -
0.0028 1 .
2379 CA   CA   . ILE ILE ILE A A 312 312 . 0.0538 0.0465 0.0469 -0.0003 -0.0126 -
0.0004 1 .
2380 CB   CB   . ILE ILE ILE A A 312 312 . 0.0540 0.0483 0.0657 -0.0038 0.0005  -
0.0082 1 .
2381 CG1  CG1  . ILE ILE ILE A A 312 312 . 0.0621 0.0556 0.0641 0.0064  0.0058  -
0.0281 1 .
2382 CD1  CD1  . ILE ILE ILE A A 312 312 . 0.1486 0.0897 0.1022 0.0014  0.0057  -
0.0319 1 .
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2383 CG2  CG2  . ILE ILE ILE A A 312 312 . 0.1033 0.0920 0.0607 -0.0133 -0.0342 -
0.0303 1 .
2384 C    C    . ILE ILE ILE A A 312 312 . 0.0364 0.0307 0.0498 0.0048  -0.0148 -
0.0024 1 .
2385 O    O    . ILE ILE ILE A A 312 312 . 0.0547 0.0610 0.0418 0.0001  -0.0146
0.0064  1 .
2386 N    N    . GLN GLN GLN A A 313 313 . 0.0344 0.0255 0.0261 -0.0013 -0.0027
0.0004  1 .
2387 CA   CA   . GLN GLN GLN A A 313 313 . 0.0254 0.0253 0.0255 0.0000  -0.0001
0.0001  1 .
2388 CB   CB   . GLN GLN GLN A A 313 313 . 0.0288 0.0256 0.0270 -0.0010 -0.0024
0.0007  1 .
2389 CG   CG   . GLN GLN GLN A A 313 313 . 0.0300 0.0363 0.0390 0.0024  -0.0033 -
0.0122 1 .
2390 CD   CD   . GLN GLN GLN A A 313 313 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2391 OE1  OE1  . GLN GLN GLN A A 313 313 . 0.0449 0.0511 0.0585 -0.0131 0.0021  -
0.0139 1 .
2392 NE2  NE2  . GLN GLN GLN A A 313 313 . 0.0348 0.0257 0.0360 0.0019  -0.0101 -
0.0020 1 .
2393 C    C    . GLN GLN GLN A A 313 313 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2394 O    O    . GLN GLN GLN A A 313 313 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2395 N    N    . ILE ILE ILE A A 314 314 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2396 CA   CA   . ILE ILE ILE A A 314 314 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2397 CB   CB   . ILE ILE ILE A A 314 314 . 0.0303 0.0310 0.0297 -0.0030 0.0041  -
0.0044 1 .
2398 CG1  CG1  . ILE ILE ILE A A 314 314 . 0.0561 0.0649 0.0718 -0.0072 -0.0340 -
0.0102 1 .
2399 CD1  CD1  . ILE ILE ILE A A 314 314 . 0.2108 0.2106 0.1828 0.0161  0.0107
0.0125  1 .
2400 CG2  CG2  . ILE ILE ILE A A 314 314 . 0.0307 0.0284 0.0362 0.0030  -0.0076 -
0.0045 1 .
2401 C    C    . ILE ILE ILE A A 314 314 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2402 O    O    . ILE ILE ILE A A 314 314 . 0.0258 0.0346 0.0287 -0.0012 0.0005  -
0.0055 1 .
2403 N    N    . VAL VAL VAL A A 315 315 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2404 CA   CA   . VAL VAL VAL A A 315 315 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2405 CB   CB   . VAL VAL VAL A A 315 315 . 0.0265 0.0257 0.0267 0.0007  -0.0013 -
0.0008 1 .
2406 CG1  CG1  . VAL VAL VAL A A 315 315 . 0.0286 0.0255 0.0324 -0.0008 -0.0048
0.0012  1 .
2407 CG2  CG2  . VAL VAL VAL A A 315 315 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2408 C    C    . VAL VAL VAL A A 315 315 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2409 O    O    . VAL VAL VAL A A 315 315 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2410 N    N    . GLY GLY GLY A A 316 316 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2411 CA   CA   . GLY GLY GLY A A 316 316 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2412 C    C    . GLY GLY GLY A A 316 316 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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2413 O    O    . GLY GLY GLY A A 316 316 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2414 N    N    . ASP ASP ASP A A 317 317 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2415 CA   CA   . ASP ASP ASP A A 317 317 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2416 CB   CB   . ASP ASP ASP A A 317 317 . 0.0257 0.0288 0.0275 -0.0012 -0.0009
0.0028  1 .
2417 CG   CG   . ASP ASP ASP A A 317 317 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2418 OD1  OD1  . ASP ASP ASP A A 317 317 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2419 OD2  OD2  . ASP ASP ASP A A 317 317 . 0.0564 0.0488 0.0319 -0.0009 -0.0053
0.0117  1 .
2420 C    C    . ASP ASP ASP A A 317 317 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2421 O    O    . ASP ASP ASP A A 317 317 . 0.0283 0.0312 0.0312 -0.0010 -0.0037
0.0038  1 .
2422 N    N    . ASP ASP ASP A A 318 318 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2423 CA   CA   . ASP ASP ASP A A 318 318 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2424 CB   CB   . ASP ASP ASP A A 318 318 . 0.0301 0.0258 0.0283 -0.0016 0.0038  -
0.0012 1 .
2425 CG   CG   . ASP ASP ASP A A 318 318 . 0.0533 0.0602 0.0466 -0.0067 0.0103  -
0.0266 1 .
2426 OD1  OD1  . ASP ASP ASP A A 318 318 . 0.0480 0.0391 0.0618 -0.0005 0.0081  -
0.0020 1 .
2427 OD2  OD2  . ASP ASP ASP A A 318 318 . 0.0809 0.0411 0.0788 0.0002  -0.0202
0.0037  1 .
2428 C    C    . ASP ASP ASP A A 318 318 . 0.0257 0.0266 0.0290 -0.0002 0.0008
0.0011  1 .
2429 O    O    . ASP ASP ASP A A 318 318 . 0.0278 0.0254 0.0333 0.0004  0.0045
0.0008  1 .
2430 N    N    . LEU LEU LEU A A 319 319 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2431 CA   CA   . LEU LEU LEU A A 319 319 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2432 CB   CB   . LEU LEU LEU A A 319 319 . 0.0260 0.0261 0.0263 0.0007  -0.0008 -
0.0009 1 .
2433 CG   CG   . LEU LEU LEU A A 319 319 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2434 CD1  CD1  . LEU LEU LEU A A 319 319 . 0.0473 0.0299 0.0593 -0.0002 0.0089
0.0117  1 .
2435 CD2  CD2  . LEU LEU LEU A A 319 319 . 0.0390 0.0428 0.0364 -0.0063 -0.0014 -
0.0119 1 .
2436 C    C    . LEU LEU LEU A A 319 319 . 0.0265 0.0254 0.0256 0.0004  -0.0005 -
0.0002 1 .
2437 O    O    . LEU LEU LEU A A 319 319 . 0.0379 0.0281 0.0260 -0.0010 0.0022  -
0.0010 1 .
2438 N    N    . THR THR THR A A 320 320 . 0.0255 0.0324 0.0269 -0.0012 0.0006  -
0.0034 1 .
2439 CA   CA   . THR THR THR A A 320 320 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2440 CB   CB   . THR THR THR A A 320 320 . 0.0254 0.0258 0.0253 -0.0001 0.0000
0.0000  1 .
2441 OG1  OG1  . THR THR THR A A 320 320 . 0.0570 0.0339 0.0551 -0.0158 -0.0041 -
0.0022 1 .
2442 CG2  CG2  . THR THR THR A A 320 320 . 0.0476 0.0729 0.0375 -0.0058 -0.0032 -
0.0077 1 .
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2443 C    C    . THR THR THR A A 320 320 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2444 O    O    . THR THR THR A A 320 320 . 0.0305 0.0259 0.0255 -0.0018 -0.0011
0.0003  1 .
2445 N    N    . VAL VAL VAL A A 321 321 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2446 CA   CA   . VAL VAL VAL A A 321 321 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2447 CB   CB   . VAL VAL VAL A A 321 321 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2448 CG1  CG1  . VAL VAL VAL A A 321 321 . 0.0317 0.0260 0.0339 0.0022  0.0074
0.0025  1 .
2449 CG2  CG2  . VAL VAL VAL A A 321 321 . 0.0284 0.0277 0.0271 0.0026  0.0013
0.0016  1 .
2450 C    C    . VAL VAL VAL A A 321 321 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2451 O    O    . VAL VAL VAL A A 321 321 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2452 N    N    . THR THR THR A A 322 322 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2453 CA   CA   . THR THR THR A A 322 322 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2454 CB   CB   . THR THR THR A A 322 322 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2455 OG1  OG1  . THR THR THR A A 322 322 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2456 CG2  CG2  . THR THR THR A A 322 322 . 0.0261 0.0350 0.0260 0.0027  0.0007
0.0026  1 .
2457 C    C    . THR THR THR A A 322 322 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2458 O    O    . THR THR THR A A 322 322 . 0.0255 0.0254 0.0255 -0.0001 -0.0001
0.0001  1 .
2459 N    N    . ASN ASN ASN A A 323 323 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2460 CA   CA   . ASN ASN ASN A A 323 323 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2461 CB   CB   . ASN ASN ASN A A 323 323 . 0.0301 0.0261 0.0333 -0.0016 0.0024  -
0.0021 1 .
2462 CG   CG   . ASN ASN ASN A A 323 323 . 0.0549 0.0262 0.0443 0.0053  0.0136
0.0020  1 .
2463 OD1  OD1  . ASN ASN ASN A A 323 323 . 0.1664 0.1130 0.1119 0.0252  0.0156
0.0190  1 .
2464 ND2  ND2  . ASN ASN ASN A A 323 323 . 0.0835 0.0748 0.0416 0.0092  -0.0172 -
0.0017 1 .
2465 C    C    . ASN ASN ASN A A 323 323 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2466 O    O    . ASN ASN ASN A A 323 323 . 0.0342 0.0361 0.0270 -0.0079 -0.0038
0.0037  1 .
2467 N    N    . PRO PRO PRO A A 324 324 . 0.0541 0.0537 0.0627 0.0055  -0.0016
0.0017  1 .
2468 CA   CA   . PRO PRO PRO A A 324 324 . 0.0798 0.0742 0.0818 -0.0020 -0.0008 -
0.0092 1 .
2469 CB   CB   . PRO PRO PRO A A 324 324 . 0.0904 0.0761 0.0752 -0.0060 -0.0054 -
0.0053 1 .
2470 CG   CG   . PRO PRO PRO A A 324 324 . 0.0971 0.1137 0.1107 0.0105  0.0105  -
0.0015 1 .
2471 CD   CD   . PRO PRO PRO A A 324 324 . 0.0862 0.0618 0.0755 -0.0067 -0.0053
0.0134  1 .
2472 C    C    . PRO PRO PRO A A 324 324 . 0.1134 0.0874 0.1000 0.0007  -0.0037
0.0074  1 .
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2473 O    O    . PRO PRO PRO A A 324 324 . 0.1295 0.1042 0.1089 0.0035  -0.0193
0.0026  1 .
2474 N    N    . LYS LYS LYS A A 325 325 . 0.1240 0.1245 0.1331 0.0073  -0.0036 -
0.0019 1 .
2475 CA   CA   . LYS LYS LYS A A 325 325 . 0.1417 0.1313 0.1381 0.0040  -0.0055 -
0.0065 1 .
2476 CB   CB   . LYS LYS LYS A A 325 325 . 0.1847 0.1756 0.1747 0.0109  -0.0029 -
0.0165 1 .
2477 CG   CG   . LYS LYS LYS A A 325 325 . 0.2629 0.2337 0.2436 0.0106  -0.0002
0.0032  1 .
2478 CD   CD   . LYS LYS LYS A A 325 325 . 0.3390 0.3731 0.3570 -0.0030 -0.0127 -
0.0030 1 .
2479 CE   CE   . LYS LYS LYS A A 325 325 . 0.3938 0.4077 0.4028 -0.0107 0.0130  -
0.0078 1 .
2480 NZ   NZ   . LYS LYS LYS A A 325 325 . 0.4050 0.4603 0.3996 0.0013  -0.0226 -
0.0110 1 .
2481 C    C    . LYS LYS LYS A A 325 325 . 0.1258 0.1261 0.1275 0.0034  -0.0030
0.0011  1 .
2482 O    O    . LYS LYS LYS A A 325 325 . 0.1462 0.1347 0.1327 0.0037  -0.0159
0.0032  1 .
2483 N    N    . ARG ARG ARG A A 326 326 . 0.1010 0.0898 0.0836 -0.0062 0.0012
0.0091  1 .
2484 CA   CA   . ARG ARG ARG A A 326 326 . 0.0905 0.0862 0.0820 -0.0020 -0.0099
0.0007  1 .
2485 CB   CB   . ARG ARG ARG A A 326 326 . 0.0857 0.0825 0.0777 0.0022  0.0061  -
0.0112 1 .
2486 CG   CG   . ARG ARG ARG A A 326 326 . 0.1878 0.0997 0.1456 0.0062  0.0106  -
0.0356 1 .
2487 CD   CD   . ARG ARG ARG A A 326 326 . 0.2504 0.2341 0.1952 0.0397  0.0457  -
0.0207 1 .
2488 NE   NE   . ARG ARG ARG A A 326 326 . 0.2759 0.3096 0.2233 -0.0041 -0.0121 -
0.0044 1 .
2489 CZ   CZ   . ARG ARG ARG A A 326 326 . 0.2359 0.2161 0.1958 -0.0218 0.0241
0.0283  1 .
2490 NH1  NH1  . ARG ARG ARG A A 326 326 . 0.1669 0.1441 0.1518 0.0389  0.0000  -
0.0153 1 .
2491 NH2  NH2  . ARG ARG ARG A A 326 326 . 0.3017 0.2204 0.2207 0.0264  0.0116
0.0276  1 .
2492 C    C    . ARG ARG ARG A A 326 326 . 0.0455 0.0521 0.0406 -0.0023 -0.0063
0.0048  1 .
2493 O    O    . ARG ARG ARG A A 326 326 . 0.1134 0.0855 0.0923 0.0053  0.0002
0.0099  1 .
2494 N    N    . ILE ILE ILE A A 327 327 . 0.0459 0.0373 0.0354 0.0087  -0.0012
0.0086  1 .
2495 CA   CA   . ILE ILE ILE A A 327 327 . 0.0395 0.0291 0.0262 0.0070  -0.0034 -
0.0015 1 .
2496 CB   CB   . ILE ILE ILE A A 327 327 . 0.0358 0.0336 0.0322 -0.0023 0.0072
0.0022  1 .
2497 CG1  CG1  . ILE ILE ILE A A 327 327 . 0.0259 0.0509 0.0335 0.0038  0.0021
0.0144  1 .
2498 CD1  CD1  . ILE ILE ILE A A 327 327 . 0.0692 0.0995 0.0646 0.0065  -0.0395
0.0060  1 .
2499 CG2  CG2  . ILE ILE ILE A A 327 327 . 0.0286 0.0364 0.0475 -0.0014 -0.0086
0.0037  1 .
2500 C    C    . ILE ILE ILE A A 327 327 . 0.0570 0.0483 0.0333 -0.0053 -0.0079
0.0057  1 .
2501 O    O    . ILE ILE ILE A A 327 327 . 0.0879 0.0520 0.0449 0.0092  -0.0066 -
0.0012 1 .
2502 N    N    . GLU GLU GLU A A 328 328 . 0.1115 0.0953 0.0735 0.0044  -0.0177 -
0.0096 1 .
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2503 CA   CA   . GLU GLU GLU A A 328 328 . 0.1347 0.1189 0.1206 0.0027  -0.0069
0.0107  1 .
2504 CB   CB   . GLU GLU GLU A A 328 328 . 0.1690 0.1461 0.1627 0.0052  -0.0094
0.0179  1 .
2505 CG   CG   . GLU GLU GLU A A 328 328 . 0.2394 0.2489 0.2613 -0.0102 0.0083
0.0351  1 .
2506 CD   CD   . GLU GLU GLU A A 328 328 . 0.3911 0.3783 0.4008 0.0301  0.0228  -
0.0031 1 .
2507 OE1  OE1  . GLU GLU GLU A A 328 328 . 0.4138 0.4311 0.4136 0.0006  0.0199
0.0310  1 .
2508 OE2  OE2  . GLU GLU GLU A A 328 328 . 0.4606 0.4173 0.4682 0.0255  -0.0218
0.0294  1 .
2509 C    C    . GLU GLU GLU A A 328 328 . 0.1143 0.1036 0.1095 -0.0007 -0.0049 -
0.0005 1 .
2510 O    O    . GLU GLU GLU A A 328 328 . 0.0949 0.0920 0.0928 0.0150  -0.0121
0.0034  1 .
2511 N    N    . ARG ARG ARG A A 329 329 . 0.1082 0.1002 0.0878 -0.0070 -0.0134
0.0036  1 .
2512 CA   CA   . ARG ARG ARG A A 329 329 . 0.0991 0.1051 0.0981 0.0032  0.0067
0.0090  1 .
2513 CB   CB   . ARG ARG ARG A A 329 329 . 0.1462 0.1226 0.1123 0.0025  -0.0073 -
0.0136 1 .
2514 CG   CG   . ARG ARG ARG A A 329 329 . 0.1394 0.1576 0.1149 -0.0017 -0.0034
0.0184  1 .
2515 CD   CD   . ARG ARG ARG A A 329 329 . 0.2027 0.2118 0.2008 0.0269  -0.0177
0.0248  1 .
2516 NE   NE   . ARG ARG ARG A A 329 329 . 0.2349 0.1951 0.2250 -0.0082 -0.0117
0.0380  1 .
2517 CZ   CZ   . ARG ARG ARG A A 329 329 . 0.2368 0.2141 0.2349 0.0064  -0.0104
0.0046  1 .
2518 NH1  NH1  . ARG ARG ARG A A 329 329 . 0.2583 0.2279 0.2118 0.0310  0.0377  -
0.0107 1 .
2519 NH2  NH2  . ARG ARG ARG A A 329 329 . 0.2704 0.2215 0.3257 0.0158  0.0149
0.0264  1 .
2520 C    C    . ARG ARG ARG A A 329 329 . 0.0965 0.1021 0.1006 0.0061  -0.0115
0.0097  1 .
2521 O    O    . ARG ARG ARG A A 329 329 . 0.1127 0.0864 0.0883 0.0145  -0.0054
0.0011  1 .
2522 N    N    . ALA ALA ALA A A 330 330 . 0.0719 0.0641 0.0420 0.0135  -0.0053
0.0181  1 .
2523 CA   CA   . ALA ALA ALA A A 330 330 . 0.0447 0.0481 0.0319 0.0024  -0.0010
0.0119  1 .
2524 CB   CB   . ALA ALA ALA A A 330 330 . 0.0497 0.0347 0.0412 0.0083  -0.0133
0.0029  1 .
2525 C    C    . ALA ALA ALA A A 330 330 . 0.0685 0.0547 0.0693 0.0035  -0.0073
0.0093  1 .
2526 O    O    . ALA ALA ALA A A 330 330 . 0.0837 0.0914 0.0598 0.0011  -0.0310
0.0037  1 .
2527 N    N    . VAL VAL VAL A A 331 331 . 0.0904 0.0993 0.1010 -0.0011 0.0087
0.0010  1 .
2528 CA   CA   . VAL VAL VAL A A 331 331 . 0.1048 0.1010 0.0991 -0.0051 -0.0019
0.0001  1 .
2529 CB   CB   . VAL VAL VAL A A 331 331 . 0.0910 0.1141 0.1095 -0.0021 -0.0020
0.0059  1 .
2530 CG1  CG1  . VAL VAL VAL A A 331 331 . 0.1542 0.1264 0.1305 -0.0192 0.0025  -
0.0136 1 .
2531 CG2  CG2  . VAL VAL VAL A A 331 331 . 0.1025 0.0743 0.1037 -0.0091 0.0038
0.0343  1 .
2532 C    C    . VAL VAL VAL A A 331 331 . 0.1325 0.1349 0.1219 -0.0008 -0.0015 -
0.0023 1 .
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2533 O    O    . VAL VAL VAL A A 331 331 . 0.1423 0.1542 0.1051 -0.0117 0.0033  -
0.0096 1 .
2534 N    N    . GLU GLU GLU A A 332 332 . 0.1573 0.1288 0.1220 0.0041  -0.0045
0.0003  1 .
2535 CA   CA   . GLU GLU GLU A A 332 332 . 0.1834 0.1930 0.1780 0.0005  -0.0107 -
0.0026 1 .
2536 CB   CB   . GLU GLU GLU A A 332 332 . 0.2094 0.1885 0.1816 0.0015  -0.0170
0.0112  1 .
2537 CG   CG   . GLU GLU GLU A A 332 332 . 0.2702 0.3044 0.3070 0.0039  0.0076  -
0.0113 1 .
2538 CD   CD   . GLU GLU GLU A A 332 332 . 0.4288 0.4115 0.4081 -0.0057 0.0000
0.0154  1 .
2539 OE1  OE1  . GLU GLU GLU A A 332 332 . 0.5024 0.4637 0.5327 0.0299  0.0076
0.0034  1 .
2540 OE2  OE2  . GLU GLU GLU A A 332 332 . 0.4723 0.4137 0.4472 -0.0310 0.0318  -
0.0113 1 .
2541 C    C    . GLU GLU GLU A A 332 332 . 0.1882 0.1792 0.1744 -0.0079 -0.0078
0.0093  1 .
2542 O    O    . GLU GLU GLU A A 332 332 . 0.2178 0.1828 0.1707 -0.0151 -0.0247
0.0177  1 .
2543 N    N    . GLU GLU GLU A A 333 333 . 0.1449 0.1500 0.1477 0.0093  -0.0078
0.0128  1 .
2544 CA   CA   . GLU GLU GLU A A 333 333 . 0.1493 0.1453 0.1464 0.0045  -0.0094
0.0102  1 .
2545 CB   CB   . GLU GLU GLU A A 333 333 . 0.1374 0.1522 0.1550 0.0096  0.0012
0.0175  1 .
2546 CG   CG   . GLU GLU GLU A A 333 333 . 0.1992 0.1862 0.2076 -0.0069 0.0001  -
0.0022 1 .
2547 CD   CD   . GLU GLU GLU A A 333 333 . 0.2394 0.2554 0.2331 0.0091  0.0045
0.0179  1 .
2548 OE1  OE1  . GLU GLU GLU A A 333 333 . 0.2452 0.2374 0.2249 -0.0001 -0.0026
0.0155  1 .
2549 OE2  OE2  . GLU GLU GLU A A 333 333 . 0.2410 0.2684 0.2486 -0.0080 -0.0584
0.0493  1 .
2550 C    C    . GLU GLU GLU A A 333 333 . 0.1257 0.1301 0.1178 -0.0063 0.0012  -
0.0034 1 .
2551 O    O    . GLU GLU GLU A A 333 333 . 0.1282 0.1477 0.1265 -0.0162 -0.0123 -
0.0058 1 .
2552 N    N    . LYS LYS LYS A A 334 334 . 0.1083 0.0882 0.0844 0.0041  -0.0115
0.0051  1 .
2553 CA   CA   . LYS LYS LYS A A 334 334 . 0.1017 0.0905 0.0806 0.0002  -0.0029 -
0.0069 1 .
2554 CB   CB   . LYS LYS LYS A A 334 334 . 0.1223 0.1243 0.0894 0.0028  -0.0237 -
0.0021 1 .
2555 CG   CG   . LYS LYS LYS A A 334 334 . 0.1347 0.1446 0.1446 -0.0065 0.0118
0.0168  1 .
2556 CD   CD   . LYS LYS LYS A A 334 334 . 0.2019 0.2121 0.1879 -0.0180 -0.0219 -
0.0060 1 .
2557 CE   CE   . LYS LYS LYS A A 334 334 . 0.2308 0.2770 0.2999 0.0124  -0.0174
0.0180  1 .
2558 NZ   NZ   . LYS LYS LYS A A 334 334 . 0.3462 0.3412 0.3161 0.0272  0.0217  -
0.0298 1 .
2559 C    C    . LYS LYS LYS A A 334 334 . 0.0924 0.0811 0.0822 0.0048  -0.0101 -
0.0048 1 .
2560 O    O    . LYS LYS LYS A A 334 334 . 0.1011 0.1189 0.0905 -0.0028 0.0023
0.0018  1 .
2561 N    N    . ALA ALA ALA A A 335 335 . 0.0759 0.0720 0.0717 0.0098  -0.0155 -
0.0090 1 .
2562 CA   CA   . ALA ALA ALA A A 335 335 . 0.0756 0.0703 0.0780 0.0081  -0.0173 -
0.0064 1 .
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2563 CB   CB   . ALA ALA ALA A A 335 335 . 0.0762 0.0653 0.0733 0.0161  -0.0046 -
0.0086 1 .
2564 C    C    . ALA ALA ALA A A 335 335 . 0.0565 0.0652 0.0804 -0.0028 -0.0057
0.0040  1 .
2565 O    O    . ALA ALA ALA A A 335 335 . 0.1033 0.1015 0.0835 0.0082  -0.0244
0.0082  1 .
2566 N    N    . CYS CYS CYS A A 336 336 . 0.0753 0.0721 0.0532 0.0133  -0.0068
0.0005  1 .
2567 CA   CA   . CYS CYS CYS A A 336 336 . 0.0393 0.0557 0.0443 0.0146  -0.0012
0.0002  1 .
2568 CB   CB   . CYS CYS CYS A A 336 336 . 0.0409 0.0469 0.0339 0.0146  -0.0115 -
0.0101 1 .
2569 SG   SG   . CYS CYS CYS A A 336 336 . 0.0788 0.0658 0.0668 0.0042  -0.0020
0.0037  1 .
2570 C    C    . CYS CYS CYS A A 336 336 . 0.0621 0.0437 0.0325 0.0127  0.0090
0.0011  1 .
2571 O    O    . CYS CYS CYS A A 336 336 . 0.0833 0.0658 0.0679 0.0058  0.0035  -
0.0053 1 .
2572 N    N    . ASN ASN ASN A A 337 337 . 0.0546 0.0628 0.0346 0.0140  -0.0045
0.0023  1 .
2573 CA   CA   . ASN ASN ASN A A 337 337 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2574 CB   CB   . ASN ASN ASN A A 337 337 . 0.0275 0.0259 0.0261 -0.0002 -0.0011 -
0.0002 1 .
2575 CG   CG   . ASN ASN ASN A A 337 337 . 0.0709 0.0602 0.0624 0.0038  -0.0203
0.0220  1 .
2576 OD1  OD1  . ASN ASN ASN A A 337 337 . 0.1022 0.0886 0.0950 -0.0279 -0.0112
0.0068  1 .
2577 ND2  ND2  . ASN ASN ASN A A 337 337 . 0.0260 0.0260 0.0255 -0.0007 0.0004  -
0.0003 1 .
2578 C    C    . ASN ASN ASN A A 337 337 . 0.0272 0.0279 0.0257 0.0022  0.0009
0.0010  1 .
2579 O    O    . ASN ASN ASN A A 337 337 . 0.0305 0.0283 0.0286 0.0039  -0.0041 -
0.0031 1 .
2580 N    N    . CYS CYS CYS A A 338 338 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2581 CA   CA   . CYS CYS CYS A A 338 338 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2582 CB   CB   . CYS CYS CYS A A 338 338 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2583 SG   SG   . CYS CYS CYS A A 338 338 . 0.0305 0.0287 0.0279 0.0042  -0.0036 -
0.0029 1 .
2584 C    C    . CYS CYS CYS A A 338 338 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2585 O    O    . CYS CYS CYS A A 338 338 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2586 N    N    . LEU LEU LEU A A 339 339 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2587 CA   CA   . LEU LEU LEU A A 339 339 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2588 CB   CB   . LEU LEU LEU A A 339 339 . 0.0337 0.0295 0.0256 0.0051  -0.0009 -
0.0010 1 .
2589 CG   CG   . LEU LEU LEU A A 339 339 . 0.0280 0.0326 0.0253 -0.0044 0.0001  -
0.0002 1 .
2590 CD1  CD1  . LEU LEU LEU A A 339 339 . 0.0304 0.0331 0.0298 0.0063  0.0047
0.0059  1 .
2591 CD2  CD2  . LEU LEU LEU A A 339 339 . 0.0271 0.0276 0.0294 -0.0020 -0.0026
0.0030  1 .
2592 C    C    . LEU LEU LEU A A 339 339 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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2593 O    O    . LEU LEU LEU A A 339 339 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2594 N    N    . LEU LEU LEU A A 340 340 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2595 CA   CA   . LEU LEU LEU A A 340 340 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2596 CB   CB   . LEU LEU LEU A A 340 340 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2597 CG   CG   . LEU LEU LEU A A 340 340 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2598 CD1  CD1  . LEU LEU LEU A A 340 340 . 0.0493 0.0417 0.0365 0.0172  0.0104
0.0023  1 .
2599 CD2  CD2  . LEU LEU LEU A A 340 340 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2600 C    C    . LEU LEU LEU A A 340 340 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2601 O    O    . LEU LEU LEU A A 340 340 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2602 N    N    . LEU LEU LEU A A 341 341 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2603 CA   CA   . LEU LEU LEU A A 341 341 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2604 CB   CB   . LEU LEU LEU A A 341 341 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2605 CG   CG   . LEU LEU LEU A A 341 341 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2606 CD1  CD1  . LEU LEU LEU A A 341 341 . 0.0701 0.0772 0.1074 -0.0263 -0.0146
0.0190  1 .
2607 CD2  CD2  . LEU LEU LEU A A 341 341 . 0.0257 0.0385 0.0645 -0.0008 -0.0011
0.0226  1 .
2608 C    C    . LEU LEU LEU A A 341 341 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2609 O    O    . LEU LEU LEU A A 341 341 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2610 N    N    . LYS LYS LYS A A 342 342 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2611 CA   CA   . LYS LYS LYS A A 342 342 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2612 CB   CB   . LYS LYS LYS A A 342 342 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2613 CG   CG   . LYS LYS LYS A A 342 342 . 0.0269 0.0262 0.0316 0.0012  -0.0032 -
0.0024 1 .
2614 CD   CD   . LYS LYS LYS A A 342 342 . 0.0311 0.0316 0.0261 -0.0060 -0.0022
0.0023  1 .
2615 CE   CE   . LYS LYS LYS A A 342 342 . 0.0865 0.0749 0.0946 0.0100  -0.0062
0.0039  1 .
2616 NZ   NZ   . LYS LYS LYS A A 342 342 . 0.0413 0.0445 0.0720 0.0004  -0.0231
0.0154  1 .
2617 C    C    . LYS LYS LYS A A 342 342 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2618 O    O    . LYS LYS LYS A A 342 342 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2619 N    N    . VAL VAL VAL A A 343 343 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2620 CA   CA   . VAL VAL VAL A A 343 343 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2621 CB   CB   . VAL VAL VAL A A 343 343 . 0.0284 0.0265 0.0255 -0.0019 0.0008  -
0.0005 1 .
2622 CG1  CG1  . VAL VAL VAL A A 343 343 . 0.0419 0.0269 0.0510 0.0051  0.0198
0.0064  1 .
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2623 CG2  CG2  . VAL VAL VAL A A 343 343 . 0.0422 0.0279 0.0253 0.0065  -0.0007 -
0.0003 1 .
2624 C    C    . VAL VAL VAL A A 343 343 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2625 O    O    . VAL VAL VAL A A 343 343 . 0.0340 0.0264 0.0256 -0.0030 -0.0017
0.0006  1 .
2626 N    N    . ASN ASN ASN A A 344 344 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2627 CA   CA   . ASN ASN ASN A A 344 344 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2628 CB   CB   . ASN ASN ASN A A 344 344 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2629 CG   CG   . ASN ASN ASN A A 344 344 . 0.0467 0.0417 0.0353 0.0101  0.0060  -
0.0069 1 .
2630 OD1  OD1  . ASN ASN ASN A A 344 344 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2631 ND2  ND2  . ASN ASN ASN A A 344 344 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2632 C    C    . ASN ASN ASN A A 344 344 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2633 O    O    . ASN ASN ASN A A 344 344 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2634 N    N    . GLN GLN GLN A A 345 345 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2635 CA   CA   . GLN GLN GLN A A 345 345 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2636 CB   CB   . GLN GLN GLN A A 345 345 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2637 CG   CG   . GLN GLN GLN A A 345 345 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2638 CD   CD   . GLN GLN GLN A A 345 345 . 0.0256 0.0259 0.0259 0.0004  -0.0004 -
0.0005 1 .
2639 OE1  OE1  . GLN GLN GLN A A 345 345 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2640 NE2  NE2  . GLN GLN GLN A A 345 345 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2641 C    C    . GLN GLN GLN A A 345 345 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2642 O    O    . GLN GLN GLN A A 345 345 . 0.0322 0.0259 0.0298 0.0020  0.0056
0.0016  1 .
2643 N    N    . ILE ILE ILE A A 346 346 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2644 CA   CA   . ILE ILE ILE A A 346 346 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2645 CB   CB   . ILE ILE ILE A A 346 346 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2646 CG1  CG1  . ILE ILE ILE A A 346 346 . 0.0353 0.0373 0.0415 -0.0101 0.0087  -
0.0048 1 .
2647 CD1  CD1  . ILE ILE ILE A A 346 346 . 0.0816 0.0559 0.0659 0.0279  -0.0136
0.0181  1 .
2648 CG2  CG2  . ILE ILE ILE A A 346 346 . 0.0455 0.0480 0.0332 0.0214  0.0126
0.0134  1 .
2649 C    C    . ILE ILE ILE A A 346 346 . 0.0283 0.0268 0.0277 0.0021  -0.0026 -
0.0019 1 .
2650 O    O    . ILE ILE ILE A A 346 346 . 0.0373 0.0253 0.0297 0.0003  -0.0072 -
0.0002 1 .
2651 N    N    . GLY GLY GLY A A 347 347 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2652 CA   CA   . GLY GLY GLY A A 347 347 . 0.0263 0.0263 0.0274 0.0010  -0.0014 -
0.0014 1 .
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2653 C    C    . GLY GLY GLY A A 347 347 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2654 O    O    . GLY GLY GLY A A 347 347 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2655 N    N    . SER SER SER A A 348 348 . 0.0305 0.0263 0.0253 0.0023  0.0005
0.0002  1 .
2656 CA   CA   . SER SER SER A A 348 348 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2657 CB   CB   . SER SER SER A A 348 348 . 0.0363 0.0270 0.0261 -0.0040 0.0021  -
0.0005 1 .
2658 OG   OG   . SER SER SER A A 348 348 . 0.0714 0.0679 0.0497 -0.0212 -0.0143 -
0.0162 1 .
2659 C    C    . SER SER SER A A 348 348 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2660 O    O    . SER SER SER A A 348 348 . 0.0347 0.0260 0.0343 -0.0020 0.0024  -
0.0020 1 .
2661 N    N    . VAL VAL VAL A A 349 349 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2662 CA   CA   . VAL VAL VAL A A 349 349 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2663 CB   CB   . VAL VAL VAL A A 349 349 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2664 CG1  CG1  . VAL VAL VAL A A 349 349 . 0.0266 0.0255 0.0290 -0.0005 -0.0022
0.0009  1 .
2665 CG2  CG2  . VAL VAL VAL A A 349 349 . 0.0294 0.0255 0.0282 0.0009  -0.0034 -
0.0008 1 .
2666 C    C    . VAL VAL VAL A A 349 349 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2667 O    O    . VAL VAL VAL A A 349 349 . 0.0349 0.0307 0.0385 0.0018  -0.0102
0.0013  1 .
2668 N    N    . THR THR THR A A 350 350 . 0.0408 0.0303 0.0350 0.0062  -0.0079
0.0005  1 .
2669 CA   CA   . THR THR THR A A 350 350 . 0.0295 0.0254 0.0271 -0.0005 0.0027  -
0.0003 1 .
2670 CB   CB   . THR THR THR A A 350 350 . 0.0301 0.0304 0.0328 -0.0049 -0.0060
0.0062  1 .
2671 OG1  OG1  . THR THR THR A A 350 350 . 0.0499 0.0389 0.0390 -0.0118 0.0014
0.0097  1 .
2672 CG2  CG2  . THR THR THR A A 350 350 . 0.0606 0.0902 0.0588 -0.0333 0.0019
0.0315  1 .
2673 C    C    . THR THR THR A A 350 350 . 0.0281 0.0253 0.0253 0.0002  -0.0003
0.0000  1 .
2674 O    O    . THR THR THR A A 350 350 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2675 N    N    . GLU GLU GLU A A 351 351 . 0.0253 0.0262 0.0285 -0.0001 -0.0002
0.0017  1 .
2676 CA   CA   . GLU GLU GLU A A 351 351 . 0.0382 0.0276 0.0294 -0.0043 -0.0054
0.0030  1 .
2677 CB   CB   . GLU GLU GLU A A 351 351 . 0.0398 0.0255 0.0299 -0.0018 -0.0019 -
0.0001 1 .
2678 CG   CG   . GLU GLU GLU A A 351 351 . 0.0384 0.0260 0.0636 0.0010  -0.0145
0.0026  1 .
2679 CD   CD   . GLU GLU GLU A A 351 351 . 0.0601 0.0444 0.0467 -0.0054 -0.0106 -
0.0058 1 .
2680 OE1  OE1  . GLU GLU GLU A A 351 351 . 0.0593 0.0410 0.0440 -0.0019 -0.0148 -
0.0032 1 .
2681 OE2  OE2  . GLU GLU GLU A A 351 351 . 0.0896 0.0773 0.1065 0.0043  -0.0029
0.0024  1 .
2682 C    C    . GLU GLU GLU A A 351 351 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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2683 O    O    . GLU GLU GLU A A 351 351 . 0.0469 0.0349 0.0438 -0.0034 0.0024
0.0058  1 .
2684 N    N    . ALA ALA ALA A A 352 352 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2685 CA   CA   . ALA ALA ALA A A 352 352 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2686 CB   CB   . ALA ALA ALA A A 352 352 . 0.0268 0.0311 0.0288 0.0002  0.0003  -
0.0043 1 .
2687 C    C    . ALA ALA ALA A A 352 352 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2688 O    O    . ALA ALA ALA A A 352 352 . 0.0341 0.0376 0.0325 -0.0104 0.0080  -
0.0094 1 .
2689 N    N    . ILE ILE ILE A A 353 353 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2690 CA   CA   . ILE ILE ILE A A 353 353 . 0.0284 0.0301 0.0253 0.0038  0.0003
0.0004  1 .
2691 CB   CB   . ILE ILE ILE A A 353 353 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2692 CG1  CG1  . ILE ILE ILE A A 353 353 . 0.0813 0.0395 0.0662 0.0120  0.0110  -
0.0120 1 .
2693 CD1  CD1  . ILE ILE ILE A A 353 353 . 0.1880 0.1620 0.1733 -0.0472 0.0265
0.0350  1 .
2694 CG2  CG2  . ILE ILE ILE A A 353 353 . 0.0493 0.0518 0.0641 0.0211  0.0052
0.0154  1 .
2695 C    C    . ILE ILE ILE A A 353 353 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2696 O    O    . ILE ILE ILE A A 353 353 . 0.0565 0.0318 0.0291 -0.0051 0.0047  -
0.0049 1 .
2697 N    N    . GLN GLN GLN A A 354 354 . 0.0339 0.0254 0.0255 -0.0008 0.0014  -
0.0001 1 .
2698 CA   CA   . GLN GLN GLN A A 354 354 . 0.0583 0.0518 0.0484 0.0008  -0.0094 -
0.0042 1 .
2699 CB   CB   . GLN GLN GLN A A 354 354 . 0.0779 0.0518 0.0660 -0.0035 0.0012
0.0060  1 .
2700 CG   CG   . GLN GLN GLN A A 354 354 . 0.1085 0.1434 0.1676 -0.0111 -0.0179 -
0.0171 1 .
2701 CD   CD   . GLN GLN GLN A A 354 354 . 0.2275 0.1934 0.2532 -0.0049 -0.0107 -
0.0027 1 .
2702 OE1  OE1  . GLN GLN GLN A A 354 354 . 0.3316 0.2471 0.2863 -0.0301 -0.0052
0.0023  1 .
2703 NE2  NE2  . GLN GLN GLN A A 354 354 . 0.2932 0.1875 0.3020 0.0119  0.0401  -
0.0257 1 .
2704 C    C    . GLN GLN GLN A A 354 354 . 0.0533 0.0541 0.0457 -0.0047 0.0045  -
0.0010 1 .
2705 O    O    . GLN GLN GLN A A 354 354 . 0.0786 0.0484 0.0527 0.0134  -0.0103 -
0.0113 1 .
2706 N    N    . ALA ALA ALA A A 355 355 . 0.0591 0.0309 0.0277 -0.0136 -0.0058
0.0026  1 .
2707 CA   CA   . ALA ALA ALA A A 355 355 . 0.0264 0.0394 0.0257 0.0040  0.0006
0.0024  1 .
2708 CB   CB   . ALA ALA ALA A A 355 355 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2709 C    C    . ALA ALA ALA A A 355 355 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2710 O    O    . ALA ALA ALA A A 355 355 . 0.0390 0.0323 0.0308 -0.0022 -0.0053
0.0056  1 .
2711 N    N    . CYS CYS CYS A A 356 356 . 0.0346 0.0258 0.0253 -0.0021 0.0003
0.0000  1 .
2712 CA   CA   . CYS CYS CYS A A 356 356 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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2713 CB   CB   . CYS CYS CYS A A 356 356 . 0.0348 0.0255 0.0253 0.0015  -0.0007 -
0.0001 1 .
2714 SG   SG   . CYS CYS CYS A A 356 356 . 0.0405 0.0321 0.0400 -0.0040 0.0002  -
0.0092 1 .
2715 C    C    . CYS CYS CYS A A 356 356 . 0.0333 0.0275 0.0286 0.0021  -0.0008 -
0.0025 1 .
2716 O    O    . CYS CYS CYS A A 356 356 . 0.0329 0.0385 0.0280 -0.0029 -0.0034 -
0.0024 1 .
2717 N    N    . LYS LYS LYS A A 357 357 . 0.0292 0.0285 0.0284 -0.0002 0.0031
0.0012  1 .
2718 CA   CA   . LYS LYS LYS A A 357 357 . 0.0567 0.0540 0.0348 -0.0078 0.0039  -
0.0025 1 .
2719 CB   CB   . LYS LYS LYS A A 357 357 . 0.0627 0.0444 0.0359 -0.0195 0.0094  -
0.0134 1 .
2720 CG   CG   . LYS LYS LYS A A 357 357 . 0.1361 0.1364 0.1001 0.0041  0.0105  -
0.0109 1 .
2721 CD   CD   . LYS LYS LYS A A 357 357 . 0.2615 0.2472 0.2491 -0.0193 0.0069
0.0060  1 .
2722 CE   CE   . LYS LYS LYS A A 357 357 . 0.3300 0.3312 0.2620 -0.0174 0.0139
0.0157  1 .
2723 NZ   NZ   . LYS LYS LYS A A 357 357 . 0.3304 0.3992 0.3158 0.0198  -0.0204 -
0.0172 1 .
2724 C    C    . LYS LYS LYS A A 357 357 . 0.0456 0.0492 0.0384 -0.0050 -0.0014
0.0100  1 .
2725 O    O    . LYS LYS LYS A A 357 357 . 0.0699 0.0428 0.0492 0.0007  -0.0013 -
0.0010 1 .
2726 N    N    . LEU LEU LEU A A 358 358 . 0.0332 0.0336 0.0378 0.0023  0.0001
0.0097  1 .
2727 CA   CA   . LEU LEU LEU A A 358 358 . 0.0352 0.0427 0.0267 0.0000  -0.0023
0.0038  1 .
2728 CB   CB   . LEU LEU LEU A A 358 358 . 0.0394 0.0301 0.0365 0.0042  -0.0022
0.0055  1 .
2729 CG   CG   . LEU LEU LEU A A 358 358 . 0.0749 0.0967 0.0650 0.0031  0.0089
0.0131  1 .
2730 CD1  CD1  . LEU LEU LEU A A 358 358 . 0.0820 0.0846 0.0606 0.0215  0.0031
0.0436  1 .
2731 CD2  CD2  . LEU LEU LEU A A 358 358 . 0.1024 0.1348 0.1275 0.0253  -0.0225 -
0.0149 1 .
2732 C    C    . LEU LEU LEU A A 358 358 . 0.0463 0.0355 0.0407 0.0083  0.0008
0.0106  1 .
2733 O    O    . LEU LEU LEU A A 358 358 . 0.0541 0.0487 0.0330 0.0034  -0.0143 -
0.0053 1 .
2734 N    N    . ALA ALA ALA A A 359 359 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2735 CA   CA   . ALA ALA ALA A A 359 359 . 0.0289 0.0329 0.0261 -0.0001 -0.0004
0.0025  1 .
2736 CB   CB   . ALA ALA ALA A A 359 359 . 0.0253 0.0366 0.0284 -0.0008 -0.0004
0.0059  1 .
2737 C    C    . ALA ALA ALA A A 359 359 . 0.0312 0.0375 0.0422 0.0022  -0.0069 -
0.0019 1 .
2738 O    O    . ALA ALA ALA A A 359 359 . 0.0600 0.0557 0.0404 -0.0126 -0.0025
0.0017  1 .
2739 N    N    . GLN GLN GLN A A 360 360 . 0.0415 0.0391 0.0381 -0.0012 -0.0009 -
0.0022 1 .
2740 CA   CA   . GLN GLN GLN A A 360 360 . 0.0499 0.0411 0.0513 -0.0008 -0.0039
0.0024  1 .
2741 CB   CB   . GLN GLN GLN A A 360 360 . 0.0525 0.0480 0.0390 0.0024  0.0038  -
0.0026 1 .
2742 CG   CG   . GLN GLN GLN A A 360 360 . 0.0608 0.0517 0.0445 0.0110  0.0014
0.0214  1 .
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2743 CD   CD   . GLN GLN GLN A A 360 360 . 0.0757 0.0859 0.0701 -0.0332 -0.0047
0.0030  1 .
2744 OE1  OE1  . GLN GLN GLN A A 360 360 . 0.1277 0.1200 0.1637 0.0136  0.0104  -
0.0115 1 .
2745 NE2  NE2  . GLN GLN GLN A A 360 360 . 0.0851 0.0404 0.0757 0.0043  -0.0092
0.0148  1 .
2746 C    C    . GLN GLN GLN A A 360 360 . 0.0660 0.0484 0.0439 -0.0043 -0.0005 -
0.0033 1 .
2747 O    O    . GLN GLN GLN A A 360 360 . 0.0861 0.1049 0.0703 0.0055  0.0031  -
0.0087 1 .
2748 N    N    . GLU GLU GLU A A 361 361 . 0.0583 0.0712 0.0547 -0.0027 -0.0018
0.0055  1 .
2749 CA   CA   . GLU GLU GLU A A 361 361 . 0.1129 0.1089 0.0842 -0.0004 -0.0048 -
0.0026 1 .
2750 CB   CB   . GLU GLU GLU A A 361 361 . 0.1350 0.1098 0.0951 -0.0077 0.0067
0.0165  1 .
2751 CG   CG   . GLU GLU GLU A A 361 361 . 0.2145 0.2315 0.2203 0.0066  0.0032
0.0196  1 .
2752 CD   CD   . GLU GLU GLU A A 361 361 . 0.3609 0.3179 0.3391 -0.0226 -0.0014 -
0.0251 1 .
2753 OE1  OE1  . GLU GLU GLU A A 361 361 . 0.3865 0.3697 0.4209 0.0170  0.0207
0.0068  1 .
2754 OE2  OE2  . GLU GLU GLU A A 361 361 . 0.3395 0.3751 0.3326 -0.0089 0.0122  -
0.0141 1 .
2755 C    C    . GLU GLU GLU A A 361 361 . 0.0958 0.0977 0.0983 -0.0044 0.0029
0.0012  1 .
2756 O    O    . GLU GLU GLU A A 361 361 . 0.1204 0.1325 0.0954 -0.0105 0.0013
0.0000  1 .
2757 N    N    . ASN ASN ASN A A 362 362 . 0.1128 0.0995 0.0848 0.0001  0.0059  -
0.0089 1 .
2758 CA   CA   . ASN ASN ASN A A 362 362 . 0.0954 0.1025 0.0863 -0.0007 0.0028  -
0.0008 1 .
2759 CB   CB   . ASN ASN ASN A A 362 362 . 0.1090 0.0994 0.1041 -0.0090 0.0074  -
0.0002 1 .
2760 CG   CG   . ASN ASN ASN A A 362 362 . 0.1377 0.1172 0.1282 -0.0033 -0.0156
0.0065  1 .
2761 OD1  OD1  . ASN ASN ASN A A 362 362 . 0.1645 0.1357 0.1528 0.0163  -0.0374
0.0156  1 .
2762 ND2  ND2  . ASN ASN ASN A A 362 362 . 0.1431 0.1103 0.1096 0.0041  -0.0300
0.0111  1 .
2763 C    C    . ASN ASN ASN A A 362 362 . 0.0826 0.0881 0.0525 -0.0008 0.0064
0.0028  1 .
2764 O    O    . ASN ASN ASN A A 362 362 . 0.1099 0.1095 0.0711 -0.0131 0.0057
0.0015  1 .
2765 N    N    . GLY GLY GLY A A 363 363 . 0.0833 0.0576 0.0340 -0.0009 0.0124  -
0.0057 1 .
2766 CA   CA   . GLY GLY GLY A A 363 363 . 0.0991 0.0956 0.0721 -0.0095 0.0061  -
0.0035 1 .
2767 C    C    . GLY GLY GLY A A 363 363 . 0.0969 0.0727 0.0804 -0.0033 0.0065
0.0031  1 .
2768 O    O    . GLY GLY GLY A A 363 363 . 0.1147 0.0875 0.0630 -0.0270 0.0229  -
0.0009 1 .
2769 N    N    . TRP TRP TRP A A 364 364 . 0.0550 0.0559 0.0408 -0.0032 -0.0029
0.0054  1 .
2770 CA   CA   . TRP TRP TRP A A 364 364 . 0.0372 0.0428 0.0551 0.0021  -0.0081 -
0.0005 1 .
2771 CB   CB   . TRP TRP TRP A A 364 364 . 0.0325 0.0518 0.0334 0.0032  0.0016
0.0011  1 .
2772 CG   CG   . TRP TRP TRP A A 364 364 . 0.0512 0.0509 0.0474 0.0093  -0.0180
0.0081  1 .
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2773 CD1  CD1  . TRP TRP TRP A A 364 364 . 0.0664 0.0762 0.0472 -0.0034 -0.0159 -
0.0089 1 .
2774 NE1  NE1  . TRP TRP TRP A A 364 364 . 0.0508 0.0463 0.0307 0.0008  -0.0057 -
0.0094 1 .
2775 CE2  CE2  . TRP TRP TRP A A 364 364 . 0.0557 0.0516 0.0504 -0.0082 -0.0011 -
0.0113 1 .
2776 CD2  CD2  . TRP TRP TRP A A 364 364 . 0.0627 0.0496 0.0433 -0.0006 -0.0108 -
0.0032 1 .
2777 CE3  CE3  . TRP TRP TRP A A 364 364 . 0.0799 0.0634 0.0332 0.0189  0.0057
0.0105  1 .
2778 CZ3  CZ3  . TRP TRP TRP A A 364 364 . 0.0486 0.0347 0.0369 0.0047  0.0120  -
0.0033 1 .
2779 CH2  CH2  . TRP TRP TRP A A 364 364 . 0.0448 0.0344 0.0479 -0.0073 -0.0035 -
0.0105 1 .
2780 CZ2  CZ2  . TRP TRP TRP A A 364 364 . 0.1013 0.0996 0.0690 -0.0066 -0.0054
0.0147  1 .
2781 C    C    . TRP TRP TRP A A 364 364 . 0.0284 0.0277 0.0261 -0.0027 -0.0016
0.0014  1 .
2782 O    O    . TRP TRP TRP A A 364 364 . 0.0377 0.0333 0.0259 -0.0025 -0.0020
0.0018  1 .
2783 N    N    . GLY GLY GLY A A 365 365 . 0.0265 0.0263 0.0253 -0.0010 0.0002  -
0.0001 1 .
2784 CA   CA   . GLY GLY GLY A A 365 365 . 0.0253 0.0254 0.0253 0.0000  0.0000
0.0000  1 .
2785 C    C    . GLY GLY GLY A A 365 365 . 0.0255 0.0256 0.0259 0.0002  0.0003
0.0004  1 .
2786 O    O    . GLY GLY GLY A A 365 365 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2787 N    N    . VAL VAL VAL A A 366 366 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2788 CA   CA   . VAL VAL VAL A A 366 366 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2789 CB   CB   . VAL VAL VAL A A 366 366 . 0.0291 0.0269 0.0269 -0.0024 -0.0024
0.0016  1 .
2790 CG1  CG1  . VAL VAL VAL A A 366 366 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2791 CG2  CG2  . VAL VAL VAL A A 366 366 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2792 C    C    . VAL VAL VAL A A 366 366 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2793 O    O    . VAL VAL VAL A A 366 366 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2794 N    N    . MET MET MET A A 367 367 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2795 CA   CA   . MET MET MET A A 367 367 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2796 CB   CB   . MET MET MET A A 367 367 . 0.0253 0.0290 0.0309 0.0002  -0.0003 -
0.0045 1 .
2797 CG   CG   . MET MET MET A A 367 367 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2798 SD   SD   . MET MET MET A A 367 367 . 0.0777 0.0659 0.0513 -0.0167 0.0030
0.0020  1 .
2799 CE   CE   . MET MET MET A A 367 367 . 0.0731 0.0777 0.0860 -0.0325 0.0154  -
0.0365 1 .
2800 C    C    . MET MET MET A A 367 367 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2801 O    O    . MET MET MET A A 367 367 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2802 N    N    . VAL VAL VAL A A 368 368 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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2803 CA   CA   . VAL VAL VAL A A 368 368 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2804 CB   CB   . VAL VAL VAL A A 368 368 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2805 CG1  CG1  . VAL VAL VAL A A 368 368 . 0.0261 0.0397 0.0341 -0.0034 0.0026  -
0.0112 1 .
2806 CG2  CG2  . VAL VAL VAL A A 368 368 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2807 C    C    . VAL VAL VAL A A 368 368 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2808 O    O    . VAL VAL VAL A A 368 368 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2809 N    N    . SER SER SER A A 369 369 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2810 CA   CA   . SER SER SER A A 369 369 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2811 CB   CB   . SER SER SER A A 369 369 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2812 OG   OG   . SER SER SER A A 369 369 . 0.0253 0.0271 0.0267 -0.0001 0.0001  -
0.0016 1 .
2813 C    C    . SER SER SER A A 369 369 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2814 O    O    . SER SER SER A A 369 369 . 0.0253 0.0253 0.0254 0.0000  0.0000
0.0000  1 .
2815 N    N    . HIS HIS HIS A A 370 370 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2816 CA   CA   . HIS HIS HIS A A 370 370 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2817 CB   CB   . HIS HIS HIS A A 370 370 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2818 CG   CG   . HIS HIS HIS A A 370 370 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2819 ND1  ND1  . HIS HIS HIS A A 370 370 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2820 CE1  CE1  . HIS HIS HIS A A 370 370 . 0.0254 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2821 NE2  NE2  . HIS HIS HIS A A 370 370 . 0.0362 0.0253 0.0254 0.0000  0.0012
0.0000  1 .
2822 CD2  CD2  . HIS HIS HIS A A 370 370 . 0.0262 0.0257 0.0277 -0.0006 0.0014  -
0.0010 1 .
2823 C    C    . HIS HIS HIS A A 370 370 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2824 O    O    . HIS HIS HIS A A 370 370 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2825 N    N    . ARG ARG ARG A A 371 371 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2826 CA   CA   . ARG ARG ARG A A 371 371 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2827 CB   CB   . ARG ARG ARG A A 371 371 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2828 CG   CG   . ARG ARG ARG A A 371 371 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2829 CD   CD   . ARG ARG ARG A A 371 371 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2830 NE   NE   . ARG ARG ARG A A 371 371 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2831 CZ   CZ   . ARG ARG ARG A A 371 371 . 0.0269 0.0253 0.0259 0.0000  0.0009
0.0000  1 .
2832 NH1  NH1  . ARG ARG ARG A A 371 371 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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2833 NH2  NH2  . ARG ARG ARG A A 371 371 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2834 C    C    . ARG ARG ARG A A 371 371 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2835 O    O    . ARG ARG ARG A A 371 371 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2836 N    N    . SER SER SER A A 372 372 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2837 CA   CA   . SER SER SER A A 372 372 . 0.0284 0.0283 0.0253 0.0030  -0.0002 -
0.0002 1 .
2838 CB   CB   . SER SER SER A A 372 372 . 0.0302 0.0488 0.0300 -0.0107 -0.0048
0.0105  1 .
2839 OG   OG   . SER SER SER A A 372 372 . 0.2759 0.1900 0.2148 -0.0288 -0.0100 -
0.0336 1 .
2840 C    C    . SER SER SER A A 372 372 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2841 O    O    . SER SER SER A A 372 372 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2842 N    N    . GLY GLY GLY A A 373 373 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2843 CA   CA   . GLY GLY GLY A A 373 373 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2844 C    C    . GLY GLY GLY A A 373 373 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2845 O    O    . GLY GLY GLY A A 373 373 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2846 N    N    . GLU GLU GLU A A 374 374 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2847 CA   CA   . GLU GLU GLU A A 374 374 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2848 CB   CB   . GLU GLU GLU A A 374 374 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2849 CG   CG   . GLU GLU GLU A A 374 374 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2850 CD   CD   . GLU GLU GLU A A 374 374 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2851 OE1  OE1  . GLU GLU GLU A A 374 374 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2852 OE2  OE2  . GLU GLU GLU A A 374 374 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2853 C    C    . GLU GLU GLU A A 374 374 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2854 O    O    . GLU GLU GLU A A 374 374 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2855 N    N    . THR THR THR A A 375 375 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2856 CA   CA   . THR THR THR A A 375 375 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2857 CB   CB   . THR THR THR A A 375 375 . 0.0270 0.0256 0.0272 -0.0006 0.0018  -
0.0007 1 .
2858 OG1  OG1  . THR THR THR A A 375 375 . 0.0256 0.0253 0.0253 0.0000  -0.0001
0.0000  1 .
2859 CG2  CG2  . THR THR THR A A 375 375 . 0.0571 0.0410 0.0626 0.0009  0.0120  -
0.0222 1 .
2860 C    C    . THR THR THR A A 375 375 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2861 O    O    . THR THR THR A A 375 375 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2862 N    N    . GLU GLU GLU A A 376 376 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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2863 CA   CA   . GLU GLU GLU A A 376 376 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2864 CB   CB   . GLU GLU GLU A A 376 376 . 0.0335 0.0304 0.0365 -0.0013 0.0092  -
0.0033 1 .
2865 CG   CG   . GLU GLU GLU A A 376 376 . 0.0315 0.0494 0.0466 -0.0076 -0.0057 -
0.0081 1 .
2866 CD   CD   . GLU GLU GLU A A 376 376 . 0.0441 0.0633 0.0489 -0.0224 -0.0090 -
0.0039 1 .
2867 OE1  OE1  . GLU GLU GLU A A 376 376 . 0.0948 0.1339 0.0918 0.0275  0.0091  -
0.0269 1 .
2868 OE2  OE2  . GLU GLU GLU A A 376 376 . 0.0421 0.0339 0.0294 0.0111  -0.0057 -
0.0054 1 .
2869 C    C    . GLU GLU GLU A A 376 376 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2870 O    O    . GLU GLU GLU A A 376 376 . 0.0423 0.0437 0.0476 -0.0014 0.0092
0.0169  1 .
2871 N    N    . ASP ASP ASP A A 377 377 . 0.0288 0.0257 0.0325 -0.0011 -0.0049
0.0017  1 .
2872 CA   CA   . ASP ASP ASP A A 377 377 . 0.0397 0.0350 0.0276 0.0115  -0.0023 -
0.0028 1 .
2873 CB   CB   . ASP ASP ASP A A 377 377 . 0.0365 0.0258 0.0444 0.0021  0.0050  -
0.0004 1 .
2874 CG   CG   . ASP ASP ASP A A 377 377 . 0.0847 0.0755 0.0738 0.0004  0.0055
0.0060  1 .
2875 OD1  OD1  . ASP ASP ASP A A 377 377 . 0.1817 0.1361 0.1442 -0.0299 0.0078
0.0007  1 .
2876 OD2  OD2  . ASP ASP ASP A A 377 377 . 0.1159 0.1157 0.0830 0.0026  0.0135  -
0.0155 1 .
2877 C    C    . ASP ASP ASP A A 377 377 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2878 O    O    . ASP ASP ASP A A 377 377 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2879 N    N    . THR THR THR A A 378 378 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2880 CA   CA   . THR THR THR A A 378 378 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2881 CB   CB   . THR THR THR A A 378 378 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2882 OG1  OG1  . THR THR THR A A 378 378 . 0.0311 0.0276 0.0260 0.0031  0.0015
0.0003  1 .
2883 CG2  CG2  . THR THR THR A A 378 378 . 0.0628 0.0726 0.0314 -0.0037 0.0060
0.0149  1 .
2884 C    C    . THR THR THR A A 378 378 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2885 O    O    . THR THR THR A A 378 378 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2886 N    N    . PHE PHE PHE A A 379 379 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2887 CA   CA   . PHE PHE PHE A A 379 379 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2888 CB   CB   . PHE PHE PHE A A 379 379 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2889 CG   CG   . PHE PHE PHE A A 379 379 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2890 CD1  CD1  . PHE PHE PHE A A 379 379 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2891 CE1  CE1  . PHE PHE PHE A A 379 379 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2892 CZ   CZ   . PHE PHE PHE A A 379 379 . 0.0332 0.0342 0.0405 0.0084  -0.0109 -
0.0116 1 .
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2893 CE2  CE2  . PHE PHE PHE A A 379 379 . 0.0383 0.0338 0.0353 0.0042  0.0007
0.0086  1 .
2894 CD2  CD2  . PHE PHE PHE A A 379 379 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2895 C    C    . PHE PHE PHE A A 379 379 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2896 O    O    . PHE PHE PHE A A 379 379 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2897 N    N    . ILE ILE ILE A A 380 380 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2898 CA   CA   . ILE ILE ILE A A 380 380 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2899 CB   CB   . ILE ILE ILE A A 380 380 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2900 CG1  CG1  . ILE ILE ILE A A 380 380 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2901 CD1  CD1  . ILE ILE ILE A A 380 380 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2902 CG2  CG2  . ILE ILE ILE A A 380 380 . 0.0257 0.0258 0.0259 0.0004  0.0005
0.0005  1 .
2903 C    C    . ILE ILE ILE A A 380 380 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2904 O    O    . ILE ILE ILE A A 380 380 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2905 N    N    . ALA ALA ALA A A 381 381 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2906 CA   CA   . ALA ALA ALA A A 381 381 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2907 CB   CB   . ALA ALA ALA A A 381 381 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2908 C    C    . ALA ALA ALA A A 381 381 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2909 O    O    . ALA ALA ALA A A 381 381 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2910 N    N    . ASP ASP ASP A A 382 382 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2911 CA   CA   . ASP ASP ASP A A 382 382 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2912 CB   CB   . ASP ASP ASP A A 382 382 . 0.0309 0.0253 0.0267 0.0000  -0.0027
0.0000  1 .
2913 CG   CG   . ASP ASP ASP A A 382 382 . 0.0260 0.0341 0.0314 0.0020  -0.0003
0.0035  1 .
2914 OD1  OD1  . ASP ASP ASP A A 382 382 . 0.0673 0.0622 0.0755 -0.0227 0.0072
0.0109  1 .
2915 OD2  OD2  . ASP ASP ASP A A 382 382 . 0.0676 0.0524 0.0749 -0.0073 0.0090
0.0165  1 .
2916 C    C    . ASP ASP ASP A A 382 382 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2917 O    O    . ASP ASP ASP A A 382 382 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2918 N    N    . LEU LEU LEU A A 383 383 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2919 CA   CA   . LEU LEU LEU A A 383 383 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2920 CB   CB   . LEU LEU LEU A A 383 383 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2921 CG   CG   . LEU LEU LEU A A 383 383 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2922 CD1  CD1  . LEU LEU LEU A A 383 383 . 0.0276 0.0259 0.0260 -0.0012 0.0013  -
0.0007 1 .
```

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2923 CD2  CD2  . LEU LEU LEU A A 383 383 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2924 C    C    . LEU LEU LEU A A 383 383 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2925 O    O    . LEU LEU LEU A A 383 383 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2926 N    N    . VAL VAL VAL A A 384 384 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2927 CA   CA   . VAL VAL VAL A A 384 384 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2928 CB   CB   . VAL VAL VAL A A 384 384 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2929 CG1  CG1  . VAL VAL VAL A A 384 384 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2930 CG2  CG2  . VAL VAL VAL A A 384 384 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2931 C    C    . VAL VAL VAL A A 384 384 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2932 O    O    . VAL VAL VAL A A 384 384 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2933 N    N    . VAL VAL VAL A A 385 385 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2934 CA   CA   . VAL VAL VAL A A 385 385 . 0.0253 0.0280 0.0263 0.0000  0.0000
0.0016  1 .
2935 CB   CB   . VAL VAL VAL A A 385 385 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2936 CG1  CG1  . VAL VAL VAL A A 385 385 . 0.0255 0.0329 0.0270 0.0013  -0.0006 -
0.0036 1 .
2937 CG2  CG2  . VAL VAL VAL A A 385 385 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2938 C    C    . VAL VAL VAL A A 385 385 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2939 O    O    . VAL VAL VAL A A 385 385 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2940 N    N    . GLY GLY GLY A A 386 386 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2941 CA   CA   . GLY GLY GLY A A 386 386 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2942 C    C    . GLY GLY GLY A A 386 386 . 0.0261 0.0253 0.0263 0.0001  0.0009
0.0001  1 .
2943 O    O    . GLY GLY GLY A A 386 386 . 0.0551 0.0602 0.0391 0.0003  0.0087
0.0198  1 .
2944 N    N    . LEU LEU LEU A A 387 387 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2945 CA   CA   . LEU LEU LEU A A 387 387 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2946 CB   CB   . LEU LEU LEU A A 387 387 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2947 CG   CG   . LEU LEU LEU A A 387 387 . 0.0281 0.0256 0.0253 -0.0009 0.0001
0.0000  1 .
2948 CD1  CD1  . LEU LEU LEU A A 387 387 . 0.0549 0.0649 0.0456 0.0275  -0.0004 -
0.0173 1 .
2949 CD2  CD2  . LEU LEU LEU A A 387 387 . 0.0624 0.0336 0.0603 -0.0159 0.0014  -
0.0077 1 .
2950 C    C    . LEU LEU LEU A A 387 387 . 0.0269 0.0259 0.0300 -0.0009 0.0027  -
0.0016 1 .
2951 O    O    . LEU LEU LEU A A 387 387 . 0.0254 0.0253 0.0254 0.0000  -0.0001
0.0000  1 .
2952 N    N    . CYS CYS CYS A A 388 388 . 0.0254 0.0282 0.0290 -0.0005 -0.0005
0.0032  1 .
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2953 CA   CA   . CYS CYS CYS A A 388 388 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2954 CB   CB   . CYS CYS CYS A A 388 388 . 0.0610 0.0673 0.0554 -0.0069 0.0114
0.0009  1 .
2955 SG   SG   . CYS CYS CYS A A 388 388 . 0.1388 0.1506 0.1243 0.0162  0.0129
0.0054  1 .
2956 C    C    . CYS CYS CYS A A 388 388 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2957 O    O    . CYS CYS CYS A A 388 388 . 0.0576 0.0497 0.0438 -0.0102 -0.0068 -
0.0139 1 .
2958 N    N    . THR THR THR A A 389 389 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2959 CA   CA   . THR THR THR A A 389 389 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2960 CB   CB   . THR THR THR A A 389 389 . 0.0319 0.0265 0.0256 0.0028  0.0014
0.0006  1 .
2961 OG1  OG1  . THR THR THR A A 389 389 . 0.0253 0.0276 0.0333 0.0002  0.0003
0.0043  1 .
2962 CG2  CG2  . THR THR THR A A 389 389 . 0.0376 0.0377 0.0377 -0.0117 0.0083  -
0.0107 1 .
2963 C    C    . THR THR THR A A 389 389 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2964 O    O    . THR THR THR A A 389 389 . 0.0500 0.0404 0.0328 -0.0182 -0.0135
0.0095  1 .
2965 N    N    . GLY GLY GLY A A 390 390 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2966 CA   CA   . GLY GLY GLY A A 390 390 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2967 C    C    . GLY GLY GLY A A 390 390 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2968 O    O    . GLY GLY GLY A A 390 390 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2969 N    N    . GLN GLN GLN A A 391 391 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2970 CA   CA   . GLN GLN GLN A A 391 391 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2971 CB   CB   . GLN GLN GLN A A 391 391 . 0.0462 0.0470 0.0435 0.0024  -0.0135
0.0126  1 .
2972 CG   CG   . GLN GLN GLN A A 391 391 . 0.0253 0.0540 0.0518 -0.0004 -0.0004
0.0276  1 .
2973 CD   CD   . GLN GLN GLN A A 391 391 . 0.0295 0.0256 0.0304 -0.0011 0.0046  -
0.0012 1 .
2974 OE1  OE1  . GLN GLN GLN A A 391 391 . 0.0416 0.0541 0.0509 -0.0073 0.0057  -
0.0081 1 .
2975 NE2  NE2  . GLN GLN GLN A A 391 391 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2976 C    C    . GLN GLN GLN A A 391 391 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2977 O    O    . GLN GLN GLN A A 391 391 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2978 N    N    . ILE ILE ILE A A 392 392 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2979 CA   CA   . ILE ILE ILE A A 392 392 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2980 CB   CB   . ILE ILE ILE A A 392 392 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2981 CG1  CG1  . ILE ILE ILE A A 392 392 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2982 CD1  CD1  . ILE ILE ILE A A 392 392 . 0.0267 0.0259 0.0258 0.0009  0.0008
0.0005  1 .
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2983 CG2  CG2  . ILE ILE ILE A A 392 392 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2984 C    C    . ILE ILE ILE A A 392 392 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2985 O    O    . ILE ILE ILE A A 392 392 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2986 N    N    . LYS LYS LYS A A 393 393 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2987 CA   CA   . LYS LYS LYS A A 393 393 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2988 CB   CB   . LYS LYS LYS A A 393 393 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2989 CG   CG   . LYS LYS LYS A A 393 393 . 0.0256 0.0255 0.0260 0.0002  -0.0005 -
0.0003 1 .
2990 CD   CD   . LYS LYS LYS A A 393 393 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2991 CE   CE   . LYS LYS LYS A A 393 393 . 0.0257 0.0256 0.0263 0.0003  -0.0006 -
0.0005 1 .
2992 NZ   NZ   . LYS LYS LYS A A 393 393 . 0.0287 0.0257 0.0284 0.0000  0.0031  -
0.0003 1 .
2993 C    C    . LYS LYS LYS A A 393 393 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2994 O    O    . LYS LYS LYS A A 393 393 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2995 N    N    . THR THR THR A A 394 394 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2996 CA   CA   . THR THR THR A A 394 394 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2997 CB   CB   . THR THR THR A A 394 394 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2998 OG1  OG1  . THR THR THR A A 394 394 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
2999 CG2  CG2  . THR THR THR A A 394 394 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3000 C    C    . THR THR THR A A 394 394 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3001 O    O    . THR THR THR A A 394 394 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3002 N    N    . GLY GLY GLY A A 395 395 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3003 CA   CA   . GLY GLY GLY A A 395 395 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3004 C    C    . GLY GLY GLY A A 395 395 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3005 O    O    . GLY GLY GLY A A 395 395 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3006 N    N    . ALA ALA ALA A A 396 396 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3007 CA   CA   . ALA ALA ALA A A 396 396 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3008 CB   CB   . ALA ALA ALA A A 396 396 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3009 C    C    . ALA ALA ALA A A 396 396 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3010 O    O    . ALA ALA ALA A A 396 396 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3011 N    N    . PRO PRO PRO A A 397 397 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3012 CA   CA   . PRO PRO PRO A A 397 397 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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3013 CB   CB   . PRO PRO PRO A A 397 397 . 0.0318 0.0329 0.0354 -0.0070 0.0081  -
0.0087 1 .
3014 CG   CG   . PRO PRO PRO A A 397 397 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3015 CD   CD   . PRO PRO PRO A A 397 397 . 0.0260 0.0255 0.0255 -0.0004 0.0003  -
0.0002 1 .
3016 C    C    . PRO PRO PRO A A 397 397 . 0.0256 0.0253 0.0256 0.0000  -0.0003
0.0000  1 .
3017 O    O    . PRO PRO PRO A A 397 397 . 0.0418 0.0304 0.0357 -0.0039 -0.0005 -
0.0064 1 .
3018 N    N    . CYS CYS CYS A A 398 398 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3019 CA   CA   . CYS CYS CYS A A 398 398 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3020 CB   CB   . CYS CYS CYS A A 398 398 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3021 SG   SG   . CYS CYS CYS A A 398 398 . 0.0447 0.0387 0.0324 -0.0016 0.0070
0.0071  1 .
3022 C    C    . CYS CYS CYS A A 398 398 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3023 O    O    . CYS CYS CYS A A 398 398 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3024 N    N    . ARG ARG ARG A A 399 399 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3025 CA   CA   . ARG ARG ARG A A 399 399 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3026 CB   CB   . ARG ARG ARG A A 399 399 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3027 CG   CG   . ARG ARG ARG A A 399 399 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3028 CD   CD   . ARG ARG ARG A A 399 399 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3029 NE   NE   . ARG ARG ARG A A 399 399 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3030 CZ   CZ   . ARG ARG ARG A A 399 399 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3031 NH1  NH1  . ARG ARG ARG A A 399 399 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3032 NH2  NH2  . ARG ARG ARG A A 399 399 . 0.0258 0.0254 0.0253 0.0002  -0.0001
0.0000  1 .
3033 C    C    . ARG ARG ARG A A 399 399 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3034 O    O    . ARG ARG ARG A A 399 399 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3035 N    N    . SER SER SER A A 400 400 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3036 CA   CA   . SER SER SER A A 400 400 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3037 CB   CB   . SER SER SER A A 400 400 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3038 OG   OG   . SER SER SER A A 400 400 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3039 C    C    . SER SER SER A A 400 400 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3040 O    O    . SER SER SER A A 400 400 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3041 N    N    . GLU GLU GLU A A 401 401 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3042 CA   CA   . GLU GLU GLU A A 401 401 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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3043 CB   CB   . GLU GLU GLU A A 401 401 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3044 CG   CG   . GLU GLU GLU A A 401 401 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3045 CD   CD   . GLU GLU GLU A A 401 401 . 0.0294 0.0261 0.0255 0.0018  -0.0009 -
0.0004 1 .
3046 OE1  OE1  . GLU GLU GLU A A 401 401 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3047 OE2  OE2  . GLU GLU GLU A A 401 401 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3048 C    C    . GLU GLU GLU A A 401 401 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3049 O    O    . GLU GLU GLU A A 401 401 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3050 N    N    . ARG ARG ARG A A 402 402 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3051 CA   CA   . ARG ARG ARG A A 402 402 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3052 CB   CB   . ARG ARG ARG A A 402 402 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3053 CG   CG   . ARG ARG ARG A A 402 402 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3054 CD   CD   . ARG ARG ARG A A 402 402 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3055 NE   NE   . ARG ARG ARG A A 402 402 . 0.0255 0.0256 0.0255 -0.0002 0.0002  -
0.0002 1 .
3056 CZ   CZ   . ARG ARG ARG A A 402 402 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3057 NH1  NH1  . ARG ARG ARG A A 402 402 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3058 NH2  NH2  . ARG ARG ARG A A 402 402 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3059 C    C    . ARG ARG ARG A A 402 402 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3060 O    O    . ARG ARG ARG A A 402 402 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3061 N    N    . LEU LEU LEU A A 403 403 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3062 CA   CA   . LEU LEU LEU A A 403 403 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3063 CB   CB   . LEU LEU LEU A A 403 403 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3064 CG   CG   . LEU LEU LEU A A 403 403 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3065 CD1  CD1  . LEU LEU LEU A A 403 403 . 0.0265 0.0258 0.0256 -0.0008 -0.0005
0.0003  1 .
3066 CD2  CD2  . LEU LEU LEU A A 403 403 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3067 C    C    . LEU LEU LEU A A 403 403 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3068 O    O    . LEU LEU LEU A A 403 403 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3069 N    N    . ALA ALA ALA A A 404 404 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3070 CA   CA   . ALA ALA ALA A A 404 404 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3071 CB   CB   . ALA ALA ALA A A 404 404 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3072 C    C    . ALA ALA ALA A A 404 404 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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3073 O    O    . ALA ALA ALA A A 404 404 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3074 N    N    . LYS LYS LYS A A 405 405 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3075 CA   CA   . LYS LYS LYS A A 405 405 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3076 CB   CB   . LYS LYS LYS A A 405 405 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3077 CG   CG   . LYS LYS LYS A A 405 405 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3078 CD   CD   . LYS LYS LYS A A 405 405 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3079 CE   CE   . LYS LYS LYS A A 405 405 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3080 NZ   NZ   . LYS LYS LYS A A 405 405 . 0.0287 0.0267 0.0260 -0.0022 0.0015  -
0.0010 1 .
3081 C    C    . LYS LYS LYS A A 405 405 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3082 O    O    . LYS LYS LYS A A 405 405 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3083 N    N    . TYR TYR TYR A A 406 406 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3084 CA   CA   . TYR TYR TYR A A 406 406 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3085 CB   CB   . TYR TYR TYR A A 406 406 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3086 CG   CG   . TYR TYR TYR A A 406 406 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3087 CD1  CD1  . TYR TYR TYR A A 406 406 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3088 CE1  CE1  . TYR TYR TYR A A 406 406 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3089 CZ   CZ   . TYR TYR TYR A A 406 406 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3090 OH   OH   . TYR TYR TYR A A 406 406 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3091 CE2  CE2  . TYR TYR TYR A A 406 406 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3092 CD2  CD2  . TYR TYR TYR A A 406 406 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3093 C    C    . TYR TYR TYR A A 406 406 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3094 O    O    . TYR TYR TYR A A 406 406 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3095 N    N    . ASN ASN ASN A A 407 407 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3096 CA   CA   . ASN ASN ASN A A 407 407 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3097 CB   CB   . ASN ASN ASN A A 407 407 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3098 CG   CG   . ASN ASN ASN A A 407 407 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3099 OD1  OD1  . ASN ASN ASN A A 407 407 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3100 ND2  ND2  . ASN ASN ASN A A 407 407 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3101 C    C    . ASN ASN ASN A A 407 407 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3102 O    O    . ASN ASN ASN A A 407 407 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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3103 N    N    . GLN GLN GLN A A 408 408 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3104 CA   CA   . GLN GLN GLN A A 408 408 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3105 CB   CB   . GLN GLN GLN A A 408 408 . 0.0263 0.0256 0.0278 0.0005  0.0016
0.0008  1 .
3106 CG   CG   . GLN GLN GLN A A 408 408 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3107 CD   CD   . GLN GLN GLN A A 408 408 . 0.0647 0.0302 0.0486 0.0049  -0.0005
0.0098  1 .
3108 OE1  OE1  . GLN GLN GLN A A 408 408 . 0.0403 0.0398 0.0478 0.0010  -0.0075
0.0158  1 .
3109 NE2  NE2  . GLN GLN GLN A A 408 408 . 0.0976 0.1285 0.1002 -0.0322 0.0178
0.0163  1 .
3110 C    C    . GLN GLN GLN A A 408 408 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3111 O    O    . GLN GLN GLN A A 408 408 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3112 N    N    . LEU LEU LEU A A 409 409 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3113 CA   CA   . LEU LEU LEU A A 409 409 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3114 CB   CB   . LEU LEU LEU A A 409 409 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3115 CG   CG   . LEU LEU LEU A A 409 409 . 0.0259 0.0275 0.0258 0.0011  -0.0005 -
0.0011 1 .
3116 CD1  CD1  . LEU LEU LEU A A 409 409 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3117 CD2  CD2  . LEU LEU LEU A A 409 409 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3118 C    C    . LEU LEU LEU A A 409 409 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3119 O    O    . LEU LEU LEU A A 409 409 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3120 N    N    . MET MET MET A A 410 410 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3121 CA   CA   . MET MET MET A A 410 410 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3122 CB   CB   . MET MET MET A A 410 410 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3123 CG   CG   . MET MET MET A A 410 410 . 0.0257 0.0256 0.0256 0.0003  0.0003
0.0003  1 .
3124 SD   SD   . MET MET MET A A 410 410 . 0.0649 0.0398 0.0407 -0.0086 0.0049
0.0021  1 .
3125 CE   CE   . MET MET MET A A 410 410 . 0.0348 0.0325 0.0253 -0.0082 -0.0004
0.0003  1 .
3126 C    C    . MET MET MET A A 410 410 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3127 O    O    . MET MET MET A A 410 410 . 0.0271 0.0307 0.0258 0.0031  -0.0009 -
0.0016 1 .
3128 N    N    . ARG ARG ARG A A 411 411 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3129 CA   CA   . ARG ARG ARG A A 411 411 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3130 CB   CB   . ARG ARG ARG A A 411 411 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3131 CG   CG   . ARG ARG ARG A A 411 411 . 0.0260 0.0254 0.0260 -0.0002 -0.0007
0.0002  1 .
3132 CD   CD   . ARG ARG ARG A A 411 411 . 0.0552 0.0472 0.0291 -0.0102 0.0076
0.0032  1 .
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3133 NE   NE   . ARG ARG ARG A A 411 411 . 0.0546 0.0305 0.0267 0.0075  0.0039  -
0.0006 1 .
3134 CZ   CZ   . ARG ARG ARG A A 411 411 . 0.0267 0.0311 0.0393 0.0028  0.0044
0.0090  1 .
3135 NH1  NH1  . ARG ARG ARG A A 411 411 . 0.0309 0.0268 0.0328 -0.0029 -0.0064
0.0033  1 .
3136 NH2  NH2  . ARG ARG ARG A A 411 411 . 0.0419 0.0377 0.0275 0.0077  -0.0059 -
0.0019 1 .
3137 C    C    . ARG ARG ARG A A 411 411 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3138 O    O    . ARG ARG ARG A A 411 411 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3139 N    N    . ILE ILE ILE A A 412 412 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3140 CA   CA   . ILE ILE ILE A A 412 412 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3141 CB   CB   . ILE ILE ILE A A 412 412 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3142 CG1  CG1  . ILE ILE ILE A A 412 412 . 0.0253 0.0262 0.0257 -0.0001 0.0000  -
0.0006 1 .
3143 CD1  CD1  . ILE ILE ILE A A 412 412 . 0.0265 0.0263 0.0269 0.0011  -0.0013 -
0.0012 1 .
3144 CG2  CG2  . ILE ILE ILE A A 412 412 . 0.0253 0.0314 0.0275 -0.0004 -0.0002
0.0036  1 .
3145 C    C    . ILE ILE ILE A A 412 412 . 0.0254 0.0256 0.0262 0.0002  0.0003
0.0005  1 .
3146 O    O    . ILE ILE ILE A A 412 412 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3147 N    N    . GLU GLU GLU A A 413 413 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3148 CA   CA   . GLU GLU GLU A A 413 413 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3149 CB   CB   . GLU GLU GLU A A 413 413 . 0.0330 0.0302 0.0292 0.0061  -0.0054 -
0.0043 1 .
3150 CG   CG   . GLU GLU GLU A A 413 413 . 0.0507 0.0560 0.0436 -0.0048 0.0103  -
0.0110 1 .
3151 CD   CD   . GLU GLU GLU A A 413 413 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3152 OE1  OE1  . GLU GLU GLU A A 413 413 . 0.0427 0.0378 0.0504 0.0111  -0.0091
0.0045  1 .
3153 OE2  OE2  . GLU GLU GLU A A 413 413 . 0.0483 0.0427 0.0324 -0.0076 0.0094
0.0037  1 .
3154 C    C    . GLU GLU GLU A A 413 413 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3155 O    O    . GLU GLU GLU A A 413 413 . 0.0255 0.0303 0.0254 -0.0010 0.0001  -
0.0007 1 .
3156 N    N    . GLU GLU GLU A A 414 414 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3157 CA   CA   . GLU GLU GLU A A 414 414 . 0.0312 0.0421 0.0336 0.0051  0.0054  -
0.0015 1 .
3158 CB   CB   . GLU GLU GLU A A 414 414 . 0.0822 0.0784 0.0457 0.0110  -0.0027 -
0.0002 1 .
3159 CG   CG   . GLU GLU GLU A A 414 414 . 0.1665 0.1672 0.1407 0.0337  0.0077  -
0.0056 1 .
3160 CD   CD   . GLU GLU GLU A A 414 414 . 0.2460 0.2630 0.2045 0.0158  -0.0237
0.0339  1 .
3161 OE1  OE1  . GLU GLU GLU A A 414 414 . 0.2916 0.3124 0.2207 -0.0023 -0.0257
0.0092  1 .
3162 OE2  OE2  . GLU GLU GLU A A 414 414 . 0.2441 0.2726 0.2002 0.0220  0.0251  -
0.0809 1 .
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3163 C    C    . GLU GLU GLU A A 414 414 . 0.0613 0.0649 0.0576 0.0046  0.0003  -
0.0053 1 .
3164 O    O    . GLU GLU GLU A A 414 414 . 0.0680 0.1002 0.0668 0.0000  0.0157  -
0.0103 1 .
3165 N    N    . GLU GLU GLU A A 415 415 . 0.0376 0.0368 0.0332 -0.0017 0.0069  -
0.0015 1 .
3166 CA   CA   . GLU GLU GLU A A 415 415 . 0.0982 0.0922 0.0897 -0.0063 0.0027  -
0.0042 1 .
3167 CB   CB   . GLU GLU GLU A A 415 415 . 0.1116 0.1160 0.1249 0.0141  0.0025
0.0002  1 .
3168 CG   CG   . GLU GLU GLU A A 415 415 . 0.2516 0.2333 0.2145 -0.0418 0.0286  -
0.0064 1 .
3169 CD   CD   . GLU GLU GLU A A 415 415 . 0.3531 0.3739 0.3752 0.0175  -0.0028
0.0024  1 .
3170 OE1  OE1  . GLU GLU GLU A A 415 415 . 0.4350 0.4232 0.4765 -0.0162 0.0223
0.0074  1 .
3171 OE2  OE2  . GLU GLU GLU A A 415 415 . 0.4835 0.4097 0.4552 0.0032  0.0289
0.0245  1 .
3172 C    C    . GLU GLU GLU A A 415 415 . 0.1096 0.1197 0.1115 0.0064  0.0018  -
0.0010 1 .
3173 O    O    . GLU GLU GLU A A 415 415 . 0.1283 0.1420 0.1291 -0.0185 -0.0158
0.0023  1 .
3174 N    N    . LEU LEU LEU A A 416 416 . 0.0951 0.1152 0.0829 -0.0072 -0.0095 -
0.0164 1 .
3175 CA   CA   . LEU LEU LEU A A 416 416 . 0.1143 0.1285 0.1039 -0.0018 0.0062
0.0048  1 .
3176 CB   CB   . LEU LEU LEU A A 416 416 . 0.0950 0.1183 0.0911 -0.0141 0.0026
0.0034  1 .
3177 CG   CG   . LEU LEU LEU A A 416 416 . 0.1100 0.1322 0.0784 -0.0119 0.0057  -
0.0123 1 .
3178 CD1  CD1  . LEU LEU LEU A A 416 416 . 0.1209 0.1651 0.1035 0.0156  -0.0142 -
0.0086 1 .
3179 CD2  CD2  . LEU LEU LEU A A 416 416 . 0.1781 0.1501 0.1645 -0.0233 0.0389  -
0.0346 1 .
3180 C    C    . LEU LEU LEU A A 416 416 . 0.1489 0.1583 0.1511 -0.0010 -0.0015 -
0.0008 1 .
3181 O    O    . LEU LEU LEU A A 416 416 . 0.1450 0.2022 0.1425 0.0030  0.0248
0.0063  1 .
3182 N    N    . GLY GLY GLY A A 417 417 . 0.1870 0.2104 0.1958 0.0059  0.0042
0.0166  1 .
3183 CA   CA   . GLY GLY GLY A A 417 417 . 0.2680 0.2559 0.2617 0.0012  0.0089  -
0.0034 1 .
3184 C    C    . GLY GLY GLY A A 417 417 . 0.3110 0.3118 0.3065 -0.0029 -0.0040 -
0.0024 1 .
3185 O    O    . GLY GLY GLY A A 417 417 . 0.3049 0.3320 0.3251 -0.0047 0.0238  -
0.0042 1 .
3186 N    N    . ASP ASP ASP A A 418 418 . 0.3528 0.3578 0.3543 -0.0020 0.0037  -
0.0046 1 .
3187 CA   CA   . ASP ASP ASP A A 418 418 . 0.3904 0.3949 0.3828 0.0004  -0.0025 -
0.0030 1 .
3188 CB   CB   . ASP ASP ASP A A 418 418 . 0.4052 0.4108 0.4048 0.0007  0.0009  -
0.0034 1 .
3189 CG   CG   . ASP ASP ASP A A 418 418 . 0.4669 0.4472 0.4598 -0.0014 -0.0019 -
0.0095 1 .
3190 OD1  OD1  . ASP ASP ASP A A 418 418 . 0.4942 0.5129 0.4842 0.0118  -0.0170 -
0.0205 1 .
3191 OD2  OD2  . ASP ASP ASP A A 418 418 . 0.4691 0.4691 0.4684 0.0247  0.0004  -
0.0209 1 .
3192 C    C    . ASP ASP ASP A A 418 418 . 0.3775 0.3810 0.3805 0.0020  0.0008  -
0.0021 1 .
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3193 O    O    . ASP ASP ASP A A 418 418 . 0.3963 0.4059 0.3930 0.0008  -0.0103 -
0.0114 1 .
3194 N    N    . GLU GLU GLU A A 419 419 . 0.3466 0.3648 0.3606 -0.0013 0.0020  -
0.0005 1 .
3195 CA   CA   . GLU GLU GLU A A 419 419 . 0.3343 0.3448 0.3431 0.0018  0.0057
0.0006  1 .
3196 CB   CB   . GLU GLU GLU A A 419 419 . 0.3483 0.3636 0.3568 -0.0019 -0.0035
0.0035  1 .
3197 CG   CG   . GLU GLU GLU A A 419 419 . 0.4216 0.4374 0.4200 0.0126  0.0081  -
0.0067 1 .
3198 CD   CD   . GLU GLU GLU A A 419 419 . 0.5204 0.4919 0.5267 -0.0140 -0.0001
0.0003  1 .
3199 OE1  OE1  . GLU GLU GLU A A 419 419 . 0.5517 0.5355 0.5401 0.0245  -0.0064
0.0065  1 .
3200 OE2  OE2  . GLU GLU GLU A A 419 419 . 0.5451 0.5359 0.5837 0.0198  0.0081
0.0116  1 .
3201 C    C    . GLU GLU GLU A A 419 419 . 0.3036 0.3067 0.3054 -0.0042 0.0040
0.0025  1 .
3202 O    O    . GLU GLU GLU A A 419 419 . 0.2891 0.3098 0.2928 0.0077  0.0059  -
0.0016 1 .
3203 N    N    . ALA ALA ALA A A 420 420 . 0.2710 0.2771 0.2805 -0.0041 0.0049  -
0.0092 1 .
3204 CA   CA   . ALA ALA ALA A A 420 420 . 0.2450 0.2422 0.2419 -0.0085 0.0013  -
0.0005 1 .
3205 CB   CB   . ALA ALA ALA A A 420 420 . 0.2049 0.2001 0.2211 -0.0319 0.0124  -
0.0045 1 .
3206 C    C    . ALA ALA ALA A A 420 420 . 0.2346 0.2407 0.2424 -0.0031 -0.0026
0.0027  1 .
3207 O    O    . ALA ALA ALA A A 420 420 . 0.2584 0.2661 0.2772 -0.0111 -0.0096 -
0.0012 1 .
3208 N    N    . ARG ARG ARG A A 421 421 . 0.2231 0.2213 0.2321 -0.0133 0.0039  -
0.0059 1 .
3209 CA   CA   . ARG ARG ARG A A 421 421 . 0.1646 0.1872 0.1773 0.0001  0.0067
0.0019  1 .
3210 CB   CB   . ARG ARG ARG A A 421 421 . 0.1849 0.1728 0.2009 0.0050  0.0229
0.0035  1 .
3211 CG   CG   . ARG ARG ARG A A 421 421 . 0.2663 0.2331 0.2241 -0.0060 -0.0047 -
0.0046 1 .
3212 CD   CD   . ARG ARG ARG A A 421 421 . 0.3000 0.2862 0.3252 0.0214  0.0092
0.0217  1 .
3213 NE   NE   . ARG ARG ARG A A 421 421 . 0.3812 0.4009 0.3850 -0.0010 0.0020  -
0.0103 1 .
3214 CZ   CZ   . ARG ARG ARG A A 421 421 . 0.4145 0.4073 0.4392 0.0286  0.0026
0.0002  1 .
3215 NH1  NH1  . ARG ARG ARG A A 421 421 . 0.4426 0.4449 0.4305 0.0273  0.0068  -
0.0058 1 .
3216 NH2  NH2  . ARG ARG ARG A A 421 421 . 0.4439 0.3967 0.4389 0.0134  0.0047
0.0135  1 .
3217 C    C    . ARG ARG ARG A A 421 421 . 0.1208 0.1259 0.1285 -0.0093 0.0077  -
0.0015 1 .
3218 O    O    . ARG ARG ARG A A 421 421 . 0.1430 0.1542 0.1753 -0.0229 0.0349  -
0.0125 1 .
3219 N    N    . PHE PHE PHE A A 422 422 . 0.0409 0.0445 0.0406 0.0043  0.0025
0.0082  1 .
3220 CA   CA   . PHE PHE PHE A A 422 422 . 0.0255 0.0258 0.0257 0.0003  0.0002
0.0004  1 .
3221 CB   CB   . PHE PHE PHE A A 422 422 . 0.0279 0.0333 0.0402 0.0013  0.0058  -
0.0009 1 .
3222 CG   CG   . PHE PHE PHE A A 422 422 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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3223 CD1  CD1  . PHE PHE PHE A A 422 422 . 0.0256 0.0277 0.0299 -0.0009 0.0013  -
0.0033 1 .
3224 CE1  CE1  . PHE PHE PHE A A 422 422 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3225 CZ   CZ   . PHE PHE PHE A A 422 422 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3226 CE2  CE2  . PHE PHE PHE A A 422 422 . 0.0336 0.0459 0.0271 -0.0087 -0.0031
0.0060  1 .
3227 CD2  CD2  . PHE PHE PHE A A 422 422 . 0.0260 0.0282 0.0259 -0.0014 -0.0006
0.0013  1 .
3228 C    C    . PHE PHE PHE A A 422 422 . 0.0262 0.0264 0.0277 -0.0010 0.0015  -
0.0016 1 .
3229 O    O    . PHE PHE PHE A A 422 422 . 0.0349 0.0536 0.0258 0.0045  -0.0004
0.0033  1 .
3230 N    N    . ALA ALA ALA A A 423 423 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3231 CA   CA   . ALA ALA ALA A A 423 423 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3232 CB   CB   . ALA ALA ALA A A 423 423 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3233 C    C    . ALA ALA ALA A A 423 423 . 0.0254 0.0259 0.0254 0.0003  -0.0001 -
0.0003 1 .
3234 O    O    . ALA ALA ALA A A 423 423 . 0.0384 0.0359 0.0309 0.0020  -0.0084
0.0000  1 .
3235 N    N    . GLY GLY GLY A A 424 424 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3236 CA   CA   . GLY GLY GLY A A 424 424 . 0.0271 0.0260 0.0253 -0.0011 0.0001
0.0000  1 .
3237 C    C    . GLY GLY GLY A A 424 424 . 0.0270 0.0254 0.0271 0.0004  0.0017
0.0004  1 .
3238 O    O    . GLY GLY GLY A A 424 424 . 0.0365 0.0288 0.0368 -0.0063 0.0113  -
0.0063 1 .
3239 N    N    . HIS HIS HIS A A 425 425 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3240 CA   CA   . HIS HIS HIS A A 425 425 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3241 CB   CB   . HIS HIS HIS A A 425 425 . 0.0334 0.0339 0.0293 -0.0083 0.0057  -
0.0058 1 .
3242 CG   CG   . HIS HIS HIS A A 425 425 . 0.0363 0.0324 0.0322 0.0045  -0.0034 -
0.0069 1 .
3243 ND1  ND1  . HIS HIS HIS A A 425 425 . 0.0778 0.0623 0.0919 0.0053  0.0087
0.0137  1 .
3244 CE1  CE1  . HIS HIS HIS A A 425 425 . 0.0587 0.0457 0.0486 0.0131  0.0052  -
0.0017 1 .
3245 NE2  NE2  . HIS HIS HIS A A 425 425 . 0.0761 0.0593 0.0686 -0.0149 -0.0162 -
0.0288 1 .
3246 CD2  CD2  . HIS HIS HIS A A 425 425 . 0.0780 0.0972 0.0552 -0.0015 -0.0165
0.0100  1 .
3247 C    C    . HIS HIS HIS A A 425 425 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3248 O    O    . HIS HIS HIS A A 425 425 . 0.0260 0.0278 0.0285 0.0013  -0.0014 -
0.0028 1 .
3249 N    N    . ASN ASN ASN A A 426 426 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3250 CA   CA   . ASN ASN ASN A A 426 426 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3251 CB   CB   . ASN ASN ASN A A 426 426 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3252 CG   CG   . ASN ASN ASN A A 426 426 . 0.0256 0.0303 0.0269 -0.0012 0.0006  -
0.0028 1 .
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3253 OD1  OD1  . ASN ASN ASN A A 426 426 . 0.1234 0.0996 0.0945 0.0128  -0.0140
0.0122  1 .
3254 ND2  ND2  . ASN ASN ASN A A 426 426 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3255 C    C    . ASN ASN ASN A A 426 426 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3256 O    O    . ASN ASN ASN A A 426 426 . 0.0484 0.0355 0.0362 -0.0084 0.0007  -
0.0091 1 .
3257 N    N    . PHE PHE PHE A A 427 427 . 0.0277 0.0263 0.0262 -0.0015 0.0014  -
0.0009 1 .
3258 CA   CA   . PHE PHE PHE A A 427 427 . 0.0510 0.0446 0.0408 0.0004  0.0006
0.0008  1 .
3259 CB   CB   . PHE PHE PHE A A 427 427 . 0.0562 0.0393 0.0268 -0.0120 0.0062  -
0.0008 1 .
3260 CG   CG   . PHE PHE PHE A A 427 427 . 0.0626 0.0565 0.0661 0.0074  -0.0017
0.0042  1 .
3261 CD1  CD1  . PHE PHE PHE A A 427 427 . 0.0745 0.0617 0.0562 0.0030  -0.0186
0.0092  1 .
3262 CE1  CE1  . PHE PHE PHE A A 427 427 . 0.0685 0.0602 0.0583 -0.0074 -0.0148
0.0143  1 .
3263 CZ   CZ   . PHE PHE PHE A A 427 427 . 0.0927 0.1102 0.0872 -0.0007 -0.0075
0.0002  1 .
3264 CE2  CE2  . PHE PHE PHE A A 427 427 . 0.0581 0.0488 0.0729 -0.0004 0.0133  -
0.0166 1 .
3265 CD2  CD2  . PHE PHE PHE A A 427 427 . 0.1010 0.1182 0.1355 0.0035  -0.0033 -
0.0155 1 .
3266 C    C    . PHE PHE PHE A A 427 427 . 0.0300 0.0275 0.0294 -0.0010 0.0029  -
0.0028 1 .
3267 O    O    . PHE PHE PHE A A 427 427 . 0.0518 0.0340 0.0380 -0.0152 0.0051  -
0.0034 1 .
3268 N    N    . ARG ARG ARG A A 428 428 . 0.0284 0.0338 0.0416 0.0003  -0.0032 -
0.0108 1 .
3269 CA   CA   . ARG ARG ARG A A 428 428 . 0.0741 0.0600 0.0551 -0.0028 -0.0098 -
0.0017 1 .
3270 CB   CB   . ARG ARG ARG A A 428 428 . 0.0488 0.0568 0.0730 0.0030  -0.0082
0.0039  1 .
3271 CG   CG   . ARG ARG ARG A A 428 428 . 0.0933 0.1016 0.0867 -0.0278 0.0069  -
0.0052 1 .
3272 CD   CD   . ARG ARG ARG A A 428 428 . 0.1495 0.2048 0.1186 -0.0033 -0.0187
0.0101  1 .
3273 NE   NE   . ARG ARG ARG A A 428 428 . 0.2053 0.1440 0.1561 0.0292  -0.0143 -
0.0115 1 .
3274 CZ   CZ   . ARG ARG ARG A A 428 428 . 0.2035 0.2062 0.2346 0.0042  -0.0204 -
0.0077 1 .
3275 NH1  NH1  . ARG ARG ARG A A 428 428 . 0.1572 0.1758 0.1714 0.0013  -0.0066 -
0.0287 1 .
3276 NH2  NH2  . ARG ARG ARG A A 428 428 . 0.2192 0.2184 0.1955 0.0101  -0.0505
0.0227  1 .
3277 C    C    . ARG ARG ARG A A 428 428 . 0.0972 0.0913 0.0993 -0.0014 -0.0052 -
0.0033 1 .
3278 O    O    . ARG ARG ARG A A 428 428 . 0.1742 0.1298 0.1392 0.0137  0.0067  -
0.0039 1 .
3279 N    N    . ASN ASN ASN A A 429 429 . 0.1135 0.1223 0.1042 -0.0040 -0.0115
0.0076  1 .
3280 CA   CA   . ASN ASN ASN A A 429 429 . 0.1303 0.1461 0.1129 -0.0075 -0.0010
0.0074  1 .
3281 CB   CB   . ASN ASN ASN A A 429 429 . 0.1729 0.1939 0.1528 0.0002  -0.0232
0.0306  1 .
3282 CG   CG   . ASN ASN ASN A A 429 429 . 0.2669 0.2862 0.2357 0.0013  -0.0124 -
0.0172 1 .
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3283 OD1  OD1  . ASN ASN ASN A A 429 429 . 0.3085 0.2961 0.3026 0.0241  -0.0512
0.0243  1 .
3284 ND2  ND2  . ASN ASN ASN A A 429 429 . 0.3772 0.4468 0.3373 0.0304  -0.0618
0.0243  1 .
3285 C    C    . ASN ASN ASN A A 429 429 . 0.1096 0.1116 0.0942 0.0012  -0.0023
0.0065  1 .
3286 O    O    . ASN ASN ASN A A 429 429 . 0.0919 0.0869 0.0798 -0.0052 0.0100
0.0016  1 .
3287 N    N    . PRO PRO PRO A A 430 430 . 0.0906 0.0847 0.0660 -0.0115 0.0017
0.0062  1 .
3288 CA   CA   . PRO PRO PRO A A 430 430 . 0.0874 0.0968 0.0667 -0.0109 0.0027  -
0.0007 1 .
3289 CB   CB   . PRO PRO PRO A A 430 430 . 0.0963 0.0837 0.0728 -0.0086 -0.0114
0.0145  1 .
3290 CG   CG   . PRO PRO PRO A A 430 430 . 0.1167 0.0964 0.0718 0.0090  0.0063
0.0000  1 .
3291 CD   CD   . PRO PRO PRO A A 430 430 . 0.0775 0.0630 0.0688 -0.0050 0.0111  -
0.0213 1 .
3292 C    C    . PRO PRO PRO A A 430 430 . 0.0796 0.0825 0.0692 -0.0158 -0.0027 -
0.0109 1 .
3293 O    O    . PRO PRO PRO A A 430 430 . 0.0924 0.0996 0.0676 -0.0252 0.0024  -
0.0052 1 .
3294 N    N    . SER SER SER A A 431 431 . 0.0961 0.1255 0.0836 -0.0145 -0.0099
0.0005  1 .
3295 CA   CA   . SER SER SER A A 431 431 . 0.1697 0.1751 0.1588 -0.0110 0.0008
0.0037  1 .
3296 CB   CB   . SER SER SER A A 431 431 . 0.1756 0.1824 0.1637 -0.0048 0.0019
0.0053  1 .
3297 OG   OG   . SER SER SER A A 431 431 . 0.2593 0.2598 0.2500 -0.0348 -0.0220
0.0231  1 .
3298 C    C    . SER SER SER A A 431 431 . 0.1783 0.1912 0.1741 -0.0109 -0.0015
0.0044  1 .
3299 O    O    . SER SER SER A A 431 431 . 0.2096 0.2490 0.1841 -0.0023 0.0023
0.0005  1 .
3300 N    N    . VAL VAL VAL A A 432 432 . 0.1784 0.1778 0.1684 -0.0124 -0.0060
0.0014  1 .
3301 CA   CA   . VAL VAL VAL A A 432 432 . 0.1657 0.1650 0.1606 -0.0141 -0.0026 -
0.0013 1 .
3302 CB   CB   . VAL VAL VAL A A 432 432 . 0.1567 0.1772 0.1522 -0.0193 -0.0153 -
0.0018 1 .
3303 CG1  CG1  . VAL VAL VAL A A 432 432 . 0.1739 0.1735 0.0981 -0.0061 -0.0012 -
0.0708 1 .
3304 CG2  CG2  . VAL VAL VAL A A 432 432 . 0.1234 0.1432 0.1234 -0.0363 -0.0458
0.0068  1 .
3305 C    C    . VAL VAL VAL A A 432 432 . 0.1663 0.1851 0.1655 -0.0096 0.0070
0.0001  1 .
3306 O    O    . VAL VAL VAL A A 432 432 . 0.1927 0.2158 0.1702 -0.0208 0.0109  -
0.0203 1 .
3307 N    N    . LEU LEU LEU A A 433 433 . 0.1515 0.1539 0.1359 -0.0099 -0.0050
0.0061  1 .
3308 CA   CA   . LEU LEU LEU A A 433 433 . 0.1642 0.1633 0.1358 -0.0047 0.0093
0.0037  1 .
3309 CB   CB   . LEU LEU LEU A A 433 433 . 0.1712 0.1375 0.1274 -0.0150 0.0063
0.0267  1 .
3310 CG   CG   . LEU LEU LEU A A 433 433 . 0.1555 0.1799 0.1523 -0.0112 0.0055  -
0.0099 1 .
3311 CD1  CD1  . LEU LEU LEU A A 433 433 . 0.1401 0.1368 0.1302 -0.0333 -0.0276
0.0059  1 .
3312 CD2  CD2  . LEU LEU LEU A A 433 433 . 0.1687 0.1163 0.1489 -0.0545 0.0044
0.0093  1 .
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3313 C    C    . LEU LEU LEU A A 433 433 . 0.1695 0.1610 0.1317 -0.0137 0.0063
0.0227  1 .
3314 O    O    . LEU LEU LEU A A 433 433 . 0.2111 0.1969 0.1876 -0.0143 0.0169  -
0.0374 1 .
3315 MG+2 MG+2 . MG2 MG2 MG2 A . 599 599 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3316 MG+2 MG+2 . MG2 MG2 MG2 A . 600 600 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3317 O4P  O4P  . 2PG 2PG 2PG A . 601 601 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3318 P    P    . 2PG 2PG 2PG A . 601 601 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3319 O2P  O2P  . 2PG 2PG 2PG A . 601 601 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3320 O3P  O3P  . 2PG 2PG 2PG A . 601 601 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3321 O1P  O1P  . 2PG 2PG 2PG A . 601 601 . 0.0283 0.0258 0.0255 -0.0012 0.0008  -
0.0003 1 .
3322 C2   C2   . 2PG 2PG 2PG A . 601 601 . 0.0924 0.1098 0.0682 0.0118  0.0066
0.0076  1 .
3323 C1   C1   . 2PG 2PG 2PG A . 601 601 . 0.0576 0.0994 0.0640 0.0109  -0.0068
0.0055  1 .
3324 O2   O2   . 2PG 2PG 2PG A . 601 601 . 0.0850 0.0895 0.0869 0.0339  -0.0102 -
0.0172 1 .
3325 O1   O1   . 2PG 2PG 2PG A . 601 601 . 0.0267 0.0269 0.0394 -0.0014 0.0044  -
0.0047 1 .
3326 C3   C3   . 2PG 2PG 2PG A . 601 601 . 0.1408 0.1583 0.1650 0.0250  0.0301  -
0.0267 1 .
3327 O3   O3   . 2PG 2PG 2PG A . 601 601 . 0.1859 0.2033 0.2256 0.0112  0.0314  -
0.0070 1 .
3328 O    O    . HOH HOH HOH A . 446 446 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3329 O    O    . HOH HOH HOH A . 447 447 . 0.0308 0.0267 0.0297 -0.0027 -0.0049
0.0024  1 .
3330 O    O    . HOH HOH HOH A . 448 448 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3331 O3   O3   . TRS TRS TRS A . 460 460 . 0.3543 0.3704 0.4034 0.0197  0.0514  -
0.0231 1 .
3332 C3   C3   . TRS TRS TRS A . 460 460 . 0.3259 0.3459 0.3532 0.0084  0.0166  -
0.0023 1 .
3333 C    C    . TRS TRS TRS A . 460 460 . 0.3398 0.3385 0.3479 0.0017  0.0031  -
0.0035 1 .
3334 N    N    . TRS TRS TRS A . 460 460 . 0.3267 0.3272 0.3344 -0.0026 0.0176
0.0014  1 .
3335 C2   C2   . TRS TRS TRS A . 460 460 . 0.3497 0.3480 0.3590 0.0104  0.0003  -
0.0003 1 .
3336 O2   O2   . TRS TRS TRS A . 460 460 . 0.3467 0.3262 0.3878 0.0444  -0.0105 -
0.0415 1 .
3337 C1   C1   . TRS TRS TRS A . 460 460 . 0.3212 0.3240 0.3259 0.0005  0.0102
0.0033  1 .
3338 O1   O1   . TRS TRS TRS A . 460 460 . 0.2503 0.2285 0.2858 -0.0018 -0.0350 -
0.0217 1 .
3339 N    N    . SER SER SER B B 1   1   . 0.2584 0.2389 0.2776 -0.0244 -0.0078
0.0045  1 .
3340 CA   CA   . SER SER SER B B 1   1   . 0.2398 0.2498 0.2551 -0.0068 -0.0015
0.0012  1 .
3341 CB   CB   . SER SER SER B B 1   1   . 0.2595 0.2551 0.2768 -0.0090 -0.0064
0.0074  1 .
3342 OG   OG   . SER SER SER B B 1   1   . 0.2809 0.3408 0.2812 -0.0040 -0.0069
0.0124  1 .
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3343 C    C    . SER SER SER B B 1   1   . 0.2167 0.2081 0.2059 -0.0060 -0.0025
0.0004  1 .
3344 O    O    . SER SER SER B B 1   1   . 0.2159 0.2073 0.2039 -0.0106 0.0072  -
0.0048 1 .
3345 N    N    . ILE ILE ILE B B 2   2   . 0.1673 0.1613 0.1561 -0.0005 0.0054
0.0171  1 .
3346 CA   CA   . ILE ILE ILE B B 2   2   . 0.1274 0.1233 0.1309 0.0070  -0.0067
0.0063  1 .
3347 CB   CB   . ILE ILE ILE B B 2   2   . 0.1214 0.1331 0.1301 0.0165  -0.0011
0.0061  1 .
3348 CG1  CG1  . ILE ILE ILE B B 2   2   . 0.1018 0.0957 0.1300 0.0129  0.0090
0.0251  1 .
3349 CD1  CD1  . ILE ILE ILE B B 2   2   . 0.0768 0.1219 0.1192 0.0061  -0.0131
0.0268  1 .
3350 CG2  CG2  . ILE ILE ILE B B 2   2   . 0.0871 0.0924 0.0652 -0.0160 -0.0009
0.0020  1 .
3351 C    C    . ILE ILE ILE B B 2   2   . 0.1329 0.1370 0.1480 0.0041  0.0046
0.0097  1 .
3352 O    O    . ILE ILE ILE B B 2   2   . 0.1385 0.1515 0.1466 0.0128  0.0080
0.0067  1 .
3353 N    N    . GLN GLN GLN B B 3   3   . 0.0930 0.1202 0.1087 0.0027  -0.0011
0.0052  1 .
3354 CA   CA   . GLN GLN GLN B B 3   3   . 0.1252 0.1318 0.1318 -0.0008 0.0016
0.0084  1 .
3355 CB   CB   . GLN GLN GLN B B 3   3   . 0.1271 0.1270 0.1456 0.0034  0.0087
0.0072  1 .
3356 CG   CG   . GLN GLN GLN B B 3   3   . 0.1857 0.1647 0.1927 -0.0180 -0.0048 -
0.0101 1 .
3357 CD   CD   . GLN GLN GLN B B 3   3   . 0.2534 0.2414 0.2700 -0.0100 0.0000
0.0307  1 .
3358 OE1  OE1  . GLN GLN GLN B B 3   3   . 0.2791 0.2652 0.3279 0.0090  -0.0077
0.0616  1 .
3359 NE2  NE2  . GLN GLN GLN B B 3   3   . 0.2256 0.2112 0.2309 -0.0149 0.0058
0.0331  1 .
3360 C    C    . GLN GLN GLN B B 3   3   . 0.1075 0.1030 0.1059 -0.0011 0.0061
0.0021  1 .
3361 O    O    . GLN GLN GLN B B 3   3   . 0.1192 0.1392 0.1235 0.0020  0.0287
0.0166  1 .
3362 N    N    . LYS LYS LYS B B 4   4   . 0.1022 0.1044 0.0860 0.0025  0.0046
0.0133  1 .
3363 CA   CA   . LYS LYS LYS B B 4   4   . 0.0913 0.0953 0.0878 -0.0012 0.0138
0.0176  1 .
3364 CB   CB   . LYS LYS LYS B B 4   4   . 0.0902 0.0994 0.0786 0.0081  -0.0071
0.0190  1 .
3365 CG   CG   . LYS LYS LYS B B 4   4   . 0.1553 0.1148 0.1707 -0.0519 0.0383
0.0400  1 .
3366 CD   CD   . LYS LYS LYS B B 4   4   . 0.2610 0.3196 0.2485 -0.0003 -0.0199
0.0136  1 .
3367 CE   CE   . LYS LYS LYS B B 4   4   . 0.3451 0.3199 0.3212 0.0151  0.0249  -
0.0440 1 .
3368 NZ   NZ   . LYS LYS LYS B B 4   4   . 0.3710 0.3699 0.3670 -0.0241 0.0324  -
0.0657 1 .
3369 C    C    . LYS LYS LYS B B 4   4   . 0.0867 0.0697 0.0815 -0.0019 0.0131
0.0052  1 .
3370 O    O    . LYS LYS LYS B B 4   4   . 0.0806 0.0508 0.0786 0.0083  0.0260
0.0157  1 .
3371 N    N    . ILE ILE ILE B B 5   5   . 0.0872 0.0864 0.0975 -0.0063 0.0140
0.0002  1 .
3372 CA   CA   . ILE ILE ILE B B 5   5   . 0.0658 0.0601 0.0773 0.0010  0.0049  -
0.0070 1 .
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3373 CB   CB   . ILE ILE ILE B B 5   5   . 0.0666 0.0631 0.0814 -0.0236 -0.0037
0.0123  1 .
3374 CG1  CG1  . ILE ILE ILE B B 5   5   . 0.0840 0.0982 0.0746 0.0290  -0.0026 -
0.0075 1 .
3375 CD1  CD1  . ILE ILE ILE B B 5   5   . 0.0826 0.0684 0.0775 0.0190  0.0423
0.0277  1 .
3376 CG2  CG2  . ILE ILE ILE B B 5   5   . 0.0886 0.0894 0.1034 -0.0112 0.0071
0.0199  1 .
3377 C    C    . ILE ILE ILE B B 5   5   . 0.0531 0.0670 0.0590 0.0054  0.0029
0.0054  1 .
3378 O    O    . ILE ILE ILE B B 5   5   . 0.0740 0.0895 0.1153 0.0019  -0.0029 -
0.0184 1 .
3379 N    N    . TRP TRP TRP B B 6   6   . 0.0382 0.0320 0.0337 0.0076  0.0058
0.0056  1 .
3380 CA   CA   . TRP TRP TRP B B 6   6   . 0.0266 0.0455 0.0497 0.0037  0.0056
0.0128  1 .
3381 CB   CB   . TRP TRP TRP B B 6   6   . 0.0548 0.0659 0.0555 -0.0026 -0.0063
0.0171  1 .
3382 CG   CG   . TRP TRP TRP B B 6   6   . 0.0875 0.0818 0.0872 -0.0169 0.0150
0.0242  1 .
3383 CD1  CD1  . TRP TRP TRP B B 6   6   . 0.1061 0.0843 0.1108 0.0006  -0.0280
0.0272  1 .
3384 NE1  NE1  . TRP TRP TRP B B 6   6   . 0.1478 0.1523 0.1375 -0.0056 -0.0001
0.0025  1 .
3385 CE2  CE2  . TRP TRP TRP B B 6   6   . 0.1317 0.1211 0.1326 -0.0106 0.0208  -
0.0044 1 .
3386 CD2  CD2  . TRP TRP TRP B B 6   6   . 0.0880 0.0886 0.0569 -0.0084 0.0122
0.0256  1 .
3387 CE3  CE3  . TRP TRP TRP B B 6   6   . 0.1044 0.1217 0.0822 0.0066  0.0262
0.0089  1 .
3388 CZ3  CZ3  . TRP TRP TRP B B 6   6   . 0.1491 0.1386 0.1652 0.0058  -0.0065 -
0.0148 1 .
3389 CH2  CH2  . TRP TRP TRP B B 6   6   . 0.1220 0.1855 0.1384 -0.0169 0.0171  -
0.0171 1 .
3390 CZ2  CZ2  . TRP TRP TRP B B 6   6   . 0.1504 0.1431 0.1769 -0.0144 -0.0041 -
0.0072 1 .
3391 C    C    . TRP TRP TRP B B 6   6   . 0.0263 0.0285 0.0327 0.0017  0.0027
0.0048  1 .
3392 O    O    . TRP TRP TRP B B 6   6   . 0.0474 0.0488 0.0431 -0.0015 0.0108
0.0029  1 .
3393 N    N    . ALA ALA ALA B B 7   7   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3394 CA   CA   . ALA ALA ALA B B 7   7   . 0.0253 0.0255 0.0255 0.0001  0.0001
0.0002  1 .
3395 CB   CB   . ALA ALA ALA B B 7   7   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3396 C    C    . ALA ALA ALA B B 7   7   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3397 O    O    . ALA ALA ALA B B 7   7   . 0.0353 0.0335 0.0270 0.0090  0.0041
0.0037  1 .
3398 N    N    . ARG ARG ARG B B 8   8   . 0.0261 0.0271 0.0255 0.0012  0.0004
0.0006  1 .
3399 CA   CA   . ARG ARG ARG B B 8   8   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3400 CB   CB   . ARG ARG ARG B B 8   8   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3401 CG   CG   . ARG ARG ARG B B 8   8   . 0.0348 0.0330 0.0364 0.0085  0.0102
0.0092  1 .
3402 CD   CD   . ARG ARG ARG B B 8   8   . 0.0369 0.0516 0.0480 0.0135  0.0075
0.0224  1 .
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3403 NE   NE   . ARG ARG ARG B B 8   8   . 0.0265 0.0307 0.0464 0.0025  0.0051
0.0107  1 .
3404 CZ   CZ   . ARG ARG ARG B B 8   8   . 0.0773 0.0652 0.0639 0.0107  0.0148  -
0.0076 1 .
3405 NH1  NH1  . ARG ARG ARG B B 8   8   . 0.0356 0.0785 0.0660 0.0075  -0.0202 -
0.0072 1 .
3406 NH2  NH2  . ARG ARG ARG B B 8   8   . 0.1148 0.1545 0.1088 -0.0003 0.0153
0.0169  1 .
3407 C    C    . ARG ARG ARG B B 8   8   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3408 O    O    . ARG ARG ARG B B 8   8   . 0.0263 0.0274 0.0295 -0.0014 0.0020  -
0.0029 1 .
3409 N    N    . GLU GLU GLU B B 9   9   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3410 CA   CA   . GLU GLU GLU B B 9   9   . 0.0322 0.0265 0.0302 0.0028  -0.0058 -
0.0024 1 .
3411 CB   CB   . GLU GLU GLU B B 9   9   . 0.0654 0.0683 0.0630 -0.0087 -0.0023 -
0.0038 1 .
3412 CG   CG   . GLU GLU GLU B B 9   9   . 0.0979 0.1337 0.1079 -0.0104 -0.0088
0.0074  1 .
3413 CD   CD   . GLU GLU GLU B B 9   9   . 0.1356 0.1006 0.1086 0.0242  0.0187  -
0.0041 1 .
3414 OE1  OE1  . GLU GLU GLU B B 9   9   . 0.0780 0.0732 0.0609 0.0066  0.0203  -
0.0146 1 .
3415 OE2  OE2  . GLU GLU GLU B B 9   9   . 0.1483 0.1667 0.1252 0.0094  0.0284
0.0233  1 .
3416 C    C    . GLU GLU GLU B B 9   9   . 0.0353 0.0428 0.0351 0.0129  0.0038
0.0074  1 .
3417 O    O    . GLU GLU GLU B B 9   9   . 0.0383 0.0434 0.0322 0.0153  0.0094
0.0111  1 .
3418 N    N    . ILE ILE ILE B B 10  10  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3419 CA   CA   . ILE ILE ILE B B 10  10  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3420 CB   CB   . ILE ILE ILE B B 10  10  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3421 CG1  CG1  . ILE ILE ILE B B 10  10  . 0.0263 0.0262 0.0253 0.0009  0.0001
0.0001  1 .
3422 CD1  CD1  . ILE ILE ILE B B 10  10  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3423 CG2  CG2  . ILE ILE ILE B B 10  10  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3424 C    C    . ILE ILE ILE B B 10  10  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3425 O    O    . ILE ILE ILE B B 10  10  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3426 N    N    . LEU LEU LEU B B 11  11  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3427 CA   CA   . LEU LEU LEU B B 11  11  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3428 CB   CB   . LEU LEU LEU B B 11  11  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3429 CG   CG   . LEU LEU LEU B B 11  11  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3430 CD1  CD1  . LEU LEU LEU B B 11  11  . 0.0625 0.0334 0.0314 0.0081  -0.0097 -
0.0068 1 .
3431 CD2  CD2  . LEU LEU LEU B B 11  11  . 0.0265 0.0253 0.0253 -0.0001 -0.0001
0.0000  1 .
3432 C    C    . LEU LEU LEU B B 11  11  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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3433 O    O    . LEU LEU LEU B B 11  11  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3434 N    N    . ASP ASP ASP B B 12  12  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3435 CA   CA   . ASP ASP ASP B B 12  12  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3436 CB   CB   . ASP ASP ASP B B 12  12  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3437 CG   CG   . ASP ASP ASP B B 12  12  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3438 OD1  OD1  . ASP ASP ASP B B 12  12  . 0.0285 0.0259 0.0349 -0.0002 0.0039  -
0.0019 1 .
3439 OD2  OD2  . ASP ASP ASP B B 12  12  . 0.0445 0.0306 0.0262 -0.0003 -0.0041 -
0.0002 1 .
3440 C    C    . ASP ASP ASP B B 12  12  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3441 O    O    . ASP ASP ASP B B 12  12  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3442 N    N    . SER SER SER B B 13  13  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3443 CA   CA   . SER SER SER B B 13  13  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3444 CB   CB   . SER SER SER B B 13  13  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3445 OG   OG   . SER SER SER B B 13  13  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3446 C    C    . SER SER SER B B 13  13  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3447 O    O    . SER SER SER B B 13  13  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3448 N    N    . ARG ARG ARG B B 14  14  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3449 CA   CA   . ARG ARG ARG B B 14  14  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3450 CB   CB   . ARG ARG ARG B B 14  14  . 0.0428 0.0293 0.0268 -0.0084 0.0051  -
0.0024 1 .
3451 CG   CG   . ARG ARG ARG B B 14  14  . 0.1412 0.0803 0.1177 0.0179  0.0242  -
0.0169 1 .
3452 CD   CD   . ARG ARG ARG B B 14  14  . 0.1168 0.1195 0.1349 0.0019  -0.0116
0.0084  1 .
3453 NE   NE   . ARG ARG ARG B B 14  14  . 0.1221 0.1220 0.1220 -0.0093 0.0265
0.0278  1 .
3454 CZ   CZ   . ARG ARG ARG B B 14  14  . 0.0375 0.0328 0.0368 -0.0086 -0.0011 -
0.0031 1 .
3455 NH1  NH1  . ARG ARG ARG B B 14  14  . 0.0325 0.0253 0.0281 0.0006  -0.0044 -
0.0003 1 .
3456 NH2  NH2  . ARG ARG ARG B B 14  14  . 0.0363 0.0269 0.0392 -0.0041 0.0108  -
0.0042 1 .
3457 C    C    . ARG ARG ARG B B 14  14  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3458 O    O    . ARG ARG ARG B B 14  14  . 0.0295 0.0275 0.0257 -0.0030 -0.0013
0.0009  1 .
3459 N    N    . GLY GLY GLY B B 15  15  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3460 CA   CA   . GLY GLY GLY B B 15  15  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3461 C    C    . GLY GLY GLY B B 15  15  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3462 O    O    . GLY GLY GLY B B 15  15  . 0.0282 0.0311 0.0328 0.0023  0.0032
0.0065  1 .
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3463 N    N    . ASN ASN ASN B B 16  16  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3464 CA   CA   . ASN ASN ASN B B 16  16  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3465 CB   CB   . ASN ASN ASN B B 16  16  . 0.0253 0.0253 0.0254 0.0000  0.0000
0.0000  1 .
3466 CG   CG   . ASN ASN ASN B B 16  16  . 0.0599 0.0545 0.0689 -0.0085 0.0053
0.0049  1 .
3467 OD1  OD1  . ASN ASN ASN B B 16  16  . 0.0533 0.0702 0.0805 -0.0141 -0.0088
0.0162  1 .
3468 ND2  ND2  . ASN ASN ASN B B 16  16  . 0.1147 0.0970 0.1030 0.0026  0.0116
0.0069  1 .
3469 C    C    . ASN ASN ASN B B 16  16  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3470 O    O    . ASN ASN ASN B B 16  16  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3471 N    N    . PRO PRO PRO B B 17  17  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3472 CA   CA   . PRO PRO PRO B B 17  17  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3473 CB   CB   . PRO PRO PRO B B 17  17  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3474 CG   CG   . PRO PRO PRO B B 17  17  . 0.0260 0.0255 0.0259 -0.0003 0.0006  -
0.0003 1 .
3475 CD   CD   . PRO PRO PRO B B 17  17  . 0.0253 0.0289 0.0310 -0.0004 0.0005  -
0.0045 1 .
3476 C    C    . PRO PRO PRO B B 17  17  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3477 O    O    . PRO PRO PRO B B 17  17  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3478 N    N    . THR THR THR B B 18  18  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3479 CA   CA   . THR THR THR B B 18  18  . 0.0255 0.0255 0.0253 0.0002  0.0000
0.0000  1 .
3480 CB   CB   . THR THR THR B B 18  18  . 0.0279 0.0257 0.0253 0.0010  0.0003
0.0001  1 .
3481 OG1  OG1  . THR THR THR B B 18  18  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3482 CG2  CG2  . THR THR THR B B 18  18  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3483 C    C    . THR THR THR B B 18  18  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3484 O    O    . THR THR THR B B 18  18  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3485 N    N    . VAL VAL VAL B B 19  19  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3486 CA   CA   . VAL VAL VAL B B 19  19  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3487 CB   CB   . VAL VAL VAL B B 19  19  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3488 CG1  CG1  . VAL VAL VAL B B 19  19  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3489 CG2  CG2  . VAL VAL VAL B B 19  19  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3490 C    C    . VAL VAL VAL B B 19  19  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3491 O    O    . VAL VAL VAL B B 19  19  . 0.0391 0.0322 0.0294 -0.0012 0.0043
0.0039  1 .
3492 N    N    . GLU GLU GLU B B 20  20  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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3493 CA   CA   . GLU GLU GLU B B 20  20  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3494 CB   CB   . GLU GLU GLU B B 20  20  . 0.0274 0.0301 0.0485 -0.0002 0.0017
0.0099  1 .
3495 CG   CG   . GLU GLU GLU B B 20  20  . 0.0710 0.0393 0.0540 0.0071  -0.0171
0.0142  1 .
3496 CD   CD   . GLU GLU GLU B B 20  20  . 0.0648 0.0868 0.0844 0.0098  -0.0191
0.0070  1 .
3497 OE1  OE1  . GLU GLU GLU B B 20  20  . 0.1080 0.1032 0.0964 -0.0017 0.0076
0.0220  1 .
3498 OE2  OE2  . GLU GLU GLU B B 20  20  . 0.1040 0.1118 0.1198 -0.0004 0.0098
0.0178  1 .
3499 C    C    . GLU GLU GLU B B 20  20  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3500 O    O    . GLU GLU GLU B B 20  20  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3501 N    N    . VAL VAL VAL B B 21  21  . 0.0253 0.0270 0.0260 0.0001  0.0000
0.0010  1 .
3502 CA   CA   . VAL VAL VAL B B 21  21  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3503 CB   CB   . VAL VAL VAL B B 21  21  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3504 CG1  CG1  . VAL VAL VAL B B 21  21  . 0.0292 0.0324 0.0328 -0.0052 -0.0054
0.0073  1 .
3505 CG2  CG2  . VAL VAL VAL B B 21  21  . 0.0414 0.0253 0.0290 0.0002  -0.0077 -
0.0001 1 .
3506 C    C    . VAL VAL VAL B B 21  21  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3507 O    O    . VAL VAL VAL B B 21  21  . 0.0274 0.0254 0.0260 -0.0004 0.0012  -
0.0002 1 .
3508 N    N    . ASP ASP ASP B B 22  22  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3509 CA   CA   . ASP ASP ASP B B 22  22  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3510 CB   CB   . ASP ASP ASP B B 22  22  . 0.0253 0.0283 0.0264 -0.0001 -0.0001
0.0017  1 .
3511 CG   CG   . ASP ASP ASP B B 22  22  . 0.0646 0.0634 0.0748 0.0074  0.0022
0.0027  1 .
3512 OD1  OD1  . ASP ASP ASP B B 22  22  . 0.0977 0.1014 0.0964 -0.0158 -0.0027
0.0234  1 .
3513 OD2  OD2  . ASP ASP ASP B B 22  22  . 0.1253 0.1553 0.1585 0.0010  0.0202
0.0191  1 .
3514 C    C    . ASP ASP ASP B B 22  22  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3515 O    O    . ASP ASP ASP B B 22  22  . 0.0351 0.0548 0.0623 0.0133  -0.0016 -
0.0052 1 .
3516 N    N    . LEU LEU LEU B B 23  23  . 0.0255 0.0256 0.0264 -0.0002 -0.0005
0.0006  1 .
3517 CA   CA   . LEU LEU LEU B B 23  23  . 0.0314 0.0355 0.0272 -0.0071 -0.0016
0.0002  1 .
3518 CB   CB   . LEU LEU LEU B B 23  23  . 0.0443 0.0505 0.0389 -0.0139 -0.0073
0.0180  1 .
3519 CG   CG   . LEU LEU LEU B B 23  23  . 0.0388 0.0579 0.0333 0.0028  -0.0024
0.0098  1 .
3520 CD1  CD1  . LEU LEU LEU B B 23  23  . 0.0906 0.0996 0.0840 0.0135  0.0015
0.0321  1 .
3521 CD2  CD2  . LEU LEU LEU B B 23  23  . 0.1127 0.0998 0.1356 -0.0243 0.0161
0.0082  1 .
3522 C    C    . LEU LEU LEU B B 23  23  . 0.0409 0.0411 0.0385 -0.0062 0.0083
0.0074  1 .
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3523 O    O    . LEU LEU LEU B B 23  23  . 0.0582 0.0504 0.1001 -0.0024 0.0062
0.0240  1 .
3524 N    N    . TYR TYR TYR B B 24  24  . 0.0421 0.0512 0.0509 0.0104  0.0148
0.0036  1 .
3525 CA   CA   . TYR TYR TYR B B 24  24  . 0.0493 0.0466 0.0494 -0.0070 0.0010  -
0.0032 1 .
3526 CB   CB   . TYR TYR TYR B B 24  24  . 0.0959 0.0921 0.0811 -0.0110 0.0089
0.0264  1 .
3527 CG   CG   . TYR TYR TYR B B 24  24  . 0.0882 0.1254 0.1181 -0.0030 -0.0157
0.0177  1 .
3528 CD1  CD1  . TYR TYR TYR B B 24  24  . 0.1669 0.1338 0.1368 -0.0307 0.0015
0.0242  1 .
3529 CE1  CE1  . TYR TYR TYR B B 24  24  . 0.1770 0.2127 0.2120 -0.0074 -0.0179
0.0342  1 .
3530 CZ   CZ   . TYR TYR TYR B B 24  24  . 0.2485 0.2123 0.2411 -0.0074 -0.0044
0.0221  1 .
3531 OH   OH   . TYR TYR TYR B B 24  24  . 0.2808 0.3051 0.2778 -0.0033 -0.0343
0.0431  1 .
3532 CE2  CE2  . TYR TYR TYR B B 24  24  . 0.2046 0.2316 0.2132 -0.0241 -0.0002
0.0109  1 .
3533 CD2  CD2  . TYR TYR TYR B B 24  24  . 0.1698 0.1758 0.1889 -0.0149 0.0223
0.0478  1 .
3534 C    C    . TYR TYR TYR B B 24  24  . 0.0650 0.0568 0.0728 0.0015  0.0047
0.0106  1 .
3535 O    O    . TYR TYR TYR B B 24  24  . 0.0431 0.0786 0.0632 0.0043  0.0036
0.0004  1 .
3536 N    N    . THR THR THR B B 25  25  . 0.0730 0.0862 0.0772 -0.0100 0.0000  -
0.0039 1 .
3537 CA   CA   . THR THR THR B B 25  25  . 0.0884 0.0996 0.1004 -0.0104 -0.0128
0.0146  1 .
3538 CB   CB   . THR THR THR B B 25  25  . 0.0903 0.0979 0.0958 -0.0088 0.0044
0.0056  1 .
3539 OG1  OG1  . THR THR THR B B 25  25  . 0.0909 0.0759 0.0949 0.0023  0.0027
0.0256  1 .
3540 CG2  CG2  . THR THR THR B B 25  25  . 0.1199 0.1180 0.1152 -0.0302 0.0055
0.0468  1 .
3541 C    C    . THR THR THR B B 25  25  . 0.1063 0.1083 0.1132 -0.0087 -0.0035
0.0085  1 .
3542 O    O    . THR THR THR B B 25  25  . 0.1143 0.1068 0.1369 -0.0194 0.0079
0.0298  1 .
3543 N    N    . ALA ALA ALA B B 26  26  . 0.1239 0.1246 0.1237 -0.0113 -0.0034
0.0101  1 .
3544 CA   CA   . ALA ALA ALA B B 26  26  . 0.1602 0.1468 0.1556 -0.0067 -0.0058
0.0053  1 .
3545 CB   CB   . ALA ALA ALA B B 26  26  . 0.1341 0.1660 0.1636 0.0004  0.0073
0.0169  1 .
3546 C    C    . ALA ALA ALA B B 26  26  . 0.1554 0.1619 0.1625 -0.0004 -0.0045
0.0071  1 .
3547 O    O    . ALA ALA ALA B B 26  26  . 0.1669 0.1692 0.1749 -0.0136 -0.0066
0.0122  1 .
3548 N    N    . LYS LYS LYS B B 27  27  . 0.1667 0.1586 0.1714 -0.0093 0.0077
0.0071  1 .
3549 CA   CA   . LYS LYS LYS B B 27  27  . 0.1626 0.1532 0.1647 -0.0091 0.0027
0.0017  1 .
3550 CB   CB   . LYS LYS LYS B B 27  27  . 0.1948 0.1750 0.1894 -0.0037 0.0041
0.0002  1 .
3551 CG   CG   . LYS LYS LYS B B 27  27  . 0.1863 0.1940 0.1858 -0.0137 0.0035  -
0.0145 1 .
3552 CD   CD   . LYS LYS LYS B B 27  27  . 0.2141 0.1944 0.1727 -0.0034 0.0202  -
0.0257 1 .
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3553 CE   CE   . LYS LYS LYS B B 27  27  . 0.1801 0.2110 0.2070 0.0120  0.0102  -
0.0112 1 .
3554 NZ   NZ   . LYS LYS LYS B B 27  27  . 0.2639 0.2790 0.3078 -0.0007 0.0449
0.0076  1 .
3555 C    C    . LYS LYS LYS B B 27  27  . 0.1733 0.1588 0.1811 -0.0034 0.0032  -
0.0042 1 .
3556 O    O    . LYS LYS LYS B B 27  27  . 0.1564 0.1535 0.1951 -0.0185 -0.0075 -
0.0116 1 .
3557 N    N    . GLY GLY GLY B B 28  28  . 0.1463 0.1444 0.1625 -0.0289 -0.0031 -
0.0024 1 .
3558 CA   CA   . GLY GLY GLY B B 28  28  . 0.1362 0.1167 0.1372 -0.0025 -0.0025
0.0127  1 .
3559 C    C    . GLY GLY GLY B B 28  28  . 0.0870 0.0911 0.0889 -0.0077 0.0044
0.0067  1 .
3560 O    O    . GLY GLY GLY B B 28  28  . 0.0798 0.0868 0.0987 -0.0011 -0.0095
0.0123  1 .
3561 N    N    . LEU LEU LEU B B 29  29  . 0.0887 0.0934 0.0835 -0.0032 -0.0068
0.0023  1 .
3562 CA   CA   . LEU LEU LEU B B 29  29  . 0.0816 0.0942 0.0793 -0.0099 0.0012
0.0069  1 .
3563 CB   CB   . LEU LEU LEU B B 29  29  . 0.1085 0.1190 0.1003 -0.0115 -0.0109
0.0202  1 .
3564 CG   CG   . LEU LEU LEU B B 29  29  . 0.1529 0.1622 0.1584 -0.0138 -0.0258
0.0123  1 .
3565 CD1  CD1  . LEU LEU LEU B B 29  29  . 0.2023 0.1727 0.2031 0.0013  -0.0237
0.0328  1 .
3566 CD2  CD2  . LEU LEU LEU B B 29  29  . 0.2213 0.1941 0.1597 -0.0041 -0.0617
0.0224  1 .
3567 C    C    . LEU LEU LEU B B 29  29  . 0.0754 0.0657 0.0738 0.0037  0.0015  -
0.0062 1 .
3568 O    O    . LEU LEU LEU B B 29  29  . 0.0962 0.0755 0.1116 0.0156  0.0059
0.0070  1 .
3569 N    N    . PHE PHE PHE B B 30  30  . 0.0521 0.0580 0.0606 -0.0074 -0.0069
0.0034  1 .
3570 CA   CA   . PHE PHE PHE B B 30  30  . 0.0488 0.0528 0.0496 -0.0082 -0.0085 -
0.0106 1 .
3571 CB   CB   . PHE PHE PHE B B 30  30  . 0.0780 0.0618 0.0812 0.0060  -0.0095 -
0.0097 1 .
3572 CG   CG   . PHE PHE PHE B B 30  30  . 0.0490 0.0746 0.0676 0.0006  0.0159  -
0.0053 1 .
3573 CD1  CD1  . PHE PHE PHE B B 30  30  . 0.0719 0.0672 0.0604 -0.0153 -0.0280 -
0.0167 1 .
3574 CE1  CE1  . PHE PHE PHE B B 30  30  . 0.0589 0.0407 0.0741 -0.0063 0.0154
0.0131  1 .
3575 CZ   CZ   . PHE PHE PHE B B 30  30  . 0.0629 0.0653 0.0816 -0.0015 -0.0039 -
0.0189 1 .
3576 CE2  CE2  . PHE PHE PHE B B 30  30  . 0.0503 0.0616 0.0622 -0.0038 0.0170
0.0023  1 .
3577 CD2  CD2  . PHE PHE PHE B B 30  30  . 0.0614 0.0707 0.0777 -0.0060 0.0167  -
0.0059 1 .
3578 C    C    . PHE PHE PHE B B 30  30  . 0.0292 0.0261 0.0545 -0.0017 0.0063  -
0.0018 1 .
3579 O    O    . PHE PHE PHE B B 30  30  . 0.0681 0.0787 0.1094 -0.0152 0.0130  -
0.0283 1 .
3580 N    N    . ARG ARG ARG B B 31  31  . 0.0271 0.0256 0.0365 -0.0007 -0.0044
0.0019  1 .
3581 CA   CA   . ARG ARG ARG B B 31  31  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3582 CB   CB   . ARG ARG ARG B B 31  31  . 0.0322 0.0418 0.0483 -0.0043 -0.0120
0.0020  1 .
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3583 CG   CG   . ARG ARG ARG B B 31  31  . 0.0345 0.0334 0.0258 -0.0086 0.0021  -
0.0020 1 .
3584 CD   CD   . ARG ARG ARG B B 31  31  . 0.0894 0.0922 0.0762 0.0355  -0.0128 -
0.0097 1 .
3585 NE   NE   . ARG ARG ARG B B 31  31  . 0.0976 0.1132 0.0955 0.0008  0.0025
0.0375  1 .
3586 CZ   CZ   . ARG ARG ARG B B 31  31  . 0.1544 0.1368 0.1495 -0.0127 -0.0105
0.0016  1 .
3587 NH1  NH1  . ARG ARG ARG B B 31  31  . 0.1571 0.1339 0.1708 -0.0209 0.0149
0.0310  1 .
3588 NH2  NH2  . ARG ARG ARG B B 31  31  . 0.1314 0.1131 0.1577 -0.0184 -0.0514 -
0.0294 1 .
3589 C    C    . ARG ARG ARG B B 31  31  . 0.0311 0.0265 0.0253 0.0027  -0.0003 -
0.0001 1 .
3590 O    O    . ARG ARG ARG B B 31  31  . 0.0376 0.0545 0.0311 0.0080  -0.0048
0.0064  1 .
3591 N    N    . ALA ALA ALA B B 32  32  . 0.0254 0.0263 0.0298 0.0003  0.0007
0.0021  1 .
3592 CA   CA   . ALA ALA ALA B B 32  32  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3593 CB   CB   . ALA ALA ALA B B 32  32  . 0.0273 0.0422 0.0465 -0.0055 -0.0020 -
0.0011 1 .
3594 C    C    . ALA ALA ALA B B 32  32  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3595 O    O    . ALA ALA ALA B B 32  32  . 0.0355 0.0254 0.0276 -0.0012 0.0049  -
0.0005 1 .
3596 N    N    . ALA ALA ALA B B 33  33  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3597 CA   CA   . ALA ALA ALA B B 33  33  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3598 CB   CB   . ALA ALA ALA B B 33  33  . 0.0259 0.0281 0.0374 0.0013  -0.0028 -
0.0058 1 .
3599 C    C    . ALA ALA ALA B B 33  33  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3600 O    O    . ALA ALA ALA B B 33  33  . 0.0386 0.0287 0.0262 0.0067  0.0034
0.0017  1 .
3601 N    N    . VAL VAL VAL B B 34  34  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3602 CA   CA   . VAL VAL VAL B B 34  34  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3603 CB   CB   . VAL VAL VAL B B 34  34  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3604 CG1  CG1  . VAL VAL VAL B B 34  34  . 0.0256 0.0254 0.0258 0.0001  0.0004
0.0001  1 .
3605 CG2  CG2  . VAL VAL VAL B B 34  34  . 0.0259 0.0262 0.0253 0.0007  0.0000
0.0000  1 .
3606 C    C    . VAL VAL VAL B B 34  34  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3607 O    O    . VAL VAL VAL B B 34  34  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3608 N    N    . PRO PRO PRO B B 35  35  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3609 CA   CA   . PRO PRO PRO B B 35  35  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3610 CB   CB   . PRO PRO PRO B B 35  35  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3611 CG   CG   . PRO PRO PRO B B 35  35  . 0.0253 0.0254 0.0253 0.0000  0.0000
0.0000  1 .
3612 CD   CD   . PRO PRO PRO B B 35  35  . 0.0259 0.0265 0.0255 -0.0008 -0.0003
0.0005  1 .
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3613 C    C    . PRO PRO PRO B B 35  35  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3614 O    O    . PRO PRO PRO B B 35  35  . 0.0284 0.0255 0.0283 0.0008  0.0030
0.0008  1 .
3615 N    N    . SER SER SER B B 36  36  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3616 CA   CA   . SER SER SER B B 36  36  . 0.0276 0.0258 0.0258 -0.0011 0.0010  -
0.0005 1 .
3617 CB   CB   . SER SER SER B B 36  36  . 0.0264 0.0257 0.0253 -0.0006 0.0000
0.0000  1 .
3618 OG   OG   . SER SER SER B B 36  36  . 0.1008 0.0513 0.0842 0.0136  0.0082
0.0003  1 .
3619 C    C    . SER SER SER B B 36  36  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3620 O    O    . SER SER SER B B 36  36  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3621 N    N    . GLY GLY GLY B B 37  37  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3622 CA   CA   . GLY GLY GLY B B 37  37  . 0.0367 0.0278 0.0255 0.0053  0.0016
0.0007  1 .
3623 C    C    . GLY GLY GLY B B 37  37  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3624 O    O    . GLY GLY GLY B B 37  37  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3625 N    N    . ALA ALA ALA B B 38  38  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3626 CA   CA   . ALA ALA ALA B B 38  38  . 0.0285 0.0253 0.0260 0.0003  -0.0015 -
0.0001 1 .
3627 CB   CB   . ALA ALA ALA B B 38  38  . 0.0288 0.0327 0.0282 0.0051  -0.0031 -
0.0046 1 .
3628 C    C    . ALA ALA ALA B B 38  38  . 0.0255 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3629 O    O    . ALA ALA ALA B B 38  38  . 0.0262 0.0253 0.0253 0.0001  0.0000
0.0000  1 .
3630 N    N    . SER SER SER B B 39  39  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3631 CA   CA   . SER SER SER B B 39  39  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3632 CB   CB   . SER SER SER B B 39  39  . 0.0265 0.0257 0.0254 0.0006  0.0003
0.0002  1 .
3633 OG   OG   . SER SER SER B B 39  39  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3634 C    C    . SER SER SER B B 39  39  . 0.0334 0.0332 0.0335 0.0049  -0.0035
0.0034  1 .
3635 O    O    . SER SER SER B B 39  39  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3636 N    N    . THR THR THR B B 40  40  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3637 CA   CA   . THR THR THR B B 40  40  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3638 CB   CB   . THR THR THR B B 40  40  . 0.0346 0.0387 0.0308 0.0111  -0.0016 -
0.0026 1 .
3639 OG1  OG1  . THR THR THR B B 40  40  . 0.0271 0.0253 0.0264 -0.0003 0.0014  -
0.0002 1 .
3640 CG2  CG2  . THR THR THR B B 40  40  . 0.0306 0.0344 0.0324 0.0069  0.0061
0.0080  1 .
3641 C    C    . THR THR THR B B 40  40  . 0.0352 0.0276 0.0263 -0.0047 -0.0031
0.0015  1 .
3642 O    O    . THR THR THR B B 40  40  . 0.0570 0.0266 0.0302 -0.0061 0.0062  -
0.0017 1 .
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3643 N    N    . GLY GLY GLY B B 41  41  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3644 CA   CA   . GLY GLY GLY B B 41  41  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3645 C    C    . GLY GLY GLY B B 41  41  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3646 O    O    . GLY GLY GLY B B 41  41  . 0.0346 0.0288 0.0284 0.0056  0.0054
0.0033  1 .
3647 N    N    . ILE ILE ILE B B 42  42  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3648 CA   CA   . ILE ILE ILE B B 42  42  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3649 CB   CB   . ILE ILE ILE B B 42  42  . 0.0267 0.0299 0.0282 -0.0025 -0.0020
0.0036  1 .
3650 CG1  CG1  . ILE ILE ILE B B 42  42  . 0.0539 0.0435 0.0355 -0.0182 0.0101
0.0000  1 .
3651 CD1  CD1  . ILE ILE ILE B B 42  42  . 0.0670 0.0397 0.0775 0.0041  -0.0092
0.0255  1 .
3652 CG2  CG2  . ILE ILE ILE B B 42  42  . 0.0476 0.0368 0.0478 -0.0001 -0.0011 -
0.0161 1 .
3653 C    C    . ILE ILE ILE B B 42  42  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3654 O    O    . ILE ILE ILE B B 42  42  . 0.0360 0.0253 0.0253 0.0006  0.0007
0.0000  1 .
3655 N    N    . TYR TYR TYR B B 43  43  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3656 CA   CA   . TYR TYR TYR B B 43  43  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3657 CB   CB   . TYR TYR TYR B B 43  43  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3658 CG   CG   . TYR TYR TYR B B 43  43  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3659 CD1  CD1  . TYR TYR TYR B B 43  43  . 0.0391 0.0393 0.0350 0.0139  0.0115
0.0116  1 .
3660 CE1  CE1  . TYR TYR TYR B B 43  43  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3661 CZ   CZ   . TYR TYR TYR B B 43  43  . 0.0503 0.0505 0.0447 0.0092  0.0177
0.0187  1 .
3662 OH   OH   . TYR TYR TYR B B 43  43  . 0.0345 0.0254 0.0313 0.0008  0.0074
0.0007  1 .
3663 CE2  CE2  . TYR TYR TYR B B 43  43  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3664 CD2  CD2  . TYR TYR TYR B B 43  43  . 0.0254 0.0355 0.0402 0.0013  0.0015
0.0123  1 .
3665 C    C    . TYR TYR TYR B B 43  43  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3666 O    O    . TYR TYR TYR B B 43  43  . 0.0329 0.0256 0.0253 0.0016  0.0005
0.0001  1 .
3667 N    N    . GLU GLU GLU B B 44  44  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3668 CA   CA   . GLU GLU GLU B B 44  44  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3669 CB   CB   . GLU GLU GLU B B 44  44  . 0.0280 0.0273 0.0356 0.0010  0.0052
0.0015  1 .
3670 CG   CG   . GLU GLU GLU B B 44  44  . 0.0460 0.0424 0.0423 0.0009  0.0021  -
0.0168 1 .
3671 CD   CD   . GLU GLU GLU B B 44  44  . 0.0482 0.0411 0.0448 0.0190  0.0211
0.0175  1 .
3672 OE1  OE1  . GLU GLU GLU B B 44  44  . 0.0698 0.0569 0.0654 0.0246  0.0043  -
0.0006 1 .
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3673 OE2  OE2  . GLU GLU GLU B B 44  44  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3674 C    C    . GLU GLU GLU B B 44  44  . 0.0273 0.0327 0.0366 0.0009  0.0023  -
0.0065 1 .
3675 O    O    . GLU GLU GLU B B 44  44  . 0.0333 0.0256 0.0259 -0.0014 0.0021  -
0.0004 1 .
3676 N    N    . ALA ALA ALA B B 45  45  . 0.0273 0.0263 0.0279 0.0014  0.0023
0.0016  1 .
3677 CA   CA   . ALA ALA ALA B B 45  45  . 0.0441 0.0481 0.0475 0.0037  0.0023  -
0.0025 1 .
3678 CB   CB   . ALA ALA ALA B B 45  45  . 0.0340 0.0286 0.0308 0.0053  -0.0069 -
0.0043 1 .
3679 C    C    . ALA ALA ALA B B 45  45  . 0.0388 0.0339 0.0270 0.0107  -0.0047 -
0.0038 1 .
3680 O    O    . ALA ALA ALA B B 45  45  . 0.0365 0.0294 0.0270 0.0067  0.0043
0.0026  1 .
3681 N    N    . LEU LEU LEU B B 46  46  . 0.0362 0.0307 0.0274 0.0015  0.0025  -
0.0024 1 .
3682 CA   CA   . LEU LEU LEU B B 46  46  . 0.0558 0.0485 0.0422 0.0096  -0.0015
0.0070  1 .
3683 CB   CB   . LEU LEU LEU B B 46  46  . 0.0864 0.0858 0.0781 0.0042  -0.0025 -
0.0199 1 .
3684 CG   CG   . LEU LEU LEU B B 46  46  . 0.1182 0.1241 0.1036 0.0161  -0.0209 -
0.0232 1 .
3685 CD1  CD1  . LEU LEU LEU B B 46  46  . 0.1385 0.1195 0.1409 -0.0017 -0.0163
0.0079  1 .
3686 CD2  CD2  . LEU LEU LEU B B 46  46  . 0.1978 0.2298 0.1497 0.0297  -0.0127 -
0.0367 1 .
3687 C    C    . LEU LEU LEU B B 46  46  . 0.0426 0.0491 0.0460 -0.0011 -0.0017
0.0012  1 .
3688 O    O    . LEU LEU LEU B B 46  46  . 0.0978 0.0720 0.0898 0.0043  0.0071
0.0072  1 .
3689 N    N    . GLU GLU GLU B B 47  47  . 0.0578 0.0504 0.0370 0.0102  -0.0051
0.0109  1 .
3690 CA   CA   . GLU GLU GLU B B 47  47  . 0.0258 0.0405 0.0342 0.0028  0.0021
0.0116  1 .
3691 CB   CB   . GLU GLU GLU B B 47  47  . 0.0482 0.0659 0.0526 0.0081  0.0058
0.0208  1 .
3692 CG   CG   . GLU GLU GLU B B 47  47  . 0.0451 0.0387 0.0388 0.0062  0.0106
0.0128  1 .
3693 CD   CD   . GLU GLU GLU B B 47  47  . 0.0939 0.0938 0.0981 0.0073  -0.0175
0.0068  1 .
3694 OE1  OE1  . GLU GLU GLU B B 47  47  . 0.1125 0.0875 0.0925 0.0032  0.0084
0.0051  1 .
3695 OE2  OE2  . GLU GLU GLU B B 47  47  . 0.0668 0.0672 0.0730 0.0005  0.0094
0.0159  1 .
3696 C    C    . GLU GLU GLU B B 47  47  . 0.0320 0.0280 0.0407 -0.0040 0.0068  -
0.0026 1 .
3697 O    O    . GLU GLU GLU B B 47  47  . 0.0720 0.0720 0.0552 -0.0018 0.0159  -
0.0158 1 .
3698 N    N    . LEU LEU LEU B B 48  48  . 0.0487 0.0369 0.0353 0.0051  0.0034  -
0.0092 1 .
3699 CA   CA   . LEU LEU LEU B B 48  48  . 0.0313 0.0253 0.0266 -0.0004 0.0028  -
0.0002 1 .
3700 CB   CB   . LEU LEU LEU B B 48  48  . 0.0325 0.0301 0.0426 0.0058  -0.0111 -
0.0091 1 .
3701 CG   CG   . LEU LEU LEU B B 48  48  . 0.0284 0.0286 0.0292 -0.0032 0.0035  -
0.0035 1 .
3702 CD1  CD1  . LEU LEU LEU B B 48  48  . 0.0878 0.0345 0.0322 0.0122  0.0060  -
0.0053 1 .
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3703 CD2  CD2  . LEU LEU LEU B B 48  48  . 0.0532 0.0518 0.0534 0.0257  0.0193
0.0114  1 .
3704 C    C    . LEU LEU LEU B B 48  48  . 0.0406 0.0291 0.0366 -0.0037 0.0003
0.0020  1 .
3705 O    O    . LEU LEU LEU B B 48  48  . 0.0565 0.0386 0.0546 0.0148  0.0155  -
0.0041 1 .
3706 N    N    . ARG ARG ARG B B 49  49  . 0.0321 0.0457 0.0490 0.0060  -0.0054 -
0.0075 1 .
3707 CA   CA   . ARG ARG ARG B B 49  49  . 0.0396 0.0321 0.0302 0.0016  0.0000  -
0.0056 1 .
3708 CB   CB   . ARG ARG ARG B B 49  49  . 0.0405 0.0630 0.0536 0.0137  -0.0081 -
0.0222 1 .
3709 CG   CG   . ARG ARG ARG B B 49  49  . 0.0897 0.1110 0.1245 0.0116  -0.0033 -
0.0225 1 .
3710 CD   CD   . ARG ARG ARG B B 49  49  . 0.1565 0.0676 0.0964 -0.0070 0.0047
0.0045  1 .
3711 NE   NE   . ARG ARG ARG B B 49  49  . 0.1317 0.0538 0.0729 0.0322  0.0124
0.0002  1 .
3712 CZ   CZ   . ARG ARG ARG B B 49  49  . 0.1043 0.0643 0.0500 0.0163  0.0071
0.0096  1 .
3713 NH1  NH1  . ARG ARG ARG B B 49  49  . 0.0511 0.0326 0.0372 0.0000  0.0052  -
0.0089 1 .
3714 NH2  NH2  . ARG ARG ARG B B 49  49  . 0.0657 0.0586 0.0679 0.0135  0.0073  -
0.0178 1 .
3715 C    C    . ARG ARG ARG B B 49  49  . 0.0464 0.0341 0.0330 0.0120  -0.0017 -
0.0047 1 .
3716 O    O    . ARG ARG ARG B B 49  49  . 0.0964 0.0958 0.0814 0.0157  -0.0074
0.0030  1 .
3717 N    N    . ASP ASP ASP B B 50  50  . 0.0320 0.0419 0.0257 0.0105  0.0015
0.0025  1 .
3718 CA   CA   . ASP ASP ASP B B 50  50  . 0.0645 0.0422 0.0453 0.0017  0.0037  -
0.0018 1 .
3719 CB   CB   . ASP ASP ASP B B 50  50  . 0.0584 0.0473 0.0300 0.0104  -0.0065
0.0059  1 .
3720 CG   CG   . ASP ASP ASP B B 50  50  . 0.0850 0.0959 0.0859 0.0045  -0.0198
0.0021  1 .
3721 OD1  OD1  . ASP ASP ASP B B 50  50  . 0.0449 0.0366 0.0403 0.0078  -0.0054
0.0083  1 .
3722 OD2  OD2  . ASP ASP ASP B B 50  50  . 0.1056 0.0532 0.0784 0.0116  0.0126
0.0054  1 .
3723 C    C    . ASP ASP ASP B B 50  50  . 0.0677 0.0746 0.0659 0.0046  -0.0059 -
0.0001 1 .
3724 O    O    . ASP ASP ASP B B 50  50  . 0.0981 0.0771 0.0864 0.0124  0.0000  -
0.0158 1 .
3725 N    N    . GLY GLY GLY B B 51  51  . 0.0970 0.0887 0.1028 0.0033  0.0034  -
0.0127 1 .
3726 CA   CA   . GLY GLY GLY B B 51  51  . 0.1090 0.1150 0.1173 -0.0013 0.0126  -
0.0028 1 .
3727 C    C    . GLY GLY GLY B B 51  51  . 0.1305 0.1204 0.1224 0.0020  -0.0022 -
0.0152 1 .
3728 O    O    . GLY GLY GLY B B 51  51  . 0.1756 0.1185 0.1686 -0.0082 0.0015
0.0083  1 .
3729 N    N    . ASP ASP ASP B B 52  52  . 0.1302 0.0973 0.1318 0.0017  0.0093  -
0.0118 1 .
3730 CA   CA   . ASP ASP ASP B B 52  52  . 0.1435 0.1357 0.1433 0.0052  -0.0005 -
0.0104 1 .
3731 CB   CB   . ASP ASP ASP B B 52  52  . 0.1549 0.1499 0.1483 0.0169  0.0017  -
0.0032 1 .
3732 CG   CG   . ASP ASP ASP B B 52  52  . 0.1575 0.1669 0.1598 -0.0001 0.0122  -
0.0167 1 .
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3733 OD1  OD1  . ASP ASP ASP B B 52  52  . 0.2430 0.2151 0.2062 -0.0062 -0.0095 -
0.0227 1 .
3734 OD2  OD2  . ASP ASP ASP B B 52  52  . 0.1891 0.1321 0.1668 0.0193  0.0128  -
0.0152 1 .
3735 C    C    . ASP ASP ASP B B 52  52  . 0.1644 0.1611 0.1651 0.0068  0.0045  -
0.0006 1 .
3736 O    O    . ASP ASP ASP B B 52  52  . 0.1924 0.1233 0.1600 0.0036  0.0049  -
0.0158 1 .
3737 N    N    . LYS LYS LYS B B 53  53  . 0.1956 0.1775 0.1934 -0.0054 0.0012  -
0.0098 1 .
3738 CA   CA   . LYS LYS LYS B B 53  53  . 0.2160 0.2173 0.2297 -0.0006 0.0021  -
0.0032 1 .
3739 CB   CB   . LYS LYS LYS B B 53  53  . 0.2448 0.2482 0.2552 -0.0028 0.0095  -
0.0088 1 .
3740 CG   CG   . LYS LYS LYS B B 53  53  . 0.3147 0.3303 0.3105 0.0111  -0.0095
0.0046  1 .
3741 CD   CD   . LYS LYS LYS B B 53  53  . 0.3867 0.3543 0.4045 -0.0115 -0.0033
0.0122  1 .
3742 CE   CE   . LYS LYS LYS B B 53  53  . 0.4430 0.4121 0.4120 0.0052  0.0038  -
0.0011 1 .
3743 NZ   NZ   . LYS LYS LYS B B 53  53  . 0.4574 0.3449 0.4423 -0.0020 -0.0100 -
0.0284 1 .
3744 C    C    . LYS LYS LYS B B 53  53  . 0.2204 0.2240 0.2391 -0.0043 -0.0011 -
0.0068 1 .
3745 O    O    . LYS LYS LYS B B 53  53  . 0.2418 0.2086 0.2611 0.0084  -0.0111 -
0.0114 1 .
3746 N    N    . GLN GLN GLN B B 54  54  . 0.2159 0.2051 0.2127 -0.0058 -0.0055 -
0.0106 1 .
3747 CA   CA   . GLN GLN GLN B B 54  54  . 0.2315 0.2013 0.2256 -0.0040 -0.0025 -
0.0017 1 .
3748 CB   CB   . GLN GLN GLN B B 54  54  . 0.2404 0.2324 0.2452 -0.0020 0.0041
0.0009  1 .
3749 CG   CG   . GLN GLN GLN B B 54  54  . 0.3267 0.2689 0.3159 -0.0051 -0.0130 -
0.0029 1 .
3750 CD   CD   . GLN GLN GLN B B 54  54  . 0.3677 0.3488 0.3976 -0.0260 -0.0016
0.0012  1 .
3751 OE1  OE1  . GLN GLN GLN B B 54  54  . 0.4187 0.4136 0.4141 -0.0364 -0.0213 -
0.0155 1 .
3752 NE2  NE2  . GLN GLN GLN B B 54  54  . 0.4445 0.4223 0.4019 -0.0285 -0.0115
0.0160  1 .
3753 C    C    . GLN GLN GLN B B 54  54  . 0.2051 0.1851 0.1962 -0.0021 -0.0081 -
0.0050 1 .
3754 O    O    . GLN GLN GLN B B 54  54  . 0.2251 0.1924 0.1847 0.0101  -0.0176 -
0.0215 1 .
3755 N    N    . ARG ARG ARG B B 55  55  . 0.1699 0.1399 0.1546 -0.0006 -0.0004 -
0.0055 1 .
3756 CA   CA   . ARG ARG ARG B B 55  55  . 0.0897 0.0837 0.0857 0.0013  -0.0007 -
0.0060 1 .
3757 CB   CB   . ARG ARG ARG B B 55  55  . 0.0936 0.0922 0.0748 0.0067  0.0170
0.0032  1 .
3758 CG   CG   . ARG ARG ARG B B 55  55  . 0.0646 0.0607 0.0576 -0.0223 0.0122  -
0.0079 1 .
3759 CD   CD   . ARG ARG ARG B B 55  55  . 0.0738 0.1018 0.0699 0.0058  -0.0095 -
0.0015 1 .
3760 NE   NE   . ARG ARG ARG B B 55  55  . 0.0474 0.0601 0.0505 0.0184  -0.0066 -
0.0061 1 .
3761 CZ   CZ   . ARG ARG ARG B B 55  55  . 0.0276 0.0276 0.0369 0.0019  -0.0052 -
0.0042 1 .
3762 NH1  NH1  . ARG ARG ARG B B 55  55  . 0.0479 0.0501 0.0373 0.0002  0.0160  -
0.0039 1 .
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3763 NH2  NH2  . ARG ARG ARG B B 55  55  . 0.0407 0.0348 0.0268 0.0070  0.0047
0.0024  1 .
3764 C    C    . ARG ARG ARG B B 55  55  . 0.0884 0.0801 0.0762 0.0058  -0.0064 -
0.0059 1 .
3765 O    O    . ARG ARG ARG B B 55  55  . 0.0874 0.0832 0.0916 0.0284  0.0010
0.0000  1 .
3766 N    N    . TYR TYR TYR B B 56  56  . 0.0714 0.0461 0.0405 0.0073  0.0048  -
0.0097 1 .
3767 CA   CA   . TYR TYR TYR B B 56  56  . 0.0575 0.0485 0.0404 0.0041  -0.0081 -
0.0122 1 .
3768 CB   CB   . TYR TYR TYR B B 56  56  . 0.0279 0.0290 0.0414 -0.0012 -0.0007
0.0074  1 .
3769 CG   CG   . TYR TYR TYR B B 56  56  . 0.0391 0.0304 0.0509 0.0010  0.0049  -
0.0105 1 .
3770 CD1  CD1  . TYR TYR TYR B B 56  56  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3771 CE1  CE1  . TYR TYR TYR B B 56  56  . 0.0347 0.0263 0.0254 -0.0030 -0.0010
0.0003  1 .
3772 CZ   CZ   . TYR TYR TYR B B 56  56  . 0.0367 0.0495 0.0345 0.0112  0.0092
0.0137  1 .
3773 OH   OH   . TYR TYR TYR B B 56  56  . 0.0324 0.0278 0.0261 0.0042  -0.0023 -
0.0014 1 .
3774 CE2  CE2  . TYR TYR TYR B B 56  56  . 0.0275 0.0278 0.0333 0.0016  0.0041
0.0037  1 .
3775 CD2  CD2  . TYR TYR TYR B B 56  56  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3776 C    C    . TYR TYR TYR B B 56  56  . 0.0463 0.0613 0.0476 -0.0005 -0.0043 -
0.0101 1 .
3777 O    O    . TYR TYR TYR B B 56  56  . 0.0881 0.0556 0.0509 0.0004  0.0026  -
0.0210 1 .
3778 N    N    . LEU LEU LEU B B 57  57  . 0.0773 0.0598 0.0746 -0.0012 0.0045  -
0.0031 1 .
3779 CA   CA   . LEU LEU LEU B B 57  57  . 0.1072 0.1003 0.1106 -0.0078 0.0050  -
0.0049 1 .
3780 CB   CB   . LEU LEU LEU B B 57  57  . 0.1123 0.1020 0.1407 -0.0153 0.0021  -
0.0066 1 .
3781 CG   CG   . LEU LEU LEU B B 57  57  . 0.1581 0.1585 0.1863 -0.0026 -0.0042 -
0.0026 1 .
3782 CD1  CD1  . LEU LEU LEU B B 57  57  . 0.1629 0.2427 0.2331 -0.0136 0.0079  -
0.0507 1 .
3783 CD2  CD2  . LEU LEU LEU B B 57  57  . 0.2345 0.2249 0.1738 -0.0251 -0.0042
0.0157  1 .
3784 C    C    . LEU LEU LEU B B 57  57  . 0.0750 0.0723 0.0763 -0.0062 0.0089  -
0.0017 1 .
3785 O    O    . LEU LEU LEU B B 57  57  . 0.0971 0.0462 0.1064 -0.0026 -0.0128 -
0.0043 1 .
3786 N    N    . GLY GLY GLY B B 58  58  . 0.0846 0.0599 0.0966 -0.0057 -0.0022 -
0.0066 1 .
3787 CA   CA   . GLY GLY GLY B B 58  58  . 0.0828 0.0723 0.0804 -0.0033 -0.0059
0.0034  1 .
3788 C    C    . GLY GLY GLY B B 58  58  . 0.0596 0.0592 0.0604 0.0012  -0.0035
0.0007  1 .
3789 O    O    . GLY GLY GLY B B 58  58  . 0.0789 0.0735 0.0774 0.0012  -0.0147 -
0.0017 1 .
3790 N    N    . LYS LYS LYS B B 59  59  . 0.0281 0.0261 0.0296 0.0009  0.0031
0.0016  1 .
3791 CA   CA   . LYS LYS LYS B B 59  59  . 0.0358 0.0364 0.0416 -0.0019 0.0029
0.0060  1 .
3792 CB   CB   . LYS LYS LYS B B 59  59  . 0.0541 0.0409 0.0605 0.0035  0.0117
0.0191  1 .
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3793 CG   CG   . LYS LYS LYS B B 59  59  . 0.0989 0.0929 0.1191 0.0022  0.0332
0.0076  1 .
3794 CD   CD   . LYS LYS LYS B B 59  59  . 0.1546 0.2029 0.2196 0.0067  0.0167  -
0.0100 1 .
3795 CE   CE   . LYS LYS LYS B B 59  59  . 0.1827 0.2064 0.2558 -0.0230 0.0270  -
0.0037 1 .
3796 NZ   NZ   . LYS LYS LYS B B 59  59  . 0.2362 0.2950 0.2862 -0.0542 0.0206  -
0.0368 1 .
3797 C    C    . LYS LYS LYS B B 59  59  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3798 O    O    . LYS LYS LYS B B 59  59  . 0.0603 0.0383 0.0414 -0.0001 0.0004
0.0011  1 .
3799 N    N    . GLY GLY GLY B B 60  60  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3800 CA   CA   . GLY GLY GLY B B 60  60  . 0.0263 0.0254 0.0259 0.0003  0.0007
0.0002  1 .
3801 C    C    . GLY GLY GLY B B 60  60  . 0.0272 0.0347 0.0279 0.0002  0.0014  -
0.0035 1 .
3802 O    O    . GLY GLY GLY B B 60  60  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3803 N    N    . VAL VAL VAL B B 61  61  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3804 CA   CA   . VAL VAL VAL B B 61  61  . 0.0263 0.0319 0.0341 -0.0025 0.0029  -
0.0076 1 .
3805 CB   CB   . VAL VAL VAL B B 61  61  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3806 CG1  CG1  . VAL VAL VAL B B 61  61  . 0.0269 0.0312 0.0411 -0.0030 -0.0050
0.0096  1 .
3807 CG2  CG2  . VAL VAL VAL B B 61  61  . 0.0287 0.0335 0.0261 0.0053  0.0016
0.0026  1 .
3808 C    C    . VAL VAL VAL B B 61  61  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3809 O    O    . VAL VAL VAL B B 61  61  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3810 N    N    . LEU LEU LEU B B 62  62  . 0.0395 0.0359 0.0293 0.0079  0.0072
0.0027  1 .
3811 CA   CA   . LEU LEU LEU B B 62  62  . 0.0268 0.0281 0.0276 0.0008  -0.0014 -
0.0022 1 .
3812 CB   CB   . LEU LEU LEU B B 62  62  . 0.0304 0.0452 0.0434 0.0100  -0.0096 -
0.0190 1 .
3813 CG   CG   . LEU LEU LEU B B 62  62  . 0.0394 0.0453 0.0323 -0.0005 -0.0074 -
0.0050 1 .
3814 CD1  CD1  . LEU LEU LEU B B 62  62  . 0.0954 0.1209 0.0732 0.0441  0.0197  -
0.0259 1 .
3815 CD2  CD2  . LEU LEU LEU B B 62  62  . 0.0539 0.0619 0.0508 0.0177  -0.0227 -
0.0040 1 .
3816 C    C    . LEU LEU LEU B B 62  62  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3817 O    O    . LEU LEU LEU B B 62  62  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3818 N    N    . LYS LYS LYS B B 63  63  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3819 CA   CA   . LYS LYS LYS B B 63  63  . 0.0256 0.0276 0.0254 0.0009  -0.0001 -
0.0004 1 .
3820 CB   CB   . LYS LYS LYS B B 63  63  . 0.0254 0.0254 0.0254 0.0000  -0.0001
0.0000  1 .
3821 CG   CG   . LYS LYS LYS B B 63  63  . 0.0609 0.0528 0.0816 -0.0069 0.0096  -
0.0268 1 .
3822 CD   CD   . LYS LYS LYS B B 63  63  . 0.1070 0.0860 0.0455 0.0071  0.0051
0.0206  1 .
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3823 CE   CE   . LYS LYS LYS B B 63  63  . 0.1610 0.1457 0.1313 -0.0085 0.0050  -
0.0246 1 .
3824 NZ   NZ   . LYS LYS LYS B B 63  63  . 0.1648 0.1002 0.1479 0.0248  0.0310  -
0.0170 1 .
3825 C    C    . LYS LYS LYS B B 63  63  . 0.0253 0.0253 0.0354 0.0000  0.0004
0.0003  1 .
3826 O    O    . LYS LYS LYS B B 63  63  . 0.0444 0.0419 0.0663 -0.0064 0.0146  -
0.0012 1 .
3827 N    N    . ALA ALA ALA B B 64  64  . 0.0423 0.0344 0.0292 -0.0014 -0.0015
0.0059  1 .
3828 CA   CA   . ALA ALA ALA B B 64  64  . 0.0439 0.0291 0.0379 0.0054  -0.0029
0.0043  1 .
3829 CB   CB   . ALA ALA ALA B B 64  64  . 0.0411 0.0259 0.0289 -0.0030 0.0075  -
0.0014 1 .
3830 C    C    . ALA ALA ALA B B 64  64  . 0.0275 0.0470 0.0272 -0.0028 -0.0013 -
0.0028 1 .
3831 O    O    . ALA ALA ALA B B 64  64  . 0.0404 0.0347 0.0482 0.0100  -0.0003
0.0077  1 .
3832 N    N    . VAL VAL VAL B B 65  65  . 0.0397 0.0375 0.0376 0.0105  0.0058
0.0109  1 .
3833 CA   CA   . VAL VAL VAL B B 65  65  . 0.0287 0.0388 0.0336 -0.0011 0.0051  -
0.0040 1 .
3834 CB   CB   . VAL VAL VAL B B 65  65  . 0.0451 0.0405 0.0434 0.0151  -0.0033
0.0015  1 .
3835 CG1  CG1  . VAL VAL VAL B B 65  65  . 0.0262 0.0360 0.0374 0.0031  0.0032
0.0113  1 .
3836 CG2  CG2  . VAL VAL VAL B B 65  65  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
3837 C    C    . VAL VAL VAL B B 65  65  . 0.0405 0.0289 0.0267 -0.0067 -0.0010 -
0.0004 1 .
3838 O    O    . VAL VAL VAL B B 65  65  . 0.0303 0.0508 0.0313 0.0070  0.0024  -
0.0052 1 .
3839 N    N    . ASP ASP ASP B B 66  66  . 0.0503 0.0306 0.0308 0.0098  0.0089
0.0016  1 .
3840 CA   CA   . ASP ASP ASP B B 66  66  . 0.0258 0.0525 0.0512 -0.0018 0.0019
0.0003  1 .
3841 CB   CB   . ASP ASP ASP B B 66  66  . 0.0533 0.0632 0.0761 0.0057  0.0087  -
0.0140 1 .
3842 CG   CG   . ASP ASP ASP B B 66  66  . 0.1782 0.1876 0.1857 0.0258  0.0271  -
0.0126 1 .
3843 OD1  OD1  . ASP ASP ASP B B 66  66  . 0.2668 0.2426 0.2789 0.0314  -0.0111
0.0162  1 .
3844 OD2  OD2  . ASP ASP ASP B B 66  66  . 0.2239 0.2477 0.2461 0.0118  0.0316
0.0013  1 .
3845 C    C    . ASP ASP ASP B B 66  66  . 0.0472 0.0480 0.0369 0.0051  0.0055  -
0.0023 1 .
3846 O    O    . ASP ASP ASP B B 66  66  . 0.0538 0.0573 0.0551 -0.0082 -0.0006
0.0004  1 .
3847 N    N    . HIS HIS HIS B B 67  67  . 0.0413 0.0276 0.0271 0.0061  0.0053
0.0020  1 .
3848 CA   CA   . HIS HIS HIS B B 67  67  . 0.0451 0.0554 0.0410 0.0135  0.0068  -
0.0035 1 .
3849 CB   CB   . HIS HIS HIS B B 67  67  . 0.0590 0.0339 0.0509 -0.0022 0.0069
0.0138  1 .
3850 CG   CG   . HIS HIS HIS B B 67  67  . 0.0432 0.0400 0.0536 0.0138  -0.0079 -
0.0161 1 .
3851 ND1  ND1  . HIS HIS HIS B B 67  67  . 0.1112 0.0923 0.1022 0.0024  0.0047  -
0.0020 1 .
3852 CE1  CE1  . HIS HIS HIS B B 67  67  . 0.1103 0.1082 0.1359 -0.0082 0.0220  -
0.0024 1 .
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3853 NE2  NE2  . HIS HIS HIS B B 67  67  . 0.0985 0.0511 0.1128 0.0172  0.0098
0.0252  1 .
3854 CD2  CD2  . HIS HIS HIS B B 67  67  . 0.0579 0.0367 0.0297 -0.0095 -0.0001 -
0.0061 1 .
3855 C    C    . HIS HIS HIS B B 67  67  . 0.0352 0.0349 0.0372 0.0046  0.0024  -
0.0080 1 .
3856 O    O    . HIS HIS HIS B B 67  67  . 0.0310 0.0297 0.0361 0.0046  0.0045
0.0013  1 .
3857 N    N    . ILE ILE ILE B B 68  68  . 0.0400 0.0452 0.0438 0.0145  0.0054
0.0149  1 .
3858 CA   CA   . ILE ILE ILE B B 68  68  . 0.0255 0.0340 0.0294 -0.0012 0.0008  -
0.0059 1 .
3859 CB   CB   . ILE ILE ILE B B 68  68  . 0.0313 0.0304 0.0274 0.0055  0.0036
0.0033  1 .
3860 CG1  CG1  . ILE ILE ILE B B 68  68  . 0.0322 0.0302 0.0326 0.0058  0.0071
0.0060  1 .
3861 CD1  CD1  . ILE ILE ILE B B 68  68  . 0.0257 0.0257 0.0255 0.0003  0.0002
0.0002  1 .
3862 CG2  CG2  . ILE ILE ILE B B 68  68  . 0.0272 0.0575 0.0364 -0.0078 0.0046  -
0.0189 1 .
3863 C    C    . ILE ILE ILE B B 68  68  . 0.0254 0.0294 0.0313 -0.0008 -0.0009
0.0049  1 .
3864 O    O    . ILE ILE ILE B B 68  68  . 0.0478 0.0593 0.0664 0.0102  0.0012
0.0046  1 .
3865 N    N    . ASN ASN ASN B B 69  69  . 0.0357 0.0323 0.0259 0.0085  0.0026
0.0021  1 .
3866 CA   CA   . ASN ASN ASN B B 69  69  . 0.0458 0.0503 0.0611 0.0073  0.0014
0.0065  1 .
3867 CB   CB   . ASN ASN ASN B B 69  69  . 0.0624 0.0398 0.0312 0.0228  0.0062
0.0050  1 .
3868 CG   CG   . ASN ASN ASN B B 69  69  . 0.0541 0.0635 0.0577 -0.0056 0.0042
0.0005  1 .
3869 OD1  OD1  . ASN ASN ASN B B 69  69  . 0.0789 0.0729 0.0537 0.0012  0.0150
0.0118  1 .
3870 ND2  ND2  . ASN ASN ASN B B 69  69  . 0.0306 0.0549 0.0525 0.0027  0.0111
0.0159  1 .
3871 C    C    . ASN ASN ASN B B 69  69  . 0.0740 0.0783 0.0923 0.0131  0.0040
0.0004  1 .
3872 O    O    . ASN ASN ASN B B 69  69  . 0.0783 0.0872 0.1169 0.0050  0.0203
0.0137  1 .
3873 N    N    . SER SER SER B B 70  70  . 0.1008 0.1037 0.0953 0.0095  -0.0019 -
0.0031 1 .
3874 CA   CA   . SER SER SER B B 70  70  . 0.1166 0.1252 0.1320 0.0129  -0.0028 -
0.0067 1 .
3875 CB   CB   . SER SER SER B B 70  70  . 0.1230 0.1323 0.1255 0.0220  -0.0004 -
0.0196 1 .
3876 OG   OG   . SER SER SER B B 70  70  . 0.2585 0.2228 0.2312 0.0456  -0.0170 -
0.0115 1 .
3877 C    C    . SER SER SER B B 70  70  . 0.1136 0.1174 0.1022 0.0044  0.0018  -
0.0022 1 .
3878 O    O    . SER SER SER B B 70  70  . 0.1360 0.1473 0.1471 -0.0019 0.0062  -
0.0017 1 .
3879 N    N    . THR THR THR B B 71  71  . 0.1081 0.1093 0.1201 0.0061  -0.0062 -
0.0131 1 .
3880 CA   CA   . THR THR THR B B 71  71  . 0.1076 0.1098 0.1089 0.0053  0.0037
0.0075  1 .
3881 CB   CB   . THR THR THR B B 71  71  . 0.1248 0.1160 0.1375 0.0097  -0.0034
0.0042  1 .
3882 OG1  OG1  . THR THR THR B B 71  71  . 0.1774 0.1470 0.1677 0.0122  0.0135
0.0004  1 .
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3883 CG2  CG2  . THR THR THR B B 71  71  . 0.1773 0.1345 0.1589 0.0095  0.0061
0.0070  1 .
3884 C    C    . THR THR THR B B 71  71  . 0.0714 0.0830 0.0813 0.0094  -0.0009
0.0056  1 .
3885 O    O    . THR THR THR B B 71  71  . 0.0722 0.0801 0.0749 0.0125  0.0090
0.0156  1 .
3886 N    N    . ILE ILE ILE B B 72  72  . 0.0676 0.0770 0.0695 0.0148  0.0076
0.0065  1 .
3887 CA   CA   . ILE ILE ILE B B 72  72  . 0.0315 0.0482 0.0442 0.0064  0.0020  -
0.0001 1 .
3888 CB   CB   . ILE ILE ILE B B 72  72  . 0.0357 0.0686 0.0560 0.0037  0.0040  -
0.0130 1 .
3889 CG1  CG1  . ILE ILE ILE B B 72  72  . 0.0693 0.0852 0.0909 0.0180  0.0000
0.0097  1 .
3890 CD1  CD1  . ILE ILE ILE B B 72  72  . 0.0691 0.0908 0.1081 0.0157  -0.0132
0.0377  1 .
3891 CG2  CG2  . ILE ILE ILE B B 72  72  . 0.0382 0.0370 0.0661 -0.0024 0.0154
0.0129  1 .
3892 C    C    . ILE ILE ILE B B 72  72  . 0.0663 0.0806 0.0683 0.0096  0.0047
0.0051  1 .
3893 O    O    . ILE ILE ILE B B 72  72  . 0.1063 0.1138 0.1134 -0.0049 -0.0160
0.0171  1 .
3894 N    N    . ALA ALA ALA B B 73  73  . 0.0727 0.0779 0.0670 0.0102  0.0105
0.0094  1 .
3895 CA   CA   . ALA ALA ALA B B 73  73  . 0.0424 0.0531 0.0637 0.0056  -0.0024
0.0176  1 .
3896 CB   CB   . ALA ALA ALA B B 73  73  . 0.0684 0.0816 0.0592 0.0056  0.0093
0.0125  1 .
3897 C    C    . ALA ALA ALA B B 73  73  . 0.0738 0.0699 0.0667 0.0028  0.0066
0.0044  1 .
3898 O    O    . ALA ALA ALA B B 73  73  . 0.0672 0.0841 0.0908 0.0206  0.0065
0.0164  1 .
3899 N    N    . PRO PRO PRO B B 74  74  . 0.0754 0.0789 0.0819 -0.0024 0.0052
0.0101  1 .
3900 CA   CA   . PRO PRO PRO B B 74  74  . 0.0837 0.0995 0.0849 0.0123  0.0022
0.0077  1 .
3901 CB   CB   . PRO PRO PRO B B 74  74  . 0.0855 0.0841 0.0713 0.0049  0.0144  -
0.0035 1 .
3902 CG   CG   . PRO PRO PRO B B 74  74  . 0.0869 0.0932 0.0859 0.0164  -0.0117
0.0168  1 .
3903 CD   CD   . PRO PRO PRO B B 74  74  . 0.0981 0.0842 0.0913 0.0172  0.0077  -
0.0038 1 .
3904 C    C    . PRO PRO PRO B B 74  74  . 0.0903 0.1026 0.0972 0.0037  -0.0001
0.0009  1 .
3905 O    O    . PRO PRO PRO B B 74  74  . 0.1135 0.1166 0.1263 -0.0032 0.0024
0.0049  1 .
3906 N    N    . ALA ALA ALA B B 75  75  . 0.0829 0.0916 0.1059 0.0169  0.0017
0.0150  1 .
3907 CA   CA   . ALA ALA ALA B B 75  75  . 0.0930 0.0945 0.0911 -0.0041 0.0031
0.0071  1 .
3908 CB   CB   . ALA ALA ALA B B 75  75  . 0.0915 0.0888 0.0923 0.0070  0.0056
0.0235  1 .
3909 C    C    . ALA ALA ALA B B 75  75  . 0.0871 0.0906 0.0790 0.0030  0.0005
0.0020  1 .
3910 O    O    . ALA ALA ALA B B 75  75  . 0.1122 0.1065 0.1276 0.0141  0.0048
0.0126  1 .
3911 N    N    . LEU LEU LEU B B 76  76  . 0.0737 0.0834 0.0649 0.0017  0.0003
0.0120  1 .
3912 CA   CA   . LEU LEU LEU B B 76  76  . 0.0633 0.0577 0.0517 -0.0013 0.0102
0.0115  1 .
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3913 CB   CB   . LEU LEU LEU B B 76  76  . 0.0347 0.0721 0.0449 -0.0045 -0.0119
0.0197  1 .
3914 CG   CG   . LEU LEU LEU B B 76  76  . 0.0977 0.1073 0.0929 0.0043  -0.0026 -
0.0036 1 .
3915 CD1  CD1  . LEU LEU LEU B B 76  76  . 0.0536 0.1129 0.1086 0.0181  -0.0299
0.0184  1 .
3916 CD2  CD2  . LEU LEU LEU B B 76  76  . 0.1090 0.1401 0.1069 0.0028  0.0102
0.0620  1 .
3917 C    C    . LEU LEU LEU B B 76  76  . 0.0315 0.0453 0.0430 -0.0060 0.0098  -
0.0040 1 .
3918 O    O    . LEU LEU LEU B B 76  76  . 0.0816 0.0978 0.1058 0.0040  0.0105
0.0142  1 .
3919 N    N    . ILE ILE ILE B B 77  77  . 0.0260 0.0718 0.0553 -0.0034 0.0028
0.0093  1 .
3920 CA   CA   . ILE ILE ILE B B 77  77  . 0.0548 0.0772 0.0794 0.0079  0.0078
0.0133  1 .
3921 CB   CB   . ILE ILE ILE B B 77  77  . 0.0427 0.0823 0.0580 0.0285  0.0024
0.0041  1 .
3922 CG1  CG1  . ILE ILE ILE B B 77  77  . 0.0668 0.0771 0.0733 0.0132  0.0059
0.0058  1 .
3923 CD1  CD1  . ILE ILE ILE B B 77  77  . 0.0899 0.1775 0.0871 0.0264  0.0068
0.0473  1 .
3924 CG2  CG2  . ILE ILE ILE B B 77  77  . 0.0905 0.0976 0.1210 0.0052  -0.0014
0.0159  1 .
3925 C    C    . ILE ILE ILE B B 77  77  . 0.0658 0.0989 0.0936 0.0086  0.0015  -
0.0037 1 .
3926 O    O    . ILE ILE ILE B B 77  77  . 0.1004 0.1142 0.1147 -0.0020 0.0238  -
0.0018 1 .
3927 N    N    . SER SER SER B B 78  78  . 0.0836 0.0833 0.1025 -0.0036 0.0114
0.0141  1 .
3928 CA   CA   . SER SER SER B B 78  78  . 0.1161 0.1262 0.1316 0.0021  -0.0040
0.0035  1 .
3929 CB   CB   . SER SER SER B B 78  78  . 0.0862 0.1135 0.1414 0.0205  -0.0042 -
0.0034 1 .
3930 OG   OG   . SER SER SER B B 78  78  . 0.2451 0.2765 0.2180 -0.0024 -0.0054 -
0.0019 1 .
3931 C    C    . SER SER SER B B 78  78  . 0.1204 0.1227 0.1212 -0.0011 -0.0039
0.0020  1 .
3932 O    O    . SER SER SER B B 78  78  . 0.1112 0.1347 0.1465 0.0022  -0.0057
0.0182  1 .
3933 N    N    . SER SER SER B B 79  79  . 0.1066 0.1123 0.1322 0.0141  -0.0077
0.0114  1 .
3934 CA   CA   . SER SER SER B B 79  79  . 0.1123 0.1136 0.1215 0.0090  0.0006
0.0008  1 .
3935 CB   CB   . SER SER SER B B 79  79  . 0.1312 0.1443 0.1278 0.0051  0.0020
0.0081  1 .
3936 OG   OG   . SER SER SER B B 79  79  . 0.1425 0.1323 0.1501 0.0197  -0.0132
0.0169  1 .
3937 C    C    . SER SER SER B B 79  79  . 0.1122 0.1191 0.1211 0.0024  -0.0031 -
0.0028 1 .
3938 O    O    . SER SER SER B B 79  79  . 0.1184 0.1268 0.1352 0.0056  0.0000
0.0098  1 .
3939 N    N    . GLY GLY GLY B B 80  80  . 0.1238 0.1369 0.1211 -0.0110 -0.0040 -
0.0023 1 .
3940 CA   CA   . GLY GLY GLY B B 80  80  . 0.1364 0.1122 0.1294 -0.0052 -0.0001
0.0047  1 .
3941 C    C    . GLY GLY GLY B B 80  80  . 0.1261 0.1324 0.1346 -0.0008 -0.0046
0.0076  1 .
3942 O    O    . GLY GLY GLY B B 80  80  . 0.1601 0.1651 0.1632 0.0015  -0.0140
0.0086  1 .
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3943 N    N    . LEU LEU LEU B B 81  81  . 0.0962 0.1259 0.1243 -0.0047 -0.0025
0.0078  1 .
3944 CA   CA   . LEU LEU LEU B B 81  81  . 0.0939 0.0842 0.0888 -0.0028 -0.0079
0.0049  1 .
3945 CB   CB   . LEU LEU LEU B B 81  81  . 0.1137 0.1160 0.1326 -0.0008 -0.0031 -
0.0080 1 .
3946 CG   CG   . LEU LEU LEU B B 81  81  . 0.0998 0.1041 0.1062 -0.0007 -0.0180
0.0129  1 .
3947 CD1  CD1  . LEU LEU LEU B B 81  81  . 0.1019 0.1192 0.1019 -0.0152 0.0085
0.0196  1 .
3948 CD2  CD2  . LEU LEU LEU B B 81  81  . 0.2016 0.1508 0.1671 0.0162  -0.0442 -
0.0115 1 .
3949 C    C    . LEU LEU LEU B B 81  81  . 0.1116 0.1197 0.1160 -0.0012 -0.0070 -
0.0055 1 .
3950 O    O    . LEU LEU LEU B B 81  81  . 0.0896 0.0915 0.0855 0.0089  -0.0085
0.0296  1 .
3951 N    N    . SER SER SER B B 82  82  . 0.1027 0.1131 0.1278 0.0061  -0.0030
0.0101  1 .
3952 CA   CA   . SER SER SER B B 82  82  . 0.1063 0.1113 0.1334 0.0029  0.0042  -
0.0022 1 .
3953 CB   CB   . SER SER SER B B 82  82  . 0.0926 0.1072 0.1169 -0.0032 -0.0034
0.0048  1 .
3954 OG   OG   . SER SER SER B B 82  82  . 0.1455 0.1360 0.1877 0.0007  0.0099
0.0172  1 .
3955 C    C    . SER SER SER B B 82  82  . 0.0855 0.1049 0.0998 0.0085  0.0045
0.0118  1 .
3956 O    O    . SER SER SER B B 82  82  . 0.0733 0.0841 0.1042 0.0082  -0.0113
0.0102  1 .
3957 N    N    . VAL VAL VAL B B 83  83  . 0.0889 0.1108 0.0960 0.0036  0.0026
0.0161  1 .
3958 CA   CA   . VAL VAL VAL B B 83  83  . 0.0864 0.0951 0.0833 -0.0023 0.0062
0.0110  1 .
3959 CB   CB   . VAL VAL VAL B B 83  83  . 0.0807 0.0627 0.0989 0.0055  -0.0099
0.0000  1 .
3960 CG1  CG1  . VAL VAL VAL B B 83  83  . 0.1001 0.1127 0.0661 -0.0046 0.0031
0.0038  1 .
3961 CG2  CG2  . VAL VAL VAL B B 83  83  . 0.0888 0.0835 0.1169 -0.0290 0.0249
0.0177  1 .
3962 C    C    . VAL VAL VAL B B 83  83  . 0.0921 0.0892 0.0854 0.0017  -0.0022 -
0.0007 1 .
3963 O    O    . VAL VAL VAL B B 83  83  . 0.0903 0.1097 0.1103 -0.0136 0.0178
0.0179  1 .
3964 N    N    . VAL VAL VAL B B 84  84  . 0.0891 0.1057 0.1062 -0.0026 0.0056
0.0064  1 .
3965 CA   CA   . VAL VAL VAL B B 84  84  . 0.1069 0.1045 0.1033 -0.0033 -0.0015
0.0046  1 .
3966 CB   CB   . VAL VAL VAL B B 84  84  . 0.1022 0.0914 0.1160 -0.0001 -0.0040
0.0121  1 .
3967 CG1  CG1  . VAL VAL VAL B B 84  84  . 0.1279 0.0894 0.1011 -0.0083 -0.0036
0.0187  1 .
3968 CG2  CG2  . VAL VAL VAL B B 84  84  . 0.1413 0.1239 0.1475 0.0032  -0.0059
0.0411  1 .
3969 C    C    . VAL VAL VAL B B 84  84  . 0.1162 0.0969 0.1108 -0.0003 -0.0071
0.0017  1 .
3970 O    O    . VAL VAL VAL B B 84  84  . 0.1423 0.1173 0.1332 -0.0169 -0.0121
0.0067  1 .
3971 N    N    . GLU GLU GLU B B 85  85  . 0.1236 0.1146 0.1154 -0.0003 0.0021
0.0137  1 .
3972 CA   CA   . GLU GLU GLU B B 85  85  . 0.1131 0.1122 0.1356 0.0064  -0.0032
0.0060  1 .
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3973 CB   CB   . GLU GLU GLU B B 85  85  . 0.1323 0.1227 0.1509 0.0110  0.0049  -
0.0035 1 .
3974 CG   CG   . GLU GLU GLU B B 85  85  . 0.1724 0.1698 0.2388 0.0100  0.0009  -
0.0023 1 .
3975 CD   CD   . GLU GLU GLU B B 85  85  . 0.3177 0.3384 0.3163 0.0013  -0.0029 -
0.0052 1 .
3976 OE1  OE1  . GLU GLU GLU B B 85  85  . 0.3208 0.3464 0.4415 -0.0024 0.0083  -
0.0154 1 .
3977 OE2  OE2  . GLU GLU GLU B B 85  85  . 0.3371 0.3528 0.3652 0.0198  -0.0184
0.0117  1 .
3978 C    C    . GLU GLU GLU B B 85  85  . 0.0930 0.0749 0.0904 0.0028  0.0063
0.0098  1 .
3979 O    O    . GLU GLU GLU B B 85  85  . 0.0696 0.0682 0.0648 -0.0133 -0.0040
0.0175  1 .
3980 N    N    . GLN GLN GLN B B 86  86  . 0.0760 0.0855 0.0873 0.0038  -0.0123
0.0252  1 .
3981 CA   CA   . GLN GLN GLN B B 86  86  . 0.0714 0.0638 0.0809 0.0083  0.0007
0.0111  1 .
3982 CB   CB   . GLN GLN GLN B B 86  86  . 0.0994 0.0969 0.1113 0.0023  0.0018  -
0.0041 1 .
3983 CG   CG   . GLN GLN GLN B B 86  86  . 0.0751 0.0894 0.0717 -0.0037 -0.0125
0.0174  1 .
3984 CD   CD   . GLN GLN GLN B B 86  86  . 0.0905 0.0647 0.0640 -0.0010 0.0062  -
0.0075 1 .
3985 OE1  OE1  . GLN GLN GLN B B 86  86  . 0.0698 0.0873 0.0789 0.0073  0.0100
0.0168  1 .
3986 NE2  NE2  . GLN GLN GLN B B 86  86  . 0.0669 0.0695 0.0664 0.0023  -0.0178
0.0080  1 .
3987 C    C    . GLN GLN GLN B B 86  86  . 0.0744 0.0632 0.0780 -0.0037 -0.0104
0.0000  1 .
3988 O    O    . GLN GLN GLN B B 86  86  . 0.0619 0.0885 0.0675 0.0198  0.0055
0.0097  1 .
3989 N    N    . GLU GLU GLU B B 87  87  . 0.1082 0.0850 0.0841 0.0039  0.0117
0.0093  1 .
3990 CA   CA   . GLU GLU GLU B B 87  87  . 0.1072 0.0774 0.0777 0.0063  0.0034
0.0093  1 .
3991 CB   CB   . GLU GLU GLU B B 87  87  . 0.1025 0.1006 0.1006 0.0009  -0.0079 -
0.0018 1 .
3992 CG   CG   . GLU GLU GLU B B 87  87  . 0.2083 0.1780 0.1852 0.0159  -0.0042
0.0044  1 .
3993 CD   CD   . GLU GLU GLU B B 87  87  . 0.3342 0.2986 0.2474 0.0069  -0.0141 -
0.0063 1 .
3994 OE1  OE1  . GLU GLU GLU B B 87  87  . 0.3977 0.3540 0.3198 -0.0148 -0.0176
0.0140  1 .
3995 OE2  OE2  . GLU GLU GLU B B 87  87  . 0.3443 0.3096 0.2463 -0.0133 -0.0533 -
0.0203 1 .
3996 C    C    . GLU GLU GLU B B 87  87  . 0.0730 0.0739 0.0766 -0.0012 -0.0115
0.0104  1 .
3997 O    O    . GLU GLU GLU B B 87  87  . 0.1113 0.0985 0.1019 0.0036  0.0024
0.0214  1 .
3998 N    N    . LYS LYS LYS B B 88  88  . 0.0551 0.0748 0.0622 0.0081  0.0112
0.0130  1 .
3999 CA   CA   . LYS LYS LYS B B 88  88  . 0.0776 0.0717 0.0831 -0.0001 -0.0093
0.0109  1 .
4000 CB   CB   . LYS LYS LYS B B 88  88  . 0.0769 0.0922 0.0630 -0.0056 0.0025
0.0150  1 .
4001 CG   CG   . LYS LYS LYS B B 88  88  . 0.1181 0.1300 0.1174 -0.0155 -0.0233
0.0047  1 .
4002 CD   CD   . LYS LYS LYS B B 88  88  . 0.1642 0.1967 0.1478 -0.0210 0.0144
0.0037  1 .
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4003 CE   CE   . LYS LYS LYS B B 88  88  . 0.2360 0.2941 0.2270 0.0181  -0.0061
0.0095  1 .
4004 NZ   NZ   . LYS LYS LYS B B 88  88  . 0.3232 0.3059 0.2749 0.0127  -0.0453 -
0.0499 1 .
4005 C    C    . LYS LYS LYS B B 88  88  . 0.0761 0.0578 0.0743 0.0123  -0.0027
0.0042  1 .
4006 O    O    . LYS LYS LYS B B 88  88  . 0.0684 0.0833 0.0743 0.0045  -0.0091
0.0156  1 .
4007 N    N    . LEU LEU LEU B B 89  89  . 0.0881 0.0936 0.0798 0.0142  -0.0170
0.0141  1 .
4008 CA   CA   . LEU LEU LEU B B 89  89  . 0.0656 0.0773 0.0856 0.0029  0.0044
0.0094  1 .
4009 CB   CB   . LEU LEU LEU B B 89  89  . 0.0880 0.0687 0.0825 0.0049  0.0155
0.0298  1 .
4010 CG   CG   . LEU LEU LEU B B 89  89  . 0.0413 0.0810 0.0949 0.0120  -0.0068 -
0.0091 1 .
4011 CD1  CD1  . LEU LEU LEU B B 89  89  . 0.0993 0.0685 0.0906 -0.0124 -0.0177
0.0083  1 .
4012 CD2  CD2  . LEU LEU LEU B B 89  89  . 0.0668 0.0867 0.0848 0.0041  0.0081
0.0077  1 .
4013 C    C    . LEU LEU LEU B B 89  89  . 0.0917 0.0810 0.0971 -0.0065 -0.0018
0.0015  1 .
4014 O    O    . LEU LEU LEU B B 89  89  . 0.0801 0.0923 0.0620 0.0242  0.0033  -
0.0006 1 .
4015 N    N    . ASP ASP ASP B B 90  90  . 0.0610 0.0776 0.0726 0.0017  -0.0010 -
0.0024 1 .
4016 CA   CA   . ASP ASP ASP B B 90  90  . 0.0806 0.0750 0.0817 0.0127  0.0105
0.0115  1 .
4017 CB   CB   . ASP ASP ASP B B 90  90  . 0.0674 0.0433 0.0738 0.0232  0.0109
0.0120  1 .
4018 CG   CG   . ASP ASP ASP B B 90  90  . 0.1043 0.0855 0.0855 0.0105  -0.0138
0.0135  1 .
4019 OD1  OD1  . ASP ASP ASP B B 90  90  . 0.1038 0.1194 0.1011 0.0232  0.0085  -
0.0048 1 .
4020 OD2  OD2  . ASP ASP ASP B B 90  90  . 0.0936 0.0744 0.0939 0.0191  0.0137
0.0441  1 .
4021 C    C    . ASP ASP ASP B B 90  90  . 0.0780 0.0815 0.0837 -0.0027 -0.0043
0.0047  1 .
4022 O    O    . ASP ASP ASP B B 90  90  . 0.0904 0.0707 0.1130 0.0007  0.0199
0.0021  1 .
4023 N    N    . ASN ASN ASN B B 91  91  . 0.0883 0.0931 0.1021 0.0060  0.0074
0.0062  1 .
4024 CA   CA   . ASN ASN ASN B B 91  91  . 0.1120 0.1076 0.1138 -0.0080 -0.0048
0.0115  1 .
4025 CB   CB   . ASN ASN ASN B B 91  91  . 0.1441 0.1514 0.1449 -0.0019 -0.0186
0.0000  1 .
4026 CG   CG   . ASN ASN ASN B B 91  91  . 0.2520 0.2695 0.2223 -0.0031 -0.0079
0.0149  1 .
4027 OD1  OD1  . ASN ASN ASN B B 91  91  . 0.3714 0.3588 0.3209 0.0209  -0.0234 -
0.0083 1 .
4028 ND2  ND2  . ASN ASN ASN B B 91  91  . 0.3760 0.4139 0.2913 0.0364  0.0286  -
0.0258 1 .
4029 C    C    . ASN ASN ASN B B 91  91  . 0.0956 0.1073 0.1104 0.0071  -0.0058
0.0117  1 .
4030 O    O    . ASN ASN ASN B B 91  91  . 0.0859 0.0845 0.0955 -0.0062 0.0056
0.0128  1 .
4031 N    N    . LEU LEU LEU B B 92  92  . 0.1009 0.0805 0.1046 -0.0014 -0.0004
0.0102  1 .
4032 CA   CA   . LEU LEU LEU B B 92  92  . 0.0897 0.0865 0.0885 0.0034  0.0039
0.0258  1 .
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4033 CB   CB   . LEU LEU LEU B B 92  92  . 0.0953 0.0989 0.1028 0.0124  0.0068
0.0273  1 .
4034 CG   CG   . LEU LEU LEU B B 92  92  . 0.1763 0.1733 0.1778 0.0271  -0.0007
0.0223  1 .
4035 CD1  CD1  . LEU LEU LEU B B 92  92  . 0.1745 0.1024 0.2195 0.0619  0.0306
0.0410  1 .
4036 CD2  CD2  . LEU LEU LEU B B 92  92  . 0.1887 0.2136 0.2206 -0.0062 0.0262
0.0694  1 .
4037 C    C    . LEU LEU LEU B B 92  92  . 0.0843 0.0852 0.0843 0.0050  0.0124
0.0031  1 .
4038 O    O    . LEU LEU LEU B B 92  92  . 0.0906 0.0954 0.1310 0.0161  0.0095
0.0265  1 .
4039 N    N    . MET MET MET B B 93  93  . 0.0660 0.0708 0.0743 0.0061  -0.0114
0.0171  1 .
4040 CA   CA   . MET MET MET B B 93  93  . 0.0679 0.0708 0.0640 0.0098  -0.0022
0.0049  1 .
4041 CB   CB   . MET MET MET B B 93  93  . 0.0455 0.0609 0.0469 0.0213  -0.0071
0.0045  1 .
4042 CG   CG   . MET MET MET B B 93  93  . 0.0932 0.1144 0.1197 0.0174  0.0206
0.0203  1 .
4043 SD   SD   . MET MET MET B B 93  93  . 0.0859 0.0999 0.0968 0.0118  0.0086
0.0173  1 .
4044 CE   CE   . MET MET MET B B 93  93  . 0.0731 0.0756 0.1067 0.0308  -0.0166
0.0218  1 .
4045 C    C    . MET MET MET B B 93  93  . 0.0312 0.0542 0.0446 0.0006  -0.0104 -
0.0060 1 .
4046 O    O    . MET MET MET B B 93  93  . 0.0495 0.0568 0.0455 0.0195  0.0175
0.0033  1 .
4047 N    N    . LEU LEU LEU B B 94  94  . 0.0458 0.0591 0.0438 0.0033  0.0141
0.0086  1 .
4048 CA   CA   . LEU LEU LEU B B 94  94  . 0.1025 0.0872 0.1035 0.0120  0.0051  -
0.0043 1 .
4049 CB   CB   . LEU LEU LEU B B 94  94  . 0.1037 0.1101 0.1123 0.0036  0.0034
0.0033  1 .
4050 CG   CG   . LEU LEU LEU B B 94  94  . 0.1679 0.1534 0.1880 0.0146  0.0147  -
0.0065 1 .
4051 CD1  CD1  . LEU LEU LEU B B 94  94  . 0.2571 0.2030 0.2099 0.0067  0.0112  -
0.0052 1 .
4052 CD2  CD2  . LEU LEU LEU B B 94  94  . 0.1716 0.1611 0.1515 -0.0050 -0.0087 -
0.0020 1 .
4053 C    C    . LEU LEU LEU B B 94  94  . 0.0749 0.0704 0.0795 0.0079  -0.0010 -
0.0036 1 .
4054 O    O    . LEU LEU LEU B B 94  94  . 0.0935 0.0734 0.0863 0.0179  0.0042
0.0263  1 .
4055 N    N    . GLU GLU GLU B B 95  95  . 0.0985 0.0998 0.0870 0.0137  -0.0051 -
0.0078 1 .
4056 CA   CA   . GLU GLU GLU B B 95  95  . 0.0942 0.0777 0.0889 0.0173  -0.0045
0.0105  1 .
4057 CB   CB   . GLU GLU GLU B B 95  95  . 0.1019 0.1057 0.1203 0.0207  -0.0006
0.0107  1 .
4058 CG   CG   . GLU GLU GLU B B 95  95  . 0.1426 0.1738 0.1597 0.0272  0.0031  -
0.0183 1 .
4059 CD   CD   . GLU GLU GLU B B 95  95  . 0.2965 0.2734 0.2775 -0.0126 0.0123
0.0094  1 .
4060 OE1  OE1  . GLU GLU GLU B B 95  95  . 0.2974 0.3901 0.3574 -0.0208 0.0414
0.0166  1 .
4061 OE2  OE2  . GLU GLU GLU B B 95  95  . 0.2909 0.2715 0.3295 0.0341  -0.0020
0.0363  1 .
4062 C    C    . GLU GLU GLU B B 95  95  . 0.0912 0.0939 0.1026 0.0070  0.0043
0.0027  1 .
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4063 O    O    . GLU GLU GLU B B 95  95  . 0.1070 0.1049 0.1348 0.0236  0.0025
0.0043  1 .
4064 N    N    . LEU LEU LEU B B 96  96  . 0.0807 0.0844 0.0892 0.0203  0.0054
0.0131  1 .
4065 CA   CA   . LEU LEU LEU B B 96  96  . 0.1020 0.0962 0.1089 0.0124  0.0039
0.0096  1 .
4066 CB   CB   . LEU LEU LEU B B 96  96  . 0.1065 0.1214 0.1177 0.0079  0.0035
0.0222  1 .
4067 CG   CG   . LEU LEU LEU B B 96  96  . 0.1461 0.1524 0.1908 0.0111  -0.0014
0.0263  1 .
4068 CD1  CD1  . LEU LEU LEU B B 96  96  . 0.1812 0.1590 0.2149 0.0018  0.0253
0.0540  1 .
4069 CD2  CD2  . LEU LEU LEU B B 96  96  . 0.0851 0.1006 0.0842 -0.0209 0.0182
0.0039  1 .
4070 C    C    . LEU LEU LEU B B 96  96  . 0.1140 0.1090 0.1022 0.0076  0.0040
0.0049  1 .
4071 O    O    . LEU LEU LEU B B 96  96  . 0.1360 0.1112 0.1164 0.0237  0.0022  -
0.0056 1 .
4072 N    N    . ASP ASP ASP B B 97  97  . 0.0798 0.0673 0.0890 0.0245  0.0068  -
0.0034 1 .
4073 CA   CA   . ASP ASP ASP B B 97  97  . 0.1014 0.0950 0.1065 0.0188  0.0014
0.0066  1 .
4074 CB   CB   . ASP ASP ASP B B 97  97  . 0.1162 0.1058 0.0845 0.0100  0.0093
0.0141  1 .
4075 CG   CG   . ASP ASP ASP B B 97  97  . 0.1105 0.1308 0.1294 0.0145  0.0129  -
0.0088 1 .
4076 OD1  OD1  . ASP ASP ASP B B 97  97  . 0.1388 0.1452 0.1221 0.0221  0.0037  -
0.0415 1 .
4077 OD2  OD2  . ASP ASP ASP B B 97  97  . 0.1634 0.1285 0.1063 0.0287  0.0306
0.0326  1 .
4078 C    C    . ASP ASP ASP B B 97  97  . 0.1193 0.1008 0.1060 0.0058  0.0085  -
0.0033 1 .
4079 O    O    . ASP ASP ASP B B 97  97  . 0.1263 0.1106 0.1285 0.0268  0.0110
0.0061  1 .
4080 N    N    . GLY GLY GLY B B 98  98  . 0.1034 0.0998 0.1117 0.0138  -0.0013
0.0037  1 .
4081 CA   CA   . GLY GLY GLY B B 98  98  . 0.1237 0.1118 0.1226 -0.0062 0.0009
0.0125  1 .
4082 C    C    . GLY GLY GLY B B 98  98  . 0.1353 0.1432 0.1459 0.0053  0.0087
0.0123  1 .
4083 O    O    . GLY GLY GLY B B 98  98  . 0.1586 0.1449 0.1665 0.0274  0.0180
0.0261  1 .
4084 N    N    . THR THR THR B B 99  99  . 0.1331 0.1328 0.1481 0.0035  0.0044
0.0088  1 .
4085 CA   CA   . THR THR THR B B 99  99  . 0.1284 0.1231 0.1415 0.0118  -0.0024
0.0101  1 .
4086 CB   CB   . THR THR THR B B 99  99  . 0.1485 0.1236 0.1390 0.0089  -0.0003 -
0.0075 1 .
4087 OG1  OG1  . THR THR THR B B 99  99  . 0.0978 0.0980 0.1341 0.0096  -0.0168
0.0373  1 .
4088 CG2  CG2  . THR THR THR B B 99  99  . 0.1336 0.0809 0.1252 0.0105  -0.0138 -
0.0038 1 .
4089 C    C    . THR THR THR B B 99  99  . 0.1510 0.1491 0.1488 0.0053  0.0005
0.0006  1 .
4090 O    O    . THR THR THR B B 99  99  . 0.1898 0.1460 0.1865 0.0252  0.0137
0.0035  1 .
4091 N    N    . GLU GLU GLU B B 100 100 . 0.1371 0.1173 0.1451 0.0168  -0.0024
0.0140  1 .
4092 CA   CA   . GLU GLU GLU B B 100 100 . 0.1537 0.1558 0.1595 0.0080  -0.0025
0.0078  1 .
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4093 CB   CB   . GLU GLU GLU B B 100 100 . 0.1813 0.1709 0.1831 0.0013  -0.0057
0.0105  1 .
4094 CG   CG   . GLU GLU GLU B B 100 100 . 0.2742 0.2737 0.2505 0.0049  0.0092
0.0000  1 .
4095 CD   CD   . GLU GLU GLU B B 100 100 . 0.3679 0.3796 0.3858 -0.0236 -0.0302 -
0.0085 1 .
4096 OE1  OE1  . GLU GLU GLU B B 100 100 . 0.4143 0.3759 0.4151 0.0098  -0.0411
0.0104  1 .
4097 OE2  OE2  . GLU GLU GLU B B 100 100 . 0.4540 0.4337 0.4589 0.0019  -0.0555 -
0.0036 1 .
4098 C    C    . GLU GLU GLU B B 100 100 . 0.1333 0.1143 0.1339 -0.0038 -0.0071
0.0107  1 .
4099 O    O    . GLU GLU GLU B B 100 100 . 0.1218 0.1313 0.1181 0.0178  0.0056  -
0.0052 1 .
4100 N    N    . ASN ASN ASN B B 101 101 . 0.1147 0.0868 0.0946 0.0069  0.0064
0.0209  1 .
4101 CA   CA   . ASN ASN ASN B B 101 101 . 0.1200 0.1240 0.1061 0.0014  0.0001  -
0.0002 1 .
4102 CB   CB   . ASN ASN ASN B B 101 101 . 0.1501 0.1325 0.1506 0.0007  -0.0014 -
0.0013 1 .
4103 CG   CG   . ASN ASN ASN B B 101 101 . 0.2506 0.2216 0.2270 0.0063  -0.0003 -
0.0302 1 .
4104 OD1  OD1  . ASN ASN ASN B B 101 101 . 0.3377 0.3058 0.2965 -0.0041 -0.0710 -
0.0092 1 .
4105 ND2  ND2  . ASN ASN ASN B B 101 101 . 0.2821 0.2423 0.3237 0.0009  0.0020  -
0.0037 1 .
4106 C    C    . ASN ASN ASN B B 101 101 . 0.0843 0.0842 0.0888 0.0071  -0.0008
0.0108  1 .
4107 O    O    . ASN ASN ASN B B 101 101 . 0.0675 0.0663 0.0696 -0.0013 0.0080  -
0.0062 1 .
4108 N    N    . LYS LYS LYS B B 102 102 . 0.0618 0.0611 0.0570 0.0003  0.0036
0.0068  1 .
4109 CA   CA   . LYS LYS LYS B B 102 102 . 0.0535 0.0331 0.0385 0.0127  -0.0025
0.0040  1 .
4110 CB   CB   . LYS LYS LYS B B 102 102 . 0.0658 0.0374 0.0603 0.0118  0.0039
0.0034  1 .
4111 CG   CG   . LYS LYS LYS B B 102 102 . 0.0690 0.0288 0.0254 0.0124  -0.0021 -
0.0006 1 .
4112 CD   CD   . LYS LYS LYS B B 102 102 . 0.0969 0.0437 0.0625 0.0202  -0.0264
0.0112  1 .
4113 CE   CE   . LYS LYS LYS B B 102 102 . 0.0555 0.0540 0.0787 0.0116  -0.0298
0.0124  1 .
4114 NZ   NZ   . LYS LYS LYS B B 102 102 . 0.0916 0.0761 0.0383 -0.0016 0.0167
0.0164  1 .
4115 C    C    . LYS LYS LYS B B 102 102 . 0.0667 0.0497 0.0575 0.0066  -0.0020
0.0057  1 .
4116 O    O    . LYS LYS LYS B B 102 102 . 0.0659 0.0612 0.0740 0.0126  0.0049
0.0052  1 .
4117 N    N    . SER SER SER B B 103 103 . 0.0786 0.0608 0.0748 0.0087  -0.0081 -
0.0056 1 .
4118 CA   CA   . SER SER SER B B 103 103 . 0.0960 0.0904 0.0982 0.0010  -0.0039 -
0.0081 1 .
4119 CB   CB   . SER SER SER B B 103 103 . 0.0992 0.1085 0.1031 -0.0012 -0.0150 -
0.0020 1 .
4120 OG   OG   . SER SER SER B B 103 103 . 0.1602 0.1388 0.1971 0.0115  -0.0159
0.0165  1 .
4121 C    C    . SER SER SER B B 103 103 . 0.1090 0.1166 0.1003 -0.0007 -0.0104 -
0.0105 1 .
4122 O    O    . SER SER SER B B 103 103 . 0.1640 0.1421 0.1402 -0.0071 -0.0047 -
0.0249 1 .
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4123 N    N    . LYS LYS LYS B B 104 104 . 0.0616 0.0606 0.0680 0.0113  0.0089  -
0.0050 1 .
4124 CA   CA   . LYS LYS LYS B B 104 104 . 0.0923 0.0746 0.0842 -0.0020 -0.0039
0.0026  1 .
4125 CB   CB   . LYS LYS LYS B B 104 104 . 0.1124 0.0989 0.1053 0.0172  -0.0042
0.0029  1 .
4126 CG   CG   . LYS LYS LYS B B 104 104 . 0.1416 0.1174 0.1274 0.0203  0.0093  -
0.0085 1 .
4127 CD   CD   . LYS LYS LYS B B 104 104 . 0.1444 0.1430 0.1803 -0.0045 -0.0431
0.0044  1 .
4128 CE   CE   . LYS LYS LYS B B 104 104 . 0.1716 0.1528 0.1284 -0.0213 0.0106
0.0184  1 .
4129 NZ   NZ   . LYS LYS LYS B B 104 104 . 0.1973 0.2409 0.2705 0.0209  0.0122
0.0043  1 .
4130 C    C    . LYS LYS LYS B B 104 104 . 0.0802 0.0825 0.0833 -0.0002 -0.0102
0.0038  1 .
4131 O    O    . LYS LYS LYS B B 104 104 . 0.1304 0.1084 0.1170 0.0025  -0.0078 -
0.0138 1 .
4132 N    N    . PHE PHE PHE B B 105 105 . 0.0866 0.0590 0.0918 0.0186  -0.0020
0.0067  1 .
4133 CA   CA   . PHE PHE PHE B B 105 105 . 0.0470 0.0610 0.0538 0.0097  -0.0015
0.0089  1 .
4134 CB   CB   . PHE PHE PHE B B 105 105 . 0.0657 0.0557 0.0650 0.0081  -0.0057 -
0.0149 1 .
4135 CG   CG   . PHE PHE PHE B B 105 105 . 0.0708 0.0747 0.0690 -0.0128 0.0283
0.0175  1 .
4136 CD1  CD1  . PHE PHE PHE B B 105 105 . 0.1016 0.0802 0.0542 0.0166  0.0004
0.0166  1 .
4137 CE1  CE1  . PHE PHE PHE B B 105 105 . 0.0936 0.0985 0.0920 -0.0005 0.0077
0.0285  1 .
4138 CZ   CZ   . PHE PHE PHE B B 105 105 . 0.1065 0.0978 0.0981 0.0031  0.0031  -
0.0099 1 .
4139 CE2  CE2  . PHE PHE PHE B B 105 105 . 0.0664 0.0908 0.0782 0.0037  0.0071
0.0074  1 .
4140 CD2  CD2  . PHE PHE PHE B B 105 105 . 0.0953 0.0869 0.0945 -0.0051 0.0184  -
0.0053 1 .
4141 C    C    . PHE PHE PHE B B 105 105 . 0.0722 0.0613 0.0578 0.0129  0.0067
0.0040  1 .
4142 O    O    . PHE PHE PHE B B 105 105 . 0.0504 0.0513 0.0548 0.0223  -0.0047
0.0089  1 .
4143 N    N    . GLY GLY GLY B B 106 106 . 0.0580 0.0508 0.0725 0.0070  0.0068
0.0094  1 .
4144 CA   CA   . GLY GLY GLY B B 106 106 . 0.0652 0.0680 0.0693 0.0037  0.0138
0.0063  1 .
4145 C    C    . GLY GLY GLY B B 106 106 . 0.0601 0.0505 0.0566 -0.0094 0.0097  -
0.0047 1 .
4146 O    O    . GLY GLY GLY B B 106 106 . 0.0533 0.0418 0.0495 -0.0005 0.0200
0.0123  1 .
4147 N    N    . ALA ALA ALA B B 107 107 . 0.0358 0.0285 0.0554 0.0057  0.0089
0.0059  1 .
4148 CA   CA   . ALA ALA ALA B B 107 107 . 0.0466 0.0441 0.0360 0.0047  -0.0070
0.0106  1 .
4149 CB   CB   . ALA ALA ALA B B 107 107 . 0.0786 0.0736 0.0837 0.0066  0.0134
0.0047  1 .
4150 C    C    . ALA ALA ALA B B 107 107 . 0.0389 0.0309 0.0414 0.0009  -0.0104
0.0059  1 .
4151 O    O    . ALA ALA ALA B B 107 107 . 0.0416 0.0266 0.0361 0.0018  -0.0087
0.0015  1 .
4152 N    N    . ASN ASN ASN B B 108 108 . 0.0443 0.0318 0.0396 0.0110  -0.0131 -
0.0069 1 .
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4153 CA   CA   . ASN ASN ASN B B 108 108 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4154 CB   CB   . ASN ASN ASN B B 108 108 . 0.0291 0.0269 0.0253 -0.0024 -0.0004
0.0002  1 .
4155 CG   CG   . ASN ASN ASN B B 108 108 . 0.0268 0.0272 0.0257 0.0017  -0.0008 -
0.0009 1 .
4156 OD1  OD1  . ASN ASN ASN B B 108 108 . 0.0676 0.0505 0.0586 0.0297  -0.0062
0.0073  1 .
4157 ND2  ND2  . ASN ASN ASN B B 108 108 . 0.0326 0.0291 0.0311 0.0052  0.0064
0.0046  1 .
4158 C    C    . ASN ASN ASN B B 108 108 . 0.0353 0.0330 0.0501 -0.0021 0.0104  -
0.0122 1 .
4159 O    O    . ASN ASN ASN B B 108 108 . 0.0546 0.0338 0.0568 0.0085  0.0203
0.0161  1 .
4160 N    N    . ALA ALA ALA B B 109 109 . 0.0255 0.0293 0.0453 0.0009  0.0021
0.0089  1 .
4161 CA   CA   . ALA ALA ALA B B 109 109 . 0.0293 0.0262 0.0280 0.0019  0.0032
0.0016  1 .
4162 CB   CB   . ALA ALA ALA B B 109 109 . 0.0393 0.0591 0.0289 0.0124  0.0067
0.0032  1 .
4163 C    C    . ALA ALA ALA B B 109 109 . 0.0383 0.0373 0.0297 -0.0017 0.0041
0.0055  1 .
4164 O    O    . ALA ALA ALA B B 109 109 . 0.0706 0.0436 0.0555 0.0057  -0.0012
0.0120  1 .
4165 N    N    . ILE ILE ILE B B 110 110 . 0.0357 0.0490 0.0263 0.0157  0.0032
0.0049  1 .
4166 CA   CA   . ILE ILE ILE B B 110 110 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4167 CB   CB   . ILE ILE ILE B B 110 110 . 0.0324 0.0253 0.0253 0.0005  0.0001
0.0000  1 .
4168 CG1  CG1  . ILE ILE ILE B B 110 110 . 0.0404 0.0261 0.0386 0.0034  0.0141
0.0032  1 .
4169 CD1  CD1  . ILE ILE ILE B B 110 110 . 0.0840 0.1105 0.0441 0.0444  0.0133
0.0219  1 .
4170 CG2  CG2  . ILE ILE ILE B B 110 110 . 0.0577 0.0611 0.0408 0.0086  -0.0068
0.0198  1 .
4171 C    C    . ILE ILE ILE B B 110 110 . 0.0263 0.0328 0.0273 -0.0027 0.0014  -
0.0038 1 .
4172 O    O    . ILE ILE ILE B B 110 110 . 0.0271 0.0257 0.0253 0.0008  0.0000
0.0000  1 .
4173 N    N    . LEU LEU LEU B B 111 111 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4174 CA   CA   . LEU LEU LEU B B 111 111 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4175 CB   CB   . LEU LEU LEU B B 111 111 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4176 CG   CG   . LEU LEU LEU B B 111 111 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4177 CD1  CD1  . LEU LEU LEU B B 111 111 . 0.0289 0.0253 0.0436 -0.0002 0.0080  -
0.0005 1 .
4178 CD2  CD2  . LEU LEU LEU B B 111 111 . 0.0262 0.0253 0.0278 -0.0001 0.0015  -
0.0002 1 .
4179 C    C    . LEU LEU LEU B B 111 111 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4180 O    O    . LEU LEU LEU B B 111 111 . 0.0278 0.0256 0.0275 0.0009  0.0023
0.0009  1 .
4181 N    N    . GLY GLY GLY B B 112 112 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4182 CA   CA   . GLY GLY GLY B B 112 112 . 0.0254 0.0303 0.0276 -0.0006 -0.0004
0.0034  1 .
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4183 C    C    . GLY GLY GLY B B 112 112 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4184 O    O    . GLY GLY GLY B B 112 112 . 0.0586 0.0544 0.0433 0.0032  -0.0087
0.0203  1 .
4185 N    N    . VAL VAL VAL B B 113 113 . 0.0335 0.0409 0.0288 0.0101  -0.0007
0.0023  1 .
4186 CA   CA   . VAL VAL VAL B B 113 113 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4187 CB   CB   . VAL VAL VAL B B 113 113 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4188 CG1  CG1  . VAL VAL VAL B B 113 113 . 0.0450 0.0492 0.0435 -0.0203 -0.0027 -
0.0043 1 .
4189 CG2  CG2  . VAL VAL VAL B B 113 113 . 0.0288 0.0273 0.0311 0.0025  0.0040
0.0024  1 .
4190 C    C    . VAL VAL VAL B B 113 113 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4191 O    O    . VAL VAL VAL B B 113 113 . 0.0298 0.0302 0.0311 0.0039  0.0038
0.0053  1 .
4192 N    N    . SER SER SER B B 114 114 . 0.0287 0.0274 0.0265 0.0027  -0.0020 -
0.0016 1 .
4193 CA   CA   . SER SER SER B B 114 114 . 0.0255 0.0262 0.0286 0.0004  0.0008
0.0018  1 .
4194 CB   CB   . SER SER SER B B 114 114 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4195 OG   OG   . SER SER SER B B 114 114 . 0.0553 0.0440 0.0563 -0.0053 -0.0076 -
0.0067 1 .
4196 C    C    . SER SER SER B B 114 114 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4197 O    O    . SER SER SER B B 114 114 . 0.0255 0.0410 0.0283 -0.0017 -0.0007
0.0068  1 .
4198 N    N    . LEU LEU LEU B B 115 115 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4199 CA   CA   . LEU LEU LEU B B 115 115 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4200 CB   CB   . LEU LEU LEU B B 115 115 . 0.0255 0.0258 0.0255 -0.0003 -0.0002
0.0003  1 .
4201 CG   CG   . LEU LEU LEU B B 115 115 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4202 CD1  CD1  . LEU LEU LEU B B 115 115 . 0.0279 0.0253 0.0292 -0.0002 0.0032  -
0.0003 1 .
4203 CD2  CD2  . LEU LEU LEU B B 115 115 . 0.0255 0.0253 0.0256 0.0000  0.0002
0.0000  1 .
4204 C    C    . LEU LEU LEU B B 115 115 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4205 O    O    . LEU LEU LEU B B 115 115 . 0.0519 0.0375 0.0435 0.0024  -0.0063
0.0136  1 .
4206 N    N    . ALA ALA ALA B B 116 116 . 0.0253 0.0254 0.0253 0.0000  0.0000
0.0000  1 .
4207 CA   CA   . ALA ALA ALA B B 116 116 . 0.0269 0.0294 0.0254 -0.0025 -0.0004
0.0007  1 .
4208 CB   CB   . ALA ALA ALA B B 116 116 . 0.0253 0.0265 0.0297 -0.0001 0.0002  -
0.0023 1 .
4209 C    C    . ALA ALA ALA B B 116 116 . 0.0253 0.0264 0.0365 -0.0001 -0.0001
0.0026  1 .
4210 O    O    . ALA ALA ALA B B 116 116 . 0.0253 0.0317 0.0253 -0.0003 0.0000
0.0002  1 .
4211 N    N    . VAL VAL VAL B B 117 117 . 0.0458 0.0466 0.0534 -0.0065 -0.0015
0.0026  1 .
4212 CA   CA   . VAL VAL VAL B B 117 117 . 0.0336 0.0270 0.0360 -0.0037 -0.0094
0.0043  1 .
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4213 CB   CB   . VAL VAL VAL B B 117 117 . 0.0551 0.0396 0.0419 0.0133  -0.0002 -
0.0064 1 .
4214 CG1  CG1  . VAL VAL VAL B B 117 117 . 0.0306 0.0266 0.0317 0.0026  0.0058
0.0029  1 .
4215 CG2  CG2  . VAL VAL VAL B B 117 117 . 0.0323 0.0465 0.0308 0.0062  -0.0031
0.0051  1 .
4216 C    C    . VAL VAL VAL B B 117 117 . 0.0361 0.0375 0.0461 -0.0026 -0.0052 -
0.0026 1 .
4217 O    O    . VAL VAL VAL B B 117 117 . 0.0546 0.0361 0.0685 0.0090  -0.0026
0.0177  1 .
4218 N    N    . CYS CYS CYS B B 118 118 . 0.0289 0.0365 0.0287 0.0035  -0.0033 -
0.0019 1 .
4219 CA   CA   . CYS CYS CYS B B 118 118 . 0.0292 0.0253 0.0269 0.0000  0.0024
0.0000  1 .
4220 CB   CB   . CYS CYS CYS B B 118 118 . 0.0299 0.0483 0.0675 -0.0062 -0.0086 -
0.0074 1 .
4221 SG   SG   . CYS CYS CYS B B 118 118 . 0.1035 0.0925 0.0953 0.0003  0.0121
0.0086  1 .
4222 C    C    . CYS CYS CYS B B 118 118 . 0.0273 0.0292 0.0319 -0.0027 0.0026  -
0.0025 1 .
4223 O    O    . CYS CYS CYS B B 118 118 . 0.0473 0.0304 0.0349 0.0019  -0.0014
0.0014  1 .
4224 N    N    . LYS LYS LYS B B 119 119 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4225 CA   CA   . LYS LYS LYS B B 119 119 . 0.0327 0.0348 0.0425 -0.0009 -0.0004
0.0127  1 .
4226 CB   CB   . LYS LYS LYS B B 119 119 . 0.0257 0.0287 0.0265 -0.0011 -0.0007
0.0020  1 .
4227 CG   CG   . LYS LYS LYS B B 119 119 . 0.0467 0.0506 0.0514 0.0085  -0.0023
0.0228  1 .
4228 CD   CD   . LYS LYS LYS B B 119 119 . 0.0271 0.0778 0.0578 0.0081  0.0038  -
0.0026 1 .
4229 CE   CE   . LYS LYS LYS B B 119 119 . 0.0751 0.0801 0.0463 0.0012  0.0012
0.0191  1 .
4230 NZ   NZ   . LYS LYS LYS B B 119 119 . 0.0990 0.1703 0.1577 0.0023  -0.0322 -
0.0069 1 .
4231 C    C    . LYS LYS LYS B B 119 119 . 0.0410 0.0386 0.0407 0.0059  -0.0001
0.0128  1 .
4232 O    O    . LYS LYS LYS B B 119 119 . 0.0769 0.0802 0.0971 -0.0145 0.0025  -
0.0022 1 .
4233 N    N    . ALA ALA ALA B B 120 120 . 0.0321 0.0322 0.0269 -0.0027 -0.0003
0.0031  1 .
4234 CA   CA   . ALA ALA ALA B B 120 120 . 0.0648 0.0510 0.0726 -0.0066 -0.0067
0.0040  1 .
4235 CB   CB   . ALA ALA ALA B B 120 120 . 0.0440 0.0678 0.0509 0.0086  0.0141
0.0077  1 .
4236 C    C    . ALA ALA ALA B B 120 120 . 0.0666 0.0595 0.0564 -0.0048 -0.0003
0.0116  1 .
4237 O    O    . ALA ALA ALA B B 120 120 . 0.0992 0.0855 0.1071 -0.0001 -0.0149
0.0008  1 .
4238 N    N    . GLY GLY GLY B B 121 121 . 0.0591 0.0528 0.0501 0.0052  -0.0075
0.0044  1 .
4239 CA   CA   . GLY GLY GLY B B 121 121 . 0.0592 0.0520 0.0498 0.0020  -0.0071 -
0.0004 1 .
4240 C    C    . GLY GLY GLY B B 121 121 . 0.0574 0.0592 0.0752 -0.0011 0.0002
0.0059  1 .
4241 O    O    . GLY GLY GLY B B 121 121 . 0.0510 0.0696 0.0658 -0.0071 -0.0036
0.0043  1 .
4242 N    N    . ALA ALA ALA B B 122 122 . 0.0578 0.0575 0.0836 0.0035  -0.0041 -
0.0026 1 .
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4243 CA   CA   . ALA ALA ALA B B 122 122 . 0.0710 0.0466 0.0742 0.0034  -0.0069
0.0163  1 .
4244 CB   CB   . ALA ALA ALA B B 122 122 . 0.0517 0.0286 0.0517 -0.0089 -0.0130
0.0068  1 .
4245 C    C    . ALA ALA ALA B B 122 122 . 0.0673 0.0803 0.0657 -0.0086 0.0059
0.0032  1 .
4246 O    O    . ALA ALA ALA B B 122 122 . 0.1108 0.0507 0.0800 -0.0128 0.0039
0.0032  1 .
4247 N    N    . ALA ALA ALA B B 123 123 . 0.0586 0.0376 0.0410 0.0000  -0.0006
0.0108  1 .
4248 CA   CA   . ALA ALA ALA B B 123 123 . 0.0669 0.0519 0.0694 0.0006  0.0068
0.0056  1 .
4249 CB   CB   . ALA ALA ALA B B 123 123 . 0.0378 0.0377 0.0408 0.0070  -0.0024
0.0062  1 .
4250 C    C    . ALA ALA ALA B B 123 123 . 0.1017 0.0793 0.0889 0.0016  -0.0012 -
0.0005 1 .
4251 O    O    . ALA ALA ALA B B 123 123 . 0.1274 0.1070 0.1337 -0.0242 0.0112
0.0083  1 .
4252 N    N    . GLU GLU GLU B B 124 124 . 0.1226 0.1133 0.1254 -0.0054 -0.0055
0.0007  1 .
4253 CA   CA   . GLU GLU GLU B B 124 124 . 0.1515 0.1494 0.1570 -0.0037 -0.0067
0.0010  1 .
4254 CB   CB   . GLU GLU GLU B B 124 124 . 0.1574 0.1594 0.1544 0.0071  -0.0136
0.0052  1 .
4255 CG   CG   . GLU GLU GLU B B 124 124 . 0.2428 0.2430 0.2690 0.0113  -0.0159 -
0.0013 1 .
4256 CD   CD   . GLU GLU GLU B B 124 124 . 0.3401 0.3530 0.3657 0.0128  0.0020
0.0072  1 .
4257 OE1  OE1  . GLU GLU GLU B B 124 124 . 0.4170 0.4040 0.4020 0.0015  -0.0357 -
0.0161 1 .
4258 OE2  OE2  . GLU GLU GLU B B 124 124 . 0.4233 0.4315 0.3995 0.0103  -0.0323 -
0.0144 1 .
4259 C    C    . GLU GLU GLU B B 124 124 . 0.1331 0.1405 0.1403 -0.0052 -0.0082
0.0051  1 .
4260 O    O    . GLU GLU GLU B B 124 124 . 0.1656 0.1513 0.1685 -0.0145 -0.0188
0.0156  1 .
4261 N    N    . ARG ARG ARG B B 125 125 . 0.1320 0.1203 0.1404 0.0036  -0.0078 -
0.0108 1 .
4262 CA   CA   . ARG ARG ARG B B 125 125 . 0.1470 0.1420 0.1442 0.0033  -0.0092 -
0.0009 1 .
4263 CB   CB   . ARG ARG ARG B B 125 125 . 0.1455 0.1553 0.1578 0.0048  -0.0164 -
0.0029 1 .
4264 CG   CG   . ARG ARG ARG B B 125 125 . 0.1560 0.1186 0.1499 -0.0039 -0.0005
0.0073  1 .
4265 CD   CD   . ARG ARG ARG B B 125 125 . 0.1616 0.1493 0.1641 0.0295  -0.0249
0.0000  1 .
4266 NE   NE   . ARG ARG ARG B B 125 125 . 0.2354 0.2466 0.1851 -0.0070 0.0098
0.0209  1 .
4267 CZ   CZ   . ARG ARG ARG B B 125 125 . 0.3084 0.2976 0.2755 0.0201  -0.0078
0.0152  1 .
4268 NH1  NH1  . ARG ARG ARG B B 125 125 . 0.3063 0.3591 0.3367 0.0037  -0.0128
0.0110  1 .
4269 NH2  NH2  . ARG ARG ARG B B 125 125 . 0.3372 0.2313 0.3216 0.0419  -0.0355
0.0128  1 .
4270 C    C    . ARG ARG ARG B B 125 125 . 0.1540 0.1411 0.1507 -0.0071 0.0002  -
0.0027 1 .
4271 O    O    . ARG ARG ARG B B 125 125 . 0.1712 0.1825 0.1559 -0.0106 0.0031  -
0.0078 1 .
4272 N    N    . GLU GLU GLU B B 126 126 . 0.1466 0.1394 0.1436 -0.0115 -0.0027
0.0011  1 .
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4273 CA   CA   . GLU GLU GLU B B 126 126 . 0.1390 0.1447 0.1547 -0.0041 0.0041
0.0013  1 .
4274 CB   CB   . GLU GLU GLU B B 126 126 . 0.1723 0.1576 0.1683 -0.0080 -0.0073
0.0106  1 .
4275 CG   CG   . GLU GLU GLU B B 126 126 . 0.2768 0.2684 0.2597 -0.0101 0.0229  -
0.0147 1 .
4276 CD   CD   . GLU GLU GLU B B 126 126 . 0.3606 0.4006 0.4020 -0.0428 0.0096
0.0134  1 .
4277 OE1  OE1  . GLU GLU GLU B B 126 126 . 0.4345 0.5010 0.4375 -0.0037 0.0014
0.0181  1 .
4278 OE2  OE2  . GLU GLU GLU B B 126 126 . 0.3999 0.4710 0.4294 -0.0661 -0.0082 -
0.0189 1 .
4279 C    C    . GLU GLU GLU B B 126 126 . 0.1374 0.1300 0.1329 -0.0034 -0.0002
0.0007  1 .
4280 O    O    . GLU GLU GLU B B 126 126 . 0.1393 0.1270 0.1473 -0.0076 0.0027  -
0.0015 1 .
4281 N    N    . LEU LEU LEU B B 127 127 . 0.1074 0.1136 0.1275 -0.0108 0.0056
0.0070  1 .
4282 CA   CA   . LEU LEU LEU B B 127 127 . 0.1255 0.1011 0.1129 0.0020  0.0013  -
0.0015 1 .
4283 CB   CB   . LEU LEU LEU B B 127 127 . 0.1365 0.1066 0.1181 0.0132  -0.0038 -
0.0004 1 .
4284 CG   CG   . LEU LEU LEU B B 127 127 . 0.1385 0.1680 0.1786 -0.0016 -0.0077
0.0059  1 .
4285 CD1  CD1  . LEU LEU LEU B B 127 127 . 0.2018 0.1929 0.1952 -0.0184 0.0238
0.0288  1 .
4286 CD2  CD2  . LEU LEU LEU B B 127 127 . 0.1715 0.1748 0.2193 -0.0031 -0.0089
0.0048  1 .
4287 C    C    . LEU LEU LEU B B 127 127 . 0.0908 0.0923 0.0895 0.0021  -0.0038 -
0.0003 1 .
4288 O    O    . LEU LEU LEU B B 127 127 . 0.0812 0.0873 0.0802 0.0020  0.0091  -
0.0034 1 .
4289 N    N    . PRO PRO PRO B B 128 128 . 0.1032 0.1001 0.0807 0.0033  -0.0081
0.0082  1 .
4290 CA   CA   . PRO PRO PRO B B 128 128 . 0.0924 0.0754 0.0871 -0.0037 -0.0001
0.0043  1 .
4291 CB   CB   . PRO PRO PRO B B 128 128 . 0.1093 0.0935 0.1073 -0.0056 -0.0095
0.0227  1 .
4292 CG   CG   . PRO PRO PRO B B 128 128 . 0.1261 0.1460 0.1135 0.0005  -0.0021 -
0.0028 1 .
4293 CD   CD   . PRO PRO PRO B B 128 128 . 0.1249 0.1333 0.1347 0.0167  -0.0102
0.0025  1 .
4294 C    C    . PRO PRO PRO B B 128 128 . 0.0737 0.0680 0.0686 -0.0065 -0.0094
0.0050  1 .
4295 O    O    . PRO PRO PRO B B 128 128 . 0.0830 0.0712 0.0825 -0.0078 0.0062
0.0023  1 .
4296 N    N    . LEU LEU LEU B B 129 129 . 0.0591 0.0346 0.0618 0.0025  -0.0052
0.0044  1 .
4297 CA   CA   . LEU LEU LEU B B 129 129 . 0.0276 0.0320 0.0264 -0.0039 -0.0015
0.0026  1 .
4298 CB   CB   . LEU LEU LEU B B 129 129 . 0.0399 0.0258 0.0333 -0.0026 0.0108  -
0.0019 1 .
4299 CG   CG   . LEU LEU LEU B B 129 129 . 0.0445 0.0357 0.0283 -0.0130 0.0033  -
0.0003 1 .
4300 CD1  CD1  . LEU LEU LEU B B 129 129 . 0.0541 0.0433 0.0503 -0.0218 -0.0116
0.0032  1 .
4301 CD2  CD2  . LEU LEU LEU B B 129 129 . 0.0808 0.0739 0.0604 -0.0283 -0.0077
0.0332  1 .
4302 C    C    . LEU LEU LEU B B 129 129 . 0.0277 0.0336 0.0274 0.0042  0.0015
0.0017  1 .
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4303 O    O    . LEU LEU LEU B B 129 129 . 0.0445 0.0414 0.0359 0.0019  0.0000
0.0119  1 .
4304 N    N    . TYR TYR TYR B B 130 130 . 0.0372 0.0383 0.0298 0.0013  0.0029  -
0.0031 1 .
4305 CA   CA   . TYR TYR TYR B B 130 130 . 0.0406 0.0304 0.0357 -0.0032 0.0021
0.0062  1 .
4306 CB   CB   . TYR TYR TYR B B 130 130 . 0.0424 0.0261 0.0389 0.0038  0.0152
0.0034  1 .
4307 CG   CG   . TYR TYR TYR B B 130 130 . 0.0311 0.0350 0.0281 -0.0073 0.0020  -
0.0015 1 .
4308 CD1  CD1  . TYR TYR TYR B B 130 130 . 0.0484 0.0332 0.0416 0.0053  0.0009  -
0.0102 1 .
4309 CE1  CE1  . TYR TYR TYR B B 130 130 . 0.0925 0.0353 0.0855 0.0131  -0.0095
0.0146  1 .
4310 CZ   CZ   . TYR TYR TYR B B 130 130 . 0.0936 0.0955 0.0692 -0.0123 -0.0069 -
0.0032 1 .
4311 OH   OH   . TYR TYR TYR B B 130 130 . 0.1866 0.1337 0.2112 0.0154  -0.0223
0.0152  1 .
4312 CE2  CE2  . TYR TYR TYR B B 130 130 . 0.0770 0.0285 0.0593 0.0013  0.0080  -
0.0099 1 .
4313 CD2  CD2  . TYR TYR TYR B B 130 130 . 0.0466 0.0421 0.0377 -0.0093 -0.0137
0.0065  1 .
4314 C    C    . TYR TYR TYR B B 130 130 . 0.0415 0.0371 0.0488 -0.0048 -0.0023
0.0161  1 .
4315 O    O    . TYR TYR TYR B B 130 130 . 0.0622 0.0711 0.0688 -0.0062 0.0014  -
0.0034 1 .
4316 N    N    . ARG ARG ARG B B 131 131 . 0.0452 0.0435 0.0665 -0.0173 -0.0114 -
0.0006 1 .
4317 CA   CA   . ARG ARG ARG B B 131 131 . 0.0685 0.0687 0.0604 -0.0060 -0.0099
0.0074  1 .
4318 CB   CB   . ARG ARG ARG B B 131 131 . 0.0922 0.0765 0.0860 -0.0142 0.0073
0.0020  1 .
4319 CG   CG   . ARG ARG ARG B B 131 131 . 0.1317 0.1717 0.1662 0.0237  0.0137
0.0072  1 .
4320 CD   CD   . ARG ARG ARG B B 131 131 . 0.2569 0.2967 0.3453 -0.0355 -0.0130 -
0.0168 1 .
4321 NE   NE   . ARG ARG ARG B B 131 131 . 0.3916 0.4037 0.4259 0.0116  0.0004  -
0.0200 1 .
4322 CZ   CZ   . ARG ARG ARG B B 131 131 . 0.4633 0.4687 0.4568 -0.0053 -0.0034 -
0.0103 1 .
4323 NH1  NH1  . ARG ARG ARG B B 131 131 . 0.4997 0.4817 0.4895 0.0194  0.0101  -
0.0167 1 .
4324 NH2  NH2  . ARG ARG ARG B B 131 131 . 0.4587 0.4653 0.4539 -0.0300 -0.0333
0.0095  1 .
4325 C    C    . ARG ARG ARG B B 131 131 . 0.0801 0.0602 0.0557 -0.0077 -0.0029 -
0.0013 1 .
4326 O    O    . ARG ARG ARG B B 131 131 . 0.0658 0.0866 0.0913 0.0150  -0.0112
0.0007  1 .
4327 N    N    . HIS HIS HIS B B 132 132 . 0.0548 0.0547 0.0600 0.0000  0.0085
0.0081  1 .
4328 CA   CA   . HIS HIS HIS B B 132 132 . 0.0620 0.0632 0.0508 -0.0028 0.0150  -
0.0005 1 .
4329 CB   CB   . HIS HIS HIS B B 132 132 . 0.0335 0.0382 0.0295 -0.0102 0.0059  -
0.0074 1 .
4330 CG   CG   . HIS HIS HIS B B 132 132 . 0.0334 0.0560 0.0525 -0.0006 -0.0048
0.0146  1 .
4331 ND1  ND1  . HIS HIS HIS B B 132 132 . 0.0871 0.0615 0.1042 0.0000  0.0004
0.0242  1 .
4332 CE1  CE1  . HIS HIS HIS B B 132 132 . 0.1182 0.1049 0.1175 0.0042  0.0118  -
0.0006 1 .
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4333 NE2  NE2  . HIS HIS HIS B B 132 132 . 0.0444 0.0842 0.0392 0.0145  -0.0050 -
0.0011 1 .
4334 CD2  CD2  . HIS HIS HIS B B 132 132 . 0.0674 0.0461 0.0484 0.0098  0.0290
0.0143  1 .
4335 C    C    . HIS HIS HIS B B 132 132 . 0.0479 0.0445 0.0438 -0.0064 -0.0044 -
0.0009 1 .
4336 O    O    . HIS HIS HIS B B 132 132 . 0.0569 0.0479 0.0591 -0.0011 -0.0142 -
0.0030 1 .
4337 N    N    . ILE ILE ILE B B 133 133 . 0.0571 0.0641 0.0584 -0.0089 0.0000
0.0087  1 .
4338 CA   CA   . ILE ILE ILE B B 133 133 . 0.0346 0.0351 0.0285 -0.0021 0.0006
0.0053  1 .
4339 CB   CB   . ILE ILE ILE B B 133 133 . 0.0418 0.0393 0.0271 -0.0125 -0.0024
0.0044  1 .
4340 CG1  CG1  . ILE ILE ILE B B 133 133 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4341 CD1  CD1  . ILE ILE ILE B B 133 133 . 0.0498 0.0647 0.0855 0.0043  -0.0184
0.0269  1 .
4342 CG2  CG2  . ILE ILE ILE B B 133 133 . 0.0603 0.0608 0.0580 -0.0205 0.0094
0.0094  1 .
4343 C    C    . ILE ILE ILE B B 133 133 . 0.0315 0.0253 0.0337 0.0006  -0.0072 -
0.0007 1 .
4344 O    O    . ILE ILE ILE B B 133 133 . 0.0590 0.0671 0.0623 -0.0094 -0.0096
0.0143  1 .
4345 N    N    . ALA ALA ALA B B 134 134 . 0.0593 0.0458 0.0340 0.0084  -0.0092 -
0.0113 1 .
4346 CA   CA   . ALA ALA ALA B B 134 134 . 0.0496 0.0397 0.0444 0.0049  -0.0103 -
0.0085 1 .
4347 CB   CB   . ALA ALA ALA B B 134 134 . 0.0333 0.0275 0.0435 -0.0029 0.0066  -
0.0062 1 .
4348 C    C    . ALA ALA ALA B B 134 134 . 0.0615 0.0565 0.0610 0.0087  0.0082  -
0.0088 1 .
4349 O    O    . ALA ALA ALA B B 134 134 . 0.0824 0.0833 0.0865 0.0103  -0.0007
0.0000  1 .
4350 N    N    . GLN GLN GLN B B 135 135 . 0.0674 0.0543 0.0773 -0.0003 0.0049  -
0.0033 1 .
4351 CA   CA   . GLN GLN GLN B B 135 135 . 0.0915 0.0938 0.0791 0.0082  -0.0047
0.0021  1 .
4352 CB   CB   . GLN GLN GLN B B 135 135 . 0.1067 0.0779 0.1245 -0.0070 -0.0059
0.0012  1 .
4353 CG   CG   . GLN GLN GLN B B 135 135 . 0.1466 0.0901 0.0881 0.0021  -0.0074 -
0.0225 1 .
4354 CD   CD   . GLN GLN GLN B B 135 135 . 0.1434 0.1603 0.1498 -0.0035 0.0006
0.0063  1 .
4355 OE1  OE1  . GLN GLN GLN B B 135 135 . 0.1607 0.1764 0.1592 -0.0254 -0.0211
0.0050  1 .
4356 NE2  NE2  . GLN GLN GLN B B 135 135 . 0.1390 0.1792 0.1449 -0.0314 -0.0708
0.0272  1 .
4357 C    C    . GLN GLN GLN B B 135 135 . 0.0827 0.0673 0.0883 -0.0076 -0.0090
0.0050  1 .
4358 O    O    . GLN GLN GLN B B 135 135 . 0.1236 0.0884 0.1005 -0.0093 -0.0162
0.0058  1 .
4359 N    N    . LEU LEU LEU B B 136 136 . 0.0922 0.0679 0.0787 0.0072  -0.0094
0.0039  1 .
4360 CA   CA   . LEU LEU LEU B B 136 136 . 0.0913 0.0757 0.0856 -0.0016 0.0000
0.0009  1 .
4361 CB   CB   . LEU LEU LEU B B 136 136 . 0.0638 0.0783 0.0782 0.0043  -0.0046
0.0004  1 .
4362 CG   CG   . LEU LEU LEU B B 136 136 . 0.0354 0.0529 0.0478 -0.0056 0.0059  -
0.0165 1 .
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4363 CD1  CD1  . LEU LEU LEU B B 136 136 . 0.0762 0.0775 0.0368 -0.0059 -0.0240
0.0000  1 .
4364 CD2  CD2  . LEU LEU LEU B B 136 136 . 0.1009 0.1423 0.1108 0.0301  0.0031  -
0.0070 1 .
4365 C    C    . LEU LEU LEU B B 136 136 . 0.1033 0.0818 0.0902 0.0029  0.0034
0.0061  1 .
4366 O    O    . LEU LEU LEU B B 136 136 . 0.0918 0.1142 0.0810 0.0214  -0.0162
0.0159  1 .
4367 N    N    . ALA ALA ALA B B 137 137 . 0.0530 0.0576 0.0575 0.0053  0.0033
0.0173  1 .
4368 CA   CA   . ALA ALA ALA B B 137 137 . 0.0820 0.1045 0.0726 0.0118  0.0035
0.0119  1 .
4369 CB   CB   . ALA ALA ALA B B 137 137 . 0.0886 0.0919 0.0725 -0.0179 0.0069
0.0170  1 .
4370 C    C    . ALA ALA ALA B B 137 137 . 0.1211 0.1271 0.1124 -0.0097 0.0008
0.0055  1 .
4371 O    O    . ALA ALA ALA B B 137 137 . 0.1474 0.1308 0.1108 -0.0083 0.0030
0.0138  1 .
4372 N    N    . GLY GLY GLY B B 138 138 . 0.1611 0.1468 0.1261 0.0040  -0.0060
0.0042  1 .
4373 CA   CA   . GLY GLY GLY B B 138 138 . 0.1885 0.1904 0.1765 -0.0011 -0.0087 -
0.0003 1 .
4374 C    C    . GLY GLY GLY B B 138 138 . 0.2026 0.2029 0.1931 0.0036  -0.0018 -
0.0079 1 .
4375 O    O    . GLY GLY GLY B B 138 138 . 0.2358 0.2284 0.2030 0.0118  -0.0009
0.0086  1 .
4376 N    N    . ASN ASN ASN B B 139 139 . 0.2205 0.2041 0.2013 -0.0041 -0.0031
0.0076  1 .
4377 CA   CA   . ASN ASN ASN B B 139 139 . 0.2330 0.2327 0.2269 -0.0011 -0.0011
0.0012  1 .
4378 CB   CB   . ASN ASN ASN B B 139 139 . 0.2160 0.2093 0.2055 -0.0165 -0.0027 -
0.0010 1 .
4379 CG   CG   . ASN ASN ASN B B 139 139 . 0.2421 0.2288 0.2244 -0.0125 -0.0198
0.0187  1 .
4380 OD1  OD1  . ASN ASN ASN B B 139 139 . 0.2636 0.2718 0.1963 0.0005  -0.0390
0.0055  1 .
4381 ND2  ND2  . ASN ASN ASN B B 139 139 . 0.2255 0.1829 0.1804 0.0078  -0.0356
0.0165  1 .
4382 C    C    . ASN ASN ASN B B 139 139 . 0.2547 0.2470 0.2528 -0.0105 -0.0016 -
0.0016 1 .
4383 O    O    . ASN ASN ASN B B 139 139 . 0.2801 0.2512 0.2666 -0.0239 -0.0028 -
0.0181 1 .
4384 N    N    . SER SER SER B B 140 140 . 0.2815 0.2892 0.2832 -0.0019 0.0041
0.0004  1 .
4385 CA   CA   . SER SER SER B B 140 140 . 0.3117 0.3027 0.3092 0.0014  0.0019  -
0.0016 1 .
4386 CB   CB   . SER SER SER B B 140 140 . 0.3131 0.3071 0.3140 -0.0013 -0.0010 -
0.0001 1 .
4387 OG   OG   . SER SER SER B B 140 140 . 0.3702 0.3406 0.3328 0.0172  0.0121  -
0.0019 1 .
4388 C    C    . SER SER SER B B 140 140 . 0.3309 0.3254 0.3221 -0.0018 -0.0031
0.0023  1 .
4389 O    O    . SER SER SER B B 140 140 . 0.3587 0.3369 0.3515 -0.0005 -0.0026
0.0032  1 .
4390 N    N    . ASP ASP ASP B B 141 141 . 0.3396 0.3447 0.3410 -0.0015 0.0018
0.0002  1 .
4391 CA   CA   . ASP ASP ASP B B 141 141 . 0.3531 0.3491 0.3515 0.0037  -0.0038 -
0.0009 1 .
4392 CB   CB   . ASP ASP ASP B B 141 141 . 0.3733 0.3823 0.3877 0.0056  0.0056
0.0038  1 .
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4393 CG   CG   . ASP ASP ASP B B 141 141 . 0.4586 0.4259 0.4506 -0.0006 0.0080
0.0137  1 .
4394 OD1  OD1  . ASP ASP ASP B B 141 141 . 0.4724 0.4668 0.5266 -0.0111 0.0119
0.0059  1 .
4395 OD2  OD2  . ASP ASP ASP B B 141 141 . 0.5059 0.4624 0.5348 0.0194  0.0298
0.0073  1 .
4396 C    C    . ASP ASP ASP B B 141 141 . 0.3284 0.3334 0.3431 0.0069  -0.0026 -
0.0005 1 .
4397 O    O    . ASP ASP ASP B B 141 141 . 0.3332 0.3265 0.3448 0.0184  -0.0024 -
0.0128 1 .
4398 N    N    . LEU LEU LEU B B 142 142 . 0.2983 0.2804 0.2943 0.0028  -0.0093
0.0008  1 .
4399 CA   CA   . LEU LEU LEU B B 142 142 . 0.2536 0.2514 0.2628 0.0006  -0.0011 -
0.0008 1 .
4400 CB   CB   . LEU LEU LEU B B 142 142 . 0.2572 0.2608 0.2525 0.0008  -0.0009 -
0.0046 1 .
4401 CG   CG   . LEU LEU LEU B B 142 142 . 0.2526 0.2695 0.2906 0.0007  -0.0007 -
0.0159 1 .
4402 CD1  CD1  . LEU LEU LEU B B 142 142 . 0.2494 0.2974 0.2518 -0.0102 -0.0121 -
0.0103 1 .
4403 CD2  CD2  . LEU LEU LEU B B 142 142 . 0.2868 0.2859 0.3522 0.0176  -0.0116 -
0.0326 1 .
4404 C    C    . LEU LEU LEU B B 142 142 . 0.2122 0.2091 0.2222 -0.0014 -0.0072 -
0.0038 1 .
4405 O    O    . LEU LEU LEU B B 142 142 . 0.2252 0.2265 0.2388 -0.0134 -0.0102 -
0.0007 1 .
4406 N    N    . ILE ILE ILE B B 143 143 . 0.1704 0.1536 0.1704 -0.0044 -0.0053
0.0030  1 .
4407 CA   CA   . ILE ILE ILE B B 143 143 . 0.1167 0.1023 0.1057 -0.0019 -0.0085
0.0009  1 .
4408 CB   CB   . ILE ILE ILE B B 143 143 . 0.1622 0.1529 0.1631 -0.0040 -0.0022
0.0082  1 .
4409 CG1  CG1  . ILE ILE ILE B B 143 143 . 0.1333 0.1579 0.1367 -0.0177 0.0167  -
0.0084 1 .
4410 CD1  CD1  . ILE ILE ILE B B 143 143 . 0.3003 0.1978 0.2023 0.0033  -0.0161 -
0.0031 1 .
4411 CG2  CG2  . ILE ILE ILE B B 143 143 . 0.1990 0.1343 0.1492 -0.0098 -0.0254 -
0.0282 1 .
4412 C    C    . ILE ILE ILE B B 143 143 . 0.0804 0.0855 0.0763 0.0062  -0.0036 -
0.0029 1 .
4413 O    O    . ILE ILE ILE B B 143 143 . 0.0801 0.0549 0.0607 0.0158  -0.0168
0.0112  1 .
4414 N    N    . LEU LEU LEU B B 144 144 . 0.0343 0.0304 0.0254 0.0061  0.0006
0.0005  1 .
4415 CA   CA   . LEU LEU LEU B B 144 144 . 0.0260 0.0269 0.0273 0.0006  0.0006  -
0.0005 1 .
4416 CB   CB   . LEU LEU LEU B B 144 144 . 0.0345 0.0255 0.0446 -0.0011 0.0006  -
0.0010 1 .
4417 CG   CG   . LEU LEU LEU B B 144 144 . 0.0696 0.0625 0.0303 0.0012  -0.0148
0.0011  1 .
4418 CD1  CD1  . LEU LEU LEU B B 144 144 . 0.0581 0.0405 0.0497 0.0068  -0.0164 -
0.0183 1 .
4419 CD2  CD2  . LEU LEU LEU B B 144 144 . 0.0471 0.0626 0.0319 0.0122  0.0033
0.0007  1 .
4420 C    C    . LEU LEU LEU B B 144 144 . 0.0283 0.0253 0.0258 -0.0002 0.0011
0.0000  1 .
4421 O    O    . LEU LEU LEU B B 144 144 . 0.0635 0.0492 0.0400 -0.0019 0.0140  -
0.0065 1 .
4422 N    N    . PRO PRO PRO B B 145 145 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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4423 CA   CA   . PRO PRO PRO B B 145 145 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4424 CB   CB   . PRO PRO PRO B B 145 145 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4425 CG   CG   . PRO PRO PRO B B 145 145 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4426 CD   CD   . PRO PRO PRO B B 145 145 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4427 C    C    . PRO PRO PRO B B 145 145 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4428 O    O    . PRO PRO PRO B B 145 145 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4429 N    N    . VAL VAL VAL B B 146 146 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4430 CA   CA   . VAL VAL VAL B B 146 146 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4431 CB   CB   . VAL VAL VAL B B 146 146 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4432 CG1  CG1  . VAL VAL VAL B B 146 146 . 0.0464 0.0326 0.0271 0.0118  0.0059
0.0036  1 .
4433 CG2  CG2  . VAL VAL VAL B B 146 146 . 0.0475 0.0407 0.0461 0.0051  -0.0022 -
0.0176 1 .
4434 C    C    . VAL VAL VAL B B 146 146 . 0.0329 0.0278 0.0263 0.0043  -0.0027 -
0.0016 1 .
4435 O    O    . VAL VAL VAL B B 146 146 . 0.0358 0.0260 0.0254 0.0026  -0.0011 -
0.0002 1 .
4436 N    N    . PRO PRO PRO B B 147 147 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4437 CA   CA   . PRO PRO PRO B B 147 147 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4438 CB   CB   . PRO PRO PRO B B 147 147 . 0.0322 0.0274 0.0253 0.0038  0.0006
0.0003  1 .
4439 CG   CG   . PRO PRO PRO B B 147 147 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4440 CD   CD   . PRO PRO PRO B B 147 147 . 0.0283 0.0276 0.0254 0.0026  0.0004
0.0004  1 .
4441 C    C    . PRO PRO PRO B B 147 147 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4442 O    O    . PRO PRO PRO B B 147 147 . 0.0275 0.0255 0.0356 -0.0006 0.0048  -
0.0014 1 .
4443 N    N    . ALA ALA ALA B B 148 148 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4444 CA   CA   . ALA ALA ALA B B 148 148 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4445 CB   CB   . ALA ALA ALA B B 148 148 . 0.0264 0.0255 0.0264 -0.0004 0.0011  -
0.0004 1 .
4446 C    C    . ALA ALA ALA B B 148 148 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4447 O    O    . ALA ALA ALA B B 148 148 . 0.0409 0.0371 0.0295 0.0100  -0.0026
0.0027  1 .
4448 N    N    . PHE PHE PHE B B 149 149 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4449 CA   CA   . PHE PHE PHE B B 149 149 . 0.0330 0.0264 0.0253 0.0029  0.0005
0.0002  1 .
4450 CB   CB   . PHE PHE PHE B B 149 149 . 0.0315 0.0295 0.0280 0.0051  0.0041
0.0034  1 .
4451 CG   CG   . PHE PHE PHE B B 149 149 . 0.0441 0.0363 0.0434 0.0061  0.0170
0.0006  1 .
4452 CD1  CD1  . PHE PHE PHE B B 149 149 . 0.0254 0.0357 0.0319 0.0012  0.0010
0.0083  1 .
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4453 CE1  CE1  . PHE PHE PHE B B 149 149 . 0.0553 0.0339 0.0354 -0.0041 -0.0148 -
0.0027 1 .
4454 CZ   CZ   . PHE PHE PHE B B 149 149 . 0.0349 0.0357 0.0301 0.0100  0.0068
0.0071  1 .
4455 CE2  CE2  . PHE PHE PHE B B 149 149 . 0.0518 0.0345 0.0389 0.0067  0.0152  -
0.0021 1 .
4456 CD2  CD2  . PHE PHE PHE B B 149 149 . 0.0514 0.0423 0.0299 -0.0148 -0.0034 -
0.0040 1 .
4457 C    C    . PHE PHE PHE B B 149 149 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4458 O    O    . PHE PHE PHE B B 149 149 . 0.0438 0.0337 0.0254 0.0125  0.0017
0.0011  1 .
4459 N    N    . ASN ASN ASN B B 150 150 . 0.0264 0.0299 0.0287 -0.0019 -0.0017
0.0039  1 .
4460 CA   CA   . ASN ASN ASN B B 150 150 . 0.0402 0.0272 0.0359 0.0052  -0.0007
0.0003  1 .
4461 CB   CB   . ASN ASN ASN B B 150 150 . 0.0434 0.0370 0.0418 0.0029  0.0141  -
0.0055 1 .
4462 CG   CG   . ASN ASN ASN B B 150 150 . 0.0756 0.0631 0.0685 0.0026  0.0120  -
0.0029 1 .
4463 OD1  OD1  . ASN ASN ASN B B 150 150 . 0.0971 0.0567 0.0904 0.0276  -0.0114
0.0094  1 .
4464 ND2  ND2  . ASN ASN ASN B B 150 150 . 0.0448 0.0276 0.0488 0.0054  0.0086
0.0064  1 .
4465 C    C    . ASN ASN ASN B B 150 150 . 0.0373 0.0418 0.0353 -0.0074 0.0019
0.0055  1 .
4466 O    O    . ASN ASN ASN B B 150 150 . 0.0643 0.0459 0.0482 -0.0012 -0.0022 -
0.0195 1 .
4467 N    N    . VAL VAL VAL B B 151 151 . 0.0400 0.0352 0.0352 0.0103  -0.0036 -
0.0074 1 .
4468 CA   CA   . VAL VAL VAL B B 151 151 . 0.0505 0.0448 0.0375 0.0118  -0.0062 -
0.0016 1 .
4469 CB   CB   . VAL VAL VAL B B 151 151 . 0.0479 0.0389 0.0317 0.0162  -0.0035 -
0.0052 1 .
4470 CG1  CG1  . VAL VAL VAL B B 151 151 . 0.0429 0.0496 0.0398 0.0163  0.0003
0.0118  1 .
4471 CG2  CG2  . VAL VAL VAL B B 151 151 . 0.0969 0.0517 0.0452 -0.0109 0.0230
0.0034  1 .
4472 C    C    . VAL VAL VAL B B 151 151 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4473 O    O    . VAL VAL VAL B B 151 151 . 0.0683 0.0735 0.0575 0.0229  0.0126
0.0003  1 .
4474 N    N    . ILE ILE ILE B B 152 152 . 0.0293 0.0545 0.0275 0.0067  -0.0011 -
0.0077 1 .
4475 CA   CA   . ILE ILE ILE B B 152 152 . 0.0613 0.0428 0.0589 0.0122  -0.0027 -
0.0044 1 .
4476 CB   CB   . ILE ILE ILE B B 152 152 . 0.0760 0.0789 0.0714 0.0055  -0.0108 -
0.0084 1 .
4477 CG1  CG1  . ILE ILE ILE B B 152 152 . 0.1060 0.0880 0.0860 0.0240  -0.0451
0.0092  1 .
4478 CD1  CD1  . ILE ILE ILE B B 152 152 . 0.1612 0.2173 0.2665 0.0264  -0.0436 -
0.0020 1 .
4479 CG2  CG2  . ILE ILE ILE B B 152 152 . 0.0839 0.0462 0.0684 0.0223  -0.0360
0.0023  1 .
4480 C    C    . ILE ILE ILE B B 152 152 . 0.0701 0.0647 0.0537 0.0190  0.0004  -
0.0084 1 .
4481 O    O    . ILE ILE ILE B B 152 152 . 0.0628 0.0446 0.0633 0.0212  -0.0146 -
0.0089 1 .
4482 N    N    . ASN ASN ASN B B 153 153 . 0.0558 0.0470 0.0310 0.0089  -0.0102 -
0.0057 1 .
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4483 CA   CA   . ASN ASN ASN B B 153 153 . 0.0588 0.0512 0.0437 0.0023  0.0000
0.0028  1 .
4484 CB   CB   . ASN ASN ASN B B 153 153 . 0.0909 0.0803 0.0648 0.0132  0.0109
0.0012  1 .
4485 CG   CG   . ASN ASN ASN B B 153 153 . 0.1073 0.1089 0.0950 0.0265  0.0157  -
0.0074 1 .
4486 OD1  OD1  . ASN ASN ASN B B 153 153 . 0.2050 0.1606 0.1529 0.0281  -0.0348 -
0.0164 1 .
4487 ND2  ND2  . ASN ASN ASN B B 153 153 . 0.0349 0.0258 0.0371 -0.0004 -0.0097
0.0013  1 .
4488 C    C    . ASN ASN ASN B B 153 153 . 0.0368 0.0260 0.0496 0.0001  -0.0018
0.0024  1 .
4489 O    O    . ASN ASN ASN B B 153 153 . 0.0638 0.0337 0.0583 0.0102  -0.0159 -
0.0134 1 .
4490 N    N    . GLY GLY GLY B B 154 154 . 0.0281 0.0402 0.0284 -0.0064 -0.0029
0.0068  1 .
4491 CA   CA   . GLY GLY GLY B B 154 154 . 0.0386 0.0353 0.0456 0.0073  -0.0140 -
0.0135 1 .
4492 C    C    . GLY GLY GLY B B 154 154 . 0.0410 0.0654 0.0524 0.0046  -0.0126 -
0.0160 1 .
4493 O    O    . GLY GLY GLY B B 154 154 . 0.0678 0.0666 0.0659 0.0152  -0.0020 -
0.0068 1 .
4494 N    N    . ASN ASN ASN B B 160 160 . 0.1209 0.1093 0.0975 -0.0074 -0.0068 -
0.0110 1 .
4495 CA   CA   . ASN ASN ASN B B 160 160 . 0.1119 0.1204 0.1040 0.0060  -0.0086 -
0.0169 1 .
4496 CB   CB   . ASN ASN ASN B B 160 160 . 0.1152 0.0925 0.1179 0.0191  -0.0080 -
0.0163 1 .
4497 CG   CG   . ASN ASN ASN B B 160 160 . 0.1527 0.0953 0.1069 0.0123  -0.0178 -
0.0077 1 .
4498 OD1  OD1  . ASN ASN ASN B B 160 160 . 0.1282 0.1534 0.1130 0.0149  0.0133  -
0.0228 1 .
4499 ND2  ND2  . ASN ASN ASN B B 160 160 . 0.1018 0.0931 0.0970 0.0186  -0.0338 -
0.0225 1 .
4500 C    C    . ASN ASN ASN B B 160 160 . 0.1154 0.0895 0.1158 0.0049  0.0000  -
0.0187 1 .
4501 O    O    . ASN ASN ASN B B 160 160 . 0.0692 0.0908 0.0718 -0.0034 -0.0078 -
0.0079 1 .
4502 N    N    . LYS LYS LYS B B 161 161 . 0.1008 0.1022 0.0979 -0.0065 -0.0031 -
0.0095 1 .
4503 CA   CA   . LYS LYS LYS B B 161 161 . 0.1253 0.1006 0.1131 0.0028  -0.0080 -
0.0130 1 .
4504 CB   CB   . LYS LYS LYS B B 161 161 . 0.1245 0.1249 0.1285 -0.0047 -0.0026 -
0.0060 1 .
4505 CG   CG   . LYS LYS LYS B B 161 161 . 0.2134 0.2256 0.1949 -0.0262 -0.0334 -
0.0154 1 .
4506 CD   CD   . LYS LYS LYS B B 161 161 . 0.2703 0.2524 0.2656 -0.0273 -0.0036
0.0258  1 .
4507 CE   CE   . LYS LYS LYS B B 161 161 . 0.3183 0.3190 0.3107 -0.0346 -0.0167 -
0.0163 1 .
4508 NZ   NZ   . LYS LYS LYS B B 161 161 . 0.4072 0.3473 0.3809 0.0135  -0.0135 -
0.0135 1 .
4509 C    C    . LYS LYS LYS B B 161 161 . 0.1159 0.1158 0.1160 -0.0007 -0.0043 -
0.0062 1 .
4510 O    O    . LYS LYS LYS B B 161 161 . 0.1670 0.1388 0.1283 0.0031  -0.0181 -
0.0205 1 .
4511 N    N    . LEU LEU LEU B B 162 162 . 0.1023 0.0958 0.0926 -0.0007 0.0048  -
0.0020 1 .
4512 CA   CA   . LEU LEU LEU B B 162 162 . 0.0793 0.0664 0.0762 -0.0012 -0.0095
0.0165  1 .
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4513 CB   CB   . LEU LEU LEU B B 162 162 . 0.0770 0.0733 0.0753 -0.0070 -0.0181 -
0.0034 1 .
4514 CG   CG   . LEU LEU LEU B B 162 162 . 0.0699 0.0554 0.0578 -0.0264 0.0144
0.0114  1 .
4515 CD1  CD1  . LEU LEU LEU B B 162 162 . 0.1299 0.1082 0.0933 0.0081  0.0254  -
0.0107 1 .
4516 CD2  CD2  . LEU LEU LEU B B 162 162 . 0.0318 0.0405 0.0382 0.0091  -0.0080 -
0.0139 1 .
4517 C    C    . LEU LEU LEU B B 162 162 . 0.0591 0.0876 0.0691 0.0102  0.0027
0.0078  1 .
4518 O    O    . LEU LEU LEU B B 162 162 . 0.1125 0.1111 0.1138 0.0075  0.0061
0.0034  1 .
4519 N    N    . ALA ALA ALA B B 163 163 . 0.0645 0.0568 0.0889 0.0034  0.0015  -
0.0010 1 .
4520 CA   CA   . ALA ALA ALA B B 163 163 . 0.0544 0.0630 0.0686 0.0002  -0.0167 -
0.0101 1 .
4521 CB   CB   . ALA ALA ALA B B 163 163 . 0.0457 0.0429 0.0696 -0.0106 -0.0070 -
0.0187 1 .
4522 C    C    . ALA ALA ALA B B 163 163 . 0.0513 0.0553 0.0499 -0.0006 0.0077  -
0.0111 1 .
4523 O    O    . ALA ALA ALA B B 163 163 . 0.0377 0.0423 0.0576 -0.0076 -0.0105 -
0.0105 1 .
4524 N    N    . MET MET MET B B 164 164 . 0.0664 0.0381 0.0475 -0.0041 -0.0107 -
0.0121 1 .
4525 CA   CA   . MET MET MET B B 164 164 . 0.0258 0.0355 0.0262 -0.0022 0.0006  -
0.0030 1 .
4526 CB   CB   . MET MET MET B B 164 164 . 0.0261 0.0266 0.0254 0.0010  -0.0003 -
0.0003 1 .
4527 CG   CG   . MET MET MET B B 164 164 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4528 SD   SD   . MET MET MET B B 164 164 . 0.0738 0.0644 0.0560 0.0000  -0.0149 -
0.0135 1 .
4529 CE   CE   . MET MET MET B B 164 164 . 0.0627 0.0266 0.0465 -0.0016 -0.0013 -
0.0050 1 .
4530 C    C    . MET MET MET B B 164 164 . 0.0309 0.0289 0.0325 0.0045  -0.0064 -
0.0051 1 .
4531 O    O    . MET MET MET B B 164 164 . 0.0575 0.0495 0.0569 0.0204  -0.0008 -
0.0006 1 .
4532 N    N    . GLN GLN GLN B B 165 165 . 0.0319 0.0253 0.0269 -0.0006 0.0032  -
0.0003 1 .
4533 CA   CA   . GLN GLN GLN B B 165 165 . 0.0280 0.0270 0.0255 0.0021  0.0008
0.0006  1 .
4534 CB   CB   . GLN GLN GLN B B 165 165 . 0.0253 0.0262 0.0253 -0.0002 0.0000
0.0002  1 .
4535 CG   CG   . GLN GLN GLN B B 165 165 . 0.0660 0.0578 0.0549 -0.0011 0.0154
0.0099  1 .
4536 CD   CD   . GLN GLN GLN B B 165 165 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4537 OE1  OE1  . GLN GLN GLN B B 165 165 . 0.0443 0.0303 0.0399 0.0094  -0.0166 -
0.0083 1 .
4538 NE2  NE2  . GLN GLN GLN B B 165 165 . 0.0580 0.0450 0.0445 0.0159  -0.0031 -
0.0165 1 .
4539 C    C    . GLN GLN GLN B B 165 165 . 0.0405 0.0285 0.0338 0.0067  -0.0062 -
0.0040 1 .
4540 O    O    . GLN GLN GLN B B 165 165 . 0.0787 0.0606 0.0333 0.0216  -0.0086
0.0001  1 .
4541 N    N    . GLU GLU GLU B B 166 166 . 0.0303 0.0312 0.0275 0.0054  -0.0033 -
0.0036 1 .
4542 CA   CA   . GLU GLU GLU B B 166 166 . 0.0284 0.0268 0.0254 0.0021  0.0006
0.0004  1 .
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4543 CB   CB   . GLU GLU GLU B B 166 166 . 0.0282 0.0313 0.0312 -0.0041 0.0041  -
0.0059 1 .
4544 CG   CG   . GLU GLU GLU B B 166 166 . 0.0670 0.0368 0.0424 -0.0124 0.0201  -
0.0134 1 .
4545 CD   CD   . GLU GLU GLU B B 166 166 . 0.0833 0.0758 0.0386 0.0099  -0.0230
0.0103  1 .
4546 OE1  OE1  . GLU GLU GLU B B 166 166 . 0.0954 0.0435 0.0532 -0.0036 -0.0194
0.0064  1 .
4547 OE2  OE2  . GLU GLU GLU B B 166 166 . 0.0897 0.0764 0.0750 0.0036  -0.0047 -
0.0143 1 .
4548 C    C    . GLU GLU GLU B B 166 166 . 0.0536 0.0403 0.0283 0.0205  -0.0092 -
0.0067 1 .
4549 O    O    . GLU GLU GLU B B 166 166 . 0.0309 0.0281 0.0254 0.0039  -0.0008 -
0.0006 1 .
4550 N    N    . PHE PHE PHE B B 167 167 . 0.0460 0.0351 0.0253 0.0142  0.0011
0.0008  1 .
4551 CA   CA   . PHE PHE PHE B B 167 167 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4552 CB   CB   . PHE PHE PHE B B 167 167 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4553 CG   CG   . PHE PHE PHE B B 167 167 . 0.0280 0.0282 0.0256 0.0028  0.0008
0.0009  1 .
4554 CD1  CD1  . PHE PHE PHE B B 167 167 . 0.0286 0.0275 0.0464 0.0016  -0.0083 -
0.0035 1 .
4555 CE1  CE1  . PHE PHE PHE B B 167 167 . 0.0624 0.0418 0.0785 0.0203  0.0019  -
0.0158 1 .
4556 CZ   CZ   . PHE PHE PHE B B 167 167 . 0.0824 0.0694 0.0997 0.0145  0.0057  -
0.0059 1 .
4557 CE2  CE2  . PHE PHE PHE B B 167 167 . 0.0461 0.0761 0.0758 0.0044  0.0152  -
0.0409 1 .
4558 CD2  CD2  . PHE PHE PHE B B 167 167 . 0.0617 0.0742 0.0630 0.0111  0.0332
0.0050  1 .
4559 C    C    . PHE PHE PHE B B 167 167 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4560 O    O    . PHE PHE PHE B B 167 167 . 0.0411 0.0367 0.0303 0.0132  0.0056
0.0058  1 .
4561 N    N    . MET MET MET B B 168 168 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4562 CA   CA   . MET MET MET B B 168 168 . 0.0253 0.0265 0.0270 0.0000  0.0000  -
0.0014 1 .
4563 CB   CB   . MET MET MET B B 168 168 . 0.0253 0.0254 0.0254 0.0000  0.0000  -
0.0001 1 .
4564 CG   CG   . MET MET MET B B 168 168 . 0.0307 0.0380 0.0277 -0.0082 0.0036  -
0.0055 1 .
4565 SD   SD   . MET MET MET B B 168 168 . 0.1282 0.0798 0.1183 0.0180  -0.0004
0.0015  1 .
4566 CE   CE   . MET MET MET B B 168 168 . 0.0580 0.0498 0.0483 0.0016  0.0065
0.0233  1 .
4567 C    C    . MET MET MET B B 168 168 . 0.0254 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4568 O    O    . MET MET MET B B 168 168 . 0.0396 0.0324 0.0360 0.0045  -0.0059
0.0048  1 .
4569 N    N    . ILE ILE ILE B B 169 169 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4570 CA   CA   . ILE ILE ILE B B 169 169 . 0.0310 0.0297 0.0257 0.0050  -0.0015 -
0.0013 1 .
4571 CB   CB   . ILE ILE ILE B B 169 169 . 0.0271 0.0254 0.0254 0.0005  -0.0004 -
0.0001 1 .
4572 CG1  CG1  . ILE ILE ILE B B 169 169 . 0.0407 0.0348 0.0260 0.0121  0.0033
0.0026  1 .
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4573 CD1  CD1  . ILE ILE ILE B B 169 169 . 0.0499 0.0465 0.0659 0.0166  0.0162  -
0.0062 1 .
4574 CG2  CG2  . ILE ILE ILE B B 169 169 . 0.0423 0.0282 0.0318 0.0070  0.0105
0.0043  1 .
4575 C    C    . ILE ILE ILE B B 169 169 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4576 O    O    . ILE ILE ILE B B 169 169 . 0.0338 0.0301 0.0254 0.0064  -0.0008 -
0.0006 1 .
4577 N    N    . LEU LEU LEU B B 170 170 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4578 CA   CA   . LEU LEU LEU B B 170 170 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4579 CB   CB   . LEU LEU LEU B B 170 170 . 0.0449 0.0350 0.0601 0.0137  -0.0011
0.0014  1 .
4580 CG   CG   . LEU LEU LEU B B 170 170 . 0.0542 0.0284 0.0270 0.0089  -0.0035 -
0.0018 1 .
4581 CD1  CD1  . LEU LEU LEU B B 170 170 . 0.0544 0.0653 0.0634 -0.0111 0.0020  -
0.0059 1 .
4582 CD2  CD2  . LEU LEU LEU B B 170 170 . 0.0822 0.0401 0.0762 0.0256  -0.0384 -
0.0264 1 .
4583 C    C    . LEU LEU LEU B B 170 170 . 0.0254 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4584 O    O    . LEU LEU LEU B B 170 170 . 0.0436 0.0282 0.0388 -0.0035 0.0059
0.0039  1 .
4585 N    N    . PRO PRO PRO B B 171 171 . 0.0316 0.0257 0.0263 0.0016  0.0025
0.0006  1 .
4586 CA   CA   . PRO PRO PRO B B 171 171 . 0.0281 0.0253 0.0253 0.0002  0.0003
0.0000  1 .
4587 CB   CB   . PRO PRO PRO B B 171 171 . 0.0328 0.0284 0.0253 -0.0048 -0.0001
0.0001  1 .
4588 CG   CG   . PRO PRO PRO B B 171 171 . 0.0443 0.0253 0.0295 0.0009  0.0089
0.0004  1 .
4589 CD   CD   . PRO PRO PRO B B 171 171 . 0.0302 0.0260 0.0257 0.0019  0.0013
0.0005  1 .
4590 C    C    . PRO PRO PRO B B 171 171 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4591 O    O    . PRO PRO PRO B B 171 171 . 0.0574 0.0439 0.0346 0.0067  0.0055
0.0131  1 .
4592 N    N    . VAL VAL VAL B B 172 172 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4593 CA   CA   . VAL VAL VAL B B 172 172 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4594 CB   CB   . VAL VAL VAL B B 172 172 . 0.0329 0.0309 0.0337 0.0065  0.0080
0.0068  1 .
4595 CG1  CG1  . VAL VAL VAL B B 172 172 . 0.0644 0.0627 0.0501 -0.0013 0.0072  -
0.0299 1 .
4596 CG2  CG2  . VAL VAL VAL B B 172 172 . 0.0431 0.0669 0.0452 -0.0070 -0.0071 -
0.0228 1 .
4597 C    C    . VAL VAL VAL B B 172 172 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4598 O    O    . VAL VAL VAL B B 172 172 . 0.0758 0.0389 0.0495 0.0094  0.0056
0.0014  1 .
4599 N    N    . GLY GLY GLY B B 173 173 . 0.0576 0.0340 0.0424 0.0014  0.0002  -
0.0121 1 .
4600 CA   CA   . GLY GLY GLY B B 173 173 . 0.0748 0.0321 0.0657 0.0058  0.0143  -
0.0132 1 .
4601 C    C    . GLY GLY GLY B B 173 173 . 0.0755 0.0726 0.0671 0.0120  0.0011  -
0.0047 1 .
4602 O    O    . GLY GLY GLY B B 173 173 . 0.1180 0.0769 0.1087 0.0137  0.0096  -
0.0086 1 .
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4603 N    N    . ALA ALA ALA B B 174 174 . 0.0616 0.0515 0.0418 0.0124  0.0110  -
0.0132 1 .
4604 CA   CA   . ALA ALA ALA B B 174 174 . 0.0582 0.0346 0.0494 0.0161  0.0086
0.0044  1 .
4605 CB   CB   . ALA ALA ALA B B 174 174 . 0.0746 0.0493 0.0369 0.0187  -0.0108 -
0.0046 1 .
4606 C    C    . ALA ALA ALA B B 174 174 . 0.0871 0.0744 0.0777 0.0070  -0.0055
0.0008  1 .
4607 O    O    . ALA ALA ALA B B 174 174 . 0.0878 0.0702 0.0613 0.0049  0.0088  -
0.0204 1 .
4608 N    N    . GLU GLU GLU B B 175 175 . 0.1195 0.0846 0.0884 0.0091  0.0005
0.0110  1 .
4609 CA   CA   . GLU GLU GLU B B 175 175 . 0.1164 0.1065 0.1115 0.0055  0.0040
0.0004  1 .
4610 CB   CB   . GLU GLU GLU B B 175 175 . 0.1471 0.1262 0.1257 0.0099  0.0042
0.0149  1 .
4611 CG   CG   . GLU GLU GLU B B 175 175 . 0.2397 0.2586 0.2860 0.0060  0.0199  -
0.0011 1 .
4612 CD   CD   . GLU GLU GLU B B 175 175 . 0.4264 0.3735 0.3904 0.0158  0.0034
0.0338  1 .
4613 OE1  OE1  . GLU GLU GLU B B 175 175 . 0.4667 0.4589 0.4655 -0.0050 0.0216
0.0173  1 .
4614 OE2  OE2  . GLU GLU GLU B B 175 175 . 0.4508 0.4245 0.4304 -0.0084 0.0015
0.0419  1 .
4615 C    C    . GLU GLU GLU B B 175 175 . 0.0989 0.0896 0.0893 0.0081  0.0034
0.0030  1 .
4616 O    O    . GLU GLU GLU B B 175 175 . 0.1304 0.0916 0.0853 0.0085  0.0081  -
0.0137 1 .
4617 N    N    . SER SER SER B B 176 176 . 0.0810 0.0746 0.0685 0.0073  -0.0013
0.0003  1 .
4618 CA   CA   . SER SER SER B B 176 176 . 0.0555 0.0472 0.0422 -0.0069 0.0002
0.0059  1 .
4619 CB   CB   . SER SER SER B B 176 176 . 0.0840 0.0621 0.0794 0.0050  -0.0016
0.0113  1 .
4620 OG   OG   . SER SER SER B B 176 176 . 0.0508 0.0437 0.0372 -0.0182 -0.0087 -
0.0006 1 .
4621 C    C    . SER SER SER B B 176 176 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4622 O    O    . SER SER SER B B 176 176 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4623 N    N    . PHE PHE PHE B B 177 177 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4624 CA   CA   . PHE PHE PHE B B 177 177 . 0.0261 0.0253 0.0254 0.0001  0.0002
0.0000  1 .
4625 CB   CB   . PHE PHE PHE B B 177 177 . 0.0267 0.0259 0.0350 -0.0006 -0.0026
0.0024  1 .
4626 CG   CG   . PHE PHE PHE B B 177 177 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4627 CD1  CD1  . PHE PHE PHE B B 177 177 . 0.0333 0.0269 0.0273 0.0036  0.0040
0.0018  1 .
4628 CE1  CE1  . PHE PHE PHE B B 177 177 . 0.0376 0.0357 0.0253 -0.0113 -0.0001
0.0001  1 .
4629 CZ   CZ   . PHE PHE PHE B B 177 177 . 0.0425 0.0370 0.0333 -0.0012 -0.0085
0.0072  1 .
4630 CE2  CE2  . PHE PHE PHE B B 177 177 . 0.0397 0.0253 0.0477 -0.0003 -0.0179
0.0004  1 .
4631 CD2  CD2  . PHE PHE PHE B B 177 177 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4632 C    C    . PHE PHE PHE B B 177 177 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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4633 O    O    . PHE PHE PHE B B 177 177 . 0.0290 0.0261 0.0261 0.0017  -0.0016 -
0.0008 1 .
4634 N    N    . ARG ARG ARG B B 178 178 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4635 CA   CA   . ARG ARG ARG B B 178 178 . 0.0577 0.0494 0.0542 -0.0034 0.0012
0.0031  1 .
4636 CB   CB   . ARG ARG ARG B B 178 178 . 0.0956 0.0627 0.0827 -0.0079 0.0098
0.0210  1 .
4637 CG   CG   . ARG ARG ARG B B 178 178 . 0.2368 0.2271 0.2099 -0.0020 0.0328  -
0.0046 1 .
4638 CD   CD   . ARG ARG ARG B B 178 178 . 0.3351 0.3478 0.3474 0.0323  -0.0060 -
0.0122 1 .
4639 NE   NE   . ARG ARG ARG B B 178 178 . 0.4654 0.4771 0.4436 -0.0167 -0.0240 -
0.0048 1 .
4640 CZ   CZ   . ARG ARG ARG B B 178 178 . 0.5220 0.4935 0.5173 -0.0029 -0.0089
0.0026  1 .
4641 NH1  NH1  . ARG ARG ARG B B 178 178 . 0.5803 0.5756 0.5634 0.0020  0.0197
0.0192  1 .
4642 NH2  NH2  . ARG ARG ARG B B 178 178 . 0.5351 0.5024 0.5062 0.0132  -0.0154 -
0.0047 1 .
4643 C    C    . ARG ARG ARG B B 178 178 . 0.0326 0.0257 0.0267 0.0017  -0.0032 -
0.0007 1 .
4644 O    O    . ARG ARG ARG B B 178 178 . 0.0293 0.0253 0.0272 0.0003  0.0027
0.0002  1 .
4645 N    N    . ASP ASP ASP B B 179 179 . 0.0416 0.0307 0.0351 0.0073  0.0038  -
0.0026 1 .
4646 CA   CA   . ASP ASP ASP B B 179 179 . 0.0346 0.0298 0.0352 -0.0039 -0.0066 -
0.0010 1 .
4647 CB   CB   . ASP ASP ASP B B 179 179 . 0.0752 0.0576 0.0314 0.0092  0.0025
0.0057  1 .
4648 CG   CG   . ASP ASP ASP B B 179 179 . 0.0877 0.0950 0.0830 0.0104  -0.0057
0.0003  1 .
4649 OD1  OD1  . ASP ASP ASP B B 179 179 . 0.1941 0.1316 0.1090 0.0177  0.0153
0.0382  1 .
4650 OD2  OD2  . ASP ASP ASP B B 179 179 . 0.1440 0.1051 0.1013 0.0358  0.0085
0.0022  1 .
4651 C    C    . ASP ASP ASP B B 179 179 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4652 O    O    . ASP ASP ASP B B 179 179 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4653 N    N    . ALA ALA ALA B B 180 180 . 0.0321 0.0289 0.0261 -0.0049 0.0023  -
0.0017 1 .
4654 CA   CA   . ALA ALA ALA B B 180 180 . 0.0322 0.0254 0.0260 0.0009  -0.0022 -
0.0003 1 .
4655 CB   CB   . ALA ALA ALA B B 180 180 . 0.0325 0.0330 0.0310 0.0074  -0.0037 -
0.0030 1 .
4656 C    C    . ALA ALA ALA B B 180 180 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4657 O    O    . ALA ALA ALA B B 180 180 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4658 N    N    . MET MET MET B B 181 181 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4659 CA   CA   . MET MET MET B B 181 181 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4660 CB   CB   . MET MET MET B B 181 181 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4661 CG   CG   . MET MET MET B B 181 181 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4662 SD   SD   . MET MET MET B B 181 181 . 0.0332 0.0253 0.0304 -0.0005 0.0063  -
0.0004 1 .
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4663 CE   CE   . MET MET MET B B 181 181 . 0.0421 0.0338 0.0453 0.0074  0.0084  -
0.0052 1 .
4664 C    C    . MET MET MET B B 181 181 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4665 O    O    . MET MET MET B B 181 181 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4666 N    N    . ARG ARG ARG B B 182 182 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4667 CA   CA   . ARG ARG ARG B B 182 182 . 0.0258 0.0265 0.0258 -0.0008 0.0005  -
0.0007 1 .
4668 CB   CB   . ARG ARG ARG B B 182 182 . 0.0347 0.0341 0.0301 0.0090  0.0067
0.0065  1 .
4669 CG   CG   . ARG ARG ARG B B 182 182 . 0.0400 0.0501 0.0637 0.0148  -0.0115 -
0.0071 1 .
4670 CD   CD   . ARG ARG ARG B B 182 182 . 0.1726 0.0698 0.1490 0.0042  0.0046
0.0085  1 .
4671 NE   NE   . ARG ARG ARG B B 182 182 . 0.1507 0.1027 0.2060 0.0509  0.0037
0.0045  1 .
4672 CZ   CZ   . ARG ARG ARG B B 182 182 . 0.2374 0.2048 0.2238 0.0250  0.0049  -
0.0138 1 .
4673 NH1  NH1  . ARG ARG ARG B B 182 182 . 0.1924 0.1320 0.1613 0.0262  0.0229  -
0.0674 1 .
4674 NH2  NH2  . ARG ARG ARG B B 182 182 . 0.2462 0.2906 0.2858 0.0538  -0.0445
0.0085  1 .
4675 C    C    . ARG ARG ARG B B 182 182 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4676 O    O    . ARG ARG ARG B B 182 182 . 0.0258 0.0253 0.0258 0.0000  0.0005
0.0000  1 .
4677 N    N    . LEU LEU LEU B B 183 183 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4678 CA   CA   . LEU LEU LEU B B 183 183 . 0.0458 0.0262 0.0263 -0.0044 0.0045  -
0.0009 1 .
4679 CB   CB   . LEU LEU LEU B B 183 183 . 0.0387 0.0398 0.0371 0.0136  -0.0016
0.0010  1 .
4680 CG   CG   . LEU LEU LEU B B 183 183 . 0.1321 0.0913 0.0929 -0.0023 -0.0122
0.0096  1 .
4681 CD1  CD1  . LEU LEU LEU B B 183 183 . 0.0769 0.0837 0.0635 0.0523  -0.0016 -
0.0160 1 .
4682 CD2  CD2  . LEU LEU LEU B B 183 183 . 0.0888 0.0773 0.1005 0.0398  0.0253  -
0.0259 1 .
4683 C    C    . LEU LEU LEU B B 183 183 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4684 O    O    . LEU LEU LEU B B 183 183 . 0.0272 0.0253 0.0263 0.0001  -0.0014
0.0000  1 .
4685 N    N    . GLY GLY GLY B B 184 184 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4686 CA   CA   . GLY GLY GLY B B 184 184 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4687 C    C    . GLY GLY GLY B B 184 184 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4688 O    O    . GLY GLY GLY B B 184 184 . 0.0353 0.0262 0.0253 0.0030  -0.0005 -
0.0001 1 .
4689 N    N    . ALA ALA ALA B B 185 185 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4690 CA   CA   . ALA ALA ALA B B 185 185 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4691 CB   CB   . ALA ALA ALA B B 185 185 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4692 C    C    . ALA ALA ALA B B 185 185 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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4693 O    O    . ALA ALA ALA B B 185 185 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4694 N    N    . GLU GLU GLU B B 186 186 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4695 CA   CA   . GLU GLU GLU B B 186 186 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4696 CB   CB   . GLU GLU GLU B B 186 186 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4697 CG   CG   . GLU GLU GLU B B 186 186 . 0.0360 0.0258 0.0313 0.0022  0.0080
0.0016  1 .
4698 CD   CD   . GLU GLU GLU B B 186 186 . 0.0803 0.0595 0.0645 -0.0101 0.0314  -
0.0255 1 .
4699 OE1  OE1  . GLU GLU GLU B B 186 186 . 0.1108 0.0721 0.0587 0.0115  0.0233
0.0381  1 .
4700 OE2  OE2  . GLU GLU GLU B B 186 186 . 0.0832 0.0376 0.0578 0.0042  0.0119  -
0.0009 1 .
4701 C    C    . GLU GLU GLU B B 186 186 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4702 O    O    . GLU GLU GLU B B 186 186 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4703 N    N    . VAL VAL VAL B B 187 187 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4704 CA   CA   . VAL VAL VAL B B 187 187 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4705 CB   CB   . VAL VAL VAL B B 187 187 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4706 CG1  CG1  . VAL VAL VAL B B 187 187 . 0.0263 0.0260 0.0256 -0.0008 -0.0005
0.0004  1 .
4707 CG2  CG2  . VAL VAL VAL B B 187 187 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4708 C    C    . VAL VAL VAL B B 187 187 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4709 O    O    . VAL VAL VAL B B 187 187 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4710 N    N    . TYR TYR TYR B B 188 188 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4711 CA   CA   . TYR TYR TYR B B 188 188 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4712 CB   CB   . TYR TYR TYR B B 188 188 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4713 CG   CG   . TYR TYR TYR B B 188 188 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4714 CD1  CD1  . TYR TYR TYR B B 188 188 . 0.0267 0.0257 0.0270 -0.0007 0.0015  -
0.0008 1 .
4715 CE1  CE1  . TYR TYR TYR B B 188 188 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4716 CZ   CZ   . TYR TYR TYR B B 188 188 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4717 OH   OH   . TYR TYR TYR B B 188 188 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4718 CE2  CE2  . TYR TYR TYR B B 188 188 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4719 CD2  CD2  . TYR TYR TYR B B 188 188 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4720 C    C    . TYR TYR TYR B B 188 188 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4721 O    O    . TYR TYR TYR B B 188 188 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4722 N    N    . HIS HIS HIS B B 189 189 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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4723 CA   CA   . HIS HIS HIS B B 189 189 . 0.0254 0.0255 0.0259 0.0001  0.0002
0.0003  1 .
4724 CB   CB   . HIS HIS HIS B B 189 189 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4725 CG   CG   . HIS HIS HIS B B 189 189 . 0.0747 0.0620 0.0670 0.0000  -0.0058
0.0088  1 .
4726 ND1  ND1  . HIS HIS HIS B B 189 189 . 0.1677 0.1542 0.1701 0.0041  0.0355  -
0.0187 1 .
4727 CE1  CE1  . HIS HIS HIS B B 189 189 . 0.1092 0.0878 0.1127 0.0264  0.0010
0.0209  1 .
4728 NE2  NE2  . HIS HIS HIS B B 189 189 . 0.0846 0.1663 0.1182 0.0276  0.0110
0.0322  1 .
4729 CD2  CD2  . HIS HIS HIS B B 189 189 . 0.1407 0.1854 0.1149 0.0190  -0.0064
0.0215  1 .
4730 C    C    . HIS HIS HIS B B 189 189 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4731 O    O    . HIS HIS HIS B B 189 189 . 0.0336 0.0564 0.0571 0.0106  -0.0017
0.0176  1 .
4732 N    N    . THR THR THR B B 190 190 . 0.0353 0.0306 0.0269 0.0072  0.0039
0.0029  1 .
4733 CA   CA   . THR THR THR B B 190 190 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4734 CB   CB   . THR THR THR B B 190 190 . 0.0285 0.0254 0.0404 0.0004  0.0070
0.0010  1 .
4735 OG1  OG1  . THR THR THR B B 190 190 . 0.0619 0.0537 0.0586 0.0161  0.0172
0.0075  1 .
4736 CG2  CG2  . THR THR THR B B 190 190 . 0.0470 0.0269 0.0376 0.0059  0.0163
0.0044  1 .
4737 C    C    . THR THR THR B B 190 190 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4738 O    O    . THR THR THR B B 190 190 . 0.0272 0.0318 0.0255 -0.0035 -0.0006
0.0011  1 .
4739 N    N    . LEU LEU LEU B B 191 191 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4740 CA   CA   . LEU LEU LEU B B 191 191 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4741 CB   CB   . LEU LEU LEU B B 191 191 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4742 CG   CG   . LEU LEU LEU B B 191 191 . 0.0264 0.0322 0.0272 0.0004  0.0002
0.0036  1 .
4743 CD1  CD1  . LEU LEU LEU B B 191 191 . 0.0349 0.0383 0.0796 0.0074  0.0193
0.0043  1 .
4744 CD2  CD2  . LEU LEU LEU B B 191 191 . 0.0272 0.0323 0.0353 0.0037  -0.0044 -
0.0083 1 .
4745 C    C    . LEU LEU LEU B B 191 191 . 0.0253 0.0259 0.0267 0.0000  -0.0001
0.0009  1 .
4746 O    O    . LEU LEU LEU B B 191 191 . 0.0253 0.0304 0.0314 -0.0003 -0.0003
0.0055  1 .
4747 N    N    . LYS LYS LYS B B 192 192 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4748 CA   CA   . LYS LYS LYS B B 192 192 . 0.0290 0.0262 0.0274 0.0018  0.0028
0.0013  1 .
4749 CB   CB   . LYS LYS LYS B B 192 192 . 0.0273 0.0255 0.0265 -0.0007 0.0015  -
0.0005 1 .
4750 CG   CG   . LYS LYS LYS B B 192 192 . 0.0598 0.0486 0.0460 0.0169  0.0067
0.0077  1 .
4751 CD   CD   . LYS LYS LYS B B 192 192 . 0.0999 0.0966 0.0758 -0.0067 0.0166
0.0119  1 .
4752 CE   CE   . LYS LYS LYS B B 192 192 . 0.1583 0.0756 0.1459 -0.0337 0.0201  -
0.0120 1 .
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4753 NZ   NZ   . LYS LYS LYS B B 192 192 . 0.1744 0.1664 0.1165 0.0355  0.0724  -
0.0243 1 .
4754 C    C    . LYS LYS LYS B B 192 192 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4755 O    O    . LYS LYS LYS B B 192 192 . 0.0329 0.0471 0.0372 0.0125  0.0093
0.0161  1 .
4756 N    N    . GLY GLY GLY B B 193 193 . 0.0391 0.0376 0.0554 0.0017  0.0105
0.0176  1 .
4757 CA   CA   . GLY GLY GLY B B 193 193 . 0.0513 0.0592 0.0765 0.0096  0.0065
0.0167  1 .
4758 C    C    . GLY GLY GLY B B 193 193 . 0.0621 0.0479 0.0548 0.0065  -0.0019
0.0029  1 .
4759 O    O    . GLY GLY GLY B B 193 193 . 0.0891 0.0992 0.1182 -0.0027 -0.0013
0.0084  1 .
4760 N    N    . VAL VAL VAL B B 194 194 . 0.0649 0.0575 0.0698 0.0059  0.0019
0.0006  1 .
4761 CA   CA   . VAL VAL VAL B B 194 194 . 0.0881 0.0871 0.0823 -0.0028 0.0011
0.0038  1 .
4762 CB   CB   . VAL VAL VAL B B 194 194 . 0.0587 0.0522 0.0582 -0.0189 0.0096
0.0070  1 .
4763 CG1  CG1  . VAL VAL VAL B B 194 194 . 0.1048 0.0634 0.0746 0.0173  0.0230
0.0333  1 .
4764 CG2  CG2  . VAL VAL VAL B B 194 194 . 0.1359 0.1197 0.1099 0.0175  0.0215  -
0.0025 1 .
4765 C    C    . VAL VAL VAL B B 194 194 . 0.0900 0.0851 0.0842 0.0138  -0.0014
0.0001  1 .
4766 O    O    . VAL VAL VAL B B 194 194 . 0.0572 0.0666 0.0843 -0.0077 0.0101
0.0082  1 .
4767 N    N    . ILE ILE ILE B B 195 195 . 0.0456 0.0542 0.0452 0.0178  0.0117
0.0103  1 .
4768 CA   CA   . ILE ILE ILE B B 195 195 . 0.0637 0.0808 0.0700 0.0026  0.0001  -
0.0042 1 .
4769 CB   CB   . ILE ILE ILE B B 195 195 . 0.0377 0.0391 0.0372 0.0033  0.0101  -
0.0041 1 .
4770 CG1  CG1  . ILE ILE ILE B B 195 195 . 0.1262 0.0793 0.1036 -0.0173 -0.0122
0.0102  1 .
4771 CD1  CD1  . ILE ILE ILE B B 195 195 . 0.2041 0.1891 0.1415 -0.0475 0.0238  -
0.0170 1 .
4772 CG2  CG2  . ILE ILE ILE B B 195 195 . 0.0500 0.0502 0.0639 -0.0079 0.0155
0.0001  1 .
4773 C    C    . ILE ILE ILE B B 195 195 . 0.0714 0.0733 0.0716 0.0000  0.0075  -
0.0012 1 .
4774 O    O    . ILE ILE ILE B B 195 195 . 0.0886 0.1045 0.1129 0.0013  0.0184  -
0.0119 1 .
4775 N    N    . LYS LYS LYS B B 196 196 . 0.0981 0.1003 0.0994 0.0043  0.0039
0.0057  1 .
4776 CA   CA   . LYS LYS LYS B B 196 196 . 0.0781 0.0977 0.0955 -0.0022 0.0058
0.0082  1 .
4777 CB   CB   . LYS LYS LYS B B 196 196 . 0.0821 0.1077 0.1243 0.0069  -0.0007
0.0182  1 .
4778 CG   CG   . LYS LYS LYS B B 196 196 . 0.1573 0.1734 0.1247 -0.0152 -0.0236
0.0021  1 .
4779 CD   CD   . LYS LYS LYS B B 196 196 . 0.2785 0.2852 0.2542 -0.0125 -0.0053
0.0517  1 .
4780 CE   CE   . LYS LYS LYS B B 196 196 . 0.3296 0.3323 0.2827 -0.0092 -0.0333
0.0203  1 .
4781 NZ   NZ   . LYS LYS LYS B B 196 196 . 0.3903 0.3933 0.3500 -0.0296 0.0011
0.0413  1 .
4782 C    C    . LYS LYS LYS B B 196 196 . 0.0870 0.0958 0.0918 0.0067  0.0040
0.0043  1 .
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4783 O    O    . LYS LYS LYS B B 196 196 . 0.0852 0.1089 0.0936 0.0023  0.0002
0.0041  1 .
4784 N    N    . ASP ASP ASP B B 197 197 . 0.1095 0.0935 0.1128 0.0049  0.0003
0.0134  1 .
4785 CA   CA   . ASP ASP ASP B B 197 197 . 0.1401 0.1451 0.1536 0.0000  0.0087
0.0056  1 .
4786 CB   CB   . ASP ASP ASP B B 197 197 . 0.1681 0.1814 0.1698 -0.0051 0.0144  -
0.0043 1 .
4787 CG   CG   . ASP ASP ASP B B 197 197 . 0.2548 0.2167 0.2590 0.0129  0.0105
0.0042  1 .
4788 OD1  OD1  . ASP ASP ASP B B 197 197 . 0.2979 0.3508 0.3453 -0.0249 0.0036  -
0.0455 1 .
4789 OD2  OD2  . ASP ASP ASP B B 197 197 . 0.3381 0.3343 0.3144 0.0143  -0.0036
0.0080  1 .
4790 C    C    . ASP ASP ASP B B 197 197 . 0.1402 0.1330 0.1484 -0.0001 0.0013
0.0027  1 .
4791 O    O    . ASP ASP ASP B B 197 197 . 0.1745 0.1694 0.1919 0.0021  0.0115
0.0059  1 .
4792 N    N    . LYS LYS LYS B B 198 198 . 0.1396 0.1546 0.1395 0.0052  0.0066
0.0006  1 .
4793 CA   CA   . LYS LYS LYS B B 198 198 . 0.1485 0.1621 0.1525 0.0011  0.0069  -
0.0003 1 .
4794 CB   CB   . LYS LYS LYS B B 198 198 . 0.1437 0.1953 0.1583 0.0102  0.0018
0.0094  1 .
4795 CG   CG   . LYS LYS LYS B B 198 198 . 0.2102 0.1999 0.1992 -0.0005 -0.0005
0.0071  1 .
4796 CD   CD   . LYS LYS LYS B B 198 198 . 0.2529 0.2932 0.2206 -0.0232 0.0002
0.0103  1 .
4797 CE   CE   . LYS LYS LYS B B 198 198 . 0.2436 0.2898 0.2558 -0.0172 0.0094
0.0195  1 .
4798 NZ   NZ   . LYS LYS LYS B B 198 198 . 0.2662 0.2362 0.2073 -0.0403 0.0594
0.0539  1 .
4799 C    C    . LYS LYS LYS B B 198 198 . 0.1470 0.1576 0.1518 -0.0067 0.0114
0.0010  1 .
4800 O    O    . LYS LYS LYS B B 198 198 . 0.1290 0.1656 0.1292 -0.0156 0.0156  -
0.0108 1 .
4801 N    N    . TYR TYR TYR B B 199 199 . 0.1091 0.1120 0.1102 -0.0020 0.0184
0.0021  1 .
4802 CA   CA   . TYR TYR TYR B B 199 199 . 0.0864 0.0957 0.0913 0.0008  0.0103
0.0103  1 .
4803 CB   CB   . TYR TYR TYR B B 199 199 . 0.0794 0.0958 0.0780 0.0053  -0.0024
0.0004  1 .
4804 CG   CG   . TYR TYR TYR B B 199 199 . 0.1004 0.1082 0.0931 -0.0043 -0.0114
0.0124  1 .
4805 CD1  CD1  . TYR TYR TYR B B 199 199 . 0.1491 0.1166 0.1358 0.0248  -0.0059 -
0.0087 1 .
4806 CE1  CE1  . TYR TYR TYR B B 199 199 . 0.0798 0.0964 0.0936 0.0269  -0.0210 -
0.0105 1 .
4807 CZ   CZ   . TYR TYR TYR B B 199 199 . 0.1404 0.1457 0.1286 -0.0117 -0.0091
0.0094  1 .
4808 OH   OH   . TYR TYR TYR B B 199 199 . 0.1974 0.2336 0.1436 0.0291  -0.0054 -
0.0064 1 .
4809 CE2  CE2  . TYR TYR TYR B B 199 199 . 0.1518 0.1687 0.1300 -0.0168 -0.0365
0.0104  1 .
4810 CD2  CD2  . TYR TYR TYR B B 199 199 . 0.1382 0.1459 0.1013 -0.0147 -0.0043
0.0221  1 .
4811 C    C    . TYR TYR TYR B B 199 199 . 0.0867 0.0964 0.0938 -0.0050 0.0106  -
0.0019 1 .
4812 O    O    . TYR TYR TYR B B 199 199 . 0.1193 0.1203 0.1222 -0.0138 0.0247
0.0133  1 .
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4813 N    N    . GLY GLY GLY B B 200 200 . 0.0674 0.0893 0.0828 0.0175  0.0116
0.0151  1 .
4814 CA   CA   . GLY GLY GLY B B 200 200 . 0.0944 0.1152 0.0971 0.0003  0.0050  -
0.0085 1 .
4815 C    C    . GLY GLY GLY B B 200 200 . 0.0969 0.1153 0.1024 0.0007  -0.0040
0.0113  1 .
4816 O    O    . GLY GLY GLY B B 200 200 . 0.1134 0.1115 0.1078 -0.0040 0.0068
0.0075  1 .
4817 N    N    . LYS LYS LYS B B 201 201 . 0.1382 0.1474 0.1303 -0.0135 0.0123
0.0115  1 .
4818 CA   CA   . LYS LYS LYS B B 201 201 . 0.1414 0.1582 0.1433 -0.0016 0.0092
0.0072  1 .
4819 CB   CB   . LYS LYS LYS B B 201 201 . 0.1507 0.1765 0.1672 0.0013  0.0026
0.0205  1 .
4820 CG   CG   . LYS LYS LYS B B 201 201 . 0.2373 0.2082 0.1969 -0.0144 0.0132
0.0052  1 .
4821 CD   CD   . LYS LYS LYS B B 201 201 . 0.2681 0.3160 0.2909 0.0201  -0.0443
0.0021  1 .
4822 CE   CE   . LYS LYS LYS B B 201 201 . 0.2915 0.2811 0.3080 -0.0064 0.0140
0.0031  1 .
4823 NZ   NZ   . LYS LYS LYS B B 201 201 . 0.2726 0.2357 0.3094 -0.0069 -0.0009 -
0.0333 1 .
4824 C    C    . LYS LYS LYS B B 201 201 . 0.1562 0.1663 0.1467 -0.0079 0.0052
0.0007  1 .
4825 O    O    . LYS LYS LYS B B 201 201 . 0.1537 0.1816 0.1679 0.0136  0.0108
0.0030  1 .
4826 N    N    . ASP ASP ASP B B 202 202 . 0.1872 0.1602 0.1761 0.0001  0.0165
0.0008  1 .
4827 CA   CA   . ASP ASP ASP B B 202 202 . 0.1840 0.1811 0.1887 -0.0010 0.0133
0.0060  1 .
4828 CB   CB   . ASP ASP ASP B B 202 202 . 0.2197 0.2187 0.2291 -0.0133 0.0091  -
0.0237 1 .
4829 CG   CG   . ASP ASP ASP B B 202 202 . 0.2933 0.2991 0.2870 0.0034  -0.0086
0.0097  1 .
4830 OD1  OD1  . ASP ASP ASP B B 202 202 . 0.3828 0.3603 0.3816 -0.0402 0.0363
0.0401  1 .
4831 OD2  OD2  . ASP ASP ASP B B 202 202 . 0.3566 0.3679 0.3825 -0.0250 -0.0067
0.0166  1 .
4832 C    C    . ASP ASP ASP B B 202 202 . 0.1619 0.1580 0.1743 -0.0092 0.0024  -
0.0157 1 .
4833 O    O    . ASP ASP ASP B B 202 202 . 0.1726 0.1495 0.1987 0.0056  0.0122  -
0.0114 1 .
4834 N    N    . ALA ALA ALA B B 203 203 . 0.1118 0.1060 0.1027 -0.0006 0.0228
0.0160  1 .
4835 CA   CA   . ALA ALA ALA B B 203 203 . 0.0748 0.0846 0.0933 -0.0019 0.0122  -
0.0073 1 .
4836 CB   CB   . ALA ALA ALA B B 203 203 . 0.0922 0.0611 0.0675 0.0127  0.0251
0.0066  1 .
4837 C    C    . ALA ALA ALA B B 203 203 . 0.0584 0.0590 0.0698 0.0089  0.0018
0.0067  1 .
4838 O    O    . ALA ALA ALA B B 203 203 . 0.0570 0.0621 0.0592 -0.0065 0.0069  -
0.0053 1 .
4839 N    N    . THR THR THR B B 204 204 . 0.0403 0.0400 0.0535 0.0010  0.0170  -
0.0101 1 .
4840 CA   CA   . THR THR THR B B 204 204 . 0.0446 0.0486 0.0502 -0.0053 0.0173  -
0.0014 1 .
4841 CB   CB   . THR THR THR B B 204 204 . 0.0542 0.0501 0.0590 -0.0075 0.0142  -
0.0014 1 .
4842 OG1  OG1  . THR THR THR B B 204 204 . 0.1029 0.1207 0.1013 0.0262  0.0148
0.0154  1 .
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4843 CG2  CG2  . THR THR THR B B 204 204 . 0.0664 0.0834 0.1222 0.0042  0.0289  -
0.0299 1 .
4844 C    C    . THR THR THR B B 204 204 . 0.0288 0.0316 0.0296 -0.0047 0.0039  -
0.0052 1 .
4845 O    O    . THR THR THR B B 204 204 . 0.0487 0.0318 0.0362 0.0000  0.0140  -
0.0040 1 .
4846 N    N    . ASN ASN ASN B B 205 205 . 0.0256 0.0290 0.0325 0.0008  -0.0009 -
0.0050 1 .
4847 CA   CA   . ASN ASN ASN B B 205 205 . 0.0287 0.0287 0.0297 -0.0031 0.0028  -
0.0018 1 .
4848 CB   CB   . ASN ASN ASN B B 205 205 . 0.0489 0.0619 0.0557 -0.0048 0.0081  -
0.0152 1 .
4849 CG   CG   . ASN ASN ASN B B 205 205 . 0.0669 0.0619 0.0366 -0.0027 -0.0182 -
0.0097 1 .
4850 OD1  OD1  . ASN ASN ASN B B 205 205 . 0.0820 0.0834 0.0775 -0.0241 0.0141  -
0.0063 1 .
4851 ND2  ND2  . ASN ASN ASN B B 205 205 . 0.0625 0.0762 0.0804 -0.0285 0.0038
0.0111  1 .
4852 C    C    . ASN ASN ASN B B 205 205 . 0.0277 0.0275 0.0254 0.0023  -0.0005 -
0.0005 1 .
4853 O    O    . ASN ASN ASN B B 205 205 . 0.0431 0.0392 0.0611 -0.0049 0.0179
0.0059  1 .
4854 N    N    . VAL VAL VAL B B 206 206 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4855 CA   CA   . VAL VAL VAL B B 206 206 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4856 CB   CB   . VAL VAL VAL B B 206 206 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4857 CG1  CG1  . VAL VAL VAL B B 206 206 . 0.0255 0.0258 0.0338 0.0000  0.0012
0.0000  1 .
4858 CG2  CG2  . VAL VAL VAL B B 206 206 . 0.0331 0.0253 0.0311 -0.0006 0.0067  -
0.0005 1 .
4859 C    C    . VAL VAL VAL B B 206 206 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4860 O    O    . VAL VAL VAL B B 206 206 . 0.0274 0.0253 0.0278 -0.0002 0.0022  -
0.0002 1 .
4861 N    N    . GLY GLY GLY B B 207 207 . 0.0334 0.0253 0.0368 0.0000  0.0095
0.0000  1 .
4862 CA   CA   . GLY GLY GLY B B 207 207 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4863 C    C    . GLY GLY GLY B B 207 207 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4864 O    O    . GLY GLY GLY B B 207 207 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4865 N    N    . ASP ASP ASP B B 208 208 . 0.0255 0.0255 0.0375 0.0002  -0.0015 -
0.0017 1 .
4866 CA   CA   . ASP ASP ASP B B 208 208 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4867 CB   CB   . ASP ASP ASP B B 208 208 . 0.0254 0.0253 0.0385 0.0000  0.0010  -
0.0001 1 .
4868 CG   CG   . ASP ASP ASP B B 208 208 . 0.0624 0.0591 0.0572 0.0127  -0.0080 -
0.0029 1 .
4869 OD1  OD1  . ASP ASP ASP B B 208 208 . 0.1293 0.0877 0.1164 0.0031  0.0168
0.0045  1 .
4870 OD2  OD2  . ASP ASP ASP B B 208 208 . 0.0753 0.0602 0.0855 -0.0014 0.0022
0.0135  1 .
4871 C    C    . ASP ASP ASP B B 208 208 . 0.0255 0.0256 0.0329 0.0002  -0.0011 -
0.0015 1 .
4872 O    O    . ASP ASP ASP B B 208 208 . 0.0262 0.0253 0.0257 0.0000  0.0006
0.0000  1 .
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4873 N    N    . GLU GLU GLU B B 209 209 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4874 CA   CA   . GLU GLU GLU B B 209 209 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4875 CB   CB   . GLU GLU GLU B B 209 209 . 0.0303 0.0372 0.0399 0.0031  -0.0029
0.0094  1 .
4876 CG   CG   . GLU GLU GLU B B 209 209 . 0.0437 0.0306 0.0584 0.0050  -0.0037 -
0.0123 1 .
4877 CD   CD   . GLU GLU GLU B B 209 209 . 0.0935 0.1114 0.0919 0.0048  0.0101
0.0136  1 .
4878 OE1  OE1  . GLU GLU GLU B B 209 209 . 0.0922 0.0397 0.0889 0.0187  -0.0109
0.0083  1 .
4879 OE2  OE2  . GLU GLU GLU B B 209 209 . 0.0959 0.0763 0.0810 0.0196  0.0289
0.0193  1 .
4880 C    C    . GLU GLU GLU B B 209 209 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4881 O    O    . GLU GLU GLU B B 209 209 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4882 N    N    . GLY GLY GLY B B 210 210 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4883 CA   CA   . GLY GLY GLY B B 210 210 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4884 C    C    . GLY GLY GLY B B 210 210 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4885 O    O    . GLY GLY GLY B B 210 210 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4886 N    N    . GLY GLY GLY B B 211 211 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4887 CA   CA   . GLY GLY GLY B B 211 211 . 0.0254 0.0256 0.0273 0.0001  0.0004
0.0008  1 .
4888 C    C    . GLY GLY GLY B B 211 211 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4889 O    O    . GLY GLY GLY B B 211 211 . 0.0456 0.0305 0.0318 0.0025  0.0054  -
0.0020 1 .
4890 N    N    . PHE PHE PHE B B 212 212 . 0.0257 0.0340 0.0278 -0.0020 -0.0010
0.0047  1 .
4891 CA   CA   . PHE PHE PHE B B 212 212 . 0.0365 0.0336 0.0392 0.0057  0.0011  -
0.0060 1 .
4892 CB   CB   . PHE PHE PHE B B 212 212 . 0.0312 0.0547 0.0322 0.0131  -0.0063 -
0.0142 1 .
4893 CG   CG   . PHE PHE PHE B B 212 212 . 0.0656 0.0791 0.0652 0.0034  -0.0093
0.0112  1 .
4894 CD1  CD1  . PHE PHE PHE B B 212 212 . 0.0609 0.0684 0.0531 0.0108  0.0083  -
0.0211 1 .
4895 CE1  CE1  . PHE PHE PHE B B 212 212 . 0.0696 0.0718 0.0666 0.0219  0.0080  -
0.0001 1 .
4896 CZ   CZ   . PHE PHE PHE B B 212 212 . 0.1156 0.1674 0.1201 -0.0065 0.0291
0.0222  1 .
4897 CE2  CE2  . PHE PHE PHE B B 212 212 . 0.1306 0.1280 0.1244 0.0121  0.0181
0.0029  1 .
4898 CD2  CD2  . PHE PHE PHE B B 212 212 . 0.1059 0.1259 0.1052 0.0116  0.0043
0.0318  1 .
4899 C    C    . PHE PHE PHE B B 212 212 . 0.0383 0.0310 0.0329 0.0040  0.0005  -
0.0056 1 .
4900 O    O    . PHE PHE PHE B B 212 212 . 0.0710 0.0609 0.0558 0.0256  -0.0087 -
0.0144 1 .
4901 N    N    . ALA ALA ALA B B 213 213 . 0.0663 0.0595 0.0571 0.0068  -0.0147 -
0.0090 1 .
4902 CA   CA   . ALA ALA ALA B B 213 213 . 0.0714 0.0631 0.0732 0.0007  -0.0027 -
0.0010 1 .
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4903 CB   CB   . ALA ALA ALA B B 213 213 . 0.1000 0.0925 0.0686 -0.0097 -0.0034 -
0.0090 1 .
4904 C    C    . ALA ALA ALA B B 213 213 . 0.1144 0.1048 0.1015 0.0079  -0.0023 -
0.0023 1 .
4905 O    O    . ALA ALA ALA B B 213 213 . 0.1134 0.1254 0.0984 -0.0055 -0.0075 -
0.0152 1 .
4906 N    N    . PRO PRO PRO B B 214 214 . 0.1059 0.1138 0.0942 0.0040  -0.0052 -
0.0070 1 .
4907 CA   CA   . PRO PRO PRO B B 214 214 . 0.0952 0.0998 0.0858 0.0003  -0.0052 -
0.0016 1 .
4908 CB   CB   . PRO PRO PRO B B 214 214 . 0.1047 0.0994 0.1016 -0.0098 -0.0172 -
0.0018 1 .
4909 CG   CG   . PRO PRO PRO B B 214 214 . 0.1102 0.0823 0.1002 -0.0141 -0.0259
0.0088  1 .
4910 CD   CD   . PRO PRO PRO B B 214 214 . 0.1086 0.0993 0.1002 0.0221  -0.0027 -
0.0137 1 .
4911 C    C    . PRO PRO PRO B B 214 214 . 0.1245 0.1295 0.1309 0.0013  -0.0049 -
0.0078 1 .
4912 O    O    . PRO PRO PRO B B 214 214 . 0.1294 0.0991 0.1135 0.0060  -0.0085 -
0.0028 1 .
4913 N    N    . ASN ASN ASN B B 215 215 . 0.1305 0.1528 0.1505 -0.0090 -0.0065 -
0.0124 1 .
4914 CA   CA   . ASN ASN ASN B B 215 215 . 0.1605 0.1565 0.1652 -0.0012 -0.0082
0.0058  1 .
4915 CB   CB   . ASN ASN ASN B B 215 215 . 0.1572 0.1636 0.1618 -0.0122 -0.0047 -
0.0134 1 .
4916 CG   CG   . ASN ASN ASN B B 215 215 . 0.1971 0.2062 0.2188 -0.0076 -0.0146
0.0122  1 .
4917 OD1  OD1  . ASN ASN ASN B B 215 215 . 0.2713 0.3154 0.3202 -0.0237 0.0305  -
0.0318 1 .
4918 ND2  ND2  . ASN ASN ASN B B 215 215 . 0.1346 0.1104 0.1295 0.0154  -0.0538 -
0.0398 1 .
4919 C    C    . ASN ASN ASN B B 215 215 . 0.1485 0.1673 0.1505 0.0011  -0.0034
0.0104  1 .
4920 O    O    . ASN ASN ASN B B 215 215 . 0.1748 0.1735 0.1862 0.0045  -0.0199
0.0161  1 .
4921 N    N    . ILE ILE ILE B B 216 216 . 0.1476 0.1429 0.1422 0.0036  0.0020  -
0.0131 1 .
4922 CA   CA   . ILE ILE ILE B B 216 216 . 0.1439 0.1363 0.1397 0.0083  -0.0089 -
0.0027 1 .
4923 CB   CB   . ILE ILE ILE B B 216 216 . 0.1467 0.1270 0.1380 0.0009  -0.0129 -
0.0253 1 .
4924 CG1  CG1  . ILE ILE ILE B B 216 216 . 0.1424 0.1691 0.2156 0.0318  0.0010
0.0221  1 .
4925 CD1  CD1  . ILE ILE ILE B B 216 216 . 0.2467 0.2726 0.2246 0.0173  0.0271  -
0.0287 1 .
4926 CG2  CG2  . ILE ILE ILE B B 216 216 . 0.1068 0.1425 0.1264 0.0002  -0.0018 -
0.0104 1 .
4927 C    C    . ILE ILE ILE B B 216 216 . 0.1383 0.1394 0.1408 0.0000  -0.0074 -
0.0202 1 .
4928 O    O    . ILE ILE ILE B B 216 216 . 0.1198 0.1274 0.1420 0.0020  -0.0140 -
0.0199 1 .
4929 N    N    . LEU LEU LEU B B 217 217 . 0.1101 0.1084 0.1199 -0.0058 -0.0114
0.0008  1 .
4930 CA   CA   . LEU LEU LEU B B 217 217 . 0.1548 0.1479 0.1539 -0.0031 -0.0146 -
0.0055 1 .
4931 CB   CB   . LEU LEU LEU B B 217 217 . 0.1495 0.1643 0.1689 -0.0097 -0.0193
0.0027  1 .
4932 CG   CG   . LEU LEU LEU B B 217 217 . 0.1949 0.1821 0.1511 0.0013  -0.0211
0.0082  1 .
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4933 CD1  CD1  . LEU LEU LEU B B 217 217 . 0.2027 0.1781 0.1542 -0.0120 -0.0434 -
0.0453 1 .
4934 CD2  CD2  . LEU LEU LEU B B 217 217 . 0.2562 0.1888 0.1523 -0.0262 -0.0240 -
0.0302 1 .
4935 C    C    . LEU LEU LEU B B 217 217 . 0.1542 0.1641 0.1461 -0.0028 -0.0076 -
0.0060 1 .
4936 O    O    . LEU LEU LEU B B 217 217 . 0.1591 0.1574 0.1744 0.0122  -0.0310 -
0.0238 1 .
4937 N    N    . GLU GLU GLU B B 218 218 . 0.1336 0.1359 0.1492 0.0109  -0.0158 -
0.0105 1 .
4938 CA   CA   . GLU GLU GLU B B 218 218 . 0.1335 0.1298 0.1219 -0.0008 -0.0020 -
0.0019 1 .
4939 CB   CB   . GLU GLU GLU B B 218 218 . 0.1573 0.1512 0.1765 0.0109  -0.0129 -
0.0037 1 .
4940 CG   CG   . GLU GLU GLU B B 218 218 . 0.1970 0.1885 0.2096 -0.0158 -0.0041
0.0022  1 .
4941 CD   CD   . GLU GLU GLU B B 218 218 . 0.3371 0.3018 0.3079 -0.0059 -0.0307
0.0452  1 .
4942 OE1  OE1  . GLU GLU GLU B B 218 218 . 0.3929 0.3116 0.3499 -0.0146 -0.0595
0.0603  1 .
4943 OE2  OE2  . GLU GLU GLU B B 218 218 . 0.4052 0.3690 0.3603 -0.0289 -0.0404
0.0480  1 .
4944 C    C    . GLU GLU GLU B B 218 218 . 0.1180 0.1020 0.1077 0.0059  -0.0068
0.0061  1 .
4945 O    O    . GLU GLU GLU B B 218 218 . 0.1055 0.0605 0.0829 0.0143  0.0063  -
0.0258 1 .
4946 N    N    . ASN ASN ASN B B 219 219 . 0.0751 0.0553 0.0872 -0.0135 -0.0132 -
0.0134 1 .
4947 CA   CA   . ASN ASN ASN B B 219 219 . 0.0582 0.0562 0.0569 0.0066  -0.0072 -
0.0015 1 .
4948 CB   CB   . ASN ASN ASN B B 219 219 . 0.0763 0.0616 0.0686 0.0098  -0.0107 -
0.0213 1 .
4949 CG   CG   . ASN ASN ASN B B 219 219 . 0.0460 0.0594 0.0586 0.0033  -0.0028 -
0.0153 1 .
4950 OD1  OD1  . ASN ASN ASN B B 219 219 . 0.0653 0.0407 0.0614 0.0049  -0.0166 -
0.0144 1 .
4951 ND2  ND2  . ASN ASN ASN B B 219 219 . 0.1307 0.1090 0.1226 0.0247  -0.0185
0.0166  1 .
4952 C    C    . ASN ASN ASN B B 219 219 . 0.0468 0.0506 0.0531 -0.0032 -0.0049
0.0017  1 .
4953 O    O    . ASN ASN ASN B B 219 219 . 0.0642 0.0480 0.0596 0.0119  -0.0068
0.0051  1 .
4954 N    N    . SER SER SER B B 220 220 . 0.0573 0.0524 0.0467 0.0086  -0.0144 -
0.0061 1 .
4955 CA   CA   . SER SER SER B B 220 220 . 0.0747 0.0796 0.0761 0.0111  -0.0105
0.0033  1 .
4956 CB   CB   . SER SER SER B B 220 220 . 0.0899 0.0811 0.0784 0.0123  -0.0063
0.0064  1 .
4957 OG   OG   . SER SER SER B B 220 220 . 0.1326 0.1135 0.1358 -0.0085 -0.0068
0.0133  1 .
4958 C    C    . SER SER SER B B 220 220 . 0.0771 0.0658 0.0649 0.0034  -0.0025
0.0034  1 .
4959 O    O    . SER SER SER B B 220 220 . 0.0834 0.0726 0.0440 0.0103  -0.0209 -
0.0016 1 .
4960 N    N    . GLU GLU GLU B B 221 221 . 0.0756 0.0711 0.0817 0.0132  -0.0101
0.0083  1 .
4961 CA   CA   . GLU GLU GLU B B 221 221 . 0.0811 0.0812 0.0751 0.0021  0.0018
0.0088  1 .
4962 CB   CB   . GLU GLU GLU B B 221 221 . 0.1303 0.0967 0.0880 0.0042  0.0013  -
0.0017 1 .
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4963 CG   CG   . GLU GLU GLU B B 221 221 . 0.1478 0.1235 0.1340 0.0139  -0.0309 -
0.0065 1 .
4964 CD   CD   . GLU GLU GLU B B 221 221 . 0.2355 0.2487 0.2529 0.0486  0.0121  -
0.0109 1 .
4965 OE1  OE1  . GLU GLU GLU B B 221 221 . 0.2801 0.3192 0.2716 0.0465  0.0298
0.0192  1 .
4966 OE2  OE2  . GLU GLU GLU B B 221 221 . 0.2608 0.2258 0.2398 0.0241  0.0043
0.0053  1 .
4967 C    C    . GLU GLU GLU B B 221 221 . 0.0753 0.0650 0.0639 0.0082  -0.0053 -
0.0099 1 .
4968 O    O    . GLU GLU GLU B B 221 221 . 0.0648 0.0540 0.0475 0.0041  -0.0203
0.0160  1 .
4969 N    N    . ALA ALA ALA B B 222 222 . 0.0395 0.0506 0.0301 0.0039  -0.0040
0.0082  1 .
4970 CA   CA   . ALA ALA ALA B B 222 222 . 0.0349 0.0348 0.0311 0.0095  -0.0075 -
0.0074 1 .
4971 CB   CB   . ALA ALA ALA B B 222 222 . 0.0430 0.0465 0.0406 0.0038  -0.0046
0.0159  1 .
4972 C    C    . ALA ALA ALA B B 222 222 . 0.0313 0.0253 0.0253 0.0000  -0.0002
0.0000  1 .
4973 O    O    . ALA ALA ALA B B 222 222 . 0.0327 0.0340 0.0304 0.0016  0.0017  -
0.0059 1 .
4974 N    N    . LEU LEU LEU B B 223 223 . 0.0274 0.0283 0.0257 0.0025  0.0009
0.0011  1 .
4975 CA   CA   . LEU LEU LEU B B 223 223 . 0.0352 0.0267 0.0254 0.0038  0.0010
0.0004  1 .
4976 CB   CB   . LEU LEU LEU B B 223 223 . 0.0486 0.0383 0.0360 0.0122  -0.0076
0.0034  1 .
4977 CG   CG   . LEU LEU LEU B B 223 223 . 0.0272 0.0290 0.0465 -0.0001 0.0058
0.0028  1 .
4978 CD1  CD1  . LEU LEU LEU B B 223 223 . 0.0551 0.0460 0.0329 0.0129  -0.0044
0.0083  1 .
4979 CD2  CD2  . LEU LEU LEU B B 223 223 . 0.0539 0.0268 0.0606 0.0046  -0.0135
0.0022  1 .
4980 C    C    . LEU LEU LEU B B 223 223 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
4981 O    O    . LEU LEU LEU B B 223 223 . 0.0534 0.0255 0.0289 -0.0025 -0.0101
0.0009  1 .
4982 N    N    . GLU GLU GLU B B 224 224 . 0.0463 0.0333 0.0448 0.0115  0.0035  -
0.0036 1 .
4983 CA   CA   . GLU GLU GLU B B 224 224 . 0.0701 0.0703 0.0781 0.0171  0.0052
0.0071  1 .
4984 CB   CB   . GLU GLU GLU B B 224 224 . 0.1073 0.0921 0.1462 -0.0037 0.0129  -
0.0018 1 .
4985 CG   CG   . GLU GLU GLU B B 224 224 . 0.1900 0.2042 0.2638 0.0129  0.0240  -
0.0053 1 .
4986 CD   CD   . GLU GLU GLU B B 224 224 . 0.3638 0.3619 0.3207 -0.0064 0.0132  -
0.0089 1 .
4987 OE1  OE1  . GLU GLU GLU B B 224 224 . 0.4089 0.3559 0.3995 -0.0206 0.0082  -
0.0358 1 .
4988 OE2  OE2  . GLU GLU GLU B B 224 224 . 0.3389 0.4092 0.3889 -0.0118 0.0820
0.0142  1 .
4989 C    C    . GLU GLU GLU B B 224 224 . 0.0656 0.0630 0.0521 0.0095  -0.0023
0.0016  1 .
4990 O    O    . GLU GLU GLU B B 224 224 . 0.0665 0.0292 0.0515 0.0008  -0.0021
0.0095  1 .
4991 N    N    . LEU LEU LEU B B 225 225 . 0.0595 0.0291 0.0388 0.0103  0.0080
0.0039  1 .
4992 CA   CA   . LEU LEU LEU B B 225 225 . 0.0408 0.0473 0.0275 0.0056  -0.0022
0.0053  1 .
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4993 CB   CB   . LEU LEU LEU B B 225 225 . 0.0712 0.0522 0.0667 0.0053  0.0014
0.0054  1 .
4994 CG   CG   . LEU LEU LEU B B 225 225 . 0.0629 0.0426 0.0788 0.0108  -0.0019
0.0074  1 .
4995 CD1  CD1  . LEU LEU LEU B B 225 225 . 0.1128 0.1209 0.0836 0.0131  -0.0099 -
0.0152 1 .
4996 CD2  CD2  . LEU LEU LEU B B 225 225 . 0.0838 0.1100 0.1177 0.0275  0.0044
0.0051  1 .
4997 C    C    . LEU LEU LEU B B 225 225 . 0.0484 0.0279 0.0296 0.0006  0.0011
0.0033  1 .
4998 O    O    . LEU LEU LEU B B 225 225 . 0.0766 0.0744 0.0535 0.0154  0.0056  -
0.0044 1 .
4999 N    N    . VAL VAL VAL B B 226 226 . 0.0387 0.0380 0.0283 0.0027  0.0022  -
0.0051 1 .
5000 CA   CA   . VAL VAL VAL B B 226 226 . 0.0366 0.0367 0.0282 0.0029  0.0037  -
0.0032 1 .
5001 CB   CB   . VAL VAL VAL B B 226 226 . 0.0542 0.0391 0.0334 0.0121  0.0094  -
0.0026 1 .
5002 CG1  CG1  . VAL VAL VAL B B 226 226 . 0.0417 0.0495 0.0282 0.0198  -0.0034 -
0.0033 1 .
5003 CG2  CG2  . VAL VAL VAL B B 226 226 . 0.0253 0.0299 0.0265 0.0004  -0.0002 -
0.0023 1 .
5004 C    C    . VAL VAL VAL B B 226 226 . 0.0515 0.0262 0.0295 -0.0048 0.0105  -
0.0019 1 .
5005 O    O    . VAL VAL VAL B B 226 226 . 0.0596 0.0458 0.0411 -0.0002 0.0084
0.0098  1 .
5006 N    N    . LYS LYS LYS B B 227 227 . 0.0364 0.0305 0.0305 0.0035  0.0073
0.0011  1 .
5007 CA   CA   . LYS LYS LYS B B 227 227 . 0.0596 0.0543 0.0418 0.0070  0.0055
0.0021  1 .
5008 CB   CB   . LYS LYS LYS B B 227 227 . 0.0659 0.0565 0.0619 0.0063  0.0029
0.0120  1 .
5009 CG   CG   . LYS LYS LYS B B 227 227 . 0.1193 0.1093 0.1081 0.0134  0.0158  -
0.0015 1 .
5010 CD   CD   . LYS LYS LYS B B 227 227 . 0.1692 0.1625 0.1435 -0.0193 0.0256
0.0086  1 .
5011 CE   CE   . LYS LYS LYS B B 227 227 . 0.2501 0.2293 0.1874 -0.0071 0.0349  -
0.0007 1 .
5012 NZ   NZ   . LYS LYS LYS B B 227 227 . 0.2536 0.1954 0.2399 -0.0055 0.0634
0.0080  1 .
5013 C    C    . LYS LYS LYS B B 227 227 . 0.0681 0.0604 0.0618 -0.0001 0.0095  -
0.0049 1 .
5014 O    O    . LYS LYS LYS B B 227 227 . 0.0923 0.0567 0.0816 -0.0028 0.0096
0.0049  1 .
5015 N    N    . GLU GLU GLU B B 228 228 . 0.0636 0.0661 0.0572 0.0071  0.0146
0.0035  1 .
5016 CA   CA   . GLU GLU GLU B B 228 228 . 0.0957 0.0962 0.1027 0.0043  0.0110
0.0000  1 .
5017 CB   CB   . GLU GLU GLU B B 228 228 . 0.1120 0.1238 0.1074 0.0027  -0.0073 -
0.0139 1 .
5018 CG   CG   . GLU GLU GLU B B 228 228 . 0.1825 0.1432 0.1520 0.0189  0.0194
0.0103  1 .
5019 CD   CD   . GLU GLU GLU B B 228 228 . 0.3013 0.3154 0.3036 -0.0097 -0.0196 -
0.0031 1 .
5020 OE1  OE1  . GLU GLU GLU B B 228 228 . 0.3848 0.3995 0.3853 0.0458  -0.0188
0.0006  1 .
5021 OE2  OE2  . GLU GLU GLU B B 228 228 . 0.3860 0.3472 0.3688 -0.0111 -0.0053
0.0053  1 .
5022 C    C    . GLU GLU GLU B B 228 228 . 0.1029 0.0894 0.0943 0.0099  0.0126
0.0027  1 .
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5023 O    O    . GLU GLU GLU B B 228 228 . 0.1209 0.1137 0.1087 0.0163  0.0056  -
0.0104 1 .
5024 N    N    . ALA ALA ALA B B 229 229 . 0.0708 0.0787 0.0691 0.0053  0.0056
0.0150  1 .
5025 CA   CA   . ALA ALA ALA B B 229 229 . 0.0596 0.0676 0.0620 0.0080  0.0074
0.0133  1 .
5026 CB   CB   . ALA ALA ALA B B 229 229 . 0.0654 0.0563 0.0493 0.0241  0.0029
0.0083  1 .
5027 C    C    . ALA ALA ALA B B 229 229 . 0.0547 0.0471 0.0313 0.0064  0.0105
0.0090  1 .
5028 O    O    . ALA ALA ALA B B 229 229 . 0.0691 0.0529 0.0491 0.0085  0.0156
0.0110  1 .
5029 N    N    . ILE ILE ILE B B 230 230 . 0.0293 0.0472 0.0357 0.0068  0.0060
0.0066  1 .
5030 CA   CA   . ILE ILE ILE B B 230 230 . 0.0484 0.0366 0.0415 0.0013  0.0033
0.0041  1 .
5031 CB   CB   . ILE ILE ILE B B 230 230 . 0.0379 0.0455 0.0325 0.0046  -0.0002 -
0.0115 1 .
5032 CG1  CG1  . ILE ILE ILE B B 230 230 . 0.0368 0.0280 0.0385 0.0055  -0.0046 -
0.0020 1 .
5033 CD1  CD1  . ILE ILE ILE B B 230 230 . 0.0870 0.0807 0.0351 0.0276  -0.0069 -
0.0227 1 .
5034 CG2  CG2  . ILE ILE ILE B B 230 230 . 0.0505 0.0356 0.0405 -0.0054 0.0152  -
0.0106 1 .
5035 C    C    . ILE ILE ILE B B 230 230 . 0.0771 0.0718 0.0768 -0.0018 0.0116
0.0012  1 .
5036 O    O    . ILE ILE ILE B B 230 230 . 0.0863 0.0668 0.0736 0.0124  0.0161
0.0027  1 .
5037 N    N    . ASP ASP ASP B B 231 231 . 0.0991 0.0934 0.0985 0.0080  0.0078
0.0009  1 .
5038 CA   CA   . ASP ASP ASP B B 231 231 . 0.1290 0.1174 0.1271 0.0080  0.0136
0.0009  1 .
5039 CB   CB   . ASP ASP ASP B B 231 231 . 0.1656 0.1337 0.1514 0.0012  0.0199
0.0188  1 .
5040 CG   CG   . ASP ASP ASP B B 231 231 . 0.2445 0.2160 0.2325 0.0151  0.0279  -
0.0151 1 .
5041 OD1  OD1  . ASP ASP ASP B B 231 231 . 0.3071 0.3096 0.2841 0.0279  0.0155  -
0.0437 1 .
5042 OD2  OD2  . ASP ASP ASP B B 231 231 . 0.3813 0.3875 0.3724 -0.0096 -0.0226 -
0.0314 1 .
5043 C    C    . ASP ASP ASP B B 231 231 . 0.1073 0.0971 0.1123 0.0031  0.0011
0.0080  1 .
5044 O    O    . ASP ASP ASP B B 231 231 . 0.1342 0.1042 0.1136 0.0112  -0.0011 -
0.0078 1 .
5045 N    N    . LYS LYS LYS B B 232 232 . 0.0884 0.0665 0.0947 0.0080  0.0118
0.0104  1 .
5046 CA   CA   . LYS LYS LYS B B 232 232 . 0.1055 0.1078 0.0985 0.0053  0.0017
0.0040  1 .
5047 CB   CB   . LYS LYS LYS B B 232 232 . 0.1393 0.1312 0.1262 -0.0010 0.0006  -
0.0036 1 .
5048 CG   CG   . LYS LYS LYS B B 232 232 . 0.1907 0.2188 0.2007 0.0236  0.0220
0.0162  1 .
5049 CD   CD   . LYS LYS LYS B B 232 232 . 0.2885 0.2861 0.2440 -0.0112 0.0178
0.0030  1 .
5050 CE   CE   . LYS LYS LYS B B 232 232 . 0.3533 0.3644 0.3687 -0.0038 -0.0086 -
0.0182 1 .
5051 NZ   NZ   . LYS LYS LYS B B 232 232 . 0.4535 0.4291 0.3917 -0.0379 0.0058  -
0.0058 1 .
5052 C    C    . LYS LYS LYS B B 232 232 . 0.0982 0.0931 0.1080 0.0068  -0.0021
0.0035  1 .
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5053 O    O    . LYS LYS LYS B B 232 232 . 0.1256 0.0978 0.1175 0.0159  0.0108
0.0078  1 .
5054 N    N    . ALA ALA ALA B B 233 233 . 0.0853 0.0761 0.0782 0.0072  0.0051  -
0.0037 1 .
5055 CA   CA   . ALA ALA ALA B B 233 233 . 0.0726 0.0816 0.0736 0.0071  0.0111  -
0.0048 1 .
5056 CB   CB   . ALA ALA ALA B B 233 233 . 0.0585 0.0582 0.0739 0.0087  0.0161  -
0.0193 1 .
5057 C    C    . ALA ALA ALA B B 233 233 . 0.1006 0.0910 0.1108 0.0036  0.0075
0.0016  1 .
5058 O    O    . ALA ALA ALA B B 233 233 . 0.1209 0.1251 0.1454 0.0027  0.0219
0.0116  1 .
5059 N    N    . GLY GLY GLY B B 234 234 . 0.1143 0.1037 0.0901 0.0137  -0.0041
0.0045  1 .
5060 CA   CA   . GLY GLY GLY B B 234 234 . 0.1256 0.1066 0.0995 0.0165  0.0072  -
0.0075 1 .
5061 C    C    . GLY GLY GLY B B 234 234 . 0.0977 0.0956 0.0975 0.0003  0.0088  -
0.0126 1 .
5062 O    O    . GLY GLY GLY B B 234 234 . 0.1485 0.1079 0.1445 0.0165  0.0272  -
0.0069 1 .
5063 N    N    . TYR TYR TYR B B 235 235 . 0.0913 0.0731 0.0937 0.0130  0.0074  -
0.0076 1 .
5064 CA   CA   . TYR TYR TYR B B 235 235 . 0.0679 0.0595 0.0529 0.0034  0.0149  -
0.0071 1 .
5065 CB   CB   . TYR TYR TYR B B 235 235 . 0.0811 0.0593 0.0438 0.0112  0.0285  -
0.0054 1 .
5066 CG   CG   . TYR TYR TYR B B 235 235 . 0.0362 0.0255 0.0300 -0.0003 -0.0070
0.0000  1 .
5067 CD1  CD1  . TYR TYR TYR B B 235 235 . 0.0531 0.0466 0.0336 0.0059  0.0115  -
0.0059 1 .
5068 CE1  CE1  . TYR TYR TYR B B 235 235 . 0.0688 0.0627 0.0738 0.0015  0.0104  -
0.0138 1 .
5069 CZ   CZ   . TYR TYR TYR B B 235 235 . 0.1330 0.0997 0.1009 -0.0113 0.0039  -
0.0107 1 .
5070 OH   OH   . TYR TYR TYR B B 235 235 . 0.1895 0.0900 0.1311 0.0310  0.0533  -
0.0178 1 .
5071 CE2  CE2  . TYR TYR TYR B B 235 235 . 0.1249 0.0936 0.1007 0.0153  0.0020
0.0105  1 .
5072 CD2  CD2  . TYR TYR TYR B B 235 235 . 0.1127 0.0827 0.1055 -0.0095 0.0300  -
0.0053 1 .
5073 C    C    . TYR TYR TYR B B 235 235 . 0.0634 0.0449 0.0602 0.0042  0.0099
0.0010  1 .
5074 O    O    . TYR TYR TYR B B 235 235 . 0.0652 0.0532 0.0256 -0.0056 0.0027  -
0.0021 1 .
5075 N    N    . THR THR THR B B 236 236 . 0.0680 0.0416 0.0641 0.0090  0.0151  -
0.0074 1 .
5076 CA   CA   . THR THR THR B B 236 236 . 0.0926 0.0856 0.0721 0.0063  0.0144  -
0.0035 1 .
5077 CB   CB   . THR THR THR B B 236 236 . 0.0881 0.0752 0.0968 -0.0018 0.0081
0.0103  1 .
5078 OG1  OG1  . THR THR THR B B 236 236 . 0.1611 0.1671 0.1143 -0.0238 -0.0010
0.0039  1 .
5079 CG2  CG2  . THR THR THR B B 236 236 . 0.0559 0.0506 0.0571 0.0232  0.0145  -
0.0028 1 .
5080 C    C    . THR THR THR B B 236 236 . 0.1002 0.1016 0.1069 0.0034  0.0087
0.0018  1 .
5081 O    O    . THR THR THR B B 236 236 . 0.1095 0.1080 0.1082 0.0128  0.0200  -
0.0053 1 .
5082 N    N    . GLU GLU GLU B B 237 237 . 0.1338 0.1254 0.1199 -0.0044 0.0060  -
0.0060 1 .
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5083 CA   CA   . GLU GLU GLU B B 237 237 . 0.1487 0.1596 0.1486 -0.0020 0.0054  -
0.0080 1 .
5084 CB   CB   . GLU GLU GLU B B 237 237 . 0.2060 0.1800 0.1887 0.0006  -0.0014 -
0.0074 1 .
5085 CG   CG   . GLU GLU GLU B B 237 237 . 0.2431 0.2868 0.2773 0.0127  0.0153  -
0.0107 1 .
5086 CD   CD   . GLU GLU GLU B B 237 237 . 0.3793 0.3534 0.3858 -0.0111 0.0077
0.0073  1 .
5087 OE1  OE1  . GLU GLU GLU B B 237 237 . 0.4361 0.4012 0.4372 -0.0081 -0.0423 -
0.0038 1 .
5088 OE2  OE2  . GLU GLU GLU B B 237 237 . 0.3903 0.4568 0.4198 0.0022  0.0071
0.0294  1 .
5089 C    C    . GLU GLU GLU B B 237 237 . 0.1391 0.1397 0.1355 -0.0047 0.0034  -
0.0083 1 .
5090 O    O    . GLU GLU GLU B B 237 237 . 0.1664 0.1675 0.1394 -0.0011 -0.0006 -
0.0148 1 .
5091 N    N    . LYS LYS LYS B B 238 238 . 0.0779 0.0849 0.0719 -0.0191 0.0058  -
0.0106 1 .
5092 CA   CA   . LYS LYS LYS B B 238 238 . 0.0773 0.0694 0.0761 0.0049  0.0109  -
0.0162 1 .
5093 CB   CB   . LYS LYS LYS B B 238 238 . 0.0781 0.0590 0.1005 0.0081  0.0043  -
0.0063 1 .
5094 CG   CG   . LYS LYS LYS B B 238 238 . 0.1235 0.1068 0.1164 -0.0086 -0.0021 -
0.0162 1 .
5095 CD   CD   . LYS LYS LYS B B 238 238 . 0.2075 0.1970 0.1861 0.0327  0.0187
0.0153  1 .
5096 CE   CE   . LYS LYS LYS B B 238 238 . 0.3333 0.2784 0.3096 -0.0282 -0.0038
0.0193  1 .
5097 NZ   NZ   . LYS LYS LYS B B 238 238 . 0.3668 0.3086 0.3636 0.0247  -0.0460
0.0724  1 .
5098 C    C    . LYS LYS LYS B B 238 238 . 0.0335 0.0370 0.0319 0.0066  0.0003  -
0.0062 1 .
5099 O    O    . LYS LYS LYS B B 238 238 . 0.0591 0.0382 0.0341 0.0018  0.0097  -
0.0082 1 .
5100 N    N    . ILE ILE ILE B B 239 239 . 0.0530 0.0350 0.0311 0.0090  0.0100  -
0.0005 1 .
5101 CA   CA   . ILE ILE ILE B B 239 239 . 0.0574 0.0267 0.0336 0.0066  -0.0014 -
0.0008 1 .
5102 CB   CB   . ILE ILE ILE B B 239 239 . 0.0675 0.0471 0.0472 0.0115  -0.0059 -
0.0214 1 .
5103 CG1  CG1  . ILE ILE ILE B B 239 239 . 0.0806 0.0530 0.0594 0.0136  -0.0193 -
0.0232 1 .
5104 CD1  CD1  . ILE ILE ILE B B 239 239 . 0.0854 0.0585 0.0668 0.0270  -0.0227
0.0122  1 .
5105 CG2  CG2  . ILE ILE ILE B B 239 239 . 0.0574 0.0449 0.0365 0.0189  -0.0079 -
0.0134 1 .
5106 C    C    . ILE ILE ILE B B 239 239 . 0.0310 0.0267 0.0333 0.0028  0.0067
0.0033  1 .
5107 O    O    . ILE ILE ILE B B 239 239 . 0.0409 0.0276 0.0403 0.0043  0.0023  -
0.0033 1 .
5108 N    N    . VAL VAL VAL B B 240 240 . 0.0303 0.0263 0.0253 0.0022  0.0003
0.0001  1 .
5109 CA   CA   . VAL VAL VAL B B 240 240 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5110 CB   CB   . VAL VAL VAL B B 240 240 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5111 CG1  CG1  . VAL VAL VAL B B 240 240 . 0.0377 0.0422 0.0319 0.0102  -0.0033 -
0.0096 1 .
5112 CG2  CG2  . VAL VAL VAL B B 240 240 . 0.0276 0.0318 0.0414 0.0000  0.0017  -
0.0097 1 .
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5113 C    C    . VAL VAL VAL B B 240 240 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5114 O    O    . VAL VAL VAL B B 240 240 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5115 N    N    . ILE ILE ILE B B 241 241 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5116 CA   CA   . ILE ILE ILE B B 241 241 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5117 CB   CB   . ILE ILE ILE B B 241 241 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5118 CG1  CG1  . ILE ILE ILE B B 241 241 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5119 CD1  CD1  . ILE ILE ILE B B 241 241 . 0.0376 0.0288 0.0286 0.0063  -0.0048 -
0.0019 1 .
5120 CG2  CG2  . ILE ILE ILE B B 241 241 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5121 C    C    . ILE ILE ILE B B 241 241 . 0.0315 0.0258 0.0279 0.0018  -0.0040 -
0.0011 1 .
5122 O    O    . ILE ILE ILE B B 241 241 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5123 N    N    . GLY GLY GLY B B 242 242 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5124 CA   CA   . GLY GLY GLY B B 242 242 . 0.0263 0.0257 0.0253 0.0006  0.0000
0.0000  1 .
5125 C    C    . GLY GLY GLY B B 242 242 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5126 O    O    . GLY GLY GLY B B 242 242 . 0.0403 0.0254 0.0284 0.0010  -0.0068 -
0.0004 1 .
5127 N    N    . MET MET MET B B 243 243 . 0.0303 0.0261 0.0269 0.0019  -0.0028 -
0.0011 1 .
5128 CA   CA   . MET MET MET B B 243 243 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5129 CB   CB   . MET MET MET B B 243 243 . 0.0291 0.0257 0.0254 -0.0013 0.0006  -
0.0002 1 .
5130 CG   CG   . MET MET MET B B 243 243 . 0.0631 0.0574 0.0342 0.0159  0.0006
0.0153  1 .
5131 SD   SD   . MET MET MET B B 243 243 . 0.0780 0.0540 0.0660 -0.0080 0.0015  -
0.0117 1 .
5132 CE   CE   . MET MET MET B B 243 243 . 0.0877 0.0396 0.0624 -0.0088 -0.0009 -
0.0219 1 .
5133 C    C    . MET MET MET B B 243 243 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5134 O    O    . MET MET MET B B 243 243 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5135 N    N    . ASP ASP ASP B B 244 244 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5136 CA   CA   . ASP ASP ASP B B 244 244 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5137 CB   CB   . ASP ASP ASP B B 244 244 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5138 CG   CG   . ASP ASP ASP B B 244 244 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5139 OD1  OD1  . ASP ASP ASP B B 244 244 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5140 OD2  OD2  . ASP ASP ASP B B 244 244 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5141 C    C    . ASP ASP ASP B B 244 244 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5142 O    O    . ASP ASP ASP B B 244 244 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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5143 N    N    . VAL VAL VAL B B 245 245 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5144 CA   CA   . VAL VAL VAL B B 245 245 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5145 CB   CB   . VAL VAL VAL B B 245 245 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5146 CG1  CG1  . VAL VAL VAL B B 245 245 . 0.0266 0.0257 0.0253 -0.0007 0.0001
0.0000  1 .
5147 CG2  CG2  . VAL VAL VAL B B 245 245 . 0.0273 0.0263 0.0253 0.0014  0.0000
0.0000  1 .
5148 C    C    . VAL VAL VAL B B 245 245 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5149 O    O    . VAL VAL VAL B B 245 245 . 0.0282 0.0334 0.0276 0.0048  -0.0026 -
0.0043 1 .
5150 N    N    . ALA ALA ALA B B 246 246 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5151 CA   CA   . ALA ALA ALA B B 246 246 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5152 CB   CB   . ALA ALA ALA B B 246 246 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5153 C    C    . ALA ALA ALA B B 246 246 . 0.0257 0.0273 0.0277 0.0008  -0.0009 -
0.0021 1 .
5154 O    O    . ALA ALA ALA B B 246 246 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5155 N    N    . ALA ALA ALA B B 247 247 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5156 CA   CA   . ALA ALA ALA B B 247 247 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5157 CB   CB   . ALA ALA ALA B B 247 247 . 0.0254 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5158 C    C    . ALA ALA ALA B B 247 247 . 0.0261 0.0256 0.0253 -0.0004 0.0001
0.0000  1 .
5159 O    O    . ALA ALA ALA B B 247 247 . 0.0298 0.0287 0.0314 0.0039  -0.0052 -
0.0045 1 .
5160 N    N    . SER SER SER B B 248 248 . 0.0269 0.0275 0.0279 0.0019  -0.0020 -
0.0023 1 .
5161 CA   CA   . SER SER SER B B 248 248 . 0.0280 0.0261 0.0259 0.0015  -0.0012 -
0.0007 1 .
5162 CB   CB   . SER SER SER B B 248 248 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5163 OG   OG   . SER SER SER B B 248 248 . 0.0266 0.0254 0.0257 0.0004  -0.0007 -
0.0002 1 .
5164 C    C    . SER SER SER B B 248 248 . 0.0429 0.0279 0.0266 0.0068  -0.0047 -
0.0018 1 .
5165 O    O    . SER SER SER B B 248 248 . 0.0800 0.0756 0.0643 0.0055  -0.0097 -
0.0138 1 .
5166 N    N    . GLU GLU GLU B B 249 249 . 0.0417 0.0329 0.0290 0.0110  -0.0068 -
0.0050 1 .
5167 CA   CA   . GLU GLU GLU B B 249 249 . 0.0380 0.0368 0.0271 0.0058  -0.0047 -
0.0026 1 .
5168 CB   CB   . GLU GLU GLU B B 249 249 . 0.0361 0.0273 0.0272 0.0047  -0.0045 -
0.0019 1 .
5169 CG   CG   . GLU GLU GLU B B 249 249 . 0.0741 0.0437 0.0535 -0.0089 -0.0142 -
0.0170 1 .
5170 CD   CD   . GLU GLU GLU B B 249 249 . 0.0761 0.1588 0.1242 -0.0139 0.0146  -
0.0210 1 .
5171 OE1  OE1  . GLU GLU GLU B B 249 249 . 0.2090 0.2325 0.1328 0.0626  -0.0215 -
0.0335 1 .
5172 OE2  OE2  . GLU GLU GLU B B 249 249 . 0.1084 0.0810 0.0682 0.0082  -0.0069 -
0.0101 1 .
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5173 C    C    . GLU GLU GLU B B 249 249 . 0.0473 0.0497 0.0536 -0.0008 0.0026
0.0107  1 .
5174 O    O    . GLU GLU GLU B B 249 249 . 0.0881 0.0641 0.0531 -0.0039 -0.0072 -
0.0186 1 .
5175 N    N    . PHE PHE PHE B B 250 250 . 0.0387 0.0329 0.0273 0.0101  -0.0052 -
0.0039 1 .
5176 CA   CA   . PHE PHE PHE B B 250 250 . 0.0339 0.0274 0.0332 0.0041  -0.0012 -
0.0011 1 .
5177 CB   CB   . PHE PHE PHE B B 250 250 . 0.0325 0.0368 0.0334 0.0004  -0.0033 -
0.0088 1 .
5178 CG   CG   . PHE PHE PHE B B 250 250 . 0.0428 0.0262 0.0310 0.0040  0.0099
0.0022  1 .
5179 CD1  CD1  . PHE PHE PHE B B 250 250 . 0.0269 0.0284 0.0370 -0.0016 -0.0011 -
0.0025 1 .
5180 CE1  CE1  . PHE PHE PHE B B 250 250 . 0.0258 0.0409 0.0363 0.0013  0.0004  -
0.0100 1 .
5181 CZ   CZ   . PHE PHE PHE B B 250 250 . 0.0347 0.0268 0.0299 -0.0037 -0.0066
0.0026  1 .
5182 CE2  CE2  . PHE PHE PHE B B 250 250 . 0.0741 0.0272 0.0453 -0.0072 0.0003  -
0.0041 1 .
5183 CD2  CD2  . PHE PHE PHE B B 250 250 . 0.0634 0.0278 0.0356 0.0097  -0.0198 -
0.0050 1 .
5184 C    C    . PHE PHE PHE B B 250 250 . 0.0340 0.0323 0.0406 0.0037  0.0075  -
0.0036 1 .
5185 O    O    . PHE PHE PHE B B 250 250 . 0.0689 0.0299 0.0557 0.0112  -0.0038
0.0061  1 .
5186 N    N    . TYR TYR TYR B B 251 251 . 0.0473 0.0261 0.0302 0.0042  -0.0104 -
0.0020 1 .
5187 CA   CA   . TYR TYR TYR B B 251 251 . 0.0464 0.0303 0.0585 0.0069  -0.0158
0.0023  1 .
5188 CB   CB   . TYR TYR TYR B B 251 251 . 0.0357 0.0317 0.0541 -0.0059 0.0093  -
0.0032 1 .
5189 CG   CG   . TYR TYR TYR B B 251 251 . 0.1034 0.0614 0.0667 0.0167  -0.0133 -
0.0127 1 .
5190 CD1  CD1  . TYR TYR TYR B B 251 251 . 0.0890 0.0682 0.0642 -0.0196 0.0067
0.0005  1 .
5191 CE1  CE1  . TYR TYR TYR B B 251 251 . 0.1022 0.1088 0.1207 0.0262  0.0015
0.0021  1 .
5192 CZ   CZ   . TYR TYR TYR B B 251 251 . 0.1335 0.0860 0.1006 -0.0015 0.0205
0.0099  1 .
5193 OH   OH   . TYR TYR TYR B B 251 251 . 0.1372 0.0934 0.1411 -0.0076 0.0060  -
0.0040 1 .
5194 CE2  CE2  . TYR TYR TYR B B 251 251 . 0.1130 0.0839 0.1137 0.0055  -0.0118
0.0044  1 .
5195 CD2  CD2  . TYR TYR TYR B B 251 251 . 0.1632 0.1193 0.1440 0.0363  0.0033  -
0.0215 1 .
5196 C    C    . TYR TYR TYR B B 251 251 . 0.0662 0.0648 0.0524 -0.0097 0.0023  -
0.0157 1 .
5197 O    O    . TYR TYR TYR B B 251 251 . 0.0980 0.0857 0.0702 -0.0108 0.0008  -
0.0143 1 .
5198 N    N    . ARG ARG ARG B B 252 252 . 0.0577 0.0338 0.0669 -0.0070 -0.0019 -
0.0165 1 .
5199 CA   CA   . ARG ARG ARG B B 252 252 . 0.0912 0.0725 0.0774 -0.0018 -0.0035 -
0.0064 1 .
5200 CB   CB   . ARG ARG ARG B B 252 252 . 0.0902 0.0599 0.0754 -0.0169 -0.0207 -
0.0120 1 .
5201 CG   CG   . ARG ARG ARG B B 252 252 . 0.1141 0.0420 0.0541 -0.0063 0.0000
0.0150  1 .
5202 CD   CD   . ARG ARG ARG B B 252 252 . 0.2418 0.1479 0.1657 0.0161  0.0122  -
0.0031 1 .
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5203 NE   NE   . ARG ARG ARG B B 252 252 . 0.2142 0.1490 0.1716 0.0074  0.0024  -
0.0069 1 .
5204 CZ   CZ   . ARG ARG ARG B B 252 252 . 0.1853 0.1767 0.1554 -0.0097 -0.0225 -
0.0006 1 .
5205 NH1  NH1  . ARG ARG ARG B B 252 252 . 0.1199 0.1012 0.1227 0.0222  -0.0039 -
0.0220 1 .
5206 NH2  NH2  . ARG ARG ARG B B 252 252 . 0.1428 0.1316 0.1439 0.0150  -0.0268
0.0088  1 .
5207 C    C    . ARG ARG ARG B B 252 252 . 0.0935 0.0616 0.0809 -0.0012 0.0001  -
0.0062 1 .
5208 O    O    . ARG ARG ARG B B 252 252 . 0.0837 0.0816 0.1090 -0.0189 -0.0086
0.0078  1 .
5209 N    N    . ASP ASP ASP B B 253 253 . 0.1101 0.0982 0.1042 -0.0023 -0.0130
0.0057  1 .
5210 CA   CA   . ASP ASP ASP B B 253 253 . 0.1116 0.0981 0.1114 -0.0093 -0.0089
0.0176  1 .
5211 CB   CB   . ASP ASP ASP B B 253 253 . 0.1448 0.1444 0.1523 0.0010  -0.0027
0.0071  1 .
5212 CG   CG   . ASP ASP ASP B B 253 253 . 0.2354 0.2176 0.1796 -0.0070 -0.0121
0.0037  1 .
5213 OD1  OD1  . ASP ASP ASP B B 253 253 . 0.2652 0.2147 0.2832 0.0083  -0.0121
0.0089  1 .
5214 OD2  OD2  . ASP ASP ASP B B 253 253 . 0.2679 0.2292 0.2441 0.0204  -0.0048 -
0.0038 1 .
5215 C    C    . ASP ASP ASP B B 253 253 . 0.0995 0.0749 0.1143 0.0035  0.0046  -
0.0026 1 .
5216 O    O    . ASP ASP ASP B B 253 253 . 0.0965 0.0754 0.1031 -0.0060 0.0176
0.0043  1 .
5217 N    N    . GLY GLY GLY B B 254 254 . 0.0875 0.0650 0.0888 0.0049  -0.0072
0.0026  1 .
5218 CA   CA   . GLY GLY GLY B B 254 254 . 0.0440 0.0408 0.0640 0.0119  -0.0002 -
0.0038 1 .
5219 C    C    . GLY GLY GLY B B 254 254 . 0.0645 0.0527 0.0601 0.0075  0.0031  -
0.0090 1 .
5220 O    O    . GLY GLY GLY B B 254 254 . 0.0771 0.0454 0.0488 0.0064  -0.0068 -
0.0149 1 .
5221 N    N    . LYS LYS LYS B B 255 255 . 0.0533 0.0367 0.0469 0.0133  -0.0048 -
0.0125 1 .
5222 CA   CA   . LYS LYS LYS B B 255 255 . 0.0387 0.0435 0.0517 0.0058  0.0055  -
0.0011 1 .
5223 CB   CB   . LYS LYS LYS B B 255 255 . 0.0527 0.0586 0.0546 0.0041  0.0088
0.0031  1 .
5224 CG   CG   . LYS LYS LYS B B 255 255 . 0.0564 0.0509 0.0349 -0.0065 -0.0054
0.0113  1 .
5225 CD   CD   . LYS LYS LYS B B 255 255 . 0.1139 0.1680 0.1458 -0.0364 -0.0220
0.0239  1 .
5226 CE   CE   . LYS LYS LYS B B 255 255 . 0.1916 0.1794 0.1683 -0.0342 -0.0306
0.0311  1 .
5227 NZ   NZ   . LYS LYS LYS B B 255 255 . 0.1946 0.2248 0.2959 -0.0363 0.0226
0.0257  1 .
5228 C    C    . LYS LYS LYS B B 255 255 . 0.0444 0.0419 0.0541 0.0024  0.0021  -
0.0070 1 .
5229 O    O    . LYS LYS LYS B B 255 255 . 0.0506 0.0258 0.0509 0.0021  0.0027  -
0.0029 1 .
5230 N    N    . TYR TYR TYR B B 256 256 . 0.0361 0.0261 0.0596 0.0016  0.0042  -
0.0036 1 .
5231 CA   CA   . TYR TYR TYR B B 256 256 . 0.0259 0.0282 0.0333 0.0002  -0.0008 -
0.0047 1 .
5232 CB   CB   . TYR TYR TYR B B 256 256 . 0.0261 0.0299 0.0326 0.0019  -0.0024 -
0.0058 1 .
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5233 CG   CG   . TYR TYR TYR B B 256 256 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5234 CD1  CD1  . TYR TYR TYR B B 256 256 . 0.0253 0.0255 0.0271 0.0000  0.0000  -
0.0006 1 .
5235 CE1  CE1  . TYR TYR TYR B B 256 256 . 0.0315 0.0261 0.0306 -0.0021 -0.0057
0.0020  1 .
5236 CZ   CZ   . TYR TYR TYR B B 256 256 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5237 OH   OH   . TYR TYR TYR B B 256 256 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5238 CE2  CE2  . TYR TYR TYR B B 256 256 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5239 CD2  CD2  . TYR TYR TYR B B 256 256 . 0.0303 0.0278 0.0383 0.0035  -0.0080 -
0.0057 1 .
5240 C    C    . TYR TYR TYR B B 256 256 . 0.0369 0.0266 0.0254 0.0038  0.0012
0.0004  1 .
5241 O    O    . TYR TYR TYR B B 256 256 . 0.0516 0.0427 0.0928 0.0007  -0.0048 -
0.0097 1 .
5242 N    N    . ASP ASP ASP B B 257 257 . 0.0660 0.0597 0.0602 0.0039  -0.0089 -
0.0118 1 .
5243 CA   CA   . ASP ASP ASP B B 257 257 . 0.0628 0.0659 0.0641 -0.0030 -0.0066 -
0.0092 1 .
5244 CB   CB   . ASP ASP ASP B B 257 257 . 0.0856 0.0676 0.0630 -0.0073 -0.0111 -
0.0226 1 .
5245 CG   CG   . ASP ASP ASP B B 257 257 . 0.1264 0.1720 0.1366 -0.0139 -0.0161 -
0.0126 1 .
5246 OD1  OD1  . ASP ASP ASP B B 257 257 . 0.1908 0.2011 0.2153 0.0009  -0.0284 -
0.0815 1 .
5247 OD2  OD2  . ASP ASP ASP B B 257 257 . 0.2006 0.1360 0.1518 -0.0325 0.0033  -
0.0004 1 .
5248 C    C    . ASP ASP ASP B B 257 257 . 0.0466 0.0441 0.0354 0.0022  -0.0059 -
0.0019 1 .
5249 O    O    . ASP ASP ASP B B 257 257 . 0.0473 0.0350 0.0565 0.0037  -0.0227 -
0.0122 1 .
5250 N    N    . LEU LEU LEU B B 258 258 . 0.0686 0.0671 0.0765 -0.0013 -0.0181
0.0015  1 .
5251 CA   CA   . LEU LEU LEU B B 258 258 . 0.0925 0.0851 0.0826 0.0035  -0.0165 -
0.0082 1 .
5252 CB   CB   . LEU LEU LEU B B 258 258 . 0.0751 0.0848 0.0798 0.0049  -0.0101 -
0.0042 1 .
5253 CG   CG   . LEU LEU LEU B B 258 258 . 0.0973 0.0516 0.0858 0.0085  -0.0191
0.0015  1 .
5254 CD1  CD1  . LEU LEU LEU B B 258 258 . 0.0835 0.1169 0.0905 0.0164  -0.0081
0.0207  1 .
5255 CD2  CD2  . LEU LEU LEU B B 258 258 . 0.0433 0.0679 0.0587 0.0275  -0.0103 -
0.0131 1 .
5256 C    C    . LEU LEU LEU B B 258 258 . 0.1158 0.1008 0.1071 0.0080  -0.0228 -
0.0042 1 .
5257 O    O    . LEU LEU LEU B B 258 258 . 0.1201 0.1077 0.1228 0.0110  -0.0243 -
0.0248 1 .
5258 N    N    . ASP ASP ASP B B 259 259 . 0.1301 0.1103 0.1258 -0.0041 -0.0123 -
0.0153 1 .
5259 CA   CA   . ASP ASP ASP B B 259 259 . 0.1401 0.1446 0.1507 0.0036  -0.0069 -
0.0115 1 .
5260 CB   CB   . ASP ASP ASP B B 259 259 . 0.1567 0.1556 0.1513 -0.0008 0.0073  -
0.0216 1 .
5261 CG   CG   . ASP ASP ASP B B 259 259 . 0.1865 0.1811 0.1949 0.0003  -0.0042 -
0.0092 1 .
5262 OD1  OD1  . ASP ASP ASP B B 259 259 . 0.2294 0.1915 0.1937 -0.0061 -0.0030 -
0.0252 1 .
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5263 OD2  OD2  . ASP ASP ASP B B 259 259 . 0.1912 0.2099 0.2242 0.0063  0.0339  -
0.0296 1 .
5264 C    C    . ASP ASP ASP B B 259 259 . 0.1572 0.1644 0.1662 -0.0021 -0.0051 -
0.0142 1 .
5265 O    O    . ASP ASP ASP B B 259 259 . 0.1611 0.1524 0.1409 0.0124  -0.0217 -
0.0005 1 .
5266 N    N    . PHE PHE PHE B B 260 260 . 0.1612 0.1649 0.1663 0.0079  0.0045  -
0.0024 1 .
5267 CA   CA   . PHE PHE PHE B B 260 260 . 0.1669 0.1507 0.1616 0.0110  0.0036  -
0.0030 1 .
5268 CB   CB   . PHE PHE PHE B B 260 260 . 0.1499 0.1323 0.1388 -0.0115 -0.0036 -
0.0017 1 .
5269 CG   CG   . PHE PHE PHE B B 260 260 . 0.1491 0.1362 0.1192 0.0092  -0.0099 -
0.0044 1 .
5270 CD1  CD1  . PHE PHE PHE B B 260 260 . 0.1043 0.1383 0.1563 -0.0127 -0.0206
0.0023  1 .
5271 CE1  CE1  . PHE PHE PHE B B 260 260 . 0.1959 0.1635 0.1102 0.0106  0.0315  -
0.0119 1 .
5272 CZ   CZ   . PHE PHE PHE B B 260 260 . 0.1439 0.0869 0.1586 -0.0013 -0.0112 -
0.0087 1 .
5273 CE2  CE2  . PHE PHE PHE B B 260 260 . 0.1437 0.1343 0.1403 -0.0070 -0.0150 -
0.0124 1 .
5274 CD2  CD2  . PHE PHE PHE B B 260 260 . 0.1379 0.1249 0.1576 -0.0001 -0.0326
0.0142  1 .
5275 C    C    . PHE PHE PHE B B 260 260 . 0.1721 0.1565 0.1626 0.0048  -0.0014 -
0.0033 1 .
5276 O    O    . PHE PHE PHE B B 260 260 . 0.1625 0.1625 0.1723 -0.0029 -0.0018 -
0.0110 1 .
5277 N    N    . LYS LYS LYS B B 261 261 . 0.1696 0.1561 0.1617 0.0009  -0.0041 -
0.0036 1 .
5278 CA   CA   . LYS LYS LYS B B 261 261 . 0.1755 0.1528 0.1648 -0.0046 -0.0034
0.0083  1 .
5279 CB   CB   . LYS LYS LYS B B 261 261 . 0.1708 0.1723 0.1301 -0.0066 -0.0010
0.0232  1 .
5280 CG   CG   . LYS LYS LYS B B 261 261 . 0.1870 0.1208 0.1582 0.0016  -0.0061
0.0068  1 .
5281 CD   CD   . LYS LYS LYS B B 261 261 . 0.1280 0.0988 0.1106 -0.0228 0.0111
0.0333  1 .
5282 CE   CE   . LYS LYS LYS B B 261 261 . 0.1898 0.1527 0.1530 -0.0158 -0.0445 -
0.0191 1 .
5283 NZ   NZ   . LYS LYS LYS B B 261 261 . 0.1553 0.1521 0.1663 0.0041  -0.0393 -
0.0161 1 .
5284 C    C    . LYS LYS LYS B B 261 261 . 0.1787 0.1807 0.1766 0.0026  -0.0044
0.0080  1 .
5285 O    O    . LYS LYS LYS B B 261 261 . 0.1646 0.1666 0.1728 -0.0234 -0.0022
0.0052  1 .
5286 N    N    . SER SER SER B B 262 262 . 0.2014 0.1861 0.2071 -0.0038 -0.0003
0.0112  1 .
5287 CA   CA   . SER SER SER B B 262 262 . 0.2462 0.2465 0.2597 0.0012  -0.0076 -
0.0024 1 .
5288 CB   CB   . SER SER SER B B 262 262 . 0.2530 0.2344 0.2430 -0.0055 0.0038  -
0.0056 1 .
5289 OG   OG   . SER SER SER B B 262 262 . 0.2612 0.3211 0.2771 0.0069  -0.0265 -
0.0193 1 .
5290 C    C    . SER SER SER B B 262 262 . 0.2807 0.2636 0.2837 -0.0001 -0.0061 -
0.0025 1 .
5291 O    O    . SER SER SER B B 262 262 . 0.2823 0.2508 0.3090 0.0076  -0.0136 -
0.0074 1 .
5292 N    N    . PRO PRO PRO B B 263 263 . 0.3047 0.2902 0.3031 -0.0025 -0.0083 -
0.0024 1 .
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5293 CA   CA   . PRO PRO PRO B B 263 263 . 0.3254 0.3142 0.3209 0.0010  -0.0006 -
0.0035 1 .
5294 CB   CB   . PRO PRO PRO B B 263 263 . 0.3116 0.3133 0.3168 0.0016  -0.0095 -
0.0031 1 .
5295 CG   CG   . PRO PRO PRO B B 263 263 . 0.3158 0.2867 0.2842 -0.0070 0.0008  -
0.0078 1 .
5296 CD   CD   . PRO PRO PRO B B 263 263 . 0.3132 0.2954 0.3070 -0.0006 -0.0018 -
0.0051 1 .
5297 C    C    . PRO PRO PRO B B 263 263 . 0.3386 0.3353 0.3276 -0.0004 -0.0029 -
0.0014 1 .
5298 O    O    . PRO PRO PRO B B 263 263 . 0.3390 0.3644 0.3417 -0.0006 0.0091
0.0095  1 .
5299 N    N    . THR THR THR B B 264 264 . 0.3525 0.3461 0.3499 0.0001  -0.0012 -
0.0011 1 .
5300 CA   CA   . THR THR THR B B 264 264 . 0.3773 0.3689 0.3716 0.0012  -0.0017 -
0.0012 1 .
5301 CB   CB   . THR THR THR B B 264 264 . 0.3789 0.3681 0.3772 0.0031  -0.0026 -
0.0011 1 .
5302 OG1  OG1  . THR THR THR B B 264 264 . 0.4031 0.3883 0.4168 -0.0038 0.0030
0.0107  1 .
5303 CG2  CG2  . THR THR THR B B 264 264 . 0.3968 0.3627 0.3777 -0.0009 -0.0082
0.0046  1 .
5304 C    C    . THR THR THR B B 264 264 . 0.3762 0.3690 0.3702 -0.0020 -0.0019 -
0.0005 1 .
5305 O    O    . THR THR THR B B 264 264 . 0.3970 0.3891 0.3811 -0.0001 -0.0032
0.0002  1 .
5306 N    N    . ASP ASP ASP B B 265 265 . 0.3704 0.3612 0.3660 -0.0018 -0.0038 -
0.0026 1 .
5307 CA   CA   . ASP ASP ASP B B 265 265 . 0.3596 0.3532 0.3566 -0.0026 -0.0041 -
0.0023 1 .
5308 CB   CB   . ASP ASP ASP B B 265 265 . 0.3696 0.3675 0.3670 -0.0082 -0.0067 -
0.0029 1 .
5309 CG   CG   . ASP ASP ASP B B 265 265 . 0.3848 0.3836 0.3580 -0.0127 -0.0018 -
0.0118 1 .
5310 OD1  OD1  . ASP ASP ASP B B 265 265 . 0.3884 0.3596 0.3820 -0.0211 -0.0372 -
0.0178 1 .
5311 OD2  OD2  . ASP ASP ASP B B 265 265 . 0.4040 0.3946 0.3091 0.0219  -0.0483 -
0.0114 1 .
5312 C    C    . ASP ASP ASP B B 265 265 . 0.3551 0.3508 0.3506 0.0033  -0.0044 -
0.0024 1 .
5313 O    O    . ASP ASP ASP B B 265 265 . 0.3418 0.3224 0.3375 -0.0002 -0.0116 -
0.0049 1 .
5314 N    N    . PRO PRO PRO B B 266 266 . 0.3434 0.3294 0.3382 0.0022  -0.0042 -
0.0026 1 .
5315 CA   CA   . PRO PRO PRO B B 266 266 . 0.3249 0.3250 0.3271 0.0037  -0.0013 -
0.0028 1 .
5316 CB   CB   . PRO PRO PRO B B 266 266 . 0.3424 0.3278 0.3325 0.0000  -0.0041
0.0034  1 .
5317 CG   CG   . PRO PRO PRO B B 266 266 . 0.3467 0.3394 0.3443 0.0030  -0.0083 -
0.0051 1 .
5318 CD   CD   . PRO PRO PRO B B 266 266 . 0.3459 0.3386 0.3436 0.0068  -0.0024 -
0.0016 1 .
5319 C    C    . PRO PRO PRO B B 266 266 . 0.3064 0.3114 0.3080 -0.0019 -0.0023 -
0.0004 1 .
5320 O    O    . PRO PRO PRO B B 266 266 . 0.2871 0.3013 0.3121 -0.0011 -0.0135 -
0.0057 1 .
5321 N    N    . SER SER SER B B 267 267 . 0.2795 0.2769 0.2875 -0.0029 -0.0117 -
0.0022 1 .
5322 CA   CA   . SER SER SER B B 267 267 . 0.2642 0.2626 0.2808 -0.0054 -0.0032
0.0028  1 .
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5323 CB   CB   . SER SER SER B B 267 267 . 0.2671 0.2615 0.2850 -0.0102 -0.0164
0.0081  1 .
5324 OG   OG   . SER SER SER B B 267 267 . 0.2594 0.2835 0.3177 -0.0375 -0.0075
0.0131  1 .
5325 C    C    . SER SER SER B B 267 267 . 0.2338 0.2343 0.2414 0.0026  -0.0040
0.0058  1 .
5326 O    O    . SER SER SER B B 267 267 . 0.2086 0.2290 0.2469 0.0050  -0.0185 -
0.0098 1 .
5327 N    N    . ARG ARG ARG B B 268 268 . 0.2203 0.2246 0.2487 0.0014  -0.0045 -
0.0030 1 .
5328 CA   CA   . ARG ARG ARG B B 268 268 . 0.2107 0.1996 0.2096 -0.0033 -0.0056
0.0016  1 .
5329 CB   CB   . ARG ARG ARG B B 268 268 . 0.2101 0.2116 0.2109 -0.0066 -0.0025
0.0054  1 .
5330 CG   CG   . ARG ARG ARG B B 268 268 . 0.2049 0.1752 0.2060 -0.0012 -0.0051 -
0.0105 1 .
5331 CD   CD   . ARG ARG ARG B B 268 268 . 0.1620 0.1869 0.2058 -0.0175 0.0002  -
0.0140 1 .
5332 NE   NE   . ARG ARG ARG B B 268 268 . 0.2266 0.2155 0.1748 -0.0178 0.0000
0.0071  1 .
5333 CZ   CZ   . ARG ARG ARG B B 268 268 . 0.2082 0.1568 0.2230 -0.0204 0.0028  -
0.0120 1 .
5334 NH1  NH1  . ARG ARG ARG B B 268 268 . 0.2220 0.1554 0.1616 -0.0295 -0.0402
0.0266  1 .
5335 NH2  NH2  . ARG ARG ARG B B 268 268 . 0.1944 0.0816 0.1678 -0.0294 -0.0073 -
0.0301 1 .
5336 C    C    . ARG ARG ARG B B 268 268 . 0.2009 0.2071 0.2143 0.0060  -0.0064 -
0.0002 1 .
5337 O    O    . ARG ARG ARG B B 268 268 . 0.1963 0.1926 0.2229 -0.0035 -0.0199
0.0066  1 .
5338 N    N    . TYR TYR TYR B B 269 269 . 0.1765 0.1903 0.2098 -0.0011 -0.0102 -
0.0055 1 .
5339 CA   CA   . TYR TYR TYR B B 269 269 . 0.1571 0.1605 0.1855 -0.0011 -0.0074 -
0.0070 1 .
5340 CB   CB   . TYR TYR TYR B B 269 269 . 0.1375 0.1489 0.1798 -0.0021 -0.0064 -
0.0032 1 .
5341 CG   CG   . TYR TYR TYR B B 269 269 . 0.1876 0.1765 0.1875 -0.0186 -0.0063 -
0.0121 1 .
5342 CD1  CD1  . TYR TYR TYR B B 269 269 . 0.1363 0.2042 0.1965 0.0020  0.0177
0.0191  1 .
5343 CE1  CE1  . TYR TYR TYR B B 269 269 . 0.2238 0.2150 0.2317 -0.0015 -0.0049 -
0.0199 1 .
5344 CZ   CZ   . TYR TYR TYR B B 269 269 . 0.2781 0.2545 0.2558 0.0119  -0.0112 -
0.0075 1 .
5345 OH   OH   . TYR TYR TYR B B 269 269 . 0.3142 0.2253 0.2849 0.0206  0.0155  -
0.0218 1 .
5346 CE2  CE2  . TYR TYR TYR B B 269 269 . 0.2142 0.2513 0.2287 -0.0061 -0.0032 -
0.0031 1 .
5347 CD2  CD2  . TYR TYR TYR B B 269 269 . 0.1813 0.2039 0.2360 -0.0179 -0.0001 -
0.0021 1 .
5348 C    C    . TYR TYR TYR B B 269 269 . 0.1335 0.1472 0.1617 0.0039  -0.0030
0.0052  1 .
5349 O    O    . TYR TYR TYR B B 269 269 . 0.1741 0.1636 0.1857 -0.0015 0.0024
0.0104  1 .
5350 N    N    . ILE ILE ILE B B 270 270 . 0.1092 0.0997 0.1249 0.0082  -0.0042 -
0.0103 1 .
5351 CA   CA   . ILE ILE ILE B B 270 270 . 0.0896 0.0835 0.1120 0.0141  -0.0040 -
0.0011 1 .
5352 CB   CB   . ILE ILE ILE B B 270 270 . 0.1012 0.0843 0.1126 0.0116  -0.0046
0.0031  1 .
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5353 CG1  CG1  . ILE ILE ILE B B 270 270 . 0.1358 0.1367 0.1470 0.0109  -0.0251 -
0.0073 1 .
5354 CD1  CD1  . ILE ILE ILE B B 270 270 . 0.1719 0.1842 0.2151 0.0173  -0.0002 -
0.0027 1 .
5355 CG2  CG2  . ILE ILE ILE B B 270 270 . 0.0656 0.0461 0.0742 -0.0152 0.0042  -
0.0211 1 .
5356 C    C    . ILE ILE ILE B B 270 270 . 0.0719 0.0493 0.0654 -0.0040 -0.0035 -
0.0069 1 .
5357 O    O    . ILE ILE ILE B B 270 270 . 0.0737 0.0453 0.0862 -0.0055 -0.0014 -
0.0092 1 .
5358 N    N    . THR THR THR B B 271 271 . 0.0616 0.0255 0.0727 0.0000  -0.0070
0.0031  1 .
5359 CA   CA   . THR THR THR B B 271 271 . 0.0811 0.0472 0.0888 -0.0089 -0.0121 -
0.0074 1 .
5360 CB   CB   . THR THR THR B B 271 271 . 0.1005 0.0736 0.0916 -0.0118 0.0184
0.0048  1 .
5361 OG1  OG1  . THR THR THR B B 271 271 . 0.1801 0.0944 0.1231 -0.0027 0.0152
0.0003  1 .
5362 CG2  CG2  . THR THR THR B B 271 271 . 0.1013 0.0551 0.1128 -0.0117 0.0005  -
0.0013 1 .
5363 C    C    . THR THR THR B B 271 271 . 0.0733 0.0735 0.0905 -0.0094 -0.0053 -
0.0057 1 .
5364 O    O    . THR THR THR B B 271 271 . 0.0677 0.0534 0.0934 0.0213  -0.0011
0.0004  1 .
5365 N    N    . GLY GLY GLY B B 272 272 . 0.0575 0.0555 0.0725 0.0059  0.0050  -
0.0036 1 .
5366 CA   CA   . GLY GLY GLY B B 272 272 . 0.0435 0.0344 0.0479 -0.0022 -0.0095 -
0.0018 1 .
5367 C    C    . GLY GLY GLY B B 272 272 . 0.0467 0.0389 0.0531 0.0036  0.0120
0.0039  1 .
5368 O    O    . GLY GLY GLY B B 272 272 . 0.0358 0.0274 0.0334 -0.0007 0.0017
0.0038  1 .
5369 N    N    . ASP ASP ASP B B 273 273 . 0.0725 0.0561 0.0568 0.0087  0.0061
0.0026  1 .
5370 CA   CA   . ASP ASP ASP B B 273 273 . 0.0962 0.0860 0.0951 0.0045  0.0022  -
0.0029 1 .
5371 CB   CB   . ASP ASP ASP B B 273 273 . 0.1240 0.1028 0.1191 0.0092  -0.0009
0.0093  1 .
5372 CG   CG   . ASP ASP ASP B B 273 273 . 0.2532 0.2481 0.2225 0.0000  0.0086  -
0.0107 1 .
5373 OD1  OD1  . ASP ASP ASP B B 273 273 . 0.3345 0.3124 0.3284 -0.0631 -0.0057 -
0.0181 1 .
5374 OD2  OD2  . ASP ASP ASP B B 273 273 . 0.3140 0.3668 0.3951 -0.0399 0.0456  -
0.0056 1 .
5375 C    C    . ASP ASP ASP B B 273 273 . 0.0859 0.0709 0.0779 0.0073  -0.0035 -
0.0039 1 .
5376 O    O    . ASP ASP ASP B B 273 273 . 0.0975 0.0566 0.0985 0.0085  -0.0084 -
0.0050 1 .
5377 N    N    . GLN GLN GLN B B 274 274 . 0.0787 0.0574 0.0812 0.0083  0.0042
0.0030  1 .
5378 CA   CA   . GLN GLN GLN B B 274 274 . 0.0695 0.0669 0.0712 -0.0064 0.0007
0.0047  1 .
5379 CB   CB   . GLN GLN GLN B B 274 274 . 0.0884 0.0602 0.1188 0.0164  0.0008  -
0.0002 1 .
5380 CG   CG   . GLN GLN GLN B B 274 274 . 0.1115 0.1206 0.1215 -0.0105 0.0102
0.0127  1 .
5381 CD   CD   . GLN GLN GLN B B 274 274 . 0.1494 0.1236 0.1809 -0.0616 0.0168  -
0.0039 1 .
5382 OE1  OE1  . GLN GLN GLN B B 274 274 . 0.1332 0.1485 0.1752 -0.0282 0.0428
0.0014  1 .
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5383 NE2  NE2  . GLN GLN GLN B B 274 274 . 0.1997 0.2052 0.2772 0.0390  -0.0077 -
0.0198 1 .
5384 C    C    . GLN GLN GLN B B 274 274 . 0.0653 0.0511 0.0710 0.0089  0.0143
0.0022  1 .
5385 O    O    . GLN GLN GLN B B 274 274 . 0.0588 0.0349 0.0702 0.0174  0.0099
0.0101  1 .
5386 N    N    . LEU LEU LEU B B 275 275 . 0.0255 0.0262 0.0355 0.0005  0.0016
0.0030  1 .
5387 CA   CA   . LEU LEU LEU B B 275 275 . 0.0287 0.0333 0.0345 0.0036  0.0026  -
0.0026 1 .
5388 CB   CB   . LEU LEU LEU B B 275 275 . 0.0408 0.0602 0.0677 0.0107  0.0072  -
0.0008 1 .
5389 CG   CG   . LEU LEU LEU B B 275 275 . 0.0769 0.0711 0.0594 0.0179  0.0051
0.0024  1 .
5390 CD1  CD1  . LEU LEU LEU B B 275 275 . 0.0372 0.0460 0.0530 0.0042  -0.0180 -
0.0094 1 .
5391 CD2  CD2  . LEU LEU LEU B B 275 275 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5392 C    C    . LEU LEU LEU B B 275 275 . 0.0334 0.0304 0.0301 0.0061  -0.0042 -
0.0020 1 .
5393 O    O    . LEU LEU LEU B B 275 275 . 0.0698 0.0438 0.0555 0.0022  -0.0028
0.0107  1 .
5394 N    N    . GLY GLY GLY B B 276 276 . 0.0446 0.0270 0.0253 -0.0058 -0.0010
0.0003  1 .
5395 CA   CA   . GLY GLY GLY B B 276 276 . 0.0267 0.0254 0.0297 0.0004  -0.0024 -
0.0008 1 .
5396 C    C    . GLY GLY GLY B B 276 276 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5397 O    O    . GLY GLY GLY B B 276 276 . 0.0313 0.0254 0.0315 -0.0008 0.0060  -
0.0008 1 .
5398 N    N    . ALA ALA ALA B B 277 277 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5399 CA   CA   . ALA ALA ALA B B 277 277 . 0.0392 0.0289 0.0368 0.0007  -0.0015 -
0.0006 1 .
5400 CB   CB   . ALA ALA ALA B B 277 277 . 0.0355 0.0328 0.0343 -0.0071 0.0075  -
0.0022 1 .
5401 C    C    . ALA ALA ALA B B 277 277 . 0.0311 0.0260 0.0276 0.0009  -0.0002
0.0011  1 .
5402 O    O    . ALA ALA ALA B B 277 277 . 0.0543 0.0457 0.0350 0.0126  0.0135  -
0.0011 1 .
5403 N    N    . LEU LEU LEU B B 278 278 . 0.0267 0.0258 0.0274 0.0008  -0.0017 -
0.0010 1 .
5404 CA   CA   . LEU LEU LEU B B 278 278 . 0.0329 0.0268 0.0312 0.0018  -0.0049 -
0.0029 1 .
5405 CB   CB   . LEU LEU LEU B B 278 278 . 0.0343 0.0561 0.0297 0.0074  0.0059
0.0084  1 .
5406 CG   CG   . LEU LEU LEU B B 278 278 . 0.0462 0.0724 0.0629 0.0012  -0.0036
0.0000  1 .
5407 CD1  CD1  . LEU LEU LEU B B 278 278 . 0.1031 0.1269 0.1242 0.0352  0.0092  -
0.0157 1 .
5408 CD2  CD2  . LEU LEU LEU B B 278 278 . 0.1659 0.1152 0.1156 0.0039  -0.0198 -
0.0603 1 .
5409 C    C    . LEU LEU LEU B B 278 278 . 0.0331 0.0344 0.0312 0.0018  0.0014
0.0073  1 .
5410 O    O    . LEU LEU LEU B B 278 278 . 0.0428 0.0258 0.0298 -0.0001 0.0088  -
0.0002 1 .
5411 N    N    . TYR TYR TYR B B 279 279 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5412 CA   CA   . TYR TYR TYR B B 279 279 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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5413 CB   CB   . TYR TYR TYR B B 279 279 . 0.0288 0.0270 0.0262 0.0024  0.0017
0.0012  1 .
5414 CG   CG   . TYR TYR TYR B B 279 279 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5415 CD1  CD1  . TYR TYR TYR B B 279 279 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5416 CE1  CE1  . TYR TYR TYR B B 279 279 . 0.0254 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5417 CZ   CZ   . TYR TYR TYR B B 279 279 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5418 OH   OH   . TYR TYR TYR B B 279 279 . 0.0278 0.0253 0.0254 0.0000  0.0006
0.0000  1 .
5419 CE2  CE2  . TYR TYR TYR B B 279 279 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5420 CD2  CD2  . TYR TYR TYR B B 279 279 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5421 C    C    . TYR TYR TYR B B 279 279 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5422 O    O    . TYR TYR TYR B B 279 279 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5423 N    N    . GLN GLN GLN B B 280 280 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5424 CA   CA   . GLN GLN GLN B B 280 280 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5425 CB   CB   . GLN GLN GLN B B 280 280 . 0.0345 0.0564 0.0269 0.0064  0.0038
0.0024  1 .
5426 CG   CG   . GLN GLN GLN B B 280 280 . 0.0598 0.0723 0.0645 0.0146  0.0027  -
0.0043 1 .
5427 CD   CD   . GLN GLN GLN B B 280 280 . 0.1651 0.1502 0.1665 0.0132  -0.0109 -
0.0252 1 .
5428 OE1  OE1  . GLN GLN GLN B B 280 280 . 0.1974 0.1720 0.2265 0.0363  0.0002  -
0.0043 1 .
5429 NE2  NE2  . GLN GLN GLN B B 280 280 . 0.1356 0.1670 0.1841 0.0208  -0.0334 -
0.0183 1 .
5430 C    C    . GLN GLN GLN B B 280 280 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5431 O    O    . GLN GLN GLN B B 280 280 . 0.0360 0.0394 0.0337 0.0115  -0.0027 -
0.0065 1 .
5432 N    N    . ASP ASP ASP B B 281 281 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5433 CA   CA   . ASP ASP ASP B B 281 281 . 0.0311 0.0259 0.0318 0.0016  0.0034
0.0009  1 .
5434 CB   CB   . ASP ASP ASP B B 281 281 . 0.0856 0.0742 0.0767 -0.0099 -0.0107 -
0.0026 1 .
5435 CG   CG   . ASP ASP ASP B B 281 281 . 0.1807 0.1854 0.1658 -0.0216 0.0142
0.0153  1 .
5436 OD1  OD1  . ASP ASP ASP B B 281 281 . 0.2276 0.2628 0.2111 -0.0061 0.0300  -
0.0092 1 .
5437 OD2  OD2  . ASP ASP ASP B B 281 281 . 0.2542 0.2436 0.2605 -0.0614 -0.0012 -
0.0183 1 .
5438 C    C    . ASP ASP ASP B B 281 281 . 0.0477 0.0262 0.0310 0.0038  0.0039
0.0018  1 .
5439 O    O    . ASP ASP ASP B B 281 281 . 0.0412 0.0364 0.0327 0.0126  0.0071
0.0034  1 .
5440 N    N    . PHE PHE PHE B B 282 282 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5441 CA   CA   . PHE PHE PHE B B 282 282 . 0.0261 0.0282 0.0275 0.0015  0.0013
0.0025  1 .
5442 CB   CB   . PHE PHE PHE B B 282 282 . 0.0395 0.0376 0.0282 -0.0026 -0.0007 -
0.0057 1 .
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5443 CG   CG   . PHE PHE PHE B B 282 282 . 0.0307 0.0276 0.0345 -0.0035 -0.0070
0.0046  1 .
5444 CD1  CD1  . PHE PHE PHE B B 282 282 . 0.0499 0.0455 0.0345 0.0098  -0.0129 -
0.0106 1 .
5445 CE1  CE1  . PHE PHE PHE B B 282 282 . 0.0612 0.0519 0.0536 -0.0202 -0.0140 -
0.0107 1 .
5446 CZ   CZ   . PHE PHE PHE B B 282 282 . 0.0439 0.0761 0.0565 0.0054  0.0138
0.0025  1 .
5447 CE2  CE2  . PHE PHE PHE B B 282 282 . 0.1376 0.0778 0.1169 -0.0048 -0.0087 -
0.0220 1 .
5448 CD2  CD2  . PHE PHE PHE B B 282 282 . 0.0285 0.0359 0.0257 -0.0058 -0.0011
0.0021  1 .
5449 C    C    . PHE PHE PHE B B 282 282 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5450 O    O    . PHE PHE PHE B B 282 282 . 0.0290 0.0286 0.0424 0.0035  0.0000  -
0.0001 1 .
5451 N    N    . VAL VAL VAL B B 283 283 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5452 CA   CA   . VAL VAL VAL B B 283 283 . 0.0267 0.0343 0.0286 0.0036  0.0021
0.0054  1 .
5453 CB   CB   . VAL VAL VAL B B 283 283 . 0.0333 0.0452 0.0336 0.0038  -0.0017 -
0.0128 1 .
5454 CG1  CG1  . VAL VAL VAL B B 283 283 . 0.0542 0.0620 0.0646 -0.0223 0.0043  -
0.0042 1 .
5455 CG2  CG2  . VAL VAL VAL B B 283 283 . 0.0377 0.0300 0.0486 0.0015  0.0158  -
0.0018 1 .
5456 C    C    . VAL VAL VAL B B 283 283 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5457 O    O    . VAL VAL VAL B B 283 283 . 0.0544 0.0360 0.0350 0.0079  0.0058
0.0101  1 .
5458 N    N    . ARG ARG ARG B B 284 284 . 0.0277 0.0253 0.0304 -0.0003 0.0035  -
0.0005 1 .
5459 CA   CA   . ARG ARG ARG B B 284 284 . 0.0462 0.0502 0.0468 0.0060  0.0049
0.0086  1 .
5460 CB   CB   . ARG ARG ARG B B 284 284 . 0.0324 0.0274 0.0495 0.0023  0.0041
0.0066  1 .
5461 CG   CG   . ARG ARG ARG B B 284 284 . 0.0540 0.0428 0.0421 -0.0079 0.0095  -
0.0041 1 .
5462 CD   CD   . ARG ARG ARG B B 284 284 . 0.0910 0.0884 0.1089 -0.0043 -0.0052 -
0.0167 1 .
5463 NE   NE   . ARG ARG ARG B B 284 284 . 0.1368 0.1395 0.1503 -0.0255 0.0060
0.0060  1 .
5464 CZ   CZ   . ARG ARG ARG B B 284 284 . 0.1711 0.1898 0.1357 0.0042  -0.0166 -
0.0095 1 .
5465 NH1  NH1  . ARG ARG ARG B B 284 284 . 0.1544 0.0964 0.0762 -0.0121 0.0214
0.0163  1 .
5466 NH2  NH2  . ARG ARG ARG B B 284 284 . 0.1924 0.1744 0.0973 0.0321  0.0205  -
0.0072 1 .
5467 C    C    . ARG ARG ARG B B 284 284 . 0.0346 0.0297 0.0309 0.0061  -0.0024 -
0.0002 1 .
5468 O    O    . ARG ARG ARG B B 284 284 . 0.0730 0.0609 0.0470 0.0044  0.0120  -
0.0045 1 .
5469 N    N    . ASP ASP ASP B B 285 285 . 0.0286 0.0437 0.0328 0.0066  0.0025
0.0000  1 .
5470 CA   CA   . ASP ASP ASP B B 285 285 . 0.0561 0.0535 0.0417 0.0021  0.0050
0.0070  1 .
5471 CB   CB   . ASP ASP ASP B B 285 285 . 0.0430 0.0447 0.0682 0.0040  0.0001  -
0.0009 1 .
5472 CG   CG   . ASP ASP ASP B B 285 285 . 0.1037 0.1038 0.0898 -0.0204 0.0113
0.0092  1 .
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5473 OD1  OD1  . ASP ASP ASP B B 285 285 . 0.2027 0.1623 0.1611 -0.0069 0.0208  -
0.0167 1 .
5474 OD2  OD2  . ASP ASP ASP B B 285 285 . 0.1796 0.1493 0.1770 -0.0253 0.0172  -
0.0063 1 .
5475 C    C    . ASP ASP ASP B B 285 285 . 0.0512 0.0272 0.0290 0.0044  -0.0016 -
0.0023 1 .
5476 O    O    . ASP ASP ASP B B 285 285 . 0.0554 0.0553 0.0554 0.0195  -0.0100 -
0.0100 1 .
5477 N    N    . TYR TYR TYR B B 286 286 . 0.0262 0.0254 0.0265 -0.0003 0.0010  -
0.0003 1 .
5478 CA   CA   . TYR TYR TYR B B 286 286 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5479 CB   CB   . TYR TYR TYR B B 286 286 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5480 CG   CG   . TYR TYR TYR B B 286 286 . 0.0586 0.0514 0.0299 0.0015  0.0123  -
0.0008 1 .
5481 CD1  CD1  . TYR TYR TYR B B 286 286 . 0.0915 0.1280 0.1043 0.0302  0.0017  -
0.0085 1 .
5482 CE1  CE1  . TYR TYR TYR B B 286 286 . 0.1323 0.1471 0.1124 -0.0054 -0.0093 -
0.0307 1 .
5483 CZ   CZ   . TYR TYR TYR B B 286 286 . 0.1748 0.1957 0.1727 0.0153  -0.0032
0.0121  1 .
5484 OH   OH   . TYR TYR TYR B B 286 286 . 0.2400 0.2577 0.2319 -0.0370 -0.0104 -
0.0480 1 .
5485 CE2  CE2  . TYR TYR TYR B B 286 286 . 0.1190 0.1392 0.1122 -0.0007 -0.0095 -
0.0126 1 .
5486 CD2  CD2  . TYR TYR TYR B B 286 286 . 0.0711 0.0655 0.0537 0.0035  0.0226  -
0.0160 1 .
5487 C    C    . TYR TYR TYR B B 286 286 . 0.0255 0.0258 0.0256 0.0003  -0.0002 -
0.0003 1 .
5488 O    O    . TYR TYR TYR B B 286 286 . 0.0254 0.0263 0.0258 0.0004  0.0002
0.0006  1 .
5489 N    N    . PRO PRO PRO B B 287 287 . 0.0312 0.0280 0.0255 0.0039  -0.0011 -
0.0007 1 .
5490 CA   CA   . PRO PRO PRO B B 287 287 . 0.0296 0.0262 0.0321 0.0019  0.0054
0.0024  1 .
5491 CB   CB   . PRO PRO PRO B B 287 287 . 0.0345 0.0284 0.0382 0.0053  0.0108
0.0063  1 .
5492 CG   CG   . PRO PRO PRO B B 287 287 . 0.0584 0.0371 0.0671 -0.0076 0.0036  -
0.0212 1 .
5493 CD   CD   . PRO PRO PRO B B 287 287 . 0.0523 0.0353 0.0492 0.0089  0.0083
0.0150  1 .
5494 C    C    . PRO PRO PRO B B 287 287 . 0.0281 0.0276 0.0285 -0.0025 0.0030  -
0.0027 1 .
5495 O    O    . PRO PRO PRO B B 287 287 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5496 N    N    . VAL VAL VAL B B 288 288 . 0.0285 0.0256 0.0254 0.0010  0.0006
0.0002  1 .
5497 CA   CA   . VAL VAL VAL B B 288 288 . 0.0259 0.0300 0.0324 0.0015  0.0010
0.0010  1 .
5498 CB   CB   . VAL VAL VAL B B 288 288 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5499 CG1  CG1  . VAL VAL VAL B B 288 288 . 0.0523 0.0482 0.0325 0.0249  0.0140
0.0129  1 .
5500 CG2  CG2  . VAL VAL VAL B B 288 288 . 0.0525 0.0564 0.0458 0.0157  -0.0205 -
0.0223 1 .
5501 C    C    . VAL VAL VAL B B 288 288 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5502 O    O    . VAL VAL VAL B B 288 288 . 0.0322 0.0454 0.0281 0.0084  -0.0017 -
0.0069 1 .
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5503 N    N    . VAL VAL VAL B B 289 289 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5504 CA   CA   . VAL VAL VAL B B 289 289 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5505 CB   CB   . VAL VAL VAL B B 289 289 . 0.0274 0.0254 0.0260 0.0005  0.0011
0.0003  1 .
5506 CG1  CG1  . VAL VAL VAL B B 289 289 . 0.0374 0.0289 0.0419 -0.0053 0.0108  -
0.0077 1 .
5507 CG2  CG2  . VAL VAL VAL B B 289 289 . 0.0253 0.0253 0.0269 0.0000  -0.0002
0.0002  1 .
5508 C    C    . VAL VAL VAL B B 289 289 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5509 O    O    . VAL VAL VAL B B 289 289 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5510 N    N    . SER SER SER B B 290 290 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5511 CA   CA   . SER SER SER B B 290 290 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5512 CB   CB   . SER SER SER B B 290 290 . 0.0357 0.0254 0.0327 0.0008  0.0087
0.0007  1 .
5513 OG   OG   . SER SER SER B B 290 290 . 0.0322 0.0267 0.0393 0.0023  0.0081
0.0010  1 .
5514 C    C    . SER SER SER B B 290 290 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5515 O    O    . SER SER SER B B 290 290 . 0.0294 0.0257 0.0278 0.0012  -0.0032 -
0.0010 1 .
5516 N    N    . ILE ILE ILE B B 291 291 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5517 CA   CA   . ILE ILE ILE B B 291 291 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5518 CB   CB   . ILE ILE ILE B B 291 291 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5519 CG1  CG1  . ILE ILE ILE B B 291 291 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5520 CD1  CD1  . ILE ILE ILE B B 291 291 . 0.0364 0.0429 0.0299 -0.0139 0.0058  -
0.0070 1 .
5521 CG2  CG2  . ILE ILE ILE B B 291 291 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5522 C    C    . ILE ILE ILE B B 291 291 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5523 O    O    . ILE ILE ILE B B 291 291 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5524 N    N    . GLU GLU GLU B B 292 292 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5525 CA   CA   . GLU GLU GLU B B 292 292 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5526 CB   CB   . GLU GLU GLU B B 292 292 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5527 CG   CG   . GLU GLU GLU B B 292 292 . 0.0258 0.0263 0.0254 0.0006  0.0002
0.0003  1 .
5528 CD   CD   . GLU GLU GLU B B 292 292 . 0.0402 0.0260 0.0256 0.0032  0.0020
0.0004  1 .
5529 OE1  OE1  . GLU GLU GLU B B 292 292 . 0.0321 0.0256 0.0265 -0.0014 0.0028  -
0.0006 1 .
5530 OE2  OE2  . GLU GLU GLU B B 292 292 . 0.0534 0.0383 0.0390 0.0191  -0.0051 -
0.0030 1 .
5531 C    C    . GLU GLU GLU B B 292 292 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5532 O    O    . GLU GLU GLU B B 292 292 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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5533 N    N    . ASP ASP ASP B B 293 293 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5534 CA   CA   . ASP ASP ASP B B 293 293 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5535 CB   CB   . ASP ASP ASP B B 293 293 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5536 CG   CG   . ASP ASP ASP B B 293 293 . 0.0255 0.0270 0.0409 -0.0005 -0.0017
0.0051  1 .
5537 OD1  OD1  . ASP ASP ASP B B 293 293 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5538 OD2  OD2  . ASP ASP ASP B B 293 293 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5539 C    C    . ASP ASP ASP B B 293 293 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5540 O    O    . ASP ASP ASP B B 293 293 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5541 N    N    . PRO PRO PRO B B 294 294 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5542 CA   CA   . PRO PRO PRO B B 294 294 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5543 CB   CB   . PRO PRO PRO B B 294 294 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5544 CG   CG   . PRO PRO PRO B B 294 294 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5545 CD   CD   . PRO PRO PRO B B 294 294 . 0.0253 0.0258 0.0285 -0.0001 -0.0002
0.0012  1 .
5546 C    C    . PRO PRO PRO B B 294 294 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5547 O    O    . PRO PRO PRO B B 294 294 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5548 N    N    . PHE PHE PHE B B 295 295 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5549 CA   CA   . PHE PHE PHE B B 295 295 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5550 CB   CB   . PHE PHE PHE B B 295 295 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5551 CG   CG   . PHE PHE PHE B B 295 295 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5552 CD1  CD1  . PHE PHE PHE B B 295 295 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5553 CE1  CE1  . PHE PHE PHE B B 295 295 . 0.0253 0.0255 0.0265 0.0000  -0.0001
0.0005  1 .
5554 CZ   CZ   . PHE PHE PHE B B 295 295 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5555 CE2  CE2  . PHE PHE PHE B B 295 295 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5556 CD2  CD2  . PHE PHE PHE B B 295 295 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5557 C    C    . PHE PHE PHE B B 295 295 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5558 O    O    . PHE PHE PHE B B 295 295 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5559 N    N    . ASP ASP ASP B B 296 296 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5560 CA   CA   . ASP ASP ASP B B 296 296 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5561 CB   CB   . ASP ASP ASP B B 296 296 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5562 CG   CG   . ASP ASP ASP B B 296 296 . 0.0303 0.0267 0.0272 0.0026  -0.0031 -
0.0016 1 .
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5563 OD1  OD1  . ASP ASP ASP B B 296 296 . 0.0285 0.0254 0.0255 0.0007  -0.0008 -
0.0001 1 .
5564 OD2  OD2  . ASP ASP ASP B B 296 296 . 0.0411 0.0322 0.0433 0.0092  -0.0126 -
0.0108 1 .
5565 C    C    . ASP ASP ASP B B 296 296 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5566 O    O    . ASP ASP ASP B B 296 296 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5567 N    N    . GLN GLN GLN B B 297 297 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5568 CA   CA   . GLN GLN GLN B B 297 297 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5569 CB   CB   . GLN GLN GLN B B 297 297 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5570 CG   CG   . GLN GLN GLN B B 297 297 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5571 CD   CD   . GLN GLN GLN B B 297 297 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5572 OE1  OE1  . GLN GLN GLN B B 297 297 . 0.0320 0.0278 0.0254 0.0041  0.0008
0.0005  1 .
5573 NE2  NE2  . GLN GLN GLN B B 297 297 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5574 C    C    . GLN GLN GLN B B 297 297 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5575 O    O    . GLN GLN GLN B B 297 297 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5576 N    N    . ASP ASP ASP B B 298 298 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5577 CA   CA   . ASP ASP ASP B B 298 298 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5578 CB   CB   . ASP ASP ASP B B 298 298 . 0.0253 0.0256 0.0275 0.0000  -0.0001 -
0.0008 1 .
5579 CG   CG   . ASP ASP ASP B B 298 298 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5580 OD1  OD1  . ASP ASP ASP B B 298 298 . 0.0302 0.0268 0.0264 0.0026  0.0002  -
0.0002 1 .
5581 OD2  OD2  . ASP ASP ASP B B 298 298 . 0.0276 0.0448 0.0335 0.0067  -0.0043 -
0.0126 1 .
5582 C    C    . ASP ASP ASP B B 298 298 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5583 O    O    . ASP ASP ASP B B 298 298 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5584 N    N    . ASP ASP ASP B B 299 299 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5585 CA   CA   . ASP ASP ASP B B 299 299 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5586 CB   CB   . ASP ASP ASP B B 299 299 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5587 CG   CG   . ASP ASP ASP B B 299 299 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5588 OD1  OD1  . ASP ASP ASP B B 299 299 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5589 OD2  OD2  . ASP ASP ASP B B 299 299 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5590 C    C    . ASP ASP ASP B B 299 299 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5591 O    O    . ASP ASP ASP B B 299 299 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5592 N    N    . TRP TRP TRP B B 300 300 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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5593 CA   CA   . TRP TRP TRP B B 300 300 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5594 CB   CB   . TRP TRP TRP B B 300 300 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5595 CG   CG   . TRP TRP TRP B B 300 300 . 0.0253 0.0253 0.0254 0.0000  0.0000
0.0000  1 .
5596 CD1  CD1  . TRP TRP TRP B B 300 300 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5597 NE1  NE1  . TRP TRP TRP B B 300 300 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5598 CE2  CE2  . TRP TRP TRP B B 300 300 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5599 CD2  CD2  . TRP TRP TRP B B 300 300 . 0.0289 0.0254 0.0272 -0.0006 0.0026  -
0.0004 1 .
5600 CE3  CE3  . TRP TRP TRP B B 300 300 . 0.0525 0.0390 0.0515 -0.0091 0.0164  -
0.0187 1 .
5601 CZ3  CZ3  . TRP TRP TRP B B 300 300 . 0.0656 0.0264 0.0274 0.0068  -0.0092 -
0.0015 1 .
5602 CH2  CH2  . TRP TRP TRP B B 300 300 . 0.0334 0.0257 0.0334 0.0018  0.0081
0.0018  1 .
5603 CZ2  CZ2  . TRP TRP TRP B B 300 300 . 0.0404 0.0254 0.0335 -0.0013 -0.0111
0.0010  1 .
5604 C    C    . TRP TRP TRP B B 300 300 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5605 O    O    . TRP TRP TRP B B 300 300 . 0.0276 0.0253 0.0254 0.0000  0.0004
0.0000  1 .
5606 N    N    . ALA ALA ALA B B 301 301 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5607 CA   CA   . ALA ALA ALA B B 301 301 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5608 CB   CB   . ALA ALA ALA B B 301 301 . 0.0327 0.0253 0.0288 0.0001  0.0050
0.0000  1 .
5609 C    C    . ALA ALA ALA B B 301 301 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5610 O    O    . ALA ALA ALA B B 301 301 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5611 N    N    . ALA ALA ALA B B 302 302 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5612 CA   CA   . ALA ALA ALA B B 302 302 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5613 CB   CB   . ALA ALA ALA B B 302 302 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5614 C    C    . ALA ALA ALA B B 302 302 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5615 O    O    . ALA ALA ALA B B 302 302 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5616 N    N    . TRP TRP TRP B B 303 303 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5617 CA   CA   . TRP TRP TRP B B 303 303 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5618 CB   CB   . TRP TRP TRP B B 303 303 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5619 CG   CG   . TRP TRP TRP B B 303 303 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5620 CD1  CD1  . TRP TRP TRP B B 303 303 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5621 NE1  NE1  . TRP TRP TRP B B 303 303 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5622 CE2  CE2  . TRP TRP TRP B B 303 303 . 0.0257 0.0255 0.0254 0.0002  -0.0001 -
0.0001 1 .
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5623 CD2  CD2  . TRP TRP TRP B B 303 303 . 0.0260 0.0269 0.0261 0.0010  -0.0007 -
0.0011 1 .
5624 CE3  CE3  . TRP TRP TRP B B 303 303 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5625 CZ3  CZ3  . TRP TRP TRP B B 303 303 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5626 CH2  CH2  . TRP TRP TRP B B 303 303 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5627 CZ2  CZ2  . TRP TRP TRP B B 303 303 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5628 C    C    . TRP TRP TRP B B 303 303 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5629 O    O    . TRP TRP TRP B B 303 303 . 0.0276 0.0255 0.0255 0.0007  -0.0007 -
0.0002 1 .
5630 N    N    . SER SER SER B B 304 304 . 0.0258 0.0256 0.0264 0.0003  -0.0007 -
0.0005 1 .
5631 CA   CA   . SER SER SER B B 304 304 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5632 CB   CB   . SER SER SER B B 304 304 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5633 OG   OG   . SER SER SER B B 304 304 . 0.0298 0.0287 0.0402 0.0021  -0.0012
0.0054  1 .
5634 C    C    . SER SER SER B B 304 304 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5635 O    O    . SER SER SER B B 304 304 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5636 N    N    . LYS LYS LYS B B 305 305 . 0.0279 0.0294 0.0302 0.0032  0.0035
0.0044  1 .
5637 CA   CA   . LYS LYS LYS B B 305 305 . 0.0349 0.0254 0.0267 0.0008  0.0036
0.0003  1 .
5638 CB   CB   . LYS LYS LYS B B 305 305 . 0.0583 0.0409 0.0524 -0.0146 0.0215
0.0014  1 .
5639 CG   CG   . LYS LYS LYS B B 305 305 . 0.0665 0.0728 0.0418 0.0135  0.0162  -
0.0046 1 .
5640 CD   CD   . LYS LYS LYS B B 305 305 . 0.1124 0.1074 0.1129 -0.0255 -0.0080
0.0166  1 .
5641 CE   CE   . LYS LYS LYS B B 305 305 . 0.1554 0.1723 0.2218 0.0063  -0.0024 -
0.0424 1 .
5642 NZ   NZ   . LYS LYS LYS B B 305 305 . 0.2099 0.1860 0.2475 -0.0087 -0.0108
0.0341  1 .
5643 C    C    . LYS LYS LYS B B 305 305 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5644 O    O    . LYS LYS LYS B B 305 305 . 0.0450 0.0328 0.0280 0.0120  0.0000  -
0.0005 1 .
5645 N    N    . PHE PHE PHE B B 306 306 . 0.0259 0.0262 0.0282 0.0007  0.0013
0.0016  1 .
5646 CA   CA   . PHE PHE PHE B B 306 306 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5647 CB   CB   . PHE PHE PHE B B 306 306 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5648 CG   CG   . PHE PHE PHE B B 306 306 . 0.0294 0.0336 0.0350 0.0056  -0.0061 -
0.0089 1 .
5649 CD1  CD1  . PHE PHE PHE B B 306 306 . 0.0338 0.0400 0.0502 -0.0026 -0.0101 -
0.0059 1 .
5650 CE1  CE1  . PHE PHE PHE B B 306 306 . 0.0561 0.0319 0.0386 0.0142  -0.0053 -
0.0030 1 .
5651 CZ   CZ   . PHE PHE PHE B B 306 306 . 0.0383 0.0487 0.0426 -0.0025 0.0141  -
0.0093 1 .
5652 CE2  CE2  . PHE PHE PHE B B 306 306 . 0.0318 0.0431 0.0438 -0.0048 0.0101  -
0.0012 1 .
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5653 CD2  CD2  . PHE PHE PHE B B 306 306 . 0.0257 0.0337 0.0265 -0.0019 -0.0007
0.0032  1 .
5654 C    C    . PHE PHE PHE B B 306 306 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5655 O    O    . PHE PHE PHE B B 306 306 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5656 N    N    . THR THR THR B B 307 307 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5657 CA   CA   . THR THR THR B B 307 307 . 0.0258 0.0254 0.0253 0.0002  0.0001
0.0000  1 .
5658 CB   CB   . THR THR THR B B 307 307 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5659 OG1  OG1  . THR THR THR B B 307 307 . 0.0495 0.0261 0.0316 0.0044  -0.0123 -
0.0022 1 .
5660 CG2  CG2  . THR THR THR B B 307 307 . 0.0506 0.0286 0.0395 0.0048  0.0032  -
0.0050 1 .
5661 C    C    . THR THR THR B B 307 307 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5662 O    O    . THR THR THR B B 307 307 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5663 N    N    . ALA ALA ALA B B 308 308 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5664 CA   CA   . ALA ALA ALA B B 308 308 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5665 CB   CB   . ALA ALA ALA B B 308 308 . 0.0347 0.0386 0.0295 0.0112  0.0063
0.0075  1 .
5666 C    C    . ALA ALA ALA B B 308 308 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5667 O    O    . ALA ALA ALA B B 308 308 . 0.0421 0.0353 0.0301 0.0039  0.0077  -
0.0015 1 .
5668 N    N    . ASN ASN ASN B B 309 309 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5669 CA   CA   . ASN ASN ASN B B 309 309 . 0.0384 0.0266 0.0263 -0.0042 -0.0036
0.0011  1 .
5670 CB   CB   . ASN ASN ASN B B 309 309 . 0.0496 0.0526 0.0320 -0.0088 0.0012  -
0.0026 1 .
5671 CG   CG   . ASN ASN ASN B B 309 309 . 0.1134 0.0806 0.1168 0.0097  -0.0166
0.0159  1 .
5672 OD1  OD1  . ASN ASN ASN B B 309 309 . 0.2479 0.1681 0.1917 -0.0227 -0.0140 -
0.0494 1 .
5673 ND2  ND2  . ASN ASN ASN B B 309 309 . 0.2187 0.1414 0.1551 -0.0123 0.0232  -
0.0329 1 .
5674 C    C    . ASN ASN ASN B B 309 309 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5675 O    O    . ASN ASN ASN B B 309 309 . 0.0279 0.0317 0.0359 0.0021  0.0027
0.0082  1 .
5676 N    N    . VAL VAL VAL B B 310 310 . 0.0286 0.0257 0.0260 -0.0012 -0.0014
0.0005  1 .
5677 CA   CA   . VAL VAL VAL B B 310 310 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5678 CB   CB   . VAL VAL VAL B B 310 310 . 0.0282 0.0478 0.0269 -0.0080 0.0021  -
0.0059 1 .
5679 CG1  CG1  . VAL VAL VAL B B 310 310 . 0.0980 0.0668 0.0943 -0.0178 0.0158  -
0.0207 1 .
5680 CG2  CG2  . VAL VAL VAL B B 310 310 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5681 C    C    . VAL VAL VAL B B 310 310 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5682 O    O    . VAL VAL VAL B B 310 310 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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5683 N    N    . GLY GLY GLY B B 311 311 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5684 CA   CA   . GLY GLY GLY B B 311 311 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5685 C    C    . GLY GLY GLY B B 311 311 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5686 O    O    . GLY GLY GLY B B 311 311 . 0.0383 0.0270 0.0254 -0.0047 0.0014  -
0.0005 1 .
5687 N    N    . ILE ILE ILE B B 312 312 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5688 CA   CA   . ILE ILE ILE B B 312 312 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5689 CB   CB   . ILE ILE ILE B B 312 312 . 0.0253 0.0253 0.0254 0.0000  0.0000
0.0000  1 .
5690 CG1  CG1  . ILE ILE ILE B B 312 312 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5691 CD1  CD1  . ILE ILE ILE B B 312 312 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5692 CG2  CG2  . ILE ILE ILE B B 312 312 . 0.0418 0.0474 0.0407 0.0191  0.0159
0.0184  1 .
5693 C    C    . ILE ILE ILE B B 312 312 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5694 O    O    . ILE ILE ILE B B 312 312 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5695 N    N    . GLN GLN GLN B B 313 313 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5696 CA   CA   . GLN GLN GLN B B 313 313 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5697 CB   CB   . GLN GLN GLN B B 313 313 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5698 CG   CG   . GLN GLN GLN B B 313 313 . 0.0266 0.0256 0.0257 0.0006  0.0007
0.0003  1 .
5699 CD   CD   . GLN GLN GLN B B 313 313 . 0.0286 0.0363 0.0255 -0.0060 -0.0008
0.0016  1 .
5700 OE1  OE1  . GLN GLN GLN B B 313 313 . 0.0693 0.0319 0.0319 -0.0166 -0.0070
0.0039  1 .
5701 NE2  NE2  . GLN GLN GLN B B 313 313 . 0.0269 0.0253 0.0292 0.0000  0.0025
0.0001  1 .
5702 C    C    . GLN GLN GLN B B 313 313 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5703 O    O    . GLN GLN GLN B B 313 313 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5704 N    N    . ILE ILE ILE B B 314 314 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5705 CA   CA   . ILE ILE ILE B B 314 314 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5706 CB   CB   . ILE ILE ILE B B 314 314 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5707 CG1  CG1  . ILE ILE ILE B B 314 314 . 0.0305 0.0270 0.0268 -0.0029 0.0028  -
0.0016 1 .
5708 CD1  CD1  . ILE ILE ILE B B 314 314 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5709 CG2  CG2  . ILE ILE ILE B B 314 314 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5710 C    C    . ILE ILE ILE B B 314 314 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5711 O    O    . ILE ILE ILE B B 314 314 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5712 N    N    . VAL VAL VAL B B 315 315 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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5713 CA   CA   . VAL VAL VAL B B 315 315 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5714 CB   CB   . VAL VAL VAL B B 315 315 . 0.0261 0.0255 0.0254 0.0003  0.0002
0.0001  1 .
5715 CG1  CG1  . VAL VAL VAL B B 315 315 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5716 CG2  CG2  . VAL VAL VAL B B 315 315 . 0.0253 0.0254 0.0258 0.0000  -0.0001 -
0.0002 1 .
5717 C    C    . VAL VAL VAL B B 315 315 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5718 O    O    . VAL VAL VAL B B 315 315 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5719 N    N    . GLY GLY GLY B B 316 316 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5720 CA   CA   . GLY GLY GLY B B 316 316 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5721 C    C    . GLY GLY GLY B B 316 316 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5722 O    O    . GLY GLY GLY B B 316 316 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5723 N    N    . ASP ASP ASP B B 317 317 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5724 CA   CA   . ASP ASP ASP B B 317 317 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5725 CB   CB   . ASP ASP ASP B B 317 317 . 0.0266 0.0268 0.0291 0.0013  0.0022
0.0024  1 .
5726 CG   CG   . ASP ASP ASP B B 317 317 . 0.0272 0.0255 0.0286 0.0006  -0.0025 -
0.0007 1 .
5727 OD1  OD1  . ASP ASP ASP B B 317 317 . 0.0453 0.0504 0.0275 0.0013  -0.0058
0.0030  1 .
5728 OD2  OD2  . ASP ASP ASP B B 317 317 . 0.0255 0.0253 0.0253 0.0000  0.0001
0.0000  1 .
5729 C    C    . ASP ASP ASP B B 317 317 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5730 O    O    . ASP ASP ASP B B 317 317 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5731 N    N    . ASP ASP ASP B B 318 318 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5732 CA   CA   . ASP ASP ASP B B 318 318 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5733 CB   CB   . ASP ASP ASP B B 318 318 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5734 CG   CG   . ASP ASP ASP B B 318 318 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5735 OD1  OD1  . ASP ASP ASP B B 318 318 . 0.0435 0.0280 0.0325 -0.0019 -0.0026 -
0.0038 1 .
5736 OD2  OD2  . ASP ASP ASP B B 318 318 . 0.0357 0.0338 0.0287 0.0094  -0.0059 -
0.0053 1 .
5737 C    C    . ASP ASP ASP B B 318 318 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5738 O    O    . ASP ASP ASP B B 318 318 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5739 N    N    . LEU LEU LEU B B 319 319 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5740 CA   CA   . LEU LEU LEU B B 319 319 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5741 CB   CB   . LEU LEU LEU B B 319 319 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5742 CG   CG   . LEU LEU LEU B B 319 319 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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5743 CD1  CD1  . LEU LEU LEU B B 319 319 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5744 CD2  CD2  . LEU LEU LEU B B 319 319 . 0.0253 0.0254 0.0254 0.0000  0.0000
0.0000  1 .
5745 C    C    . LEU LEU LEU B B 319 319 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5746 O    O    . LEU LEU LEU B B 319 319 . 0.0288 0.0253 0.0253 -0.0004 -0.0003
0.0000  1 .
5747 N    N    . THR THR THR B B 320 320 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5748 CA   CA   . THR THR THR B B 320 320 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5749 CB   CB   . THR THR THR B B 320 320 . 0.0254 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5750 OG1  OG1  . THR THR THR B B 320 320 . 0.0301 0.0370 0.0256 0.0074  0.0011
0.0018  1 .
5751 CG2  CG2  . THR THR THR B B 320 320 . 0.0346 0.0270 0.0270 -0.0039 0.0040  -
0.0017 1 .
5752 C    C    . THR THR THR B B 320 320 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5753 O    O    . THR THR THR B B 320 320 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5754 N    N    . VAL VAL VAL B B 321 321 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5755 CA   CA   . VAL VAL VAL B B 321 321 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5756 CB   CB   . VAL VAL VAL B B 321 321 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5757 CG1  CG1  . VAL VAL VAL B B 321 321 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5758 CG2  CG2  . VAL VAL VAL B B 321 321 . 0.0257 0.0259 0.0269 0.0004  0.0008
0.0009  1 .
5759 C    C    . VAL VAL VAL B B 321 321 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5760 O    O    . VAL VAL VAL B B 321 321 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5761 N    N    . THR THR THR B B 322 322 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5762 CA   CA   . THR THR THR B B 322 322 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5763 CB   CB   . THR THR THR B B 322 322 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5764 OG1  OG1  . THR THR THR B B 322 322 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5765 CG2  CG2  . THR THR THR B B 322 322 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5766 C    C    . THR THR THR B B 322 322 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5767 O    O    . THR THR THR B B 322 322 . 0.0268 0.0253 0.0279 0.0000  -0.0020 -
0.0001 1 .
5768 N    N    . ASN ASN ASN B B 323 323 . 0.0311 0.0299 0.0253 0.0051  0.0000
0.0000  1 .
5769 CA   CA   . ASN ASN ASN B B 323 323 . 0.0318 0.0326 0.0383 -0.0043 0.0020
0.0060  1 .
5770 CB   CB   . ASN ASN ASN B B 323 323 . 0.0255 0.0253 0.0253 0.0001  0.0000
0.0000  1 .
5771 CG   CG   . ASN ASN ASN B B 323 323 . 0.0779 0.0491 0.0742 0.0332  -0.0027
0.0040  1 .
5772 OD1  OD1  . ASN ASN ASN B B 323 323 . 0.0960 0.0825 0.1056 0.0159  -0.0310 -
0.0329 1 .
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5773 ND2  ND2  . ASN ASN ASN B B 323 323 . 0.0803 0.0447 0.0307 0.0081  0.0050
0.0050  1 .
5774 C    C    . ASN ASN ASN B B 323 323 . 0.0254 0.0309 0.0279 0.0008  -0.0004 -
0.0005 1 .
5775 O    O    . ASN ASN ASN B B 323 323 . 0.0253 0.0301 0.0323 -0.0003 -0.0004
0.0058  1 .
5776 N    N    . PRO PRO PRO B B 324 324 . 0.0328 0.0339 0.0368 0.0060  0.0000  -
0.0049 1 .
5777 CA   CA   . PRO PRO PRO B B 324 324 . 0.0516 0.0597 0.0559 0.0059  -0.0125
0.0051  1 .
5778 CB   CB   . PRO PRO PRO B B 324 324 . 0.0784 0.0771 0.0619 -0.0078 0.0058
0.0079  1 .
5779 CG   CG   . PRO PRO PRO B B 324 324 . 0.0804 0.0510 0.0517 0.0168  -0.0114 -
0.0058 1 .
5780 CD   CD   . PRO PRO PRO B B 324 324 . 0.0291 0.0341 0.0552 0.0008  -0.0058
0.0037  1 .
5781 C    C    . PRO PRO PRO B B 324 324 . 0.0310 0.0367 0.0515 0.0033  -0.0056 -
0.0066 1 .
5782 O    O    . PRO PRO PRO B B 324 324 . 0.0714 0.0774 0.0749 0.0026  -0.0060 -
0.0051 1 .
5783 N    N    . LYS LYS LYS B B 325 325 . 0.0797 0.0841 0.0880 0.0076  -0.0089 -
0.0014 1 .
5784 CA   CA   . LYS LYS LYS B B 325 325 . 0.0648 0.0635 0.0744 -0.0015 -0.0076
0.0026  1 .
5785 CB   CB   . LYS LYS LYS B B 325 325 . 0.1209 0.1134 0.0934 0.0142  -0.0069
0.0022  1 .
5786 CG   CG   . LYS LYS LYS B B 325 325 . 0.1540 0.1917 0.1695 0.0003  0.0089
0.0111  1 .
5787 CD   CD   . LYS LYS LYS B B 325 325 . 0.3020 0.2502 0.3088 0.0175  0.0043  -
0.0189 1 .
5788 CE   CE   . LYS LYS LYS B B 325 325 . 0.3552 0.2965 0.3213 0.0073  0.0098  -
0.0306 1 .
5789 NZ   NZ   . LYS LYS LYS B B 325 325 . 0.3166 0.3812 0.4031 0.0081  0.0132  -
0.0504 1 .
5790 C    C    . LYS LYS LYS B B 325 325 . 0.0744 0.0668 0.0561 0.0017  -0.0047
0.0047  1 .
5791 O    O    . LYS LYS LYS B B 325 325 . 0.0866 0.0947 0.0946 -0.0150 -0.0046
0.0163  1 .
5792 N    N    . ARG ARG ARG B B 326 326 . 0.0398 0.0355 0.0655 -0.0030 -0.0018
0.0065  1 .
5793 CA   CA   . ARG ARG ARG B B 326 326 . 0.0338 0.0378 0.0307 0.0073  -0.0049 -
0.0002 1 .
5794 CB   CB   . ARG ARG ARG B B 326 326 . 0.0426 0.0400 0.0255 0.0065  -0.0013 -
0.0016 1 .
5795 CG   CG   . ARG ARG ARG B B 326 326 . 0.0319 0.0590 0.0780 0.0093  0.0000  -
0.0328 1 .
5796 CD   CD   . ARG ARG ARG B B 326 326 . 0.0579 0.0401 0.0743 0.0150  0.0281  -
0.0010 1 .
5797 NE   NE   . ARG ARG ARG B B 326 326 . 0.0332 0.0265 0.0563 -0.0030 -0.0156
0.0060  1 .
5798 CZ   CZ   . ARG ARG ARG B B 326 326 . 0.0304 0.0399 0.0470 0.0078  0.0103
0.0173  1 .
5799 NH1  NH1  . ARG ARG ARG B B 326 326 . 0.0260 0.0266 0.0620 0.0009  -0.0015 -
0.0040 1 .
5800 NH2  NH2  . ARG ARG ARG B B 326 326 . 0.0426 0.0336 0.0341 -0.0008 -0.0109
0.0044  1 .
5801 C    C    . ARG ARG ARG B B 326 326 . 0.0282 0.0306 0.0409 -0.0035 0.0043  -
0.0019 1 .
5802 O    O    . ARG ARG ARG B B 326 326 . 0.0398 0.0260 0.0256 -0.0025 0.0010
0.0000  1 .
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5803 N    N    . ILE ILE ILE B B 327 327 . 0.0320 0.0255 0.0274 0.0000  -0.0016
0.0005  1 .
5804 CA   CA   . ILE ILE ILE B B 327 327 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5805 CB   CB   . ILE ILE ILE B B 327 327 . 0.0397 0.0328 0.0439 0.0016  -0.0142
0.0041  1 .
5806 CG1  CG1  . ILE ILE ILE B B 327 327 . 0.0384 0.0340 0.0291 0.0075  0.0063
0.0018  1 .
5807 CD1  CD1  . ILE ILE ILE B B 327 327 . 0.0504 0.0342 0.0790 0.0028  0.0186
0.0043  1 .
5808 CG2  CG2  . ILE ILE ILE B B 327 327 . 0.0497 0.0395 0.0370 0.0159  0.0071
0.0107  1 .
5809 C    C    . ILE ILE ILE B B 327 327 . 0.0315 0.0344 0.0265 0.0033  0.0016  -
0.0014 1 .
5810 O    O    . ILE ILE ILE B B 327 327 . 0.0309 0.0302 0.0281 -0.0052 -0.0039
0.0037  1 .
5811 N    N    . GLU GLU GLU B B 328 328 . 0.0334 0.0255 0.0279 -0.0013 -0.0046
0.0007  1 .
5812 CA   CA   . GLU GLU GLU B B 328 328 . 0.0659 0.0663 0.0744 0.0095  -0.0095
0.0039  1 .
5813 CB   CB   . GLU GLU GLU B B 328 328 . 0.0756 0.0903 0.0976 0.0052  0.0119
0.0068  1 .
5814 CG   CG   . GLU GLU GLU B B 328 328 . 0.1531 0.1789 0.2196 -0.0019 0.0198
0.0179  1 .
5815 CD   CD   . GLU GLU GLU B B 328 328 . 0.3101 0.3202 0.2989 -0.0063 -0.0110 -
0.0122 1 .
5816 OE1  OE1  . GLU GLU GLU B B 328 328 . 0.3007 0.3429 0.3144 -0.0048 0.0301
0.0595  1 .
5817 OE2  OE2  . GLU GLU GLU B B 328 328 . 0.3185 0.3946 0.3744 -0.0522 -0.0032
0.0171  1 .
5818 C    C    . GLU GLU GLU B B 328 328 . 0.0477 0.0528 0.0489 0.0064  -0.0021
0.0009  1 .
5819 O    O    . GLU GLU GLU B B 328 328 . 0.0734 0.0804 0.0895 0.0062  -0.0105 -
0.0052 1 .
5820 N    N    . ARG ARG ARG B B 329 329 . 0.0303 0.0434 0.0488 0.0089  -0.0058 -
0.0042 1 .
5821 CA   CA   . ARG ARG ARG B B 329 329 . 0.0320 0.0299 0.0272 -0.0024 0.0018  -
0.0007 1 .
5822 CB   CB   . ARG ARG ARG B B 329 329 . 0.0692 0.0526 0.0616 0.0051  0.0120  -
0.0011 1 .
5823 CG   CG   . ARG ARG ARG B B 329 329 . 0.0480 0.0454 0.0550 -0.0123 -0.0013 -
0.0001 1 .
5824 CD   CD   . ARG ARG ARG B B 329 329 . 0.0785 0.0702 0.0541 0.0096  0.0056  -
0.0099 1 .
5825 NE   NE   . ARG ARG ARG B B 329 329 . 0.0546 0.0253 0.0410 -0.0007 -0.0184
0.0004  1 .
5826 CZ   CZ   . ARG ARG ARG B B 329 329 . 0.0695 0.0583 0.0647 0.0082  -0.0002
0.0091  1 .
5827 NH1  NH1  . ARG ARG ARG B B 329 329 . 0.0888 0.0896 0.0780 0.0493  0.0077
0.0186  1 .
5828 NH2  NH2  . ARG ARG ARG B B 329 329 . 0.0496 0.0271 0.0617 0.0057  0.0112
0.0063  1 .
5829 C    C    . ARG ARG ARG B B 329 329 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5830 O    O    . ARG ARG ARG B B 329 329 . 0.0340 0.0406 0.0436 0.0070  0.0057  -
0.0071 1 .
5831 N    N    . ALA ALA ALA B B 330 330 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5832 CA   CA   . ALA ALA ALA B B 330 330 . 0.0258 0.0256 0.0268 -0.0004 -0.0008
0.0007  1 .
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5833 CB   CB   . ALA ALA ALA B B 330 330 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5834 C    C    . ALA ALA ALA B B 330 330 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5835 O    O    . ALA ALA ALA B B 330 330 . 0.0262 0.0333 0.0263 0.0026  -0.0009 -
0.0028 1 .
5836 N    N    . VAL VAL VAL B B 331 331 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5837 CA   CA   . VAL VAL VAL B B 331 331 . 0.0315 0.0262 0.0262 -0.0023 -0.0023
0.0009  1 .
5838 CB   CB   . VAL VAL VAL B B 331 331 . 0.0446 0.0376 0.0371 -0.0026 -0.0033 -
0.0012 1 .
5839 CG1  CG1  . VAL VAL VAL B B 331 331 . 0.0911 0.0634 0.0716 0.0031  -0.0513
0.0130  1 .
5840 CG2  CG2  . VAL VAL VAL B B 331 331 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5841 C    C    . VAL VAL VAL B B 331 331 . 0.0469 0.0496 0.0360 0.0061  0.0050
0.0070  1 .
5842 O    O    . VAL VAL VAL B B 331 331 . 0.0606 0.0450 0.0543 -0.0039 -0.0036 -
0.0040 1 .
5843 N    N    . GLU GLU GLU B B 332 332 . 0.0621 0.0419 0.0366 0.0006  -0.0033
0.0134  1 .
5844 CA   CA   . GLU GLU GLU B B 332 332 . 0.0827 0.0677 0.0671 0.0059  -0.0100
0.0092  1 .
5845 CB   CB   . GLU GLU GLU B B 332 332 . 0.1085 0.1079 0.1055 0.0115  0.0031
0.0094  1 .
5846 CG   CG   . GLU GLU GLU B B 332 332 . 0.2038 0.2243 0.1841 0.0140  -0.0159
0.0254  1 .
5847 CD   CD   . GLU GLU GLU B B 332 332 . 0.3737 0.3231 0.3696 -0.0267 0.0109
0.0104  1 .
5848 OE1  OE1  . GLU GLU GLU B B 332 332 . 0.4157 0.4243 0.3749 -0.0085 0.0370  -
0.0065 1 .
5849 OE2  OE2  . GLU GLU GLU B B 332 332 . 0.3807 0.4020 0.4195 0.0022  0.0588
0.0024  1 .
5850 C    C    . GLU GLU GLU B B 332 332 . 0.0615 0.0362 0.0384 0.0088  -0.0017 -
0.0111 1 .
5851 O    O    . GLU GLU GLU B B 332 332 . 0.0837 0.0803 0.0826 -0.0010 -0.0078
0.0165  1 .
5852 N    N    . GLU GLU GLU B B 333 333 . 0.0327 0.0408 0.0443 0.0013  -0.0051
0.0143  1 .
5853 CA   CA   . GLU GLU GLU B B 333 333 . 0.0564 0.0460 0.0336 0.0131  0.0037  -
0.0004 1 .
5854 CB   CB   . GLU GLU GLU B B 333 333 . 0.0544 0.0581 0.0677 0.0102  -0.0125
0.0087  1 .
5855 CG   CG   . GLU GLU GLU B B 333 333 . 0.0950 0.0539 0.0911 0.0244  -0.0244 -
0.0024 1 .
5856 CD   CD   . GLU GLU GLU B B 333 333 . 0.0985 0.0757 0.0829 -0.0165 0.0028  -
0.0001 1 .
5857 OE1  OE1  . GLU GLU GLU B B 333 333 . 0.0779 0.0823 0.0786 0.0161  0.0253
0.0157  1 .
5858 OE2  OE2  . GLU GLU GLU B B 333 333 . 0.0637 0.0640 0.0740 0.0284  -0.0094 -
0.0012 1 .
5859 C    C    . GLU GLU GLU B B 333 333 . 0.0287 0.0294 0.0329 0.0037  -0.0050 -
0.0056 1 .
5860 O    O    . GLU GLU GLU B B 333 333 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5861 N    N    . LYS LYS LYS B B 334 334 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5862 CA   CA   . LYS LYS LYS B B 334 334 . 0.0253 0.0266 0.0256 0.0002  -0.0001 -
0.0006 1 .
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5863 CB   CB   . LYS LYS LYS B B 334 334 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5864 CG   CG   . LYS LYS LYS B B 334 334 . 0.0456 0.0611 0.0709 -0.0074 -0.0038 -
0.0205 1 .
5865 CD   CD   . LYS LYS LYS B B 334 334 . 0.1429 0.1618 0.0896 0.0100  -0.0139 -
0.0163 1 .
5866 CE   CE   . LYS LYS LYS B B 334 334 . 0.1759 0.2030 0.1909 -0.0341 -0.0112 -
0.0259 1 .
5867 NZ   NZ   . LYS LYS LYS B B 334 334 . 0.2407 0.2797 0.2615 -0.0403 0.0618  -
0.0144 1 .
5868 C    C    . LYS LYS LYS B B 334 334 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5869 O    O    . LYS LYS LYS B B 334 334 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5870 N    N    . ALA ALA ALA B B 335 335 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5871 CA   CA   . ALA ALA ALA B B 335 335 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5872 CB   CB   . ALA ALA ALA B B 335 335 . 0.0256 0.0255 0.0254 0.0002  -0.0001 -
0.0001 1 .
5873 C    C    . ALA ALA ALA B B 335 335 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5874 O    O    . ALA ALA ALA B B 335 335 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5875 N    N    . CYS CYS CYS B B 336 336 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5876 CA   CA   . CYS CYS CYS B B 336 336 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5877 CB   CB   . CYS CYS CYS B B 336 336 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5878 SG   SG   . CYS CYS CYS B B 336 336 . 0.0319 0.0259 0.0253 0.0020  0.0000
0.0000  1 .
5879 C    C    . CYS CYS CYS B B 336 336 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5880 O    O    . CYS CYS CYS B B 336 336 . 0.0327 0.0264 0.0395 0.0029  -0.0102 -
0.0040 1 .
5881 N    N    . ASN ASN ASN B B 337 337 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5882 CA   CA   . ASN ASN ASN B B 337 337 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5883 CB   CB   . ASN ASN ASN B B 337 337 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5884 CG   CG   . ASN ASN ASN B B 337 337 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5885 OD1  OD1  . ASN ASN ASN B B 337 337 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5886 ND2  ND2  . ASN ASN ASN B B 337 337 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5887 C    C    . ASN ASN ASN B B 337 337 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5888 O    O    . ASN ASN ASN B B 337 337 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5889 N    N    . CYS CYS CYS B B 338 338 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5890 CA   CA   . CYS CYS CYS B B 338 338 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5891 CB   CB   . CYS CYS CYS B B 338 338 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5892 SG   SG   . CYS CYS CYS B B 338 338 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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5893 C    C    . CYS CYS CYS B B 338 338 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5894 O    O    . CYS CYS CYS B B 338 338 . 0.0255 0.0253 0.0253 -0.0001 -0.0001
0.0000  1 .
5895 N    N    . LEU LEU LEU B B 339 339 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5896 CA   CA   . LEU LEU LEU B B 339 339 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5897 CB   CB   . LEU LEU LEU B B 339 339 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5898 CG   CG   . LEU LEU LEU B B 339 339 . 0.0258 0.0253 0.0288 -0.0001 0.0013  -
0.0004 1 .
5899 CD1  CD1  . LEU LEU LEU B B 339 339 . 0.0253 0.0257 0.0255 0.0000  0.0000
0.0002  1 .
5900 CD2  CD2  . LEU LEU LEU B B 339 339 . 0.0253 0.0254 0.0253 0.0000  0.0000
0.0000  1 .
5901 C    C    . LEU LEU LEU B B 339 339 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5902 O    O    . LEU LEU LEU B B 339 339 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5903 N    N    . LEU LEU LEU B B 340 340 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5904 CA   CA   . LEU LEU LEU B B 340 340 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5905 CB   CB   . LEU LEU LEU B B 340 340 . 0.0321 0.0322 0.0287 -0.0068 -0.0048
0.0048  1 .
5906 CG   CG   . LEU LEU LEU B B 340 340 . 0.0260 0.0256 0.0254 0.0005  -0.0003 -
0.0002 1 .
5907 CD1  CD1  . LEU LEU LEU B B 340 340 . 0.0266 0.0261 0.0253 0.0010  0.0000
0.0000  1 .
5908 CD2  CD2  . LEU LEU LEU B B 340 340 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5909 C    C    . LEU LEU LEU B B 340 340 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5910 O    O    . LEU LEU LEU B B 340 340 . 0.0361 0.0264 0.0255 0.0035  0.0014
0.0004  1 .
5911 N    N    . LEU LEU LEU B B 341 341 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5912 CA   CA   . LEU LEU LEU B B 341 341 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5913 CB   CB   . LEU LEU LEU B B 341 341 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5914 CG   CG   . LEU LEU LEU B B 341 341 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5915 CD1  CD1  . LEU LEU LEU B B 341 341 . 0.1014 0.0760 0.0403 0.0309  -0.0003
0.0127  1 .
5916 CD2  CD2  . LEU LEU LEU B B 341 341 . 0.0718 0.0539 0.0820 -0.0114 0.0028  -
0.0191 1 .
5917 C    C    . LEU LEU LEU B B 341 341 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5918 O    O    . LEU LEU LEU B B 341 341 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5919 N    N    . LYS LYS LYS B B 342 342 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5920 CA   CA   . LYS LYS LYS B B 342 342 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5921 CB   CB   . LYS LYS LYS B B 342 342 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5922 CG   CG   . LYS LYS LYS B B 342 342 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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5923 CD   CD   . LYS LYS LYS B B 342 342 . 0.0418 0.0540 0.0407 -0.0032 -0.0134
0.0138  1 .
5924 CE   CE   . LYS LYS LYS B B 342 342 . 0.0378 0.0613 0.0413 0.0184  0.0133
0.0155  1 .
5925 NZ   NZ   . LYS LYS LYS B B 342 342 . 0.1186 0.0528 0.0943 -0.0120 -0.0066
0.0063  1 .
5926 C    C    . LYS LYS LYS B B 342 342 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5927 O    O    . LYS LYS LYS B B 342 342 . 0.0337 0.0323 0.0277 0.0076  0.0044
0.0040  1 .
5928 N    N    . VAL VAL VAL B B 343 343 . 0.0362 0.0267 0.0352 -0.0002 0.0035  -
0.0035 1 .
5929 CA   CA   . VAL VAL VAL B B 343 343 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5930 CB   CB   . VAL VAL VAL B B 343 343 . 0.0469 0.0278 0.0321 0.0073  -0.0121 -
0.0041 1 .
5931 CG1  CG1  . VAL VAL VAL B B 343 343 . 0.0924 0.0852 0.0462 0.0128  -0.0374 -
0.0051 1 .
5932 CG2  CG2  . VAL VAL VAL B B 343 343 . 0.0824 0.0803 0.0543 -0.0078 -0.0218 -
0.0015 1 .
5933 C    C    . VAL VAL VAL B B 343 343 . 0.0263 0.0262 0.0253 0.0009  0.0000
0.0000  1 .
5934 O    O    . VAL VAL VAL B B 343 343 . 0.0281 0.0270 0.0254 0.0021  0.0004
0.0003  1 .
5935 N    N    . ASN ASN ASN B B 344 344 . 0.0256 0.0256 0.0323 0.0003  0.0014
0.0015  1 .
5936 CA   CA   . ASN ASN ASN B B 344 344 . 0.0284 0.0255 0.0254 -0.0008 -0.0006
0.0001  1 .
5937 CB   CB   . ASN ASN ASN B B 344 344 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5938 CG   CG   . ASN ASN ASN B B 344 344 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5939 OD1  OD1  . ASN ASN ASN B B 344 344 . 0.0634 0.0401 0.0691 0.0143  0.0066
0.0060  1 .
5940 ND2  ND2  . ASN ASN ASN B B 344 344 . 0.0440 0.0274 0.0577 -0.0041 -0.0231
0.0073  1 .
5941 C    C    . ASN ASN ASN B B 344 344 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5942 O    O    . ASN ASN ASN B B 344 344 . 0.0346 0.0373 0.0341 -0.0074 -0.0075
0.0101  1 .
5943 N    N    . GLN GLN GLN B B 345 345 . 0.0260 0.0257 0.0253 0.0005  0.0001
0.0000  1 .
5944 CA   CA   . GLN GLN GLN B B 345 345 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5945 CB   CB   . GLN GLN GLN B B 345 345 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5946 CG   CG   . GLN GLN GLN B B 345 345 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5947 CD   CD   . GLN GLN GLN B B 345 345 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5948 OE1  OE1  . GLN GLN GLN B B 345 345 . 0.0255 0.0253 0.0257 0.0000  0.0002
0.0000  1 .
5949 NE2  NE2  . GLN GLN GLN B B 345 345 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5950 C    C    . GLN GLN GLN B B 345 345 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5951 O    O    . GLN GLN GLN B B 345 345 . 0.0273 0.0264 0.0290 0.0014  0.0027
0.0020  1 .
5952 N    N    . ILE ILE ILE B B 346 346 . 0.0275 0.0269 0.0313 0.0019  0.0037
0.0031  1 .
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5953 CA   CA   . ILE ILE ILE B B 346 346 . 0.0262 0.0260 0.0307 -0.0008 -0.0021
0.0020  1 .
5954 CB   CB   . ILE ILE ILE B B 346 346 . 0.0401 0.0468 0.0348 0.0108  0.0047
0.0113  1 .
5955 CG1  CG1  . ILE ILE ILE B B 346 346 . 0.0253 0.0253 0.0254 0.0000  0.0000
0.0000  1 .
5956 CD1  CD1  . ILE ILE ILE B B 346 346 . 0.1019 0.0780 0.0629 0.0370  -0.0308
0.0147  1 .
5957 CG2  CG2  . ILE ILE ILE B B 346 346 . 0.0279 0.0280 0.0321 -0.0027 0.0042  -
0.0043 1 .
5958 C    C    . ILE ILE ILE B B 346 346 . 0.0313 0.0277 0.0313 0.0037  0.0060
0.0037  1 .
5959 O    O    . ILE ILE ILE B B 346 346 . 0.0606 0.0570 0.0552 0.0175  0.0127
0.0110  1 .
5960 N    N    . GLY GLY GLY B B 347 347 . 0.0330 0.0330 0.0294 0.0077  0.0056
0.0056  1 .
5961 CA   CA   . GLY GLY GLY B B 347 347 . 0.0547 0.0449 0.0453 0.0051  0.0087  -
0.0023 1 .
5962 C    C    . GLY GLY GLY B B 347 347 . 0.0390 0.0340 0.0367 0.0035  0.0075  -
0.0056 1 .
5963 O    O    . GLY GLY GLY B B 347 347 . 0.0843 0.0653 0.0686 0.0120  0.0164
0.0050  1 .
5964 N    N    . SER SER SER B B 348 348 . 0.0300 0.0266 0.0264 0.0005  0.0015  -
0.0007 1 .
5965 CA   CA   . SER SER SER B B 348 348 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5966 CB   CB   . SER SER SER B B 348 348 . 0.0255 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
5967 OG   OG   . SER SER SER B B 348 348 . 0.0586 0.0570 0.0350 0.0300  -0.0062
0.0005  1 .
5968 C    C    . SER SER SER B B 348 348 . 0.0319 0.0291 0.0285 -0.0050 -0.0045
0.0034  1 .
5969 O    O    . SER SER SER B B 348 348 . 0.0265 0.0259 0.0257 -0.0008 0.0007  -
0.0004 1 .
5970 N    N    . VAL VAL VAL B B 349 349 . 0.0357 0.0290 0.0290 -0.0027 0.0014
0.0028  1 .
5971 CA   CA   . VAL VAL VAL B B 349 349 . 0.0472 0.0373 0.0432 -0.0043 -0.0023
0.0038  1 .
5972 CB   CB   . VAL VAL VAL B B 349 349 . 0.0426 0.0355 0.0291 0.0021  -0.0004
0.0061  1 .
5973 CG1  CG1  . VAL VAL VAL B B 349 349 . 0.1037 0.0581 0.0733 0.0088  -0.0296
0.0168  1 .
5974 CG2  CG2  . VAL VAL VAL B B 349 349 . 0.0290 0.0461 0.0366 0.0037  0.0008  -
0.0094 1 .
5975 C    C    . VAL VAL VAL B B 349 349 . 0.0395 0.0404 0.0403 0.0132  0.0000
0.0018  1 .
5976 O    O    . VAL VAL VAL B B 349 349 . 0.0322 0.0272 0.0260 0.0036  0.0022
0.0011  1 .
5977 N    N    . THR THR THR B B 350 350 . 0.0483 0.0511 0.0464 0.0027  -0.0064 -
0.0064 1 .
5978 CA   CA   . THR THR THR B B 350 350 . 0.0685 0.0636 0.0641 -0.0010 -0.0007
0.0047  1 .
5979 CB   CB   . THR THR THR B B 350 350 . 0.0729 0.0926 0.0832 0.0032  0.0025
0.0164  1 .
5980 OG1  OG1  . THR THR THR B B 350 350 . 0.0593 0.0676 0.0760 -0.0011 -0.0018
0.0129  1 .
5981 CG2  CG2  . THR THR THR B B 350 350 . 0.1301 0.1247 0.0944 -0.0028 -0.0143 -
0.0076 1 .
5982 C    C    . THR THR THR B B 350 350 . 0.0419 0.0442 0.0338 -0.0030 -0.0064
0.0048  1 .
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5983 O    O    . THR THR THR B B 350 350 . 0.0576 0.0754 0.0503 0.0013  0.0124  -
0.0097 1 .
5984 N    N    . GLU GLU GLU B B 351 351 . 0.0427 0.0374 0.0302 0.0005  -0.0066
0.0051  1 .
5985 CA   CA   . GLU GLU GLU B B 351 351 . 0.0403 0.0453 0.0489 -0.0052 -0.0029
0.0021  1 .
5986 CB   CB   . GLU GLU GLU B B 351 351 . 0.0900 0.0412 0.0460 0.0169  -0.0062 -
0.0010 1 .
5987 CG   CG   . GLU GLU GLU B B 351 351 . 0.0546 0.0703 0.0515 0.0067  0.0210  -
0.0005 1 .
5988 CD   CD   . GLU GLU GLU B B 351 351 . 0.0864 0.0960 0.0997 -0.0110 -0.0006 -
0.0044 1 .
5989 OE1  OE1  . GLU GLU GLU B B 351 351 . 0.0735 0.0833 0.0711 -0.0063 0.0094
0.0077  1 .
5990 OE2  OE2  . GLU GLU GLU B B 351 351 . 0.1392 0.1375 0.1499 0.0130  -0.0105
0.0131  1 .
5991 C    C    . GLU GLU GLU B B 351 351 . 0.0303 0.0383 0.0328 0.0081  0.0061
0.0098  1 .
5992 O    O    . GLU GLU GLU B B 351 351 . 0.0392 0.0490 0.0362 0.0122  -0.0012
0.0107  1 .
5993 N    N    . ALA ALA ALA B B 352 352 . 0.0256 0.0296 0.0299 0.0012  0.0012
0.0044  1 .
5994 CA   CA   . ALA ALA ALA B B 352 352 . 0.0254 0.0254 0.0253 0.0001  0.0000
0.0000  1 .
5995 CB   CB   . ALA ALA ALA B B 352 352 . 0.0392 0.0410 0.0378 0.0052  -0.0117 -
0.0105 1 .
5996 C    C    . ALA ALA ALA B B 352 352 . 0.0263 0.0258 0.0268 0.0007  0.0012
0.0008  1 .
5997 O    O    . ALA ALA ALA B B 352 352 . 0.0273 0.0301 0.0269 0.0030  0.0018
0.0028  1 .
5998 N    N    . ILE ILE ILE B B 353 353 . 0.0390 0.0298 0.0381 0.0062  -0.0122 -
0.0073 1 .
5999 CA   CA   . ILE ILE ILE B B 353 353 . 0.0347 0.0305 0.0439 0.0053  -0.0029 -
0.0010 1 .
6000 CB   CB   . ILE ILE ILE B B 353 353 . 0.0310 0.0312 0.0382 -0.0014 -0.0048
0.0082  1 .
6001 CG1  CG1  . ILE ILE ILE B B 353 353 . 0.0529 0.0864 0.0434 0.0163  0.0081
0.0096  1 .
6002 CD1  CD1  . ILE ILE ILE B B 353 353 . 0.0974 0.0641 0.0669 -0.0070 0.0062
0.0300  1 .
6003 CG2  CG2  . ILE ILE ILE B B 353 353 . 0.0413 0.0561 0.0488 -0.0054 0.0054  -
0.0146 1 .
6004 C    C    . ILE ILE ILE B B 353 353 . 0.0622 0.0291 0.0306 -0.0026 0.0020  -
0.0044 1 .
6005 O    O    . ILE ILE ILE B B 353 353 . 0.0759 0.0630 0.0582 -0.0009 0.0187
0.0117  1 .
6006 N    N    . GLN GLN GLN B B 354 354 . 0.0468 0.0594 0.0593 0.0096  -0.0050
0.0132  1 .
6007 CA   CA   . GLN GLN GLN B B 354 354 . 0.0617 0.0545 0.0450 0.0059  0.0050
0.0072  1 .
6008 CB   CB   . GLN GLN GLN B B 354 354 . 0.1274 0.0889 0.0986 0.0249  0.0079
0.0104  1 .
6009 CG   CG   . GLN GLN GLN B B 354 354 . 0.2124 0.1740 0.1780 0.0030  0.0262
0.0246  1 .
6010 CD   CD   . GLN GLN GLN B B 354 354 . 0.3375 0.2484 0.3111 0.0280  0.0023
0.0118  1 .
6011 OE1  OE1  . GLN GLN GLN B B 354 354 . 0.4396 0.3510 0.3385 0.0075  -0.0356
0.0010  1 .
6012 NE2  NE2  . GLN GLN GLN B B 354 354 . 0.3696 0.3234 0.3105 0.0265  -0.0318
0.0185  1 .
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6013 C    C    . GLN GLN GLN B B 354 354 . 0.0619 0.0524 0.0504 -0.0042 -0.0039
0.0039  1 .
6014 O    O    . GLN GLN GLN B B 354 354 . 0.0565 0.0614 0.0449 0.0055  -0.0043
0.0083  1 .
6015 N    N    . ALA ALA ALA B B 355 355 . 0.0304 0.0309 0.0355 0.0035  0.0000
0.0056  1 .
6016 CA   CA   . ALA ALA ALA B B 355 355 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6017 CB   CB   . ALA ALA ALA B B 355 355 . 0.0427 0.0274 0.0262 0.0061  -0.0039 -
0.0013 1 .
6018 C    C    . ALA ALA ALA B B 355 355 . 0.0262 0.0255 0.0270 0.0004  0.0012
0.0006  1 .
6019 O    O    . ALA ALA ALA B B 355 355 . 0.0274 0.0255 0.0258 0.0007  -0.0010 -
0.0003 1 .
6020 N    N    . CYS CYS CYS B B 356 356 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6021 CA   CA   . CYS CYS CYS B B 356 356 . 0.0273 0.0265 0.0297 -0.0015 -0.0029
0.0023  1 .
6022 CB   CB   . CYS CYS CYS B B 356 356 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6023 SG   SG   . CYS CYS CYS B B 356 356 . 0.0639 0.0429 0.0624 0.0024  -0.0030
0.0097  1 .
6024 C    C    . CYS CYS CYS B B 356 356 . 0.0260 0.0257 0.0254 0.0005  0.0003
0.0002  1 .
6025 O    O    . CYS CYS CYS B B 356 356 . 0.0442 0.0290 0.0471 -0.0044 -0.0038 -
0.0065 1 .
6026 N    N    . LYS LYS LYS B B 357 357 . 0.0459 0.0298 0.0289 -0.0088 -0.0034
0.0000  1 .
6027 CA   CA   . LYS LYS LYS B B 357 357 . 0.0668 0.0660 0.0578 -0.0034 -0.0087 -
0.0018 1 .
6028 CB   CB   . LYS LYS LYS B B 357 357 . 0.0941 0.1145 0.0828 -0.0023 0.0117  -
0.0003 1 .
6029 CG   CG   . LYS LYS LYS B B 357 357 . 0.2002 0.1366 0.1691 0.0015  -0.0016
0.0239  1 .
6030 CD   CD   . LYS LYS LYS B B 357 357 . 0.3005 0.2929 0.2897 0.0097  0.0257
0.0115  1 .
6031 CE   CE   . LYS LYS LYS B B 357 357 . 0.3453 0.3727 0.3797 -0.0021 -0.0141
0.0260  1 .
6032 NZ   NZ   . LYS LYS LYS B B 357 357 . 0.3628 0.4006 0.3806 0.0000  -0.0016
0.0350  1 .
6033 C    C    . LYS LYS LYS B B 357 357 . 0.0609 0.0482 0.0417 -0.0016 0.0044  -
0.0031 1 .
6034 O    O    . LYS LYS LYS B B 357 357 . 0.1124 0.0978 0.0842 -0.0038 -0.0034 -
0.0077 1 .
6035 N    N    . LEU LEU LEU B B 358 358 . 0.0438 0.0324 0.0379 -0.0051 0.0105
0.0032  1 .
6036 CA   CA   . LEU LEU LEU B B 358 358 . 0.0506 0.0418 0.0342 0.0067  -0.0036
0.0101  1 .
6037 CB   CB   . LEU LEU LEU B B 358 358 . 0.0256 0.0254 0.0253 -0.0001 0.0000
0.0000  1 .
6038 CG   CG   . LEU LEU LEU B B 358 358 . 0.0895 0.0535 0.0891 -0.0151 -0.0184
0.0202  1 .
6039 CD1  CD1  . LEU LEU LEU B B 358 358 . 0.0943 0.1068 0.0822 0.0202  -0.0205
0.0031  1 .
6040 CD2  CD2  . LEU LEU LEU B B 358 358 . 0.0810 0.0780 0.0860 0.0083  -0.0132 -
0.0188 1 .
6041 C    C    . LEU LEU LEU B B 358 358 . 0.0287 0.0277 0.0254 0.0028  0.0005
0.0004  1 .
6042 O    O    . LEU LEU LEU B B 358 358 . 0.0590 0.0500 0.0264 0.0047  0.0055
0.0031  1 .
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6043 N    N    . ALA ALA ALA B B 359 359 . 0.0437 0.0473 0.0347 0.0054  -0.0024
0.0037  1 .
6044 CA   CA   . ALA ALA ALA B B 359 359 . 0.0454 0.0381 0.0339 0.0064  -0.0033
0.0082  1 .
6045 CB   CB   . ALA ALA ALA B B 359 359 . 0.0500 0.0544 0.0489 0.0026  -0.0197 -
0.0171 1 .
6046 C    C    . ALA ALA ALA B B 359 359 . 0.0495 0.0399 0.0255 0.0060  -0.0003
0.0015  1 .
6047 O    O    . ALA ALA ALA B B 359 359 . 0.0679 0.0729 0.0531 0.0087  0.0144  -
0.0136 1 .
6048 N    N    . GLN GLN GLN B B 360 360 . 0.0377 0.0388 0.0305 0.0004  -0.0036 -
0.0076 1 .
6049 CA   CA   . GLN GLN GLN B B 360 360 . 0.0632 0.0378 0.0568 -0.0066 -0.0048 -
0.0018 1 .
6050 CB   CB   . GLN GLN GLN B B 360 360 . 0.0668 0.0670 0.0570 0.0074  0.0172  -
0.0057 1 .
6051 CG   CG   . GLN GLN GLN B B 360 360 . 0.0869 0.0747 0.0751 -0.0053 -0.0137 -
0.0148 1 .
6052 CD   CD   . GLN GLN GLN B B 360 360 . 0.0912 0.1159 0.0540 0.0097  -0.0030 -
0.0089 1 .
6053 OE1  OE1  . GLN GLN GLN B B 360 360 . 0.0816 0.1082 0.0985 -0.0077 -0.0224
0.0224  1 .
6054 NE2  NE2  . GLN GLN GLN B B 360 360 . 0.1081 0.0576 0.0977 0.0059  0.0162
0.0388  1 .
6055 C    C    . GLN GLN GLN B B 360 360 . 0.0598 0.0464 0.0449 0.0002  0.0082
0.0041  1 .
6056 O    O    . GLN GLN GLN B B 360 360 . 0.0864 0.0606 0.0765 -0.0012 0.0102  -
0.0068 1 .
6057 N    N    . GLU GLU GLU B B 361 361 . 0.0614 0.0613 0.0535 -0.0026 -0.0110 -
0.0044 1 .
6058 CA   CA   . GLU GLU GLU B B 361 361 . 0.1056 0.0906 0.0927 -0.0006 -0.0031
0.0044  1 .
6059 CB   CB   . GLU GLU GLU B B 361 361 . 0.1221 0.1404 0.1231 0.0051  0.0020  -
0.0044 1 .
6060 CG   CG   . GLU GLU GLU B B 361 361 . 0.2433 0.2149 0.2416 0.0055  0.0140
0.0281  1 .
6061 CD   CD   . GLU GLU GLU B B 361 361 . 0.3315 0.3647 0.3757 0.0344  0.0262
0.0044  1 .
6062 OE1  OE1  . GLU GLU GLU B B 361 361 . 0.3966 0.4129 0.4030 0.0619  0.0207
0.0228  1 .
6063 OE2  OE2  . GLU GLU GLU B B 361 361 . 0.4043 0.3561 0.4226 0.0276  0.0035
0.0437  1 .
6064 C    C    . GLU GLU GLU B B 361 361 . 0.0940 0.1011 0.0925 0.0013  -0.0067 -
0.0051 1 .
6065 O    O    . GLU GLU GLU B B 361 361 . 0.1129 0.1231 0.1125 -0.0006 -0.0092
0.0044  1 .
6066 N    N    . ASN ASN ASN B B 362 362 . 0.0822 0.0556 0.0851 -0.0121 -0.0003 -
0.0012 1 .
6067 CA   CA   . ASN ASN ASN B B 362 362 . 0.0766 0.0739 0.0584 0.0042  -0.0008 -
0.0009 1 .
6068 CB   CB   . ASN ASN ASN B B 362 362 . 0.0519 0.0556 0.0313 -0.0073 -0.0047 -
0.0107 1 .
6069 CG   CG   . ASN ASN ASN B B 362 362 . 0.0903 0.0839 0.0477 0.0073  0.0065
0.0146  1 .
6070 OD1  OD1  . ASN ASN ASN B B 362 362 . 0.1136 0.1015 0.0927 0.0123  -0.0369
0.0388  1 .
6071 ND2  ND2  . ASN ASN ASN B B 362 362 . 0.1210 0.0940 0.1069 0.0159  -0.0110 -
0.0016 1 .
6072 C    C    . ASN ASN ASN B B 362 362 . 0.0773 0.0784 0.0648 -0.0078 -0.0055
0.0015  1 .
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6073 O    O    . ASN ASN ASN B B 362 362 . 0.1007 0.1049 0.1037 -0.0077 0.0079
0.0104  1 .
6074 N    N    . GLY GLY GLY B B 363 363 . 0.0602 0.0623 0.0416 -0.0051 -0.0162
0.0009  1 .
6075 CA   CA   . GLY GLY GLY B B 363 363 . 0.0721 0.0786 0.0554 -0.0050 -0.0089 -
0.0036 1 .
6076 C    C    . GLY GLY GLY B B 363 363 . 0.0446 0.0607 0.0372 0.0101  0.0002
0.0103  1 .
6077 O    O    . GLY GLY GLY B B 363 363 . 0.0902 0.1120 0.0753 -0.0068 0.0043
0.0027  1 .
6078 N    N    . TRP TRP TRP B B 364 364 . 0.0269 0.0254 0.0273 0.0003  -0.0017 -
0.0003 1 .
6079 CA   CA   . TRP TRP TRP B B 364 364 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6080 CB   CB   . TRP TRP TRP B B 364 364 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6081 CG   CG   . TRP TRP TRP B B 364 364 . 0.0268 0.0263 0.0264 0.0012  0.0013
0.0010  1 .
6082 CD1  CD1  . TRP TRP TRP B B 364 364 . 0.0328 0.0256 0.0269 0.0014  -0.0034 -
0.0006 1 .
6083 NE1  NE1  . TRP TRP TRP B B 364 364 . 0.0302 0.0302 0.0280 -0.0049 -0.0036
0.0036  1 .
6084 CE2  CE2  . TRP TRP TRP B B 364 364 . 0.0350 0.0274 0.0295 0.0045  -0.0063 -
0.0029 1 .
6085 CD2  CD2  . TRP TRP TRP B B 364 364 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6086 CE3  CE3  . TRP TRP TRP B B 364 364 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6087 CZ3  CZ3  . TRP TRP TRP B B 364 364 . 0.0451 0.0362 0.0479 -0.0146 -0.0211
0.0156  1 .
6088 CH2  CH2  . TRP TRP TRP B B 364 364 . 0.0276 0.0284 0.0467 0.0026  0.0070
0.0081  1 .
6089 CZ2  CZ2  . TRP TRP TRP B B 364 364 . 0.0411 0.0266 0.0351 -0.0045 -0.0124
0.0036  1 .
6090 C    C    . TRP TRP TRP B B 364 364 . 0.0262 0.0256 0.0253 -0.0005 0.0002  -
0.0001 1 .
6091 O    O    . TRP TRP TRP B B 364 364 . 0.0432 0.0428 0.0269 -0.0051 0.0015
0.0008  1 .
6092 N    N    . GLY GLY GLY B B 365 365 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6093 CA   CA   . GLY GLY GLY B B 365 365 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6094 C    C    . GLY GLY GLY B B 365 365 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6095 O    O    . GLY GLY GLY B B 365 365 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6096 N    N    . VAL VAL VAL B B 366 366 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6097 CA   CA   . VAL VAL VAL B B 366 366 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6098 CB   CB   . VAL VAL VAL B B 366 366 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6099 CG1  CG1  . VAL VAL VAL B B 366 366 . 0.0467 0.0519 0.0323 0.0049  -0.0013 -
0.0066 1 .
6100 CG2  CG2  . VAL VAL VAL B B 366 366 . 0.0350 0.0314 0.0255 0.0077  0.0013
0.0010  1 .
6101 C    C    . VAL VAL VAL B B 366 366 . 0.0273 0.0256 0.0288 -0.0008 -0.0026
0.0011  1 .
6102 O    O    . VAL VAL VAL B B 366 366 . 0.0396 0.0263 0.0275 0.0038  -0.0055 -
0.0015 1 .
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6103 N    N    . MET MET MET B B 367 367 . 0.0316 0.0330 0.0275 0.0069  -0.0037 -
0.0041 1 .
6104 CA   CA   . MET MET MET B B 367 367 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6105 CB   CB   . MET MET MET B B 367 367 . 0.0257 0.0253 0.0254 0.0000  -0.0001
0.0000  1 .
6106 CG   CG   . MET MET MET B B 367 367 . 0.0326 0.0319 0.0289 0.0069  -0.0051 -
0.0048 1 .
6107 SD   SD   . MET MET MET B B 367 367 . 0.0495 0.0364 0.0424 0.0023  -0.0011
0.0057  1 .
6108 CE   CE   . MET MET MET B B 367 367 . 0.0592 0.0525 0.0283 -0.0001 -0.0047 -
0.0079 1 .
6109 C    C    . MET MET MET B B 367 367 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6110 O    O    . MET MET MET B B 367 367 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6111 N    N    . VAL VAL VAL B B 368 368 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6112 CA   CA   . VAL VAL VAL B B 368 368 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6113 CB   CB   . VAL VAL VAL B B 368 368 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6114 CG1  CG1  . VAL VAL VAL B B 368 368 . 0.0267 0.0331 0.0275 0.0031  -0.0013 -
0.0038 1 .
6115 CG2  CG2  . VAL VAL VAL B B 368 368 . 0.0295 0.0281 0.0458 -0.0029 -0.0063
0.0015  1 .
6116 C    C    . VAL VAL VAL B B 368 368 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6117 O    O    . VAL VAL VAL B B 368 368 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6118 N    N    . SER SER SER B B 369 369 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6119 CA   CA   . SER SER SER B B 369 369 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6120 CB   CB   . SER SER SER B B 369 369 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6121 OG   OG   . SER SER SER B B 369 369 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6122 C    C    . SER SER SER B B 369 369 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6123 O    O    . SER SER SER B B 369 369 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6124 N    N    . HIS HIS HIS B B 370 370 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6125 CA   CA   . HIS HIS HIS B B 370 370 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6126 CB   CB   . HIS HIS HIS B B 370 370 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6127 CG   CG   . HIS HIS HIS B B 370 370 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6128 ND1  ND1  . HIS HIS HIS B B 370 370 . 0.0310 0.0253 0.0264 0.0001  0.0024
0.0000  1 .
6129 CE1  CE1  . HIS HIS HIS B B 370 370 . 0.0294 0.0276 0.0271 0.0031  -0.0027 -
0.0020 1 .
6130 NE2  NE2  . HIS HIS HIS B B 370 370 . 0.0255 0.0369 0.0256 0.0017  -0.0002 -
0.0019 1 .
6131 CD2  CD2  . HIS HIS HIS B B 370 370 . 0.0257 0.0263 0.0279 -0.0006 -0.0010
0.0016  1 .
6132 C    C    . HIS HIS HIS B B 370 370 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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6133 O    O    . HIS HIS HIS B B 370 370 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6134 N    N    . ARG ARG ARG B B 371 371 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6135 CA   CA   . ARG ARG ARG B B 371 371 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6136 CB   CB   . ARG ARG ARG B B 371 371 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6137 CG   CG   . ARG ARG ARG B B 371 371 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6138 CD   CD   . ARG ARG ARG B B 371 371 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6139 NE   NE   . ARG ARG ARG B B 371 371 . 0.0272 0.0275 0.0253 0.0020  -0.0001 -
0.0001 1 .
6140 CZ   CZ   . ARG ARG ARG B B 371 371 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6141 NH1  NH1  . ARG ARG ARG B B 371 371 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6142 NH2  NH2  . ARG ARG ARG B B 371 371 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6143 C    C    . ARG ARG ARG B B 371 371 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6144 O    O    . ARG ARG ARG B B 371 371 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6145 N    N    . SER SER SER B B 372 372 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6146 CA   CA   . SER SER SER B B 372 372 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6147 CB   CB   . SER SER SER B B 372 372 . 0.0322 0.0262 0.0278 0.0024  0.0041
0.0014  1 .
6148 OG   OG   . SER SER SER B B 372 372 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6149 C    C    . SER SER SER B B 372 372 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6150 O    O    . SER SER SER B B 372 372 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6151 N    N    . GLY GLY GLY B B 373 373 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6152 CA   CA   . GLY GLY GLY B B 373 373 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6153 C    C    . GLY GLY GLY B B 373 373 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6154 O    O    . GLY GLY GLY B B 373 373 . 0.0355 0.0270 0.0375 0.0014  -0.0078 -
0.0042 1 .
6155 N    N    . GLU GLU GLU B B 374 374 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6156 CA   CA   . GLU GLU GLU B B 374 374 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6157 CB   CB   . GLU GLU GLU B B 374 374 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6158 CG   CG   . GLU GLU GLU B B 374 374 . 0.0276 0.0275 0.0254 0.0022  0.0005
0.0005  1 .
6159 CD   CD   . GLU GLU GLU B B 374 374 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6160 OE1  OE1  . GLU GLU GLU B B 374 374 . 0.0315 0.0360 0.0323 0.0080  0.0063
0.0077  1 .
6161 OE2  OE2  . GLU GLU GLU B B 374 374 . 0.0428 0.0367 0.0455 0.0137  -0.0026
0.0012  1 .
6162 C    C    . GLU GLU GLU B B 374 374 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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6163 O    O    . GLU GLU GLU B B 374 374 . 0.0319 0.0270 0.0255 0.0033  -0.0012 -
0.0006 1 .
6164 N    N    . THR THR THR B B 375 375 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6165 CA   CA   . THR THR THR B B 375 375 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6166 CB   CB   . THR THR THR B B 375 375 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6167 OG1  OG1  . THR THR THR B B 375 375 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6168 CG2  CG2  . THR THR THR B B 375 375 . 0.0295 0.0257 0.0309 0.0011  -0.0025
0.0001  1 .
6169 C    C    . THR THR THR B B 375 375 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6170 O    O    . THR THR THR B B 375 375 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6171 N    N    . GLU GLU GLU B B 376 376 . 0.0298 0.0279 0.0320 -0.0034 -0.0055
0.0042  1 .
6172 CA   CA   . GLU GLU GLU B B 376 376 . 0.0318 0.0268 0.0355 -0.0003 -0.0040
0.0036  1 .
6173 CB   CB   . GLU GLU GLU B B 376 376 . 0.0615 0.0422 0.0400 0.0015  0.0047
0.0062  1 .
6174 CG   CG   . GLU GLU GLU B B 376 376 . 0.0616 0.0735 0.0509 -0.0028 -0.0030
0.0086  1 .
6175 CD   CD   . GLU GLU GLU B B 376 376 . 0.0620 0.0719 0.0720 -0.0141 0.0014
0.0137  1 .
6176 OE1  OE1  . GLU GLU GLU B B 376 376 . 0.1309 0.0934 0.0696 -0.0381 0.0220
0.0058  1 .
6177 OE2  OE2  . GLU GLU GLU B B 376 376 . 0.0253 0.0296 0.0268 0.0002  -0.0001 -
0.0025 1 .
6178 C    C    . GLU GLU GLU B B 376 376 . 0.0378 0.0261 0.0378 0.0009  -0.0108
0.0006  1 .
6179 O    O    . GLU GLU GLU B B 376 376 . 0.0400 0.0511 0.0520 -0.0127 -0.0190
0.0111  1 .
6180 N    N    . ASP ASP ASP B B 377 377 . 0.0268 0.0267 0.0307 -0.0011 -0.0027
0.0016  1 .
6181 CA   CA   . ASP ASP ASP B B 377 377 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6182 CB   CB   . ASP ASP ASP B B 377 377 . 0.0356 0.0314 0.0376 0.0079  -0.0007 -
0.0009 1 .
6183 CG   CG   . ASP ASP ASP B B 377 377 . 0.0574 0.0615 0.0794 0.0109  -0.0085
0.0166  1 .
6184 OD1  OD1  . ASP ASP ASP B B 377 377 . 0.1232 0.1075 0.1212 0.0063  -0.0186 -
0.0232 1 .
6185 OD2  OD2  . ASP ASP ASP B B 377 377 . 0.0774 0.0592 0.0682 0.0010  0.0076  -
0.0011 1 .
6186 C    C    . ASP ASP ASP B B 377 377 . 0.0263 0.0265 0.0296 -0.0011 -0.0020
0.0022  1 .
6187 O    O    . ASP ASP ASP B B 377 377 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6188 N    N    . THR THR THR B B 378 378 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6189 CA   CA   . THR THR THR B B 378 378 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6190 CB   CB   . THR THR THR B B 378 378 . 0.0313 0.0266 0.0277 0.0028  -0.0038 -
0.0018 1 .
6191 OG1  OG1  . THR THR THR B B 378 378 . 0.0368 0.0318 0.0521 -0.0036 0.0125
0.0045  1 .
6192 CG2  CG2  . THR THR THR B B 378 378 . 0.0325 0.0273 0.0286 0.0035  -0.0046 -
0.0019 1 .
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6193 C    C    . THR THR THR B B 378 378 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6194 O    O    . THR THR THR B B 378 378 . 0.0312 0.0253 0.0281 0.0003  0.0040
0.0002  1 .
6195 N    N    . PHE PHE PHE B B 379 379 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6196 CA   CA   . PHE PHE PHE B B 379 379 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6197 CB   CB   . PHE PHE PHE B B 379 379 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6198 CG   CG   . PHE PHE PHE B B 379 379 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6199 CD1  CD1  . PHE PHE PHE B B 379 379 . 0.0539 0.0500 0.0509 0.0078  -0.0102 -
0.0010 1 .
6200 CE1  CE1  . PHE PHE PHE B B 379 379 . 0.0427 0.0613 0.0288 0.0045  -0.0037 -
0.0107 1 .
6201 CZ   CZ   . PHE PHE PHE B B 379 379 . 0.0469 0.0330 0.0377 0.0002  -0.0010 -
0.0097 1 .
6202 CE2  CE2  . PHE PHE PHE B B 379 379 . 0.0981 0.0737 0.0766 0.0065  -0.0118
0.0220  1 .
6203 CD2  CD2  . PHE PHE PHE B B 379 379 . 0.0457 0.0333 0.0708 0.0124  0.0014
0.0048  1 .
6204 C    C    . PHE PHE PHE B B 379 379 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6205 O    O    . PHE PHE PHE B B 379 379 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6206 N    N    . ILE ILE ILE B B 380 380 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6207 CA   CA   . ILE ILE ILE B B 380 380 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6208 CB   CB   . ILE ILE ILE B B 380 380 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6209 CG1  CG1  . ILE ILE ILE B B 380 380 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6210 CD1  CD1  . ILE ILE ILE B B 380 380 . 0.0352 0.0261 0.0352 -0.0028 -0.0099
0.0028  1 .
6211 CG2  CG2  . ILE ILE ILE B B 380 380 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6212 C    C    . ILE ILE ILE B B 380 380 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6213 O    O    . ILE ILE ILE B B 380 380 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6214 N    N    . ALA ALA ALA B B 381 381 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6215 CA   CA   . ALA ALA ALA B B 381 381 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6216 CB   CB   . ALA ALA ALA B B 381 381 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6217 C    C    . ALA ALA ALA B B 381 381 . 0.0295 0.0269 0.0257 0.0025  0.0013
0.0008  1 .
6218 O    O    . ALA ALA ALA B B 381 381 . 0.0284 0.0264 0.0282 0.0018  -0.0030 -
0.0017 1 .
6219 N    N    . ASP ASP ASP B B 382 382 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6220 CA   CA   . ASP ASP ASP B B 382 382 . 0.0285 0.0283 0.0318 -0.0031 -0.0045
0.0044  1 .
6221 CB   CB   . ASP ASP ASP B B 382 382 . 0.0292 0.0315 0.0300 -0.0049 -0.0043
0.0053  1 .
6222 CG   CG   . ASP ASP ASP B B 382 382 . 0.0713 0.0594 0.0829 -0.0084 -0.0011
0.0125  1 .
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6223 OD1  OD1  . ASP ASP ASP B B 382 382 . 0.1022 0.0884 0.1026 -0.0190 -0.0128
0.0276  1 .
6224 OD2  OD2  . ASP ASP ASP B B 382 382 . 0.0803 0.0750 0.1052 -0.0396 -0.0120
0.0046  1 .
6225 C    C    . ASP ASP ASP B B 382 382 . 0.0463 0.0288 0.0323 -0.0085 -0.0121
0.0049  1 .
6226 O    O    . ASP ASP ASP B B 382 382 . 0.0262 0.0253 0.0260 -0.0001 -0.0007
0.0001  1 .
6227 N    N    . LEU LEU LEU B B 383 383 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6228 CA   CA   . LEU LEU LEU B B 383 383 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6229 CB   CB   . LEU LEU LEU B B 383 383 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6230 CG   CG   . LEU LEU LEU B B 383 383 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6231 CD1  CD1  . LEU LEU LEU B B 383 383 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6232 CD2  CD2  . LEU LEU LEU B B 383 383 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6233 C    C    . LEU LEU LEU B B 383 383 . 0.0257 0.0254 0.0255 -0.0002 -0.0002
0.0001  1 .
6234 O    O    . LEU LEU LEU B B 383 383 . 0.0399 0.0265 0.0350 0.0038  -0.0036
0.0003  1 .
6235 N    N    . VAL VAL VAL B B 384 384 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6236 CA   CA   . VAL VAL VAL B B 384 384 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6237 CB   CB   . VAL VAL VAL B B 384 384 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6238 CG1  CG1  . VAL VAL VAL B B 384 384 . 0.0415 0.0338 0.0399 0.0087  -0.0079
0.0020  1 .
6239 CG2  CG2  . VAL VAL VAL B B 384 384 . 0.0355 0.0276 0.0279 0.0048  0.0051
0.0024  1 .
6240 C    C    . VAL VAL VAL B B 384 384 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6241 O    O    . VAL VAL VAL B B 384 384 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6242 N    N    . VAL VAL VAL B B 385 385 . 0.0267 0.0256 0.0261 0.0006  -0.0010 -
0.0005 1 .
6243 CA   CA   . VAL VAL VAL B B 385 385 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6244 CB   CB   . VAL VAL VAL B B 385 385 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6245 CG1  CG1  . VAL VAL VAL B B 385 385 . 0.0409 0.0253 0.0355 0.0001  -0.0126
0.0000  1 .
6246 CG2  CG2  . VAL VAL VAL B B 385 385 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6247 C    C    . VAL VAL VAL B B 385 385 . 0.0323 0.0306 0.0356 0.0052  -0.0054 -
0.0069 1 .
6248 O    O    . VAL VAL VAL B B 385 385 . 0.0387 0.0267 0.0268 0.0044  -0.0044 -
0.0014 1 .
6249 N    N    . GLY GLY GLY B B 386 386 . 0.0255 0.0259 0.0302 0.0003  0.0011
0.0016  1 .
6250 CA   CA   . GLY GLY GLY B B 386 386 . 0.0349 0.0417 0.0440 0.0002  -0.0019
0.0173  1 .
6251 C    C    . GLY GLY GLY B B 386 386 . 0.0340 0.0332 0.0315 -0.0083 -0.0074
0.0070  1 .
6252 O    O    . GLY GLY GLY B B 386 386 . 0.0677 0.0492 0.0602 -0.0081 -0.0040
0.0237  1 .
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6253 N    N    . LEU LEU LEU B B 387 387 . 0.0307 0.0354 0.0292 -0.0071 -0.0044
0.0062  1 .
6254 CA   CA   . LEU LEU LEU B B 387 387 . 0.0471 0.0313 0.0352 -0.0035 -0.0082
0.0074  1 .
6255 CB   CB   . LEU LEU LEU B B 387 387 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6256 CG   CG   . LEU LEU LEU B B 387 387 . 0.0332 0.0300 0.0321 -0.0061 0.0073  -
0.0056 1 .
6257 CD1  CD1  . LEU LEU LEU B B 387 387 . 0.0386 0.0448 0.0256 -0.0160 -0.0020
0.0025  1 .
6258 CD2  CD2  . LEU LEU LEU B B 387 387 . 0.0417 0.0296 0.0527 0.0082  -0.0048 -
0.0001 1 .
6259 C    C    . LEU LEU LEU B B 387 387 . 0.0464 0.0416 0.0462 0.0042  0.0017
0.0043  1 .
6260 O    O    . LEU LEU LEU B B 387 387 . 0.0571 0.0613 0.0407 0.0027  -0.0221 -
0.0019 1 .
6261 N    N    . CYS CYS CYS B B 388 388 . 0.0587 0.0396 0.0544 0.0081  -0.0027
0.0032  1 .
6262 CA   CA   . CYS CYS CYS B B 388 388 . 0.0954 0.0781 0.0798 -0.0032 -0.0047
0.0043  1 .
6263 CB   CB   . CYS CYS CYS B B 388 388 . 0.1263 0.1082 0.1133 0.0116  -0.0022 -
0.0111 1 .
6264 SG   SG   . CYS CYS CYS B B 388 388 . 0.3003 0.2318 0.2773 -0.0109 -0.0250
0.0078  1 .
6265 C    C    . CYS CYS CYS B B 388 388 . 0.0878 0.0894 0.0834 0.0001  0.0017  -
0.0085 1 .
6266 O    O    . CYS CYS CYS B B 388 388 . 0.1512 0.1414 0.1015 -0.0107 -0.0105
0.0090  1 .
6267 N    N    . THR THR THR B B 389 389 . 0.0597 0.0495 0.0483 -0.0067 -0.0044 -
0.0004 1 .
6268 CA   CA   . THR THR THR B B 389 389 . 0.0574 0.0449 0.0456 -0.0075 -0.0079 -
0.0065 1 .
6269 CB   CB   . THR THR THR B B 389 389 . 0.0529 0.0300 0.0588 0.0008  -0.0045 -
0.0125 1 .
6270 OG1  OG1  . THR THR THR B B 389 389 . 0.0678 0.0486 0.0403 -0.0049 -0.0001 -
0.0170 1 .
6271 CG2  CG2  . THR THR THR B B 389 389 . 0.0873 0.0645 0.0597 -0.0068 -0.0133
0.0172  1 .
6272 C    C    . THR THR THR B B 389 389 . 0.0472 0.0359 0.0376 -0.0016 -0.0057
0.0083  1 .
6273 O    O    . THR THR THR B B 389 389 . 0.0735 0.0530 0.0626 -0.0131 0.0000  -
0.0071 1 .
6274 N    N    . GLY GLY GLY B B 390 390 . 0.0328 0.0260 0.0283 -0.0023 -0.0047
0.0015  1 .
6275 CA   CA   . GLY GLY GLY B B 390 390 . 0.0323 0.0281 0.0267 -0.0043 -0.0030
0.0020  1 .
6276 C    C    . GLY GLY GLY B B 390 390 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6277 O    O    . GLY GLY GLY B B 390 390 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6278 N    N    . GLN GLN GLN B B 391 391 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6279 CA   CA   . GLN GLN GLN B B 391 391 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6280 CB   CB   . GLN GLN GLN B B 391 391 . 0.0539 0.0721 0.0433 -0.0082 -0.0044
0.0125  1 .
6281 CG   CG   . GLN GLN GLN B B 391 391 . 0.0712 0.0449 0.0956 0.0077  0.0079
0.0083  1 .
6282 CD   CD   . GLN GLN GLN B B 391 391 . 0.0431 0.0448 0.0506 0.0044  -0.0054
0.0195  1 .
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6283 OE1  OE1  . GLN GLN GLN B B 391 391 . 0.0669 0.0469 0.0398 -0.0117 -0.0052
0.0101  1 .
6284 NE2  NE2  . GLN GLN GLN B B 391 391 . 0.0670 0.0382 0.0423 -0.0126 -0.0136 -
0.0065 1 .
6285 C    C    . GLN GLN GLN B B 391 391 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6286 O    O    . GLN GLN GLN B B 391 391 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6287 N    N    . ILE ILE ILE B B 392 392 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6288 CA   CA   . ILE ILE ILE B B 392 392 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6289 CB   CB   . ILE ILE ILE B B 392 392 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6290 CG1  CG1  . ILE ILE ILE B B 392 392 . 0.0284 0.0272 0.0257 -0.0024 0.0010  -
0.0008 1 .
6291 CD1  CD1  . ILE ILE ILE B B 392 392 . 0.0253 0.0257 0.0253 -0.0001 0.0000  -
0.0001 1 .
6292 CG2  CG2  . ILE ILE ILE B B 392 392 . 0.0439 0.0355 0.0283 0.0137  0.0074
0.0055  1 .
6293 C    C    . ILE ILE ILE B B 392 392 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6294 O    O    . ILE ILE ILE B B 392 392 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6295 N    N    . LYS LYS LYS B B 393 393 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6296 CA   CA   . LYS LYS LYS B B 393 393 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6297 CB   CB   . LYS LYS LYS B B 393 393 . 0.0296 0.0253 0.0255 0.0000  0.0009
0.0000  1 .
6298 CG   CG   . LYS LYS LYS B B 393 393 . 0.0463 0.0266 0.0433 0.0007  0.0068
0.0046  1 .
6299 CD   CD   . LYS LYS LYS B B 393 393 . 0.0747 0.0484 0.0634 0.0019  0.0387  -
0.0069 1 .
6300 CE   CE   . LYS LYS LYS B B 393 393 . 0.0709 0.0654 0.0423 -0.0127 -0.0190 -
0.0129 1 .
6301 NZ   NZ   . LYS LYS LYS B B 393 393 . 0.0540 0.0453 0.0360 -0.0056 -0.0002
0.0092  1 .
6302 C    C    . LYS LYS LYS B B 393 393 . 0.0255 0.0255 0.0255 -0.0001 0.0002  -
0.0002 1 .
6303 O    O    . LYS LYS LYS B B 393 393 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6304 N    N    . THR THR THR B B 394 394 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6305 CA   CA   . THR THR THR B B 394 394 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6306 CB   CB   . THR THR THR B B 394 394 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6307 OG1  OG1  . THR THR THR B B 394 394 . 0.0274 0.0262 0.0255 0.0013  0.0006
0.0004  1 .
6308 CG2  CG2  . THR THR THR B B 394 394 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6309 C    C    . THR THR THR B B 394 394 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6310 O    O    . THR THR THR B B 394 394 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6311 N    N    . GLY GLY GLY B B 395 395 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6312 CA   CA   . GLY GLY GLY B B 395 395 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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6313 C    C    . GLY GLY GLY B B 395 395 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6314 O    O    . GLY GLY GLY B B 395 395 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6315 N    N    . ALA ALA ALA B B 396 396 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6316 CA   CA   . ALA ALA ALA B B 396 396 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6317 CB   CB   . ALA ALA ALA B B 396 396 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6318 C    C    . ALA ALA ALA B B 396 396 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6319 O    O    . ALA ALA ALA B B 396 396 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6320 N    N    . PRO PRO PRO B B 397 397 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6321 CA   CA   . PRO PRO PRO B B 397 397 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6322 CB   CB   . PRO PRO PRO B B 397 397 . 0.0253 0.0254 0.0259 0.0000  0.0000  -
0.0002 1 .
6323 CG   CG   . PRO PRO PRO B B 397 397 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6324 CD   CD   . PRO PRO PRO B B 397 397 . 0.0269 0.0256 0.0260 0.0006  0.0010
0.0004  1 .
6325 C    C    . PRO PRO PRO B B 397 397 . 0.0253 0.0254 0.0256 0.0000  0.0000
0.0001  1 .
6326 O    O    . PRO PRO PRO B B 397 397 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6327 N    N    . CYS CYS CYS B B 398 398 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6328 CA   CA   . CYS CYS CYS B B 398 398 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6329 CB   CB   . CYS CYS CYS B B 398 398 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6330 SG   SG   . CYS CYS CYS B B 398 398 . 0.0314 0.0255 0.0263 -0.0012 0.0025  -
0.0005 1 .
6331 C    C    . CYS CYS CYS B B 398 398 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6332 O    O    . CYS CYS CYS B B 398 398 . 0.0271 0.0259 0.0253 0.0010  -0.0002 -
0.0001 1 .
6333 N    N    . ARG ARG ARG B B 399 399 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6334 CA   CA   . ARG ARG ARG B B 399 399 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6335 CB   CB   . ARG ARG ARG B B 399 399 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6336 CG   CG   . ARG ARG ARG B B 399 399 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6337 CD   CD   . ARG ARG ARG B B 399 399 . 0.0282 0.0253 0.0337 0.0004  0.0049
0.0006  1 .
6338 NE   NE   . ARG ARG ARG B B 399 399 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6339 CZ   CZ   . ARG ARG ARG B B 399 399 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6340 NH1  NH1  . ARG ARG ARG B B 399 399 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6341 NH2  NH2  . ARG ARG ARG B B 399 399 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6342 C    C    . ARG ARG ARG B B 399 399 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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6343 O    O    . ARG ARG ARG B B 399 399 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6344 N    N    . SER SER SER B B 400 400 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6345 CA   CA   . SER SER SER B B 400 400 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6346 CB   CB   . SER SER SER B B 400 400 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6347 OG   OG   . SER SER SER B B 400 400 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6348 C    C    . SER SER SER B B 400 400 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6349 O    O    . SER SER SER B B 400 400 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6350 N    N    . GLU GLU GLU B B 401 401 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6351 CA   CA   . GLU GLU GLU B B 401 401 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6352 CB   CB   . GLU GLU GLU B B 401 401 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6353 CG   CG   . GLU GLU GLU B B 401 401 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6354 CD   CD   . GLU GLU GLU B B 401 401 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6355 OE1  OE1  . GLU GLU GLU B B 401 401 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6356 OE2  OE2  . GLU GLU GLU B B 401 401 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6357 C    C    . GLU GLU GLU B B 401 401 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6358 O    O    . GLU GLU GLU B B 401 401 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6359 N    N    . ARG ARG ARG B B 402 402 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6360 CA   CA   . ARG ARG ARG B B 402 402 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6361 CB   CB   . ARG ARG ARG B B 402 402 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6362 CG   CG   . ARG ARG ARG B B 402 402 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6363 CD   CD   . ARG ARG ARG B B 402 402 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6364 NE   NE   . ARG ARG ARG B B 402 402 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6365 CZ   CZ   . ARG ARG ARG B B 402 402 . 0.0260 0.0393 0.0316 0.0032  0.0021
0.0093  1 .
6366 NH1  NH1  . ARG ARG ARG B B 402 402 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6367 NH2  NH2  . ARG ARG ARG B B 402 402 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6368 C    C    . ARG ARG ARG B B 402 402 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6369 O    O    . ARG ARG ARG B B 402 402 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6370 N    N    . LEU LEU LEU B B 403 403 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6371 CA   CA   . LEU LEU LEU B B 403 403 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6372 CB   CB   . LEU LEU LEU B B 403 403 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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6373 CG   CG   . LEU LEU LEU B B 403 403 . 0.0292 0.0299 0.0253 -0.0042 0.0000
0.0000  1 .
6374 CD1  CD1  . LEU LEU LEU B B 403 403 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6375 CD2  CD2  . LEU LEU LEU B B 403 403 . 0.0255 0.0253 0.0257 0.0000  -0.0003
0.0000  1 .
6376 C    C    . LEU LEU LEU B B 403 403 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6377 O    O    . LEU LEU LEU B B 403 403 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6378 N    N    . ALA ALA ALA B B 404 404 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6379 CA   CA   . ALA ALA ALA B B 404 404 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6380 CB   CB   . ALA ALA ALA B B 404 404 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6381 C    C    . ALA ALA ALA B B 404 404 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6382 O    O    . ALA ALA ALA B B 404 404 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6383 N    N    . LYS LYS LYS B B 405 405 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6384 CA   CA   . LYS LYS LYS B B 405 405 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6385 CB   CB   . LYS LYS LYS B B 405 405 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6386 CG   CG   . LYS LYS LYS B B 405 405 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6387 CD   CD   . LYS LYS LYS B B 405 405 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6388 CE   CE   . LYS LYS LYS B B 405 405 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6389 NZ   NZ   . LYS LYS LYS B B 405 405 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6390 C    C    . LYS LYS LYS B B 405 405 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6391 O    O    . LYS LYS LYS B B 405 405 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6392 N    N    . TYR TYR TYR B B 406 406 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6393 CA   CA   . TYR TYR TYR B B 406 406 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6394 CB   CB   . TYR TYR TYR B B 406 406 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6395 CG   CG   . TYR TYR TYR B B 406 406 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6396 CD1  CD1  . TYR TYR TYR B B 406 406 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6397 CE1  CE1  . TYR TYR TYR B B 406 406 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6398 CZ   CZ   . TYR TYR TYR B B 406 406 . 0.0253 0.0253 0.0254 0.0000  0.0000
0.0000  1 .
6399 OH   OH   . TYR TYR TYR B B 406 406 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6400 CE2  CE2  . TYR TYR TYR B B 406 406 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6401 CD2  CD2  . TYR TYR TYR B B 406 406 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6402 C    C    . TYR TYR TYR B B 406 406 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
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6403 O    O    . TYR TYR TYR B B 406 406 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6404 N    N    . ASN ASN ASN B B 407 407 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6405 CA   CA   . ASN ASN ASN B B 407 407 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6406 CB   CB   . ASN ASN ASN B B 407 407 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6407 CG   CG   . ASN ASN ASN B B 407 407 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6408 OD1  OD1  . ASN ASN ASN B B 407 407 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6409 ND2  ND2  . ASN ASN ASN B B 407 407 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6410 C    C    . ASN ASN ASN B B 407 407 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6411 O    O    . ASN ASN ASN B B 407 407 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6412 N    N    . GLN GLN GLN B B 408 408 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6413 CA   CA   . GLN GLN GLN B B 408 408 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6414 CB   CB   . GLN GLN GLN B B 408 408 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6415 CG   CG   . GLN GLN GLN B B 408 408 . 0.0258 0.0253 0.0269 -0.0001 0.0009  -
0.0002 1 .
6416 CD   CD   . GLN GLN GLN B B 408 408 . 0.0323 0.0500 0.0372 0.0131  0.0091
0.0172  1 .
6417 OE1  OE1  . GLN GLN GLN B B 408 408 . 0.0310 0.0352 0.0421 0.0067  0.0058
0.0115  1 .
6418 NE2  NE2  . GLN GLN GLN B B 408 408 . 0.0479 0.0499 0.0412 -0.0210 -0.0013
0.0101  1 .
6419 C    C    . GLN GLN GLN B B 408 408 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6420 O    O    . GLN GLN GLN B B 408 408 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6421 N    N    . LEU LEU LEU B B 409 409 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6422 CA   CA   . LEU LEU LEU B B 409 409 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6423 CB   CB   . LEU LEU LEU B B 409 409 . 0.0281 0.0269 0.0261 0.0021  0.0015
0.0011  1 .
6424 CG   CG   . LEU LEU LEU B B 409 409 . 0.0267 0.0255 0.0257 0.0005  0.0007
0.0002  1 .
6425 CD1  CD1  . LEU LEU LEU B B 409 409 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6426 CD2  CD2  . LEU LEU LEU B B 409 409 . 0.0305 0.0366 0.0313 -0.0024 -0.0025
0.0081  1 .
6427 C    C    . LEU LEU LEU B B 409 409 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6428 O    O    . LEU LEU LEU B B 409 409 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6429 N    N    . MET MET MET B B 410 410 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6430 CA   CA   . MET MET MET B B 410 410 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6431 CB   CB   . MET MET MET B B 410 410 . 0.0381 0.0275 0.0307 0.0052  -0.0047 -
0.0019 1 .
6432 CG   CG   . MET MET MET B B 410 410 . 0.0356 0.0381 0.0383 0.0072  0.0035  -
0.0070 1 .
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6433 SD   SD   . MET MET MET B B 410 410 . 0.0738 0.0675 0.0563 0.0068  0.0025
0.0013  1 .
6434 CE   CE   . MET MET MET B B 410 410 . 0.0833 0.0509 0.0367 0.0000  -0.0059 -
0.0074 1 .
6435 C    C    . MET MET MET B B 410 410 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6436 O    O    . MET MET MET B B 410 410 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6437 N    N    . ARG ARG ARG B B 411 411 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6438 CA   CA   . ARG ARG ARG B B 411 411 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6439 CB   CB   . ARG ARG ARG B B 411 411 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6440 CG   CG   . ARG ARG ARG B B 411 411 . 0.0343 0.0259 0.0531 -0.0009 -0.0158
0.0017  1 .
6441 CD   CD   . ARG ARG ARG B B 411 411 . 0.0259 0.0295 0.0302 -0.0015 -0.0017
0.0045  1 .
6442 NE   NE   . ARG ARG ARG B B 411 411 . 0.0670 0.0413 0.0681 -0.0249 -0.0035
0.0029  1 .
6443 CZ   CZ   . ARG ARG ARG B B 411 411 . 0.0570 0.0472 0.0634 0.0090  -0.0173 -
0.0175 1 .
6444 NH1  NH1  . ARG ARG ARG B B 411 411 . 0.0398 0.0277 0.0293 -0.0059 -0.0076
0.0031  1 .
6445 NH2  NH2  . ARG ARG ARG B B 411 411 . 0.0263 0.0255 0.0254 0.0004  0.0004
0.0001  1 .
6446 C    C    . ARG ARG ARG B B 411 411 . 0.0287 0.0265 0.0273 -0.0020 -0.0026
0.0015  1 .
6447 O    O    . ARG ARG ARG B B 411 411 . 0.0583 0.0343 0.0476 -0.0031 -0.0057
0.0141  1 .
6448 N    N    . ILE ILE ILE B B 412 412 . 0.0256 0.0256 0.0264 -0.0003 -0.0005
0.0006  1 .
6449 CA   CA   . ILE ILE ILE B B 412 412 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6450 CB   CB   . ILE ILE ILE B B 412 412 . 0.0304 0.0257 0.0285 0.0015  -0.0040 -
0.0012 1 .
6451 CG1  CG1  . ILE ILE ILE B B 412 412 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6452 CD1  CD1  . ILE ILE ILE B B 412 412 . 0.1643 0.1768 0.1645 0.0078  0.0190
0.0180  1 .
6453 CG2  CG2  . ILE ILE ILE B B 412 412 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6454 C    C    . ILE ILE ILE B B 412 412 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6455 O    O    . ILE ILE ILE B B 412 412 . 0.0603 0.0434 0.0564 -0.0010 -0.0241
0.0169  1 .
6456 N    N    . GLU GLU GLU B B 413 413 . 0.0288 0.0255 0.0254 0.0009  0.0005
0.0001  1 .
6457 CA   CA   . GLU GLU GLU B B 413 413 . 0.0363 0.0304 0.0293 -0.0014 -0.0051
0.0035  1 .
6458 CB   CB   . GLU GLU GLU B B 413 413 . 0.0418 0.0297 0.0274 0.0078  0.0053
0.0020  1 .
6459 CG   CG   . GLU GLU GLU B B 413 413 . 0.1097 0.0683 0.0816 -0.0011 0.0114  -
0.0109 1 .
6460 CD   CD   . GLU GLU GLU B B 413 413 . 0.0849 0.0802 0.0836 -0.0026 -0.0026 -
0.0138 1 .
6461 OE1  OE1  . GLU GLU GLU B B 413 413 . 0.1168 0.1042 0.1239 -0.0139 0.0028
0.0021  1 .
6462 OE2  OE2  . GLU GLU GLU B B 413 413 . 0.0916 0.0705 0.0864 -0.0092 -0.0095
0.0181  1 .
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6463 C    C    . GLU GLU GLU B B 413 413 . 0.0553 0.0287 0.0311 -0.0098 -0.0058
0.0008  1 .
6464 O    O    . GLU GLU GLU B B 413 413 . 0.0627 0.0379 0.0304 -0.0217 -0.0138
0.0080  1 .
6465 N    N    . GLU GLU GLU B B 414 414 . 0.0456 0.0272 0.0292 -0.0023 -0.0039
0.0027  1 .
6466 CA   CA   . GLU GLU GLU B B 414 414 . 0.0697 0.0466 0.0712 -0.0138 0.0081
0.0030  1 .
6467 CB   CB   . GLU GLU GLU B B 414 414 . 0.0818 0.0600 0.0605 -0.0115 0.0042
0.0154  1 .
6468 CG   CG   . GLU GLU GLU B B 414 414 . 0.1589 0.1027 0.1204 -0.0193 0.0052
0.0095  1 .
6469 CD   CD   . GLU GLU GLU B B 414 414 . 0.1838 0.1684 0.1670 0.0023  -0.0195
0.0026  1 .
6470 OE1  OE1  . GLU GLU GLU B B 414 414 . 0.1763 0.1809 0.1658 -0.0049 -0.0033 -
0.0288 1 .
6471 OE2  OE2  . GLU GLU GLU B B 414 414 . 0.1819 0.2171 0.1680 -0.0296 -0.0177 -
0.0072 1 .
6472 C    C    . GLU GLU GLU B B 414 414 . 0.0768 0.0684 0.0695 0.0041  -0.0088
0.0031  1 .
6473 O    O    . GLU GLU GLU B B 414 414 . 0.1226 0.0797 0.1178 -0.0156 0.0010  -
0.0070 1 .
6474 N    N    . GLU GLU GLU B B 415 415 . 0.1156 0.0803 0.0855 0.0013  -0.0009
0.0033  1 .
6475 CA   CA   . GLU GLU GLU B B 415 415 . 0.1319 0.1285 0.1218 0.0034  -0.0031
0.0019  1 .
6476 CB   CB   . GLU GLU GLU B B 415 415 . 0.1703 0.1641 0.1658 0.0085  0.0001  -
0.0034 1 .
6477 CG   CG   . GLU GLU GLU B B 415 415 . 0.2450 0.2852 0.2334 -0.0109 -0.0101 -
0.0081 1 .
6478 CD   CD   . GLU GLU GLU B B 415 415 . 0.4073 0.3771 0.4088 0.0309  0.0063  -
0.0130 1 .
6479 OE1  OE1  . GLU GLU GLU B B 415 415 . 0.4383 0.4425 0.4070 0.0229  -0.0160 -
0.0278 1 .
6480 OE2  OE2  . GLU GLU GLU B B 415 415 . 0.4412 0.4143 0.4633 0.0344  -0.0114
0.0301  1 .
6481 C    C    . GLU GLU GLU B B 415 415 . 0.1443 0.1439 0.1305 -0.0067 -0.0017
0.0075  1 .
6482 O    O    . GLU GLU GLU B B 415 415 . 0.1409 0.1430 0.1205 -0.0033 -0.0007
0.0230  1 .
6483 N    N    . LEU LEU LEU B B 416 416 . 0.1459 0.1320 0.1274 -0.0094 0.0071  -
0.0074 1 .
6484 CA   CA   . LEU LEU LEU B B 416 416 . 0.1416 0.1421 0.1230 -0.0012 -0.0055
0.0021  1 .
6485 CB   CB   . LEU LEU LEU B B 416 416 . 0.1753 0.1293 0.1204 0.0035  -0.0034
0.0036  1 .
6486 CG   CG   . LEU LEU LEU B B 416 416 . 0.1609 0.1180 0.1503 0.0058  -0.0093
0.0145  1 .
6487 CD1  CD1  . LEU LEU LEU B B 416 416 . 0.1202 0.1793 0.0888 -0.0046 -0.0286
0.0210  1 .
6488 CD2  CD2  . LEU LEU LEU B B 416 416 . 0.1688 0.1469 0.1642 -0.0136 0.0153  -
0.0091 1 .
6489 C    C    . LEU LEU LEU B B 416 416 . 0.1812 0.1691 0.1625 -0.0005 -0.0127 -
0.0125 1 .
6490 O    O    . LEU LEU LEU B B 416 416 . 0.1856 0.1895 0.1491 -0.0186 -0.0265 -
0.0002 1 .
6491 N    N    . GLY GLY GLY B B 417 417 . 0.2090 0.2033 0.1994 0.0069  -0.0127 -
0.0151 1 .
6492 CA   CA   . GLY GLY GLY B B 417 417 . 0.2685 0.2593 0.2721 0.0065  -0.0050 -
0.0092 1 .
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6493 C    C    . GLY GLY GLY B B 417 417 . 0.2990 0.3028 0.2912 0.0003  -0.0021 -
0.0014 1 .
6494 O    O    . GLY GLY GLY B B 417 417 . 0.2931 0.2828 0.2771 -0.0026 -0.0004
0.0098  1 .
6495 N    N    . ASP ASP ASP B B 418 418 . 0.3407 0.3298 0.3306 -0.0015 -0.0020 -
0.0062 1 .
6496 CA   CA   . ASP ASP ASP B B 418 418 . 0.3752 0.3703 0.3668 0.0002  -0.0024 -
0.0015 1 .
6497 CB   CB   . ASP ASP ASP B B 418 418 . 0.4013 0.3948 0.3936 -0.0077 -0.0112 -
0.0056 1 .
6498 CG   CG   . ASP ASP ASP B B 418 418 . 0.4621 0.4530 0.4549 0.0125  0.0032  -
0.0104 1 .
6499 OD1  OD1  . ASP ASP ASP B B 418 418 . 0.5307 0.5238 0.5209 0.0021  -0.0057 -
0.0381 1 .
6500 OD2  OD2  . ASP ASP ASP B B 418 418 . 0.5133 0.4978 0.5087 -0.0068 -0.0156 -
0.0166 1 .
6501 C    C    . ASP ASP ASP B B 418 418 . 0.3640 0.3547 0.3613 -0.0038 0.0020  -
0.0023 1 .
6502 O    O    . ASP ASP ASP B B 418 418 . 0.3609 0.3529 0.3563 -0.0068 0.0108  -
0.0065 1 .
6503 N    N    . GLU GLU GLU B B 419 419 . 0.3507 0.3408 0.3466 -0.0011 -0.0018 -
0.0021 1 .
6504 CA   CA   . GLU GLU GLU B B 419 419 . 0.3392 0.3352 0.3333 -0.0043 -0.0045
0.0009  1 .
6505 CB   CB   . GLU GLU GLU B B 419 419 . 0.3513 0.3573 0.3537 -0.0029 -0.0088
0.0010  1 .
6506 CG   CG   . GLU GLU GLU B B 419 419 . 0.4305 0.4066 0.4110 -0.0015 -0.0008 -
0.0021 1 .
6507 CD   CD   . GLU GLU GLU B B 419 419 . 0.4775 0.5198 0.5024 0.0164  0.0032  -
0.0023 1 .
6508 OE1  OE1  . GLU GLU GLU B B 419 419 . 0.4825 0.5247 0.5177 0.0180  0.0222  -
0.0068 1 .
6509 OE2  OE2  . GLU GLU GLU B B 419 419 . 0.5152 0.5724 0.5215 0.0114  -0.0161 -
0.0101 1 .
6510 C    C    . GLU GLU GLU B B 419 419 . 0.3046 0.3086 0.3067 0.0008  -0.0035
0.0012  1 .
6511 O    O    . GLU GLU GLU B B 419 419 . 0.3090 0.2963 0.2877 -0.0085 -0.0016
0.0042  1 .
6512 N    N    . ALA ALA ALA B B 420 420 . 0.2739 0.2682 0.2597 -0.0038 0.0009  -
0.0007 1 .
6513 CA   CA   . ALA ALA ALA B B 420 420 . 0.2485 0.2451 0.2373 0.0031  -0.0015
0.0034  1 .
6514 CB   CB   . ALA ALA ALA B B 420 420 . 0.2463 0.2525 0.2340 -0.0017 -0.0013 -
0.0008 1 .
6515 C    C    . ALA ALA ALA B B 420 420 . 0.2337 0.2243 0.2220 0.0049  -0.0017 -
0.0025 1 .
6516 O    O    . ALA ALA ALA B B 420 420 . 0.2564 0.2440 0.2459 0.0080  -0.0144 -
0.0033 1 .
6517 N    N    . ARG ARG ARG B B 421 421 . 0.2076 0.1953 0.1785 -0.0058 -0.0059
0.0037  1 .
6518 CA   CA   . ARG ARG ARG B B 421 421 . 0.1885 0.1767 0.1911 -0.0039 -0.0036 -
0.0079 1 .
6519 CB   CB   . ARG ARG ARG B B 421 421 . 0.2119 0.1960 0.2131 -0.0201 -0.0050 -
0.0040 1 .
6520 CG   CG   . ARG ARG ARG B B 421 421 . 0.2718 0.2709 0.2863 0.0005  0.0059  -
0.0031 1 .
6521 CD   CD   . ARG ARG ARG B B 421 421 . 0.4024 0.4020 0.3661 -0.0287 -0.0334 -
0.0104 1 .
6522 NE   NE   . ARG ARG ARG B B 421 421 . 0.4504 0.4946 0.4783 0.0089  0.0000  -
0.0088 1 .
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6523 CZ   CZ   . ARG ARG ARG B B 421 421 . 0.5048 0.5289 0.5230 -0.0088 0.0065  -
0.0002 1 .
6524 NH1  NH1  . ARG ARG ARG B B 421 421 . 0.5442 0.5440 0.5566 0.0145  -0.0077 -
0.0036 1 .
6525 NH2  NH2  . ARG ARG ARG B B 421 421 . 0.4868 0.5273 0.5189 0.0035  -0.0081 -
0.0058 1 .
6526 C    C    . ARG ARG ARG B B 421 421 . 0.1331 0.1328 0.1390 -0.0030 0.0043  -
0.0063 1 .
6527 O    O    . ARG ARG ARG B B 421 421 . 0.1802 0.1685 0.1902 0.0114  0.0000  -
0.0115 1 .
6528 N    N    . PHE PHE PHE B B 422 422 . 0.1118 0.0767 0.0905 -0.0057 -0.0011 -
0.0024 1 .
6529 CA   CA   . PHE PHE PHE B B 422 422 . 0.0645 0.0608 0.0432 -0.0003 0.0073
0.0015  1 .
6530 CB   CB   . PHE PHE PHE B B 422 422 . 0.0706 0.0615 0.0420 0.0103  -0.0050 -
0.0141 1 .
6531 CG   CG   . PHE PHE PHE B B 422 422 . 0.0502 0.0368 0.0399 -0.0043 0.0009
0.0123  1 .
6532 CD1  CD1  . PHE PHE PHE B B 422 422 . 0.0481 0.0347 0.0355 0.0009  -0.0129
0.0047  1 .
6533 CE1  CE1  . PHE PHE PHE B B 422 422 . 0.0283 0.0423 0.0329 -0.0056 0.0031  -
0.0006 1 .
6534 CZ   CZ   . PHE PHE PHE B B 422 422 . 0.0326 0.0253 0.0280 0.0005  0.0044
0.0003  1 .
6535 CE2  CE2  . PHE PHE PHE B B 422 422 . 0.0422 0.0414 0.0253 -0.0165 -0.0002
0.0002  1 .
6536 CD2  CD2  . PHE PHE PHE B B 422 422 . 0.0321 0.0556 0.0424 -0.0057 0.0038  -
0.0146 1 .
6537 C    C    . PHE PHE PHE B B 422 422 . 0.0690 0.0370 0.0496 0.0068  0.0043  -
0.0014 1 .
6538 O    O    . PHE PHE PHE B B 422 422 . 0.0792 0.0783 0.0585 0.0034  0.0060
0.0021  1 .
6539 N    N    . ALA ALA ALA B B 423 423 . 0.0726 0.0327 0.0323 -0.0066 0.0077
0.0050  1 .
6540 CA   CA   . ALA ALA ALA B B 423 423 . 0.0455 0.0265 0.0451 -0.0028 -0.0073
0.0047  1 .
6541 CB   CB   . ALA ALA ALA B B 423 423 . 0.0441 0.0254 0.0256 -0.0015 0.0026  -
0.0002 1 .
6542 C    C    . ALA ALA ALA B B 423 423 . 0.0607 0.0307 0.0371 0.0021  -0.0056 -
0.0079 1 .
6543 O    O    . ALA ALA ALA B B 423 423 . 0.1084 0.0694 0.0649 0.0027  0.0065
0.0065  1 .
6544 N    N    . GLY GLY GLY B B 424 424 . 0.0475 0.0327 0.0570 0.0005  0.0009  -
0.0014 1 .
6545 CA   CA   . GLY GLY GLY B B 424 424 . 0.0683 0.0418 0.0507 -0.0077 0.0033  -
0.0044 1 .
6546 C    C    . GLY GLY GLY B B 424 424 . 0.0896 0.0749 0.0546 0.0050  0.0030  -
0.0002 1 .
6547 O    O    . GLY GLY GLY B B 424 424 . 0.0720 0.0500 0.0546 -0.0035 -0.0050
0.0031  1 .
6548 N    N    . HIS HIS HIS B B 425 425 . 0.1221 0.1042 0.0921 -0.0011 0.0143  -
0.0027 1 .
6549 CA   CA   . HIS HIS HIS B B 425 425 . 0.1412 0.1169 0.1053 -0.0034 0.0134
0.0000  1 .
6550 CB   CB   . HIS HIS HIS B B 425 425 . 0.1597 0.1428 0.1135 0.0068  0.0254  -
0.0047 1 .
6551 CG   CG   . HIS HIS HIS B B 425 425 . 0.2117 0.2163 0.1537 0.0076  0.0187
0.0074  1 .
6552 ND1  ND1  . HIS HIS HIS B B 425 425 . 0.2794 0.2630 0.1992 0.0086  0.0365
0.0033  1 .
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6553 CE1  CE1  . HIS HIS HIS B B 425 425 . 0.2786 0.2958 0.2485 -0.0128 0.0294
0.0031  1 .
6554 NE2  NE2  . HIS HIS HIS B B 425 425 . 0.3003 0.2689 0.2366 0.0154  0.0206  -
0.0321 1 .
6555 CD2  CD2  . HIS HIS HIS B B 425 425 . 0.2798 0.2049 0.2057 -0.0068 -0.0096 -
0.0211 1 .
6556 C    C    . HIS HIS HIS B B 425 425 . 0.1323 0.1213 0.1098 -0.0045 0.0136  -
0.0142 1 .
6557 O    O    . HIS HIS HIS B B 425 425 . 0.1625 0.1227 0.1215 -0.0067 0.0135
0.0074  1 .
6558 N    N    . ASN ASN ASN B B 426 426 . 0.1276 0.1144 0.1030 -0.0070 0.0087  -
0.0372 1 .
6559 CA   CA   . ASN ASN ASN B B 426 426 . 0.1369 0.1303 0.1138 -0.0006 0.0002  -
0.0070 1 .
6560 CB   CB   . ASN ASN ASN B B 426 426 . 0.1867 0.1618 0.1713 -0.0101 -0.0031 -
0.0082 1 .
6561 CG   CG   . ASN ASN ASN B B 426 426 . 0.2611 0.2563 0.2334 0.0146  0.0089  -
0.0161 1 .
6562 OD1  OD1  . ASN ASN ASN B B 426 426 . 0.3283 0.3663 0.3008 0.0067  -0.0264 -
0.0089 1 .
6563 ND2  ND2  . ASN ASN ASN B B 426 426 . 0.3080 0.3321 0.3341 0.0173  -0.0075 -
0.0290 1 .
6564 C    C    . ASN ASN ASN B B 426 426 . 0.0860 0.0883 0.0909 0.0042  0.0022  -
0.0069 1 .
6565 O    O    . ASN ASN ASN B B 426 426 . 0.0780 0.0657 0.0880 -0.0050 -0.0028
0.0103  1 .
6566 N    N    . PHE PHE PHE B B 427 427 . 0.0610 0.0486 0.0508 0.0048  -0.0009
0.0050  1 .
6567 CA   CA   . PHE PHE PHE B B 427 427 . 0.0424 0.0354 0.0263 0.0128  0.0010
0.0014  1 .
6568 CB   CB   . PHE PHE PHE B B 427 427 . 0.0475 0.0302 0.0462 -0.0058 0.0150  -
0.0100 1 .
6569 CG   CG   . PHE PHE PHE B B 427 427 . 0.0452 0.0311 0.0257 0.0099  -0.0011
0.0000  1 .
6570 CD1  CD1  . PHE PHE PHE B B 427 427 . 0.0574 0.0637 0.0896 0.0116  -0.0013
0.0170  1 .
6571 CE1  CE1  . PHE PHE PHE B B 427 427 . 0.1154 0.0978 0.1256 -0.0001 -0.0072
0.0167  1 .
6572 CZ   CZ   . PHE PHE PHE B B 427 427 . 0.1082 0.0852 0.1155 0.0069  0.0024  -
0.0104 1 .
6573 CE2  CE2  . PHE PHE PHE B B 427 427 . 0.0574 0.0704 0.0562 0.0032  -0.0088
0.0348  1 .
6574 CD2  CD2  . PHE PHE PHE B B 427 427 . 0.0472 0.0554 0.0538 -0.0099 0.0070  -
0.0018 1 .
6575 C    C    . PHE PHE PHE B B 427 427 . 0.0551 0.0407 0.0396 0.0053  0.0090
0.0021  1 .
6576 O    O    . PHE PHE PHE B B 427 427 . 0.0745 0.0360 0.0686 0.0108  -0.0026
0.0086  1 .
6577 N    N    . ARG ARG ARG B B 428 428 . 0.0702 0.0568 0.0487 0.0030  -0.0055
0.0090  1 .
6578 CA   CA   . ARG ARG ARG B B 428 428 . 0.0874 0.0608 0.0669 0.0055  0.0049
0.0067  1 .
6579 CB   CB   . ARG ARG ARG B B 428 428 . 0.0714 0.0760 0.0874 -0.0048 -0.0083
0.0020  1 .
6580 CG   CG   . ARG ARG ARG B B 428 428 . 0.0729 0.0931 0.0660 -0.0073 0.0052
0.0023  1 .
6581 CD   CD   . ARG ARG ARG B B 428 428 . 0.0997 0.0570 0.0807 -0.0145 -0.0107 -
0.0028 1 .
6582 NE   NE   . ARG ARG ARG B B 428 428 . 0.0686 0.0592 0.0706 -0.0028 -0.0047 -
0.0020 1 .
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6583 CZ   CZ   . ARG ARG ARG B B 428 428 . 0.0867 0.0656 0.0573 0.0120  -0.0035 -
0.0225 1 .
6584 NH1  NH1  . ARG ARG ARG B B 428 428 . 0.0409 0.0458 0.0253 -0.0179 0.0004  -
0.0004 1 .
6585 NH2  NH2  . ARG ARG ARG B B 428 428 . 0.1218 0.0442 0.0642 0.0062  -0.0244 -
0.0262 1 .
6586 C    C    . ARG ARG ARG B B 428 428 . 0.1077 0.0796 0.0766 0.0146  -0.0058 -
0.0025 1 .
6587 O    O    . ARG ARG ARG B B 428 428 . 0.1353 0.1383 0.1472 0.0163  -0.0071 -
0.0108 1 .
6588 N    N    . ASN ASN ASN B B 429 429 . 0.1134 0.0899 0.0963 -0.0076 -0.0139
0.0226  1 .
6589 CA   CA   . ASN ASN ASN B B 429 429 . 0.1171 0.1160 0.1240 0.0018  -0.0008
0.0010  1 .
6590 CB   CB   . ASN ASN ASN B B 429 429 . 0.1591 0.1372 0.1418 0.0054  -0.0042
0.0098  1 .
6591 CG   CG   . ASN ASN ASN B B 429 429 . 0.1420 0.1613 0.1770 -0.0122 0.0174
0.0045  1 .
6592 OD1  OD1  . ASN ASN ASN B B 429 429 . 0.2359 0.2473 0.2155 -0.0212 0.0162  -
0.0120 1 .
6593 ND2  ND2  . ASN ASN ASN B B 429 429 . 0.2114 0.1866 0.1518 -0.0064 -0.0196
0.0071  1 .
6594 C    C    . ASN ASN ASN B B 429 429 . 0.1216 0.1088 0.1075 0.0011  0.0000
0.0077  1 .
6595 O    O    . ASN ASN ASN B B 429 429 . 0.1313 0.1286 0.0938 -0.0158 -0.0141 -
0.0050 1 .
6596 N    N    . PRO PRO PRO B B 430 430 . 0.1162 0.1208 0.1102 -0.0022 0.0011  -
0.0057 1 .
6597 CA   CA   . PRO PRO PRO B B 430 430 . 0.1299 0.1289 0.1244 0.0039  -0.0017
0.0063  1 .
6598 CB   CB   . PRO PRO PRO B B 430 430 . 0.1165 0.1243 0.1053 -0.0127 0.0113  -
0.0122 1 .
6599 CG   CG   . PRO PRO PRO B B 430 430 . 0.1321 0.1402 0.1234 0.0051  0.0040
0.0049  1 .
6600 CD   CD   . PRO PRO PRO B B 430 430 . 0.1367 0.1271 0.1259 -0.0061 0.0031
0.0050  1 .
6601 C    C    . PRO PRO PRO B B 430 430 . 0.1627 0.1585 0.1610 -0.0098 0.0046
0.0014  1 .
6602 O    O    . PRO PRO PRO B B 430 430 . 0.1841 0.1565 0.1480 -0.0073 0.0155  -
0.0003 1 .
6603 N    N    . SER SER SER B B 431 431 . 0.2010 0.2160 0.1990 -0.0060 0.0030  -
0.0068 1 .
6604 CA   CA   . SER SER SER B B 431 431 . 0.2499 0.2643 0.2603 -0.0080 -0.0012 -
0.0091 1 .
6605 CB   CB   . SER SER SER B B 431 431 . 0.2477 0.2650 0.2511 -0.0017 0.0012  -
0.0020 1 .
6606 OG   OG   . SER SER SER B B 431 431 . 0.2369 0.2883 0.2697 -0.0485 -0.0273
0.0053  1 .
6607 C    C    . SER SER SER B B 431 431 . 0.2913 0.2947 0.2856 -0.0052 -0.0027 -
0.0131 1 .
6608 O    O    . SER SER SER B B 431 431 . 0.3015 0.3074 0.3053 -0.0191 -0.0097 -
0.0183 1 .
6609 N    N    . VAL VAL VAL B B 432 432 . 0.2917 0.3014 0.2970 -0.0034 0.0046  -
0.0045 1 .
6610 CA   CA   . VAL VAL VAL B B 432 432 . 0.3320 0.3279 0.3269 0.0000  0.0010  -
0.0075 1 .
6611 CB   CB   . VAL VAL VAL B B 432 432 . 0.3264 0.3279 0.3224 0.0000  0.0044  -
0.0093 1 .
6612 CG1  CG1  . VAL VAL VAL B B 432 432 . 0.3428 0.3545 0.3512 0.0128  0.0145  -
0.0048 1 .
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6613 CG2  CG2  . VAL VAL VAL B B 432 432 . 0.3620 0.3203 0.3389 0.0026  -0.0188
0.0006  1 .
6614 C    C    . VAL VAL VAL B B 432 432 . 0.3459 0.3329 0.3381 0.0004  0.0051  -
0.0069 1 .
6615 O    O    . VAL VAL VAL B B 432 432 . 0.3699 0.3699 0.3592 -0.0023 0.0104  -
0.0187 1 .
6616 MG+2 MG+2 . MG2 MG2 MG2 B B 599 599 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6617 MG+2 MG+2 . MG2 MG2 MG2 B B 600 600 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6618 O4P  O4P  . 2PG 2PG 2PG B B 601 601 . 0.0270 0.0267 0.0255 0.0015  0.0005
0.0005  1 .
6619 P    P    . 2PG 2PG 2PG B B 601 601 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6620 O2P  O2P  . 2PG 2PG 2PG B B 601 601 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6621 O3P  O3P  . 2PG 2PG 2PG B B 601 601 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6622 O1P  O1P  . 2PG 2PG 2PG B B 601 601 . 0.0622 0.0262 0.0342 0.0059  0.0180
0.0029  1 .
6623 C2   C2   . 2PG 2PG 2PG B B 601 601 . 0.1439 0.1326 0.0993 -0.0040 -0.0317 -
0.0001 1 .
6624 C1   C1   . 2PG 2PG 2PG B B 601 601 . 0.0668 0.0595 0.0874 -0.0141 0.0058
0.0095  1 .
6625 O2   O2   . 2PG 2PG 2PG B B 601 601 . 0.0477 0.0413 0.0393 0.0123  -0.0009
0.0107  1 .
6626 O1   O1   . 2PG 2PG 2PG B B 601 601 . 0.0533 0.0443 0.0465 0.0154  0.0001  -
0.0148 1 .
6627 C3   C3   . 2PG 2PG 2PG B B 601 601 . 0.2220 0.1514 0.1223 0.0236  -0.0150 -
0.0259 1 .
6628 O3   O3   . 2PG 2PG 2PG B B 601 601 . 0.3082 0.2671 0.3602 -0.0163 0.0457
0.0103  1 .
6629 O    O    . HOH HOH HOH B B 800 800 . 0.0316 0.0266 0.0283 0.0009  0.0000
0.0018  1 .
6630 O    O    . HOH HOH HOH B B 801 801 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6631 O    O    . HOH HOH HOH B B 802 802 . 0.0302 0.0259 0.0371 0.0017  0.0076
0.0027  1 .
6632 N    N    . GLY GLY GLY B B 155 155 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6633 CA   CA   . GLY GLY GLY B B 155 155 . 0.0269 0.0290 0.0254 0.0024  -0.0003 -
0.0005 1 .
6634 C    C    . GLY GLY GLY B B 155 155 . 0.0333 0.0446 0.0301 0.0093  -0.0056 -
0.0041 1 .
6635 O    O    . GLY GLY GLY B B 155 155 . 0.0310 0.0349 0.0413 0.0036  -0.0031 -
0.0121 1 .
6636 N    N    . SER SER SER B B 156 156 . 0.0341 0.0479 0.0428 0.0123  -0.0009 -
0.0109 1 .
6637 CA   CA   . SER SER SER B B 156 156 . 0.0376 0.0315 0.0255 -0.0015 0.0005
0.0010  1 .
6638 CB   CB   . SER SER SER B B 156 156 . 0.0267 0.0258 0.0253 0.0008  0.0000
0.0000  1 .
6639 OG   OG   . SER SER SER B B 156 156 . 0.1015 0.0726 0.0768 -0.0039 0.0119
0.0477  1 .
6640 C    C    . SER SER SER B B 156 156 . 0.0271 0.0361 0.0257 -0.0037 0.0001
0.0009  1 .
6641 O    O    . SER SER SER B B 156 156 . 0.0372 0.0261 0.0303 0.0030  0.0077
0.0020  1 .
6642 N    N    . HIS HIS HIS B B 157 157 . 0.0308 0.0283 0.0270 -0.0005 0.0030  -
0.0007 1 .
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6643 CA   CA   . HIS HIS HIS B B 157 157 . 0.0435 0.0394 0.0334 -0.0023 -0.0017
0.0013  1 .
6644 CB   CB   . HIS HIS HIS B B 157 157 . 0.0427 0.0555 0.0501 0.0069  0.0110
0.0012  1 .
6645 CG   CG   . HIS HIS HIS B B 157 157 . 0.0362 0.0288 0.0478 -0.0033 -0.0090
0.0089  1 .
6646 ND1  ND1  . HIS HIS HIS B B 157 157 . 0.0521 0.0673 0.0480 0.0176  0.0219
0.0078  1 .
6647 CE1  CE1  . HIS HIS HIS B B 157 157 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6648 NE2  NE2  . HIS HIS HIS B B 157 157 . 0.0408 0.0522 0.0477 0.0184  0.0029  -
0.0069 1 .
6649 CD2  CD2  . HIS HIS HIS B B 157 157 . 0.0480 0.0606 0.0275 0.0110  0.0023  -
0.0066 1 .
6650 C    C    . HIS HIS HIS B B 157 157 . 0.0333 0.0391 0.0353 0.0024  0.0004  -
0.0029 1 .
6651 O    O    . HIS HIS HIS B B 157 157 . 0.0360 0.0400 0.0298 0.0000  -0.0012 -
0.0061 1 .
6652 N    N    . ALA ALA ALA B B 158 158 . 0.0484 0.0305 0.0257 -0.0002 -0.0016 -
0.0011 1 .
6653 CA   CA   . ALA ALA ALA B B 158 158 . 0.0295 0.0277 0.0256 0.0031  0.0012
0.0009  1 .
6654 CB   CB   . ALA ALA ALA B B 158 158 . 0.0523 0.0280 0.0285 0.0003  0.0048  -
0.0024 1 .
6655 C    C    . ALA ALA ALA B B 158 158 . 0.0441 0.0285 0.0286 0.0052  0.0058
0.0000  1 .
6656 O    O    . ALA ALA ALA B B 158 158 . 0.0395 0.0382 0.0281 0.0001  -0.0025 -
0.0011 1 .
6657 N    N    . GLY GLY GLY B B 159 159 . 0.0294 0.0267 0.0255 0.0024  0.0009
0.0005  1 .
6658 CA   CA   . GLY GLY GLY B B 159 159 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6659 C    C    . GLY GLY GLY B B 159 159 . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6660 O    O    . GLY GLY GLY B B 159 159 . 0.0256 0.0258 0.0253 -0.0004 0.0000
0.0000  1 .
6661 O    O    . HOH HOH HOH S . 2   2   . 0.0298 0.0257 0.0254 0.0014  0.0007
0.0002  1 .
6662 O    O    . HOH HOH HOH S . 3   3   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6663 O    O    . HOH HOH HOH S . 4   4   . 0.0379 0.0319 0.0411 0.0049  0.0071  -
0.0046 1 .
6664 O    O    . HOH HOH HOH S . 5   5   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6665 O    O    . HOH HOH HOH S . 6   6   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6666 O    O    . HOH HOH HOH S . 7   7   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6667 O    O    . HOH HOH HOH S . 8   8   . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6668 O    O    . HOH HOH HOH S . 9   9   . 0.0291 0.0311 0.0383 -0.0006 -0.0064 -
0.0024 1 .
6669 O    O    . HOH HOH HOH S . 10  10  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6670 O    O    . HOH HOH HOH S . 11  11  . 0.0481 0.0469 0.0433 0.0170  0.0001  -
0.0125 1 .
6671 O    O    . HOH HOH HOH S . 12  12  . 0.0418 0.0269 0.0306 -0.0025 -0.0036 -
0.0017 1 .
6672 O    O    . HOH HOH HOH S . 13  13  . 0.0520 0.0277 0.0309 0.0080  -0.0122 -
0.0037 1 .
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6673 O    O    . HOH HOH HOH S . 14  14  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6674 O    O    . HOH HOH HOH S . 15  15  . 0.0276 0.0266 0.0253 0.0017  -0.0001 -
0.0001 1 .
6675 O    O    . HOH HOH HOH S . 16  16  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6676 O    O    . HOH HOH HOH S . 17  17  . 0.0450 0.0253 0.0263 0.0007  0.0045
0.0001  1 .
6677 O    O    . HOH HOH HOH S . 18  18  . 0.0345 0.0339 0.0346 0.0004  0.0006
0.0089  1 .
6678 O    O    . HOH HOH HOH S . 19  19  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6679 O    O    . HOH HOH HOH S . 20  20  . 0.0257 0.0255 0.0267 -0.0002 -0.0007
0.0005  1 .
6680 O    O    . HOH HOH HOH S . 21  21  . 0.0264 0.0281 0.0330 0.0017  -0.0029 -
0.0046 1 .
6681 O    O    . HOH HOH HOH S . 22  22  . 0.0570 0.0480 0.0470 0.0055  0.0029  -
0.0072 1 .
6682 O    O    . HOH HOH HOH S . 23  23  . 0.0421 0.0398 0.0534 0.0112  0.0013  -
0.0130 1 .
6683 O    O    . HOH HOH HOH S . 24  24  . 0.0546 0.0408 0.0554 0.0151  0.0046
0.0033  1 .
6684 O    O    . HOH HOH HOH S . 25  25  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6685 O    O    . HOH HOH HOH S . 26  26  . 0.0714 0.0691 0.0834 -0.0187 -0.0001 -
0.0159 1 .
6686 O    O    . HOH HOH HOH S . 27  27  . 0.0414 0.0792 0.0688 0.0132  0.0236
0.0100  1 .
6687 O    O    . HOH HOH HOH S . 28  28  . 0.0656 0.0435 0.0458 -0.0004 0.0036  -
0.0192 1 .
6688 O    O    . HOH HOH HOH S . 29  29  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6689 O    O    . HOH HOH HOH S . 30  30  . 0.0474 0.0361 0.0521 -0.0044 -0.0120
0.0000  1 .
6690 O    O    . HOH HOH HOH S . 31  31  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6691 O    O    . HOH HOH HOH S . 32  32  . 0.0890 0.0259 0.0347 0.0059  0.0204
0.0023  1 .
6692 O    O    . HOH HOH HOH S . 33  33  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6693 O    O    . HOH HOH HOH S . 34  34  . 0.0884 0.1119 0.1211 -0.0019 -0.0448 -
0.0006 1 .
6694 O    O    . HOH HOH HOH S . 35  35  . 0.0332 0.0424 0.0338 0.0009  0.0006
0.0120  1 .
6695 O    O    . HOH HOH HOH S . 36  36  . 0.0381 0.0327 0.0376 -0.0019 -0.0013
0.0095  1 .
6696 O    O    . HOH HOH HOH S . 37  37  . 0.0865 0.0446 0.0570 0.0024  0.0030  -
0.0108 1 .
6697 O    O    . HOH HOH HOH S . 38  38  . 0.0760 0.0596 0.0584 0.0238  -0.0040 -
0.0028 1 .
6698 O    O    . HOH HOH HOH S . 39  39  . 0.0479 0.0631 0.0506 0.0129  0.0186  -
0.0067 1 .
6699 O    O    . HOH HOH HOH S . 40  40  . 0.0272 0.0432 0.0559 0.0005  -0.0034 -
0.0082 1 .
6700 O    O    . HOH HOH HOH S . 41  41  . 0.0416 0.0305 0.0439 0.0010  -0.0042 -
0.0072 1 .
6701 O    O    . HOH HOH HOH S . 42  42  . 0.1586 0.2018 0.1807 -0.0002 0.0501
0.0616  1 .
6702 O    O    . HOH HOH HOH S . 43  43  . 0.0268 0.0257 0.0256 0.0007  -0.0006 -
0.0003 1 .
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6703 O    O    . HOH HOH HOH S . 44  44  . 0.0413 0.0437 0.0367 -0.0054 -0.0019 -
0.0128 1 .
6704 O    O    . HOH HOH HOH S . 45  45  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6705 O    O    . HOH HOH HOH S . 46  46  . 0.0746 0.0990 0.0722 -0.0061 -0.0041 -
0.0141 1 .
6706 O    O    . HOH HOH HOH S . 47  47  . 0.0466 0.0316 0.0460 -0.0054 0.0011
0.0097  1 .
6707 O    O    . HOH HOH HOH S . 48  48  . 0.1042 0.1330 0.1228 0.0049  0.0189
0.0287  1 .
6708 O    O    . HOH HOH HOH S . 49  49  . 0.0737 0.0649 0.0549 0.0160  0.0118
0.0083  1 .
6709 O    O    . HOH HOH HOH S . 50  50  . 0.0724 0.0432 0.0548 0.0289  0.0074
0.0067  1 .
6710 O    O    . HOH HOH HOH S . 51  51  . 0.0253 0.0253 0.0253 0.0000  0.0000
0.0000  1 .
6711 O    O    . HOH HOH HOH S . 52  52  . 0.0392 0.0504 0.0520 0.0176  -0.0033 -
0.0125 1 .
6712 O    O    . HOH HOH HOH S . 53  53  . 0.1475 0.1512 0.1580 0.0102  -0.0075
0.0204  1 .
6713 O    O    . HOH HOH HOH S . 54  54  . 0.0274 0.0333 0.0317 0.0040  -0.0036 -
0.0071 1 .
6714 O    O    . HOH HOH HOH S . 55  55  . 0.0387 0.0528 0.0401 0.0024  0.0030
0.0178  1 .
6715 O    O    . HOH HOH HOH S . 56  56  . 0.0918 0.0893 0.0831 -0.0123 0.0103  -
0.0110 1 .
6716 O    O    . HOH HOH HOH S . 57  57  . 0.0313 0.0262 0.0296 -0.0008 0.0027  -
0.0019 1 .
6717 O    O    . HOH HOH HOH S . 58  58  . 0.0742 0.0318 0.0626 0.0054  0.0164
0.0154  1 .
6718 O    O    . HOH HOH HOH S . 60  60  . 0.0990 0.0845 0.0600 0.0119  0.0115  -
0.0222 1 .
6719 O    O    . HOH HOH HOH S . 61  61  . 0.0525 0.0270 0.0276 0.0025  -0.0043 -
0.0019 1 .
6720 O    O    . HOH HOH HOH S . 62  62  . 0.0629 0.0477 0.0301 0.0147  -0.0078 -
0.0103 1 .
6721 O    O    . HOH HOH HOH S . 63  63  . 0.0753 0.0563 0.0596 0.0119  -0.0067 -
0.0117 1 .
6722 O    O    . HOH HOH HOH S . 64  64  . 0.0479 0.0260 0.0301 0.0041  0.0104
0.0018  1 .
6723 O    O    . HOH HOH HOH S . 65  65  . 0.0300 0.0325 0.0413 0.0011  -0.0034 -
0.0104 1 .
6724 O    O    . HOH HOH HOH S . 66  66  . 0.0881 0.0561 0.0529 0.0122  0.0147
0.0171  1 .
6725 O    O    . HOH HOH HOH S . 67  67  . 0.0744 0.0496 0.0475 -0.0111 0.0036
0.0086  1 .
6726 O    O    . HOH HOH HOH S . 68  68  . 0.0344 0.0308 0.0303 0.0070  0.0067
0.0052  1 .
6727 O    O    . HOH HOH HOH S . 70  70  . 0.0321 0.0333 0.0266 0.0073  -0.0029 -
0.0032 1 .
6728 O    O    . HOH HOH HOH S . 71  71  . 0.0724 0.0403 0.0831 0.0260  0.0068  -
0.0016 1 .
6729 O    O    . HOH HOH HOH S . 72  72  . 0.0612 0.0303 0.0472 -0.0099 0.0017  -
0.0075 1 .
6730 O    O    . HOH HOH HOH S . 73  73  . 0.1854 0.2036 0.1460 -0.0321 -0.0027
0.0378  1 .
6731 O    O    . HOH HOH HOH S . 74  74  . 0.0627 0.0599 0.0473 -0.0149 -0.0049 -
0.0227 1 .
6732 O    O    . HOH HOH HOH S . 75  75  . 0.0520 0.0324 0.0362 0.0137  0.0170
0.0087  1 .
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6733 O    O    . HOH HOH HOH S . 76  76  . 0.0559 0.0673 0.0385 0.0061  -0.0001 -
0.0110 1 .
6734 O    O    . HOH HOH HOH S . 77  77  . 0.0494 0.0493 0.0322 -0.0077 0.0059  -
0.0096 1 .
6735 O    O    . HOH HOH HOH S . 78  78  . 0.1570 0.1425 0.1339 -0.0119 -0.0387 -
0.0295 1 .
6736 O    O    . HOH HOH HOH S . 79  79  . 0.1030 0.1122 0.0641 0.0018  -0.0012 -
0.0111 1 .
6737 O    O    . HOH HOH HOH S . 80  80  . 0.0416 0.0317 0.0481 0.0076  -0.0026 -
0.0092 1 .
6738 O    O    . HOH HOH HOH S . 81  81  . 0.0749 0.0454 0.0411 -0.0116 0.0014  -
0.0069 1 .
6739 O    O    . HOH HOH HOH S . 82  82  . 0.0719 0.0529 0.0540 0.0044  0.0154  -
0.0167 1 .
6740 O    O    . HOH HOH HOH S . 83  83  . 0.0451 0.0337 0.0303 -0.0092 0.0010
0.0039  1 .
6741 O    O    . HOH HOH HOH S . 84  84  . 0.1814 0.1653 0.1821 0.0321  0.0290  -
0.0694 1 .
6742 O    O    . HOH HOH HOH S . 85  85  . 0.0399 0.0293 0.0422 -0.0037 0.0006
0.0070  1 .
6743 O    O    . HOH HOH HOH S . 86  86  . 0.1016 0.0742 0.0603 0.0005  0.0102
0.0211  1 .
6744 O    O    . HOH HOH HOH S . 87  87  . 0.0591 0.0736 0.0495 0.0216  0.0019
0.0043  1 .
6745 O    O    . HOH HOH HOH S . 88  88  . 0.1123 0.0604 0.0801 -0.0030 -0.0038 -
0.0280 1 .
6746 O    O    . HOH HOH HOH S . 89  89  . 0.0451 0.0414 0.0387 0.0175  0.0020  -
0.0009 1 .
6747 O    O    . HOH HOH HOH S . 90  90  . 0.1718 0.1130 0.1375 -0.0038 -0.0021
0.0051  1 .
6748 O    O    . HOH HOH HOH S . 91  91  . 0.2663 0.2417 0.1224 0.0267  -0.0389
0.0008  1 .
6749 O    O    . HOH HOH HOH S . 92  92  . 0.0459 0.0365 0.0280 0.0008  0.0051  -
0.0009 1 .
6750 O    O    . HOH HOH HOH S . 93  93  . 0.1524 0.1378 0.1695 0.0346  0.0819  -
0.0177 1 .
6751 O    O    . HOH HOH HOH S . 94  94  . 0.0726 0.0266 0.0502 0.0039  -0.0097 -
0.0055 1 .
6752 O    O    . HOH HOH HOH S . 95  95  . 0.0592 0.0677 0.0579 -0.0076 0.0021  -
0.0001 1 .
6753 O    O    . HOH HOH HOH S . 96  96  . 0.0392 0.0482 0.0472 0.0125  0.0099  -
0.0041 1 .
6754 O    O    . HOH HOH HOH S . 97  97  . 4.5175 1.8034 2.9519 1.2603  -0.0329
1.8859  1 .
6755 O    O    . HOH HOH HOH S . 98  98  . 0.0784 0.0571 0.0743 -0.0184 -0.0154
0.0059  1 .
6756 O    O    . HOH HOH HOH S . 99  99  . 0.0455 0.0760 0.0446 -0.0112 0.0128
0.0035  1 .
6757 O    O    . HOH HOH HOH S . 100 100 . 0.1073 0.0923 0.0956 -0.0134 0.0266
0.0153  1 .
6758 O    O    . HOH HOH HOH S . 101 101 . 0.0802 0.0548 0.0700 -0.0143 -0.0014 -
0.0041 1 .
6759 O    O    . HOH HOH HOH S . 102 102 . 0.1089 0.1331 0.0983 -0.0007 -0.0471 -
0.0063 1 .
6760 O    O    . HOH HOH HOH S . 103 103 . 0.0480 0.0289 0.0590 -0.0004 -0.0078
0.0060  1 .
6761 O    O    . HOH HOH HOH S . 104 104 . 0.0485 0.0800 0.0772 0.0059  -0.0104
0.0074  1 .
6762 O    O    . HOH HOH HOH S . 105 105 . 0.1877 0.1391 0.1770 0.0148  -0.0404
0.0268  1 .
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6763 O    O    . HOH HOH HOH S . 106 106 . 0.1171 0.1277 0.1135 -0.0325 0.0183  -
0.0046 1 .
6764 O    O    . HOH HOH HOH S . 107 107 . 0.0612 0.0459 0.0612 -0.0039 0.0023
0.0266  1 .
6765 O    O    . HOH HOH HOH S . 108 108 . 0.1375 0.1454 0.1086 -0.0116 0.0417
0.0061  1 .
6766 O    O    . HOH HOH HOH S . 109 109 . 0.1305 0.1645 0.1347 0.0041  0.0044
0.0253  1 .
6767 O    O    . HOH HOH HOH S . 110 110 . 0.0990 0.1352 0.1363 -0.0019 -0.0107
0.0105  1 .
6768 O    O    . HOH HOH HOH S . 111 111 . 0.1032 0.1172 0.1490 0.0004  0.0288  -
0.0275 1 .
6769 O    O    . HOH HOH HOH S . 112 112 . 2.0985 1.2417 1.2760 -0.8025 -0.7635
1.2326  1 .
6770 O    O    . HOH HOH HOH S . 114 114 . 0.1819 0.2236 0.2588 0.0308  -0.0685 -
0.0043 1 .
6771 O    O    . HOH HOH HOH S . 115 115 . 0.1033 0.0913 0.1098 -0.0002 -0.0366
0.0045  1 .
6772 O    O    . HOH HOH HOH S . 116 116 . 0.0481 0.0521 0.0856 0.0069  -0.0052 -
0.0093 1 .
6773 O    O    . HOH HOH HOH S . 117 117 . 0.1391 0.1320 0.1125 -0.0052 0.0156
0.0013  1 .
6774 O    O    . HOH HOH HOH S . 118 118 . 0.1241 0.0913 0.0697 -0.0054 0.0111
0.0209  1 .
6775 O    O    . HOH HOH HOH S . 119 119 . 0.1698 0.2266 0.1794 -0.0186 -0.0302 -
0.0371 1 .
6776 O    O    . HOH HOH HOH S . 120 120 . 0.1037 0.0740 0.0818 0.0161  -0.0096
0.0081  1 .
6777 O    O    . HOH HOH HOH S . 121 121 . 0.0350 0.0305 0.0305 0.0071  0.0070
0.0052  1 .
6778 O    O    . HOH HOH HOH S . 122 122 . 0.1361 0.1147 0.1310 0.0019  0.0071
0.0228  1 .
6779 O    O    . HOH HOH HOH S . 123 123 . 0.0899 0.1091 0.0769 0.0001  -0.0144
0.0242  1 .
6780 O    O    . HOH HOH HOH S . 124 124 . 0.1683 0.1976 0.1575 -0.0035 0.0014
0.0109  1 .
6781 O    O    . HOH HOH HOH S . 125 125 . 0.1904 0.1398 0.1549 0.0206  -0.0032
0.0136  1 .
6782 O    O    . HOH HOH HOH S . 126 126 . 0.1262 0.1933 0.1944 0.0407  0.0260  -
0.0011 1 .
6783 O    O    . HOH HOH HOH S . 127 127 . 0.1345 0.1050 0.1180 0.0130  0.0096
0.0326  1 .
6784 O    O    . HOH HOH HOH S . 128 128 . 0.0970 0.1391 0.1769 -0.0344 0.0043
0.0305  1 .
6785 O    O    . HOH HOH HOH S . 129 129 . 0.1635 0.1230 0.1776 0.0069  0.0576  -
0.0440 1 .
6786 O    O    . HOH HOH HOH S . 130 130 . 0.1907 0.1497 0.2357 -0.0580 0.0147
0.0398  1 .
6787 O    O    . HOH HOH HOH S . 131 131 . 0.2952 0.1781 0.2503 0.0911  -0.0446 -
0.0403 1 .
6788 O    O    . HOH HOH HOH S . 132 132 . 0.1399 0.1458 0.1635 0.0182  -0.0048
0.0059  1 .
6789 O    O    . HOH HOH HOH S . 133 133 . 0.1803 0.1838 0.1542 0.0129  0.0186  -
0.0257 1 .
6790 O    O    . HOH HOH HOH S . 134 134 . 0.2025 0.1811 0.1815 0.0614  -0.0245
0.0891  1 .
6791 O    O    . HOH HOH HOH S . 135 135 . 0.1335 0.1151 0.1351 0.0165  0.0116  -
0.0036 1 .
6792 O    O    . HOH HOH HOH S . 136 136 . 0.1237 0.1000 0.1006 -0.0196 0.0092
0.0312  1 .
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6793 O    O    . HOH HOH HOH S . 137 137 . 0.2976 0.2357 0.1899 0.0270  0.0317
0.0023  1 .
6794 O    O    . HOH HOH HOH S . 138 138 . 0.0997 0.0717 0.0699 0.0005  -0.0134 -
0.0128 1 .
6795 O    O    . HOH HOH HOH S . 139 139 . 0.1480 0.1542 0.1687 0.0282  0.0318  -
0.0379 1 .
6796 O    O    . HOH HOH HOH S . 140 140 . 0.1160 0.0784 0.0956 -0.0139 0.0075
0.0036  1 .
6797 O    O    . HOH HOH HOH S . 141 141 . 0.2019 0.1914 0.1953 0.0035  0.0136
0.0121  1 .
6798 O    O    . HOH HOH HOH S . 142 142 . 0.1127 0.1480 0.1399 -0.0053 0.0145
0.0157  1 .
6799 O    O    . HOH HOH HOH S . 143 143 . 0.1369 0.1186 0.1593 -0.0174 0.0227
0.0455  1 .
6800 O    O    . HOH HOH HOH S . 144 144 . 0.1130 0.0791 0.1360 -0.0123 -0.0433 -
0.0080 1 .
6801 O    O    . HOH HOH HOH S . 146 146 . 0.1779 0.1767 0.2157 -0.0265 -0.0249 -
0.0107 1 .
6802 O    O    . HOH HOH HOH S . 147 147 . 0.1545 0.2223 0.2109 0.0183  -0.0401 -
0.0135 1 .
6803 O    O    . HOH HOH HOH S . 148 148 . 0.0922 0.1154 0.0869 -0.0049 -0.0240 -
0.0046 1 .
6804 O    O    . HOH HOH HOH S . 149 149 . 0.6059 0.3749 0.4531 0.0103  0.0754
0.0669  1 .
6805 O    O    . HOH HOH HOH S . 150 150 . 0.1075 0.0940 0.0587 0.0196  -0.0013
0.0188  1 .
6806 O    O    . HOH HOH HOH S . 151 151 . 0.1819 0.2388 0.1850 -0.0023 0.0130
0.0414  1 .
6807 O    O    . HOH HOH HOH S . 152 152 . 0.1455 0.1192 0.1711 0.0229  0.0471  -
0.0102 1 .
6808 O    O    . HOH HOH HOH S . 153 153 . 0.1161 0.1136 0.1292 0.0448  -0.0059
0.0215  1 .
6809 O    O    . HOH HOH HOH S . 154 154 . 0.1442 0.1489 0.1053 -0.0253 -0.0074 -
0.0915 1 .
6810 O    O    . HOH HOH HOH S . 155 155 . 0.1816 0.2246 0.1876 -0.0828 0.0329
0.0160  1 .
6811 O    O    . HOH HOH HOH S . 156 156 . 0.1089 0.1242 0.1247 0.0221  0.0154
0.0146  1 .
6812 O    O    . HOH HOH HOH S . 157 157 . 0.1451 0.1328 0.1657 0.0253  -0.0123 -
0.0201 1 .
6813 O    O    . HOH HOH HOH S . 158 158 . 0.2728 0.1358 0.2327 -0.0137 0.0242
0.1097  1 .
6814 O    O    . HOH HOH HOH S . 159 159 . 0.1804 0.1984 0.1762 -0.0219 -0.0034
0.0319  1 .
6815 O    O    . HOH HOH HOH S . 160 160 . 0.0738 0.0613 0.0692 0.0013  -0.0046
0.0266  1 .
6816 O    O    . HOH HOH HOH S . 161 161 . 0.1980 0.1242 0.1848 0.0431  -0.0148 -
0.0343 1 .
6817 O    O    . HOH HOH HOH S . 162 162 . 0.1277 0.1072 0.0831 0.0135  0.0239  -
0.0081 1 .
6818 O    O    . HOH HOH HOH S . 163 163 . 0.1674 0.2339 0.2170 -0.0226 -0.0429 -
0.0140 1 .
6819 O    O    . HOH HOH HOH S . 164 164 . 0.1957 0.1261 0.1735 0.0144  0.0152
0.0017  1 .
6820 O    O    . HOH HOH HOH S . 165 165 . 0.1383 0.0731 0.0987 0.0006  0.0035
0.0054  1 .
6821 O    O    . HOH HOH HOH S . 166 166 . 0.1030 0.0823 0.1096 -0.0128 0.0069
0.0150  1 .
6822 O    O    . HOH HOH HOH S . 167 167 . 0.1504 0.1358 0.1930 0.0008  0.0005  -
0.0707 1 .
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6823 O    O    . HOH HOH HOH S . 168 168 . 0.1338 0.1547 0.1633 -0.0157 -0.0037 -
0.0176 1 .
6824 O    O    . HOH HOH HOH S . 169 169 . 0.1378 0.1195 0.1304 0.0419  0.0187  -
0.0153 1 .
6825 O    O    . HOH HOH HOH S . 170 170 . 0.1487 0.0443 0.1112 -0.0259 0.0226
0.0185  1 .
6826 O    O    . HOH HOH HOH S . 171 171 . 0.1716 0.1870 0.1164 0.0104  -0.0368
0.0007  1 .
6827 O    O    . HOH HOH HOH S . 172 172 . 0.0872 0.0954 0.0652 -0.0339 0.0288
0.0211  1 .
6828 O    O    . HOH HOH HOH S . 174 174 . 0.2574 0.2961 0.3695 -0.0698 0.0561  -
0.1325 1 .
6829 O    O    . HOH HOH HOH S . 175 175 . 0.1165 0.1422 0.0964 0.0379  -0.0019
0.0364  1 .
6830 O    O    . HOH HOH HOH S . 176 176 . 0.2391 0.2085 0.1558 0.0025  0.0079
0.0128  1 .
6831 O    O    . HOH HOH HOH S . 177 177 . 0.1205 0.0934 0.1196 0.0216  -0.0051 -
0.0422 1 .
6832 O    O    . HOH HOH HOH S . 178 178 . 0.1289 0.1727 0.1528 -0.0025 -0.0159
0.0015  1 .
6833 O    O    . HOH HOH HOH S . 179 179 . 0.1338 0.1903 0.1805 0.0426  -0.0155
0.0286  1 .
6834 O    O    . HOH HOH HOH S . 180 180 . 0.3332 0.4196 0.2639 -0.0041 -0.0431 -
0.0260 1 .
6835 O    O    . HOH HOH HOH S . 181 181 . 0.1138 0.1168 0.1016 0.0205  -0.0056
0.0190  1 .
6836 O    O    . HOH HOH HOH S . 182 182 . 0.2365 0.1735 0.2071 -0.0118 -0.0117
0.0049  1 .
6837 O    O    . HOH HOH HOH S . 183 183 . 0.2654 0.1283 0.1856 0.0515  0.0022
0.0155  1 .
6838 O    O    . HOH HOH HOH S . 184 184 . 0.2286 0.4800 0.3890 -0.0110 0.0382  -
0.0231 1 .
6839 O    O    . HOH HOH HOH S . 185 185 . 0.2491 0.1204 0.2155 0.0141  -0.0147 -
0.0408 1 .
6840 O    O    . HOH HOH HOH S . 186 186 . 0.1140 0.0671 0.0760 0.0022  0.0057
0.0096  1 .
6841 O    O    . HOH HOH HOH S . 187 187 . 0.1152 0.1093 0.0973 -0.0397 -0.0056 -
0.0190 1 .
6842 O    O    . HOH HOH HOH S . 188 188 . 0.3209 0.1584 0.2269 -0.0405 -0.0154 -
0.0413 1 .
6843 O    O    . HOH HOH HOH S . 189 189 . 0.1970 0.2020 0.2550 -0.0011 -0.0277
0.0075  1 .
6844 O    O    . HOH HOH HOH S . 190 190 . 0.1285 0.1150 0.1281 -0.0137 -0.0026 -
0.0671 1 .
6845 O    O    . HOH HOH HOH S . 191 191 . 0.2120 0.1393 0.2339 -0.0002 -0.0088
0.0606  1 .
6846 O    O    . HOH HOH HOH S . 192 192 . 0.1554 0.1420 0.1928 -0.0520 -0.0307 -
0.0009 1 .
6847 O    O    . HOH HOH HOH S . 193 193 . 0.1050 0.1127 0.0984 -0.0110 0.0061  -
0.0230 1 .
6848 O    O    . HOH HOH HOH S . 194 194 . 0.1815 0.1451 0.1308 -0.0031 0.0117  -
0.0315 1 .
6849 O    O    . HOH HOH HOH S . 195 195 . 0.3072 0.3300 0.2777 -0.0194 -0.0358 -
0.0550 1 .
6850 O    O    . HOH HOH HOH S . 196 196 . 0.1995 0.2710 0.2040 -0.0154 -0.0400
0.1157  1 .
6851 O    O    . HOH HOH HOH S . 197 197 . 0.1115 0.0938 0.0841 -0.0120 -0.0028
0.0046  1 .
6852 O    O    . HOH HOH HOH S . 198 198 . 0.1536 0.1675 0.1898 -0.0572 -0.0101 -
0.0398 1 .
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6853 O    O    . HOH HOH HOH S . 199 199 . 0.1688 0.1582 0.1666 0.0101  0.0071  -
0.0326 1 .
6854 O    O    . HOH HOH HOH S . 200 200 . 0.2200 0.1964 0.1243 0.0081  -0.0181 -
0.0213 1 .
6855 O    O    . HOH HOH HOH S . 201 201 . 0.1864 0.1534 0.2067 -0.0510 -0.0272
0.0123  1 .
6856 O    O    . HOH HOH HOH S . 202 202 . 0.1273 0.0934 0.1062 0.0091  -0.0112 -
0.0033 1 .
6857 O    O    . HOH HOH HOH S . 203 203 . 0.2343 0.3491 0.3892 0.0395  0.0607  -
0.0335 1 .
6858 O    O    . HOH HOH HOH S . 204 204 . 0.2209 0.2661 0.1657 -0.0296 -0.1480 -
0.0592 1 .
6859 O    O    . HOH HOH HOH S . 205 205 . 0.2125 0.1276 0.2457 0.0997  0.0024
0.0568  1 .
6860 O    O    . HOH HOH HOH S . 206 206 . 0.0763 0.0828 0.1178 0.0236  -0.0058
0.0492  1 .
6861 O    O    . HOH HOH HOH S . 207 207 . 0.4498 0.2935 0.4275 -0.0312 0.0265
0.0066  1 .
6862 O    O    . HOH HOH HOH S . 208 208 . 0.1617 0.0927 0.2002 0.0359  0.0224
0.0233  1 .
6863 O    O    . HOH HOH HOH S . 209 209 . 0.4527 0.3496 0.5267 0.0424  -0.0376
0.1075  1 .
6864 O    O    . HOH HOH HOH S . 210 210 . 0.3298 0.1752 0.3361 0.1416  0.0098
0.0310  1 .
6865 O    O    . HOH HOH HOH S . 211 211 . 0.2114 0.2215 0.2315 0.0020  0.0527  -
0.0400 1 .
6866 O    O    . HOH HOH HOH S . 212 212 . 0.3485 0.3070 0.4471 0.0651  0.0558  -
0.0203 1 .
6867 O    O    . HOH HOH HOH S . 213 213 . 0.1740 0.1732 0.2285 0.0168  0.0531  -
0.0262 1 .
6868 O    O    . HOH HOH HOH S . 214 214 . 0.1139 0.1247 0.1026 -0.0069 -0.0251 -
0.0143 1 .
6869 O    O    . HOH HOH HOH S . 215 215 . 0.1963 0.2264 0.2216 -0.0278 -0.0496 -
0.0346 1 .
6870 O    O    . HOH HOH HOH S . 216 216 . 0.5064 0.6036 0.2902 -0.0712 -0.1086 -
0.0148 1 .
6871 O    O    . HOH HOH HOH S . 217 217 . 0.5954 0.3733 0.3936 -0.0426 -0.0861 -
0.0746 1 .
6872 O    O    . HOH HOH HOH S . 218 218 . 0.9976 0.7510 0.4147 -0.4784 0.0002
0.1689  1 .
6873 O    O    . HOH HOH HOH S . 219 219 . 0.1517 0.1859 0.1851 0.1005  -0.0029
0.0197  1 .
6874 O    O    . HOH HOH HOH S . 220 220 . 0.1374 0.1879 0.2260 -0.0194 0.0214  -
0.0644 1 .
6875 O    O    . HOH HOH HOH S . 221 221 . 0.1731 0.1850 0.1938 0.0115  -0.0178
0.0121  1 .
6876 O    O    . HOH HOH HOH S . 222 222 . 0.1972 0.1749 0.2117 -0.0099 0.0050
0.0580  1 .
6877 O    O    . HOH HOH HOH S . 223 223 . 0.2415 0.2291 0.2668 -0.0393 -0.0056
0.0262  1 .
6878 O    O    . HOH HOH HOH S . 224 224 . 0.2434 0.2864 0.3713 -0.0414 -0.0023 -
0.0102 1 .
6879 O    O    . HOH HOH HOH S . 225 225 . 0.1586 0.2749 0.2332 0.0339  0.0530
0.0104  1 .
6880 O    O    . HOH HOH HOH S . 226 226 . 0.3915 0.3372 0.4699 -0.0307 0.1083  -
0.0151 1 .
6881 O    O    . HOH HOH HOH S . 227 227 . 0.2366 0.2683 0.2564 -0.0403 -0.0570
0.0484  1 .
6882 O    O    . HOH HOH HOH S . 228 228 . 0.2248 0.3609 0.2406 0.0290  -0.1162
0.0463  1 .
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6883 O    O    . HOH HOH HOH S . 229 229 . 0.3230 0.3202 0.4277 0.0647  -0.1645
0.1038  1 .
6884 O    O    . HOH HOH HOH S . 230 230 . 0.2330 0.1860 0.2282 -0.0420 -0.0039 -
0.0231 1 .
6885 O    O    . HOH HOH HOH S . 231 231 . 0.1942 0.1444 0.1237 -0.0182 -0.0109 -
0.0193 1 .
6886 O    O    . HOH HOH HOH S . 232 232 . 0.2028 0.1701 0.1366 0.0605  0.0012
0.0056  1 .
6887 O    O    . HOH HOH HOH S . 233 233 . 0.1308 0.0733 0.1359 -0.0009 0.0085  -
0.0007 1 .
6888 O    O    . HOH HOH HOH S . 234 234 . 0.7694 0.4607 0.2728 -0.1853 -0.0635 -
0.1617 1 .
6889 O    O    . HOH HOH HOH S . 235 235 . 0.1104 0.1264 0.0867 0.0308  -0.0419
0.0129  1 .
6890 O    O    . HOH HOH HOH S . 236 236 . 0.1290 0.1094 0.1213 -0.0196 -0.0117 -
0.0459 1 .
6891 O    O    . HOH HOH HOH S . 237 237 . 0.1961 0.1912 0.2287 0.0495  -0.0411
0.0217  1 .
6892 O    O    . HOH HOH HOH S . 238 238 . 0.3541 0.1954 0.2256 0.0287  0.0400  -
0.0063 1 .
6893 O    O    . HOH HOH HOH S . 239 239 . 0.2780 0.1615 0.2173 0.1491  0.0270
0.0366  1 .
6894 O    O    . HOH HOH HOH S . 240 240 . 0.4996 0.2278 0.3410 -0.0683 -0.0223 -
0.1891 1 .
6895 O    O    . HOH HOH HOH S . 242 242 . 0.1371 0.1782 0.1902 -0.0163 0.0139
0.0538  1 .
6896 O    O    . HOH HOH HOH S . 243 243 . 0.2357 0.2184 0.1870 -0.0315 -0.0298
0.0308  1 .
6897 O    O    . HOH HOH HOH S . 244 244 . 0.1641 0.3584 0.5639 -0.0896 -0.0318
0.1569  1 .
6898 O    O    . HOH HOH HOH S . 245 245 . 0.1420 0.2553 0.2097 0.0142  -0.0300 -
0.0355 1 .
6899 O    O    . HOH HOH HOH S . 246 246 . 0.1405 0.1224 0.2234 -0.0059 -0.0102 -
0.0010 1 .
6900 O    O    . HOH HOH HOH S . 247 247 . 0.2009 0.6736 0.6114 -0.1471 0.1236
0.0251  1 .
6901 O    O    . HOH HOH HOH S . 248 248 . 0.1690 0.1382 0.2021 -0.0459 0.0377
0.0090  1 .
6902 O    O    . HOH HOH HOH S . 249 249 . 0.1616 0.2086 0.1678 -0.0081 -0.0043
0.0146  1 .
6903 O    O    . HOH HOH HOH S . 250 250 . 0.2275 0.2404 0.2145 0.0267  -0.0047
0.0397  1 .
6904 O    O    . HOH HOH HOH S . 251 251 . 0.7770 0.5112 0.3938 0.3950  -0.3180 -
0.3782 1 .
6905 O    O    . HOH HOH HOH S . 252 252 . 0.2054 0.2092 0.2708 0.0262  0.0369
0.1041  1 .
6906 O    O    . HOH HOH HOH S . 253 253 . 0.2102 0.3126 0.2039 -0.0527 0.0874  -
0.0501 1 .
6907 O    O    . HOH HOH HOH S . 254 254 . 0.1309 0.0665 0.1083 0.0008  -0.0039 -
0.0180 1 .
6908 O    O    . HOH HOH HOH S . 255 255 . 0.2328 0.2436 0.2619 0.0230  0.0087  -
0.0143 1 .
6909 O    O    . HOH HOH HOH S . 256 256 . 0.1618 0.2137 0.1682 -0.0802 -0.0584 -
0.0246 1 .
6910 O    O    . HOH HOH HOH S . 257 257 . 0.2632 0.1991 0.1696 -0.0024 -0.0468 -
0.0009 1 .
6911 O    O    . HOH HOH HOH S . 258 258 . 0.1932 0.1804 0.1614 0.0600  0.0052
0.0785  1 .
6912 O    O    . HOH HOH HOH S . 259 259 . 0.3263 0.4253 0.5306 -0.1348 0.1260
0.0113  1 .
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6913 O    O    . HOH HOH HOH S . 260 260 . 0.2875 0.2792 0.2487 -0.0232 0.0238
0.0186  1 .
6914 O    O    . HOH HOH HOH S . 261 261 . 0.3769 0.5583 0.6535 0.2352  0.0058  -
0.3263 1 .
6915 O    O    . HOH HOH HOH S . 262 262 . 0.1470 0.1676 0.1169 0.0169  0.0133
0.0150  1 .
6916 O    O    . HOH HOH HOH S . 263 263 . 0.6433 0.2567 0.4875 0.1189  -0.2691 -
0.0788 1 .
6917 O    O    . HOH HOH HOH S . 264 264 . 0.2077 0.3362 0.2265 0.1046  -0.0113 -
0.0096 1 .
6918 O    O    . HOH HOH HOH S . 265 265 . 0.3963 0.3961 0.2081 0.0713  0.0070  -
0.0473 1 .
6919 O    O    . HOH HOH HOH S . 266 266 . 0.2483 0.3033 0.2190 0.0476  0.0455
0.0300  1 .
6920 O    O    . HOH HOH HOH S . 267 267 . 0.1991 0.1823 0.1469 0.0261  0.0418  -
0.0550 1 .
6921 O    O    . HOH HOH HOH S . 268 268 . 0.4212 0.2302 0.4517 -0.0402 0.1047  -
0.1059 1 .
6922 O    O    . HOH HOH HOH S . 269 269 . 0.2238 0.1515 0.2398 0.0023  0.0193  -
0.0170 1 .
6923 O    O    . HOH HOH HOH S . 270 270 . 0.2127 0.2104 0.2855 0.0019  -0.0498 -
0.0759 1 .
6924 O    O    . HOH HOH HOH S . 271 271 . 0.1884 0.1688 0.1243 -0.0145 0.0053
0.0006  1 .
6925 O    O    . HOH HOH HOH S . 272 272 . 0.2970 0.3304 0.3627 0.0099  0.0626
0.0118  1 .
6926 O    O    . HOH HOH HOH S . 273 273 . 0.3248 0.2423 0.3620 0.1024  -0.0090 -
0.0424 1 .
6927 O    O    . HOH HOH HOH S . 274 274 . 0.4756 0.5646 0.4080 -0.1868 0.2795
0.0107  1 .
6928 O    O    . HOH HOH HOH S . 275 275 . 0.3503 0.2245 0.3045 0.0423  0.0166  -
0.0434 1 .
6929 O    O    . HOH HOH HOH S . 276 276 . 1.7998 0.7052 1.8956 -0.8535 -0.0420
0.0122  1 .
6930 O    O    . HOH HOH HOH S . 277 277 . 0.3970 0.3638 0.1826 0.1953  0.0974
0.0075  1 .
6931 O    O    . HOH HOH HOH S . 278 278 . 0.4151 0.4330 0.3067 -0.0035 -0.0406
0.0221  1 .
6932 O    O    . HOH HOH HOH S . 279 279 . 0.1158 0.1215 0.1178 -0.0200 -0.0139
0.0255  1 .
6933 O    O    . HOH HOH HOH S . 280 280 . 0.2476 0.2708 0.2145 0.0388  -0.0340
0.0307  1 .
6934 O    O    . HOH HOH HOH S . 281 281 . 0.4055 0.4410 0.5623 -0.1347 -0.0739 -
0.1746 1 .
6935 O    O    . HOH HOH HOH S . 282 282 . 0.4729 0.3140 0.3718 0.0464  0.0472
0.1032  1 .
6936 O    O    . HOH HOH HOH S . 283 283 . 0.3263 0.3042 0.2061 -0.0578 0.0866  -
0.0199 1 .
6937 O    O    . HOH HOH HOH S . 284 284 . 0.2337 0.2306 0.2374 -0.0546 -0.0337
0.0446  1 .
6938 O    O    . HOH HOH HOH S . 285 285 . 0.2024 0.2052 0.1920 -0.0104 0.0036  -
0.0682 1 .
6939 O    O    . HOH HOH HOH S . 286 286 . 0.2230 0.2503 0.2263 0.0274  0.0815
0.0406  1 .
6940 O    O    . HOH HOH HOH S . 287 287 . 0.1381 0.1664 0.1460 -0.0023 0.0393
0.0508  1 .
6941 O    O    . HOH HOH HOH S . 288 288 . 1.0143 0.7874 1.1879 -0.4538 -0.0108
0.0544  1 .
6942 O    O    . HOH HOH HOH S . 289 289 . 0.6412 0.4696 0.3121 -0.0581 -0.0392
0.0872  1 .
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6943 O    O    . HOH HOH HOH S . 290 290 . 0.1234 0.1116 0.1119 0.0121  -0.0168 -
0.0339 1 .
6944 O    O    . HOH HOH HOH S . 291 291 . 0.6105 0.4059 0.4323 0.1315  -0.1361
0.0398  1 .
6945 O    O    . HOH HOH HOH S . 292 292 . 0.3017 0.2337 0.3392 -0.1456 -0.0085 -
0.0703 1 .
6946 O    O    . HOH HOH HOH S . 293 293 . 0.2117 0.4475 0.3292 0.0838  0.0156
0.0234  1 .
6947 O    O    . HOH HOH HOH S . 294 294 . 0.2425 0.2193 0.2758 -0.0050 0.0017  -
0.0378 1 .
6948 O    O    . HOH HOH HOH S . 295 295 . 0.2327 0.3281 0.2559 0.1290  -0.1128
0.1238  1 .
6949 O    O    . HOH HOH HOH S . 296 296 . 0.2324 0.0748 0.1983 0.0415  0.0011  -
0.0069 1 .
6950 O    O    . HOH HOH HOH S . 297 297 . 0.1941 0.1568 0.1887 0.0433  0.0282
0.0077  1 .
6951 O    O    . HOH HOH HOH S . 298 298 . 0.2633 0.3307 0.2941 -0.0151 0.0945  -
0.0301 1 .
6952 O    O    . HOH HOH HOH S . 299 299 . 0.2051 0.1814 0.2226 -0.0350 0.0238  -
0.0169 1 .
6953 O    O    . HOH HOH HOH S . 300 300 . 0.1421 0.0906 0.1416 0.0197  -0.0079 -
0.0216 1 .
6954 O    O    . HOH HOH HOH S . 301 301 . 0.1811 0.2085 0.1922 0.0512  0.0001
0.0014  1 .
6955 O    O    . HOH HOH HOH S . 302 302 . 0.2703 0.1729 0.2369 0.0427  -0.0149
0.0303  1 .
6956 O    O    . HOH HOH HOH S . 303 303 . 0.2022 0.2221 0.1235 0.0313  0.0457
0.0468  1 .
6957 O    O    . HOH HOH HOH S . 304 304 . 0.0943 0.0780 0.0689 -0.0113 -0.0019
0.0099  1 .
6958 O    O    . HOH HOH HOH S . 305 305 . 0.1140 0.0873 0.0710 0.0154  -0.0203 -
0.0181 1 .
6959 O    O    . HOH HOH HOH S . 306 306 . 0.2105 0.1787 0.1850 0.0435  0.0229  -
0.0062 1 .
6960 O    O    . HOH HOH HOH S . 307 307 . 1.1063 0.7288 0.3014 -0.1009 0.4308  -
0.3093 1 .
6961 O    O    . HOH HOH HOH S . 308 308 . 0.1499 0.1577 0.1271 -0.0578 -0.0023
0.0234  1 .
6962 O    O    . HOH HOH HOH S . 309 309 . 0.1332 0.0914 0.1256 0.0000  0.0005
0.0188  1 .
6963 O    O    . HOH HOH HOH S . 310 310 . 0.0956 0.0749 0.1074 -0.0173 -0.0026
0.0013  1 .
6964 O    O    . HOH HOH HOH S . 311 311 . 0.3974 0.2488 0.2965 0.0077  -0.0604 -
0.0116 1 .
6965 O    O    . HOH HOH HOH S . 312 312 . 0.7221 0.6123 0.4388 -0.3186 -0.1800 -
0.0080 1 .
6966 O    O    . HOH HOH HOH S . 313 313 . 0.1870 0.2090 0.1270 0.0325  0.0280
0.0212  1 .
6967 O    O    . HOH HOH HOH S . 314 314 . 0.1803 0.1065 0.1531 -0.0203 0.0042
0.0126  1 .
6968 O    O    . HOH HOH HOH S . 315 315 . 0.2439 0.1294 0.1793 0.0476  0.0224  -
0.0735 1 .
6969 O    O    . HOH HOH HOH S . 316 316 . 0.1949 0.1386 0.1988 0.0012  0.0264
0.0202  1 .
6970 O    O    . HOH HOH HOH S . 317 317 . 0.1838 0.2984 0.3905 0.0757  0.0023  -
0.0708 1 .
6971 O    O    . HOH HOH HOH S . 318 318 . 0.0394 0.0576 0.0808 0.0078  -0.0251
0.0009  1 .
6972 O    O    . HOH HOH HOH S . 319 319 . 0.1890 0.2414 0.2910 0.0117  -0.0199 -
0.0201 1 .
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6973 O    O    . HOH HOH HOH S . 320 320 . 0.2050 0.3803 0.4021 -0.0816 0.1408  -
0.0026 1 .
6974 O    O    . HOH HOH HOH S . 321 321 . 0.2316 0.1781 0.1509 0.0175  0.0296
0.0065  1 .
6975 O    O    . HOH HOH HOH S . 322 322 . 0.2140 0.5117 0.2419 -0.0408 -0.0005
0.0779  1 .
6976 O    O    . HOH HOH HOH S . 323 323 . 0.4577 0.0995 0.3273 -0.0005 0.0943  -
0.1243 1 .
6977 O    O    . HOH HOH HOH S . 324 324 . 0.1095 0.0919 0.0949 0.0157  0.0121  -
0.0311 1 .
6978 O    O    . HOH HOH HOH S . 325 325 . 0.1483 0.1285 0.1309 0.0237  0.0287
0.0203  1 .
6979 O    O    . HOH HOH HOH S . 326 326 . 0.1535 0.1200 0.1555 0.0264  0.0207  -
0.0061 1 .
6980 O    O    . HOH HOH HOH S . 327 327 . 0.7774 0.8114 0.2980 -0.2245 -0.0219
0.1233  1 .
6981 O    O    . HOH HOH HOH S . 328 328 . 0.3627 0.3688 0.2601 0.0275  0.0436
0.0792  1 .
6982 O    O    . HOH HOH HOH S . 329 329 . 0.2411 0.2911 0.2399 -0.0006 0.0279
0.0718  1 .
6983 O    O    . HOH HOH HOH S . 330 330 . 0.1810 0.1667 0.1071 -0.0060 -0.0367 -
0.0058 1 .
6984 O    O    . HOH HOH HOH S . 331 331 . 0.2077 0.1884 0.1503 -0.0098 -0.0088
0.0194  1 .
6985 O    O    . HOH HOH HOH S . 332 332 . 0.4193 0.3828 0.3069 0.0213  -0.0711
0.1594  1 .
6986 O    O    . HOH HOH HOH S . 333 333 . 0.2847 0.2518 0.3018 -0.0094 0.0078  -
0.0179 1 .
6987 O    O    . HOH HOH HOH S . 334 334 . 0.2677 0.2067 0.1255 0.0372  0.0504  -
0.0580 1 .
6988 O    O    . HOH HOH HOH S . 335 335 . 0.4751 0.2644 0.2809 -0.1172 0.0351  -
0.0218 1 .
6989 O    O    . HOH HOH HOH S . 336 336 . 0.2860 0.2543 0.2034 0.0199  0.0148
0.0400  1 .
6990 O    O    . HOH HOH HOH S . 337 337 . 0.2163 0.1894 0.2453 0.0740  -0.0154
0.0962  1 .
6991 O    O    . HOH HOH HOH S . 338 338 . 0.1204 0.1456 0.1221 -0.0415 0.0187
0.0025  1 .
6992 O    O    . HOH HOH HOH S . 339 339 . 0.2971 0.2733 0.3077 0.0560  0.0099
0.0083  1 .
6993 O    O    . HOH HOH HOH S . 340 340 . 0.3726 0.2821 0.2185 -0.0142 -0.0602
0.0528  1 .
6994 O    O    . HOH HOH HOH S . 341 341 . 0.5231 0.3223 0.2683 0.0435  -0.1758 -
0.0358 1 .
6995 O    O    . HOH HOH HOH S . 342 342 . 0.1891 0.1633 0.2135 0.0461  0.0705  -
0.0707 1 .
6996 O    O    . HOH HOH HOH S . 343 343 . 0.2046 0.2036 0.2219 0.0157  0.0170  -
0.0108 1 .
6997 O    O    . HOH HOH HOH S . 344 344 . 0.0903 0.0721 0.0697 0.0108  -0.0058
0.0251  1 .
6998 O    O    . HOH HOH HOH S . 345 345 . 0.3881 0.2316 0.3278 -0.0389 -0.0816 -
0.0129 1 .
6999 O    O    . HOH HOH HOH S . 346 346 . 0.2686 0.2417 0.2751 0.0348  0.0777
0.0984  1 .
7000 O    O    . HOH HOH HOH S . 347 347 . 0.1926 0.1772 0.2146 0.0108  0.0290  -
0.1081 1 .
7001 O    O    . HOH HOH HOH S . 348 348 . 0.3358 0.3018 0.2604 0.1423  -0.0294 -
0.0230 1 .
7002 O    O    . HOH HOH HOH S . 349 349 . 0.1294 0.1264 0.1369 0.0219  0.0124  -
0.0300 1 .
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7003 O    O    . HOH HOH HOH S . 350 350 . 0.2658 0.2070 0.2628 0.0294  -0.0143
0.0754  1 .
7004 O    O    . HOH HOH HOH S . 351 351 . 0.1258 0.1172 0.0828 0.0039  -0.0108
0.0178  1 .
7005 O    O    . HOH HOH HOH S . 352 352 . 0.1670 0.1292 0.1822 0.0254  -0.0063 -
0.0076 1 .
7006 O    O    . HOH HOH HOH S . 353 353 . 0.1972 0.1619 0.2049 -0.0335 0.0060
0.0419  1 .
7007 O    O    . HOH HOH HOH S . 354 354 . 0.1193 0.1409 0.1359 0.0059  0.0118  -
0.0492 1 .
7008 O    O    . HOH HOH HOH S . 355 355 . 0.1861 0.2851 0.2776 0.0097  0.0512
0.0097  1 .
7009 O    O    . HOH HOH HOH S . 356 356 . 0.2301 0.1497 0.1430 -0.0019 0.0221  -
0.0017 1 .
7010 O    O    . HOH HOH HOH S . 357 357 . 0.2200 0.1629 0.1978 0.0092  -0.0597
0.0179  1 .
7011 O    O    . HOH HOH HOH S . 358 358 . 0.2469 0.1673 0.1433 -0.0006 -0.0098
0.0041  1 .
7012 O    O    . HOH HOH HOH S . 359 359 . 0.4702 0.3128 0.4062 0.0532  0.0347  -
0.0283 1 .
7013 O    O    . HOH HOH HOH S . 360 360 . 0.2776 0.3993 0.2458 0.0437  0.0301  -
0.0298 1 .
7014 O    O    . HOH HOH HOH S . 361 361 . 0.4794 0.3857 0.6489 -0.1061 0.2745
0.1942  1 .
7015 O    O    . HOH HOH HOH S . 362 362 . 0.5379 0.2817 0.5483 -0.1667 0.0052
0.0029  1 .
7016 O    O    . HOH HOH HOH S . 363 363 . 0.2573 0.1403 0.2286 0.0131  0.0347
0.0351  1 .
7017 O    O    . HOH HOH HOH S . 364 364 . 0.1943 0.2236 0.1269 -0.0333 -0.0142
0.0014  1 .
7018 O    O    . HOH HOH HOH S . 365 365 . 0.6093 0.3089 0.4246 0.1575  -0.0550
0.1989  1 .
7019 O    O    . HOH HOH HOH S . 366 366 . 0.2148 0.1235 0.2399 -0.0113 -0.0051
0.0052  1 .
7020 O    O    . HOH HOH HOH S . 367 367 . 0.1933 0.2230 0.2020 -0.0261 -0.0110 -
0.0290 1 .
7021 O    O    . HOH HOH HOH S . 368 368 . 0.3036 0.2369 0.2985 0.0201  0.0534  -
0.1100 1 .
7022 O    O    . HOH HOH HOH S . 369 369 . 0.3961 0.3203 0.3567 -0.1689 0.0129  -
0.0743 1 .
7023 O    O    . HOH HOH HOH S . 370 370 . 0.1365 0.2053 0.1201 0.0166  0.0031
0.0143  1 .
7024 O    O    . HOH HOH HOH S . 371 371 . 0.3082 0.2972 0.3562 -0.0307 0.0099  -
0.0776 1 .
7025 O    O    . HOH HOH HOH S . 372 372 . 0.3555 0.3953 0.2120 -0.0881 0.0119  -
0.0189 1 .
7026 O    O    . HOH HOH HOH S . 373 373 . 0.2584 0.2125 0.2542 0.0127  -0.0020 -
0.0070 1 .
7027 O    O    . HOH HOH HOH S . 374 374 . 0.2710 0.2119 0.1956 -0.0284 -0.0321
0.0397  1 .
7028 O    O    . HOH HOH HOH S . 375 375 . 0.5442 0.5086 0.5718 0.3591  0.2286
0.0252  1 .
7029 O    O    . HOH HOH HOH S . 376 376 . 0.3646 0.1439 0.2629 -0.0199 0.0123
0.0673  1 .
7030 O    O    . HOH HOH HOH S . 377 377 . 0.2195 0.2676 0.2541 -0.0356 0.0765
0.0182  1 .
7031 O    O    . HOH HOH HOH S . 378 378 . 0.2005 0.2253 0.3191 -0.0162 -0.0246
0.0111  1 .
7032 O    O    . HOH HOH HOH S . 379 379 . 0.2413 0.2842 0.1295 -0.1243 0.0191  -
0.1250 1 .
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7033 O    O    . HOH HOH HOH S . 380 380 . 0.3177 0.3341 0.2688 0.0367  -0.0412 -
0.0653 1 .
7034 O    O    . HOH HOH HOH S . 381 381 . 0.3392 0.3504 0.3968 -0.0555 -0.0148 -
0.0054 1 .
7035 O    O    . HOH HOH HOH S . 382 382 . 0.2407 0.2482 0.2294 0.0225  -0.0072 -
0.0199 1 .
7036 O    O    . HOH HOH HOH S . 383 383 . 0.6633 0.4524 0.7831 0.0470  -0.0572
0.1786  1 .
7037 O    O    . HOH HOH HOH S . 384 384 . 0.1644 0.1250 0.1450 0.0294  -0.0087 -
0.0191 1 .
7038 O    O    . HOH HOH HOH S . 385 385 . 0.2215 0.2594 0.2180 0.0155  -0.0483 -
0.0173 1 .
7039 O    O    . HOH HOH HOH S . 386 386 . 0.1709 0.2682 0.2193 -0.0399 -0.0325 -
0.0069 1 .
7040 O    O    . HOH HOH HOH S . 387 387 . 0.3550 0.3381 0.3739 -0.0411 0.0538  -
0.0350 1 .
7041 O    O    . HOH HOH HOH S . 388 388 . 0.2498 0.3389 0.2340 0.0481  -0.0334 -
0.0002 1 .
7042 O    O    . HOH HOH HOH S . 389 389 . 0.4507 0.2716 0.3450 -0.0237 -0.0875 -
0.0051 1 .
7043 O    O    . HOH HOH HOH S . 390 390 . 0.1137 0.1208 0.1295 0.0171  0.0046
0.0144  1 .
7044 O    O    . HOH HOH HOH S . 391 391 . 0.2476 0.2476 0.2427 0.0268  -0.0103 -
0.0531 1 .
7045 O    O    . HOH HOH HOH S . 392 392 . 0.2320 0.2282 0.2903 0.0608  -0.0380 -
0.0253 1 .
7046 O    O    . HOH HOH HOH S . 393 393 . 0.2150 0.1825 0.2373 0.0026  0.0169  -
0.0375 1 .
7047 O    O    . HOH HOH HOH S . 394 394 . 1.1600 0.1339 0.6011 -0.1459 0.0899  -
0.1033 1 .
7048 O    O    . HOH HOH HOH S . 395 395 . 0.4359 0.4386 0.4947 -0.1024 -0.1939 -
0.1892 1 .
7049 O    O    . HOH HOH HOH S . 396 396 . 0.3126 0.4556 0.5546 0.1019  -0.0021 -
0.1297 1 .
7050 O    O    . HOH HOH HOH S . 397 397 . 0.4006 0.3813 0.4164 -0.0432 -0.0821 -
0.0869 1 .
7051 O    O    . HOH HOH HOH S . 398 398 . 0.2309 0.3541 0.2850 -0.0058 -0.0094
0.0899  1 .
7052 O    O    . HOH HOH HOH S . 399 399 . 0.6317 0.5340 0.1919 0.0214  0.1042
0.2785  1 .
7053 O    O    . HOH HOH HOH S . 400 400 . 0.5754 0.3796 0.5790 -0.0890 0.1182
0.2167  1 .
7054 O    O    . HOH HOH HOH S . 401 401 . 0.5164 0.4171 0.3893 0.1521  -0.0257
0.0503  1 .
7055 O    O    . HOH HOH HOH S . 402 402 . 0.1594 0.4126 0.4776 0.1727  0.0336
0.0832  1 .
7056 O    O    . HOH HOH HOH S . 403 403 . 0.3118 0.4979 0.2398 -0.0115 0.0376  -
0.0078 1 .
7057 O    O    . HOH HOH HOH S . 404 404 . 0.4943 0.4980 0.3522 -0.2276 0.0708
0.0057  1 .
7058 O    O    . HOH HOH HOH S . 405 405 . 0.6483 0.4375 0.2501 -0.1589 -0.0930
0.1782  1 .
7059 O    O    . HOH HOH HOH S . 406 406 . 0.2946 0.2510 0.2482 -0.0101 -0.0463 -
0.0616 1 .
7060 O    O    . HOH HOH HOH S . 407 407 . 0.3817 0.4220 0.4070 -0.0696 -0.0251 -
0.1022 1 .
7061 O    O    . HOH HOH HOH S . 408 408 . 0.2940 0.3501 0.2827 -0.0419 -0.0080
0.0036  1 .
7062 O    O    . HOH HOH HOH S . 409 409 . 0.3694 0.3217 0.2976 -0.1079 0.0320
0.0483  1 .
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7063 O    O    . HOH HOH HOH S . 410 410 . 0.3497 0.3238 0.3169 -0.1012 -0.0174
0.0660  1 .
7064 O    O    . HOH HOH HOH S . 411 411 . 0.4361 0.1864 0.3653 -0.0433 -0.0282 -
0.1015 1 .
7065 O    O    . HOH HOH HOH S . 412 412 . 0.3155 0.2390 0.2874 0.0184  0.0066  -
0.0037 1 .
7066 O    O    . HOH HOH HOH S . 413 413 . 0.2304 0.2245 0.2957 0.0107  0.0974  -
0.0428 1 .
7067 O    O    . HOH HOH HOH S . 414 414 . 0.3366 0.3292 0.2502 0.1146  0.0842
0.0177  1 .
7068 O    O    . HOH HOH HOH S . 415 415 . 0.5316 0.3113 0.1504 0.0084  -0.0848 -
0.1124 1 .
7069 O    O    . HOH HOH HOH S . 416 416 . 0.4628 0.7753 0.5372 0.2232  -0.0967 -
0.1663 1 .
7070 O    O    . HOH HOH HOH S . 417 417 . 0.2559 0.2046 0.2589 -0.0833 0.0615
0.0877  1 .
7071 O    O    . HOH HOH HOH S . 418 418 . 0.4280 0.6548 0.2533 -0.0572 0.2311
0.1263  1 .
7072 O    O    . HOH HOH HOH S . 419 419 . 0.2618 0.3678 0.4363 0.0323  0.0379
0.1116  1 .
7073 O    O    . HOH HOH HOH S . 420 420 . 0.1558 0.1531 0.1925 -0.0362 0.0312
0.0154  1 .
7074 O    O    . HOH HOH HOH S . 421 421 . 0.1890 0.2122 0.1725 -0.0012 -0.0409
0.0451  1 .
7075 O    O    . HOH HOH HOH S . 422 422 . 0.3423 0.2723 0.2015 -0.0470 0.0586
0.0111  1 .
7076 O    O    . HOH HOH HOH S . 423 423 . 0.3782 0.2050 0.2394 0.0604  0.0583  -
0.0451 1 .
7077 O    O    . HOH HOH HOH S . 424 424 . 0.4029 0.4470 0.4011 0.0961  0.0026
0.0860  1 .
7078 O    O    . HOH HOH HOH S . 425 425 . 0.4235 0.2346 0.2450 0.0112  0.0024  -
0.0668 1 .
7079 O    O    . HOH HOH HOH S . 426 426 . 0.4003 0.2938 0.3259 0.0533  0.0511  -
0.0983 1 .
7080 O    O    . HOH HOH HOH S . 427 427 . 0.6207 0.6897 0.9218 0.3164  -0.3641
0.3499  1 .
7081 O    O    . HOH HOH HOH S . 428 428 . 0.4228 0.5012 0.1451 0.0982  -0.1352
0.0365  1 .
7082 O    O    . HOH HOH HOH S . 429 429 . 0.2702 0.3673 0.3937 0.0111  -0.0446
0.0630  1 .
7083 O    O    . HOH HOH HOH S . 430 430 . 0.5502 0.4494 0.4527 0.0351  -0.2365
0.0310  1 .
7084 O    O    . HOH HOH HOH S . 431 431 . 0.1717 0.2361 0.2193 0.0690  0.0511
0.0498  1 .
7085 O    O    . HOH HOH HOH S . 432 432 . 0.6823 0.4897 0.3696 -0.0252 -0.0900
0.0367  1 .
7086 O    O    . HOH HOH HOH S . 433 433 . 0.7470 0.3358 0.6164 -0.1104 0.2201
0.0466  1 .
7087 O    O    . HOH HOH HOH S . 434 434 . 0.4119 0.4226 0.2142 -0.1189 0.0083  -
0.0430 1 .
7088 O    O    . HOH HOH HOH S . 435 435 . 0.2164 0.2552 0.1997 -0.0010 0.0446  -
0.0222 1 .
7089 O    O    . HOH HOH HOH S . 436 436 . 0.4043 0.3482 0.4518 -0.0963 0.0328  -
0.0488 1 .
7090 O    O    . HOH HOH HOH S . 437 437 . 0.2490 0.2376 0.2386 0.0025  0.0371  -
0.0561 1 .
7091 O    O    . HOH HOH HOH S . 438 438 . 0.2285 0.2506 0.3389 0.0523  0.0451
0.0055  1 .
7092 O    O    . HOH HOH HOH S . 439 439 . 0.1725 0.2023 0.1980 0.0196  0.0263
0.0335  1 .
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7093 O    O    . HOH HOH HOH S . 440 440 . 0.2146 0.4165 0.3929 -0.0506 0.0799
0.0503  1 .
7094 O    O    . HOH HOH HOH S . 441 441 . 0.2534 0.2974 0.3953 -0.0753 0.0287
0.0404  1 .
7095 O    O    . HOH HOH HOH S . 442 442 . 0.2582 0.3404 0.3817 0.0284  0.1451
0.0560  1 .
7096 O    O    . HOH HOH HOH S . 443 443 . 0.1747 0.2245 0.2595 0.0466  -0.0005 -
0.0005 1 .
7097 O    O    . HOH HOH HOH S . 444 444 . 0.4434 0.2120 0.4877 -0.0330 0.1936
0.1564  1 .
7098 O    O    . HOH HOH HOH S . 445 445 . 0.3009 0.2022 0.3380 -0.0217 -0.0346 -
0.0597 1 .
7099 O    O    . HOH HOH HOH S . 446 446 . 0.3166 0.1720 0.2347 -0.0030 0.0005  -
0.0114 1 .
7100 O    O    . HOH HOH HOH S . 447 447 . 0.2477 0.2114 0.2673 0.0301  -0.0334 -
0.0028 1 .
7101 O    O    . HOH HOH HOH S . 448 448 . 1.0383 0.7256 0.0820 0.0792  0.1241
0.1794  1 .
7102 O    O    . HOH HOH HOH S . 449 449 . 0.2979 0.4508 0.3459 0.1432  0.1742
0.0370  1 .
7103 O    O    . HOH HOH HOH S . 451 451 . 0.2475 0.3527 0.3947 -0.0622 -0.0504
0.0810  1 .
7104 O    O    . HOH HOH HOH S . 452 452 . 0.4406 0.2696 0.4176 -0.0357 -0.0268
0.0337  1 .
7105 O    O    . HOH HOH HOH S . 453 453 . 0.4644 0.4713 0.5643 -0.0557 -0.0489
0.0001  1 .
7106 O    O    . HOH HOH HOH S . 454 454 . 0.5322 0.3066 0.6993 -0.0476 -0.1093 -
0.3674 1 .
7107 O    O    . HOH HOH HOH S . 455 455 . 0.2564 0.2530 0.2452 -0.0156 0.0158  -
0.0733 1 .
7108 O    O    . HOH HOH HOH S . 456 456 . 0.3868 0.3515 0.4044 -0.0908 0.1460  -
0.0909 1 .
7109 O    O    . HOH HOH HOH S . 457 457 . 0.1769 0.2506 0.1970 -0.0023 0.0119  -
0.0506 1 .
7110 O    O    . HOH HOH HOH S . 458 458 . 0.1395 0.1488 0.1768 -0.0257 -0.0367
0.0608  1 .
7111 O    O    . HOH HOH HOH S . 459 459 . 0.2953 0.2006 0.2698 -0.0380 -0.0815
0.0128  1 .
7112 O    O    . HOH HOH HOH S . 460 460 . 0.3814 0.2652 0.3396 0.1289  -0.1328 -
0.0900 1 .
7113 O    O    . HOH HOH HOH S . 461 461 . 0.2660 0.3016 0.2638 -0.0032 -0.0239 -
0.0512 1 .
7114 O    O    . HOH HOH HOH S . 462 462 . 0.4050 0.2932 0.4557 0.0320  -0.0031
0.0704  1 .
7115 O    O    . HOH HOH HOH S . 463 463 . 0.6816 0.5036 0.3260 -0.0968 -0.0907 -
0.2923 1 .
7116 O    O    . HOH HOH HOH S . 464 464 . 0.3728 0.8117 0.6078 0.1708  -0.1624
0.1052  1 .
7117 O    O    . HOH HOH HOH S . 465 465 . 0.2797 0.3934 0.3157 -0.0622 -0.0811
0.0563  1 .
7118 O    O    . HOH HOH HOH S . 466 466 . 0.2518 0.2055 0.1777 0.0091  0.0317  -
0.0350 1 .
7119 O    O    . HOH HOH HOH S . 467 467 . 0.3145 0.2973 0.3033 0.0942  -0.0569
0.0814  1 .
7120 O    O    . HOH HOH HOH S . 468 468 . 0.3674 0.2360 0.3011 -0.0458 0.0013
0.0225  1 .
7121 O    O    . HOH HOH HOH S . 469 469 . 0.2943 0.2981 0.3452 -0.0285 -0.0605 -
0.0448 1 .
7122 O    O    . HOH HOH HOH S . 470 470 . 0.2384 0.3738 0.2742 -0.0564 0.1959  -
0.1139 1 .
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7123 O    O    . HOH HOH HOH S . 471 471 . 0.1810 0.2106 0.2686 0.0214  -0.0433 -
0.0546 1 .
7124 O    O    . HOH HOH HOH S . 472 472 . 0.4103 0.2537 0.9655 0.0818  0.0309  -
0.1658 1 .
7125 O    O    . HOH HOH HOH S . 473 473 . 0.3700 0.3312 0.3164 0.0469  -0.0013
0.0448  1 .
7126 O    O    . HOH HOH HOH S . 474 474 . 0.2892 0.4068 0.3112 0.0814  0.0701  -
0.0004 1 .
7127 O    O    . HOH HOH HOH S . 475 475 . 0.1292 0.0792 0.0800 0.0367  0.0485
0.0398  1 .
7128 O    O    . HOH HOH HOH S . 476 476 . 0.0893 0.0646 0.1065 -0.0316 -0.0377
0.0255  1 .
7129 O    O    . HOH HOH HOH S . 477 477 . 0.2728 0.3820 0.2156 0.0489  -0.0391 -
0.0876 1 .
7130 O    O    . HOH HOH HOH S . 478 478 . 0.1841 0.1748 0.1750 -0.0388 0.0739  -
0.0336 1 .
7131 O    O    . HOH HOH HOH S . 479 479 . 0.1862 0.2288 0.2645 -0.0244 -0.0068
0.0156  1 .
7132 O    O    . HOH HOH HOH S . 480 480 . 0.2337 0.2479 0.2508 0.0507  -0.0095
0.1054  1 .
7133 O    O    . HOH HOH HOH S . 481 481 . 0.2360 0.1758 0.2002 -0.0161 -0.0449 -
0.0256 1 .
7134 O    O    . HOH HOH HOH S . 482 482 . 0.2265 0.1400 0.2128 0.0381  -0.0110 -
0.0170 1 .
7135 O    O    . HOH HOH HOH S . 483 483 . 0.4604 0.2886 0.3371 0.3384  0.0020
0.0023  1 .
7136 O    O    . HOH HOH HOH S . 484 484 . 0.4293 0.0728 0.2979 0.0587  -0.0988
0.0840  1 .
7137 O    O    . HOH HOH HOH S . 485 485 . 0.3698 0.1829 0.3015 -0.0111 -0.0388 -
0.0983 1 .
7138 O    O    . HOH HOH HOH S . 486 486 . 0.5706 0.2468 0.4118 -0.0873 -0.1023 -
0.0142 1 .
7139 O    O    . HOH HOH HOH S . 487 487 . 0.5871 0.2816 0.3871 -0.0584 -0.0151 -
0.0198 1 .
7140 O    O    . HOH HOH HOH S . 488 488 . 0.4645 0.4226 0.3747 -0.1466 -0.0036 -
0.1211 1 .
7141 O    O    . HOH HOH HOH S . 489 489 . 0.9051 0.5825 0.4163 -0.2942 0.0924  -
0.3127 1 .
7142 O    O    . HOH HOH HOH S . 490 490 . 0.4772 0.2879 0.2542 -0.0411 0.0687
0.0305  1 .
7143 O    O    . HOH HOH HOH S . 491 491 . 0.2624 0.2915 0.3379 0.0837  -0.0150
0.0609  1 .
7144 O    O    . HOH HOH HOH S . 492 492 . 0.3500 0.3313 0.3451 0.0543  -0.1773
0.2237  1 .
7145 O    O    . HOH HOH HOH S . 493 493 . 0.3123 0.5493 0.4284 -0.1022 0.0975  -
0.0723 1 .
7146 O    O    . HOH HOH HOH S . 494 494 . 0.1927 0.2032 0.2223 0.0121  0.0402  -
0.0154 1 .
7147 O    O    . HOH HOH HOH S . 495 495 . 0.4356 0.2670 0.3579 0.0796  0.1240  -
0.0654 1 .
7148 O    O    . HOH HOH HOH S . 496 496 . 0.4220 0.2540 0.2762 0.0252  0.0606
0.0579  1 .
7149 O    O    . HOH HOH HOH S . 497 497 . 0.5880 0.3707 0.1826 0.1759  -0.0273 -
0.1435 1 .
7150 O    O    . HOH HOH HOH S . 498 498 . 0.3076 0.1552 0.2400 -0.0229 -0.0168 -
0.0271 1 .
7151 O    O    . HOH HOH HOH S . 499 499 . 0.4052 0.5877 0.7031 -0.3984 -0.0343
0.0569  1 .
7152 O    O    . HOH HOH HOH S . 500 500 . 0.3662 0.4209 0.4124 -0.1417 -0.0831 -
0.0698 1 .
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7153 O    O    . HOH HOH HOH S . 501 501 . 0.2647 0.3015 0.3538 0.1156  0.1080
0.0328  1 .
7154 O    O    . HOH HOH HOH S . 502 502 . 0.2405 0.1479 0.3152 -0.0174 -0.0239 -
0.0158 1 .
7155 O    O    . HOH HOH HOH S . 503 503 . 0.3167 0.4819 0.3315 -0.1462 0.0166
0.0361  1 .
7156 O    O    . HOH HOH HOH S . 504 504 . 0.2817 0.2755 0.2835 -0.1250 -0.0050 -
0.0740 1 .
7157 O    O    . HOH HOH HOH S . 505 505 . 0.2875 0.2119 0.3958 -0.0401 0.0501
0.0815  1 .
7158 O    O    . HOH HOH HOH S . 506 506 . 0.2482 0.2204 0.1517 -0.0055 0.0539
0.0629  1 .
7159 O    O    . HOH HOH HOH S . 507 507 . 0.2987 0.4144 0.2030 0.0514  0.0842
0.0776  1 .
7160 O    O    . HOH HOH HOH S . 508 508 . 0.2609 0.1035 0.2063 0.0033  0.0007
0.0559  1 .
7161 O    O    . HOH HOH HOH S . 509 509 . 0.2583 0.3931 0.4087 -0.0038 -0.0420 -
0.0755 1 .
7162 O    O    . HOH HOH HOH S . 510 510 . 0.2642 0.1577 0.3620 0.1489  0.0251  -
0.0064 1 .
7163 O    O    . HOH HOH HOH S . 511 511 . 0.5341 0.3472 0.3244 0.1257  0.1316
0.1242  1 .
7164 O    O    . HOH HOH HOH S . 512 512 . 0.2878 0.2616 0.2610 0.0554  -0.0836 -
0.0111 1 .
7165 O    O    . HOH HOH HOH S . 513 513 . 0.4922 0.4744 0.3768 -0.0491 -0.1204
0.0727  1 .
7166 O    O    . HOH HOH HOH S . 514 514 . 0.3412 0.2580 0.2228 -0.0295 -0.0100
0.0445  1 .
7167 O    O    . HOH HOH HOH S . 515 515 . 0.7270 0.3021 0.4543 -0.1332 0.1700  -
0.2353 1 .
7168 O    O    . HOH HOH HOH S . 516 516 . 0.2187 0.1700 0.2379 0.0704  0.0205  -
0.0086 1 .
7169 O    O    . HOH HOH HOH S . 517 517 . 0.3067 0.2843 0.4324 -0.0443 -0.1018 -
0.0218 1 .
7170 O    O    . HOH HOH HOH S . 518 518 . 0.4078 0.4002 0.3387 -0.0365 0.0853
0.0959  1 .
7171 O    O    . HOH HOH HOH S . 519 519 . 0.6897 0.2496 0.3991 -0.0916 -0.0399 -
0.0508 1 .
7172 O    O    . HOH HOH HOH S . 520 520 . 0.1677 0.2299 0.2037 -0.0381 -0.0027
0.0318  1 .
7173 O    O    . HOH HOH HOH S . 521 521 . 0.3811 0.2110 0.3886 0.1598  0.0720  -
0.0909 1 .
7174 O    O    . HOH HOH HOH S . 522 522 . 0.4304 0.2740 0.3564 -0.0888 -0.0269 -
0.0407 1 .
7175 O    O    . HOH HOH HOH S . 523 523 . 0.2495 0.2730 0.1685 0.0715  -0.0414
0.0182  1 .
7176 O    O    . HOH HOH HOH S . 524 524 . 0.4067 0.3326 0.2237 -0.0480 0.0134
0.0505  1 .
7177 O    O    . HOH HOH HOH S . 525 525 . 0.3302 0.4286 0.2850 -0.1670 -0.0726 -
0.0095 1 .
7178 O    O    . HOH HOH HOH S . 526 526 . 0.7669 0.5099 0.6395 0.0823  0.1279  -
0.2260 1 .
7179 O    O    . HOH HOH HOH S . 527 527 . 0.2021 0.2263 0.2459 0.0079  -0.0164
0.0057  1 .
7180 O    O    . HOH HOH HOH S . 528 528 . 0.3295 0.2645 0.2714 0.0303  0.0911
0.1196  1 .
7181 O    O    . HOH HOH HOH S . 529 529 . 0.3844 0.4181 0.3197 0.0508  0.2382
0.1417  1 .
7182 O    O    . HOH HOH HOH S . 530 530 . 0.3795 0.3026 0.3080 0.0204  0.0445  -
0.1070 1 .
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7183 O    O    . HOH HOH HOH S . 531 531 . 0.2825 0.2924 0.2633 0.0123  0.0467
0.0337  1 .
7184 O    O    . HOH HOH HOH S . 532 532 . 0.4640 0.3024 0.4117 0.1087  -0.0343
0.0828  1 .
7185 O    O    . HOH HOH HOH S . 533 533 . 0.5125 0.1021 0.4618 -0.0586 -0.0477 -
0.1172 1 .
7186 O    O    . HOH HOH HOH S . 534 534 . 0.4694 0.2620 0.2918 -0.0940 -0.0900
0.2510  1 .
7187 O    O    . HOH HOH HOH S . 535 535 . 0.5412 0.5371 0.4350 -0.1482 -0.0961
0.0873  1 .
7188 O    O    . HOH HOH HOH S . 536 536 . 0.2098 0.1961 0.2434 -0.0331 -0.0436
0.0579  1 .
7189 O    O    . HOH HOH HOH S . 538 538 . 0.4246 0.2375 0.4778 -0.1040 0.0988  -
0.0053 1 .
7190 O    O    . HOH HOH HOH S . 539 539 . 0.4677 0.4289 0.6384 0.0341  -0.0090
0.2720  1 .
7191 O    O    . HOH HOH HOH S . 540 540 . 0.3278 0.2724 0.4693 -0.0135 0.1554  -
0.2059 1 .
7192 O    O    . HOH HOH HOH S . 541 541 . 0.4079 0.3492 0.4147 0.2037  0.0181  -
0.1151 1 .
7193 O    O    . HOH HOH HOH S . 542 542 . 0.4645 0.5941 0.3453 -0.0562 0.2047  -
0.0440 1 .
7194 O    O    . HOH HOH HOH S . 543 543 . 0.2046 0.1119 0.1669 0.0326  -0.0175 -
0.0084 1 .
7195 O    O    . HOH HOH HOH S . 544 544 . 0.3437 0.3105 0.2692 0.1051  0.0319
0.0493  1 .
7196 O    O    . HOH HOH HOH S . 545 545 . 0.2802 0.2455 0.2477 -0.0073 0.0069
0.0146  1 .
7197 O    O    . HOH HOH HOH S . 547 547 . 0.5016 0.4400 0.3547 -0.1637 0.0496  -
0.1755 1 .
7198 O    O    . HOH HOH HOH S . 548 548 . 0.4063 0.3816 0.4504 -0.1783 0.1036  -
0.0141 1 .
7199 O    O    . HOH HOH HOH S . 549 549 . 0.5275 0.4487 0.1653 0.1559  -0.1130 -
0.0631 1 .
7200 O    O    . HOH HOH HOH S . 550 550 . 0.3852 0.2678 0.3581 0.0462  -0.0895 -
0.0216 1 .
7201 O    O    . HOH HOH HOH S . 551 551 . 0.2939 0.3758 0.3299 0.0518  -0.0293 -
0.0314 1 .
7202 O    O    . HOH HOH HOH S . 552 552 . 0.4742 0.3843 0.3199 -0.0347 -0.0586 -
0.1092 1 .
7203 O    O    . HOH HOH HOH S . 554 554 . 0.2431 0.5416 0.4324 -0.1536 0.1549  -
0.0507 1 .
7204 O    O    . HOH HOH HOH S . 555 555 . 0.2907 0.4705 0.6345 0.2344  -0.0476
0.1061  1 .
7205 O    O    . HOH HOH HOH S . 556 556 . 0.4935 1.2108 0.1815 0.0033  -0.1793 -
0.3235 1 .
7206 O    O    . HOH HOH HOH S . 557 557 . 0.2741 0.1842 0.1753 0.0117  -0.0960
0.0168  1 .
7207 O    O    . HOH HOH HOH S . 558 558 . 0.3753 0.3987 0.4171 -0.0767 -0.0308
0.0354  1 .
7208 O    O    . HOH HOH HOH S . 559 559 . 0.2612 0.2769 0.3535 -0.0377 -0.0752 -
0.0953 1 .
7209 O    O    . HOH HOH HOH S . 560 560 . 0.3832 0.4290 0.3575 0.0905  0.0642  -
0.0023 1 .
7210 O    O    . HOH HOH HOH S . 561 561 . 0.4391 0.1723 0.6624 0.1106  0.0388  -
0.1058 1 .
7211 O    O    . HOH HOH HOH S . 562 562 . 0.3210 0.4965 0.6215 0.0889  0.0120  -
0.3510 1 .
7212 O    O    . HOH HOH HOH S . 563 563 . 0.2633 0.3091 0.3773 -0.1847 -0.0729
0.0441  1 .
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7213 O    O    . HOH HOH HOH S . 564 564 . 0.2328 0.2517 0.2450 0.0094  -0.0203
0.0353  1 .
7214 O    O    . HOH HOH HOH S . 565 565 . 0.5002 0.3261 0.6739 0.0323  0.1540
0.0780  1 .
7215 O    O    . HOH HOH HOH S . 566 566 . 0.4128 0.3009 0.3537 -0.0389 0.1244
0.1194  1 .
7216 O    O    . HOH HOH HOH S . 567 567 . 0.3642 0.3395 0.3018 -0.0704 0.0237
0.0993  1 .
7217 O    O    . HOH HOH HOH S . 568 568 . 0.3661 0.2862 0.2404 -0.1051 -0.0602
0.0463  1 .
7218 O    O    . HOH HOH HOH S . 569 569 . 0.5768 0.1414 0.3052 0.1732  0.0479  -
0.1153 1 .
7219 O    O    . HOH HOH HOH S . 570 570 . 0.5562 0.5742 0.4169 0.0329  -0.0871
0.1396  1 .
7220 O    O    . HOH HOH HOH S . 571 571 . 0.4254 0.2401 0.1680 -0.0929 0.0451
0.0637  1 .
7221 O    O    . HOH HOH HOH S . 572 572 . 0.2700 0.2940 0.3455 0.0295  -0.0510 -
0.0389 1 .
7222 O    O    . HOH HOH HOH S . 573 573 . 0.3760 0.2927 0.4075 0.0048  0.1863  -
0.0163 1 .
7223 O    O    . HOH HOH HOH S . 574 574 . 0.3979 0.2546 0.4163 -0.0606 0.0725  -
0.1361 1 .
7224 O    O    . HOH HOH HOH S . 575 575 . 0.3332 0.1826 0.3267 0.0652  -0.0042
0.0115  1 .
7225 O    O    . HOH HOH HOH S . 576 576 . 0.3061 0.2579 0.4761 -0.0854 -0.1078
0.1872  1 .
7226 O    O    . HOH HOH HOH S . 578 578 . 0.2690 0.3872 0.3476 0.0063  0.0704  -
0.0022 1 .
7227 O    O    . HOH HOH HOH S . 579 579 . 0.4739 0.3451 0.2656 -0.0329 0.0490
0.0422  1 .
7228 O    O    . HOH HOH HOH S . 580 580 . 0.5619 0.5294 0.2931 0.1066  -0.1099 -
0.0370 1 .
7229 O    O    . HOH HOH HOH S . 581 581 . 0.3430 0.2300 0.2209 -0.0184 -0.0170
0.0327  1 .
7230 O    O    . HOH HOH HOH S . 582 582 . 0.2993 0.3371 0.2403 0.0507  -0.1618
0.0285  1 .
7231 O    O    . HOH HOH HOH S . 583 583 . 0.3380 0.4035 0.5290 0.0237  -0.1598
0.1950  1 .
7232 O    O    . HOH HOH HOH S . 584 584 . 0.4840 0.3722 0.3851 0.1520  -0.1812
0.0496  1 .
7233 O    O    . HOH HOH HOH S . 585 585 . 0.3867 0.5014 0.4161 -0.0296 0.0244
0.1209  1 .
7234 O    O    . HOH HOH HOH S . 586 586 . 0.4579 0.4013 0.6279 0.0957  -0.0579
0.1942  1 .
7235 O    O    . HOH HOH HOH S . 587 587 . 0.2266 0.4855 0.6039 -0.0131 -0.0182
0.0346  1 .
7236 O    O    . HOH HOH HOH S . 588 588 . 0.1932 0.2450 0.3770 -0.0827 -0.0543 -
0.0700 1 .
7237 O    O    . HOH HOH HOH S . 589 589 . 0.3064 0.2644 0.6246 0.1258  -0.2064 -
0.1278 1 .
7238 O    O    . HOH HOH HOH S . 590 590 . 0.4309 0.4251 0.4016 -0.2710 0.0253  -
0.1892 1 .
7239 O    O    . HOH HOH HOH S . 591 591 . 0.2361 0.1881 0.2624 -0.0304 -0.0267 -
0.0427 1 .
7240 O    O    . HOH HOH HOH S . 592 592 . 0.2298 0.6855 0.6632 0.2868  0.1640  -
0.1310 1 .
7241 O    O    . HOH HOH HOH S . 594 594 . 0.4307 0.4548 0.4760 0.0830  -0.1294
0.1035  1 .
7242 O    O    . HOH HOH HOH S . 596 596 . 0.2243 0.4501 0.2595 0.0008  -0.1663 -
0.0583 1 .
```

```
7243 O    O    . HOH HOH HOH S . 597 597 . 0.7289 0.6752 0.8729 0.0264  -0.0859 -
0.0979 1 .
7244 O    O    . HOH HOH HOH S . 598 598 . 0.1799 0.6981 0.5094 -0.0806 0.0503
0.2685  1 .
7245 O    O    . HOH HOH HOH S . 599 599 . 0.3019 0.5916 0.2652 -0.1429 0.1026
0.0731  1 .
7246 O    O    . HOH HOH HOH S . 600 600 . 0.3162 0.6233 0.3262 -0.0134 -0.0576 -
0.0170 1 .
7247 O    O    . HOH HOH HOH S . 601 601 . 0.3477 0.2945 0.3568 0.0385  0.0725
0.0373  1 .
7248 O    O    . HOH HOH HOH S . 602 602 . 1.0157 0.8449 0.9375 0.4613  0.5454  -
0.3542 1 .
7249 O    O    . HOH HOH HOH S . 603 603 . 0.4477 0.3903 0.3097 -0.0181 0.0669  -
0.1699 1 .
7250 O    O    . HOH HOH HOH S . 605 605 . 0.1835 0.4233 0.3497 -0.0466 -0.0123
0.0180  1 .
7251 O    O    . HOH HOH HOH S . 606 606 . 0.5100 0.2410 0.3777 0.1229  0.0194  -
0.2360 1 .
7252 O    O    . HOH HOH HOH S . 609 609 . 0.5340 0.7088 0.2523 0.0640  0.0933  -
0.2216 1 .
7253 O    O    . HOH HOH HOH S . 610 610 . 0.5323 0.3446 0.3966 -0.1989 0.0234  -
0.1766 1 .
7254 O    O    . HOH HOH HOH S . 613 613 . 0.1893 0.4775 0.5010 0.1633  -0.1297 -
0.0009 1 .
7255 O    O    . HOH HOH HOH S . 615 615 . 0.4095 0.2499 0.3425 -0.0820 0.0043
0.0265  1 .
#
_atom_sites.entry_id                    UNNAMED
_atom_sites.fract_transf_matrix[1][1]   0.008712
_atom_sites.fract_transf_matrix[1][2]   0.000000
_atom_sites.fract_transf_matrix[1][3]   0.000000
_atom_sites.fract_transf_matrix[2][1]   0.000000
_atom_sites.fract_transf_matrix[2][2]   0.008356
_atom_sites.fract_transf_matrix[2][3]   0.000000
_atom_sites.fract_transf_matrix[3][1]   0.000000
_atom_sites.fract_transf_matrix[3][2]   0.000000
_atom_sites.fract_transf_matrix[3][3]   0.014706
_atom_sites.fract_transf_vector[1]      0.000000
_atom_sites.fract_transf_vector[2]      0.000000
_atom_sites.fract_transf_vector[3]      0.000000
#
_cell.length_a      114.785
_cell.length_b      119.677
_cell.length_c      68.001
_cell.angle_alpha   90.000
_cell.angle_beta    90.000
_cell.angle_gamma   90.000
_cell.entry_id      UNNAMED
#
_computing.entry_id                  UNNAMED
_computing.structure_refinement      'REFMAC 5.5.0109'
_computing.structure_solution        ?
_computing.pdbx_data_reduction_ds    HKL
_computing.pdbx_data_reduction_ii    HKL
_computing.cell_refinement           HKL
#
_data_extraction.software           pdb_extract
_data_extraction.extraction_date    'Fri Oct 21 15:28:23 2011'
_data_extraction.version            3.10
_data_extraction.release_date       'June 10, 2010'
```

```
_data_extraction.location         http://sw-tools.rcsb.org/apps/PDB_EXTRACT/
#
loop_
_database_2.database_id
_database_2.database_code
PDB  UNNAMED
RCSB UNNAMED
#
_database_PDB_remark.id     3
_database_PDB_remark.text
;
REMARK   3
REMARK   3 REFINEMENT.
REMARK   3   PROGRAM     : REFMAC 5.5.0109
REMARK   3   AUTHORS     : MURSHUDOV,VAGIN,DODSON
REMARK   3
REMARK   3    REFINEMENT TARGET : MAXIMUM LIKELIHOOD
REMARK   3
REMARK   3  DATA USED IN REFINEMENT.
REMARK   3   RESOLUTION RANGE HIGH (ANGSTROMS) :   1.50
REMARK   3   RESOLUTION RANGE LOW  (ANGSTROMS) :  82.84
REMARK   3   DATA CUTOFF            (SIGMA(F)) : NONE
REMARK   3   COMPLETENESS FOR RANGE        (%) :  82.89
REMARK   3   NUMBER OF REFLECTIONS             :  118194
REMARK   3
REMARK   3  FIT TO DATA USED IN REFINEMENT.
REMARK   3   CROSS-VALIDATION METHOD          : THROUGHOUT
REMARK   3   FREE R VALUE TEST SET SELECTION  : RANDOM
REMARK   3   R VALUE     (WORKING + TEST SET) : 0.22142
REMARK   3   R VALUE            (WORKING SET) :  0.21950
REMARK   3   FREE R VALUE                     :  0.25768
REMARK   3   FREE R VALUE TEST SET SIZE   (%) :  5.0
REMARK   3   FREE R VALUE TEST SET COUNT      :  6211
REMARK   3
REMARK   3  FIT IN THE HIGHEST RESOLUTION BIN.
REMARK   3   TOTAL NUMBER OF BINS USED           :      20
REMARK   3   BIN RESOLUTION RANGE HIGH           :    1.500
REMARK   3   BIN RESOLUTION RANGE LOW            :    1.539
REMARK   3   REFLECTION IN BIN     (WORKING SET) :     3470
REMARK   3   BIN COMPLETENESS (WORKING+TEST) (%) :    33.24
REMARK   3   BIN R VALUE           (WORKING SET) :    0.277
REMARK   3   BIN FREE R VALUE SET COUNT          :      184
REMARK   3   BIN FREE R VALUE                    :    0.340
REMARK   3
REMARK   3  NUMBER OF NON-HYDROGEN ATOMS USED IN REFINEMENT.
REMARK   3   ALL ATOMS                :     7255
REMARK   3
REMARK   3  B VALUES.
REMARK   3   FROM WILSON PLOT           (A**2) : NULL
REMARK   3   MEAN B VALUE      (OVERALL, A**2) :   7.585
REMARK   3   OVERALL ANISOTROPIC B VALUE.
REMARK   3    B11 (A**2) :     0.44
REMARK   3    B22 (A**2) :    -0.23
REMARK   3    B33 (A**2) :    -0.21
REMARK   3    B12 (A**2) :     0.00
REMARK   3    B13 (A**2) :     0.00
REMARK   3    B23 (A**2) :     0.00
REMARK   3
REMARK   3  ESTIMATED OVERALL COORDINATE ERROR.
REMARK   3   ESU BASED ON R VALUE                            (A):   0.132
```

```
REMARK   3   ESU BASED ON FREE R VALUE                       (A):   0.104
REMARK   3   ESU BASED ON MAXIMUM LIKELIHOOD                 (A):   0.064
REMARK   3   ESU FOR B VALUES BASED ON MAXIMUM LIKELIHOOD (A**2):   3.759
REMARK   3
REMARK   3 CORRELATION COEFFICIENTS.
REMARK   3   CORRELATION COEFFICIENT FO-FC      :   0.882
REMARK   3   CORRELATION COEFFICIENT FO-FC FREE :   0.862
REMARK   3
REMARK   3  RMS DEVIATIONS FROM IDEAL VALUES        COUNT    RMS    WEIGHT
REMARK   3   BOND LENGTHS REFINED ATOMS        (A):  6755 ; 0.023 ; 0.022
REMARK   3   BOND ANGLES REFINED ATOMS   (DEGREES):  9136 ; 1.955 ; 1.972
REMARK   3   TORSION ANGLES, PERIOD 1    (DEGREES):   861 ; 6.020 ; 5.000
REMARK   3   TORSION ANGLES, PERIOD 2    (DEGREES):   308 ;40.405 ;25.000
REMARK   3   TORSION ANGLES, PERIOD 3    (DEGREES):  1162 ;15.349 ;15.000
REMARK   3   TORSION ANGLES, PERIOD 4    (DEGREES):    40 ;24.828 ;15.000
REMARK   3   CHIRAL-CENTER RESTRAINTS       (A**3):  1024 ; 0.136 ; 0.200
REMARK   3   GENERAL PLANES REFINED ATOMS      (A):  5104 ; 0.011 ; 0.021
REMARK   3
REMARK   3  ISOTROPIC THERMAL FACTOR RESTRAINTS.     COUNT   RMS    WEIGHT
REMARK   3   MAIN-CHAIN BOND REFINED ATOMS  (A**2):  4277 ; 1.444 ; 1.500
REMARK   3   MAIN-CHAIN ANGLE REFINED ATOMS (A**2):  6836 ; 2.295 ; 2.000
REMARK   3   SIDE-CHAIN BOND REFINED ATOMS  (A**2):  2478 ; 3.933 ; 3.000
REMARK   3   SIDE-CHAIN ANGLE REFINED ATOMS (A**2):  2300 ; 5.988 ; 4.500
REMARK   3
REMARK   3 ANISOTROPIC THERMAL FACTOR RESTRAINTS.    COUNT   RMS   WEIGHT
REMARK   3   RIGID-BOND RESTRAINTS          (A**2):  6755 ; 2.252 ; 3.000
REMARK   3
REMARK   3  NCS RESTRAINTS STATISTICS
REMARK   3   NUMBER OF NCS GROUPS : NULL
REMARK   3
REMARK   3  TWIN DETAILS
REMARK   3   NUMBER OF TWIN DOMAINS  : NULL
REMARK   3
REMARK   3
REMARK   3  TLS DETAILS
REMARK   3   NUMBER OF TLS GROUPS  : NULL
REMARK   3
REMARK   3
REMARK   3  BULK SOLVENT MODELLING.
REMARK   3   METHOD USED :  MASK
REMARK   3   PARAMETERS FOR MASK CALCULATION
REMARK   3   VDW PROBE RADIUS   :   1.40
REMARK   3   ION PROBE RADIUS   :   0.80
REMARK   3   SHRINKAGE RADIUS   :   0.80
REMARK   3
REMARK   3  OTHER REFINEMENT REMARKS:
REMARK   3  HYDROGENS HAVE BEEN ADDED IN THE RIDING POSITIONS
REMARK   3  U VALUES      : REFINED INDIVIDUALLY
REMARK   3
;
#
_entity_poly.entity_id                  1
_entity_poly.pdbx_seq_one_letter_code
;SIQKIWAREILDSRGNPTVEVDLYTAKGLFRAAVPSGASTGIYEALELRDGDKQRYLGKG
VLKAVDHINSTIAPALISSGLSVVEQEKLDNLMLELDGTENKSKFGANAILGVSLAVCKA
GAAERELPLYRHIAQLAGNSDLILPVPAFNVINGGSHAGNKLAMQEFMILPVGAESFRDA
MRLGAEVYHTLKGVIKDKYGKDATNVGDEGGFAPNILENSEALELVKEAIDKAGYTEKIV
IGMDVAASEFYRDGKYDLDFKSPTDPSRYITGDQLGALYQDFVRDYPVVSIEDPFDQDDW
AAWSKFTANVGIQIVGDDLTVTNPKRIERAVEEKACNCLLLKVNQIGSVTEAIQACKLAQ
ENGWGVMVSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEELGDEA
```

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RFAGHNFRNPSVL
;
_entity_poly.pdbx_strand_id             A,B
_entity_poly.type                       'polypeptide(L)'
_entity_poly.pdbx_target_identifier     ?
#
_entry.id   UNNAMED
#
_exptl.crystals_number   1
_exptl.entry_id          UNNAMED
_exptl.method            'X-RAY DIFFRACTION'
#
_exptl_crystal.id                    1
_exptl_crystal.pdbx_mosaicity        0.950
_exptl_crystal.pdbx_mosaicity_esd    ?
_exptl_crystal.density_Matthews      ?
_exptl_crystal.density_diffrn        ?
_exptl_crystal.density_meas          ?
_exptl_crystal.density_meas_temp     ?
_exptl_crystal.density_percent_sol   ?
_exptl_crystal.size_max              ?
_exptl_crystal.size_mid              ?
_exptl_crystal.size_min              ?
_exptl_crystal.size_rad              ?
#
_refine.entry_id                                 UNNAMED
_refine.pdbx_refine_id                           'X-RAY DIFFRACTION'
_refine.ls_d_res_high                            1.5000
_refine.ls_d_res_low                             82.8400
_refine.pdbx_ls_sigma_F                          0.000
_refine.pdbx_data_cutoff_high_absF               ?
_refine.pdbx_data_cutoff_low_absF                ?
_refine.ls_percent_reflns_obs                    82.8900
_refine.ls_number_reflns_obs                     124405
_refine.ls_number_reflns_all                     ?
_refine.pdbx_ls_cross_valid_method               THROUGHOUT
_refine.ls_matrix_type                           ?
_refine.pdbx_R_Free_selection_details            RANDOM
_refine.details
' HYDROGENS HAVE BEEN ADDED IN THE RIDING POSITIONS U VALUES      : REFINED
INDIVIDUALLY '
_refine.ls_R_factor_all                          ?
_refine.ls_R_factor_obs                          0.2214
_refine.ls_R_factor_R_work                       0.2195
_refine.ls_wR_factor_R_work                      0.1997
_refine.ls_R_factor_R_free                       0.2577
_refine.ls_wR_factor_R_free                      0.2329
_refine.ls_percent_reflns_R_free                 5.0000
_refine.ls_number_reflns_R_free                  6211
_refine.ls_number_reflns_R_work                  118194
_refine.ls_R_factor_R_free_error                 ?
_refine.B_iso_mean                               7.5848
_refine.solvent_model_param_bsol                 ?
_refine.solvent_model_param_ksol                 ?
_refine.pdbx_isotropic_thermal_model             ?
_refine.aniso_B[1][1]                            0.4400
_refine.aniso_B[2][2]                            -0.2300
_refine.aniso_B[3][3]                            -0.2100
_refine.aniso_B[1][2]                            0.0000
_refine.aniso_B[1][3]                            0.0000
```

```
_refine.aniso_B[2][3]                              0.0000
_refine.correlation_coeff_Fo_to_Fc                 0.8820
_refine.correlation_coeff_Fo_to_Fc_free            0.8620
_refine.overall_SU_R_Cruickshank_DPI               0.1320
_refine.pdbx_overall_SU_R_free_Cruickshank_DPI     ?
_refine.pdbx_overall_SU_R_Blow_DPI                 ?
_refine.pdbx_overall_SU_R_free_Blow_DPI            ?
_refine.overall_SU_R_free                          0.1037
_refine.pdbx_overall_ESU_R                         0.1320
_refine.pdbx_overall_ESU_R_Free                    0.1040
_refine.overall_SU_ML                              0.0640
_refine.overall_SU_B                               3.7590
_refine.solvent_model_details                      MASK
_refine.pdbx_solvent_vdw_probe_radii               1.4000
_refine.pdbx_solvent_ion_probe_radii               0.8000
_refine.pdbx_solvent_shrinkage_radii               0.8000
_refine.ls_number_parameters                       ?
_refine.ls_number_restraints                       ?
_refine.pdbx_starting_model                        ?
_refine.pdbx_method_to_determine_struct            ?
_refine.pdbx_stereochemistry_target_values         'MAXIMUM LIKELIHOOD'
_refine.pdbx_stereochem_target_val_spec_case       ?
_refine.overall_FOM_work_R_set                     0.8841
_refine.B_iso_max                                  244.050
_refine.B_iso_min                                  2.000
_refine.pdbx_overall_phase_error                   ?
_refine.occupancy_max                              1.000
_refine.occupancy_min                              0.260
#
loop_
_refine_ls_restr.pdbx_refine_id
_refine_ls_restr.type
_refine_ls_restr.number
_refine_ls_restr.dev_ideal
_refine_ls_restr.dev_ideal_target
_refine_ls_restr.weight
_refine_ls_restr.pdbx_restraint_function
'X-RAY DIFFRACTION' r_bond_refined_d       6755 0.023  0.022  ? ?
'X-RAY DIFFRACTION' r_angle_refined_deg    9136 1.955  1.972  ? ?
'X-RAY DIFFRACTION' r_dihedral_angle_1_deg 861  6.020  5.000  ? ?
'X-RAY DIFFRACTION' r_dihedral_angle_2_deg 308  40.405 25.000 ? ?
'X-RAY DIFFRACTION' r_dihedral_angle_3_deg 1162 15.349 15.000 ? ?
'X-RAY DIFFRACTION' r_dihedral_angle_4_deg 40   24.828 15.000 ? ?
'X-RAY DIFFRACTION' r_chiral_restr         1024 0.136  0.200  ? ?
'X-RAY DIFFRACTION' r_gen_planes_refined   5104 0.011  0.021  ? ?
'X-RAY DIFFRACTION' r_mcbond_it            4277 1.444  1.500  ? ?
'X-RAY DIFFRACTION' r_mcangle_it           6836 2.295  2.000  ? ?
'X-RAY DIFFRACTION' r_scbond_it            2478 3.933  3.000  ? ?
'X-RAY DIFFRACTION' r_scangle_it           2300 5.988  4.500  ? ?
'X-RAY DIFFRACTION' r_rigid_bond_restr     6755 2.252  3.000  ? ?
#
_refine_ls_shell.d_res_high                        1.5000
_refine_ls_shell.d_res_low                         1.5390
_refine_ls_shell.pdbx_total_number_of_bins_used    20
_refine_ls_shell.percent_reflns_obs                33.2400
_refine_ls_shell.number_reflns_R_work              3470
_refine_ls_shell.R_factor_all                      ?
_refine_ls_shell.R_factor_R_work                   0.2770
_refine_ls_shell.R_factor_R_free                   0.3400
_refine_ls_shell.percent_reflns_R_free             ?
```

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_refine_ls_shell.number_reflns_R_free             184
_refine_ls_shell.R_factor_R_free_error            ?
_refine_ls_shell.number_reflns_all                3654
_refine_ls_shell.number_reflns_obs                ?
_refine_ls_shell.pdbx_refine_id                   'X-RAY DIFFRACTION'
#
_reflns.entry_id                     UNNAMED
_reflns.d_resolution_high            1.500
_reflns.d_resolution_low             50.000
_reflns.pdbx_number_measured_all     685677
_reflns.number_obs                   131445
_reflns.pdbx_Rmerge_I_obs            0.084
_reflns.pdbx_netI_over_av_sigmaI     28.180
_reflns.pdbx_netI_over_sigmaI        16.100
_reflns.pdbx_chi_squared             3.407
_reflns.pdbx_redundancy              5.200
_reflns.percent_possible_obs         87.500
_reflns.pdbx_Rmeas_mean              0.084
_reflns.pdbx_average_I_obs           7509.900
_reflns.pdbx_average_sigmaI_obs      266.500
#
loop_
_reflns_shell.d_res_high
_reflns_shell.d_res_low
_reflns_shell.number_measured_obs
_reflns_shell.number_measured_all
_reflns_shell.number_unique_obs
_reflns_shell.pdbx_rejects
_reflns_shell.Rmerge_I_obs
_reflns_shell.meanI_over_sigI_obs
_reflns_shell.pdbx_Rsym_value
_reflns_shell.pdbx_chi_squared
_reflns_shell.pdbx_redundancy
_reflns_shell.percent_possible_obs
_reflns_shell.pdbx_Rmeas_mean
_reflns_shell.pdbx_netI_over_sigmaI_obs
_reflns_shell.pdbx_number_centric
_reflns_shell.pdbx_number_anomalous
_reflns_shell.pdbx_Rmerge_I_anomalous
_reflns_shell.pdbx_meanI_over_sigI_anomalous
_reflns_shell.pdbx_PCV_mean
_reflns_shell.number_possible
_reflns_shell.number_unique_all
_reflns_shell.Rmerge_F_all
_reflns_shell.Rmerge_F_obs
_reflns_shell.Rmerge_I_all
_reflns_shell.meanI_over_sigI_all
_reflns_shell.percent_possible_all
_reflns_shell.pdbx_Rrim_I_all
_reflns_shell.pdbx_Rpim_I_all
1.500 1.550  ? ? ? ? 0.347 ? ? 1.294 1.600 ? ? ? ? ? ? ? ? ? 6200  ? ? ? ? 41.700  ?
?
1.550 1.620  ? ? ? ? 0.390 ? ? 1.124 2.200 ? ? ? ? ? ? ? ? ? 9528  ? ? ? ? 64.000  ?
?
1.620 1.690  ? ? ? ? 0.376 ? ? 1.186 2.800 ? ? ? ? ? ? ? ? ? 12380 ? ? ? ? 83.400  ?
?
1.690 1.780  ? ? ? ? 0.367 ? ? 1.271 3.700 ? ? ? ? ? ? ? ? ? 13188 ? ? ? ? 88.700  ?
?
1.780 1.890  ? ? ? ? 0.326 ? ? 1.481 4.800 ? ? ? ? ? ? ? ? ? 14463 ? ? ? ? 96.700  ?
?
```

```
1.890 2.040  ? ? ? ? 0.252 ? ? 1.944 5.900 ? ? ? ? ? ? ? ? ? 14878 ? ? ? ? 99.800  ?
?
2.040 2.240  ? ? ? ? 0.163 ? ? 2.808 6.300 ? ? ? ? ? ? ? ? ? 15001 ? ? ? ? 100.000 ?
?
2.240 2.560  ? ? ? ? 0.109 ? ? 3.494 6.600 ? ? ? ? ? ? ? ? ? 15044 ? ? ? ? 100.000 ?
?
2.560 3.230  ? ? ? ? 0.078 ? ? 4.865 7.100 ? ? ? ? ? ? ? ? ? 15161 ? ? ? ? 100.000 ?
?
3.230 50.000 ? ? ? ? 0.047 ? ? 6.299 7.200 ? ? ? ? ? ? ? ? ? 15602 ? ? ? ? 99.900  ?
?
#
loop_
_software.pdbx_ordinal
_software.name
_software.version
_software.date
_software.type
_software.contact_author
_software.contact_author_email
_software.classification
_software.location
_software.language
1 HKL         ?    ?               package 'Zbyszek Otwinowski' hkl@hkl-xray.com
'data reduction'  http://www.hkl-xray.com/                    ?
2 REFMAC5     ?    ?               program 'Garib N. Murshudov' garib@ysbl.york.ac.uk
refinement        http://www.ccp4.ac.uk/dist/html/refmac5.html Fortran_77
3 pdb_extract 3.10 'June 10, 2010' package PDB
deposit@deposit.rcsb.org
'data extraction' http://sw-tools.pdb.org/apps/PDB_EXTRACT/    C++
#
_struct_biol.id        1
_struct_biol.details   ?
#
_symmetry.space_group_name_H-M   'P 21 21 2'
_symmetry.entry_id               UNNAMED
_symmetry.Int_Tables_number      18
#
```

10/27/11 05:19 PM (EDT) Generated by RCSB PDB Summary Report for Review

wwPDB Validation Report

TITLE: Asymmetric complex of human neuron specific enolase-5-PGA/PEP

AUTHOR(S): J Qin, G Chai, J Brewer, L Lovelace, L Lebioda

Summary of PDB Entry Validation

The results of the validation of this PDB entry are shown below. No major issues were found.

Sequence Validation

The reported biological sequence and the sequence given in the coordinates show no discrepancy.

Summary of Structure Factor Validation

Structure quality	
Average Real space R-factor (Deviation) (Calculated by SFCHECK, V7.02.4)	0.0627
Average Real space R-factor (Deviation) (Calculated by MAPMAN, V7.8.5)	0.0788
Average Real-space correlation coefficient (Deviation) (Calculated by SFCHECK, V7.02.4)	0.9925
Average Real-space correlation coefficient (Deviation) (Calculated by MAPMAN, V7.8.5)	0.889
Average Occupancy-weighted avg temperature factor (Deviation)	8.31

Resolution	
High Resolution (Author reported)	1.40
High Resolution (Calculated by SFCHECK, V7.02.4)	1.40
High Resolution (Calculated by REFMAC, V5.5.0109)	1.400
Low Resolution (Author reported)	81.25
Low Resolution (Calculated by SFCHECK, V7.02.4)	41.67
Low Resolution (Calculated by REFMAC, V5.5.0109)	41.674

Crystal data	

Space group	P 21 21 2
Total number of reflections	138298
Number of reflections used	131411
Completeness of data	77.7

R-factors	
R-factor (Author reported)	0.215
R-factor (Calculated by SFCHECK, V7.02.4)	0.243
R-factor (Calculated by REFMAC, V5.5.0109)	0.2153
Free R-factor (Author reported)	0.261
Free R-factor (Calculated by SFCHECK, V7.02.4)	0.276
Free R-factor (Calculated by REFMAC, V5.5.0109)	0.2609

Wilson statistics (PHENIX, V1.6-289)	
Wilson B-factor	5.00
Wilson Scale	0.51

Padilla-Yeates statistics for twin detection (PHENIX, V1.6-289)	
Padilla-Yeates <|L|>	0.282
Padilla-Yeates <L*L>	0.119

10/28/11 11:19 AM (EDT) Generated by RCSB PDB Summary Report for Review

wwPDB Validation Report

TITLE: Asymmetric complex of human neuron specific enolase-6-PGA/PEP

AUTHOR(S): J Qin, G Chai, J Brewer, L Lovelace, L Lebioda

Summary of PDB Entry Validation

The results of the validation of this PDB entry are shown below. No major issues were found.

Sequence Validation

The reported biological sequence and the sequence given in the coordinates show no discrepancy.

Summary of Structure Factor Validation

Structure quality	
Average Real space R-factor (Deviation) (Calculated by SFCHECK, V7.02.4)	0.0545
Average Real space R-factor (Deviation) (Calculated by MAPMAN, V7.8.5)	0.0746
Average Real-space correlation coefficient (Deviation) (Calculated by SFCHECK, V7.02.4)	0.9921
Average Real-space correlation coefficient (Deviation) (Calculated by MAPMAN, V7.8.5)	0.975
Average Occupancy-weighted avg temperature factor (Deviation)	22.04

Resolution	
High Resolution (Author reported)	1.42
High Resolution (Calculated by SFCHECK, V7.02.4)	1.41
High Resolution (Calculated by REFMAC, V5.5.0109)	1.416
Low Resolution (Author reported)	82.76
Low Resolution (Calculated by SFCHECK, V7.02.4)	43.84
Low Resolution (Calculated by REFMAC, V5.5.0109)	43.842

Crystal data	

Space group	P 21 21 2
Total number of reflections	166990
Number of reflections used	158604
Completeness of data	93.7

R-factors	
R-factor (Author reported)	0.156
R-factor (Calculated by SFCHECK, V7.02.4)	0.194
R-factor (Calculated by REFMAC, V5.5.0109)	0.1565
Free R-factor (Author reported)	0.199
Free R-factor (Calculated by SFCHECK, V7.02.4)	0.220
Free R-factor (Calculated by REFMAC, V5.5.0109)	0.1991

Wilson statistics (PHENIX, V1.6-289)	
Wilson B-factor	17.96
Wilson Scale	0.49

Padilla-Yeates statistics for twin detection (PHENIX, V1.6-289)	
Padilla-Yeates <|L|>	0.467
Padilla-Yeates <L*L>	0.295

10/27/11 04:48 PM (EDT) Generated by RCSB PDB Summary Report for Review

wwPDB Validation Report

TITLE: Asymmetric complex of human neuron specific enolase-4-PGA/PEP

AUTHOR(S): J Qin, G Chai, J Brewer, L Lovelace, L Lebioda

Summary of PDB Entry Validation

The results of the validation of this PDB entry are shown below. No major issues were found.

Sequence Validation

The reported biological sequence and the sequence given in the coordinates show no discrepancy.

Summary of Structure Factor Validation

Structure quality	
Average Real space R-factor (Deviation) (Calculated by SFCHECK, V7.02.4)	0.0951
Average Real-space correlation coefficient (Deviation) (Calculated by SFCHECK, V7.02.4)	0.9749
Average Occupancy-weighted avg temperature factor (Deviation)	35.39

Resolution	
High Resolution (Author reported)	2.10
High Resolution (Calculated by SFCHECK, V7.02.4)	2.10
Low Resolution (Author reported)	80.72
Low Resolution (Calculated by SFCHECK, V7.02.4)	37.39

Crystal data	
Space group	P 21 21 2
Total number of reflections	47009
Number of reflections used	44629
Completeness of data	89.1

R-factors	
R-factor (Author reported)	0.190
R-factor (Calculated by SFCHECK, V7.02.4)	0.239
Free R-factor (Author reported)	0.250
Free R-factor (Calculated by SFCHECK, V7.02.4)	0.284

Wilson statistics (PHENIX, V1.6-289)	
Wilson B-factor	31.88
Wilson Scale	0.50

Padilla-Yeates statistics for twin detection (PHENIX, V1.6-289)	
Padilla-Yeates <|L|>	0.485
Padilla-Yeates <L*L>	0.318

10/28/11 12:03 PM (EDT) Generated by RCSB PDB Summary Report for Review

wwPDB Validation Report

TITLE: Asymmetric complex of human neuron specific enolase-3-PGA/PEP

AUTHOR(S): J Qin, G Chai, J Brewer, L Lovelace, L Lebioda

Summary of PDB Entry Validation

The results of the validation of this PDB entry are shown below. No major issues were found.

Sequence Validation

The reported biological sequence and the sequence given in the coordinates show no discrepancy.

Summary of Structure Factor Validation

Structure quality	
Average Real space R-factor (Deviation) (Calculated by SFCHECK, V7.02.4)	0.0485
Average Real space R-factor (Deviation) (Calculated by MAPMAN, V7.8.5)	0.0725
Average Real-space correlation coefficient (Deviation) (Calculated by SFCHECK, V7.02.4)	0.9938
Average Real-space correlation coefficient (Deviation) (Calculated by MAPMAN, V7.8.5)	0.965
Average Occupancy-weighted avg temperature factor (Deviation)	15.09

Resolution	
High Resolution (Author reported)	1.55
High Resolution (Calculated by SFCHECK, V7.02.4)	1.55
High Resolution (Calculated by REFMAC, V5.5.0109)	1.554
Low Resolution (Author reported)	80.84
Low Resolution (Calculated by SFCHECK, V7.02.4)	42.68
Low Resolution (Calculated by REFMAC, V5.5.0109)	42.679

Crystal data	

Space group	P 21 21 2
Total number of reflections	112548
Number of reflections used	106884
Completeness of data	87.1

R-factors	
R-factor (Author reported)	0.143
R-factor (Calculated by SFCHECK, V7.02.4)	0.181
R-factor (Calculated by REFMAC, V5.5.0109)	0.1440
Free R-factor (Author reported)	0.189
Free R-factor (Calculated by SFCHECK, V7.02.4)	0.205
Free R-factor (Calculated by REFMAC, V5.5.0109)	0.1901

Wilson statistics (PHENIX, V1.6-289)	
Wilson B-factor	13.05
Wilson Scale	0.52

Padilla-Yeates statistics for twin detection (PHENIX, V1.6-289)	
Padilla-Yeates <|L|>	0.465
Padilla-Yeates <L*L>	0.294

10/27/11 03:11 PM (EDT) Generated by RCSB PDB Summary Report for Review

wwPDB Validation Report

TITLE: Asymmetric complex of human neuron specific enolase-2-PGA/PEP

AUTHOR(S): J Qin, G Chai, J Brewer, L Lovelace, L Lebioda

Summary of PDB Entry Validation

The results of the validation of this PDB entry are shown below. No major issues were found.

Sequence Validation

The reported biological sequence and the sequence given in the coordinates show no discrepancy.

Summary of Structure Factor Validation

Structure quality	
Average Real space R-factor (Deviation) (Calculated by SFCHECK, V7.02.4)	0.0503
Average Real space R-factor (Deviation) (Calculated by MAPMAN, V7.8.5)	0.0735
Average Real-space correlation coefficient (Deviation) (Calculated by SFCHECK, V7.02.4)	0.9933
Average Real-space correlation coefficient (Deviation) (Calculated by MAPMAN, V7.8.5)	0.964
Average Occupancy-weighted avg temperature factor (Deviation)	13.18

Resolution	
High Resolution (Author reported)	1.41
High Resolution (Calculated by SFCHECK, V7.02.4)	1.41
High Resolution (Calculated by REFMAC, V5.5.0109)	1.414
Low Resolution (Author reported)	44.58
Low Resolution (Calculated by SFCHECK, V7.02.4)	41.08
Low Resolution (Calculated by REFMAC, V5.5.0109)	41.075

Crystal data	

Space group	P 21 21 2
Total number of reflections	152702
Number of reflections used	145026
Completeness of data	94.1

R-factors	
R-factor (Author reported)	0.161
R-factor (Calculated by SFCHECK, V7.02.4)	0.190
R-factor (Calculated by REFMAC, V5.5.0109)	0.1615
Free R-factor (Author reported)	0.198
Free R-factor (Calculated by SFCHECK, V7.02.4)	0.213
Free R-factor (Calculated by REFMAC, V5.5.0109)	0.1976

Wilson statistics (PHENIX, V1.6-289)	
Wilson B-factor	11.40
Wilson Scale	0.55

Padilla-Yeates statistics for twin detection (PHENIX, V1.6-289)	
Padilla-Yeates <|L|>	0.485
Padilla-Yeates <L*L>	0.316

10/27/11 10:34 AM (EDT) Generated by RCSB PDB Summary Report for Review

wwPDB Validation Report

TITLE: Asymmetric complex of human neuron specific enolase-1-PGA/PEP

AUTHOR(S): J Qin, G Chai, J Brewer, L Lovelace, L Lebioda

Summary of PDB Entry Validation

The results of the validation of this PDB entry are shown below. No major issues were found.

Sequence Validation

The reported biological sequence and the sequence given in the coordinates show no discrepancy.

Summary of Structure Factor Validation

Structure quality	
Average Real space R-factor (Deviation) (Calculated by SFCHECK, V7.02.4)	0.0675
Average Real space R-factor (Deviation) (Calculated by MAPMAN, V7.8.5)	0.0834
Average Real-space correlation coefficient (Deviation) (Calculated by SFCHECK, V7.02.4)	0.9912
Average Real-space correlation coefficient (Deviation) (Calculated by MAPMAN, V7.8.5)	0.883
Average Occupancy-weighted avg temperature factor (Deviation)	7.58

Resolution	
High Resolution (Author reported)	1.50
High Resolution (Calculated by SFCHECK, V7.02.4)	1.50
High Resolution (Calculated by REFMAC, V5.5.0109)	1.500
Low Resolution (Author reported)	82.84
Low Resolution (Calculated by SFCHECK, V7.02.4)	36.44
Low Resolution (Calculated by REFMAC, V5.5.0109)	36.444

Crystal data	

Space group	P 21 21 2
Total number of reflections	124405
Number of reflections used	118194
Completeness of data	82.9

R-factors	
R-factor (Author reported)	0.220
R-factor (Calculated by SFCHECK, V7.02.4)	0.244
R-factor (Calculated by REFMAC, V5.5.0109)	0.2197
Free R-factor (Author reported)	0.258
Free R-factor (Calculated by SFCHECK, V7.02.4)	0.271
Free R-factor (Calculated by REFMAC, V5.5.0109)	0.2578

Wilson statistics (PHENIX, V1.6-289)	
Wilson B-factor	3.44
Wilson Scale	0.52

Padilla-Yeates statistics for twin detection (PHENIX, V1.6-289)	
Padilla-Yeates <|L|>	0.286
Padilla-Yeates <L*L>	0.122